

The scanned images of the bulletins of the International Seismological Summary (ISS) have been obtained thanks to funding provided by the US National Science Foundation through grant EAR-9725140 (Villaseñor et al., 1997) and collected by SGA Storia Geofisica Ambiente (Bologna) on behalf of the Istituto Nazionale di Geofisica e Vulcanologia (Rome), in the frame of the EUROSEISMOS project.

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The International Seismological Summary

1963 APRIL, MAY, JUNE

The Summary is produced by means of an electronic computer and a card-controlled tabulator. No lower case letters are available so the letterpress is uniformly in capitals. Phases pP, sP, sS when available are therefore designated by *PP, *SP, *SS; the asterisk implying that the first letter of the pair is equivalent to lower case. An additional column is provided and used exclusively for the phase pP. Surface waves are no longer included in a separate column. Residuals are by comparison with the Jeffreys-Bullen tables; P is used up to 105°, PKP from 110°, S up to 95° and SKS from 95°. For P and PKP beyond the scope of the tables the dummy figure of 777 is placed to complete the residual column. The quantity called SE at the head of each earthquake is the standard error of the computed P residuals.

I.S.C., EDINBURGH
March 1969

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The Director of the I.S.S. wishes to express his thanks to H.M. Treasury, to U.N.E.S.C.O. and I.C.S.U. acting through the agency of F.A.G.S. and to the International Association of Seismology which have covered the cost of preparation and printing of this volume.

He also thanks the Director-General of the Meteorological Office, the Superintendent of Kew Observatory and the University of Edinburgh for the hospitality extended to his staff, and the Director of the Atlas Computer Laboratory at the National Institute for Research in Nuclear Science for the services of the electronic computer.

U.N.E.S.C.O. Subvention 1967 AVS/414/24.

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APRIL 1 4.4M 28.4M 44.5 EPICENTRE 44.74 141.34 DEPTH= 256.KM

A=-0.55647 B= 0.44517 C= 0.70154 D= 0.6247 E= 0.7809
G=-0.5478 H= 0.4382 K=-0.7126 HT= -3.5

DEPTH OF FOCUS= 0.035R

SE= 1.99

	DELTA DEG.	AZ. DEG.	P		O-C S	S			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
WAKKANAI	0.72	19.5	0	36K	1	1	2	-1				
RUMOE	0.82	165.7	0	38K	2	1	4	1				
ASAHIGAWA	1.22	142.1	0	39K	1	1	6	-1				
SAPPORO	1.67	179.8	0	43A	2	1	15	2				
SUTTSU	2.10	202.9	0	47A	2	1	20	1				
TOMAKOMAI	2.12	175.2	0	47	2	1	22	2				
ABASHIRI	2.23	107.9	0	47A	1	1	19	-2				
OBIIHIRO	2.27	142.9	0	46K	0	1	24	2				
MURORAN	2.44	186.3	0	48A	0	1	25	0				
Y.-SAKHLINSK	2.47	22.5	0	48A	0	1	24	-2				
MORI	2.70	192.3	0	54	3	1	33	3				
URAKAWA	2.80	157.5	0	53K	1	1	33	1				
KUSIRO	2.83	127.5	0	52K	0	1	30	-2				
HIROO	2.85	149.0	0	52	0	1	31	-2				
HAKODATE	2.96	188.4	0	54A	1	1	34	-1				
NEMURO	3.37	113.3	0	57K	-1	1	28	-15				
AOMORI	3.94	186.2	1	5	1	1	53	-1				
HATINOHE	4.21	178.0	1	7A	-1	1	55	-5				
MORIOKA	5.04	181.5	1	17A	-1	2	12	-6				
AKITA	5.10	190.8	1	20A	2	2	17	-2				
MIYAKO	5.11	174.5	1	16A	-2	2	13	-6				
MIZUSAWA	5.61	181.7	1	24	-1	2	27	-3				
SAKATA	5.95	191.4	1	30A	1	2	40	2				
SENDAI	6.48	183.1	1	35A	0	2	45	-5				
YAMAGATA	6.53	186.9	1	36A	0	2	48	-3				
VLADIVOSTOK	7.01	259.9	1	43	1	3	2	1			2	10
HUKUSIMA	7.02	185.7	1	41A	-1	2	58	-4				
NIIGATA	7.03	195.0	1	45	3							
AIKAWA	7.11	200.1	1	44A	1	3	1	-3				
SHIRAKAWA	7.66	186.7	1	49	-1	3	14	-2				
ONAHAMA	7.79	182.6	1	50A	-2	3	15	-4				
TAKADA	7.99	198.1	1	55	1	3	20	-4				
UTUNOMIYA	8.26	188.3	1	57	-1	3	24	-6				
MITO	8.38	184.8	1	56	-3	3	28	-5				
NAGANO	8.41	197.5	2	1A	1							
MAEBASI	8.51	192.5	2	1A	0	4	1	25				
MATUSIRO	8.53	197.2	2	0A	-1	3	2	-34				
KAKIOKA	8.55	186.3	1	59	-2	3	30	-6				
TUKUBASAN	8.57	186.7	1	57A	-5	3	28	-9			3	0 *SP
TOYAMA	8.63	202.8	2	2	0						2	31
OIWAKE	8.67	195.1	2	3A	0	3	46	7				
KUMAGAYA	8.71	190.5	2	1A	-3	3	40	0				
MATUMOTO	8.86	198.0	2	6	1							
TITIBU	8.92	191.9	2	4	-2							
KANAZAWA	8.94	205.1	2	3	-3							
TYOSI	9.02	182.5	2	6A	-1	3	40	-7				
TAKAYAMA	9.13	201.3	2	9	0							
TOKYO C.M.O.	9.13	188.2	2	9	0	3	40	-10				
KOHU	9.31	194.1	2	10	-1	4	20	26				
YOKOHAMA	9.39	188.5	2	26	14	3	51	-5				
HUNATU	9.44	192.9	2	8	-5						2	48
HUKUI	9.52	205.9	2	16	2							
AJIRO	9.83	190.8	2	15	-3	3	59	-7				
HERA	9.88	187.3	2	18	0	4	2	-5				
TSURUGA	9.93	205.7	2	20	1							
SHIZUOKA	10.02	194.0	2	17	-3						4	22
OSIMA	10.07	189.3	2	22	1							
NAGOYA	10.13	200.8	2	21A	0	4	22	10			5	15
HIKONE	10.23	204.1	2	24	1							
HAMAMATU	10.39	196.8	2	22	-3	4	56	38				
OMAESAKI	10.41	194.4	2	24	-1							
TOYOOKA	10.46	210.7	2	26	0						4	38
KAMEYAMA	10.57	202.4	2	30	3						3	12
KYOTO	10.62	205.8	2	27	-1	4	16	-7				
TOTTORI	10.72	213.1	2	29	0							
ABUYAMA	10.81	206.2	2	30A	0							
NARA	10.91	204.7	2	32	1							
YONAGO	11.13	216.0	2	35	1							
OWASE	11.37	202.2	2	37	0							

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CHANGCHUN	11.53	271.1	2	39K	0	4	46	2			
HIMEJI	11.54	209.9	2	33	-6						
HATIDYOZIMA	11.69	186.4	2	39	-2	4	40	-8			
TAKAMATU	11.83	210.8	2	41	-2	4	58	7			
TOKUSIMA	11.87	208.4	2	44	1						
HAMADA	12.13	219.0				5	19	21		3	10
KOTI	12.71	211.1	2	52	-2	5	8	-2			
ASHIZURI	13.65	211.2	3	13	8	5	39	8			
OOTA	13.75	216.6	3	8	2	5	30	-4			
HUKUOKA	14.00	221.0	3	10	1	5	41	2			
PETROPVLOVK	14.05	47.8	3	8A	-2	5	41	1			
SAGA	14.32	220.5	3	25	12	6	16	30			
KUMAMOTO	14.50	218.4	3	15	0	5	53	3			
KAGOSIMA	15.63	216.4	3	13	-16	6	21	6			
MAGADAN	15.90	17.8	3	30A	-2	6	21	0			
YAKUTSK	18.59	342.7	3	59A	-2						
PEKING	19.15	264.6	4	6K	0	7	27	2		5	19 *SP
ZO-SE	20.87	236.1	4	26K	3	7	59	3	5	6	
MAWASHI	21.50	215.3									8 13
NANKING	21.66	241.9	4	32	1	8	15	5	5	16	
PAOTOW	23.32	270.8	4	49K	2	8	45	7			10 8 *SS
ULAN-BATOR	23.87	290.0	4	51K	-1	8	48	1			
IRKUTSK	25.43	300.5	5	5K	-1						10 49 *SS
SIAN	26.96	258.4	5	20K	0				6	9	
TIKSI	27.63	351.5	5	24A	-2	9	43	-5			6 30
LANCHOW	29.64	266.1	5	45K	1	10	20	0			11 48 *SS
ESEN BULAK	31.29	289.3	5	49K	-10	10	32	-13			
CANTON	31.46	235.9	6	2K	2	10	50	2			
CHENG TU	32.41	257.2	6	8K	0	11	1	-2			
BAGUIO CITY	33.22	218.4				11	16	1			7 31
KUNMING	36.77	250.9	6	47K	2	12	10	0			
SEMIPALATNSK	40.58	300.5	7	16K	-1	13	2	-4			
LHASA	42.14	266.6	7	31K	2	13	32	3			9 17 PP
NHATRANG	42.48	230.3	7	33	1						
COLLEGE	42.76	36.5	7	33	-1				8	26	
SHILLONG	44.00	261.2	7	42K	-2						
KHEYS	45.11	346.7	7	53A	0				9	0	9 54 PP
CHITTAGONG	46.08	257.8	8	2	1	14	29	3			
CHATRA	46.55	266.3	8	5K	1	14	34	2			
MOULD BAY	49.20	18.2	8	22A	-3	15	6	-3			13 14
SVERDLOVSK	49.51	314.5	8	25A	-2						
SITKA	50.75	44.5	8	38	2						
DEHRA DUN	51.00	276.3	8	39K	1						
TASHKENT	51.19	293.1	8	40K	1	15	38	1			
KHOROG	51.63	287.8	8	44K	1	15	46	3			
ALERT	52.45	3.8	8	46A	-3						
NORD	53.36	356.1									14 52
RESOLUTE	55.18	15.6	9	6A	-3						
MEDAN	55.49	235.2									19 11
APATITY	55.70	333.7	9	9K	-3	16	32	-5	10	7	18 31 SCS
KEVO	56.25	337.6	9	15A	-1	16	38	-6			11 20 PP
YELLOWKNIFE	57.25	32.4	9	22A	-1						
THULE	57.63	8.0	9	26	0						
PORT HARDY	57.83	48.7	9	27A	0						
SODANKYLA	57.89	335.5	9	26K	-2	17	2	-4	10	26	10 15 PCP
TROMSOE	58.44	339.7	9	30	-1						
QUETTA	58.87	283.0	9	34	0	17	19	1			
KIRUNA	59.33	337.8	9	36K	-2	17	20	-4			10 22 PCP
TANGERANG	59.50	221.1	9	40	1						12 0 PP
LEMBANG	59.62	219.7	9	37K	-3						
KAJAANI	59.69	332.2	9	38	-2	17	24	-5			
ASHKABAD	60.11	295.2	9	42	-1	17	36	2			
MADRAS	60.54	258.7	9	44	-2						12 1
MOSCOW	61.12	321.1	9	47	-3	17	43	-4	10	45	12 4 PP
POONA	61.28	268.1	9	51K	0						
PULKOVO	61.59	327.5	9	51K	-2	17	48	-5			10 31 PCP
BOMBAY	61.78	269.1	9	53	-1						
UMEA	62.26	334.6	9	55K	-2	17	56	-5			10 33 PCP
SEATTLE	62.39	49.3	10	4	6						
PENTICTON	62.79	46.6	10	0A	-1						
NURMIJARVI	63.17	330.3	10	1	-2	18	6	-7			10 37 PCP
HELSINKI	63.30	329.9	10	2A	-2						10 37 PCP
SKALSTUGAN	64.75	337.4	10	11K	-2						12 26 PP
TEHERAN	65.89	297.0	10	21	0	18	49	3			
UPPSALA	66.05	332.6	10	20K	-2	18	42	-6	11	22	10 49 PCP
TIFLIS	66.15	305.6	10	24	2	18	52	3			
HUNGRY HORSE	66.26	44.8	10	23	0						
SHASTA	66.64	55.4	10	26A	1						

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GORIS	66.65	302.9	10 26K	1	18 58	3			
BLUE MTS.	66.84	49.3	10 27A	0	19 1	4	11 25	12 55	PP
MINERAL	67.33	55.3	10 17A	-13					
CALISTOGA	67.84	57.2	10 33A	0					
BERKELEY	68.53	57.7	10 37K	0					
BUTTE	68.56	46.0	10 37	0			11 39	12 56	PP
KONGSBERG	68.68	336.0	10 38	0	19 17	-2	11 33	11 30	PCP
SHIRAZ	69.02	291.2	10 40K	0	19 22	-1	10 56	13 19	PP
LICK	69.25	57.8	10 42A	1					
GOTEBORG	69.56	333.7	10 42K	-1					
BOZEMAN	69.57	45.5	10 43	0					
KARLSKRONA	69.60	331.0	10 38K	-5					
SIMFEROPOL	69.87	313.7	10 45K	0	19 33	0			
WARSAW	70.62	325.7	10 50	0					
PRIEST	70.63	58.2	10 51A	1					
COPENHAGEN	71.05	332.2	10 52A	0	19 46	0			
EUREKA	71.15	52.9	10 54	1	19 45	-2	11 53	13 27	PP
LWOW	71.17	322.6	10 52	-1	19 48	0			
DUGWAY	72.42	50.6	11 1	1					
KRAKOW	72.73	324.8	11 3	1	20 5	0			
UZHGOROD	72.82	322.6	11 3	0					
RACIBORZ	73.41	325.7	11 6	0				11 21	PCP
PASADENA	73.48	58.3	11 7	0			12 8		
FLAMING GRGE	73.76	48.2	11 8	0			12 34		
PRICE	73.93	49.9	11 11	2					
UINTA BASIN	74.10	48.7	11 11A	1	20 22	2	12 12	13 31	PP
BOULDER CITY	74.21	54.9	11 12	1			12 13		
COLLMBERG	74.42	329.3	11 11K	-1	20 22	-2			
RAPID CITY	74.60	42.5	11 13	0					
HALLE	74.64	329.9	11 12	-1	20 25	-1			
PRUHONICE	74.92	327.6	11 16	1	20 30	1			
JENA	75.24	329.8	11 16	-1	20 31	-2		14 28	
ISTANBUL UN.	75.29	313.7	11 17A	0					
BRATISLAVA	75.36	325.1	11 18K	1				13 46	
GLEN CANYON	75.37	52.3	11 18	1			12 18		
LARAMIE	75.47	45.7	11 19	1					
VIENNA-H.	75.59	325.6	11 20	1					
MUNSTER	75.73	332.5	11 21	2					
KASPERSKE H.	75.98	327.6	11 21K	0				11 43	
KSARA	76.67	304.5	11 26K	1	20 52	3		14 19	PP
BENSBERG	76.74	332.2	11 25K	0				20 48	
GOLDEN	76.76	46.7	11 26	1					
SOFIA	76.86	318.1	11 27	1	20 50	-1		12 3	*SS
STUTTGART	77.87	329.8	11 32	1					
SCHIEFFERVILLE	77.97	16.2	11 31	-1					
DOURBES	78.32	333.2	11 39	5	21 9	3			
JERUSALEM	78.51	303.4	11 34K	-1					
STRASBOURG	78.56	330.6	11 35	0				12 5	
KEW	78.59	336.7	11 35	0	21 8	-1			
RIVERVIEW	78.71	171.7	11 53	17					
TUCSON	79.18	55.2	11 39	1			12 40	14 38	PP
WELSCHBRUCH	79.20	331.3	11 37	-1					
ALBUQUERQUE	79.70	50.6	11 42	1			12 47		
MUNDARING	79.71	201.5	11 42	1					
ATHENS	80.29	314.7	11 44A	0					
BESANCON	80.32	330.9	11 44	0					
FOLINIERE	81.06	335.5	11 48	0					
ROSELEND	81.44	329.8	11 51	1					
TOOLANGI	82.02	176.7	11 55	2					
LAWRENCE	82.33	41.0	11 55	0					
SEPT ILES	82.41	17.6	11 55K	0					
ISOLA	82.58	328.7	11 56	0					
MONACO	82.82	328.2	11 58	1					
WICHITA MTS.	84.05	45.8	12 4	1	22 3	-1	13 7	15 23	PP
SHAWINIGAN	84.23	22.9	12 4	0					
OTTAWA	84.42	25.3	12 5	0					
TULSA	84.51	43.2	12 6A	0	22 2	-7		13 9	*SP
BREBEUF	84.95	23.9	12 8K	0					
FAYETTEVILLE	85.14	42.1	12 9	0					
CLEVELAND	85.96	30.8	12 14A	1	22 15	-8			
MORGANTOWN	88.16	30.7	12 25K	2				13 27	
PALISADES	88.96	25.9	12 28	1	22 25	-26	13 45		
CUMBERLAND	89.45	36.5	12 30	1	22 33	-22	13 31	24 4	SP
BLACKSBURG	90.11	32.1	12 34	2					
LWIRO	107.48	284.6	18 23	777					
CHILEKA	112.44	269.9	18 8	2					
LA PAZ	142.49	50.8	19 6	3					
N-LAZARVSKYA	144.31	206.0	19 6	0				20 11	

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COLLMBERG	42.41	309.3	7 51	6					9 42 PP
HALLE	43.06	309.6	7 41	-9					9 49 PP
TROMSOE	43.14	336.8	7 56	5					
GOTEBORG	43.18	318.7	7 40	-11					7 52
JENA	43.32	308.8	7 54	2			8 24		10 39 PPP
SKALSTUGAN	43.84	327.2	7 57A	1					
KONGSBERG	44.56	321.3	8 2	0				8 32	
KHEYS	44.91	357.4	8 7	2	14 44	11			10 45
STUTTGART	44.98	305.9	8 8	3					
YAKUTSK	45.17	35.3	8 4K	-3	14 38	1			
TIKSI	46.72	22.1	8 17	-2	15 7	8			8 48
ROSELEND	47.25	302.0	8 25	2					8 57 *SP
ISOLA	47.28	299.9	8 26	2					8 58
BAGUID CITY	49.39	99.4	8 51	11					
FOLINIERE	51.34	307.4	8 55	0					
LWIRO	53.61	233.7							10 17 PCP
MATUSIRO	54.42	67.5	9 12	-5	17 12	27			
TOLEDO	56.43	297.8	9 32A	0			10 4		
ALERT	59.37	353.4	9 53	1					
CHILEKA	60.81	218.4	9 58	-4					
BROKEN HILL	63.31	225.1	10 3	-16					
MOULD BAY	67.87	2.2	10 47A	-1					
COLLEGE	75.31	15.4	11 30	-2					12 13
YELLOWKNIFE	81.77	1.8	12 6	-1					
SCHEFFERVILLE	81.96	336.1	12 8	0					
CHARTERS TS.	91.62	113.6	12 50	-5					
PENTICTON	94.65	5.8	13 9	0					
BLUE MTS.	99.27	4.7					14 9		17 29 PP
UINTA BASIN	104.01	359.1							18 35 PP
EUREKA	104.70	4.2	18 17	263					
CUMBERLAND	104.99	339.0					14 41		
WICHITA MTS.	108.71	349.5							19 7 PP
SOUTH POLE	125.85	180.0	18 45	-3					

APRIL 2 16.H 18.M 57.S EPICENTRE 53.14-171.71 DEPTH= 157.KM

A=-0.59615 B=-0.08690 C= 0.79815 D=-0.1442 E= 0.9895
G=-0.7898 H=-0.1151 K=-0.6025 HT= -6.6

DEPTH OF FOCUS= 0.020R

SE= 2.15

	DELTA DEG.	AZ. DEG.	P		O-C S	S O-C			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
COLLEGE	16.87	36.6	3 47K	-1	6 49	0					18 2 PCP	
PETROPAVLOVK	17.76	281.5	4 0A	2								
SITKA	21.02	64.7	4 33	1	8 21	9						
MAGADAN	21.51	302.3	4 40K	3	8 32	11						
PORT HARDY	27.04	77.1	5 30K	1								
ALBERNI	29.22	78.4	5 49K	0								
Y.-SAKHLINSK	29.47	276.7	5 50A	-1								
MOULD BAY	30.34	22.1	5 59K	0	10 49	3					8 54	
VICTORIA	30.38	79.0	6 0K	1								
YELLOWKNIFE	30.81	49.6	6 3K	0								
TIKSI	31.34	328.3	6 8	0	11 4	2						
SEATTLE	31.45	79.8	6 15	6							12 29	
YAKUTSK	31.57	309.8	6 9	-1								
PENTICTON	32.24	75.4	6 16K	0								
KIPAPA	33.36	156.4	6 25	0								
HONOLULU	33.46	156.6	6 26	0	11 39	4						
BANFF	33.77	70.2	6 28K	-1								
SHASTA	35.21	90.4	6 41K	0								
UKIAH	35.69	93.2	6 46	1				7 19			9 10 PCP	
BLUE MTS.	35.86	80.9	6 47K	1	12 13	1		7 18			9 10 PCP	
MINERAL	35.90	90.3	6 47K	0								
HUNGRY HORSE	35.95	73.8	6 47	0	12 19	6		7 20			9 11 PCP	
RESOLUTE	36.29	25.9	6 41	-9								
CALISTOGA	36.38	93.3	6 51K	0								
BERKELEY	37.07	94.0	6 57K	1	12 33	3		7 30			9 14 PP	
LICK	37.79	94.2	7 3K	0								
BUTTE	38.02	76.2	7 4	0	13 15	30		7 38			9 16 PCP	
MATUSIRO	38.33	264.9	7 7K	0								
BOZEMAN	39.10	75.7	7 14	1				7 47			9 16 PCP	
PRIEST	39.17	94.8	7 15K	1								
ALERT	40.10	11.1	7 23K	1	12 57	-19						

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ABUYAMA	41.04	265.2	7 30K	1							
SALT LAKE C.	41.50	82.4	7 34	1	13 38	2	8 7	9 28	PCP		
CHANGCHUN	41.51	283.4	7 33K	0							
PASADENA	42.02	94.9	7 37	0	13 45	1	8 11	9 29	PCP		
BOULDER CITY	42.79	90.1	7 45	1	13 58	3	8 19	9 32	PCP		
FLAMING GRGE	42.87	80.5	7 44	0	13 10	-46	8 18	10 8			
UINTA BASIN	43.14	81.3	7 47K	1	14 1	1	8 21	9 34	PCP		
KHEYS	43.66	349.5	7 51K	0	14 8	0					
GLEN CANYON	44.08	86.5	7 54	0				9 36	PCP		
RAPID CITY	44.57	72.9	7 58	0				9 38	PCP		
NORD	44.83	5.0	8 1	1							
GOLDEN	46.02	79.1	8 10	1				14 42			
TUCSON	47.76	90.7	8 23	0	15 8	2	8 57				
IRKUTSK	48.05	304.7	8 24K	-1							
ALBUQUERQUE	48.52	84.7	8 28	-1							
SOCORRO	48.83	85.9	8 32	1							
PEKING	49.21	285.1	8 34K	0	15 27	1		16 29	*SS		
ULAN-BATOR	49.36	298.8	8 36	1	15 46	18					
GODHAVN	49.88	24.3	8 39K	0	15 29	-7					
ZO-SE	52.32	273.1	8 58K	0							
PAOTOW	52.37	289.7	8 58K	0	16 14	4		17 16	*SS		
LAWRENCE	52.42	73.0	8 57	-1							
MADISON	52.58	65.4	8 58	-1	16 9	-3	9 32	10 7	PCP		
NANKING	53.08	275.8	9 2K	-1							
WICHITA MTS.	53.37	79.2	9 5	0	16 25	2	9 37	10 9	PCP		
TULSA	54.19	76.2	9 10K	-1	16 33	-1					
SCORESBY SD.	54.78	12.0	9 15	-1							
FAYETTEVILLE	55.00	74.9	9 15K	-2							
ST. LOUIS 1	55.51	70.0	9 19	-2				16 52			
ESEN BULAK	55.86	303.3	9 23	0			9 32				
SCHIEFFERVILLE	55.87	42.5	9 22K	-1							
KEVO	56.65	352.3	9 28K	-1	17 8	1	10 8	39 24	PKPPKP		
TROMSOE	57.30	355.6	9 33	0			10 13				
SIAN	57.37	284.8	9 34K	0							
LONDON ONT.	57.40	60.5	9 33K	-1							
APATITY	58.17	348.9	9 38K	-2	17 29	2	10 18	23 59	SSS		
KIRUNA	59.01	354.7	9 45K	0			10 24	39 17	PKPPKP		
LANCHOW	59.02	289.8	9 46K	0	17 39	1					
SODANKYLA	59.03	351.8	9 45K	-1	17 40	2	10 24	39 9	PKPPKP		
SHAWINIGAN	59.14	52.6	9 44K	-2							
SEPT ILES	59.39	46.1	9 46K	-2							
BREBEUF	59.48	53.9	9 46A	-3				14 19	SCP		
CUMBERLAND	60.30	69.4	9 52K	-2	17 46	-8	10 27	39 18	PKPPKP		
MORGANTOWN	60.48	62.5	9 54K	-1							
REYKJAVIK	60.74	14.6	9 57K	0			10 37				
BLACKSBURG	61.98	64.7	10 5	-1							
KAJAANI	62.15	350.5	10 5	-2	18 19	2	10 45	39 1	PKPPKP		
SVERDLOVSK	62.33	330.6	10 7A	-1	18 21	1					
GEORGETOWN	62.54	61.2	10 8	-1							
PALISADES	62.62	57.6	10 8K	-2	18 25	2	10 46	19 44	SCS		
CHENG TU	62.83	285.5	10 11K	0				11 4	*SP		
CANTON	62.92	272.8	10 12K	0	18 28	1					
UMEA	63.01	354.1	10 11K	-1	18 30	2	10 51	39 2	PKPPKP		
SKALSTUGAN	63.58	358.0	10 15K	-1			10 55				
CHAPEL HILL	63.67	64.8	10 16	-1				10 51			
BAGUIO CITY	63.67	262.2	10 15	-2							
COLUMBIA	64.00	67.6	10 18	-1							
RABAU	64.71	220.6	10 21	-2							
MANILA	64.74	260.6	10 24	0							
HALIFAX	64.85	48.6	10 24K	0							
VIBORG	65.31	349.1	10 26K	-1			10 45				
NURMIJARVI	65.95	351.2	10 30K	-1	19 5	1	11 12	38 54	PKPPKP		
PULKOVO	66.06	348.0	10 31K	-1			11 6				
HELSINKI	66.25	351.0	10 33K	0			11 14				
AFIAMALU	66.77	180.1	10 35	-2							
BERGEN	66.79	1.6	10 36	-1							
UPPSALA	67.11	354.9	10 37K	-2	19 18	0	11 18	38 50	PKPPKP		
ALMATA	67.36	312.5	10 39K	-1							
KUNMING	67.71	282.4	10 43K	1	19 27	2					
MOSCOW	68.83	342.7	10 48K	-1	19 34	-5					
GOTEBORG	69.48	357.9	10 53K	0			11 34	38 52	PKPPKP		
KARLSKRONA	70.90	355.7	11 1K	-1			11 43	38 50	PKPPKP		
LHASA	70.94	294.0	11 4K	2							
ANDIJAN	71.40	313.9	11 6K	1							
PORT MORESBY	71.45	223.2	11 5K	0							
COPENHAGEN	71.49	357.5	11 5K	0	20 13	3					
DURHAM	72.15	6.0	11 1	-8							
TASHKENT	72.25	316.2	11 10A	0	20 21	3					
SHILLONG	73.64	290.7	11 14K	-4							

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WITTEVEEN	74.40	1.0	11 24K	2				12 5
WARSAW	74.46	351.9	11 22	-1				12 2
DUZHANBE	74.76	315.0	11 35K	11				
CHATRA	75.26	295.0	11 28K	1				
MUNSTER	75.26	0.4	11 29	2				
KEM	75.51	5.6	11 29	0	20 55	1	12 11	
HALLE	75.69	357.6	11 30	0			12 12	
COLLMBERG	75.86	357.0	11 31	0			14 27	
JENA	76.27	357.9	11 42	9	21 3	0	11 59	14 24 PP
BENSBERG	76.27	0.7	11 33K	0			12 14	
CHORZOW	76.55	353.0	11 34	0				12 26
KRAKOW	76.72	352.3	11 35	0				12 45
RACIBORZ	76.82	353.5	11 36	0				14 36 PP
DOURBES	77.09	2.4	11 40	3	21 18	6		
PRUHONICE	77.12	355.9	11 38	0	21 14	2		
DEHRA DUN	77.25	303.7	11 49K	11				12 29
WARSAK DAM	77.35	310.5	11 38	-1				
HEIDELBERG	77.84	359.7	11 32	-10			12 24	
UZHGOROD	77.91	350.5	11 41	-1				
KASPERSKE H.	78.01	356.5	11 43K	1			12 21	
LAHORE	78.07	307.1	11 43	0				
FOLINIERE	78.19	5.9	11 43	0				12 24
BOKARO	78.39	294.1	12 45	60				
STUTTART	78.46	359.3	11 45K	0			12 27	14 9
STRASBOURG	78.66	0.4	11 47	1				12 35
TUBINGEN	78.71	359.5	11 47K	1			12 29	
VIENNA-H.	78.75	354.5	11 47	1			12 29	
WELSCHBRUCH	78.81	1.3	11 48	1				13 23
EBINGEN	79.06	359.5	11 49	1			12 31	
RAVENSBURG	79.45	359.1	11 51K	1			12 33	
ASHKABAD	79.46	321.9	11 51	1				
SIMFEROPOL	79.81	341.7	11 52K	0				
BESANCON	79.97	1.6	11 53	0				13 15
TIFLIS	80.41	333.1	11 56	1				
BAKURIANI	80.74	334.1	11 58K	1				
KIROVOBAD	80.97	331.7	11 59	1			12 54	
LJUBLJANA	81.05	355.6	11 59	0			12 40	
CLERMONT-FD.	81.37	3.7	12 3	3				
TRIESTE	81.48	356.1	12 2	1			12 43	
CHARTERS TS.	81.49	219.5	12 0	-1				23 5
ROSELEND	81.54	1.2	12 3	2				12 45
PADOVA	81.78	357.5	12 6	3	21 53	-8	12 44	14 54 PP
BELGRADE	81.86	351.3						12 45 PCP
GORIS	82.04	331.2	12 5K	1				
QUETTA	82.65	311.8	12 7K	0	22 12	2		
ISOLA	83.05	0.9	12 10	1				22 52
FLORENCE X.	83.43	357.8					12 43	
MONACO	83.51	0.6	12 11	0				12 54
TEHERAN	83.90	326.0	12 15A	2	22 31	9	12 53	15 15 *PPP
BAGNERES	83.91	6.0	12 13	0				12 59
PORT BLAIR	84.08	281.4	12 13	-1				
SAN JUAN	84.47	66.8	12 17	1	22 35	7	12 53	22 57
GALERAZAMBA	85.30	78.4			22 44	8		
TOLEDO	86.74	9.5	12 28K	1	22 37	-12	13 8	28 29 SS
MEDAN	86.93	271.8	12 28K	0				
ANTIGUA	87.82	64.1	12 34	2				
ATHENS	88.28	347.9	12 34	-1				13 17
ST. CLAUDE	88.81	64.7	12 38	1	22 51	-18		
SHIRAZ	89.02	322.6	12 38K	0			13 20	13 57 PP
CHINCHINA	89.71	82.2	12 43K	2	22 57	-20		23 22 5
LEMBANG	89.85	258.5	12 40K	-2			13 15	16 7 PP
TANGERANG	89.91	259.7	12 41K	-1			13 24	16 17 PP
KSARA	90.14	337.3	12 42	-1	23 21	0	13 24	16 22 PP
FORT FRANCE	90.17	65.0	12 44	0	23 24	3		
CARACAS	90.38	72.0	12 47K	2	23 1	-22		
BOGOTA	90.91	81.1	12 48K	1	23 6	-22		23 29 5
JERUSALEM	92.24	337.3	12 53	0			13 35	
RIVERVIEW	92.44	210.2	12 55K	1			13 34	24 56 *SS
AVERROES	92.84	13.1						16 40 PP
TRINIDAD	93.38	67.4	12 57	-1				
CANBERRA	94.48	211.3	13 4A	1				
BENI ABBES	96.59	9.1	13 13	0				17 46 PP
TOOLANGI	97.66	213.0	13 17	-1				17 17 PP
LA PAZ	111.16	89.4	18 18	3				
LWIRO	126.51	334.2	18 47A	3			19 29	20 39 PP
CHILEKA	137.13	320.5	18 55	-9				22 24
BROKEN HILL	138.22	329.9	19 4	-2				22 28
BANDEIRA	141.64	352.2	19 14	1			19 56	
SOUTH POLE	142.95	180.0	19 10	-5				

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ARGENTINE I.	143.13	138.0	19 13	-2
BULAWAYO	143.52	326.7	19 13K	-3
CHANGALANE	147.79	317.0	19 23A	0
MAWSON	150.58	219.5	19 27A	0
KIMBERLEY	152.77	327.0	19 32K	1
N-LAZARVSKYA	162.23	183.8	19 40K	-2

APRIL 3 14.H 47.M 58.S EPICENTRE -52.13-131.47 DEPTH= 0.KM

A=-0.40822 B=-0.46187 C=-0.78742 D=-0.7493 E= 0.6623
G= 0.5215 H= 0.5900 K=-0.6164 HT= -6.2

SE= 5.68

	DELTA DEG.	AZ. DEG.	P		O-C S	S			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
CAPE HALLETT	31.93	209.5	6	14	-16							
WELLINGTON	37.61	264.9				13	34	25			8	58 PP
SOUTH POLE	38.06	180.0	7	46	24							
CHATEAU	38.37	268.2	7	33	8							
ROXBURGH	38.59	255.7	7	31	4	13	44	20				
KARAPIRO	39.16	269.8	7	39	7							
AFIAMALU	49.87	304.8	9	12	15	16	52	45				
SAVANNAH	53.73	246.6	9	23	-4							
TARRALEAH	53.77	245.6	9	22	-5							
ANTOFAGASTA	53.97	82.7				16	32	-31				
RIVERVIEW	56.74	256.3	9	48	0	17	52	12			18	9 PS
MIRNY	56.94	199.5	9	24	-26							
CANBERRA	56.99	253.5	9	48	-2	17	47	3				
TOOLANGI	57.49	249.3	9	50	-4	17	56	6				
HUANCAYO	60.05	69.7	10	3	-9							
BRISBANE	60.31	262.7	10	15	2	18	42	15				
LA PAZ	60.82	79.1	9	59	-18	18	22	-12				
ADELAIDE	63.19	246.9	10	30A	-3	18	32	-32				
CHARTERS TS.	69.71	263.2	11	14	0	20	30	7				
CHINCHINA	73.92	59.1	11	30	-9	21	10	-1			21	33 SKS
BOGOTA	74.45	60.7	11	34	-8							
PORT MORESBY	77.35	271.0	11	53	-6							
MUNDARING	77.53	233.6	11	39	-21	21	41	-10				
RABAU	78.33	278.2	11	58	-6							
CARACAS	83.22	63.4	12	19	-11	22	35	-15				
TUCSON	85.95	17.4	12	46	2							
TRINIDAD	86.45	67.8	12	38	-8	23	12	-10			28	24
PASADENA	86.70	11.0	12	53	6	23	46	22			23	26 SKS
TONTO FOREST	87.86	16.6	12	57	4				13	4	16	33 PP
PRIEST	88.41	8.7	13	2A	6							
BOULDER CITY	88.94	13.4	13	3	5							
LICK	89.51	7.8	13	8K	7							
BERKELEY	89.99	7.3	13	27	24	24	20	25				
CALISTOGA	90.73	7.0	13	5K	-2							
WICHITA MTS.	91.15	26.6	13	9	-1	24	22	17			30	46 SS
EUREKA	92.23	11.9	13	19	6							
TULSA	93.06	28.3				24	37	15			30	52 SS
UINTA BASIN	94.03	16.6	13	26A	4	24	50	20			31	37 SS
CUMBERLAND	96.12	36.1				25	0	52			31	24 SS
BLUE MTS.	97.37	10.1				25	24	70			32	14 SS
CHANGALANE	100.61	165.1	13	26	-26							
LEMBANG	102.79	240.9									15	33
TANGERANG	103.87	240.4									15	37
YELLOWKNIFE	115.05	8.6	18	41	-3							
TUKUBASAN	116.72	295.2									30	1 SP
COLLEGE	117.35	352.2	18	44	-4							
MATUSIRO	118.00	294.2	18	45	-4	26	2	18				
LWIRO	123.30	156.2	19	6	6	25	48	-13			20	3 PP
MOULD BAY	128.33	3.7	18	56	-13							
MADRAS	133.43	224.8									22	38
CHATRA	141.60	243.9	19	24	-10							
BOMBAY	141.76	219.0									23	4
TOLEDO	142.29	87.6	19	41	6						22	32 PP
SCORESBY SD.	144.18	32.8	19	30	-8							
NORD	144.77	13.4	19	36	-3							
DEHRA DUN	149.24	236.4	19	41	-6							
CLERMONT-FD.	149.91	83.9	19	42	-6							
DURHAM	150.55	64.7	19	43	-6							
ISOLA	151.54	89.6	19	43	-7						23	38
DOURBES	152.66	76.6	19	50	-2	26	56	-2				

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MESSINA	153.17	108.2				20 17	PKP2
ROME	153.63	98.4				20 12	PKP2
FLORENCE X.	153.92	93.8				18 7	PKP2
QUETTA	154.19	218.9	19 43	-11		28 28	PP
BENSBERG	154.50	76.1	19 35	-19		22 17	
STUTTGART	155.00	82.0	19 50	-5			
PADOVA	155.13	91.0				21 2	PKP2
WARSAK DAM	155.45	231.4	19 45	-11			
TRIESTE	156.40	92.1				20 7	
JENA	157.14	78.3	19 47	-11			
SHIRAZ	157.34	189.1	19 49	-9		28 58	
JERUSALEM	157.45	149.3	19 45	-13			
HALLE	157.53	77.0	19 49	-9		25 20	
KASPERSCHE H.	157.76	83.8	19 48	-11		20 5	
COLLMBERG	158.10	78.0	19 48K	-11		20 50	
PRUHONICE	158.64	82.2	19 49	-11		43 57	SS
KSARA	159.55	148.6	19 52	-9		23 27	PKS
KEVO	159.68	21.6				44 32	SS
UMEA	161.17	40.6				20 40	
TEHERAN	163.49	188.2	19 52	-13		20 21	PKP2
NURMIJARVI	164.41	48.1	19 54	-12		24 37	PP

APRIL 3 15.H 54.M 57.S EPICENTRE 61.57-147.05 DEPTH= 117.KM

A=-0.40157 B=-0.26023 C= 0.87808 D=-0.5438 E= 0.8392
G=-0.7369 H=-0.4775 K=-0.4785 HT= -9.4

DEPTH OF FOCUS= 0.013R

SE= 3.18

	DELTA DEG.	AZ. DEG.	P		O-C S	S O-C			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
COLLEGE	3.33	354.4	0	52	0							
YELLOWKNIFF	15.16	72.3	3	29A	0							
MOULD BAY	17.45	21.8	4	0A	2							
PENTICTON	19.63	116.2	4	19	-3							
SEATTLE	19.82	123.4	4	32A	8						11	3
RESOLUTE	22.40	33.4	4	54	4							
HUNGRY HORSE	22.81	110.3	4	55	1				5	7		
BLUE MTS.	24.12	120.3	5	6K	0				5	19		
BUTTE	25.23	112.2	5	17	0							
SHASTA	25.71	133.0	5	19A	-2							
ALERT	28.80	15.8	5	54	5							
EUREKA	29.17	124.9	5	52	-1						6	39
SALT LAKE C.	29.76	118.1	5	57	-1							
UINTA BASIN	31.10	115.7	6	10	0				6	23	9	2
LARAMIE	32.06	109.9	6	18	0							
BOULDER CITY	32.66	126.7	6	23	0				6	35		
PASADENA	33.06	132.7	6	25	-2							
TONTO FOREST	35.53	123.6	6	48	0						8	3
GODHAVN	35.91	37.3	6	59	8							
ALBUQUERQUE	36.94	117.2	7	0	0							
TUCSON	37.50	124.7	7	4	0							
LAWRENCE	38.68	101.4	7	15	1							
SCHEFFERVILLE	40.28	61.9	7	31	4							
WICHITA MTS.	40.61	108.7	7	31	1						9	30
TULSA	40.90	104.7	7	33K	0							
FAYETTEVILLE	41.50	103.0	7	37K	0							
SEPT ILES	43.73	66.5	7	58A	2							
BREBEUF	43.93	76.3	7	56	-1							
CUMBERLAND	45.98	95.1	8	14	1						9	49
BLACKSBURG	47.14	89.2	8	24	1							
KEVO	48.89	2.7	8	48	12							
KIRUNA	50.57	6.1	8	52	3							
SODANKYLA	51.27	3.1	8	58K	4							
MATUSIRO	51.54	277.2	8	56	0							
SKALSTUGAN	54.20	11.2	9	35	19							
UMEA	54.56	6.9	9	21	2							
KAJAANI	54.60	2.8	9	20	1							
NURMIJARVI	56.08	4.8	9	46	2							
UPPSALA	58.33	9.0	9	42	-3							
GOTEBORG	59.94	12.8	9	59	2							
COLLMBERG	66.35	13.5	10	41	2							
FOLINIERE	66.78	23.4	10	18	-23						13	22
PRUHONICE	67.83	12.7	10	51	3							
KASPERSCHE H.	68.56	13.5	10	56	4							

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UMEA	132.19	348.7	18	9 -6	20 51 SKP
CHILEKA	132.95	227.0			20 55 PP
SKALSTUGAN	133.61	353.2	18	5 -12	20 56 SKP
BULAWAYO	133.70	216.7			20 58 PP
NURMIJARVI	134.13	344.1	18	6 -12	20 58 SKP
UPPSALA	136.34	348.1			21 4 SKP
BROKEN HILL	138.17	221.7			21 12 PP
GOTEBORG	139.35	351.1	18	30 2	
DURHAM	143.02	2.7	18	26K -9	
LWOW	143.14	335.2	18	34 -1	
WITTEVEEN	144.78	354.2	18	39A 1	
COLLMBERG	145.27	347.0	18	40 1	21 28
MUNSTER	145.51	353.0	18	41 2	
PRAGUE	146.08	344.7	18	43A 3	
PRUMONICE	146.13	344.5	18	42 2	
LWIRO	146.29	236.5	18	44K 4	
BENSBERG	146.56	353.1	18	44A 3	21 3
KASPERSCHE H.	147.16	344.9	18	41 0	19 7
VIENNA-H.	147.19	341.2	18	46 5	
DOURBES	147.65	355.9	18	50 8	
STUTTGART	148.40	349.8	18	49A 6	
STRASBOURG	148.82	351.6	18	50 6	
WELSCHBRUCH	149.17	353.3	18	50 6	
LJUBLJANA	149.72	341.4	18	51A 6	
ROSELEND	151.81	351.9	19	1 13	

APRIL 6 11.H 19.M 18.S EPICENTRE 63.43-149.72 DEPTH= 14.KM

A=-0.38828 B=-0.22675 C= 0.89321 D=-0.5043 E= 0.8635
G=-0.7713 H=-0.4504 K=-0.4496 HT=-10.0

SE= 1.81

	DELTA DEG.	AZ. DEG.	P		O-C S	S O-C			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
COLLEGE	1.66	29.1	0	33	3	0	54	3				
SITKA	9.58	125.3	2	20	-1	5	3	53				
COPPERMINE	14.81	57.6	3	28K	-3							
YELLOWKNIFE	15.87	77.6	3	45	0							
MOULD BAY	16.24	25.7	3	50K	0							
PORT HARDY	17.42	126.6	4	7	2							
VICTORIA	20.74	123.7	4	43	0							
PENTICTON	21.57	116.8	4	52A	0							
RESOLUTE	21.57	36.2	4	52A	0							
BANFF	21.85	108.1	4	53	-2							
SEATTLE	21.88	123.3	4	35	-20						5	6 PP
HUNGRY HORSE	24.63	110.9	5	22	0							
BLUE MTS.	26.13	120.0	5	36A	0	10	29	24			6	28 PP
BUTTE	27.08	112.4	5	45	0						6	34 PP
ALERT	27.35	16.6	5	49A	2							
MAGADAN	27.75	289.6	5	50	-1							
SHASTA	27.88	131.7	5	52K	0							
BOZEMAN	27.99	111.0	5	54	1							
MINERAL	28.46	130.9	5	57A	0							
CALISTOGA	29.68	133.8	6	9K	1							
TIKSI	29.73	320.8	6	9K	0	11	6	3				
BERKELEY	30.48	134.0	6	16K	1						11	30
LICK	31.17	133.5	6	22A	1							
EUREKA	31.24	124.0	6	23	1						9	16 PCP
SALT LAKE C.	31.72	117.5	6	26	0							
FLAMING GRGE	32.58	114.4	6	35	1						9	20 PCP
PRIEST	32.58	133.1	6	35A	1							
RAPID CITY	32.63	104.1	6	35	1							
UINTA BASIN	33.02	115.2	6	39A	2	12	16	21			8	4 PP
MORD	33.03	11.4	6	38	0							
PRICE	33.12	117.4	6	41	3							
LARAMIE	33.85	109.6	6	50	5							
BOULDER CITY	34.75	125.5	6	53	1							
GLEN CANYON	35.10	120.7	6	55K	0							
PASADENA	35.23	131.2	6	57	1	12	42	13				
GOLDEN	35.28	111.0	6	58	1						12	50
KHEYS	35.33	352.4	7	1K	4							
TONTO FOREST	37.58	122.4	7	18A	2	13	21	16			9	38 PCP
ALBUQUERQUE	38.89	116.3	7	29	2						9	40 PCP
MADISON	39.16	91.7	7	30	0						16	2 SS
TUCSON	39.57	123.4	7	34	1							

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Y.-SAKHLINSK	39.75	278.5	7 37	3	12 43	5	
LAWRENCE	40.26	101.0	7 39	0			
SCHEFFERVILLE	40.50	62.2	7 41A	0			
SCORESBY SD.	41.52	23.6	7 50	1			
LUBBOCK	41.97	112.2	7 53	0			
WICHITA MTS.	42.36	107.9	7 56	0	14 32	15	17 36
KIPAPA	42.37	191.5	7 56	0			
HONOLULU	42.49	191.6	7 56	-1			
TULSA	42.57	104.1	7 58A	0			14 27
FAYETTEVILLE	43.12	102.3	8 1	-1			23 2
LONDON ONT.	43.28	84.5	8 4K	1			
OTTAWA	43.85	77.9	8 8	0			
HAWAII V.OB.	44.13	187.5	8 11	1			
SHAWINIGAN	44.24	74.5	8 11K	0			
CLEVELAND	44.36	86.1	8 12A	0			
BREBEUF	44.69	76.1	8 14K	-1			
PENNSYLVANIA	46.55	83.6	8 29	-1			
MORGANTOWN	46.57	86.3	8 30	0			
TROMSOE	46.98	5.4	8 34	1			
KEVO	47.07	1.6	8 34	0			
CUMBERLAND	47.37	94.4	8 35	-1	15 34	5	10 29 PP
PALISADES	48.14	80.1	8 44	2	16 16	36	
BLACKSBURG	48.34	88.6	8 44	0	15 44	2	
KIRUNA	48.83	4.9	8 48A	1			
APATITY	49.29	358.4	8 52K	1			
SODANKYLA	49.46	1.9	8 54A	2			
CHANGCHUN	49.84	289.4	8 54A	-1			
MATUSIRO	50.14	273.4	8 58A	1	16 13	5	
COLUMBIA	50.73	91.4	9 3	1			
IRKUTSK	51.05	310.6	8 54	-10			
SKALSTUGAN	52.59	10.0	9 16A	0			
KAJAANI	52.78	1.4	9 17	0			
UMEA	52.83	5.7	9 17A	-2			12 19
ULAN-BATOR	53.78	305.8	9 27	2			
BERGEN	55.04	14.8	9 34	0			
KONGSBERG	56.23	12.4	9 43K	0			
NURMIJARVI	56.30	3.3	9 43	0			
HELSINKI	56.65	3.2	9 45	-1			
UPPSALA	56.66	7.6	9 45A	-1			
PEKING	56.81	293.8	9 47	0			
PULKOVO	57.12	360.0	9 50	1			
SVERDLOVSK	57.80	340.8	9 54	0			
GOTEBORG	58.38	11.4	9 57A	-1			
ESEN BULAK	58.80	312.4	10 3	2			
PAOTOW	58.81	298.8	10 1	0			
SEMIPALATNSK	59.92	325.5	10 8	-1			
KARLSKRONA	60.20	9.4	10 9A	-1			
COPENHAGEN	60.42	11.5	10 12K	0			
MOSCOW	61.03	355.3	10 17K	1			
NANKING	62.50	286.9	10 25	-1			
MITTEVEEN	62.62	15.9	10 24	-3			
MUNSTER	63.57	15.4	10 35	2			
WARSAW	64.45	6.3	10 39	0			
HALLE	64.51	12.6	10 40	1			11 4 PCP
BENSBERG	64.51	16.0	10 39A	0			11 2
SIAN	64.72	296.1	10 40A	-1			
COLLMBERG	64.80	11.9	10 41A	0			12 4
DOURBES	65.02	17.9	10 45	3			
JENA	65.03	12.9	10 42	-1			14 9
LANCHOW	65.16	301.1	10 43A	0			
FOLINIERE	65.53	21.8	10 45	-1			
PRAGUE	66.15	11.1	10 50A	0			
PRUHONICE	66.25	11.0	10 51	1			15 9
RACIBORZ	66.43	8.5	10 52	1			11 15 PCP
KRAKOW	66.57	7.3	10 53	1			11 32 PCP
STUTT GART	66.92	14.9	10 54	-1			11 21
STRASBOURG	66.92	16.0	10 56	1			11 25
LWOW	66.98	4.4	10 55	0			
KASPERSKE H.	67.01	11.8	10 56A	1			11 42
ALMATA-2	67.27	324.5	10 57K	0			
BESANCON	68.00	17.6	11 6	5			
UZHGOROD	68.10	5.7	11 2	0			
VIENNA-H.	68.12	10.0	11 3	1			
ROSELEND	69.61	17.5	11 13	2			12 12
CHENG TU	69.84	298.2	11 13A	0			
LJUBLJANA	70.15	11.6	11 4	-11			
SAN JUAN	70.88	87.2	11 19	0			
ANDIJAN	70.90	327.4	11 21	2			
TASHKENT	71.08	329.9	11 21A	1	20 38	3	

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PAOTOW	22.71	65.9	4 57	-1	9 6 8	
ULAN-BATOR	22.77	45.9	5 1	2	9 22 23	
IRKUTSK	23.84	34.4	5 11	2		
TEHERAN	25.45	282.2	5 27	3	10 7 22	
SHIRAZ	25.78	268.0	5 26	-1	9 46 -4	6 29 PP
SVERDLOVSK	27.02	333.2	5 40A	1		
PEKING	27.35	68.0	5 40	-2		
KIROVOBAD	29.24	293.2	6 0	1		
GORTS	29.24	290.9	6 2	3		
BAKURIANI	31.38	295.3	6 19	1		
SIMFEROPOL	38.23	301.0	7 16	0		
KSARA	38.35	282.8	7 17	0		8 52 PP
YAKUTSK	40.57	32.2	7 35K	-1		
PULKOVO	42.21	323.5	7 50	1		
VIBORG	43.17	324.6	7 59	2		
KAJAANI	44.47	329.2	8 7	0		
MATUSIRO	44.94	70.4	8 8	-3	14 48 4	
LWOW	44.94	308.6	8 14	3		
NURMIJARVI	45.13	323.8	8 13	0	15 4 17	18 14 SS
SODANKYLA	45.82	333.5	8 19	1		
UZHGOROD	46.15	307.1	8 25	4		
KEVO	46.45	336.7	8 18	-5		
LEMBANG	47.31	145.0				27 14
UMEA	47.65	327.9	8 33	0		11 33
KIRUNA	48.24	333.3	8 39	2		
UPPSALA	48.57	322.5	8 40A	0		
PRUONICE	51.02	309.7	9 0	2		
SKALSTUGAN	51.17	327.3	9 2	2		
COLLMBERG	51.78	311.5	9 4	0		10 14 PCP
KASPERSKE H.	51.79	308.7	9 4	0		
KONGSBERG	52.62	322.4	9 10	0		
STUTTGART	54.63	309.0	9 24	-1		
FOLINIÈRE	60.82	311.2	10 3	-6		
LWIRO	62.08	245.7	10 13A	-4		
CHILEKA	67.15	230.4	10 45	-5		
MOULD BAY	68.89	5.5	11 0K	-1		13 25
BENI ABBES	69.71	293.1	11 3	-3		
BROKEN HILL	70.59	236.2	11 6	-5		
MUNDARING	73.15	150.5	11 18	-8		
COLLEGE	73.67	20.0	11 29	0		
YELLOWKNIFE	82.58	7.9	12 17A	-1		
ADELAIDE	86.68	136.8	12 34A	-5		
BRISBANE	90.48	123.2	12 59	2		
TOOLANGI	92.40	134.9				19 54 *SP
CANBERRA	93.04	131.3				18 56
BLUE MTS.	99.21	14.1				17 35 PP

APRIL 7 3.H 57.M 31.S EPICENTRE -24.60-176.67 DEPTH= 111.KM

A=-0.90873 B=-0.05285 C=-0.41403 D=-0.0581 E= 0.9983
G= 0.4133 H= 0.0240 K=-0.9103 HT= 3.5

DEPTH OF FOCUS= 0.012R

SE= 3.01

	DELTA DEG.	AZ. DEG.	P		S O-C			*PP		SUPP.	
			M	S	M	S	S	M	S	M	S
RAOUL ISLAND	4.76	193.3	1 11	0							
AFIHALU	11.59	24.3	2 36A	-7	4 33	-18					
KARAPIRO	14.85	204.7	3 28	3							
PORT VILA	15.57	293.2	3 37A	3							
NOUMEA	15.66	275.0	3 38A	2	6 40	14					
KOUMAC	18.04	279.1	4 7A	2							
WELLINGTON	18.10	201.2			7 5	-15					
BRISBANE	27.56	257.6	5 38	0							
RIVERVIEW	29.45	244.4	5 56	1							
CANBERRA	31.46	242.1	6 12K	-1			6 40		9 4	PCP	
CHARTERS TS.	34.51	270.0	6 38	-1							
TOOLANGI	34.66	239.0	6 39	-2			7 8		9 12	PCP	
TARRALEAH	35.13	230.7	6 44	-1					9 14		
ADELAIDE	39.79	244.3	7 22A	-2							
KIPAPA	49.21	23.2	8 38	-1							
DARWIN	50.97	273.8	8 49	-4							
MUNDARING	58.74	246.4	9 45	-3							
BYRD STATION	60.41	170.3	10 1	1							
SOUTH POLE	65.54	180.0	10 34	0							

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MIRNY	67.83	205.6	10 47	-1			
MATUSIRO	74.22	323.6	11 24	-2			
MAWSON	78.13	199.7	11 48A	0		14 9	
PRIEST	80.28	42.9	12 1K	1			
BERKELEY	80.44	40.7				15 52	
LICK	80.46	41.5	12 3A	2			
PASADENA	80.61	45.8	12 3	1			
CALISTOGA	80.76	40.0	12 4A	1			
MINERAL	82.46	39.2	12 12A	1			
TUCSON	84.50	51.0	12 24	2		12 53	
N-LAZARVSKYA	84.70	182.8	12 22A	-1			
EUREKA	85.26	42.6	12 26	1		12 56	15 43 PP
TONTO FOREST	85.32	49.1	12 28	2		12 57	15 52 PP
GLEN CANYON	86.60	46.7	12 35	3			
BLUE MTS.	87.77	37.8	12 38	0			16 3 PP
ALBUQUERQUE	89.02	50.6	12 35	-9			13 15
PENTICTON	89.38	33.3	12 46A	1			
UINTA BASIN	89.77	44.8	12 48	1		13 18	16 21 PP
COLLEGE	91.94	11.9	12 57	0			
WICHITA MTS.	94.58	54.0	13 10	1	23 39 -30	13 35	
BULAWAYO	129.17	211.2	18 57	2			
BROKEN HILL	134.08	215.0	19 7	3			
KAJAANI	137.42	344.4	19 8	-3			
UMEA	139.23	348.6	19 15	1			20 13
VIBORG	139.86	340.9	19 16	1			22 47 SKP
SKALSTUGAN	140.58	353.7					20 25
NURMIJARVI	141.20	343.3	19 10	-8			22 44 PKS
UPPSALA	143.39	347.9	19 17	-4			19 57 *SPKP
LWIRO	143.61	226.4	19 23K	1			
KONGSBERG	144.70	354.5	19 23K	-1			
GOTEBORG	146.35	351.6	19 27A	0			
KARLSKRONA	147.23	347.3	19 33	5			
KSARA	150.24	295.5	19 40	7			
JERUSALEM	151.07	291.5	19 41	7			
UZHGOROD	151.75	332.9	19 43	8			
COLLMBERG	152.33	346.9	19 43A	7			20 52
JENA	152.96	348.5	19 36	-1		20 14	
PRUHONICE	153.20	343.8	19 46	9			
KASPERSKE H.	154.23	344.4	19 38A	0			20 37
VIENNA-H.	154.25	339.7	20 3	25			
STUTT GART	155.43	350.5	19 41	1			

APRIL 7 11.H 15.M 59.S EPICENTRE 71.76 -12.44 DEPTH= 0.KM

A= 0.30751 B=-0.06781 C= 0.94913 D=-0.2153 E=-0.9765
G= 0.9269 H=-0.2044 K=-0.3149 HT=-12.2

SE= 2.68

	DELTA DEG.	AZ. DEG.	P		O-C S	S O-C			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
SCORESBY SD.	3.35	252.0	0	49	-6							
SIDA	8.29	197.6	2	9	5							
REYKJAVIK	8.44	209.5	2	12	6							
NORD	9.94	356.4	2	27	0	4	14	-7				
KIRUNA	11.90	93.1	2	52	-2							
SKALSTUGAN	12.36	119.1	3	2A	2							
SODANKYLA	14.12	88.8	3	24	1							
UMEA	14.49	106.8	3	29A	1							
ALERT	14.64	336.5	3	27	-3							
ABERDEEN	15.27	158.2				6	43	14			4	16
APATITY	16.15	82.4	3	55A	5							
KAJAANI	16.60	97.2	3	52	-3							
UPPSALA	16.88	119.5	3	59	0							
GOTEBORG	17.32	131.8	4	7	2							
KHEYS	17.54	30.9	4	12K	5							
NURMIJARVI	18.36	108.7	4	16	-2	7	49	9				
VIBORG	19.45	103.3	4	24	-7							
KARLSKRONA	19.58	128.3	4	28A	-4							
PULKOVO	20.67	103.3	4	45	1	8	44	13				
RESOLUTE	22.19	315.7	5	0	1							
BENSBERG	22.66	146.6	5	2	-2							
HALLE	23.06	138.8	4	37	-31						5	9
COLLMBERG	23.47	137.4	5	12	0						5	51 PP
PRAGUE	24.93	136.3	5	26A	0							
PRUHONICE	25.04	136.2	5	27	0						5	53

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STUTTGART	25.14	144.8	5 26	-2	
KASPERSKE H.	25.64	138.3	5 22	-11	6 3
MOULD BAY	25.90	328.3	5 37A	2	
MOSCOW	26.23	101.1	5 41	3	
LWOW	27.48	123.5	5 48	-2	
UZHGOROD	28.13	126.7	5 56	0	
COPPERMINE	31.58	315.0	6 27A	1	
SVERDLOVSK	32.51	78.1	6 34	0	
YELLOWKNIFE	35.93	309.3	7 4A	0	
COLLEGE	40.31	332.4	7 42	1	
TIFLIS	40.81	105.6	7 47	2	
KIROVOBAD	42.26	104.7	7 57A	0	
GORIS	43.31	105.3	8 5	0	
YAKUTSK	43.97	24.6	8 10A	0	
TEHERAN	48.32	102.2	8 44	-1	10 51
VANNOVSKAYA	48.38	94.4	8 47	2	
ASHKABAD	48.46	94.1	8 48	2	
PENICTON	48.94	304.0	8 50	0	
ALMATA-2	49.53	73.8	8 56A	2	
BUTTE	50.05	296.5	8 59	1	
CUMBERLAND	51.36	286.9	9 7	-1	
BLUE MTS.	52.44	299.9	9 15	-1	
FLAMING GRGE	53.81	291.3	9 27	1	
SHIRAZ	54.33	103.9	9 30	0	11 31 PP
UINTA BASIN	54.42	291.1	9 31A	0	
SALT LAKE C.	54.67	293.3	9 33	0	
WARSAK DAM	56.24	83.6	9 41	-3	
WICHITA MTS.	56.25	278.7	9 43	-1	
EUREKA	57.04	296.3	9 50	0	10 38
TONTO FOREST	60.51	290.0	10 14	0	10 49
DEHRA DUN	61.68	79.2	10 22	0	
TUCSON	62.29	288.8	10 25	-1	
PASADENA	62.64	296.0	10 0	-28	
NEW DELHI	63.03	80.7	10 31	0	
SHILLONG	70.30	68.4	11 16A	-1	

APRIL 7 15.H 7.M 29.S EPICENTRE 26.66 129.32 DEPTH= 0.KM

A=-0.56699 B= 0.69235 C= 0.44630 D= 0.7737 E= 0.6336
G=-0.2828 H= 0.3453 K=-0.8949 HT= 2.9

SE= 2.76

	DELTA DEG.	AZ, DEG.	P		O-C S	S O-C			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
ZO-SE	8.39	303.7	2	7	1	3	41	-1				
ABUYAMA	9.79	31.8	2	24A	-1							
NANKING	10.65	302.8	2	36	-1							
MATUSIRO	12.42	35.4	2	59	-2	5	17	-4				
MANILA	14.19	214.4	3	24	-1						6	11
PEKING	17.25	323.9	4	6	2							
CHANGCHUN	17.44	350.3	4	7A	1	7	23	3				
SIAN	19.12	298.2	4	27A	0	8	2	4				
PAOTOW	21.17	315.8	4	48	-1	8	41	0				
CHENGTU	22.54	286.1				9	2	-4				
Y.-SAKHLINSK	22.92	24.0	5	7	0							
LANCHOW	23.63	299.6	5	14	0	9	23	-3				
KURILSK	23.75	33.9	5	23	8							
KUNMING	23.95	272.3				9	35	4				
UGLEGORSK	24.47	20.5	5	25K	3							
ULAN-BATOR	27.54	326.3	5	51	1	10	43	12				
ESEN BULAK	32.74	315.7	6	38	1							
SHILLONG	33.56	276.7	6	44	0							
PETROPVLOVK	34.21	31.8	6	55	6							
YAKUTSK	35.35	0.3	6	57	-2							
MEDAN	37.23	237.2	7	15A	0							
RABAU	37.82	140.8	7	16	-4							
PORT MORESBY	39.81	151.8	7	32	-5							
DEHRA DUN	44.90	287.1	8	19	1							
ALMATA-2	44.95	305.5	8	19	0							
TIKSI	45.01	359.8	8	18A	-1	14	54	-4				
NEW DELHI	45.92	284.9	8	24	-2							
CHARTERS TS.	49.29	158.8	8	49	-4							
WARSAK DAM	49.84	293.1	8	56	-1							
TASHKENT	50.93	302.8	9	5A	0							
DUZHANBE	51.53	299.3	9	9	-1							
QUETTA	54.36	289.3	9	9	-22	17	28	20				

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SVERDLOVSK	56.52	322.1	9 45K	-1				
BRISBANE	58.29	155.4	10 2	3				
VANNOVSKAYA	59.93	300.1	10 11	1				
KHEYS	60.83	349.8	10 15	-1				
ADELAIDE	61.94	171.3	10 26K	2			10 35	PCP
COLLEGE	63.19	28.3	10 32	0				
CANBERRA	64.39	162.2	10 42	2		10 52		
TOOLANGI	65.67	165.9	10 51	3		11 1	12 3	
TEHERAN	65.68	299.2	10 49	1				
SHIRAZ	66.57	292.5	10 43K	-11	19 44	-1	11 41	11 10
APATITY	67.86	335.6	11 2	0				PCP
KIROVOBAD	68.11	305.5	11 3K	-1				
MOULD BAY	69.19	13.8	11 8	-3				
MOSCOW	69.32	322.8	11 8	-3				
KEVO	69.39	338.7	11 10	-2				
BAKURIANI	69.81	307.3	11 21	7				
SODANKYLA	70.40	336.4	11 16	-2				
ALERT	70.92	1.6	11 20	-1				
PULKOVO	71.69	328.2	11 26	0				
VIBORG	72.04	329.5	11 25A	-3				
KIRUNA	72.36	337.9	11 29	-1			12 3	
NURMIJARVI	73.99	330.1	11 38	-1				
HELSINKI	74.00	329.7	11 39	0				
UMEA	74.32	334.2	11 39A	-2				11 59
COPPERMINE	74.57	20.8	11 40	-3				PCP
RESOLUTE	74.95	11.1	11 43	-2				
UPPSALA	77.39	331.3	11 57A	-2				
SKALSTUGAN	77.46	335.9	11 58	-1				
KARAPIRO	77.50	144.2	12 3	4		12 12		
YELLOWKNIFE	77.72	25.3	12 3	3				
KARLSKRONA	80.30	328.7	12 16	2				
GOTEBORG	81.03	331.1	12 22	4				
PENTICTON	82.70	38.0	12 23	-4				
PRUHONICE	84.33	323.9	12 36	1				
VIENNA-H.	84.33	321.8	12 36	1				
PRAGUE	84.34	324.0	12 48	13				
COLLMBERG	84.36	325.6	12 35	0			16 5	
HALLE	84.77	326.1	12 50	13			15 53	PP
JENA	85.30	325.8	12 46	6			13 19	
KASPERSCHE H.	85.34	323.6	12 40	0			13 8	
SHASTA	85.62	46.4	12 41K	-1				
HUNGRY HORSE	86.29	36.7	12 44	-1				
MINERAL	86.32	46.4	12 9A	-36				
BLUE MTS.	86.50	40.9	12 45	-1			13 7	
CALISTOGA	86.57	48.2	12 51A	5				
LJUBLJANA	86.62	320.7	13 3	16				
BERKELEY	87.19	48.7	13 3K	14				
STUTTGART	87.80	325.0	13 11	19				
LICK	87.89	48.9	13 7A	14				
BUTTE	88.50	37.9	12 56	0				
PRIEST	89.20	49.5	13 13K	14				
EUREKA	90.40	44.7	13 4	-1			14 49	
DUGWAY	91.92	42.6	13 11K	-1				
FLAMING GRGE	93.49	40.4	12 47	-32			13 19	
UINTA BASIN	93.78	41.0	13 24	4				
TONTO FOREST	96.52	46.5	13 32	-1			17 28	PP
HUANCAYO	152.65	62.6	20 7	16				

APRIL 7 15.H 28.M 4.5 EPICENTRE 53.71-169.96 DEPTH= 224.KM

A=-0.58533 B=-0.10360 C= 0.80415 D=-0.1743 E= 0.9847
G=-0.7918 H=-0.1402 K=-0.5944 HT= -6.8

DEPTH OF FOCUS= 0.030R

SE= 2.42

	DELTA DEG.	AZ. DEG.	P		O-C S	S			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
COLLEGE	15.79	36.3	3	30	-2	6	26	6			8	24
PETROPAVLOVK	18.67	280.6	4	3A	0	7	31	11				
SITKA	19.83	66.3	4	15	0							
MAGADAN	22.10	301.1	4	39K	1	8	38	16				
PORT HARDY	25.90	79.2	5	13A	0							
COPPERMINE	29.10	39.7	5	41A	-1							
VICTORIA	29.25	81.0	5	43	0							
MOULD BAY	29.42	22.1	5	45A	0							

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YELLOWKNIFE	29.64	50.6	5 46K	-1					
SEATTLE	30.33	81.8	5 59A	6					
PENTICTON	31.09	77.3	6 0A	0					
TIKSI	31.40	327.8	6 2K	0					
YAKUTSK	32.01	309.4	6 16	8					
BANFF	32.59	71.9	6 12A	-1					
SHASTA	34.18	92.7	6 26A	0					
BLUE MTS.	34.74	82.9	6 31A	0		7 21		12 28	SCP
HUNGRY HORSE	34.79	75.6	6 31	0		7 9		9 0	PCP
MINERAL	34.87	92.5	6 33A	1					
RESOLUTE	35.32	26.4	6 35A	-1					
CALISTOGA	35.39	95.6	6 36A	0					
BERKELEY	36.08	96.3	6 42A	0				12 33	
LICK	36.80	96.4	6 49K	1				12 35	
BUTTE	36.87	78.0	6 49	0		7 27			
BOZEMAN	37.95	77.5	7 0	2		7 36		12 40	SCP
PRIEST	38.19	97.0	7 0A	0					
EUREKA	38.77	89.0	7 5	1		7 43		9 6	PP
ALERT	39.33	11.4	7 10A	1					
MATUSIRO	39.42	265.7	7 8	-2				9 13	PCP
DUGWAY	40.19	85.7	7 17	1					
SALT LAKE C.	40.40	84.3	7 18	0					
PASADENA	41.04	97.0	7 24	1		7 43			
PRICE	41.75	84.9	7 27	-2					
FLAMING GRGE	41.75	82.4	7 29	0	12 54	-35			
BOULDER CITY	41.76	92.2	7 30	1					
UINTA BASIN	42.03	83.2	7 32A	1			8 10	12 55	SCP
CHANGCHUN	42.39	283.9	7 32K	-2					
GLEN CANYON	43.01	88.5	7 39	0					
KHEYS	43.28	349.8	7 44	3				8 34	*SP
LARAMIE	43.74	79.2	7 45	0					
NORD	44.17	5.4	7 48	0					
GOLDEN	44.90	80.9	7 55	1					
TONTO FOREST	45.03	91.0	7 56A	1	14 24	8	8 34	9 18	PP
TUCSON	46.73	92.7	8 8	0			8 47		
ALBUQUERQUE	47.43	86.6	8 14	0			8 53	10 27	PP
PEKING	50.06	285.8	8 33K	-1					
MADISON	51.39	66.9	8 42	-2	15 55	10	9 23	10 39	PP
WICHITA MTS.	52.24	80.9	8 50	0			9 29	13 38	SCP
TULSA	53.05	77.8	8 55A	-1	16 8	1	9 35		
PAOTOW	53.16	290.4	8 57K	0					
FAYETTEVILLE	53.85	76.5	9 0A	-2					
SCHEFFERVILLE	54.74	43.6	9 7A	-1					
LONDON ONT.	56.21	61.9	9 18A	-1					
KEVO	56.22	353.0					10 4		
SHAWINIGAN	57.96	53.9	9 20A	-11					
SIAN	58.23	285.7	9 33K	0					
SEPT ILES	58.24	47.3	9 31A	-2					
BREBEUF	58.30	55.2	9 31	-3			10 15		
KIRUNA	58.53	355.4	9 34	-1			10 21		
SODANKYLA	58.60	352.6	9 36	0			10 22		
CUMBERLAND	59.12	70.9	9 37A	-2			10 18	10 3	
MORGANTOWN	59.29	63.9	9 40A	0			10 22		
LANCHOW	59.80	290.7	9 42	-2					
BLACKSBURG	60.79	66.2	9 50	0					
PALISADES	61.43	59.0	9 54	-1	17 59	3	10 38	10 36	PCP
WESTON	61.72	56.3	9 56	-1				10 39	
KAJAANI	61.74	351.3	9 57	0			10 45		
SVERDLOVSK	62.33	331.3	10 1A	0					
UMEA	62.54	354.9	10 2	0			10 46		
SKALSTUGAN	63.03	358.9	10 6	1					
HALIFAX	63.68	49.9	10 9	-1					
VIBORG	64.94	349.9	10 17K	-1				11 2	SP
NURMIJARVI	65.53	352.1	10 21	0			11 7	11 35	
UPPSALA	66.63	355.8	10 28	0			11 11		
KONGSBERG	66.99	0.2	10 31	0			11 16		
ALMATA-2	67.55	313.2	10 34K	0					
GOTEBORG	68.94	358.9	10 53	10			11 31		
KARLSKRONA	70.40	356.7	10 50	-2			11 38		
LHASA	71.65	295.1	11 1K	2	20 6	7			
PORT MORESBY	72.59	224.7	11 4K	-1					
SHILLONG	74.40	291.8	11 14K	-1					
COLLMBERG	75.33	358.1	11 21	1			12 8		
JENA	75.72	359.0	11 31	8			12 8	13 13	
PRUHONICE	76.61	357.0	11 29	1				12 16	
KASPERSCHE H.	77.49	357.6	11 34	2				12 20	
FOLINIERE	77.51	7.1	11 33	1					
DEHRA DUM	77.79	304.9	11 28A	-6					

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PEKING	46.92	13.8	8 23A	1	15	3	-1			18 12 SCS
OOITA	46.55	33.4	8 26	2						
SIMONOSEKI	46.73	32.1	8 27	2						
ASHIZURI	46.94	35.0	8 28	1						10 31
KOTI	47.85	34.7	8 35A	1						
TSURUGISAN	48.35	34.8	8 39	1						
TAKAMATU	48.71	34.4	8 43A	2						10 51
RABAU	48.83	91.3	8 40A	-2						
TOKUSIMA	48.83	35.1	8 44	2						
WARSAK DAM	48.92	324.7	8 41	-1						
SUMOTO	49.21	35.1	8 45	0						15 49
TOTTORI	49.66	33.5	8 48	0						
OWASE	49.77	36.3	8 49	0						
OSAKA	49.79	35.3	8 50	1						10 12
ABUYAMA	49.97	35.1	8 51A	0						
NARA	49.99	35.5	8 51	0						
TORISIMA	50.00	42.8	8 52	1						
TOYOOKA	50.03	33.9	8 50A	-1						
TOOLANGI	50.40	136.0	8 55	1	16	6	4	9 11		10 12 PCP
KAMEYAMA	50.48	35.8	8 55	1						
HIKONE	50.65	35.3	8 57	1						
TSURUGA	50.82	34.8	8 56	-1						
GIHU	51.04	35.5								9 21
HAMAMATU	51.13	36.9	8 59	0						
KHOROG	51.47	327.7	9 2A	0	16	17	1			
ESEN BULAK	51.48	353.9	9 1A	-1	16	17	0			
SHIZUOKA	51.71	37.1	9 4	0						16 23
IIDA	51.74	36.2	9 4	0						
CANBERRA	51.90	131.8	9 5	0	16	24	2	9 21		16 52 *SS
MISIMA	52.14	37.4	9 5A	-2						
BRISBANE	52.17	121.0	9 8	1	16	29	3			
AJIRO	52.18	37.5	9 6	-1						
TOYAMA	52.20	34.7	9 8	1						
KOHU	52.28	36.6	9 7	-1	16	27	0			
HUNATU	52.29	36.9	9 8	0	16	27	-1			
MATUMOTO	52.33	35.6	9 10	2						
KERGUELEN I.	52.38	206.8	9 7	-2	16	46	17			
CHANGCHUN	52.49	20.1	9 8A	-1	16	29	-1	9 22		
WAZIMA	52.52	33.9	9 11	1						
MATUSIRO	52.67	35.5	9 9A	-2	16	35	2			10 20 PCP
OIWAKE	52.72	36.0	9 10	-1						
ULAN-BATOR	52.73	3.1	9 11A	0	16	36	2			
NAGANO	52.76	35.4	9 13	2						9 51
RIVERVIEW	52.94	129.2	9 13	0	16	41	5	9 22		17 5 PPS
TOKYO C.M.O.	53.00	37.4	9 11	-2						
MAEBASI	53.08	36.3	9 12	-2						
TAKADA	53.08	35.1	9 6	-8						9 28
KUMAGAYA	53.09	36.7	9 12	-2						
TUKUBASAN	53.57	37.1	9 15A	-3	16	40	-5			11 26 PP
KAKIOKA	53.62	37.2	9 9	-9						
UTUNOMIYA	53.65	36.7	9 17	-1						
MITO	53.90	37.2	9 19	-1	16	47	-2			
FRUNSE	54.14	334.3	9 21	-1	16	52	-1			11 25 PP
SHIRAKAWA	54.24	36.4	9 21	-1						
ONAHAMA	54.53	37.0	9 24A	-1	16	58	0			
HUKUSIMA	54.81	36.0	9 26	-1						
YAMAGATA	55.08	35.5	9 27A	-2						
SENDAI	55.41	35.8	9 29	-2						
TASHKENT	55.48	329.3	9 30A	-1	17	10	-1			17 30 PS
ISINOMAKI	55.77	35.9	9 31	-3						
AKITA	55.95	34.0	9 35	0	17	39	22			
TANANARIVE	55.95	250.6	9 37A	2						10 20
MIZUSAWA	56.13	35.2	9 36	0	17	18	-1			
HONIARA	56.45	98.0	9 37	-1	17	20	-4			
MIYAKO	56.96	35.2	9 41	-1	17	28	-2			
IRKUTSK	57.00	0.8	9 42A	0	17	28	-3			
AOMORI	57.08	33.5	9 42	-1						
HATINOHE	57.30	34.2	9 44	0						
HAKODATE	57.76	32.6	9 47A	-1	17	43	2			
MORI	57.86	32.3	9 53	5						
SUTTSU	58.17	31.5	9 50	-1						
MURORAN	58.23	32.3	9 50	-1						
SEMIPALATNSK	58.57	343.0	9 51A	-2	17	50	-1			
TOMAKOMAI	58.76	32.4	9 54	-1						
SAPPORO	58.95	31.9	9 50	-6	17	21	-35			
URAKAWA	59.09	33.5	10 0	3						
SHIRAZ	59.49	308.6	9 59A	-1	18	3	0			19 43 SCS
ASHKABAD	59.59	319.7	10 0	0	18	4	-1			12 15 PP

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RUMOE	59.70	31.3	10	2	1						
ASAHIGAWA	59.97	31.9	10	2K	-1						
KUSIRO	60.53	33.7	10	6A	-1	17	43	-34			
WAKKANAI	60.76	30.2	10	9K	1						
ABASHIRI	61.15	32.8	10	10A	-1					18	29
NEMURO	61.42	34.1	10	11A	-2					18	47
WILKES	61.51	176.6	10	13	0	18	29	0	10	25	
MIRNY	61.91	184.6	10	15A	-1	18	30	-4			19 1 PS
Y.-SAKHLINSK	62.39	29.4	10	19	0						19 2 PS
TEHERAN	63.15	314.2	10	24A	0	18	48	-2			
NOUMEA	63.43	112.4	10	26A	0	18	51	-2			
PORT VILA	64.84	107.2	10	35	0	19	16	5			
MACQUARIE I.	66.65	148.3	9	48A	-59						
MAWSON	68.27	195.5	10	55	-2	19	51	-1			39 4 PKPPKP
GORIS	68.45	315.9	10	58A	0	19	56	2			
YAKUTSK	69.82	13.0	11	4A	-3	20	4	-6	11	31	13 42 PP
ROXBURGH	69.86	136.7	11	6	-1	20	10	-1			
TIFLIS	70.47	317.4	11	11	0	20	20	2			13 47 PP
SVERDLOVSK	70.61	336.8	11	10	-1	20	17	-3			13 48 PP
CHANGALANE	70.79	244.0	11	13A	0	20	25	3	11	37	21 10 SP
WELLINGTON	72.94	131.6	11	25	0	20	46	0			14 8 PP
KARAPIRO	73.07	128.0	11	27	1						14 7 PP
BULAWAYO	73.84	250.6	11	32	1						
BROKEN HILL	74.00	256.5	11	31	0						
JERUSALEM	74.12	304.8	11	31A	-1						
PETROPVLOVK	74.15	31.2	11	32A	0						11 48 PCP
KSARA	74.18	307.0	11	35	3	21	6	6			
LWIRO	74.26	269.1	11	34A	1	21	5	4			26 1 SS
MAGADAN	74.43	23.0	11	34A	0	21	11	8			
KIMBERLEY	77.48	241.8	11	52	1						
TIKSI	78.25	8.1	11	51A	-4	21	39	-6			14 49 PP
CAPE HALLETT	78.45	163.3	12	13	16						
SIMFEROPOL	78.90	317.5	11	58A	-1	21	50	-2			15 0 PP
SCOTT BASE	79.77	168.9	12	4	0						
MOSCOW	80.63	328.5	12	7A	-1	22	8	-2	12	24	22 51 *SS
ISTANBUL UN.	81.41	312.6	12	12A	0	22	11	-7			
HERMANUS	82.25	236.1									22 31
AFIAMALU	84.02	103.4	12	28A	2	22	50	6			
BACAU	84.20	317.6	12	30	3	22	48	2			
BUCHAREST	84.26	315.4	12	29	2	22	48	1			14 12
ATHENS	84.74	308.7	12	28K	-1	22	46	-5			22 50 SKS
SOUTH POLE	85.09	180.0	12	28	-3						
CAMPULUNG	85.19	316.1	12	32	0						
PULKOVO	85.71	331.0	12	35	1	23	2	1			15 53 PP
N-LAZARVSKYA	85.82	199.4	12	36	1	22	52	-10			16 8 PP
SOFIA	85.89	313.3	12	35	0	23	2	-1			15 55 PP
LWOW	86.77	320.4	12	41	2	23	11	0			16 20 PP
APATITY	86.93	338.8	12	40A	0	23	12	-1			23 53 *SS
KAJAANI	88.11	334.8	12	46	0	23	25	1			23 46
KHEYS	88.23	353.3	12	45A	-1	23	7	-18			16 13 PP
BELGRADE	88.30	315.1	12	48A	1	23	29	4			24 30 PS
HELSINKI	88.41	330.7	12	48	1						
BANDEIRA	88.63	255.3	12	49A	1				13	6	12 50 PCP
NURMIJARVI	88.64	331.0	12	48A	0	23	30	2			16 16 PP
TITOGRAD	88.82	312.6	12	50	1	23	30	0			16 19 PP
WARSAW	89.08	322.5	12	51A	1	23	32	-1	13	13	16 18 PP
SKALNATE PL.	89.09	319.4	12	51	1	23	39	6			16 22 PP
SODANKYLA	89.38	337.9	12	52A	0	23	36	1			16 17 PP
KRAKOW	89.42	320.2	12	54	2	23	37	1	13	12	16 25 PP
KEVO	89.85	340.2	12	53A	-1	23	42	2			16 28 PP
CHORZOW	90.05	320.3	12	56A	1				13	6	16 19 PP
HURBANOVO	90.26	317.9	13	8	12	23	54	11			25 42
RACIBORZ	90.53	320.1	12	59	2				13	12	16 25 PP
BRATISLAVA	91.03	318.1	13	0A	0						16 38
REGGIO CALA.	91.07	308.0	12	55	-5	23	50	-1	13	6	25 5 PS
MESSINA	91.16	308.1	13	2A	2	23	51	0	13	18	16 42 PP
UMEA	91.28	333.9	13	0A	-1	23	46	-6			16 43 PP
VIENNA-H.	91.52	318.1	13	3	1	24	20	25			
ZAGREB	91.55	315.7	13	3A	1	23	50	-5			
KIRUNA	91.80	337.9	13	2A	-1	23	56	-1	13	20	
UPPSALA	92.00	329.8	13	3A	-1	23	50	-9			16 42 PP
BYRD STATION	92.49	173.2	13	8	2						23 38
TROMSOE	92.59	339.6	13	6	-1						16 50 PP
LJUBLJANA	92.59	315.8	13	7A	0	24	2	-2	13	30	16 49 PP
KARLSKRONA	92.72	326.0	13	7A	0						16 49 PP
PRUHONICE	92.86	319.7	13	8	0	24	13	7			
PRAGUE	92.93	319.8	13	10	2	24	13	6			16 51 PP
TRIESTE	93.10	315.4	13	10A	1	24	4	-4	13	31	16 54 PP
KASPERSCHE H.	93.44	318.8	13	10A	-1						16 42 PP

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ROME	93.79	311.6	13 12A	0	24 23 9	13 26	19 28	PPP
COLLMBERG	93.93	321.0	13 13	0	23 53 -22			
CHEB	94.27	319.8	13 17	3			24 9	
PADOVA	94.40	315.1	13 12	-3	23 53 -26		17 28	PP
COPENHAGEN	94.46	325.4	13 16	1	23 56 -24			
HALLE	94.60	321.2	13 16	0	23 44 -37			
FLORENCE X.	94.78	313.4	13 11	-6	24 23 0	13 26	19 28	PPP
GOTEBORG	94.78	327.4	13 17A	0			17 6	PP
SKALSTUGAN	94.79	333.3	13 17	0			17 8	PP
JENA	94.81	320.6	13 17	0	24 22 -1	13 35	17 4	PP
STUTTART	96.26	318.4	13 24	1	24 38 44		17 15	PP
PAVIA	96.30	314.8	13 24A	0			16 53	PP
TUBINGEN	96.40	318.2	13 24	0				
EBINGEN	96.46	317.8	13 25	1				
HEIDELBERG	96.63	319.0	13 26	1				
KARLSRUHE	96.83	318.6	13 28	2			24 25	
STRASBOURG	97.26	318.2	13 29	1	24 45 46	13 45	17 12	PP
BENSBERG	97.60	320.6	13 30A	0		13 52	17 3	PP
ISOLA	97.82	313.8	13 31	1			24 45	
WITTEVEEN	97.85	322.5	13 31	0				
ROSELEND	98.09	315.3	13 36	4			17 27	PP
BERGEN	98.17	330.2	17 9	217				
BESANCON	98.49	316.9	13 34	0			17 22	PP
DE BILT	98.79	321.8	13 34	-1	24 40 33		17 37	PP
DOURBES	99.28	319.8	13 41	4			17 33	PP
HONOLULU	99.89	69.3	13 43	3			27 10	
KIPAPA	99.96	69.2	13 43	3			26 54	
CLERMONT-FD.	100.54	315.5	13 43	0			18 7	
ALERT	102.23	358.1	13 50	0				
KEW	102.25	321.5	13 51	1	24 20 -4		17 49	PP
ABERDEEN	102.40	327.5	13 53	2	24 44 19		18 3	PP
DURHAM	102.52	325.0			24 26 1		18 8	PP
FOLINIÈRE	102.70	318.8	13 53	1				
BAGNERÈS	102.88	312.9	14 12	19			18 6	PP
ALICANTE	103.76	308.1	14 2	5			18 31	PP
MOULD BAY	105.01	9.6	14 2	777				
ALMERIA	105.47	306.7					18 28	PP
BENI ABBES	105.75	299.8	14 6	777			18 26	PP
SCORESBY SD.	105.86	343.4			24 43 3		18 33	PP
GRANADA	106.33	307.2					19 2	PP
TOLEDO	106.37	310.0	14 11	777	24 48 5	14 31	18 31	PP
RESOLUTE	109.53	5.0	14 23	777				
AVERROES	109.90	303.5	14 24	777			18 53	PP
YELLOWKNIFE	116.19	18.5	14 53	-224				
PORT HARDY	117.86	33.8	18 41	1				
M+BOUR	120.40	283.7	18 46	1			20 18	PP
VICTORIA	121.26	34.4	18 49	2				
SEATTLE	122.37	34.8	18 53	4			37 54	SSS
PENTICTON	122.89	32.0	18 52	2				
BANFF	123.77	28.3	18 52	0				
SHASTA	125.86	42.1	18 57A	1				
MINERAL	126.56	42.1	19 0K	3				
CALISTOGA	126.69	44.4	19 0A	3				
BLUE MTS.	126.80	35.2	19 0A	2			20 46	PP
BERKELEY	127.26	45.1	19 2K	3				
LICK	127.94	45.4	19 3K	3				
BUTTE	128.66	31.4	19 3	2			22 15	SKP
PRIEST	129.19	46.3	19 5A	3				
SCHEFFERVILLE	129.61	352.5	19 4	1				
BOZEMAN	129.68	30.8	19 5	2			21 31	PP
EUREKA	130.70	40.1	18 59	-6			21 17	PP
PASADENA	131.92	47.4	18 59	-8			21 21	PP
DUGWAY	132.25	37.5	19 9	1				
SALT LAKE C.	132.47	36.2	19 10	2			21 35	PP
BOULDER CITY	133.37	43.4	19 9	-1			22 37	SKP
FLAMING GRGE	133.79	34.4	18 57	-14			22 39	SKP
PRICE	133.82	36.8	19 14	3				
SEPT ILES	134.05	350.7	19 13	2			21 38	
UINTA BASIN	134.09	35.2	19 14	3		19 32	21 41	PP
RAPID CITY	134.63	26.7	19 8	-4				
GLEN CANYON	134.96	40.2	19 15	2			22 41	SKP
LARAMIE	135.58	31.2	19 1	-13			21 17	
TONTO FOREST	136.73	43.1	19 4	-12			21 48	PP
GOLDEN	136.85	32.6	19 5	-12			19 55	
SHAWINIGAN	138.40	355.8	19 20A	1				
HALIFAX	138.81	345.6	19 17	-3				
ALBUQUERQUE	139.47	38.7	19 16	-5			22 55	SKP
OTTAWA	139.69	358.8	19 18	-4				
MADISON	140.05	14.7					32 12	SKSP

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LONDON ONT.	141.86	5.2	19 23A	-3			
CHICAGO JSA.	141.95	13.2	19 21	-5			
LAWRENCE	142.22	23.7	19 22	-4			
WESTON	142.40	353.3	19 23	-4			
CLEVELAND	143.37	5.9	19 27K	-1		22 54 PP	
PALISADES	143.99	356.3	19 28	-1		23 5 PKS	
WICHITA MTS.	144.16	31.5	19 29A	-1		22 48 PP	
TULSA	144.57	27.1	19 30A	0	19 47	22 49 PP	
FAYETTEVILLE	145.12	25.0	19 31A	0			
MORGANTOWN	145.35	4.3	19 34A	2		24 11 PKS	
GEORGETOWN	146.19	0.4	19 34	1			
WASHINGTON	146.19	0.4	19 36	3			
BLACKSBURG	147.71	5.4	19 37	1			
CUMBERLAND	148.45	13.7	19 38	1	20 0	23 12 PP	
CHAPEL HILL	149.10	3.5	19 41	3			
BERMUDA	150.43	338.9	19 46	6		30 42	
COLUMBIA	150.82	7.2	19 45	5			
ANTOFAGASTA	150.86	192.1	19 43	3		30 10	
LA PAZ	157.03	201.8	19 54	5	20 14		
ANTIGUA	160.97	310.7	19 57	3			
FORT FRANCE	161.77	303.4	19 58	4		24 28 PP	
SAN JUAN	163.04	322.8	19 58	2		20 49	
HUANCAYO	163.06	185.0	20 2	6			
TRINIDAD	163.71	291.3	20 1	5		24 40 PP	
HOPE	167.02	359.7				21 6	
CARACAS	168.76	300.0	20 4A	4		21 15 PKP2	
GALERAZAMBA	174.00	345.3	20 6	3		25 46 PP	
BALBOA HTS.	175.16	34.1	20 5	2			
FUQUENE	176.88	279.9	20 5	1		25 50 PP	
BOGOTA	177.25	263.5	20 6A	2		25 48 PP	
CHINCHINA	178.81	271.6	20 7	3		25 54 PP	

APRIL 8 14.H 38.M 37.S EPICENTRE 27.63 -44.44 DEPTH= 130.KM

A= 0.63348 B=-0.62122 C= 0.46128 D=-0.7002 E=-0.7140
G= 0.3293 H=-0.3230 K=-0.8873 HT= 2.6

DEPTH OF FOCUS= 0.015R

SE= 2.47

	DELTA DEG.	AZ. DEG.	P		O-C S	S O-C			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
BERMUDA	18.15	290.0	4	1	-4							
ST. CLAUDE	19.72	237.7	4	25	3	7	57	5				
FORT FRANCE	20.15	233.8	4	24	-2	8	3	3				
SAN JUAN	21.95	249.8	4	40	-4							
HALIFAX	22.86	322.9	4	56	3							
TRINIDAD	23.23	226.6	4	57	1	9	8	13			10	59
PALISADES	27.61	306.6	5	42	5	10	24	16				
M. BOUR	28.75	111.7	5	56	8	10	44	18				
SHAWINIGAN	29.21	317.9	5	57	5							
BREBEUF	29.22	315.4	5	51	-1	10	53	20			11	47 55
PENNSYLVANIA	30.41	304.3	6	1	-1							
SCHEFFERVILLE	31.66	335.2	6	13	0							
AVERROES	32.29	70.7	5	57	-22						6	36
LONDON ONT.	33.39	307.2	6	27A	-1							
TOLEDO	35.45	59.3	6	45A	-1	12	19	9			7	59 PP
GRANADA	35.54	64.0	7	14A	28	12	27	15			8	5
CUMBERLAND	35.71	293.3	6	48	0	12	33	19			8	2 PP
ALMERIA	36.43	64.6	6	54	0						15	39 55S
BENI ABBES	36.94	75.8	6	56	-2						8	21 PP
ALICANTE	38.08	62.3	7	7A	-1						8	29 PP
TORTOSA	39.01	58.4	7	5	-10						13	14
BAGNERES	39.02	54.8	7	15	-1							
REYKJAVIK	39.28	15.4	7	20A	2							
MADISON	39.59	305.6	7	21	1	13	29	16			8	51 PP
FOLINIERE	39.79	45.9	7	21	-1							
SIDA	39.97	17.9	7	26	3							
DURHAM	41.17	36.8	7	33	0	13	53	17				
CLERMONT-FD.	41.54	51.2	7	37	1							
DOURBES	43.33	45.1	7	54	3	14	27	19				
LAWRENCE	43.45	298.5	7	51	-1							
BESANCON	43.71	49.4	7	54	0						8	43
ROSELEND	43.96	51.8	7	56	0							
TULSA	44.01	294.1	7	56A	0							
ISOLA	44.12	54.0	7	57	0							

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MONACO	44.37	54.6	7 59	0			
STRASBOURG	45.10	47.8	8 11	6	14 52	19	9 23
PAVIA	45.70	52.7	8 11	1	15 9	27	
STUTTGART	46.11	47.7	8 12	-1	14 59	11	
WICHITA MTS.	46.40	292.8	8 15	0	15 7	15	9 41 PP
BERGEN	46.76	31.3	8 19	1			
FLORENCE X.	47.13	54.7	8 35	14	15 35	33	11 23 PP
JENA	47.86	45.1	8 48	21	15 47	35	10 26 PP
ROME	48.05	57.3	8 29	1	15 33	18	10 3 PP
HALLE	48.16	44.3	8 30	1			9 28
COLLMBERG	48.79	44.7	8 33	-1			8 55
TRIESTE	48.94	52.2	8 34K	-1	15 45	17	
KASPERSKE H.	48.97	47.6	8 33	-2			9 54
COPENHAGEN	49.11	38.9	8 37	1	15 50	20	
GOTEBORG	49.26	36.2	8 36	-1			
LJUBLJANA	49.49	51.7	8 38	-1			
HUANCAYO	49.52	221.3	8 36	-3			
PRAGUE	49.59	46.4	8 41	1			15 54
PRUHONICE	49.66	46.6	8 39	-1	15 54	16	
MESSINA	50.68	61.9	8 42	-6			13 42
VIENNA-H.	50.78	48.9	8 47	-2			
SKALSTUGAN	50.92	28.8	8 49	-1			
KARLSKRONA	50.93	38.6	8 51	1			
BRATISLAVA	51.27	49.0	8 55	2			
UPPSALA	52.56	34.2	9 2	0	16 32	15	
ALBUQUERQUE	52.77	294.3	9 5	1			
SKALNATE PL.	53.35	47.7	9 8	0			
RESOLUTE	53.50	345.2	9 10	1			
WARSAW	53.82	43.9	9 12	0			9 32
FLAMING GRGE	54.15	302.1	9 14	0			10 18
UINTA BASIN	54.37	301.4			17 3	21	
UMEA	54.43	29.5	9 16	0	17 0	17	
NORD	55.13	4.8	9 18	-3			
TROMSOE	55.16	22.4	9 21	0			
KIRUNA	55.27	24.7	9 21	-1			
ALERT	55.36	357.2	9 22K	-1			
PRICE	55.41	300.7	9 23	0			
SOFIA	56.00	55.4	9 28	1	17 56	52	11 47 PP
NURMIJARVI	56.12	33.8	9 27	-1	17 29	24	23 39
HUNGRY HORSE	56.63	311.5	9 30	-2			
YELLOWKNIFE	56.75	328.5	9 31	-2			
TONTO FOREST	56.79	294.5	9 34	1			11 13 PP
DUGWAY	56.83	301.7	9 33	0			
ATHENS	57.08	60.9	8 33	-62			17 33
COPPERMINE	57.42	334.9	9 37K	0			
SODANKYLA	57.54	25.7	9 37	-1			
KAJAANI	57.73	29.7	9 40	0			
KEYO	57.95	22.9	9 41	0	17 49	20	
VIBORG	58.17	33.6	9 41A	-2			
PULKOVO	58.94	34.7	9 49	1			
BLUE MTS.	59.33	307.8	9 49	-2	18 3	16	10 39 PCP
EUREKA	59.36	301.4	9 51	0			12 2 PP
MOULD BAY	59.78	344.5	9 53K	-1			
APATITY	60.16	25.7	9 56A	0			10 18
PENTICTON	60.18	313.2	9 56	-1			
ISTANBUL UN.	60.45	56.4	9 56	-2	18 10	9	
WOODY	62.49	297.9	10 11	-1			
MOSCOW	63.28	38.8	10 17	0			
MINERAL	63.37	303.5	10 17K	-1			
PRIEST	63.77	298.8	10 27K	7			
SHASTA	63.87	304.1	10 19	-2			
LICK	64.20	300.3	10 25A	2			
BERKELEY	64.52	301.0	10 30A	5	19 11	19	
CALISTOGA	64.55	301.9	10 27A	1			
KHEYS	64.94	10.2	10 28	0			
BANDEIRA	70.13	119.6	11 1K	1			11 22 11 38 PP
BAKURIANI	70.76	52.4	11 4K	0			
COLLEGE	70.77	333.9	11 4	0			
TIFLIS	71.66	52.1	11 11	1			
GORTS	73.56	53.8	11 21	0			
SVERDLOVSK	75.02	33.3	11 29A	0			
LWIRO	76.25	99.9	11 35A	-1	21 28	20	26 2 55
TEHERAN	78.76	55.6	11 51	1			
TIKSI	80.90	2.1	12 0K	-1			
BROKEN HILL	82.06	110.8	12 7	0			
SHIRAZ	82.33	60.7	12 9K	0			12 33
ASHKABAD	82.69	51.0	12 39	28			
TASHKENT	88.02	43.6	12 39A	2			

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N-LAZARVSKYA	91.28	183.4	12	6K	-2					
WICHITA MTS.	91.98	54.2	12	11	-1					
YELLOWKNIFE	94.32	24.7	12	21	-1	14	15	29	25 PKKP	
TULSA	94.53	53.9	12	24K	1			29	18 PKKP	
TIKSI	96.13	345.3	12	28K	-2	22	2	-44	14	38 PP
MOULD BAY	100.33	12.1	12	47	-2					
CUMBERLAND	102.44	56.5							28	55 PKKP
ALMATA-2	112.31	310.1	17	33K	-1					
KEVO	125.85	349.4	17	55	-5					
APATITY	126.35	345.4	17	59A	-2					
TROMSOE	127.18	352.5	18	1	-2					
SODANKYLA	127.99	348.0	18	2	-2			20	30 SKP	
KIMBERLEY	128.49	206.2	18	5	0					
KIRUNA	128.66	351.0	18	4A	-1			20	34 SKP	
KAJAANI	130.55	345.2	18	7	-2			20	40 SKP	
REYKJAVIK	131.12	13.4							20	44
SIDA	132.22	11.6							20	49
SHIRAZ	132.29	294.0	18	11K	-1				20	46
UMEA	132.38	348.9	18	10	-3				20	46 SKP
TEHERAN	132.66	302.3	18	12	-1			20	48	
VIBORG	133.02	342.1	18	8	-6					
CHILEKA	133.14	226.6	18	15	1					
SKALSTUGAN	133.77	353.4	18	13	-2			20	51 SKP	
BULAWAYO	133.83	216.3	18	3	-12					
NURMIJARVI	134.34	344.3	18	0	-16			20	53 SKP	
HELSINKI	134.55	343.8	18	15	-2			20	54 SKP	
GORIS	135.80	308.6	18	19	0					
TIFLIS	136.23	312.2	18	21	1					
UPPSALA	136.52	348.3	18	6	-14			20	58 SKP	
BROKEN HILL	138.34	221.2	18	14A	-10					
GOTEBORG	139.52	351.4	18	16	-10			21	8 SKP	
KARLSKRONA	140.36	347.8	18	34	6			21	25 SKP	
COPENHAGEN	141.39	350.2	18	20	-10					
ADOIS ABABA	142.85	261.2	18	37	5					
LWOW	143.40	335.5	18	31	-2					
KRAKOW	144.71	339.5	18	34	-1					
WITTEVEEN	144.93	354.6	18	36K	0					
UZHGOROD	145.03	335.8	18	36	0					
RACIBORZ	145.24	341.2	18	36	0					
SKALNATE PL.	145.34	338.3	18	36	0					
BANDEIRA	145.42	200.2	18	38K	2	20	43	22	3 PP	
COLLMBERG	145.46	347.4	18	35K	-1			18	37 PKP2	
HALLE	145.48	348.6	18	37	1					
KSARA	145.51	304.1	18	37	0					
MUNSTER	145.67	353.4	18	38	1					
JENA	146.10	348.7	18	36	-1	20	43	22	6 PP	
PRUHONICE	146.34	344.9	18	39	1			20	51 PP	
KEM	146.47	2.2	18	40	2					
LWIRO	146.55	236.0	18	38K	0					
JERUSALEM	146.65	300.9	18	40	2					
BENSBERG	146.72	353.6	18	40K	2			20	52	
ISTANBUL UN.	147.07	320.2	18	38	0			20	54	
BRATISLAVA	147.26	340.7	18	40	1			20	58	
KASPERSKE H.	147.37	345.3	18	38K	-1			19	56	
VIENNA-H.	147.42	341.5	18	39	0					
DOURBES	147.78	356.4	18	45	5					
HEIDELBERG	148.05	351.2	18	44K	4					
STUTT GART	148.58	350.2	18	41	0					
TUBINGEN	148.85	350.4	18	46K	5					
BELGRADE	148.86	333.6	18	46A	5					
STRASBOURG	148.99	352.0	18	42	1					
FOLINIERE	149.16	2.7	18	41	-1					
RAVENSBURG	149.48	349.3	18	47	5					
LJUBLJANA	149.95	341.9	18	43	0			18	48 PKP2	
BESANCON	150.51	353.9	18	50	6					
TRIESTE	150.53	342.5	18	50K	6					
ROSELEND	151.97	352.5	18	54	8			19	54	
ATHENS	152.16	320.4	18	52K	6					
CLERMONT-FD.	152.18	357.7	18	55	9					
ISOLA	153.40	351.2	18	48	0			19	54	

APRIL 10 7.M 50.M 25.S EPICENTRE -9.14 124.90 DEPTH= 0.KM

A=-0.56503 B= 0.80985 C=-0.15775 D= 0.8201 E= 0.5722
G= 0.0903 H=-0.1294 K=-0.9875 HT= 6.6

SE= 2.64

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	DELTA DEG.	AZ. DEG.	P		O-C S	S			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
LEMBANG	17.27	276.4	4	9A	5							9 15
DJAKARTA	18.15	278.0	4	19	4							
TANGERANG	18.35	277.9	4	19K	2							8 56
PORT MORESBY	21.96	92.5	4	58K	1	8	48	-7				
CHARTERS TS.	23.33	120.2	5	9	-1	9	12	-8				
MANILA	23.95	350.9	5	23	6	9	53	22				
MUNDARING	24.11	198.3	5	17	-1	9	31	-3				
PERTH	24.21	199.1				9	41	6				10 14
BAGUIO CITY	25.75	350.4	5	37	3	10	23	22				
RABAU	27.51	81.5	5	45	-5	10	0	-30				
ADELAIDE	28.66	155.9	6	0A	0	10	55	6				15 53
BRISBANE	31.97	128.3	6	8	-22	11	4	-37				
TOOLANG!	33.87	149.9	6	46	0				6 55			8 15 PPP
CANBERRA	34.11	143.5	6	48A	0	12	11	-3				18 59
RIVERVIEW	34.45	139.4	6	51A	0	12	14	-6				
HONIARA	34.58	93.4	6	49	-3	12	11	-11				
SAVANNAH	37.94	152.5	7	30	9							
TARRALEAH	38.08	153.8	7	24	2							
KOUMAC	39.61	111.2	7	38	3							
ZO-SE	40.16	355.0	7	40	1							
KUNMING	40.32	328.1	7	43	2							
NANKING	41.38	352.1	7	50	1	14	6	1				
NOUMEA	41.93	113.2	7	53	-1							
CHENGTU	44.36	333.9	8	14	0	14	49	0				
SIAN	45.73	341.4				15	15	7				
MATUSIRO	47.12	14.7	8	34	-2	15	22	-6				
TUKUBASAN	47.33	16.8	8	40K	3	15	29	-2				19 22 SS
LANCHOW	49.13	337.3	8	52	1							
MADRAS	49.66	295.7	8	55	0	16	17	15				11 55 PPP
PEKING	49.58	351.2	8	53	-2	16	3	0				
BOKARO	50.33	311.4	9	0	0							
LHASA	50.49	321.0	9	3A	1	16	19	4				
ROXBURGH	52.53	141.7				16	41	-2				20 35 SS
CHANGCHUN	52.71	0.4	9	16	-2	16	45	-1				
KARAPIRO	53.71	130.7	9	26	0							
CHATEAU	54.13	132.2	9	33	4							
WELLINGTON	54.31	134.8	9	30	0	17	3	-4				20 49 SS
POONA	57.38	298.8	8	50	-62							
WILKES	57.97	186.8	9	56	0	17	55	-1				
Y.-SAKHLINSK	58.12	14.3	9	57	-1							
BOMBAY	58.42	298.7										13 8
ULAN-BATOR	59.00	346.0	10	2	-2	18	6	-4				
DEHRA DUN	59.69	313.0	10	7K	-1							
ESEN BULAK	60.93	337.7	10	17	0							
MIRNY	61.31	194.0	10	15	-5							
AFIAMALU	62.08	100.9	10	45A	20	18	39	-10				24 59 SSS
LAHORE	63.05	312.3	10	29	-2							
IRKUTSK	63.66	346.1	10	35	0							
WARSAK DAM	66.31	313.3	10	44	-8							
ALMATA-2	67.71	324.4	11	1A	0							
QUETTA	67.99	307.7	11	2	-1							
KHOROG	68.09	316.5	11	4	0							
PETROPVLOVK	68.26	21.2	11	5	0							
CAPE HALLETT	68.75	166.5	11	7	-1							
ANDIJAN	69.28	319.9	11	12	1							
DUZHANBE	70.52	316.3	11	18	0							
SEMIPALATNSK	70.83	331.6	11	19	-1							
MAWSON	71.14	201.0	11	20	-2							11 41 PCP
MAGADAN	71.54	13.6	11	23	-2							
TASHKENT	71.57	319.1	11	23A	-2							
SCOTT BASE	71.94	171.5										21 35
ASHKABAD	77.64	312.1	12	0	0							
VANNOVSKAYA	77.83	312.0	12	0	-1							
SHIRAZ	79.48	302.5	12	11	1	22	17	6				12 33
KIZYL-ARVAT	79.62	312.6	12	10A	-1							
TIKSI	80.63	1.3	12	14A	-2	22	17	-6				
SOUTH POLE	80.92	180.0	12	15	-2							
HONOLULU	81.36	66.8	12	23	3	22	33	2				27 57
KIPAPA	81.46	66.7	12	18	-2				12 29			
TEHERAN	82.17	308.1	12	23	-1							
HAWAII V.OB.	83.54	69.2	12	34	3							
GORIS	87.05	310.6	12	49	0							
CHILEKA	87.50	254.6	12	53	2							
ADDIS ABABA	87.64	279.5	12	54	3							
CHANGALANE	88.42	243.8	13	3	8				13 14			23 55 SCS
TIFLIS	88.71	312.5	12	59A	2	23	44	1				

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N-LAZARVSKYA	88.82	197.8	12	56A	-1						
BAKURIANI	89.65	312.3	13	2A	1						
BROKEN HILL	93.90	254.8	13	22	1						
KSARA	94.21	303.4	13	21	-1	24	34	3			17 13 PP
LWIRO	95.67	266.8	13	32A	3						26 49 PPS
COLLEGE	97.04	25.5	13	36	1						
APATITY	98.94	337.1	13	40	-3						
ISTANBUL UN.	100.38	310.1	13	45	-5						27 5
KEVO	101.25	339.4									32 27 SS
NURMIJARVI	102.94	330.0				24	45	4			33 1 SS
UPPSALA	106.51	329.8									28 1 PS
PRUHONICE	110.01	319.9									19 17 PP
RESOLUTE	110.72	10.5	18	39	4						
COLLMBERG	110.74	321.5									19 11 PP
YELLOWKNIFE	111.86	25.5	18	38	1						
SEATTLE	112.02	42.2									24 41
CALISTOGA	113.22	51.9	18	43A	4						
PENTICTON	113.41	40.1	18	31	-9						
BERKELEY	113.56	52.7	18	45A	5						29 11
MINERAL	113.74	50.0	18	51K	11						
LICK	114.11	53.2	18	47A	6						
STRASBOURG	114.65	319.4									29 25
PRIEST	115.04	54.4	18	45A	2						
BLUE MTS.	116.00	44.4	18	46	1						19 47 PP
PASADENA	117.32	56.3	18	50	3						
EUREKA	118.16	50.1	18	51	2						20 21 PP
KEW	118.64	324.4									30 20 PPS
BUTTE	118.89	42.1	18	52	2						
FOLINIERE	119.77	321.6	19	0	8						
BOZEMAN	120.01	42.1	18	55	2						
DUGWAY	120.36	48.6	18	55	2						
GLEN CANYON	122.08	52.0	18	59	2						
FLAMING GRGE	122.66	47.0	18	59	1						
UINTA BASIN	122.71	47.7	19	0	2						20 38 PP
TONTO FOREST	122.93	55.0	19	1	3						19 39
TUCSON	123.70	57.3	19	2	2						
LARAMIE	125.25	45.4	19	6	3						
TOLEDO	125.34	312.8									21 6 PP
GRANADA	125.87	309.5									37 26
GOLDEN	125.96	47.1	19	7	3			19	12		
ALBUQUERQUE	126.62	53.1	19	9	4						
WICHITA MTS.	132.81	50.6	19	12	-5						21 43 PP
LAWRENCE	133.41	43.8	19	19	1						
SCHEFFERVILLE	133.50	9.3	19	23	5						
TULSA	134.42	47.8	19	13	-7						22 51 PP
MADISON	134.45	35.5	19	20	0						22 49 PKS
FAYETTEVILLE	135.50	46.8	19	24	2						22 57
BREBEUF	140.41	20.5	19	30	-1						
CUMBERLAND	141.73	41.9	19	28	-5						22 34 PP
MORGANTOWN	142.39	32.1	19	38K	3						
ANTOFAGASTA	144.09	155.6	19	38	1						
PALISADES	144.14	24.6	19	42	4						
GEORGETOWN	144.41	30.1	19	43	5						
COLUMBIA	145.65	40.1	19	43	3						
HUANCAYO	150.89	135.9	19	59	10						
LA PAZ	151.45	153.1	19	59	10						
CHINCHINA	159.22	100.1	20	4	4						
BOGOTA	160.64	102.1	20	5	4						24 48 PP
FUQUENE	161.16	99.9	20	11	9						
SAN JUAN	165.90	48.2	20	12	5						21 8
CARACAS	168.26	82.4	20	30	22						25 5 PP
TRINIDAD	173.61	75.9	20	16	5						

APRIL 12 0.H 41.M 29.S EPICENTRE 32.00 78.79 DEPTH= 36.KM

A= 0.16511 B= 0.83347 C= 0.52732 D= 0.9809 E=-0.1943
G= 0.1025 H= 0.5173 K=-0.8497 HT= 1.2

DEPTH OF FOCUS= 0.000R

SE= 1.79

	DELTA DEG.	AZ. DEG.	P		O-C S	S O-C			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
DEHRA DUN	1.79	201.1	0	31A	2						0	39 PP
NEW DELHI	3.68	202.4	0	54K	-1	1	33	-5			1	40 S*
LAHORE	3.83	264.5	0	57	-1							

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WARSAK DAM	6.41	290.1	1 35	1							
KHOROG	8.10	314.4	1 57K	-1	3 25	-4					
SEHORE	8.92	190.2	3 6	57						4 7	
CHATRA	8.93	123.1	2 7	-2						3 55	
ANDIJAN	10.15	331.2	2 27	1	4 25	5					
BOKARO	10.22	141.0	2 25	-2	4 20	-1				4 32	SS
QUETTA	10.32	263.0	2 24	-4	4 9	-15					
DUZHANBE	10.49	311.4	2 30	-1	4 26	-2					
LHASA	10.79	99.4	2 35	0	4 36	1					
ALMATA-2	11.31	354.7	2 41K	-1							
TASHKENT	12.03	323.3	2 51	0	5 0	-5					
CALCUTTA	12.70	135.6			5 3	-19					
BOMBAY	14.11	203.8	3 19	0	6 0	5					
POONA	14.13	199.6	3 15K	-4	5 44	-12				6 8	SS
HYDERABAD	14.51	181.3	3 16	-8	5 52	-13					
VISHAKHAPTAM	14.79	162.9	3 4	-24	5 34	-37					
ASHKABAD	17.76	295.2	4 5	-1							
VANNOVSKAYA	17.96	295.0	4 6	-2							
SEMIPALATNSK	18.41	2.9	4 12	-2							
MADRAS	18.95	175.8	4 23	3	7 32	-15				4 37	PP
KIZYL-ARVAT	19.65	297.7	4 30	2	8 9	7					
ESEN BULAK	19.68	38.1	4 28	0	8 22	19					
LANCHOW	21.12	72.1	4 43	0							
CHENG TU	21.57	86.9	4 50	2	8 43	3					
KODAIKANAL	21.70	183.5								8 41	
KUNMING	22.09	102.0	4 56	3	8 56	6					
SHIRAZ	22.67	271.0	4 59	0	9 6	6				12 29	PCS
TEHERAN	23.03	286.8	5 7	5	9 27	21				16 15	SCS
ULAN-BATOR	26.58	45.1	5 37	1	10 22	16					
GORIS	27.28	295.0	5 46	3							
SVERDLOVSK	27.83	338.5	5 48A	0							
TIFLIS	28.72	299.4	5 57	1							
BAKURIANI	29.67	299.2	6 5A	1							
PEKING	31.10	64.5	6 16	-1							
KSARA	35.89	284.7	7 0	2							
MOSCOW	37.19	322.0	7 10K	1							
PULKOVO	42.28	325.7	7 52	1							
VIBORG	43.30	326.7	8 2	2							
ADDIS ABABA	43.54	247.2	8 4A	2							
YAKUTSK	44.14	31.7	8 6	0	14 39	3					
APATITY	44.26	336.9	8 8A	1							
KAJAANI	44.91	331.0	8 14A	1							
HELSINKI	44.97	325.2	8 14K	1						10 54	
UZHGOROD	45.11	308.7	8 16	2							
NURNIJARVI	45.21	325.6	8 15K	0							
SODANKYLA	46.53	335.1	8 26A	1						10 25	
KRAKOW	46.66	310.6	8 27	1							
KEVO	47.37	338.2	8 32A	0							
TIKSI	47.70	19.2	8 34	-1							
UMEA	47.99	329.4	8 37K	0							
UPPSALA	48.54	323.8	8 41K	0							
MATUSIRO	48.64	67.5	8 41	-1	15 31	-9					
KIRUNA	48.93	334.6	8 44	0							
KARLSKRONA	49.36	318.8	8 46K	-1							
KHEYS	49.42	355.6	8 48K	0							
TROMSOE	49.96	336.7	8 52	0							
PRUMONICE	50.13	310.7	8 55	2						10 18	
LJUBLJANA	50.56	305.7	8 58	1							
COLLMBERG	51.01	312.5	9 0	0						11 8	
COPENHAGEN	51.12	318.2	9 1	0							
GOTEBORG	51.36	320.8	9 2	-1							
SKALSTUGAN	51.46	328.4	9 3K	0							
JENA	51.94	312.2	9 7	0						10 50	PP
KONGSBERG	52.57	323.3	9 12A	0							
STUTT GART	53.69	309.7	9 20	0							
HEIDELBERG	53.96	310.6	9 22	0							
MAGADAN	54.02	36.8	9 19	-4							
STRASBOURG	54.71	309.7	9 27	-1							
MONACO	55.94	304.0	9 32	-4							
ISOLA	56.10	304.6	9 37	-1						9 49	
BESANCON	56.15	308.4	9 37	-1							
LWIRO	58.32	244.1	9 51A	-2							
KEW	59.22	314.4	10 0	0							
NORD	59.36	350.2	9 59	-2							
FOLINIERE	60.00	311.4	10 2	-3							
BAGNERES	61.22	304.9	10 13	0							
ALMERIA	65.27	299.2	10 39A	-1							
TOLEDO	65.28	302.8	10 40K	0							

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TUCSON	97.55	54.6	13 39	1	
TONTO FOREST	98.62	52.8	13 44	2	
EUREKA	99.31	46.3	13 46	1	
LANCHOW	100.40	308.0	13 32	-18	
BLUE MTS.	102.25	41.6	14 0	1	18 12 PP
UINTA BASIN	103.56	49.0			18 13 PP
FLAMING GRGE	104.05	48.6	14 0	-7	
WICHITA MTS.	107.09	59.1	14 33	777	34 0 SS
BOGOTA	107.77	98.6			28 23 PS
TULSA	109.65	59.4			28 28 SP
YELLOWKNIFE	114.89	28.5	18 45	2	
CUMBERLAND	116.52	64.5	18 52	6	36 9 SS
TRINIDAD	121.29	102.2			30 30
MOULD BAY	121.61	14.6	18 52	-4	
RESOLUTE	126.59	19.3	19 2	-4	
OTTAWA	127.49	57.9	19 4	-3	
BREBEUF	128.92	58.4	19 11	1	
LMIRO	129.59	223.4	19 14	3	22 18 PKS
SHIRAZ	133.65	276.2			22 52
APATITY	144.83	336.6	19 34K	-5	
KEVO	145.13	342.2	19 35	-5	42 58 SKSP
SODANKYLA	146.94	339.3	19 41	-2	
TROMSOE	146.97	346.0	19 43	0	
KIRUNA	148.15	343.2	19 44A	-1	
KSARA	148.28	273.2	18 56	-49	20 59 PP
KAJAANI	148.82	334.1	19 46	0	
HELWAN	150.26	263.1	19 50	2	21 41
UMEA	151.36	338.4	19 52A	2	
NURMIJARVI	152.18	330.3	19 54	3	53 8
HELSINKI	152.27	329.5	19 54	3	
SKALSTUGAN	153.55	344.4	19 57	4	
UPPSALA	155.18	334.7	20 6A	11	
COLLMBERG	163.13	322.8	20 52	48	21 15
PRUMONICE	163.17	317.1	20 18	14	22 1 PKP2
TOLEDO	178.78	32.0			26 23 PP

APRIL 13 2.M 20.M 57.S EPICENTRE -6.26 -76.63 DEPTH= 115.KM

A= 0.22991 B=-0.96718 C=-0.10824 D=-0.9729 E=-0.2313
G=-0.0250 H= 0.1053 K=-0.9941 HT= 6.9

DEPTH OF FOCUS= 0.013R

SE= 1.87

	DELTA DEG.	AZ. DEG.	P			S			O-C		*PP		SUPP.	
			M	S	S	M	S	S	M	S	M	S		
HUANCAYO	5.90	167.5	1	27	1	1	57	-36						
BOGOTA	11.10	13.4	2	37A	1	4	43	4				2	52 PP	
CHINCHINA	11.20	5.2	2	1	-37							2	17 PP	
AREQUIPA	11.32	154.0	2	38	-1									
FUQUENE	12.00	14.0	2	49A	1							3	3 PP	
LA PAZ	13.15	141.4	3	1	-2									
BALBOA HTS.	15.39	349.0	3	33	1									
ANTOFAGASTA	18.34	161.6	4	8K	0	7	34	9				4	32	
CARACAS	19.24	30.2	4	18K	0	8	3	19						
TRINIDAD	22.63	42.2	4	53	1	8	43	-4						
HOPE	24.10	359.7	5	10	4									
SAN JUAN	26.58	22.8	5	28	-1									
ST. CLAUDE	26.62	33.6	5	29	0	9	55	1						
COMITAN	27.12	325.7										6	35	
ANTIGUA	27.46	32.0	5	3	-34									
SANTA LUCIA	27.61	169.2	5	38K	-1	10	7	-3				6	5 PP	
MERIDA	29.89	335.1	5	54	-5	10	48	2						
VERA CRUZ	31.76	323.2	6	19	4	11	23	7						
TACUBAYA	33.82	319.4	6	37	4	11	53	5						
GUADALAJARA	37.47	316.3	6	43	-21							7	35	
COLUMBIA	40.25	354.3	7	27	0	13	26	1						
CHAPEL HILL	42.01	357.1	7	42	1							15	2	
CUMBERLAND	42.46	349.2	7	44K	-1	13	56	-2	8	5		9	36 PP	
DALLAS	43.35	335.0	7	53	1									
CHIHUAHUA	44.81	322.2	7	39	-25	14	15	-17						
FAYETTEVILLE	45.23	339.9	8	7K	0							8	52	
TULSA	45.64	338.1	8	11K	0	14	29	-15	8	38		18	38 SS	
WICHITA MTS.	45.72	334.5	8	11K	0	14	47	2	9	48		17	53 SS	
CINCINNATI	45.76	351.5	8	9	-2							9	47	
PHILADELPHIA	45.99	1.6	8	16	3	14	49	0				10	7 PP	

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PENNSYLVANIA	46.84	358.7	8 20	0	15 3	2		
FORDHAM	46.94	2.9	8 20	-1	15 0	-2		
PALISADES	47.10	2.8	8 21	-1	15 1	-3	8 51	9 51 PCP
CLEVELAND	47.71	355.0	8 18K	-9	15 4	-9		
LAWRENCE	48.19	340.5	8 40	9				
CHICAGO CGS.	48.84	349.1	8 33	-3	15 23	-6		18 13 SCS
LONDON ONT.	49.24	355.6	8 36K	-3				
SOCORRO	49.30	326.5	8 40	1				
ALBUQUERQUE	49.71	327.6	8 43	1	15 35	-6		
TUCSON	50.27	321.7	8 47	1	16 53	65		10 43 PCP
OTTAWA	51.43	0.8	8 54K	-1	16 9	5		
BREBEUF	51.59	2.7	8 56K	0	16 10	3	9 21	10 8 PCP
TONTO FOREST	51.94	323.3	9 0K	1	16 14	3	9 35	11 0 PP
HALIFAX	51.98	11.8	8 59K	0				
SHAWINIGAN	52.68	3.3	9 3K	-2				
GOLDEN	52.87	332.3	9 6	0			9 35	
LARAMIE	54.26	333.3	9 17	1				
BOULDER CITY	55.23	322.4	9 24A	1			9 53	10 23 PCP
UINTA BASIN	55.38	329.7	9 24K	0	17 1	3	9 52	10 23 PCP
PASADENA	56.18	318.5	9 30	0	17 15	7	10 0	10 26 PCP
SALT LAKE C.	56.88	328.5	9 34K	-1			10 4	10 27 PCP
PRIEST	59.00	319.0	9 50K	0				
ARGENTINE I.	59.54	174.0	9 53	0				
BOZEMAN	60.14	332.8	9 58K	0				10 40 PCP
LICK	60.34	319.6	9 59K	0				
BERKELEY	61.05	319.7	10 4K	0	18 15	3	10 25	10 45 PCP
BUTTE	61.10	332.1	10 4	0	18 11	-1	10 29	19 19 SCS
SCHEFFERVILLE	61.41	6.5	10 5K	-1				
CALISTOGA	61.71	320.3	10 8K	0				
MINERAL	62.12	322.3	10 10K	-1				
BLUE MTS.	62.60	328.5	10 13	-1	18 33	2	10 45	12 25 PP
M.BOUR	62.62	70.4	10 14	0	18 35	4		
PONTA DELGDA	64.49	43.0	10 25K	-2	19 9	14		11 3 PCP
SPOKANE	64.60	330.8	10 26	-1				18 56
BANFF	66.24	334.4	10 36K	-2				
PENTICTON	66.80	331.0	10 41K	0				
SEATTLE	67.05	328.3	10 38	-5	19 19	-7		
VICTORIA	68.18	328.5	10 49K	-1				
PORT HARDY	71.63	328.7	11 10K	-1				
YELLOWKNIFE	74.45	342.7	11 26K	-1				
AVERROES	76.33	53.7	11 39K	1			12 5	21 43 SP
BYRD STATION	76.49	187.0	11 39	0				21 22
LISBON	76.68	48.0	11 25K	-15	21 1	-14	11 35	20 55 SKS
GODHAVN	77.01	8.2	11 40	-2	21 16	-3		
LOME	78.66	82.5	11 50	-1				
COPPERMINE	78.73	346.1	11 49K	-2				
GRANADA	80.41	50.8	12 1A	1	22 0	5		15 3 PP
VALENTIA	80.70	35.1	12 2	0	22 3	5		
TOLEDO	80.80	48.1	12 3K	1	22 1	2	12 40	14 49 PP
ALMERIA	81.20	51.3	12 4	0	22 3	0		15 12 PP
HAWAII V.OB.	81.43	290.7	12 7	1	21 57	-9		
RESOLUTE	81.57	355.2	12 5K	-1				
ALICANTE	83.09	50.3	12 14K	0	22 24	2		15 18 PP
N-LAZARVSKYA	83.63	160.5	12 17K	0	22 59	31	12 49	22 30 SKS
SOUTH POLE	83.79	180.0	12 17	-1				
KIPAPA	84.30	292.2	12 21	1	22 37	3		23 33
HONOLULU	84.35	292.1	12 22	2	22 37	2		28 12 SS
TORTOSA	84.40	48.0	12 22	1	22 40	5		
BAGNERES	84.67	45.8	12 22	0				12 42
JERSEY	84.70	39.4	12 22	0	22 39	1		
SCORESBY SD.	84.76	16.0	12 23	1				
FOLINIÈRE	85.62	40.1	12 27	0				
MOULD BAY	85.99	350.6	12 28K	0	22 49	-2		12 59
KEW	86.40	37.5	12 30K	0	22 53	-2	12 57	15 52 PP
DURHAM	86.54	34.1	12 32A	1	23 57	61	12 59	15 53 PP
CLERMONT-FD.	87.33	43.6	12 35K	0				
COLLEGE	87.77	336.1	12 36K	-1	23 7	-1	13 7	16 4 PP
BANDEIRA	88.36	104.7	12 43K	3	23 16	3	13 15	15 13 PP
ALERT	88.87	1.9	12 42K	0				
DOURBES	89.15	39.5	12 44	0	23 23	2		
SCOTT BASE	89.35	190.9	12 43	-1	23 8	-14		
BESANCON	89.55	42.5	12 45	0				16 18 PP
ROSELEND	89.74	44.1	12 45K	-1				16 24 PP
ISOLA	89.79	45.7	12 47	0				16 13 PP
DE BILT	89.87	37.6	12 47	0	23 57	30		24 27 PS
MONACO	90.00	46.1	12 46	-2				
WITTEVEEN	90.89	37.1	12 52K	0				
BENSBERG	90.91	39.0	12 52K	0				16 29 PP
CAPE HALLETT	90.94	196.3	12 52	0				

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STRASBOURG	90.94	41.4	12 52K	0	23 53	16		16 16	PP
HERMANUS	91.32	124.7			23 40	0		25 42	PPS
MUNSTER	91.34	38.0	12 54	0					
KARLSRUHE	91.42	41.0	12 55	1					
PAVIA	91.43	44.9			23 54	13		25 24	PS
HEIDELBERG	91.68	40.6	12 55K	0					
EBINGEN	91.68	41.9	12 57K	2					
TUBINGEN	91.79	41.5	12 55K	-1					
NORD	91.94	7.3	12 56K	-1					
STUTT GART	91.96	41.3	12 56	-1				16 36	PP
RAVENSBU RG	92.07	42.3	12 57K	0					
PRATO	92.65	46.3	12 59	-1	24 14	22			
FLORENCE X.	92.75	46.4	13 7	7	24 29	37	13 27	16 47	
PADOVA	93.35	44.9	13 4K	1	24 18	20		16 38	PP
KONGSBERG	93.46	30.5	13 4K	0	24 11	12		14 20	
ROME	93.47	48.4	13 5K	1	24 29	30	13 25	16 47	PP
AFIAMALU	93.49	255.7	13 7A	3	23 34	-25			
JENA	93.68	39.3	13 5	0	23 33	-27	13 51	16 48	PP
HALLE	93.96	38.8	13 6	0	24 10	7			
CHEB	94.11	40.2	13 8	2				16 55	PP
GOTEBORG	94.49	32.6	13 8K	0				16 55	PP
COPENHAGEN	94.60	34.6	13 9K	0					
COLLMBERG	94.60	39.0	13 9K	0	23 58	-10			
TRIESTE	94.69	44.7	13 9K	0			13 41	16 57	PP
SKALSTUGAN	95.07	26.7	13 10K	-1					
LJUBLJANA	95.25	44.4	13 12K	0				16 58	PP
PRAGUE	95.43	40.3	13 13K	1	24 27	51		17 4	PP
PRUHONICE	95.50	40.4	13 13	0	24 16	39			
MESSINA	95.53	52.3	13 14	1	24 12	35	13 40	17 6	PP
KARLSKRONA	96.39	34.2	13 18K	1				17 10	PP
VIENNA-H.	96.62	42.2	13 18K	0	23 37	-6			
KIMBERLEY	96.94	119.9						13 20	PCP
BRATISLAVA	97.10	42.3	13 20A	0				13 47	
UPPSALA	97.51	30.5	13 21K	-1	23 44	-3		17 19	PP
RACIBORZ	97.86	40.4	13 24	0				17 18	
KIRUNA	98.42	22.4	13 25K	-1	23 52	0		17 22	PP
UMEA	98.61	26.5	13 26K	-1	24 47	54		17 25	PP
KRAKOW	98.97	40.4	13 29	0				17 29	
BELGRADE	99.40	45.7	13 31	0	24 59	3		17 4	PP
WARSAW	99.60	38.2						17 35	
WELLINGTON	99.66	226.4	13 39	7	24 3	5	14 3	26 23	SP
CHATEAU	99.70	228.6						29 52	PKKP
KARAPIRO	100.05	229.9						29 52	PKKP
KEVO	100.55	20.1	13 30	-6	24 5	3		17 39	PP
SODANKYLA	100.84	22.6	13 36	-1				17 40	PP
MAWSON	100.94	165.3	13 37	0			14 10		
NURMIJARVI	100.97	29.6	13 36	-2	24 4	0		17 39	PP
HELSINKI	101.17	29.9	13 39	1				17 40	PP
SOFIA	101.53	47.8	13 43	3	25 8	61		17 50	PP
LWOW	101.63	40.5			25 9	61		17 52	PP
KAJAANI	101.85	25.8	13 41	-1				17 49	PP
ATHENS	101.97	52.6	13 42K	0				17 52	
ROXBURGH	102.01	221.1			24 13	4		32 23	SS
BULAWAYO	102.03	112.0	13 43K	1					
KHEYS	102.79	6.9	13 45K	-1	24 15	2		18 1	PP
BROKEN HILL	102.95	106.3	13 47K	1					
APATITY	103.35	21.8	17 19	211				18 0	PP
PULKOVO	103.89	29.9	13 51K	1	24 18	0		18 5	PP
CHANGALANE	103.90	118.9	13 52	1			14 24	27 9	SP
LCO. MARQUES	104.33	118.7	13 52	0			14 24		
LWIRO	105.07	94.0	13 57	777	25 30	67		14 38	*SP
MOSCOW	108.68	33.0	14 11K	777	24 37	-2		18 39	PP
CHILEKA	108.88	108.8	14 3	777					
SIMFEROPOL	109.04	44.6			24 43	2		18 44	PP
JERUSALEM	111.83	58.4	14 28	-233				16 12	
KSARA	112.14	56.1	18 25	3	25 45	52		19 9	PP
TIKSI	112.78	351.5						21 33	PPP
PETROPAYLOVK	115.36	326.7						19 33	PP
MAGADAN	115.83	335.4	19 36	67					
ADDIS ABABA	115.98	83.0	18 33	4					
TIFLIS	117.38	46.0	18 33	1				19 44	PP
GORIS	119.15	48.0	18 36	1				19 55	PP
TANANARIVE	119.59	115.8	18 41	5				20 1	
RIVERVIEW	119.74	225.2						20 30	PP
YAKUTSK	121.04	345.9						20 9	PP
TEHERAN	124.13	50.7	18 46	1	24 43	-53	19 17	20 27	PP
SHIRAZ	126.84	57.5	18 52	2				20 56	
ADELAIDE	127.17	216.6	18 52	1				20 56	

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Y.-SAKHLINSK	127.22	327.0	18 51	0	19 24	20 54	PP
ASHKABAD	128.45	45.6	18 55	2	19 29	20 58	PP
RABAU	130.18	259.2	18 58K	1			
SEMIPALATNSK	131.93	19.7	19 1	1		22 27	PKS
MIZUSAWA	132.79	319.5	19 6A	4		21 56	
PORT MORESBY	133.69	250.7	19 5	2		23 11	
TASHKENT	133.73	35.8	19 5	2	19 38	21 42	PP
IRKUTSK	134.12	359.2	19 5	1	19 38	21 32	PP
TUKUBASAN	135.07	316.8	19 7K	1		39 25	SS
VLADIVOSTOK	135.50	330.1				22 37	PKS
FRUNSE	135.60	30.4	19 11	4		22 41	PKS
KHOROG	137.51	38.4	19 10	0			
CHANGCHUN	137.91	336.2	19 10K	-1	19 43	21 59	PP
QUETTA	138.32	50.6	19 14	2		21 47	
MUNDARING	140.07	197.1	19 16	1	19 43		
PEKING	144.46	343.0	19 21K	-2	19 54	22 36	PP
PAOTOW	145.31	351.1	19 25K	1	19 57	22 41	PP
DEHRA DUN	146.24	41.7	19 28K	2			
NEW DELHI	146.74	45.0	19 28	1		22 45	PP
DARWIN	147.02	235.8	19 31	4			
BOMBAY	147.71	64.3	19 31	3		30 39	
POONA	148.75	64.3	19 32K	2			
SEHORE	149.61	53.7	19 34	3			
ZO-SE	150.17	328.2	19 34K	2	20 6	23 18	PP
LANCHOW	150.34	359.2	19 35K	3	20 8	19 40	PKP2
NANKING	150.57	332.7	19 33K	1	20 11	23 17	PP
SIAN	151.67	350.3	19 36K	2	20 16	19 43	PKP2
LHASA	153.99	25.1	19 41K	4		23 42	PP
CHATRA	154.37	35.2	19 41	3			
BOKARO	155.70	42.2	19 42	2		31 17	
CHENG TU	155.72	358.7	19 42K	2	20 15	23 44	PP
MADRAS	156.19	71.9	19 55	15		25 15	
BAGUIO CITY	160.35	302.4	19 47	2		24 55	PP
CANTON	160.70	331.2	19 48K	2	20 21	24 10	PP
KUNMING	161.23	1.8	19 49K	3	20 22	24 13	PP
LEMBANG	166.33	198.1	19 53K	2		25 15	PP
TANGERANG	167.24	194.8	19 49K	-3		24 43	
PORT BLAIR	168.19	62.2	19 30	-22		24 54	
MEDAN	174.62	119.4	19 56K	0		21 33	

APRIL 13 14.H 31.M 23.S EPICENTRE -3.41 135.68 DEPTH= 44.KM

A=-0.71414 B= 0.69751 C=-0.05900 D= 0.6987 E= 0.7154
G= 0.0422 H=-0.0412 K=-0.9983 HT= 7.1

DEPTH OF FOCUS= 0.002R

SE= 2.65

	DELTA DEG.	AZ. DEG.	P			S			*PP		SUPP.	
			M	S	O-C	M	S	O-C	M	S	M	S
PORT MORESBY	12.86	118.1	3	1A	-2							
RABAU	16.48	93.3	3	52A	2	6	57	6				
GUAM	19.02	28.1	4	24	3	8	9	21				
CHARTERS TS.	19.53	148.9	4	26	-1	7	50	-9				
MANILA	23.06	321.5	5	4	1	9	12	6				
BAGUIO CITY	24.71	323.3	5	16	-3	9	59	24			7 41 PCP	
HONIARA	24.84	105.1	5	20	0	9	45	8				
LEMBANG	28.14	261.9	5	48A	-3	10	36	5			6 43	
DJAKARTA	28.87	263.4									6 40	
BRISBANE	28.91	147.3	5	56	-1	10	36	-7				
TANGERANG	29.07	263.5	6	0K	1	10	52	6				
ADELAIDE	31.53	175.2	6	20A	-1	11	13	-12			6 32 PP	
KOUMAC	32.66	123.8	6	23A	-8							
RIVERVIEW	33.54	156.3	6	39A	1	11	56	0			7 58	
MUNDARING	33.79	210.6	6	40	0				6 49			
PERTH	33.97	211.1	6	57	15	12	10	7			8 0 PP	
CANBERRA	34.07	160.3	6	42	-1						8 11 PPP	
CANTON	34.18	321.5	6	41K	-3	12	2	-4	6 54			
PORT VILA	35.02	116.4	6	52A	1							
TOOLANGI	35.17	166.4	6	53	1				7 2		9 28 PCP	
NOUMEA	35.26	124.8	6	53A	0							
ZO-SE	36.99	339.1	7	7K	-1	12	49	0	7 20		13 16 *SS	
ABUYAMA	38.07	359.9	7	16K	-1							
NANKING	38.75	336.8	7	22K	0	13	17	1	7 35		13 41 *SS	
TUKUBASAN	39.64	5.6	7	26K	-4	13	19	-10	7 41		8 42 PP	

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MATUSIRO	39.81	3.2	7 40	9						7 56	
MIZUSAWA	42.62	6.3	7 55	1	14 16	2					
KUNMING	42.73	313.4	7 55K	0						8 8	
SIAN	45.14	328.3	8 15K	1	14 51	1				8 26	
PORT BLAIR	45.26	290.0	8 25	10	14 58	6					18 29 SSS
CHENGTU	45.40	320.6	8 16K	0	14 52	-2				8 29	
PEKING	46.79	339.4	8 26K	-1	15 11	-3				8 41	15 38 *SS
CHANGCHUN	47.94	349.9	8 34	-3						8 48	
LANCHOW	49.26	325.6	8 48K	1	15 50	2				9 0	16 11 *SS
TOCKLAI	49.59	309.7									9 51
KURTILSK	49.63	11.3	8 49K	-1	15 55	1					
PAOTOW	49.67	334.4	8 49K	-1	15 54	0				9 2	
KARAPIRO	50.06	138.6	8 53	0							9 56 PCP
CHATEAU	50.76	140.0	8 57	-1						9 5	
ROXBURGH	51.20	150.0			16 53	38					20 13
WELLINGTON	51.49	142.6	9 3	-1	15 49	-30					18 49 SCS
UGLEGORSK	52.57	5.3	9 12A	0							
AFIAMALU	52.87	104.8	9 15A	1	16 44	6					
LHASA	53.89	310.8	9 22K	0	16 53	1				9 36	17 15 *SS
BOKARO	55.57	301.9	9 33	-1							17 17
CHATRA	55.63	305.8	9 34	0							17 17
ULAN-BATOR	56.98	337.3	9 41	-3	17 35	2					
MADRAS	57.45	287.7	9 47	0	17 39	0					11 57 PP
PETROPVLOVK	59.46	15.9	10 0	-1							
IRKUTSK	61.49	338.7	10 14K	-1	18 36	4					
MAGADAN	63.89	8.5	10 31	0	19 6	4					
DEHRA DUN	64.37	305.9	10 33K	-1							19 50
NEW DELHI	64.47	303.8	10 34K	-1	19 6	-3					
POONA	64.62	292.2	10 33K	-3							
YAKUTSK	65.40	356.9	10 40K	-1	19 20	0					
BOMBAY	65.66	292.4	10 41	-1	19 21	-2					13 27 PP
LAHORE	67.79	306.0	10 55	-1							
HONOLULU	69.27	65.8	11 7	2	20 17	10				11 26	
KIPAPA	69.37	65.7	11 7	1	20 23	15				11 25	27 57
MIRNY	69.65	196.8	11 6	-1							
ALMATA-2	69.95	318.6	11 15K	6	20 24	9					
WARSAK DAM	70.79	307.7	11 15	1							
HAWAII V.OB.	71.50	68.3	11 20	1						11 38	
SEMIPALATNSK	71.51	326.2	11 17K	-2							
KHOROG	71.91	311.1	11 21K	0							
CAPE HALLETT	72.09	169.5	11 33	11							
ANDIJAN	72.40	314.6	11 21K	-3							
QUETTA	73.49	302.7	11 30K	0							
TASHKENT	74.79	314.3	11 38K	0	21 15	5					
TIKSI	75.03	357.8	11 36K	-3	21 7	-6					
SCOTT BASE	76.19	173.5	11 46	0							
MAWSON	80.35	201.8	12 7A	-2							
ASHKABAD	82.12	308.9	12 17	-1	22 12	-16					
KIZYL-ARVAT	83.95	309.8	12 28K	1	22 48	2					
SVERDLOVSK	84.70	327.8	12 31K	0							
SHIRAZ	85.73	299.9	12 36	0	22 55	-9				12 58	23 18
SOUTH POLE	86.62	180.0	12 39	-1							
TANANARIVE	87.14	251.3	12 47	4							13 13
TEHERAN	87.33	305.9	11 56	-48	23 21	2					
COLLEGE	87.36	24.6	12 43	-1						12 57	
BYRD STATION	89.22	170.3	12 53	0							
KHEYS	91.32	350.8	13 4	1							
GORIS	91.64	309.3	13 4K	0							
MOULD BAY	96.84	13.5	13 26A	-2							
MOSCOW	97.34	325.6	13 26	-4							
APATITY	97.80	337.7	13 30A	-2	24 8	3					
KEVO	99.58	340.5	13 38	-2	24 11	-3					26 39 PS
KSARA	100.02	303.6	14 30	48							
COPPERMINE	100.34	21.4	13 42	-2							
SODANKYLA	100.40	338.2	13 42	-2							17 57 PP
JERUSALEM	100.67	301.5	13 57	12							16 51
KAJAANI	100.85	334.8	13 42	-4							17 54 PP
VIBORG	101.18	331.3	13 46	-2							
MINERAL	101.89	49.6	13 55A	4							
YELLOWKNIFE	102.04	26.5	13 51	0							
LICK	102.14	52.7	13 58K	6							
TROMSOE	102.27	341.3	13 51	-1							
KIRUNA	102.48	339.4	13 51	-2	24 30	2					18 1 PP
RESOLUTE	103.03	12.2	13 54	-2							
HELSINKI	103.15	331.3	13 56	0							18 12 PP
NURMIJARVI	103.20	331.7	13 55	-2	24 25	-6					18 13 PP
UMEA	104.07	335.6	13 58	-2	24 34	-1					18 14 PP
BLUE MTS.	104.43	44.6	14 2	0	25 13	36					18 23 PP
ISTANBUL UN.	104.80	311.5	14 16	12	24 40	1					

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LWIRO	106.69	266.6									19 0 PP
UPPSALA	106.73	332.3	14	10	777						18 52 PP
CAMPULUNG	106.88	316.3				25	1	13			
SKALSTUGAN	107.37	337.0									18 51 PP
KRAKOW	108.94	322.1	18	15	777						19 5 PP
ATHENS	109.34	309.0	19	6K	777						
TONTO FOREST	110.90	54.6	18	31	2						21 0
UINTA BASIN	110.95	48.0	14	30	-239	25	14	9			19 12 PP
BRATISLAVA	111.31	320.9	18	47	18						19 13 PP
TUCSON	111.63	56.7	18	33	3						
VIENNA-H.	111.74	321.1	18	31	1						19 23 PP
PRUHONICE	112.22	323.3	15	1	-210						19 21 PP
PRAGUE	112.26	323.5									19 21
COLLMBERG	112.60	325.1	14	50	-222						19 34 PP
HALLE	113.11	325.6									20 39 PP
JENA	113.57	325.1	18	56	22						19 40 PP
LJUBLJANA	113.71	319.4	18	36	2						19 42 PP
TRIESTE	114.35	319.2									19 47 PP
MUNSTER	115.28	327.4									19 45 PP
STUTTGART	115.86	323.7	18	39	1						19 55 PP
BENSBERG	116.02	326.6	19	12	33						20 0 PP
ROME	116.57	315.7									19 53 PP
STRASBOURG	116.83	324.0									19 59 PP
DOURBES	117.87	326.7									20 15 PP
DURHAM	118.22	333.5	18	54	11						19 57 PP
BESANCON	118.53	323.4									20 14
ROSELEND	118.87	321.6	18	45	1						20 15 PP
MONACO	119.25	319.3	19	51	66						
ISOLA	119.30	319.9	18	46	1						20 11
WICHITA MTS.	120.91	51.2	18	48	0						20 19 PP
CLERMONT-FD.	120.98	323.0									20 31 PP
TULSA	122.64	48.9	18	53	1						37 15 SS
BAGNERES	124.20	321.6	19	1	6						20 40 PP
ALICANTE	127.05	317.0	19	16	16						21 4 PP
TOLEDO	128.59	320.5	19	17A	14						21 12 PP
GRANADA	129.77	317.3									21 35 PP
CUMBERLAND	130.24	44.7	19	7	1						21 29 PP
BREBEUF	130.86	27.1	19	8K	0						
BENI ABBES	132.13	308.4									21 27 PP
PALISADES	134.07	31.3	19	16	3						
BALBOA MTS.	144.56	79.4	19	32	0						
HUANCAYO	145.57	117.0	19	39	5						
AREQUIPA	146.68	127.1	19	40	4						
CHINCHINA	148.75	86.1	19	8	-31						19 20 PKP2
LA PAZ	149.26	130.7	19	49	9				21	1	
FUQUENE	150.61	84.9	19	55	13						20 7 PKP2
M. BOUR	150.90	293.7	20	6	24						
SAN JUAN	153.99	53.5	19	49	2						
CARACAS	156.49	71.4	19	53	3						
TRINIDAD	161.60	66.1	20	22	26						

APRIL 15 23.H 39.M 23.S EPICENTRE -18.64-173.29 DEPTH= 0.KM

A=-0.94171 B=-0.11074 C=-0.31768 D=-0.1168 E= 0.9932
G= 0.3155 H= 0.0371 K=-0.9482 HT= 5.0

SE= 2.22

	DELTA DEG.	AZ. DEG.	P		O-C S	S O-C			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
AFIAMALU	4.92	17.4	1	13	-4	1	27	-49				
PORT VILA	17.50	270.1	4	8K	1							
NOUMEA	19.32	255.7	4	29	0							
KOUMAC	21.21	261.1	4	51A	1							
KARAPIRO	21.55	204.6	4	54K	1							
CHATEAU	22.66	203.0	5	4	0							
WELLINGTON	24.77	201.8				9	55	10				
HONIARA	27.49	285.8	5	59	9							
RIVERVIEW	35.10	237.3									15	1
CANBERRA	37.22	235.8	7	12	-3							
PORT MORESBY	39.38	278.0	7	31	-2							
TOOLANGI	40.57	233.6	7	39	-4							
TARRALEAH	41.41	226.4	7	51	1							
KIPAPA	42.53	21.3	8	0	1							
CAPE HALLETT	54.52	186.1	9	33	1							
MUNDARING	64.12	242.9	10	35	-3							

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BYRD STATION	65.76	171.1	10 49	0			
MATUSIRO	71.48	320.5	11 23	-1	20 31	-12	
LICK	73.92	40.6	11 40K	1			
PASADENA	74.21	45.0	11 41	1			
MINERAL	75.86	38.2	11 50	0			
TUCSON	78.30	50.1	12 4	0			
EUREKA	78.75	41.6	12 6	0			
TONTO FOREST	79.04	48.1	12 8	0			
GLEN CANYON	80.23	45.7	12 16	2	12 17	13 14	
BLUE MTS.	81.14	36.6	12 18	-1			
PENTICTON	82.68	32.1	12 27	0			
UINTA BASIN	83.33	43.7	12 31K	1			
FLAMING GRGE	83.76	43.2	12 33	1			
BUTTE	84.53	37.6	12 37	1			
MAWSON	84.77	198.6	12 37	0			
COLLEGE	85.51	10.6	12 40	-1			
WICHITA MTS.	88.51	52.6	12 56	0			
YELLOWKNIFE	93.01	23.4	13 16	-1			
CUMBERLAND	98.82	55.5	13 46	3			
MOULD BAY	100.07	11.3	13 47	-2			
QUETTA	124.50	294.2	19 3	1			
APATITY	128.21	347.3	19 8K	-1			
TROMSOE	128.47	354.6	19 9	0			
SODANKYLA	129.64	350.1	19 11	0			
KIRUNA	130.05	353.2	19 12	0			
KAJAANI	132.41	347.7	19 15	-2			
UMEA	133.92	351.7	19 14A	-5			
SKALSTUGAN	134.93	356.5	19 23A	2			
BULAWAYO	135.88	210.2	19 24	1			
NURMIJARVI	136.25	347.3	19 20	-4			
SHIRAZ	137.03	293.7	19 25	0			22 58
WITTEVEEN	145.89	0.0	19 42	1			
LWOW	145.93	339.9	19 44	3			
BANDEIRA	146.04	191.5	19 43	2			
MUNSTER	146.73	359.0	19 47	5			
KEW	146.77	8.0	19 45	3			
KRAKOW	146.92	344.3	19 45	2			
HALLE	146.95	354.0	19 46	3			
COLLMBERG	147.03	352.7	19 44A	1			22 7
RACIBORZ	147.31	346.3	19 46	3			
ADDIS ABABA	147.49	257.3	19 47	4			
JENA	147.55	354.2	19 45	1			23 19 PP
SKALNATE PL.	147.63	343.3	19 47	3			
BENSBERG	147.75	359.5	19 48A	4			
PRAGUE	148.04	350.6	19 49	5			
PRUMONICE	148.11	350.4	19 50A	6			22 2
DOURBES	148.57	2.6	19 52	7			
KASPERSKE H.	149.08	351.2	19 48	2			
BRATISLAVA	149.35	346.3	19 54	8			20 32
FOLINIERE	149.39	9.4	19 52	5			
VIENNA-H.	149.44	347.3	19 49	2			
STUTTART	149.87	356.6	19 49	2			
KSARA	149.91	306.0	19 55	8			
LWIRO	149.94	228.6	19 55K	8			
STRASBOURG	150.12	358.6	19 55	7			
ISTANBUL UN.	150.63	324.2	19 56	8			
JERUSALEM	151.17	302.5	19 58	9			
BESANCON	151.46	1.0	19 59	9			
LJUBLJANA	151.91	348.4	19 53	3			20 13
CLERMONT-FD.	152.78	5.5	20 2	10			
ROSELEND	153.03	0.1	20 1	9			
ISOLA	154.53	359.4	20 4	10			

APRIL 16 1.4M 29.4M 22.5 EPICENTRE -1.07 128.03 DEPTH= 40.KM

A=-0.61601 B= 0.78752 C=-0.01863 D= 0.7877 E= 0.6161
G= 0.0115 H=-0.0147 K=-0.9998 HT= 7.2

DEPTH OF FOCUS= 0.001R

SE= 3.45

	DELTA DEG.	AZ. DEG.	P			S			*PP		SUPP.	
			M	S	S	M	S	S	M	S		
MANILA	17.09	336.5	3	54	-3	7	14	9				
PORT MORESBY	20.74	114.1	4	35A	-4							
LEMBANG	21.14	253.8	4	44K	0	8	34	3			8 40 PCP	

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DJAKARTA	21.75	256.0	4 51K	1				
TANGERANG	21.95	256.1	4 51K	-1	8 41	-5	9 0	PCP
HENGCHUN	24.01	343.2	5 13	1	9 36	13		
TAMU	24.30	343.8	5 14A	-1	9 34	6		
RABAU	24.31	97.8	5 12	-3				
TAITUNG	24.61	344.6	5 19	1				
HSINKONG	24.89	345.3	5 19	-1	9 54	16		
TAINAN	25.11	342.8	5 23	1				
YUSHAN	25.36	344.7	5 26	1				
ALISHAN	25.44	344.4	5 26	1	10 2	15		
ISIGAKIZIMA	25.53	351.8	5 30	4				
HWALIEN	25.66	346.4	5 29A	1	9 59	8		
PENGHU	25.81	341.9	5 37	8	10 9	16		
CHARTERS TS.	25.98	137.8	5 29	-2				
TAICHUNG	26.07	344.6	5 34	3				
HSINCHU	26.62	345.6	5 44	8	10 25	18		
TAIPEI	26.71	346.8	5 41	4	10 14	6		
ANPU	26.85	346.8	5 41	2				
MAWASHI	27.15	359.3	5 39	-2				
CANTON	27.96	330.1	5 46	-3				
MEDAN	29.70	279.1	6 4	0				
YAKUSIMA	31.44	4.1	6 22	2	11 24	1		
KAGOSIMA	32.55	4.0	6 39K	10	11 43	2		
ZO-SE	32.65	349.1	6 27	-3				
MUNDARING	32.69	198.8	6 28	-3				
PERTH	32.80	199.4	6 34	3			7 45	PP
HONIARA	32.82	105.8	6 28	-4	11 51	6		
MIYAZAKI	32.97	5.3	6 23	-10	11 51	4		
TORISIMA	33.48	19.4	6 36	-1				
HUKUE	33.60	1.2	6 43	5			11 9	
NAGASAKI	33.67	2.8	6 38A	-1	11 58	0	17 16	
UNZENAKE	33.69	3.4	6 33	-6	12 12	14		
KUMAMOTO	33.81	4.0	6 40	0	11 48	-12		
ASOSAN	33.91	4.6	6 45	4	12 6	4		
ASHIZURI	33.94	7.5	6 45	4	12 4	2		
NANKING	34.10	345.9	6 40	-3				
SAGA	34.21	3.4	6 50	6	12 22	15		
OOITA	34.29	5.3	6 59K	15	12 12	4		
UMAZIMA	34.39	6.7	6 58	13	12 52	43		
HUKUOKA	34.54	3.5	6 48	2	12 8	-4		
MUROTO	34.63	9.1	6 34	-13	12 15	2		
KOTI	34.83	8.1	6 52	3	12 17	1		
SIMONOSEKI	34.95	4.2	6 51	1				
MATUYAMA	35.01	6.9	6 54	3	12 21	2		
SIOMISAKI	35.11	11.3	7 0	9	12 19	-1	14 26	
ITUHARA	35.11	1.8	6 50	-1	12 25	5		
ADELAIDE	35.16	164.7	6 51K	-1	12 8	-13		
TSURUGISAN	35.19	8.6	7 0	8				
BRISBANE	35.32	139.9	6 58	5	12 25	1		
TOKUSIMA	35.50	9.4	6 58	3	12 46	20		
HIROSIMA	35.50	6.3	6 53	-2	12 26	0		
TAKAMATU	35.66	8.6	6 55	-1	12 30	1		
KUNMING	35.75	318.5	6 55A	-2	12 29	-1		
WAKAYAMA	35.75	10.1	6 57	0	12 5	-25		
HATIDYOZIMA	35.76	17.0					8 19	
SUMOTO	35.81	9.7	6 53	-4	12 27	-4		
HAMADA	35.99	5.7	6 56	-3	12 41	7	10 51	
KOBE	36.19	10.0	7 3	2	12 45	8		
OSAKA	36.23	10.5	6 59	-2	12 51	13		
NARA	36.31	10.9	7 0	-2				
ABUYAMA	36.45	10.5	6 58	-5				
KAMEYAMA	36.60	11.7	7 5	1	12 46	3		
KYOTO	36.62	10.6	7 10	6	12 54	10		
MATSUE	36.64	6.9	7 8	4	12 55	11		
YONAGO	36.65	7.3	7 5	1	12 47	3		
HAMAMATU	36.75	13.4	7 1	-4	12 49	3		
OMAESAKI	36.75	14.1	7 8	3				
TOTTORI	36.85	8.4	6 59	-7	12 43	-4		
HIKONE	36.96	11.2	7 6	-1	12 51	2		
MAIZURU	37.00	10.0	7 17	10	12 51	1		
NAGOYA	37.01	12.2	7 4	-3	12 47	-3		
SHIZUOKA	37.15	14.2	7 3	-6	12 59	7		
GIHU	37.19	11.8	7 10	1	12 53	0		
OSIMA	37.21	15.5	7 21	12				
TSURUGA	37.30	10.8			12 44	-10	7 30	
PORT BLAIR	37.30	290.9	7 13K	3	12 58	4	8 28	PP
AJIRO	37.40	15.0	7 6	-5			15 53	
SAIGO	37.41	7.1	7 13	2	13 6	10	15 0	

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MISIMA	37.43	14.8	7 6	-5	13 13	17			
MERA	37.47	16.0			12 38	-19		8 47 PP	
IIDA	37.54	13.2	7 15	3	13 7	9		7 47	
HUNATU	37.74	14.4	7 19	5	12 48	-13			
KOHU	37.85	14.0	7 8	-6	13 10	7			
YOKOHAMA	37.90	15.5	6 59	-16	13 9	6			
TAKAYAMA	38.02	12.2	7 16	0					
HONGO	38.20	15.5	7 6	-11	13 1	-7			
KANAZAWA	38.26	11.2	7 20	2					
MATUMOTO	38.27	13.0	7 21	3	13 11	2			
TITIBU	38.28	14.5	7 22	4				16 4	
OIWAKE	38.48	13.7	7 20	0	13 18	6			
TYOSI	38.51	16.9						13 26	
KUMAGAYA	38.51	14.8	7 20	0					
TOYAMA	38.54	11.9	7 22	2				14 12	
MATUSIRO	38.60	13.2	7 16	-5	13 12	-2			
MAEBASI	38.67	14.3	7 24	3	13 55	40			
NAGANO	38.72	13.1	7 23	1	13 14	-2			
TUKUBASAN	38.77	15.7	7 23A	1	13 10	-6		8 48 PP	
KAKIOKA	38.80	15.8	7 17	-5	13 16	-1			
CHENG TU	38.97	326.1	7 22	-2					
UTUNOMIYA	39.02	15.2	7 20	-4				14 54	
MITO	39.02	16.0	7 28	4				15 8	
RIVERVIEW	39.12	148.8	7 28A	3	13 26	4	7 36	13 43 *SS	
WAZIMA	39.13	11.2	7 23	-2	13 24	2			
TAKADA	39.15	13.0	7 23	-2	13 21	-1			
CANBERRA	39.27	152.5	7 26K	0	13 35	11	7 36	9 4 PP	
SIAM	39.46	334.7	7 26A	-2					
ONAHAMA	39.67	16.2	7 20	-10	13 29	-1			
TOOLANGI	39.72	158.1	7 30	0				9 6 PP	
AIKAWA	40.03	12.6	7 14	-19					
NIIGATA	40.11	13.6	7 46	13					
HUKUSIMA	40.31	15.3	7 34	-1	13 44	4			
KOUMAC	40.35	121.2	7 34	-1	13 30	-10			
YAMAGATA	40.75	14.9	7 37	-2	13 47	1			
SENDAI	40.91	15.5	7 40	0	13 47	-2			
ISINOMAKI	41.17	15.9	7 43	1	13 59	7			
SAKATA	41.23	14.0	7 44	1	14 0	7			
MIZUSAWA	41.78	15.3	7 46	-1	14 1	0			
AKITA	42.08	13.9	7 52	3	14 13	7			
CHITTAGONG	42.29	305.6	7 51	0					
PEKING	42.32	346.4	7 48	-3	14 7	-2			
MORIOKA	42.32	15.1	7 51	0	14 10	1			
TOCKLAI	42.34	313.3						8 56	
MIYAKO	42.49	16.0	7 49	-4	14 13	1			
PORT VILA	42.90	115.1	7 55K	-1					
NOUMEA	42.90	122.3	7 57A	1	14 16	-2			
HATINHOE	43.20	15.1	7 52	-7	14 7	-15			
LANCHOW	43.27	331.0	7 57	-2	14 25	2			
AOMORI	43.28	14.1	8 3	4	14 27	4			
VLADIVOSTOK	44.13	4.1	8 5	-1				9 15	
HAKODATE	44.22	13.7	8 4	-3	14 39	2			
TARRALEAH	44.26	160.4	8 8	1					
MORI	44.45	13.3	8 13	4	14 45	5			
PAOTOW	44.59	340.4	8 6	-4	14 40	-2			
MOORLANDS	44.63	159.8	8 12	2					
CHANGCHUN	44.77	357.2	8 16	5	14 38	-7			
SUTTSU	45.04	12.7	8 13	0					
URAKAWA	45.04	15.5	8 16	3	14 48	-1			
TOMAKOMAI	45.19	14.1						8 39	
HIROO	45.31	16.0	8 15	-1					
SAPPORO	45.55	13.7	8 15	-2	14 58	2			
OBHIRO	45.87	15.5	8 23	3	15 4	3			
KUSIRO	46.26	16.6	8 24	1	15 2	-4			
RUMOE	46.44	13.5	8 22	-3					
ASAHIGAWA	46.46	14.3	8 22K	-3	15 17	8			
LHASA	46.68	313.9	8 25	-1	15 14	2			
NEMURO	46.93	17.5	8 29	1	15 14	-2			
ABASHIRI	47.19	16.0	8 28A	-2	15 22	3			
VISHAKHAPTNM	47.83	295.2	8 36K	1	15 34	6			
WAKKANAI	47.85	13.0	8 39	3	15 33	4			
BOKARO	47.90	303.9	8 37A	1	15 34	5		9 53 PCP	
CHATRA	48.14	308.3	8 36K	-2	15 17	-16			
MADRAS	49.48	288.1	8 50	2					
Y.--SAKHLINSK	49.60	13.2	8 49A	0	15 56	3		10 37 PP	
KODAIKANAL	51.55	283.9	9 5A	1	16 23	3			
ULAN-BATOR	52.16	342.1	9 3	-5	16 39	10			
HYDERABAD	52.17	293.0	9 11A	2	16 33	4		20 0 SS	
ESEN BULAK	54.92	333.5	9 32K	3	17 18	1:			

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SEHORE	55.09	299.4	9 35	5	17 8	0	
POONA	56.68	293.0	9 40A	-2	17 32	3	11 57 PP
IRKUTSK	56.78	342.8	9 41A	-1	17 30	-1	
DEHRA DUN	56.87	307.7	9 45K	2	17 32	0	11 53 PP
NEW DELHI	56.87	305.5	9 39A	-4	17 30	-2	12 8 PP
KARAPIRO	56.94	135.9	9 42	-1			9 46 12 8 PP
ROXBURGH	57.19	146.5	9 48	3	17 48	12	18 38 SP
CHATEAU	57.55	137.2	9 50	2			12 14 PP
BOMBAY	57.72	293.1	9 50	1	17 50	7	13 56 PP
WELLINGTON	58.08	139.7	9 52A	1	17 50	2	11 44
MACQUARIE I.	58.97	159.5	9 52K	-6			
PETROPAYLOVK	59.67	20.9	10 1A	-1			12 19 PP
LAHORE	60.29	307.6	10 4	-3			
AFIAMALU	60.85	105.3	10 13	2			
YAKUTSK	62.94	0.9	10 20A	-5	18 49	-1	18 3
MAGADAN	63.03	12.8	10 23	-2			
WARSAK DAM	63.37	309.2	10 26	-1			
KHOROG	64.68	312.8	10 36A	0	19 17	5	
FRUNSE	64.80	319.2	10 37	0			13 3 PP
SEMIPALATNSK	65.44	328.6	10 38	-3	19 21	0	13 4 PP
TASHKENT	67.77	315.9	10 56A	1	19 52	3	11 20 PCP
MIRNY	69.84	194.2	11 9	1	20 27	13	
TIKSI	72.58	0.3	11 21K	-4	20 46	1	11 32 PCP
ASHKABAD	74.75	309.8	11 38	1			12 0 PCP
HONOLULU	75.38	67.8	11 39	-2	21 25	8	
KIPAPA	75.47	67.7	11 40	-2			
CAPE HALLETT	75.86	167.8	11 46	2			
HAWAII V.OB.	77.82	70.0	11 58	3			
SHIRAZ	77.96	300.5	11 52	-4	21 46	1	
SVERDLOVSK	78.72	328.8			21 51	-2	12 22 PCP
SCOTT BASE	79.43	172.3	12 3	-1			
MAWSON	79.73	200.7	12 4	-1	22 3	0	
TEHERAN	79.80	306.5	12 6	0			15 12 PP
GORIS	84.27	309.7	12 30A	1	22 48	-2	22 59 SCS
TIFLIS	85.65	311.8	12 38	3	23 15	12	28 56 SS
KHEYS	87.84	351.1	12 45	-1	23 30	6	16 2 PP
COLLEGE	88.47	25.1	12 47K	-2			15 59 PP
ADDIS ABABA	89.44	279.0	12 53	-1			
MOSCOW	91.11	325.5	13 6	4	23 54	0	16 47 PP
KSARA	92.38	303.6	13 8	1	24 18	13	16 54 PP
CHILEKA	92.65	254.3	13 11	2			
APATITY	92.75	337.5	13 10	1	24 9	1	17 0 PP
BYRD STATION	92.77	170.7	13 10	1			
JERUSALEM	92.96	301.6	13 12	2			16 59 PP
SIMFEROPOL	93.53	314.8	13 12	-1	23 31	-44	24 0 SKKS
CHANGALANE	94.77	243.7	13 18	0	23 55	-31	17 12 PP
PULKOVO	94.82	329.8	13 16	-3	24 33	7	17 20 PP
SODANKYLA	95.38	337.6	13 20	-1	23 53	1	17 25
KAJAANI	95.48	334.3	13 19	-3	23 55	2	17 11 PP
MOULD BAY	96.33	12.9	13 22	-3			
HELWAN	96.35	299.8	13 24	-2			
N-LAZARVSKYA	97.39	197.4					24 23 SKKS
HELSINKI	97.42	330.6	13 32	2			
ISTANBUL KA.	97.47	311.1	13 31	0			
NURMIJARVI	97.50	331.0	13 29	-2	24 4	0	17 45 PP
ISTANBUL UN.	97.53	311.1	13 33A	2	24 14	10	
KIRUNA	97.59	338.6	13 29	-2	24 6	2	17 31 PP
TROMSOE	97.59	340.5	13 31	0			17 5 PP
FOCSANI	98.34	315.9					14 10
BACAU	98.43	316.8	13 45	10			14 6
BULAWAYO	98.48	249.6	13 36	1			
ALERT	98.51	1.4	13 42	7			
UMEA	98.76	334.7	13 33	-3	24 14	4	17 36 PP
BROKEN HILL	98.99	255.3	13 39K	2			
LWIRO	99.18	267.6	13 39A	1	25 10	58	19 49 PPP
BUCHAREST	99.27	314.7			25 16	63	18 18 PP
CAMPULUNG	99.91	315.7	13 37	-5			14 11
COPPERMINE	100.89	20.2	13 43	-3			
UPPSALA	101.07	331.2	13 51	4	24 32	11	18 17 PP
WARSAW	101.22	323.2	14 8	20			18 3 PP
SOFIA	101.52	313.3	12 54	-55	23 42	-42	17 24 PP
ATHENS	101.93	308.5	13 50A	-1			25 30
SKALSTUGAN	102.18	335.7	13 57	5			18 22 PP
RESOLUTE	102.27	10.7	13 49	-3			
SKALNATE PL.	102.38	320.2					18 13 PP
KRAKOW	102.39	321.1	14 11	18	24 31	3	14 44
CHORZOW	102.92	321.5					18 13 PP
SKOPJE	103.02	312.8	17 49	233			24 35
BELGRADE	103.18	315.8	17 36	220	24 42	11	18 29 PP

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KARLSKRONA	103.24	327.9	13	55	-2					18 17 PP
YELLOWKNIFE	103.29	25.1	13	54	-3					
RACIBORZ	103.46	321.5	14	0	2	24	30	-3		18 12 PP
HURBANOVO	104.01	319.2				25	19	44		18 25 PP
TITOGRAĐ	104.52	313.6				24	44	6		18 20 PP
GOTEBORG	104.57	330.1								18 44 PP
BRATISLAVA	104.65	319.7	14	16	13					24 49
HERMANUS	104.83	234.0				25	1	22		18 45
KONGSBERG	104.93	332.5	14	4	0					17 49 PP
VIENNA-H.	105.10	320.0	14	15	777	25	41	61		20 38 PPP
PENTICTON	105.24	38.8	14	3	777					
PRUMONICE	105.75	322.0	14	24	777					18 37 PP
CALISTOGA	105.75	50.1	14	22A	777					
PRAGUE	105.80	322.1	14	54	777					18 34 PP
ZAGREB	106.01	317.6	17	44	777	24	52	8		
MINERAL	106.14	48.2								18 8
BERKELEY	106.15	50.9	13	45A	777	24	46	1		17 58 PP
COLLMBERG	106.27	323.7	14	26	777	26	17	92		
TARANTO	106.42	312.0	18	38	777	24	56	10		34 33 SS
KASPERSCHE H.	106.61	321.4	14	25	777					17 50
LICK	106.74	51.3	14	54A	777					
HALLE	106.82	324.1	14	20	777	26	11	83		
LJUBLJANA	106.93	318.1	14	18	777	26	16	88		18 44 PP
CHEB	107.04	322.6	17	55	777					18 38 PP
SPOKANE	107.16	40.0				26	18	89		18 50 PP
JENA	107.23	323.6	17	59	777					14 29 P
TRIESTE	107.56	317.9	17	54	777	25	10	19		18 48 PP
PRIEST	107.76	52.4								18 46
SCORESBY SD.	107.97	349.8	14	27	777					
BLUE MTS.	108.05	42.8	14	20	777	25	0	7		18 42 PP
REGGIO CALA.	108.17	309.8	18	14	777					19 28 PP
MESSINA	108.22	310.0	18	22	777	24	47	-7		18 49 PP
PADOVA	108.89	318.1	18	2	777	24	53	-4		18 58 PP
HUNGRY HORSE	109.05	38.6	18	40	777					
MUNSTER	109.13	325.6	18	30	777					
WITTEVEEN	109.31	326.7	18	8	777					
STUTTGART	109.40	322.1	14	42	777					18 58 PP
ROME	109.53	314.4	14	27	777	25	8	9		18 57 PP
BENSBERG	109.80	324.8	18	17	777					18 31 PP
FLORENCE X.	109.83	316.6	17	52	777	26	23	82		18 33 PP
KARLSRUHE	109.84	322.5								19 5 PP
PRATO	109.90	316.7	17	59	777	26	46	105		
PASADENA	110.18	53.9	14	53	-214	25	2	0		19 3 PP
STRASBOURG	110.40	322.3	18	22	-6	25	48	45		19 6 PP
DE BILT	110.44	326.4	14	38	-230	25	8	5		19 35 PP
EUREKA	110.55	48.0	14	38	-230					
PAVIA	110.76	318.5	14	38	-230					19 11 PKP
BUTTE	110.81	40.5	14	32	-236					19 14 PP
ABERDEEN	111.51	333.4				24	7	-61		19 38 PP
DOURBES	111.65	324.7								18 52 PP
BOZEMAN	111.93	40.4	14	45	-226					18 35 PKP
GODHAVN	111.94	0.6								19 8
BESANCON	112.03	321.5	18	58	27					19 21
ROSELEND	112.24	319.7	18	36	5					19 22 PP
MONACO	112.45	317.5	18	13	-19					
ISOLA	112.54	318.1	18	35	3					19 41 PP
DURHAM	112.62	331.1	19	3A	31	24	27	-45		20 3 PP
SALT LAKE C.	113.15	45.6	18	43	10					
BANDEIRA	113.55	253.3				25	37	21		19 33 PP
KEW	113.74	327.6				24	53	-23		19 20 PP
LUANDA	114.31	259.9	18	31	-4	24	54	-25	18 45	19 32 PP
CLERMONT-FD.	114.45	320.9	19	10	35					19 47
UINTA BASIN	114.93	45.4	18	40	4	25	43	22		19 41 PP
FOLINIÈRE	115.21	325.1								19 0
TONTO FOREST	115.66	52.2	18	44	6	27	30	126		19 50 PP
JERSEY	115.91	326.1								23 24
BARCELONA	116.95	316.9								20 23
LARAMIE	117.33	43.1	18	49	8					19 46
BAGNERES	117.55	319.3	18	45	3					19 21 PP
GOLDEN	118.15	44.6	15	30	-193					18 48
TORTOSA	118.32	316.9								20 3 PP
ALICANTE	120.07	314.7	18	39	-7	25	52	13		20 19 PP
CHIHUAHUA	121.61	56.7	18	38	-11					34 38
TOLEDO	121.84	317.8	18	54	4	25	50	5		20 31 PP
ALMERIA	122.14	313.9	18	52K	2					20 32 PP
GRANADA	122.80	314.7	19	3K	11	26	20	32		20 43 PP
HAZATLAN	122.85	63.0								32 38
SCHEFFERVILLE	125.07	10.4	19	0	4					

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APATITY	92.88	337.5	13 21	5			
JERUSALEM	93.25	301.6	13 25A	7			
CHANGALANE	95.09	243.6	13 40	14	24 47	45	25 51 SP
SODANKYLA	95.50	337.6	13 25	-3			
KAJAANI	95.62	334.3	13 34	5			
NURMIJARVI	97.67	331.0	13 30	-8			
KIRUNA	97.70	338.6	13 35	-3			17 38 PP
UMEA	98.90	334.7	13 40	-4			
UPPSALA	101.23	331.2					18 31 PP
SKALSTUGAN	102.32	335.7	13 59	0			
KARLSKRONA	103.42	328.0					17 35
SEATTLE	103.72	41.1					21 39 PP
COLLMBERG	106.47	323.7					18 59 PP
LJUBLJANA	107.15	318.2					18 52 PP
JENA	107.43	323.7	14 36	777			32 43
BLUE MTS.	107.80	42.9					18 28 PP
MUNSTER	109.32	325.7	18 10	777			
STRASBOURG	110.60	322.4					19 13 PP
ABERDEEN	111.66	333.5	14 47K-230		25 14	-5	19 7 PP
BESANCON	112.24	321.6					19 32 PP
ISOLA	112.76	318.2	18 40	1			
DURHAM	112.78	331.2	19 7	28			
KEW	113.92	327.7					19 25 PP
CLERMONT-FD.	114.66	321.0	19 51	68			
UINTA BASIN	114.68	45.5	18 43	0			19 41 PP
TONTO FOREST	115.38	52.3	18 43	-1			19 5
TUCSON	116.33	54.3	18 45	-1			30 27 PKKP
GRANADA	123.04	314.9					21 17
WICHITA MTS.	124.92	47.3					20 40 PP
MADISON	125.88	33.8	19 1	-3			
LISBON	126.05	319.2	19 4	-1			26 15 PKS
CLEVELAND	131.56	30.0	19 26A	11			22 44 SKP
BREBEUF	131.69	20.7	19 18	3			
CUMBERLAND	133.37	38.8	19 23	4			22 52
ANTOFAGASTA	149.34	144.6	19 52	5			
BALBOA MTS.	151.10	73.3	19 55	6			
HUANCAYO	153.09	119.7	20 0	8			
LA PAZ	156.12	137.7	20 5	9			
SAN JUAN	157.67	38.7	20 9	11			24 9 PP

APRIL 16 1.4M 55.4M 14.5S EPICENTRE -1.00 128.05 DEPTH= 51.KM

A=-0.61627 B= 0.78734 C=-0.01734 D= 0.7875 E= 0.6164
G= 0.0107 H=-0.0137 K=-0.9998 HT= 7.2

DEPTH OF FOCUS= 0.003R

SE= 3.14

	DELTA DEG.	AZ. DEG.	P		O-C		S O-C			*PP		SUPP.	
			M	S	S	S	M	S	M	S			
LEMBANG	21.18	253.6	4	41K	-2	8	34	3			8	41	PCP
DJAKARTA	21.79	255.8	4	49K	0								
GUAM	21.91	48.5	4	49	-1								
TANGERANG	21.98	256.0	4	46K	-5								
HENGCHUN	23.95	343.1	5	15	5	9	44	24					
TAMU	24.23	343.7	5	12	-1	9	37	12					
RABAU	24.30	98.0	5	14	0								
TAITUNG	24.55	344.5	5	16	0								
HSINKONG	24.82	345.2	5	20	1	9	50	15					
ALISHAN	25.37	344.3	5	25	1	10	10	26					
HWALIEN	25.59	346.3	5	27	1	10	5	17					
PENGHU	25.75	341.8	5	31	3	10	14	23					
TAICHUNG	26.00	344.5	5	34	4								
HSINCHU	26.55	345.5	5	42	7	10	32	28					
TAIPEI	26.64	346.7	5	42	6								
ANPU	26.78	346.8	5	38	1								
CANTON	27.90	330.0	5	50	3								
KAGOSIMA	32.48	4.0	6	31K	3	11	18	-20					
MUNDARING	32.77	198.8	6	30	0								
HONIARA	32.82	105.9	6	29	-2								
MIYAZAKI	32.90	5.3	6	33	2								
KUMAMOTO	33.73	4.0	6	42	3						10	17	
ASOSAN	33.84	4.6	6	40	0	12	3	4					
ASHIZURI	33.86	7.5	6	37	-3								
NANKING	34.03	345.9	6	13	-28								
SAGA	34.13	3.4	6	44	2	12	17	13					

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OOITA	34.21	5.3	6 49	6	11 55	-10
MATUYAMA	34.94	6.9	6 52	3	12 26	10
SIOMISAKI	35.03	11.3	6 53	3		
ADELAIDE	35.23	164.7	6 52	0		
HIROSIWA	35.42	6.3	6 56	3		13 22
TAKAMATU	35.58	8.5	6 57	2	12 26	0
WAKAYAMA	35.68	10.1	6 56	1		
KUNMING	35.70	318.4	6 55	-1		
SUMOTO	35.74	9.7	6 57	1		8 57
OSAKA	36.15	10.5	7 5	6		
ABUYAMA	36.37	10.5	6 58A	-3		
KAMEYAMA	36.52	11.7	7 8	6	12 43	3
KYOTO	36.55	10.6	7 1	-2	12 40	-1
MATSUE	36.56	6.9	7 4	1		
HAMAMATU	36.67	13.4	7 3	-1		
OMASAKI	36.67	14.1	7 4	0		
HIKONE	36.89	11.2	7 6	0	12 51	5
NAGOYA	36.94	12.2	7 4	-2	12 39	-8
SHIZUOKA	37.07	14.2	7 10	3		
OSIMA	37.13	15.5	7 21	13		
TSURUGA	37.22	10.8	7 13	5		15 22
PORT BLAIR	37.29	290.8	7 7	-2		
MISIMA	37.35	14.8	7 5	-4	12 34	-19
HUNATU	37.67	14.4	7 11	-1	13 22	24
						8 58 PPP
KOHU	37.78	14.0	7 8	-5		8 51
YOKOHAMA	37.83	15.5	7 35	22		11 24
MATUMOTO	38.19	13.0				13 16
OIWAKE	38.40	13.7	7 17	-1	13 29	20
MATUSIRO	38.53	13.2	7 15K	-4		
MAEBASI	38.60	14.3	7 11	-9		
NAGANO	38.65	13.1	7 20	0		
TUKUBASAN	38.69	15.7	7 16	-5		7 26 PP
UTUNOMIYA	38.94	15.2	7 20	-3		
MITO	38.94	16.0	7 21	-2		
WAZIMA	39.06	11.2	7 22	-2		
RIVERVIEW	39.18	148.9	7 26	1		
CANBERRA	39.32	152.5	7 27K	1		
SIAN	39.40	334.7	7 29	3		
SHIRAKAWA	39.57	15.3	7 28	0		
ONAHAMA	39.60	16.2	7 27	-1		
TOOLANGI	39.78	158.2	7 32	2		
HUKUSIMA	40.23	15.3	7 34	1	13 41	4
KOUMAC	40.37	121.2	7 37K	2		
YAMAGATA	40.67	14.9	7 36	-1	13 46	3
SENDAI	40.83	15.5	7 38	0	13 50	4
ISINOMAKI	41.10	15.9	7 38	-3	13 54	5
SAKATA	41.16	14.0	7 51	10		
MIZUSAWA	41.70	15.3	7 42	-3	13 57	-1
AKITA	42.00	13.9	7 49	1		
MORIOKA	42.25	15.1	7 51	1	14 9	3
PEKING	42.25	346.4	7 48	-2		
CHITTAGONG	42.27	305.6	7 49	-1		
MIYAKO	42.42	16.0	7 52	1	14 12	3
NOUMEA	42.93	122.4	7 57	2		
HATINOHE	43.12	15.1	7 55	-2	14 16	-3
AOMORI	43.21	14.1	8 3	5	14 27	7
LANCHOW	43.22	331.0	7 57A	-1		
VLADIVOSTOK	44.06	4.1	8 3A	-2		
HAKODATE	44.14	13.7	8 4	-1	14 39	5
TARRALEAH	44.32	160.4	8 8	1		
MORI	44.37	13.3	8 12	5		
MOORLANDS	44.69	159.8	8 12	2		
SUTTSU	44.96	12.7	8 13	1		
URAKAWA	44.97	15.5	8 11K	-1	14 53	7
SAPPORO	45.47	13.7	8 14	-2	14 56	3
OBHIRO	45.80	15.5	8 21	2		
KUSIRO	46.19	16.6	8 20	-2	15 7	4
ASAHIGAWA	46.39	14.3	8 24A	1		
LHASA	46.64	313.9	8 27A	2		
NEMURO	46.85	17.5	8 25	-2		
ABASHIRI	47.11	16.0	8 25A	-4	15 31	15
WAKKANAI	47.77	13.0	8 36	2	15 33	7
VISHAKHAPTNM	47.81	295.1	8 37K	3	15 35	9
BOKARO	47.87	303.9	8 37	2		
CHATRA	48.11	308.2	8 36	-1		15 44
MADRAS	49.47	288.0	8 55	8	16 5	15
UGLEGORSK	51.33	11.8	9 0	-1		10 51 PP
SEHORE	55.06	299.3	9 29	0	17 14	8
DEHRA DUN	56.84	307.7	9 44	2		17 59

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NEW DELHI	56.84	305.4	9 38	-4	17 26	-4					
KARAPIRO	56.98	136.0	9 44	1				9 55			
ROXBURGH	57.24	146.5	9 47	2				9 59			
CHATEAU	57.59	137.3	9 49	2				9 59	12 13	PP	
BOMBAY	57.71	293.1	9 46	-2							
WELLINGTON	58.13	139.8	9 49	-2							
MACQUARIE I.	59.03	159.6	9 57A	0				10 6			
PETROPAVLOV	59.60	20.9	9 55	-6							
LAHORE	60.26	307.6	10 1	-5	18 14	0					
MAGADAN	62.95	12.8	10 24	0							
WARSAK DAM	63.33	309.2	10 27K	1							
QUETTA	65.81	303.8	10 39	-3	19 37	14					
TASHKENT	67.72	315.9	10 55	1							
TIKSI	72.51	0.3	11 21	-2							
HONOLULU	75.34	67.8	11 41	1							
KIPAPA	75.43	67.7	11 43	3							
KIZYL-ARVAT	76.59	310.6	11 53	6							
HAWAII V.OB.	77.78	70.0	12 0	7							
SHIRAZ	77.94	300.5	11 52	-2	21 38	-4			22 9	SKS	
TEHERAN	79.77	306.5	12 13	9							
MAWSON	79.81	200.7	12 4	-1							
TANANARIVE	80.69	251.1	12 11	2					23 15		
TIFLIS	85.61	311.8	12 35	1							
COLLEGE	88.40	25.1	12 47	-1					16 4	PP	
MOSCOW	91.06	325.5	12 59	-1					16 44	PP	
KSARA	92.36	303.6	13 7	1					16 54	PP	
CHILEKA	92.69	254.4							13 11		
APATITY	92.69	337.5	13 14	6							
JERUSALEM	92.93	301.6	13 8	-1							
SIMFEROPOL	93.49	314.8	13 17	6							
CHANGALANE	94.82	243.7	13 17	0	24 13	-11			17 8	PP	
SODANKYLA	95.31	337.6	13 19	-1	24 14	24			17 10	PP	
VIBORG	95.40	330.8	13 19	-1							
KAJAANI	95.42	334.3	13 18	-2	24 10	20			17 16	PP	
MOULD BAY	96.26	12.9	13 23	-1							
ISTANBUL KA.	97.43	311.1	13 28	-1							
NURMIJARVI	97.45	331.0	13 34	5	24 24	23			17 30	PP	
ISTANBUL UN.	97.50	311.1	13 45	15							
KIRUNA	97.52	338.6	13 27	-3					17 57		
TROMSOE	97.52	340.5	13 32	2					19 36	PPP	
BULAWAYO	98.52	249.6							13 11		
UMEA	98.70	334.7	13 44	9							
BROKEN HILL	99.03	255.3							24 43		
LWIRO	99.20	267.6	13 55K	18					17 50	PP	
COPPERMINE	100.81	20.2	13 44	-1							
UPPSALA	101.02	331.2	13 58	12					18 22	PP	
WARSAW	101.17	323.2	14 19	33					16 11		
SOFIA	101.48	313.3	17 2	194	23 47	-34			17 44	PP	
SKALSTUGAN	102.12	335.7	14 8	17					17 35		
SKALNATE PL.	102.34	320.2	14 12	21							
CHORZOW	102.87	321.5							17 27		
VICTORIA	102.96	40.3							18 12		
BELGRADE	103.14	315.8							18 30	PP	
KARLSKRONA	103.18	327.9							18 16	PP	
YELLOWKNIFE	103.21	25.1	13 56	1							
RACIBORZ	103.42	321.5	14 8	12					18 10	PP	
HURBANOVO	103.97	319.3							18 55		
TITograd	104.48	313.6			24 57	22			18 48	PP	
GOTEBORG	104.51	330.1							18 35	PP	
BRATISLAVA	104.61	319.8	14 18	17					23 51		
COPENHAGEN	105.01	328.1							18 50	PP	
VIENNA-H.	105.06	320.0	14 17	777	25 26	48					
PRUHONICE	105.70	322.0	14 26	777							
COLLMBERG	106.22	323.7	14 22	777					18 47	PP	
HALLE	106.77	324.1	14 32	777	25 53	68					
LJUBLJANA	106.89	318.1	17 53	777					18 40	PP	
CHEB	107.00	322.6							18 56	PP	
TRIESTE	107.52	317.9	18 57	777	24 56	7					
BLUE MTS.	107.98	42.8	14 18	777					18 42	PP	
REGGIO CALA.	108.14	309.9	18 36	777	25 22	31					
MESSINA	108.19	310.0	18 46	777							
PADOVA	108.85	318.1	18 46	777	25 1	7			21 1	PPP	
STUTTGART	109.35	322.1	14 42	777					18 26	PKP	
ROME	109.50	314.4	19 6	777					21 46	PPP	
BENSBERG	109.75	324.8	18 10	777					19 9	PP	
FLORENCE X.	109.79	316.6	18 58	777	25 0	2					
PRATO	109.86	316.7							19 0		
STRASBOURG	110.35	322.3	18 24	-2					19 3	PP	
BUTTE	110.75	40.5	14 29	-238					19 11	PP	

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DOORBES	111.60	324.7	18 22	-7					19 33
BESANCON	111.99	321.5	18 26	-3					19 18 PP
ROSELEND	112.19	319.8	18 31	1					19 28 PP
MONACO	112.40	317.6							14 42
ISOLA	112.49	318.1	18 38	8					22 1 PPP
SALT LAKE C.	113.09	45.6	14 24	-248					18 31 PKP
BANDEIRA	113.59	253.4			26 7	54			19 46 PP
KEW	113.69	327.6							19 26 PP
LUANDA	114.34	259.9							19 46 *PPP
CLERMONT-FD.	114.40	320.9	19 5	31					
UINTA BASIN	114.87	45.4	18 38	3					19 38 PP
FOLINIERE	115.16	325.1	18 46	10					
TONTO FOREST	115.60	52.1	18 40	3					
TUCSON	116.56	54.2	18 40	2					
LARAMIE	117.26	43.0	18 44	4					
BAGNERES	117.51	319.3							19 57 PP
TORTOSA	118.28	316.9							19 59 PP
ALBUQUERQUE	119.12	50.0	18 54	11					
ALICANTE	120.03	314.7	18 51	6					20 11 PP
CHIHUAHUA	121.55	56.7	19 0	12					29 46
TOLEDO	121.80	317.8	18 53K	4					20 36 PP
ALMERIA	122.10	314.0	18 51K	2					20 38 PP
GRANADA	122.76	314.8	19 18K	28	25 48	2			20 47 PP
MAZATLAN	122.80	63.0							30 46
SCHEFFERVILLE	125.00	10.4	18 56	1					
WICHITA MTS.	125.12	47.1	18 55	0	26 22	29			20 45 PP
LISBON	125.78	319.1	18 57	1					21 5 PP
MADISON	126.01	33.6	18 56	-1					
GUADALAJARA	126.20	65.0							32 6
TULSA	126.55	44.4	18 59	1					
LOME	126.72	276.8	19 28	30					
DALLAS	127.32	48.3	19 1	2					
AVERROES	127.33	312.4	19 0	1					21 11 PP
FAYETTEVILLE	127.57	43.4	19 1	1					
TACUBAYA	130.27	65.3	19 34	29					22 48
LONDON ONT.	130.66	28.2	19 7A	1					
OTTAWA	131.07	22.1	19 8	2					
SHAWINIGAN	131.11	19.0	19 7A	0					
CLEVELAND	131.67	29.8	19 13K	5					22 33 SKP
BREBEUF	131.75	20.4	19 10	2					
VERA CRUZ	133.10	64.4							23 6
OAXACA	133.12	67.5							22 50
CUMBERLAND	133.52	38.5	19 13	2					21 47 PP
HALIFAX	135.35	11.8	19 16	2					
PALISADES	135.49	23.8	19 21	6					
COMITAN	137.61	66.8							31 30
MERIDA	138.24	59.0							22 1
SANTA LUCIA	141.48	154.5	19 28	2					
M. BOUR	142.96	292.8	19 45	17					22 59 PP
ANTOFAGASTA	149.58	145.0	19 49	10					
HOPE	150.35	53.8	19 53	13					
BALBOA HTS.	151.40	73.1	19 49	7					
HUANCAYO	153.40	119.9	19 57	12					
CHINCHINA	156.04	80.0	19 48	0					
LA PAZ	156.39	138.1	19 55	6			20 12		
BOGOTA	157.62	80.3	19 57	7					
SAN JUAN	157.82	38.0	19 56	5					
ST. KITTS	160.61	32.6							20 16
ST. CLAUDE	162.24	32.3	20 2	7					24 18 PP
CARACAS	162.37	57.1	20 3	7	26 56	3			
FORT FRANCE	163.61	33.2	20 0	3					23 24 PP
TRINIDAD	166.58	44.1	20 3	3					24 48 PP

APRIL 16 12.H 3.M 45.S EPICENTRE -1.10 127.44 DEPTH= 53.KM

A=-0.60785 B= 0.79383 C=-0.01904 D= 0.7940 E= 0.6080
G= 0.0116 H=-0.0151 K=-0.9998 MT= 7.2

DEPTH OF FOCUS= 0.003R

SE= 1.94

	DELTA DEG.	AZ. DEG.	P		O-C S	S O-C			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
DARWIN	11.70	163.5	2 44	-3	4 49	-8						
MANILA	16.88	338.3	3 55	1	6 55	-4						

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BAGUIO CITY	18.68	339.0	4 15	-1	7 43	4				
LEMBANG	20.57	253.4	4 38K	1	8 33	14			5 7	PP
DJAKARTA	21.17	255.7	4 43	0						
PORT MORESBY	21.27	113.5	4 46	2	8 36	4				
TANGERANG	21.37	255.9	4 44K	-1	8 32	-2			5 11	PP
NHATRANG	22.42	306.7	4 58	3	9 3	10				
RABAU	24.89	97.6	5 19	0	9 43	7			12 33	
CHARTERS TS.	26.36	136.9	5 34	1	10 2	2				
MEDAN	29.12	279.3	5 58	0	10 52	7			6 55	PP
MUNDARING	32.49	198.0	6 26	-2						
ZO-SE	32.57	350.0	6 28	0						
HONIARA	33.38	105.5	6 34	-1	11 51	0				
NANKING	33.98	346.8	6 41	1	12 5	4				
ADELAIDE	35.30	163.9	6 51K	-1	12 21	0			7 54	PP
KUNMING	35.38	319.1	6 54K	2	12 29	7				
BRISBANE	35.69	139.3	6 54	-1	12 32	5				
CHENG TU	38.66	326.7	7 21K	1	13 14	2			8 53	PP
MATUSIRO	38.76	13.9	7 19K	-2	12 54	-20				
SIAN	39.23	335.4	7 26K	1					8 59	PP
RIVERVIEW	39.41	148.2	7 28K	2	13 30	6			16 21	SS
CANBERRA	39.52	151.8	7 27A	0	13 29	4			9 27	PPP
TOOLANGI	39.92	157.4	7 31A	1	13 37	6			7 45	*SP
PEKING	42.21	347.1	7 48	-1	14 1	-4			9 30	PP
LANCHOW	43.01	331.6	7 57K	1	14 22	5			9 44	PP
PORT VILA	43.43	114.9	8 1K	2						
PAOTOW	44.41	341.0	8 6	-1	14 38	1			9 51	PP
TARRALEAH	44.44	159.8	8 8	1						
MOORLANDS	44.82	159.2	8 9	-1						
LHASA	46.27	314.4	8 25K	3	15 10	6			10 16	PP
VISHAKHPTNM	47.30	295.4	8 31K	1	15 29	10				
BOKARO	47.42	304.3	8 32K	1	15 28	8				
CHATRA	47.69	308.6	8 35K	2	15 32	8				
MADRAS	48.92	288.3	8 42K	-1	15 48	7			10 39	PP
KODAIKANAL	50.98	284.0	8 55	-3	16 13	3				
ULAN-BATOR	52.00	342.6	9 4	-2	16 17	-7				
ESEN BULAK	54.68	333.9	9 27	1	17 5	5				
POONA	56.15	293.2	9 35K	-1						
NEW DELHI	56.40	305.7	9 37K	-1	17 23	0				
DEHRA DUN	56.42	308.0	9 38K	0	17 31	8				
IRKUTSK	56.63	343.2	9 39K	-1	17 31	5				
BOMBAY	57.19	293.3	9 44	0	17 36	2				
KARAPIRO	57.34	135.6	9 46	1						
LAHORE	59.84	307.8	10 1	-1						
PETROPAYLOVK	59.90	21.2	10 3	0						
AFIAMALU	61.41	105.2	10 15K	2						
ALMATA-2	62.89	321.0	10 23K	0						
WARSAK DAM	62.92	309.4	10 25K	2						
YAKUTSK	62.97	1.2	10 21K	-2	18 51	3				
KHOROG	64.26	313.0	10 32K	0	19 10	6				
FRUNSE	64.43	319.5	10 33K	0						
ANDIJAN	65.01	316.6	10 37K	0						
SEMIPALATNSK	65.15	328.8	10 35K	-3						
QUETTA	65.36	304.0	10 39	0	19 24	7				
DUZHANBE	66.69	313.2	10 47K	0						
TASHKENT	67.37	316.1	10 51	-1						
MIRNY	69.67	194.0	11 5	-1						
TIKSI	72.61	0.5	11 22K	-1	20 42	-1				
ASHKABAD	74.31	309.9	11 34	1						
VANNOVSKAYA	74.50	309.9	11 35	0						
CAPE HALLETT	75.97	167.6	11 45	2						
KIZYL-ARVAT	76.19	310.8	11 44K	0	21 30	7				
SHIRAZ	77.47	300.6	11 52A	1	21 39	2				
SVERDLOVSK	78.43	329.0	11 55A	-2						
TEHERAN	79.34	306.5	11 59	-3						
MAWSON	79.50	200.6	12 1	-1						
TIFLIS	85.23	311.8	12 34	2						
BAKURIANI	86.18	311.8	12 37	0						
KHEYS	87.77	351.2	12 44A	0						
COLLEGE	88.74	25.2	12 48	-1					13 2	
SOUTH POLE	88.91	180.0	12 49	-1						
MOSCOW	90.79	325.5	12 58A	-1						
CHILEKA	92.08	254.4	13 6	1						
BYRD STATION	92.84	170.8	13 8	0						
SODANKYLA	95.17	337.6	13 3	-16						
VIBORG	95.19	330.8	13 16	-3						
KAJAANI	95.24	334.2	13 19	0						
MOULD BAY	96.48	12.8	13 24A	-1						
NURMIJARVI	97.24	330.9			24 7	8			17 16	PP

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KIRUNA	97.39	338.5	13 27A	-2	
BULAWAYO	97.92	249.6	13 31	0	
BROKEN HILL	98.41	255.3	13 34	1	
LWIRO	98.59	267.6			17 35
UZHGOROD	100.81	319.3	13 45	1	
COPPERMINE	101.11	20.1	13 45	-1	
YELLOWKNIFE	103.56	25.0	13 53	-3	
PRUHONICE	105.40	321.9	17 42	777	18 30
COLLMBERG	105.93	323.5	18 22	777	18 32 PP
KASPERSCHE H.	106.26	321.3			18 25
HALLE	106.49	324.0	17 51	777	18 40
LJUBLJANA	106.55	318.0	18 12	777	18 41 PP
JENA	106.90	323.5			18 30
TRIESTE	107.18	317.8			18 46 PP
BLUE MTS.	108.47	42.7			18 29 PP
STUTTGART	109.05	321.9	18 57	777	
FLORENCE X.	109.44	316.4	17 56	777	
EUREKA	111.00	47.8	18 30	3	
MONACO	112.06	317.4			19 19
FLAMING GRGE	115.27	44.5	18 38	3	
UINTA BASIN	115.37	45.2	18 38	2	19 38 PP
TONTO FOREST	116.14	52.0	18 40	3	19 10
TUCSON	117.11	54.1	18 42	3	19 59 PP
TOLEDO	121.46	317.5			20 21 PP
WICHITA MTS.	125.63	46.8	18 58	2	21 4 PP
SHAWINIGAN	131.40	18.5	19 8A	1	
BREBEUF	132.05	19.9	19 10	2	
CUMBERLAND	133.98	38.1	19 13	2	22 42 PKS
HUANCAYO	153.88	120.7	19 52	7	
SAN JUAN	158.27	37.0	19 52	1	

APRIL 16 18.H 47.M 8.S EPICENTRE 35.91 44.38 DEPTH= 60.KM

A= 0.58019 B= 0.56777 C= 0.58397 D= 0.6994 E=-0.7147
G= 0.4174 H= 0.4084 K=-0.8118 MT= -0.2

DEPTH OF FOCUS= 0.004R

SE= 2.53

	DELTA DEG.	AZ. DEG.	P		O-C S	S O-C			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
GORIS	3.90	22.8	0	59	0						2	9 SG
EREVAN	4.26	1.2	1	4	-1						2	15 SG
TEHERAN	5.70	89.7	1	27	2	3	3	34				
TIFLIS	5.81	3.1	1	27	1							
BAKURIANI	5.85	353.7	1	25	-2							
KSARA	7.29	255.8	1	43	-4	3	3	-6			3	47
MAKHACH-KALA	7.45	17.9	1	50	1							
GROZNY	7.47	7.7	1	51	2							
SOTCHI	8.45	336.3	1	59	-4							
JERUSALEM	8.66	244.2	2	9	3							
SHIRAZ	9.27	130.1	2	8	-6	3	53	-5				
KIZYL-ARVAT	9.99	67.3	2	25	1	4	19	4				
VANNOVSKAYA	11.17	75.5	2	37	-3							
ASHKABAD	11.37	75.6	2	41	-1							
SIMFEROPOL	11.93	322.3	2	49	-1							
HELWAN	12.51	244.9	2	54	-4						6	43
ISTANBUL UN.	13.10	297.6	3	7K	2	5	38	8				
ATHENS	16.64	283.2	3	56K	5						7	9
SOFIA	17.62	299.0	4	8	5	7	32	17			4	22 PP
DUZHANBE	19.59	74.9	4	26A	0							
QUETTA	19.75	100.4	4	27A	-1						8	12
TASHKENT	20.16	66.9	4	33	1							
LWOW	20.30	319.5	4	33	-1	8	29	16				
MOSCOW	20.35	349.0	4	32A	-2							
UZHGOROD	20.61	314.9	4	37	0							
KHOROG	21.80	77.8	4	50	1							
WARSAK DAM	22.33	86.9	4	53	-1							
ANDIJAN	22.44	69.1	4	56A	1							
KRAKOW	22.66	316.2	4	56	-1	8	55	-2				
MESSINA	23.08	284.3	4	58	-4	9	6	2	5	17	5	37 PP
WARSAW	23.25	321.8	5	10	7						5	48 PPP
BRATISLAVA	23.54	309.8	5	6A	0						5	27
SVERDLOVSK	23.62	22.6	5	7K	0	9	24	10				
VIENNA-H.	24.02	309.6	5	11	0							
FRUNSE	24.29	64.2	5	15A	2							

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LJUBLJANA	24.58	303.5	5 16	0						6 2
TRIESTE	25.02	302.3	5 21	1						6 47
LAHORE	25.24	91.3	5 22	0						
ROME	25.44	293.3								11 15 SS
PULKOVO	25.56	343.4	5 26	1	9 55	9				
PRUHONICE	25.76	312.4	5 27	0	10 2	12				
KASPERSKE H.	26.06	310.0	5 29A	-1						6 9
ALMATA-2	26.34	63.7	5 31A	-2						
VIBORG	26.76	342.9	5 35A	-1						
COLLMBERG	27.17	314.3	5 38	-2						8 58 PP
ADDIS ABABA	27.24	192.2	5 43	2						
HELSINKI	27.31	338.8	5 40	-1						
NURMIJARVI	27.68	338.9	5 44	-1	10 29	8				7 5
HALLE	27.86	314.2	5 36	-10	10 11	-13				
JENA	27.87	312.8	5 45	-2					6 6	
KARLSKRONA	28.11	325.1	5 50	1						
NEW DELHI	28.61	95.4	6 0	7	11 9	33				
DEHRA DUN	28.66	91.5	5 53A	-1						10 52
STUTTGART	28.68	307.6	5 58	4						
COPENHAGEN	29.37	322.3	6 1	1						
UPPSALA	29.54	332.6	6 0A	-1						12 32
ISOLA	29.54	297.8	6 2	1						
SEMIPALATNSK	29.58	49.4	6 1	-1						
KAJAANI	29.97	345.4	6 4	-1						
GOTEBORG	30.61	325.6	6 10	-1						
APATITY	32.30	352.2	6 26A	0	11 41	7				
KONGSBERG	32.67	327.6	6 28A	-1						
SODANKYLA	33.11	347.5	6 33	0						7 16 *SP
SKALSTUGAN	33.91	334.8	6 40A	0						
KIRUNA	34.73	344.3	6 46A	-1						
KEVO	35.21	349.6	6 59	8						14 42
TROMSOE	36.52	345.4	7 1	-1						7 49
TOLEDO	38.05	290.9	7 14A	-1						17 52
BENI ABBES	39.18	275.2	7 24	0						8 49 PP
KHEYS	45.13	3.1	8 18	5						
TIKSI	54.65	22.8	9 23	-2						
BULAWAYO	57.71	197.6	9 46	-1						
RESOLUTE	66.46	349.1	10 46A	0						
MOULD BAY	67.65	355.8	10 54A	1						
SCHEFFERVILLE	72.14	325.5	11 20	0						
MATUSIRO	72.39	57.5	11 21	-1						
COPPERMINE	75.42	352.1	11 39A	-1						
HALIFAX	76.71	315.7	11 47A	0						
COLLEGE	79.09	5.3	12 0	0						12 27
YELLOWKNIFE	80.49	350.3	12 7A	0						
CUMBERLAND	94.96	321.2	13 17	0						
CANBERRA	120.24	113.7								21 49

APRIL 17 1.4H 10.4M 7.5 EPICENTRE -0.79 127.93 DEPTH= 0.4KM

A=-0.61464 B= 0.78869 C=-0.01366 D= 0.78888 E= 0.6147
G= 0.0084 H=-0.0108 K=-0.9999 HT= 7.2

SE= 2.13

	DELTA DEG.	AZ. DEG.	P		O-C S	S O-C			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
DARWIN	11.87	166.1	2 51		-2	4 36		-32				
MANILA	16.79	336.4	3 53		-5	7 13		9				
LEMBANG	21.13	253.0	4 49A		1	8 39		0			8 49	PCP
DJAKARTA	21.72	255.2	4 58K		4	8 46		-5			9 16	
TANGERANG	21.92	255.4	4 56A		0	8 47		-7			5 19	PP
HENGCHUN	23.71	343.2	5 19		5							
TAWU	24.00	343.8	4 56		-21							
TAITUNG	24.31	344.6	5 23		3							
RABAU	24.45	98.4	5 21		0							
HWALTIEN	25.36	346.4	5 37		7							
CHARTERS TS.	26.26	138.1	5 39		1	10 7		-3				
ANPU	26.55	346.9	5 26		-15							
CANTON	27.66	330.0	5 52A		1	10 32		0				
MEDAN	29.55	278.6	6 9A		1	11 3		0			12 43	
ZO-SE	32.35	349.1	6 33K		0	11 48		1			7 47	PP
MUNDARING	32.93	198.5	6 36		-2							
PERTH	33.04	199.1				11 59		2			14 8	SS
NANKING	33.80	346.0	6 45		0	12 8		-1				
KUNMING	35.47	318.3	7 0		0	12 37		2			8 19	PP
ADELAIDE	35.47	164.6	6 59K		-1	12 29		-6			8 45	

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BRISBANE	35.61	140.1	6 59	-2	12 41	4					
ABUYAMA	36.19	10.7	6 5A	-61							
PORT BLAIR	37.10	290.6	7 20	6						8 54	
MATUSIRO	38.35	13.4	7 22K	-2	13 31	12					
TUKUBASAN	38.52	15.9			13 28	6				16 8 55	
CHENG TU	38.68	326.0	7 27	0	13 24	0				8 57 PP	
SIAN	39.15	334.7	7 33	2	13 34	3					
RIVERVIEW	39.42	148.9	7 32	-1	13 37	2				9 3 PP	
CANBERRA	39.57	152.5	7 34A	0	13 39	1				9 19 PP	
TOOLANGI	40.02	158.1	7 39	1	13 43	-2	7 56			9 15 PP	
PEKING	42.02	346.5	7 54	0	14 14	0				9 33 PP	
LANCHOW	42.97	331.0	8 2	0	14 30	2				9 45 PP	
VLADIVOSTOK	43.86	4.2	8 10	1	14 33	-8					
CHANGCHUN	44.48	357.3	8 13	-1							
MOORLANDS	44.93	159.8	8 24	6							
FORT NELSON	45.42	159.9	8 22	0							
LHASA	46.41	313.8	8 31	1	15 21	3					
VISHAKHAPTNM	47.61	295.0	8 38K	-1	15 36	1					
BOKARO	47.66	303.8	8 42K	2	15 37	2				10 34 PP	
CHATRA	47.88	308.1	8 42	1							
MADRAS	49.29	287.9	8 53	1	15 56	-2				10 47 PP	
Y.-SAKHLINSK	49.34	13.3	8 53	0							
UGLEGORSK	51.15	11.9	9 7	1							
ESEN BULAK	54.62	333.5	9 35	3	17 10	-1					
IRKUTSK	56.48	342.8	9 44K	-2							
POONA	56.48	292.8	9 44	-2							
DEHRA DUN	56.61	307.6	9 45	-2	17 36	-2					
NEW DELHI	56.62	305.4	9 44A	-3	17 31	-7				11 26	
ROXBURGH	57.49	146.5			17 59	9					
BOMBAY	57.51	293.0	9 53	0	17 52	2				13 13 PPP	
WELLINGTON	58.37	139.8			18 11	9					
PETROPVLOVK	59.44	21.0	10 8A	1							
LAHORE	60.03	307.5	9 7	-64							
YAKUTSK	62.66	1.0	10 27	-1							
MAGADAN	62.77	12.9	10 30	1	18 59	1					
ALMATA-2	62.96	320.7	10 30K	0							
WARSAK DAM	63.11	309.1	10 30	-1							
KHOROG	64.41	312.7	10 40	0							
FRUNSE	64.52	319.2	10 40A	-1							
ANDIJAN	65.12	316.3	10 45A	1							
SEMIPALATNSK	65.14	328.6	10 42	-3							
QUETTA	65.59	303.7	10 45	-2	19 33	1					
TASHKENT	67.49	315.9	10 59	-1							
TIKSI	72.30	0.3	11 26K	-3							
ASHKABAD	74.49	309.7	11 42	0							
VANNOVSKAYA	74.68	309.7	11 42	-1							
KIZYL-ARVAT	76.36	310.6	11 53	1							
SHIRAZ	77.73	300.4	11 58	-2	21 44	-8				22 17 SKS	
SVERDLOVSK	78.42	328.8	12 1	-3							
TEHERAN	79.55	306.4	12 10	0	22 8	-3					
SCOTT BASE	79.72	172.2	12 12	1							
MAWSON	79.96	200.7	12 11	-1							
GORIS	84.01	309.7	12 35A	2	22 57	0					
TIFLIS	85.38	311.8	12 41	1							
BAKURIANI	86.34	311.7	12 44	-1							
COLLEGE	88.26	25.2	12 55	1							
SOUTH POLE	89.22	180.0	12 57	-2							
KSARA	92.14	303.6	13 11	-1						16 36 PP	
BYRD STATION	93.06	170.7	13 16	0							
KEVO	94.52	340.0								25 47 PS	
MOULD BAY	96.08	12.8	13 29	-1						15 10	
NURMIJARVI	97.21	331.0			24 12	-1				26 13 PS	
ISTANBUL UN.	97.27	311.1								17 9	
KIRUNA	97.28	338.6								31 57	
LWIRO	99.09	267.6								17 39 PP	
COPPERMINE	100.65	20.1	13 49	-2							
UPPSALA	100.77	331.2								29 33	
RESOLUTE	102.01	10.6	13 57	0							
YELLOWKNIFE	103.07	25.0	14 1	-1							
PRUMONICE	105.46	322.1	18 26	777							
COLLMBERG	105.98	323.7								18 56 PP	
BLUE MTS.	107.91	42.8	14 27	777						18 58 PP	
WOODY	109.19	52.4	18 59	777							
EUREKA	110.43	47.9	18 20	-14						18 58	
UINTA BASIN	114.81	45.3	18 45	3						19 45 PP	
TONTO FOREST	115.57	52.0	18 47	3						19 51	
WICHITA MTS.	125.07	46.9	19 4	2						20 57 PP	
CLEVELAND	131.54	29.6	20 16	61						22 44 PP	
CUMBERLAND	133.43	38.3	19 20	2						21 44 PP	

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HUANCAYO	153.61	119.6	20 16	24	20 38
AREQUIPA	154.29	132.7	20 6	13	
CHINCHINA	156.12	79.5	19 59	3	
BOGOTA	157.70	79.8	20 3	5	
FUQUENE	157.88	77.4	20 14	16	
CARACAS	162.36	56.3	20 59A	56	24 48 PP

APRIL 17 2.H 11.M 31.5 EPICENTRE -19.72 178.52 DEPTH= 73.KM

A=-0.94176 B= 0.02432 C=-0.33539 D= 0.0258 E= 0.9997
G= 0.3353 H=-0.0087 K=-0.9421 MT= 4.7

DEPTH OF FOCUS= 0.006R

SE= 2.55

	DELTA DEG.	AZ. DEG.	P		O-C S	S			•PP		SUPP.	
			M	S		M	S	S	M	S	M	S
PORT VILA	9.87	279.9	2	22A	1							
AFIAMALU	10.93	59.6	2	29K	-7	4	31	-6				
NOUMEA	11.56	255.1	2	46K	2	4	48	-4				
KOUMAC	13.40	264.0	3	12K	3	5	51	15				
KARAPIRO	18.33	187.5	4	12	1	7	51	22				
CHATEAU	19.58	186.9	4	24	-1						8	18
WELLINGTON	21.73	187.7	4	47K	0	8	41	3			9	25 SS
BRISBANE	24.77	247.2	5	17	1							
ROXBURGH	26.80	194.5	5	40	5	10	7	3			10	41
RIVERVIEW	28.08	234.4	5	47A	0	10	33	8			6	36 PP
RABAUL	29.96	297.6	5	59	-5							
CANBERRA	30.30	233.0	6	7	0	11	5	5			7	3 PP
CHARTERS TS.	30.31	263.7	6	6	-1	11	8	8				
PORT MORESBY	31.99	284.2	6	20A	-2							
TOOLANGI	33.78	231.2	6	37	0	12	3	9			7	50 PP
MOORLANDS	34.80	222.4	6	45	-1							
FORT NELSON	34.95	221.6	6	49	2							
ADELAIDE	38.21	238.2	7	14K	0	12	59	-3			6	47 PP
HONOLULU	46.74	30.5	8	29	5	15	19	12			18	49 SS
KIPAPA	46.89	30.5	8	32	7	15	23	14			18	51 SS
CAPE HALLETT	52.82	183.2	9	9	-1							
MUNDARING	56.72	244.2	9	37	-2	17	21	-3				
PERTH	57.04	244.2	9	40	-1	17	35	7				
SCOTT BASE	58.46	182.9	9	49	-2	17	57	10				
BYRD STATION	65.95	170.3	10	40	-1						27	29
MANILA	66.03	296.8	10	33	-8	19	22	0				
TUKUBASAN	66.45	326.8	10	42K	-2	19	36	9			23	44 SS
MATUSIRO	67.68	325.7	10	50A	-2	19	37	-5				
ABUYAMA	67.91	322.8	10	52A	-1							
LEMBANG	69.77	269.9	11	5A	0	20	17	10			13	35 PP
TAITUNG	70.13	304.2	11	10	3							
MIRNY	70.32	205.1	11	6	-2	20	15	2				
SOUTH POLE	70.40	180.0	11	7	-1							
HUALIEN	70.42	305.6	11	12	4							
DJAKARTA	70.72	270.2	11	10K	0	20	34	16			21	13 PS
TANGERANG	70.92	270.2	11	10A	-1	20	30	10			11	22 PCP
ANPU	71.16	306.6	11	17	4							
Y.-SAKHLINSK	73.85	335.4	11	28A	-1							
PETROPAYLOVK	74.46	347.7	11	31	-1							
ZO-SE	74.71	311.5	11	35A	1							
UGLEGORSK	75.79	336.2	11	42K	2							
VLADIVOSTOK	75.80	326.7	11	38A	-2							
CANTON	76.51	300.7	11	44A	0	21	30	8				
NANKING	76.94	311.2	11	44	-2	21	26	-1				
CHANGCHUN	79.81	323.9	12	1	-1	22	9	11				
BERKELEY	79.83	43.7	12	3K	1	22	55	57			15	33 PP
PRIEST	79.93	45.9	12	3A	0							
LICK	79.94	44.4	12	3A	0							
UKIAH	79.94	42.2	12	5K	2							
CALISTOGA	80.07	42.9	12	3A	0							
PASADENA	80.59	48.7	12	6	0	22	17	11			23	1 PS
MAWSON	81.17	200.5	12	8	-1	22	15	3				
MEDAN	81.66	276.8	12	11A	-1							
MINERAL	81.66	41.9	12	11A	-1							
MAGADAN	82.18	346.2	12	14	-1							
ARGENTINE I.	82.94	157.8	12	18	0							
PEKING	83.06	316.8	12	18A	-1	22	41	10				
BOULDER CITY	83.88	48.5	12	24K	1							
EUREKA	84.84	45.0	12	28A	0							

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TUCSON	85.04	53.4	12 31	2							
SIAM	85.17	308.8	12 31A	1	23	0	8				
VICTORIA	85.36	34.5	12 30	-1							
SEATTLE	85.45	35.6	12 19	-12					23	3	
TONTO FOREST	85.64	51.4	12 33A	1	23	23	27	12	42	30	16 PKKP
KUMMING	86.09	298.3	12 36A	2	23	9	8			23	4 SKKS
GLEN CANYON	86.64	48.9	12 38	1							
BLUE MTS.	86.78	39.9	12 35A	-2	23	8	1	12	46	16	1 PP
CHENG TU	87.33	303.8	12 40A	0	23	14	1			23	10 SKKS
PENTICTON	87.87	35.3	12 43A	0							
COLLEGE	88.19	13.7	12 42A	-2							
SALT LAKE C.	88.23	45.4	12 45	1							
SOCORRO	88.77	53.2	12 48	1							
N-LAZARVSKYA	89.27	184.4	12 48	-1	23	27	-4				
UINTA BASIN	89.57	46.6	12 51	0	23	47	14			16	37 PP
LANCHOW	89.71	308.6	12 53A	2							
FLAMING GRGE	89.96	46.1	12 53	0							
YAKUTSK	90.18	339.2	12 52	-2							
BUTTE	90.25	40.6	12 54	0	24	0	20			13	47
BOZEMAN	91.02	41.4	12 59	1							
BANFF	91.08	35.1	12 58	0							
GOLDEN	92.23	48.5	13 4	1							
LARAMIE	92.73	47.0	13 6	1						16	49
ULAN-BATOR	92.77	320.3	13 4	-2							
WICHITA MTS.	95.40	55.2	13 17	-1						14	59 PP
SANTA LUCIA	95.52	128.3	13 18	0						25	47
IRKUTSK	96.14	323.5	13 20A	-1							
TIKSI	97.16	345.9	13 24	-2						17	22 PP
YELLOWKNIFE	97.19	25.5	13 25A	-1							
LHASA	97.41	298.7	13 29A	2	24	4	8				
TULSA	97.95	54.8	13 31	2	24	4	5			16	44 PP
LAWRENCE	99.31	52.0	13 36	1							
HUANCAYO	100.76	107.0	18 0	258							
MADRAS	102.01	279.6	13 50	3	24	38	19			17	58
MOULD BAY	102.72	12.5	13 48	-3						18	8 PKP
KODAIKANAL	103.70	276.1								24	47
LA PAZ	105.28	114.1								18	25 PP
CUMBERLAND	105.87	57.4	14 3	777	24	45	8			18	27 PP
CHINCHINA	106.58	90.6	18 27	777	24	52	12				
BOGOTA	107.93	91.5	18 39	777							
RESOLUTE	107.96	16.2	18 18A	777							
FUQUENE	108.52	90.8	18 50	777						28	20 PS
COLUMBIA	109.19	59.9	18 53	777							
BOMBAY	110.45	283.4	18 41	17	25	11	15			26	15
LONDON ONT.	110.58	50.4	19 3K	39							
CHAPEL HILL	111.13	58.2								19	6
ALERT	113.13	7.2	18 28	-1							
FRUNSE	113.18	309.0								19	25 PP
KHEYS	114.16	351.1	18 34	3							
WARSAK DAM	114.53	299.1								19	29 PP
OTTAWA	114.73	48.3	18 32A	0							
BREBEUF	116.21	48.3	18 35K	0						36	3 SS
SHAWINIGAN	116.83	47.1	18 36	0							
TASHKENT	117.03	307.0	18 40	3							
DUZHANBE	117.25	303.9								19	49 PP
QUETTA	117.88	294.3	18 39	1							
SCHEFFERVILLE	120.09	37.4	18 42	-1							
GODHAVN	121.32	19.2	19 19	34							
SVERDLOVSK	121.50	325.3	18 44	-1							
TRINIDAD	121.72	89.5	18 47	1							
HERMANUS	122.67	200.3								38	2
HALIFAX	123.32	49.1	18 49K	0							
ASHKABAD	125.43	303.0	18 53	0							
KIMBERLEY	125.55	208.5	18 53	0							
VANNOVSKAYA	125.63	303.0	18 54	1							
KIZYL-ARVAT	126.99	304.6	18 59	3							
KEYO	127.06	348.0	18 58	2						20	49 PP
APATITY	127.33	344.0	18 56	-1							
TROMSOE	128.56	351.0	18 59	0							
SODANKYLA	129.11	346.4	19 0	0							
KIRUNA	129.94	349.4	19 0	-2						21	13 PP
SHIRAZ	130.32	292.5	19 8	6						28	12 SKKS
BULAWAYO	130.62	218.4	19 6	3							
TEHERAN	131.12	300.6	19 4	0						22	30 PKS
KAJAANI	131.51	343.4	18 58	-7						22	28 PKS
MOSCOW	133.64	330.5	19 7	-2							
VIBORG	133.79	339.9	19 4	-5							
PULKOVO	133.98	338.2								22	38 SKP

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GORIS	134.59	306.4	19 14K	4	22 44 SKP
BROKEN HILL	135.04	223.2	19 15	4	
SKALSTUGAN	135.18	351.3	19 2	-9	
TIFLIS	135.22	309.8	19 16	4	22 46 SKP
NURMIJARVI	135.23	342.0	19 0	-12	21 45 PP
HELSINKI	135.41	341.5	19 11	-1	
UPPSALA	137.64	345.8	19 11	-5	21 59 PP
KONGSBERG	139.32	351.4	19 15	-4	
ADDIS ABABA	139.69	260.6	19 19	-1	
GOTEBORG	140.79	348.6	19 19	-3	
SIMFEROPOL	141.27	318.6	19 19	-4	22 56 PKS
KARLSKRONA	141.43	344.7	19 21	-2	
COPENHAGEN	142.59	347.0	19 24	-1	
BANDEIRA	142.65	204.0	19 24	-1	19 34 22 35 PP
WARSAW	143.11	336.9	19 24	-2	23 29 PKS
LWIRO	143.12	237.1	19 26A	0	22 47 PP
KSARA	144.02	300.7	19 26	-1	23 14 PP
BACAU	144.55	325.6	19 36	8	
JERUSALEM	144.99	297.5	19 30	1	
KRAKOW	145.27	335.6	19 29	-1	20 27
UZHGOROD	145.38	331.9	19 31	1	
RACIBORZ	145.89	337.2	19 36	5	21 0
BUCHAREST	146.34	323.2	19 37	6	20 27
WITTEVEEN	146.36	351.1	19 34K	3	
CAMPULUNG	146.39	325.3	19 38	7	20 2
ISTANBUL UN.	146.47	316.0	19 34K	2	
COLLMBERG	146.48	343.5	19 32A	0	19 42 PKP2
HALLE	146.57	344.7	19 32	0	
MUNSTER	147.03	349.6	19 34	1	
PRAGUE	147.17	341.0	19 33	0	19 59
JENA	147.19	344.7	19 32	-1	23 17 PP
PRUHONICE	147.21	340.8	19 33	0	42 19 SS
DE BILT	147.27	352.4	19 39K	6	
CHEB	147.76	343.2	19 44	10	20 7
BRATISLAVA	147.88	336.4	19 36	2	20 2
BENSBERG	148.08	349.6	19 37	3	
VIENNA-M.	148.08	337.2	19 36	2	19 48 PKP2
KASPERSKE H.	148.26	341.1	19 35A	0	22 5
KEW	148.30	358.6	19 40	5	41 59 SS
SOFIA	148.98	323.1	19 37	1	20 4 23 13 PP
BELGRADE	149.05	328.9	19 42	6	23 10 PKS
HEIDELBERG	149.28	346.9	19 37	1	
DOORBES	149.30	352.3	19 40	4	
STUTTGART	149.75	345.8	19 38	1	23 11 PP
TUBINGEN	150.02	345.9	19 40	3	
ZAGREB	150.25	335.0	19 47	9	20 1 PKP2
STRASBOURG	150.26	347.6	19 38	0	26 55 19 23 17 PP
EBINGEN	150.37	345.8	19 39	1	
LJUBLJANA	150.62	337.0	19 39A	1	20 0
FOLINIERE	151.01	358.6	19 39	0	19 45 PKP2
TRIESTE	151.24	337.5	19 40	1	19 55 PKP2
ATHENS	151.54	315.1	19 40A	1	23 22
BESANCON	151.87	349.2	19 42	2	20 57
PADOVA	152.10	339.7			20 9 PKP2
PAVIA	153.12	343.2	19 49	7	22 58 PKS
ROSELEND	153.25	347.3	19 43	1	20 25
CLERMONT-FD.	153.74	352.7	19 44	1	
FLORENCE X.	153.75	338.9	19 41	-2	
ISOLA	154.59	345.6	19 44	0	24 0 PP
ROME	154.92	334.9	19 45A	1	19 53 23 43 PP
MONACO	154.92	344.6	19 56	12	
MESSINA	156.38	324.8	19 46	0	23 46 PP
BAGNERES	156.68	357.0	19 47	1	20 16
TOLEDO	159.79	5.7	19 56K	6	24 13 PP
GRANADA	162.50	5.6			20 33 PKP2
ALMERIA	162.91	2.7	19 57	4	24 30 PP
M.BOUR	164.27	107.3	20 59	64	
AVERROES	165.47	20.2	19 59	3	24 50 PP

APRIL 18 1.H 51.M 58.S EPICENTRE -20.32-177.82 DEPTH= 557.KM

A=-0.93785 B=-0.03574 C=-0.34520 D=-0.0381 E= 0.9993
G= 0.3450 H= 0.0131 K=-0.9385 HT= 4.6

DEPTH OF FOCUS= 0.083R

SE= 0.89

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	DELTA DEG.	AZ. DEG.	P		O-C S	S O-C			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
PORT VILA	13.36	278.8	2	53	1							
NOUMEA	14.79	259.5	3	5K	-2							
KOUMAC	16.78	266.1	3	27A	1							
KARAPIRO	18.47	196.8	3	43K	1							
CHATEAU	19.67	195.5	3	51	-2						7	4
WELLINGTON	21.82	195.2	4	15	2							
BRISBANE	27.75	249.6	5	6	0							
CANBERRA	32.75	235.8	5	48	0							
CHARTERS TS.	33.67	264.0	5	56	0							
PORT MORESBY	35.48	282.6	6	11	0							
TOOLANGI	36.14	233.6	6	16K	0							
ADELAIDE	40.85	239.7	6	54K	-1							
DARWIN	49.74	270.8	8	2	-1							
BYRD STATION	64.79	170.6	9	46	1							
SOUTH POLE	69.81	180.0	10	15	-1							
MATUSIRO	70.16	323.5	10	17K	-1							
BAGUIO CITY	70.65	296.5	10	21	0							
LEMBANG	73.21	268.8	10	36K	0							
TANGERANG	74.36	269.1	10	42K	0							
LICK	78.00	42.6	11	2A	0							
WOODY	78.85	45.3	11	6	0				13	1		
MINERAL	79.85	40.2	11	12A	0							
CHANGCHUN	82.36	322.3	11	24	0							
TUCSON	82.67	51.8	11	27	1							
EUREKA	82.87	43.4	11	27	0							
TONTO FOREST	83.36	49.9	11	30	1				13	27	29	46
BLUE MTS.	85.06	38.4	11	37	-1				13	34	29	41
PEKING	85.88	315.3	11	42	0							PKKP
PENTICTON	86.41	33.9	11	44K	0							PKKP
UINTA BASIN	87.51	45.3	11	49	0							
FLAMING GRGE	87.93	44.8	11	52	1							
COLLEGE	88.00	12.3	11	50	-2				13	47		
SIAN	88.25	307.5	11	53	0							
KUNMING	89.42	297.0	12	0	2							
LANCHOW	92.79	307.4	12	15	1							
WICHITA MTS.	92.94	54.1	12	14	0						14	11
BULAWAYO	132.19	214.4	18	13	2							
KAJAANI	133.02	345.0	18	17	5						20	52
SHIRAZ	133.74	292.0	18	19	6						20	58
UMEA	134.85	348.8	18	14	-1							
SKALSTUGAN	136.23	353.5	18	17	-1							
NURMIJARVI	136.81	344.0	18	10	-9						21	4
UPPSALA	138.99	348.2	18	14	-9							SKP
GOTEBORG	141.98	351.5	18	23	-7							
KARLSKRONA	142.83	347.6	18	28	-3							
ADDIS ABABA	142.96	257.8	18	32	1							
COPENHAGEN	143.86	350.1	18	31A	-1							
LWIRO	145.58	232.4	18	39K	4							
KRAKOW	147.15	338.8	18	41	4							
KSARA	147.28	301.3	18	43	6				21	3		
COLLMBERG	147.93	347.2	18	46	8						20	58
HALLE	147.95	348.5	18	44	6							
JERUSALEM	148.32	297.9	18	46K	7							
JENA	148.57	348.6	18	41	2						19	32
PRUHONICE	148.81	344.5	18	46	6						20	52
ISTANBUL UN.	149.25	318.1	18	56	16							
KASPERSCHE H.	149.84	345.0	18	42K	1				20	56		
DOURBES	150.22	356.9	18	52	10							
STUTT GART	151.05	350.3	18	44	1							
FOLINIERE	151.54	3.7	18	51	7							
WELSCHBRUCH	151.78	354.1	18	52	8							
LJUBLJANA	152.41	341.3	18	46	1							
ROSELEND	154.43	352.8									19	20

APRIL 19 7.H 35.M 20.S EPICENTRE 35.53 96.44 DEPTH= 0.KM

A=-0.09150 B= 0.81047 C= 0.57859 D= 0.9937 E= 0.1122
G=-0.0649 H= 0.5749 K=-0.8156 HT= -0.1

SE= 4.10

	DELTA DEG.	AZ. DEG.	P		O-C S	S O-C			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
LANCHOW	6.03	83.0	1	24K	-8	2	33	-10			1	50

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LHASA	7.44	219.3	1 56K	4	3 25	7	
CHENG TU	7.99	125.3	1 54	-6			
TOCKLAI	8.87	189.7	3 12	60			5 40
SIAN	10.33	93.5	2 21K	-11			
ESEN BULAK	10.86	359.3	2 35	-5			4 46
XUNMING	11.71	150.7	2 45	-6	4 56	-8	
CHATRA	11.75	225.0	2 52K	0	5 9	4	3 0 PP
PAOTOW	11.83	60.8	2 40	-13			
CHITTAGONG	13.73	198.3	3 17	-1			
ULAN-BATOR	14.61	28.9	3 24	-6	6 9	-5	
CALCUTTA	14.75	210.7	3 33	2	6 19	2	
BOKARO	14.87	221.2	3 31K	-2			6 57
PEKING	16.22	68.1	3 39	-12	6 36	-15	
DEHRA DUN	16.29	256.6	3 52K	1	6 48	-5	4 7 PP
IRKUTSK	17.65	16.1	4 5	-4			4 11 PP
NEW DELHI	17.71	252.3	4 5K	-4	7 27	2	4 24 PP
FRUNSE	18.39	299.9	4 18A	0			7 58 SS
LAHORE	18.85	264.1	4 25	2			
NANKING	18.88	94.2	4 16A	-8	7 38	-14	
SEMIPALATNSK	18.94	326.6	4 22A	-3			4 59 PPP
CANTON	19.22	125.6	4 19A	-9	7 54	-6	
KHOROG	20.11	282.9	4 40A	2	8 30	11	
WARSAK DAM	20.50	272.9	4 45K	3			
SEHORE	20.85	239.0	4 46	0	8 46	12	5 15 PP
ZO-SE	21.12	95.0	4 40	-8	8 34	-5	
VISHAKHAPTNM	21.24	216.7	4 51K	1	8 51	9	5 17 PP
TASHKENT	22.00	293.4	5 0A	3			5 27 PP
PENGHU	23.33	114.6	5 8	-2	9 28	8	
CHANGCHUN	23.62	60.7	5 5K	-8	9 17	-8	
HSINCHU	23.69	110.1	5 8	-6	9 38	12	
TAICHUNG	23.83	111.8	5 13	-2			
ANPU	23.91	108.7	5 13	-3			
TAIPEI	23.99	109.0	5 16	-1	9 38	6	
PORT BLAIR	24.00	189.0	5 19K	2	9 40	8	5 59 PP
TAINAN	24.14	114.7	5 15	-3	9 38	4	
ALISHAN	24.27	112.9	5 20	0	9 29	-7	
ILAN	24.31	109.2	5 20	0	9 44	7	
YUSHAN	24.41	112.8	5 15	-6	9 42	3	
HUALIEN	24.64	111.0	5 21A	-2	9 50	7	
HSINKONG	24.94	113.0	5 25	-1	9 55	7	
TAITUNG	24.98	114.0	5 26	0			
TAWU	25.03	115.1	5 28	1	10 0	11	
HENGCHUN	25.13	115.9	5 26	-2			
QUETTA	25.29	266.2	5 31K	2	10 4	10	
NHATRANG	25.93	150.4	5 32	-3	10 9	5	
POONA	26.20	235.6	5 38K	0	10 8	-1	6 34 PP
ISIGAKIZIMA	26.41	107.4	5 42	2			
BOMBAY	26.65	237.8	5 42	0	10 21	5	
MADRAS	26.81	217.2	5 45K	2	10 26	7	6 33 PP
HUKUE	26.90	86.6	5 40	-4	9 41	-39	
ITUHARA	26.91	83.2	5 42	-2	9 24	-56	
NAGASAKI	27.75	86.1	5 46	-6	10 24	-10	12 56
HUKUOKA	27.94	84.1	5 48	-6	10 14	-23	
SAGA	27.96	84.8					6 28
UNZENDAKE	28.05	85.9	5 45	-10	10 34	-5	
MAWASHI	28.28	100.4					7 4
VLADIVOSTOK	28.30	63.6					9 6 PCP
SIMONOSEKI	28.30	83.1	6 10	13			
KUMAMOTO	28.39	85.5	5 53	-5	10 48	4	
KAGOSIMA	28.61	88.1	6 0K	0	10 47	-1	
ASOSAN	28.67	85.2	6 0	0	10 18	-31	
BAGUIO CITY	28.73	125.3	5 57	-4	10 45	-5	
YAKUSIMA	28.92	90.3	5 56	-7	11 4	11	
HAMADA	29.02	80.7	5 55	-8	10 43	-11	
OOITA	29.03	84.3	5 54	-10	10 21	-34	
MIYAZAKI	29.22	86.9			10 56	-2	6 29
HIROSIMA	29.42	81.7	6 2	-5	10 52	-9	
MATSUE	29.72	79.3	6 15	5			15 16
UWAZIMA	29.79	83.9	6 4	-6			
SAIGO	29.79	77.8	6 27	17	12 9	62	
MATUYAMA	29.83	82.6	6 4	-7	11 4	-3	
YONAGO	29.94	79.3	6 5	-7			
ASHIZURI	30.29	84.7			11 30	15	
MANILA	30.33	127.0	6 13	-2	11 11	-4	
ASHKABAD	30.48	286.0	6 20	3			7 31 PP
KOTI	30.50	82.8	6 1	-16	11 7	-11	
KODAIKANAL	30.54	219.0	6 15K	-2	11 21	3	13 21 SS
TOTTORI	30.59	78.9	6 20	2	11 20	1	
TAKAMATU	30.74	81.2	6 12	-7	11 11	-11	

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TSURUGISAN	30.82	82.1	6 22	3				7 4	
HIMEJI	30.98	80.7						15 56	
TOYOOKA	31.10	78.6	6 23	1					
MUROTO	31.10	83.1						11 37	
TOKUSIMA	31.23	81.5	6 17	-6				13 36	
SUMOTO	31.43	80.8	6 16	-9					
KOBE	31.57	80.1	6 20	-6	11 27	-8			
MAIZURU	31.57	78.6						16 58	
WAKAYAMA	31.66	80.9						8 15	
ABUYAMA	31.84	79.6	6 19K	-9					
OSAKA	31.86	80.0	6 23	-6	11 24	-15		10 48	
MEDAN	31.86	175.8	6 29A	0	11 36	-3		7 50	PPP
KYOTO	31.94	79.3	6 21	-8	11 33	-7			
NARA	32.09	79.9	6 33	2					
SVERDLOVSK	32.12	322.8	6 31K	0					
HUKUI	32.13	77.2						14 1	
HIKONE	32.30	78.7	6 34	2	11 44	-2			
SIOMISAKI	32.34	82.1	6 30	-3				12 15	
KANAZAWA	32.37	76.2						6 59	
WAZIMA	32.42	74.6			11 34	-14		6 55	
OWASE	32.53	80.8	6 36	1	11 46	-4			
KAMEYAMA	32.57	79.3			11 35	-16		7 10	
GIHU	32.69	78.2	6 35	-1					
TOYAMA	32.77	75.8	6 36	-1	11 47	-6			
NAGOYA	32.90	78.6	6 31	-7	11 18	-37		7 38	
MATUMOTO	33.47	76.4	6 40	-3	12 0	-4			
TAKADA	33.53	74.8	6 37	-6					
NAGANO	33.57	75.6	6 42	-2	12 8	2		8 0	
MATUSIRO	33.60	75.8	6 36K	-8	11 49	-17			
YAKUTSK	33.72	27.8	6 39A	-6	11 56	-12		7 52	PP
OIWAKE	33.91	76.1	6 50	3				7 57	
NIIGATA	34.02	73.1						7 37	
OMAESAKI	34.03	79.2						10 40	
KOHU	34.06	77.2						7 57	
SHIZUOKA	34.08	78.5						12 33	
HUNATU	34.26	77.4	7 1	11					
TITIBU	34.40	76.5	6 54	3					
SUTTSU	34.41	64.3						8 2	
SAKATA	34.48	71.2						14 26	
MISIMA	34.49	78.0						7 37	
AKITA	34.58	69.8	6 58	6				18 48	
KUMAGAYA	34.61	76.1	6 48	-5					
AJIRO	34.62	78.1						14 51	
MORI	34.70	65.5	6 57	4				13 34	
HAKODATE	34.86	66.0	6 49	-6					
UTUNOMIYA	34.91	75.3	7 6	11					
OSIMA	34.91	78.5						14 56	
YOKOHAMA	34.98	77.3						8 22	
YAMAGATA	34.98	72.3						7 57	
MURORAN	34.99	65.1						8 12	
TOKYO C.M.O.	35.00	76.8			12 34	6		7 49	
HONGO	35.01	76.8			11 32	-56		7 34	PP
SHIRAKAWA	35.08	74.2						7 40	
HUKUSIMA	35.16	73.1	6 54	-3				14 58	
TUKUBASAN	35.16	75.8	6 47A	-10	12 16	-14	6 53	8 15	PP
SAPPORO	35.21	63.8						8 7	
KAKIOKA	35.22	75.8	7 6	8					
HERA	35.24	78.1						9 8	
WAKKANAI	35.39	59.7						12 34	
MORIOKA	35.40	69.6						8 1	
SENDAI	35.40	72.1						8 5	
TOMAKOMAI	35.41	64.5						8 25	
MITO	35.42	75.4						8 1	
MIZUSAWA	35.45	70.6	7 21	21	12 21	-14			
HATINOHE	35.57	68.1	6 48	-13					
ONAHAMA	35.64	74.3	6 54	-7					
ISINOMAKI	35.70	71.7	6 54	-8				14 53	
TYOSI	35.86	76.4						15 53	
ASAHIKAWA	35.92	62.5	6 59	-5					
MIYAKO	36.02	69.6	7 0	-5	12 37	-7			
Y.-SAKHLINSK	36.13	57.0	7 1A	-5	12 40	-6		8 31	PP
URAKAWA	36.33	65.2	7 6	-1	12 50	1			
TEHERAN	36.37	283.8	7 12K	5	12 59	10		8 42	PP
OBIHIRO	36.58	63.9	7 5	-4				16 22	
HIROO	36.72	64.9	7 4	-6					
TORISIMA	36.90	85.1	7 2	-10	12 47	-10			
SHIRAZ	37.23	273.7	7 18K	3	13 10	8	7 25	8 51	PP
ABASHIRI	37.29	62.0	7 2	-13	13 5	2			
KUSIRO	37.45	63.7	7 14	-3	13 4	-2			

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NEMURO	38.28	63.0	7 20	-4	13 16	-2				
GORIS	39.53	291.1	7 36A	2	13 45	8			9 7 PP	
TIKSI	39.91	15.4	7 32A	-5	13 33	-10			8 58 PP	
TIFLIS	40.31	294.9	7 44	4	13 55	6			9 24 PP	
TANGERANG	42.57	164.9	7 58A	-1	14 20	-2			9 34 PP	
DJAKARTA	42.63	164.6	8 2	3	14 30	7			18 2	
LEMBANG	43.43	163.7	8 6	0	14 36	1			9 51 PP	
MOSCOW	44.27	316.1	8 12	-1	14 48	1			10 0 PP	
PETROPAVLOVK	46.31	47.7	8 27K	-2					10 13 PP	
SIMFEROPOL	47.44	301.4	8 40	2	15 37	5			10 33 PPP	
APATITY	47.44	332.3	8 36A	-2	15 25	-7			10 31 PP	
KHEYS	47.50	352.1	8 36K	-2	15 25	-8			10 35 PP	
PULKOVO	48.23	321.7	8 44A	0	15 40	-4			10 42 PP	
GUAM	48.57	104.3	8 47	0	15 46	-2				
KSARA	49.14	286.5	8 54K	3	16 13	17			10 52 PP	
KAJAANI	49.48	327.4	8 51	-3	16 2	1			10 55 PP	
SODANKYLA	50.03	331.7	8 55	-3	16 10	1			11 28	
KEVO	50.05	334.8	8 56	-2	16 10	1			10 58 PP	
JERUSALEM	50.38	284.3	9 4K	3						
HELSINKI	50.90	322.4	9 4	-1						
NURMIJARVI	51.03	322.8	9 3K	-3	16 25	2			10 56 PP	
ISTANBUL KA.	51.98	297.6	9 12	-1						
BACAU	52.01	304.9	9 16	3						
FOCSANI	52.02	303.8	9 19	6						
KIRUNA	52.40	332.3	9 13A	-3	16 41	0			11 23 PP	
UMEA	52.78	327.3	9 16A	-3	16 44	-3			11 19 PP	
TROMSOE	52.86	334.6	9 16	-3			9 27		11 26 PP	
LWOW	53.10	309.5	9 22A	1					17 55	
BUCHAREST	53.12	302.5	7 22	1	17 1	10			9 32	
CAMPULUNG	53.61	303.8	7 25	0	17 6	8			11 26	
WARSAW	54.38	312.9	9 33	2	17 13	5			20 4	
UPPSALA	54.60	322.6	9 29A	-3	17 13	2			11 37 PP	
SOFIA	55.55	301.2	9 44	5	17 37	13	10 8		13 1 PPP	
KRAKOW	55.60	310.6	9 40	0	17 16	-9				
SKALNATE PL.	55.64	309.5	9 41	1	17 18	-7			11 49 PP	
CHORZOW	56.11	311.0	9 41	-2					11 51 PP	
SKALSTUGAN	56.32	327.7	9 41A	-4					13 6	
KARLSKRONA	56.49	318.5	9 44A	-2					12 47	
RACIBORZ	56.66	311.0	9 47	0	17 41	2			11 52 PP	
BELGRADE	56.84	304.4	9 49	1					12 6 PP	
ATHENS	56.91	295.7	9 48A	-1					13 23 PP	
SKOPJE	57.12	300.9	9 50	0					17 49	
HURBANOVO	57.34	308.5	9 54	2					11 48 PP	
BRATISLAVA	57.94	309.1	9 56A	0	18 6	10			12 9 PP	
GOTEBORG	57.97	320.9	9 53	-3					13 20	
NORD	58.32	350.9	9 54	-5						
COPENHAGEN	58.32	318.6	9 58	-1	18 10	9				
VIENNA-H.	58.37	309.4	10 0A	1	18 10	9			12 15 PP	
TITOGRAĐ	58.47	302.1	9 59	-1	17 50	-13			13 41 PPP	
KONGSBERG	58.57	323.5	9 58K	-3	18 8	4			12 10 PP	
ADDIS ABABA	58.60	257.9	10 3	2						
PRUMONICE	58.93	311.7	10 1	-2	18 13	4				
PRAGUE	58.97	311.9	10 4	1	18 12	3			13 31	
COLLMBERG	59.41	313.6	10 5	-1	18 24	9				
KASPERSKE H.	59.81	311.1	10 8	-1					12 6	
HALLE	59.96	314.1	10 8	-2	18 23	1				
CHEB	60.21	312.4	10 13	1	18 31	6				
LJUBLJANA	60.33	307.5	10 11A	-2	18 43	16			12 24 PP	
JENA	60.38	313.5	10 12	-1	18 31	4			12 26 PP	
TARANTO	60.61	300.7	10 15	0	18 48	18			23 50	
TRIESTE	60.98	307.3	10 17A	0	18 42	7			12 33 PP	
ALERT	61.75	356.9	10 18	-4	18 44	-1				
PADOVA	62.29	307.6	10 26	0	18 44	-8			12 45 PP	
MUNSTER	62.29	315.7	10 26	0						
WITTEVEEN	62.50	316.8	10 26	-1						
STUTTGART	62.58	311.9	10 27A	-1	19 0	5			14 10 PPP	
HEIDELBERG	62.66	312.7	10 28	0						
REGGIO. CALA.	62.71	298.8	10 40A	11	19 3	6			19 40 PPS	
MESSINA	62.74	298.9	10 28K	-1					12 53 PP	
RAVENSBERG	62.76	310.8	10 28	-1						
TUBINGEN	62.80	311.7	10 28	-1						
BENSBERG	62.95	314.8	10 29A	-1			10 36		12 53 PP	
EBINGEN	63.00	311.4	10 30A	-1						
KARLSRUHE	63.01	312.4	10 30	-1	19 2	1				
BOLOGNA	63.01	306.9	10 36	5					19 18 PS	
ROME	63.32	303.8	10 33A	0	19 9	5			12 59 PP	
FLORENCE X.	63.36	306.1	10 17	-16	18 42	-23			12 33 PP	
PRATO	63.41	306.3	10 34	1	19 6	0				

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STRASBOURG	63.57	312.1	10 34	0	19 10	2				12 54	PP
DE BILT	63.62	316.5	10 35	0	19 17	9					
PAVIA	64.12	308.3	10 39K	1	19 19	5				13 2	PP
WELSCHBRUCH	64.50	312.4	10 36	-5							
DOURBES	64.80	314.7	10 42	-1						13 9	PP
ABERDEEN	65.21	323.6	10 42K	-3	19 31	3				14 48	PPP
BESANCON	65.22	311.4	10 44	-1						13 5	PP
RABAU	65.42	115.0	10 43	-3							
PORT MORESBY	65.43	122.9	10 42A	-5	19 28	-3					
ROSELEND	65.51	309.6	10 47	0	19 40	8				13 10	PP
ISOLA	65.92	308.0	10 49	-1							
DURHAM	66.07	321.1	10 50A	-1	20 48	70				11 47	PCP
MOULD BAY	66.22	8.8	10 46	-6	19 37	-3					
KEW	66.96	317.5	10 56	0	19 52	3				13 25	PP
CLERMONT-FD.	67.66	310.9	11 0	-1	20 5	7					
COLLEGE	68.17	24.5	10 57	-7	19 55	-9				12 4	
FOLINIÈRE	68.36	315.0	11 4	-1							
JERSEY	69.08	316.0	11 26	16	20 16	1					
PERTH	69.55	162.5	11 16	4	20 16	-4				13 51	PP
MUNDARING	69.67	162.1	11 12	-1	21 16	55					
RESOLUTE	69.81	3.2	11 9A	-5							
BARCELONA	70.41	307.2	11 20	2	20 34	4					
BAGNERES	70.84	309.5	11 19	-1	20 44	9				13 38	PP
TANANARIVE	71.27	228.9	11 26	3						11 51	
TORTOSA	71.78	307.4	11 31	5	20 39	-7					
VALENTIA	71.98	321.4	11 26	-1	20 51	3					
CHARTERS TS.	72.72	131.2	11 28	-4	20 48	-9					
GODHAVN.	73.21	349.3	11 30A	-4	20 52	-10					
LWIRO	73.29	254.8	11 36	1	21 13	10				14 14	PP
ALICANTE	73.73	305.6	11 40	3	21 8	0				14 29	PP
COPPERMINE	74.25	11.9	11 34	-6							
HONIARA	74.65	113.7	11 42	-1	21 15	-3					
TOLEDO	75.21	308.5	11 46A	0	21 29	4				14 37	PP
ALMERIA	75.87	305.2	11 47	-3	21 34	2				14 42	PP
GRANADA	76.43	306.0	12 14	21	21 43	5				15 8	PP
CHILEKA	77.29	240.2	11 58	0							
SITKA	77.96	26.0	11 59	-2	22 2	7					
LISBON	79.11	309.9	12 9	1	22 18	11				27 1	SS
YELLOWKNIFE	79.17	14.1	12 2	-6							
BENI ABBES	79.46	299.4	12 10	0	22 13	2					
ADELAIDE	80.47	145.9	12 13	-2	22 22	1				27 46	SS
BROKEN HILL	81.21	245.3	12 21	2							
AVERROES	81.23	304.6	12 20	1			12 30			23 30	SP
BRISBANE	82.11	131.7	12 21	-3	22 37	-1					
BULAWAYO	84.77	240.9	12 37A	0							
KOUMAC	85.05	119.4	12 45	6							
TOOLANGI	85.79	143.0	12 40	-2	23 7	-8				23 56	
CANBERRA	85.84	139.4	12 40	-3	23 10	-5				28 49	SS
RIVERVIEW	85.89	137.1	12 39	-4	23 15	-1				16 1	PP
CHANGALANE	86.38	234.1	12 46A	1	23 12	-8				24 16	SP
NOUMEA	87.71	119.4	12 54K	2							
EDMONTON	87.75	17.3	12 48K	-4							
SCHIEFFERVILLE	88.86	350.4	12 54K	-3							
VICTORIA	89.09	25.2	12 56	-2							
BANFF	89.20	19.5	12 55	-4							
PONTA DELGDA	89.50	317.8			23 59	9				29 48	SS
KIPAPA	89.63	63.9			23 36	-15				29 22	SS
HONOLULU	89.64	64.0	13 4	3	23 36	-15				16 36	PP
PENTICTON	89.65	22.7	12 58A	-3							
SEATTLE	90.22	25.0	13 6	2						25 25	
HUNGRY HORSE	92.17	19.8	13 10A	-2							
KIMBERLEY	92.95	236.6	13 15	-1							
BLUE MTS.	94.34	23.3	13 19	-3	24 35	3				17 0	PP
BUTTE	94.71	19.8	13 23	-1						17 15	PP
BOZEMAN	95.44	19.0	13 25	-3							
MINERAL	96.76	28.3	17 22	228							
SHAWINIGAN	97.72	352.5	13 35	-3							
CALISTOGA	97.84	29.8								18 2	PP
HALIFAX	98.19	345.7	13 51	11							
BERKELEY	98.63	30.0	13 30K	-12	24 6	-14				17 46	PP
BREBEUF	98.84	352.9	13 42	-1							
OTTAWA	99.13	354.4	13 43	-1							
LICK	99.34	29.9	17 10A	205							
AFIAMALU	99.37	100.4			24 18	4				26 40	S
EUREKA	99.59	24.9	13 44A	-2						16 56	PP
M. BOUR	99.86	295.5	13 49	1	24 29	3					
HERMANUS	100.15	235.0			24 35	7				36 16	
FLAMING GRGE	100.29	19.6	13 48	-2							

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TONTO FOREST	116.82	292.3	18 38	-3	20 40
SCHEFFERVILLE	118.46	334.1	18 39	-5	
KARLSKRONA	119.56	24.9	18 36A	-10	
UINTA BASIN	120.91	297.5	18 44	-5	20 23 PP
FLAMING GRGE	121.32	298.1	18 46	-4	
LAHORE	121.32	80.2	18 48	-2	
WOODY	121.63	287.4	18 47	-3	19 2
WARSAK DAM	121.88	76.3	18 47	-4	
UPPSALA	123.38	24.3	18 48A	-6	
NURMIJARVI	125.56	27.7	18 53	-5	37 28 SS
SKALSTUGAN	125.78	19.6	18 53A	-5	
UMEA	127.50	23.5	18 56	-6	
BLUE MTS.	128.01	295.5	18 59	-4	21 3 PP
KAJAANI	129.37	27.0	19 0	-5	22 14
KIRUNA	131.08	21.1	19 1	-8	
SODANKYLA	131.92	24.2	19 5	-5	22 23
PENTICTON	132.38	298.0	19 6	-5	
EDMONTON	132.57	305.6	19 6A	-5	
APATITY	133.57	26.9	19 8K	-5	
YELLOWKNIFE	139.18	314.7	19 6	-18	
RESOLUTE	141.19	336.6	19 15A	-12	
COPPERMINE	142.45	321.5	19 20	-9	
ALERT	142.76	352.4	19 20	-10	
KHEYS	146.74	17.3	19 35	-2	23 15 PKS
MOULD BAY	147.29	333.8	19 31	-7	
ULAN-BATOR	150.09	90.8	19 44	2	
IRKUTSK	151.40	81.6	19 40	-4	
COLLEGE	153.34	306.7	19 49	2	
TIKSI	163.76	29.6	20 0	1	
YAKUTSK	167.44	66.5	19 58	-4	
MAGADAN	177.96	79.1			21 36 PKP2

APRIL 20 20.H 32.M 20.S EPICENTRE 52.26 159.31 DEPTH= 72.KM

A=-0.57501 B= 0.21715 C= 0.78880 D= 0.3533 E= 0.9355
G=-0.7379 H= 0.2787 K=-0.6146 HT= -6.2

DEPTH OF FOCUS= 0.006R

SE= 2.65

	DELTA DEG.	AZ. DEG.	P O-C			S O-C			*PP		SUPP.	
			M	S	S	M	S	S	M	S	M	S
PETROPAVLOVK	0.86	332.4	0	17K	-2	0	31	-1				
MAGADAN	8.72	330.2	2	9	3	4	1	17				
UGLEGORSK	11.39	260.6	2	46	4						5	21
Y.-SAKHLINSK	11.96	250.6	2	51A	1	5	12	10				
YAKUTSK	18.62	313.2	4	14	0							
MATUSIRO	21.66	231.8	4	47A	1	8	46	9				
TIKSI	23.63	336.4	5	6K	0	9	21	9			5	42 PP
CHANGCHUN	24.06	263.1	5	6	-4	9	21	2				
PEKING	31.82	264.8	6	19	-1							
ULAN-BATOR	33.29	283.8	6	23	-10							
MOULD BAY	38.00	22.6	7	12	-1							
ESEN BULAK	40.35	287.7	7	33	1							
LANCHOW	41.89	269.8	7	45	0							
ALERT	43.82	7.3	8	1	0							
YELLOWKNIFE	44.10	41.7	8	2	-1							
RESOLUTE	44.28	21.5	8	4	-1							
PENTICTON	48.78	59.2	8	41	1							
SVERDLOVSK	52.56	316.8	9	6	-3							
BLUE MTS.	52.78	62.5	9	9	-1	17	7	36				
ALMATA-2	53.01	295.1	9	11K	-1							
KEVO	53.45	341.3	9	7	-8							
TROMSOE	55.03	344.2	9	26	-1							
SODANKYLA	55.52	339.8	9	31	1							
KIRUNA	56.36	342.6	9	35	-1							
SHILLONG	56.53	269.3	9	37A	-1							
EUREKA	57.09	66.6	9	41	-1							
WOODY	58.04	71.7	9	47	-1							
KAJAANI	58.05	337.2	9	48	0							
FLAMING GRGE	59.72	61.3	10	10	10							
UMEA	59.94	340.4	10	0	-1							
UINTA BASIN	60.05	61.9	10	2	0							
PULKOVO	61.01	333.3	10	10	1							
SKALSTUGAN	61.65	343.9	10	13	0							
NURMIJARVI	61.85	336.5	10	15	1							

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MOSCOW	62.10	327.0	10 16	0			
WARSAK DAM	62.68	290.9	10 19	-1			
GOLDEN	62.75	59.8	10 21	1			
NEW DELHI	63.28	282.8	10 22K	-2			
TONTO FOREST	63.42	67.8	10 25	0			
UPPSALA	64.06	339.6	10 28A	-1			
TUCSON	65.15	69.0	10 36	0			
GOTEBORG	67.19	341.7	10 50	1			
KARLSKRONA	67.88	339.1	10 53A	0			
QUETTA	68.12	291.2	10 54	-1			
COPENHAGEN	68.99	340.6	10 59	-1			
WICHITA MTS.	70.06	59.0	11 5	-2		20	16
TULSA	70.59	56.3	11 9K	-1			
FAYETTEVILLE	71.26	55.1	11 13	-1			
BREBEUF	72.53	36.0	11 30	9			
COLLMBERG	72.97	338.6	11 25	1		12	35
JENA	73.63	339.4	11 28	0		11	49
DE BILT	73.76	343.7	11 25	-4			
PRUHONICE	73.84	337.2	11 32	3			
KASPERSKA H.	74.86	337.5	11 35	0			
MORGANTOWN	75.02	43.4	11 35	-1			
CUMBERLAND	75.86	49.6	11 40	-1		30	57
SHIRAZ	76.49	301.0	11 44	0	21 27 4		
STRASBOURG	76.65	341.0	11 46	1			
WELSCHBRUCH	77.09	341.9	11 48	0			
LJUBLJANA	77.51	335.7	11 52	2			
TRIESTE	78.08	336.1				29	48
ROSELEND	79.64	340.9	12 3	2			
ISOLA	81.00	340.2	12 12	3			
KSARA	81.08	315.3	12 11	2			
JERUSALEM	83.11	314.7	12 23K	3			

APRIL 21 4.M 38.M 22.5 EPICENTRE 24.19 122.38 DEPTH= 39.KM

A=-0.48905 B= 0.77119 C= 0.40754 D= 0.8445 E= 0.5355
G=-0.2183 H= 0.3442 K=-0.9132 HT= 3.6

DEPTH OF FOCUS= 0.001R

SE= 1.70

	DELTA DEG.	AZ. DEG.	P		O-C S	S			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
HWALIEN	0.73	252.3	0	14A	-1	0	24	-2				
ILAN	0.81	315.0	0	29	13	0	42	15				
TAIPEI	1.14	316.9	0	24A	4	0	42	7				
ANPU	1.25	321.6	0	24	2							
HSINCHU	1.42	295.4	0	25	1	0	51	9				
HSINKONG	1.43	220.6	0	22A	-2	0	36	-6				
YUSHAN	1.49	241.8	0	38	13	0	52	8				
TAICHUNG	1.55	268.7	0	31A	5	0	50	5				
ALISHAN	1.60	245.4	0	26	0	0	44	-2				
TAITUNG	1.83	218.4	1	2K	32	1	21	29				
TAWU	2.29	216.8	0	32K	-4	0	55	-9				
TAINAN	2.31	239.5	0	37	0	1	4	0				
HENGCHUN	2.65	214.8	0	41	0	1	11	-2				
PENGHU	2.67	256.2	0	41	-1	1	12	-1				
ZO-SE	6.96	351.5	1	41A	-1	3	1	0				
BAGUIO CITY	7.92	192.6	1	51	-5							
CANTON	8.36	264.3	1	58A	-4							
NANKING	8.45	338.7	2	1	-2	3	38	0				
MANILA	9.55	187.6	2	19	1	4	39	34				
SIAN	15.43	313.5	3	37A	1	6	31	5				
PEKING	16.63	343.1	3	55A	3	7	1	7				
CHENG TU	17.52	295.6	4	2A	-1	7	20	5				
KUNMING	17.88	277.0	4	7A	0	7	31	8				
MATUSIRO	18.35	44.2	4	10	-3	7	43	10				
PAOTOW	19.35	330.5	4	26A	1	7	59	3				
TUKUBASAN	19.41	47.8	4	20A	-6	8	5	8				
CHANGCHUN	19.73	6.3	4	29A	0	8	4	0				
LANCHOW	19.89	310.7	4	32A	1	8	15	8				
VLADIVOSTOK	20.44	20.3	4	36A	-1						4	45 PP
GUAM	23.67	112.8	5	11	2	9	32	14				
ULAN-BATOR	26.68	336.4	5	36A	-1	10	34	26				
SHILLONG	27.69	279.3	5	45A	-2	11	22	58			16	38
Y.-SAKHLINSK	27.99	30.5	5	50	1						6	52 PP
LHASA	28.41	287.9	5	54A	1							

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ESEM BULAK	30.51	323.1	6 12A	0			
MEDAN	30.70	231.8	6 13K	0			
IRKUTSK	31.24	338.4	6 17A	-1			
CHATRA	31.83	282.3	6 23A	0			10 5
BOKARO	33.36	277.0	6 36A	-1			
TANGERANG	33.86	209.0	6 42K	1			8 33
LEMBANG	34.03	206.9	6 43A	1			12 7
YAKUTSK	38.14	5.6	7 16A	-1			13 17 PCS
RBAUL	40.47	130.2	7 38A	1			
NEW DELHI	40.53	286.3	7 36A	-1	13 40	-3	16 42
PORT MORESBY	41.23	141.2	7 43K	0	14 4	10	
MADRAS	41.37	262.2	7 45	1			20 46
SEMIPALATNSK	41.71	319.8	7 45K	-2			
FRUNSE	43.31	307.4	8 1A	1			17 56 SCS
WARSAK DAM	45.09	294.6	8 15A	1			
KHOROG	45.12	299.5	8 15A	1			15 1 PS
POONA	45.37	272.6	8 16K	0			
TASHKENT	47.07	304.7	8 30A	0	15 21	3	
TIKSI	47.61	2.8	8 30A	-4	15 27	1	10 31 PP
QUETTA	49.27	289.8	8 47	0			
CHARTERS TS.	49.78	150.1	8 51	0	15 53	-3	
SVERDLOVSK	54.69	323.6	9 26K	-2	17 3	0	11 32 PP
ASHKABAD	55.55	300.5	9 34	0	17 22	7	
MUNDARING	56.16	186.3	9 39	1			
BRISBANE	59.08	148.4	9 59	0	18 6	5	
KOUMAC	60.35	133.9	10 14K	6			
ADELAIDE	60.85	164.7	10 11A	0			29 8
TEHERAN	61.38	298.8	10 15	0			
SHIRAZ	61.69	291.8	10 16	-1	18 34	-1	
KHEYS	62.17	350.4	10 18A	-2			12 13
RIVERVIEW	63.86	153.5			19 10	8	
CANBERRA	64.34	156.0	10 34	0			10 44
GORIS	64.63	303.8	10 36A	0	19 27	16	13 1 PP
TOOLANGI	65.17	159.9	10 39	0			10 49
TIFLIS	65.34	306.4	10 41	0			19 55 PS
MOSCOW	67.46	322.4	10 52A	-2			13 15 PP
APATITY	67.50	335.4	10 54K	0	19 48	2	
COLLEGE	68.29	27.4	10 59	0			
KEVO	69.37	338.3	11 5K	-1	20 10	1	20 46 PS
SODANKYLA	70.10	335.8	11 10K	0			12 8
KAJAANI	70.53	332.3	11 13K	0			
TROMSOE	72.10	339.0	11 21	-1			
SIMFEROPOL	72.14	311.8	11 22A	0	20 42	1	21 25 SCS
KIRUNA	72.22	337.0	11 22A	-1	20 40	-2	
HONOLULU	72.42	74.1			20 54	10	
KIPAPA	72.45	74.0			20 56	12	
NURMIJARVI	72.93	329.1	11 27K	0	20 44	-6	11 49 PCP
ALERT	73.49	0.7	11 30A	0			
UMEA	73.74	333.1	11 31A	-1	20 59	0	
KSARA	74.21	300.3	11 36	1	21 8	4	14 16 PP
JERUSALEM	75.40	298.5	11 43A	2			
UPPSALA	76.44	329.9	11 46A	-1			30 41
ISTANBUL KA.	76.89	309.2	11 49A	-1			
ISTANBUL UN.	76.96	309.2	11 50	0	21 45	11	
SKALSTUGAN	77.05	334.5	11 50A	-1			
RESOLUTE	78.48	9.5	11 58A	-1			
COPPERMINE	79.01	19.0	12 0	-2			
KARLSKRONA	79.04	326.9	12 3	1			
KRAKOW	79.36	320.2	12 3	-1			20 19
KARAPIRO	79.43	139.9	12 4	0			12 15
CHORZOW	79.81	320.7	12 6	0			12 16 PCP
GOTEBORG	80.04	329.3	12 6	-1			
KONGSBERG	80.11	331.6	12 7	-1	22 18	10	27 38 SS
SOFIA	80.24	312.4	12 8	0			
CHATEAU	80.28	140.9	12 8	0			12 19
COPENHAGEN	80.82	327.4	12 12	1	22 18	3	
ATHENS	81.89	307.9	12 16K	-1	22 26	0	
VIENNA-H.	82.25	319.6	12 20A	1			
SCORESBY SD.	82.27	348.6	12 19	0			
PRUHONICE	82.49	321.7	12 20	0			
PRAGUE	82.51	321.8	12 22	2			
YELLOWKNIFE	82.53	23.1	12 20K	0			
COLLMBERG	82.71	323.3	12 21	0			15 31 PP
HALLE	83.17	323.8	12 24	1	22 42	3	
KASPERSCHE H.	83.46	321.3	12 25A	0			13 13
JENA	83.67	323.5	12 25	-1	22 41	-3	13 24
LJUBLJANA	84.41	318.2	12 28A	-2			
TRIESTE	85.08	318.2	12 34A	1			

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MUNSTER	85.21	325.7	12 35	1							
BENSBERG	86.00	325.0	12 38A	0						12 58	
HEIDELBERG	86.04	323.1	12 38	0							
STUTTGART	86.07	322.4	12 38	0							
KARLSRUHE	86.42	322.9	12 40	0							
ABERDEEN	86.55	333.3								46 53	
VICTORIA	86.82	37.4	12 42	0							
STRASBOURG	87.01	322.8	12 44	1	23	2	-15			15 56	PP
ROME	87.76	315.4								24 48	PS
DOORBES	87.84	325.2	12 48	1							
WELSCHBRUCH	87.89	323.2	12 45	-2							
DURHAM	87.91	331.3	12 52K	5						18 43	PPP
SEATTLE	87.92	37.7	12 52A	5						26 57	
PENTICTON	88.42	35.3	12 51A	2							
EDMONTON	88.95	29.7	12 53A	1							
ROSELEND	89.28	320.8	12 53	0							
BANFF	89.35	32.2	12 53	-1							
ISOLA	89.89	319.4	12 56	0							
MONACO	89.92	318.9	12 55	-1							
BLUE MTS.	92.37	37.9	13 9A	1	24	14	8	13	20	14	0 PP
MINERAL	92.48	43.4	13 9K	1							
LICK	94.17	45.9	13 18A	2							
LWIRO	94.18	269.4	13 16A	0						26	2 PS
BUTTE	94.19	34.9	13 17	1							
EUREKA	96.48	41.5	13 28	2							
TOLEDO	99.03	321.2	13 38	0	24	21	9			17	40 PP
FLAMING GRGE	99.33	37.1	13 41	2							
UINTA BASIN	99.65	37.6	13 43	2	24	31	16			17	44 PP
SCHEFFERVILLE	100.92	5.4	13 46	-1							
BULAWAYO	101.30	253.0								1	10
TONTO FOREST	102.69	43.1	13 56	2						18	1 PP
MADISON	106.56	23.9								18	33 PP
WICHITA MTS.	109.69	35.0								18	42 PP
TULSA	110.17	32.3								28	33 PS
PALISADES	113.39	13.4			25	29	13				
SOUTH POLE	114.05	180.0								19	6
CUMBERLAND	114.92	24.9	19 38	61						29	18
BYRD STATION	118.45	169.9								20	1
N-LAZARVSKYA	119.39	200.9	18 46	1							
CARACAS	144.34	15.8	19 33	1						22	56 PP
TRINIDAD	145.17	6.5	19 35	1							
CHINCHINA	146.12	33.5	19 50K	15							
BOGOTA	147.18	31.4	19 42	5						19	55 PKP2
LA PAZ	167.52	54.1	20 7	5					20	17	

APRIL 21 9.M 17.M 5.S EPICENTRE 26.56 128.69 DEPTH= 34.KM

A=-0.55991 B= 0.69912 C= 0.44466 D= 0.7805 E= 0.6251
G=-0.2780 H= 0.3471 K=-0.8957 HT= 2.9

DEPTH OF FOCUS= 0.000R

SE= 1.29

	DELTA DEG.	AZ. DEG.	P			S			*PP		SUPP.	
			M	S	S	M	S	S	M	S		
ZO-SE	7.99	306.2	1	57A	1	3	26	0				
NANKING	10.24	304.7	2	27	0	4	24	2				
BAGUIO CITY	12.59	218.4	2	59	0							
MATUSIRO	12.83	36.8	3	3	1					5	53	
PEKING	17.01	325.3	3	58	2							
CHANGCHUN	17.45	351.8	4	2A	0							
SIAH	18.68	299.0	4	17A	0	7	42	1				
PAOTOW	20.85	316.8	4	41	0	8	28	1				
CHENG TU	22.04	286.5	4	52	-1							
LANCHOW	23.20	300.1	5	4A	0							
Y.-SAKHLINSK	23.24	24.9	5	4A	-1							
KUNMING	23.39	272.3	5	7	1	9	20	7				
ULAN-BATOR	27.32	327.0	5	41	-2	10	37	18				
ESEN BULAK	32.42	316.2	6	8	-21							
SHILLONG	33.02	276.6	6	33A	-1	11	49	0		7	41 PP	
LHASA	33.26	284.2	6	36	0							
PETROPAVLOVK	34.60	32.1	6	46K	-1							
YAKUTSK	35.46	0.8	6	52	-3							
CHATRA	36.98	280.0	7	8A	1							
SEMIPALATNSK	43.78	316.2	8	2	-2							

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ALMATA-2	44.55	305.6	8 11K	1				
TIKSI	45.11	0.1	8 12A	-2	14 40	-11		
NEW DELHI	45.40	284.9	8 16A	-1				
ANDIJAN	48.20	302.0	8 39	0				
WARSAK DAM	49.36	293.1	8 49	1				
CHARTERS TS.	49.40	158.1	8 46	-2				
TASHKENT	50.52	302.9	8 57	1				
QUETTA	53.87	289.2	9 22	0				
SVERDLOVSK	56.26	322.2	9 38K	-1				
ASHKABAD	59.30	300.0	10 1	1				
KHEYS	60.83	349.8	10 10K	-1				
COLLEGE	63.55	28.3	10 28	-1				
CANBERRA	64.47	161.7	10 34	-1				
TOOLANGI	65.71	165.4	10 42	-1				
SHIRAZ	66.09	292.4	10 46	1				
APATITY	67.73	335.6	10 55	-1				
GORIS	68.05	304.2	10 55	-3				
MOSCOW	69.07	322.7	11 3	-1				
SODANKYLA	70.27	336.3	11 11	0				
ALERT	71.03	1.5	11 17A	1				
KAJAANI	71.07	332.9	11 16	0				
TROMSOE	71.91	339.7	11 21	0				
KIRUNA	72.25	337.8	11 23A	0				
NURMIJARVI	73.80	330.0	11 32	0				
UMEA	74.17	334.1	11 33A	-1				
RESOLUTE	75.16	10.9	11 40A	0				
UPPSALA	77.21	331.1	11 51A	-1				
SKALSTUGAN	77.32	335.8	11 52	0				
KSARA	77.89	301.7	11 58	2				
YELLOWKNIFE	78.06	25.1	11 57	1				
JERUSALEM	79.23	300.1	12 5A	2				
KARLSKRONA	80.10	328.5	12 6A	-2				
KONGSBERG	80.67	333.3	12 10	-1				
GOTEBORG	80.85	330.9	12 11A	-1				
SCORESBY SD.	81.00	350.4	12 13	1				
KRAKOW	81.13	321.8	12 13	0				12 21 PCP
VICTORIA	81.42	39.8	12 15	0				
PENTICTON	83.13	37.8	12 24	1				
EDMONTON	84.00	32.2	12 28A	0				
VIENNA-H.	84.07	321.6	12 31	3				
COLLMBERG	84.13	325.3	12 29A	1				13 15
JENA	85.07	325.6	12 33	0				
KASPERSCHE H.	85.09	323.3	12 34	1				13 15
BLUE MTS.	86.94	40.6	12 43	1	23 22	5		36 12 SKKS
STUTTGART	87.57	324.8	12 43	-2				
BUTTE	88.92	37.7	12 54	2				
EUREKA	90.87	44.4	13 1	0				
BOULDER CITY	93.66	46.7	13 27	13				
FLAMING GRGE	93.94	40.1	13 16	1				
UINTA BASIN	94.23	40.7	13 21	5	24 33	11		30 55 55

APRIL 21 10.H 38.M 26.S EPICENTRE -3.12 147.05 DEPTH= 0.KM

A=-0.83794 B= 0.54307 C=-0.05411 D= 0.5439 E= 0.8392
G= 0.0454 H=-0.0294 K=-0.9985 HT= 7.1

SE= 1.63

	DELTA DEG.	AZ. DEG.	P		O-C S	S			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
PORT MORESBY	6.24	179.1	1	32A	-3	2	43	-5				
HONIARA	14.26	116.6	3	23	-2	6	10	5				
GUAM	16.63	352.1	3	59	3	8	6	65				
CHARTERS TS.	16.88	182.6	4	1	2	7	2	-4				
KOUMAC	24.13	137.2	5	20K	2							
BRISBANE	24.74	167.8	5	24	0	9	58	14				
NOUMEA	26.79	137.0	5	42	-1							
RIVERVIEW	30.79	173.3	6	5	-14	11	24	2				
CANBERRA	32.09	177.0	6	29K	-1							
BAGUIO CITY	32.58	307.4	6	33	-2	11	48	-2				
ADELAIDE	32.62	192.8	6	37	2	11	46	-5			15 4	
TOOLANGI	34.31	182.2	6	48	-2						8 17 PPP	
LEMBANG	39.45	263.1	7	33	0							
MATUSIRO	40.31	349.0	7	39	-1	13	50	1				
TANGERANG	40.39	264.2	7	44	3							
MUNDARING	40.78	221.8	7	44	0							
PERTH	41.03	222.2	7	45	-1						21 34	

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ZO-SE	42.02	320.0	7 54	0	14 13	-1	
AFIAMALU	42.02	107.3	7 56K	2	14 20	6	17 40
KARAPIRO	43.35	146.7	8 5	0			
NANKING	44.10	324.7	8 12A	1	14 43	-1	
CHATEAU	44.27	147.9	8 13	0			
WELLINGTON	45.43	150.5			15 28	24	19 52
ROXBURGH	46.48	158.4					19 0
VLADIVOSTOK	48.02	345.1	8 40	-2			
MEDAN	48.80	277.5	8 45K	-3			
CHANGCHUN	50.66	339.7	9 1	-2			
KUNMING	51.33	305.8	9 8	0	16 24	-2	
PEKING	51.44	329.7	9 9	1			
SIAN	51.66	319.3	9 9A	-1			
CHENGTU	53.03	312.6	9 20	0	16 41	-9	
PAOTOW	55.10	326.0	9 35	-1			
LANCHOW	56.09	318.0	9 43	0			
HONOLULU	58.90	62.9			18 28	20	
SHILLONG	60.55	301.6	10 12A	-2			
ULAN-BATOR	61.75	330.5	10 23	1	18 48	4	
LHASA	62.66	305.6	10 29	1	18 59	3	
CHATRA	64.95	301.4	10 43A	0			
YAKUTSK	66.31	351.2	10 52K	0	19 42	1	
ESEN BULAK	66.57	324.2	10 32	-22			
WILKES	68.08	195.0	11 5	2			
MIRNY	73.49	199.8	11 35	-1			
NEW DELHI	73.93	300.8	11 37K	-1			
ALMATA-2	77.51	315.4	11 59A	0			
FRUNSE	79.34	314.5	12 8	-1			
WARSAK DAM	79.77	305.2	12 11	0			
ANDIJAN	80.49	312.0	12 16	1			
COLLEGE	82.51	23.0	12 24	-1			
DUZHANBE	82.80	309.3	12 32	5			
TASHKENT	82.89	312.1	12 27	0	22 46	0	
QUETTA	83.02	300.8	12 28	0			
SOUTH POLE	86.90	180.0	12 48	1			
BYRD STATION	87.54	170.0	12 50	-1			
BLUE MTS.	96.19	45.4	13 33	2	24 24	17	31 38 55
YELLOWKNIFE	96.61	27.6	13 33	0			
UINTA BASIN	102.21	49.6					27 22 PS
NURMIJARVI	108.16	333.9					28 8 PS
UMEA	108.29	338.0					34 28 55
TULSA	113.68	52.1					29 10 PS

APRIL 22 7.H 25.M 31.S EPICENTRE -30.11-177.58 DEPTH= 40.KM

A=-0.86575 B=-0.03662 C=-0.49913 D=-0.0423 E= 0.9991
G= 0.4987 H= 0.0211 K=-0.8665 HT= 1.8

DEPTH OF FOCUS= 0.001R

SE= 2.19

	DELTA DEG.	AZ. DEG.	P		O-C S	S O-C			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
KARAPIRO	9.66	214.4	2	17	-3						3	11
CHATEAU	10.69	210.1	2	35	1						4	29
WELLINGTON	12.76	207.0	3	5	3						5	8
NOUMEA	16.30	294.8	3	53	5							
AFIAMALU	16.99	19.6	3	53	-3	6	41	-22				
ROXBURGH	18.47	210.2	4	10	-5						4	29
BRISBANE	26.10	268.6	5	34A	2						9	3
RIVERVIEW	26.73	253.9	5	39A	1						10	33
CANBERRA	28.51	250.7	5	54A	0							
MOORLANDS	30.74	236.7	6	15	1						9	11
TARRALEAH	31.24	237.2	6	18	0						9	12 PCP
TOOLANGI	31.41	246.4	6	20K	0						9	10 PCP
CHARTERS TS.	34.11	278.5	6	42	-1						16	26
ADELAIDE	36.94	250.8	7	7K	0						17	17
DARWIN	50.78	278.8	8	57	-1							
BYRD STATION	55.15	169.6	9	32	1							
SOUTH POLE	60.06	180.0	10	5	0							
MIRNY	62.55	206.8	10	21A	-1							
MAWSON	72.71	200.4	11	25A	-1							
MATUSIRO	78.21	325.0	11	55A	-2						38	3
N-LAZARVSKYA	79.18	183.2	12	2	-1							
Y.-SAKLINSK	84.71	334.0	12	30	-1							
PRIEST	84.85	42.9	12	33A	1							

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MAGADAN	30.28	47.6	6 16	1	11 18	3	
QUETTA	32.90	253.0	6 41	3			
BAGUIO CITY	33.27	149.7	6 41	0			
ASHKABAD	34.32	271.9	6 56	6			8 10 PP
PETROPAYLOVK	35.14	59.1	6 58	1	12 37	7	
KHEYS	37.38	348.8	7 14K	-2			8 40 PP
TEHERAN	40.24	273.5	7 45	5	13 47	-1	10 1 PPP
APATITY	40.64	326.3	7 41	-2			9 18 PP
MOSCOW	40.92	307.8	7 42	-4	13 50	-8	9 20 PP
TIFLIS	41.73	285.4	7 50A	-2			19 18 PP
GORIS	41.76	281.6	7 51	-2	14 15	4	17 12 SS
SHIRAZ	42.97	265.2	7 59	-4			
SODANKYLA	43.26	326.6	8 2	-3			
PULKOVO	43.54	315.2	8 11	4			17 57 SCS
KAJAANI	43.57	321.8	8 12	5			
KIRUNA	45.45	328.1	8 21	-1			
TROMSOE	45.47	330.7	8 20	-3			8 26
NURMIJARVI	45.99	317.5	8 25	-2			
UMEA	46.80	322.8	8 31	-2	15 19	-5	18 58 SS
SIMFEROPOL	47.11	294.6	8 32	-4	15 24	-4	15 35 PS
UPPSALA	49.49	318.5	8 57	3	15 57	-5	
SKALSTUGAN	50.14	324.4	8 57A	-2			
ALERT	50.85	357.7	9 9	5			
KSARA	51.89	281.3	9 10	-2	16 34	-1	11 8 PP
KARLSKRONA	52.16	314.9	9 13	-1			
ISTANBUL UN.	52.34	292.8	9 13A	-3	16 50	9	
TANGERANG	52.72	176.5	9 17K	-2			
KRAKOW	52.98	306.6	9 23	2			27 47
GOTEBORG	53.10	317.8	9 23	2			11 26 PP
KONGSBERG	53.15	320.7	9 25	3			
JERUSALEM	53.54	279.7	9 22	-3			
RACIBORZ	53.92	307.4	9 31	4			28 55
COPENHAGEN	53.92	315.5	9 31	4			
MOULD BAY	54.24	11.6	9 6	-24			
BRATISLAVA	55.56	305.9	9 43	4			10 48
COLLEGE	55.69	29.4	9 39	-1	17 8	-18	10 5
VIENNA-H.	55.92	306.3	9 40	-2			
PRUHONICE	55.95	308.8	9 40	-2			
PRAGUE	55.96	309.0	9 50	8			
COLLMBERG	56.03	310.8	9 39	-4			14 23
HALLE	56.46	311.4	9 47	1	17 41	5	
KASPERSCHE H.	56.95	308.4	9 46	-3			11 47
JENA	56.98	311.0	9 46	-4	17 42	-1	11 51
LJUBLJANA	58.22	305.0	10 2	4			12 9
RESOLUTE	58.24	5.8	9 55K	-3			
TRIESTE	58.89	305.0	10 8	5			
BENSBERG	59.21	313.0	10 9	4			
STUTTART	59.45	310.0	10 4	-3			10 10 32 24
KARLSRUHE	59.76	310.6	10 13	4			
STRASBOURG	60.36	310.6	10 16	3			
DURHAM	60.94	320.3	10 21A	4			
DOURBES	61.03	313.4	10 25	7			
WELSCHBRUCH	61.21	311.1	10 19	0			
ROME	61.91	302.2					24 18 SSS
COPPERMINE	62.08	15.6	10 21	-4			
MESSINA	62.40	297.3					38 10
KEW	62.54	316.9	10 31	3			
ROSELEND	62.79	308.6	10 33	3			
PARIS	62.92	313.3	10 26	-4			
GODHAVN	63.14	351.1	10 29	-3			
ISOLA	63.53	307.0	10 31	-3			
MONACO	63.61	306.5	10 38	3			
GARCHY	63.63	311.7	10 22	-13			10 54
FOLINIERE	64.41	314.7	10 37	-3			
CLERMONT-FD.	64.60	310.4	10 45	4			
YELLOWKNIFE	66.89	18.3	10 55	-1			
TOLEDO	72.48	309.8	11 30	0			
ALMERIA	73.82	306.7	11 41A	3			
EDMONTON	75.36	22.0	11 47A	0			
CHARTERS TS.	76.74	139.3	11 54	-1			
PENTICTON	77.18	27.5	11 56	-1			
SCHEFFERVILLE	78.52	354.5	12 9A	4			
LWIRO	81.40	257.5	12 18A	-2			
BLUE MTS.	81.87	28.2	12 22	-1			23 27
BUTTE	82.26	24.7	12 24	-1			
BOZEMAN	83.01	23.8	12 29	0			
MINERAL	84.32	33.2	12 35A	0			
CALISTOGA	85.43	34.7	12 43A	2			
BRISBANE	86.02	137.8	12 45	1			

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BERKELEY	86.22	34.8	12 49A	4							
LICK	86.92	34.7	12 48K	0							
FLAMING GRGE	87.85	24.5	12 52	-1							
PRIEST	88.35	34.6	12 54K	-1							
UINTA BASIN	88.36	24.9	12 55	0	23 52	13				13 31	
GOLDEN	90.09	22.1	13 4	1							
BOULDER CITY	90.65	30.4	13 9	3						14 17	
RIVERVIEW	90.81	142.3								4 0	
TONTO FOREST	93.39	28.5	13 19	1				13 29		17 2 PP	
ALBUQUERQUE	94.25	24.5	13 23	1							
TUCSON	95.40	28.9	13 27	-1							
WICHITA MTS.	96.46	18.4	13 32	0						17 45	
CUMBERLAND	97.63	7.7	13 42	4						24 9	
LA PAZ	149.13	344.8	19 51	5							

APRIL 23 9.H 55.M 13.5 EPICENTRE 25.67 99.59 DEPTH= 93.KM

A=-0.15037 B= 0.88983 C= 0.43081 D= 0.9860 E= 0.1666
G=-0.0718 H= 0.4248 K=-0.9024 HT= 3.2

DEPTH OF FOCUS= 0.010R

SE= 3.12

	DELTA DEG.	AZ. DEG.	P		O-C S	S			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
KUNMING	2.90	100.2	0 40A	-6							0 45	PG
TOCKLAI	4.46	285.0	1 10	3	2 4	6					2 14	SS
CHENG TU	6.32	37.1	1 28K	-4	2 42	-2					1 50	PG
SHILLONG	6.97	270.9	1 33A	-9	2 37	-23						
LHASA	8.55	299.5	2 0A	-3	3 35	-4						
LANCHOW	10.97	18.3	2 33K	-3	4 41	4						
CHATRA	11.21	278.6	2 31K	-8	4 23	-20						
SIAN	11.76	41.2	2 41	-5	4 53	-3						
BOKARO	12.67	264.6	2 50	-8							5 41	
CANTON	12.79	98.7	2 51	-9								
PORT BLAIR	15.36	206.3	3 29	-4	6 17	-4					7 48	S
PAOTOW	17.23	27.8	3 51K	-5								
NANKING	17.96	64.8	4 2	-3	7 17	-2						
TAICHUNG	19.19	90.0									9 4	
ZO-SE	19.74	69.1	4 23	-2	7 58	1						
TAIPEI	19.83	87.1									9 28	
TAITUNG	19.88	93.9	4 21	-5								
PEKING	19.93	40.0	4 26K	-1	8 11	10						
HWALIEN	20.07	90.1	4 27	-1								
NEW DELHI	20.14	283.3	4 26A	-3	8 13	8					8 47	SS
SEHORE	20.65	267.9	3 59	-35								
ESEN BULAK	20.86	353.5	4 36A	0	8 41	22						
BAGUTO CITY	21.62	111.1	4 45	1	8 41	8						
MEDAN	21.98	182.4	4 48A	0							11 34	
MADRAS	22.20	239.0	4 58	8	9 2	19					6 5	
MANILA	22.91	114.4	5 2	5	9 8	12						
LAHORE	22.91	290.6	4 56	-1								
ULAN-BATOR	22.94	12.7	4 57	0	9 5	9						
POONA	24.86	258.6	5 17K	2	9 46	17						
ALMATA-2	25.25	319.6	5 21K	2								
BOMBAY	25.64	260.2	5 25	2	9 58	16						
WARSAK DAM	25.64	295.5	5 22	-1	9 53	11						
KHOROG	26.55	303.1	5 31	0								
FRUNSE	26.67	316.2	5 33	1								
IRKUTSK	26.80	6.4	5 34K	0								
ANDIJAN	27.15	310.4	5 36	-1								
CHANGCHUN	27.66	42.6	5 56	15	10 40	25						
KULYAB	28.02	303.1	5 44	-1								
DUZHANBE	28.96	303.9	5 50	-3								
QUETTA	29.13	286.4	5 53	-1	10 52	14						
TASHKENT	29.52	309.5	5 58A	0								
LEMBANG	33.23	165.3	6 32	2							17 43	
MATUSIRO	34.59	62.3	6 50	8	11 59	-4						
ASHKABAD	36.84	299.6	7 1	0	12 48	10						
YAKUTSK	41.58	20.9	7 45	5								
SHIRAZ	41.66	286.5	7 41	0	13 56	6						
SVERDLOVSK	41.79	328.8	7 42A	0	14 2	10						
TEHERAN	42.28	295.6	7 49	3	14 12	13					9 32	PP
GORIS	46.32	301.0	8 21	3	15 7	9						
KIROVOBAD	46.35	302.6	8 19	0	15 7	9						

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BRATISLAVA	6.39	344.8	1 27	-7	2 47	0	1 51	PG
PRATO	6.51	289.4	1 39	3	2 11	-39		
PADOVA	6.54	303.7			2 55	5	3 23	S*
VIENNA-H.	6.63	340.9	1 33	-4			3 23	SG
UZHGOROD	6.87	15.1	1 36	-5				
ISTANBUL UN.	7.11	94.9	1 45	1	3 4	-1		
NIEDZIKA	7.41	3.6	1 43	-5			1 53	PP
KRAKOW	8.02	1.5	1 54	-3	3 47	20	3 18	
RACIBORZ	8.11	353.6	1 54	-4			3 50	SS
KASPERSKE H.	8.26	331.3	1 53A	-7			2 34	PG
CHORZOW	8.27	357.3	1 57	-3	3 36	3	4 14	SSS
LWOW	8.38	20.1	2 2	0			4 57	
CHUR	8.67	307.2	1 59	-7				
PRUHONICE	8.69	337.9	2 1	-5	3 43	-1		
PRAGUE	8.81	337.7	2 13	5			3 50	
ISOLA	9.43	287.4	2 10	-6			2 21	PP
EBINGEN	9.71	312.9	2 12	-8				
STUTTGART	9.90	316.4	2 16	-7	4 0	-13		
ROSELEND	10.06	295.7	2 18	-7	4 6	-11		
WARSAW	10.25	4.9			4 27	5		
COLLMBERG	10.32	336.2	2 21K	-7			5 26	SG
JENA	10.47	330.9	2 23	-7	4 20	-7	5 32	SG
STRASBOURG	10.59	312.2	2 29	-3	4 22	-8	5 23	
HALLE	10.82	333.7	2 31	-4			5 38	SG
SIMFEROPOL	10.94	69.6	2 42	5				
WELSCHBRUCH	11.31	308.8	2 26	-16	4 16	-31		
BENSBERG	12.36	320.5	3 2	6	4 55	-18		
GARCHY	12.88	299.6	2 53	-10				
DOURBES	13.16	312.9	3 12	6				
KARLSKRONA	14.38	350.9	3 20A	-2				
FOLINIÈRE	15.61	302.4	3 23	-15				
GOTEBORG	16.42	345.4	3 55	7				
UPPSALA	17.89	356.8	4 2	-5			4 56	
KONGSBERG	18.69	344.1	4 11	-5				
NURMIJARVI	18.76	7.8	4 11	-6				
PULKOVO	18.96	16.8	4 23	3				
UMEA	21.83	0.8	4 44	-6				
SKALSTUGAN	22.01	351.2	4 46A	-5				
KAJAANI	22.58	9.3	4 53	-4				
SODANKYLA	25.68	6.3	5 22	-5				
KIRUNA	25.86	0.7	5 23	-6			5 46	
APATITY	26.65	11.8	5 31K	-5				
TROMSOE	27.67	359.5	5 40	-5				
NORD	41.57	352.5	7 39	-5				
ALMATA-2	41.77	68.1	7 46K	0				
ALERT	47.56	349.8	8 29	-3				
SCHEFFERVILLE	55.17	315.3	9 25	-5				
RESOLUTE	55.88	343.0	9 30A	-5				
CHATRA	56.39	82.6	9 37K	-1				
MOULD BAY	59.13	349.4	9 53A	-5				
COPPERMINE	65.27	342.7	10 34	-5				
COLLEGE	72.98	354.4	11 23	-3				
EDMONTON	76.71	333.2	11 45	-2				
MATUSIRO	83.79	45.3	12 31	6				
WICHITA MTS.	84.94	313.2	12 29	-2			12 51	
BLUE MTS.	85.31	330.8	12 30	-3				
TONTO FOREST	91.70	321.2	13 2	-1				

APRIL 24 13.H 32.M 12.S EPICENTRE 26.68 129.08 DEPTH= 43.KM

A=-0.56410 B= 0.69456 C= 0.44652 D= 0.7762 E= 0.6304
G=-0.2815 H= 0.3466 K=-0.8948 HT= 2.9

DEPTH OF FOCUS= 0.002R

SE= 2.03

	DELTA DEG.	AZ. DEG.	P		O-C S	S O-C			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
ZO-SE	8.21	304.3	1	59A	0	3	37	5				
NANKING	10.46	303.3	2	30A	0							
MATUSIRO	12.53	36.1	2	56	-2							
BAGUIO CITY	12.91	219.4	3	0	-3							
MANILA	14.09	213.6	3	24	5	6	18	23				
PEKING	17.11	324.3	3	59	2	7	14	9				
CHANGCHUN	17.39	350.8	4	3	2							

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SIAN	18.93	298.3	4 19A	-1			
PAOTOW	21.01	316.1	4 42	0			
CHENG TU	22.34	286.1	4 53	-2	8 54	1	
Y.-SAKHLINSK	22.99	24.4	5 2K	0			
LANCHOW	23.45	299.7	5 6	0	9 18	5	
KUNMING	23.74	272.1	5 9	0	9 25	7	
UGLEGORSK	24.53	20.8	5 19K	2			
ULAN-BATOR	27.41	326.5	5 44	0	10 25	6	
ESEN BULAK	32.58	315.8	6 30	1			
SHILLONG	33.36	276.6	6 34K	-2	11 52	-1	9 17 PCP
LHASA	33.57	284.0	6 38	0			
CHITTAGONG	34.10	271.0	6 43	1			
YAKUTSK	35.34	0.5	6 52K	-1	12 24	0	
CHATRA	37.30	280.0	7 10	0			
TANGERANG	39.24	216.9	7 31	5			
LEMBANG	39.27	215.0	7 26	0			
SEMIPALATNSK	43.94	316.0	8 3	-1			
ALMATA-2	44.77	305.5	8 14K	3			
TIKSI	44.99	359.9	8 12K	-1			
NEW DELHI	45.71	284.8	8 17A	-2			
FRUNSE	46.76	304.7	8 27A	0			
LAHORE	47.67	289.4	8 18	-16			
ANDIJAN	48.44	301.9	8 41	1			
KHOROG	49.27	297.6	8 48	2	15 49	1	
CHARTERS TS.	49.38	158.5	8 45	-2			
WARSAK DAM	49.64	293.1	8 49	0			
TASHKENT	50.75	302.8	8 58	0			
DUZHANBE	51.34	299.3	9 2	0			
QUETTA	54.16	289.2	9 22K	-1	16 58	3	
SVERDLOVSK	56.38	322.1	9 38	-1			
KHEYS	60.78	349.8	10 9	-1			
KIZYL-ARVAT	60.89	301.8	10 12	1	18 28	4	
ADELAIDE	61.98	171.0	10 16	-2			
COLLEGE	63.28	28.3	10 27	0			
CANBERRA	64.47	162.0	10 33A	-1			10 45
TOOLANGI	65.74	165.7	10 41	-1			10 53
SHIRAZ	66.37	292.5	10 45	-1	19 32	0	
APATITY	67.76	335.6	10 55	0	19 52	4	
KIROVOBAD	67.94	305.5	10 56	0			
GORIS	68.27	304.3	10 58	0			
MOULD BAY	69.23	13.8	11 4K	0			
BAKURIANI	69.64	307.3	11 8K	1			
SODANKYLA	70.30	336.3	11 10	-1			13 52 PP
NORD	70.55	355.0	11 11	-1			
ALERT	70.91	1.6	11 14K	-1			
KAJAANI	71.12	332.9	11 15	-1			
PULKOVO	71.57	328.2	11 18	0			
VIBORG	71.92	329.4	11 20	-1			
TROMSOE	71.92	339.8	11 20	-1			
KIRUNA	72.27	337.8	11 22	-1			11 33
NURMIJARVI	73.87	330.1	11 32	0	21 1	2	26 18 SS
UMEA	74.22	334.1	11 33K	-1			11 45
COPPERMINE	74.63	20.7	11 35K	-1			
RESOLUTE	74.97	11.0	11 38K	0			
UPPSALA	77.28	331.2	11 50	-1			12 3
SKALSTUGAN	77.36	335.8	11 51	-1			12 2
KARAPIRO	77.64	144.1	11 52	-1			
UZHGOROD	80.64	319.9	12 11	1			
KONGSBERG	80.72	333.4	12 10	0			
GOTEBORG	80.92	331.1	12 5	-6			12 18
COPENHAGEN	81.91	329.2	12 18	2	22 32	7	
PENTICTON	82.82	37.9	12 22	1			
EDMONTON	83.71	32.3	12 27A	1			
PRUHONICE	84.19	323.8	12 29	1			
COLLMBERG	84.23	325.5	12 29A	1			12 53
HALLE	84.64	326.0	12 31	1	12 55		
ATHENS	85.05	310.1					14 52
JENA	85.17	325.7	12 34	1			13 2
KASPERSKE H.	85.20	323.5	12 33	0			13 13
LJUBLJANA	86.48	320.6	12 40	1			
BLUE MTS.	86.62	40.8	12 42A	2			16 8
STUTT GART	87.67	324.9	12 56	11			
STRASBOURG	88.57	325.4	13 13	24			16 3
BUTTE	88.61	37.8	12 51	1			
EUREKA	90.53	44.6	13 0	1			14 3
GARCHY	91.79	326.6					19 20
FLAMING GRGE	93.62	40.3	13 15	2			
UINTA BASIN	93.91	40.9	13 16	2			13 59

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TONTO FOREST 96.66 46.4 13 28 1 13 49

APRIL 24 21.H 42.M 49.S EPICENTRE -20.94-178.93 DEPTH= 603.KM

A=-0.93458 B=-0.01750 C=-0.35532 D=-0.0187 E= 0.9998
G= 0.3553 H= 0.0067 K=-0.9347 MT= 4.4

DEPTH OF FOCUS= 0.090R

SE= 2.02

	DELTA DEG.	AZ. DEG.	P		O-C S	S			#PP		SUPP.	
			M	S		M	S	S	M	S	M	S
AFIAMALU	9.77	45.4	2	16	-1						4	2
KOUMAC	15.71	268.4	3	18	3							
KARAPIRO	17.59	194.6	3	34	1							
CHATEAU	18.81	193.4	3	44	0							
WELLINGTON	20.97	193.4	4	2	-2							
ROXBURGH	26.32	198.9	4	57	6							
BRISBANE	26.56	250.5	4	23K	-30						6	46
CANBERRA	31.54	236.1	5	37	1						10	57 SCP
CHARTERS TS.	32.58	265.2	5	45K	0	10	23	2				
PORT MORESBY	34.61	284.2	6	1K	-1	10	56	5				
TOOLANGI	34.94	233.8	6	5	1	10	54	-2			11	9 SCP
ADELAIDE	39.64	240.1	6	43A	0							
HAWAII V.OB.	46.33	31.6	7	35	0							
HONOLULU	46.65	27.1	7	37	0							
KIPAPA	46.80	27.1	7	37	-1							
DARWIN	48.72	271.7	7	52	-1							
CAPE HALLETT	51.76	184.2	8	16	1							
MUNDARING	58.35	244.7	9	0	-1							
BYRD STATION	64.35	170.4	9	38	-1							
SOUTH POLE	69.19	180.0	10	9	0							
BAGUJO CITY	70.00	297.3	10	13	-1							
MATUSIRO	70.05	324.4	10	13K	-1	18	39	1				
MIRNY	70.23	205.2	10	14	-1							
TANGERANG	73.31	269.7	10	31K	-2							
ZO-SE	77.32	310.5	10	55	0	20	11	14				
PRIEST	79.09	44.5	11	5K	1							
BERKELEY	79.09	42.3	11	5K	1							
LICK	79.16	43.1	11	5K	0							
CANTON	79.19	299.8	11	6K	1							
CALISTOGA	79.36	41.6	11	6K	0							
NANKING	79.55	310.1	11	7K	0	20	26	6				
PASADENA	79.62	47.4	11	8	1							
SHASTA	80.73	40.0	11	13K	0							
MAWSON	80.86	200.0	11	12A	-1							
ARGENTINE I.	80.90	157.2	11	14	0							
MINERAL	81.00	40.6	11	15A	1							
CHANGCHUN	82.22	322.9	11	19K	-1							
BOULDER CITY	82.91	47.3	11	26	2							
TUCSON	83.87	52.3	11	30	2				13	51		
EUREKA	84.04	43.9	11	29	0				13	38		
TONTO FOREST	84.55	50.3	11	32	0						15	46
SEATTLE	85.07	34.5	11	33	-1							
PEKING	85.60	315.8	11	36K	-1							
BLUE MTS.	86.20	38.8	11	39	-1	21	27	3			29	34 PKMP
SALT LAKE C.	87.40	44.4	11	46	1							
PENTICTON	87.51	34.3	11	46K	0							
SIAM	87.81	307.9	11	48K	1	21	18	-21				
UINTA BASIN	88.68	45.7	11	52K	1						15	35 PP
KUNMING	88.78	297.4	11	53K	1	21	23	-24				
COLLEGE	88.83	12.7	11	49	-3				14	5		
FLAMING GRGE	89.10	45.2	11	43	-10							
CHENGTU	90.00	302.9	11	59K	2	22	4	6			21	29 SKS
LANCHOW	92.34	307.7	12	9K	1	21	41	-38				
WICHITA MTS.	94.14	54.5	12	15	-1						14	32
YELLOWKNIFE	97.27	25.0	12	29A	-1							
SHILLONG	98.09	294.2	12	34K	0							
COPPERMINE	99.92	20.2	12	41	-1							
LHASA	100.10	297.8				22	23	-1				
MOULD BAY	103.39	12.3	12	56	-2							
RESOLUTE	108.46	16.2	17	19	777							
QUETTA	120.57	293.4	17	45	1						19	20
APATITY	129.15	344.6	17	58A	-3						20	26
TROMSOE	130.12	351.9	18	1	-2						20	28 SKP
SODANKYLA	130.84	347.3	18	2	-2						20	32 SKP

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BULAWAYO	131.08	215.2	18 4	0	20 34 PP
KIRUNA	131.56	350.3	18 3	-2	20 34 SKP
SHIRAZ	133.00	291.4	18 7	-1	20 40
KAJAANI	133.34	344.3	17 54	-15	20 40 SKP
TEHERAN	133.80	299.8	17 46	-24	
UMEA	135.24	348.1	17 59	-13	20 46 SKP
BROKEN HILL	135.72	219.7	17 51	-22	20 49 PP
SKALSTUGAN	136.72	352.7	18 3	-12	20 51 SKP
NURMIJARVI	137.11	343.1	18 4	-12	20 52 SKP
UPPSALA	139.38	347.2	18 9	-11	20 57 SKP
KONGSBERG	140.85	353.1	18 16A	-8	21 3 SKP
GOTEBORG	142.43	350.4	18 21K	-5	21 6 SKP
KARLSKRONA	143.20	346.5	18 23K	-4	21 7 SKP
LWIRO	144.38	233.0	18 31A	2	
DURHAM	146.17	2.8	18 33	1	
KSARA	146.70	300.1	18 37	4	16 24
KRAKOW	147.34	337.3	18 37	3	19 10
JERUSALEM	147.68	296.6	18 39	5	20 53 PKP
NIEDZIKA	147.71	336.2	18 35	1	
WITTEVEEN	147.89	353.6	18 39K	5	
RACIBORZ	147.92	339.1	18 39	5	18 59
COLLMBERG	148.29	345.7	18 39	4	21 20
HALLE	148.34	347.0	18 40	5	18 45 PKP2
MUNSTER	148.61	352.2	18 41	6	
JENA	148.95	347.1	18 35	-1	21 21 - 22 20 PP
ISTANBUL UN.	149.00	316.6	18 40K	4	
PRAGUE	149.07	343.2	18 43	7	
PRUHONICE	149.12	343.0	18 42K	6	21 7
KEW	149.51	1.7	18 41	4	
BENSBERG	149.66	352.4	18 43K	6	
BRATISLAVA	149.93	338.4	18 45	8	
VIENNA-H.	150.10	339.3	18 44K	6	
KASPERSKE H.	150.15	343.4	18 37	-1	21 3
STUTTGART	151.47	348.6	18 39	-1	
PARIS	152.17	358.0	18 49	8	
FOLINIERE	152.21	2.2	18 43	2	
LJUBLJANA	152.64	339.4	18 41	0	19 3 PKP2
TRIESTE	153.24	340.0			19 7 PKP2
GARCHY	153.68	356.9	18 52	9	

APRIL 25 8.H 12.M 57.S EPICENTRE 4.49 122.97 DEPTH= 578.KM

A=-0.54258 B= 0.83640 C= 0.07772 D= 0.8389 E= 0.5442
G=-0.0423 H= 0.0652 K=-0.9970 HT= 7.1

DEPTH OF FOCUS= 0.086R

SE= 3.16

	DELTA DEG.	AZ. DEG.	P			S			*PP		SUPP.	
			M	S	S	M	S	S	M	S	M	S
MANILA	10.29	349.7	2 21		-1	4 14		-1				
BAGUIO CITY	12.09	349.0	2 37		-3	4 53		4				
DARWIN	18.49	155.1	3 43		1	6 42		2				
LEMBANG	19.01	233.8	3 45K		-1	6 47		-2		4 45 PPP		
TANGERANG	19.45	237.2	3 49K		-2	6 56		0		4 36 PPP		
CANTON	20.70	334.2	4 0K		-2	7 11		-6		6 32 *SP		
ZO-SE	26.53	356.6	4 53K		-1	8 46		-3		14 37 SCS		
NANKING	27.71	352.3	5 3K		-1	9 4		-4		14 37 SCS		
PORT MORESBY	27.77	119.8	5 5A		0					10 46 PCP		
KUNMING	28.26	318.5	5 7K		-2	9 12		-4		14 39 SCS		
RABAU	30.42	106.1	5 3U		2							
CHENG TU	31.58	327.7	5 35K		-2	9 59		-9	7 14	14 53 SCS		
SIAN	32.36	337.9	5 42K		-2	10 14		-6				
ABUYAMA	32.41	19.6	5 44A		0							
CHARTERS TS.	33.47	137.6	5 54		1	10 37		1				
MATUSIRO	34.84	21.7	6 2A		-3	10 49		-8				
CHITTAGONG	34.99	303.4	6 4		-2	10 52		-7				
PEKING	35.91	351.1	6 12K		-2	11 7		-6		15 19 SCS		
LANCHOW	36.02	333.1	6 13K		-1	11 9		-6		15 18 SCS		
MUNDARING	36.82	189.6	6 19		-2				8 5			
LHASA	39.21	313.2	6 39K		-1	11 56		-5		15 36 SCS		
HONIARA	39.36	110.6	6 41A		-1							
BOKARO	40.65	301.9	6 47		-5					7 38		
CHATRA	40.76	306.8	6 49K		-4					12 14		
VISHAKHAPTNM	40.98	291.9	6 50A		-5					8 40		

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ADELAIDE	41.95	160.5	7 2A	0	12 43	2				7 25	
BRISBANE	42.81	139.4	7 10A	1						11 40	
MADRAS	43.07	284.2	7 8K	-3						7 43	
ULAN-BATOR	45.42	344.8	7 26K	-3	13 22	-7					
Y.-SAKHLINSK	45.68	18.9	7 29	-2	13 26	-7				16 18	SCS
RIVERVIEW	46.49	147.2	7 39A	2						8 18	
CANBERRA	46.54	150.4	7 38A	0	13 46	1				8 59	PCP
TOOLANGI	46.80	155.3	7 39A	-1	13 51	3				9 35	
KOUMAC	47.57	123.1	7 47K	1							
NEW DELHI	49.56	304.1	7 55K	-6	14 16	-10				16 40	
POONA	49.94	290.4	7 58K	-5							
IRKUTSK	50.07	345.2	8 1K	-3	14 29	-4				16 46	SCS
WARSAK DAM	55.96	308.4	8 59K	13							
PETROPAVLOVK	56.55	25.0	8 49A	-1							
KHOROG	57.22	312.3	8 51	-4	16 2	-5					
FRUNSE	57.31	319.2	8 52K	-3							
YAKUTSK	57.62	3.8	8 54K	-3	16 5	-7	10 54			17 39	SCS
SEMIPALATNSK	58.10	329.2	8 57K	-4							
QUETTA	58.58	302.7	8 59	-5							
MAGADAN	58.94	16.1	9 4	-2	16 27	-2				17 54	SCS
TASHKENT	60.28	315.7	9 11K	-4	16 39	-6	11 13			18 0	SCS
KARAPIRO	64.43	135.9	9 41	-1							
ROXBURGH	64.60	145.7	9 41	-2							
CHATEAU	65.04	137.1	9 46	0							
WELLINGTON	65.57	139.4	9 47	-2							
AFIAMALU	67.25	107.0	10 1K	2							
ASHKABAD	67.33	309.3	9 56	-4	18 7	-3	11 59			10 19	PCP
SHIRAZ	70.81	299.7	10 14A	-6	18 41	-9				10 47	
SVERDLOVSK	71.38	329.1	10 19A	-5	18 46	-10					
TEHERAN	72.46	306.0	10 26	-4	18 31	-37	12 17			10 49	PCP
GORIS	76.85	309.4	10 51K	-3	20 50	55					
HONOLULU	78.08	69.3	11 4	3							
KIPAPA	78.15	69.2	11 4	3							
TIFLIS	78.20	311.5	10 58	-3	20 3	-6	13 8				
KHEYS	81.61	351.4	11 15K	-4			13 29			14 48	PP
CAPE HALLETT	82.36	166.9	11 23	0							
MAWSON	83.18	199.5	11 24K	-3			13 37				
KSARA	85.11	303.4	11 34	-2			13 43				
COLLEGE	85.63	25.4	11 36	-3							
APATITY	85.71	337.3	11 35A	-4	21 3	-20					
SIMFEROPOL	86.05	314.6			21 4	-22				21 18	SKKS
PULKOVO	87.50	329.6	11 44	-4	21 12	-28	13 59				
KAJAANI	88.30	334.0	11 47A	-4	21 37	-10				21 16	SKS
SODANKYLA	88.34	337.4	11 47A	-5	21 37	-10	13 58			15 27	PP
ISTANBUL UN.	90.09	311.0	11 56A	-4						21 42	
NURMIJARVI	90.22	330.7	11 55A	-5	21 52	-12	14 5			15 39	PP
KIRUNA	90.59	338.3	11 57A	-5							
UMEA	91.59	334.4	12 1	-6							
MOULD BAY	92.04	12.3	12 6A	-3							
UZHGOROD	93.69	319.2	12 12	-4			14 29				
UPPSALA	93.79	330.8	12 11	-6						16 10	PP
SOFIA	94.05	313.2								21 47	
SKALSTUGAN	95.05	335.2	12 18	-4							
BULAWAYO	95.62	250.3	12 20K	-5							
GOTEBORG	97.25	329.6	12 27A	-5							
PRUHONICE	98.28	321.8	12 34	-3						16 42	
COLLMBERG	98.82	323.3	12 35A	-4						24 57	
LJUBLJANA	99.44	318.0								16 50	PP
TRIESTE	100.07	317.7								17 0	PP
YELLOWKNIFE	100.33	23.5	12 43	-3							
STUTTGART	101.93	321.7								17 13	PP
EDMONTON	105.59	31.2	17 16	777							
CLERMONT-FD.	106.97	320.6								18 0	
LICK	107.08	48.9	17 42A	777							
BLUE MTS.	107.27	40.3	13 16	777						17 44	PP
EUREKA	110.42	45.0	13 32	-235						18 10	PP
ALICANTE	112.59	314.7	17 36	5						18 28	PP
BOULDER CITY	112.67	48.1	17 33	2						18 23	
FLAMING GRGE	114.24	41.1	17 34	0						18 40	PP
UINTA BASIN	114.43	41.8	17 35	1	23 28	-1				18 34	PP
ALMERIA	114.67	314.0								18 41	PP
TONTO FOREST	116.03	48.4	17 38	0						18 49	
TUCSON	117.23	50.3	17 41	1						19 9	PP
ALBUQUERQUE	119.23	45.6	17 45	1						18 53	
WICHITA MTS.	124.78	41.7	17 54	-1						19 44	PP
TULSA	125.85	38.8	17 56K	-1			20 18				
PENNSYLVANIA	131.05	21.0								20 34	
MORGANTOWN	131.28	23.6					20 36				
CUMBERLAND	131.97	31.6	18 7	-1						20 37	SKP

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SAN JUAN	155.57	21.3	19 17	30
ANTOFAGASTA	156.94	147.2	19 26	37
HUANCAYO	160.40	113.7	18 57	4
LA PAZ	163.84	138.4	19 0	3

19 59

APRIL 25 11.H 19.M 25.S EPICENTRE 31.20 140.32 DEPTH= 118.KM

A=-0.65951 B= 0.54714 C= 0.51544 D= 0.6385 E= 0.7696
G=-0.3967 H= 0.3291 K=-0.8569 MT= 1.4

DEPTH OF FOCUS= 0.013R

SE= 5.14

	DELTA DEG.	AZ. DEG.	P		O-C S	S			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
TORISIMA	0.72	161.4	0	18	-2	0	33	-3				
HATIDYOZIMA	1.95	346.8	0	24	-9	0	38	-20				
MERA	3.73	353.8	0	48	-9	1	19	-21				
OMAESAKI	3.83	333.1									1	33
AJIRO	3.98	345.4	0	50	-10	1	29	-17				
MISIMA	4.08	344.0	0	51	-10							
SHIZUOKA	4.09	337.3	1	17	15							
HAMAMATU	4.14	328.8	1	4	2							
YOKOHAMA	4.26	352.6	1	0	-4	1	35	-18				
HUNATU	4.48	343.6	1	27	20	1	59	1				
TOKYO C.M.O.	4.50	354.1	1	5	-2	1	38	-21				
TYOSI	4.53	5.5				1	54	-6				
KOHU	4.70	342.2	1	2	-8	1	51	-13				
IIDA	4.79	334.9	1	9	-2	1	56	-10				
NAGOYA	4.86	325.6	1	8	-4	1	58	-9				
KAMEYAMA	4.87	319.4									1	46
TITIBU	4.88	348.1	1	12	0							
KUMAGAYA	5.00	351.2	1	4	-10	1	55	-16				
KAKIOKA	5.02	358.7	1	6	-8							
NARA	5.13	313.8	1	14	-2							
GIHU	5.14	325.6	1	18	2							
MITO	5.17	1.3	1	5	-11	2	3	-12				
MAEBASI	5.29	349.0	1	11	-7							
OSAKA	5.30	311.8	1	16	-2	2	21	3				
HIKONE	5.30	321.1									2	12
OIWAKE	5.33	344.4	1	12	-6	2	8	-11				
UTUNOMIYA	5.35	356.1	1	18	0	1	58	-21				
MATUMOTO	5.41	339.4	1	23	4						1	49
ABUYAMA	5.41	313.8	1	12K	-7							
KYOTO	5.42	315.9	1	17	-2	2	9	-12				
MATUSIRO	5.61	342.3	1	10K	-12	2	15	-11				
NAGANO	5.74	342.7	1	18	-6	2	37	8				
ONAHAMA	5.76	4.6				2	9	-20			1	51
SHIRAKAWA	5.91	359.2	1	17	-9	2	17	-16				
HUKUJ	5.92	325.9									2	4
TOYAMA	6.07	335.6	1	34	6							
TAKADA	6.13	344.3	1	31	2							
HUKUSIMA	6.54	1.0	1	26	-9							
NIIGATA	6.79	351.5				2	58	3				
YAMAGATA	7.04	0.2	1	30	-11	2	38	-22				
SENDAI	7.07	3.7	1	46	4						2	36
ISINOMAKI	7.26	6.2	1	31	-13	2	42	-24				
MIZUSAWA	7.94	4.6				4	1	39			3	1
AKITA	8.51	358.9				3	19	-17				
URAKAWA	11.11	9.5				4	15	-23				
OBIHIRO	11.92	10.3									4	16
KUSIRO	12.20	14.3									4	33
NEMURO	12.81	17.6									4	49
BAGUIO CITY	23.24	235.2	5	2	5							
NEW DELHI	54.12	284.5	9	15K	1							
COLLEGE	54.55	29.9	9	15	-3							
MOULD BAY	62.38	15.4	10	8	-4							
CANBERRA	66.67	172.3	10	45	5							
RESOLUTE	68.47	13.6	10	48	-3							
TOOLANGI	68.58	175.6	10	52	0							
YELLOWKNIFE	69.33	28.6	10	53K	-3							
SODANKYLA	70.00	337.8	10	59	-1							
KAJAANI	71.45	334.7	11	8	-1							
KIRUNA	71.65	339.7	11	8	-2							
TEHERAN	71.78	301.1	11	8	-3							

16 25 *PPPP

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MAGADAN	63.22	12.4	10	32	-1	19	5	1			
YAKUTSK	63.29	0.5	10	31K	-2						
ALMATA-2	64.00	320.6	10	37	-1						
WARSAK DAM	64.17	309.1	10	38	-1						
KHOROG	65.47	312.7	10	48	1	19	29	-3			
FRUNSE	65.56	319.1	10	48	0	19	32	-1			
WILKES	66.05	188.0	10	50	-1						
SEMIPALATNSK	66.14	328.4	10	55K	3						
ANDIJAN	66.17	316.2	10	51	-1	19	40	0			
QUETTA	66.66	303.8	10	53	-2	19	45	-1			
DUZHANBE	67.90	312.9	11	1	-2	20	0	-1			
TASHKENT	68.54	315.8	11	7A	0	20	6	-3			
MIRNY	69.67	194.4	11	12	-2						
HONOLULU	74.83	67.6	11	51	7						
KIPAPA	74.92	67.5	11	50	5						
ASHKABAD	75.55	309.7	11	51	3						
KIZYL-ARVAT	77.42	310.6	11	59	0	21	48	-1			
SHIRAZ	78.79	300.5	12	5	-1	21	59	-5			
MAWSON	79.66	200.8	12	10K	-1						
TEHERAN	80.62	306.4	12	19	3	22	23	0	15	23	PP
GORIS	85.08	309.7	12	41	2						
KIROVOBAD	85.19	310.8	12	38	-2						
TIFLIS	86.45	311.8	12	45	-1						
BAKURIANI	87.40	311.7	12	51A	0						
COLLEGE	88.48	25.1	12	53	-3				16	15	PP
SOUTH POLE	88.57	180.0	12	54	-2						
MOSCOW	91.83	325.5	13	12	1						
BYRD STATION	92.29	170.7	13	14	1						
KSARA	93.20	303.6	13	22	4				17	5	PP
APATITY	93.37	337.5	13	16	-2	24	21	-3	19	5	PPP
SODANKYLA	95.99	337.6	13	27	-4				17	29	PP
KAJAANI	96.13	334.3	13	28	-3						
MOULD BAY	96.52	12.9	13	31	-2						
NURMIJARVI	98.18	331.0	13	38	-2	24	15	-3	17	21	PP
KIRUNA	98.19	338.7	13	38	-2	24	15	-3	17	43	PP
BULAWAYO	99.05	249.5	13	43	-1						
UMEA	99.40	334.8	13	43	-3	24	21	-3			
UPPSALA	101.75	331.3				24	31	-5	27	5	PS
UZHGOROD	101.93	319.4	13	55	-2						
RESOLUTE	102.49	10.8	13	58	-2						
BERKELEY	105.80	51.1							27	51	
PRUHONICE	106.49	322.1	18	46	777						
COLLMBERG	107.00	323.8	18	50	777						
KASPERSKE H.	107.36	321.5							18	1	
LJUBLJANA	107.70	318.2	19	1	777						
BLUE MTS.	107.80	43.1	14	29	777	25	7	4	18	48	PP
JENA	107.97	323.7	19	1	777						
UINTA BASIN	114.66	45.7	18	44	1				19	51	PP
TONTO FOREST	115.29	52.5	18	45	1				29	20	
ALBUQUERQUE	118.85	50.4	18	46	-5						
WICHITA MTS.	124.88	47.6	18	59	-3				22	23	SKP
CUMBERLAND	133.41	39.3	19	18	-1				22	45	SKP
ANTOFAGASTA	148.81	144.4	19	52	6						

APRIL 25 17.H 50.M 24.S EPICENTRE -21.79-177.77 DEPTH= 360.KM

A=-0.92869 B=-0.03619 C=-0.36908 D=-0.0389 E= 0.9992
G= 0.3688 H= 0.0144 K=-0.9294 HT= 4.2

DEPTH OF FOCUS= 0.052R

SE= 1.70

	DELTA DEG.	AZ. DEG.	P		O-C S	S O-C			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
AFIAMALU	9.69	37.0	2	12	-3	3	53	-9				
PORT VILA	13.70	284.7	3	3A	1							
KOUMAC	16.79	270.9	3	39K	4							
KARAPIRO	17.09	198.3	3	41	3							
CHATEAU	18.27	196.8	3	51	1	7	5	9				
HONIARA	24.69	296.4	4	54	3							
BRISBANE	27.32	252.3	5	14K	0							
CANBERRA	31.99	237.8	5	54	-1							
CHARTERS TS.	33.59	266.2	6	8	-1							
TOOLANGI	35.33	235.3	6	22K	-1				7	32		
PORT MORESBY	35.87	284.6	6	27K	-1							
ADELAIDE	40.17	241.2	7	3	0							

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MUNDARING	58.97	245.0	9 22	-2					
SOUTH POLE	68.34	180.0	10 24	0					
MIRNY	69.93	205.2	10 33K	-1					
MATUSIRO	71.37	323.8	10 41	-2					
LEMBANG	73.23	269.2	10 54K	0			13 30		
TANGERANG	74.38	269.5	10 59K	-1					
PRIEST	78.94	43.8	11 27A	2					
BERKELEY	78.99	41.6	11 27A	1					
LICK	79.05	42.4	11 27	1					
CALISTOGA	79.28	40.9	11 28A	1					
MAWSON	80.43	199.8	11 32K	-1			13 1		
SHASTA	80.69	39.3	11 35	0					
MINERAL	80.94	40.0	11 37K	1					
TUCSON	83.54	51.7	11 51	2			13 18		
TONTO FOREST	84.27	49.7	11 54	1	22 11 25		13 21	14 16	
SEATTLE	85.17	34.0	11 56A	-1					
BLUE MTS.	86.18	38.3	12 2	0				38 3 PKPPKP	
PENTICTON	87.60	33.8	12 9K	0					
ALBUQUERQUE	88.04	51.1	12 11	0			13 40		
UINTA BASIN	88.51	45.2	12 14	1				13 46	
COLLEGE	89.42	12.3	12 15	-2			13 44		
YAKUTSK	93.36	338.0	12 32K	-4					
WICHITA MTS.	93.76	54.2	12 37	0					
MOULD BAY	103.99	12.1	17 35	252					
APATITY	130.25	344.9	18 26K	-1				21 14 PP	
BULAWAYO	131.00	213.6	18 28	-1					
TROMSOE	131.10	352.3	18 28	-1					
SODANKYLA	131.90	347.6	18 29	-2				21 37 SKP	
KIRUNA	132.58	350.7	18 30	-2					
KAJAANI	134.45	344.6	18 34	-1				21 29 SKP	
UMEÅ	136.29	348.6	18 26	-13					
VIBORG	136.89	341.2	18 37	-3					
SKALSTUGAN	137.69	353.3	18 40	-1					
MURMIJARVI	138.23	343.5	18 31	-15				21 39 SKP	
UPPSALA	140.44	347.9	18 39K	-8					
GOTEBORG	143.43	351.2	18 47K	-5					
KARLSKRONA	144.27	347.2	18 50K	-4					
LWIRO	144.71	230.7	18 54K	0					
COPENHAGEN	145.31	349.8	18 54A	-1					
UZHGOROD	148.79	333.9	19 2	2					
JERUSALEM	149.02	295.7	19 5K	4			20 53		
COLLMBERG	149.37	346.7	19 1	0					
HALLE	149.40	348.0	19 5	4			20 30		
MUNSTER	149.59	353.4	19 7	5					
JENA	150.01	348.1	18 42	-20			20 43	22 50 PP	
PRUHONICE	150.23	343.9	19 8K	5			20 46		
BENSBERG	150.63	353.6	19 9A	6					
KASPERSCHE H.	151.26	344.4	19 4	0				20 45	
VIENNA-H.	151.27	340.1	19 12	8					
DOURBES	151.69	356.8	19 13	8					
STUTTGART	152.50	349.9	19 5	-1					
STRASBOURG	152.91	351.9	19 8	2				19 28 PKP2	
FOLINIÈRE	152.99	4.0	19 7	0				21 14	
LJUBLJANA	153.81	340.4	19 7	-1					

APRIL 26 16.H 44.M 15.S EPICENTRE -18.17 -69.14 DEPTH= 135.KM

A= 0.33855 B=-0.88841 C=-0.31001 D=-0.9344 E=-0.3561
G=-0.1104 H= 0.2897 K=-0.9507 HT= 5.1

DEPTH OF FOCUS= 0.016R

SE= 1.81

	DELTA DEG.	AZ. DEG.	P		O-C S	S O-C			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
AREQUIPA	2.82	306.9	0	45	0							
ANTOFAGASTA	5.63	192.1	1	24	1	2	17	-10				
HUANCAYO	8.53	314.7	2	2	0							
NANA	9.65	308.5	2	13	-3							
BOGOTA	23.17	347.4	5	2	7							
CHINCHINA	23.87	343.9	5	5	3							
CARACAS	28.57	4.5	5	44K	-1	10	25	3				
SAN JUAN	36.45	4.8	6	51	-2						7	24
CUMBERLAND	55.69	343.8	9	23	-1						9	56
TULSA	59.42	335.0	9	50	0				10	20		

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WICHITA MTS.	59.59	332.0	9 50	-2	17 50	1		10 21	PCP
M. BOUR	60.75	61.3	10 0	0					
LAWRENCE	61.88	337.1	10 7	0					
ALBUQUERQUE	63.62	326.2	10 18	-1					
MADISON	64.10	343.4	10 21	-1			10 52		
SHAWINIGAN	64.50	357.2	10 22	-2					
BYRD STATION	65.73	188.5	10 31	-1				11 3	
TONTO FOREST	65.80	322.5	10 33	0				13 18	
SEPT ILES	68.11	1.9	10 45A	-2					
LARAMIE	68.14	331.2	10 49	2				11 20	
UINTA BASIN	69.30	328.0	10 55	1	20 51	63	11 27	11 1	PCP
SOUTH POLE	71.94	180.0	11 9	-1					
EUREKA	72.12	323.6	11 13	2			11 44		
SCHEFFERVILLE	72.73	1.4	11 14	-1					
PRIEST	72.73	318.4	11 17A	2					
LICK	74.09	318.9	11 25K	2					
CALISTOGA	75.48	319.5	11 32A	1					
MINERAL	75.95	321.3	11 34A	1					
BLUE MTS.	76.52	327.0	11 37	0				12 10	
SHASTA	76.64	321.2	11 36K	-1					
BENI ABBES	80.35	54.0	11 31	-27					
PENTICTON	80.71	329.2	11 59	0					
GRANADA	82.65	47.1	11 48A	-21					
TOLEDO	83.67	44.6	12 17A	2			12 52		
KIMBERLEY	84.76	118.4	12 20A	0					
MAWSON	87.57	163.4	12 33	-1					
YELLOWKNIFE	87.99	340.7	12 35K	-1					
FOLINIÈRE	90.20	38.0	12 43	-3			13 16		
BULAWAYO	90.82	111.4	12 50A	1					
CLERMONT-FD.	91.07	41.8	12 51	1					
CHANGALANE	91.78	118.3	12 54	1				12 55	PCP
BROKEN HILL	92.58	106.0	12 57	0					
ROSELEND	93.28	42.9	13 1	1					
RESOLUTE	94.08	353.3	13 4	0					
STUTTGART	96.10	40.7	13 8A	-5					
MOULD BAY	98.93	349.3	13 28	2					
COLLEGE	101.57	334.7	13 42	4			14 7		
TEHERAN	124.97	58.8						20 0	
SHIRAZ	125.94	66.2	18 48	2				20 37	
NEW DELHI	147.51	65.2	19 27A	2				22 50	
DEHRA DUN	147.85	61.7	19 28K	2				22 58	
MATUSIRO	149.75	312.7	19 36	7				20 9	PKP2

APRIL 26 23.H 45.M 2.5 EPICENTRE 24.08 122.57 DEPTH= 37.KM

A=-0.49210 B= 0.77023 C= 0.40568 D= 0.8427 E= 0.5384
G=-0.2184 H= 0.3419 K=-0.9140 HT= 3.6

DEPTH OF FOCUS= 0.001R

SE= 2.41

	DELTA DEG.	AZ. DEG.	P		O-C			*PP		SUPP.	
			M	S	M	S	S	M	S	M	S
HWALIEN	0.88	263.2	0	16A	-1	0	27	-2			
ILAN	1.02	312.7	0	24	6	0	40	8			
TAIPEI	1.35	314.9	0	26	3	0	45	5			
ANPU	1.46	319.1	0	26	1						
HSINKONG	1.47	228.9	0	22A	-3	0	37	-6			
HSINCHU	1.63	296.5	0	25	-2	0	45	-2			
ALISHAN	1.72	251.5	0	26	-2	0	46	-3			
TAICHUNG	1.73	272.8	0	30	2	0	53	3			
TAITUNG	1.86	225.0	0	35	5	0	56	3			
TAWU	2.31	222.2	0	33	-4	0	58	-6			
TAINAN	2.41	244.1	0	36	-2	1	16	9			
HENGCHUN	2.66	219.5	0	44	2	1	15	2			
PENGHU	2.82	259.5	0	41	-3	1	13	-4			
ZO-SE	7.10	350.3	1	43	-1						
BAGUIO CITY	7.84	194.2	1	52	-3						
MANILA	9.46	188.8	2	14	-3	4	4	1			
SIAN	15.64	313.5	3	41	2						
PEKING	16.80	342.8	3	56	2						
CHENG TU	17.74	295.8	4	6	0						
KUNMING	18.07	277.4	4	10	0						
MATUSIRO	18.31	43.7	4	11	-2				8	58	
PAOTOW	19.54	330.4	4	28	1						
LANCHOW	20.10	310.7	4	34A	1						

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ULAN-BATOR	26.86	336.3	5 43	4		
SHILLONG	27.88	279.5	5 48A	-1		
Y.-SAKHLINSK	28.00	30.1	5 51	1		
LHASA	28.62	288.1	5 56	1		
ESEN BULAK	30.71	323.1	6 12	-2		
IRKUTSK	31.41	338.3	6 18	-2		
CHATRA	32.02	282.5	6 26A	1		
DARWIN	37.12	166.6	7 7	-2		
YAKUTSK	38.24	5.4	7 16A	-2		
DEHRA DUN	39.89	289.0	7 42A	10		
NEW DELHI	40.73	286.4	7 37A	-2		
PORT MORESBY	41.03	141.3	7 41K	0		
ALMATA-2	41.63	308.7	7 48A	2		
SEMIPALATNSK	41.91	319.8	7 48A	-1		
LAHORE	43.04	291.1	7 57	-1		
ANDIJAN	44.91	304.2	8 14	1		
WARSAK DAM	45.30	294.7	8 17A	1		
TASHKENT	47.29	304.7	8 31	-1		
DUZHANBE	47.55	301.0	8 34	0		
TIKSI	47.72	2.7	8 32A	-3		
CHARTERS TS.	49.59	150.3	8 49	-1		
ASHKABAD	55.76	300.6	9 36	0		
VANNOVSKAYA	55.96	300.6	9 38	1		
KIZYL-ARVAT	57.26	302.2	9 46A	0		
BRISBANE	58.89	148.5	9 58	0	11 0	
KOUMAC	60.14	134.0	10 7A	1		
ADELAIDE	60.69	164.8	10 10A	0	10 23	
TEHERAN	61.59	298.9	10 16	0		
SHIRAZ	61.90	291.9	10 17	-1	10 41	
CANBERRA	64.16	156.1	10 44	11		
KIROVOBAD	64.62	305.1	10 33A	-3		
GORIS	64.84	303.9	10 38A	0		
TOOLANGI	65.00	160.0	10 40	1	10 52 *SP	
TIFLIS	65.55	306.5	10 41	-1		
BAKURIANI	66.49	306.7	10 49	1		
MOSCOW	67.66	322.5	10 54	-1		
APATITY	67.68	335.5	11 0K	4		
COLLEGE	68.31	27.4	11 0	0		
SODANKYLA	70.28	335.9	11 10	-2		
PULKOVO	70.63	327.6	11 16	2		
KAJAANI	70.71	332.4	11 13	-1		
VIBORG	71.11	328.8	11 16K	-1		
KIRUNA	72.40	337.1	11 23	-1		
HELSINKI	73.09	328.8	11 27	-1		
MOULD BAY	73.10	12.8	11 26	-2		
NURMIJARVI	73.13	329.2	11 28K	-1	20 46 -6	26 12 SS
UMEA	73.92	333.2	11 32K	-1		
KSARA	74.42	300.4	11 38	2		
JERUSALEM	75.61	298.6	11 43	0		
UPPSALA	76.63	329.9	11 47	-2		
ISTANBUL UN.	77.17	309.3	11 51	-1		
SKALSTUGAN	77.23	334.5	11 51	-1		
RESOLUTE	78.57	9.5	11 58	-1		
UZHGOROD	78.73	318.3	12 2	2		
COPPERMINE	79.06	19.1	12 0	-2		
KARAPIRO	79.22	140.0	12 10	7		
KARLSKRONA	79.23	327.0	12 4	1		
KRAKOW	79.56	320.2	12 5	0	12 21	12 40
CHATEAU	80.07	141.0	12 7	-1		
GOTEBORG	80.23	329.3	12 7K	-2		
COPENHAGEN	81.01	327.4	12 13	0		
COLLMBERG	82.91	323.4	12 22K	0		15 31
KASPERSKE H.	83.66	321.3	12 26	0		
JENA	83.86	323.5	12 27	0		13 1
LJUBLJANA	84.62	318.3	12 30	-1		
DOURBES	88.04	325.3	12 49	1		
PENTICTON	88.41	35.4	12 51A	1		
EDMONTON	88.96	29.8	12 53A	1		
ROSELEND	89.48	320.9	12 14	-41		
BLUE MTS.	92.35	38.0	13 9	1		30 33 PKKP
EUREKA	96.45	41.6	13 28	1		
CARACAS	144.40	16.2	19 32K	0		23 28 PP
TRINIDAD	145.27	6.9	19 35	1		
LA PAZ	167.45	55.1	20 7	5	20 17	

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APRIL 27 3.4M 42.4M 28.5 EPICENTRE 66.35 -19.44 DEPTH= 0.4KM

A= 0.38040 B=-0.13428 C= 0.91502 D=-0.3329 E=-0.9430
G= 0.8628 H=-0.3046 K=-0.4034 HT=-10.8

SE= 2.73

	DELTA DEG.	AZ. DEG.	P		O-C S	S			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
AKUREYRI	0.88	140.6	0	18	-1	0	32	-1				
REYKJAVIK	2.46	206.0	0	41	-1	1	10	-3				
SIDA	2.65	166.6	0	46	2	1	23	5				
SCORESBY SD.	4.25	348.6	1	5	-2	2	14	16				
GODHAVN	13.09	298.1	3	8	-2							
SKALSTUGAN	13.62	86.9	3	23	6							
TROMSOE	14.57	59.8	3	26	-3						3	46
NORD	15.35	1.5	3	40	1							
KIRUNA	15.41	66.3	3	41	1	6	50	18				
UMEA	16.71	80.2	3	59	2							
UPPSALA	17.76	93.8	4	10	0							
COPENHAGEN	18.54	109.8	4	24	4	7	57	13				
ALERT	18.93	343.9	4	21	-3							
KARLSKRONA	19.40	104.8	4	33A	3							
KAJAANI	19.53	74.6	4	30	-1							
FOLINIERE	20.19	141.5	4	35	-4							
NURMIJARVI	20.20	85.8	4	38	-1	8	26	5				
APATITY	20.22	62.4	4	39A	0	8	21	0				
DOURBES	20.40	131.2	4	46	5	8	22	-3				
HELSINKI	20.52	86.3	4	40	-2							
PARIS	20.94	136.3	4	48	2							
HALLE	21.65	118.0	4	50	-4				5	1		
VIBORG	21.74	82.0	4	53K	-1							
JENA	21.99	119.4	4	59	2	9	8	12			5	50 PPP
COLLMBERG	22.19	116.9	5	3	4							
GARCHY	22.50	137.1	5	2	0							
PULKOVO	22.91	82.8	5	8	2							
STUTTGART	23.05	125.7	5	10	3							
PRUONICE	23.84	116.7	5	19	4							
CLERMONT-FD.	23.90	138.5	5	18	2							
KASPERSKE H.	24.20	119.2	5	21	2						5	43
RESOLUTE	24.63	321.9	5	27	4							
ROSELEND	24.96	133.1	5	23	-3						6	8
SCHEFFERVILLE	25.25	266.0	5	28	-1							
LJUBLJANA	27.17	121.6	5	48	1							
UZHGOROD	27.83	108.9	5	58	5							
MOULD BAY	29.33	331.2	6	13	7							
COPPERMINE	33.75	317.2	6	45	0							
BREBEUF	35.26	261.0	7	0	2							
TIKSI	40.63	14.8	7	43	0							
MADISON	43.52	274.3	8	8	1							
COLLEGE	43.91	331.1	8	10	0							
EDMONTON	44.27	301.1	8	15	2							
CUMBERLAND	48.45	264.8	8	46	0							
YAKUTSK	49.95	18.4	8	56A	-1							
FAYETTEVILLE	51.49	273.0	9	10	1							
UINTA BASIN	53.91	288.9	9	27	0							
WICHITA MTS.	54.45	276.1	9	26	-5						9	47
EUREKA	57.05	293.6	9	53	3							
TONTO FOREST	59.84	286.8	9	13	-56						10	9
TUCSON	61.47	285.4	10	20	0							

APRIL 27 8.4M 42.4M 56.5 EPICENTRE -0.86 128.32 DEPTH= 0.4KM

A=-0.61996 B= 0.78449 C=-0.01482 D= 0.7846 E= 0.6200
G= 0.0092 H=-0.0116 K=-0.9999 HT= 7.2

SE= 2.73

	DELTA DEG.	AZ. DEG.	P		O-C S	S			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
MANILA	17.01	335.4	4	4	4	7	20	11				
BAGUIO CITY	18.79	336.3	4	22	0	7	51	1			4	53 PP
PORT MORESBY	20.57	115.0	4	39	-3	8	28	0				
LEMBANG	21.48	253.4	4	54K	2	8	50	4	5	2	6	12 PPP
DJAKARTA	22.08	255.6	5	7	9	9	6	9			6	13
TANGERANG	22.27	255.8	5	1K	1	9	4	3			5	29 PP
NHATRANG	22.99	305.0	5	8	1	9	17	3				

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HENGCHUN	23.89	342.4	5 20	4							
RABAUL	24.06	98.4	5 17	0	9 30	-2					
TAMU	24.17	343.0	5 17	-1							
HWALIEN	25.52	345.7	5 35	4							
ANPU	26.70	346.2	5 42	0							
CANTON	27.91	329.4	5 54	1	10 35	-1	6 1				
MEDAN	29.95	278.6	6 11K	-1	11 6	-3					
ZO-SE	32.49	348.6	6 33K	-1			6 42				
HONTARA	32.61	106.2	6 33	-2	11 50	-1					
MUNDARING	32.99	199.1	6 35	-3	11 49	-8					
PERTH	33.10	199.7			11 56	-2			7 45	PP	
NANKING	33.96	345.4	6 47K	0	12 13	1	6 55				
ADELAIDE	35.30	165.1	6 57A	-1	12 34	2	7 6		14 45	SS	
BRISBANE	35.31	140.4	6 57	-1					14 45		
KUNMING	35.77	318.0	7 3K	1	12 42	2	7 11				
MATUSIRO	38.32	12.9	7 22K	-2	13 16	-3					
TUKUBASAN	38.48	15.4	7 26	1	13 14	-7			9 23	PPP	
CHENGTU	38.95	325.6	7 29	0	13 29	1	7 36				
RIVERVIEW	39.16	149.2	7 39	8	13 28	-3			16 18	SSS	
CANBERRA	39.33	152.9	7 32K	0					9 5	PP	
SIAN	39.38	334.3	7 32	0	13 37	2	7 40				
TOOLANGI	39.82	158.5	7 36	0			7 45		9 12	PP	
KOUMAC	40.22	121.5	7 39K	0							
MIZUSAWA	41.49	15.1	7 53	3	14 13	7					
PEKING	42.18	346.1	7 55	0	14 13	-3	8 4				
CHITTAGONG	42.40	305.3	7 57	0	14 20	0					
PORT VILA	42.73	115.5	8 0K	0							
NOUMEA	42.78	122.7	7 58K	-2							
LANCHOW	43.22	330.6	8 5K	1	14 32	0	8 12				
VLADIVOSTOK	43.89	3.8	8 8	-1							
SHILLONG	43.94	309.4	8 9	-1	14 39	-3					
PAOTOM	44.48	340.1	8 13	-1	14 44	-6					
CHANGCHUN	44.57	356.9	8 13	-2			8 21				
LHASA	46.74	313.6	8 33K	1	15 22	0	8 41				
BOKARO	48.02	303.6	8 43A	1	15 39	-1			10 27	PP	
CHATRA	48.23	308.0	8 44A	0							
Y.-SAKHLINSK	49.32	13.0	8 53	1	15 54	-5					
MADRAS	49.68	287.8	8 56	1	16 6	2			10 51	PP	
KODAIKANAL	51.77	283.7	9 5	-6	16 38	5					
ULAN-BATOR	52.04	341.8	9 13K	0	16 30	-6					
HYDERABAD	52.35	292.8	9 20	5	16 37	-3			11 8	PP	
ESEN BULAK	54.85	333.3	9 33	-1							
IRKUTSK	56.66	342.6	9 45K	-2							
POONA	56.86	292.8	9 48	0							
KARAPIRO	56.90	136.1	9 48	-1							
DEHRA DUN	56.96	307.5	9 47A	-2	17 49	7			10 45		
NEW DELHI	56.98	305.3	9 46K	-3	17 40	-3			10 42	PCP	
CHATEAU	57.52	137.5	9 56	3							
BOMBAY	57.90	292.9	9 55	-1	17 55	0					
WELLINGTON	58.06	139.9	9 54	-3	18 8	11					
PETROPAVLOVK	59.37	20.8	10 11	5							
LAHORE	60.38	307.4	10 10	-3							
YAKUTSK	62.72	0.7	10 27A	-2							
MAGADAN	62.75	12.7	10 29	0							
WARSAK DAM	63.45	309.0	10 31	-2							
KHOROG	64.74	312.6	10 40	-2	19 20	-2					
SEMIPALATNSK	65.40	328.4	10 44	-2	19 22	-8					
ANDIJAN	65.44	316.2	10 45	-1							
QUETTA	65.95	303.7	10 47K	-3	19 34	-3					
WILKES	66.56	187.7	10 55	2	19 40	-4					
DUZHANBE	67.17	312.8	10 58	1							
TASHKENT	67.81	315.8	10 59	-2							
MIRNY	70.12	194.2	11 14	-2							
TIKSI	72.36	0.2	11 26K	-3	20 48	-4					
HONOLULU	75.04	67.8	11 50	5	21 31	8			24 49		
KIPAPA	75.13	67.7	11 47	2	21 38	15					
CAPE HALLETT	76.02	167.9	11 58	8							
KIZYL-ARVAT	76.70	310.6	11 54	0							
SHIRAZ	78.10	300.4	12 1	-1	21 58	2					
SVERDLOVSK	78.68	328.8	12 2K	-3							
SCOTT BASE	79.61	172.3	12 9	-1							
TEHERAN	79.90	306.4	12 10	-2					15 25	PP	
MAWSON	80.04	200.7	12 11K	-1							
GORIS	84.35	309.7	12 34	-1							
KIROVOBAD	84.47	310.8	12 34	-1							
TIFLIS	85.72	311.8	12 40	-2							
BAKURIANI	86.67	311.7	12 46	0							
KHEYS	87.66	351.1	12 49	-2							

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COLLEGE	88.15	25.1	12 53	0				16 29 PP
SOUTH POLE	89.15	180.0	12 56	-2				
MOSCOW	91.09	325.5	13 14	7				
KSARA	92.50	303.6	13 35	21				17 18 PP
APATITY	92.66	337.5	13 14	0				23 11
BYRD STATION	92.93	170.7	13 19	3				
JERUSALEM	93.08	301.6	13 23	7				
SODANKYLA	95.28	337.6	13 21	-6				
VIBORG	95.40	330.9	13 25	-2				
MOULD BAY	96.05	12.9	13 28	-2				
NURMIJARVI	97.45	331.0	13 33	-3	24 12	-2		24 52 S
KIRUNA	97.49	338.6	13 33	-3	24 22	8		
ISTANBUL UN.	97.60	311.1			24 15	1		14 22
UMEA	98.68	334.7	13 39	-3	24 22	2		25 17 SCS
LWIRO	99.48	267.6						26 49 PS
UPPSALA	101.02	331.2			25 27	55		17 34
RESOLUTE	102.01	10.7	13 56K	-1				
PRUHONICE	105.75	322.1	18 34	777				
PRAGUE	105.80	322.2	18 51	777				
COLLMBERG	106.26	323.8	18 22	777				19 39
KASPERSKE H.	106.62	321.5	17 53	777				18 26
EDMONTON	107.22	33.5	18 28	777				
STRASBOURG	110.40	322.4						35 34 SS
ROSELEND	112.26	319.9						19 39
UINTA BASIN	114.58	45.4			25 44	14		19 53 PP
TONTO FOREST	115.30	52.2	18 46	3				22 42
ALBUQUERQUE	118.83	50.0	18 51	1				
TOLEDO	121.87	318.0			26 16	20		20 50
WICHITA MTS.	124.83	47.1	19 8	6				21 8 PP
LAWRENCE	125.03	41.0	19 2	0				
MADISON	125.74	33.6	19 4	1				38 0 SS
TULSA	126.26	44.5						22 49 SKP
SHAWINIGAN	130.89	19.2	19 20	7				
BREBEUF	131.52	20.5	19 19	5				
CUMBERLAND	133.24	38.6	19 19	1				21 36 PP
PALISADES	135.25	24.0						23 14 PKS
HOPE	150.05	53.9	19 59	12				
BALBOA HTS.	151.10	72.9	19 57	8				
HUANCAYO	153.24	119.4	20 4	12				
CHINCHINA	155.75	79.8	20 4	9				
BOGOTA	157.33	80.1	20 8	11				44 14 SS
FUQUENE	157.52	77.8	20 8	11				
SAN JUAN	157.54	38.3	20 28	31				
CARACAS	162.07	57.2	20 16	14				24 34 PP
TRINIDAD	166.29	44.4	20 19	13				21 8 PKP2

APRIL 28 19.H 50.M 15.S EPICENTRE 36.83 70.83 DEPTH= 137.KM

A= 0.26342 B= 0.75786 C= 0.59688 D= 0.9446 E=-0.3283
G= 0.1960 H= 0.5638 K=-0.8023 HT= -0.5

DEPTH OF FOCUS= 0.016R

SE= 3.31

	DELTA DEG.	AZ. DEG.	P		O-C S	S			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
KHOROG	0.85	40.5	0	21K	-2	0	39	-2				
KULYAB	1.37	321.3	0	30	2	0	55	6				
OBI-GARM	2.07	334.6	0	38K	2	1	9	6				
GARM	2.21	349.1	0	39K	2	1	10	4				
DUZHANBE	2.38	317.3	0	41K	1	1	15	5				
DZERGETAL	2.40	7.4	0	42	2	1	14	4				
WARSAK DAM	2.89	168.1	0	33	-13							
MURGAB	2.90	57.1	0	44	-2	1	19	-3				
FERGANA	3.62	11.5	0	57K	1	1	43	4				
ANDIJAN	4.09	16.6	1	2K	0	1	54	4			2	15
SAMARKAND	4.15	314.2	1	4K	1						1	47
NAMANGAN	4.19	8.7	1	5	2	1	56	4				
TASHKENT	4.64	345.4	1	11K	2						2	7
TCHIMKENT	5.54	350.5	1	23	2						2	28
LAHORE	6.01	150.2	1	13	-15	2	12	-24				
NARYN	6.10	39.6	1	25A	-4	2	33	-5				
FRUNSE	6.66	24.8	1	36	+1						2	51
QUETTA	7.38	207.2	1	36K	-10	2	31	-38				
FABRICHNAYA	7.62	32.6	1	47	-2							
ALMATA	7.96	34.2	1	52K	-2	3	23	0			2	28

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CHATEAU	26.72	29.5	5 41	-1			
TOOLANGI	27.70	336.5	5 51	0		6 6	*SP
KARAPIRO	27.94	28.7	5 52	-2			
CANBERRA	29.37	343.2	6 6	0	11 5	5	12 44 SS
RIVERVIEW	30.60	347.1	6 21	4	11 3	-16	7 34
ADELAIDE	31.62	327.1	6 22	-4	11 42	7	14 30
MAWSON	35.79	220.7	7 3A	1	12 46	6	8 19 PP
BRISBANE	36.85	350.8	7 11	0	13 0	4	
MUNDARING	41.60	299.6	7 50	-1	14 10	2	
PERTH	41.76	299.2	7 54	2	14 16	6	17 38 SS
NOUMEA	41.99	10.3	7 54K	0			
CHARTERS TS.	44.73	342.9	8 15	-1	14 34	-20	
HONIARA	54.50	1.2	9 30K	-1	17 12	2	
PORT MORESBY	55.17	345.7	9 34K	-2	17 22	3	21 10 SS
LEMBANG	67.72	303.0	11 2K	1			
MEDAN	80.67	298.5					12 40
ANTOFAGASTA	84.49	135.6	12 36	0	22 36	-26	
BAGUIO CITY	85.46	323.3	12 38	-2	23 24	13	
AREQUIPA	90.93	132.2	13 8	1			
KIPAPA	91.47	39.5	13 10	1			
LA PAZ	91.96	135.3	13 14	3			
LWIRO	104.43	232.0					46 2
BOGOTA	109.61	122.2					19 2 PP
CARACAS	117.64	127.1					23 10 PP
TUCSON	118.55	74.7	18 49	0			
TONTO FOREST	120.11	73.2	18 53	0			20 12 PP
EUREKA	122.61	66.3	18 57	0			19 52
SHIRAZ	123.41	269.7	18 59	0			
ALMATA-2	124.49	298.7	19 0K	-1			
ST. CLAUDE	124.58	130.4			25 59	-5	
WICHITA MTS.	125.94	83.6	19 2	-2			
UINTA BASIN	125.95	70.8	19 4	0			21 0 PP
FLAMING GRGE	126.53	70.5	19 6	1			
BLUE MTS.	126.62	61.8	19 4	-1			20 59 PP
SEATTLE	127.09	56.2	19 6A	0			
ASHKABAD	127.89	280.1	19 6	-2			
TULSA	128.17	85.2					39 12 SS
TEHERAN	129.08	272.6	19 10	0			
LAWRENCE	130.96	83.5	19 12	-1			
CUMBERLAND	132.40	94.6					21 49 PP
COLLEGE	134.35	28.6	19 4	-16			21 48 PP
EDMONTON	135.06	57.9	19 20	-1			
KIROVOBAD	135.38	271.8	19 20	-2			
MADISON	136.94	84.6					1 28
YELLOWKNIFE	141.46	48.1	19 27	-6			
SVERDLOVSK	141.74	298.6	19 27	-6			
ISTANBUL UN.	143.27	255.6	19 30	-6			22 44 PP
BENI ABBES	144.05	208.4	19 35	-2			
COPPERMINE	144.95	41.2	19 35	-4			
BREBEUF	145.72	97.2	19 39K	-1			42 48 SS
MESSINA	146.27	237.7	19 46	5			
SHAWINIGAN	146.91	96.8	19 42	0			
SOFIA	147.02	251.2	19 43	1			
AVERROES	148.12	201.9	19 47	3			
MOULD BAY	148.90	27.3	19 40	-5			
HALIFAX	149.32	108.7	19 50K	4			
MOSCOW	150.46	281.6	19 44	-4			23 27 PP
ALMERIA	150.59	211.3	19 53A	5			
ROME	150.65	237.2	19 54	6	26 12	-42	
GRANADA	151.16	209.7	19 38A	-11			23 15 PP
UZHGOROD	152.18	257.2	19 57	7			
LWOW	152.33	260.7	19 59	9			23 39
SEPT ILES	152.46	98.4	19 57A	6			
TRIESTE	153.35	243.0	20 0	8			
LJUBLJANA	153.37	244.5	19 51	-1			
TOLEDO	153.84	210.6	19 54	1			23 57 PP
RESOLUTE	153.88	35.5	19 49	-4			
KHEYS	154.07	338.4	20 0	7			20 14 PKP2
ISOLA	154.58	232.0	19 49	-5			20 20
SCHIEFFERVILLE	155.50	90.4	19 53	-2			
PULKOVO	156.01	283.7	19 53	-2			20 22 PKP2
KASPERSKE H.	156.23	247.6	19 54	-2			20 25
PRAGUE	156.61	250.2					20 30 PKP2
STUTTGART	157.65	241.3					20 32 PKP2
APATITY	158.02	303.4	20 0	2			
COLLMBERG	158.13	250.5	19 57	-1			20 33
NURMIJARVI	158.82	281.6	19 56	-3			24 18 PP
KARLSKRONA	160.39	263.5	20 39	38			
SODANKYLA	160.50	301.0					20 42 PKP2

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KEVO	160.77	308.3	19 57	-4		24 26	PP
UPPSALA	161.56	274.8	20 48A	46			
UMEA	162.09	288.1	20 48	46		24 31	
GOTEBORG	162.90	263.6	20 53	50			
KIRUNA	162.92	301.2	20 52A	49			
SKALSTUGAN	165.39	283.4	21 3	57			

APRIL 29 20.H 35.M 38.S EPICENTRE 17.54 -92.57 DEPTH= 0.KM

A=-0.04271 B=-0.95314 C= 0.29950 D=-0.9990 E= 0.0448
G=-0.0134 H=-0.2992 K=-0.9541 HT= 5.2

SE= 1.86

	DELTA DEG.	AZ. DEG.	P		O-C S	S O-C			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
COMITAN	1.35	161.9	0	26	0	0	46	1				
OAXACA	4.05	263.3	1	7	2	1	50	-4				
MERIDA	4.39	38.9	1	10	0	2	1	-1			2	28
SAN SALVADOR	5.02	139.3	1	17	-2	2	50	32				
TACUBAYA	6.56	287.4	1	46	6						2	52
GUADALAJARA	10.64	288.8									5	6
MANZANILLO	11.28	279.5									5	4
BALBOA HTS.	15.25	122.3	3	38	0							
CHIHUAHUA	16.61	314.1									4	38
WICHITA-MTS.	17.94	343.7	4	10	-3							
TULSA	18.52	351.7	4	18K	-2	7	40	-4				
FAYETTEVILLE	18.53	355.9	4	19K	-1	7	41	-3				
CUMBERLAND	19.03	17.7	4	25	-1	7	34	-22				
COLUMBIA	19.38	30.0	4	30	0							
CHINCHINA	20.76	125.0	4	45	0	8	47	14				
ST. LOUIS 1	21.12	5.1	4	48	-1							
ALBUQUERQUE	21.31	327.1	4	51	0							
CHAPEL HILL	21.89	30.6	4	57	1							
FUQUENE	21.98	120.8	4	57	0							
TUCSON	22.06	315.0	4	59	1							
BOGOTA	22.20	123.2	4	58	-2	9	4	4				
BLACKSBURG	22.33	26.2	5	2	1							
TONTO FOREST	23.62	318.5	5	15	1	9	44	19	5	24	9	0 PCP
MORGANTOWN	24.59	23.9	5	26	3	10	0	18				
GOLDEN	24.72	335.9	5	25	1	10	0	16				
SAN JUAN	25.17	84.0	5	30	2							
CARACAS	25.82	102.3	5	34	-1	10	6	3				
MADISON	25.86	4.7	5	35	0	10	20	17				
LARAMIE	26.20	337.4	5	40	2							
PENNSYLVANIA	26.42	25.6	5	44	4							
UINTA BASIN	27.05	330.5	5	46	0	10	56	33			6	38 PP
LONDON ONT.	27.20	18.5	5	46	-1							
PASADENA	28.25	310.8	5	57	0	11	16	34			6	6
PALISADES	28.37	30.6	6	2	4	11	2	18				
SALT LAKE C.	28.50	328.3	6	0	1							
EUREKA	29.85	321.9	6	12	1						7	34 PP
PRIEST	31.00	312.3	6	23K	2							
OTTAWA	31.14	23.3	6	36	13							
BREBEUF	32.05	25.5	6	30	-1							
LICK	32.28	313.5	6	33A	0							
BUTTE	32.91	334.0	6	38	0							
BERKELEY	32.97	313.9	6	40A	1						14	22
CALISTOGA	33.57	314.9	6	44A	0							
MINERAL	33.83	318.2	6	46K	0							
HUANCAYO	33.97	148.8	6	49	2							
BLUE MTS.	34.22	328.0	6	48	-2						9	25
SHASTA	34.53	318.2	6	47	-5							
BANFF	38.21	336.6	7	23	0							
PENTICTON	38.51	331.4	7	26	0							
SEATTLE	38.66	327.5	7	20	-7							
EDMONTON	39.27	340.4	7	30A	-2							
LA PAZ	41.52	143.2	7	49	-2	14	35	28				
SCHEFFERVILLE	42.15	22.0	7	54	-2							
ANTOFAGASTA	46.34	151.5	8	29	-1							
YELLOWKNIFE	47.48	346.3	8	37A	-2							
RESOLUTE	57.17	359.3	9	48K	-3							
COLLEGE	59.80	336.0	10	8	-1							
MOULD BAY	60.34	352.9	10	11	-2							
ALERT	66.07	4.2	10	50	-1							
TOLEDO	77.86	51.9				22	2	8				

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LANCHOW	53.84 284.4	9 23A 0	16 59 4 9 36
ALBUQUERQUE	54.63 76.6	9 27 -2	17 10 5 9 46 10 42 PCP
CANTON	56.98 266.1	9 44 -2	17 39 2 9 58
SEMIPALATNSK	57.23 311.2	9 46A -2	17 41 1
KEVO	57.30 348.7	9 46 -2	17 38 -3 11 58 PP
CHENG TU	57.40 279.5	9 47A -2	17 44 2 10 4
SCORESBY SD.	57.43 8.1	9 47 -2	
BAGUIO CITY	57.54 254.8	9 47 -3	17 45 1 11 58 PP
TROMSOE	58.29 351.8	9 55 0	
LUBBOCK	58.35 74.6	9 55 -1	19 44
APATITY	58.44 345.1	9 56A 0	17 52 -4 10 46 PCP
MADISON	58.58 58.7	9 40 -17	11 54 PP
MANILA	58.60 253.1	9 55 -2	18 11 13
WICHITA MTS.	59.52 71.5	10 2 -2	18 11 1 14 3 PPP
SODANKYLA	59.60 347.8	10 5 1	12 18 PP
KIRUNA	59.89 350.6	10 6A 0	18 6 -9 39 35 PKPPKP
TULSA	60.34 68.7	10 7A -2	18 18 -2 19 55 SCS
SVERDLOVSK	60.62 326.2	10 12K 1	18 26 2 12 19 PP
SCHEFFERVILLE	60.93 37.0	10 11A -2	
FAYETTEVILLE	61.14 67.5	10 12 -3	18 29 -2
ST. LOUIS 1	61.60 62.9	10 16 -2	18 32 -5
KUNMING	62.12 275.9	10 20 -1	18 45 2 10 33
KAJAANI	62.56 346.1	10 22 -2	12 44 PP
HONIARA	62.78 200.8	10 26 0	18 48 -3
LONDON ONT.	63.28 53.9	10 29 0	
REYKJAVIK	63.61 9.9	10 33A 2	
UMEA	63.80 349.5	10 31A -1	19 1 -3 11 19 PCP
OTTAWA	64.21 48.9	10 34 -1	
CLEVELAND	64.22 55.3	10 40K 5	19 16 7
SEPT ILES	64.64 40.1	10 37A -1	
SHAWINIGAN	64.71 46.3	10 36 -2	
SKALSTUGAN	64.78 353.3	10 38 -1	
HOUSTON	64.96 73.3	10 40 0	
BREBEUF	65.11 47.6	10 38 -3	18 30 -50 25 42 SSS
FRUNSE	65.34 308.2	10 42A 0	19 30 7 13 3 PP
AFIAMALU	65.65 169.8	10 50 6	19 24 -3
LHASA	66.00 287.8	10 47A 0	19 37 6 11 0
PULKOVO	66.18 343.1	10 47A -1	19 33 0 13 15 PP
CUMBERLAND	66.37 62.3	10 45 -4	19 34 -2 13 13 PP
MORGANTOWN	66.41 55.7	10 50K 1	
NURMIJARVI	66.41 346.3	10 47 -2	19 34 -2 14 54 PPP
PORT MORESBY	66.45 214.2	10 47 -2	19 34 -3
PENNSYLVANIA	66.59 53.6	10 51 1	
HELSINKI	66.69 346.0	10 52 1	
UPPSALA	67.96 349.8	10 56A -3	19 53 -2 39 26 PKPPKP
BLACKSBURG	67.96 57.7	10 57 -2	
MOSCOW	68.37 337.5	11 0A -1	20 1 1 13 25 PP
PALISADES	68.39 50.9	11 2A 0	19 58 -2 20 52 SCS
GEORGETOWN	68.43 54.4	11 0 -2	19 53 -7
SHILLONG	68.48 284.2	11 1A -1	20 2 1 13 36 PP
KONGSBERG	68.86 354.0	11 4A -1	20 10 4 11 30 PCP
TASHKENT	69.07 310.5	11 5A -1	20 10 2 24 46 SS
CHAPEL HILL	69.66 57.8	11 10 1	
COLUMBIA	70.05 60.4	11 13 1	
HALIFAX	70.23 42.2	11 12 -1	
CHATRA	70.36 288.5	11 12A -2	20 30 7
GOTEBORG	70.63 352.5	11 14 -1	
KHOROG	70.94 306.4	11 18A 1	20 34 4
ABERDEEN	71.70 0.4	11 26K 4	20 46 7 25 47 SS
KARLSKRONA	71.80 350.1	11 18 -4	
COPENHAGEN	72.59 351.9	11 27A 0	20 52 3
DEHRA DUN	72.98 297.3	11 30A 1	20 54 1
BOKARO	73.43 287.4	11 32K 0	21 3 5 14 1 PP
WARSAK DAM	73.64 304.1	11 31A -2	
LAHORE	74.07 300.7	11 35A -1	21 6 0
DURHAM	74.11 0.1	11 37A 1	21 13 7 26 2 SS
NEW DELHI	74.79 296.7	11 38A -2	21 18 4 14 29 PP
WITTEVEEN	75.85 355.0	11 48 2	
DE BILT	76.64 355.9	11 49 -1	21 52 18 26 46 SS
CHARTERS TS.	76.71 211.1	11 49 -2	21 33 -2
HALLE	76.77 351.5	11 52 1	21 36 1
LWOW	76.78 343.4	11 51A 0	21 36 1 14 49 PP
COLLMBERG	76.87 350.8	11 51 -1	22 6 30
KRAKOW	77.23 346.1	11 56 2	
JENA	77.37 351.6	11 53 -1	21 43 1 12 5 15 1 PP
KEW	77.41 359.3	11 57 2	21 47 5 27 7 SS
RACIBORZ	77.45 347.2	11 57 2	22 1 18 13 17
BENSBERG	77.67 354.5	11 57 1	

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PRAGUE	77.93	349.7	11 58	0	22 6	18				14 52	PP
PORT BLAIR	78.44	274.2	12 3	3	22 5	12					
DOURBES	78.66	356.1	12 1	-1	22 0	4					
TIFLIS	78.86	326.6	12 3	0	22 4	6				15 6	PP
KASPERSKE H.	78.95	350.1	12 2A	-1						15 4	PP
QUETTA	79.03	305.0	12 4A	0	22 4	4					
HEIDELBERG	79.12	353.3	12 4	0							
SIMFEROPOL	79.17	335.2	12 3A	-1	22 1	0				15 8	PP
BRATISLAVA	79.47	347.5	12 6	0	22 27	23				15 9	PP
VIENNA-H.	79.49	348.1	12 7	1	22 19	15					
KARLSRUHE	79.53	353.5	12 8	2							
STUTTGART	79.71	352.9	12 6A	-1	22 12	5				15 18	PP
STRASBOURG	80.01	353.9	12 10A	1	22 14	4				15 14	PP
PARIS	80.03	357.4	12 11	2	22 32	22				15 11	PP
FOLINIÈRE	80.12	359.4	12 8	-1						12 18	PCP
GORIS	80.28	324.5	12 11A	1	22 21	8				15 17	PP
EBINGEN	80.32	353.0	12 11	0							
MEDAN	80.95	264.4	12 14	0							
GARCHY	81.54	357.0	12 18	1						12 56	
BUCHAREST	81.56	340.5	12 21	4	22 34	8					
TEHERAN	81.61	319.1	12 18	1	22 33	7	12 36				
BRISBANE	81.77	203.1	12 16	-2	22 26	-2					
LJUBLJANA	81.88	348.9	12 18A	-1						15 30	PP
ZAGREB	81.92	347.8	12 12	-7	22 37	7					
BELGRADE	82.23	344.5	12 22K	1	22 42	9				12 37	PCP
TRIESTE	82.37	349.4	12 22	1	22 43	9				32 2	SSS
HYDERABAD	82.72	288.7	12 26A	3	22 56	18				15 56	PP
PADOVA	82.81	350.6	12 16	-7	22 46	7				23 46	PS
ROSELEND	82.96	354.4	12 24	0						13 17	
CLERMONT-FD.	83.05	356.8	12 27	2							
PAVIA	83.28	352.5	12 27A	1						23 5	SCS
TANGERANG	83.76	252.0	12 30	2							
SOFIA	83.77	342.0	12 31	3	22 50	2				16 1	PP
ISTANBUL UN.	84.13	337.4	12 28A	-2	22 51	-1					
PRATO	84.40	351.0	12 31	-1	23 5	10					
ISOLA	84.43	353.9	12 31	-1							
FLORENCE X.	84.48	350.9	12 46	14	22 43	-12				32 2	SSS
POONA	84.54	292.8	12 32A	0	22 40	-16					
BOMBAY	84.84	293.9	12 34	0	23 4	5				15 54	
MADRAS	85.14	284.6	12 38	3	23 4	2				15 55	PP
ROME	86.21	349.7	12 41A	0	23 19	7				16 16	PP
SHIRAZ	86.37	315.2	12 41	0	23 4	-10				23 35	
ATHENS	88.25	340.4	12 49A	-1	23 18	-13				16 20	PP
RIVERVIEW	88.32	202.6	12 51	0	23 35	3				23 37	SCS
KSARA	88.97	329.7	12 52	-2	23 51	13				16 30	PP
TOLEDO	88.98	2.1	12 52A	-2	23 28	-10	13 19			16 25	PP
KARAPIRO	89.08	182.5	12 53	-1							
MESSINA	89.47	346.8	12 57	1	23 41	-2				16 23	PP
CANBERRA	90.27	203.9	13 2	2	23 53	3				30 1	SS
BALBOA HTS.	90.32	75.3	13 0	0							
CHATEAU	90.35	182.4	13 10	10							
SAN JUAN	90.49	59.2	13 1	0			13 17				
JERUSALEM	91.06	329.5	13 6	2							
GRANADA	91.68	1.8								25 32	PPS
WELLINGTON	92.45	182.9			23 36	-33				25 16	PS
ST. CLAUDE	94.78	57.0			23 50	-39				15 16	
AVERROES	95.41	5.1								17 20	PP
CHINCHINA	95.84	74.6	13 30	4	23 59	0					
CARACAS	96.49	64.3	13 30A	2	24 4	2					
FUQUENE	96.58	72.8	13 30	1	24 2	-1					
ROXBURGH	96.92	186.6			24 4	0				26 12	S
BOGOTA	97.05	73.5	13 33A	2	24 4	-1				26 52	PPS
PERTH	99.68	230.1			25 14	56				17 50	PP
M. BOUR	113.01	16.5	19 22	47							
LA PAZ	117.19	82.3	19 0	17	25 35	2					
LWIRO	124.79	322.3	18 59A	1	25 40	-18				20 49	PP
CHILEKA	134.01	307.5	19 18	3						22 44	PKS
MIRNY	134.12	213.8								22 44	SKP
BYRD STATION	135.81	167.3	19 16	-3						22 49	
BROKEN HILL	135.97	316.1	19 21	2							
BULAWAYO	140.90	311.9	19 25	-3							
SOUTH POLE	141.30	180.0	19 15	-14							
CHANGALANE	144.25	301.9	19 32	-2						22 52	PP
MAWSON	145.59	217.6	19 33A	-3							
ARGENTINE I.	145.87	138.1	19 36	-1							
PIETERMZBURG	147.85	300.5	19 43	3							
N-LAZARVSKYA	159.73	192.6	19 57	1						23 33	PKS

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APRIL 30 0.H 58.M 16.S EPICENTRE -1.23 128.56 DEPTH= 0.KM

A=-0.62315 B= 0.78181 C=-0.02135 D= 0.7820 E= 0.6233
G= 0.0133 H=-0.0167 K=-0.9998 HT= 7.2

SE= 3.37

	DELTA DEG.	AZ. DEG.	P		O-C	S			*PP		SUPP.	
			M	S	S	M	S	S	M	S	M	S
DARWIN	11.30	168.6	2	42	-3							
MANILA	17.45	335.2	4	2	-4						8	38
PORT MORESBY	20.20	114.3	4	33K	-6	8	41	20			5	29
LEMBANG	21.60	254.5	4	58A	5	9	2	14			5	26 PP
DJAKARTA	22.23	256.7	5	4A	5	9	4	4			5	33 PP
TANGERANG	22.42	256.8	5	3A	2	9	4	1			5	31 PP
RABAU	23.77	97.6	5	11	-3							
HENGCHUN	24.32	342.2	5	28	8	10	10	33				
TAWU	24.60	342.8	5	17	-6	9	42	0				
TAITUNG	24.91	343.6	5	24	-2							
HSINKONG	25.18	344.3	5	34	6							
TAINAN	25.42	341.9	5	32	2							
CHARTERS TS.	25.51	138.4				10	6	9				
ALISHAN	25.73	343.4	5	30	-3							
HUALIEN	25.94	345.4	5	46	11	10	23	19				
TAICHUNG	26.36	343.6	5	54	15							
TAIPEI	26.98	345.8	5	48	3	10	22	1				
ANPU	27.13	345.9	5	50	4							
CANTON	28.35	329.4	5	56A	-1	10	40	-4	6	9	6	16 *SP
MEDAN	30.24	279.2	6	14A	0						11	17
YAKUSIMA	31.56	3.2	6	30	4						13	29
HONIARA	32.27	105.7	6	23K	-9	11	40	-5			9	16
KAGOSIMA	32.68	3.2	6	38	2							
MUNDARING	32.72	199.6	6	38	2	11	52	0				
PERTH	32.83	200.2	6	53	16						10	40
ZO-SE	32.91	348.3	6	35A	-3	11	51	-4			6	58 *SP
MIYAZAKI	33.08	4.5	6	48	9							
HUKUE	33.75	0.4	6	47	2						7	57
NAGASAKI	33.80	2.0	6	45	0	12	4	-5				
KUMAMOTO	33.93	3.2	6	49	2							
ASHIZURI	34.03	6.7	6	48	1	12	9	-4				
SAGA	34.34	2.6	6	54	4							
NANKING	34.38	345.2	6	48A	-2	12	11	-7	7	3	7	8 *SP
OITA	34.40	4.5	6	52	1	11	53	-26				
HUKUOKA	34.67	2.7	7	7	14	12	17	-6				
BRISBANE	34.87	140.3	6	53	-2	12	14	-12				
ADELAIDE	34.88	165.3	6	53A	-2	12	34	8			11	56
KOTI	34.90	7.3	6	48	-7	12	22	-4				
SIOMISAKI	35.16	10.5	6	58	1	12	23	-7				
TOKUSIMA	35.57	8.6	7	5	4							
HIROSIMA	35.60	5.5	7	3	2	12	35	-2				
TAKAMATU	35.74	7.8	7	1	-1	12	33	-6				
OWASE	35.84	10.9	7	3	0							
SUMOTO	35.88	9.0	7	2A	-1	12	34	-8			17	22
HAMADA	36.09	4.9	7	7	2	12	38	-7				
KUNMING	36.21	318.1	7	6A	0	12	48	1	7	21	7	28 *SP
KOBE	36.26	9.2	7	4	-2							
OSAKA	36.29	9.7	7	2	-5						9	22
NARA	36.37	10.1	7	1	-6							
ABUYAMA	36.51	9.7	7	6A	-3							
KAMEYAMA	36.65	10.9	7	8	-2	12	50	-3				
KYOTO	36.68	9.9	7	6	-4	12	45	-9				
YONAGO	36.75	6.5	7	14	4							
HAMAMATU	36.78	12.7	7	12	1							
HIKONE	37.02	10.5	7	12	-1	12	53	-6				
TOYOOKA	37.04	8.5	7	18	5	12	53	-6			15	7
NAGOYA	37.06	11.5	7	11	-2	12	53	-7				
SHIZUOKA	37.17	13.4	7	21	7						15	23
OSIMA	37.22	14.8									8	44
MISIMA	37.45	14.1	7	14	-2							
NERA	37.48	15.3									8	11
IIDA	37.57	12.4	7	20	3							
PORT BLAIR	37.84	290.8	7	22A	2	13	19	7			8	45 PP
KOHU	37.88	13.3	7	17	-3							
YOKOHAMA	37.92	14.8									8	57
TOKYO C.M.O.	38.18	14.8									8	58
TITIBU	38.30	13.8	7	27	3							
MATUNOTO	38.31	12.3	7	22	-2							
TOYAMA	38.58	11.2	7	27	1	13	14	-9				
MATUSIRO	38.64	12.5	7	22K	-4	13	13	-11				

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MAEBASI	38.70	13.6	7 25	-2						9 29	
RIVERVIEW	38.72	149.3	7 28A	1	13 23	-2				8 59 PP	
NAGANO	38.76	12.4	7 26	-1	13 17	-8					
TUKUBASAN	38.78	15.0	7 31	3	13 8	-18				9 11 PPP	
CANBERRA	38.89	152.9	7 28	0	13 28	1					
MITO	39.03	15.3	7 25	-5							
UTUNOMIYA	39.03	14.5	7 30	0							
WAZIMA	39.19	10.5			13 25	-7					
TOOLANGI	39.38	158.6	7 36	3	13 37	2	7 46		9 11 PP		
CHENGTU	39.39	325.7	7 31A	-2	13 33	-2	7 46		7 52 *SP		
SHIRAKAWA	39.66	14.7	7 33	-2							
ONAHAMA	39.68	15.6	7 26	-9							
KOUMAC	39.82	121.3	7 38	2							
SIAN	39.82	334.2	7 35	-1			7 49		7 57 *SP		
NIIGATA	40.15	12.9							8 20		
HUKUSIMA	40.32	14.6	7 38	-2	13 44	-5					
YAMAGATA	40.77	14.3	7 42	-2	13 46	-10					
SENDAI	40.92	14.9	7 43	-2	13 50	-8					
ISINOMAKI	41.18	15.3							8 39		
MIZUSAWA	41.79	14.7	7 52	0	14 3	-8					
MORIOKA	42.34	14.5	7 55	-2	14 14	-5					
PORT VILA	42.36	115.2	7 55K	-2							
NOUMEA	42.38	122.4	7 57	0	14 27	8					
MIYAKO	42.50	15.4	7 56	-2							
PEKING	42.60	345.9	7 56A	-3			8 11		8 17 *SP		
CHITTAGONG	42.81	305.4	8 3	2	14 29	3					
HATINOHE	43.22	14.5	8 0	-4	14 29	-3					
AOMORI	43.31	13.5	8 3	-2	14 28	-5					
LANCHOW	43.66	330.6	8 7A	-1	14 37	-1	8 22		9 27 *SP		
TARRALEAH	43.94	160.8	8 10	0							
HAKODATE	44.25	13.1	8 11	-1	14 45	-2					
VLADIVOSTOK	44.25	3.5	8 13K	1	14 40	-7			10 1 PP		
MOORLANDS	44.30	160.2	8 15	2							
SHILLONG	44.36	309.5	8 12A	-1	14 49	1					
MORI	44.48	12.8	8 12	-2	14 46	-4					
CHANGCHUN	44.95	356.7	8 15	-3	14 49	-8			8 36 *SP		
URAKAWA	45.06	15.0	8 18A	-1	14 57	-1					
TOMAKOMAI	45.21	13.6	8 17	-3							
SAPPORO	45.58	13.1	8 18	-5	15 1	-5					
CALCUTTA	45.73	303.6	8 22	-2					12 32		
OBIHIRO	45.89	15.0	8 26	0							
KUSIRO	46.26	16.1	8 27	-2	15 9	-7					
NEMURO	46.92	17.0	8 29	-5							
LHASA	47.17	313.7	8 37A	1	15 30	2	8 51		9 0 *SP		
ABASHIRI	47.20	15.5	8 26	-10	15 27	-2					
WAKKANAI	47.89	12.4	8 55	14	15 34	-5					
VISHAKHAPTNM	48.37	295.1	8 47K	2	15 53	8			10 40 PP		
BOKARO	48.42	303.8	8 45K	0	15 44	-2			10 39 PP		
CHATRA	48.65	308.1	8 47A	0	15 53	4			10 14 PP		
Y.-SAKHLINSK	49.63	12.7	8 52K	-3	15 55	-8			10 38 PP		
MADRAS	50.02	288.0	8 57A	-1	16 10	1			10 48 PP		
KODAIKANAL	52.09	283.9	9 12	-2	16 39	2			9 58		
ULAN-BATOR	52.47	341.8	9 14	-2	16 38	-4					
HYDERABAD	52.72	293.0	9 15A	-3	16 44	-2			11 1 PP		
ESEN BULAK	55.29	333.3	9 19	-18	17 19	-1					
KARAPIRO	56.47	136.1	9 44	-2							
ROXBURGH	56.77	146.7	9 52	4	17 44	4			20 56 SS		
CHATEAU	57.08	137.4	9 49	-1					13 12		
IRKUTSK	57.09	342.5	9 47	-3	17 40	-4			11 58 PP		
POONA	57.23	292.9	9 50A	-1	17 51	5					
DEHRA DUN	57.38	307.6	9 50A	-2	17 49	1			11 58 PP		
NEW DELHI	57.39	305.4	9 49A	-3	17 46	-2			11 54 PP		
WELLINGTON	57.63	139.9	9 54	0	17 48	-3			11 56 PP		
BOMBAY	58.26	293.1	9 58	0	17 55	-5			16 47		
PETROPAVLOVK	59.63	20.6	10 5K	-3	18 12	-5					
AFIAMALU	60.30	105.2	10 9	-3	18 29	3					
LAHORE	60.80	307.5	10 13	-3	18 33	1					
MAGADAN	63.07	12.5	10 29	-2					19 0 PS		
YAKUTSK	63.09	0.6	10 28A	-3	18 53	-8					
WARSAK DAM	63.87	309.1	10 34	-2							
KHOROG	65.17	312.7	10 43A	-2	19 27	0			11 9 PCP		
FRUNSE	65.26	319.1	10 43A	-2	19 18	-10			14 34 PPP		
SEMIPALATNSK	65.85	328.4	10 46A	-3	19 31	-5					
WILKES	66.22	187.8	10 54	3	19 43	3					
QUETTA	66.36	303.7	10 50	-2	19 44	2					
TASHKENT	68.24	315.8	11 2A	-2	20 3	-1			13 31 PP		
MIRNY	69.81	194.4	11 16	2	20 32	9			11 40 PCP		
TIKSI	72.74	0.1			20 51	-6			14 17 PP		
HONOLULU	74.96	67.7	11 50	6	21 29	7			12 14		

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KIPAPA	75.05	67.6	11	54	9	21	26	3	
HAWAII V.OB.	77.38	69.9	12	0	2	22	25	37	
SHIRAZ	78.49	300.4	12	2	-2	21	56	-4	15 21 PP
SVERDLOVSK	79.12	328.8	12	6K	-2	21	58	-9	
MAWSON	79.77	200.8	12	11K	0	22	15	1	
TEHERAN	80.31	306.4	12	14	0	21	57	-22	15 37 PP
GORIS	84.77	309.7	12	37A	0	22	54	-11	15 51 PP
TIFLIS	86.14	311.8	12	44	0	23	9	-9	15 59 PP
KHEYS	88.07	351.1	12	53	0	23	34	-2	16 25 PP
COLLEGE	88.39	25.1	12	51A	-4				
SOUTH POLE	88.78	180.0	12	56	-1				
MOSCOW	91.53	325.5	13	9	0	24	3	-5	16 43 PP
BYRD STATION	92.53	170.7	13	15	1				17 0
KSARA	92.91	303.6	13	6	-10	24	15	-5	17 0 PP
APATITY	93.10	337.5	13	19K	2	24	23	2	17 0 PP
CHILEKA	93.12	254.3	13	33	16				
JERUSALEM	93.48	301.6	13	19	1				
SIMFEROPOL	94.01	314.8	13	23	2	24	31	2	17 7 PP
KEVO	95.14	340.0	13	29	3	23	56	-6	17 22 PP
CHANGALANE	95.17	243.6	13	17	-9				
PULKOVO	95.22	329.8	13	30	4	23	58	-4	30 44 SS
SODANKYLA	95.72	337.6	13	25	-4				30 23 PKKP
KAJAANI	95.85	334.3	13	25	-4				30 22 PKKP
MOULD BAY	96.37	12.9	13	28	-4				
N-LAZARVSKYA	97.40	197.4	13	42A	6	24	19	5	24 32 SKKS
NURMIJARVI	97.90	331.0	13	36	-2	24	10	-6	17 52 PP
TROMSOE	97.91	340.6	13	42	3				
KIRUNA	97.92	338.6	13	35	-4	24	27	11	17 36 PP
ISTANBUL UN.	98.03	311.1	13	38	-1	24	16	-1	
NORD	98.16	355.1	13	42	2				
BULAWAYO	98.91	249.5	13	44	1				
UMEA	99.12	334.8	13	39	-5	24	32	10	17 40 PP
BROKEN HILL	99.46	255.2	13	49	3				
LWIRO	99.70	267.5				24	34	9	17 51 PP
LWOW	100.29	320.4				24	29	1	17 59 PP
COPPERMINE	100.85	20.3	13	49	-3				
UPPSALA	101.46	331.2	13	58	3	24	28	-6	26 53
SOFIA	102.01	313.3	13	56	-2				18 11 PKP
RESOLUTE	102.33	10.8	13	56	-2				
ATHENS	102.44	308.5				24	38	1	18 2
SKALSTUGAN	102.54	335.7	14	2A	3				18 19 PP
KRAKOW	102.84	321.2	17	21	200	24	47	7	21 39
YELLOWKNIFE	103.21	25.2	13	59	-3				
CHORZOW	103.37	321.6	17	30	207				18 25
KARLSKRONA	103.65	328.0	14	8	4				18 24 PP
BELGRADE	103.66	315.9	17	32	208	25	2	18	18 42 PP
RACIBORZ	103.91	321.5				24	42	-3	18 21 PP
GOTEBORG	104.96	330.2	17	19	189				
BRATISLAVA	105.11	319.8	17	16	777	24	55	4	19 52 PP
CALISTOGA	105.45	50.3	18	35A	777				
VIENNA-H.	105.56	320.0	17	57	777	25	0	7	
BERKELEY	105.85	51.0	18	20K	777	25	44	50	
MINERAL	105.85	48.4	18	29	777				
PRUHONICE	106.19	322.1	14	20	777				24 58 SKKS
PRAGUE	106.24	322.2	18	40	777				33 54 SS
LICK	106.43	51.4	18	36A	777				
ZAGREB	106.48	317.7	17	53	777				
COLLMBERG	106.70	323.7	14	18	777				18 47
KASPERSKE H.	107.06	321.5	17	35	777				18 12
HALLE	107.25	324.2	14	25	777				18 34 PP
LJUBLJANA	107.39	318.2	17	53	777				18 54 PP
EDMONTON	107.40	33.6	18	34	777				
PRIEST	107.44	52.5	18	37A	777				
JENA	107.67	323.7	14	26	777				18 53 PP
BLUE MTS.	107.80	43.0	14	28	777	25	44	42	18 41 PP
TRIESTE	108.03	318.0	17	58	777				18 58 PP
MESSINA	108.72	310.0	18	35	777	25	17	11	19 29 PP
PADOVA	109.36	318.2				26	14	65	18 54 PP
WITTEVEEN	109.72	326.8	18	44	777				
STUTTGART	109.85	322.2	14	56	777				19 12 PP
PASADENA	109.85	54.1	18	40	777	25	23	12	28 23 PS
ROME	110.02	314.5	18	24	-9				19 8 PP
FLORENCE X.	110.30	316.7							19 8 PP
STRASBOURG	110.84	322.4	18	44	9	26	44	89	19 17 PP
DE BILT	110.86	326.5				26	14	59	34 50 SS
PAVIA	111.23	318.6							19 26 PP
ABERDEEN	111.88	333.6				27	22	123	29 2 PS
BOULDER CITY	112.07	51.5	18	33	-4				

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DOURBES	112.08	324.8									19 24
GODHAVN	112.09	0.8	15	19	-198						
ROSELEND	112.70	319.8	18	46	8						19 36 PP
SALT LAKE C.	112.88	45.8	18	45	6						
ISOLA	113.00	318.2	18	45	6						19 33
DURHAM	113.01	331.2	18	45K	6						19 37 PP
PARIS	113.90	324.2	18	44	3						20 57 PP
KEW	114.15	327.7				25	25	-3			
GARCHY	114.26	322.5	18	48	7						19 52
FLAMING GRGE	114.58	44.9	18	49	7						
UINTA BASIN	114.67	45.6	18	48	6	25	32	2			19 31 PP
CLERMONT-FD.	114.90	321.0	19	42	60						
TONTO FOREST	115.34	52.4	18	45	2						29 14 PS
TUCSON	116.28	54.4	18	46	1						21 16
LARAMIE	117.08	43.3	18	53	6						
GOLDEN	117.89	44.9	18	49	1						24 55
VALENTIA	118.86	332.2									19 44 PP
ALBUQUERQUE	118.88	50.2	18	51	1						
TOLEDO	122.31	317.9	19	3A	6	25	54	-3			20 33 PP
ALMERIA	122.63	314.1									23 17 PPP
GRANADA	123.28	314.9	19	13A	14						21 18 PP
WICHITA MTS.	124.91	47.4	19	2	0	26	8	3			20 45 PP
SCHEFFERVILLE	125.13	10.8	19	8K	6						
LAWRENCE	125.16	41.3	19	3	1						
MADISON	125.92	33.9	19	9	5						21 6 PP
TULSA	126.36	44.8	19	4	-1						21 6 PP
FAYETTEVILLE	127.39	43.8	19	2A	-5						
AVERROES	127.86	312.5	19	6	-2				19	16	
FLORISSANT	128.39	38.8	19	13	4						
LONDON ONT.	130.62	28.6	19	18K	5						
OTTAWA	131.09	22.6	19	14	0						
SHAWINIGAN	131.16	19.5	19	19A	5						
BREBEUF	131.78	20.9	19	17	2						21 36 PP
CUMBERLAND	133.39	39.0	19	18	0						22 0 PP
MORGANTOWN	133.79	30.7	19	25	6						22 49
PENNSYLVANIA	133.91	28.0	19	21	2						
BLACKSBURG	135.33	33.4	19	24	2						23 11
HALIFAX	135.47	12.4	19	18	-4						
PALISADES	135.49	24.4	19	28	6						23 6 PKS
COLUMBIA	137.24	37.2	19	30	5						
SANTA LUCIA	141.06	154.1	19	38	6						30 4
M. BOUR	143.51	292.7	19	41	5	26	41	-3			
ANTOFAGASTA	149.10	144.5	19	53	7						23 20 PKS
HOPE	150.08	54.6	19	58	11						
BALBOA HTS.	150.98	73.7	19	55	6						
NANA	151.56	118.2	19	54	5						
HUANCAYO	152.85	119.8	19	58	7						
AREQUIPA	153.53	132.4	19	56	4						
GALERAZAMBA	154.50	67.2									23 51 PP
CHINCHINA	155.58	80.7	19	58A	3						20 28 PKP2
LA PAZ	155.88	137.6	19	59	4	27	3	3			
BOGOTA	157.16	81.1	20	2	5						
FUQUENE	157.36	78.8	20	0	3						24 5 PP
CARACAS	162.07	58.5	20	10A	7						24 54 PP
ST. CLAUDE	162.15	34.0	19	49	-14						
TRINIDAD	166.38	46.2	20	14	7						21 13

APRIL 30 3.H 26.M 5.S EPICENTRE 51.33 178.54 DEPTH= 58.KM

A=-0.62719 B= 0.01596 C= 0.77870 D= 0.0254 E= 0.9997
G=-0.7784 H= 0.0198 K=-0.6274 HT= -5.9

DEPTH OF FOCUS= 0.004R

SE= 2.49

	DELTA DEG.	AZ. DEG.	P		O-C S	S			#PP		SUPP.	
			M	S		M	S	S	M	S	M	S
PETROPAVLOVK	12.33	285.7	2	56A	1							
COLLEGE	22.00	39.2	4	51	0	8	43	-2			5	10
Y.-SAKHLINSK	23.66	273.7	5	8	1	9	24	10				
YAKUTSK	28.18	311.3	5	47A	-2							
MATUSIRO	32.14	258.5	6	24	0							
MOULD BAY	34.28	22.1	6	42	-1							
ABUYAMA	34.85	258.8	6	48A	0							
CHANGCHUN	35.99	279.4	6	56	-1							
YELLOWKNIFE	36.47	45.9	7	0	-1							

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SEATTLE	37.70	71.7	7 19	7				
PENTICTON	38.50	67.9	7 18	0				
EDMONTON	40.20	59.4	7 32K	0				
RESOLUTE	40.47	24.1	7 34A	-1				
SHASTA	41.32	81.0	7 42A	0				
MINERAL	42.01	80.9	7 47A	0				
BLUE MTS.	42.10	72.7	7 46	-2			9 56	
CALISTOGA	42.42	83.6	7 51K	0				
ALERT	42.97	9.7	7 56A	1				
BERKELEY	43.09	84.3	7 59A	3				
PEKING	43.76	280.4	8 2	0				
LICK	43.80	84.5	8 2A	0				
BUTTE	44.28	68.6	8 18	12				
KHEYS	44.28	348.3	8 8	2				
ULAN-BATOR	44.84	295.1	8 11	1				
PRIEST	45.17	85.1	8 16A	3				
BOZEMAN	45.36	68.2	8 14	0				
EUREKA	46.01	78.2	8 20	0			10 37 PP	
ZO-SE	46.33	267.0	8 22	0				
PAOTOW	47.19	285.0	8 30A	1				
NANKING	47.19	269.9	8 29	0				
SALT LAKE C.	47.73	74.2	8 33	0				
PASADENA	48.01	85.3	8 26	-9				
BOULDER CITY	48.90	81.1	8 43	1			8 56	
UINTA BASIN	49.38	73.2	8 46	0	15 50	3	9 55 PCP	
LARAMIE	51.14	69.8	8 59	0				
ESEN BULAK	51.66	299.0	9 4	1				
SIAN	51.89	279.3	9 4A	-1				
TOMTO FOREST	52.21	80.3	9 7	0			11 5	
LANCHOW	53.82	284.4	9 19K	0				
ALBUQUERQUE	54.73	76.4	9 26	0			9 39	
CANTON	56.91	266.2	9 41	-1				
SEMIPALATNSK	57.29	311.2	9 43	-1				
BAGUIO CITY	57.44	254.9	9 43	-2				
KEYO	57.45	348.7	9 57	12				
APATITY	58.58	345.1	9 51K	-2			10 43 PCP	
LAWRENCE	58.66	65.6	10 4	10				
WICHITA MTS.	59.62	71.3	10 0	0			12 20	
SODANKYLA	59.75	347.8	10 0	-1				
KIRUNA	60.03	350.6	10 2	-1				
TULSA	60.45	68.5	10 6A	0				
SVERDLOVSK	60.72	326.2	10 9K	1				
SCHEFFERVILLE	61.09	36.9	10 8	-2				
FAYETTEVILLE	61.26	67.3	10 11	-1				
FLORISSANT	61.53	62.7	10 12	-1				
KUNMING	62.08	276.0	10 16	-1				
KAJAANI	62.70	346.1	10 19	-2				
ALMATA-2	63.70	306.9	10 29A	1				
UMEA	63.94	349.5	10 28	-1				
SKALSTUGAN	64.93	353.3	10 36	0				
BREBEUF	65.27	47.5	10 31A	-7				
FRUNSE	65.39	308.2	10 39A	0				
VIBORG	65.69	344.2	10 38	-3				
LHASA	65.99	287.8	10 44	1				
PORT MORESBY	66.29	214.2	10 43	-2				
CUMBERLAND	66.50	62.1	10 45	-1				
NURMIJARVI	66.55	346.3	10 45	-1				
UPPSALA	68.11	349.8	10 54	-2				
SHILLONG	68.46	284.2	10 58A	0				
MOSCOW	68.49	337.5	11 0	2				
KONGSBERG	69.01	354.0	11 1	-1				
TASHKENT	69.13	310.4	11 3	1				
CHATRA	70.36	288.5	11 9A	-1				
KARLSKRONA	71.95	350.1	11 19	0				
DEHRA DUN	73.00	297.2	11 27K	2				
WARSAK DAM	73.67	304.1	11 28	-1				
NEW DELHI	74.81	296.7	11 35A	-1				
CHARTERS TS.	76.55	211.1	11 45	-1				
ASHKABAD	76.85	315.4	11 48	0				
COLLMBERG	77.01	350.7	11 54	5				
JENA	77.52	351.6	11 51	0			14 45	
PRUMONICE	78.15	349.5	11 56	1			12 52	
UZHGOROD	78.36	344.2	11 57	1				
TIFLIS	78.96	326.6	12 1	2				
KASPERSKE H.	79.10	350.0	12 0	0				
KIROVOBAD	79.36	325.0	12 3	2				
BAKURIANI	79.39	327.4	12 3A	1				
BRATISLAVA	79.61	347.5	12 3	0				

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STUTTGART	79.86	352.8	12 3	-1			
GORIS	80.38	324.5	12 9	2			
BRISBANE	81.60	203.0	12 13	0			
GARCHY	81.69	356.9	12 14	0			
ISOLA	84.59	353.9	12 29	1			
SHIRAZ	86.44	315.1	12 38	0	23 11	4	
KARAPIRO	88.92	182.4	12 50	1			
KSARA	89.08	329.7	12 52	2			
SOUTH POLE	141.14	180.0	19 19	-5			
MAWSON	145.42	217.5	19 31K	-1			

APRIL 30 7.M 7.M 55.S EPICENTRE 51.46 178.57 DEPTH= 60.KM

A=-0.62542 B= 0.01559 C= 0.78013 D= 0.0249 E= 0.9997
G=-0.7799 H= 0.0194 K=-0.6256 HT= -6.0

DEPTH OF FOCUS= 0.004R

SE= 1.71

	DELTA DEG.	AZ. DEG.	P		O-C S	S O-C			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
PETROPAVLOVK	12.31	285.1	2	55	0							
COLLEGE	21.89	39.4	4	49	0							
Y.-SAKHLINSK	23.67	273.4	5	9A	2							
YAKUTSK	28.11	311.1	5	47A	-1							
TIKSI	29.75	330.8	6	2	-1							
MATUSIRO	32.18	258.3	6	24	0	11	41	9				
VLADIVOSTOK	32.26	273.7	6	22	-3							
MOULD BAY	34.15	22.2	6	42A	1							
COPPERMINE	35.21	37.1	6	50A	-1							
YELLOWKNIFE	36.36	46.1	7	0A	0							
SEATTLE	37.64	71.8	7	18	7							
PENTICTON	38.43	68.1	7	18	0							
EDMONTON	40.12	59.6	7	31A	-1							
RESOLUTE	40.35	24.2	7	34K	1							
SHASTA	41.28	81.2	7	42A	1							
MINERAL	41.98	81.1	7	47A	0							
BLUE MTS.	42.05	72.9	7	47K	0	14	8	6			9	52 PP
CALISTOGA	42.39	83.8	7	51A	1							
ALERT	42.83	9.8	7	55A	1							
BERKELEY	43.06	84.5	7	56K	0	14	21	4				
PEKING	43.75	280.3	8	1	0	14	33	6				
LICK	43.77	84.6	8	2K	1							
IRKUTSK	43.96	301.6	8	3	0							
KHEYS	44.16	348.3	8	4A	-1							
BUTTE	44.21	68.8	8	4	-1							
ULAN-BATOR	44.80	295.0	8	10	0							
PRIEST	45.14	85.2	8	17K	5							
BOZEMAN	45.29	68.3	8	14	0							
EUREKA	45.96	78.3	8	20	1	15	3	4			13	53 SCP
ZO-SE	46.36	266.9	8	22	0	15	10	6				
PAOTOW	47.17	284.9	8	30A	2	15	24	8				
NANKING	47.21	269.8	8	28	-1	15	20	4				
SALT LAKE C.	47.68	74.3	8	32	0							
BOULDER CITY	48.86	81.2	8	42	0						14	1 SCP
FLAMING GRGE	49.06	72.6	8	43	0						10	19
UINTA BASIN	49.33	73.3	8	45	0	15	46	0			14	0 SCP
TONTO FOREST	52.17	80.4	9	7	0	16	43	18	9	20	10	31
GOLDEN	52.22	71.3	9	7	0							
LANCHOW	53.81	284.4	9	20A	1							
TUCSON	53.82	82.0	9	18	-1						14	21
ALBUQUERQUE	54.68	76.5	9	24	-1				9	38		
CANTON	56.94	266.1	9	42A	0	17	37	8				
KEVO	57.32	348.6	9	42	-2						21	45 SS
CHENG TU	57.36	279.5	9	44	-1							
TROMSOE	58.31	351.8	9	51	0							
APATITY	58.46	345.1	9	53A	1						10	42 PCP
WICHITA MTS.	59.56	71.4	9	59	-1	18	9	6	10	12	14	52
SODANKYLA	59.62	347.8	10	0	0						10	47 PCP
KIRUNA	59.91	350.6	10	2	0							
TULSA	60.39	68.6	10	4A	-1	18	7	-7				
SVERDLOVSK	60.62	326.1	10	8	1							
SCHEFFERVILLE	60.97	37.0	10	8K	-1							
FAYETTEVILLE	61.19	67.4	10	9	-2							
KUNMING	62.08	275.9	10	17	0							
KAJAANI	62.58	346.0	10	19	-1							

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SHAWINIGAN	54.01	4.5	9 21	12					
LARAMIE	54.76	334.7	9 19	5					
BOULDER CITY	55.38	323.8	9 15	-4					
UINTA BASIN	55.77	331.1	9 18	-4	17	4	11		9 45
FLAMING GRGE	56.16	331.7	9 21	-3					
PASADENA	56.21	320.0	9 27	2					
SALT LAKE C.	57.23	329.8	9 29	-3					
PRIEST	59.04	320.3	9 38A	-7					
LICK	60.40	320.8	9 55	1					
BOZEMAN	60.63	334.0	9 54	-1					
BERKELEY	61.12	320.9	10 3K	4	18	5	2		
BUTTE	61.57	333.3	9 58	-4					
CALISTOGA	61.79	321.4	9 56K	-7					
MINERAL	62.26	323.5	10 7	1					
SCHEFFERVILLE	62.80	7.3	10 13	3					
BLUE MTS.	62.95	329.6	10 7	-4	18	38	12		
SHASTA	62.95	323.4	10 11K	0					
M. BOUR	64.35	70.2	10 33	13					19 54
PENTICTON	67.22	331.9	10 36	-2					
EDMONTON	67.62	338.0	10 37A	-4					
BYRD STATION	75.09	186.9	11 19	-6					
YELLOWKNIFE	75.23	343.4	11 25	-1					
AVERROES	78.18	53.8	11 54	12					
COPPERMINE	79.61	346.6	11 50	0					
MALAGA	81.53	51.2	12 11	11					15 30
BENI ABBES	81.65	58.1	12 11	10					
GRANADA	82.27	50.9	12 25A	21					
SOUTH POLE	82.55	180.0	12 U	-5					
TOLEDO	82.66	48.2	12 17A	11	22	46	38	12 24	15 42 PP
RESOLUTE	82.69	355.5	12 7	1					
SCORESBY SD.	86.34	16.2	12 31	7					
MOULD BAY	86.99	350.9	12 28A	1					
COLLEGE	88.34	336.4	12 32	-2					
GARCHY	89.46	42.3	12 48	9					
ALERT	90.16	2.0	12 45	3					
DOURBES	90.99	39.7	12 53	7	24	21	55		
JENA	95.52	39.5	13 15	8	23	57	32		
COLLMBERG	96.44	39.2	13 20	9					
LWIRO	106.37	94.6							18 41 PP
CHARTERS TS.	128.52	237.0	18 46	-1					
SHIRAZ	128.68	57.9	18 53	6					22 17
MATUSIRO	136.13	316.6	19 3	2					36 23 SS
QUETTA	140.18	50.9	19 9	0					
WARSAK DAM	141.50	42.5	19 13	2					
LAHORE	144.83	43.4	19 23	6					
PEKING	145.20	340.7	19 18	0					
PAOTOW	146.29	348.9	19 22	2					
DEHRA DUN	148.09	41.6	19 29	6					
NEW DELHI	148.60	45.0	19 29K	6					
LANCHOW	151.54	356.8	19 39	12					
SHILLONG	159.61	27.0	19 43A	5					
KUNMING	162.47	357.7	19 46	5					

MAY 1 10.H 3.M 20.S EPICENTRE -19.09 169.04 DEPTH= 134.KM

A=-0.92843 B= 0.17975 C=-0.32514 D= 0.1901 E= 0.9818
G= 0.3192 H=-0.0618 K=-0.9457 HT= 4.9

DEPTH OF FOCUS= 0.016R

SE= 2.37

	DELTA DEG.	AZ. DEG.	P			O-C			S		O-C		*PP		SUPP.	
			M	S	S	M	S	S	M	S	M	S				
PORT VILA	1.52	339.0	0	29A	0											
NOUMEA	4.01	216.8	1	2K	1											
KOUMAC	4.72	251.2	1	10A	0											
HONIARA	13.03	316.2	3	0A	-1	5	24	1								
AFIAMALU	19.09	77.2	4	12	-3	7	35	-5								
KARAPIRO	19.61	164.5	4	20A	0											
CHATEAU	20.81	165.7	4	33	1									12	0 SCP	
CHARTERS TS.	21.49	263.5	4	38	-1	8	18	-6								
RIVERVIEW	21.68	223.8	4	41K	0	8	34	7	5	11				9	23 *SS	
RABAUL	22.15	309.8	4	42	-3	9	8	33								
WELLINGTON	22.65	168.7	4	51A	1	8	51	7						12	5 SCP	
PORT MORESBY	23.28	291.4	4	55	-1											
CANBERRA	23.99	223.6	5	3K	0	9	9	2	5	35				9	57 *SS	

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ROXBURGH	26.31	179.6	5 25A	0	9 40	-6	6 1	6 8	PP		
TOOLANGI	27.60	223.3	5 35K	-1							
MOORLANDS	29.74	213.7	5 55	-1				6 31			
TARRALEAH	30.03	214.7	5 58	0							
ADELAIDE	31.14	233.3	5 46A	-22	11 0	-2		7 20	PP		
MACQUARIE I.	36.18	190.0	6 52A	1							
DARWIN	37.32	274.6	6 56	-5				8 35			
MUNDARING	48.94	243.9	8 32	-2	15 26	0					
PERTH	49.26	244.0	8 35	-2	15 31	0		10 35	PP		
HONOLULU	51.44	40.3	8 53	0	16 2	1	9 29				
KIPAPA	51.58	40.3	8 53	-1	16 2	-1					
HAWAII V.OB.	51.88	44.4	8 56	0				17 13			
CAPE HALLETT	53.23	179.6	9 6	0							
SCOTT BASE	58.81	180.6	9 46	0	17 46	7					
BAGUIO CITY	59.30	303.3	9 46	-4	17 45	-1		10 28	*SP		
WILKES	60.21	203.4	9 56	0	17 56	-1	10 27				
LEMBANG	60.82	272.8						20 39			
TUKUBASAN	61.45	333.5	10 34K	30	18 12	-1	11 23	13 8	PP		
DJAKARTA	61.76	273.2	10 9	3	18 35	18	10 31	12 16	PP		
ABUYAMA	62.38	329.2	10 9K	-1							
HENGCHUN	62.43	308.6	10 18	7							
TAWU	62.53	309.0	10 12	1							
MATUSIRO	62.53	332.3	10 9K	-3	18 27	1					
TAITUNG	62.59	309.5	10 12	0							
HWALIEN	63.00	310.9	10 23	8							
MIZUSAMA	63.54	336.0	10 52	34	18 42	3					
TAIPEI	63.73	311.7	10 53	34							
ANPU	63.83	311.9	10 48	28							
MIRNY	67.09	204.9	10 41A	0				11 14	PCP		
ZO-SE	67.84	316.6	10 44	-2	19 30	-1		11 17	*SP		
BYRD STATION	68.12	169.7	10 46	-1				19 42			
CANTON	68.66	305.2	10 50K	-1	19 44	3		11 24	*SP		
Y.-SAKHLINSK	69.95	341.2						20 40	PS		
NANKING	70.03	316.0	10 58	-1	19 55	-2		11 31	*SP		
VLADIVOSTOK	70.70	332.1	11 2	-1	20 5	0	11 34	13 43	PP		
SOUTH POLE	71.03	180.0	11 3	-2				20 19			
UGLEGORSK	71.99	341.7	11 9	-2				21 5	PS		
PETROPAVLOVK	72.37	353.4	11 11A	-2	20 24	0					
MEDAN	72.72	280.1	11 10K	-5	20 12	-16	11 46	21 14	*SS		
CHANGCHUN	74.33	328.7	11 22	-2	20 45	-1		11 57	*SP		
PEKING	76.70	321.0	11 36	-2	21 13	1		12 11	*SP		
SIAN	77.99	312.7	11 44K	-1	21 27	1		12 19	*SP		
KUNMING	78.04	302.0	11 46K	1	21 29	3		12 20	*SP		
MAWSON	78.50	202.1	11 47A	-1	21 33	2					
CHENG TU	79.69	307.4	11 53	-1	21 45	1		12 28	*SP		
MAGADAN	79.77	350.7	11 53	-1	21 43	-1	12 28				
PAOTOW	80.78	318.6	12 0	0	21 58	3		12 34	*SP		
PORT BLAIR	81.16	285.6	12 4A	2	22 0	1		12 39	PP		
LANCHOW	82.48	312.1	12 9K	0	22 15	3		12 44	*SP		
TOCKLAI	85.20	300.3	12 26	4							
UKIAM	85.74	46.2	12 25	0			13 1	13 19	*SP		
BERKELEY	85.81	47.7	12 26A	1	22 36	-9		15 44	PP		
CALISTOGA	85.94	46.9	12 26A	0							
CHITTAGONG	85.95	295.2	12 27	1	22 38	-8					
LICK	86.00	48.4	12 27A	1							
PRIEST	86.15	49.8	12 28A	1							
YAKUTSK	86.66	342.6	12 27A	-2			13 3				
ARGENTINE I.	86.73	160.2	12 29	-1				23 2			
ULAN-BATOR	86.75	323.4	12 28	-2	22 41	-13					
SHASTA	87.05	45.1	12 40A	9							
PASADENA	87.11	52.5	12 31	-1	23 44	47	13 9	13 24	*SP		
SHILLONG	87.13	298.1	12 30A	-2				15 56	PP		
MINERAL	87.41	45.7	12 32A	-1							
SITKA	88.89	26.8	12 40	0			13 16				
N-LAZARVSKYA	88.98	187.4	12 40A	0			13 14	23 12	SKKS		
CALCUTTA	88.98	294.1					13 15				
LHASA	89.36	301.6	12 42	0	22 59	-19		13 19	*SP		
COLLEGE	89.96	17.0	12 41	-4	23 0	-24	13 23	16 18	PP		
VICTORIA	90.15	37.9	12 45A	-1							
BOULDER CITY	90.36	51.9	12 48	1			13 23	30 16	PKKP		
SEATTLE	90.39	39.0	12 47	0	23 21	-7					
IRKUTSK	90.48	326.2	12 45	-2	23 3	-25		24 4	*SS		
EUREKA	90.93	48.4	12 50	0			13 25	38 22	PKPPKP		
CHATRA	91.52	297.8	12 51	-1	23 38	0		16 30	PP		
BOKARO	91.65	294.5			23 9	-30	13 26	16 10	PP		
VISHAKHAPTNM	91.80	288.0						13 41			
TUCSON	92.02	56.6	12 55	0	23 15	-27		38 23	PKPPKP		
BLUE MTS.	92.24	43.1	12 55A	-1	23 40	-4	13 33	16 39	PP		

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ESEN BULAK	92.36	318.6	12 49	-7	23 15	-30				
TONTO FOREST	92.42	54.6	12 57A	1	23 54	9	13 35	16 25	PP	
PENTICTON	92.74	38.4	12 57A	-1						
MADRAS	93.12	282.6			23 22	-30	13 35	16 26	PP	
SPOKANE	93.43	40.5	13 0	-1	23 55	1				
SALT LAKE C.	94.35	48.4	13 5	0			13 42	17 0	PP	
TIKSI	94.55	348.2	13 12	6	23 22	-42	13 40			
CHIHUAHUA	94.63	61.5						15 20		
KODAIKANAL	94.76	279.1					13 43	31 52		
BUTTE	95.77	43.3	13 11	-1			13 48	17 40	*PPP	
UINTA BASIN	95.81	49.5	13 12	0	23 30	-4	13 50	16 58	PP	
BANFF	95.90	37.8	13 10	-2						
FLAMING GRGE	96.15	48.9	13 13	0			13 50			
ALBUQUERQUE	96.37	55.4	13 14	0	22 56	-41		17 41	*PPP	
BOZEMAN	96.64	44.0	13 16	0				17 5	PP	
TACUBAYA	97.74	72.2					14 10	25 13		
EDMONTON	97.96	36.2	13 19A	-3						
GOLDEN	98.67	51.1	13 25	0	23 52	3				
LARAMIE	99.00	49.5	13 26	0				17 30		
DEHRA DUN	100.22	298.5	13 31	-1				23 55		
NEW DELHI	100.46	296.6			23 56	-2	14 8	18 20	PPP	
POONA	100.60	286.0	13 35A	1				14 14	PP	
YELLOWKNIFE	100.62	27.3	13 33	-1						
BOMBAY	101.64	286.1			24 1	-2	14 13	24 56	PS	
COPPERMINE	102.31	22.1	13 40A	-1				14 17		
WICHITA MTS.	102.50	57.5	13 40	-2	24 7	0	14 20	17 53	PP	
SANTA LUCIA	102.76	132.3	13 44	1	24 8	-1	14 38	17 56	PKP	
COMITAN	103.29	77.2						23 20		
LAHORE	103.63	298.9					14 22			
SEMIPALATNSK	103.71	318.8						18 28	PP	
HOUSTON	103.89	63.1	13 50	2						
MOULD BAY	104.14	13.6	13 47A	-2				14 24		
TULSA	105.01	56.8	13 54	777	24 15	-4		18 10	PP	
MERIDA	106.82	73.2						15 32		
NANA	108.12	110.0	17 8	777						
HUANCAYO	109.43	110.7	17 15	777						
QUETTA	109.52	296.1	17 16	777	24 44	6				
TASHKENT	109.55	308.0			24 41	2		28 8	PS	
RESOLUTE	109.87	16.3	14 14	777						
AREQUIPA	110.78	116.7	14 23	-234						
BALBOA HTS.	113.03	88.2	14 30A	-231						
CUMBERLAND	113.13	58.7	14 31	-230	24 52	-1	15 13	19 4	PP	
ALERT	113.58	6.5	18 22	0						
LA PAZ	113.58	118.4	14 35	-227	24 54	-1				
CHINCHINA	115.54	93.6	18 27	1	25 1	-1		19 31	PP	
COLUMBIA	116.66	60.9						19 37		
CLEVELAND	116.80	52.6	18 33	5				27 36		
BOGOTA	116.89	94.6	14 47	-221	26 10	63		19 35	PP	
FUQUENE	117.48	93.8						19 45	PP	
CHANGALANE	118.44	224.3	18 33	2	25 17	4		36 4	SS	
HERMANUS	119.53	208.5						29 40	PS	
GEORGETOWN	120.14	55.6						20 2		
OTTAWA	120.98	48.0	18 34	-2						
KIMBERLEY	121.23	216.9	18 38	1						
SHIRAZ	121.85	293.5	18 39	1	25 25	1		20 57	PKS	
BREBEUF	122.45	47.8	18 38K	-1	27 57	151		20 14	PP	
PALISADES	122.54	53.1	15 10	-209	25 26	0	16 6	18 38	PKP	
FORDHAM	122.57	53.3						20 13	PP	
SHAWINIGAN	122.93	46.4	18 38	-2						
TEHERAN	123.10	300.7	18 41	1	25 32	4	19 20	20 52	*PPP	
CHILEKA	123.10	235.7	18 41	1						
APATITY	124.04	341.1	18 40A	-2				20 58	PP	
KEVO	124.35	345.0	18 31	-12	25 30	-2	19 23	20 58	*PPP	
SCHEFFERVILLE	124.93	35.7	18 43	-1						
BULAWAYO	125.01	226.9	18 45K	1						
CARACAS	125.40	90.5	18 42A	-3	25 20	-15				
SODANKYLA	126.14	343.0	18 46	0				21 13	*SPP	
TROMSOE	126.27	347.5	18 45	-2			19 23			
SEPT ILES	126.44	41.1	18 46	-1						
GORIS	126.97	305.4	18 48	0	25 47	7	19 27	22 26	PKS	
KIRUNA	127.39	345.6	18 47	-2			19 24	21 20	PP	
TIFLIS	127.87	308.4	18 50	0			19 28	20 55	PP	
KAJAANI	128.07	339.6	18 42	-8			19 50	21 27	*SPP	
SCORESBY SD.	128.19	4.7	18 52	2						
MOSCOW	128.46	327.2	18 51	0			19 29	30 45	SKSP	
BROKEN HILL	128.83	232.2	18 54	2						
HALIFAX	129.60	47.4	18 53A	0						
PULKOVO	129.80	334.2	18 53A	0	25 51	4	19 30	22 51		
UMEA	130.56	342.4	18 47	-8			19 31	22 52	*PPKS	

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TRINIDAD	130.67	92.3	18 57	2			21 13	PP
NURMIJARVI	131.52	337.4	18 51	-6		19 34	21 14	PP
HELSINKI	131.64	336.9	18 48	-9			22 7	SKP
ST. CLAUDE	131.66	85.3	18 59	2			21 20	PP
ANTIGUA	131.74	83.8	18 58	1			22 10	
FORT FRANCE	131.91	87.1	18 58	1			21 21	PP
SKALSTUGAN	132.81	346.1	18 51	-8			22 11	SKP
UPPSALA	134.41	340.2	18 53	-9		19 39	22 16	SKP
SIMFEROPOL	134.68	315.0					31 22	SKSP
LWIRO	135.54	245.8	18 57A	-7		19 43	21 46	PP
KSARA	135.95	299.2	19 6	1		19 45	21 50	PP
JERUSALEM	136.73	296.3	19 7	1			22 30	PP
KONGSBERG	136.86	344.9	19 7	0		19 47	22 25	SKP
GOTEBORG	137.89	341.8	19 8	0			22 28	SKP
KARLSKRONA	137.97	338.1	19 1	-8		19 43	22 28	SKP
WARSAW	138.57	330.5	19 11	1	25 46 -19	19 51	22 33	
COPENHAGEN	139.42	339.8	19 7	-4				
BUCHAREST	140.14	317.6					22 48	PP
KRAKOW	140.51	328.6	19 16	3			23 28	
CHORZOW	140.81	329.6	19 15	1			24 6	
RACIBORZ	141.33	329.8	19 14	-1			23 18	
ABERDEEN	141.41	352.3	19 33K	18			40 35	SS
SOFIA	142.72	316.7	19 14	-3			21 40	SKP
HURBANOVO	142.79	327.1					23 21	PP
HALLE	142.97	336.2	19 14	-4			22 42	
PRAGUE	143.05	332.6	19 17	-1			23 3	
PRUMONICE	143.06	332.4	19 14	-4				
BRATISLAVA	143.15	328.3	19 15	-3		19 51	22 40	PCP
BELGRADE	143.40	321.5	19 16A	-2			23 8	PKS
VIENNA-H.	143.45	329.0	19 17A	-1			22 36	PP
JENA	143.56	335.9	19 16	-3		19 53	23 0	PP
WITTEVEEN	143.65	341.9	19 17	-2				
DURHAM	143.67	350.8	19 16K	-3			40 55	SS
MUNSTER	144.10	340.4	19 19	-1				
KASPERSKE H.	144.12	332.3	19 17	-3			22 30	PP
SKOPJE	144.30	316.8	19 20	0			23 2	
ATHENS	144.47	309.3	19 18K	-2			29 13	
DE BILT	144.71	342.7	19 19A	-2		19 55	23 11	*PPP
BENSBERG	145.11	339.9	19 22A	1		19 59	26 19	
ZAGREB	145.28	326.2	19 22K	0		20 0		
TITograd	145.44	318.9	19 24	2			33 41	PPP
LJUBLJANA	145.88	327.7	19 22K	-1		20 2	22 33	PP
HEIDELBERG	145.88	336.9	19 24A	1		20 3		
UCCLE	146.11	342.5	19 24	1			41 45	SS
STUTT GART	146.18	335.7	19 22	-1		20 0	22 26	PP
KARLSRUHE	146.32	336.8	19 22	-1			22 39	PP
TUBINGEN	146.46	335.7	19 25	1		20 3		
TRIESTE	146.55	327.9	19 23	-1		20 4	23 10	PKS
KEW	146.62	347.9	19 23	-1		20 3	22 55	PP
DOURBES	146.66	341.7	19 25	1			19 27	PKP2
EBINGEN	146.78	335.4	19 26	2		20 5		
RAVENSBERG	146.84	334.3	19 26	2		20 3		
STRASBOURG	146.91	337.0	19 26A	2		20 4	22 46	PP
WELSCHBRUCH	147.57	338.3	19 28	2			23 22	*PPP
PADOVA	147.65	329.3	19 29	3		20 7	29 40	SKKS
PARIS	148.43	342.9	20 32	65		21 8	23 31	PP
BESANCON	148.68	337.6	19 29	2		20 8	20 25	*SPKP
AQUILA	148.96	323.6	19 27	-1	26 14 -6		24 0	PP
PAVIA	149.08	331.7	19 29A	1		20 7	23 44	PP
FLORENCE X.	149.13	327.8	19 23	-5		20 5	23 10	PP
PRATO	149.13	328.0	19 32	4			23 48	PP
FOLINIERE	149.21	346.4	19 27	-1				
GARCHY	149.63	340.9	19 33	4		20 12	23 42	PP
ROSELEND	149.74	335.1	19 30	1		20 10	23 39	*PPP
ROME	149.78	323.9	19 29A	0		20 6	23 44	PP
REGGIO CALA.	150.10	314.9	19 28	-1			23 47	PP
MESSINA	150.11	315.1	19 34	5	26 31 9	20 12	23 40	PP
ISOLA	150.79	322.9	19 33	2		20 15		
CLERMONT-FD.	150.96	339.5	19 32A	1	26 26 3			
TORTOSA	156.22	338.0	20 13	35			24 22	PP
PONTA DELGDA	157.42	31.6	19 42A	3			20 14	PKP2
TOLEDO	158.44	345.4	19 42A	1	26 38 7	20 54	24 0	PP
ALICANTE	158.76	336.8	19 44K	3	26 26 -5		20 21	PKP2
LISBON	160.38	355.8	19 58A	15			24 23	PP
ALMERIA	160.80	338.9	19 42A	-1			27 49	PPP
GRANADA	160.86	341.8	20 21K	38	27 34 61		24 47	PP
LOME	162.48	224.2					21 6	
AVERROES	165.50	348.1	19 48A	0		20 28	25 18	*PPP
BENI ABBES	166.43	325.7	19 49A	0		20 27	25 11	PP

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M,BOUR 172.58 128.2 19 54 2 26 56 16

MAY 3 10.H 54.M 38.S EPICENTRE -15.33-173.14 DEPTH= 0.KM

A=-0.95796 B=-0.11533 C=-0.26269 D=-0.1195 E= 0.9928
G= 0.2608 H= 0.0314 K=-0.9649 HT= 5.7

SE= 2.88

	DELTA DEG.	AZ. DEG.	P		O-C S	S O-C			#PP		SUPP.	
			M	S		M	S	S	M	S	M	S
AFIAMALU	1.93	43.1	0	30	-4	0	46	-14				
NOUMEA	20.52	247.2	4	44K	1	8	57	29				
KOUMAC	22.10	253.1	5	0	1							
KARAPIRO	24.64	201.9	5	25	2							
CHATEAU	25.78	200.5	5	33	-1							
HONTARA	26.92	279.4	5	40	-5	10	34	13				
WELLINGTON	27.90	199.7	5	52	-2							
BRISBANE	33.82	243.5	6	47	1	12	37	27				
RIVERVIEW	37.09	233.7	7	15	1						13	29
CHARTERS TS.	38.90	256.9	7	28	-1						18	48
PORT MORESBY	39.19	273.9	7	31	-1	13	42	10				
CANBERRA	39.28	232.5	7	32	0							
HONOLULU	39.28	22.5				13	36	2				
KIPAPA	39.42	22.5	7	50	17							
TOOLANGI	42.71	230.7	8	0	0						8	13 *SP
ADELAIDE	47.26	236.4	8	30	-7						23	10
MUNDARING	65.79	241.6	10	49	0				11	0		
BYRD STATION	68.99	171.3	11	10	1							
MATUSIRO	69.05	319.7	11	9	-1						16	22
LICK	71.33	41.2	11	19K	-5							
PASADENA	71.78	45.6				20	49	3				
BAGUIO CITY	72.62	293.0	11	33	2							
MINERAL	73.18	38.7	11	46A	11							
SOUTH POLE	74.77	180.0	11	44	0							
BOULDER CITY	75.08	45.6	11	44	-2				12	0		
TUCSON	76.08	50.6	11	51	0							
EUREKA	76.20	42.0	11	57	5							
TONTO FOREST	76.74	48.6	11	55	0						13	7
BLUE MTS.	78.41	36.9	12	4	0	22	4	4			25	4 55
PENTICTON	79.82	32.3	12	12	0							
ALBUQUERQUE	80.56	49.9	12	16	0							
UINTA BASIN	80.84	43.9	12	18	1	22	29	4				
COLLEGE	82.25	10.6	12	24	-1				12	35		
BOZEMAN	82.56	38.7	12	28	2							
GOLDEN	83.42	46.0	12	32	1							
LARAMIE	83.99	44.4	12	35	1							
WICHITA MTS.	86.40	52.7	12	46	0	23	22	1			29	0 55
MAWSON	87.94	198.5	12	54K	1							
TULSA	88.96	52.4				23	47	2				
YELLOWKNIFE	89.93	23.3	13	2	0							
MOULD BAY	96.81	11.2	13	33	-1							
CUMBERLAND	96.82	55.1	13	34	0	24	59	48			31	30 55
BREBEUF	107.39	46.6									44	40 555
CARACAS	108.20	83.8									19	44
KEVO	124.16	351.7	19	14	13							
KAJAANI	129.22	348.4	19	15	4							
NURMIJARVI	133.07	348.1	19	23	5						31	46 SKSP
COLLMBERG	143.78	353.5	19	38	1						19	42 PKP2
JENA	144.29	354.9	19	42	4							
BENSBERG	144.46	359.7	19	38	0							
PRUHONICE	144.88	351.4	19	39	0							
KASPERSKE H.	145.84	352.1	19	43A	2							
FOLINIERE	146.11	8.7	19	43	2							
BRATISLAVA	146.18	347.7	19	42	1							
VIENNA-H.	146.25	348.5	19	45	4							
PARIS	146.42	5.2	19	56	14							
STUTT GART	146.59	357.1	19	46	4							
STRASBOURG	146.83	358.9	19	48	6							
GARCHY	147.99	4.9	19	49	5							
ISTANBUL UN.	147.99	327.5	19	50A	6						23	22 PP
KSARA	147.99	310.4	19	48	4						23	20 PP
LJUBLJANA	148.71	349.7	19	50	5						19	59 PKP2
SOFIA	149.27	335.9	19	55	9							
JERUSALEM	149.41	307.4	19	54A	7							
ROSELEND	149.73	0.3	20	0	13							

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UPPSALA	68.07	353.0	10 54K	0	
GOTEBORG	70.55	355.9	11 9	-1	
KARLSKRONA	71.88	353.7	11 36	18	
SHILLONG	72.00	288.5	11 17	-1	
COLLMBERG	76.89	354.7	11 46	0	
JENA	77.33	355.6	11 49	0	
NEW DELHI	77.90	301.0	11 51K	-1	
PRUMONICE	78.10	353.6	11 55	2	12 43
DOURBES	78.32	0.1	11 59	5	
KASPERSKA H.	79.01	354.1	11 15K	-43	11 37
GARCHY	81.13	1.2	12 10A	1	12 44
KARAPIRO	89.87	187.3	12 51	-2	13 6
RIVERVIEW	90.36	207.4	12 55A	0	
CARACAS	92.80	69.2	13 12	6	
SOUTH POLE	141.77	180.0	19 17	-7	
CHANGALANE	147.05	310.5	19 37	4	
MAWSON	148.30	218.3	19 38A	3	
KIMBERLEY	152.43	319.5	19 50	9	

MAY 5 15.H 17.M 4.S EPICENTRE -24.77 -69.78 DEPTH= 67.KM

A= 0.31414 B=-0.85306 C=-0.41665 D=-0.9384 E=-0.3456
G=-0.1440 H= 0.3910 K=-0.9091 HT= 3.4

DEPTH OF FOCUS= 0.005R

SE= 2.00

	DELTA DEG.	AZ. DEG.	P		O-C S	S			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
ANTOFAGASTA	1.21	331.3	0	21K	-1	0	31	-8				
LA PAZ	8.37	11.0	2	3	2	3	55	20				
AREQUIPA	8.42	348.8	1	58	-4	3	31	-5				
SANTA LUCIA	8.67	184.8				3	53	10				
HUANCAYO	13.70	336.5	3	23	10							
BOGOTA	29.51	351.3	6	2	2	10	59	10				
CHINCHINA	30.10	348.3	6	44	38							
CARACAS	35.16	4.9	6	49A	0	12	16	-1				
SAN JUAN	43.04	5.1	7	53	-2							
BYRD STATION	59.15	188.9	9	56	0							
CUMBERLAND	61.86	345.4	10	14A	-1	18	31	0			22	37 SS
BLACKSBURG	62.46	350.4	10	19	0							
TULSA	65.17	336.9	10	35A	-1	19	13	1	10	50	10	57 *SP
WICHITA MTS.	65.17	334.1	10	35	-1	19	14	1			23	37 SS
SOUTH POLE	65.38	180.0	10	36	-2							
PALISADES	65.55	356.6	10	40	1	19	20	3				
PENNSYLVANIA	65.66	353.3	10	39	-1							
ST. LOUIS 1	65.92	342.6	10	40	-1							
LAWRENCE	67.74	338.8	10	52	-1							
LONDON ONT.	68.28	351.0	10	55K	-1							
ALBUQUERQUE	68.82	328.3	11	0	1				11	14	39	12 PKPPKP
TUCSON	68.92	323.4	11	0	0				11	15		
HALIFAX	69.28	4.7	11	3	1							
OTTAWA	70.04	355.6	11	6	-1							
TONTO FOREST	70.72	324.5	11	12	1	20	25	6			14	44
SHAWINIGAN	71.03	357.8	11	12	-1							
GOLDEN	72.22	331.9	11	20	0							
UINTA BASIN	74.60	329.5	11	34A	0	21	11	8			26	4 SS
CAPE HALLETT	75.06	195.9	11	36	0							
EUREKA	77.10	325.0	11	48	0				12	4		
PRIEST	77.31	319.9	11	50A	1							
SCHIEFFERVILLE	79.30	1.8	12	0	0							
BERKELEY	79.43	320.3									21	50
BOZEMAN	79.51	331.9	12	2	1				12	18	12	24 *SP
CALISTOGA	80.13	320.7	12	5K	0							
BUTTE	80.44	331.3	12	7	1				12	22	12	29 *SP
MINERAL	80.75	322.5	12	8K	0							
SHASTA	81.43	322.3	12	10	-1							
BLUE MTS.	81.73	328.0	12	13	0							
PENTICTON	86.07	329.9	12	35	0							
EDMONTON	86.51	335.6	12	35A	-2							
TOLEDO	88.77	44.6	12	50	2	24	6	39			16	23 PP
BULAWAYO	88.97	111.6	12	49	0							
CHANGALANE	89.18	118.6	12	50	0							
BROKEN HILL	91.32	106.5	13	3	3							
KARAPIRO	92.58	226.0	13	22	17							

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YELLOWKNIFE	93.99	340.8	13 11	-1	
LWIRO	96.85	95.6			26 47
COPPERMINE	98.21	344.2	13 30	-1	
MOULD BAY	105.26	349.1	14 1	777	18 19
COLLEGE	107.23	334.1	14 10	777	18 10 PKP
ISTANBUL UN.	112.17	53.8			19 13
SODANKYLA	115.06	25.1	18 32	-2	
SHIRAZ	128.90	71.0	19 3K	3	22 24 PKS
POONA	145.71	93.2	19 34K	3	
LEMBANG	148.49	175.1	19 38	2	
NEW DELHI	150.31	75.3	19 46A	8	
MATUS'RO	153.31	302.7	19 52A	9	
CHATRA	159.15	79.4	19 24	-26	

MAY 5 17.H 12.M 10.S EPICENTRE -18.01-173.91 DEPTH= 237.KM

A=-0.94622 B=-0.10093 C=-0.30737 D=-0.1061 E= 0.9944
G= 0.3056 H= 0.0326 K=-0.9516 HT= 5.1

DEPTH OF FOCUS= 0.032R

SE= 2.92

	DELTA DEG.	AZ. DEG.	P		O-C S	S O-C			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
PORT VILA	16.92	268.2	3	43K	-1							
NOUMEA	18.92	253.7	4	6	1							
KARAPIRO	21.89	202.9	4	32	-2							
CHATEAU	23.02	201.3	4	43	-2							
HONIARA	26.76	285.1	5	18	-2							
BRISBANE	32.03	247.0	6	5	-1							
RIVERVIEW	34.95	236.3	6	36	5							
CANBERRA	37.09	234.9	6	50	1							
CHARTERS TS.	37.64	260.3	6	52	-2						13	45
PORT MORESBY	38.72	277.5	7	3	0							
TOOLANGI	40.47	232.8	7	14	-3							7 36
KIPAPA	42.17	22.3	7	37	6							
ADELAIDE	45.20	238.4	7	54	-1							21 20
CAPE HALLETT	55.08	185.9	9	11	2							
BYRD STATION	66.46	171.1	10	28	2							
MATUSIRO	70.62	320.7	10	49	-2							
SOUTH POLE	72.10	180.0	11	1	1							
BAGUIO CITY	73.01	294.0	11	5	0							
LICK	73.83	41.0	11	22A	12							
SHASTA	75.49	37.9	11	16	-4							
MINERAL	75.74	38.6	11	19A	-2							
LEMBANG	76.99	267.0	11	30	2							
TUCSON	78.36	50.5	11	34	-1			11	49			
EUREKA	78.68	42.0	11	36	-1							
TONTO FOREST	79.06	48.5	11	38	-1							12 0
BLUE MTS.	80.99	37.0	11	48	-1							
ALBUQUERQUE	82.85	49.9	11	57	-2							
UINTA BASIN	83.28	43.9	12	0	-1							12 31
FLAMING GRGE	83.71	43.5	12	2	-1							
BUTTE	84.40	37.9	12	6	-1							
COLLEGE	85.01	10.9	12	7	-3			12	21			
BOZEMAN	85.11	38.8	12	10	0							
MAWSON	85.17	198.8	12	12	1							
EDMONTON	88.04	31.5	12	26	2							
CONCEPCION	88.48	128.2										17 18
WICHITA MTS.	88.60	52.9	12	27	0							
YELLOWKNIFE	92.67	23.6	12	47	1							
COPPERMINE	95.59	19.0	12	56	-3							
LWOW	145.14	339.6	19	12	3							
WITTEVEEN	145.26	359.4	19	12	3							
KRAKOW	146.16	343.9	19	14	3							19 53
HALLE	146.27	353.4	19	13	2							22 24 PKS
COLLMBERG	146.34	352.2	19	14	3							19 35
RACIBORZ	146.56	345.8	19	15	3							19 22 PKP2
JENA	146.87	353.6	19	15	3			19	32			42 8 SS
BENSBERG	147.12	358.7	18	17	-55							
PRUHONICE	147.39	349.8	19	18A	5							
DOURBES	147.97	1.8	19	23	9							
KASPERSKE H.	148.37	350.6	19	17	3							19 51
BRATISLAVA	148.61	345.8	19	19	4							
VIENNA-H.	148.70	346.7	19	22	7							
FOLINIERE	148.86	8.4	19	22	7							

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1963		PAGE 380									
ROME	6.88	294.3									3 4 S*
ZAGREB	7.39	332.3									1 51 PG
LJUBLJANA	8.16	327.0	1 46	-11	3 20	-8					2 20 PG
TRIESTE	8.20	322.3	1 49	-8	3 19	-10					
FLORENCE X.	8.46	304.5	1 49	-12	3 19	-16					
PADOVA	9.00	315.1			3 38	-10					2 38 P*
BRATISLAVA	9.21	344.0	2 7	-4							4 43
UZNGOROD	9.32	5.8	2 8	-4							
VIENNA-H.	9.46	341.3			4 4	4					2 58 PGPG
NIEDZIKA	10.06	357.9	2 18	-4							2 26 PP
LWOW	10.69	11.0	2 41	10	4 56	27					
KRAKOW	10.70	356.7	2 27	-4							2 45 PPP
RACIBORZ	10.88	350.8									3 4
MONACO	10.99	297.7	2 27	-8							
KASPERSKE H.	11.07	334.2	2 26	-10							4 29
CHUR	11.17	315.7									4 32
SIMFEROPOL	11.29	56.1	2 42	3							
ISOLA	11.39	299.4	2 33	-7							2 55
PRUMONICE	11.52	339.1	2 34	-8							
PRAGUE	11.64	338.9									4 15
STUTTGART	12.56	322.2	2 45	-11	5 2	-11					
KARLSRUHE	13.14	321.3	3 8	5	5 52	25					
COLLMBERG	13.15	337.7	3 7	4	5 59	32					
STRASBOURG	13.18	318.6	2 59	-5	5 50	22					3 40
KSARA	13.25	110.0	2 58	-7	5 33	3					
JENA	13.28	333.5	2 56	-9	5 40	9					6 52
BESANCON	13.40	310.9	2 59	-8							3 26
HALLE	13.64	335.7			5 42	3					3 26 PPP
WELSCHBRUCH	13.82	315.6	3 3	-9							
JERUSALEM	13.90	118.6	3 9	-4							
CLERMONT-FD.	14.56	301.8	3 25	4							3 47
BENSBERG	15.07	324.8									8 22
GARCHY	15.17	307.2	3 28	-1							6 17
PARIS	16.21	311.6	3 39	-3							
KARLSKRONA	17.17	349.9	3 52	-2							
BAKURIANI	17.36	74.9	3 56	0							
FOLINIERE	17.95	308.5	3 56	-8							
GOTEBORG	19.24	345.4	4 25A	7							
KIROVOBAD	19.52	78.1	4 21	0							
GORIS	19.64	81.5	4 20	-2							
MOSCOW	19.80	28.8	4 22	-2							
UPPSALA	20.61	355.3	4 28A	-4							
BENI ABBES	21.04	251.1	4 28	-9							4 46 PP
PULKOVO	21.28	13.2	4 37	-2							
NURMIJARVI	21.30	5.1	4 36	-3	8 40	16					
KONGSBERG	21.52	344.3	4 38	-3							
VIBORG	21.94	10.4	4 42	-3							
UMEA	24.49	359.3	5 9	-1							5 44 PP
SKALSTUGAN	24.79	350.8	5 10	-3							
KAJAANI	25.08	7.1	5 14	-2							
SHIRAZ	27.69	100.8	5 44	4							16 27
SODANKYLA	28.24	4.7	5 42	-3							
KIRUNA	28.52	359.6	5 53A	6							
ASHKABAD	29.16	80.8	5 56	3							
SVERDLOVSK	31.20	42.7	6 12	1							
TIKSI	58.45	20.7	9 47	0							
MOULD BAY	61.92	350.0	10 8	-2							
COPPERMINE	68.10	343.5	10 49	-1							
COLLEGE	75.72	355.1	11 34	-1							
HUNGRY HORSE	83.94	331.6	12 20	1							
WICHITA MTS.	87.48	314.1	12 37	0							
BLUE MTS.	88.11	331.7	12 39	-1							

MAY 7 16.H 23.M 10.S EPICENTRE -22.02 -68.53 DEPTH= 95.KM

A= 0.33960 B=-0.86358 C=-0.37269 D=-0.9306 E=-0.3660
G=-0.1364 H= 0.3468 K=-0.9280 HT= 4.2

DEPTH OF FOCUS= 0.010R

SE= 2.25

	DELTA DEG.	AZ. DEG.	P			O-C			*PP		SUPP.	
			M	S	S	M	S	S	M	S		
ANTOFAGASTA	2.42	225.7	0	38A	0	0	53	-14				
LA PAZ	5.50	4.0	1	24K	3	1	58	-25				
AREQUIPA	6.19	332.7	1	28	-2							

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SANTA LUCIA	11.53	188.8	2 41	-1	4 15	-35					
HUANCAYO	11.85	325.7	2 50	3							
NANA	12.74	320.1	2 58	-1							
BOGOTA	27.02	347.8	5 36	1	10 14	10	6 1	10 52	*SS		
CHINCHINA	27.70	344.7	5 33K	-8			5 58				
FUQUENE	27.79	348.8	5 40	-2			6 4				
CARACAS	32.35	2.9	6 21	-1	11 24	-4					
TRINIDAD	33.21	12.9	6 31	2							
FORT FRANCE	37.23	11.9	7 5	1							
ST. CLAUDE	38.40	10.6						7 34			
SAN JUAN	40.22	3.6	7 25	-3			7 54	14 6	*SS		
COLUMBIA	56.96	347.6	9 37	-1							
CUMBERLAND	59.52	343.9	9 54K	-1	17 56	0	10 21	10 34	PCP		
BLACKSBURG	59.96	349.0	9 58	0							
BYRD STATION	62.04	188.8	10 10	-2							
M. BOUR	62.16	59.1	10 12	-1	18 28	-1					
MORGANTOWN	62.24	350.1	10 13K	-1			10 41				
FAYETTEVILLE	62.68	336.8	10 6K	-11				10 42	PP		
PALISADES	62.90	355.4	10 31	13	18 29	-10	10 46				
PENNSYLVANIA	63.09	352.1	10 19	0							
TULSA	63.12	335.4	10 18K	-2	18 40	-1	10 46	19 25	*SS		
WICHITA MTS.	63.24	332.5	10 18K	-2	18 43	0	10 46	19 17			
ST. LOUIS 1	63.67	341.2	10 21	-2							
LAWRENCE	65.62	337.4	10 34	-2	19 10	-2					
LONDON ONT.	65.77	349.9	10 35K	-2							
N-LAZARVSKYA	66.23	159.1	10 40A	0							
ALBUQUERQUE	67.12	326.8	10 45	0			11 13				
BREBEUF	67.35	356.1	10 46K	-1			11 15				
OTTAWA	67.41	354.5	10 46	-1							
TUCSON	67.44	321.9					11 12	11 28	PCP		
SOUTH POLE	68.12	180.0	10 51	0							
SHAWINIGAN	68.35	356.9	10 52	-1							
TONTO FOREST	69.19	323.1	10 59K	1			11 27	11 40	PCP		
GOLDEN	70.37	330.6	11 5	0				11 46			
LARAMIE	71.77	331.5	11 15	1				11 44			
BOULDER CITY	72.42	322.0	11 19	2			11 48	12 0	*SP		
UINTA BASIN	72.84	328.3	11 21K	1			11 49				
PASADENA	73.13	318.7	11 22	0			11 51	12 3	*SP		
FLAMING GRGE	73.23	328.8	11 23	1			11 51				
SALT LAKE C.	74.31	327.2	11 29	1			11 58	12 10	*SP		
EUREKA	75.54	323.9	11 37	2			12 5	11 48	PCP		
PRIEST	75.98	318.8	11 39K	1							
SCHEFFERVILLE	76.53	1.0	11 40K	-1							
LICK	77.35	319.2	11 47K	1							
BOZEMAN	77.65	331.0	11 48	1			12 17	12 30	*SP		
CAPE HALLETT	78.01	195.5	11 50	1							
BERKELEY	78.07	319.3	11 50K	0							
BUTTE	78.61	330.4	11 54	1			12 22				
CALISTOGA	78.76	319.7	11 54K	1							
MINERAL	79.29	321.5	11 57K	1							
UKIAH	79.46	319.8					12 27	12 39	*SP		
BLUE MTS.	80.04	327.1	12 1K	1			12 30	15 34	PP		
HUNGRY HORSE	81.01	331.2	12 6	1			12 34				
SPOKANE	82.08	329.1	12 11	0				23 10			
PENTICTON	84.28	329.2	12 23K	1							
VICTORIA	85.61	326.9	12 28	-1							
TOLEDO	86.01	44.1	12 32K	1	22 56	1	12 58	23 43	*SS		
BULAWAYO	88.90	111.2	12 45A	0							
BROKEN HILL	90.99	105.9	12 57	3							
YELLOWKNIFE	91.79	340.5	12 57K	-1							
CHATEAU	94.63	224.5	13 14	3							
KARAPIRO	95.32	225.6	13 15	1							
COPPERMINE	95.89	343.9	13 16K	-1							
LWIRO	95.96	94.8	13 21	4							
RESOLUTE	97.95	353.2	13 26	0							
COLLMBERG	101.79	39.4					14 15				
PRUHONICE	102.27	41.0						17 54	PP		
MOULD BAY	102.79	349.0	13 47	-1							
COLLEGE	105.27	334.2	13 58	777			14 29	17 57	PKP		
SOPIA	105.91	50.0	16 47	777							
UZHGOROD	106.73	43.8						18 27	PP		
CHARTERS TS.	126.09	221.6	18 53	2							
SHIRAZ	126.88	68.8	18 58	6				20 52			
SVERDLOVSK	129.31	33.4	18 58	1							
TIKSI	129.36	353.0	18 50	-7							
ASHKABAD	131.95	58.2						21 28	PP		
YAKUTSK	138.10	347.2	19 5	-9							
QUETTA	139.41	68.9	19 10	-6							

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TASHKENT	139.73	51.5				21 45 SKP
WARSAK DAM	143.01	62.4	19 42	20		
Y.-SAKHLINSK	144.55	322.3	19 25K	0		
POONA	144.60	88.7	19 57	32		
ALMATA-2	144.67	45.1	19 27K	2		
LAHORE	145.65	66.0	19 30	3		
NEW DELHI	148.41	71.0	19 34A	2	20 6	
DEHRA DUN	148.98	67.5	19 36	4		
IRKUTSK	149.30	8.6	19 39	6		
LEMBANG	151.09	172.1	19 44K	8		
MATUSIRO	152.66	307.9	19 46	8	43 38 SS	
ULAN-BATOR	153.89	7.0	19 43	3		
SHILLONG	161.72	75.0	19 52	3		

MAY 8

8.H 50.M 59.S EPICENTRE 54.96-163.64 DEPTH= 116.KM

A=-0.55334 B=-0.16248 C= 0.81696 D=-0.2817 E= 0.9595
G=-0.7839 H=-0.2302 K=-0.5767 HT= -7.2

DEPTH OF FOCUS= 0.013R

SE= 1.53

	DELTA DEG.	AZ. DEG.	P			S			*PP		SUPP.	
			M	S	O-C	M	S	S	M	S	M	S
COLLEGE	12.67	32.1	2 56		-1	5 20		4			11 49	SCP
PETROPAVLOVK	22.08	280.6	4 48K		1	8 46		8				
MAGADAN	24.67	299.4	5 17		5							
VICTORIA	25.44	87.9	5 19		0							
COPPERMINE	25.75	40.9	5 23K		1							
YELLOWKNIFE	25.96	53.2	5 25K		1							
MOULD BAY	26.87	21.7	5 33K		1	10 1		3				
PENTICTON	27.23	83.5	5 36K		1							
SHASTA	30.64	100.4	6 6K		0							
HUNGRY HORSE	30.92	81.4	6 9		1	11 9		6			12 35	SCP
BLUE MTS.	30.96	89.6	6 9K		0	11 9		6	6 32		7 23	PP
UKIAH	31.24	103.5	6 12		1				6 33			
MINERAL	31.33	100.2	6 43K		31							
CALISTOGA	31.94	103.5	6 18K		1							
TIKSI	32.35	326.8	6 20		-1						12 39	
RESOLUTE	32.52	27.4	6 21		-1							
BERKELEY	32.66	104.2									11 31	
BUTTE	33.02	84.1	6 27		0						7 41	PP
LICK	33.38	104.3	6 31K		1							
KIPAPA	33.76	170.6	6 31		-2						7 45	PP
HONOLULU	33.87	170.7	6 32		-2						7 46	PP
YAKUTSK	34.08	309.4	6 34K		-2							
BOZEMAN	34.09	83.5	6 37		1						7 56	PP
PRIEST	34.79	104.7	6 43K		1							
EUREKA	35.12	96.0	6 45		1				7 5		12 50	SCP
SALT LAKE C.	36.64	90.8	6 58		1						12 56	SCP
ALERT	37.34	12.3	7 4		1							
PASADENA	37.64	104.5	7 6		0	12 51		5				
FLAMING GRGE	37.96	88.6	7 9		1						13 1	SCP
BOULDER CITY	38.19	99.2	7 12		2				7 34		7 56	PP
UINTA BASIN	38.25	89.5	7 12		1				7 35		17 12	SCS
TONTO FOREST	41.44	97.8	7 38		1	13 57		14	8 0		9 21	PP
KHEYS	42.67	350.7	7 47		0							
MATUSIRO	43.17	269.6	7 49K		-2				9 38			
TUCSON	43.18	99.4	7 52		1				8 14		13 21	SCP
ALBUQUERQUE	43.72	92.9	7 56		0						13 23	SCP
WICHITA MTS.	48.42	86.7	8 33		0	15 28		5	8 53		13 42	SCP
TULSA	49.19	83.4	8 38K		-1	15 36		2			19 31	
FAYETTEVILLE	49.98	82.1	8 43K		-2							
SCHIFFERVILLE	51.22	47.5	8 54K		0							
SCORESBY SD.	51.88	15.4	8 59		0							
LONDON ONT.	52.33	66.7	9 2K		0							
ULAN-BATOR	52.54	302.1	9 3		-1							
OTTAWA	53.52	61.1	9 10K		-1							
SHAWINIGAN	54.18	58.3	9 15		-1							
BREBEUF	54.50	59.8	9 12K		-6				9 39			
SEPT ILES	54.61	51.4	9 18K		-1							
CUMBERLAND	55.21	76.2	9 21		-2	16 59		3			19 2	SCS
KEYO	55.34	355.5	9 23		-1							
MORGANTOWN	55.39	68.8	9 24K		-1							
PENNSYLVANIA	55.66	66.5	9 26		-1							
TROMSOE	55.70	358.9	9 26		-1				9 52			

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GEORGETOWN	57.46	67.5	9 15	-24							
KIRUNA	57.49	358.2	9 38K	-2				10 5			
PALISADES	57.58	63.7	9 39	-1	17 32	5		10 2			
SODANKYLA	57.74	355.3	9 40	-1							
COLUMBIA	58.91	74.2	9 48	-2							
HALIFAX	59.99	54.3	9 56	-1							
KAJAANI	60.97	354.3	10 3	-1							
UMEA	61.51	358.0	10 5	-2						39 15	PKPPKP
SKALSTUGAN	61.75	2.1	10 8	-1							
SVERDLOVSK	62.91	334.5	10 16	-1							
VIBORG	64.24	353.2	10 26K	1							
NURMIJARVI	64.69	355.5	10 27	-1				10 52		19 29	PS
UPPSALA	65.53	359.3	10 32	-2						39 6	PKPPKP
ABERDEEN	67.22	10.8								20 21	PS
BAGUIO CITY	68.57	268.1	10 50	-3							
ALMATA-2	69.28	316.9	10 57K	0							
DURHAM	69.64	11.0	10 40K	-19	19 27	-30					
ANDIJAN	73.37	318.9	11 25	4	20 47	8					
COLLMBERG	74.07	2.2	11 26A	1				13 54			
JENA	74.40	3.1	11 26	-1						13 19	
PRUHONICE	75.42	1.2	11 35	2						13 27	
FOLINIERE	75.67	11.4	11 35	0							
PORT MORESBY	76.16	230.3	11 36A	-1							
KASPERSKE H.	76.25	1.9	11 38	0							
STUTT GART	76.47	4.8	11 39	0							
KHOROG	76.53	317.8	11 41	2	21 18	4					
BRATISLAVA	77.24	359.5	11 43	0						12 12	
SAN JUAN	79.37	73.3	11 56	1							
ROSELEND	79.38	6.9	11 56	1						12 32	
DEHRA DUN	79.99	309.4	11 59	1							
ASHKABAD	80.71	327.6	12 5	3							
VANNOVSKAYA	80.79	327.8	12 4	1							
ISOLA	80.91	6.8	12 5	2						12 39	
KIROVOBAD	81.37	337.4	12 6	0							
NEW DELHI	81.86	309.1	12 7	-1							
ANTIGUA	82.73	70.7	12 14	1							
TOLEDO	83.93	15.7	12 21K	2	22 30	-1		12 45			
TEHERAN	84.79	332.0	12 25	2							
CARACAS	85.31	78.5	12 26K	0	22 41	-4					
CHARTERS TS.	86.06	226.3	12 28	-1						12 53	
TRINIDAD	88.29	74.0	12 40	0							
SHIRAZ	90.19	329.1	12 50	1	23 9	-21				16 51	PP
KARAPIRO	94.23	196.4	13 7	0							
LWIRO	126.48	344.5						19 19			
MIRNY	143.32	220.7	19 17	-4							
BULAWAYO	144.01	340.2	19 22	0						22 40	
SOUTH POLE	144.78	180.0	19 20	-4							
KIMBERLEY	153.11	343.5	19 15	-22							

MAY 8 10.4M 22.4M 10.5 EPICENTRE 36.47 141.19 DEPTH= 45.KM

A=-0.62811 B= 0.50517 C= 0.59184 D= 0.6267 E= 0.7792
G=-0.4612 H= 0.3709 K=-0.8061 HT= -0.4

DEPTH OF FOCUS= 0.002R

SE= 2.38

	DELTA DEG.	AZ. DEG.	P		O-C S	S			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
ONAHAMA	0.53	333.9	0	11K	-2	0	20	-2				
MITO	0.59	261.2	0	11K	-2	0	20	-3				
TYOSI	0.80	200.3	0	13A	-3	0	22	-5				
KAKIOKA	0.85	253.8	0	14K	-2	0	24	-4				
TUKUBASAN	0.92	254.4	0	15A	-2							
SHIRAKAWA	1.01	309.9	0	18K	0	0	32	0				
UTUNOMIYA	1.07	274.5	0	18K	-1	0	31	-2				
HONGO	1.38	237.0	0	22	-1	0	37	-4				
HUKUSIMA	1.40	335.9	0	24K	1	0	41	0				
TOKYO C.M.O.	1.41	236.3	0	23K	-1	0	37	-4				
KUMAGAYA	1.50	258.1	0	24K	-1	0	42	-2				
YOKOHAMA	1.63	230.7	0	26K	-1	0	44	-3				
MAEBASI	1.71	268.2	0	27K	-1	0	50	1				
TITIBU	1.78	254.6	0	28	-1	0	50	0				
SENDAI	1.81	352.7	0	30K	1	0	52	1				
YAMAGATA	1.90	339.6	0	31K	1	0	56	3				
NERA	1.90	216.0	0	32K	2	0	55	1				

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ISINOMAKI	1.96	3.0	0 31K	0	0 54	-1	
OIWAKE	2.14	267.0	0 33	-1	1 1	2	
HUNATU	2.19	244.4	0 34	0	0 58	-3	
AJIRO	2.22	230.8	0 35K	0	1 1	0	
NIIGATA	2.24	310.8	0 38K	3	1 7	5	
OSIMA	2.25	221.5	0 35A	0	1 1	-1	
MISIMA	2.27	234.1	0 34K	-2	0 54	-9	
KOHU	2.28	250.2	0 35K	-1	1 5	2	
MATUSIRO	2.40	272.5	0 37K	-1	1 8	2	
NAGANO	2.42	275.6	0 39K	1	1 11	5	
TAKADA	2.44	285.7	0 40K	2	1 8	1	
MATUMOTO	2.61	266.1	0 42K	2	1 12	1	
SAKATA	2.65	336.4	0 43K	2	1 19	7	
MIZUSAWA	2.65	359.0	0 42	1	1 23	11	
NAGATURO	2.67	226.3	0 42	1	1 19	6	
SHIZUOKA	2.72	237.4	0 44	2	1 14	0	
AIKAWA	2.81	304.2	0 44	1	1 27	11	
IIDA	2.89	251.8	0 45	1	1 22	4	
OMAESAKI	3.06	233.2	0 49	2	1 27	4	
TAKAYAMA	3.20	265.4	0 51	2	1 22	-4	
TOYAMA	3.22	275.2	0 51	2	1 36	9	
MORIOKA	3.22	359.7	0 49	0	1 29	2	
MIYAKO	3.23	10.7	0 49A	0	1 25	-2	
HAMAMATU	3.33	239.3	0 52	1	1 38	9	
AKITA	3.35	345.5	0 54A	3	1 44	14	
WAZIMA	3.56	286.0	0 55K	1	1 36	1	
HATIDYOZIMA	3.56	199.3	0 55	1	1 31	-4	
KANAZAWA	3.66	272.2	0 57A	2	1 45	7	
NAGOYA	3.67	250.5	0 56	1	1 42	4	
GIHU	3.74	254.7	0 59K	3	1 47	7	
HUKUI	4.03	265.5	1 2A	1	1 52	5	
HATINOHE	4.06	3.6	1 0	-1	1 56	8	
KAMEYAMA	4.17	248.5	1 4A	1	2 10	19	
HIKONE	4.19	254.8	1 3K	0	1 54	3	
TU	4.20	246.5	1 8	5	2 10	19	
AOMORI	4.35	355.9	1 7	2	2 1	6	
KYOTO	4.67	253.5	1 8	-2	2 14	11	
NARA	4.72	249.3	1 9	-1	2 9	4	
OWASE	4.73	241.0	1 12	2	2 15	10	
MAIZURU	4.81	259.7	1 13K	1	2 17	10	
ABUYAMA	4.85	252.4	1 13K	1			
OSAKA	4.96	250.2	1 20	6	2 8	-3	
KOBE	5.22	251.7	1 19	2			
TOYOOKA	5.25	261.6	1 19	1	2 24	6	
HAKODATE	5.34	356.5	1 19A	0	2 23	3	
SIOMISAKI	5.38	237.5	1 21	2	2 25	4	
WAKAYAMA	5.41	247.3	1 21	1	2 46	24	
SUMOTO	5.55	249.3	1 22	0	2 35	10	
MORI	5.64	355.3	1 23	0	2 40	12	
TOTTORI	5.77	262.5	1 24	-1	2 38	7	
URAKAWA	5.80	11.8	1 25K	0	2 34	2	
MURORAN	5.84	358.5	1 24	-2	2 36	3	
HIMEJI	5.88	252.4	1 25	-1	2 42	8	
TOKUSIMA	5.92	248.0	1 28K	1	3 6	32	
TORISIMA	6.02	187.4	1 27	-1	2 28	-9	
HIROO	6.03	15.2	1 27	-2	2 34	-3	
TOMAKOMAI	6.16	2.7	1 30	0	2 45	5	
OKAYAMA	6.19	255.3	1 30	-1	2 41	0	
TAKAMATU	6.22	251.9	1 30	-1	2 47	5	
SAIGO	6.35	269.9	1 33	0	2 49	4	
SUTTSU	6.36	353.6	1 35	2	3 0	14	
TSURUGISAN	6.44	248.1	1 35	1			
YONAGO	6.45	263.0	1 37	3	2 54	6	2 26
SAPPORO	6.59	1.0	1 34	-2	2 55	4	
MUROTO	6.60	242.9	1 34	-3	2 55	4	
OBIHIRO	6.62	12.9	1 33	-4	2 55	3	3 45
MATSUE	6.67	263.6	1 39	2	3 34	41	
KOTI	6.93	247.4	1 40	-1	2 58	-2	
KUSIRO	6.95	19.8	1 40	-2	2 54	-6	
ASAHIKAWA	7.35	6.7	1 45	-2	3 9	-1	
MATUYAMA	7.37	251.6	1 50	3	3 44	33	
HIROSIMA	7.45	256.2	1 48	0	3 46	33	
RUMOE	7.48	2.4	1 51	2			
HAMADA	7.59	260.7	1 51A	1	3 16	0	
NEMURO	7.63	24.9	1 48	-3	3 8	-9	
ASHIZURI	7.72	243.4	1 51	-1	3 34	15	
UWAZIMA	7.80	248.0	1 53	0	3 24	3	
ABASHIRI	7.90	16.4	1 54A	-1	3 55	31	3 20

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OOITA	8.51	250.4	2 5	2	4 16	37	
SIMONOSEKI	8.77	256.3	2 7	0	4 2	17	
WAKKANAI	8.95	2.2	2 11	2	3 59	9	
ASOSAN	9.06	249.8	2 11	0	4 16	23	
MIYAZAKI	9.28	243.5	2 14	0	4 19	21	
HUKUOKA	9.32	255.1	2 15	1	4 5	6	
SAGA	9.51	253.4	2 18K	1	4 58	54	
VLADIVOSTOK	9.75	315.7	2 21A	1			
NAGASAKI	10.04	251.5	2 24A	0	4 20	3	5 0
KAGOSIMA	10.09	244.1	2 27	2	4 30	12	
KURILSK	10.10	27.9	2 23	-2			
Y.-SAKHLINSK	10.60	5.7	2 28	-4	4 21	-9	
YAKUSIMA	10.76	239.1	2 31	-3			
CHANGCHUN	14.18	306.1	3 18A	-2	5 59	3	
ZO-SE	17.47	257.9	3 59A	-2			
NANKING	19.03	263.2	4 16A	-4	7 43	-4	
PEKING	19.95	287.9	4 26A	-5	8 5	-2	8 31 55
ANPU	20.26	241.7	4 30	-4			
TAIPEI	20.35	241.4	4 50	15	7 58	-17	
PETROPAVLOVK	20.58	31.0	4 39K	2	8 26	6	
HUALIEN	20.96	238.9	4 47	6			
TAMU	22.53	236.9	4 57	0			
HENGCHUN	22.87	236.5	5 3	3			
GUAM	23.14	171.2	5 4	1	9 13	6	
MAGADAN	23.92	12.1	5 11	1	9 25	5	
PAOTOW	24.65	289.1	5 13	-4			
SIAN	26.35	274.8	5 31A	-2			
YAKUTSK	26.56	347.9	5 35A	0			10 14 55
BAGUIO CITY	27.08	227.9	5 36	-4	10 5	-8	6 34 PP
HONG KONG	27.34	246.4	5 39A	-3	10 15	-2	8 35 PCP
CANTON	27.50	248.7	5 42A	-2	10 19	-1	
ULAN-BATOR	27.64	305.2	5 42	-3	10 20	-2	
MANILA	28.18	224.8	5 48	-2			11 58
LANCHOW	30.01	280.5	6 4A	-2	10 56	-4	7 5 PP
IRKUTSK	30.33	313.1	6 8A	-1	11 8	3	
CHENG TU	31.38	270.3	6 16A	-2	11 22	1	7 23 PP
KUNMING	34.70	261.9	6 46A	-1	12 9	-4	8 2 PP
ESEN BULAK	34.71	300.8	6 49	2	12 21	8	
TIKSI	35.81	353.4	6 56A	-1	12 20	-10	19 48
RABAU	41.74	163.4	7 45	-1			17 2
LHASA	42.20	275.7	7 50A	0	14 8	2	9 36 PP
SHILLONG	43.23	269.8	7 57A	-1	14 23	1	9 50 PCP
CHITTAGONG	44.79	265.8	8 21	10			
SEMIPALATNSK	45.14	307.9	8 12A	-2			
PORT MORESBY	45.97	171.8	8 28	8	14 56	-5	
CHATRA	46.46	274.0	8 24A	0	15 6	-2	
BOKARO	48.93	271.2	8 41A	-2	15 38	-5	15 53 PPS
HONIARA	48.95	155.1	8 32	-11			15 44
COLLEGE	49.66	32.0	8 49	0	15 56	3	9 10
PORT BLAIR	50.03	253.1	8 50	-2	16 1	3	10 33 PP
FRUNSE	50.46	298.9	8 54A	-1			16 11 PS
DEHRA DUN	52.25	282.7	9 6K	-2	16 27	-2	16 55
KHEYS	53.16	348.3	9 14A	-1			11 20 PP
DJAKARTA	53.25	224.5	9 17	1	16 43	1	17 13 PPS
LEMBANG	53.35	223.2	9 14A	-3	16 43	-1	17 53 SCS
TANGERANG	53.36	224.7	9 16A	-1	16 42	-2	9 26 11 15 PP
NEW DELHI	53.66	281.1	9 17A	-2	16 46	-2	11 30 PP
VISHAKHAPTNM	54.03	266.0	9 27	5	17 8	15	17 21 PS
HONOLULU	54.45	88.5	9 28	3	17 6	8	20 48 55
KHOROG	54.45	293.5	9 25A	0	17 0	2	
KIPAPA	54.45	88.3	9 32	7	17 6	8	
LAHORE	54.65	285.7	9 25	-1			
TASHKENT	54.70	298.7	9 26A	-1	17 3	1	
SVERDLOVSK	55.45	318.8	9 31K	-1			16 58
WARSAK DAM	55.78	289.6	9 34	0			
SEHORE	56.26	275.3	9 36	-2			
CHARTERS TS.	56.46	174.3	9 33	-6	17 25	0	
MOULD BAY	57.12	16.3	9 43K	-1	17 37	3	
HYDERABAD	58.09	268.7	9 50A	-1	17 50	3	21 32 55
MADRAS	59.13	263.3	9 58A	0	18 6	6	12 2 PP
ALERT	60.70	3.5	10 8A	-1	18 18	-3	
KOUMAC	60.78	155.1	10 34K	25			
POONA	61.21	272.5	10 10A	-2	18 0	-27	
COPPERMINE	61.64	24.8	10 14A	-1	18 33	1	
BOMBAY	61.85	273.4	10 15	-1	18 34	-1	12 49 PP
KODAIKANAL	62.89	262.5	10 19K	-4	18 52	4	20 43
APATITY	63.13	335.8	10 24A	-1	18 51	0	12 44 PP
NOUMEA	63.14	153.7	10 41K	16			
RESOLUTE	63.19	14.3	10 24A	-1			

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1963										PAGE 386	
KEVO	63.90	339.3	10 29A	-1	19 3	2				12 50	PP
YELLOWKNIFE	64.38	30.0	10 33A	0							
SODANKYLA	65.41	337.2	10 38A	-2							
TROMSOE	66.19	341.1	10 43	-2							
AFIAMALU	66.91	129.4	11 2A	13	19 40	3				23 12	SS
VICTORIA	66.94	46.0	10 49	0							
KIRUNA	66.98	339.2	10 49A	-1	19 42	4				24 17	SS
KAJAANI	67.02	334.0	10 49A	-1							
MOSCOW	67.60	323.5	10 52A	-2	19 45	-1				13 18	PP
PULKOVO	68.58	329.5	10 59	-1	19 58	1				13 30	PP
PENTICTON	68.70	43.9	11 1A	1							
UMEA	69.72	336.1	11 6A	-1	20 12	1	11 17				
TEHERAN	69.73	299.9	11 7	0	20 18	7					
NURMIJARVI	70.36	332.0	11 10A	-1	20 14	-4				13 45	PP
HELSINKI	70.46	331.6	11 10	-1							
RIVERVIEW	70.55	171.2	11 12	0	20 25	4				25 11	SS
TIFLIS	71.02	308.1	11 15	0	20 31	5				11 39	PCP
ADELAIDE	71.11	182.1	11 14A	-1	20 26	-1	11 23			25 6	SS
GORIS	71.21	305.5	11 16A	0	20 33	5					
SHASTA	71.58	52.8	11 18A	0							
CANBERRA	71.79	173.3	11 20K	1						11 38	*SP
MUNDARING	71.99	202.2	11 19	-1	20 36	-1					
SHIRAZ	72.09	293.9	11 21A	0	20 38	0				14 6	PP
PERTH	72.09	202.5	11 25	4	20 54	16					
MINERAL	72.28	52.7	11 24A	2							
HUNGRY HORSE	72.32	42.6	11 23	1							
SKALSTUGAN	72.37	338.6	11 22A	-1			11 35			13 58	PP
BLUE MTS.	72.44	47.0	11 24A	1	20 47	5	11 37			13 46	PP
CALISTOGA	72.57	54.7	11 25A	1							
SCORESBY SD.	72.66	354.1	11 25	1	20 51	6					
BERKELEY	73.20	55.2	11 30K	2	20 56	5					
UPPSALA	73.38	334.0	11 28A	-1	20 52	-1	11 40			14 12	PP
TOOLANGI	73.78	176.4	11 31	0						12 44	
LICK	73.90	55.4	11 34A	2							
BUTTE	74.49	44.0	11 32	-3	20 57	-8				11 51	
PRIEST	75.22	56.0	11 41K	2							
BOZEMAN	75.55	43.6	11 43	2							
SIMFEROPOL	75.60	315.5	11 40A	-1	21 20	2				11 56	PCP
KONGSBERG	76.21	337.0	11 45A	0	21 29	5	11 57			14 33	PP
EUREKA	76.34	50.9	11 47	1	21 31	5	12 2			14 46	PP
KARLSKRONA	76.82	332.1	11 46A	-2			11 58			14 32	PP
GOTEBORG	76.96	334.7	11 48	-1						14 14	
LWOW	77.73	323.9	11 54A	1	21 42	1					
PASADENA	78.04	56.4	11 57	2	21 47	3					
SALT LAKE C.	78.09	47.9	11 56	1							
COPENHAGEN	78.34	333.2	11 57A	0	21 52	5					
BOULDER CITY	79.15	53.3	12 4	3							
UZHGOROD	79.37	323.8	12 3	1						23 25	
FLAMING GRGE	79.44	46.6	12 14	11							
KRAKOW	79.47	325.9	12 2	-1	22 16	17				15 2	PP
CHORZOW	79.72	326.5	12 5	1						14 55	
UINTA BASIN	79.72	47.2	12 6A	2	22 6	4	12 18			38 36	PKPPKP
RACIBORZ	80.22	326.7	12 8	1						15 10	PP
KARAPIRO	80.56	153.1	12 10	1							
ISTANBUL UN.	80.98	314.8	12 12	1	22 22	7					
KSARA	81.33	305.7	12 14	1	22 19	0				15 18	PP
COLLMBERG	81.50	330.1	12 13A	-1	22 17	-4					
CHATEAU	81.69	153.7	12 15	0						15 32	
ABERDEEN	81.70	340.8			22 30	7				27 30	SS
HALLE	81.76	330.7	12 14	-1	22 24	1					
PRAGUE	81.85	328.6	12 16	0	22 28	4				15 24	PP
PRUHONICE	81.87	328.4	12 17	1	22 28	4					
BRATISLAVA	82.11	326.0	12 17A	0	22 37	10				15 27	PP
JENA	82.36	330.5	12 17	-1	22 26	-3				15 25	PP
VIENNA-H.	82.38	326.4	12 19A	1			12 31			15 26	PP
TONTO FOREST	82.49	52.8	12 21	2	22 36	5				15 30	PP
WITTEVEEN	82.68	334.1	12 20	0							
CHEB	82.69	329.6	12 21	1						13 46	
KASPERSKE H.	82.93	328.4	12 21	0						15 55	
BELGRADE	82.96	322.0	12 22K	1	22 42	7				12 35	PCP
SOFIA	82.98	319.0	12 22	1						24 30	
JERUSALEM	83.03	304.4	12 23A	1							
MUNSTER	83.03	333.2	12 22	0							
WELLINGTON	83.27	155.2	12 22	-1	22 38	0				28 3	SS
DURHAM	83.66	339.3	12 26	1	23 9	27				12 38	PCP
BENSBERG	84.02	332.8	12 26A	-1							
TUCSON	84.06	54.1	12 28	1							
ZAGREB	84.37	325.0	12 38	10	23 12	23					

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SKOPJE	84.49	319.4	12 22	-7	22 57	6					
HEIDELBERG	84.69	331.1	12 30	0							
LJUBLJANA	84.87	325.9	12 31A	0	22 59	5	12 44	15 50	PP		
STUTTGART	84.98	330.4	12 32A	1	23 0	5	12 44				
ALBUQUERQUE	85.08	49.7	12 34	2	22 54	-2	12 46				
KARLSRUHE	85.13	331.0	12 34	2				23 24			
UCCLE	85.17	334.2	12 34	2	23 4	7					
TUBINGEN	85.25	330.3	12 33	0							
TITOGRAD	85.28	320.9	12 38	5	23 6	8		15 54	PP		
ROXBURGH	85.44	160.6			23 0	0		28 32	SS		
TRIESTE	85.52	326.0	12 34A	0	22 58	-3		24 16			
EBINGEN	85.57	330.2	12 35	1							
DOURBES	85.66	333.7	12 36	1	23 3	1					
STRASBOURG	85.72	331.1	12 36A	1	23 0	-3	12 49	15 56	PP		
SCHEFFERVILLE	85.95	15.8	12 37A	1							
ATHENS	86.06	315.3	12 36A	-1				23 15			
KEW	86.15	337.0	12 37	0	23 3	-4	12 50	23 24	*SS		
FELDBERG	86.20	330.5	12 37	0							
WELSCHBRUCH	86.41	331.7	12 39	1			12 52				
PADOVA	86.54	326.9	12 45	6	23 0	-11		23 26	SCS		
PARIS	87.49	334.1	13 25	41				13 45			
BESANCON	87.51	331.3	12 44	0			12 57				
PAVIA	87.89	328.3	12 43	-3	23 30	7		24 54	PS		
PRATO	88.08	326.4	12 48	1	23 34	9					
FLORENCE X.	88.10	326.2	12 34	-13	22 56	-29					
AQUILA	88.22	324.1	12 50	3	23 32	6		16 18	PP		
ROSELEND	88.53	330.0	12 48	-1			14 2	16 5			
FOLINIÈRE	88.54	335.8	12 49	0							
GARCHY	88.58	333.0	12 50A	1			13 3	15 56	PP		
ROME	89.00	324.4	12 52A	1	23 45	11		16 26	PP		
ISOLA	89.59	328.9	12 54	0	23 47	8					
MONACO	89.80	328.4	12 54	-1				16 29			
CLERMONT-FD.	89.83	332.1	12 55	0							
WICHITA MTS.	89.92	45.4	12 56	1	23 24	-18		16 38	PP		
MESSINA	90.32	320.2	12 57	0	23 45	-1		16 34	PP		
SEPT ILES	90.33	17.3	12 58	1							
TULSA	90.63	42.9	12 59A	0	23 50	2		29 38	SS		
FAYETTEVILLE	91.36	41.8	13 2A	0	24 1	6		13 14	PCP		
SHAWINIGAN	91.90	22.7	13 5A	1							
OTTAWA	91.95	25.0	13 4	-1							
BREBEUF	92.56	23.7	13 8	1	24 8	3		30 26	SS		
CLEVELAND	93.12	30.7			24 16	6					
BAGNERES	93.25	332.5	13 13	2				16 50	PP		
MORGANTOWN	95.33	30.7	13 22K	2							
CUMBERLAND	96.15	36.7	13 24	0	24 0	5		17 23	PP		
PALISADES	96.44	26.0	13 25	0	24 1	4					
PHILADELPHIA	96.92	27.3			24 38	39					
GEORGETOWN	97.11	29.1	13 29	1				17 26	PP		
TOLEDO	97.56	333.7	13 31A	1	24 7	4		17 18	PP		
COLUMBIA	99.58	34.5			24 18	5					
AVERROES	104.65	333.2						18 21	PP		
LWIRO	109.26	281.8	14 26	777	25 6	9		18 54	PP		
CHILEKA	112.07	266.5	18 27	-3							
BROKEN HILL	116.64	271.4	18 41	2				19 46			
BULAWAYO	119.56	265.9	18 45	0							
CHANGALANE	119.76	257.9	18 46	1				31 32	SPP		
M. BOUR	125.38	333.8						20 45	PP		
SOUTH POLE	126.29	180.0	18 57	-1							
CARACAS	126.30	35.1	19 16	18				20 56	PP		
CHINCHINA	126.30	47.8	18 56	-2							
KIMBERLEY	126.73	258.9	19 UK	2							
BYRD STATION	127.26	167.5	19 1	2							
BOGOTA	127.50	46.5	19 2	2				22 22	PKS		
HERMANUS	133.29	254.5						22 47			
N-LAZARVSKYA	136.70	201.9	19 17	0				23 5	PKS		
HUANCAYO	139.15	62.9	19 20	-2							
LA PAZ	147.27	60.3	19 40	4			20 U				
ANTOFAGASTA	149.97	73.8	19 48	8				20 36	PKS		
SANTA LUCIA	153.80	92.8	20 6	20							

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CAPE HALLETT	82.68	167.5	12 28	8		
COLLEGE	83.58	25.4	12 22	-3		
MOSCOW	84.48	325.4	12 27	-2		
APATITY	85.90	337.4	12 46A	10		
KSARA	86.90	303.5	12 39	-2		
JERUSALEM	87.62	301.5	12 42	-3		
SODANKYLA	88.52	337.5	12 46	-3		
KAJAANI	88.66	334.2	12 46	-4		
VIBORG	88.69	330.8	12 53	3		
MOULD BAY	90.51	12.5	12 55	-3		
TROMSOE	90.72	340.4	12 59	0		
KIRUNA	90.72	338.5	13 7A	8		
NURMIJARVI	90.74	330.9	12 54	-5	23 38 -12	30 34 SS
UMEA	91.93	334.7	13 14	9		
UPPSALA	94.30	331.2	13 26	10		
SKALSTUGAN	95.34	335.7	13 30	10		
SOUTH POLE	95.41	180.0	13 17	-4		
COPPERMINE	95.56	19.5	13 18A	-3		
RESOLUTE	96.31	10.0	13 23A	-2		
LWIRO	97.13	268.4				17 31 PP
YELLOWKNIFE	98.34	24.1	13 33	-1		
PRUHONICE	99.24	322.4	13 53	15		17 44
BYRD STATION	99.52	170.8	13 51	12		17 50
COLLMBERG	99.69	324.0	13 52	12		17 28
KASPERSCHE H.	100.12	321.8	13 55	13		18 5
JENA	100.65	324.0	13 54	10		
BLUE MTS.	104.74	41.0	14 1	-2		18 20 PP
HUNGRY HORSE	105.30	36.7	14 5	777		18 25 PP
ISOLA	106.18	318.9				18 34 PP
EUREKA	107.77	45.7	18 15	777		
UINTA BASIN	111.85	42.6	14 40	-230	18 29	19 11 PP
TONTO FOREST	113.31	49.1	14 56	-217		19 24 PP
TUCSON	114.48	51.0				19 32 PP
TOLEDO	115.48	319.1				19 37 PP
ALBUQUERQUE	116.57	46.5	18 40	1	18 59	
WICHITA MTS.	122.21	42.9	18 48	-2		20 26 PP
SHAWINIGAN	125.68	15.7	18 54	-3		
BREBEUF	126.40	16.9	18 40	-18		
MORGANTOWN	129.26	25.6	16 20A	-164		
CUMBERLAND	129.68	33.4	19 4	0	19 19	21 15 PP
BLACKSBURG	131.04	27.8	19 7	0		
SANTIAGO MA.	141.16	60.7	19 40	14		
SANTA LUCIA	148.24	153.4	19 40	2		
ANTOFAGASTA	156.08	141.0	20 16	27		
NANA	156.75	107.7	20 5	15		
CARACAS	159.74	38.6	20 23	29		
AREQUIPA	159.86	124.3	20 10	16		
LA PAZ	162.51	130.0	19 58	2		

MAY 9 15.H 4.M 1.S EPICENTRE 12.54 -86.21 DEPTH= 213.KM

A= 0.06446 B=-0.97431 C= 0.21580 D=-0.9978 E=-0.0660
G= 0.0142 H=-0.2153 K=-0.9764 HT= 6.2

DEPTH OF FOCUS= 0.028R

SE= 3.42

	DELTA DEG.	AZ. DEG.	P		O-C S	S O-C			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
SANTIAGO MA.	2.39	293.4	0	13	-31	0	40	-38				
SAN SALVADOR	3.12	291.5	0	22	-30	0	56	-36				
COMITAN	6.81	303.4				3	7	12			2	23
BALBOA HTS.	7.45	117.9	1	35	-11							
MERIDA	8.97	339.1	2	11	5						4	20
HOPE	10.62	58.1	2	27	0						4	25
OAXACA	11.13	294.8				4	15	-21			5	7
VERA CRUZ	11.61	306.0				4	59	12			6	11
CHINCHINA	12.89	124.8	2	54	-2	5	30	15				
FUQUENE	14.19	118.6	3	9	-3							
TACUBAYA	14.22	300.3	3	21	8						7	1
BOGOTA	14.35	122.2	3	14	0	6	1	13				
CARACAS	19.01	94.1	4	8	1	7	49	22				
HOUSTON	19.10	334.9	4	8	0							
SAN JUAN	20.21	70.8	4	24	5	8	13	24				
COLUMBIA	21.87	11.6	4	36	0							

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CUMBERLAND	22.95	1.3	4 46	0	9 2	25	
ST. CLAUDE	24.00	78.8	5 2	6	9 38	43	
CHAPEL HILL	24.16	14.3	5 0	3			
TRINIDAD	24.38	91.8	5 6	6			
FAYETTEVILLE	24.52	344.3	4 58	-3	9 42	39	
WICHITA MTS.	24.77	335.1	4 59	-4	9 25	18	
TULSA	24.82	341.2	5 0A	-4	9 31	23	10 19
BLACKSBURG	25.11	11.0	5 7	1			
ST. LOUIS 1	26.23	352.9	5 18	1	9 49	18	
HUANCAYO	26.71	155.7	5 25	4			
LAWRENCE	27.51	344.6	5 25	-3			
MORGANTOWN	27.54	10.5	5 31	2			
ALBUQUERQUE	28.88	323.9	5 35	-6			
TUCSON	29.91	314.9	5 48	-2			
PALISADES	30.34	18.6	6 40	47	11 0	23	
LONDON ONT.	30.70	7.2	5 56	0			
TONTO FOREST	31.42	317.7	6 0	-3			6 43
GOLDEN	31.91	331.4	6 4	-3	11 23	22	
LARAMIE	33.29	332.9	6 17	-2	11 2	-21	
LA PAZ	33.95	147.8	6 27	3	11 33	0	
UINTA BASIN	34.46	327.6	6 27K	-2	11 57	16	
BREBEUF	34.55	15.7	6 31K	1			
BOULDER CITY	34.77	317.1	6 31	0			6 56
FLAMING GRGE	34.82	328.5	6 30	-2			6 50
SHAWINIGAN	35.75	15.9	6 40	0			
EUREKA	37.56	320.9	6 53	-2			8 18 PP
BOZEMAN	39.18	332.2	7 8	0			7 34
LICK	40.14	314.2	7 10A	-6			
BUTTE	40.14	331.3	7 14	-2			8 50 PP
SEPT ILES	40.92	19.4	7 27	4			
BLUE MTS.	41.72	326.5	7 26	-3	13 42	13	9 8 PP
HUNGRY HORSE	42.53	332.6	7 34	-2			12 19
SPOKANE	43.65	329.6	7 42	-3			12 25 PP
SCHEFFERVILLE	44.85	15.8	7 54	0			
PENTICTON	45.85	329.9	8 1	-1			
EDMONTON	46.11	337.7	8 3	-1			
YELLOWKNIFE	53.84	344.1	9 3K	1			
COPPERMINE	58.39	347.6	9 34A	-1			
RESOLUTE	62.31	357.4	10 0	-1			
MOULD BAY	66.08	351.8	10 25	-1			
COLLEGE	66.83	335.9	10 29	-1			
ALERT	70.63	3.2	10 55	1			
TOLEDO	76.09	51.7	11 30	4	21 17	26	14 13 PP
FOLINIERE	77.89	42.4	11 39	4			
BENSBERG	82.49	39.6					16 48
SKALSTUGAN	82.62	26.5	12 3	3			
KIRUNA	84.64	21.4	12 15	5			
UMEA	85.94	25.2	12 20	3			
COLLMBERG	86.00	38.4	12 22	5			15 1
KASPERSKE H.	86.93	40.4	12 26	5			
SODANKYLA	87.00	20.9	12 25	3			
NURMIJARVI	89.12	27.5	12 36	4	23 25	25	29 11 SS
KRAKOW	90.58	38.3					13 41
TOOLANGI	127.72	232.0	18 49	9			
CHARTERS TS.	129.25	254.3	18 49	6			

MAY 10 4.M 28.M 39.S EPICENTRE -20.14 168.25 DEPTH= 12.KM

A=-0.91989 B= 0.19138 C=-0.34231 D=0.2037 E= 0.9790
G= 0.3351 H=-0.0697 K=-0.9396 HT= 4.6

SE= 1.93

	DELTA DEG.	AZ. DEG.	P		O-C S	S O-C			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
PORT VILA	2.40	1.7	0	39A	-1	1	7	-3				
NOUMEA	2.72	217.7	0	43A	-2	1	15	-3				
KOUMAC	3.75	262.9	0	57K	-2							
HONIARA	13.33	321.9	3	12	0							
BRISBANE	15.88	240.1	3	49	4							
KARAPIRO	18.82	161.9	4	22	0							
CHATEAU	20.01	163.2	4	37	1							
AFIAMALU	20.07	75.1	4	36K	0	8	27	11				
RIVERVIEW	20.40	224.6	4	41A	1	8	31	8				
CHARTERS TS.	20.65	266.3	4	43	1	8	36	8				
RABAU	22.28	313.2	5	3	4							

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CAMBERRA	22.72	224.3	5	5K	2			5	17	7	22
PORT MORESBY	23.00	294.6	5	6	0	9	42	30			
TOOLANGI	26.32	223.9	5	38K	0				5	49	6 16 PP
ADELAIDE	29.92	234.2	6	10A	0				6	18	14 9
DARWIN	36.67	276.3	7	8	-1						
MUNDARING	47.81	244.7	8	38	-2				8	49	
CAPE HALLETT	52.19	179.2	9	12	-1						
SCOTT BASE	57.76	180.4	9	52	-2						
MANILA	57.85	303.0	10	3	9						
BAGUIO CITY	59.26	304.4	10	1	-3						
LEMBANG	60.13	273.7	10	8K	-2						
TANGERANG	61.27	274.0	10	16K	-2						
MATUSIRO	63.12	333.1	10	28K	-2	18	34	-25			
MIRNY	65.83	205.1	10	47	-1						
BYRD STATION	67.23	169.6	10	55	-2						
SOUTH POLE	69.98	180.0	11	12	-2						
MEDAN	72.17	280.7	10	51	-36						
CHANGCHUN	74.83	329.3	11	41K	-2						
PEKING	77.05	321.6	11	54	-1						
KUNMING	77.96	302.5	12	1K	1						
LANCHOW	82.63	312.5	12	25K	0						
SHILLONG	86.97	298.5	12	47K	0						
BERKELEY	87.06	47.9	12	48A	1						
CALISTOGA	87.21	47.1	12	48A	0						
LICK	87.25	48.6	12	48K	0						
PRIEST	87.39	50.0	12	49A	0						
SHASTA	88.31	45.4	12	53A	0						
PASADENA	88.34	52.7	12	53	0				13	5	
MINERAL	88.68	46.0	12	55A	0						
LHASA	89.27	301.9	12	59	1						
COLLEGE	91.18	17.2	13	4	-3				13	16	
BOULDER CITY	91.59	52.2	13	10	2				13	22	
EUREKA	92.19	48.7	13	11	0						
TUCSON	93.22	56.9	13	16	0				13	28	
BLUE MTS.	93.52	43.4	13	17	0						30 24 PKKP
TONTO FOREST	93.63	54.9	13	18	0						14 16
PENTICTON	94.03	38.6	13	19	-1						
HUNGRY HORSE	96.99	41.0	13	26	-7						
UINTA BASIN	97.06	49.8	13	33	-1						30 14 PKKP
ALBUQUERQUE	97.58	55.7	13	36	0						14 13
YELLOWKNIFE	101.89	27.6	14	1	6						
COPPERMINE	103.56	22.3	14	2K	-1						
WICHITA MTS.	103.70	57.8	14	15	12						29 55 PKKP
MOULD BAY	105.33	13.7	14	11	777						18 22
RESOLUTE	111.09	16.4	18	32	-2						
CUMBERLAND	114.32	59.2									29 27 PKKP
SHIRAZ	121.57	293.0	18	54	0						
BULAWAYO	123.75	227.0	18	59K	1						
KEVO	125.16	344.5	19	0	-1						
SODANKYLA	126.92	342.5	19	3	-1						
TROMSOE	127.13	347.1	19	4	-1						
BROKEN HILL	127.60	232.1	19	8K	2						
KIRUNA	128.21	345.1	19	6	-1						
KAJAANI	128.78	339.0	19	8	0						
UMEA	131.32	341.8	19	12A	-1						
NURMIJARVI	132.19	336.6	19	14	-1						
SKALSTUGAN	133.63	345.4	19	17	0						
LWIRO	134.43	245.5	19	21K	2						
COLLMBERG	143.33	333.9	19	34A	-1						19 38 PKP2
HALLE	143.61	334.9	19	33	-2				19	50	
BRATISLAVA	143.63	327.0	19	34	-1						
PRUHONICE	143.63	331.2	19	33	-2						21 9
BELGRADE	143.74	320.1	19	35	0						20 44
VIENNA-H.	143.95	327.6	19	33	-3						
JENA	144.20	334.6	19	34	-2						20 45
ATHENS	144.54	307.8	19	36A	-1						
KASPERSKE H.	144.68	330.9	19	36	-1						20 42
MUNSTER	144.82	339.1	19	49	12						
ZAGREB	145.72	324.7	19	54	15						
BENSBERG	145.82	338.6	19	40	1				19	54	
LJUBLJANA	146.35	326.2	19	41	1						20 38
STUTTGART	146.81	334.3	19	43	2						
KARLSRUHE	146.97	335.4	19	46	5						
TRIESTE	147.02	326.3	19	44	3						
DOURBES	147.40	340.3	19	44	2						
STRASBOURG	147.57	335.6	19	47A	5						20 35
PARIS	149.19	341.5	19	50	5						
BESANCON	149.35	336.0	19	49	4						
FOLINIERE	150.03	345.0	19	51	5						

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ROSELEND	150.36	333.5	19 53	7						20 37
GARCHY	150.36	339.4	19 43K	-3						20 7 PKP2
ISOLA	151.36	331.1	19 55	7						
CLERMONT-FD.	151.66	337.8	20 7	19						20 45

MAY 10 22.H 22.M 44.S EPICENTRE -2.12 -77.51 DEPTH= 25.KM

A= 0.21607 B=-0.97569 C=-0.03672 D=-0.9763 E=-0.2162
G=-0.0079 H= 0.0359 K=-0.9993 MT= 7.2

SE= 3.06

	DELTA DEG.	AZ. DEG.	P		O-C S	S			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
CHINCHINA	7.29	15.0	1	44A	-3	3	11	1	1	49		
BOGOTA	7.53	27.2	1	51A	1	3	16	0				
FUQUENE	8.43	26.6	2	1	-2							
HUANCAYO	10.10	167.7	2	20	-6							
BALBOA HTS.	11.19	349.5	2	40	-1	4	42	-5				
AREQUIPA	15.43	157.8	3	33	-4							
CARACAS	16.37	39.8	3	48K	-1	7	9	19				
LA PAZ	17.01	147.7	3	51	-6	6	52	-13				
SANTIAGO MA.	18.94	325.3	4	21	0							
SAN SALVADOR	19.51	323.9	4	32	4							
HOPE	20.01	2.1	4	36	3							
TRINIDAD	20.45	51.4	4	37A	-1	8	28	8				
ANTOFAGASTA	22.53	162.8	4	58	-1	8	55	-5				
SAN JUAN	23.25	28.4	5	4	-2	9	18	5				
FORT FRANCE	23.30	43.6	5	4	-2	9	29	16				
ST. CLAUDE	23.86	40.4	5	11	-1	9	35	12				
ANTIGUA	24.60	38.3	5	22	3							
MERIDA	25.81	333.2	5	28	-2	10	1	5			6	31
OAXACA	26.88	315.7									16	28
VERA CRUZ	27.99	320.0	6	0	10	10	56	24			11	48
TACUBAYA	30.19	316.1	6	8	-2	11	26	19			6	49
SANTA LUCIA	31.82	169.1	6	22A	-2						9	35
MANZANILLO	33.73	309.8									9	52
GUADALAJARA	33.95	313.1	6	44	1	12	24	19			18	56
HOUSTON	35.98	333.0	7	1	1							
COLUMBIA	36.08	355.0	7	0	-1	12	42	4				
MAZATLAN	37.74	313.4									15	16
CUMBERLAND	38.26	349.4	7	17A	-2	13	15	3			8	51 PP
BLACKSBURG	39.22	356.3	7	27	0							
DALLAS	39.26	334.0	7	25	-3							
GEORGETOWN	40.82	0.5	7	40	-1	13	48	-2				
WASHINGTON	40.82	0.5	7	45	4	13	44	-6				
CHIHUAHUA	41.06	320.2									9	52
FAYETTEVILLE	41.08	339.3	7	31	-12	13	47	-7			7	39 PCP
TULSA	41.51	337.4	7	44A	-2	14	1	1			11	16
MORGANTOWN	41.61	357.2	7	49K	2	14	6	4				
WICHITA MTS.	41.64	333.5	7	45	-2						40	14 PKPPKP
PHILADELPHIA	41.92	2.7	7	52	2	14	1	-5				
ST. LOUIS 1	42.22	345.1	7	49	-3	14	6	-5				
PENNSYLVANIA	42.71	359.6	7	57	1							
FORDHAM	42.89	4.1	7	56	-2	13	57	-24				
PALISADES	43.05	4.0	7	58	-1	14	28	5	8	25		
CLEVELAND	43.55	355.6	8	7K	4						14	33
LAWRENCE	44.03	340.0	8	3	-4							
LONDON ONT.	45.07	356.2	8	15	0							
SCARBOROUGH	45.66	358.3	8	24	4	15	56	55				
TUCSON	46.52	320.1	8	25	-2	15	23	10				
OTTAWA	47.34	1.7	8	31	-2							
BREBEUF	47.54	3.7	8	33K	-2	15	0	-27			10	20 PP
TONTO FOREST	48.14	321.8	8	38	-1						40	4 PKPPKP
HALIFAX	48.16	13.3	9	13	33							
SHAWINIGAN	48.64	4.4	8	44	1							
GOLDEN	48.83	331.4	8	43	-2	16	8	22				
LARAMIE	50.20	332.5	8	54	-1							
UINTA BASIN	51.40	328.7	9	3A	-1	16	27	6			10	55 PP
BOULDER CITY	51.45	321.0	9	4	-1							
PASADENA	52.54	317.1	9	10	-3	16	41	4				
SEPT ILES	52.99	8.9	9	20	4							
EUREKA	54.38	323.7	9	25	-2	16	44	-18			18	59 SCS
PRIEST	55.35	317.7	9	31A	-3							
BOZEMAN	56.09	332.2	9	37	-2	17	23	-2				
LICK	56.66	318.4	9	42A	-1							
BUTTE	57.06	331.5	9	44	-2	17	41	4			10	32 PCP

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BERKELEY	57.37	318.6	9 46K	-2	17 40	-1				21 26 SS
SCHEFFERVILLE	57.43	7.3	9 47	-2						
CALISTOGA	58.00	319.2	9 50A	-3						
MINERAL	58.34	321.3	9 52A	-3						
BLUE MTS.	58.64	327.8	9 54A	-3	18 1	3				11 50 PP
UKIAH	58.69	319.3	9 57	0						
HUNGRY HORSE	59.44	332.6	9 59	-4	18 5	-4				
SPOKANE	60.59	330.2	10 8	-2					10 42	
PONTA DELGDA	62.14	44.8	10 18	-3	18 45	2				
M. BOUR	62.15	72.6	10 20	-1	18 46	3				
PENTICTON	62.78	330.4	10 23A	-2						
EDMONTON	62.88	336.8	10 22A	-4						
ARGENTINE I.	63.72	173.8								20 28
VICTORIA	64.22	328.0	10 27A	-6						
YELLOWKNIFE	70.27	342.7	11 9A	-4						
COPPERMINE	74.53	346.1	11 34A	-4						
LISBON	74.61	49.0	11 35K	-3						
AVERROES	74.64	54.7	11 38K	0	20 16	-56				21 32
RESOLUTE	77.40	355.3	11 50A	-4						
BENI ABBES	78.41	58.8	11 58	-2	21 56	3				15 54 PP
GRANADA	78.52	51.5	12 7A	7	22 6	12				22 47 PS
TOLEDO	78.73	48.8	12 2K	1	21 59	3				15 16 PP
ALMERIA	79.34	52.1	12 3A	-2	22 24	22				12 46
SCORESBY SD.	81.06	16.3	12 14	0	22 22	2				
ALICANTE	81.16	50.8	12 14A	0	22 23	2				12 16 PCP
MOULD BAY	81.79	350.7	12 15A	-3						
KIPAPA	81.94	291.8	12 23	4	22 40	11				
HONOLULU	82.00	291.7	12 22	3	22 36	6				
JERSEY	82.10	39.9			22 31	0				
TORTOSA	82.32	48.5	12 20	0	22 35	2				
BAGNERES	82.44	46.2	12 19	-2						12 48
FOLINIERE	83.06	40.5	12 22	-2						
DURHAM	83.64	34.4	12 24	-3	22 47	0				12 39 PCP
COLLEGE	83.65	336.1	12 25	-2						15 32 PP
KEW	83.69	37.9	12 26	-1	22 48	1				
ABERDEEN	83.90	32.0			22 51	2				15 41 PP
ALERT	84.80	2.0	12 31A	-2						
CLERMONT-FD.	84.97	43.9	12 33	-1	23 4	4				
PARIS	85.00	40.8	12 33	-1	23 1	1				
GARCHY	85.16	42.4	12 32	-3						15 55 PP
DOURBES	86.55	39.7	12 40	-2	23 3	-12				
BESANCON	87.12	42.7	12 44	0						
DE BILT	87.16	37.8	12 50K	5	23 24	3				
ROSELEND	87.40	44.3	12 44	-2						13 29
ISOLA	87.56	45.8	12 47	0	23 29	4				
MONACO	87.79	46.3	12 50	2						
N-LAZARVSKYA	87.80	160.6	12 46A	-2	23 28	1				24 36 PS
SOUTH POLE	87.90	180.0	12 46	-2						
NORD	87.98	7.4	12 47K	-2						
WITTEVEEN	88.15	37.2	12 49	0						
BENSBERG	88.27	39.0	12 48	-2						16 23 PP
STRASBOURG	88.45	41.5	12 49	-2	23 20	-13				16 1 PP
MUNSTER	88.65	38.1	12 51	-1						
KARLSRUHE	88.90	41.1	12 53	0	23 37	0				
HEIDELBERG	89.14	40.7	12 54	0						
PAVIA	89.14	44.9			23 56	17				32 44
EBINGEN	89.21	41.9	12 52	-2						
STUTTGART	89.46	41.3	12 54K	-2	23 44	2				29 40 SS
RAVENSBURG	89.62	42.3	12 56	0						
KONGSBERG	90.36	30.5	12 59	-1	23 34	-17				16 32 PP
PRATO	90.45	46.3	13 8	8	23 58	7				
FLORENCE X.	90.56	46.4	13 10	9	24 0	8				17 10 PP
JENA	91.06	39.3	13 0	-3	23 34	-23				30 6 SS
PADOVA	91.06	44.8	13 6	3	24 1	4				23 31 SKS
HALLE	91.31	38.7	13 3	-1	24 5	6				
ROME	91.39	48.3	13 10K	5	24 3	3				17 11 PP
GOTEBORG	91.50	32.5	13 3	-2						
CHEB	91.54	40.1	13 6	1						14 6
COPENHAGEN	91.71	34.5	13 10	4	24 6	3				
SKALSTUGAN	91.79	26.6	13 11A	5						
COLLMBERG	91.96	38.9	13 6K	-1	23 52	-13				
AQUILA	92.09	47.9	13 6	-2	24 6	0				16 54 PP
KASPERSKE H.	92.30	41.1	13 7K	-2						15 57
TRIESTE	92.39	44.6	13 10	1	24 10	2				16 47 PP
PRAGUE	92.86	40.2	13 14	3	23 45	-28				29 31 SS
LJUBLJANA	92.93	44.2	13 11K	-1						16 50 PP
PRUHONICE	92.94	40.2	13 11	-1	23 44	-29				
SCOTT BASE	93.21	191.0	13 12	-1						

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BOKARO	153.04	35.5	19 58	11		
KODAIKANAL	153.88	71.0			23 47	
SHILLONG	154.54	22.8	19 49	0		
MADRAS	155.42	62.8	20 23	33	27 51	PPP
HONG KONG	156.95	331.4			25 54	PP
BAGUIO CITY	157.22	309.7	19 58	5		
MANILA	157.81	305.2	20 8	14		
PORT BLAIR	166.44	45.1			21 12	
LEMBANG	169.74	209.9	20 7K	3	26 59	-5
TANGERANG	170.79	206.7	20 7K	2	25 12	PP
					21 17	PKP2
MEDAN	175.93	69.0	20 10	3		

MAY 11 4.4M 44.4M 27.5 EPICENTRE -15.84-176.64 DEPTH= 489.KM

A=-0.96087 B=-0.05636 C=-0.27119 D=-0.0586 E= 0.9983
G= 0.2707 H= 0.0159 K=-0.9625 HT= 5.6

DEPTH OF FOCUS= 0.072R

SE= 2.61

	DELTA DEG.	AZ. DEG.	P		O-C S	S O-C			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
AFIAMALU	5.08	68.5	1	28K	0	2	7	-31				
PORT VILA	14.52	260.4	2	57A	-9	5	9	-27				
NOUMEA	17.22	245.5	3	23	-10						4	35
KARAPIRO	23.06	195.9	4	24	-4							
CHATEAU	24.26	194.9	4	32	-7							
CHARTERS TS.	35.49	257.5	6	16	0						8	35
PORT MORESBY	35.87	275.9	6	22K	3							
CANBERRA	36.30	231.2	6	23	0				7	42		
TOOLANGI	39.79	229.7	6	51	0				8	14		
PARAISO	72.91	43.3	10	44	4							
BERKELEY	73.87	42.0	10	46	0							
PRIEST	73.94	44.3	10	45K	-1							
LICK	73.97	42.8	10	46K	0							
CALISTOGA	74.11	41.2	10	46K	-1							
SOUTH POLE	74.26	180.0	10	48	0							
PASADENA	74.58	47.2	10	50	0							
SHASTA	75.44	39.6	10	54	-1							
MINERAL	75.72	40.3	10	57A	1							
BOULDER CITY	77.87	47.0	11	8	0							
EUREKA	78.86	43.4	11	13	0							
TUCSON	79.04	51.9	11	14	0				12	42	11	21
BLUE MTS.	80.87	38.3	11	23K	-1				12	50		
PENTICTON	82.08	33.7	11	30K	0							
COLLEGE	83.40	12.0	11	36	0				13	8		
UINTA BASIN	83.58	45.1	11	37	0				13	11		
HUNGRY HORSE	84.65	36.5	11	41	-1							
BOZEMAN	85.09	39.9	11	46	1							
MAWSON	86.37	199.3	11	51K	0							
EDMONTON	87.58	32.4	11	56	0							
WICHITA MTS.	89.41	53.7	12	4	-1				13	35	29	41
												PKKP
TULSA	91.96	53.3	12	17K	0							
COPPERMINE	94.41	19.6	12	28A	0							
MOULD BAY	97.98	11.7	12	43	-1							
CUMBERLAND	99.89	55.8	12	53	0							
KEVO	124.13	350.3	18	4	1							
SODANKYLA	126.32	349.1	18	8	1							
KIRUNA	126.88	352.0	18	9	1							
KAJAANI	128.98	346.5	18	14	2							
UMEA	130.66	350.2	18	16	1						21	7
NURMIJARVI	132.79	345.8	18	20	1							SKP
BROKEN HILL	140.99	220.8	18	32	-3							
HALLE	143.76	350.9	19	40	60				20	17		
COLLMBERG	143.79	349.7	18	40	0						21	47
RACIBORZ	143.79	343.8	18	40	0							SKP
KEW	144.33	3.9	18	43	3							
JENA	144.37	351.1	18	40	0				20	16		
BENSBERG	144.83	355.8	18	44K	3							
KASPERSKE H.	145.76	348.0	18	45	2						20	23
DOURBES	145.81	358.6	18	49	6							
VIENNA-H.	145.95	344.4	18	48	5							
STUTTGAERT	146.80	352.8	19	47	63							
JERUSALEM	146.97	304.4	18	51	7							
FOLINIERE	147.01	4.7	18	49	4							
PARIS	147.11	1.1	18	51	6							

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STRASBOURG	147.15	354.6				18 51	PKP2
WELSCHBRUCH	147.42	356.3	18 51	6			
BELGRADE	147.70	337.0	18 53	8		22 44	PP
LJUBLJANA	148.46	345.1	18 50	4		18 54	PKP2
BESANCON	148.60	356.6				18 54	PKP2
GARCHY	148.65	0.4	18 54	7		19 9	PKP2
TRIESTE	149.02	345.8				18 56	PKP2
LWIRO	149.09	236.7	18 57K	10			
ROSELEND	150.11	355.4				18 58	PKP2
ISOLA	151.57	354.4	19 2	11		19 29	

MAY 11 17.H 49.M 43.S EPICENTRE 24.17 122.43 DEPTH= 37.KM

A=-0.48982 B= 0.77095 C= 0.40708 D= 0.8441 E= 0.5363
G=-0.2183 H= 0.3436 K=-0.9134 HT= 3.6

DEPTH OF FOCUS= 0.001R

SE= 1.88

	DELTA DEG.	AZ. DEG.	P		O-C S	S		O-C S	*PP		SUPP.	
			M	S		M	S		M	S	M	S
HWALIEN	0.76	255.4	0	14	-1	0	21	-5				
TAIPEI	1.19	316.3	0	23	3	0	40	4				
HSINKONG	1.44	222.7	0	23	-1	0	37	-5				
HSINCHU	1.47	295.7	0	55	31	1	28	46				
YUSHAN	1.52	243.6	0	24	-1	0	38	-6				
TAICHUNG	1.60	269.8	0	26	0	0	44	-2				
ALISHAN	1.62	247.0	1	11	45	1	27	41				
TAITUNG	1.83	220.1	0	28	-1	0	47	-5				
TAMU	2.29	218.2	0	38	2	1	3	0				
TAINAN	2.34	240.7	0	39	3	1	17	13				
KAOSIUNG	2.51	232.6	0	52	13	1	22	13				
HENGCHUN	2.65	216.0	0	42	1	1	33	21				
PENGHU	2.71	257.1	0	43	1	1	9	-5				
ZO-SE	7.00	351.2	1	42	0							
HONG KONG	7.82	257.9	1	50	-4	2	54	-28				
BAGUIO CITY	7.90	193.0	1	51	-4							
CANTON	8.40	264.5	1	59	-3							
NANKING	8.50	338.5	2	1	-2	3	35	-4				
MANILA	9.53	187.9	2	12	-5	4	58	54				
SIAN	15.48	313.5	3	38	1							
PEKING	16.67	343.0	3	54A	2	7	2	7				
CHENG TU	17.58	295.6	4	2A	-1	7	23	7				
KUNMING	17.93	277.1	4	8	0	7	28	4				
MATUSIRO	18.34	44.1	4	12	-1	7	35	2				
PAOTOW	19.40	330.5	4	26A	1	8	0	4				
CHANGCHUN	19.76	6.2	4	30	1	8	10	6				
LANCHOW	19.94	310.7	4	32A	1	8	13	5				
ULAN-BATOR	26.72	336.4	5	36	-1	10	38	29				
SHILLONG	27.73	279.3	5	45	-2	10	22	-3			6 54	PPP
LHASA	28.47	287.9	5	53	0							
ESEN BULAK	30.56	323.1	6	13	1	11	55	45				
IRKUTSK	31.28	338.4	6	18	0							
CHATRA	31.88	282.4	6	22	-2						10 40	
BOKARO	33.41	277.1	6	38	1							
TANGERANG	33.86	209.1	6	47	6							
LEMBANG	34.03	207.0	6	38A	-4							
YAKUTSK	38.16	5.6	7	15K	-2	13	29	21				
DEHRA DUN	39.74	288.9	7	32	2						13 29	
RABAU	40.42	130.3									13 59	
NEW DELHI	40.58	286.3	7	36K	-1						8 0	
PORT MORESBY	41.18	141.2	7	42A	0	13	59	6				
ALMATA-2	41.47	308.7	7	45K	0							
SEMIPALATNSK	41.76	319.8	7	47	0							
FRUNSE	43.36	307.5	8	1A	1							
ANDIJAN	44.75	304.2	8	12	1							
WARSAK DAM	45.14	294.6	8	14	0							
KHOROG	45.18	299.5	8	15	0	14	54	3				
TASHKENT	47.13	304.7	8	31A	1							
TIKSI	47.63	2.8	8	33A	-1	15	28	2				
QUETTA	49.32	289.8	8	47A	0	15	41	-9				
CHARTERS TS.	49.74	150.2	8	51	1	16	3	7				
KIZYL-ARVAT	57.10	302.2	9	44	-1							
ADELAIDE	60.81	164.7	10	10	0						11 53	
SHIRAZ	61.74	291.9	10	22	5						12 56	PP
KHEYS	62.20	350.4	10	20	0							

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RIVERVIEW	63.82	153.5									19 35
CANBERRA	64.29	156.0	10	35	2						
KIROVOBAD	64.46	305.1	10	34	-1						
GORIS	64.68	303.8	10	38K	2	19	20	8			
TOOLANGI	65.13	159.9	10	39	0						11 49
TIFLIS	65.39	306.5	10	41	0						
MOSCOW	67.51	322.4	10	53	-1						
APATITY	67.54	335.4	10	51A	-3						20 3 PS
COLLEGE	68.30	27.4	10	59	0						11 44
KEVO	69.41	338.3	11	5	-1						15 23 PPP
SODANKYLA	70.15	335.8	11	9	-1						11 53
PULKOVO	70.48	327.6	11	9	-3						
KAJAANI	70.57	332.3	11	11	-2						11 55
SIMFEROPOL	72.20	311.8	11	22	-1	20	44	3			
KIRUNA	72.27	337.1	11	22	-1						
NORD	72.47	354.2	11	23	-1						
HELSINKI	72.95	328.8	11	29	2						
NURMIJARVI	72.98	329.2	11	27	0	20	51	1			15 49 PPP
MOULD BAY	73.04	12.7	11	26	-2						
ALERT	73.52	0.7	11	29	-1						
UMEA	73.78	333.2	11	30	-2	21	3	4			11 53
KSARA	74.26	300.3	11	37	2						
JERUSALEM	75.45	298.5	11	36	-6						
UPPSALA	76.49	329.9	11	46A	-1	21	27	-2			12 47
ISTANBUL UN.	77.01	309.2	11	50	0						
LWOW	77.07	318.9	11	52	1	22	17	42			
RESOLUTE	78.50	9.5	11	59K	0						
UZHGOROD	78.58	318.2	11	59	0						
COPPERMINE	79.02	19.0	12	1K	0						
KRAKOW	79.41	320.2									27 3
CHATEAU	80.22	140.9	12	9	1						
BELGRADE	81.31	315.2									12 58
BRATISLAVA	81.91	319.3									13 0
VIENNA-H.	82.30	319.6	12	20	1						13 3
PRUHONICE	82.54	321.7	12	21	1						
YELLOWKNIFE	82.54	23.1	12	21	1						
COLLMBERG	82.76	323.4	12	21	0						
KASPERSKE H.	83.51	321.3	12	25	0						13 6
JENA	83.72	323.5	12	26	0						15 2
LJUBLJANA	84.46	318.3	12	30A	0						13 13
BENSBERG	86.05	325.0	12	36	-2						13 5
VICTORIA	86.81	37.4	12	43	2						
STRASBOURG	87.06	322.8	12	40	-3	23	17	0			33 17 SSS
MESSINA	87.61	311.0									23 13
PENTICTON	88.41	35.3	12	51	2						
EDMONTON	88.95	29.7	12	53	1						
ROSELEND	89.33	320.9	12	54	1						13 37
SPOKANE	90.59	35.7	13	2	3						
HUNGRY HORSE	91.91	33.8	13	7	2						13 26
BLUE MTS.	92.37	37.9	13	10	2	24	17	12			
EUREKA	96.47	41.6	13	28	2						
BROKEN HILL	99.33	258.4									33 16
BULAWAYO	101.33	253.0									31 26
CUMBERLAND	114.93	25.0									19 35 PP
CARACAS	144.35	15.9	19	35	3						20 3 PKP2
TRINIDAD	145.20	6.6	19	35	2						
FUQUENE	146.60	30.2	19	40	4						
BOGOTA	147.18	31.5	19	42	5						
LA PAZ	167.51	54.3	20	7	6						

MAY 12 2.H 57.M 17.S EPICENTRE 36.40 141.37 DEPTH= 51.KM

A=-0.63028 B= 0.50363 C= 0.59085 D= 0.6242 E= 0.7812
G=-0.4616 H= 0.3688 K=-0.8068 HT= -0.4

DEPTH OF FOCUS= 0.003R

SE= 3.32

	DELTA DEG.	AZ. DEG.	P		O-C S	S		O-C S	*PP		SUPP.	
			M	S		M	S		M	S	M	S
ONAHAMA	0.67	325.3	0	12K	-3	0	21	-5				
MITO	0.73	268.6	0	12K	-4	0	20	-7				
TYOSI	0.80	212.1	0	14A	-2	0	24	-4				
KAKIOKA	0.98	260.3	0	14K	-4	0	24	-8				
SHIRAKAWA	1.17	308.1	0	16K	-5	0	29	-7				
UTUNOMIYA	1.22	277.4	0	17	-4	0	30	-8				

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HONGO	1.47	242.5	0 25	0	0 39	-5
TOKYO C.M.O.	1.50	241.8	0 23	-2	0 39	-5
HUKUSIMA	1.53	332.0	0 25K	-1	0 42	-3
KUMAGAYA	1.63	261.7	0 25K	-2	0 43	-4
YOKOHAMA	1.70	235.8	0 26	-2	0 45	-4
MAEBASI	1.86	270.6	0 28K	-2	0 47	-6
TITIBU	1.90	257.9	0 30	-1	0 49	-5
SENDAI	1.90	348.7	0 30K	-1	0 52	-2
MERA	1.94	220.8	0 38	7		
YAMAGATA	2.02	336.4	0 31	-1	0 58	1
ISINOMAKI	2.02	358.8	0 31K	-2	0 54	-3
OIWAKE	2.28	269.0	0 34	-2	0 58	-5
AJIRO	2.29	234.6	0 35K	-1	1 0	-4
HUNATU	2.30	247.7	0 36	0	1 10	6
OSIMA	2.30	225.5	0 35	-1		
MISIMA	2.35	237.7	0 37	0	1 7	2
KOHU	2.39	253.1	0 36	-2	1 5	-1
NIIGATA	2.40	309.9	0 47	9		
MATUSIRO	2.55	274.0	0 37K	-3	1 3	-7
NAGANO	2.57	276.9	0 40K	0		
TAKADA	2.60	286.4	0 37	-4	1 4	-8
MIZUSAWA	2.73	356.0	0 43	0	1 16	1
MATUMOTO	2.75	267.8	0 41	-2	1 10	-5
SAKATA	2.78	334.3	0 44	1		
SHIZUOKA	2.81	240.3	0 44	0	1 19	2
IIDA	3.01	254.0	0 46	0	1 19	-3
OMAESAKI	3.14	236.0	0 59	11		
MIYAKO	3.28	8.1	0 55	5	1 27	-1
MORIOKA	3.30	357.3	0 52	1	1 25	-4
TOYAMA	3.37	276.3	1 1	9	1 30	-1
HAMAMATU	3.42	241.7	0 53	1	1 31	-1
AKITA	3.46	343.5	0 58	5	1 38	5
HATIDYOZIMA	3.54	202.0			1 34	-1
WAZIMA	3.72	286.6	1 0	4		
NAGOYA	3.79	252.3	0 55	-2	1 40	-1
KANAZAWA	3.81	273.3			1 55	13
GIHU	3.87	256.4	0 56	-3	1 49	6
HATINOHE	4.12	1.7	1 1	-1	1 50	0
HUKUJ	4.17	266.7				
KAMEYAMA	4.28	250.2	1 12	8	1 51	-3
HIKONE	4.31	256.3	1 9	4	2 16	21
TSURUGA	4.36	261.7	1 1	-5		
AOMORI	4.44	354.2	1 11	4		
KYOTO	4.79	254.9	1 16	4	2 9	2
NARA	4.84	250.8	1 16	4		
ABUYAMA	4.97	253.8	1 13A	-1		
OSAKA	5.08	251.6	1 39	23	2 37	23
MAKODATE	5.42	355.1	1 20K	0	2 31	9
MORI	5.72	354.0	1 31	6		
URAKAWA	5.84	10.3	1 26	0	2 34	1
TOKUSIMA	6.03	249.3				
HIROO	6.06	13.8			2 36	-3
SAPPORO	6.66	359.9			3 1	7
OBHIRO	6.66	11.6				
KUSIRO	6.97	18.6				
NEMURO	7.64	23.8			3 8	-10
YAKUTSK	26.66	347.7	5 34A	-2		
TIKSI	35.89	353.3	6 56	-1		
SHILLONG	43.38	270.0	7 57	-2		
ALMATA-2	48.56	298.9	8 40A	0		
COLLEGE	49.64	32.0	8 50	2		
NEW DELHI	53.82	281.3	9 17K	-3		
MOULD BAY	57.15	16.3	9 44A	0		
COPPERMINE	61.65	24.8	10 15	0		
RESOLUTE	63.22	14.3	10 25A	0		
APATITY	63.25	335.8	10 24	-1		
KEVO	64.02	339.3	10 46	16		
YELLOWKNIFE	64.37	30.0	10 34	1		
SODANKYLA	65.54	337.3	10 38	-2		
KAJAANI	67.14	334.1	10 49	-1		
VIBORG	68.76	330.9	10 59	-1		
EDMONTON	69.76	38.0	11 9	2		
UMEA	69.85	336.1	11 6A	-1		
NURMIJARVI	70.49	332.0	11 9	-2		
BLUE MTS.	72.38	47.0	11 25	3		
EUREKA	76.27	51.0	11 48	3		
UINTA BASIN	79.66	47.3	12 6	2		
COLLMBERG	81.64	330.2	12 13	-1		
PRUHONICE	82.01	328.5	12 16	0		

1 34

2 4

3 33

2 25

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TONTO FOREST	82.41	52.9	12 21	3		12 54
WICHITA MTS.	89.87	45.5	12 57	2		
LA PAZ	147.18	60.7	19 43	8	19 56	

MAY 12 9.H 43.M 0.S EPICENTRE -57.56 159.78 DEPTH= 70.KM

A=-0.50573 B= 0.18624 C=-0.84235 D= 0.3456 E= 0.9384
G= 0.7905 H=-0.2911 K=-0.5389 HT= -8.1

DEPTH OF FOCUS= 0.006R

SE= 1.87

	DELTA DEG.	AZ. DEG.	P M S	O-C S	S M S S	O-C S	*PP M S	SUPP. M S
MACQUARIE I.	3.11	351.0	0 51K	3				
ROXBURGH	13.46	30.1	3 4A	-5				
CAPE HALLETT	15.41	168.0	3 35	1				
MOORLANDS	17.12	326.8	3 53	-3				
TARRALEAH	17.47	325.3	4 0	0	7 17	7		
WELLINGTON	18.92	37.0	4 20K	2	7 32	-11		
SCOTT BASE	20.52	175.8	4 36	1				
CHATEAU	21.05	36.0	4 40	0				7 52
TOOLANGI	22.12	328.6	4 50A	-1				5 19 PP
KARAPIRO	22.21	34.6	4 52	0				
CANBERRA	23.40	337.3	5 4A	1	9 24	16		8 49 PCP
WILKES	24.13	228.4	5 10	0	9 32	12	5 20	
RIVERVIEW	24.45	342.4	5 14A	1				10 16
ADELAIDE	26.67	318.9	5 33K	-1	10 32	30		8 50
BRISBANE	30.56	347.7	6 9	0	11 22	17		
MIRNY	31.02	225.5	6 12	-1	11 25	13		7 15 PP
SOUTH POLE	32.61	180.0	6 25	-2				9 10
NOUMEA	35.56	10.7	6 52A	0				
KOUMAC	37.10	7.0	7 6A	1				
CHARTERS TS.	38.73	339.4	7 19	0	13 18	7		
MUNDARING	39.13	291.8	7 21	-1				
PERTH	39.34	291.4	7 29	5	13 31	11		
MAWSON	41.13	215.3	7 38	-1			7 54	9 14 PP
HONTARA	48.02	0.2	8 34A	0				20 18
AFIAMALU	48.59	38.1	8 39K	1				16 50
PORT MORESBY	49.04	343.4	8 42A	0	15 48	8		11 53 PCP
N-LAZARVSKYA	49.95	193.3	8 47A	-2				
RABAUL	53.56	350.5	9 15	-1				
LEMBANG	64.67	299.8	10 34	1	19 21	15		
TANGERANG	65.72	299.2	10 39A	0				11 17
MEDAN	78.01	296.7	11 52	0				
BAGUIO CITY	80.55	322.1	12 2	-4				
TANANARIVE	85.50	241.5	12 35	4				
HONOLULU	86.07	38.8			22 51	-10		
KIMBERLEY	86.08	218.5	12 34A	0				15 44
KIPAPA	86.21	38.8	12 37	2				
HONG KONG	88.20	318.5	12 44	0	23 0	-21		16 10 PP
CANTON	89.23	318.1	12 50A	1				
CHILEKA	94.02	232.5	13 12	1				
KUNMING	95.15	310.2	13 19	2				
MATUSIRO	95.49	342.7	13 18A	0	24 34	48		
NANKING	95.72	326.0	13 20	1				
LA PAZ	96.24	134.3	13 8	-14			13 23	
CHENG TU	99.57	313.7	13 37	0				
SHILLONG	100.29	301.7	13 39A	-1				
SIAN	100.96	319.1	13 44	1				
VLADIVOSTOK	103.00	339.4						18 1 PP
LANCHOW	104.42	316.1	14 0	2				
LWIRO	108.68	232.8						28 27 PS
TUCSON	116.26	70.9	18 25	-10				29 11 PKKP
BOULDER CITY	117.23	65.4	18 40	3				
TONTO FOREST	117.66	69.2	18 39	1				19 26
EUREKA	119.45	62.2	18 43	1				
ALBUQUERQUE	120.62	72.3	18 43	-1				
YAKUTSK	121.52	343.9	18 45K	-1				
FRUNSE	122.49	299.7	18 48	1				
BLUE MTS.	123.01	57.3	18 49K	1				20 20 PP
UINTA BASIN	123.20	66.0	18 51K	2				20 31 PP
SHIRAZ	123.63	273.3	18 50K	0				20 31 SKP
TASHKENT	123.89	294.9	18 50	0				20 32 PP
WICHITA MTS.	124.55	78.4	18 52	1				20 36 PP
GOLDEN	124.82	69.5	18 54	2				20 43 PP

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SPOKANE	125.20	55.1	18 53	0	
PENTICTON	125.41	52.4	18 54A	1	
LARAMIE	125.93	68.0	18 56	2	
BUTTE	126.07	59.5	18 57	3	20 30 PP
BOZEMAN	126.52	60.7	18 57	2	19 31 PP
TULSA	126.93	79.6	18 56	0	38 32 SS
VANNOVSKAYA	127.02	284.2	18 58	2	
HUNGRY HORSE	127.13	56.6	18 57	1	
COLLEGE	128.41	25.6	18 57	-2	20 3
TEHERAN	128.92	277.2	19 1	1	
LAWRENCE	129.50	77.4	19 1	0	
TIKSI	130.71	347.6	18 48	-15	21 2 PP
EDMONTON	131.05	52.5	19 2	-2	
CUMBERLAND	132.16	88.0	19 5	-1	21 25 PP
JERUSALEM	134.58	259.9	19 12	1	21 44
KIROVOBAD	135.22	277.7	19 12	0	
KSARA	135.80	262.4	19 7	-6	22 52 PK5
YELLOWKNIFE	136.62	42.4	19 3	-11	
TIFLIS	136.79	277.6	19 16	1	
BAKURIANI	137.48	276.7	19 16	0	
COPPERMINE	139.64	35.7	19 13	-7	
MOULD BAY	142.88	23.1	19 21	-5	
OTTAWA	144.37	85.4	19 26	-2	
SIMFEROPOL	144.71	273.0	19 27	-2	22 45 PP
ISTANBUL UN.	144.81	263.6	19 28A	-1	22 40
ATHENS	145.37	254.8	19 30K	0	
BREBEUF	145.57	87.0	19 30A	0	22 42
SHAWINIGAN	146.69	86.2	19 34A	2	
KHEYS	148.09	342.3	19 34K	0	
RESOLUTE	148.20	29.1	19 31	-4	
MOSCOW	148.97	291.7	19 35	-1	23 17 PP
BENI ABBES	149.83	212.3	19 38	1	
SEPT ILES	152.28	85.3	19 47	6	
ALERT	152.58	11.1	19 40	-1	
LWOW	153.10	272.5	19 50	8	
UZHGOROD	153.36	268.9	19 50	8	
PULKOVO	154.14	296.4	19 52	9	
APATITY	154.22	314.7	19 46A	3	26 30 -11 20 5 PKP2
SCHEFFERVILLE	154.34	76.1	19 43K	-1	
NIEDZIKA	154.88	268.7	19 53	9	
VIBORG	155.13	298.1	19 43	-2	20 10 PKP2
LJUBLJANA	155.91	256.5	19 46	0	
ALMERIA	156.17	217.2	20 13	27	
KAJAANI	156.26	305.9	19 44	-2	20 15 PKP2
KEVO	156.50	320.2	19 47	1	20 15 PKP2
GRANADA	156.83	215.5	20 15K	28	24 11 PP
SODANKYLA	156.83	314.1	19 45	-2	24 50 PP
NURMIJARVI	157.07	296.4	19 46	-1	20 18 PKP2
PRUHONICE	158.30	264.5	19 49	0	24 13
KASPERSKE H.	158.33	261.7	19 48	-1	20 23 PKP2
PRAGUE	158.41	264.6	19 51	2	20 24
KIRUNA	159.15	316.0			20 26 PKP2
TOLEDO	159.43	217.6	19 50	0	24 8 PP
UMEA	159.53	304.6	19 49	-1	20 29 PKP2
COLLMBERG	159.84	266.2	19 45	-6	24 10 PP
UPPSALA	160.39	292.7	19 48	-3	20 32 PKP2
STUTTGART	160.39	256.0	20 33	42	
JENA	160.41	263.9	19 50	-1	20 32
HALLE	160.50	265.7	19 50	-1	20 34 PKP2
KARLSKRONA	160.51	281.1	19 43	-8	20 33 PKP2
GARCHY	162.55	243.9			20 42 PKP2
BENSBERG	162.77	259.2	19 52	-1	
SKALSTUGAN	163.08	304.3			20 43 PKP2
KONGSBERG	164.37	290.3	20 49	54	
SCORESBY SD.	167.01	2.6			21 6

MAY 12 20.H 8.M 33.5 EPICENTRE 57.32-154.15 DEPTH= 0.KM

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G=-0.7560 H=-0.3662 K=-0.5426 HT= -8.0

SE= 1.92

	DELTA	AZ.	P		O-C	S			O-C	*PP	SUPP.	
	DEG.	DEG.	M	S	S	M	S	S	M	S	M	S
COLLEGE	8.17	19.4	2	3	1	3	43	7				

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SITKA	10.23	83.6	2 27	-4				
YELLOWKNIFE	20.24	58.7	4 38	-1				
VICTORIA	20.36	102.4	4 41	1				
COPPERMINE	20.44	43.2	4 41K	0				
PENTICTON	21.92	96.5	4 58K	2				
MOULD BAY	22.74	20.7	5 5A	1	9 13	4		
EDMONTON	23.26	82.2	5 11K	1				
HUNGRY HORSE	25.50	93.2	5 32	1				8 50 PCP
BLUE MTS.	25.94	102.8	5 36	1	10 8	4	5 49	
SHASTA	26.31	115.5	5 40K	1				
PETROPAVLOVK	26.86	281.2	5 45A	1				
MINERAL	26.97	114.9	5 46K	1				
UKIAH	27.13	118.8	5 48	2				9 8 PCP
BUTTE	27.71	96.0	5 52	0	10 26	-7	6 8	9 4 PCP
CALISTOGA	27.83	118.5	5 53K	0				
RESOLUTE	27.93	29.2	5 53K	0				
MAGADAN	28.21	298.0	5 57	1				
BERKELEY	28.59	119.1	5 59	0	10 43	-4	6 15	
BOZEMAN	28.76	95.2	6 2	1	10 47	-3		
LICK	29.31	118.9	6 6K	0				
PARAISO	29.78	121.1	6 15	5				
EUREKA	30.46	109.3	6 17	1				
PRIEST	30.74	119.1	6 19A	0				
SALT LAKE C.	31.66	103.1	6 27	0			6 41	
UINTA BASIN	33.19	101.3	6 41K	1	11 57	-3	6 55	7 54 PP
TIKSI	33.34	325.8	6 41K	0	11 59	-3		7 49 PP
PASADENA	33.54	118.1	6 44	1	12 5	0	6 53	7 27 *SP
BOULDER CITY	33.72	112.2	6 46	1	12 13	5	7 1	9 25 PCP
ALERT	33.85	13.7	6 46K	0				
LARAMIE	34.63	96.3	6 53	0				
GOLDEN	35.88	98.0	7 4	1			7 19	
KIPAPA	35.96	186.1	7 2	-2	12 45	2		
HONOLULU	36.09	186.3	7 4	-1	12 47	2		8 49 PP
YAKUTSK	36.67	309.9	7 8A	-2	12 45	-9		
TONTO FOREST	36.85	110.0	7 13	2	12 59	3	7 29	8 51 PP
TUCSON	38.69	111.6	7 28	1			7 43	9 37 PCP
Y.-SAKHLINSK	38.70	282.6	7 28A	1	13 22	-2		9 16 PPP
ALBUQUERQUE	38.83	104.3	7 29	1			7 46	
KHEYS	41.12	352.4	7 48K	1	13 58	-3		9 18 PP
LAWRENCE	41.88	89.9	7 52	-1				
WICHITA MTS.	43.20	97.0	8 4	0	14 31	0		9 58 PP
TULSA	43.82	93.4	8 8K	-1	14 17	-23	8 23	10 7 PP
CHIHUAHUA	44.02	109.7						9 31
FAYETTEVILLE	44.55	91.8	8 16K	1	14 49	-2		9 49 PP
ST. LOUIS 1	44.84	86.1	8 16	-1	14 51	-4		
MIZUSAWA	44.91	275.0	8 18	0	14 52	-4		
DALLAS	45.60	97.1	8 22	-1				
SCHEFFERVILLE	45.62	54.0	8 22K	-1				
LONDON ONT.	46.55	74.9	8 30K	-1				
VLADIVOSTOK	47.00	285.8	8 34	0	15 16	-10		11 1 PPP
SCARBOROUGH	47.09	72.9	8 35	0	15 23	-4		
CLEVELAND	47.47	76.7	8 47A	9	15 31	-2		
TUKUBASAN	47.59	273.1	8 38A	-1	15 31	-3	9 2	10 27 PP
OTTAWA	47.72	68.9	8 38K	-2				
SCORESBY SD.	48.04	19.6	8 42	-1				
MATUSIRO	48.38	274.9	8 45K	0	15 39	-7		
SHAWINIGAN	48.40	65.9	8 44K	-1				
BREBEUF	48.71	67.4	9 46K	58	15 46	-4	10 7	11 11 PCP
SEPT ILES	48.92	58.4	8 47K	-2				
CUMBERLAND	49.60	85.2	8 53K	-2	16 0	-3		11 1 PP
MORGANTOWN	49.63	77.3	8 54K	-1				
PENNSYLVANIA	49.88	74.7	8 55	-2				
CHANGCHUN	49.89	291.0	8 56K	-1	15 58	-9	9 6	10 53 PP
ABUYAMA	51.05	275.6	9 6A	0				
GEORGETOWN	51.69	75.8	9 9	-1				
WASHINGTON	51.69	75.8	9 11	1				28 3
PALISADES	51.78	71.7	9 10	-1	16 32	-1	9 30	
PHILADELPHIA	51.91	73.5	9 9	-3	16 30	-5		
FORDHAM	51.91	71.8	9 10	-2	16 33	-2		
CHAPEL HILL	52.86	79.8	9 18	-1				
KEVO	53.22	359.5	9 21K	-1	16 50	-2		11 39 PP
COLUMBIA	53.24	82.9	9 21	-1	16 50	-3		
TROMSOE	53.26	3.0	9 22	0				10 29 PCP
IRKUTSK	53.41	311.4	9 23K	0	16 53	-2		
HALIFAX	54.25	61.6	9 27K	-2				
KIRUNA	55.10	2.5	9 35K	-1	17 15	-3		19 21 SCS
TACUBAYA	55.15	109.7	9 31	-5	17 20	2		16 48
APATITY	55.32	356.5	9 37K	0	17 20	-1		17 39 PS
ULAN-BATOR	55.61	306.4	9 39	0	17 23	-2		

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SODANKYLA	55.63	359.6	9 39K	-1	17 22	-3		
VERA CRUZ	56.90	106.9	9 47	-2	17 39	-3	31 27	
PEKING	57.28	294.1	9 50K	-1	17 45	-2	10 2	12 1 PP
MERIDA	58.89	99.7	9 33	-30				10 0
KAJAANI	58.92	359.0	10 2K	-1	18 6	-2		10 51 PCP
SKALSTUGAN	58.98	7.0	10 2K	-1			10 13	
UMEA	59.12	2.9	10 3K	-1	18 1	-10	10 14	19 50 SCS
PAOTOW	59.84	298.8	10 9K	0	18 20	0	10 20	12 23 PP
ESEN BULAK	61.29	312.0	10 20	1	18 42	3		
ZO-SE	61.64	283.9	10 21K	0	18 40	-3	10 32	
NANKING	62.14	286.4	10 24K	-1	18 40	-9	10 35	11 41 PP
NURMIJARVI	62.51	0.7	10 26K	-1	18 51	-3		22 51 SS
KONGSBERG	62.67	9.2	10 27K	-1	18 51	-5	10 45	
HELSINKI	62.85	0.5	10 29	-1				
UPPSALA	63.00	4.6	10 29K	-1	18 51	-9	10 40	19 14 *SS
PULKOVO	63.20	357.5	10 32K	0	19 2	-1	10 43	
SEMIPALATNSK	63.68	324.5	10 34	-1	19 6	-3		
GOTEBORG	64.80	8.2	10 42K	0			10 53	
SIAN	65.39	295.3	10 45	-1	19 29	-1	10 57	
DURHAM	66.07	17.0	10 50K	0				
LANCHOW	66.38	300.1	10 52K	0	19 39	-3	11 3	
KARLSKRONA	66.58	6.2	10 51K	-3	19 41	-3		
COPENHAGEN	66.84	8.2	10 55	0	19 47	-1		
MOSCOW	66.91	352.8	10 55K	-1	19 45	-3		20 3 PS
HOPE	68.25	90.5	11 11	7				
MITTEVEEN	69.11	12.3	11 11K	1				
KEM	69.46	17.1	11 11	-1	20 23	4		
MUNSTER	70.05	11.9	11 17	2				
CHENG TU	70.71	296.7	11 20K	1	20 33	-1	11 31	
WARSAW	70.74	3.1	11 15	-5	20 21	-13	11 30	20 40 SP
UCCLE	70.80	14.3	11 20	0	20 35	0		
HALLE	70.95	-9.1	11 21	0	20 36	0		
BENSBERG	71.00	12.4	11 21K	0	20 37	0		11 43
COLLMBERG	71.23	8.5	11 22K	-1	20 40	0		
JENA	71.48	9.5	11 24	0	20 39	-3		12 49
DOURBES	71.52	14.2	11 28	4				11 37 PCP
FOLINIÈRE	72.05	18.0	11 27	0			11 43	
FRUNSE	72.19	324.5	11 29K	1	20 51	0		11 40 PCP
CANTON	72.20	284.9	11 29K	1	20 46	-5	11 40	21 11 *SS
CHEB	72.39	9.1	11 30	1	20 54	1		
HONG KONG	72.41	283.8	11 30	0	20 47	-6	11 59	25 53 SS
AFIAMALU	72.45	198.0	11 29A	-1	20 47	-7		
PARIS	72.48	16.0	11 30K	0				
PRAGUE	72.56	7.7	11 31	1				11 43 PCP
CHORZOW	72.61	4.6	11 30K	-1	20 56	1	11 42	11 51 PCP
PRUHONICE	72.66	7.6	11 32	1	20 52	-4		
HEIDELBERG	72.71	11.6	11 31K	0				
RACIBORZ	72.78	5.1	11 33	1	20 42	-15		11 44 PCP
KRAKOW	72.89	4.0	11 32	0				11 43 PCP
KARLSRUHE	73.06	11.9	11 35	2				13 57 PP
STUTTGART	73.39	11.4	11 35K	0	21 5	1	11 57	
STRASBOURG	73.41	12.4	11 34K	-1	20 58	-6	12 0	14 13 PP
KASPERSKE H.	73.43	8.4	11 35K	-1	21 4	-1		14 1
TUBINGEN	73.61	11.5	11 37K	0				
SAN JUAN	73.68	81.4	11 36	-1				
BAGUIO CITY	73.80	275.1	11 36	-2	21 5	-4		
EBINGEN	73.94	11.7	11 39K	1				
GARCHY	74.06	15.9	11 39	0				12 20
FELDBERG	74.13	12.4	11 40K	0				
BALBOA HTS.	74.20	98.2	11 37	-3				
UZHGOROD	74.38	2.4	11 41	0	21 16	1		
RAVENSBURG	74.41	11.3	11 42K	1				
BESANCON	74.50	13.9	11 42	0			12 8	14 27 PP
VIENNA-H.	74.51	6.6	11 43K	1				22 23
RABAU	74.96	236.3	11 43	-1				
MANILA	74.97	273.7	11 45	1	21 19	-3		
TASHKENT	75.18	327.6	11 46K	0	21 24	0		
CLERMONT-FD.	75.54	16.2	11 57	9				
PONTA DELGDA	75.87	39.8	11 52A	2				
KUNMING	75.93	294.5	11 49K	-1	21 25	-7	12 1	
ROSELEND	76.12	13.7	11 51K	0				14 50
HONIARA	76.36	226.8	11 51	-1				
LJUBLJANA	76.57	8.1	11 54K	0				14 44 PP
ZAGREB	76.90	7.1	12 2	7	21 44	1		14 49 PP
TRIESTE	76.91	8.7	11 55K	0	21 42	-1		
PAVIA	76.92	12.0						13 44
PADOVA	76.98	10.1	11 57	1	21 47	3		26 2 SS
ANTIGUA	76.99	78.7	11 29	-27				
LHASA	77.58	306.0	12 1K	2	21 50	0	12 11	

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ISOLA	77.65	13.7	12	1K	1	21	54	3	
BAGNERES	77.69	19.0	12	1	1				15 1
SIMFEROPOL	77.87	354.0	12	1K	0	21	52	-1	12 12 PCP
ST. CLAUDE	77.98	79.2	12	3	2	21	47	-8	
KHOROG	78.03	324.4	12	3K	1	21	54	-1	
BELGRADE	78.13	3.9	12	3	1	21	58	2	12 15 PCP
PRATO	78.42	10.8	12	4	0				14 27
FLORENCE X.	78.53	10.7	11	53	-11	21	42	-19	
FORT FRANCE	79.36	79.5	12	8	-1	22	19	10	
CARACAS	79.75	86.6	12	9K	-2				15 25 PP
LISBON	79.89	27.1	12	13K	1				
TORTOSA	79.93	19.3	12	13	1				
TOLEDO	79.95	22.9	12	13K	1	22	15	-1	15 15 PP
TIFLIS	80.05	345.7	12	14	1	22	17	0	12 26 PCP
AQUILA	80.15	9.3	12	13	0	22	19	1	12 23 27 22 SS
FUQUENE	80.25	95.1	12	9A	-5				
SOFIA	80.33	1.9	12	13	-1	22	19	-1	22 0 PS
TITOGRAĐ	80.47	4.9	12	15	0	22	21	0	23 5 PS
ROME	80.51	10.1	12	16K	1	22	23	2	12 26 27 28 SS
SHILLONG	80.71	303.3	12	15K	-1	22	18	-5	
BOGOTA	80.77	95.9	12	16K	0	22	18	-6	23 20 PS
SKOPJE	81.01	3.3	12	20	2	22	27	0	
WARSAK DAM	81.21	323.0	12	17	-2				
ASHKABAD	81.22	334.5	12	19	0	22	31	2	15 33 PP
CHATRA	81.69	307.6	12	22K	1	22	33	-1	
PORT MORESBY	81.84	238.4	12	22K	0				
ISTANBUL UN.	81.97	357.6	12	23K	0	22	36	-1	
GORIS	82.02	344.1	12	24K	1	22	40	3	
ALICANTE	82.15	20.6	12	24K	0	22	47	9	15 36 PP
DEHRA DUN	82.28	316.4	12	25K	1	22	41	1	
TRINIDAD	82.61	81.9	12	24K	-2				
GRANADA	82.64	23.3	12	25A	-1	22	45	2	15 46 PP
ALMERIA	83.20	22.5	12	28K	-1	22	44	-5	13 14
CHITTAGONG	83.50	301.7	12	26	-5	22	41	-11	
NEW DELHI	84.16	316.3	12	34K	0	22	55	-4	12 41 PCP
MESSINA	84.45	8.1	12	34	-1	23	8	7	23 52
REGGIO CALA.	84.56	8.1	12	34	-2				
TEHERAN	84.82	339.4	12	39	2	23	1	-4	12 50 15 57 PP
BOKARO	84.91	307.3	12	38	0	23	4	-2	16 11 PP
CALCUTTA	84.92	304.6	12	39	1	23	1	-5	
KOUMAC	85.00	218.6	12	38K	0				
ATHENS	85.06	1.7	12	38K	0				22 57
NOUMEA	85.91	216.1	12	44A	1				
QUETTA	86.21	325.2	12	44	0	23	18	-1	
KSARA	88.82	351.7	12	58K	1	23	53	10	24 56 PS
BENI ABBES	89.75	24.0	13	1	0	23	29	-23	16 32 PP
SHIRAZ	90.49	337.0	13	5K	0	23	58	-1	16 23 PP
JERUSALEM	90.90	352.0	13	8K	2				
KARACHI	91.16	323.2	13	9	1	24	8	4	
CHARTERS TS.	91.64	234.2	13	10	0	23	38	-31	
PORT BLAIR	92.29	295.6	13	14	1	23	10	-64	23 33
HYDERABAD	93.70	310.5	13	20	1	23	47	-40	24 19 PS
HUANCAYO	94.09	105.8	13	21	0				
BOMBAY	94.59	316.0	13	22	-1	24	25	-9	
BRISBANE	95.42	225.6	13	27	0				
MADRAS	96.93	307.1				24	8	-3	18 1
LEMBANG	100.16	273.2							16 53
LA PAZ	101.60	102.3	13	53	-2				27 21 PPS
ADELAIDE	107.82	232.6							28 9
LWIRO	125.04	356.4	19	5A	3				20 51 PS
CAPE HALLETT	131.68	193.8	19	15	0				
SCOTT BASE	137.03	191.3	19	25	0				
BROKEN HILL	137.17	356.3	19	15	-10				
CHILEKA	137.87	346.8	19	26	0				
TANANARIVE	138.41	328.2	19	35	8				22 20
BYRD STATION	138.53	171.4	19	17	-10				
BULAWAYO	142.82	355.7	19	33A	-2				
SOUTH POLE	147.14	180.0	19	38	-4				
MIRNY	148.66	225.2	19	42K	-3				
CHANGALANE	148.67	349.0	19	45	0				23 23 PP
KIMBERLEY	151.44	2.0	19	45K	-4				
PIETERMZBURG	152.13	351.5	19	51A	1				
MAWSON	160.37	223.4	19	59	-2				24 25 PP
N-LAZARVSKYA	165.24	161.6	20	1	-5				21 2 PKP2

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G=-0.7931 H= 0.2402 K=-0.5598 MT= -7.6

DEPTH OF FOCUS= 0.003R

SE= 1.42

	DELTA DEG.	AZ. DEG.	P		O-C S	S O-C			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
PETROPVLOVK	4.08	221.8	1	3K	1						2	3
Y.-SAKHLINSK	15.58	242.7	3	39	1						6	53
YAKUTSK	18.00	302.8	4	7A	-1							
TIKSI	21.16	330.4	4	44A	1						9	42
MIZUSAWA	22.41	229.9	4	57	2						5	38
COLLEGE	25.04	49.6	5	21	0							
TUKUBASAN	25.31	227.8	5	22A	-1							
MATUSIRO	25.84	231.2	5	27	-1	9	50	-2				
MOULD BAY	33.54	25.0	6	36A	-1							
KHEYS	37.49	344.9	7	11A	1						9	29 PCP
ALERT	39.67	8.5	7	30A	1							
YELLOWKNIFE	39.74	46.0	7	30	1							
RESOLUTE	39.83	24.0	7	30A	0							
PENTICTON	44.96	64.6	8	12	0							
HUNGRY HORSE	48.40	62.3	8	42	3						10	5 PCP
BLUE MTS.	49.10	67.7	8	44	0						10	9 PCP
SHASTA	49.29	75.1	8	45K	-1							
MINERAL	49.96	74.9	8	50K	-1							
KEVO	50.48	341.8	8	54A	-1							
APATITY	51.12	337.7	8	58A	-2							
BOZEMAN	51.72	63.0	9	4	0							
TROMSOE	51.89	344.9	9	4	-1							
LICK	52.10	77.6	9	7A	0							
SODANKYLA	52.63	340.4	9	10A	-1						10	19 PCP
KIRUNA	53.30	343.3	9	15A	-1							
ALMATA-2	53.41	294.9	9	16A	-1							
EUREKA	53.60	71.7	9	18	0							
SCORESBY SD.	53.63	2.1	9	18	0							
SALT LAKE C.	54.83	67.8	9	27	0							
KAJAANI	55.32	338.0	9	30A	-1						10	29 PCP
UINTA BASIN	56.33	66.6	9	38	0						10	19 PCP
PASADENA	56.35	77.7	9	35	-3						9	55
BOULDER CITY	56.79	73.7	9	43	2							
UMEA	57.00	341.4	9	41A	-2						10	36 PCP
SKALSTUGAN	58.51	345.2	9	52A	-1							
PULKOVO	58.52	334.2	9	53	0							
NURMIJARVI	59.16	337.5	9	57A	-1							
HELSINKI	59.40	337.2	10	0	1							
TONTO FOREST	59.97	72.4	10	4	1				10	14	12	9 PP
MOSCOW	60.04	327.9	10	4A	0						18	29 PS
CHATRA	60.45	274.7	10	5K	-2							
UPPSALA	61.16	341.0	10	10A	-2				10	30	10	47 PCP
TUCSON	61.77	73.6	10	14	-2							
SCHEFFERVILLE	62.15	30.1	10	17A	-1							
DEHRA DUN	62.77	284.3	10	20A	-2							
GOTEBORG	64.17	343.3	10	30A	-1							
NEW DELHI	64.59	283.8	10	31A	-3							
KARLSKRONA	65.01	340.7	10	33A	-4				10	52		
WICHITA MTS.	66.20	63.0	10	44	-1						39	12 PKPPKP
TULSA	66.63	60.2	10	47A	0							
PORT MORESBY	66.64	197.2	11	4K	17							
ST. LOUIS 1	67.05	54.6	10	50	0							
FAYETTEVILLE	67.26	59.0	10	51A	0							
SHAWINIGAN	67.47	38.2	10	52A	-1							
BREBEUF	68.08	39.4	10	55A	-1							
TIFLIS	69.49	315.3	11	7	2							
WITTEVEEN	69.69	345.0	11	7	1							
KIROVOBAD	69.78	313.6	11	6	-1							
CHORZOW	69.84	336.4	11	7	0						11	54
KRAKOW	69.85	335.7	11	7A	0						11	28 PCP
COLLMBERG	70.11	340.6	11	8A	-1						13	58
HALLE	70.11	341.3	11	7	-2						11	24 PCP
RACIBORZ	70.21	336.8	11	11	2						11	37 PCP
MUNSTER	70.38	344.2	11	12	2							
PENNSYLVANIA	70.52	44.8	11	10	-1							
SIMFEROPOL	70.54	324.2	11	11A	0							
MORGANTOWN	70.68	46.9	11	13A	1							
JENA	70.73	341.4	11	13	0							
BENSBERG	71.43	344.2	11	16	-1							

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CUMBERLAND	71.67	53.1	11 18	0					
TEHERAN	71.76	307.3	11 20	1					
KEM	71.89	349.2	11 19	0					
KASPERSKE H.	72.08	339.5	11 21A	0					
VIENNA-H.	72.34	337.4	11 24	2					
STUTT GART	73.21	342.3	11 28	1					
STRASBOURG	73.64	343.2	11 34A	4				12	34
PARIS	74.18	346.8	11 33	0					
FOLINIERE	74.57	348.8	11 35	0					
LJUBLJANA	74.82	337.9	11 37	0					
BESANCON	75.22	344.1	11 40	1					
GARCHY	75.61	346.1	11 41A	0					
SOFIA	75.84	330.6	11 44	2					
SHIRAZ	76.34	303.0	11 45A	0	21	53	28	14	21
ROSELEND	76.64	343.3	11 48	1					
CHARTERS TS.	77.26	196.3	11 50	0					
ISOLA	78.04	342.7	11 56	1					
KSARA	79.81	317.7	12 5	1					
BAGNERES	80.12	347.4	12 10	4					
JERUSALEM	81.88	317.3	12 17	2					
TOLEDO	83.73	350.1	12 26A	1					
ALICANTE	84.85	347.1	12 39K	3					
GRANADA	86.36	349.4	12 41A	3					
ALMERIA	86.57	348.5	12 39K	0					
CHILEKA	123.76	294.4	18 53K	1					
BROKEN HILL	125.93	301.7	18 59	3					
KIMBERLEY	139.81	295.3	19 19	-3					
SOUTH POLE	145.96	180.0	19 33	0					

MAY 13 9.H 44.M 16.S EPICENTRE 40.49 142.14 DEPTH= 82.KM

A=-0.60216 B= 0.46809 C= 0.64676 D= 0.6137 E= 0.7895
G=-0.5106 H= 0.3969 K=-0.7627 HT= -1.9

DEPTH OF FOCUS= 0.008R

SE= 4.21

	DELTA DEG.	AZ. DEG.	P		O-C S	S			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
HATINOHE	0.47	275.3	0	10	-6	0	21	-6				
MIYAKO	0.85	188.9	0	7K	-12	0	17	-16				
MORIOKA	1.08	223.7	0	15K	-6	0	28	-9				
AOMORI	1.09	288.2	0	21K	0	0	40	3				
MIZUSAWA	1.56	210.2	0	22	-5	0	38	-10				
HAKODATE	1.68	322.2	0	30K	1	0	55	5				
URAKAWA	1.73	16.0	0	30K	0	0	59	8				
AKITA	1.74	244.5	0	29	-1	0	53	1				
MORI	2.00	324.2	0	33	0	1	4	7				
HIROO	2.00	26.0	0	33	0	0	58	1				
ISINOMAKI	2.15	197.4	0	28	-7	0	52	-9				
TOMAKOMAI	2.18	349.1	0	38	2	1	11	9				
SAKATA	2.39	229.1	0	35	-3	1	7	0				
SENDAI	2.41	203.8	0	35	-4	1	0	-8				
OBTHIRO	2.56	17.7									1	42
YAMAGATA	2.63	212.4	0	36A	-6	1	6	-7				
SAPPORO	2.65	347.4	0	46	4	1	31	18				
SUTTSU	2.72	328.8	0	53	10							
KUSIRO	3.01	33.4	0	42	-5	1	17	-5				
HUKUSIMA	3.03	205.9	0	40	-7	1	15	-8				
ASAHIKAWA	3.29	2.9	0	54A	3	1	37	8				
RUMOE	3.48	353.8	0	58	4							
NIIGATA	3.51	224.1				1	26	-9				
ONAHAMA	3.66	195.7									1	19
SHIRAKAWA	3.68	204.6	0	51	-5	1	29	-10				
NEMURO	3.83	41.0	0	53	-5	1	34	-9				
ABASHIRI	3.87	23.5	1	9K	10	2	0	16				
AIKAWA	3.90	232.0	0	56	-3							
MITO	4.31	198.3	0	59	-6	1	48	-7				
UTUNOMIYA	4.32	205.1	0	53	-12	1	44	-11				
KAKIOKA	4.52	200.5	1	1	-7							
TAKODA	4.55	223.2	1	0	-8	1	53	-7				
MAEBASI	4.74	211.5	1	6	-5							
KUMAGAYA	4.84	207.5	1	8	-4	2	16	8				
NAGANO	4.91	220.2	1	9	-4	1	46	-23				
MATUSIRO	5.00	219.3	1	10A	-5	2	21	9				

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OIWAKE	5.02	215.3	1 12	-3	2 18	6	
TITIBU	5.10	209.1	1 17	1			
TOKYO C.M.O.	5.16	202.2	1 28	11	2 26	10	
MATUMOTO	5.35	219.1	1 17	-2			
YOKOHAMA	5.42	202.1			2 32	10	2 8
KOHU	5.58	211.5	1 20	-3	2 32	6	
HUNATU	5.65	209.2	1 31	7	2 31	3	
MERA	5.85	199.0			2 24	-9	
MISIMA	5.92	206.2			2 13	-21	
AJIRO	5.94	204.9	1 20	-7	2 25	-10	
IIDA	6.01	215.8	1 25	-4	2 47	10	
Y.-SAKHLINSK	6.54	3.5	1 34K	-2			
NAGOYA	6.70	219.2	1 39	1	3 2	8	
HAMAMATU	6.74	212.7			2 56	1	
KAMEYAMA	7.20	220.4	1 50	5			
KYOTO	7.45	224.9	1 51	3			
YAKUTSK	22.84	344.8	4 56	-1			
TIKSI	31.92	352.1	6 19	-1			
COLLEGE	45.89	34.0	8 16	0			
ALMATA-2	47.22	295.8	8 28A	1			
MOULD BAY	53.07	17.2	9 11A	0			
NEW DELHI	53.71	278.7	9 15A	-1			
ALERT	56.65	3.8	9 37	0			
RESOLUTE	59.13	15.1	9 53A	-2			
APATITY	59.79	335.1	9 58	-1			
KEVO	60.42	338.8	10 4	0			
YELLOWKNIFE	60.55	31.3	10 3K	-1			
SODANKYLA	62.01	336.7	10 14	0			
TROMSOE	62.64	340.7	10 18	0			10 31
KIRUNA	63.50	338.9	10 24	0			10 37
KAJAANI	63.75	333.5	10 26	0			
EDMONTON	66.20	39.3	10 41K	-1			
UMEA	66.37	335.7	10 42	-1			10 55
NURMIJARVI	67.18	331.6	10 47	-1			
HUNGRY HORSE	68.89	44.0	10 58	0			11 11
BLUE MTS.	69.19	48.4	10 59	-1			
UPPSALA	70.11	333.7	11 5	-1			
BUTTE	71.11	45.3	11 14	2			11 24
SHIRAZ	71.17	293.1	11 12A	0			
EUREKA	73.27	52.3	11 24	-1			
UINTA BASIN	76.48	48.3	11 42	-1			11 56
COLLMBERG	78.39	330.2	11 54	0			12 7 PCP
PRUHONICE	78.84	328.6	11 58	2			
TONTO FOREST	79.49	53.8	12 0	0			12 27
KASPERSKE H.	79.90	328.6	12 3	1			
ALBUQUERQUE	81.94	50.6	12 13	1			
WICHITA MTS.	86.59	46.0	12 35	-1			12 49

MAY 13 12.4M 44.4M 1.5 EPICENTRE 14.47 -93.02 DEPTH= 65.KM

A=-0.05104 B=-0.96734 C= 0.24827 D=-0.9986 E= 0.0527
G=-0.0131 H=-0.2479 K=-0.9687 HT= 5.8

DEPTH OF FOCUS= 0.005R

SE= 1.87

	DELTA DEG.	AZ. DEG.	P			S			*PP		SUPP.	
			M	S	S	M	S	S	M	S		
COMITAN	1.97	25.8	0 39	7		0 59	3					
SAN SALVADOR	3.79	101.5	0 56	-2						1 44		
OAXACA	4.41	305.6	0 51	-15		1 55	-2					
SANTIAGO MA.	4.52	101.9	1 6	-2		2 10	10					
MERIDA	7.21	26.2	1 44	-1		3 2	-5					
TACUBAYA	7.68	310.5	1 47	-5		3 19	1					
GUADALAJARA	11.60	303.6								5 23		
MANZANILLO	11.75	294.4								5 35		
BALBOA MTS.	14.27	111.1	3 20A	0								
HOPE	16.01	75.1	3 46	3								
CHIHUAHUA	18.58	321.4								5 11		
DALLAS	18.62	350.0	4 15	0								
WICHITA MTS.	20.78	347.0	4 36	-2		8 29	8					
BOGOTA	21.07	115.8	4 44A	3		8 43	16					
TULSA	21.50	353.9	4 45K	0		8 34	-1					
FAYETTEVILLE	21.56	357.4	4 53	7		8 20	-16					
CUMBERLAND	22.07	16.3	4 49	-2		8 54	9			5 23 PP		
COLUMBIA	22.27	27.1	4 54	1		9 1	12					

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SOCORRO	23.23	329.6	5 5	3				
ALBUQUERQUE	23.72	331.7	5 8	1	9 35	21	14 59	
TUCSON	24.03	320.5	5 11	1				
ST. LOUIS 1	24.20	5.3	5 12	0	9 41	18		
LAWRENCE	24.48	355.8	5 13	-1				
CHAPEL HILL	24.76	27.9	5 17	0				
BLACKSBURG	25.28	24.1	5 21	-1				
TONTO FOREST	25.72	323.3	5 28A	2			9 2 PCP	
CARACAS	25.77	95.8	5 27	0	10 7	18		
SAN JUAN	26.08	77.7	5 10	-20			8 57 PCP	
GOLDEN	27.37	339.0	5 42	1			12 33 PP	
MORGANTOWN	27.57	22.2	5 42K	-1				
CLEVELAND	28.70	18.2	5 53	0				
LARAMIE	28.89	340.2	5 55	0				
BOULDER CITY	28.99	321.6	5 58	2			9 5 PCP	
ST. KITTS	29.26	80.3	5 57	-1				
PENNSYLVANIA	29.37	23.9	5 57	-2				
UINTA BASIN	29.54	333.8	6 2A	1	10 59	9	9 5 PCP	
PASADENA	30.01	315.2	6 5	0	11 7	10	9 6 PCP	
ST. CLAUDE	30.24	82.9			11 54	53	16 19 SCS	
FORT FRANCE	30.83	85.4	7 15	63			10 28	
SALT LAKE C.	30.92	331.5	6 14	1			9 9 PCP	
PALISADES	31.24	28.5	6 14	-2	11 44	28		
HUANCAYO	31.65	145.5	6 21	2				
EUREKA	32.05	325.3	6 24	1				
PRIEST	32.82	316.1	6 30A	0				
PARAISO	34.08	315.1	6 35	-5				
LICK	34.14	317.1	6 42A	1				
BOZEMAN	34.62	337.5	6 46	1			9 20 PCP	
BERKELEY	34.84	317.4	6 49	2	12 21	9	8 5 PP	
BREBEUF	35.01	24.0	6 47K	-1				
CALISTOGA	35.49	318.3	6 53A	1				
BUTTE	35.49	336.3	6 53	0		7 5	9 23 PCP	
MINERAL	35.88	321.4	6 56A	0				
SHAWINIGAN	36.21	23.9	6 56	-3				
SHASTA	36.57	321.3	7 0A	-2				
BLUE MTS.	36.62	330.6	7 2A	0		7 15	8 34 PP	
HUNGRY HORSE	37.98	337.1	7 14	1			7 42	
LA PAZ	39.38	140.5	7 21	-4	13 28	6		
SEPT ILES	41.70	25.7	7 41A	-3				
EDMONTON	42.02	341.9	7 46A	-1				
VICTORIA	42.19	329.9	7 48A	0				
SCHEFFERVILLE	45.14	21.2	8 10K	-2				
YELLOWKNIFE	50.35	347.2	8 52A	-1				
SANTA LUCIA	52.21	156.2	9 9	2				
COPPERMINE	55.22	350.0	9 29A	0				
GODHAVN	60.11	15.2	9 37	-26				
RESOLUTE	60.22	359.4	10 2A	-2				
KIPAPA	61.86	286.7	10 14	-1				
HONOLULU	61.95	286.6			18 50	17	25 59	
COLLEGE	62.42	336.8	10 17	-2			10 58 PCP	
MOULD BAY	63.32	353.2	10 24A	-1				
ALERT	69.15	4.1	11 1A	-1				
NORD	73.79	8.6	11 29	0				
TOLEDO	80.10	51.4	12 4A	-1			23 7 PS	
FOLINIERE	80.92	42.0	12 8	-1				
ALMERIA	81.91	54.1	12 11K	-3				
BAGNERES	82.55	47.6	12 17	0				
PARIS	82.83	41.5	12 19	0				
BENI ABBES	83.59	60.7	12 22	-1				
TROMSOE	83.93	19.1	12 26	2				
CLERMONT-FD.	83.99	44.4	12 24	-1			13 11	
MUNSTER	85.16	37.6	12 31	0				
BENSBERG	85.19	38.7	12 30	-1				
KIRUNA	85.22	20.5	12 32	1				
WELSCHBRUCH	85.41	41.3	12 49	17				
BESANCON	85.50	42.5	12 33	1				
GOTEBORG	85.71	31.3	12 33	0				
STRASBOURG	86.26	40.8	12 49	13			13 9	
KEVO	86.33	17.6	12 37A	1	23 6	1	29 15 SS	
ROSELEND	86.37	43.8	12 37	0			13 39	
UMEA	86.97	24.1	12 41	2				
ISOLA	87.10	45.2	12 40	0		13 0		
STUTTGART	87.15	40.3	12 40	0				
MONACO	87.50	45.5	12 41	-1				
SODANKYLA	87.51	19.7	12 42	0				
UPPSALA	87.60	28.2	12 43	1			13 29	
JENA	87.84	37.8	12 45	1			13 35	

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HALLE	87.86	37.2	12 44	0		13 11
KARLSKRONA	88.12	32.0	12 47	2		13 40
COLLMBERG	88.54	37.1	12 47	0		15 50
APATITY	89.53	18.0	12 52	0		
KAJAANI	89.69	22.2	12 53	1		
KASPERSKA H.	89.69	39.0	12 54	2		13 29
PRUHONICE	89.95	38.0	12 56	2		14 35
NURMIJARVI	90.40	26.0	12 56	0	23 43 0	25 19 PS
LJUBLJANA	91.44	41.6	13 2	1		
VIENNA-H.	91.74	39.1	13 4	2		
MATUSIRO	109.96	318.1	18 30	777		28 34 PS
KIMBERLEY	121.03	115.0	18 48	2		
LWIRO	121.34	83.7	18 49A	3		
BROKEN HILL	123.49	97.9	18 54A	4		
TOOLANGI	123.56	234.4	18 52	2		
ZO-SE	124.03	324.4	18 54	3		20 36 PP
BULAWAYO	124.22	104.7	18 53	1		
NANKING	124.60	327.1	18 54	2		
MAWSON	124.63	169.0	18 53	0		
SHIRAZ	124.96	36.9	18 55	2		
SIAN	127.24	337.1	18 59A	1		20 58 PP
LANCHOW	127.29	342.8	19 0A	2		21 1 PP
WARSAK DAM	129.61	16.7	19 4	2		
CHILEKA	129.88	98.5	19 4	1		
QUETTA	131.60	23.4	19 9	3		
CHENGTU	132.23	340.1	19 11A	4		21 31 PP
DEHRA DUN	134.65	10.9	19 16	4		
LHASA	135.98	354.9	19 18A	4		22 51 PKS
NEW DELHI	136.17	12.5	19 17A	3		
KUNMING	137.76	338.5	19 20	3		21 53 PP
SHILLONG	139.92	353.1	19 15A	-6		
MUNDARING	148.13	231.8	19 38	3		

MAY 13 14.H 7.M 46.S EPICENTRE -19.42 169.21 DEPTH= 158.KM

A=-0.92712 B= 0.17661 C=-0.33053 D= 0.1871 E= 0.9823
G= 0.3247 H=-0.0619 K=-0.9438 HT= 4.8

DEPTH OF FOCUS= 0.020R

SE= 1.39

	DELTA DEG.	AZ. DEG.	P			O-C			*PP		SUPP.	
			M	S	S	M	S	S	M	S		
PORT VILA	1.88	333.1	0	35A	0							
NOUMEA	3.86	221.6	1	OK	0	1	40	-6				
KOUMAC	4.78	255.5	1	12A	0							
HONIARA	13.38	316.6	3	6	1	5	36	6				
BRISBANE	17.03	239.2	3	51	1	7	3	10				
AFIAMALU	19.01	76.1	4	10	-2	7	22	-13				
KARAPIRO	19.25	164.7	4	15A	0							
CHATEAU	20.45	165.8	4	28A	1							
RIVERVIEW	21.55	224.6	4	40K	2	8	29	7			9 20	
CHARTERS TS.	21.61	264.4	4	39	1	8	32	9				
WELLINGTON	22.30	168.9	4	46A	1	8	38	3				
RABAU	22.48	310.1	4	42	-5							
PORT MORESBY	23.55	291.9	4	58K	1							
CANBERRA	23.86	224.3	5	1K	1				5 36		5 48 PP	
ROXBURGH	25.99	179.8	5	19	-1							
TOOLANGI	27.47	223.9	5	33K	-1							
MOORLANDS	29.55	214.2	5	52	0							
TARRALEAH	29.85	215.2	5	53	-2							
ADELAIDE	31.08	233.8	6	5K	-1						7 26 PPP	
DARWIN	37.51	274.9	7	3	2							
MUNDARING	48.94	244.2	8	32	0	15	24	1				
SCOTT BASE	58.48	180.6	9	41	-1							
BAGUIO CITY	59.62	303.4	9	48	-2							
LEMBANG	61.00	272.9	10	UK	1	18	9	6	10 38		12 13 PP	
TANGERANG	62.14	273.3	10	7K	0	18	22	4	10 44		12 28 PP	
MATUSIRO	62.90	332.2	10	11K	-1	18	25	-2				
HONG KONG	67.91	305.0	10	44	0	19	26	-2			11 20	
ZO-SE	68.19	316.6	10	44	-2	19	33	1			11 18 *SP	
CANTON	68.98	305.3	10	51K	0	19	46	5			11 27 *SP	
NANKING	70.38	316.0	10	57	-2	19	56	-1			11 35 *SP	
SOUTH POLE	70.70	180.0	10	59	-2							
CHANGCHUN	74.69	328.6	11	24K	0	20	50	4			12 0 *SP	
PEKING	77.06	321.0	11	38	0	21	16	4			12 14 *SP	

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MAWSON	78.26	202.1	11 44	0					
SIAN	78.33	312.7	11 45	0	21 31	6		12 22	*SP
KUNMING	78.35	301.9	11 46K	1	21 31	6		12 23	*SP
CHENG TU	80.02	307.4	11 55	1	21 48	5		12 32	*SP
PAOTOW	81.14	318.5	12 0	0	21 59	5		12 37	*SP
LANCHOW	82.82	312.1	12 10K	2	22 17	5		12 47	*SP
PARAISO	85.10	48.9	12 24	4					
UKIAH	85.85	46.1	12 25	2					
BERKELEY	85.91	47.6						22 26	
CALISTOGA	86.05	46.8	12 24A	0					
LICK	86.09	48.3	12 25A	1					
PRIEST	86.24	49.7	12 26A	1					
YAKUTSK	87.02	342.5	12 28A	-1					
SHASTA	87.16	45.1	12 30A	0					
PASADENA	87.18	52.4	12 30	0					
SHILLONG	87.43	298.1	12 31K	0					
MINERAL	87.53	45.6	12 31A	0					
N-LAZARVSKYA	88.67	187.3	12 35	-2					
LHASA	89.67	301.6	12 43	1	23 23	6		13 20	*SP
COLLEGE	90.23	16.9	12 42	-2	23 24	2			
VICTORIA	90.31	37.9	12 44	-1					
BOULDER CITY	90.43	51.9	12 46	1			13 25		
EUREKA	91.03	48.3	12 49	1				16 26	PP
TUCSON	92.07	56.6	12 54	1					
BLUE MTS.	92.37	43.0	12 54A	0			13 40	16 35	PP
TONTO FOREST	92.47	54.6	12 55	0	23 50	8		16 58	
TIKSI	94.90	348.1	13 4	-2					
UINTA BASIN	95.90	49.4	13 10	0	24 20	50		16 48	PP
ALBUQUERQUE	96.42	55.3	13 13	1					
EDMONTON	98.13	36.2	13 20	0					
YELLOWKNIFE	100.84	27.3	13 32	-1					
WICHITA MTS.	102.54	57.5	13 39	-1				17 49	PP
COPPERMINE	102.55	22.1	13 40	0					
MOULD BAY	104.42	13.6	13 47	-1				21 22	
SHIRAZ	122.12	293.3	18 36	0					
SHAWINIGAN	123.03	46.6	18 37	-1					
KEVO	124.71	345.0	18 41	0					
SODANKYLA	126.50	343.0	18 44	-1					
SEPT ILES	126.58	41.3	18 44	-1					
KIRUNA	127.75	345.6	18 46	-1				21 52	SKP
KAJAANI	128.43	339.6	18 48	0				21 53	SKP
BROKEN HILL	128.76	231.8						16 0	
PULKOVO	130.16	334.2	18 52	0					
UMEA	130.92	342.4	18 53A	0				22 2	SKP
NURMIJARVI	131.89	337.3	18 54	-1			19 35	22 6	SKP
HELSINKI	132.00	336.9						22 7	SKP
SKALSTUGAN	133.16	346.1						22 4	SKP
UPPSALA	134.78	340.2						22 15	SKP
LWIRO	135.55	245.4						22 24	*PPP
KSARA	136.25	298.9						22 24	PP
GOTEBORG	138.26	341.8						22 25	SKP
KARLSKRONA	138.33	338.0						22 32	SKP
COLLMBERG	143.08	335.1	19 13	-3				22 40	PP
PRAGUE	143.42	332.6						22 41	
PRUHONICE	143.43	332.4	19 13	-3				22 42	
BELGRADE	143.76	321.4	19 16	-1				22 43	PP
JENA	143.93	335.9	19 15	-2			19 55	22 42	PP
MUNSTER	144.46	340.4	19 17	-1					
KASPERSKE H.	144.48	332.2	19 18	0				22 54	PP
ATHENS	144.81	309.0	19 18K	-1					
BENSBERG	145.47	339.9	19 21	1			19 58		
LJUBLJANA	146.25	327.6	19 22	1			20 1	22 48	PP
STUTTGART	146.55	335.7	19 24	2			20 4	22 49	PP
TRIESTE	146.91	327.8	19 25	3			20 4		
DOURBES	147.02	341.7	19 27	5				20 7	
STRASBOURG	147.28	337.0	19 38	15				20 18	
WELSCHBRUCH	147.93	338.3	19 26	2					
BESANCON	149.05	337.5	19 31	5					
GARCHY	150.00	341.0	19 33A	6			20 13		
ROSELEND	150.11	335.1	19 34	7			20 13		
ISOLA	151.16	332.8	19 36	7				20 16	
CLERMONT-FD.	151.32	339.5	19 38	9					
MONACO	151.35	331.8	19 30	1					

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MAY 15 2.H 52.M 36.S EPICENTRE -3.38 146.76 DEPTH= 0.KM

A=-0.83494 B= 0.54721 C=-0.05858 D= 0.5481 E= 0.8364
G= 0.0490 H=-0.0321 K=-0.9983 HT= 7.1

SE= 2.81

	DELTA DEG.	AZ. DEG.	P			S			*PP		SUPP.	
			M	S	O-C	M	S	O-C	M	S	M	S
RABUL	5.46	98.7	1	22	-3	2	20	-9				
PORT MORESBY	5.99	176.3	1	32K	0	2	52	9				
HONIARA	14.41	115.3	3	23A	-5	6	8	-1				
CHARTERS TS.	16.61	181.6	3	58	2	7	4	3				
BRISBANE	24.56	167.0	5	23	0	9	43	1				
PORT VILA	25.50	125.5	5	28K	-4							
RIVERVIEW	30.57	172.8				11	19	0			8	0
MANILA	31.13	305.8	6	23	0	11	13	-15				
CANBERRA	31.85	176.5	6	27	-2	11	33	-6			11	10
ADELAIDE	32.31	192.4	6	32	-1	11	48	1	6	45	13	36 SS
BAGUIO CITY	32.51	308.0	6	42	7							
TOOLANGI	34.05	181.8	6	46	-2						14	42 SSS
MUNDARING	40.40	221.8	7	42	0	13	55	4				
MATUSIRO	40.51	349.4	7	41A	-2	13	48	-4				
PERTH	40.64	222.1	7	48	4	14	0	6			9	18 PP
CANTON	41.89	310.6	7	53	-1	14	4	-9				
ZO-SE	42.07	326.4	7	55	0	14	8	-8				
KARAPIRO	43.30	146.3	8	0	-5							
NANKING	44.14	325.1	8	14	2	14	46	0				
WELLINGTON	45.35	150.2				15	0	-3				
VLADIVOSTOK	48.19	345.4	8	44	0	15	42	-2				
Y.-SAKHLINSK	50.31	356.4	9	4	3							
KUNMING	51.24	306.1	9	9	1	16	27	1				
PEKING	51.51	330.1	9	9	-1	16	22	-8				
SIAN	51.67	319.6	9	9	-2							
CHENG TU	52.99	312.9	9	20	-1	16	42	-8				
PAOTOW	55.15	326.3	9	36	-1	17	15	-4				
LANCHOW	56.08	318.3	9	42	-1							
HONOLULU	59.27	62.9				18	26	12				
KIPAPA	59.38	62.8				18	26	11				
SHILLONG	60.43	301.8	10	13K	-1	18	32	4				
ULAN-BATOR	61.83	330.7	10	21	-2	18	54	8				
LHASA	62.57	305.9	10	27	-1	18	51	-5				
BOKARO	65.15	298.1	10	45	0							
IRKUTSK	66.01	333.0	10	50	-1							
YAKUTSK	66.52	351.3	10	51	-3							
ESEN BULAK	66.60	324.4	11	1	6	19	56	11				
CAPE HALLETT	70.38	172.6	11	15	-3							
DEHRA DUN	73.50	302.8	11	36	-1							
NEW DELHI	73.81	300.9	11	36K	-2							
SCOTT BASE	75.17	175.7	11	46	0							
TIKSI	75.78	354.2	11	49	-1	21	30	-1				
ALMATA	77.78	315.5	11	59K	-2							
TASHKENT	82.85	312.2	12	27	-1							
COLLEGE	82.86	23.0	12	24	-4							
QUETTA	82.90	300.8	12	28K	0							
SOUTH POLE	86.64	180.0	12	46	-1							
BYRD STATION	87.34	170.0	12	48	-2							
SVERDLOVSK	90.68	326.7	13	6	0							
BERKELEY	92.83	52.4									23	32
LICK	93.30	52.9	13	23A	5							
MINERAL	93.42	49.9	13	27K	8							
PENTICTON	94.91	41.0	13	25	-1							
SHIRAZ	95.34	299.3	13	25	-3							
BLUE MTS.	96.58	45.4	13	34	1						17	22 PP
EUREKA	97.75	50.8	13	39	1							
HUNGRY HORSE	98.64	41.8	13	42	0							
TONTO FOREST	101.79	55.8	13	56	-1						14	22
UINTA BASIN	102.60	49.6	14	2	2						18	21 PP
KEVO	103.14	341.9									33	11 SS
MOSCOW	103.50	326.7									18	29 PP
NURMIJARVI	108.26	333.8									34	24 SS
WICHITA MTS.	112.10	53.9	18	58	20						19	44 PP
TULSA	114.07	52.1									29	10
ATHENS	117.78	311.5									19	45
PRUHONICE	118.54	327.0									20	2
KASPERSKE H.	119.53	326.6	18	52	0							
JENA	119.57	329.1	19	0	8						20	9 PP
CUMBERLAND	122.08	49.6	18	56	-1						37	16 SS
BOGOTA	139.25	86.9									40	54 SS

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MAY 15 11.H 15.M 44.S EPICENTRE 41.72 20.06 DEPTH= 79.KM

A= 0.70320 B= 0.25683 C= 0.66298 D= 0.3431 E=-0.9393
G= 0.6227 H= 0.2274 K=-0.7486 HT= -2.3

DEPTH OF FOCUS= 0.007R

SE= 3.52

	DELTA DEG.	AZ. DEG.	P		O-C S	S			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
TITOGRAD	0.93	320.1									0	14 PG
SKOPJE	1.06	75.9									0	12 PG
TARANTO	2.47	240.5	0	49	10	1	19	11				
SOFIA	2.62	66.9									0	40 PG
BELGRADE	3.11	5.1	0	45	-3	1	28	4			1	39 SG
PATRAS	3.72	159.2	1	0	4							
ATHENS	4.68	141.9	1	4	-6	1	56	-7				
MESSINA	4.94	226.1	1	16	3	2	17	7			2	41 SG
REGGIO CALA.	4.96	224.6	1	7	-6	2	3	-7			2	55
AQUILA	5.00	279.4	1	11	-3						1	30 P*
ZAGREB	5.05	325.6	1	13	-2						2	37 SG
CAMPULUNG	5.06	43.8									2	44
BUCHAREST	5.18	56.6									2	36
ROME	5.67	274.3									3	2 S*
LJUBLJANA	5.90	319.1	1	24A	-2	2	32	-1			1	50 PG
TRIESTE	6.03	312.8	1	25	-3	2	34	-3			1	47 PG
MURBANOVO	6.29	348.5				2	46	3			3	52 SG
ISTANBUL UN.	6.75	92.8	1	39	1							
BRATISLAVA	6.78	343.0	1	40	1	3	8	13			2	19 PG
FLORENCE X.	6.81	290.5	1	25	-14						2	34
PRATO	6.94	291.1	1	44	3	2	57	-2				
PADOVA	7.00	304.5				3	0	-1			2	10 P*
VIENNA-H.	7.03	339.4	1	43	1	3	1	0				
UZHGOROD	7.09	12.1	1	41	-2							
SKALNATE PL.	7.46	0.9	1	48	0							
NIEDZIKA	7.70	1.2	1	50	-1						1	57 PP
KRAKOW	8.33	359.4	2	0	0						4	52
RACIBORZ	8.46	351.8	2	7	5	3	51	15			2	23 PPP
LWOW	8.56	17.5	2	15	12						4	38
KASPERSKE H.	8.70	330.6	2	2A	-3						2	45
PRUHONICE	9.11	336.9	2	11	0						4	7
CHUR	9.13	307.7	2	9	-2	3	51	-2				
PRAGUE	9.23	336.8									3	40
MONACO	9.51	286.4	2	16	0						2	34 SG
RAVENSBURG	9.58	312.7	2	14	-3						4	42
ISOLA	9.86	288.8	2	16	-5	4	10	0				
EBINGEN	10.17	313.2	2	26	1							
TUBINGEN	10.32	315.0	2	35	8						5	45
STUTTGART	10.36	316.5	2	25A	-2						5	48
ROSELEND	10.50	296.7	2	28K	-1	4	20	-6				
FELDBERG	10.54	309.8	2	28	-2						5	54
COLLMBERG	10.74	335.5	2	31	-2						5	51 SG
JENA	10.91	330.5	2	46	11	4	40	4			3	52 PG
KARLSRUHE	10.96	315.6	2	39	3	4	51	14				
HEIDELBERG	11.05	317.9	2	33	-4							
STRASBOURG	11.06	312.5	2	42	5	4	45	6			5	29
HALLE	11.25	333.1	2	46	7	4	56	12				
BESANCON	11.47	303.6	2	38	-4						5	29
WELSCHBRUCH	11.77	309.3	2	34	-12	4	42	-15				
BENSBERG	12.82	320.5	3	15	15	5	26	4			3	36
CLERMONT-FD.	12.90	294.0	3	14	13							
GARCHY	13.33	300.4	3	4	-3						7	30
KARLSKRONA	14.74	350.1	3	24	-1						4	14
FOLINIERE	16.07	303.0	3	41	-1							
GOTEBORG	16.81	344.9	3	53	2							
BAKURIANI	17.50	82.1	4	1	1							
MOSCOW	18.11	33.3	4	5	-2							
UPPSALA	18.22	356.1	4	7	-2							
HELSINKI	18.72	7.7	4	12	-2							
NURMIJARVI	19.03	7.0	4	17	-1							
VIBORG	19.76	12.8	4	23K	-3							
KIROVOBAD	19.78	84.3	4	24	-2							
UMEA	22.14	0.2	4	49	-1							
SKALSTUGAN	22.37	350.8	4	52K	0							
KAJAANI	22.84	8.7	4	56	-1							
SODANKYLA	25.95	5.8	5	26	-1							
KIRUNA	26.17	0.3	5	27	-2							
APATITY	26.89	11.3	5	34A	-1							
TROMSOE	27.98	359.2	5	44	-1							

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KEVO	28.34	5.1	5 47	-1	
SHIRAZ	28.81	104.2	5 50K	-3	
KHEYS	41.34	8.8	7 34	-5	
ALMATA-2	41.57	67.9	7 41A	0	
NEW DELHI	47.72	86.9	8 29A	-1	
CHATRA	56.09	82.7	9 31	-2	
RESOLUTE	56.28	343.2	9 34	0	
TIKSI	56.48	21.1	9 35A	-1	
MOULD BAY	59.50	349.6	9 57	0	
COPPERMINE	65.67	342.9	10 38	0	
YELLOWKNIFE	69.96	339.4	11 4A	-1	
COLLEGE	73.33	354.6	11 25	0	
EDMONTON	77.15	333.5	11 48	2	
CUMBERLAND	77.31	306.4	11 53	6	
HUNGRY HORSE	81.58	331.0	12 13	3	
WICHITA MTS.	85.40	313.5	12 32	2	13 50
BLUE MTS.	85.75	331.1	12 32	1	
UINTA BASIN	86.44	323.8	12 35	0	
TONTO FOREST	92.15	321.5	13 4	2	13 21

MAY 15 12.H 8.M 9.S EPICENTRE 38.27 -26.49 DEPTH= 23.KM

A= 0.70446 B=-0.35110 C= 0.61682 D=-0.4461 E=-0.8950
G= 0.5520 H=-0.2751 K=-0.7871 HT= -1.1

SE= 2.35

	DELTA DEG.	AZ. DEG.	P		O-C			*PP		SUPP.	
			M	S	M	S	S	M	S	M	S
ANGRA DO HO.	0.69	303.3	0	18	3	0	30	5			
PONTA DELGDA	0.84	129.9	0	12	-5						
HORTA	1.70	279.4	0	26	-3	0	44	-6			
AVERROES	16.25	102.0	3	51	3				4	19	
TOLEDO	17.50	77.7	4	5K	1	7	30	14	4	25 PP	
VALENTIA	17.77	34.6	4	12	4	7	39	16			
GRANADA	18.14	86.4	4	15K	3				4	24 PP	
ALMERIA	19.09	86.8	4	22	-2				4	40 PP	
ALICANTE	20.40	81.7	4	42A	4				5	1 PP	
BAGNERES	20.73	68.2	4	41	-1						
FOLINIERE	21.48	52.4	4	52	3						
BENI ABBES	21.65	104.8	4	49	-2				8	13	
KEW	22.61	45.8	5	2	2	9	13	11			
CLERMONT-FD.	23.15	61.6	5	7	1						
PARIS	23.37	53.9	5	10	2						
GARCHY	23.38	57.8	5	8	0				5	36	
DURHAM	23.60	37.6	5	10A	0	9	24	4			
ABERDEEN	24.80	32.4							8	4	
DOURBES	25.05	51.8	5	24	0	9	53	9			
UCCLE	25.10	50.1	5	25	0	10	2	17			
M.BOUR	25.25	157.9	5	31	5						
BESANCON	25.32	58.8	5	26	-1						
WELSCHBRUCH	25.77	56.2	5	36	5						
ISOLA	25.79	66.0	5	33	2				5	41	
DE BILT	26.01	47.6	5	33	0						
MONACO	26.06	67.1	5	31	-3				5	57	
STRASBOURG	26.73	56.2	5	37	-3	10	16	4	9	15	
BENSBERG	26.86	50.9	5	41	0				6	21 PP	
WITTEVEEN	27.11	46.8	5	42	-1						
PAVIA	27.33	63.9							11	6	
MUNSTER	27.41	48.9	5	47	1						
STUTTART	27.74	56.2	5	46	-3						
JENA	29.57	52.2	6	5	0				7	24	
ROME	29.86	70.6				11	22	20	14	51	
AQUILA	30.50	69.5	6	15	1	11	21	9	14	31	
COLLMBERG	30.52	51.8	6	13	-1				7	13 PP	
KASPERSCHE H.	30.60	56.2	6	13	-2						
SEPT ILES	30.60	306.0	6	20	5						
LJUBLJANA	31.10	62.2	6	18	-1						
COPENHAGEN	31.23	43.4	6	20	0						
PRAGUE	31.25	54.5	6	21	1						
PRUHONICE	31.32	54.6	6	20	-1						
KONGSBERG	31.32	35.2	6	19A	-2						
GOTEBORG	31.65	39.5	6	23	-1						
KARLSKRONA	33.06	43.4	6	35K	-1						
SKALSTUGAN	34.29	29.8	6	47	0						
NIEDZIKA	35.02	56.1	6	53	0						

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UPPSALA	35.15	37.6	6	53K	-1						
PALISADES	36.27	289.6				12	50	8			
UZHGOROD	36.34	57.4	7	4	0						
LWOW	37.43	55.3	7	14	1						
UMEA	37.62	32.0	7	15K	0						
NURMIJARVI	38.71	38.0	7	23	-1	13	13	-6		8	55 PP
ATHENS	39.10	74.3	7	32	5						
KIRUNA	39.22	26.0	7	28	0					8	19
TROMSOE	39.54	23.1	7	32	1						
VIBORG	40.76	38.2	7	38K	-3						
KAJAANI	40.85	33.0	7	42	0						
MORGANTOWN	41.08	289.2	7	46A	2						
SODANKYLA	41.27	28.0	7	44K	-1						
KEVO	42.17	24.6	7	52	-1	14	12	1			
ISTANBUL UN.	42.20	68.1								19	31
APATITY	43.86	28.7	8	6K	0	14	34	-2			
MOSCOW	45.33	45.7	8	18A	0						
ALERT	45.94	353.8	8	22	-1						
CUMBERLAND	46.60	285.8	8	27	-1	15	16	1	8	34	18 44 SS
RESOLUTE	47.81	340.5	8	38K	0						
KSARA	49.79	75.0	8	53	0						
KHEYS	51.63	12.0	9	8	1						
BAKURIANI	52.38	62.6	9	12	-1						
LAWRENCE	52.51	293.7	9	12	-2						
FAYETTEVILLE	52.87	289.9	9	9	-7						
TIFLIS	53.28	62.2	9	12	-7						
MOULD BAY	53.88	342.8	9	22K	-2						
TULSA	54.12	290.4				17	2	3			
COPPERMINE	54.69	332.3	9	28K	-2						
KIROVOBAD	54.75	62.9	9	29	-1						
GORIS	55.21	64.2	9	33	0						
YELLOWKNIFE	56.06	326.0	9	38A	-2						
WICHITA MTS.	56.70	290.3	9	42	-2	17	41	7		11	52 PP
EDMONTON	58.70	315.6	9	58	0						
LARAMIE	58.81	300.1	10	3	4						
GOLDEN	59.37	298.4	10	1	-2						
TEHERAN	60.45	66.1	10	9	-1						
HUNGRY HORSE	61.18	310.5	10	14	-1						
UINTA BASIN	61.96	300.7	10	19	-2	18	47	5		12	36 PP
PENTICTON	64.00	313.4	10	33	-1						
SHIRAZ	64.27	71.6	10	34K	-2					11	17 PP
ASHKABAD	64.30	60.9	10	37	1						
BLUE MTS.	64.82	308.2	10	38	-1					19	7
LWIRO	64.93	114.9	10	39K	-1						
TONTO FOREST	66.10	295.6	10	48	1					13	11
EUREKA	66.66	302.6	10	50	-1					13	11 PP
TUCSON	66.84	293.5	10	53	1						
LA PAZ	67.03	223.8	10	54	1	19	49	5			
COLLEGE	67.48	336.7	10	56	0						
TIKSI	69.01	8.1	11	5K	-1						
TASHKENT	69.75	53.0	11	11	1						
MINERAL	69.87	305.8	11	12A	1						
CALISTOGA	71.45	304.8	11	27K	6						
LICK	71.56	303.2	11	28K	7						
PRIEST	71.59	301.7	11	27A	6						
BERKELEY	71.67	304.0	11	20K	-2						
ALMATA-2	73.53	47.7	11	33K	0						
QUETTA	74.48	63.8	11	38K	0						
WARSAK DAM	75.41	58.2	11	43	-1						
YAKUTSK	78.22	11.2	11	59K	0						
DEHRA DUN	82.01	57.7	12	20	0						
NEW DELHI	82.55	59.5	12	22K	-1						
PORT MORESBY	150.69	12.9	19	52K	7						

MAY 16 15.H 52.M 12.S EPICENTRE -0.81 128.68 DEPTH= 0.KM

A=-0.62485 B= 0.78062 C=-0.01400 D= 0.7807 E= 0.6249
G= 0.0088 H=-0.0109 K=-0.9999 MT= 7.2

SE= 2.48

	DELTA	AZ.	P		O-C		S			*PP		SUPP.	
	DEG.	DEG.	M	S	S	S	M	S	S	M	S	M	S
DARWIN	11.69	169.6	2	33	-19	4	44	-20					
MANILA	17.12	334.2	4	1	-2						12	45	
BAGUIO CITY	18.89	335.3	4	24	-1	8	7	14					
PORT MORESBY	20.27	115.5	4	38A	-2	8	23	0					

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LEMBANG	21.83	253.6	4 58K	2	8 54	0				5 28	PP
DJAKARTA	22.44	255.7	5 0	-2	9 0	-5				5 30	PP
TANGERANG	22.63	255.9	5 3A	-1	9 13	5				5 34	PP
RABAU	23.71	98.6	5 16	1							
CHARTERS TS.	25.75	139.2	5 36	2	10 4	2					
HONG KONG	26.97	329.2	5 40	-6	10 19	-3					
CANTON	28.05	328.8	5 57	2							
HONIARA	32.28	106.4	6 33	0							
ZO-SE	32.52	348.0	6 36	1	11 51	1					
PERTH	33.27	200.2			12 3	1					
HANKING	34.01	344.9	6 50	2	12 15	2					
BRISBANE	35.12	140.9	6 57	-1	12 28	-3					
ADELAIDE	35.26	165.6	6 46	-13			7 1		14 0		
KUNMING	35.98	317.6	7 7	2	12 48	4					
MATUSIRO	38.20	12.5	7 22	-2	13 13	-5					
RIVERVIEW	39.02	149.6	7 35	5							
CHENG TU	39.11	325.2	7 32A	1	13 36	4					
CANBERRA	39.21	153.3	7 27	-5			7 42		9 4	PP	
SIAN	39.50	333.9	7 35	1	13 44	7					
TOOLANGI	39.73	158.9	7 40	4					7 56	*SP	
PEKING	42.22	345.7	7 55	-2	14 15	-3					
LANCHOW	43.36	330.3	8 7	1	14 37	2					
SHILLONG	44.19	309.1	7 56K	-17	14 45	-1					
CHANGCHUN	44.54	356.5	8 17	1							
PAOTOM	44.56	339.7	8 16	0	14 54	2					
LHASA	46.96	313.3	8 36A	1	15 29	3					
BOKARO	48.29	303.4	8 51	6							
CHATRA	48.48	307.7	8 51	4							
MADRAS	50.01	287.7	8 59	0					11 2		
ULAN-BATOR	52.10	341.6	9 13	-1	16 39	1					
ESEN BULAK	54.97	333.1	9 42	6	17 12	-5					
KARAPIRO	56.69	136.3	9 51	3							
IRKUTSK	56.72	342.4	9 46	-2							
POONA	57.17	292.6	9 54K	3							
DEHRA DUN	57.22	307.3	9 51	-1					18 38		
NEW DELHI	57.24	305.1	9 50K	-2							
ALMATA-2	63.45	320.4	10 34A	0							
WARSAK DAM	63.70	308.9	10 34	-2							
KHOROG	64.97	312.5	10 38	-6							
FRUNSE	65.02	318.9	10 45K	0							
ANDIJAN	65.65	316.1	10 49	0	19 37	3					
QUETTA	66.23	303.6	10 51A	-1							
WILKES	66.66	187.9	10 58	3							
TASHKENT	68.02	315.6	11 2	-2	20 3	0					
MIRNY	70.25	194.4	11 15	-2							
TIKSI	72.32	0.1			20 51	-2					
ASHKABAD	75.07	309.6	11 49	3							
CAPE HALLETT	75.99	167.9	11 50	-1							
KIZYL-ARVAT	76.94	310.5	11 58	2							
SHIRAZ	78.38	300.4	12 2A	-2			12 8		20 49		
SVERDLOVSK	78.83	328.7	12 6	-1							
SCOTT BASE	79.61	172.4	12 9	-2							
MAWSON	80.21	200.8	12 13A	-1							
TANANARIVE	81.34	251.1	12 23	3							
KIROVOBAD	84.71	310.8	12 37	-1							
TIFLIS	85.95	311.7	12 41	-3							
BAKURIANI	86.91	311.7	12 49	1							
COLLEGE	87.96	25.1	12 54	1			13 8				
SOUTH POLE	89.20	180.0	12 40	-19							
BYRD STATION	92.92	170.7	13 16	-1					22 2		
SODANKYLA	95.37	337.7	13 26	-2							
MOULD BAY	95.93	12.9	13 28	-2							
KIRUNA	97.57	338.7	13 36	-2							
NURMIJARVI	97.58	331.0							26 20	PS	
COPPERMINE	100.41	20.3	13 53	2							
RESOLUTE	101.89	10.8	13 55	-2							
ATHENS	102.27	308.6							16 21		
PRUHNICE	105.94	322.2							18 46	PP	
EUREKA	109.89	48.1							18 59	PP	
UINTA BASIN	114.29	45.5	18 44	2					19 0	PP	
TONTO FOREST	114.99	52.2	18 46	3					19 2		
WICHITA MTS.	124.53	47.3	19 0	-2							
LA PAZ	156.11	136.8	20 4	8							

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MAY 16 16.M 17.M 55.S EPICENTRE -0.92 128.88 DEPTH= 0.KM

A=-0.62755 B= 0.77841 C=-0.01590 D= 0.7785 E= 0.6276
G= 0.0100 H=-0.0124 K=-0.9999 HT= 7.2

SE= 1.60

	DELTA DEG.	AZ. DEG.	P		O-C S	S O-C			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
DARWIN	11.55	170.4	2	46	-3	4	39	-21				
MANILA	17.30	333.8	4	4	-1							
BAGUIO CITY	19.07	334.9	4	27	1	8	3	6				
PORT MORESBY	20.04	115.5	4	37	0	8	27	9				
LEMBANG	22.00	254.0	4	58K	0	8	54	-2			9	42 5SS
DJAKARTA	22.61	256.1	5	5	1	9	9	2			5	36 PP
TANGERANG	22.80	256.2	5	4A	-1	9	10	-1			5	35 PP
CHARTERS TS.	25.54	139.4	5	32	0	10	7	9				
HONG KONG	27.17	329.0	5	48	1	10	25	0				
CANTON	28.25	328.6	5	58	1	10	43	1				
PERTH	33.23	200.5									8	0 PP
BRISBANE	34.91	141.0	6	55	0						9	29
ADELAIDE	35.10	165.9	6	57K	0							
KUNMING	36.20	317.5	7	8	2	12	49	2				
MATUSIRO	38.26	12.2	7	24K	0						9	38 PCP
RIVERVIEW	38.83	149.8	7	31	3							
CANBERRA	39.02	153.5	7	31K	1						8	7
TOOLANGI	39.56	159.1	7	36	1						7	49 *SP
PEKING	42.37	345.5	7	57	-1							
LANCHOW	43.55	330.1	8	8	1	14	35	-2				
SHILLONG	44.41	309.0	8	13	-1						10	0
LHASA	47.18	313.3	8	37	1	15	29	0				
CHATRA	48.71	307.7	8	48K	0							
MADRAS	50.23	287.7	8	59	-1							
POONA	57.40	292.7	9	59	6							
DEHRA DUN	57.44	307.3	9	52	-1							
NEW DELHI	57.47	305.1	9	50K	-3							
YAKUTSK	62.77	0.4	10	28K	-1							
ALMATA-2	63.66	320.4	10	35A	0							
WARSAK DAM	63.92	308.9	10	36	-1							
KHOROG	65.19	312.4	10	45	0							
ANDIJAN	65.87	316.0	10	48	-2							
QUETTA	66.45	303.5	10	52K	-1							
TASHKENT	68.24	315.6	11	3	-2							
TIKSI	72.43	360.0	11	30A	0							
CAPE HALLETT	75.84	168.0	11	30	-20							
KIZYL-ARVAT	77.16	310.5	11	58	1							
SHIRAZ	78.61	300.4	12	3K	-2	21	55	-7	12	23	22	19 SP
SVERDLOVSK	79.02	328.7	12	6	-1							
MAWSON	80.18	200.8	12	13K	-1							
TANANARIVE	81.50	251.1	12	23	2							
GORIS	84.82	309.6	12	39	1							
KIROVOBAD	84.93	310.8	12	37	-1							
TIFLIS	86.17	311.7	12	46	2							
BAKURIANI	87.13	311.7	12	50	1							
COLLEGE	87.97	25.1	12	54	1						16	33 PP
SOUTH POLE	89.09	180.0	12	58	0							
BYRD STATION	92.78	170.7	13	16	0							
SODANKYLA	95.55	337.7	13	27	-1							
MOULD BAY	95.99	12.9	13	30	0							
KIRUNA	97.75	338.7	13	37A	-1							
COPPERMINE	100.45	20.3	13	51	1							
RESOLUTE	101.96	10.8	13	58	1							
BERKELEY	105.40	51.0	18	35	777							
UINTA BASIN	114.22	45.6	18	45	3							
TONTO FOREST	114.90	52.3	18	47	4							
WICHITA MTS.	124.46	47.4	19	5	4						21	20 PP
CUMBERLAND	132.94	39.0	19	21	3							
PALISADES	135.07	24.5	19	42	20	26	42	11				
HUANCAYO	152.73	118.9	20	16	25							
LA PAZ	155.89	136.6	19	58	2							

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MAY 17 4.M 6.M 38.S EPICENTRE 45.49 150.85 DEPTH= 42.KM

A=-0.61437 B= 0.34264 C= 0.71074 D= 0.4871 E= 0.8734
G=-0.6207 H= 0.3462 K=-0.7035 HT= -3.7

DEPTH OF FOCUS= 0.001R

SE= 1.73

	DELTA DEG.	AZ. DEG.	P			S			*PP		SUPP.	
			M	S	O-C	M	S	O-C	M	S	M	S
KURILSK	2.12	264.1	0	36K	2	1	0	0				
Y.-SAKHLINSK	5.84	288.1	1	30K	3							
MIZUSAWA	9.60	232.0	2	20	1	3	51	-16				
MATUSIRO	13.06	231.2	3	0	-6	5	25	-6				
VLADIVOSTOK	13.78	266.8	3	13	-2	5	46	-2				
CHANGCHUN	18.23	273.9	4	10	-2	7	26	-4				
YAKUTSK	20.58	331.1	4	38	0	8	25	4				
PEKING	25.91	270.2	5	30	0	9	54	-1				
ZO-SE	27.18	248.4	5	41	-1							
NANKING	28.17	252.8	5	49	-2							
TIKSI	28.25	345.5	5	49A	-3							
ULAN-BATOR	29.94	290.7	6	13	6							
PAOTOW	30.00	275.3	6	10	3							
SIAN	33.73	265.5	6	39A	-1	11	57	-2				
LANCHOW	36.38	271.9	7	3A	1	12	39	-1				
ESEN BULAK	37.34	291.6	7	11	1							
COLLEGE	38.11	37.4	7	18	1							
BAGUIO CITY	38.49	231.0	7	18	-2							
CHENG TU	39.17	264.4	7	26A	0	13	19	-4				
KUNMING	43.46	258.8	8	0A	-1	14	25	-1				
SEMIPALATNSK	45.92	302.8	8	18	-3							
MOULD BAY	46.32	19.3	8	24A	0	15	9	2				
KIPAPA	47.98	102.5	8	46	9							
LHASA	48.88	272.7	8	46A	2	15	46	3				
COPPERMINE	50.31	29.5	8	55A	0							
SHILLONG	50.77	267.9	8	57	-1							
ALMATA	51.10	295.6	9	0	-1							
ALERT	51.17	5.3	9	1	0							
RESOLUTE	52.53	17.8	9	11A	-1							
FRUNSE	52.80	296.2	9	14A	0							
YELLOWKNIFE	52.87	35.5	9	14A	0							
NORD	52.99	357.7	9	14A	-1							
CHATRA	53.29	272.4	9	17A	0							
SVERDLOVSK	53.68	317.0	9	19K	-1							
ANDIJAN	55.33	295.2	9	33A	1	17	17	6				
VICTORIA	55.55	53.5	9	32	-2							
TASHKENT	56.96	297.3	9	45A	1	17	35	2				
PENTICTON	57.23	51.1	9	45A	-1							
KHOROG	57.70	292.4	9	50A	1	17	44	1				
APATITY	57.87	336.3	9	49K	-1							
KEVO	58.00	340.1	9	50A	-1				10	32	PCP	
EDMONTON	58.22	44.5	9	53A	0							
NEW DELHI	59.18	280.7	9	58A	-1							
SPOKANE	59.39	51.6	10	2	1				10	49	PCP	
WARSAK DAM	59.73	289.1	10	4	1							
SODANKYLA	59.85	338.3	10	2	-2				10	49	PCP	
TROMSOE	59.92	342.5	10	3	-2							
HUNGRY HORSE	60.82	49.6	10	9	-2							
KIRUNA	61.02	340.7	10	10A	-2							
BLUE MTS.	61.09	54.3	10	12A	0	18	58	31	12	30	PP	
MINERAL	61.23	60.6	10	13A	0							
CALISTOGA	61.64	62.7	10	14A	-2							
KAJAANI	62.01	335.4	10	18	-1				10	59	PCP	
LICK	63.02	63.3	9	47A	-38							
BUTTE	63.02	51.0	10	26	1				11	1	PCP	
BOZEMAN	64.07	50.5	10	31	-1				11	7	PCP	
VIBORG	64.19	332.4	10	31A	-2							
SCORESBY SD.	64.23	357.3	10	34	1							
UMEA	64.29	338.1	10	32A	-2							
PRIEST	64.38	63.8	10	35K	1							
PULKOVO	64.39	331.1	10	32	-2							
MOSCOW	64.58	324.9	10	35	-1							
QUETTA	65.15	288.4	10	39	0	19	17	0				
EUREKA	65.17	58.4	10	40	1				11	2		
CHARTERS TS.	65.39	184.7	10	41	0							
NURMIJARVI	65.66	334.0	10	41	-1				11	13	PCP	
ASHKABAD	65.73	300.0	10	45	2							
HELSINKI	65.83	333.6	10	39	-5							
VANNOVSKAYA	65.89	300.1	10	45	1							

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KIZYL-ARVAT	66.19	302.2	10 48A	2					
SKALSTUGAN	66.44	341.2	10 47	0					
SALT LAKE C.	66.77	55.1	10 50	1					
PASADENA	67.22	64.1	10 51	-1					
BOULDER CITY	68.11	60.6	10 59	1					
UPPSALA	68.26	336.7	10 57A	-2					11 21 PCP
UINTA BASIN	68.37	54.2	10 59	-1	20	0	4		39 14 PKPPKP
RAPID CITY	69.30	47.8	11 5	0					
LARAMIE	69.94	51.2	11 9	0					
KONGSBERG	70.50	340.3	11 11K	-2					11 27 PCP
KIROVOBAD	70.91	308.8	11 16A	1					
TIFLIS	71.00	310.5	11 17	1					
GOLDEN	71.16	52.3	11 17	0					
TEHERAN	71.38	302.1	11 20	2					
TONTO FOREST	71.41	59.9	11 19	1					13 56 PP
GOTEBORG	71.63	338.2	11 18A	-1					11 35 PCP
GORIS	71.71	307.9	11 21A	1	20	40	5		
KARLSKRONA	71.97	335.5	11 23A	2					
BRISBANE	72.55	178.2	11 24	-1					
TUCSON	73.07	61.2	11 28	0					
COPENHAGEN	73.28	336.9	11 29A	0					
ALBUQUERQUE	73.84	56.6	11 32	0					
SIMFEROPOL	73.99	318.7	11 33A	0					
SHIRAZ	74.87	296.8	11 39A	1	21	8	-3	11 53	
SCHEFFERVILLE	75.10	21.4	11 40A	0					
KRAKOW	75.74	329.8	11 43A	0					12 12
CHORZOW	75.87	330.5	11 44	0					
UZHGOROD	76.06	327.7	11 46	1					
RACIBORZ	76.32	330.8	11 47	0					11 57 PCP
COLLMBERG	76.95	334.4	11 49A	-1					12 16
HALLE	77.09	335.1	11 50	-1	21	37	2		
LAWRENCE	77.11	47.0	11 50	-1					
WITTEVEEN	77.37	338.7	11 53	0					
DURHAM	77.41	344.1	11 53A	0					
LUBBOCK	77.49	54.7	11 53	0					
PRUHONICE	77.62	332.8	11 55	1					
JENA	77.70	335.0	11 55	1					13 1
MUNSTER	77.89	337.7	11 56	1					
BRATISLAVA	78.33	330.4	11 58	0					
WICHITA MTS.	78.49	51.9	11 58	-1					15 1 PP
VIENNA-H.	78.51	330.9	12 0	1					12 10 PCP
KASPERSKE H.	78.67	333.0	12 0A	0					
BENSBERG	78.92	337.6	12 1	0					
TULSA	79.13	49.4	12 2A	0					
SEPT ILES	79.36	23.3	12 2A	-1					
FAYETTEVILLE	79.84	48.2	12 5A	-1					
ST. LOUIS 1	79.89	44.1	12 6	0					
KEW	80.27	342.2	12 9	1					
STUTTGART	80.31	335.3	12 9A	0					
DOORBES	80.38	338.7	12 10	1					
CANBERRA	80.45	181.5							12 28 *SP
SOFIA	80.54	323.6	12 8	-2					
OTTAWA	80.58	31.2	12 8A	-2					
SHAWINIGAN	80.63	28.9	12 10A	0					
ADELAIDE	80.83	190.1	12 6	-5					
STRASBOURG	80.91	336.2	12 13A	1					12 38
LJUBLJANA	81.05	330.9	12 12	0					
BREBEUF	81.25	29.9	12 13A	0					
WELSCHBRUCH	81.47	337.0	12 14	-1					
FELDBERG	81.48	335.7	12 16	1					
KSARA	81.58	310.3	12 16K	1					
VALENTIA	81.61	348.3	12 16	1					
PARIS	82.10	339.5	12 19A	1					
BESANCON	82.63	336.7	12 21	0					
TOOLANGI	82.82	184.3	12 25	3					
FOLINIÈRE	82.84	341.3	12 22	0					
GARCHY	83.38	338.6	12 25A	1					12 53
JERUSALEM	83.49	309.4	12 29A	4					
PENNSYLVANIA	83.67	35.0	12 26	0					
MORGANTOWN	83.79	37.0	12 27A	0					
ROSELEND	83.86	335.7	12 28A	1					13 0
ATHENS	84.27	320.7	12 28K	-1					
CUMBERLAND	84.57	43.0	12 30A	0					
CLERMONT-FD.	84.76	338.0	12 34	3					13 14
PALISADES	85.03	32.3	12 34	1	23	23	26		
ISOLA	85.11	334.8	12 34	1					
BLACKSBURG	85.61	38.7	12 36	0					
BAGNERES	88.05	339.0	12 51	4					

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TOLEDO	92.08	340.9	13	6	0
BROKEN HILL	122.77	283.4	18	54	2
BULAWAYO	126.58	278.3	18	59A	0
HUANCAYO	128.60	64.6	19	6	3
MAWSON	130.31	210.2	19	6	0
LA PAZ	136.49	61.2	19	20	2
N-LAZARVSKYA	147.84	204.1	19	40	2

MAY 17 6.H 9.M 21.S EPICENTRE 15.69 120.13 DEPTH= 99.KM

A=-0.48354 B= 0.83305 C= 0.26872 D= 0.8649 E= 0.5020
G=-0.1349 H= 0.2324 K=-0.9632 HT= 5.6

DEPTH OF FOCUS= 0.010R

SE= 1.91

	DELTA DEG.	AZ. DEG.	P		O-C S	S			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
MANILA	1.36	137.8	0	25	0	0	43	0				
HENGCHUN	6.31	5.2	1	34	3							
TAMU	6.67	6.1	1	34	-2							
TAITUNG	7.09	7.6	1	44	2							
HSINKONG	7.46	8.8	1	50	3							
YUSHAN	7.79	5.5	1	54	2							
ALISHAN	7.82	4.5	1	55	3							
HWALIEN	8.36	9.4	2	1	1							
TAICHUNG	8.43	3.4	2	0	-1							
TAIPEI	9.38	7.7	2	12	-1							
ANPU	9.53	7.6	2	14	-1							
CANTON	9.76	320.0	2	13	-5							
ZO-SE	15.37	3.4	3	31A	-1							
NANKING	16.34	355.9	3	44A	0	6	57	15				
KUNMING	18.79	302.7	4	15K	2	7	46	10				
CHENG TU	20.98	318.1	4	36K	0	8	24	5				
SIAN	21.06	333.4	4	38A	1	8	29	8				
ABUYAMA	23.60	33.1	5	3K	1							
MEDAN	24.30	242.5	5	5	-4							
PEKING	24.50	352.6	5	11	0	9	23	2				
LANCHOW	24.96	327.4	5	16K	1	9	32	3				
TANGERANG	25.50	212.6	5	21K	1	9	38	0	5	44	6	3 PP
LEMBANG	25.58	209.9	5	22A	1	9	46	7			6	12 PP
MATUSIRO	26.27	34.4	5	25A	-2	9	45	-5				
PAOTOW	26.31	342.5	5	29	1							
PORT BLAIR	26.92	264.9	5	33	0						6	37
CHITTAGONG	27.55	288.3	5	39	0							
SHILLONG	28.16	295.0	5	43	-2	10	19	-2			12	37
CHANGCHUN	28.39	7.9	5	46	-1							
VLADIVOSTOK	29.13	17.9	5	50	-3	10	35	-2				
MIZUSAWA	29.73	34.2	6	28	29	10	49	3				
LHASA	30.12	302.5	6	2K	0	10	54	2				
CHATRA	32.56	295.4	6	22K	-1	11	28	-2			16	47
BOKARO	33.24	289.6	6	27	-2							
ULAN-BATOR	33.95	344.0	6	41	6	11	37	-15				
VISHAKHAPTMM	35.30	278.6	6	53	6						8	18
Y.-SAKHLINSK	36.44	26.3	6	57K	1	12	32	2				
ESEN BULAK	36.53	331.9	6	56	-1	12	31	-1				
PORT MORESBY	36.57	131.2	6	52	-5	13	3	31				
MADRAS	38.76	271.3	7	17K	1	13	11	6			8	49 PP
DEHRA DUN	41.14	298.2	7	35	0	13	38	-3			17	34
NEW DELHI	41.57	295.5	7	36K	-3						9	34
CHARTERS IS.	43.86	143.3	7	58	0	14	18	-2				
POONA	44.24	280.6	8	0K	-1							
BOMBAY	45.19	281.2	8	7	-1						14	42
ALMATA-2	45.57	316.0	8	12K	1							
YAKUTSK	46.77	6.2	8	20A	-1	15	1	-1				
SEMIPALATNSK	47.19	326.0	8	23	-1	15	8	0				
WARSAK DAM	47.24	301.9	8	24	0							
FRUNSE	47.27	314.4	8	25K	0	15	12	3				
MUNDARING	47.53	184.5	8	26	-1	15	17	4				
KHOROG	47.97	306.5	8	31K	1	15	22	3				
PETROPVLOVK	47.98	30.4	8	30A	0							
ANDIJAN	48.19	311.0	8	32	0	15	26	4				
KARACHI	50.37	289.4	8	49	1							
TASHKENT	50.60	310.9	8	49K	-1	15	57	1				
QUETTA	50.64	296.3	8	50K	0	15	58	2				
BRISBANE	53.26	143.2	9	10	0							

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ADELAIDE	53.38	161.0	9 10A	-1							9 31 PP
TIKSI	56.17	3.3	9 29A	-2	17	6	-5				
RIVERVIEW	57.44	149.4	9 43K	3	17	27	-1				22 45
CANBERRA	57.65	152.1	9 41	-1	17	33	3				
TOOLANGI	58.10	156.4	9 43	-2				10	3		10 14 *SP
VANNOVSKAYA	58.56	305.1	9 48	0							
KIZYL-ARVAT	60.08	306.4	9 59K	1	18	7	5				
SVERDLOVSK	60.45	327.0	10 0A	-1							
SHIRAZ	63.15	295.6	10 18K	-1	18	43	2				39 24 PKPPKP
TEHERAN	63.87	302.4	10 24	0	18	53	3				20 11 SCS
KIROVOBAD	67.74	307.9	10 48K	0	19	39	2				
GORIS	67.78	306.6	10 49K	0							
TIFLIS	68.85	309.1	10 55	0	19	52	2				
MOSCOW	72.98	324.1	11 19K	-1	20	37	0				
APATITY	74.37	336.5	11 27K	-1	20	51	-2				
KARAPIRO	74.46	137.5	11 30	1							11 54
SIMFEROPOL	76.30	313.2	11 38K	-1							
KEVO	76.49	339.1	11 40K	0							
PULKOVO	76.50	328.6	11 38K	-2	21	14	-2				
KSARA	76.75	301.7	11 42	0							14 48 PP
COLLEGE	76.80	26.0	11 42	0							
HONOLULU	76.96	71.3			21	45	24				
SODANKYLA	77.00	336.6	11 43K	0							
KAJAANI	77.09	333.2	11 43K	-1							
VIBORG	77.12	329.7	11 43K	-1							
JERUSALEM	77.67	299.7	11 48K	1							
HELSINKI	79.08	329.5	11 54	0							
NURMIJARVI	79.16	329.9	11 54K	-1	21	44	-1				22 15 SCS
KIRUNA	79.22	337.6	11 55K	0	21	44	-2				33 6
TANANARIVE	79.26	246.8	11 59K	4							
TROMSOE	79.27	339.5	11 55	0				12	14		
UMEA	80.36	333.7	12 0K	-1	21	54	-3			12	19
NORD	80.65	354.1	12 3K	0							
MOULD BAY	81.74	12.0	12 8	-1	22	9	-3				
ALERT	81.98	0.3	12 10K	0	22	17	3				
LWOW	82.04	319.4	12 11	1	22	16	1				
UPPSALA	82.72	330.2	12 13K	-1	22	20	-2				
UZHGOROD	83.46	318.6	12 18	1							
SKALSTUGAN	83.79	334.6	12 19	0							
SOFIA	84.41	312.7	12 22	0							
MIRNY	84.44	190.6	12 23	1							
KRAKOW	84.52	320.4	12 23	0						12	55
KARLSKRONA	84.99	327.1	12 28K	3							
CHORZOW	85.02	320.8	12 25	0						12	51
RACIBORZ	85.57	320.8	12 29	1							
BELGRADE	85.79	315.3	12 30A	1							13 13 *SPCP
GOTEBORG	86.24	329.2	12 31K	0							12 53
											13 0 *SP
KONGSBERG	86.55	331.5	12 30K	-3	22	57	-2			12	49
COPENHAGEN	86.80	327.3	12 35	1	23	2	0				
RESOLUTE	87.17	8.8	12 36K	0							
VIENNA-H.	87.32	319.5	12 38	2							
COPPERMINE	87.71	18.2	12 38K	0							
PRUHONICE	87.81	321.5	12 39	0	23	14	3				
COLLMBERG	88.22	323.1	12 41K	0							16 6 PP
KASPERSCHE H.	88.72	321.0	12 43K	0							13 5
HALLE	88.75	323.6	12 42	-1	23	6	-14				
JENA	89.19	323.1	12 46	1				13	21		16 16 PP
LJUBLJANA	89.30	317.9	12 45	-1							
TRIESTE	89.95	317.7	12 48	-1	23	34	3				24 19 *SS
YELLOWKNIFE	91.16	22.3	12 56	2							
AQUILA	91.45	314.8									37 49
STUTTGART	91.45	321.8	12 57	1	23	49	5				
BENSBERG	91.69	324.4	12 57	0							
LWIRO	91.88	268.2	13 0A	2							30 4 PS
FLORENCE X.	92.32	316.7	12 48	-12	23	34	-18				
STRASBOURG	92.43	322.1	13 1A	1	23	53	0				17 9 PP
FELDBERG	92.61	321.4	13 2	1							
MAWSON	92.78	198.8	13 2K	0							
WELSCHBRUCH	93.35	322.4	13 3	-1							
DOURBES	93.54	324.4	13 7	2	24	7	5				
BESANCON	94.12	321.4	13 8	0							
ROSELEND	94.45	319.9	13 10	1							
VICTORIA	94.85	36.7	13 13	2							
ISOLA	94.88	318.4	13 12	1							
BROKEN HILL	95.38	256.6	13 15A	1							
PARIS	95.38	324.0	13 14	0							
GARCHY	95.83	322.4	13 16	0							13 49
PENTICTON	96.56	34.7	13 21	2							

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CLERMONT-FD.	96.56	321.1	13 21	2				
BULAWAYO	96.66	251.0	13 20K	0				
EDMONTON	97.36	29.1	13 25	2				
MINERAL	100.10	43.1	13 38K	3				
BLUE MTS.	100.36	37.6	13 39	3	24 12	7		26 41 SP
BERKELEY	100.89	45.6			24 15	8		32 15
LICK	101.58	45.8	13 46K	4				
EUREKA	104.22	41.5	13 57	4				17 54 PKP
UINTA BASIN	107.65	37.7	14 16	777	24 46	8		34 25 SS
TONTO FOREST	110.29	43.6	14 25	-235				18 25 PKP
TUCSON	111.80	45.1	14 27	-236				
ALBUQUERQUE	112.98	40.4	18 28	3				
WICHITA MTS.	117.82	35.6	18 36	2				28 58 PKKP
BREBEUF	117.84	10.9						35 57 SS
TULSA	118.45	32.8						29 39 PS
PALISADES	122.11	12.5	14 46	-237	25 20	-12		
CUMBERLAND	123.48	25.1	18 47	2				37 42 SS
SAN JUAN	145.59	10.5	19 29	3				
ANTIGUA	147.32	3.5	19 35	6				
ST. CLAUDE	148.43	3.4	19 37	6				
FORT FRANCE	149.75	2.5	19 41	8				
CARACAS	153.06	15.5	19 46	8	26 51	18		
TRINIDAD	153.79	3.4	19 52	13				
CHINCHINA	154.22	38.5	19 43	4				
FUQUENE	154.89	34.2	19 44	4				30 22 SKKS
BOGOTA	155.41	36.0	19 46	5				30 27 SKKS
HUANCAYO	164.56	78.4	19 58	7				
LA PAZ	172.02	96.9	20 2	6			20 23	

MAY 17 7.H 33.M 14.S EPICENTRE -31.90-179.06 DEPTH= 333.KM

A=-0.85041 B=-0.01390 C=-0.52593 D=-0.0163 E= 0.9999
G= 0.5259 H= 0.0086 K=-0.8505 HT= 1.2

DEPTH OF FOCUS= 0.047R

SE= 2.84

	DELTA DEG.	AZ. DEG.	P		O-C S	S O-C			#PP		SUPP.	
			M	S		M	S	S	M	S	M	S
RAOUL ISLAND	2.82	20.7	0	56	-1							
ONERAHI	6.69	233.0	1	40	1	3	2	6				
KARAPIRO	7.47	214.9	1	49	1	3	18	5				
TUAI	7.54	203.1	1	50	1	3	19	4				
WELLINGTON	10.58	206.2	2	25	-1	4	21	0				
NOUMEA	16.04	303.0	3	22A	-7	7	11	54				
KOUMAC	18.71	303.1	3	50A	-6							
AFIAMALU	19.11	22.1	3	57K	-3	7	8	-6				
BRISBANE	24.85	273.2	4	50K	-4						6	48
RIVERVIEW	25.06	257.5	4	58A	2						10	46
CANBERRA	26.75	253.9	5	11A	0							
TOOLANGI	29.56	249.1	5	34	-2						11	36
CHARTERS TS.	33.18	282.2	6	1	-6						8	2
HAWAII V.OB.	55.91	27.4	9	4	-2							
KIPAPA	56.72	23.6	9	9	-2							
SOUTH POLE	58.27	180.0	9	16	-6							
MAWSON	70.58	201.0	11	56	75							
N-LAZARVSKYA	77.32	183.7	11	20K	1							
MATUSIRO	78.96	326.2	11	22	-6							
PARAISO	86.16	42.6	12	8	3							
PRIEST	87.02	43.7	12	10K	1							
PASADENA	87.18	46.5	12	10	1							
LICK	87.29	42.3	12	11K	1							
BERKELEY	87.30	41.5	12	10K	0							
CALISTOGA	87.67	40.8	12	12K	0							
MINERAL	89.40	40.1	12	20A	0							
BOULDER CITY	90.44	46.9	12	27	2				13	50	14	24 *SP
TUCSON	90.69	51.9	12	28	2				13	50		
TONTO FOREST	91.65	50.1	12	32	2				13	56	16	37
EUREKA	92.01	43.7	12	32	0				13	53	14	25 *SP
BLUE MTS.	94.78	39.0	12	44	-1							
ALBUQUERQUE	95.22	51.9	12	46	-1				14	10		
UINTA BASIN	96.38	46.1	12	53	1						14	16
MOULD BAY	114.07	13.1	17	57	-2							
RESOLUTE	118.95	17.6	18	6K	-3							
ALMATA-2	120.33	304.7	18	9K	-2							
QUETTA	124.23	286.9	18	18K	-1							

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SVERDLOVSK	132.48	320.0	18 33A	-2	
SHIRAZ	135.96	281.1	18 39	-2	
SODANKYLA	141.40	344.4	18 49	-3	
KIROVOBAD	142.72	296.6	18 47	-7	
KAJAANI	143.72	340.5	18 49	-7	
TIFLIS	143.88	298.4	18 52	-4	
UMEA	145.84	344.9	18 56	-3	
VIBORG	145.86	335.8	18 56K	-3	
PULKOVO	145.96	333.7	18 57K	-2	
NURMIJARVI	147.38	338.3	18 59	-2	20 25
SKALSTUGAN	147.50	350.6	19 1K	0	
HELSINKI	147.55	337.7	19 2	0	
UPPSALA	149.91	343.2	19 7K	2	
KSARA	150.67	283.2	19 13A	7	
SIMFEROPOL	151.14	306.4	19 21K	14	
KONGBERG	151.65	350.7	19 10A	2	
GOTEBORG	153.11	346.9	19 15	5	
KARLSKRONA	153.67	341.4	19 19	8	
UZHGOROD	156.78	322.2	19 25	10	
COLLMBERG	158.68	338.8	19 15	-2	23 28 PP
HALLE	158.81	340.7			19 51
JENA	159.42	340.6	19 54	36	20 52
KASPERSKE H.	160.34	334.7	19 18	-1	20 58
STUTTGART	162.01	341.9	20 9	49	
ROSELEND	165.54	343.8			20 22 PKP2

MAY 17 12.H 9.M 9.S EPICENTRE 41.76 141.99 DEPTH= 75.KM

A=-0.58948 B= 0.46073 C= 0.66351 D= 0.6158 E= 0.7879
G=-0.5228 H= 0.4086 K=-0.7482 HT= -2.3

DEPTH OF FOCUS= 0.007R

SE= 3.04

	DELTA DEG.	AZ. DEG.	P		O-C		S		O-C		*PP		SUPP.	
			M	S	S	M	S	S	M	S	M	S		
URAKAWA	0.71	56.3	0	15A	-2	0	27	-3						
HAKODATE	0.92	273.5	0	18K	-1	0	32	-1						
TOMAKOMAI	0.92	340.8	0	21K	2	0	37	4						
MURORAN	0.94	307.0	0	19K	0	0	34	1						
MORI	1.11	288.3	0	21K	0	0	36	-1						
HIROO	1.12	61.9	0	20	-1	0	37	0						
HATINOHE	1.28	195.9	0	17	-6	0	30	-11						
AOMORI	1.31	224.5	0	20K	-4	0	34	-7						
SAPPORO	1.39	340.3	0	25	0	0	47	4						
OBIHIRO	1.47	37.3	0	27	1	0	47	2						
SUTTSU	1.67	309.1	0	29	0	0	46	-4				1	7	
ASAHIGAWA	2.04	7.8	0	35A	2	1	2	4						
MIYAKO	2.11	180.4	0	27	-7	0	47	-13						
MORIOKA	2.15	197.1	0	30	-5	0	51	-10						
KUSIRO	2.16	54.9	0	33K	-2	0	58	-3						
RUMOE	2.21	353.0	0	37	1	1	11	9						
AKITA	2.49	215.8	0	41A	1	1	6	-3						
MIZUSAWA	2.71	194.3	0	37	-6	1	3	-12						
ABASHIRI	2.82	35.9	0	45A	1	1	21	4						
NEMURO	3.08	58.2	0	44	-4	1	16	-8						
SAKATA	3.30	210.7	0	49	-2	1	27	-2						
ISINOMAKI	3.37	189.0	0	45K	-7	1	19	-12						
SENDAI	3.58	193.9	0	51	-4	1	27	-10						
WAKKANAI	3.67	356.6	1	1	5	1	48	9						
YAMAGATA	3.72	200.3	0	52K	-5	1	33	-7						
HUKUSIMA	4.17	196.8	0	59	-4	1	53	2						
NIIGATA	4.45	211.5	1	7	0									
AIKAWA	4.71	218.8	1	7	-4									
SHIRAKAWA	4.83	197.0	1	7	-5	2	5	-3						
ONAHAMA	4.88	190.3	1	22	9	2	10	1						
Y.--SAKHLINSK	5.29	5.4	1	20A	1	2	21	2						
UTUNOMIYA	5.46	198.3	1	15	-6	2	17	-6						
TAKADA	5.48	213.1	1	9	-12	2	11	-13						
MITO	5.50	192.9	1	15	-6	2	16	-8						
KAKIOKA	5.70	194.9	1	17	-7	1	43	-46						
MAEBASI	5.81	203.9	1	27	1	2	31	-1						
NAGANO	5.87	211.3	1	28	1	2	9	-24						
WAZIMA	5.88	223.6	1	25	-2	2	35	1						
KUMAGAYA	5.96	200.8	1	25	-3	2	33	-2						
MATUSIRO	5.98	210.6	1	23A	-5	2	31	-5						

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OIWAKE	6.05	207.4	1 27	-2	2 56	18		
TYOSI	6.10	188.8	1 16	-14	2 20	-19		
TITIBU	6.20	202.4	1 39	8				
TOYAMA	6.27	217.9	1 34	2	3 28	45		
HONGO	6.28	196.7					4 10	
TOKYO C.M.O.	6.32	196.8	1 31	-2	2 39	-5		
MATUMOTO	6.33	210.9	1 33	0				
YOKOHAMA	6.58	196.9	1 54	18	3 0	9		
KOHU	6.64	204.9	1 39	2	3 2	10		
KANAZAWA	6.67	220.2	1 36	-2				
HUNATU	6.74	203.0	1 39	0	3 4	9		
IIDA	7.03	208.9	1 41	-2	3 5	3		
NERA	7.04	194.6	2 0	17	2 59	-3		
MISIMA	7.04	200.8	1 45	2	3 5	3		
AJIRO	7.07	199.6	1 37	-6	2 52	-11		
OSIMA	7.27	197.2			3 0	-8		
SHIZUOKA	7.34	203.7	2 6	19	2 45	-25		
GINU	7.55	214.4			3 13	-2		
VLADIVOSTOK	7.59	283.7	1 50	0	3 22	6		
NAGOYA	7.67	212.5	1 51	0	3 20	2		
OMAESAKI	7.74	203.8					2 19	
HAMAMATU	7.79	206.9			3 39	18	3 8	
HIKONE	7.89	216.6	1 54	0				
KAMEYAMA	8.15	213.9	2 9	11	3 13	-16		
KYOTO	8.33	218.1	1 52	-8	3 9	-25		
ABUYAMA	8.53	218.3	1 58A	-5				
NARA	8.57	216.4	2 7	3				
OSAKA	8.73	217.7	2 28	22	4 7	23		
HATIDYOZIMA	8.82	192.1					3 32	
OOITA	11.84	227.3	2 43	-5				
CHANGCHUN	12.43	285.2	2 56	0	5 19	6		
KAGOSIMA	13.69	225.7					6 50	
PEKING	19.58	273.5	4 21	-4	7 54	-2	4 39 *SP	
ZO-SE	19.79	244.2	4 22	-5	7 58	-2	4 40 *SP	
NANKING	20.88	249.9	4 34	-4	8 19	-3		
YAKUTSK	21.58	344.2	4 46A	1				
PAOTOW	24.02	277.9	5 7	-2	9 19	1		
ULAN-BATOR	25.48	296.0	5 30	7	9 53	11		
SIAN	26.99	264.8	5 36	-1				
IRKUTSK	27.46	305.5	5 41A	0	10 19	4		
LANCHOW	30.06	271.8	6 2	-2				
CANTON	30.31	241.0	6 5	-2	11 1	1		
HONG KONG	30.33	238.9	6 4	-3	11 8	8		
TIKSI	30.65	351.9	6 8	-2				
ESEN BULAK	32.83	293.9	6 29	0	11 45	6		
LHASA	42.54	270.4	7 51	1	14 12	6	8 11 *SP	
SEMIPALATNSK	42.56	303.6	7 50	0				
SHILLONG	44.10	264.8	8 1A	-2				
COLLEGE	44.91	34.7	8 10	1				
ALMATA	46.86	294.8	8 23A	-2				
KHEYS	48.13	347.3	8 36	2				
FRUNSE	48.61	295.2	8 38	0				
ANDIJAN	51.00	293.6	8 56A	0				
MOULD BAY	51.89	17.5	9 3A	0				
SVERDLOVSK	51.97	316.4	9 2K	-2	16 27	7		
TASHKENT	52.85	295.5	9 10A	0				
KHOROG	53.05	290.3	9 12	0	16 39	5		
NEW DELHI	53.41	277.7	9 12A	-3				
KIPAPA	53.87	92.7	10 4	46				
HONOLULU	53.89	92.8			17 1	15		
DUZHANBE	54.46	292.7	9 22	0				
WARSAK DAM	54.73	286.5	9 24	0				
ALERT	55.39	3.8	9 28A	-1				
COPPERMINE	56.61	26.3	9 36A	-2				
LEMBANG	57.67	221.6	9 43K	-2				
RESOLUTE	57.93	15.2	9 46A	-1				
APATITY	58.59	334.7	9 50	-2	17 51	3		
KEVO	59.20	338.5	9 55	-1			11 2	
YELLOWKNIFE	59.53	31.6	9 57	-1				
QUETTA	60.06	285.1	10 1A	-1	18 23	16		
SODANKYLA	60.80	336.4	10 6	-1				
TROMSOE	61.41	340.5	10 10	-1				
KIRUNA	62.27	338.6	10 16	-1			19 11	
KIZYL-ARVAT	62.55	299.2	10 19A	1				
KAJAANI	62.56	333.2	10 17	-2				
VICTORIA	62.88	48.1	10 20	-1				
MOSCOW	63.76	322.3	10 26	0				
VIBORG	64.34	329.9	10 28	-2				
PULKOVO	64.37	328.6	10 28	-2				

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PENTICTON	64.51	45.8	10 31	0							
UMEA	65.16	335.4	10 35	-1	19 11	0					
EDMONTON	65.29	39.6	10 37	1							
BANFF	65.56	42.5	10 55	17							
NURMIJARVI	66.01	331.2	10 40A	-1	19 31	10				11 14	PCP
HELSINKI	66.13	330.9	10 40	-2							
SPOKANE	66.68	46.3	11 2	17							
SCORESBY SD.	67.47	354.2	11 10	20							
SKALSTUGAN	67.69	338.2	10 52	0						11 45	
TEHERAN	67.70	298.4	10 52	0							
KIROVOBAD	68.01	305.3	10 53A	-1							
HUNGRY HORSE	68.05	44.3	10 52	-2							
BLUE MTS.	68.44	48.7	10 56	0	19 55	5				24 25	SS
GORIS	68.70	304.3	10 58A	0	20 0	6					
UPPSALA	68.92	333.5	10 57	-2							
BAKURIANI	69.05	307.6	11 2A	2							
CALISTOGA	69.07	56.6	11 17A	17							
BRISBANE	69.52	169.8	11 0	-3						22 36	
BERKELEY	69.74	57.1	11 13A	9	20 7	1					
BUTTE	70.30	45.5	11 10	2							
LICK	70.45	57.2	11 26A	18							
SHIRAZ	70.57	292.6	11 9A	0	20 13	-2				13 55	PP
PARAISO	70.61	58.4	11 30	21							
BOZEMAN	71.34	45.1	11 13	-1					11 31		
PRIEST	71.81	57.7	11 35A	18							
EUREKA	72.58	52.5	11 21	0					11 38	11 56	*SP
LNOW	73.84	323.4	11 29	0							
SALT LAKE C.	74.13	49.3	11 31	1							
PASADENA	74.65	57.9	11 31	-2	21 5	3					
UZHGOROD	75.49	323.5	11 39	1							
BOULDER CITY	75.54	54.6	11 39	1					11 57		
UINTA BASIN	75.72	48.5	11 39	0	21 20	7				26 10	SS
RAPID CITY	76.48	42.3	11 43	-1							
LARAMIE	77.22	45.6	11 48	0							
COLLMBERG	77.24	330.0	11 47A	-1						15 20	
PRAGUE	77.67	328.5							12 23		
PRUHONICE	77.70	328.4	11 49	-1						12 13	
JENA	78.06	330.5	11 53	1						12 21	
GOLDEN	78.47	46.6	11 56	1						33 51	
KASPERSKE H.	78.76	328.3	11 57A	1						12 21	
KSARA	78.77	305.4	11 58	2					12 24	15 2	PP
TONTO FOREST	78.83	53.9	11 57	0						12 47	
TOOLANGI	79.02	177.2	11 57	-1							
BENSBERG	79.60	332.9	12 25	24							
TUCSON	80.50	55.2	12 5	-1					12 23		
JERUSALEM	80.57	304.2	12 7	1							
STUTTGART	80.69	330.5	12 11	4							
SCHEFFERVILLE	80.70	16.4	12 6	-1							
ALBUQUERQUE	81.22	50.6	12 10	1							
STRASBOURG	81.40	331.2	12 14	4							
FOLINIERE	83.97	336.1	12 24	1							
ROSELEND	84.26	330.3	12 25	0						13 41	
LAWRENCE	84.26	41.2	12 25	0							
LUBBOCK	84.84	48.8	12 10	-18							
KARAPIRO	85.01	154.0	12 26	-3							
ISOLA	85.38	329.3	12 32	2							
CLERMONT-FD.	85.44	332.5								12 59	
MONACO	85.61	328.8	12 40	8							
WICHITA MTS.	85.79	46.0	12 32	0	23 2	4				32 55	SSS
TULSA	86.35	43.5	12 35	0	23 5	2					
BREBEUF	87.49	24.2	12 42	1						23 27	PS
PALISADES	91.43	26.4	12 58	-1	23 50	0					
CUMBERLAND	91.55	37.0	13 0	0						30 5	SS
TOLEDO	93.08	334.5	13 8	1					13 24	29 7	SS
LA PAZ	143.91	54.8	19 41	14					20 9		

MAY 17 22.H 40.M 9.S EPICENTRE -24.59-177.10 DEPTH= 90.KM

A=-0.90919 B=-0.04610 C=-0.41382 D=-0.0506 E= 0.9987
G= 0.4133 H= 0.0210 K=-0.9104 HT= 3.5

DEPTH OF FOCUS= 0.009R

SE= 3.03

DELTA	AZ.	P	O-C	S	O-C	*PP	SUPP.
DEG.	DEG.	M	S	M	S	M	S

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RAOUL ISLAND	4.70	188.8	1 19	-1	1 52	-12		
AFIAMALU	11.75	26.2	2 41	-5	4 38	-17		
KARAPIRO	14.70	203.5	3 47	23				
NOUMEA	15.27	275.2	3 39K	7	6 41	23		
KOUMAC	17.66	279.4	4 4A	3				
WELLINGTON	17.97	200.2	3 58	-7	7 3	-16		
BRISBANE	27.19	257.6	5 37K	0			12 12	
CANBERRA	31.12	241.9	6 13	1			6 43	*SP
CHARTERS TS.	34.12	270.1	6 37	-1	11 59	3		
TOOLANGI	34.33	238.9	6 38	-2			7 10	*SP
PORT MORESBY	37.24	287.7	7 3K	-1			15 39	
ADELAIDE	39.44	244.3	7 14	-9			7 42	
CAPE HALLETT	48.28	185.2	8 35	1				
HAWAII V.OB.	48.65	27.9	8 37	1				
HONOLULU	49.21	23.6	8 41	0				
KIPAPA	49.35	23.7	8 42	0				
MIRNY	67.68	205.6	10 46	-3			11 18	
LEMBANG	73.83	269.8	11 26	0				
MATUSIRO	73.99	323.9	11 25K	-2	20 46	-5		
ARGENTINE I.	76.90	156.5	11 43	-1				
MAWSON	78.02	199.8	11 49	-1			12 20	
PARAISO	79.61	42.1	12 3	4				
PRIEST	80.54	43.1	12 5K	1				
BERKELEY	80.68	41.0	12 5K	1				
LICK	80.71	41.7	12 6A	1				
PASADENA	80.88	46.0	12 6	1				
CALISTOGA	81.00	40.2	12 6K	0				
HONG KONG	81.39	299.2	12 1	-7			12 24	17 19
MINERAL	82.69	39.4	12 15K	0				
BOULDER CITY	84.17	46.2	12 24	2				
N-LAZARVSKYA	84.70	183.0	12 33A	8				
TUCSON	84.80	51.2	12 27	2			13 3	
BLUE MTS.	87.99	38.0	12 40	-1	23 6	-9		16 7 PP
PEKING	89.37	315.1	12 47K	0				
PENTICTON	89.58	33.5	12 49K	1				
UINTA BASIN	90.04	45.0	12 50	-1	23 40	6		16 26 PP
HUNGRY HORSE	91.90	36.5	12 58	-1				16 37 PP
KUNMING	91.93	296.7	13 0	1				
COLLEGE	92.01	12.1	12 58	-2			13 31	
BOZEMAN	92.06	39.9	13 1	1				
GOLDEN	92.47	47.2	13 2	0				
CHENG TU	93.37	302.1	13 7	1				
PAOTOW	93.67	313.2	13 7	0				
WICHITA MTS.	94.89	54.1	13 12	-1	23 39	-37		
EDMONTON	95.16	32.6	13 13	-1				
YAKUTSK	96.18	337.7	13 17	-2				
LA PAZ	99.62	113.0	13 37	3				
TIKSI	102.88	344.7	13 46	-3				
MOULD BAY	106.59	12.2	14 1	777				18 12 PKP
RESOLUTE	111.47	16.4	18 21	-2				
NEW DELHI	114.43	291.6	18 28A	-1				
ALERT	117.41	7.7					19 42	
ALMATA-2	117.43	307.5	18 34K	-1				
KHEYS	119.57	351.1	18 38	-1				
QUETTA	123.50	291.0	18 47K	0				
BULAWAYO	128.98	211.6	18 57	0				
KEYO	132.62	348.9	19 4	0			22 20	SKP
APATITY	133.10	344.5	19 3K	-2			22 22	PKS
BROKEN HILL	133.86	215.4	19 5	-2				
TROMSOE	133.95	352.3	19 5	-2				
SODANKYLA	134.76	347.3	18 57	-11			22 27	SKP
KIRUNA	135.43	350.6	19 1	-8			22 29	SKP
SHIRAZ	135.82	287.9	19 10A	0			21 44	PP
KAJAANI	137.30	344.2	19 1	-12			22 34	SKP
UMEA	139.14	348.3	19 7	-9			22 40	SKP
SKALSTUGAN	140.53	353.4	19 12	-7				
NURMIJARVI	141.07	343.0	19 12	-8			22 45	SKP
HELSINKI	141.28	342.5	19 12	-8				
TIFLIS	141.41	306.7	19 16	-4				
BAKURIANI	142.34	307.1	19 48	26				
UPPSALA	143.29	347.6	19 19	-5				
LWIRO	143.34	227.0	19 22K	-2				
KONGSBERG	144.65	354.1	19 22K	-4			22 21	SKP
GOTEBORG	146.28	351.2	19 29	0				
KARLSKRONA	147.13	346.9	19 31	1				
SIMFEROPOL	147.59	316.6	19 34	3				
DURHAM	149.67	5.1	19 40A	6				
KSARA	149.89	295.4	19 43	9			20 20	
LWOW	149.92	332.2	19 40	5				

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JERUSALEM	150.70	291.5	19 43	7	
KRAKOW	151.34	336.8	19 43	6	20 13
CHORZOW	151.47	338.2	19 43	6	19 52 PKP2
UZHGOROD	151.56	332.4	19 45	8	
COLLMBERG	152.22	346.3	19 40K	2	23 23 PP
HALLE	152.25	347.8	19 43	5	19 52 PKP2
MUNSTER	152.43	353.7	19 45	7	
ISTANBUL UN.	152.77	313.4	19 46A	7	
JENA	152.86	347.9	19 39	0	20 15 23 21 PP
KEM	153.05	4.4	19 47	8	19 57 PKP2
PRUHONICE	153.08	343.3	19 47	8	20 22
BENSBERG	153.47	354.0	19 49	9	
BRATISLAVA	153.92	338.1	20 4	24	20 11 PKP2
VIENNA-H.	154.10	339.1	19 41	0	20 4 PKP2
KASPERSKE H.	154.11	343.8	19 39	-2	20 3
DOURBES	154.50	357.5	19 47	6	
KARLSRUHE	155.25	351.3			20 9 PKP2
STUTTGART	155.35	349.9	19 42	0	20 9
FOLINIÈRE	155.72	5.4	20 1	18	
STRASBOURG	155.75	352.1			20 12 PKP2
PARIS	155.82	0.7	19 54	11	
WELSCHBRUCH	156.07	354.3			20 12 PKP2
LJUBLJANA	156.63	339.3	19 53	9	20 14 PKP2
TRIESTE	157.23	340.1			20 16 PKP2
BESANCON	157.25	354.6			20 17 PKP2
GARCHY	157.36	359.7	19 49	4	23 50 PP
ROSELEND	158.73	352.8			20 24 PKP2
CLERMONT-FD.	158.87	359.6	20 44	57	
ISOLA	160.17	351.2	20 30	42	24 10 PP
MONACO	160.55	350.1	20 31	42	

MAY 18 5.H 33.M 29.S EPICENTRE -29.59 -69.35 DEPTH= 41.KM

A= 0.30717 B=-0.81505 C=-0.49127 D=-0.9358 E=-0.3527
G=-0.1733 H= 0.4597 K=-0.8710 MT= 2.0

DEPTH OF FOCUS= 0.001R

SE= 2.65

	DELTA DEG.	AZ. DEG.	P		O-C S	S			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
SANTA LUCIA	3.99	195.7	1	1	1	1	51	5				
ANTOFAGASTA	5.94	350.5	1	27A	0	2	37	2				
LA PAZ	13.08	5.2	3	5	0	5	50	20				
AREQUIPA	13.22	351.0	3	4	-3							
HUANCAYO	18.32	341.1	4	16	4							
BOGOTA	34.31	351.6	6	46	2	12	13	5				
CHINCHINA	34.88	349.0	6	49A	0	12	22	5				
FUQUENE	35.11	352.4	6	50	-1							
ARGENTINE I.	35.82	176.3	6	51	-6							
BALBOA MTS.	39.57	344.0	7	30A	2							
CARACAS	39.92	3.7	7	28A	-3	13	29	-4				
TRINIDAD	40.73	12.0	7	39	1	13	45	0				
ANTIGUA	47.02	9.8	8	27	-2							
SAN JUAN	47.79	4.1	8	38	3							
HOPE	47.85	350.5	8	37	2							
BYRD STATION	54.48	189.5	9	23	-2							
N-LAZARVSKYA	59.48	157.7	9	56	-5							
SOUTH POLE	60.58	180.0	10	5	-3							
CUMBERLAND	66.61	345.6	10	46	-2	19	36	1			14	58 PPP
M. BOUR	66.80	56.6	10	46	-3	19	40	3				
BLACKSBURG	67.25	350.4	10	51	-1							
SCOTT BASE	67.84	190.9	10	52	-4							
FAYETTEVILLE	69.38	338.7	11	4A	-1							
MORGANTOWN	69.57	351.3	11	5K	-1							
WICHITA MTS.	69.66	334.6	11	5	-2	20	17	6			13	45 PP
TULSA	69.74	337.3	11	6A	-1	20	17	5				
PALISADES	70.37	356.3	11	9	-2	20	23	4			21	15 SCS
PENNSYLVANIA	70.48	353.1	11	10	-2							
CAPE HALLETT	70.56	196.2	11	15	3							
ST. LOUIS 1	70.62	342.8	11	11	-2							
LAWRENCE	72.36	339.1	11	21	-2							
TUCSON	73.02	324.1	11	23	-4				11	37		
LONDON OMT.	73.09	351.0	11	25	-2							
HALIFAX	74.04	4.3	11	33	0							
BREBEUF	74.83	356.9	11	37K	0							

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OTTAWA	74.86	355.4	11 43	5			
TONTO FOREST	74.86	325.0	11 39	1		11 49	17 16
SHAWINIGAN	75.84	357.6	11 42	-1			
GOLDEN	76.65	332.2	11 48	0	21 38	8	
BOULDER CITY	77.99	323.8	11 57	2			12 4 PCP
LARAMIE	78.10	332.9	11 57	1			
PASADENA	78.40	320.4	11 59	2			
UINTA BASIN	78.94	329.8	12 1	1	22 5	10	27 26 55
SALT LAKE C.	80.32	328.6	12 9	1			
PRIEST	81.24	320.3	12 14A	1			
EUREKA	81.26	325.3	12 14	1			
PARAISO	82.34	319.4	12 14	-4			
LICK	82.65	320.5	12 23A	3			
MIRNY	83.22	173.0	12 24	1			
BERKELEY	83.37	320.5	12 23A	-1			22 51
BOZEMAN	83.93	332.0	12 27.	0			
SCHEFFERVILLE	84.09	1.5	12 26	-1			
CALISTOGA	84.10	320.9	12 28A	1			
WILKES	84.38	179.9	12 36	7	22 59	9	
MINERAL	84.80	322.6	12 31K	0			
BUTTE	84.84	331.4	12 32	1			
AVERROES	85.71	47.8	12 41	6			
BLUE MTS.	86.01	328.0	12 37A	0	23 19	13	28 59 55
CHANGALANE	86.56	118.2	12 38	-2			
BULAWAYO	86.86	111.3	12 38	-3			
HUNGRY HORSE	87.30	332.0	12 43	0			
BANFF	90.12	333.0	12 55	-2			
PENTICTON	90.41	329.8	12 57	-1			
EDMONTON	91.04	335.4	12 59	-2			
VICTORIA	91.56	327.4	13 11	8			
TOLEDO	91.93	44.4	13 8	3	23 33	-28	16 51 PP
LWIRO	95.98	96.0			24 56	61	25 53 PS
MESSINA	103.98	54.0					35 0
BENSBERG	104.60	39.5					18 16
TRIESTE	106.07	46.4					18 29 PP
LJUBLJANA	106.72	46.3					18 33 PP
JENA	107.07	40.8	18 24	777			18 49 PP
KASPERSKE H.	107.46	43.1					18 39 PP
COLLMBERG	108.03	40.9					18 51 PP
PRUHONICE	108.39	42.6					18 43 PP
VIENNA-H.	108.78	44.7					18 52 PP
MOULD BAY	110.05	348.7	18 26	0			
COLLEGE	111.71	333.2					19 1 PP
NURMIJARVI	117.20	33.7	18 44	4			
KSARA	117.56	65.0					19 51 PP
SODANKYLA	119.22	26.2	18 44	0			
APATITY	121.84	26.2	18 50A	1			
BAKURIANI	125.39	57.8	18 56	0			
KIROVOBAD	127.30	59.5	19 5	5			
SHIRAZ	129.95	74.7	19 14	9			21 5 PP
TEHERAN	130.38	66.6	19 13	7			21 22 PP
SVERDLOVSK	135.89	37.2	19 27	11			
ASHKABAD	136.21	64.7					22 10 PP
TIKSI	136.74	351.7	19 11	-7			22 10 PP
QUETTA	142.28	77.9	19 18	-10			22 31
LEMBANG	143.67	174.9	19 44K	14			
TANGERANG	144.24	173.1	19 25	-6			
DUZHANBE	144.43	64.1	19 35	4			
TASHKENT	144.64	59.3	19 31	-1			22 49 PP
YAKUTSK	145.23	344.3	19 31	-2			
WARSAK DAM	146.62	72.2	19 37	2			
FRUNSE	148.32	55.5	19 41A	3			
SEMIPALATNSK	149.12	39.1	19 47	8			
Y.-SAKHLINSK	149.69	314.0	19 45	5			19 50 PKP2
ALMATA-2	150.16	53.7	19 44K	3			
NEW DELHI	150.80	83.6	19 44	2			
MATUSIRO	155.94	294.0	20 5	16			44 31 55
SHILLONG	162.88	99.0	20 10A	13			
LHASA	162.94	85.0	20 6	9			
LANCHOW	171.37	39.9	20 3	0			
SIAN	175.13	17.1	20 13	8			

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MAY 18 12.H 20.M 34.5 EPICENTRE -8.25 115.53 DEPTH= 54.KM

A=-0.42653 B= 0.89317 C=-0.14251 D= 0.9024 E= 0.4309
G= 0.0614 H=-0.1286 K=-0.9898 HT= 6.7

DEPTH OF FOCUS= 0.003R

SE= 2.56

	DELTA DEG.	AZ. DEG.	P		O-C S	S		O-C S	*PP		SUPP.		
			M	S		M	S		M	S	M	S	
LEMBANG	7.96	279.7	1	54K	-1	3	24	-1			8	30	PCP
DJAKARTA	8.87	282.8	2	9	1	3	50	3			8	30	PCP
TANGERANG	9.06	282.6	2	10K	0	3	51	-1			4	20	SS
DARWIN	15.60	106.5	3	36	-1	6	16	-13					
MANILA	23.43	13.6	5	1U	6	9	22	12					
PERTH	23.59	179.4	5	12	6	9	36	23					
MUNDARING	23.61	178.6	5	7	1								
BAGUIO CITY	25.01	11.5	5	18	-2	9	54	17					
PORT BLAIR	30.10	310.8									7	26	
HONG KONG	30.39	357.5	6	9	0	10	58	-6	7	15	8	46	PCP
CANTON	31.22	356.1	6	16	0	11	23	6					
PORT MORESBY	31.26	94.5	5	34	-42	11	15	-3					
CHARTERS TS.	31.97	114.9	6	22	-1	11	9	-20					
ADELAIDE	34.06	144.7	6	33A	-8	12	10	9			14	46	SSS
ZO-SE	39.50	7.6	7	28K	2	13	29	5					
TOOLANGI	39.84	141.7	7	30	1				8	22	14	25	
BRISBANE	40.03	123.2	7	32	1	13	37	5					
NANKING	40.20	4.3	7	34K	2	13	38	3					
CHENG TU	40.23	344.6	7	34K	2	13	42	7					
SHILLONG	40.74	326.3	7	38K	1	13	48	5					
MADRAS	40.97	300.7	7	41	2	13	51	5			9	20	PP
RIVERVIEW	41.52	133.0	7	45A	2	14	7	12	7	54	9	30	PP
KODAIKANAL	42.10	295.2									14	0	
SIAN	42.73	351.9	7	55K	2	14	20	8					
BOKARO	43.12	318.4	7	57	1	14	22	4			18	0	
HONIARA	43.89	95.0	8	1	-1	14	30	1					
CHATRA	44.41	322.7	8	8	1								
LHASA	44.43	329.0	8	9	2	14	44	7					
LANCHOW	45.42	346.7	8	17K	2	14	59	8					
ABUYAMA	46.89	22.7	8	27K	1								
PEKING	48.04	0.7	8	35K	0	15	32	4					
KOUMAC	48.60	110.1	8	40A	0								
PAOTOW	48.85	354.4	8	42K	0	15	43	3					
POONA	48.97	303.3	8	29	-13								
MATUSIRO	49.38	24.2	8	44K	-2	15	49	2					
BOMBAY	50.00	303.1				15	55	-1					
NOUMEA	50.83	112.0	8	57A	0						10	0	
NEW DELHI	52.04	316.2	9	3K	-3	16	24	0					
DEHRA DUN	52.58	318.5									14	15	
CHANGCHUN	52.59	8.9				16	34	3					
VLADIVOSTOK	53.25	14.9	9	15K	0								
ULAN-BATOR	56.44	353.0	9	38	0	17	27	4					
ESEN BULAK	57.06	344.2	9	39	-3	17	36	5					
WILKES	58.11	182.4	9	47	-3	17	57	12					
WARSAK DAM	59.17	317.8	9	56	-1								
Y.-SAKHLINSK	60.10	21.1	10	3	-1								
MIRNY	60.23	190.2	10	4	0	18	22	9			10	25	
QUETTA	60.28	311.6	10	3K	-2	18	15	2					
IRKUTSK	61.04	352.2	10	9	-1								
KHOROG	61.31	321.0	10	11	-1	18	28	2					
KARAPIRO	61.42	128.7	10	12	0								
ANDIJAN	62.88	324.3	10	22	0	18	51	5					
FRUNSE	63.01	327.3	10	23K	0								
DUZHANBE	63.70	320.4	10	24	-4								
TASHKENT	65.05	323.1	10	34	-2	19	15	2					
SEMIPALATNSK	65.94	336.1	10	41	-1								
TANANARIVE	66.59	253.0	10	46	0								
MAWSON	68.79	199.1	11	0A	0								
YAKUTSK	70.92	7.0	11	11	-2	20	24	1					
PETROPAVLOVK	71.16	25.9	11	14	0								
SHIRAZ	71.28	305.0	11	14K	-1	20	26	-1			13	56	PP
AFIAMALU	71.34	101.9	11	14	-1	20	36	8					
CAPE HALLETT	71.91	164.8	11	21	2								
SCOTT BASE	74.30	170.1	11	34	1								
TEHERAN	74.43	310.5	11	33	-1								
CHILEKA	78.76	255.6	11	58	0								
SVERDLOVSK	78.82	332.7	11	56	-2	21	52	1					
GORIS	79.53	312.6	12	1	-1	22	1	3					
KIROVOBAD	79.92	313.7	12	3K	-1	22	3	1					

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TIKSI	80.20	4.3	12	3K	-3	22	3	-2		
CHANGALANE	80.45	244.7	12	9	2				12 20	12 15 PCP
TIFLIS	81.37	314.4	12	12	0					
PIETERMZBURG	81.76	241.2	12	8	-6					
SOUTH POLE	81.81	180.0	12	15	1				22	31
BULAWAYO	84.33	250.5	12	28	1					
BROKEN HILL	85.15	256.2	12	32	1					
KSARA	86.04	304.8	12	40	5				13	47
LWIRO	86.44	268.3	12	49	12	23	22	14		39 58 SS
KIMBERLEY	86.74	241.6	12	41K	2					
N-LAZARVSKYA	86.74	198.8	12	40A	1					
BYRD STATION	87.63	171.8	12	44	1					
HONOLULU	89.60	68.5				23	58	21		29 45
KIPAPA	89.70	68.4	12	59	6					
SIMFEROPOL	89.73	315.4	12	52	-1	23	43	5		
MOSCOW	90.01	326.4	12	53	-1					
KEVO	97.16	339.5								26 16 PS
NURMIJARVI	97.54	330.1				24	0	0		31 38 SS
COLLEGE	100.24	25.5	13	41	0					37 46 PP
GARCHY	111.21	317.5								19 6
RESOLUTE	111.36	8.3	18	27	0					
YELLOWKNIFE	114.89	23.1	18	34K	0					
TOLEDO	117.84	310.8								19 59 PP
CALISTOGA	119.88	50.1	18	51A	7					
MINERAL	120.17	47.9	18	47A	3					
EDMONTON	120.26	31.5	18	42	-3					
BERKELEY	120.31	50.9								29 50
LICK	120.92	51.3	18	48A	2					
BLUE MTS.	121.70	41.8	18	48	1					30 3 SP
PRIEST	121.97	52.5	18	50A	2					
HUNGRY HORSE	122.31	36.9	18	49	0					
PASADENA	124.45	54.1	18	54	1					
EUREKA	124.55	47.3	18	55	2					
BOULDER CITY	126.55	51.0	19	5	8					
UINTA BASIN	128.76	44.0	19	3	2				20	40 PP
TONTO FOREST	129.86	51.8	19	7	4				21	14 PP
TUCSON	130.88	54.2	19	7	2				22	28 SKP
RAPID CITY	130.94	36.6							22	29 SKP
GOLDEN	131.90	42.7	19	9	2				22	32
WICHITA MTS.	139.10	44.9	19	14	-6				22	55 SKP
TULSA	140.32	41.4	19	31	8				22	58 SKP
PENNSYLVANIA	145.46	18.1	19	32	0					
MORGANTOWN	145.81	21.5	19	34A	2					
PALISADES	146.31	12.9	19	35	2					
CUMBERLAND	146.64	32.2	19	35	1				23	13 PP
ANTOFAGASTA	147.72	169.8	19	40	5					
BLACKSBURG	147.74	24.3	19	38	3					
AREQUIPA	154.49	164.2	20	13	28					
LA PAZ	155.15	171.6	19	51	5				20	16 PKP2
CARACAS	176.70	47.1	20	5	2	26	58	-1		

MAY 18 13.M 3.M 35.5 EPICENTRE -8.29 115.84 DEPTH= 56.KM

A=-0.43131 B= 0.89078 C=-0.14315 D= 0.9000 E= 0.4358
G= 0.0624 H=-0.1288 K=-0.9897 HT= 6.7

DEPTH OF FOCUS= 0.004R

SE= 2.23

	DELTA DEG.	AZ. DEG.	P		O-C S	S O-C			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
LEMBANG	8.27	279.5	1	59A	-1	3	30	-3			8	29 PCP
DJAKARTA	9.18	282.6	2	13	1	3	56	1			4	26 SSS
TANGERANG	9.37	282.4	2	14K	-1	3	53	-7			2	31 PPP
DARWIN	15.30	106.7	3	35	2	6	20	-2				
MANILA	23.39	12.9	5	6	2							
MUNDARING	23.57	179.2	5	7	1							
BAGUIO CITY	24.99	10.8	5	21	1	9	35	-2				
HONG KONG	30.44	357.0	6	10	1						9	2 PCP
PORT MORESBY	30.96	94.4	6	7	-7							
CANTON	31.28	355.6	6	17	1	11	25	7				
CHARTERS TS.	31.68	115.0	5	31	-49	11	28	4				
ADELAIDE	33.85	145.0	6	32A	-7						13	30 SS
ZO-SE	39.49	7.2	7	27	1	13	30	6				
TOOLANGI	39.62	141.9	7	29	2						8	9
BRISBANE	39.75	123.3	7	30	2						8	21

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NANKING	40.22	3.9	7 33	1					
CHENG TU	40.35	344.2	7 34	1	13 42	5			
SHILLONG	40.94	326.0	7 38K	0					
MADRAS	41.25	300.5	7 39	-2	13 49	-1			
RIVERVIEW	41.27	133.2	7 43	2					
SIAN	42.81	351.6	7 54K	0	14 19	6			
TARRALEAH	43.30	146.6	8 4	7					
LHASA	44.62	328.7	8 9	1	14 44	4			
CHATRA	44.63	322.4	8 8	0					
LANCHOW	45.52	346.3	8 17K	2	15 1	9			
ABUYAMA	46.80	22.4	8 26A	1					
PEKING	48.07	0.3	8 34	-1	15 31	2			
KOUMAC	48.30	110.1	8 38K	1					
PAOTOW	48.91	354.1	8 41	-1	15 44	4			
MATUSIRO	49.29	23.9	8 43K	-2	15 37	-9			
NEW DELHI	52.28	316.0	9 3K	-4					
CHANGCHUN	52.58	8.6	9 12	2					
DEHRA DUN	52.81	318.3	9 12	1					
VLADIVOSTOK	53.21	14.7	9 15	1	16 48	8			
ULAN-BATOR	56.51	352.8	9 37	-1	17 26	2			
ESEN BULAK	57.18	344.0	9 43	0	17 40	7			
WARSAK DAM	59.41	317.6	9 57	-2					
Y.-SAKHLINSK	60.03	20.9	10 2	-1					
MIRNY	60.25	190.3	10 4	0					
QUETTA	60.53	311.5	10 3	-3	18 15	-1			
ALMATA	62.29	328.8	10 15K	-3					
TASHKENT	65.26	323.0	10 37	-1	19 14	-1			
TANANARIVE	66.87	253.0	10 50	2					
MAWSON	68.85	199.1	10 59A	-1					
ASHKABAD	70.56	315.0	11 13	2					
SHIRAZ	71.55	304.9	11 14K	-3	20 26	-4		13 54	PP
CAPE HALLETT	71.79	164.8	11 19	1					
SCOTT BASE	74.21	170.2	11 33	1					
TEHERAN	74.69	310.5	11 37	2					
SVERDLOVSK	79.00	332.6	11 59	0					
CHILEKA	79.05	255.6	11 58	-1					
KIROVOBAD	80.17	313.7	12 6	1					
TIKSI	80.21	4.2	12 2K	-4					
CHANGALANE	80.71	244.7	12 9	1	12 19	12 12	PCP		
TIFLIS	81.61	314.3	12 15	2					
SOUTH POLE	81.77	180.0	12 14	0					
BULAWAYO	84.61	250.5	12 29	1					
BROKEN HILL	85.44	256.1	12 32A	0					
KSARA	86.31	304.8	12 41	4					
N-LAZARVSKYA	86.81	198.8	12 40A	1					
KIMBERLEY	86.99	241.5	12 38	-2					
BYRD STATION	87.55	171.7	12 43	0					
MOSCOW	90.21	326.4	12 59	4					
COLLEGE	100.15	25.5	13 45	4				17 55	PP
YELLOWKNIFE	114.80	23.2	18 34K	0					
EDMONTON	120.13	31.6	18 45	1					
EUREKA	124.35	47.5	18 54	2					
BOULDER CITY	126.34	51.2	19 0	4					
UINTA BASIN	128.57	44.1	19 3	2				21 24	PP
TONTO FOREST	129.64	52.0	19 5	2				22 21	PP
TUCSON	130.66	54.3	19 7	2				22 27	SKP
WICHITA MTS.	138.91	45.1	19 18	-2				22 53	SKP
PENNSYLVANIA	145.40	18.5	19 32	-1					
MORGANTOWN	145.74	21.9	19 37K	5					
PALISADES	146.28	13.3	19 34	1					
CUMBERLAND	146.51	32.6	19 34	1					
AREQUIPA	154.37	163.6	20 12	27					
LA PAZ	155.06	170.9	19 55	9	20 15				

MAY 19 1.H 2.M 59.S EPICENTRE -46.41 -75.39 DEPTH= 0.KM

A= 0.17451 B=-0.66958 C=-0.72195 D=-0.9677 E=-0.2522
G=-0.1821 H= 0.6986 K=-0.6919 HT= -4.1

SE= 2.96

	DELTA DEG.	AZ. DEG.	P			S			*PP		SUPP.	
			M	S	O-C	M	S	S	M	S	M	S
CONCEPCION	9.89	15.8	2	22	-5	4	53	33				
SANTA LUCIA	13.45	17.3	3	12	-3	6	50	64				
O.HIGGINS	19.59	156.1	4	21	-11						8	21
G. G. VIDELA	19.69	164.0	4	36	2							

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ARGENTINE I.	19.83	166.2	4 35	0	8 10	-3					
ANTOFAGASTA	23.01	11.7	5 7A	-1	9 26	11					
AREQUIPA	30.04	7.5	6 14	1							
LA PAZ	30.43	13.9	6 18	2	11 29	12					
HUANCAYO	34.24	0.1	6 52	2							
BYRD STATION	37.11	191.6	7 12	-2							
SOUTH POLE	43.78	180.0	8 7	-2							
N-LAZARVSKYA	46.19	152.7	8 26A	-2	15 16	1	8 32	10 18	PP		
SCOTT BASE	50.43	194.1	9 2	1	16 19	4		10 56	PP		
BOGOTA	50.82	1.7	9 5A	1	16 31	11					
CHINCHINA	51.15	359.7	8 39A	-28	16 9	-16					
CAPE HALLETT	53.13	200.4	9 21	-1							
BALBOA HTS.	55.24	355.0	9 36A	-1	17 23	3					
CARACAS	57.15	9.9	9 48A	-3	17 51	5					
TRINIDAD	58.17	16.2	9 59A	1				18 10	PS		
SANTIAGO MA.	60.77	345.4	10 18	2							
SAN SALVADOR	61.09	344.6	10 26	8							
MAWSON	62.04	163.2	10 21	-4	16 46	-3		12 43	PP		
FORT FRANCE	62.19	15.6	10 24	-2	18 54	3					
ST. CLAUDE	63.36	14.8	10 34	1	19 4	-1					
COMITAN	64.17	342.1	10 41	2	19 29	14		23 17			
ANTIGUA	64.42	14.4	10 37	-3							
SAN JUAN	65.02	9.7	10 42K	-2	19 34	8					
OAXACA	66.02	337.6	10 49	-2	19 33	-5		31 49			
MIRNY	67.02	175.0	10 55A	-2				13 25	PP		
WILKES	67.49	182.6	11 2	2	19 58	2	11 16				
VERA CRUZ	67.94	338.8	11 5	2				35 45			
MERIDA	68.27	345.7	11 4	-1	20 10	5					
HERMANUS	68.89	118.0	11 16	7				20 23	PS		
TACUBAYA	68.95	335.9	11 12	3	20 26	13					
GUADALAJARA	71.40	332.4	11 22	-2				13 1			
ROXBURGH	72.24	221.9	11 29	0	20 55	3		25 41	SS		
WELLINGTON	72.69	228.0	11 33	1	20 59	2					
KARAPIRO	74.74	230.8	11 43	-1							
KIMBERLEY	76.22	117.1	11 50	-2							
PIETERMZBURG	78.99	121.4	12 10K	3							
CHIHUAHUA	79.69	332.9						20 45			
KERGUELEN I.	80.01	157.9	12 20	7	22 33	16					
M,BOUR	80.04	57.0	12 15	2	22 27	10					
COLUMBIA	80.20	355.2	12 13	-1	22 23	4		15 23	PP		
CHAPEL HILL	82.02	357.0	12 25	2							
CUMBERLAND	82.14	351.6	12 23A	-1	22 42	3		15 33	PP		
CHANGALANE	82.51	120.3	12 26K	0	22 44	2	12 37	28 19	SS		
LUANDA	82.72	95.1	12 29	2	22 58	13		15 36	PP		
LUBBOCK	83.12	338.0	12 28	-1	22 53	4					
BLACKSBURG	83.36	356.0	12 29	-1							
WICHITA MTS.	83.42	340.9	12 29A	-2	22 28	-24		15 41	PP		
FAYETTEVILLE	83.85	344.8	12 31A	-2	22 59	3					
TULSA	83.98	343.5	12 32A	-1	23 3	6		15 53	PP		
TUCSON	84.59	330.4	12 37	0				39 27	PKPPKP		
BULAWAYO	84.85	113.7	12 35	-3							
GEORGETOWN	84.94	358.7	12 39	1	23 8	1					
ALBUQUERQUE	85.69	334.8	12 42	0	22 5	-69		15 5			
ST. LOUIS 1	85.71	348.4	12 41	-1	23 18	4					
MORGANTOWN	85.75	356.5	12 43	1				15 46	PP		
PHILADELPHIA	85.98	0.2	12 48	5	23 40	23					
TONTO FOREST	86.60	330.9	12 47	0	23 19	-4		16 10	PP		
LAWRENCE	86.84	344.6	12 46	-2							
PENNSYLVANIA	86.85	358.1	12 47	-1							
FORDHAM	86.89	1.1	12 47	-1	22 54	-32					
PALISADES	87.04	1.1	12 51	2	23 15	-12					
CLEVELAND	87.67	355.4	12 53K	1	23 43	10					
TOOLANGI	88.70	211.3	12 56	-1	23 31	-12		13 9	*SP		
BROKEN HILL	88.95	109.8	12 58	0							
PASADENA	88.98	325.7	12 58	0	23 59	14		16 31	PP		
LONDON ONT.	89.21	355.8	12 57A	-2							
BOULDER CITY	89.36	329.0	13 1	1				16 38	PP		
RIVERVIEW	89.78	217.2	13 4A	2	23 50	-3		16 37	PP		
SCARBOROUGH	89.81	357.2	13 2	0							
GOLDEN	89.82	337.3	13 1	-1	24 5	12					
HALIFAX	91.24	8.4	13 10	2							
LARAMIE	91.39	337.7	13 10	1				24 12			
OTTAWA	91.42	359.8	13 8	-1							
BREBEUF	91.54	1.2	13 9	-1	24 17	9		16 45	PP		
UINTA BASIN	91.58	334.6	13 9	-1	24 18	9		16 55	PP		
PRIEST	91.70	324.9	13 12K	1							
NOUMEA	91.72	234.8	13 12K	1							
CHILEKA	92.19	115.4	13 14	1							

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PARAISO	92.56	323.8	13	15	0					
SALT LAKE C.	92.69	333.1	13	15	0				17	0 PP
EUREKA	92.89	329.7	13	16	0				17	6 PP
LICK	93.13	324.8	13	19A	2					
ADELAIDE	93.36	207.5	13	11	-7	24	41	17	23	53 SKS
BERKELEY	93.84	324.6	13	23K	3	24	1	-27	17	7 PP
KOUMAC	94.32	234.2	13	27A	4					
BRISBANE	94.59	221.7	13	14	-10				19	49
CALISTOGA	94.63	324.8	13	24A	0					
PONTA DELGDA	94.89	37.4	13	34K	9				17	20 PP
BOZEMAN	96.92	335.7	13	35	0				17	34 PP
BUTTE	97.68	334.9	13	40	2	24	22	7	17	38 PP
BLUE MTS.	98.12	331.3	13	39	-1	24	23	5	17	42 PP
LWIRO	98.13	101.9	13	41A	1	24	34	16	17	41 PP
AVERROES	100.20	52.1	14	0	11				18	14 PP
HONOLULU	100.30	289.9	13	59	9	24	41	12		
KIPAPA	100.33	290.1	14	1	11	24	39	10		
MUNDARING	101.28	190.0				25	28	55		
PERTH	101.35	189.7	13	47	-8	25	35	61	18	10 PP
PENTICTON	102.80	332.1	13	59	-2					
CHARTERS TS.	103.85	220.0	14	11	5	25	52	67		
EDMONTON	104.55	337.6	14	7A	-2					
GRANADA	105.17	51.8	14	48K	777	25	0	9	18	41 PP
ALMERIA	105.55	52.7				24	59	6	26	15 S
HONIARA	105.71	237.5	14	19	777	26	19	85		
TOLEDO	106.90	49.6	14	25K	777	25	6	7	18	49 PP
ALICANTE	107.73	52.8				26	37	94	28	23 PS
BAGNERES	111.39	49.6	18	47	11				19	25 PP
PORT MORESBY	112.70	226.3	19	17	38	25	35	12	19	27 PP
VALENTIA	112.76	37.5							19	33
CLERMONT-FD.	114.78	49.1	18	56	13					
GARCHY	115.75	47.8	18	51	6				20	3
MONACO	115.76	53.0							19	49
ISOLA	115.84	52.4							19	52 PP
ROSELEND	116.59	50.9	18	46	0				20	9 PP
KEW	116.86	42.6							20	2 PP
MESSINA	116.97	62.1				25	26	-13	19	56 PP
BESANCON	117.24	49.3	18	49	2				19	44 PP
ROME	117.46	57.2							19	46
PAVIA	117.65	52.6							20	11 PP
COPPERMINE	117.76	344.1	18	48	0					
AQUILA	118.28	57.3							19	49
DOURBES	118.35	46.1	18	48	-2					
DURHAM	118.46	39.3							20	10 PP
UCCLE	118.67	45.4							20	8 PP
STRASBOURG	119.02	48.9	15	25	-206				20	7 PP
PADOVA	119.28	53.8				26	1	13	20	11 PP
KARLSRUHE	119.62	48.8							20	15 PP
ABERDEEN	119.81	37.0							20	17 PP
DE BILT	119.89	44.6							20	31 PP
STUTT GART	119.92	49.5	15	21	-212				20	15 PP
BENSBERG	120.17	46.5							20	20 PP
LJUBLJANA	121.15	54.5	18	57	2				20	29 PP
RESOLUTE	121.50	354.0	18	54	-2					
TITOG RAD	121.79	60.2	18	59	3				20	39 PP
ATHENS	121.93	66.9	19	31	34				27	37
JENA	122.40	48.5	18	58	1	26	1	3	20	33 PP
KASPERSKE H.	122.43	51.1	18	57	-1				20	36 PP
SCORESBY SD.	122.78	18.7	18	56	-2					
HALLE	122.92	48.1	19	1	3				20	38 PP
COLLMBERG	123.35	48.7	19	0	1	26	8	7		
PRAGUE	123.41	50.5	19	1	2	26	7	6	20	43 PP
PRUHONICE	123.43	50.7	19	1	2	26	7	6	27	49 SKKS
VIENNA-H.	123.45	53.2	18	59	0				20	43 PP
BRATISLAVA	123.81	53.6	18	58	-2				20	34 PP
BELGRADE	123.87	58.5	19	2	2				20	54 PP
COLLEGE	124.31	330.5	18	59	-2				19	41
SOFIA	124.41	62.0	19	3	2				20	44 PP
RACIBORZ	125.46	52.1	19	7	4				21	25
COPENHAGEN	125.47	44.0	19	8	5					
MOULD BAY	125.56	348.2	18	51	-13					
CHORZOW	126.00	52.2	19	3	-1				20	58
GOTEBORG	126.30	41.7	19	7	2					
KRAKOW	126.39	52.9	19	7	2				22	37
LEMBANG	126.93	183.7	19	10	4				21	10
ISTANBUL UN.	127.03	66.6	19	11	5					
KARLSKRONA	127.23	44.6	19	7	0					
KSARA	127.51	78.0	19	10	3				21	9 PP

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DJAKARTA	127.61	182.8			27 15 61	21 13
WARSAW	128.08	50.9				21 42
LWOW	128.57	54.8	19 11	2		22 29 SKP
ALERT	128.82	2.2	19 7	-3		
SKALSTUGAN	129.28	35.3	19 4	-7		
UPPSALA	129.91	41.1	19 13	1		21 26 PP
NORD	131.40	9.6	19 11	-4		
STIMFEROPOL	132.25	64.7	19 16	0	26 20 -6	21 38 PP
UMEA	132.62	36.9	19 16	-1		21 45 PP
NURMIJARVI	133.40	42.1	19 14	-5		21 41 PP
HELSINKI	133.43	42.6	19 18	-1		
TROMSOE	133.99	29.0	19 19	-1		21 56 PP
KIRUNA	133.99	31.7	19 18	-2		21 53 PP
KAJAANI	135.84	37.9	19 16	-7		21 59 PP
PULKOVO	135.85	44.4	19 23	0	26 25 -7	22 1 PP
SODANKYLA	136.18	33.1	19 17	-7		22 12 PP
SHIRAZ	136.51	93.8	19 22	-2		22 4 PP
KEVO	136.76	29.7	19 26	1		22 8 PP
KODAIKANAL	137.18	138.7				23 4
GORIS	137.64	77.6	19 28	2		22 21 PP
TIFLIS	137.66	73.9	19 29	3		22 15 PP
MOSCOW	138.45	51.7	19 29	1		23 5 PKS
APATITY	138.79	33.5	19 23	-5	26 17 -20	22 22 PP
TEHERAN	139.19	85.6	19 21	-8		22 17 PP
MADRAS	140.84	140.3	19 43	11		
BOMBAY	142.12	125.7	19 20	-14		23 20
KHEYS	142.21	11.2				22 35 PP
POONA	142.39	127.3	19 34K	-1		
HYDERABAD	143.89	134.4	19 38	1		
PETROPAYLOVK	145.16	301.1	19 38	-2		
MANILA	145.47	209.0	19 43	3		23 11
VISHAKHAPTNM	146.39	141.3	20 23	41		
QUETTA	146.66	105.7	19 42A	0		21 44
BAGUIO CITY	147.27	209.2	19 48	5		
MAGADAN	149.91	312.8	19 54	7		
TUKUBASAN	151.68	261.7	19 54A	4		23 37 PP
NEW DELHI	152.11	120.1	19 52A	1		
CALCUTTA	152.78	145.6	19 50	-2		
BOKARO	152.86	139.7	19 58	6		
MATUSIRO	153.14	260.6	19 54	2		23 43 PP
DEHRA DUN	153.87	118.6	19 57K	4		
KHOROG	153.99	98.1	19 54	1		
ABUYAMA	154.00	254.8	19 57K	4		
Y.-SAKHLINSK	154.03	285.4	19 54	1		30 45 SKKS
TASHKENT	154.17	88.5	19 55	1		30 49
HONG KONG	154.73	201.1	19 57	3		23 25 PP
CANTON	155.69	199.8	20 25	30		24 0 PP
CHATRA	156.06	138.7	20 0	4		
SHILLONG	156.85	149.6	19 59A	2		
FRUNSE	158.42	88.6				24 23 PP
KUNMING	158.70	175.3	20 0	1		24 18 PP
YAKUTSK	158.77	326.5				24 22 PP
ZO-SE	160.05	225.8	20 1	0		24 26 PP
LHASA	160.19	142.9	20 3A	2		24 28 PP
VLADIVOSTOK	160.38	270.3	20 1	0		20 56
NANKING	161.99	222.3	20 1	-2		
SEMIPALATNSK	163.37	67.2				24 43 PP
CHENG TU	164.27	178.1	20 5	0		24 39 PP
CHANGCHUN	165.16	267.5	20 3	-3		
SIAN	167.42	196.6	20 8	0		25 2 PP
PEKING	169.43	237.0	20 8	-1		25 15 PP
LANCHOW	169.63	176.5	20 9	0		25 13 PP
PAOTOW	172.97	216.0	20 9	-2		25 28 PP
IRKUTSK	174.13	1.7	20 9	-2		21 49 PKP2
ESEN BULAK	174.22	87.1	20 11	0		21 44 PKP2

MAY 19 10.M 0.M 8.S EPICENTRE 46.27 14.53 DEPTH= 53.KM

A= 0.67155 B= 0.17403 C= 0.72023 D= 0.2509 E=-0.9680
G= 0.6972 H= 0.1807 K=-0.6937 HT= -4.0

DEPTH OF FOCUS= 0.003R

SE= 2.81

DELTA	AZ.	P	O-C	S	O-C	*PP	SUPP.
DEG.	DEG.	M S	S	M S S	M S S	M S	M S

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LJUBLJANA	0.22	181.5					0 0 PG	
TRIESTE	0.82	221.6					0 10 PG	
ZAGREB	1.11	113.3					0 15 PG	
PADOVA	2.05	246.2	0 34	1	0 54	-4	0 40 PG	
VIENNA-H.	2.35	31.6	0 36K	-1	1 1	-4	0 42 PG	
BRATISLAVA	2.59	41.7	0 39	-2	1 6	-5	1 26 SG	
BOLOGNA	2.86	233.1	0 52	8	1 31	13	1 49 SG	
KASPERSKE H.	2.94	347.7	0 46	0				
HURBANOVO	2.98	56.1	0 52	6	1 24	3	1 0 PG	
PRATO	3.40	226.7	0 54	2	1 33	1		
CHUR	3.50	281.4	0 54	1	1 55	21		
RAVENSBURG	3.68	296.0	0 57K	1			2 0	
PRAGUE	3.81	359.0	0 58	0	1 49	7	1 11 P*	
PAVIA	3.91	255.8	0 59K	0	1 49	5	1 21 PG	
AQUILA	4.00	192.1					0 58 PG	
CHEB	4.08	340.1	1 1	-1	1 49	0		
EBINGEN	4.24	298.8	1 4A	0			1 24 PG	
TUBINGEN	4.34	303.4	1 5A	0	2 0	5	2 28 SG	
STUTTGART	4.35	307.1	1 6A	1	2 0	5	1 29 PG	
BELGRADE	4.40	107.0	1 2K	-4			2 16 SG	
ROME	4.61	199.4	1 10	1	2 7	5	1 22 P*	
FELDBERG	4.74	292.3	1 10A	-1			1 36 PG	
SKALNATE PL.	4.84	50.9	1 10	-2	2 32	24	1 50 PG	
KARLSRUHE	4.96	305.8	1 15	1	2 15	4		
CHORZOW	5.01	34.9	1 12	-3	2 14	2	1 40 PG	
HEIDELBERG	5.01	310.8	1 14A	-1	2 14	2		
JENA	5.06	338.3	1 15	0	2 14	1	1 35 PG	
TITOGRAD	5.12	136.8	1 12	-4	2 12	-3	1 29 PG	
STRASBOURG	5.14	299.2	1 16A	0	2 18	3	1 42 PG	
COLLMBERG	5.14	349.2	1 15	-1			2 49 SG	
KRAKOW	5.23	41.7	1 20	2			1 41 PPP	
NEUCHATEL	5.27	280.7	1 17	-1	3 0	41		
HALLE	5.51	343.0	1 20	-2			2 54 SG	
ROSELEND	5.54	266.9	1 22	0	2 27	2	3 21 SG	
MONACO	5.64	245.8	1 20	-3			1 50	
ISOLA	5.68	251.1	1 21	-3	2 31	2		
UZHGOROD	5.78	63.0	1 23	-2				
BESANCON	5.96	282.6	1 26	-2	2 52	16	1 53 PG	
WELSCHBRUCH	5.96	294.1	1 18	-10				
TARANTO	6.12	160.1					2 21	
SKOPJE	6.57	128.3	1 26	-10			3 20 SG	
BENSBERG	6.77	316.6	1 40K	1	2 53	-3	2 14 PG	
SOFIA	7.23	116.4	1 37	-9	3 2	-5	3 46 SG	
MUNSTER	7.29	324.1	1 47	1				
LWOW	7.29	57.4	1 49	3				
DOURBES	7.66	303.6	1 50	-2			3 59 SG	
GARCHY	7.93	281.5	1 53	-2			2 30 PG	
CLERMONT-FD.	7.96	270.5	1 54	-2			4 36 SG	
MESSINA	8.10	174.3	1 57	-1	3 21	-8	3 53	
UCCLE	8.13	307.6					2 9 PP	
REGGIO CALA.	8.20	173.8	2 0	1			3 41	
BUCHAREST	8.36	98.6					4 11	
DE BILT	8.46	317.0	2 10	7			4 14	
PARIS	8.53	291.7	2 3	-1			4 42	
COPENHAGEN	9.52	352.9	2 19K	2			5 14	
KARLSKRONA	9.93	3.4	2 24	1				
FOLINIERE	10.46	289.3	2 29	-1				
BAGNERES	10.73	257.8	2 30	-4	4 48	15	5 24	
ATHENS	10.73	137.3	2 27A	-7	4 14	-19	5 48	
KEW	11.07	303.4	2 38	0			6 8 SG	
GOTEBORG	11.56	353.2	2 46	1				
DURHAM	13.30	315.6	3 16K	8	5 37	2	7 32	
UPPSALA	13.73	6.6	3 13	-1			6 12 SS	
ABERDEEN	14.96	322.9	3 25	-5	6 8	-6	7 42	
TOLEDO	14.99	251.4	3 28A	-2	6 28	13	3 35 PP	
HELSINKI	15.24	20.2	3 35	2				
NURMIJARVI	15.47	19.1	3 35	-1				
GRANADA	16.27	242.5	3 50A	4	7 8	23		
PULKOVO	16.46	29.1	3 51	2				
VIBORG	16.72	24.9	3 53	1				
MOSCOW	17.28	48.4	3 57	-2				
SKALSTUGAN	17.40	356.6	4 0	0				
UMEA	17.88	8.3	4 4	-2			8 10	
KAJAANI	19.30	17.7	4 22	-1				
KSARA	20.46	119.9	4 32	-4	8 12	-5		
JERUSALEM	21.54	124.9	4 44	-2				
KIRUNA	21.84	6.0	4 50	1				
SODANKYLA	22.09	12.5	4 53	1				
APATITY	23.50	18.2	5 6K	0				

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TROMSOE	23.53	3.9	5	7	1				
KIROVOBAD	23.66	92.2	5	6	-1				
GORIS	24.15	94.8	5	12A	0				
KEVO	24.37	10.5	5	15	1	9	49	22	
SVERDLOVSK	29.99	52.4	6	5K	-1				
SHIRAZ	33.86	105.9	6	38A	-1				14 22
QUETTA	43.40	92.8	7	58A	-1				
ALMATA-2	43.68	70.2	8	0A	-1				
WARSAK DAM	44.39	85.0	8	6	-1				
RESOLUTE	50.73	341.1	8	56	-1				
NEW DELHI	51.47	87.1	9	0A	-2				
MOULD BAY	54.26	347.7	9	23A	0				
BREBEUF	58.15	304.1	9	51K	0				
CHATRA	59.45	82.0	9	59A	-1				
COPPERMINE	60.10	340.3	10	4	0				
SHILLONG	63.48	80.0	10	24A	-3				
YELLOWKNIFE	64.24	336.4	10	31K	-1				
COLLEGE	68.35	352.0	10	58	0				
EDMONTON	71.25	330.1	11	16A	0				
CUMBERLAND	71.45	302.2	11	17	0				
LAWRENCE	74.45	310.4	11	34	0				
HUNGRY HORSE	75.63	327.4	11	41	0				
TULSA	77.00	308.6	11	50K	1				
WICHITA MTS.	79.40	309.6	12	4	2				13 38
BLUE MTS.	79.80	327.4	12	4	0				
UINTA BASIN	80.40	320.0	12	8	1				30 49 PKKP
ALBUQUERQUE	83.26	314.8	12	24	2				
EUREKA	83.83	323.7	12	27	2				
TONTO FOREST	86.11	317.7	12	38	2				13 21

MAY 19 19.H 21.M 16.S EPICENTRE 2.51 128.80 DEPTH= 100.KM

A=-0.62606 B= 0.77856 C= 0.04348 D= 0.7793 E= 0.6267
G=-0.0272 H= 0.0339 K=-0.9991 HT= 7.1

DEPTH OF FOCUS= 0.011R

SE= 1.53

	DELTA DEG.	AZ. DEG.	P		O-C S	S			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
MANILA	14.29	328.2	3	16	-2	6	28	34				
DARWIN	14.93	172.3	3	29	3							
BAGUIO CITY	16.02	330.2	3	42	2	7	6	32				
PORT MORESBY	21.77	123.1	4	46	2							
LEMBANG	23.09	246.2	4	57K	0	8	51	-6				
TANGERANG	23.76	248.6	5	3K	-1						9	58
HONG KONG	24.27	325.3	5	7	-2	9	24	7	5	37	6	16 *SP
CANTON	25.36	325.0	5	19	0							
CHARTERS TS.	28.25	143.4	5	46	1	10	31	9				
ZO-SE	29.34	346.6	5	55	0							
NANKING	30.87	343.3	6	8	-1							
MATUSIRO	34.96	13.3	6	42K	-2	12	6	-1				
MUNDARING	36.31	198.2	6	54	-1							
CHENG TU	36.52	322.6	6	56	-1							
SIAN	36.62	331.8	6	58	0							
BRISBANE	37.65	143.7	7	6	-1						8	53
ADELAIDE	38.43	166.8	7	6A	-7							
PEKING	39.07	344.5	7	18K	0	13	16	6				
VLADIVOSTOK	40.53	3.5	7	31K	1	13	41	9				
LANCHOW	40.59	328.3	7	33K	2	13	43	10				
CHANGCHUN	41.26	356.2	7	36	0							
SHILLONG	42.27	306.2	7	45K	0							
TOOLANGI	42.78	160.4	7	50	1							
LHASA	44.85	310.9	8	7K	1	14	45	10				
CHATRA	46.63	305.2	8	1K	-19							
ULAN-BATOR	49.03	340.6	9	37	59							
MADRAS	49.20	284.9	8	40K	0	15	49	13			10	36 PP
ESEN BULAK	52.11	331.8	9	2	0	16	27	11				
DEHRA DUN	55.36	305.5	9	26A	0							
NEW DELHI	55.50	303.2	9	25K	-2							
ALMATA-2	61.01	319.2	10	5K	0							
WARSAK DAM	61.76	307.5	10	10	0							
FRUNSE	62.64	317.8	10	16K	0							
ANDIJAN	63.39	314.9	10	22	1							
QUETTA	64.54	302.3	10	27	-1	19	22	24				

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DUZHANBE	65.28	311.6	10 32	-1				
TASHKENT	65.78	314.6	10 36K	0				
TIKSI	69.02	0.0	10 55K	-1	19 53	1		
VANNOVSKAYA	73.28	308.8	11 23	1				
KIZYL-ARVAT	74.91	309.9	11 31	0				
SVERDOLOVSK	76.08	328.3	11 38A	0				
SHIRAZ	76.84	299.7	11 42	0	21 26	6	15 11	
TEHERAN	78.32	305.8	11 52	2				
GORIS	82.60	309.3	12 15K	2	22 32	12		
TIFLIS	83.86	311.5	12 22	3				
BAKURIANI	84.82	311.5	12 26	2				
COLLEGE	84.92	25.2	12 26	1			13 5 *SP	
MOSCOW	88.61	325.5	13 0	17				
APATITY	89.76	337.5	12 47A	-1				
SODANKYLA	92.37	337.8	13 0A	0				
KAJAANI	92.60	334.4	12 59	-2				
MOULD BAY	92.69	12.9	13 2	0				
KIRUNA	94.55	338.8	13 10A	0				
NURMIJARVI	94.76	331.2	13 11	0				
UMEA	95.86	335.0	13 14	-2				
COPPERMINE	97.28	20.1	13 23	1				
RESOLUTE	98.63	10.7	13 30K	1				
UZHGOROD	98.96	319.9	13 31	1				
PRUHONICE	103.40	322.8					18 11 PP	
UINTA BASIN	111.87	44.6	18 27	4			29 19 PKKP	
TONTO FOREST	112.85	51.1	18 29	4				
WICHITA MTS.	122.17	45.7	18 46	3			28 42 PKKP	
CUMBERLAND	130.31	37.1	19 2	4				

MAY 19 21.H 35.M 48.S EPICENTRE 24.37 -45.97 DEPTH= 0.KM

A= 0.63387 B=-0.65563 C= 0.41031 D=-0.7189 E=-0.6951
G= 0.2852 H=-0.2950 K=-0.9119 HT= 3.5

SE= 2.65

	DELTA DEG.	AZ. DEG.	P		O-C S	S			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
ANTIGUA	16.49	247.1	3	50	-4							
ST. CLAUDE	16.93	243.6	3	54	-5	7	12	4				
FORT FRANCE	17.21	238.9	3	58	-5	7	31	17				
SAN JUAN	19.68	256.3	4	29	-4	8	17	7				
TRINIDAD	20.04	229.8	4	32	-5	8	19	1				
ANGRA DO HO.	21.34	43.7	5	3	12							
PONTA DELGDA	21.84	47.7	4	58	2	9	4	11	5	13	5	33 PPP
CARACAS	24.25	239.0	5	15A	-4	9	28	-8				
HALIFAX	24.79	328.9	5	28A	4							
FORDHAM	28.52	311.9	6	0	1	11	1	15				
PALISADES	28.61	312.2	6	2K	2	10	59	11				
PHILADELPHIA	29.03	309.4	6	5	2	11	2	7				
M,BOUR	29.05	104.6	6	1	-3	10	39	-16				
HOPE	29.35	263.5	6	4	-2							
GEORGETOWN	30.01	306.3	6	13	1	11	19	9				
BREBEUF	30.71	320.3	6	19K	1	11	30	9			7	22 PP
SHAWINIGAN	30.83	322.6	6	22K	2							
PENNSYLVANIA	31.26	309.4	6	22	-1							
OTTAWA	31.90	318.6	6	30A	1							
COLUMBIA	31.95	295.6	6	29	0	12	17	36			6	50
BLACKSBURG	32.07	301.7	6	32	2							
MORGANTOWN	32.37	306.3	6	35A	2	12	0	13				
FUQUENE	32.63	239.3	6	28	-7							
SCARBOROUGH	33.34	313.6	6	43A	2							
BOGOTA	33.42	238.5	6	38A	-4	12	6	3				
CLEVELAND	34.09	308.8	6	48K	0	12	18	4				
SCHEFFERVILLE	34.11	338.5	6	49	1							
LISBON	34.24	56.4	6	50K	1	12	17	1			6	58 PP
LONDON ONT.	34.38	311.5	6	52A	2							
CHINCHINA	34.42	240.7	6	42A	-9	12	12	-7			8	10 PP
AVERROES	34.76	66.3	6	58A	4	12	33	9			8	12 PP
BALBOA HTS.	35.51	250.2	6	56	-4							
CUMBERLAND	35.86	297.5	7	3	0	12	50	9			8	26 PP
GRANADA	38.27	60.3	7	21K	-2	13	15	-3			8	51 PP
TOLEDO	38.35	55.9	7	24A	0	13	25	6			8	48 PP
CHICAGO CGS.	38.54	307.1	7	26	0	13	26	4			8	48 PP
ALMERIA	39.14	61.0	7	31A	0	13	37	6			9	4 PP
BENI ABBES	39.17	71.7	7	30	-1	13	52	20			9	5 PP
ST. LOUIS 1	39.95	301.7	7	29	-8	13	42	-1				

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MERIDA	40.31	274.1	7 36	-4	13 51	2				16 42
ALICANTE	40.87	59.0	7 46A	1	14 2	5				9 23 PP
TORTOSA	41.94	55.4	7 55	1	14 19	6				
BAGNERES	42.06	52.0	7 55	0	14 12	-3				9 29 PP
SAN SALVADOR	42.08	263.5	7 53	-2						
FAYETTEVILLE	42.88	297.4	8 1A	0	14 26	-1				9 47 PP
FOLINIERE	43.06	43.7	8 4	1						
COMITAN	43.88	268.4								12 12
LAWRENCE	43.89	301.5	8 9	-1						
KEW	44.04	40.0	8 11A	0	14 45	1				18 21 SS
TULSA	44.18	297.1	8 12A	0	14 49	3				18 2
DURHAM	44.60	35.3	8 10K	-5	14 57	5				9 58 PP
CLERMONT-FD.	44.68	48.8	8 17	1	15 3	10				
PARIS	44.95	44.5	8 18	0	14 52	-5				10 28 PP
GARCHY	44.96	46.7	8 19	1	15 13	16				10 20 PP
ABERDEEN	45.39	32.0	8 13	-9	15 8	5				10 33 PPP
LA PAZ	46.02	210.2	8 22	-5	15 1	-11				
HUANCAYO	46.18	221.7	8 24	-4						
WICHITA MTS.	46.48	295.5	8 29	-1	15 15	-4				10 25 PP
DOURBES	46.61	43.2	8 31	0	15 13	-8				
UCCLE	46.64	42.2	8 31	-1	15 6	-15				
VERA CRUZ	46.67	273.9	8 34	2	15 32	11				10 52
BESANCON	46.90	47.3	8 34	0	15 30	5				10 28 PP
ROSELEND	47.08	49.5	8 36	1						10 2
ISOLA	47.18	51.6	8 36	0	15 40	11				
WELSCHBRUCH	47.36	45.8	8 44	7						
DE BILT	47.48	40.7	8 29A	-9	15 41	8				
AREQUIPA	47.62	214.0	8 32	-7						
SCORESBY SD.	48.21	10.6	8 46	2	15 53	10				
STRASBOURG	48.32	45.8	8 45A	0	15 48	3				10 38 PP
FELDBERG	48.36	46.8	8 45A	0						
BENSBERG	48.41	42.6	8 46A	1	15 53	7				10 34 PP
WITTEVEEN	48.55	40.1	8 46	-1						
PAVIA	48.79	50.5	8 52	4	16 12	20				11 0 PP
KARLSRUHE	48.81	45.3	8 49	0	15 51	-1				
MUNSTER	48.91	41.3	8 50	1						
EBINGEN	49.04	46.5	8 50A	0						
HEIDELBERG	49.08	44.9	8 51A	0						
TUBINGEN	49.16	46.1	8 52	1						
STUTTGART	49.34	45.8	8 52	-1	16 2	3				
RAVENSBURG	49.42	47.1	8 53A	0						
PRATO	50.06	52.3	9 1	3	15 58	-11				
FLORENCE X.	50.17	52.5			16 40	29				9 14 PP
PADOVA	50.71	50.4	9 2A	-1	16 23	5				11 3 PP
ROME	51.00	54.9	9 6A	1	16 9	-13				11 0 PP
JENA	51.14	43.3	9 5	-1	16 27	3				20 22 SS
HALLE	51.46	42.6	9 9	0	16 40	12				
CHEB	51.53	44.5	9 9	0	16 36	7				
AQUILA	51.69	54.4	9 10	-1	16 25	-7	9 32			11 2 PP
GOLDEN	51.75	302.3	9 11	0	16 40	8				
TRIESTE	52.05	50.2	9 13A	0	16 40	3				12 6 PPP
COLLMBERG	52.08	43.0	9 12	-2	16 43	6				11 24 PP
KASPERSKE H.	52.19	45.8	9 13A	-1						9 40
COPENHAGEN	52.51	37.5	9 18	1	16 50	7				
LJUBLJANA	52.60	49.7	9 17A	0	16 46	2				11 9 PP
GOTEBORG	52.70	34.9	9 18A	0						
GUADALAJARA	52.79	278.1	9 20	1	16 56	9				
PRAGUE	52.84	44.7	9 20	1	16 56	9				11 19 PP
PRUHONICE	52.91	44.8	9 20	0	16 56	8				
ALBUQUERQUE	52.92	296.3	9 20	0	16 36	-12				
ANTOFAGASTA	53.35	208.2	9 12	-11	16 38	-16	9 41			11 21 PP
MESSINA	53.46	59.5	9 20	-4	16 44	-12	9 44			11 20 PP
CHINUAHUA	53.48	288.5								15 8
ZAGREB	53.61	50.1	9 25	0	17 3	5				
VIENNA-H.	53.97	47.1	9 27A	-1	17 9	6				11 35 PP
KARLSKRONA	54.33	37.3	9 26A	-4						
SKALSTUGAN	54.43	27.9	9 31A	0						
TARANTO	54.64	56.6	9 26	-6						15 40
UINTA BASIN	54.94	303.2	9 33	-2	17 24	8				11 32 PP
HURBANOVO	55.18	47.6	9 38	2						
RACIBORZ	55.26	44.9	9 35	-2	17 25	5				12 47 PPP
CHORZOW	55.78	44.7	9 41	0						11 53 PP
BOZEMAN	55.81	309.8	9 41	0						39 49 PKPPKP
UPPSALA	56.02	33.0	9 41A	-1	17 33	3				
TITOGRAD	56.03	54.1	9 35	-8						11 32 PP
RESOLUTE	56.30	346.1	9 44K	0						
KRAKOW	56.37	45.0	9 44	-1						11 54 PP
SKALNATE PL.	56.57	46.0	9 49	3	17 42	5				

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SALT LAKE C.	56.64	303.9	9 46	-1			12 24
BELGRADE	56.78	51.2	9 48K	0	17 48	8	12 4 PP
BUTTE	56.86	310.2	9 48	-1	17 48	7	39 52 PKPPKP
TUCSON	56.90	293.7	9 48	-1			
TONTO FOREST	56.94	296.2	9 49	0	17 52	10	11 42 PP
WARSAW	57.13	42.4	9 50	0			11 47 PP
EDMONTON	57.42	319.0	9 52K	0			
SKOPJE	57.68	54.6	9 48	-6	17 56	4	
HUNGRY HORSE	57.80	313.0	9 53	-2	17 56	2	39 40 PKPPKP
UZHGOROD	57.92	46.7	9 57	1			
UMEA	57.93	28.6	9 55A	-1	17 51	-4	39 37 PKPPKP
NORD	58.48	4.8	10 0	0			
ALERT	58.54	357.5	10 0	0	18 9	6	
TROMSOE	58.68	21.8	10 1	0			10 44 PCP
BANFF	58.72	316.3	10 1	-1			
KIRUNA	58.79	24.0	10 2A	0	18 9	2	18 26 PS
YELLOWKNIFE	58.83	329.6	10 0	-2			
SOFIA	59.01	53.6	10 3	-1	18 14	4	12 17 PP
LWOW	59.02	45.2	10 4A	0	18 13	3	18 26 PS
NURMIJARVI	59.59	32.8	10 7K	-1	18 7	-10	12 20 PP
HELSINKI	59.72	33.2	10 7	-1			
COPPERMINE	59.80	335.8	10 10A	1			
ATHENS	59.89	59.0	10 9A	-1	18 23	2	10 35
EUREKA	59.92	302.8	10 9	-1			39 41 PKPPKP
BLUE MTS.	60.27	309.1	10 12	0	18 36	10	12 28 PP
SODANKYLA	61.06	25.0	10 18K	0			
KAJAANI	61.24	28.8	10 19K	0			39 27 PKPPKP
PENTICTON	61.43	314.4	10 20K	0			
KEYO	61.47	22.3	10 21K	1	18 47	6	12 25 PP
VIBORG	61.63	32.6	10 23	1			
SANTIAGO	62.10	203.3	10 19	-6	18 50	1	
SANTA LUCIA	62.10	203.3	10 19	-6	18 50	1	12 36 PP
PULKOVO	62.40	33.7	10 24A	-3	18 45	-8	12 36 PP
MOULD BAY	62.55	345.0	10 27	-1			
PASADENA	62.59	297.2	10 28	0	19 2	7	12 56 PP
ISTANBUL UN.	63.42	54.8	10 32A	-1			
APATITY	63.69	24.9	10 35A	0	19 5	-4	14 15 PPP
VICTORIA	64.01	313.8	10 35	-2			
PRIEST	64.16	299.8	10 38A	0			
LICK	64.68	301.3	10 42A	0			
BERKELEY	65.05	302.0	10 45A	1	19 34	8	13 15 PP
CALISTOGA	65.13	302.9	10 46A	1			
PARAISO	65.47	300.4	10 42	-5			
PORT HARDY	66.29	316.6	9 52	-60			
SIMFEROPOL	66.40	49.8	10 51A	-2	19 41	-1	13 3 PP
LUANDA	66.50	112.2	10 58K	5	19 29	-15	
MOSCOW	66.68	37.7	10 54A	0	19 51	5	13 14 PP
KHEYS	68.38	9.9	11 7K	2			13 45 PP
SITKA	69.56	324.3	11 15	3	20 36	16	
KSARA	70.43	61.0	11 17A	-1	20 31	1	13 46 PP
JERUSALEM	70.49	63.2	11 18A	0			
COLLEGE	73.08	334.1	11 33	-1	21 4	3	14 33 PP
TIFLIS	74.76	50.9	11 45	2	21 27	7	11 59 PCP
KIROVOBAD	76.20	51.5	11 51A	-1			
GORIS	76.60	52.6	11 54	0			14 54 PP
LWIRO	77.09	98.5	11 55A	-2	21 48	3	26 34 SS
SVERDLOVSK	78.49	32.5	12 5K	1	22 7	7	26 48 SS
TEHERAN	81.74	54.6	12 22A	0	22 45	11	
BROKEN HILL	82.22	109.6	12 22	-2			
KIZYL-ARVAT	83.79	49.8	12 33A	1			
TIKSI	84.19	1.6	12 35A	1			15 58 PP
BULAWAYO	84.98	114.6	12 37	-1			
HERMANUS	85.10	131.1			23 9	1	28 57 SS
SHIRAZ	85.14	59.8	12 40	1	22 58	-10	28 30 SS
VANNOVSKAYA	85.64	50.3	12 43	2			
ASHKABAD	85.81	50.2	12 42	0			16 8 PP
KIMBERLEY	86.12	123.8	12 40A	-4			
CHILEKA	88.39	107.9	12 54	-1			
GRAHAMSTOWN	89.72	127.0					14 0
PIETERMZBURG	90.84	122.2	13 11	5			
TASHKENT	91.32	43.0	13 9A	1	23 37	-29	24 12 SCS
SEMIPALATNSK	91.69	31.1	13 11	1			23 48 SKKS
ANDIJAN	93.56	42.1	13 20A	1			
FRUNSE	93.64	39.4	13 20A	1			24 3 SKKS
YAKUTSK	93.85	2.0	13 23	3	24 34	6	17 13 PP
ALMATA	94.69	38.0	13 26K	2			
KHOROG	94.95	45.1	13 28	3	23 59	-39	
QUETTA	95.87	53.3	13 30A	1	24 42	36	

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WARSAK DAM	96.99	47.9	13 35	1				
IRKUTSK	99.38	18.0	13 47	2			31 54	SS
KIPAPA	99.79	298.8			24 34	8	32 22	SS
HONOLULU	99.92	298.7	13 38	-10	24 45	19	17 38	PP
PETROPVLOVK	100.01	345.2	14 4	16				
ESEN BULAK	101.69	25.7	17 32	216				
N-LAZARVSKYA	103.07	163.3	14 3	1				
ULAN-BATOR	104.02	18.4	17 33	207				
NEW DELHI	104.09	49.4	18 21	255			33 25	
BOMBAY	106.48	59.9	18 42	777				
POONA	107.49	59.7	18 26	777				
Y.-SAKHLINSK	108.52	353.7					21 10	PPP
BYRD STATION	111.04	190.3					19 18	
PAOTOM	111.63	19.5					19 30	PP
CHANGCHUN	111.67	6.8					19 20	PP
HYDERABAD	111.71	58.0	19 18	42			28 40	
CHATRA	111.90	44.6	18 47	10			28 50	
LHASA	112.26	39.9					19 25	PP
VLADIVOSTOK	112.82	1.7					19 34	PP
BOKARO	113.04	47.9	18 40	1				
LANCHOW	113.47	26.4					19 34	PP
SOUTH POLE	114.22	180.0	18 32	-9				
KODAIKANAL	114.97	65.0					27 33	
VISHAKHAPTM	115.22	54.7	19 51	68				
MADRAS	115.63	60.8	19 47A	63			19 58	PP
CALCUTTA	115.66	47.2					20 18	PP
SHILLONG	115.75	42.3	18 47	3			30 56	PPS
SIAN	117.01	23.2					19 58	PP
CHENG TU	118.18	29.3	18 52	3			20 7	PP
MATUSIRO	119.29	356.1	18 52	1			32 12	PPS
TUKUBASAN	119.47	354.4			25 52	4	20 18	PP
NANKING	122.03	15.3	18 59	3			20 35	PP
ZO-SE	123.49	13.2					20 44	PP
CAPE HALLETT	128.00	193.2	19 9	1				
AFIAMALU	128.04	271.1	19 11A	3				
CANTON	128.72	24.7	19 12	3				
HONG KONG	129.76	24.2	18 16	-55			21 26	
MIRNY	130.64	159.7	19 15	2			24 2	
WILKES	135.47	166.7	19 30	8			22 4	PP
MEDAN	135.80	55.9	19 27A	4			23 0	
BAGUIO CITY	137.39	19.3	19 22	-3				
MANILA	139.19	19.4	19 29	0				
WELLINGTON	142.23	233.4	19 32	-2			22 36	PP
KARAPIRO	142.30	239.0	19 28	-6				
ROXBURGH	144.62	224.6	19 35	-3			41 45	SS
TANGERANG	148.08	59.9	19 45K	1			23 20	PKS
DJAKARTA	148.24	59.7	19 53	9				
LEMBANG	149.26	59.8	19 51K	5			21 47	
NOUMEA	150.20	267.3	19 54K	7				
HONIARA	151.17	296.6	19 57	8			43 8	SS
KOUMAC	151.82	271.7	19 57	7				
PORT MORESBY	160.55	317.7	20 8	7			24 34	PP
RIVERVIEW	162.34	233.9	20 11	8			24 37	PP
BRISBANE	162.86	255.9	20 7	4			27 7	
CHARTERS TS.	167.90	288.2	20 9	1			25 19	
ADELAIDE	168.68	200.0	20 4K	-4			24 27	PP

MAY 19 23.H 31.M 22.S EPICENTRE -17.84 -69.24 DEPTH= 116.KM

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G=-0.1079 H= 0.2847 K=-0.9525 HT= 5.2

DEPTH OF FOCUS= 0.013R

SE= 1.99

	DELTA DEG.	AZ. DEG.	P		O-C S	S O-C			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
LA PAZ	1.70	38.7	0	38	8	1	0	7				
AREQUIPA	2.55	302.2	0	43	2							
ANTOFAGASTA	5.94	190.5	1	24A	-3	2	24	-10				
HUANCAYO	8.23	313.5	1	58	0							
BOGOTA	22.82	347.5	5	2	9							
CHINCHINA	23.52	343.9	4	57	-3							
CARACAS	28.25	4.8	5	44	0	10	16	-4				
TRINIDAD	29.35	15.9	5	53	-1							
ARGENTINE I.	47.49	177.2	8	27	2							

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1963		PAGE 441									
KARAPIRO	8.74	214.9	2	8	1						
TUAI	8.77	204.9	2	6	-2	3	47	1			
WELLINGTON	11.83	207.0	2	44	-5	4	52	-9	12	7	PCS
NOUMEA	16.21	298.2	3	50K	3	7	9	24			
ROXBURGH	17.54	210.4	4	0	-3	7	3	-12	12	19	SCP
PORT VILA	17.98	313.7	4	11A	2						
KOUMAC	18.87	298.9	4	22	2						
BRISBANE	25.60	270.5	5	31A	3	10	3	12			
RIVERVIEW	26.05	255.4	5	36A	4	10	3	5	5	45	11 12 SS
MACQUARIE I.	28.73	208.2	5	56A	0						9 6 PCP
HONIARA	29.54	311.7	6	2A	-1	10	29	-25			
TOOLANGI	30.66	247.5	6	14	1	11	14	2			7 32 PPP
CHARTERS TS.	33.75	280.1	6	42	2	11	58	-2			
RABAUL	38.56	307.6	7	20	-1						
PORT MORESBY	38.72	296.1	7	23A	1	13	15	-2	8	19	9 12 PP
CAPE HALLETT	41.93	185.3	7	52	3						
SCOTT BASE	47.53	184.3	8	37	3	15	36	11			10 34 PP
BYRD STATION	54.46	169.5	9	27	1						17 11
WILKES	54.65	208.0	9	26	-2						
HAWAII V.OB.	54.66	26.7	9	27	-1	17	8	5			
MUNDARING	55.21	250.5	9	31	-1				9	41	
HONOLULU	55.36	22.9	9	32	-1	17	17	4			
KIPAPA	55.50	22.9	9	33	-1	17	18	3			
PERTH	55.53	250.4	9	34	0	17	18	3			11 40 PP
GUAM	56.73	315.4	9	42	-1						
SOUTH POLE	59.27	180.0	10	1	1						
LEMBANG	73.01	272.2	11	29K	1	21	25	34	11	39	14 14 PP
MANILA	73.89	298.5	11	33	0	20	59	-2			
DJAKARTA	74.01	272.3	11	33	-1	20	59	-3			11 49 PCP
TANGERANG	74.19	272.3	11	33A	-2	21	1	-3			14 19 PP
BAGUIO CITY	75.35	299.6	11	40	-2	22	12	55			
TUKUBASAN	77.42	326.5	11	51A	-2	21	34	-6			14 45 PP
N-LAZARVSKYA	78.37	183.4	11	58	-1	21	45	-5			14 59 PP
MATUSIRO	78.58	325.5	11	57A	-3	21	46	-6			
ABUYAMA	78.60	322.7	11	59K	-1						
TAMU	78.87	304.4	12	1	0						
KERGUELEN I.	79.75	218.1	12	1	-5	22	8	3			
ANPU	80.26	307.0	12	7	-2						
HONG KONG	83.72	300.5	12	26A	-1	22	41	-4			15 49 PP
ZO-SE	84.35	311.3	12	29A	-1	22	48	-3			
CANTON	84.80	300.6	12	33A	1	22	53	-3			
PARAISO	84.89	42.1	12	36	3						
Y.-SAKHLINSK	85.21	334.3	12	33A	-1	22	54	-6			12 53
PRIEST	85.76	43.2	12	38A	1						
PASADENA	85.92	46.0	12	37	-1	23	15	8			22 59 SKS
MEDAN	85.97	276.6	12	34A	-4	22	56	-11	12	47	15 55 PP
PETROPVLOVK	85.98	346.2	12	37A	-1	22	55	-12			
LICK	86.02	41.8	12	39A	1						
BERKELEY	86.03	41.1	12	38A	0	22	59	-9			15 59 PP
SANTA LUCIA	86.32	127.0	12	41A	1	23	5	-6			24 8 PS
CALISTOGA	86.40	40.3	12	40A	0						
NANKING	86.53	310.7	12	41A	0	23	15	2			23 3 SKS
VLADIVOSTOK	86.74	325.8	12	42A	0	23	3	-12			
MINERAL	88.13	39.6	12	49A	1						
BOULDER CITY	89.19	46.4	12	55	2				13	14	13 25 *SP
TUCSON	89.45	51.4	12	56	1						30 20 PKKP
TONTO FOREST	90.40	49.6	13	0	1	23	53	4			16 33 PP
CHANGCHUN	90.56	322.9	12	58A	-2	23	52	2			23 22 SKS
CHIHUAHUA	90.62	56.8									10 59
EUREKA	90.75	43.2	13	1	0	23	44	-8	13	21	16 24 PP
TACUBAYA	90.75	67.9	13	3	2						24 2
ANTOFAGASTA	92.04	119.1	13	8	1	23	36	-27			16 59 PP
SEATTLE	92.88	34.1	13	9	-2						
VICTORIA	92.96	32.9	13	10	-1						
VERA CRUZ	93.11	69.6									13 15
SOCORRO	93.16	51.9	13	12	0						
PEKING	93.19	315.5	13	11A	-1	24	18	5			23 41 SKS
BLUE MTS.	93.51	38.5	13	13K	0	24	22	6			16 33 PP
KUNMING	93.93	296.8	13	16A	1	24	24	4			23 47 SKS
ALBUQUERQUE	93.99	51.4	13	15	-1						38 20 PKPPKP
SALT LAKE C.	94.01	44.2	13	16	0				13	34	30 17 PKKP
SIAN	94.44	307.4	13	19A	1						
HUANCAYO	94.62	106.9	13	22	4						
SITKA	94.79	21.9	13	19	0	24	35	8			23 51 SKS
COMITAN	94.86	74.1									24 47
UINTA BASIN	95.12	45.6	13	21K	0	23	56	4			17 4 PP
PORT BLAIR	95.16	280.4	13	19A	-2	23	50	-2			16 36 PP
AREQUIPA	95.31	112.6	13	25	3						

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PENTICTON	95.32	34.1	13 21A	-1				
SPOKANE	95.39	36.3	13 21	-1	24 21	27		
LUBBOCK	96.39	54.7	13 26	0	24 1	2		
BUTTE	96.83	39.7	13 29	1			13 45	13 59
PAOTOW	97.29	313.1	13 30A	-1	24 4	0		24 52 S
GOLDEN	97.40	48.0	13 32	1	24 10	6		
BOZEMAN	97.46	40.6	13 33	2				17 21 PP
HUNGRY HORSE	97.49	37.3	13 26	-5				17 27 PP
LA PAZ	97.93	114.5	13 36	3	24 13	6		
LARAMIE	98.17	46.6	13 35	0				17 34
COLLEGE	98.35	12.6	13 34	-1	24 5	-4		30 1 PKKP
BANFF	98.51	34.4	13 35	-1				
LANCHOW	98.91	306.6	13 39A	1	24 12	0		
WICHITA MTS.	99.29	55.2	13 38	-2	24 16	2		17 43 PP
EDMONTON	100.94	33.5	13 46A	-1				
RAPID CITY	101.15	45.2	13 48	0				29 59 PKKP
CHITTAGONG	101.17	289.3						17 18 PP
YAKUTSK	101.64	337.7	13 49	-1	24 22	-3		
TULSA	101.86	55.3	13 51A	0	24 24	-2		18 1 PP
BALBOA HTS.	101.88	86.6	13 53	2				
SHILLONG	102.66	292.2	13 56K	1	24 29	-1		18 9 PP
FAYETTEVILLE	103.08	55.8	12 59	-58				18 10
ULAN-BATOR	103.18	318.1						17 29
CHINCHINA	103.28	92.1	13 58	1	24 31	-2		18 14 PP
LAWRENCE	103.72	52.8	13 34	-25				
CALCUTTA	104.06	287.9						18 6
BOGOTA	104.43	93.3	14 6A	3	24 41	3		18 27 PP
FUQUENE	105.15	92.7	14 8	777	24 42	1		18 29 PP
LHASA	105.20	295.6	14 7	777	24 42	0		
VISHAKHAPTNM	106.05	281.3	12 58	777				25 5
MADRAS	106.49	275.5						18 12
BOKARO	106.76	288.0	17 53	777				24 43
IRKUTSK	106.81	321.2	14 12A	777	24 45	-4		
CHATRA	106.99	291.4	17 43	777				
ST. LOUIS 1	107.05	54.9	14 14	777				
KODAIKANAL	107.48	271.6	18 40A	777				24 31
TIKSI	108.70	344.5	14 19A	777				18 48 PP
ESEN BULAK	108.86	313.2	18 0	777				
COPPERMINE	108.97	21.0	18 25	777				
CUMBERLAND	109.12	59.5	14 24	777	24 56	-3		18 56 PP
HYDERABAD	110.02	278.7	17 59	-29				24 59
COLUMBIA	111.89	62.7	18 38	7	25 11	1		19 34 PP
MOULD BAY	112.93	12.9	14 46	-227				18 32 PKP
HERMANUS	112.99	195.6			27 1	106		19 27 PP
CARACAS	113.48	91.6	14 45A	-229	25 19	3		
BLACKSBURG	113.57	59.7	14 40	-235				19 31
CLEVELAND	114.30	55.0	18 38K	2				35 24 SS
POONA	114.43	277.7	18 20	-16				29 14
MORGANTOWN	114.79	57.3	18 39	2				19 53 PP
LONDON ONT.	115.08	53.5	18 37A	-1				
BOMBAY	115.47	277.6	18 24	-14				22 15
DEHRA DUN	115.73	291.2	18 40	1				25 23
NEW DELHI	115.75	289.1	14 51A	-228				19 43 PP
CHANGALANE	116.16	210.3	18 40	0				29 17 SP
SCARBOROUGH	116.65	53.3	18 41	0				
KIMBERLEY	116.78	202.5	18 43K	2				
RESOLUTE	117.76	17.4	18 41	-2				
SAN JUAN	117.79	84.3	18 42	-1	25 31	-1		20 4 PP
PHILADELPHIA	118.37	58.4						
OTTAWA	119.53	52.3	18 45K	-1				
PALISADES	119.60	57.5	18 48	2	26 0	21		15 9 P
SEMIPALATNSK	120.22	313.5	18 47	0				20 13 PP
ST. CLAUDE	120.55	88.9						
ANTIGUA	120.92	87.6	18 51	2				
BREBEUF	120.99	52.6	18 48	-1	25 43	0		36 51 SS
FRUNSE	122.24	303.8	18 51	0	25 40	-8		20 26 PP
BULAWAYO	123.11	210.3	18 55K	2				
KHOROG	123.17	297.0	18 53	0				
ALERT	123.76	8.2	18 53A	-1				28 43
CHILEKA	123.79	219.3	18 54K	0				
QUETTA	124.69	287.2	18 51	-5				20 47 PP
KHEYS	125.63	350.3	18 57	-1				20 17 PP
TASHKENT	125.78	301.0	18 59	1	26 3	5		27 43 SKKS
SCHEFFERVILLE	126.72	42.3	18 59A	-1				
HALIFAX	127.79	55.3	19 2A	0				
BROKEN HILL	128.15	213.5	19 6	3				
SVERDLOVSK	132.21	320.6	19 11	0				
SHIRAZ	136.54	281.8	19 19A	0				20 21 PP
SCORESBY SD.	138.21	11.7	19 22	0				

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LMIRO	138.22	222.8	19 14K	-8					22 12 PP
KEVO	138.58	347.1	19 13	-9					22 17 PP
TEHERAN	138.68	290.4	19 17	-5					22 23 PP
APATITY	138.86	342.2	19 13A	-10					22 9 PP
LUANDA	139.00	197.3	19 26A	3					22 19 PP
TROMSOE	140.03	350.8	19 22	-3					22 17 PP
SODANKYLA	140.65	345.2	19 19	-7					22 49 PKS
KIRUNA	141.45	348.8	19 21	-7					22 28 PP
GORIS	142.97	295.8	19 27	-3					23 4 PKS
KAJAANI	143.03	341.4	19 25	-5					23 7 PKS
TIFLIS	144.08	299.6	19 32	0					26 3 PPP
MOSCOM	144.68	325.1	19 32	-1					22 47 PP
UMEA	145.07	345.9	19 31A	-3					22 50 PP
PULKOVO	145.40	334.9	19 34	0					22 46 PP
SKALSTUGAN	146.64	351.5	19 36A	0					
NURMIJARVI	146.74	339.5	19 36K	-1	26 33	-6			22 59 PP
HELSINKI	146.91	338.9	19 38	1					
UPPSALA	149.17	344.5	19 34	-7					29 59 SKKS
SIMFEROPOL	151.16	308.2	19 44	1					23 33 PP
KSARA	151.19	284.9	19 44A	0					23 27 PP
JERUSALEM	151.55	280.5	19 46	2					21 26
GOTEBORG	152.31	348.3	19 45A	0					
KARLSKRONA	152.96	343.0	19 45	-1					20 11
COPENHAGEN	154.12	346.2	19 49A	1					
WARSAW	154.47	332.1	20 11	23					25 34
LWOW	154.81	324.9	19 50	1	26 54	4			23 52 PP
LOME	155.34	178.5	19 53	4					23 59 PP
ISTANBUL UN.	155.91	302.3	19 50A	0					
DURHAM	156.02	4.9	20 4	14					23 57 PP
MABOUR	156.14	129.4	19 52	2					23 58 PP
KRAKOW	156.56	329.8	19 53	2					23 46 PP
CHORZOW	156.77	331.4	19 53	2					20 9 PKP2
RACIBORZ	157.26	332.0	19 54	2					24 2 PP
WITTEVEEN	157.82	352.2	19 54	1					20 27 PKP2
COLLMBERG	158.01	341.1	19 51	-2					24 1 PP
HALLE	158.11	342.9	19 52	-1					24 14 PP
MUNSTER	158.53	350.2	19 55	2					
PRAGUE	158.65	337.3	19 54	0					24 8 PP
DE BILT	158.68	354.4	19 55A	1					44 41 SS
PRUHONICE	158.69	337.0	19 55	1					24 8 PP
JENA	158.72	342.9	19 52	-2					24 5 PP
HURBANOVO	158.94	328.2	20 15	21					
BRATISLAVA	159.20	330.3	19 55A	1					24 8 PP
SOFIA	159.22	310.5	19 56	2					23 15 SKP
CHEB	159.28	340.6	20 0	6					20 35
KEW	159.39	3.9	19 54	0					24 10 PP
VIENNA-H.	159.44	331.5	19 55	0					24 19
BENSBERG	159.57	350.3	19 55A	0					24 22 PP
KASPERSKE H.	159.75	337.3	19 54A	-1					24 11 PP
BELGRADE	159.85	318.8	19 56A	1					24 34 PP
UCCLE	160.04	355.4	19 56	1					24 15 PP
ATHENS	160.66	297.3	19 56A	0					24 22 PP
DOURBES	160.71	354.6	19 57	1					24 18 PP
SKOPJE	160.80	310.5	18 59	-57					
KARLSRUHE	161.24	346.5	19 58	2					31 1 SKKS
STUTTGART	161.28	344.6	19 57	1					24 19 PP
ZAGREB	161.48	327.5	20 0	3					
TUBINGEN	161.56	344.7	19 58	1					20 42
STRASBOURG	161.78	347.4	19 58A	1					24 21 PP
EBINGEN	161.91	344.5	19 58	1					20 44
LJUBLJANA	161.95	330.5	19 57A	0					23 59 PP
FOLINIERE	162.07	5.0	19 58	1					20 43 PKP2
PARIS	162.11	358.6	19 59	2					24 27 PP
RAVENSBERG	162.13	342.7	19 58A	1					
WELSCHBRUCH	162.18	350.2	19 59	2					
FELDBERG	162.40	346.2	19 59	1					
TRIESTE	162.60	331.1	20 4	6					28 30 PPP
CHUR	163.01	341.7	19 59	1					20 51 PPS
BESANCON	163.37	350.1	20 0	1					24 30 PP
PADOVA	163.54	334.4	21 5	66					31 19 SKKS
GARCHY	163.62	357.1	19 59	0					22 39 PP
TARANTO	164.29	311.6							40 25
PAVIA	164.64	340.1	19 59A	-1					51 9 SSS
ROSELEND	164.77	347.2	20 1	1					24 39 PP
CLERMONT-FD.	165.12	356.6	20 2	2					24 43 PP
FLORENCE X.	165.15	332.5	20 4	4					28 30 PPP
AQUILA	165.31	324.2	20 1	1	26 37	-22			24 49 PP
ROME	166.10	325.1	20 11A	10					24 49 PP

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1963		PAGE 444									
ISOLA	166.13	344.2	20	2	1						
REGGIO CALA.	166.56	306.0	20	4	3					24	49
MESSINA	166.58	306.5	20	1	0	26	59	-1	20	13	24 53 PP
BAGNERES	167.78	5.9	20	5	3						24 54 PP
LISBON	168.06	46.2	20	6A	4				20	10	25 1 PP
TOLEDO	169.83	26.7	20	5A	2	26	44	-18	20	24	25 10 PP
TORTOSA	170.04	6.0	20	17	13						31 30 SKKS
AVERROES	171.78	70.7	20	9A	4				20	22	25 22 PP
GRANADA	172.27	34.4	20	9K	4	26	54	-9	21	54	25 23 PP
ALICANTE	172.33	13.9	20	7A	2						25 22 PP
ALMERIA	173.06	30.1	20	6A	1	27	14	11			25 24 PP
BENI ABBES	176.43	101.6	20	9	3						25 41 PP

MAY 20 17.H 1.M 35.S EPICENTRE 72.20 126.25 DEPTH= 0.KM

A=-0.18187 B= 0.24808 C= 0.95151 D= 0.8065 E= 0.5912
G=-0.5626 H= 0.7674 K=-0.3076 HT=-12.3

SE= 1.22

	DELTA DEG.	AZ. DEG.	P		O-C S	S			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
TIKSI	1.00	123.6	0	20	-1	0	32	-4				
YAKUTSK	10.31	170.8	2	31A	-2						5	34
KHEYS	16.79	328.2	3	56	-2						11	20
IRKUTSK	22.18	217.4	4	58K	-2	8	54	-6				
ULAN-BATOR	25.93	210.6	5	35	-1	10	14	9				
Y.-SAKHLINSK	26.39	154.1	5	43	3							
MOULD BAY	26.70	29.0	5	43	0							
CHANGCHUN	28.45	181.4	5	58K	-1							
KEVO	28.97	314.8	6	31	27	11	27	33				
APATITY	29.22	308.2	6	5A	-1							
VLADIVOSTOK	29.29	171.5	6	7A	1							
ESEN BULAK	29.40	224.8	6	8	1							
COLLEGE	29.58	59.7	6	10	1							
SEMIPALATNSK	29.78	247.9	6	9	-2							
SVERDLOVSK	30.16	274.7	6	15A	1							
SODANKYLA	30.96	312.1	6	21	0						7	1
RESOLUTE	31.17	19.8	6	27	4							
KIRUNA	31.95	316.4	6	30A	0							
PEKING	32.63	194.4	6	35	-1	11	51	-1				
KAJAANI	33.42	307.9	6	43	0							
COPPERMINE	34.48	36.0	6	52	0							
MATUSIRO	36.25	163.6	7	6	-1						17	25
ALMATA-2	37.09	245.8	7	14K	0							
NURMIJARVI	37.22	306.7	7	14	-1						9	34 PCP
MOSCOW	37.92	293.1	7	23	2							
LANCHOW	38.01	210.1	7	23K	1	13	19	4				
SIAN	39.08	203.0	7	31K	0							
ANDIJAN	40.85	249.8	7	46	1						17	1 5S
TASHKENT	41.22	253.4	7	49	1						9	34 PP
ZO-SE	41.25	186.6	7	48	-1							
CHENGTU	43.27	208.4	8	5K	0	14	32	-1				
KHOROG	44.12	248.9	8	13	1							
LHASA	46.61	223.7	8	34K	2							
LWOW	46.94	299.9	8	35	0							
KIZYL-ARVAT	47.09	265.3	8	38	2							
VANNOVSKAYA	47.68	262.9	8	41	1							
KRAKOW	47.80	303.4									16	6
TIFLIS	48.31	277.5	8	46	1							
COLLMBERG	48.36	309.5	8	43	-3						10	38
BAKURIANI	48.69	278.7	8	49	1							
KIROVOBAD	48.82	275.6	8	49	0						10	41 PP
KUNMING	48.90	208.7	8	51	1							
JENA	49.04	310.4	8	49	-2							
DEHRA DUN	49.06	238.6	8	51A	0							
PRUHONICE	49.21	307.6	8	53	1						10	51
GORIS	49.87	274.9	8	57K	0							
CHATRA	50.17	227.2	9	0K	0							
KASPERSKE H.	50.24	308.0	9	0	0						10	52
SHILLONG	50.38	221.5	9	1K	0							
NEW DELHI	50.94	238.8	9	4K	-1							
HUNGRY HORSE	52.62	46.8	9	18	0							
BLUE MTS.	55.16	50.9	9	38	1						10	1
SHIRAZ	57.09	264.5	9	50K	-1							
EUREKA	60.56	51.8	10	15	0						10	37
UINTA BASIN	61.24	46.2	10	19	0							

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PASADENA	86.87	54.5	12 41	1	23 18	5					13 5
VICTORIA	87.47	39.6	12 43	0							
EUREKA	89.96	49.8	12 55	0							15 57
BOULDER CITY	89.99	53.4	12 56	1							
PENTICTON	90.10	39.6	12 55	0							
BLUE MTS.	90.37	44.4	12 56	-1	23 57	12					16 32 PP
DEHRA DUN	91.52	300.5	13 5	3							
NEW DELHI	91.89	298.6	13 2A	-2							
TUCSON	92.41	57.8	13 6	0							
TONTO FOREST	92.46	55.7	13 7	1							16 47 PP
BANFF	93.11	38.5	13 8	-1							
HUNGRY HORSE	93.42	41.5	13 10	-1							
BUTTE	93.89	44.0	13 13	0							
ALMATA-2	94.62	313.0	13 17K	1							
BOZEMAN	94.86	44.6	13 19	2							
EDMONTON	94.91	36.7	13 18	0							
UINTA BASIN	94.95	50.0	13 20	2	24 31	6					31 26 SS
N-LAZARVSKYA	95.99	189.2	13 23A	1							
COPPERMINE	97.10	22.2	13 27	-1							
MOULD BAY	97.77	13.6	13 31	0							
ANDIJAN	97.89	309.9									17 26 PP
QUETTA	100.97	298.8	13 45	0							16 56 PP
WICHITA MTS.	102.88	56.8	13 54	0	24 39	11					30 49 PKKP
TULSA	105.24	55.7			24 44	6					18 22 PP
SHIRAZ	113.44	297.5									20 43
CUMBERLAND	113.55	56.0	14 33	-239							19 24 PP
KEVO	115.29	344.6									35 22 SS
GORIS	117.79	308.8	18 31	-9							
KIRUNA	118.35	344.9									31 49
BREBEUF	120.88	43.4									37 18 SS
PALISADES	121.85	48.5			25 53	10					
NURMIJARVI	122.11	337.3	18 48	-1							30 8 PS
LA PAZ	122.18	117.6	18 53	4							
BULAWAYO	125.65	235.3	18 57	1							
KSARA	127.09	304.0	19 0	2	26 9	10					21 2 PP
BROKEN HILL	128.51	241.4	19 4K	3							
LWIRO	132.84	256.4									11 24 PP
COLLMBERG	133.22	334.7	19 9	-1							22 43
JENA	134.09	335.3									24 10
KASPERSKE H.	134.56	332.3	19 14	1							
MUNSTER	134.78	339.0									20 42
STUTTGART	136.71	335.0	19 20	3							22 54
STRASBOURG	137.47	336.0									21 15
AQUILA	139.33	325.2									22 24
PAVIA	139.51	331.6	18 22	-60							
MESSINA	140.57	318.6	19 30	6							22 37
TOLEDO	149.28	340.8	19 46A	8	26 49	10					23 18 PP
M.BOUR	176.79	4.8									22 15 PKP2

MAY 22 13.H 56.M 47.S EPICENTRE 48.70 154.87 DEPTH= 49.KM

A=-0.59975 B= 0.28134 C= 0.74910 D= 0.4247 E= 0.9053
G=-0.6782 H= 0.3181 K=-0.6625 HT= -4.9

DEPTH OF FOCUS= 0.002R

SE= 2.46

	DELTA DEG.	AZ. DEG.	P		O-C S	S		O-C S	*PP		SUPP.	
			M	S		M	S		M	S	M	S
PETROPAVLOVK	4.94	27.6	1	15A	1	2	14	4				
KURILSK	5.92	236.6	1	29	2	2	33	-2				
Y.-SAKHLINSK	8.34	262.9	2	3K	2	3	43	8				
NEMURO	8.40	233.7	1	58	-4	3	27	-10				
ABASHIRI	8.69	241.3	2	7K	1	3	51	7				
KUSIRO	9.28	235.8	2	11	-3	3	51	-7				
WAKKANAI	9.58	254.9	2	24	6	4	10	4				
ASAHIKAWA	9.96	245.0	2	25A	2	4	25	10				
OBIHIRO	9.99	239.0	2	23	-1	4	24	8				
RUMOE	10.32	247.5	2	32	4							
HIROO	10.34	235.9	2	24	-5	4	13	-11				
URAKAWA	10.72	236.8	2	32A	-2	4	28	-5				
SAPPORO	10.97	244.2	2	37A	0	4	52	12				
TOMAKOMAI	11.10	241.8	2	39	0							
MAGADAN	11.12	349.2	2	41	2	4	57	14				
MURORAN	11.64	241.9	2	47	1	4	47	-9				
SUTTSU	11.80	245.4	2	49	1	5	5	5				

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MORI	12.02	242.0	2 54	3	5 16	11	
HAKODATE	12.09	240.5	2 49K	-3	5 0	-6	
HATINOHE	12.52	234.2	2 51	-7	5 2	-15	
AOMORI	12.73	237.0	2 58	-3	5 17	-5	
MIYAKO	12.93	230.4			5 10	-18	3 22
MORIOKA	13.31	232.5	3 4	-4	5 23	-13	
MIZUSAWA	13.75	231.0	3 9	-5	5 29	-17	
AKITA	13.87	235.1	3 14	-2	5 43	-6	
I SINOMAKI	14.19	228.7	3 14	-6	5 45	-12	
SENDAI	14.52	229.3	3 20	-4	5 50	-14	
SAKATA	14.60	233.4	3 30	5	6 33	27	
YAMAGATA	14.82	230.5	3 24A	-4	5 55	-16	
HUKUSIMA	15.14	229.0	3 29	-3	6 7	-12	
ONAHAMA	15.56	226.1	3 47	9			
NIIGATA	15.74	232.6					4 9
SHIRAKAWA	15.75	228.1	3 37	-3	6 28	-5	
AIKAWA	16.09	234.6	3 42	-2	6 51	10	
UTUNOMIYA	16.38	227.7	3 41	-7	6 55	7	
KAKIOKA	16.48	226.3	3 46	-3			
TUKUBASAN	16.53	226.4	3 44K	-6	6 48	-3	4 7 PPP
MAEBASI	16.89	229.1	3 52K	-2	7 9	10	
VLADIVOSTOK	16.90	259.3	3 55	0	7 3	3	
KUMAGAYA	16.93	227.9	3 52	-3	7 12	12	
NAGANO	17.12	231.6	3 58	1	7 14	9	
TOKYO C.M.O.	17.13	226.1	3 57	0	7 10	5	
OIWAKE	17.21	230.1	3 57	-1	7 16	9	
TITIBU	17.22	228.2	3 55	-4			
MATUSIRO	17.22	231.3	3 54	-5	7 11	4	
WAZIMA	17.29	235.8	4 2	3	7 16	8	
YOKOHAMA	17.38	225.9	4 3	2	7 20	10	
MATUMOTO	17.57	231.1	4 1	-2	7 27	12	
TOYAMA	17.63	233.7	4 8	4	7 24	8	
KOHU	17.72	228.7	4 3	-2	7 23	5	
HUNATU	17.75	227.9	4 4	-1	7 12	-7	
AJIRO	17.95	226.3	4 4	-4	7 15	-8	
MISIMA	17.97	226.8	4 5	-3	7 23	-1	
KANAZAWA	18.05	234.4	4 6	-3			
IIDA	18.20	229.9	4 10	-1			
SHIZUOKA	18.35	227.7	4 20	7	7 44	12	
OMAESAKI	18.74	227.4	4 23	6	7 48	7	
GIHU	18.84	231.8	4 20	2	7 45	2	
HAMAMATU	18.89	228.6	4 18	-1	7 49	5	
NAGOYA	18.91	231.0	4 18	-1	7 47	2	
HIKONE	19.21	232.6	4 22	-1	7 57	6	
HATIDYOZIMA	19.25	221.5	4 29	6			
YAKUTSK	19.37	322.8	4 24A	0	8 1	6	
KAMEYAMA	19.42	231.3	4 29	4	8 1	5	
KYOTO	19.68	233.1	4 24	-4	8 2	1	
TOYOOKA	19.78	235.7	4 29	0	8 7	3	
ABUYAMA	19.88	233.1	4 29A	-1			
NARA	19.89	232.2	4 31	1			
OSAKA	20.07	232.7	4 34	2	8 17	7	5 19
SAIGO	20.13	239.6	4 33	0			
OWASE	20.17	230.4	4 31	-2	8 18	6	
KOBE	20.23	233.4	4 33	-1			
SUMOTO	20.63	233.3	4 38	0	8 22	1	
YONAGO	20.67	238.1	4 40	2	8 26	5	
MATSUE	20.82	238.6	4 42	2	8 34	10	
SIOMISAKI	20.88	230.1	4 40	0	8 28	3	
CHANGCHUN	20.94	267.7	4 37	-4			
TAKAMATU	21.11	234.8	4 45	2	8 31	1	
TORISIMA	21.32	216.7	4 44	-1	8 9	-25	
HAMADA	21.78	239.1	4 51	2	8 47	5	
KOTI	21.97	234.3	4 52	1	8 50	4	
ASHIZURI	22.89	233.8	5 0A	0	9 7	5	
OOITA	23.26	236.9	5 7	3	9 15	6	
HUKUOKA	23.70	239.4	5 10	2	9 22	6	
KUMAMOTO	24.08	237.7	5 14	2	9 28	5	
MIYAZAKI	24.36	235.1	5 18	3	9 33	5	
NAGASAKI	24.61	238.8	5 19A	2	9 37	5	
KAGOSIMA	25.10	236.0	5 14	-8			7 43
TIKSI	25.94	341.5	5 28A	-2	9 53	-1	
YAKUSIMA	25.99	234.4	5 29	-1			
PEKING	28.73	267.1	5 53	-2	10 35	-4	6 6 *SP
ZO-SE	30.92	247.8	6 14A	0	11 15	1	6 27 *SP
ULAN-BATOR	31.50	287.0	6 17	-3	10 41	-42	
NANKING	31.76	251.8	6 21	-1	11 26	-1	6 33 *SP
IRKUTSK	31.83	295.9	6 22	0	11 26	-2	

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PAOTOW	32.52	272.6	6 27	-1					6 40 *SP
COLLEGE	33.89	40.1	6 40	0					11 5
ANPU	35.08	240.1	6 50	0					
HUALIEN	35.96	238.7	6 58	0					
GUAM	36.13	196.9	6 55	-4					
SIAN	36.76	264.2	7 5	0	12 43	-1			7 18 *SP
HSINKONG	36.79	238.1	7 7	2					
TAITUNG	37.19	238.0	6 53	-15					
TAMU	37.64	237.9	7 19	7					
HENGCHUN	38.00	237.7	7 24	9					
ESEN BULAK	38.79	289.4	7 23	1					
LANCHOW	39.06	270.6	7 23	-1	13 18	-2			7 38 *SP
SITKA	41.21	51.1	7 44	2	14 1	9	7 57		9 23 PP
CANTON	41.52	247.1	7 45A	1	13 56	0			7 57 *SP
HONG KONG	41.61	245.4	7 46A	1	13 26	-31			9 41 PPP
MOULD BAY	42.36	20.8	7 51	0					
KHEYS	43.44	346.3	7 59A	-1					9 49 PCP
MANILA	43.83	231.0	7 39	-24	14 5	-25			
COPPERMINE	46.15	31.8	8 21A	-1					
KIPAPA	46.21	109.0	8 22	0					
HONOLULU	46.24	109.1	8 23	1	15 8	3			
SEMIPALATNSK	46.52	301.8	8 23	-2					13 51
KUNMING	46.77	259.1	8 25	-1	15 7	-5			8 39 *SP
ALERT	47.69	6.2	8 33	-1					
RESOLUTE	48.61	19.4	8 40A	-1					
HAWAII V.OB.	49.40	108.2	8 46	-1	15 53	4			
NORD	49.86	358.4	8 50	0					
VICTORIA	51.46	57.3	9 3	0					
LHASA	51.47	272.8	9 4A	1	16 17	-1			9 18 *SP
ALMATA-2	51.95	295.1	9 5A	-1					
NHATRANG	52.40	242.0	9 10	0	16 34	4			
SEATTLE	52.57	57.7	9 16	5	16 41	8			
RABAU	52.74	183.4	9 10	-2					
PENTICTON	53.10	54.7	9 14K	-1					
SHILLONG	53.62	268.4	9 17A	-2	16 45	-2			20 17 SS
FRUNSE	53.85	296.1	9 19A	-1	16 49	-1			17 5 PS
EDMONTON	54.01	47.7	9 22A	0					
BANFF	54.20	50.9	9 21	-2					
CHITTAGONG	55.86	265.6	9 35	0	17 19	2			
CHATRA	55.88	273.0	9 33	-2	17 23	6			19 22
APATITY	56.02	336.7	9 37K	1	17 17	-2			12 50 PPP
ANDIJAN	56.44	295.3	9 39A	0					
SHASTA	56.62	64.6	9 40A	0					
HUNGRY HORSE	56.66	53.0	9 40	-1					
BLUE MTS.	57.01	57.9	9 43K	0	17 41	9			11 52 PP
UKIAH	57.09	66.5	9 45	1			9 59		
TROMSOE	57.66	343.2	9 47	-1					10 34 PCP
CALISTOGA	57.79	66.6	9 49K	0					
SODANKYLA	57.86	339.0	9 47	-2					10 37 PCP
TASHKENT	57.92	297.6	9 48	-2	17 44	0			
CALCUTTA	58.02	268.4	9 56	6					17 44
HONIARA	58.05	174.1	9 48A	-3					17 43
PORT MORESBY	58.25	189.0	9 51A	-1	17 40	-9			
BERKELEY	58.47	67.1	9 54K	1	17 59	8			21 55
BOKARO	58.82	271.4	9 56A	0	18 0	4			10 41 PCP
KIRUNA	58.87	341.5	9 54A	-2	17 51	-6			19 38 SCS
BUTTE	58.89	54.4	9 57	1			10 12		
KHOROG	59.00	292.8	9 57A	0	17 55	-3			
LICK	59.18	67.2	9 58K	0					
PARAISO	59.39	68.6	10 4	4					
DEHRA DUN	59.54	282.4	10 4	3	18 12	7			19 47
BOZEMAN	59.93	53.9	10 3	-1			10 18		
KAJAANI	60.20	336.2	10 0	-5					10 51 PCP
PRIEST	60.56	67.7	10 8K	0					
SCORESBY SD.	61.11	358.8	10 13	1	18 30	5			
EUREKA	61.19	62.0	10 12	0	18 22	-5			39 8 PKPPKP
WARSAK DAM	61.25	289.8	10 12	-1					
NEW DELHI	61.25	281.5	10 10A	-3	18 18	-9			14 20 PPP
UMEA	62.30	339.1	10 19A	-1	18 36	-4			14 33
VIBORG	62.57	333.4	10 19	-2					
SALT LAKE C.	62.71	58.6	10 22	0			10 37		10 51 *SP
PULKOVO	62.87	332.1	10 22	-1	18 45	-3			10 50 PCP
PORT BLAIR	63.02	256.4	10 26	2	18 51	2			12 40 PP
PASADENA	63.40	67.8	10 27	0	19 9	15	10 41		
MOSCOW	63.50	325.8	10 27	-1	18 51	-4			12 59 PP
NURMIJARVI	63.94	335.1	10 28	-2	18 59	-2			12 51 PP
HELSINKI	64.13	334.8	10 29	-3					
BOULDER CITY	64.19	64.3	10 32	0			10 48		10 56 *SP
SKALSTUGAN	64.24	342.4	10 32	0					39 26 PKPPKP

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UINTA BASIN	64.30	57.6	10 33K	0	19 13	8		12 50 PP
VISHAKHAPTNM	64.77	268.4	10 38A	2	19 14	3		17 8
SEHORE	65.04	277.2	10 29	-9				
MEDAN	65.52	245.7	10 41A	0				
UPPSALA	66.35	338.0	10 44A	-2	19 27	-3		20 35 SCS
VANNOVSKAYA	66.61	301.2	10 47	0				
QUETTA	66.70	289.6	10 46	-2	19 29	-6		
KIZYL-ARVAT	66.76	303.3	10 50	2	19 39	4		
PORT VILA	67.21	166.1	10 51K	0				
TONTO FOREST	67.47	63.4	10 53	0	19 51	7	11 0	13 19 PP
BERGEN	68.49	344.3	10 59	0				
DJAKARTA	68.88	232.4	11 3	1	20 5	4		11 23 PCP
CHARTERS TS.	68.91	188.7	11 1	-1	19 57	-4		
TANGERANG	68.98	232.6	11 2A	0				14 15
AFIAMALU	69.00	145.1	11 2K	0	19 33	-29		
LEMBANG	69.02	231.3	10 53A	-10	19 49	-13		15 16 PPP
TUCSON	69.16	64.7	11 3	0				39 0 PKPPKP
KOUMAC	69.46	170.6	11 5K	0				
GOTEBORG	69.62	339.8	11 7K	1				39 8 PKPPKP
KARLSKRONA	70.12	337.2	11 7	-2				39 9 PKPPKP
MADRAS	70.25	267.3	11 11	1	20 18	1		13 43 PP
POONA	70.44	276.0	11 11A	0	20 23	4		
BOMBAY	70.86	277.0	11 14	0	20 22	-2		11 25 PCP
TIFLIS	70.95	311.9	11 15	1	20 26	1		11 41 PCP
KIROVOBAD	70.98	310.3	11 12	-3	20 25	0		
SCHEFFERVILLE	71.07	24.0	11 14	-1				
COPENHAGEN	71.34	338.6	11 17	0	20 32	3		
NOUMEA	71.43	168.7	11 19A	2				
GORIS	71.84	309.5	11 21A	1	20 39	4		11 36 *SP
TEHERAN	71.94	303.7	11 19	-1	20 41	5	14 12	21 23 SCS
WARSAW	72.04	332.2			20 34	-4		21 21 PPS
LWOW	73.14	329.2	11 28	1	20 47	-3		
SIMFEROPOL	73.33	320.4	11 28A	0	20 51	-1		11 55 PCP
KODAIKANAL	74.07	267.4			20 55	-5		21 43
KRAKOW	74.28	331.7	11 35	1	21 3	0		12 0 PCP
CHORZOW	74.36	332.4	11 35	1				12 24
WICHITA MTS.	74.37	55.1	11 34	0	21 13	9		14 12 PP
UZHGOROD	74.74	329.6	11 27	-10				
RACIBORZ	74.78	332.7	11 38	1	21 11	3		14 33 PP
TULSA	74.97	52.5	11 37	-1	21 35	24	11 51	14 27 PP
DURHAM	75.01	346.1	11 40	2	21 17	6		14 25 PP
COLLMBERG	75.17	336.4	11 38A	-1	21 16	3		
HALLE	75.26	337.1	11 39	-1				
SEPT ILES	75.30	26.0	11 39	-1				
WITTEVEEN	75.31	340.7	11 41	1				
FAYETTEVILLE	75.67	51.3	11 40	-2	21 28	10		
BRISBANE	75.77	181.9	11 42	0				
SHIRAZ	75.80	298.7	11 41K	-2	21 21	1		38 38 PKPPKP
JENA	75.88	337.0	11 44	1	21 19	-2		21 49 PS
MUNSTER	75.89	339.8	11 43	0				
PRAGUE	75.89	335.0	11 44	1	21 22	1		
PRUHONICE	75.94	334.9	11 44	1	21 21	0		
LONDON ONT.	76.22	38.8	11 45A	0				
DE BILT	76.30	341.3	11 46	1	21 30	5		
CHEB	76.45	336.2	11 47	1				
SHAWINIGAN	76.47	31.6	11 45	-1				
HURBANOVO	76.74	331.7	11 51	3	21 39	9		
BRATISLAVA	76.81	332.5	11 50A	2	21 35	4		16 43 PPP
BENSBERG	76.93	339.7	11 50A	1	21 35	3		15 5 PP
VIENNA-H.	76.96	333.0	11 51	2	21 37	5		
KASPERSKE H.	76.98	335.1	11 50A	1	21 38	5		21 58
BREBEUF	77.07	32.7	11 49A	-1				21 36 SS
UCCLE	77.70	341.4	11 54	1	21 42	2		
KEW	77.97	344.4	11 56A	1	21 44	1		
DOURBES	78.31	341.0	11 58	1	21 47	0		
KARLSRUHE	78.45	338.2			21 54	6		
STUTTGART	78.46	337.6	11 57	0	21 51	3		15 13 PP
ISTANBUL UN.	78.68	321.3	11 59	0				
BELGRADE	78.68	328.8	12 1	2	21 53	2		22 17 SCS
TUBINGEN	78.73	337.6	12 0	1				
STRASBOURG	79.01	338.4	12 1A	1	21 56	2		15 20 PP
EBINGEN	79.08	337.5	12 2	1				
ZAGREB	79.26	332.1	12 2	0	21 56	-1		
RAVENSBERG	79.28	337.0	12 3	1				
PENNSYLVANIA	79.45	37.9			22 2	3		
LJUBLJANA	79.50	333.1	12 3A	0				
SOFTA	79.50	325.9	12 2	-1	21 59	0		22 23 SKS
WELSCHBRUCH	79.50	339.3	12 2	-1				

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MORGANTOWN	79.57	39.9	12	4K	0	21	58	-2			
FELDBERG	79.60	338.0	12	4	0						
PARIS	79.98	341.9	12	7	1	22	8	4			
TRIESTE	80.09	333.5	12	7A	1	22	6	0			
CUMBERLAND	80.35	46.0	12	7	-1	22	11	3		14	58 PP
FOLINIÈRE	80.60	343.8	12	9	0						
BESANCON	80.68	339.1	12	10	1					12	53
SKOPJE	80.82	326.7	12	13	3						
PALISADES	80.83	35.2	12	10	0	22	16	3		12	28 PCP
FORDHAM	80.98	35.3	12	10	-1	22	16	1			
HALIFAX	81.14	26.7	12	12	0						
TITOGRAD	81.20	328.4	12	38	26	22	19	2		22	29 SCS
GARCHY	81.31	341.0	12	13A	0	22	19	1		13	3
BLACKSBURG	81.38	41.6	12	14	1						
WASHINGTON	81.38	38.4	12	14	1					15	21 PP
GEORGETOWN	81.38	38.4	12	13	0	22	22	3			
KSARA	81.51	312.6	12	14A	0	22	25	5		15	20 PP
PAVIA	81.81	336.3	12	18A	3	22	24	1		18	53
RIVERVIEW	82.23	183.1	12	18A	0	22	32	4	12	31	27 55 SS
FLORENCE X.	82.52	334.3	12	7	-12	22	6	-25			37 56
CLERMONT-FD.	82.73	340.5	12	22A	2	22	40	7			
AQUILA	83.19	332.3	12	24	2	22	35	-2		23	43 PS
ISOLA	83.29	337.3	12	24	1	22	42	4			
ATHENS	83.43	323.2	12	23A	-1	22	38	-2			
JERUSALEM	83.48	311.8	12	25A	1						
MONACO	83.61	336.9	12	25	0					12	54
COLUMBIA	83.78	43.8	12	27	2	23	9	26			
CANBERRA	83.81	184.8	12	24	-2	22	36	-8		12	35 *SP
ROME	83.88	332.7	12	27A	1	22	47	3		28	22 SS
ADELAIDE	84.54	193.3	12	29A	0	22	43	-8		12	43 PCP
BAGNERES	85.94	341.7	12	39	3					13	43
MESSINA	86.24	329.0	12	36	-2	23	4	-3		15	56 PP
TOOLANGI	86.30	187.5	12	38	0					12	51 *SP
REGGIO CALA.	86.30	328.9								13	7
MUNDARING	87.42	212.1	12	43	0	23	21	2			
KARAPIRO	88.19	163.8	12	46	-1				13	0	
CHATEAU	89.42	164.1	12	51	-2				13	4	
TOLEDO	89.84	343.9	12	55K	0	23	43	2		16	35 PP
WELLINGTON	91.31	165.1	13	1	-1	23	26	-28	13	14	25 5 PS
GRANADA	92.37	342.9	12	48A	-19	23	48	-15			27 9
ROXBURGH	94.65	169.9				24	20	-3			31 15 SS
AVERROES	96.84	345.1	13	28	1						
CARACAS	110.49	44.4								19	4 PP
FUQUENE	111.42	53.3								19	12 PP
BOGOTA	111.95	54.1								19	18 PP
TRINIDAD	112.80	39.1								19	21 PP
LWIRO	114.77	297.2	18	39K	4	25	26	7		29	17 PS
WILKES	119.62	198.9								20	20 PP
MIRNY	124.16	205.2	18	52	-2					19	5 *SP
BROKEN HILL	124.51	288.9	18	56	2						
SCOTT BASE	126.50	176.9	18	58	0						
CHANGALANE	130.62	275.4	19	7	1						
LA PAZ	132.55	62.6	19	13	3					22	42 PKS
MAWSON	134.48	212.5	19	13	0						
BYRD STATION	136.78	165.3	19	4	-13						
KIMBERLEY	137.14	279.0	19	3	-15					19	20
SOUTH POLE	138.51	180.0								21	41
N-LAZARVSKYA	151.91	205.0	19	43K	0						
ARGENTINE I.	153.61	143.3	19	51	6						

MAY 22 15.H 42.M 54.S EPICENTRE 4.27 127.89 DEPTH= 99.KM

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G=-0.0454 H= 0.0583 K=-0.9973 HT= 7.1

DEPTH OF FOCUS= 0.010R

SE= 2.42

	DELTA DEG.	AZ. DEG.	P		O-C S	S O-C			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
MANILA	12.32	327.5	2	49	-4	5	12	4				
DARWIN	16.79	170.0	3	46	-4						5	14
HENGCHUN	18.94	339.2	4	17	2							
GUAM	18.98	60.1	4	17	1							
TAMU	19.21	340.0	4	22	4							

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TAITUNG	19.50	341.1	3 20	-61					
NHATRANG	20.09	294.3	4 26	-1	8 10	7			
ALISHAN	20.33	341.0						7 41	
HUALIEN	20.50	343.4	4 40	8					
TAIPEI	21.53	344.1	4 14	-28					
HONG KONG	22.32	324.7	4 49	-1	8 44	1			
LEMBANG	23.04	241.5	4 57A	0	9 1	5		5 36	PP
CANTON	23.41	324.4	5 0K	0	9 7	4	5 12	5 20	*SP
DJAKARTA	23.45	243.9	5 4	3	9 16	13		10 8	SS
PORT MORESBY	23.51	125.3	5 1K	0	9 8	4			
TANGERANG	23.62	244.1	5 1A	-1	9 14	8		5 39	PP
RABAU	25.68	108.8	5 13	-9					
ZO-SE	27.43	347.4	5 36	-2	10 9	0		5 51	*SP
NANKING	28.94	343.9	5 51	-1	10 35	1			
MEDAN	29.15	269.7	5 53A	0	10 33	-4		6 26	PP
CHARTERS TS.	30.19	143.9	6 5	2				9 38	
ABUYAMA	31.27	12.2	6 11A	-1					
KUNMING	31.84	313.1	6 17A	0	11 16	-3		6 35	*SP
MATUSIRO	33.49	15.2	6 29	-2	11 42	-3			
TUKUBASAN	33.73	17.9	6 49A	16				8 7	PP
SIAN	34.65	331.7	6 43A	2	12 6	3		7 1	*SP
HONIARA	34.73	113.2	6 39	-3	12 23	19			
PORT BLAIR	35.57	284.1	6 47	-2	12 17	0		14 21	SS
PEKING	37.14	345.0	7 2K	0	12 40	-1		17 9	SCS
MUNDARING	37.71	196.3	7 7	0	12 53	4			
PERTH	37.80	196.8			12 56	5		8 36	PP
LANCHOW	38.62	328.0	7 17A	2	13 6	3	7 27	7 36	*SP
VLADIVOSTOK	38.85	4.7	7 18	1					
CHANGCHUN	39.47	357.1	7 21	-1	13 14	-2		7 43	*SP
PAOTOW	39.57	338.5	7 22A	-1	13 20	2		7 43	*SP
BRISBANE	39.60	144.0	7 21	-2				17 17	
ADELAIDE	40.34	166.2	7 29	0				13 36	
SHILLONG	40.51	305.2	7 30A	0	13 34	2		9 26	PCP
CALCUTTA	42.32	299.1	7 41	-4	13 56	-2			
LHASA	43.02	310.1	7 52A	1	14 11	3	8 3	8 12	*SP
RIVERVIEW	43.80	151.6	8 5	8	14 23	3		17 36	SS
CANBERRA	44.09	155.0	8 1	2	14 33	9	8 18		
Y.-SAKHLINSK	44.48	14.5	8 2	-1					
TOOLANGI	44.73	160.0	8 5	0					
CHATRA	44.88	304.3	8 6A	0	14 37	2			
BOKARO	44.97	299.7	8 8	1	14 39	2		18 5	SCS
VISHAKHAPTNM	45.63	290.6	8 14A	2	14 52	6			
ULAN-BATOR	47.08	340.8	8 22	-1	15 7	0			
MADRAS	47.89	283.6	8 29A	0	15 23	5		10 22	PP
ESEN BULAK	50.14	331.8	8 48A	1	15 54	5			
KODAIKANAL	50.32	279.7	8 43	-5	15 51	-1			
IRKUTSK	51.68	341.7	8 58A	-1	16 14	3			
DEHRA DUN	53.61	304.8	9 13	0	16 39	2		16 58	PPS
NEW DELHI	53.78	302.5	9 12A	-2	16 36	-3			
PETROPALOVK	54.79	22.2	9 21K	0					
BOMBAY	55.64	289.9	9 25	-3	17 5	1		17 30	
YAKUTSK	57.64	1.0	9 40A	-2	17 38	8			
ALMATA-2	59.09	318.9	9 52A	0					
WARSAK DAM	59.98	307.0	9 58	0	18 5	4			
FRUNSE	60.74	317.5	10 3	0	17 38	-32			
SEMIPALATNSK	60.87	327.2	10 3	-1	18 13	1			
KARAPIRO	60.92	138.0	10 3	-1					
ANDIJAN	61.51	314.6	10 13	5					
CHATEAU	61.61	139.2	10 18	9					
AFIAMALU	62.50	108.0	10 15A	0					
QUETTA	62.84	301.7	10 17A	0	18 44	7			
TASHKENT	63.90	314.3	10 24A	0	18 55	5			
TIKSI	67.28	0.3	10 42A	-4	19 28	-3			
ASHKABAD	71.29	308.6	11 10	0	20 26	8			
VANNOVSKAYA	71.48	308.5	11 13	2					
KIZYL-ARVAT	73.09	309.6	11 22A	1	20 48	9			
HONOLULU	73.57	69.2	11 26	2					
KIPAPA	73.65	69.0	11 26	2					
SVERDLOVSK	74.12	328.2	11 28K	1					
MIRNY	74.95	193.7	11 31A	-1	21 3	4		13 17	
SHIRAZ	75.19	299.4	11 32A	-1	21 1	-1	11 52	38 59	PKPPKP
HAWAII V.OB.	76.19	71.1	11 40	1					
TEHERAN	76.56	305.6	11 41A	0	21 23	6		21 48	SCS
GORIS	80.79	309.2	12 4	0	22 11	9			
KIROVOBAD	80.83	310.3	12 3	-1	22 6	4			
TIFLIS	82.02	311.4	12 11	1	22 19	4			
KHEYS	82.57	351.1	12 12A	-1	22 20	0			
COLLEGE	83.73	25.3	12 18	-1			12 36	15 46	PP
MAWSON	84.65	200.4	12 24A	1			12 38		

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1963		PAGE 452									
SCOTT BASE	84.70	172.3	12 24	0							
MOSCOW	86.65	325.5	12 32A	-1							
APATITY	87.80	337.5	12 38K	-1	23 14	3					
KSARA	89.32	303.7	12 46	0	23 33	8	13 9		16 13	PP	
SIMFEROPOL	89.69	314.9	12 48	0							
JERUSALEM	90.05	301.7	12 51	2							
SODANKYLA	90.41	337.7	12 51	0	23 33	-2			13 20		
KAJAANI	90.64	334.4	12 51	-1	23 39	2			16 34	PP	
VIBORG	90.75	331.0	12 52	-1							
MOULD BAY	91.19	12.8	12 54A	-1							
TROMSOE	92.54	340.6	12 59	-2			13 17				
KIRUNA	92.59	338.8	12 59A	-2	23 54	0	13 14		23 24	SKS	
NORD	92.66	355.1	13 1	0							
NURMIJARVI	92.79	331.2	13 1	-1	23 46	-10			16 47	PP	
UMEA	93.89	334.9	13 6	-1	23 35	-30	13 23				
SOUTH POLE	94.24	180.0	13 8	-1							
LWOW	95.65	320.8	13 17	2							
COPPERMINE	95.95	19.9	13 15A	-1							
UPPSALA	96.35	331.5	13 16A	-2			13 34		17 18	PP	
UZHGOROD	97.04	319.9	13 21	0							
RESOLUTE	97.09	10.5	13 21A	-1							
SKALSTUGAN	97.28	336.0	13 21	-2			13 38				
BYRD STATION	98.02	170.6							17 18		
KRAKOW	98.15	321.7	13 26	0					13 40	PCP	
KARLSKRONA	98.65	328.4	13 28	-1							
LWIRO	99.22	268.4							17 41	PP	
BULAWAYO	100.16	250.4	13 35A	-1							
BROKEN HILL	100.16	256.2	13 36	0							
BRATISLAVA	100.49	320.5	13 37	0					18 1		
PRUHONICE	101.46	322.8	13 42	1					18 11		
PRAGUE	101.50	322.9	13 42	0					18 11		
COLLMBERG	101.89	324.4	13 43	0					18 11	PP	
KASPERSCHE H.	102.35	322.2	13 45	0							
HALLE	102.42	324.9	13 48	2					24 17	SKP	
SCORESBY SD.	102.72	350.0	13 48	1							
LJUBLJANA	102.85	319.0							18 12	PP	
JENA	102.86	324.4	13 46	-2					17 39	PP	
EDMONTON	103.19	32.7	13 50	1							
TRIESTE	103.50	318.8							18 17	PP	
KIMBERLEY	103.53	241.6							17 32		
BLUE MTS.	104.22	41.8	13 54	0					18 16	PP	
MESSINA	104.66	311.1							18 8		
AQUILA	104.88	315.7							18 10	PP	
HUNGRY HORSE	104.96	37.5	13 57	0							
ROME	105.68	315.5							18 24	PP	
FLORENCE X.	105.84	317.7							18 17		
MONACO	108.40	318.8							18 56	PP	
ISOLA	108.45	319.4							18 47	PP	
GARCHY	109.49	323.6							19 8		
FOLINIERE	110.74	326.3	18 31	10							
UINTA BASIN	111.26	43.8	18 24	2					29 20	PKKP	
TONTO FOREST	112.45	50.3	18 28	4			18 44		19 6	PP	
TUCSON	113.55	52.2							29 20	PKKP	
SCHEFFERVILLE	119.87	9.7	18 40	2							
WICHITA MTS.	121.59	44.5	18 43	1					20 12	PP	
SHAWINIGAN	126.20	17.6	18 51A	0							
CUMBERLAND	129.44	35.6	18 58	1			21 19		22 15	SKP	
COLUMBIA	133.16	33.4	19 24	20					21 50	PP	
HOPE	147.14	47.0	19 35	6							
BALBOA HTS.	149.65	64.3	19 40	7							
CHINCHINA	154.79	68.9	19 45A	5							
HUANCAYO	155.77	110.0	19 40	-1							
FUQUENE	156.34	66.1	19 49	7							
BOGOTA	156.35	68.3	19 46	4							
AREQUIPA	157.44	123.9	20 20	36							
CARACAS	159.19	45.1	20 10	24							
LA PAZ	160.12	128.9	19 51	4			20 10				
TRINIDAD	162.53	31.9	19 54	5							

MAY 22 16.H 25.M 32.S EPICENTRE 52.08-165.33 DEPTH= 0.KM

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	DELTA DEG.	AZ. DEG.	P		O-C	S O-C			*PP		SUPP.	
			M	S	S	M	S	S	M	S	M	S
COLLEGE	15.67	28.4	3	40	-3						8	43 PCP
SITKA	18.01	62.2	4	14	1							
COPPERMINE	28.63	37.5	6	0	0							
PENTICTON	28.72	77.1	6	1	0							
MOULD BAY	29.93	20.2	6	12K	1							
EDMONTON	30.92	66.7	6	21	1							
SHASTA	31.29	94.1	6	25K	2							
BLUE MTS.	32.15	83.6	6	31	0							
CALISTOGA	32.42	97.4	6	38K	5							
HUNGRY HORSE	32.48	75.8	6	35	1						9	20 PCP
HAWAII V.OB.	33.53	162.6	6	43	0							
LICK	33.81	98.3	6	25K	-20							
TIKSI	34.26	329.1	6	48K	-1							
BUTTE	34.45	78.7	6	52	1						8	53
PRIEST	35.19	99.0	6	59A	2							
YAKUTSK	35.20	312.2	7	0	3							
BOZEMAN	35.55	78.3	7	0	0							
RESOLUTE	35.56	25.5	7	0K	0							
SALT LAKE C.	37.74	85.7	7	20	1							
BOULDER CITY	38.87	94.1	7	30	2	13	14	-13	7	42	9	40 PCP
UINTA BASIN	39.41	84.6	7	34	1						9	52
ALERT	40.37	11.4	7	42	1							
TONTO FOREST	42.17	93.1	7	56	0						9	50 PCP
MATUSIRO	42.18	271.3	7	55K	-1						9	46 PP
TUCSON	43.82	94.9	8	9	0						9	55 PCP
KHEYS	45.36	350.9	8	23	2							
NORD	45.51	6.2	8	23A	0							
CHANGCHUN	45.54	288.4	8	22K	-1							
WICHITA MTS.	49.69	82.9	8	55	0						10	15
PEKING	53.23	290.1	9	21	-1	16	42	-11				
ULAN-BATOR	53.24	303.0	9	22	0							
SCHEFFERVILLE	53.94	45.1	9	26K	-1							
SCORESBY SD.	54.93	14.2	9	33	-1							
ZO-SE	56.30	278.7	9	43	-1							
PADTOW	56.37	294.4	9	44K	-1							
BREBEUF	56.88	57.1	9	46	-3							
CUMBERLAND	56.95	73.1	9	46	-3							
NANKING	57.08	281.2	9	49	-1							
PENNSYLVANIA	57.80	63.7	9	53	-2							
TROMSOE	58.56	358.3	10	0	0				10	11		
ESEN BULAK	59.64	307.5	10	8	0							
APATITY	59.86	351.8	10	9A	0							
KIRUNA	60.33	357.5	10	11	-2							
SODANKYLA	60.53	354.7	10	16	2						11	1 PCP
SIAN	61.40	289.8	10	19	-1							
LANCHOW	63.02	294.6	10	30K	-1							
KAJAANI	63.73	353.6	10	34	-1							
SEMIPALATNSK	63.81	319.5	10	34	-2							
UMEA	64.36	357.3	10	38	-1							
SKALSTUGAN	64.66	1.2	10	41	0							
SVERDLOVSK	65.07	334.2	10	46A	2							
CANTON	66.89	278.2	10	55	-1							
HONG KONG	66.97	277.0	10	55	-1							
VIBORG	66.98	352.5	10	55	-1							
NURMIJARVI	67.47	354.7	10	58	-1						11	41
HELSINKI	67.79	354.5	11	0	-1							
UPPSALA	68.40	358.4	11	4	-1							
GOTEBORG	70.56	1.5	11	18	0							
ALMATA-2	70.69	316.5	11	19	0							
MOSCOW	70.89	346.5	11	19	-1							
KUNMING	71.74	287.4	11	25	-1							
KARLSKRONA	72.12	359.5	11	29A	1							
FRUNSE	72.20	318.0	11	29K	1							
ANDIJAN	74.86	318.3	11	45	1							
LHASA	74.89	298.8	11	46K	2							
TASHKENT	75.62	320.7	11	48K	0							
COLLMBERG	76.98	1.1	11	56	0							
BENSBERG	77.14	4.9	11	57	0							
JENA	77.33	2.0	11	56	-2						14	34
LWOW	78.16	353.8	12	3	1							
PRAGUE	78.22	0.2	12	3	0							
PRUHONICE	78.31	0.1	12	5	2						14	36
FOLINIERE	78.70	10.2	12	4	-1							
PARIS	78.95	8.2	12	7	0							
KASPERSKE H.	79.16	0.7	12	8	0						14	43
UZHGOROD	79.45	354.9	12	14	5							

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1963		PAGE 454	
BRATISLAVA	80.10 358.3	12 14K	1
GARCHY	80.52 8.0	12 16	1
KIZYL-ARVAT	82.14 328.6	12 26	2
ASHKABAD	82.58 326.6	12 27	1 22 38 -5
VANNOVSKAYA	82.67 326.8	12 28	2
NEW DELHI	82.87 308.1	12 26A	-1
TIFLIS	82.98 337.7	12 30	2
KIROVOBAD	83.63 336.3	12 32	1
ISOLA	83.89 5.5	12 34	1 13 10
MONACO	84.36 5.3	12 35	0
GORIS	84.71 335.9	12 38K	1
TEHERAN	86.84 330.8	12 48	1
BRISBANE	87.23 216.5	12 49	0
SHIRAZ	92.11 327.7	13 12K	0 23 28 -45 16 0 PP
KSARA	92.46 342.5	13 15	1
LWIRO	128.95 341.7	19 12A	2
BROKEN HILL	140.87 338.5	19 26	-6
SOUTH POLE	141.90 180.0	19 27	-6
BULAWAYO	146.31 335.9	19 43	2
MAWSON	152.18 217.8	19 56K	6
KIMBERLEY	155.50 338.2	20 23A	28

MAY 22 21.H 53.M 5.5 EPICENTRE -8.21 115.69 DEPTH= 56.KM

A=-0.42912 B= 0.89204 C=-0.14186 D= 0.9012 E= 0.4335
G= 0.0615 H=-0.1278 K=-0.9899 HT= 6.8

DEPTH OF FOCUS= 0.004R

SE= 2.40

	DELTA DEG.	AZ. DEG.	P		O-C S	S			*PP		SUPP.		
			M	S		M	S	S	M	S	M	S	
LEMBANG	8.12	279.2	1	57A	-1	3	42	13			8	29	PCP
DJAKARTA	9.02	282.3	2	13	3	3	53	1			8	25	PCP
TANGERANG	9.21	282.1	2	11K	-2	3	55	-1			8	33	PCP
DARWIN	15.46	106.8	3	32	-4						3	40	PP
MEDAN	20.62	304.0	4	38K	1	8	24	5			5	2	PP
NHATRANG	21.29	342.3	4	43	-1	8	36	4					
MANILA	23.35	13.3	5	5	1	8	32	-37					
PERTH	23.62	179.7	6	8	61	9	29	15			6	39	PP
MUNDARING	23.65	178.9	5	7	0	9	16	2					
PORT BLAIR	30.20	310.5	6	8	1	11	3	2			7	22	PPP
HENGCHUN	30.43	9.3	6	20	10								
PORT MORESBY	31.11	94.6	6	13	-3	11	9	-7					
CANTON	31.19	355.8	6	16K	0	11	24	7			7	20	PP
CHARTERS TS.	31.84	115.0	6	21	-1	11	31	4					
HWALIEN	32.50	10.1	5	34	-54								
ADELAIDE	33.99	144.9	6	40A	-1	12	3	2			13	34	
KUNMING	35.45	339.5	6	55K	2	12	52	29			8	17	PP
GUAM	35.99	53.5	6	59	1								
RABAUL	36.47	86.0	7	2	0								
CHITTAGONG	38.34	322.9	7	23	6	13	13	6					
ZO-SE	39.44	7.4	7	27K	1	13	27	3			9	6	PP
TOOLANGI	39.76	141.9	7	30	1	13	35	6			7	42	*SP
BRISBANE	39.91	123.3	7	31	1	13	10	-21					
NANKING	40.15	4.1	7	33K	1	13	39	4			9	12	PP
CALCUTTA	40.61	319.3	7	37	1	13	45	3					
CANBERRA	40.70	136.5	7	37A	0	13	43	0			9	16	PP
SHILLONG	40.80	326.1	7	38K	0	13	49	5			9	15	PP
VISHAKHAPTNM	41.08	309.0	7	41A	1	13	53	5			9	21	PP
MADRAS	41.09	300.5	7	39	-1	13	52	3			9	17	PP
RIVERVIEW	41.43	133.1	7	44A	1	14	0	6			9	24	PP
KODAIKANAL	42.23	295.0									13	58	
SIAN	42.71	351.7	7	55K	2	14	20	8					
BOKARO	43.20	318.2	8	0	3	14	28	8			9	41	PCP
HONIARA	43.73	95.1	8	0A	-2	14	28	1					
CHATRA	44.48	322.5	8	8K	0	14	42	4					
LHASA	44.48	328.8	8	10K	2	14	45	7					
LANCHOW	45.42	346.5	8	18K	3	15	0	8			10	3	PP
PEKING	48.00	0.5	8	35K	0	15	34	6			10	27	PP
KOUMAC	48.46	110.1	8	40K	1						10	52	
PAOTOW	48.82	354.3	8	42K	0	15	43	3					
POONA	49.09	303.1	8	42A	-2	15	44	1			18	25	SCS
MATUSIRO	49.28	24.0	8	44	-1	15	50	4					
BOMBAY	50.12	302.9	8	52	0	15	55	-3			12	14	PPP
NOUMEA	50.70	112.0	8	55A	-1						11	23	

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1963			PAGE 455							
NEW DELHI	52.13	316.1	9 4K	-3	16	24	-1			11 8 PP
CHANGCHUN	52.52	8.8	9 8K	-2	16	33	2			9 17 *SP
DEHRA DUN	52.66	318.4	9 16	5	16	30	-3			
MIZUSAWA	52.69	24.8	9 12	1	16	40	7			
VLADIVOSTOK	53.17	14.8	9 14	-1	16	46	6			
ULAN-BATOR	56.42	352.9	9 37K	-1	17	26	3			
ESEN BULAK	57.07	344.1	9 45K	2						
WILKES	58.15	182.5	9 49	-2	17	49	3			
ROXBURGH	59.08	138.7	9 58	1	18	5	7			
WARSAK DAM	59.26	317.7	9 56	-2						
MIRNY	60.30	190.2	10 4	-1	18	21	7	10 18	11 9	
QUETTA	60.38	311.5	10 3A	-3	18	8	-7			
IRKUTSK	61.02	352.0	10 9K	-1	18	27	4			
KARAPIRO	61.32	128.8	10 13	1						
KHOROG	61.38	320.8	10 11	-2	18	27	-1			
WELLINGTON	61.54	132.7	10 13	-1	18	31	1		21 37	
ALMATA	62.15	328.9	10 16K	-2						
ANDIJAN	62.94	324.2	10 23	0	18	50	3			
FRUNSE	63.07	327.2	10 23K	-1	18	50	1			
TASHKENT	65.12	323.0	10 34	-3	19	15	1			
SEMIPALATNSK	65.98	336.0	10 42	-1						
MAWSON	68.88	199.1	11 0A	-1	20	2	3		20 20 PS	
VANNOVSKAYA	70.58	315.0	11 12	1						
YAKUTSK	70.86	7.0	11 11K	-2	20	27	4			
AFTAMALU	71.19	101.9	11 20A	5						
SHIRAZ	71.39	305.0	11 13A	-3	20	18	-11		39 5 PKPPKP	
CAPE HALLETT	71.90	164.8	11 20	1						
KIZYL-ARVAT	72.42	315.4	11 20	-2	20	42	1			
MAGADAN	73.12	17.8	11 25	-1						
SCOTT BASE	74.31	170.1	11 34	1	21	13	11			
TEHERAN	74.53	310.5	11 31	-4	21	6	2		26 15 SS	
SVERDLOVSK	78.86	332.7	11 59K	0	21	55	4			
CHILEKA	78.93	255.6	11 58	-1						
GORIS	79.62	312.6	12 4K	1	22	0	1			
KIROVOBAD	80.01	313.7	12 3K	-2	22	2	-1			
TIKSI	80.15	4.2	12 3A	-3	22	2	-3			
CHANGALANE	80.61	244.7	12 8A	0	22	12	2	12 33	12 14 PCP	
TIFLIS	81.46	314.3	12 13	0	22	22	4			
SOUTH POLE	81.84	180.0							21 25	
PIETERMZBURG	81.92	241.2	12 16A	1						
BULAWAYO	84.50	250.5	12 29	1						
GRAHAMSTOWN	84.82	237.2	13 31A	61						
BROKEN HILL	85.31	256.1	12 34	2						
KSARA	86.15	304.8	12 38	2	23	14	9		16 1 PP	
JERUSALEM	86.26	302.7	12 38A	1						
LWIRO	86.61	268.2	12 39A	0					23 15 PPS	
N-LAZARVSKYA	86.83	198.8	12 40	0						
KIMBERLEY	86.90	241.6	12 42	2						
HONOLULU	89.44	68.5	13 3	11	23	55	19		29 41 SS	
KIPAPA	89.53	68.4	13 12	19						
SIMFEROPOL	89.82	315.4	12 55	1	23	43	4			
MOSCOW	90.06	326.4	12 53	-2	23	41	-1			
HERMANUS	90.70	235.2							24 3	
ISTANBUL UN.	92.85	310.9	13 11	3						
KHEYS	93.04	352.0	13 7	-2						
APATITY	94.58	337.6	13 19	3	23	45	-36		17 9 PP	
PULKOVO	94.70	329.6	13 19	3	24	29	7			
VIBORG	95.57	330.4	13 23	3						
KAJAANI	96.44	333.8	13 22	-2						
ATHENS	96.53	307.3							23 59	
SODANKYLA	97.15	337.0	13 31	3					17 23 PP	
LWOW	97.28	319.3	13 32	4	24	2	3			
HELSINKI	97.42	329.7	13 21	-8						
NURMIJARVI	97.59	330.1	13 27	-3	24	1	0		17 29 PP	
UZHGOROD	98.34	318.0	13 35	2						
KIRUNA	99.54	337.5	13 41	3	24	10	-1		26 43 PS	
UMEA	99.72	323.4			24	12	0		26 34 PS	
KRAKOW	99.93	319.4							17 49 PP	
COLLEGE	100.14	25.5	13 42	1						
UPPSALA	101.10	329.4			24	18	0		26 58 PS	
BRATISLAVA	101.79	317.5			24	27	5		18 3 PP	
MESSINA	102.98	307.3			24	31	4		18 9 PP	
PRUHONICE	103.40	319.4	14 14	18					17 31	
PRAGUE	103.48	319.5	14 19	23					18 14	
LJUBLJANA	103.61	315.3	18 5	248						
KASPERSKE H.	104.09	318.5	14 32	33					18 18 PP	
TRIESTE	104.17	314.9	18 6	247	24	35	2		20 34 PPP	
COLLMBERG	104.30	320.8							18 18 PP	

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1963		PAGE 456									
AQUILA	104.56	311.6									18 29 PP
JENA	105.22	320.5	14 28	777							25 50
ROME	105.26	311.1				24 42	4				18 30 PP
PADOVA	105.50	314.8				24 45	6				18 54 PP
STUTTGART	106.94	318.4				26 9	84				18 35 PP
PAVIA	107.42	314.7									18 51 PP
STRASBOURG	107.96	318.4				26 16	86				18 45 PP
BENSBERG	107.98	320.9									18 46 PP
ISOLA	109.04	313.8									18 57 PP
DOURBES	109.75	320.3	18 37	777							28 2
GARCHY	111.29	317.6									19 9 PP
COPPERMINE	111.64	18.4	18 28	0							
DURHAM	112.24	326.2	19 24K	55							28 58
TOLEDO	117.93	310.9									35 35 SS
BENI ABBES	118.15	299.7	18 42	1							
SHASTA	119.35	47.8	18 50A	7							
CALISTOGA	119.73	50.1	18 43A	-1							
BERKELEY	120.16	50.9	18 27	-18							36 37 SS
PARAISO	120.43	52.6	18 48	3							
BLUE MTS.	121.56	41.8	18 48	0							20 27 PP
PRIEST	121.82	52.5	18 46A	-2							
HUNGRY HORSE	122.18	37.0	18 48	-1							
WOODY	123.35	52.5	18 57	6							
PASADENA	124.29	54.2	18 55	2							19 18
BOZEMAN	125.23	38.7	18 56	1							
UINTA BASIN	128.62	44.0	19 3	2							21 29 PP
TUCSON	130.73	54.2	19 6	1							21 22 PP
SCHEFFERVILLE	133.48	2.0	19 11	1							
WICHITA MTS.	138.96	45.0	19 11	-10				22 19			22 48 SKP
TULSA	140.19	41.5	19 14	-9							22 58 PP
BREBEUF	141.99	10.6	19 21	-5							
HALIFAX	143.72	359.1	19 30	1							
PENNSYLVANIA	145.37	18.3	19 31	-1							
MORGANTOWN	145.72	21.7	19 34	2							
PALISADES	146.24	13.1	19 35	2							
CUMBERLAND	146.52	32.4	19 34	0							22 43 PP
GEORGETOWN	147.36	18.6	19 39	4							
WASHINGTON	147.36	18.6	19 37	2							
BLACKSBURG	147.64	24.4	19 38	2							
ANTOFAGASTA	147.73	169.5	19 41	5							
CHAPEL HILL	149.31	29.9	19 44	6							
COLUMBIA	150.06	28.6	19 42	3							
LA PAZ	155.16	171.2	19 51	4				20 2			
HUANCAYO	157.08	151.3	19 49	0							
BOGOTA	169.67	109.6	20 2	1							25 9 PP
FUQUENE	170.26	105.6	20 3	2							25 10 PP
TRINIDAD	176.24	310.4									20 11
CARACAS	176.56	48.4	20 7	3							25 47 PP

MAY 23 O.H 51.M 36.S EPICENTRE 1.74 126.57 DEPTH= 0.KM

A=-0.59550 B= 0.80279 C= 0.03009 D= 0.8032 E= 0.5958
G=-0.0179 H= 0.0242 K=-0.9995 HT= 7.2

SE= 1.35

	DELTA DEG.	AZ. DEG.	P		O-C S	S O-C			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
MANILA	13.95	337.4	2	57	-25							
DARWIN	14.65	163.3	3	31	0							
NHATRANG	20.11	302.0	4	38	-1						4 53	*SP
LEMBANG	20.74	245.6	4	46	1							
TANGERANG	21.40	248.3	4	52	0							
PORT MORESBY	23.30	118.7	5	12A	1							
CANTON	24.81	329.9	5	26A	1	9 47	1					
MEDAN	27.92	274.3	5	54A	0							
CHARTERS TS.	29.04	139.3	6	4	0						10 14	
NANKING	31.04	347.1	6	23	1							
KUNMING	32.69	317.3	6	37	0							
ABUYAMA	34.02	13.3	6	48A	0							
MUNDARING	34.93	195.5	6	55	-1				7 4			
MATUSIRO	36.27	15.9	7	6A	-1	13 1	13					
SIAN	36.31	334.9	7	10A	2	12 54	5					
ADELAIDE	38.25	163.8	7	24K	0							
BRISBANE	38.41	140.8	7	24	-1						18 25	
PEKING	39.27	347.4	7	33	1							
LANCHOW	40.12	330.9	7	41	1							

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SHILLONG	40.96	308.3	7 45K	-1		
CHANGCHUN	41.93	358.6	7 58	4		
RIVERVIEW	42.27	149.0	8 UK	3		
CANBERRA	42.42	152.4	7 59	1		
TOOLANGI	42.86	157.7	8 4	2		9 46 PP
KOUMAC	43.07	122.9	8 3	-1		
LHASA	43.70	312.9	8 10A	1	14 35	-4
Y.-SAKHLINSK	47.25	15.0	8 37K	0		
NEW DELHI	54.07	304.5	9 27A	-2		
KARAPIRO	59.97	136.4	10 9	-2		
ALMATA-2	60.16	320.4	10 11K	-1		
YAKUTSK	60.18	1.7	10 10A	-2		
WARSAK DAM	60.47	308.5	10 13	-1		
QUETTA	63.08	303.1	10 30	-2		
TASHKENT	64.74	315.5	10 44	1		
TIKSI	69.81	0.8	11 13A	-2	20 19	-5
ASHKABAD	71.84	309.4	11 30	3	20 33	-14
KIZYL-ARVAT	73.69	310.3	11 39	1		
SHIRAZ	75.29	300.1	11 45K	-2	21 20	-6
SVERDLOVSK	75.57	328.8	11 50K	1		
TEHERAN	76.97	306.2	11 56	-1		
CAPE HALLETT	78.90	167.6	12 7	0		
GORIS	81.36	309.5	12 20A	0		
KIROVOBAD	81.46	310.7	12 20	-1		
MAWSON	81.84	200.3	12 22	-1		
TIFLIS	82.70	311.7	12 29	2		
BAKURIANI	83.66	311.6	12 33A	1		
KHEYS	84.85	351.2	12 38K	0		
COLLEGE	86.57	25.2	12 46	-1		
MOSCOW	87.98	325.5	12 54	0	23 33	-3
APATITY	89.61	337.4	13 2A	1		
SODANKYLA	92.24	337.6	13 12	-1		
KAJAANI	92.33	334.2	13 14	0		
MOULD BAY	93.93	12.7	13 20A	-1		
HELSINKI	94.27	330.6	13 22	-1		
NURMIJARVI	94.35	331.0	13 22	-1	24 26	-7
KIRUNA	94.45	338.5	13 24	0		
NORD	95.05	354.9	13 25	-1		
UZHGOROD	98.10	319.5	13 40	0		
COPPERMINE	98.76	19.8	13 42A	-1		
RESOLUTE	99.80	10.3	13 47A	-1		
PRUHONICE	102.65	322.2	14 3	2		17 33
KASPERSKE H.	103.52	321.5	14 8	3		17 44
BLUE MTS.	106.97	41.9	14 21	777		18 41 PP
WOODY	108.71	51.4	18 34	777	18 56	
UINTA BASIN	113.98	44.0	18 44	2		19 34 PP
TONTO FOREST	115.07	50.7	18 46	2		19 51 PP
ALBUQUERQUE	118.47	48.3	18 53	3		
WICHITA MTS.	124.30	45.0	19 3	1		20 44 PP
CUMBERLAND	132.25	35.9	19 18	1		21 36 PP
LA PAZ	159.39	136.2	20 6	5		

MAY 23 3.H 33.M 26.S EPICENTRE -14.71-175.98 DEPTH= 309.KM

A=-0.96524 B=-0.06787 C=-0.25239 D=-0.0701 E= 0.9975
G= 0.2518 H= 0.0177 K=-0.9676 HT= 5.8

DEPTH OF FOCUS= 0.043R

SE= 1.80

	DELTA DEG.	AZ. DEG.	P		O-C S	S O-C			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
AFIAMALU	4.15	79.4	1	9A	0	1	58	-5				
PORT VILA	15.37	256.6	3	25K	2	5	41	-25				
NOUMEA	18.28	243.0	3	53K	-1							
KOUMAC	19.68	250.0	4	8K	0							
KARAPIRO	24.32	196.5	4	50A	-2							
CHATEAU	25.51	195.4	4	58	-5							
WELLINGTON	27.66	195.1	5	18	-4							
ROXBURGH	33.09	199.1	6	6	-3							
RIVERVIEW	35.28	231.5	6	28	0						7 38 PP	
CANBERRA	37.51	230.4	6	45	-2							
HAWAII V.OB.	39.58	31.6	7	4	0							
HONOLULU	39.86	26.5	7	6	0	12	51	4				
KIPAPA	40.00	26.5	7	7	0							
TOOLANGI	41.00	229.0	7	14A	-1						8 47 PP	

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1963										PAGE 458
ADELAIDE	45.34	235.2	7 48A	-2	13 54	-12				15 58
GUAM	47.91	303.9	8 2	-8						
CAPE HALLETT	58.16	184.9	9 25	1						
SCOTT BASE	63.74	184.0	10 2	1						
PERTH	63.99	241.4			17 58	-15				13 29 PPP
MATUSIRO	66.82	321.1	10 18	-3						
ABUYAMA	67.41	318.2	11 22K	57						
BAGUIO CITY	69.86	293.9	10 39	-1						18 19
BYRD STATION	70.01	171.1	10 40	0						
BERKELEY	72.61	42.0	10 56K	0	19 58	4	12 7			11 14 PCP
PRIEST	72.69	44.2	10 57A	1						
LICK	72.71	42.7	10 57A	0						
CALISTOGA	72.85	41.1	10 58K	1						
PASADENA	73.35	47.1	11 0	0						
SHASTA	74.17	39.5	11 5	0						
LEMBANG	75.18	266.7	11 11A	0	20 18	-5	12 14			
SOUTH POLE	75.38	180.0	11 12	0						
TANGERANG	76.29	267.1	11 15A	-2						
BOULDER CITY	76.64	46.9	11 19	0			12 28			
MIRNY	77.03	204.2	11 20	-1						11 43
HONG KONG	77.68	297.1	11 25	0			12 42			14 19 PP
TUCSON	77.84	51.9	11 26	1			12 36			
SEATTLE	78.37	33.8			20 54	-3				25 37
TONTO FOREST	78.42	49.8	11 29	0	21 3	6	12 39			15 54 PPP
CHANGCHUN	79.08	321.0	11 32A	0						
BLUE MTS.	79.60	38.2	11 34	-1	21 10	0	12 44			30 18 PKKP
PENTICTON	80.80	33.5	12 21A	40						
SALT LAKE C.	81.00	43.8	11 43	1			12 52			
SOCORRO	81.57	51.6	11 49	4						
COLLEGE	82.18	11.7	11 47	-1	21 34	-2	12 57			
ALBUQUERQUE	82.29	50.9	11 49	0			13 0			30 11 PKKP
UINTA BASIN	82.33	45.0	11 49A	0	22 27	50	12 59			28 9 SS
PEKING	83.20	314.3	11 54A	1						
HUNGRY HORSE	83.37	36.3	11 52	-2			13 3			
GOLDEN	84.99	46.9	12 2	0	22 2	-1				
LUBBOCK	85.30	53.7	12 3	-1						13 14 PP
SIAN	86.29	306.7	12 10A	1						
EDMONTON	86.29	32.2	12 8A	-1						
PAOTOW	87.73	312.9	12 16A	1						
WICHITA MTS.	88.23	53.5	12 17	-1	22 22	-12	13 28			30 1 PKKP
KUNMING	88.49	296.3	12 20A	1						
YELLOWKNIFE	90.47	24.1	12 27	-1						
TULSA	90.77	53.1	12 29A	-1	22 37	-20	13 41			29 14 SS
LANCHOW	90.82	307.0	12 30A	0						
ULAN-BATOR	92.39	319.0			22 40	-31	13 50			
COPPERMINE	93.15	19.4	12 40	-1						
MOULD BAY	96.75	11.6	12 55A	-2						
SHILLONG	98.12	294.3					14 7			
CUMBERLAND	98.73	55.5	13 6	0			14 17			18 18 PP
ESEN BULAK	98.98	315.6					14 31			
RESOLUTE	101.74	15.6	13 18	-2						
PALISADES	108.55	51.3								22 29 PP
APATITY	123.83	346.9	18 20A	-2						
TROMSOE	124.32	353.7	18 22	-1						
SODANKYLA	125.34	349.5	18 24	-1						
KIRUNA	125.86	352.4	18 24	-2						31 48 PS
KAJAANI	128.04	347.0	18 29	-1						21 49 PKS
UMEA	129.67	350.7	18 32	-1						21 27 SKP
SKALSTUGAN	130.85	355.1	18 34	-1						21 30 SKP
NURMIJARVI	131.87	346.5	18 25	-12						22 3 PKS
HELSINKI	132.10	346.1	18 27	-11						21 36 SKP
SHIRAZ	133.03	296.9	18 39K	0						21 40 PP
UPPSALA	133.84	350.5	18 39	-2						21 41 SKP
GOTEBORG	136.67	353.8	18 45	-1						
BULAWAYO	137.76	215.6	18 37	-11						18 50
LWOW	141.37	339.2	18 55	0						
BROKEN HILL	142.26	220.9	18 54A	-3						
KRAKOW	142.45	343.1								23 11
HALLE	142.76	351.8	18 57	-1						23 56
COLLMBERG	142.80	350.7	18 53	-5						22 8 PP
KEW	143.17	4.5	18 54	-4						
JENA	143.36	352.0	18 53	-6			20 15			22 9 PP
PRAGUE	143.73	348.7	18 57	-2						24 2
BENSBERG	143.76	356.6	18 57A	-2						
PRUHONICE	143.80	348.5	18 57	-2						
DOURBES	144.71	359.4	18 51	-10						
KASPERSCHE H.	144.79	349.1	19 0A	-1			20 17			22 13 PP
BRATISLAVA	144.93	344.7	19 1A	0			20 16			22 12

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1963					PAGE 459				
VIENNA-H.	145.04	345.6	19 2A	1					19 18 PKP2
KSARA	145.49	309.1	19 4	2		20 19			25 40 PPP
KARLSRUHE	145.61	354.9							19 5 PKP2
STUTT GART	145.77	353.8	19 3	1					20 18
FOLINI ERE	145.84	5.3	19 3	0					
ISTANBUL UN.	145.96	325.2	19 4A	1					
PARIS	145.98	1.8	19 5	2					
TUBINGEN	146.02	354.0	19 5	2					
STRASBOURG	146.09	355.5	19 3	0		20 18			40 42 55
EBINGEN	146.38	354.0	19 6	3					
JERUSALEM	146.84	306.2	19 8	4		20 26			
BELGRADE	146.91	338.4	19 8	4					20 25
BESANCON	147.52	357.5	19 9	4					
GARCHY	147.52	1.2	19 9	4		20 32			19 13 PKP2
LJUBLJANA	147.54	346.3	19 5A	0		20 17			
TRIESTE	148.09	347.0	19 7	1		20 28			25 2
CLERMONT-FD.	149.03	1.2	19 12	5					
LWIRO	150.23	237.5	19 18A	9					
ISOLA	150.52	355.6	19 16	6		19 36			
MONACO	150.94	354.9	19 17	7					20 35
ATHENS	151.00	326.7	19 16A	6					
AQUILA	151.30	345.4	19 12	1		19 37			26 4 PPP
ROME	151.94	346.5	19 12	0		20 28			26 16 PPP
TOLEDO	153.95	14.2	19 17K	3					22 2 PP
MESSINA	154.48	338.6							24 54

MAY 23 7.H 43.M 59.S EPICENTRE 19.04 -64.88 DEPTH= 48.KM

A= 0.40162 B=-0.85650 C= 0.32422 D=-0.9054 E=-0.4246
G= 0.1376 H=-0.2936 K=-0.9460 HT= 4.9

DEPTH OF FOCUS= 0.002R

SE= 3.22

	DELTA DEG.	AZ. DEG.	P			S			*PP		SUPP.	
			M	S	S	M	S	S	M	S	M	S
SAN JUAN	1.35	241.2	0	25K	2							
ANTIGUA	3.45	122.7	0	47A	-5							
ST. CLAUDE	4.26	134.1	1	0	-4	1	49	-4				
DOMINICA	4.99	137.7	1	16	2							
FORT FRANCE	5.57	139.6	1	21	-1	2	22	-4				
ST. VINCENT	6.79	148.8	1	38	-1							
GRENADA	7.58	156.0	1	48	-2							
BARBADOS	7.77	138.5	1	57	4							
CARACAS	8.72	193.4	2	8	2	3	44	0				
TRINIDAD	8.99	157.6	2	10	0						4	2
HOPE	11.31	266.7	2	41	0							
BERMUDA	13.29	0.7	2	56	-12	5	2	-33				
FUQUENE	16.01	213.7	3	46	3							
BOGOTA	16.91	213.2	3	56A	2	7	9	10			4	13 PPP
BALBOA HTS.	17.40	236.9	4	3A	3							
CHINCHINA	17.47	218.2	3	54	-7	7	19	7				
COLUMBIA	20.72	319.2	4	37	-1	8	17	-5				
GEORGETOWN	22.44	334.4	4	54	-2	9	4	10				
WASHINGTON	22.44	334.4									5	45
BLACKSBURG	22.65	326.3	4	57	-1							
PHILADELPHIA	22.65	339.1	5	3	5	9	3	5				
FORDHAM	23.07	342.4	5	1	-1	9	8	3				
PALISADES	23.23	342.5	5	0	-3	9	14	6	5	9		
MORGANTOWN	24.30	330.8	5	15A	1	9	35	8				
PENNSYLVANIA	24.38	335.6	5	14	0							
CUMBERLAND	24.61	316.3	5	17	0	9	41	9			5	42
CLEVELAND	26.50	331.1	6	5	31							
BREBEUF	27.37	346.6	5	46	4							
SCARBOROUGH	27.41	337.0	5	55	12							
LONDON ONT.	27.60	333.6	6	19	34							
SHAWINIGAN	28.20	348.4	5	52	2							
ST. LOUIS 1	29.41	316.9	6	19	18							
FAYETTEVILLE	30.88	309.4	6	13K	-1						13	34
TULSA	31.98	308.1	6	23A	0							
HUANCAYO	32.56	199.3	6	28	-1							
WICHITA MTS.	33.69	304.5	6	35	-3	12	0	3			7	37 PP
LA PAZ	35.46	185.4	6	53	0	12	35	11				
SCHEFFERVILLE	35.75	358.1	6	54	-2							
LUBBOCK	35.96	301.2	6	57	-1							
ALBUQUERQUE	39.99	302.0	7	32	1							

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1963										PAGE 460	
GOLDEN	40.42	309.4	7 35	0	13 43	3					
LARAMIE	41.11	311.6	7 41	0					17	8	
TUCSON	43.16	297.1	7 58	1							
UINTA BASIN	43.69	308.9	8 1	-1	14 32	4			9	45	PP
TONTO FOREST	43.78	299.9	8 4	2					9	50	PP
SALT LAKE C.	45.48	308.9	8 16	0							
BOULDER CITY	46.90	301.7	8 27	0					10	31	
BUTTE	47.45	315.6	8 32	1							
HUNGRY HORSE	49.14	318.1	8 44	-1							
PASADENA	49.45	299.0	8 48	1	15 57	7					
BLUE MTS.	50.35	312.9	8 52	-2	16 16	14			20	25	SS
EDMONTON	50.57	324.5	8 52	-4							
PRIEST	51.61	301.4	9 3A	0							
SANTA LUCIA	52.47	186.1	9 10	0							
LICK	52.48	302.8	9 11A	1							
BERKELEY	53.01	303.4	9 10A	-4	16 55	17					
CALISTOGA	53.31	304.4	9 16A	0							
SEATTLE	54.32	315.5			17 7	11			26	19	
TOLEDO	55.81	54.3	9 43	9	17 25	9			21	6	SS
BENI ABBES	57.46	66.0	9 43	-3							
RESOLUTE	57.97	351.0	9 46	-4							
COPPERMINE	58.01	339.9	9 46	-4							
GARCHY	61.36	46.0	10 6	-7					10	51	
MOULD BAY	63.48	347.4	10 24A	-3							
ALERT	63.52	0.4	10 23	-4							
JENA	66.97	42.0	11 8	19					11	40	
COLLMBERG	67.85	41.5	11 10	15					11	45	
KASPERSCHE H.	68.36	43.8	10 56	-2					15	9	
PRUHONICE	68.92	42.9	11 3	1					20	6	
LJUBLJANA	69.28	47.0	11 11	7					11	37	
COLLEGE	69.95	333.2	11 6	-2							
UPPSALA	69.99	32.2			20 11	-3					
KIRUNA	70.77	23.6	11 14	1							
UMEA	70.96	27.9							11	44	
TARANTO	72.03	52.6							24	50	
SODANKYLA	73.18	23.8	11 24	-3							
NURMIJARVI	73.41	31.1	11 32	3	20 51	-2			21	21	PS
LWIRO	94.20	90.9	13 27	12							
BRISBANE	144.51	249.4	19 32	1							
CANBERRA	145.98	234.6	19 36	3							
TOOLANGI	147.71	228.8	19 38	2					20	6	
ADELAIDE	153.76	228.0	20 10	25							

MAY 23 15.H 12.M 10.S EPICENTRE 5.98 126.14 DEPTH= 127.KM

A=-0.58663 B= 0.80322 C= 0.10344 D= 0.8076 E= 0.5898
G=-0.0610 H= 0.0835 K=-0.9946 HT= 7.0

DEPTH OF FOCUS= 0.015R

SE= 1.91

	DELTA DEG.	AZ. DEG.	P		O-C S	S			#PP		SUPP.	
			M	S		M	S	S	M	S	M	S
MANILA	9.97	330.4	2	22	1	4	47	15				
BAGUIO CITY	11.72	332.7	2	44	-1	5	22	29				
DARWIN	18.82	165.7	4	10	-3	7	35	0				
HONG KONG	19.93	325.7	4	25	1	8	4	8				
CANTON	21.02	325.3	4	37K	2	8	24	7				
LEMBANG	22.44	235.7	4	49A	0	8	48	6	5	10	5	21 PP
TANGERANG	22.91	238.5	4	55K	1	8	54	4			5	23 PP
ZO-SE	25.42	350.0	5	17	-1	9	37	4			9	57 *SS
NANKING	26.85	346.1	5	35	4	10	5	9				
MEDAN	27.47	266.3	5	37A	0							
KUNMING	29.41	312.8	5	55	1	10	41	4			6	15 *SP
SIAN	32.34	332.7	6	19	-1							
MATUSIRO	32.37	18.3	6	17	-3	11	26	3				
CHARTERS TS.	32.59	143.1	6	21	-1	11	32	5				
PEKING	35.07	346.6	6	43	0	12	9	4			16	58 SCS
LANCHOW	36.26	328.7	6	54A	1	12	28	4			7	13 *SP
PAOTOW	37.36	339.6	7	7	5	12	52	12			7	26 *SP
CHANGCHUN	37.71	359.0	7	6A	1							
SHILLONG	38.12	304.5	7	7A	-2						13	1
MUNDARING	38.90	193.5	7	14	-1				7	36		
LHASA	40.60	309.7	7	30A	1	13	34	5			7	49 *SP
BRISBANE	42.00	143.4	7	39	-2						13	20
ADELAIDE	42.42	164.6	7	44A	0						17	8

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1963				PAGE 461			
CHATRA	42.49	303.7	7 43K	-2			
ULAN-BATOR	44.91	341.7	8 3	-1			
KOUMAC	45.81	126.2	8 10A	-1			
RIVERVIEW	46.13	150.8	8 16A	2	8 33	18 24	55
CANBERRA	46.37	154.0	8 16A	0	8 35	10 4	PP
TOOLANGI	46.93	158.9	8 20	0		10 12	PP
ESEN BULAK	47.82	332.3	8 34	7			
NOUMEA	48.44	126.8	8 31A	-1			
DEHRA DUN	51.21	304.4	8 52K	-1			
NEW DELHI	51.41	301.9	8 53K	-1			
TARRALEAH	51.49	160.8	8 56	1			
MOORLANDS	51.86	160.2	8 58	0		10 59	
YAKUTSK	55.99	2.0	9 27A	-1	17 11	7	
ALMATA	56.95	318.7	9 32A	-3			
FRUNSE	58.31	317.4	9 43A	-1			
SEMIPALATNSK	58.50	327.4	9 41	-5			
QUETTA	60.47	301.3	9 58A	-1	18 12	9	
DUZHANBE	61.01	311.0	10 12A	9			
TASHKENT	61.47	314.1	10 5A	-1			
KARAPIRO	63.35	137.8	10 18	0			
CHATEAU	64.03	139.0	10 25	2			
ROXBURGH	64.10	147.6	10 23	0			
TIKSI	65.60	0.9	10 32A	-1	19 11	5	
ASHKABAD	68.87	308.3	10 53	0			
KIZYL-ARVAT	70.67	309.4	11 4A	0			
SVERDLOVSK	71.76	328.2	11 9K	-2			
SHIRAZ	72.84	299	11 15A	-2	20 33	2	
WILKES	73.03	186.5	11 21	3			
TEHERAN	74.16	305.3	11 24	-1			
KIPAPA	74.67	69.5	11 30	2		11 53	
MIRNY	76.20	193.0	11 36	0			
HAWAII V.OB.	77.29	71.5	11 44	2			
GORIS	78.37	309.0	11 48	0	21 38	6	
KIROVOBAD	78.41	310.1	11 48	-1			
TIFLIS	79.59	311.2	11 56	1			
BAKURIANI	80.55	311.2	12 1A	1			
KHEYS	80.62	351.1	12 0A	0	22 1	6	
TANANARIVE	81.21	249.9	12 5	1			12 45
COLLEGE	82.94	25.4	12 12	0			
CAPE HALLETT	83.11	167.6	12 14	1			
MOSCOW	84.27	325.4	12 18A	-1	22 34	2	
APATITY	85.56	337.4	12 25A	0	22 50	5	23 26 *55
MAWSON	85.64	200.1	12 25A	-1			
SCOTT BASE	86.63	172.1	12 32	1			
KSARA	86.93	303.5	12 35	3			
SIMFEROPOL	87.25	314.7	12 33	-1			
KEVO	87.59	339.9	12 35K	0			
JERUSALEM	87.67	301.5	12 37	1			
PULKOVO	87.81	329.8	12 36	0			
SODANKYLA	88.18	337.6	12 37K	-1			
KAJAANI	88.35	334.2	12 39K	0			
VIBORG	88.42	330.8	12 39	0			
MOULD BAY	89.91	12.6	12 46	0			
TROMSOE	90.35	340.5	12 48	0			
KIRUNA	90.37	338.6	12 48A	0			
HELSINKI	90.39	330.6	12 48A	-1			
NURMIJARVI	90.46	331.0	12 48A	-1	23 32	2	30 22 55
NORD	90.81	354.9	12 51A	0			
ALERT	91.55	1.1	12 55A	1			
UMEA	91.62	334.7	12 52	-2			
UPPSALA	94.02	331.3	13 4A	-1			
UZHGOROD	94.62	319.7	13 9	1			
COPPERMINE	94.94	19.5	13 9	0			
SKALSTUGAN	95.02	335.8	13 8	-2			
RESOLUTE	95.72	10.1	13 13	0			
SOUTH POLE	95.94	180.0	13 14	0			16 11
KARLSKRONA	96.29	328.2	13 13	-3			
GOTEBORG	97.55	330.4	13 20	-1			
YELLOWKNIFE	97.70	24.1	13 21	-1			
PRUHONICE	99.05	322.6	13 28	0			13 59
BULAWAYO	99.09	250.6	13 23	-5			
COLLMBERG	99.49	324.2	13 30K	0			17 20
KASPERSKE H.	99.94	322.0	13 32	0			
BYRD STATION	99.98	170.7					17 29
HALLE	100.02	324.6	13 33	0	14 12		
LJUBLJANA	100.43	318.8	17 52	258			
EDMONTON	102.68	31.9	13 12	-32			
BLUE MTS.	104.09	41.0	13 54	3			29 58 PKKP

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WOODY	106.38	50.3				29 32
UINTA BASIN	111.21	42.7	18 10	-9		29 17 PKKP
TONTO FOREST	112.68	49.1	18 26	4		19 50
TUCSON	113.86	51.0	18 26	2		
SCHIEFFERVILLE	118.47	8.5	18 36K	3		
BENI ABBES	118.86	309.1	18 37	3		
WICHITA MTS.	121.56	42.9	18 42	3		28 38 PKKP
LONDON ONT.	125.28	24.3	18 49K	3		
BREBEUF	125.79	17.0	18 49	2		
CUMBERLAND	129.03	33.5	18 56	3		22 12 SKP
BALBOA HTS.	150.39	60.1	19 40	9		
HUANCAYO	157.96	107.4	19 48	6		
LA PAZ	162.54	128.0	19 52	5		

MAY 24 21.H 0.M 24.S EPICENTRE 36.33 141.15 DEPTH= 46.KM

A=-0.62897 B= 0.50652 C= 0.58978 D= 0.6272 E= 0.7788
G=-0.4593 H= 0.3699 K=-0.8076 HT= -0.3

DEPTH OF FOCUS= 0.002R

SE= 3.77

	DELTA DEG.	AZ. DEG.	P			S			*PP		SUPP.	
			M	S	O-C	M	S	O-C	M	S	M	S
MITO	0.56	275.8	0	9K	-4	0	18	-5				
TYOSI	0.65	202.3	0	10A	-5	0	18	-7				
ONAHAMA	0.66	341.9	0	11K	-4	0	20	-5				
KAKIOKA	0.79	263.4	0	12K	-4	0	21	-7				
UTUNOMIYA	1.06	282.6	0	16K	-3	0	28	-5				
SHIRAKAWA	1.09	316.8	0	17K	-3	0	31	-3				
HONGO	1.28	241.6	0	21K	-1							
TOKYO C.M.O.	1.31	240.9	0	20K	-3	0	36	-4				
KUMAGAYA	1.45	263.6	0	22	-3	0	40	-3				
YOKOHAMA	1.51	234.3	0	25	-1	0	43	-2				
HUKUSIMA	1.52	339.1	0	23K	-3	0	42	-3				
MAEBASI	1.68	273.1	0	25K	-3	0	45	-4				
TITIBU	1.71	259.0	0	27	-1	0	47	-2				
NERA	1.77	218.0	0	29	0							
SENDAI	1.95	354.1	0	29K	-3	0	51	-4				
YAMAGATA	2.03	341.8	0	30	-3	0	56	-1				
AJIRO	2.10	233.3	0	32A	-2	0	57	-2				
OIWAKE	2.10	270.9	0	32	-2	0	58	-1				
HUNATU	2.10	247.6	0	35	1	0	59	0				
OSIMA	2.12	223.5	0	37	3							
MISIMA	2.16	236.8	0	36	1							
KOHU	2.20	253.5	0	33	-2	1	1	-1				
NIIGATA	2.32	314.0									1	44
MATUSIRO	2.38	276.0	0	35K	-3	1	8	2				
NAGANO	2.41	279.1	0	39	1							
TAKADA	2.46	289.2	0	28	-11	0	57	-11				
MATUMOTO	2.57	269.3	0	39	-2	1	9	-2				
SHIZUOKA	2.62	239.7	0	41	0	1	14	2				
SAKATA	2.78	338.1	0	53	10							
MIZUSAWA	2.80	359.6	0	47	3	1	10	-7				
IIDA	2.82	254.4	0	43	-1	1	11	-6				
AIKAWA	2.87	307.0	0	50	5							
OMAESAKI	2.95	235.2	0	55	9							
TAKAYAMA	3.16	268.0	0	51	2							
HAMAMATU	3.23	241.2	0	52	2	1	32	5				
MORIOKA	3.37	0.2	0	51	-1	1	35	4				
MIYAKO	3.38	10.7	0	58	6							
HATIDYOZIMA	3.41	199.7	0	57	5							
AKITA	3.49	346.5				1	45	11			1	24
NAGOYA	3.59	252.5	0	56	1	1	40	3				
GIHU	3.68	256.7	0	56	0							
HUKUI	3.99	267.5	1	1	0	2	12	25			3	7
KAMEYAMA	4.09	250.3	1	14	12	1	54	5				
HIKONE	4.12	256.6	1	8	6	1	59	9				
TSURUGA	4.18	262.2	1	2	-1							
HATINOHE	4.21	3.9				1	56	4				
AOMORI	4.50	356.4									1	59
OWASE	4.64	242.4	1	8	-2							
NARA	4.64	250.9	1	12	2							
ABUYAMA	4.78	253.9	1	10A	-2							
OSAKA	4.88	251.6	1	33	20	2	32	23				
TOYOOKA	5.20	263.1	1	24	6							

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HAKODATE	5.49	356.9	1 25	3	2 28	4				
URAKAWA	5.95	11.7	1 34K	6	2 34	-2				
OBHIRO	6.77	12.8							2 50	
KUSIRO	7.10	19.6							2 54	
YAKUTSK	26.70	348.0	5 33A	-4						
TIKSI	35.95	353.4	6 51	-7						
SHILLONG	43.20	269.9	7 55K	-3						
ALMATA-2	48.44	298.9	8 38A	-2						
NEW DELHI	53.66	281.2	9 15K	-4						
SVERDLOVSK	55.55	318.9	9 30	-3						
MOULD BAY	57.27	16.3	9 42	-4						
QUETTA	60.97	287.6	10 8A	-3						
RESOLUTE	63.34	14.3	10 18	-9						
SODANKYLA	65.54	337.2	10 38	-3						
KIRUNA	67.10	339.3	10 48	-3						
KAJAANI	67.14	334.0	10 48	-3						
UMEA	69.85	336.1	11 5	-3						
NURMIJARVI	70.47	332.0	11 8	-4						
HELSINKI	70.57	331.6	11 10	-2						
KIROVOBAD	70.67	306.5	11 10	-3						
GORIS	71.27	305.5	11 13	-4						
SHIRAZ	72.12	293.9	11 19	-3						
BLUE MTS.	72.56	46.9	11 23A	-1						
UPPSALA	73.50	334.0	11 26	-4						
EUREKA	76.46	50.9	11 46	-1						
WOODY	76.78	55.4	11 47	-2						
UINTA BASIN	79.85	47.2	12 5	0						
COLLMBERG	81.61	330.1	12 12A	-3					12 36	
PRUHONICE	81.98	328.4	12 15	-2						
JENA	82.47	330.5	12 17	-2						
TOMTO FOREST	82.60	52.7							12 32	
KASPERSCHE H.	83.04	328.4	12 20A	-2						

MAY 25 8.H 41.M 13.S EPICENTRE 43.15 144.43 DEPTH= 94.MM

A=-0.59531 B= 0.42569 C= 0.68147 D= 0.5817 E= 0.8134
G=-0.5543 H= 0.3964 K=-0.7318 HT= -2.9

DEPTH OF FOCUS= 0.010R

SE= 3.82

	DELTA DEG.	AZ. DEG.	P		O-C S	S		*PP		SUPP.	
			M	S		M	S	M	S	M	S
KUSIRO	0.17	187.9	0	9K	-6	0	18	-7			
NEMURO	0.86	77.6	0	15A	-4	0	29	-5			
ABASHIRI	0.88	352.8	0	21K	1	0	40	6			
OBHIRO	0.93	256.1	0	16K	-4	0	31	-4			
HIROO	1.20	223.7	0	16K	-7	0	29	-11			
URAKAWA	1.58	231.2	0	21A	-7	0	39	-9			
ASAHIGAWA	1.63	293.4	0	29K	1	0	54	5			
TOMAKOMA!	2.16	257.0	0	33	-2	1	0	-1			
RUMOE	2.20	292.3	0	36	0	1	5	3			
SAPPORO	2.26	269.0	0	35K	-2	1	3	-1			
MURORAN	2.68	253.1	0	39K	-3	1	11	-3			
WAKKANAI	3.01	319.9	0	52K	5	1	34	12			
HAKODATE	3.03	245.0	0	42K	-5	1	15	-8			
MORI	3.04	251.1	0	44	-3	1	17	-6			
SUTTSU	3.10	264.9	0	47	-1	1	31	7			
KURILSK	3.23	48.8	0	50A	0	1	30	2			
HATINOHE	3.40	220.6	0	42	-10	1	16	-16			
AOMORI	3.58	230.7	0	55	0	1	30	-6			
MIYAKO	3.96	208.7	0	49	-11	1	26	-20			
Y.-SAKHLINSK	4.05	343.2	1	3	2	1	53	5			
MORIOKA	4.23	216.5	0	54	-10	1	35	-17			
AKITA	4.73	225.0	1	11	0	1	53	-12			
MIZUSAWA	4.73	212.9	1	1	-10	1	46	-19			
SAKATA	5.49	220.9	1	15	-6						
SENDAI	5.57	210.0	1	11	-11	2	5	-20			
YAMAGATA	5.80	213.7	1	15	-10	2	12	-19			
HUKUSIMA	6.18	210.6	1	19	-11	2	21	-19			
ONAHAMA	6.76	204.8							3 0		
SHIRAKAWA	6.83	209.6	1	27	-12	2	35	-21			
AIKAWA	6.96	224.6	1	32	-9						
MITO	7.42	205.6	1	34	-13	2	50	-21			
UTUNOMIYA	7.47	209.5	1	36	-12				1 49		
KAKIOKA	7.65	206.8	1	40	-11				1 57		

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MAEBASI	7.90	213.2	2	3	9	3	9	-14			
KUMAGAYA	8.00	210.8	1	47	-8	3	8	-17			
NAGANO	8.05	218.6	1	52	-4						
MATUSIRO	8.15	218.0	1	47K	-10	3	9	-20			
OIWAKE	8.18	215.6	1	48	-10						
TITIBU	8.27	211.8	2	9	10						
TOKYO C.M.O.	8.29	207.4				3	11	-21		3	48
YOKOHAMA	8.55	207.2				3	18	-20			
KOHU	8.74	213.2								2	52
HUNATU	8.81	211.7								3	12
NERA	8.96	205.0				3	28	-20			
AJIRO	9.09	208.9	1	57	-13	3	28	-23			
VLADIVOSTOK	9.17	274.1	2	11	0						
IIDA	9.17	216.0	2	11	0	3	36	-18			
OSIMA	9.25	206.8				3	31	-25			
NAGOYA	9.85	218.5	2	12	-8						
KYOTO	10.56	222.7	2	20	-10	3	58	-29			
ABUYAMA	10.76	222.7	2	23K	-10						
CHANGCHUN	13.90	279.4	3	13	-1	5	50	4			
PEKING	21.33	271.3	4	38	-3	8	28	1			
NANKING	23.05	249.8	4	57	-1	9	1	3			
PAOTOW	25.64	276.1	5	22	-1	9	46	4	5	39	
ULAN-BATOR	26.54	293.5	5	30	-1						
TIKSI	29.56	350.1	5	55A	-3						
LANCHOW	31.84	271.0	6	17A	-1	11	25	5	6	35	
BAGUIO CITY	33.51	224.7	6	34	1						
ESEN BULAK	33.94	292.5	6	37	1						
MANILA	34.74	222.3	6	42	-1						
KUNMING	38.45	255.8	7	15	1				7	31	
COLLEGE	42.73	35.6	7	49	0						
NHATRANG	43.30	235.3	7	51	-3				8	11	
SEMIPALATNSK	43.31	302.9	7	54	0						
LHASA	44.34	270.5	8	2	0						
SHILLONG	46.03	265.2	8	17	1						
KHEYS	47.17	347.1	8	23	-2						
ALMATA-2	47.64	294.4	8	29A	0						
CHATRA	48.73	269.9	8	57	20						
FRUNSE	49.65	295.1	8	44	0						
MOULD BAY	50.02	18.1	8	46K	-1						
SITKA	50.32	44.4	8	50	1						
SVERDLOVSK	52.22	316.3	9	4K	0						
TASHKENT	53.88	295.7	9	14	-2						
COPPERMINE	54.56	27.3	9	20A	-1						
NEW DELHI	55.01	278.2	9	21A	-3						
NORD	55.09	356.7	9	24	-1						
DUZHANBE	55.58	293.0	9	27	-1						
WARSAK DAM	56.06	286.9	9	30	-2						
RESOLUTE	56.10	16.0	9	31A	-1						
APATITY	58.10	335.0	9	45A	-1				15	28	
KEVO	58.56	338.8	9	49A	0						
SODANKYLA	60.25	336.8	10	0A	-1				10	44	PCP
VICTORIA	60.61	49.7	10	8	5						
TROMSOE	60.69	340.9	10	4	0				10	21	12 16 PP
QUETTA	61.43	285.7	10	7	-2	18	23	2			
KIRUNA	61.63	339.0	10	10A	0						12 19 PP
KAJAANI	62.13	333.6	10	13A	0						
PENTICTON	62.24	47.3	10	15A	1						
CHARTERS TS.	62.95	178.1	10	12	-7						10 52
VANNOVSKAYA	62.98	297.7	10	19	0						
EDMONTON	63.06	41.1	10	20A	0						
BANFF	63.31	43.9	10	21	0						
MOSCOW	63.75	322.9	10	24A	0						
SPOKANE	64.41	47.8	10	29	1						
UMEA	64.64	336.0	10	29A	-1						
NURMIJARVI	65.64	331.9	10	36A	0	19	39	26			
SHASTA	65.68	56.4	10	36A	-1						
HELSINKI	65.78	331.5	10	37	0						
BLUE MTS.	66.16	50.3	10	39A	-1				11	3	13 16 PP
SCORESBY SD.	66.25	355.0	10	41	1						
SKALSTUGAN	67.06	338.9	10	45A	0						13 11 PP
BUTTE	68.03	47.1	10	52	1				11	15	
LICK	68.18	58.9	10	52A	0						
UPPSALA	68.47	334.2	10	54A	0				11	11	
TIFLIS	68.89	307.7	10	58	1						
BOZEMAN	69.07	46.6	10	57	-1						
BAKURIANI	69.62	308.4	11	2A	1						
EUREKA	70.30	54.2	11	6	1						
BERGEN	71.53	340.0	11	14	1						

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1963										PAGE 465	
SHIRAZ	71.69	293.6	11 13	-1	20 27	3				14 1	PP
GOTEBORG	71.96	335.4	11 15A	0							
KARLSKRONA	72.06	332.7	11 16A	0							
PASADENA	72.38	59.6	11 17	-1				11 35			
BOULDER CITY	73.26	56.3	11 24	1				11 47	11 56	*SP	
UINTA BASIN	73.44	50.1	11 24A	0				11 42	13 59	PP	
COPENHAGEN	73.48	333.9	11 25A	1							
LWOW	73.78	324.4	11 27	1							
LARAMIE	74.95	47.1	11 33	0							
RACIBORZ	75.97	327.6	11 39	1							
GOLDEN	76.20	48.2	11 40	0							
TONTO FOREST	76.55	55.6	11 43	1				12 1	11 52	PCP	
COLLMBERG	76.92	331.1	11 44	0					14 25		
PRAGUE	77.41	329.6	11 48	2							
PRUHONICE	77.44	329.5	11 47A	0					14 26		
JENA	77.72	331.7	11 49	1							
BRATISLAVA	77.93	327.0	11 51	2							
ISTANBUL UN.	78.00	315.7	11 50	0							
VIENNA-H.	78.15	327.5	11 52	1							
MUNSTER	78.15	334.4	11 52	1							
TUCSON	78.22	56.8	11 51	0				12 8			
DURHAM	78.24	340.7			21 26	-11			21 2		
KASPERSCHE H.	78.50	329.5	11 53A	1							
SCHEFFERVILLE	78.84	17.8	11 54A	0							
ALBUQUERQUE	78.94	52.3	11 55	0							
BENSBERG	79.17	334.1	11 56	0					12 22		
STUTTGART	80.34	331.8	12 3A	1							
TOOLANGI	80.35	179.1	11 59	-3				12 21			
LJUBLJANA	80.68	327.2	12 4A	0					15 13		
KEW	80.92	338.6	12 6	1							
STRASBOURG	81.02	332.5	12 7	1					13 50		
TRIESTE	81.31	327.4	12 8	0							
LAWRENCE	82.02	42.8	12 11	0							
PARIS	82.51	335.7	12 15	1							
BESANCON	82.78	332.9	12 15	0							
FOLINIERE	83.41	337.5	12 19	1							
WICHITA MTS.	83.52	47.6	12 19	0							
GARCHY	83.69	334.7	12 20	0							
FLORENCE X.	83.85	327.9	12 7	-13							
ROSELEND	83.92	331.7	12 21	0							
TULSA	84.10	45.1	12 22A	0				12 41			
FLORISSANT	84.51	39.9	12 24	0							
ST. LOUIS 1	84.71	39.9	12 25	0							
FAYETTEVILLE	84.78	44.0	12 23A	-2							
SHAWINIGAN	84.79	24.8	12 24	-1							
OTTAWA	84.87	27.1	12 25A	-1							
LONDON ONT.	84.95	31.7	12 26A	0							
ISOLA	85.08	330.7	12 28	1							
BREBEUF	85.46	25.8	12 29A	1							
PENNSYLVANIA	88.13	30.7	12 42	1							
MORGANTOWN	88.34	32.7	12 44K	2							
CUMBERLAND	89.34	38.6	12 47	0				13 5			
LA PAZ	141.64	56.3	19 19	-2							

MAY 25 16.H 7.M 56.5 EPICENTRE -56.79 -24.90 DEPTH= 0.KM

A= 0.49908 B=-0.23167 C=-0.83501 D=-0.4210 E=-0.9070
G=-0.7574 H= 0.3516 K=-0.5502 HT= -7.8

SE= 2.23

	DELTA DEG.	AZ. DEG.	P		O-C S	S			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
ARGENTINE I.	20.53	229.6	4	42	0							
N-LAZARVSKYA	20.94	146.3	4	47K	0	8	36	0			8	47
SOUTH POLE	33.38	180.0	6	40	-2							
HERMANUS	37.22	72.1	7	19	4	13	5	3			12	3
MAWSON	38.79	142.3	7	28	0	13	19	-7				
KIMBERLEY	44.59	72.5	8	13	-2							
SCOTT BASE	45.42	183.4	8	24	2							
MIRNY	48.53	151.8	8	48K	1	15	53	5			10	57
CHANGALANE	50.49	77.7	9	5	3	16	20	5			11	10
CAPE HALLETT	50.76	185.9	9	4	0							
LA PAZ	51.66	303.1	9	10	-1	16	30	-1				
WILKES	52.71	159.1	9	21	3	16	52	6				
AREQUIPA	53.28	299.6	9	21	-2							
BULAWAYO	53.61	69.8	9	22	-3							

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BROKEN HILL	58.33	66.0	9	57	-2					
HUANCAYO	58.93	298.3	10	4	1					
CHILEKA	60.64	72.9	10	12	-3					
LWIRO	69.02	59.6	11	9K	0	20	18	4		24 59 55
M,BOUR	71.21	8.1	11	54	31	20	42	2		
BOGOTA	73.03	308.0	11	33	0	21	13	13		
FUQUENE	73.65	308.7	11	37	0					
TRINIDAD	73.65	322.5	11	39	2	21	14	7		
CARACAS	75.48	317.1	11	48K	0	21	24	-4		
FORT FRANCE	77.39	324.1	12	3	5	21	56	7		
ROXBURGH	77.40	190.2	12	4	6	21	54	5		
BALBOA HTS.	79.32	304.9	12	9	0					
WELLINGTON	80.89	194.9	12	14	-3	22	26	0		27 47 55
MOORLANDS	80.91	174.1	12	17	0	22	16	-10		
SAN JUAN	82.45	320.9	12	21	-4	22	26	-16		
CHATEAU	82.82	195.9	12	26	-1					
KARAPIRO	84.06	196.1	12	33	-1					
PERTH	85.55	147.3	13	10	29	23	20	8		18 34 PPP
MUNDARING	85.64	147.6	12	41	-1	23	17	4		
TOOLANGI	85.65	172.4	12	40	-2				12 50	23 24
ADELAIDE	87.54	166.6	12	50K	-1	23	28	-4		43 44
CANBERRA	88.10	175.0	12	54	0	23	38	1		
BENI ABBES	88.69	19.6	12	58	2					
RIVERVIEW	89.67	176.7	12	59	-2	23	56	5		23 59 SCS
AVERROES	90.96	14.6	12	34	-33					17 21
PONTA DELGDA	94.16	359.4	13	53	31					
BERMUDA	95.00	327.1	13	28	2	24	40	39		
BRISBANE	96.13	177.9	13	31	0					
TOLEDO	97.91	16.1	13	44	5	24	16	0		17 44 PP
TORTOSA	99.58	19.3				24	15	-10		
MESSINA	100.62	31.3				24	30	0		16 29
ATHENS	102.95	37.5	14	7	6					24 40
CHARTERS TS.	103.06	171.5	13	57	-5					32 48
ROME	103.25	27.8				24	22	-20		18 22 PP
KSARA	103.83	48.4								27 6
AQUILA	103.91	28.3								18 22 PP
CUMBERLAND	105.31	312.5	14	11	777	24	52	0		18 30 PP
PAVIA	105.54	24.3								18 55 PP
PALISADES	105.82	323.6	18	22	777	24	48	-6		
TRIESTE	107.08	27.3								32 33 55
SHIRAZ	107.86	63.2	18	49A	777					
MADRAS	109.04	95.4								23 1
DOURBES	109.29	19.6								19 27 PP
BREBEUF	109.77	325.8								34 34 55
TULSA	109.96	305.3	14	38	777					19 6 PP
LONDON ONT.	110.11	319.5	19	9	36					
WICHITA MTS.	110.25	302.6	14	43	-231	25	19	6		18 58 PP
KASPERSKE H.	110.28	25.8	19	6	32					19 39 PP
SHAWINIGAN	110.46	326.9	19	17	43					
PRUHONICE	111.31	26.1								20 34
DE BILT	111.32	19.4	19	4	28					28 34
JENA	111.50	23.9								20 26
SIMFEROPOL	112.76	41.3								19 47 PP
DURHAM	112.81	14.4								26 33
GORIS	113.08	52.8								19 22 PP
HONIARA	113.89	185.2				27	20	112		19 28 PP
ALBUQUERQUE	114.19	297.0	18	32	-9					
TUCSON	114.23	292.1	18	39	-2					
TIFLIS	114.25	50.4								19 44 PP
WARSAW	115.02	29.2								32 48
QUETTA	115.66	73.8	18	45	1					
TONTO FOREST	116.07	293.1	18	45	0	25	41	5		20 10 PP
RABAU	119.16	176.7	19	16	25					28 4
BOULDER CITY	119.20	291.7	18	52	1					20 19 PP
NEW DELHI	119.92	82.8								20 21
UINTA BASIN	119.94	298.5	18	52	0	25	56	6		20 17 PP
WOODY	121.07	288.6	18	55	0					
WARSAK DAM	121.07	74.5	18	56	1					
UPPSALA	121.07	23.5	18	53	-2					23 22 PPP
PRIEST	122.34	287.6	18	58A	1					
EUREKA	122.46	293.5	18	57	0					28 55 PKKP
MOSCOW	123.02	36.8								20 42 PP
NURMI JARVI	123.30	26.8	19	1	2	25	54	-7		20 34 PP
KHOROG	123.71	71.9								20 44 PP
LJCK	123.76	287.8	19	1K	1					
PULKOVO	124.15	30.1	19	9	8					
BERKELEY	124.49	287.8	19	2K	1					26 10 PP
UMEA	125.18	22.6	19	7	4					19 28

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CALISTOGA	125.23	288.2	19	9K	6	
TASHKENT	125.41	67.2	19	U	-3	27 45 SKKS
SHILLONG	125.61	97.3	19	4	1	
BUTTE	125.68	301.0	19	7	3	
KAJAANI	127.10	26.0	19	4	-2	
BLUE MTS.	127.11	297.0	19	6K	0	21 10 PP
HUNGRY HORSE	128.06	302.1	19	8	0	
LHASA	128.34	93.5	19	15	6	
KIRUNA	128.73	20.2	19	8	-1	22 31 PKS
FRUNSE	129.24	69.5	19	13	3	21 26 PP
SODANKYLA	129.60	23.2	19	11	0	21 50 PP
BANFF	130.74	303.8	19	14	1	
HONOLULU	130.75	243.8				21 31 PP
KIPAPA	130.81	244.0				22 44 SKP
KUNMING	131.08	107.8	19	33	19	22 37 PP
EDMONTON	131.28	307.2	19	13A	-1	
APATITY	131.30	25.8	19	28	14	22 38 PP
PENTICTON	131.38	299.6	19	11	-3	
SEATTLE	131.54	296.4				21 26 PP
KEVO	131.66	21.5	19	18	3	21 44 PP
BAGUIO CITY	132.04	132.9	19	24	8	
SVERDLOVSK	132.37	47.9				22 46 SKP
HONG KONG	134.43	121.8				22 33
SEMIPALATNSK	137.19	65.4	19	40	15	
YELLOWKNIFE	137.58	316.5	19	22	-4	
RESOLUTE	139.02	337.6	19	26	-3	
COPPERMINE	140.64	323.2	19	29	-3	
ESEN BULAK	143.10	80.6	19	38	2	
KHEYS	144.35	16.2	19	39K	1	20 53
NANKING	144.84	119.2	19	41	2	
ZO-SE	145.17	123.1	19	42	3	
MOULD BAY	145.17	335.3	19	37A	-2	
PAOTOW	146.83	99.7	19	44	2	
PEKING	149.72	106.9	19	54	7	
ULAN-BATOR	149.83	86.3	19	38	-9	
IRKUTSK	150.76	77.0	19	55	7	
COLLEGE	151.98	310.3	19	50	0	27 20 PP
MATUSIRO	156.78	143.6	20	21	24	43 58 SS
TUKUBASAN	157.07	147.5	20	4K	7	24 24 PP
VLADIVOSTOK	159.89	123.0	20	6	5	24 33 PP
TIKSI	161.52	26.2	19	53	-9	23 28 PKS
YAKUTSK	166.11	57.4	20	4	-3	

MAY 25 19.H 57.M 18.S EPICENTRE 31.24 141.70 DEPTH= 39.KM

A=-0.67219 B= 0.53084 C= 0.51611 D= 0.6198 E= 0.7848
G=-0.4050 H= 0.3199 K=-0.8565 HT= 1.4

DEPTH OF FOCUS= 0.001R

SE= 1.57

	DELTA DEG.	AZ. DEG.	P		O-C S	S O-C			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
MATUSIRO	6.02	332.2	1	30A	-1	2	39	-2				
ABUYAMA	6.29	306.7	1	34K	2							
MIZUSAWA	7.88	356.8				3	21	-2				
Y.-SAKHLINSK	15.78	2.6									9	36
ZO-SE	17.57	274.9	4	3	0							
CHANGCHUN	18.04	318.7	4	7	-2							
PEKING	22.47	300.0	4	56	-1	9	0	4				
BAGUIO CITY	24.25	237.4	5	12	-2							
MANILA	25.08	233.5				10	4	24				
HONG KONG	26.09	256.8				10	7	9			11	33
PAOTOW	27.17	298.9	5	41	0							
ULAN-BATOR	31.24	312.3	6	18	0							
LANCHOW	31.75	289.0	6	20	-2							
IRKUTSK	34.37	318.6	6	45	0							
ESEN BULAK	37.97	306.7	7	18	3							
TIKSI	41.04	353.8	7	40	-1							
SEMIPALATNSK	48.81	311.7	8	42	-1							
CHARTERS TS.	51.22	174.5	9	1	0							
ALMATA-2	51.43	302.6	9	4A	1							
FRUNSE	53.49	302.5	9	19	1							
COLLEGE	53.92	29.9	9	26	4							
NEW DELHI	55.26	285.0	9	29K	-2							
ANDIJAN	55.58	300.5	9	34	0							

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ESEN BULAK	39.95	284.8	7 35K	3	13 45	10					
SIAN	40.77	260.8	7 40	1						9 19	PP
RESOLUTE	41.44	22.8	7 44K	-1							
YELLOWKNIFE	41.69	44.1	7 47K	0							
LANCHOW	42.39	267.2	7 52K	0	14 10	-1				9 33	PP
VICTORIA	45.54	65.0	8 17	-1							
KIPAPA	45.97	120.0	8 22	1							
SEMIPALATNSK	46.02	298.9	8 21K	-1						10 10	PP
HONOLULU	46.03	120.1	8 24	2	15 12	8					
CHENG TU	46.21	261.8	8 22	-1	15 2	-4				10 13	PP
SEATTLE	46.68	65.2	8 34	7	15 30	17					
PENTICTON	46.99	61.9	8 29K	0							
EDMONTON	47.47	54.2	8 33K	0							
BANFF	47.84	57.7	8 36	0							
HAWAII V.OB.	49.02	118.4	8 46	1							
BAGUIO CITY	49.04	233.8	8 43	-2	15 49	3					
MANILA	50.35	232.2	8 54	-1							
HUNGRY HORSE	50.43	59.7	8 54	-2	16 21	16				18 23	SCS
SVERDLOVSK	50.76	315.6	8 58A	0							
KEVO	50.85	340.8	9 0	1	16 16	5				11 0	PP
BLUE MTS.	51.12	65.0	9 1K	0	16 22	7				10 22	PCP
KUNMING	51.17	258.2	9 1	-1	16 13	-3					
APATITY	51.34	336.7	9 1K	-2						11 1	PP
TROMSOE	52.37	343.9	9 10	0							
CALISTOGA	52.61	74.1	9 12K	0							
SODANKYLA	52.95	339.4	9 13	-2							
BERKELEY	53.33	74.6	9 17K	-1	16 54	9				15 32	
KIRUNA	53.72	342.2	9 18K	-3	16 57	6					
BOZEMAN	53.75	60.4	9 20	-1	16 57	6					
FRUNSE	53.95	294.9	9 22K	0						17 3	
LICK	54.05	74.6	9 23A	0							
LHASA	54.40	271.9	9 25	-1						12 49	PPP
SCORESBY SD.	54.66	0.8	9 33	6	17 14	11					
PRIEST	55.46	74.9	9 34K	1							
KAJAANI	55.55	336.8	9 33	-1						11 41	PP
EUREKA	55.60	68.9	9 34	0							
SHILLONG	57.01	268.0	9 42A	-2							
UMEA	57.35	340.1	9 45K	-2	17 44	5				11 54	PP
TASHKENT	57.79	297.1	9 49K	-1						17 53	PS
PASADENA	58.31	74.7	9 52	-1	17 58	7					
UINTA BASIN	58.36	63.9	9 53	-1	17 58	6				39 28	PKPPKP
CHATRA	58.75	272.8	9 55A	-2							
BOULDER CITY	58.78	70.9	9 27	-30							
SKALSTUGAN	58.99	343.8	9 57	-1						12 12	PP
NURMIJARVI	59.37	336.2	10 0A	-1	18 12	7				12 14	PP
KHOROG	59.46	292.6	10 1K	0							
RABAU	59.50	189.1	10 2	0							
HELSINKI	59.60	335.8	10 0	-2							
LARAMIE	59.65	60.5	10 3	0							
MOSCOW	59.91	326.5	10 4K	-1	18 18	6				12 11	PP
GOLDEN	60.96	61.6	10 12	0	18 36	10					
DEHRA DUN	61.27	282.5			18 32	2					
UPPSALA	61.49	339.5	10 13K	-2	18 31	-2				12 34	PP
TONTO FOREST	61.97	69.7	10 19	0	18 48	9	10 28			12 26	PP
LAHORE	62.41	286.1	10 20	-1							
BERGEN	63.06	346.2	10 26	0							
NEW DELHI	63.08	281.9	10 23A	-3	18 53	1					
KONGSBERG	63.13	343.7	10 26A	0	19 1	8				12 50	PP
TUCSON	63.76	70.8	10 30	0							
SCHEFFERVILLE	63.87	28.0	10 29	-2							
ALBUQUERQUE	64.02	65.8	10 32	0	19 14	10					
HONIARA	64.34	180.1	10 34	0	19 10	2					
GOTEBORG	64.58	341.7	10 35	-1							
KARLSKRONA	65.32	339.0	10 38	-3							
COPENHAGEN	66.40	340.6	10 48	1	19 41	8					
ABERDEEN	67.10	349.5								39 50	
QUETTA	67.48	290.6	10 51K	-3	19 49	3					
WARSAW	67.72	334.1	10 56	0	19 57	8				20 57	SKS
WICHITA MTS.	68.23	60.4	10 58	-1	20 0	5				24 32	SS
TULSA	68.66	57.7	11 0K	-2	20 4	4					
TIFLIS	68.91	313.5	11 4	1	20 14	11				24 24	SS
ST. LOUIS 1	69.06	52.1	11 3	-1	20 8	3					
LWOW	69.12	331.2	11 4K	0	20 13	7					
LONDON ONT.	69.26	43.4	11 4	-1							
FAYETTEVILLE	69.29	56.4	11 5	0	20 7	-1					
OTTAWA	69.30	38.5	11 3	-2							
SHAWINIGAN	69.33	36.0	11 4	-2							
DURHAM	69.40	348.7			20 17	8					

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BREBEUF	69.95	37.1	11 8	-1	20 6	-10				
KRAKOW	69.99	333.9	11 11	1	20 25	9			13 51	PP
GORIS	70.10	311.1	11 12A	2					11 33	PCP
WITTEVEEN	70.16	343.2	11 12	1						
SIMFEROPOL	70.27	322.3	11 10K	-1	20 25	6			13 42	PP
RACIBORZ	70.39	335.0	11 14	2	20 30	9			11 35	PCP
COLLMBERG	70.42	338.7	11 12A	0	20 37	16				
HALLE	70.45	339.5	11 13	1	20 26	5				
MUNSTER	70.81	342.3	11 16	1						
TEHERAN	70.91	305.3	11 15	0	20 37	10				
JENA	71.06	339.5	11 15	-1	20 36	7	12 41		13 50	PP
DE BILT	71.09	343.9	11 18	2	20 36	7			13 56	PP
PRAGUE	71.28	337.4	11 18	1	20 40	9			15 43	PPP
PRUHONICE	71.33	337.3	11 19	1	20 40	8				
BENSBERG	71.86	342.3	11 21A	0					14 3	PP
KASPERSKE H.	72.35	337.6	11 24	0					15 52	PP
PENNSYLVANIA	72.46	42.4	11 23	-1						
UCCLE	72.49	344.1	11 27	2	20 49	4				
KEW	72.50	347.3	11 30	5	20 53	8			21 32	
VIENNA-H.	72.54	335.5	11 26	1						
MORGANTOWN	72.64	44.5	11 25A	-1						
AFIAMALU	72.81	151.3	11 27	0	20 52	3				
DOURBES	73.12	343.7	11 31	3					15 13	PP
BOMBAY	73.13	278.8							20 59	
STUTTART	73.58	340.3	11 32	1	21 6	9			16 6	PPP
CUMBERLAND	73.67	50.7	11 30	-2	21 3	5			25 54	SS
PALISADES	73.77	39.6	11 31K	-1	21 1	2				
HALIFAX	73.95	30.8	11 32	-1						
STRASBOURG	74.05	341.2	11 34K	0	21 12	9			14 19	PP
EBINGEN	74.20	340.3	11 36	1						
WASHINGTON	74.41	42.9	11 36	0						
WELSCHBRUCH	74.46	342.1	11 46	10						
BLACKSBURG	74.51	46.1	11 35	-2	21 14	6				
FELDBERG	74.67	340.9	11 39	2						
BELGRADE	74.68	331.4	11 37A	0	21 25	15			11 49	PCP
PARIS	74.71	344.8	11 39	1						
ZAGREB	74.91	334.8	11 21	-18						
LJUBLJANA	75.04	335.9	11 41	1						
FOLINIÈRE	75.16	346.8	11 41	1						
TANGERANG	75.35	235.6	11 38A	-3						
SHIRAZ	75.36	300.9	11 40	-1						
ISTANBUL UN.	75.49	323.9	11 43	1						
KOUMAC	75.49	175.9	11 43	1						
TRIESTE	75.60	336.3	11 41	-2	21 24	4				
BESANCON	75.65	342.1	11 43	0						
SOFIA	75.80	328.6	11 43	-1						
CHARTERS TS.	75.85	193.3	11 43	-1	21 27	4				
GARCHY	76.11	344.1	11 45A	-1					12 48	
PADOVA	76.25	337.5	11 54	8	21 23	-4			26 23	SS
COLUMBIA	77.00	48.3	11 29	-22						
PAVIA	77.04	339.3	11 55	4	21 50	14			22 21	PS
ROSELEND	77.04	341.2	11 52	1					12 32	
NOUMEA	77.33	173.9	11 53	0						
CLERMONT-FD.	77.57	343.7	11 56	2						
ISOLA	78.42	340.5	11 59	0					12 26	
AQUILA	78.80	335.4	12 3	2	22 2	8			16 52	PPP
KSARA	79.31	315.5	12 6	3						
ROME	79.44	335.9	12 4K	0	22 8	7			16 56	PPP
ATHENS	80.00	326.3	12 7	0						
BAGNERES	80.66	345.2	12 14	3					15 6	
JERUSALEM	81.36	315.0	12 14	0						
MESSINA	82.17	332.5	12 16	-2	22 25	-4			15 15	PP
BRISBANE	82.44	186.5	12 21	1					15 18	
TORTOSA	82.81	344.5			22 37	1				
TOLEDO	84.36	347.7	12 30A	0	22 59	8	12 37		15 52	PP
BERMUDA	84.77	36.7	12 36	4	22 58	3				
GRANADA	86.97	347.0	13 8K	26	23 30	13			41 6	
RIVERVIEW	88.95	187.4	12 53	1	23 44	9			29 25	SS
AVERROES	91.25	349.5							16 44	PP
TOOLANGI	93.19	191.5	13 16	4	24 24	11				
WELLINGTON	96.88	168.9							31 30	SS
LWIRO	114.20	304.5							19 34	PP
BROKEN HILL	124.88	297.9	18 58	2						
LA PAZ	126.76	63.1	19 1	1						
BULAWAYO	129.57	293.9	19 6	1						
SCOTT BASE	132.81	178.1	19 10	-1						
MAWSON	141.60	217.8	19 26	-2						
BYRD STATION	142.16	163.7	19 22	-6						

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BOULDER CITY	58.67	71.1	9	56	1						10 46 PCP
CHATRA	58.84	272.9	9	44	-12						
SKALSTUGAN	58.96	343.9	9	56	-1						12 6 PP
NURMIJARVI	59.35	336.2	9	59A	-1	18	6	3			12 14 PP
KHOROG	59.52	292.7	10	1K	0	18	4	-1			13 34 PPP
LARAMIE	59.53	60.7	10	1	0						
RABAU	59.58	189.3	10	1	0						27 9
HELSINKI	59.58	335.9	10	1	0						
MOSCOW	59.91	326.6	10	3K	-1						12 10 PP
GOLDEN	60.85	61.7	10	11	1	18	32	10			
UPPSALA	61.46	339.6	10	13K	-1	18	35	5			12 27 PP
TONTO FOREST	61.86	69.8	10	18K	1	18	48	13	10	29	12 39 PP
BERGEN	63.02	346.3	10	24	-1						
KONGSBERG	63.10	343.7	10	26A	1						12 40 PP
NEW DELHI	63.16	282.0	10	24A	-2	18	54	2			
TUCSON	63.65	71.0	10	29	0						12 48 PP
SCHEFFERVILLE	63.77	28.1	10	28K	-2						
ALBUQUERQUE	63.91	65.9	10	31	1	19	13	12			11 6 PCP
SOCORRO	64.33	66.9	10	34	1						
HONTARA	64.40	180.3	10	34	0						
GOTEBORG	64.55	341.7	10	34	-1						12 50 PP
KARLSKRONA	65.30	339.1	10	38K	-1						
LAWRENCE	66.36	55.4	10	45	-1						
COPENHAGEN	66.37	340.7	10	46	0	19	42	11			
LUBBOCK	67.36	63.6	10	53	0	19	52	9			
QUETTA	67.55	290.7	10	52K	-2	19	47	2			
WARSAW	67.70	334.2	10	55	0	19	54	7			20 5 PS
WICHITA MTS.	68.11	60.5	10	56	-1	19	58	6			13 28 PP
TULSA	68.54	57.8	11	0K	0	20	2	5			
TIFLIS	68.94	313.6	11	4	2						20 12
ST. LOUIS 1	68.95	52.2	11	2	0	20	11	9			
LWOW	69.11	331.3	11	3K	0						20 12
LONDON ONT.	69.15	43.5	11	2K	-2						
FAYETTEVILLE	69.17	56.6	11	2	-2	20	11	6			
OTTAWA	69.19	38.6	11	2K	-2						
SHAWINIGAN	69.22	36.1	11	3	-1						
SCARBOROUGH	69.33	41.8	11	3	-2						
DURHAM	69.36	348.8	11	5K	0						
BREBEUF	69.85	37.2	11	6K	-2	20	16	4			
KRAKOW	69.98	334.0	11	10	1	20	22	8			15 29 PPP
CHORZOW	69.99	334.7	11	11	2						12 5
WITTEVEEN	70.12	343.3	11	10	0						
GORIS	70.14	311.2	11	10K	0						15 32 PPP
SIMFEROPOL	70.28	322.4	11	10K	-1						13 40 PP
RACIBORZ	70.38	335.1	11	13	2	20	29	10			11 28 PCP
COLLMBERG	70.40	338.8	11	11	0	20	26	7			
HALLE	70.42	339.6	11	12	1	20	25	6			
MUNSTER	70.78	342.4	11	16	2						
TEHERAN	70.96	305.4	11	14	-1	20	40	15			15 37 *PPP
JENA	71.04	339.6	11	14	-1	20	31	5	11	36	13 48 PP
DE BILT	71.06	344.0	11	17	2	20	39	12	11	58	15 42
PRAGUE	71.25	337.5	11	17	1	20	38	9			13 45 PP
PRUHONICE	71.31	337.4	11	17	0	20	37	7			
BENSBERG	71.83	342.4	11	21A	1						14 1 PP
KASPERSKA H.	72.33	337.7	11	23	0						11 48
PENNSYLVANIA	72.35	42.5	11	22	-1						
UCCLE	72.45	344.2	11	24	1						
KEW	72.45	347.4	11	24	0	20	55	12			
VIENNA-H.	72.52	335.6	11	26	2						
MORGANTOWN	72.53	44.6	11	24A	0						
AFTAMALU	72.81	151.5	11	26A	0	20	34	-13			
DOURBES	73.09	343.8	11	28	1	21	38	48			
KARLSRUHE	73.48	341.0	11	32	2						
STUTTGART	73.55	340.4	11	31	1						
CUMBERLAND	73.56	50.8	11	25	-5	20	58	3			25 58 SS
PALISADES	73.66	39.7	11	31K	0	21	3	7			
STRASBOURG	74.02	341.3	11	33K	0	21	10	10			13 18 PP
EBINGEN	74.18	340.4	11	35	1						
WASHINGTON	74.30	43.0	11	32	-2						
BLACKSBURG	74.40	46.2	11	34	-1	21	10	5			
RAVENSBURG	74.43	339.9	11	36	1						
WELSCHBRUCH	74.43	342.2	11	35	0						
BELGRADE	74.67	331.5	11	38A	2						12 22
PARIS	74.67	344.9	11	38	2						14 25 PP
LJUBLJANA	75.02	336.0	11	40	2						12 0
FOLINIÈRE	75.12	346.9	11	39	0						
SHIRAZ	75.41	301.0	11	38	-3	21	24	8			12 40
KOUMAC	75.55	176.0	11	40A	-1						

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HUNGRY HORSE	58.54	51.3	9 40	-3		
BLUE MTS.	58.87	56.2	9 46	0	12	1
KIRUNA	59.59	341.0	9 49A	-1		
NEW DELHI	60.11	280.8	9 53A	-1		
KAJAANI	60.75	335.6	9 57	-1		
EUREKA	63.03	60.3	10 14	0		
VIBORG	63.04	332.8	10 12	-2		
MOSCOW	63.72	325.2	10 16	-2		
NURMIJARVI	64.45	334.4	10 19A	-4	10	57 PCP
HELSINKI	64.64	334.1	10 23	-1	10	58 PCP
SKALSTUGAN	64.98	341.7	10 25	-1		
QUETTA	65.77	288.7	10 31A	0		
UINTA BASIN	66.16	55.9	10 34	0	11	5
UPPSALA	66.96	337.2	10 37A	-2		
CHARTERS TS.	67.49	186.6	10 42	0	11	5
KONGSBERG	69.07	341.0	10 53A	1	11	9
BERGEN	69.29	343.4	10 53	0		
TOMTO FOREST	69.30	61.7	10 54	1	11	30
GOTEBORG	70.28	338.9	10 58A	-1		
KIROVOBAD	70.69	309.3	11 2A	0		
KARLSKRONA	70.70	336.2	11 3A	1		
TIFLIS	70.71	311.0	11 3	1		
TUCSON	70.98	63.0	10 55	-8	11	38
BAKURIANI	71.35	311.8	11 7A	1		
TEHERAN	71.44	302.7	11 8	2		
GORIS	71.52	308.5	11 7	0		
ALBUQUERQUE	71.66	58.2	11 8	1		
COPENHAGEN	71.96	337.6	11 9	0		
UZHGOROD	75.07	328.5	11 27	0		
NIEDZIKA	75.09	330.1	11 28	1		
SHIRAZ	75.13	297.6	11 28A	0	12	3
RACIBORZ	75.22	331.7	11 29	1		
COLLMBERG	75.72	335.3	11 30	-1		
HALLE	75.84	336.0	11 31	-1		
WICHITA MTS.	76.24	53.5	11 34	0		
PRAGUE	76.40	333.8	11 34	-1		
PRUHONICE	76.44	333.7	11 36	1		
JENA	76.45	335.9	11 36	1	11	57
MUNSTER	76.54	338.7	11 37	2		
VIENNA-H.	77.40	331.8	11 42	2		
DOURBES	79.00	339.8	11 53	4		
STUTTGART	79.04	336.4	11 50	1		
STRASBOURG	79.62	337.2	11 54K	2		
WELSCHBRUCH	80.14	338.0	11 55	0		
PARIS	80.69	340.6	12 1	3		
KSARA	81.28	311.3	12 2	1		
BESANCON	81.31	337.8	12 2	1		
FOLINIERE	81.37	342.5	12 2	0		
GARCHY	82.00	339.7	12 6A	1		
CUMBERLAND	82.22	44.4	12 6	0		
ROSELEND	82.59	336.8	12 9	1		
JERUSALEM	83.23	310.5	12 14A	3		
CLERMONT-FD.	83.40	339.1	12 24	12		
ISOLA	83.87	335.9	12 16	2		
MONACO	84.18	335.5	12 18	2		

MAY 28 21.H 58.M 22.S EPICENTRE 35.54 141.02 DEPTH= 55.KM

A=-0.63397 B= 0.51310 C= 0.57862 D= 0.6291 E= 0.7773
G=-0.4498 H= 0.3640 K=-0.8156 HT= -0.1

DEPTH OF FOCUS= 0.003R

SE= 2.76

	DELTA DEG.	AZ. DEG.	P		O-C S	S O-C			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
TYOSI	0.23	323.8	0	7A	-4	0	12	-6				
MITO	0.95	332.4	0	18K	0	0	33	1				
KAKIOKA	0.97	315.8	0	18	0	0	32	0				
HONGO	1.03	280.1	0	18	-1							
TOKYO C.M.O.	1.04	278.3	0	18	-1	0	31	-3				
YOKOHAMA	1.12	265.0	0	19	-1	0	31	-4				
MERA	1.15	238.0	0	19A	-2							
UTUNOMIYA	1.37	317.8	0	22	-2	0	38	-4				
ONAHAMA	1.41	356.3	0	25K	1	0	42	0				
KUMAGAYA	1.46	295.2	0	25A	0	0	47	3				

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OSIMA	1.54	240.8	0 24A	-2	0 40	-6	
TITIBU	1.63	286.3	0 29	2	0 54	6	
AJIRO	1.64	253.3	0 25A	-2	0 40	-8	
SHIRAKAWA	1.71	338.1	0 28	0	0 45	-4	
MISIMA	1.74	256.8	0 28A	-1	0 43	-7	
MAEBASI	1.80	299.2	0 29	-1	0 55	3	
HUNATU	1.83	269.5	0 29	-1	0 50	-2	
KOHU	2.01	274.5	0 32	0	1 3	6	
OIWAKE	2.15	292.3	0 34	-1	1 7	7	
SHIZUOKA	2.21	256.0	0 35	0	0 59	-3	
HUKUSIMA	2.25	348.9	0 38	2	1 8	5	
OMAESAKI	2.48	248.6	0 39	0			
MATUSIRO	2.48	294.6	0 38A	-1	1 10	1	
NAGANO	2.54	297.2	0 40	0			
MATUMOTO	2.57	287.0	0 41	1	1 23	12	
IIDA	2.60	270.6	0 40	-1	1 18	6	
HATIDYOZIMA	2.63	203.0	0 43	2			
SENDAI	2.73	358.1	0 43	0	1 12	-3	
YAMAGATA	2.76	349.1	0 43	0	1 29	13	
HAMANATU	2.82	254.2	0 45	1	1 9	-8	
NIIGATA	2.86	327.0	0 53	9			
ISINOMAKI	2.90	4.7	0 45	0	1 18	-1	
TOYAMA	3.30	291.7	0 52	1	1 35	6	
NAGOYA	3.33	264.9	0 52	1	1 31	1	
AIKAWA	3.33	319.0	0 52	1			
GIHU	3.47	269.0	0 52	-1	1 7	-26	
SAKATA	3.49	344.6	0 55	2			
MIZUSAWA	3.59	1.4	0 57	2	1 37	1	
KANAZAWA	3.67	286.9	0 58	2			
KAMEYAMA	3.78	260.9	1 9	12	1 53	12	
WAZIMA	3.79	300.2	0 58	0			
HIKONE	3.90	267.5	1 0	1	2 0	16	
HUKUI	3.92	278.9	1 9	10			
TSURUGA	4.03	273.0	1 0	-1			
MORIOKA	4.16	1.6	1 3	0	1 50	-1	
AKITA	4.24	350.4	1 20	16	2 12	19	
NARA	4.34	260.1	1 4	-1			
KYOTO	4.35	264.7			2 13	17	1 27
ABUYAMA	4.51	263.1	1 6A	-2			
OSAKA	4.58	260.5	1 1	-8	1 54	-7	
KOBE	4.86	261.6			2 11	3	
TOYOOKA	5.05	271.7			2 39	26	1 38
SUMOTO	5.15	258.4	1 23	6	2 38	22	
AOMORI	5.28	358.1	1 38	20			
TAKAMATU	5.85	260.0	1 43	17	3 8	35	
HAKODATE	6.27	358.3	1 31	-1	3 5	22	
HIROO	6.97	14.2	1 39	-3			
OBIHIRO	7.57	12.3	1 59	9			
KUSIRO	7.88	18.4	1 51	-4	3 13	-10	
OOITA	8.10	256.2					4 3
NEMURO	8.55	23.0	1 59	-5	3 29	-11	
HUKUOKA	8.99	260.5					4 32
Y.-SAKHLINSK	11.54	5.8	2 40	-5			
YAKUTSK	27.45	348.4	5 41A	-2			
TIKSI	36.72	353.6	7 3	-1			
SHILLONG	43.09	270.7	7 44	-12			
ALMATA-2	48.73	299.4	8 41	0			
COLLEGE	50.53	31.6	8 56	1			
NEW DELHI	53.71	281.7	9 16	-3			
CHARTERS TS.	55.54	174.0	9 30	-2			
SVERDLOVSK	56.07	319.2	9 34K	-2			
MOULD BAY	58.06	16.2	9 50A	0			
QUETTA	61.10	288.0	10 9A	-2			
APATITY	63.92	335.9	10 28A	-2			
RESOLUTE	64.13	14.2	10 31K	0			
KEVO	64.72	339.4	10 34	-1			
SODANKYLA	66.22	337.3	10 43	-1			
TROMSOE	67.03	341.2	10 49	0			
KAJAANI	67.79	334.2	10 53	-1			
KIRUNA	67.80	339.3	10 54A	0			
KIROVOBAD	71.05	306.7	11 14	0			
NURMIJARVI	71.11	332.1	11 14	-1			
HELSINKI	71.21	331.7	11 14	-1			
BAKURIANI	72.30	308.8	11 22	0			
SHIRAZ	72.34	294.0	11 21A	-1			
HUNGRY HORSE	73.10	42.3	11 27	1			
BLUE MTS.	73.18	46.7	11 29	2			
SKALSTUGAN	73.19	338.6	11 26	-1			
UPPSALA	74.16	334.0	11 32	-1			

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EUREKA	77.04	50.7	11 52	3	
GOTEBORG	77.74	334.7	11 52A	-1	
UINTA BASIN	80.47	47.0	12 10	2	
COLLMBERG	82.24	330.1	12 16A	-1	
PRUHONICE	82.59	328.4	12 20	1	
JENA	83.10	330.5	12 22	1	
TONTO FOREST	83.17	52.6	12 25	3	12 32 PCP
STUTTGART	85.72	330.3	12 35	1	
GARCHY	89.34	332.9	12 53	1	
WICHITA MTS.	90.68	45.3	13 0	2	
LA PAZ	147.85	61.4	19 45	9	

MAY 29 0.H 47.M 49.S EPICENTRE 28.16 52.50 DEPTH= 44.KM

A= 0.53758 B= 0.70047 C= 0.46941 D= 0.7933 E=-0.6088
G= 0.2858 H= 0.3724 K=-0.8830 HT= 2.4

DEPTH OF FOCUS= 0.002R

SE= 2.39

	DELTA DEG.	AZ. DEG.	P		O-C S	S O-C			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
SHIRAZ	1.49	0.8	0	26A	1						15	27 SCS
TEHERAN	7.62	353.2	1	49	-2							
VANNOVSKAYA	10.84	24.2	2	35	0							
ASHKABAD	10.93	25.2	2	34	-3							
KIZYL-ARVAT	11.45	14.9	2	45	1							
GORIS	12.42	337.3	2	55	-2							
QUETTA	12.79	77.5	3	1	-1	5	7	-17				
KIROVOBAD	13.46	339.4	3	8	-2							
TIFLIS	14.92	337.1	3	30	1							
KSARA	15.32	295.7	3	34	-1						6	45 SS
JERUSALEM	15.40	287.8	3	38	2							
WARSAK DAM	17.32	65.6	3	59	-1							
KHOROZ	18.48	55.0	4	16	2	7	43	B				
TASHKENT	19.00	41.9	4	21A	0							
NEW DELHI	21.74	83.0	4	49K	0							
SIMFEROPOL	22.25	323.8	4	54	0							
ADDIS ABABA	23.01	216.8	5	3	1							
FRUNSE	23.12	44.9	5	6	3							
ISTANBUL UN.	23.14	309.9	5	8	5							
ALMATA	24.81	46.1	5	22A	3							
ATHENS	25.94	299.6	5	31	1							
MOSCOW	29.56	342.9	6	3	0	10	56	3				
SEMIPALATNSK	30.60	35.8	6	12	0							
UZHGOROD	30.96	319.6	6	15	0							
RACIBORZ	34.01	319.5	6	41	-1						7	29
LJUBLJANA	34.75	311.3	6	48A	0						7	9
PULKOVO	35.05	340.6	6	50A	-1							
PRUHONICE	36.10	317.6	6	59	0						8	28
VIBORG	36.27	340.5	7	0	-1							
HELSINKI	37.06	337.5	7	7A	0							
NURMIJARVI	37.41	337.7	7	10A	0						8	39 PP
COLLMBERG	37.52	319.0	7	11	0						9	48
LWIRO	37.85	220.9	7	25K	11							
HALLE	38.20	318.9	7	17	0						8	51 PP
JENA	38.21	317.9	7	13	-4						8	16 PP
KARLSKRONA	38.36	327.2	7	20A	2							
STUTTGART	38.95	313.9	7	21	-2							
KAJAANI	39.29	343.1	7	25	-1						13	23
ISOLA	39.49	306.3	7	28	0							
UPPSALA	39.56	333.1	7	27A	-1							
COPENHAGEN	39.67	325.2	7	30	1							
ROSELEND	40.02	308.5	7	32	0							
GOTEBORG	40.85	327.8	7	38A	-1							
APATITY	41.07	349.0	7	41A	0						9	1 SP
DOURBES	42.24	314.7	7	59	9						8	40
SODANKYLA	42.24	345.5	7	53	3							
GARCHY	42.71	310.3	7	53	-1						8	30
KONGSBERG	42.86	329.5	7	56K	0						9	32 PP
PARIS	43.33	312.4	7	59	0							
SKALSTUGAN	43.82	335.3	8	2A	-1							
KIRUNA	44.09	343.2	8	5A	0							
KEVO	44.16	347.6	8	6	0						9	46 PP
BERGEN	45.14	329.1	8	19	5							
FOLINIERE	45.27	312.0	8	14	-1							

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TROMSOE	45.79	344.3	8 18	-1	
ULAN-BATOR	46.13	49.4	8 24	2	
BROKEN HILL	48.33	211.9	8 38	-1	
KHEYS	52.61	1.1	9 12K	0	
BULAWAYO	53.28	208.3	9 16	-1	
TIKSI	59.26	21.0	9 58A	-1	
NORD	59.30	350.8	9 59A	-1	
YAKUTSK	59.60	32.2	10 UA	-2	
KIMBERLEY	62.50	207.4	10 15	-6	
ALERT	65.40	352.4	10 40	0	
MATUSIRO	70.65	58.3	11 11	-2	
MOULD BAY	75.74	358.0	11 42A	-1	14 33
SCHEFFERVILLE	82.36	329.4	12 19	0	
COPPERMINE	83.86	355.3	12 26A	0	
COLLEGE	85.94	8.5	12 37	0	
RABAU	100.49	89.2			18 18
WICHITA MTS.	111.75	334.6	18 27	-3	19 15 PP
TONTO FOREST	116.02	345.1	18 40	2	19 39 PP

MAY 29 8.H 35.M 5.S EPICENTRE 27.10 59.38 DEPTH= 58.KM

A= 0.45406 B= 0.76713 C= 0.45315 D= 0.8606 E=-0.5094
G= 0.2308 H= 0.3900 K=-0.8914 HT= 2.7

DEPTH OF FOCUS= 0.004R

SE= 1.65

	DELTA DEG.	AZ. DEG.	P		O-C S	S O-C			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
SHIRAZ	6.55	294.4	1	35K	-1	2	33	-17			2	53 SG
KARACHI	7.26	106.5	1	42	-4							
QUETTA	7.32	63.5	1	47K	0	3	1	-9				
ASHKABAD	10.85	355.7	2	36	1							
TEHERAN	10.98	323.6	2	37	0							
KIZYL-ARVAT	12.34	348.6	2	53A	-2	5	15	3				
WARSAK DAM	12.53	53.8	2	57	-1							
LAHORE	13.77	67.7	3	12	-2							
BOMBAY	14.82	120.6	3	26	-2	6	31	20			3	45 PP
NEW DELHI	15.83	80.5	3	37K	-4	6	27	-7			6	47 SS
TASHKENT	16.36	27.4	3	47	0							
GORIS	16.46	321.9	3	51K	2	6	53	4				
SEHORE	16.50	99.8	3	48	-1						4	5 PP
DEHRA DUN	16.69	74.5	3	52A	1	7	6	12			4	10 PP
KIROVOBAD	17.29	324.7	3	57	-2	7	2	-6				
TIFLIS	18.86	324.3	4	19	1							
FRUNSE	20.00	34.4	4	32	1	8	12	5				
KSARA	21.31	294.0	4	46	2	8	42	10			5	13 PP
JERUSALEM	21.53	288.3	4	48A	2							
ALMATA-2	21.75	37.5	4	47A	-1							
KODAIKANAL	23.93	131.1				9	33	14				
MADRAS	24.00	121.7	5	27	17	9	52	32			5	50
BOKARO	24.06	91.9	5	15	4							
CHATRA	24.75	84.2	5	19	1	9	39	6				
ADDIS ABABA	26.51	231.2	5	36	2							
SIMFEROPOL	26.93	318.0	5	39	1	10	10	1				
LHASA	27.93	77.3	5	49	2	10	28	3				
SEMIPALATNSK	28.20	28.8	5	51	2							
ISTANBUL UN.	28.59	306.9	6	6	13							
SVERDLOVSK	29.72	1.4	6	2	-1	10	57	4				
ATHENS	31.78	299.0	6	23K	2							
MOSCOW	32.64	337.1	6	28	-1							
SOPIA	33.12	307.4	6	32	-1							
LWOW	35.29	319.6	7	7	16	12	24	4				
BELGRADE	35.72	310.0	7	12A	17						8	37
UZHGOROD	35.82	316.9	6	55	-1							
KRAKOW	37.80	318.1	7	29	17	13	17	18			13	0
MESSINA	38.21	298.1	7	34	18							
PULKOVO	38.27	336.6	7	16	0	13	7	1				
LANCHOW	38.63	65.4	7	20	1	13	7	-4	7	39		
RACIBORZ	38.85	317.4	7	22	1						9	21 PPP
KUNMING	38.85	82.9	7	22	1	13	12	-3	7	39		
BRATISLAVA	38.91	314.2	7	16	-6						20	52
VIENNA-H.	39.40	314.1	7	27	1							
VIBORG	39.48	336.8	7	26	0							
LJUBLJANA	40.07	310.3	7	32	1						8	3

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AQUILA	40.24	304.4	7 35	2	13 37	2				9 25 PP
HELSINKI	40.52	334.2	7 35	0						
NURMIJARVI	40.86	334.5	7 37A	-1						9 15 PP
ROME	40.87	303.6			13 48	3				8 19
PRUHONICE	41.04	316.1	7 40	1						11 22
PRAGUE	41.14	316.2	7 57	17						9 8 PP
LWIRO	41.48	230.1								17 16
PADOVA	41.77	308.8	8 5	20	14 0	2				9 30 PP
PRATO	42.10	306.4	8 6	18	14 23	20				
KAJAANI	42.23	339.9	7 48	-1						
ULAN-BATOR	42.25	47.6	7 51	2						
COLLMBERG	42.37	317.6	7 50K	0						10 33
KARLSKRONA	42.64	325.1	7 52	0						9 44 PP
SIAN	42.86	67.9	7 54	0				8 13		
HALLE	43.06	317.6	7 55	-1				8 12		
JENA	43.13	316.7	7 56	0						9 23 PP
UPPSALA	43.37	330.7	7 57	-1	14 20	-2				9 42 PP
APATITY	43.43	345.8	7 59A	0	14 25	3				14 42 *SS
PAOTOW	43.60	58.7	8 2	2				8 19		
COPENHAGEN	44.09	323.5	8 5	1						
STUTTGART	44.10	313.2	8 3	-1						8 25
MONACO	44.73	305.8								8 28
SODANKYLA	44.93	342.8	8 10A	-1						
ISOLA	45.03	306.4	8 12	0						10 28
STRASBOURG	45.05	312.7	8 11A	-1						9 52
GOTEBORG	45.07	326.1	8 12	0						
ROSELEND	45.46	308.5	8 15	0						9 25
MUNSTER	45.78	317.3	8 20	2						
WELSCHBRUCH	45.96	312.2	8 13	-6						
BESANCON	46.07	310.6	8 19	-1						9 23
KEVO	46.62	345.1	8 24A	0	15 9	1				10 13 PP
KONGSBERG	46.93	328.0	8 28	1	15 13	0		8 45		18 48 SS
KIRUNA	46.97	341.0	8 26	-1	15 20	7				18 48 SS
SKALSTUGAN	47.41	333.6	8 30	-1						
CLERMONT-FD.	47.92	308.3	8 52	17						
PEKING	48.30	59.4						8 56		
TROMSOE	48.55	342.4	8 39	0				9 7		
CHILEKA	48.68	212.0	8 36	-4						
CANTON	48.73	82.2						8 59		
NHATRANG	48.89	97.5	8 42	0						8 59 *SP
BERGEN	49.23	327.9	8 45	0						
HONG KONG	49.69	82.9	9 5	17	15 57	6				
BAGNERES	50.02	304.7								9 17
FOLINIERE	50.51	312.2	8 53	-1						
KEW	50.59	315.7	8 55	0						
ALICANTE	50.81	298.7	9 14	17						
BROKEN HILL	51.05	219.8								12 10
NANKING	51.34	69.4						9 18		
DURHAM	51.68	319.8	9 21A	18						
ALMERIA	52.56	297.0	9 28K	18						
TOLEDO	53.40	301.0	9 17A	1						22 43
GRANADA	53.41	297.6			16 57	15				10 9 PP
ZO-SE	53.54	70.0						9 34		
BENI ABBES	53.55	288.7	9 17	0						9 53
KHEYS	53.61	359.7	9 18K	0						
CHANGCHUN	54.84	53.9						9 42		
VALENTIA	56.77	316.1	9 41	0	17 31	4				
AVERROES	57.20	293.7								11 10 PP
YAKUTSK	57.25	31.9	9 42	-2	17 37	3				
TIKSI	58.08	20.5	9 47	-3	17 44	0				
NORD	61.33	350.6	10 10	-2						
MATUSIRO	65.94	59.9	10 42	0	19 27	3				
Y.-SAKHLINSK	66.35	47.9	10 45A	0						
ALERT	67.21	353.0	10 50	0						
MOULD BAY	76.91	359.7	11 47A	-1						
RESOLUTE	77.10	353.2	11 48A	-1						
DARWIN	79.60	109.6	12 22	19						
MUNDARING	79.88	133.7	12 19	15						
COPPERMINE	85.27	357.9	12 31	-1						
COLLEGE	85.92	11.3	12 34	-1				12 53		12 37 PCP
SCHEFFERVILLE	86.26	332.1	12 38	1						
YELLOWKNIFE	90.59	357.2	12 58	1						
EDMONTON	99.61	355.6	13 41K	3						
BLUE MTS.	108.33	357.5	14 40	777						18 41 PP
CUMBERLAND	109.41	330.2	18 27	777	25 4	9				19 3 PP
LAWRENCE	110.12	339.2								17 55
EUREKA	113.62	356.1	18 30	-2						29 29 PKKP
WICHITA MTS.	115.07	340.1	18 37	2						19 34 PP
TONTO FOREST	118.30	351.2	18 45	4						20 17 PP

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TUCSON 120.25 350.4 18 47 2 19 5
 LA PAZ 130.44 271.0 19 11 7

MAY 29 10.H 59.M 14.S EPICENTRE -18.17-177.88 DEPTH= 601.KM

A=-0.95012 B=-0.03523 C=-0.30988 D=-0.0371 E= 0.9993
 G= 0.3097 H= 0.0115 K=-0.9508 HT= 5.1

DEPTH OF FOCUS= 0.090R

SE= 0.86

	DELTA DEG.	AZ. DEG.	P		O-C S	S O-C			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
AFIAMALU	7.23	55.0	1	52K	0	3	21	-1				
PORT VILA	13.14	269.8	2	51K	1	5	13	7				
NOUMEA	15.27	251.8	3	11K	1	5	48	4				
KOUMAC	17.00	259.1	3	27	0							
KARAPIRO	20.52	195.0	4	0	1							
CHATEAU	21.73	193.9	4	9	-1							
WELLINGTON	23.88	193.8	4	28	-2							
BRISBANE	28.51	245.9	5	10	0						10	49
RIVERVIEW	31.75	234.5	5	38K	1							
CHARTERS TS.	33.90	260.9	5	55	0							
CANBERRA	33.95	233.1	5	56K	0	10	38	-3			11	6 SCP
TOOLANGI	37.40	231.3	6	24K	0	11	30	-2				
MOORLANDS	38.25	223.2	6	31	0							
TARRALEAH	38.66	223.8	6	35	1							
ADELAIDE	41.92	237.6	7	0K	0	12	36	-1				
DARWIN	49.69	269.0	7	59	-1						12	10
CAPE HALLETT	54.59	184.4	8	35	0							
MUNDARING	60.46	243.1	9	13	-1							
BYRD STATION	66.91	170.7	9	56	1							
MATUSIRO	68.41	323.1	10	3K	-1	18	16	-3				
BAGUIO CITY	69.65	295.9	10	11	0							
HONG KONG	77.67	298.5	10	56	0							
NHATRANG	78.00	287.2	10	58	0							
NANKING	78.55	309.3	11	1	0							
CHANGCHUN	80.63	322.1	11	11	-1							
EUREKA	81.36	43.7	11	16	0							
TUCSON	81.39	52.1	11	17	1							
TONTO FOREST	82.02	50.1	11	20	1							
BLUE MTS.	83.42	38.6	11	26	0				13	23		
PEKING	84.32	315.2	11	30	0							
PENTICTON	84.66	34.0	11	32	0							
COLLEGE	85.92	12.4	11	36	-2							
SIAN	86.90	307.4	11	44	1							
KUNMING	88.40	297.0	11	51	1							
EDMONTON	90.17	32.7	11	57	-1							
LANCHOW	91.45	307.5	12	5K	1							
WICHITA MTS.	91.72	54.1	12	5	0							
SODANKYLA	128.35	348.2									20	24 SKP
KIRUNA	129.00	351.2									20	26 SKP
KAJAANI	130.94	345.4	18	2	-2						20	33 SKP
SHIRAZ	132.85	293.8	18	8K	1						20	39
NURMIJARVI	134.73	344.5	18	10	-1						20	43 SKP
NIEDZIKA	145.54	338.9	18	32	1							
RACIBORZ	145.65	341.6	18	33	2							
HALLE	145.84	349.0	18	33	2							
JENA	146.45	349.2	18	33	1						19	38
PRAGUE	146.67	345.5	18	35	3							
PRUHONICE	146.73	345.3	18	36	4						20	57
LWIRO	146.81	235.0	18	38K	6							
JERUSALEM	147.22	300.8	18	38K	5							
KASPERSKE H.	147.75	345.8	18	38	4						20	58
VIENNA-H.	147.83	342.0	18	38	4							
STUTTGART	148.93	350.8	18	41	5							
FOLINIERE	149.40	3.4	18	42	6							
ISOLA	153.74	352.0	18	52	9							

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MAY 30 6.H 56.M 4.5 EPICENTRE -54.36 144.00 DEPTH= 0.KM

A=-0.47354 B= 0.34410 C=-0.81078 D= 0.5878 E= 0.8090
G= 0.6559 H=-0.4766 K=-0.5854 HT= -7.0

SE= 2.52

	DELTA DEG.	AZ. DEG.	P		O-C S	S			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
MACQUARIE I.	8.72	97.0	1	32K	-39						2	10
MOORLANDS	12.11	11.3	2	56	-1							
TOOLANGI	16.82	4.1	3	56	-3	7	7	1			4	26 PPP
ROXBURGH	18.48	71.7	4	21	2	7	55	12				
CANBERRA	19.35	12.4	4	26	-4	8	7	4				
ADELAIDE	19.73	347.1	4	34K	0	8	8	-3				
WILKES	20.14	220.3	4	37	-2	8	36	16	5	0		
RIVERVIEW	21.13	16.7	4	48	-1	8	46	6	4	57	5	12 PP
CAPE HALLETT	21.17	158.0	4	50	1							
WELLINGTON	24.23	70.0	5	20	0	9	41	5				
SCOTT BASE	24.94	168.8	5	27	0							
CHATEAU	26.11	67.5	5	34	-3							
KARAPIRO	27.03	65.6	5	48	2							
MIRNY	27.07	223.1	5	46	0						16	25 PP
BRISBANE	27.70	17.0	5	50	-2	10	22	-12				
MUNDARING	29.85	307.2	6	9	-2	11	0	-8				
PERTH	30.04	306.7	6	14	1	11	21	10			13	17 SS
CHARTERS TS.	34.25	3.8	6	51	1	12	7	-10				
KOUMAC	37.10	32.6	7	16	2							
BYRD STATION	38.11	163.7	7	25	2							
MAWSON	38.42	217.5	7	25	0	13	19	-2			8	47
DARWIN	43.15	341.0	8	4	0							
KERGUELEN I.	44.00	244.8	7	20	-51	14	52	8				
PORT MORESBY	44.90	4.4	8	20	2	15	0	3			18	30 SS
HONTARA	46.59	21.9	8	29	-3	15	21	0				
RABAU	50.44	10.6	9	4	2							
N-LAZARVSKYA	50.60	198.5	9	3	0	16	11	-6				
TANGERANG	56.69	313.8	9	48	0							
MANILA	71.47	336.6	11	12	-13							
NHATRANG	72.57	324.2	11	33	2						12	20 PP
BAGUIO CITY	73.28	336.5	11	41	6	20	56	-8				
CHANGALANE	80.68	237.6	12	19	2				12	29	12	25 PCP
CANTON	81.52	331.7	12	23	2							
KIMBERLEY	82.12	230.7	12	18	-6							
KUNMING	86.75	323.2	12	54A	7	23	36	11			23	20 SKS
ZO-SE	87.36	340.5				23	35	5				
NANKING	88.77	338.8				23	50	7				
HONOLULU	90.16	52.2				24	7	11			25	16 PS
TUKUBASAN	90.27	356.9				23	59	2			29	59 SS
KIPAPA	90.30	52.2									25	58
MATUSIRO	90.66	355.3	13	6	0	24	6	5				
LANCHOW	96.46	328.3	13	34	1							
LWIRO	102.56	247.9									27	28 PS
LA PAZ	104.28	148.2	18	27	259						33	38 SS
SHIRAZ	114.34	287.2	19	26	44						35	13 SS
YAKUTSK	116.58	352.5									19	49 PP
BOGOTA	121.62	133.8									30	26 PS
TUCSON	124.08	80.9	19	6	5							
TONTO FOREST	125.31	78.9	19	3	0							
TIKSI	126.14	354.1	19	3	-2						38	30 SKKKS
EUREKA	126.32	71.1	19	8	3							
KSARA	126.92	278.2	19	13	7						21	15 PP
TIFLIS	127.41	291.5	19	3	-4						21	2 PP
ALBUQUERQUE	128.55	81.8	19	11	1						22	36 SKP
BLUE MTS.	129.26	65.2	19	15	4						21	17 PP
SVERDLOVSK	129.80	314.7	19	12	0							
COLLEGE	129.81	31.1	19	14	2							
LUBBOCK	130.26	86.6	19	16	3							
UINTA BASIN	130.48	74.6	19	12	-1						21	31 PP
GOLDEN	132.45	78.1	19	22	5						22	50
BUTTE	132.55	66.9	19	23	6						22	53 SKP
WICHITA MTS.	132.98	88.1	19	18	0						22	49 SKP
HUNGRY HORSE	133.24	63.6	19	20	2							
SIMFEROPOL	135.41	288.0									22	11 PP
TULSA	135.44	89.1	19	25	3						23	0 SKP
ISTANBUL UN.	135.85	280.2	19	32	9							
EDMONTON	136.54	58.2	19	19	-5							
LAWRENCE	137.83	86.3	19	27	0							
MOSCOW	139.63	303.1	19	39	9							
CUMBERLAND	141.19	98.2	19	27	-6						22	43 PP

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MESSINA	141.82	266.6			41 16 SS
COPPERMINE	142.39	37.6	19 33	-2	
MOULD BAY	143.46	23.6	19 30	-7	
LWOW	143.81	288.1	19 40	3	
UZHGOROD	144.16	285.4	19 38	0	
PULKOVO	144.91	306.3	19 38	-1	
AQUILA	145.74	270.2	19 41	0	22 46 PP
APATITY	145.85	320.2	19 42A	1	
ROME	146.01	268.8	18 58	-43	27 22
WARSAW	146.64	290.2	19 49	7	19 59 PKP2
ANN ARBOR	146.74	91.3	19 47	5	
RACIBORZ	147.21	285.2	19 48	5	20 0 PKP2
LJUBLJANA	147.25	276.5	19 49	6	
VIENNA-H.	147.34	281.2	19 51	8	
TRIESTE	147.47	275.3	19 53	9	23 46
HELSINKI	147.58	305.4	19 48	4	
NURMIJARVI	147.83	305.9	19 46	2	30 10 SKKS
FLORENCE X.	147.86	270.5	19 54	10	23 50
WASHINGTON	148.37	102.2	20 0	15	
SODANKYLA	148.40	319.0	19 47	2	20 15
KEVO	148.49	323.6	19 50	5	20 6
LONDON ONT.	148.64	92.3	19 49A	3	
PENNSYLVANIA	149.17	98.7			20 54
PRUHONICE	149.24	282.9	19 51	5	
PRAGUE	149.35	283.0	19 50	3	
KASPERSKE H.	149.39	280.9	19 51	4	22 22
RESOLUTE	149.54	26.7	19 48K	1	
ISOLA	150.55	267.7	19 57	8	20 20
COLLMBERG	150.71	284.4	19 54	5	25 28
ALERT	150.78	6.9	19 54	5	
KIRUNA	150.80	319.6	19 56	7	
AVERROES	150.87	235.4			21 4
UPPSALA	151.06	302.9	19 52	3	
KARLSKRONA	151.10	294.9	19 54	5	
ALMERIA	151.11	246.5	20 3	14	
ALICANTE	151.11	251.0	20 2	13	21 19
TROMSOE	151.31	323.4	19 50	0	
JENA	151.36	282.9	19 59	9	20 17 PKP2
PALISADES	151.58	102.3	20 0	10	
ROSELEND	151.66	269.9			20 14
STUTTGART	151.70	277.5	20 5	15	
GRANADA	151.96	245.6	20 17A	26	26 41 -16
NORD	152.03	354.0	19 58	7	24 9 PP
STRASBOURG	152.48	276.1			20 16
BESANCON	152.87	272.3	20 2	10	
OTTAWA	153.20	93.1	20 3	11	
GOTEBORG	153.43	296.9	20 3	10	
CLERMONT-FD.	153.75	267.1	20 1	8	
BENSBERG	153.90	280.4			20 22
BAGNERES	153.90	259.3	20 8	15	20 30
SKALSTUGAN	154.08	310.2	20 7	13	
TOLEDO	154.15	249.1	20 16	22	26 38 -21
BREBEUF	154.49	94.7	20 2	8	23 41 PP
GARCHY	154.58	270.0	19 58	4	21 9
KONGSBERG	155.00	300.8	20 22	27	
DOURBES	155.02	277.0	20 3	8	

MAY 31 6.H 3.M 31.S EPICENTRE -15.16-173.21 DEPTH= 0.KM

A=-0.95889 B=-0.11409 C=-0.25982 D=-0.1181 E= 0.9930
G= 0.2580 H= 0.0307 K=-0.9657 HT= 5.7

SE= 2.14

	DELTA DEG.	AZ. DEG.	P		O-C S	S O-C			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
AFIAMALU	1.86	48.4	0	29	-5	0	47	-11				
PORT VILA	17.90	259.2	4	16A	4							
KOUMAC	22.08	252.6	5	4K	6							
KARAPIRO	24.77	201.6	5	26	1							
HONIARA	26.82	279.1	5	41	-3							
WELLINGTON	28.04	199.5				10	59	20				
RABAU	35.76	284.2	7	3	0							
RIVERVIEW	37.13	233.5	6	21	-53						12	47
CHARTERS TS.	38.87	256.7	7	27	-2	13	39	11				
PORT MORESBY	39.11	273.7	7	31	0	13	47	16			17	9

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HONOLULU	39.15	22.7			13	39	7	
KIPAPA	39.29	22.7	7	34	2			8 24
CANBERRA	39.32	232.3	7	30K	-3			
ADELAIDE	47.29	236.2	8	35K	-2			24 1
CAPE HALLETT	57.97	185.9	9	57	0			
TUKUBASAN	67.49	320.4	10	58A	-2	19	58	2
MATUSIRO	68.87	319.7	11	7A	-2	20	14	2
BYRD STATION	69.17	171.3	11	12	1			
PRIEST	71.17	42.8	11	21K	-2			
BERKELEY	71.18	40.5	11	24A	1	20	41	1
								29 29
LICK	71.25	41.3	11	23K	0			
CALISTOGA	71.45	39.7	11	29K	5			
PASADENA	71.72	45.7	11	32	6	20	48	2
BAGUIO CITY	72.49	293.0	11	36	5	20	51	-4
SHASTA	72.84	38.1	11	32	-1			
MINERAL	73.10	38.8	11	34K	0			
Y.-SAKHLINSK	73.43	330.2	11	35K	-1			
TUCSON	76.04	50.7	11	51	0			
EUREKA	76.12	42.1	11	51	-1			13 1
TONTO FOREST	76.68	48.7	11	55	0		12 3	13 27
MIRNY	77.73	204.1	11	58	-2			
ZO-SE	77.96	307.0	12	1	-1	22	0	5
BLUE MTS.	78.32	37.0	12	3	-1	21	58	-1
SALT LAKE C.	79.49	42.7	12	10	0			27 2 SS
PENTICTON	79.71	32.4	11	47	-24			
NANKING	80.22	307.0	12	17	3			
ALBUQUERQUE	80.51	49.9	12	16	0			
UINTA BASIN	80.78	44.0	12	16	-1	22	25	0
CHANGCHUN	81.12	319.9	12	18	-1	22	32	4
BUTTE	81.75	37.9	12	22	0			23 10 PS
COLLEGE	82.09	10.7	12	22	-2			14 4
HUNGRY HORSE	82.16	35.3	12	26	2			
BOZEMAN	82.48	38.7	12	27	1			
GOLDEN	83.36	46.0	12	29	-1	22	55	4
LUBBOCK	83.42	52.8	12	32	1			
LARAMIE	83.92	44.5	12	33	0			
EDMONTON	85.26	31.3	12	39K	-1			
PEKING	85.43	313.4	12	41	0	23	12	0
WICHITA MTS.	86.35	52.7	12	45	0	23	10	-11
MAWSON	88.08	198.6	12	53	-1			29 9 SS
TULSA	88.91	52.4	13	1	3	23	34	-11
YAKUTSK	88.94	336.7	12	55	-3			29 39 SS
YELLOWKNIFE	89.80	23.4	13	3	1			
PAOTOW	89.99	312.1				24	5	10
LAWRENCE	90.33	49.7	13	4	0			23 39 SKS
COPPERMINE	92.69	18.8	13	15	0			
LANCHOW	93.22	306.3	13	19	1	23	53	-30
N-LAZARVSKYA	94.22	181.7	13	21	-1			
ULAN-BATOR	94.48	318.4	13	22	-1			
TIKSI	94.81	344.4	13	24	-1			
CUMBERLAND	96.79	55.1	13	33	-1	24	3	-8
LA PAZ	99.66	110.0	13	49	2			17 27 PP
BOGOTA	100.01	.87.9						26 54 PPP
PALISADES	106.74	51.2				25	4	6
CARACAS	108.26	83.8				26	49	104
								18 51 PP
SVERDLOVSK	122.02	328.4	18	56	-1			
QUETTA	123.09	296.3	19	1	2			
KAJAANI	129.04	348.3	19	11	1			
SKALSTUGAN	131.48	356.7	19	16	1			
NURMIJARVI	132.88	348.0	19	22	4			39 21 SS
SHIRAZ	135.61	297.0	19	28	5			22 57 SKP
BROKEN HILL	143.60	217.1	19	37	0			
COLLMBERG	143.60	353.4	19	43	6			21 39
JENA	144.11	354.8	19	38	0			20 13
UZHGOROD	144.26	342.3	19	38	0			
BENSBERG	144.29	359.6	19	38	0			20 5
PRAGUE	144.63	351.5	19	41	2			
PRUMONICE	144.70	351.3	19	40	1			
DOURBES	145.10	2.5	19	42	2			
KASPERSCHE H.	145.67	352.1	19	41A	1			20 3
BRATISLAVA	146.00	347.6	19	42A	1			
VIENNA-H.	146.07	348.5	19	44	3			
PARIS	146.26	5.1	19	48	7			
STUTTART	146.42	357.0	19	45	3			
STRASBOURG	146.66	358.8	19	49A	7			
WELSCHBRUCH	146.84	0.5	19	48	6			
GARCHY	147.82	4.8	19	48A	4			20 44
KSARA	147.83	310.5	19	50	6			23 30 PP
BESANCON	148.00	1.0	19	47	3			20 19

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LJUBLJANA	148.52	349.7	19 50	5	20 48
CLERMONT-FD.	149.33	5.0	19 54	8	20 46
ROSELEND	149.56	0.2	19 58	11	20 40
ISOLA	151.07	359.6			21 2
LWIRO	152.18	233.4	20 9	18	23 46 PP
TOLEDO	153.61	19.0	20 5	12	20 17 PKP2

MAY 31 23.H 58.M 45.S EPICENTRE -15.13-173.17 DEPTH= 0.KM

A=-0.95891 B=-0.11489 C=-0.25939 D=-0.1190 E= 0.9929
G= 0.2575 H= 0.0309 K=-0.9658 HT= 5.7

SE= 2.90

	DELTA	AZ.	P		O-C	S			O-C	#PP		SUPP.	
	DEG.	DEG.	M	S	S	M	S	S	M	S	M	S	
AFTAMALU	1.81	48.1	0	27K	-6	0	51	-6					
PORT VILA	17.95	259.2	4	17	4								
NOUMEA	20.57	246.7	4	48K	5	8	48	19					
KOUMAC	22.13	252.6	5	3K	4								
KARAPIRO	24.81	201.7	5	25	0								
HONIARA	26.86	279.1	5	42	-2								
WELLINGTON	28.08	199.6				10	57	17					
BRISBANE	33.88	243.3	6	35	-12	12	25	14					
RABAUL	35.79	284.1	7	2	-1								
RIVERVIEW	37.18	233.5									15	52	
CHARTERS TS.	38.92	256.7	7	27	-2	13	41	13					
HONOLULU	39.11	22.6				13	37	6					
PORT MORESBY	39.15	273.7	7	29	-2						16	55	
KIPAPA	39.25	22.6	7	33	1								
CANBERRA	39.37	232.3	7	31	-2				7	42			
TOOLANGI	42.81	230.6	7	59	-2						8	17	
ADELAIDE	47.35	236.2	8	35A	-3						19	27	
TUKUBASAN	67.50	320.4	11	0A	0						19	58	
MATUSIRO	68.88	319.6	11	8A	-1	20	13	0					
PARAISO	70.13	41.7	11	21	4								
PRIEST	71.12	42.7	11	21A	-2								
BERKELEY	71.13	40.5	11	29A	6	20	45	6			29	21	
LICK	71.20	41.2	11	24A	1								
CALISTOGA	71.40	39.7	11	32A	8								
PASADENA	71.67	45.7	11	25	-1	20	45	0					
PETROPAVLOVK	72.09	342.6	11	27	-1								
MINERAL	73.05	38.7	11	34A	0								
Y.-SAKHLINSK	73.43	330.2	11	35A	-1	21	8	3					
BOULDER CITY	74.96	45.6	11	42	-3								
TUCSON	75.98	50.7	11	51	0								
EUREKA	76.07	42.1	11	52	1								
TONTO FOREST	76.63	48.6	11	55	0	21	45	4	12	2	14	37 PP	
VICTORIA	77.22	31.4	11	56	-2								
MIRNY	77.77	204.1	11	59	-2								
ZO-SE	77.98	307.0	12	2	0								
BLUE MTS.	78.27	37.0	12	3K	-1	22	0	1			22	38 SKS	
PENTICTON	79.67	32.3	12	12	1								
SPOKANE	79.93	34.6	12	8	-5								
MAGADAN	79.95	342.3	12	13	0								
NANKING	80.24	307.0	12	15A	1								
ALBUQUERQUE	80.46	49.9	12	16	1								
UINTA BASIN	80.72	43.9	12	17	0	22	27	3			27	43 SS	
CHANGCHUN	81.13	319.9	12	19A	0	22	32	3					
CANTON	81.28	296.7	12	21	1								
BUTTE	81.70	37.8	12	22	0								
COLLEGE	82.06	10.6	12	23	-1								
HUNGRY HORSE	82.11	35.3	12	23	-1								
BOZEMAN	82.43	38.7	12	25	-1								
GOLDEN	83.31	46.0	12	31	1	22	53	2					
LUBBOCK	83.37	52.8	12	31	0								
LARAMIE	83.87	44.5	12	34	1								
EDMONTON	85.22	31.3	12	39K	-1								
PEKING	85.45	313.4	12	41A	0	23	17	5			23	4 SKS	
WICHITA MTS.	86.30	52.7	12	45	0	23	17	-3			24	21 PS	
MAWSON	88.12	198.5	12	54K	0								
TULSA	88.86	52.4	12	57	-1	23	31	-13			29	47 SS	
YAKUTSK	88.93	336.7	12	57K	-1								
FAYETTEVILLE	90.15	52.7	13	12	8								
LAWRENCE	90.28	49.7	13	5	1								
KUNMING	91.11	295.6	13	9	1								

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1963							PAGE 484
CHENGTU	91.58	301.2	13 12	2	24 18	9	23 48 SKS
COPPERMINE	92.65	18.8	13 16	1			
LANCHOW	93.25	306.3	13 19	1	24 34	11	23 54 SKS
FLORISSANT	93.86	51.0	13 21	0			24 31
TIKSI	94.79	344.4	13 24A	-1			
MOULD BAY	96.62	11.2	13 32	-1			
CUMBERLAND	96.74	55.1	13 34	0	24 13	2	17 31 PP
LA PAZ	99.62	110.0	13 20	-27	24 30	5	
BOGOTA	99.96	87.9			24 31	4	32 37 SS
PALISADES	106.69	51.2			25 3	5	
BREBEUF	107.28	46.6					34 15 SS
CARACAS	108.21	83.7	18 51	777			28 16
SVERDLOVSK	122.02	328.5	18 57K	0			
QUETTA	123.12	296.3	19 1K	2			
SODANKYLA	126.22	350.7	19 11	6			
KIRUNA	126.60	353.6					38 5 SS
KAJAANI	129.02	348.4	19 11	1			
UMEA	130.48	352.2	19 12	-1			22 36 PKS
PULKOVO	132.22	344.2	19 25	8			
NURMIJARVI	132.87	348.1	19 19	1			21 41 PP
MOSCOW	133.09	336.6	19 20	2			
UPPSALA	134.65	352.4					22 52 PKS
SHIRAZ	135.64	297.0	19 24	1			22 56 SKP
TIFLIS	137.90	316.6	19 29	2			
SIMFEROPOL	142.38	327.8	19 33	-2			22 43 PP
HALLE	143.49	354.6	19 38	1			23 21 PKS
KRAKOW	143.58	345.8	19 35	-2			20 30
COLLMBERG	143.58	353.5	19 36	-1			23 14 PKS
BROKEN HILL	143.65	217.1					29 37
RACIBORZ	143.94	347.5	19 37	-1			20 14
JENA	144.09	354.9	19 35	-3			22 56 PP
UZHGOROD	144.25	342.4	19 38	0			
BENSBERG	144.26	359.6	19 38	0			19 58
PRAGUE	144.61	351.5	19 39	0			21 21
PRUMONICE	144.68	351.4	19 40	1			
DOURBES	145.08	2.5	19 40	0			
KASPERSCHE H.	145.65	352.1	19 42A	1			22 26
HEIDELBERG	145.79	357.8	19 43	2			
BRATISLAVA	145.98	347.7	19 44	3			20 27
VIENNA-H.	146.05	348.6	19 44	3			19 57 PKP2
PARIS	146.23	5.2	19 34	-8			20 13
STUTT GART	146.40	357.1	19 44	2			
STRASBOURG	146.64	358.9	19 46	4			20 47
TUBINGEN	146.64	357.3	19 46	4			
WELSCHBRUCH	146.81	0.6	19 46	3			
EBINGEN	147.00	357.4	19 47	4			
FELDBERG	147.33	358.5	19 47	4			
RAVENSBURG	147.36	356.5	19 48	4			
GARCHY	147.79	4.8	19 48	4			20 52
KSARA	147.84	310.6	19 48	4			23 31 PP
BESANCON	147.97	1.1	19 49	5			
ADDIS ABABA	148.21	262.7	19 53	8			
BELGRADE	148.24	341.5	19 39A	-4			20 2 PKP2
CHUR	148.30	356.5	19 54	9			
ZAGREB	148.45	347.7	19 57	12			
LJUBLJANA	148.51	349.7	19 45	0			19 59 PKP2
TRIESTE	149.02	350.6	19 52A	6			20 1 PKP2
SOFIA	149.08	336.0	19 53	7			
JERUSALEM	149.27	307.6	19 53A	6			
CLERMONT-FD.	149.30	5.1	19 52	5			
PADOVA	149.52	353.0	20 0	13			21 0
ROSELEND	149.54	0.3	19 54	7			
PAVIA	149.98	356.7					29 35
ISOLA	151.05	359.7	19 57	8			20 45
BAGNERES	151.57	10.3	20 2	12			23 6
LWIRO	152.23	233.4	19 53	2			23 40 PP
AQUILA	152.29	349.5	19 55	4			34 55
ATHENS	152.78	329.9	19 59K	7			
ROME	152.88	350.7	19 45	-7			25 15
TOLEDO	153.57	19.0	20 3	10			23 56 PP
GRANADA	156.16	21.0	20 36A	40			44 5 SS

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1963										PAGE 486	
ZO-SE	41.55	82.1	7 41	2							
KARLSKRONA	41.97	316.3	7 43A	0				9 28	PP		
KIRUNA	42.37	334.1	7 47A	1				9 25	PP		
PRUHONICE	42.55	307.1	7 48	0				18 47			
LJUBLJANA	42.96	301.4	7 51	0				9 36	PP		
KASPERSCHE H.	43.25	305.9	7 53	0				9 34	PP		
COLLMBERG	43.46	309.1	7 56A	1				9 41	PP		
TRIESTE	43.55	300.9				8 20		9 43	PP		
TROMSOE	43.55	336.3	7 56	0				9 32	PP		
GOTEBORG	44.03	318.4	8 0	0				9 47	PP		
YAKUTSK	44.09	35.3	7 59A	-1	14 21	-4					
HALLE	44.11	309.5	7 56	-4				9 42	PP		
JENA	44.38	308.7	8 2	0			8 25	9 47	PP		
SKALSTUGAN	44.49	326.9	8 4A	1				9 47	PP		
KHEYS	44.77	357.0	8 1	-5				9 46	PP		
KONGSBERG	45.35	321.1	8 13K	3				9 58	PP		
TIKSI	45.94	21.9	8 14A	-1	14 50	-1	8 38	8 58			
STUTTGART	46.10	305.9	8 17	1			8 41				
HEIDELBERG	46.38	306.8	8 19	1			8 43				
MUNSTER	46.75	310.5	8 22	1							
STRASBOURG	47.12	305.9	8 27	3				10 23			
BENSBERG	47.15	309.2	8 25	1			8 49	10 18	PP		
BERGEN	47.54	322.1	8 28	1							
BAGUIO CITY	47.91	100.9	8 31	1							
MONACO	48.34	299.5	8 35	1				8 59			
ISOLA	48.50	300.2	8 35	0				9 44			
BESANCON	48.55	304.4	8 35	0				9 16			
DOURBES	48.91	308.4	8 40	2							
GARCHY	50.48	305.0	8 39	-11			8 54				
CLERMONT-FD.	50.81	303.1					9 35				
KEW	51.70	310.9	8 58	-1			9 23				
DURHAM	51.78	315.2	9 0	0							
FOLINIÈRE	52.43	307.6	9 0	-5							
Y.-SAKHLINSK	52.80	54.6	9 6	-1							
MATUSIRO	52.90	68.4	9 7K	-1			9 23				
BAGNERES	53.62	300.6	9 12	-2							
ALERT	59.32	353.6	9 54A	0							
CHILEKA	61.96	220.1	10 11K	-1							
BROKEN HILL	64.58	226.7	10 28A	-1							
MOULD BAY	67.58	2.7	10 47A	-1				11 16			
RESOLUTE	68.96	356.1	10 56A	-1							
BULAWAYO	69.04	222.9	10 57	0							
DARWIN	74.12	118.8	11 27	0							
COLLEGE	74.68	16.2	11 31	0			11 58	15 33			
COPPERMINE	76.12	2.4	11 37A	-2							
KIMBERLEY	78.02	220.6	11 47	-2							
YELLOWKNIFE	81.48	2.7	12 8A	0							
SCHIEFFERLLE	82.37	337.0	12 13	0							
PORT MORESBY	84.38	105.9	12 50	27							
EDMONTON	90.64	2.7	12 53A	0							
PENTICTON	94.26	7.1	13 10K	1							
UINTA BASIN	103.79	0.6	13 53	1							
EUREKA	104.35	5.7	13 58	3							
WICHITA MTS.	108.75	351.1						29 41	PKKP		
TONTO FOREST	109.78	2.2	18 16	777							

JUNE 1 12.H 30.M 56.S EPICENTRE -14.77-172.30 DEPTH= 24.KM

A=-0.95867 B=-0.12961 C=-0.25329 D=-0.1340 E= 0.9910
G= 0.2510 H= 0.0339 K=-0.9674 HT= 5.8

SE= 2.54

	DELTA DEG.	AZ. DEG.	P		O-C S	S O-C			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
AFIAMALU	0.99	30.7	0	19K	1	0	37	5				
KARAPIRO	25.46	202.8	5	23	-5							
CHATEAU	26.59	201.5	5	33	-5							
WELLINGTON	28.71	200.6									7	36
BRISBANE	34.79	243.1	6	46	-5							
MONOWAI	35.24	204.6	6	50	-4							
RIVERVIEW	38.07	233.5	7	21	3						15	46 SS
CHARTERS TS.	39.82	256.3	7	31	-2	13	43	7				
TOOLANGI	43.69	230.6	7	58	-7						8	12 *SP
MUNDARING	66.77	241.3	10	48	-3							
MATUSIRO	69.15	319.1	11	8	2							

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PRIEST	70.29	42.4	11 15A	2				
BERKELEY	70.31	40.1	11 16A	3	21	4	41	
LICK	70.38	40.9	11 16A	2				
CALISTOGA	70.59	39.3	11 15K	0				
PASADENA	70.82	45.4	11 21	5				
MINERAL	72.25	38.4	11 26A	1				
BOULDER CITY	74.11	45.3	11 38	2				
TUCSON	75.11	50.4	11 42	0				
EUREKA	75.24	41.8	11 43	1				
TONTO FOREST	75.76	48.4	11 46	1				12 43
BLUE MTS.	77.48	36.6	11 55K	0				
PENTICTON	78.92	32.0	12 3	0				
ALBUQUERQUE	79.58	49.6	12 8	1				
UINTA BASIN	79.88	43.7	12 9	1				15 11 PP
BUTTE	80.90	37.6	12 15	1				
HUNGRY HORSE	81.33	35.0	12 15	-1				
COLLEGE	81.55	10.3	12 17	0				
BOZEMAN	81.62	38.4	12 18	1				
GOLDEN	82.45	45.7	12 23	1				
LARAMIE	83.02	44.2	12 26	1				
EDMONTON	84.47	31.0	12 32A	0				
WICHITA MTS.	85.42	52.5	12 35	-2	23	16	11	13 2
TULSA	87.98	52.2						24 44 PS
YELLOWKNIFE	89.10	23.1	12 55A	1				
CUMBERLAND	95.84	54.9	13 37	11				
MOULD BAY	96.11	11.1	13 27	0				
QUETTA	123.71	296.5	18 57	1				
SODANKYLA	125.99	351.1	19 0	0				
KIRUNA	126.33	354.0	19 1	0				
SHIRAZ	136.22	297.5	19 20	0				
COLLMBERG	143.31	354.4	19 31	-1				21 26
RACIBORZ	143.76	348.5	19 32	-1				
JENA	143.80	355.8	19 30	-3				
BENSBERG	143.90	0.6	19 33A	0				
UCCLE	143.96	3.6	19 38	5				
PRAGUE	144.37	352.6	19 33	-1				
BROKEN HILL	144.44	216.2	19 32	-2				
PRUHONICE	144.44	352.4	19 35K	1				
DOURBES	144.67	3.5	19 38	3				
KASPERSKE H.	145.40	353.2	19 38K	2				20 54
FOLINIÈRE	145.43	9.5	19 37	1				
VIENNA-H.	145.85	349.7	19 31	-6				19 41 PKP2
STUTTGART	146.07	358.1	19 41	4				
STRASBOURG	146.28	359.9	19 42	5				25 4
WELSCHBRUCH	146.44	1.6	19 42	4				
GARCHY	147.36	5.8	19 43	4				
BESANCON	147.58	2.2	19 46	6				20 12
LJUBLJANA	148.29	350.9	19 42	1				20 6
TRIESTE	148.80	351.8	19 48	7				
CLERMONT-FD.	148.86	6.2	19 51	9				20 10
JERUSALEM	149.70	308.7	19 51	8				
ISOLA	150.68	1.0	19 54	10				
BAGNERES	151.06	11.5	19 54	9				
TOLEDO	152.95	20.2	19 59	11				
LWIRO	153.12	232.7	19 53	5				

JUNE 1 20.M 36.M 5.S EPICENTRE 38.65 14.93 DEPTH= 250.KM

A= 0.75661 B= 0.20180 C= 0.62195 D= 0.2577 E=-0.9662
G= 0.6009 H= 0.1603 K=-0.7831 HT= -1.2

DEPTH OF FOCUS= 0.034R

SE= 2.35

	DELTA DEG.	AZ. DEG.	P		O-C S	S O-C			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
MESSINA	0.66	132.5	0	29K	-5	0	51	-10			0	59 SG
REGGIO CALA.	0.78	133.9	0	30	-5	0	31	-30			0	56 SG
TARANTO	2.55	43.8				1	41	17				
ROME	3.75	330.8	1	2A	0	1	47	-2			2	4 S*
ATHENS	6.94	92.9	1	40A	-1						2	59 SG
TRIESTE	7.05	353.2	1	41	-1	3	0	-2			2	13 PG
PADOVA	7.13	342.3				2	55	-9			3	30 S*
ZAGREB	7.21	5.8	1	44	0							
LJUBLJANA	7.40	357.8	1	45A	-1	3	5	-5				
BELGRADE	7.42	32.0	1	46	-1						3	28

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SOFIA	7.56	54.9	1 47	-1							
ISOLA	8.10	315.5	1 57	2							3 52 *SS
ROSELEND	9.35	321.5	2 15	4	4 11	17					
BRATISLAVA	9.65	8.7	2 14	-1							
VIENNA-H.	9.66	5.7	2 16	1	4 3	2					
EBINGEN	10.47	337.5	2 25	0							
FELDBERG	10.51	333.6	2 26	0							
KASPERSKE H.	10.53	355.1	2 25	-1							3 10
BESANCON	10.81	325.6	2 28	-2							2 50
STUTTART	10.91	339.9	2 31	0	4 32	2					
ISTANBUL UN.	11.07	73.1	2 39	6							
STRASBOURG	11.20	334.8	2 35	1	4 56	20					
CLERMONT-FD.	11.28	312.9	2 41	6							5 4
UZHGOROD	11.31	25.7	2 39	3							
PRUHONICE	11.33	358.7	2 37	1							4 42
KARLSRUHE	11.37	337.7	2 39	2							
PRAGUE	11.43	358.4	2 41	4							4 42
NIEDZIKA	11.44	18.0	2 38	0							3 18
WELSCHBRUCH	11.57	330.3	2 35	-4							
RACIBORZ	11.67	10.5	2 43	3							4 56
KRAKOW	11.94	15.7	2 48	4							5 5
BAGNERES	12.03	296.2	2 51	6							
JENA	12.51	350.2	2 51	0	5 7	1					
COLLMBERG	12.73	354.5	2 55A	2						3 37	
HALLE	13.02	351.7	2 58	1	5 23	6					
BENSBERG	13.48	338.5	3 4A	1							3 30
TOLEDO	14.76	280.7	3 18K	0	5 55	-1					3 45 PP
FOLINIERE	15.03	317.3	3 20	-2							
SIMFEROPOL	15.62	60.1	3 29	0							
COPENHAGEN	17.12	355.2	3 44	-1							
KARLSKRONA	17.53	1.2	3 46K	-4							
KSARA	17.56	99.5	3 50	0							5 59
JERUSALEM	17.92	106.3	3 58A	4							
GOTEBORG	19.16	355.2	4 5	-1							
UPPSALA	21.29	3.7	4 26K	-2							
KONGSBERG	21.29	352.6	4 28A	0							
BAKURIANI	22.01	72.9	4 35	0							
HELSINKI	22.46	13.2	4 37	-2							
BERGEN	22.61	347.5	4 39	-1							
NURMIJARVI	22.73	12.5	4 41A	0	8 36	8					
MOSCOW	22.85	34.2	4 41K	-2							
TIFLIS	22.97	72.8	4 45	1							
PULKOVO	23.29	19.8	4 46K	-1							
VIBORG	23.75	17.0	4 50	-1							
KIROVOBAD	24.19	75.3	4 56	1							
SKALSTUGAN	25.02	357.2	5 0	-3							
UMEA	25.41	5.5	5 4K	-2							5 53
KAJAANI	26.58	12.5	5 14	-3					5 57		
TEHERAN	29.07	84.3	5 40	1							
KIRUNA	29.40	4.2	5 40	-2							
SODANKYLA	29.51	9.2	5 41	-2					6 24		
APATITY	30.74	13.8	5 52	-2							
TROMSOE	31.12	2.7	5 55	-2							
KEVO	31.84	7.9	6 1	-2							
SHIRAZ	32.19	94.7	6 7K	1	11 5	5					7 6 PP
SVERDLOVSK	34.89	43.4	6 30A	0							
DUZHANBE	41.55	72.6	7 25A	0							
QUETTA	43.25	85.0	7 39K	1							
FRUNSE	44.60	64.8	7 49K	0							
KHEYS	44.98	9.1	7 53K	1							
ALMATA-2	46.41	63.4	8 3K	0							
NEW DELHI	51.94	81.4	8 44K	-1							
RESOLUTE	58.07	342.9	9 27K	-2							
CHATRA	60.48	77.9	9 46K	1							
TIKSI	60.72	19.4	9 45K	-2							
MOULD BAY	61.78	348.8	9 53K	-1							
SHILLONG	64.73	76.6	10 13K	0							
YAKUTSK	66.82	27.8	10 24K	-3							
SIAN	72.34	60.1	11 2K	2							
PEKING	73.66	51.7	11 8K	0							
CUMBERLAND	75.88	304.3	11 19	-1							
CHANGCHUN	76.59	44.2	11 34K	10							
EDMONTON	78.04	331.3	11 32K	0							
LARAMIE	83.71	319.2	12 3	1							
WICHITA MTS.	84.54	310.6	12 7	1					13 7		
BLUE MTS.	86.41	328.2	12 15	0							
UINTA BASIN	86.46	320.9	12 15	0							
EUREKA	90.17	324.2	12 34	1							
TONTO FOREST	91.96	318.0	12 42	1							

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JUNE 1 21.H 13.M 49.S EPICENTRE -15.07-173.32 DEPTH= 0.KM

A=-0.95948 B=-0.11230 C=-0.25841 D=-0.1163 E= 0.9932
G= 0.2567 H= 0.0300 K=-0.9660 HT= 5.7

SE= 2.24

	DELTA DEG.	AZ. DEG.	P		O-C S	S O-C			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
AFIAMALU	1.89	52.5	0	28	-6							
PORT VILA	17.81	258.9	4	16A	5							
NOUMEA	20.45	246.4	4	50A	9	8	25	-1				
KOUMAC	22.00	252.4	4	56K	-1							
KARAPIRO	24.81	201.3	5	23	-2							
CHATEAU	25.95	200.1	5	56	20							
BRISBANE	33.77	243.1	6	43	-2						9	29
RIVERVIEW	37.09	233.3	7	15	1	12	52	-8				
CHARTERS TS.	38.78	256.6	7	26	-2	13	16	-10				
PORT MORESBY	39.00	273.6	7	29A	-1	13	45	16			16	52 SS
HONOLULU	39.11	22.8	7	35	4	13	34	3			9	14 PP
KIPAPA	39.25	22.9	7	33	1							
CANBERRA	39.29	232.1	7	29	-3				7	41		
TOOLANGI	42.73	230.5	7	57A	-3						8	27
ADELAIDE	47.25	236.2	8	35A	-1							
DARWIN	54.20	265.5	9	27	-2							
CAPE HALLETT	58.04	185.9	9	57	0							
SCOTT BASE	63.58	184.6	10	36	1							
MUNDARING	65.75	241.5	10	47	-2							
TUKUBASAN	67.36	320.5	10	57A	-2	19	56	2			13	20 PP
MATUSIRO	68.73	319.7	11	7A	0	20	13	3				
BYRD STATION	69.27	171.3	11	10	-1							
PARAISO	70.18	41.8	11	20	4							
PRIEST	71.18	42.8	11	23K	1							
BERKELEY	71.19	40.6	11	25K	3	20	35	-4				
LICK	71.26	41.3	11	23A	0							
MANILA	71.26	291.5	11	21	-2	20	47	7				
CALISTOGA	71.46	39.8	11	24A	0							
PASADENA	71.74	45.8	11	24	-2	20	48	2				
PETROPAVLOVK	71.99	342.6	11	27A	0							
BAGUIO CITY	72.36	293.0	11	27	-2	21	0	7				
MINERAL	73.10	38.8	11	34A	0							
Y.-SAKHLINSK	73.30	330.3	11	34A	-1							
BOULDER CITY	75.03	45.7	11	45	0							
TUCSON	76.07	50.7	11	51	0							
EUREKA	76.13	42.2	11	51	0							
TONTO FOREST	76.71	48.7	11	55	1	21	42	1	12	3	14	48 PP
VICTORIA	77.25	31.4	11	56	-1							
MIRNY	77.76	204.1	11	59	-1							
ZO-SE	77.83	307.0	12	1A	0	21	58	5				
BLUE MTS.	78.32	37.0	12	3K	0	22	0	2			15	0 PP
TANGERANG	78.84	266.6	12	5A	-1						13	2
SALT LAKE C.	79.50	42.7	12	11	1							
PENTICTON	79.70	32.4	12	11A	0							
MAGADAN	79.85	342.3	12	11A	-1							
SPOKANE	79.97	34.6	12	12	0	22	15	-1				
NANKING	80.09	307.0	12	14A	1	22	25	8				
HONG KONG	80.13	296.3				22	40	22				
UINTA BASIN	80.79	44.0	12	17	0	22	27	3			15	23 PP
CHANGCHUN	80.98	320.0	12	18A	0	22	31	4				
CANTON	81.12	296.8	12	19A	1	22	35	7				
COLLEGE	82.03	10.7	12	22	-1						13	3
HUNGRY HORSE	82.15	35.4	12	24	0							
BOZEMAN	82.48	38.8	12	27	2							
GOLDEN	83.38	46.0	12	31	1						34	41
LUBBOCK	83.45	52.8	12	31	1							
EDMONTON	85.25	31.4	12	38K	-2							
PEKING	85.30	313.4	12	41K	1	23	16	6			23	3 SKS
WICHITA MTS.	86.39	52.8	12	44	-1	23	23	3			28	31 SS
SIAN	88.57	305.9	12	58K	2	23	53	12			23	26 SKS
YAKUTSK	88.82	336.7	12	55A	-2							
TULSA	88.95	52.4	12	57	-1	23	51	6			23	31 SKS
PAOTOM	89.86	312.2	13	3K	1	24	2	9			23	32 SKS
LAWRENCE	90.36	49.7	13	4	0							
KUNMING	90.95	295.6	13	10	3	24	14	11				
CHENG TU	91.42	301.2	13	10	1	24	15	8				
SANTA LUCIA	92.04	125.3	13	18	6	24	20	8			30	35 SS
COPPERMINE	92.64	18.8	13	14	-1							
LANCHOW	93.09	306.4	13	18A	1	24	33	11			23	51 SKS
FLORISSANT	93.94	51.0	13	20	-1							

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TIKSI	94.70	344.4	13 19	-5	24 36	1		
MOULD BAY	96.60	11.2	13 32	-1				
CUMBERLAND	96.83	55.1	13 34	0	24 13	2	17 26 PP	
IRKUTSK	97.17	322.1	13 36A	1				
CHINCHINA	98.70	87.2	13 45	3	25 14	54		
BOGOTA	100.11	87.9	13 50	1			17 52 PP	
FUQUENE	100.65	87.2					17 52 PP	
RESOLUTE	101.39	15.4	13 53	-1				
PENNSYLVANIA	103.76	51.1	17 20	195				
PALISADES	106.77	51.2	13 48	777	25 2	4		
BREBEUF	107.35	46.6					34 14 SS	
CARACAS	108.36	83.8			25 7	2	18 55 PP	
SEMIPALATNSK	111.92	318.6	18 34	-3				
BERMUDA	113.52	61.0			25 26	0	19 29 PP	
TASHKENT	120.32	309.2	18 54	1				
SVERDLOVSK	121.89	328.4	18 56K	0				
QUETTA	122.96	296.3	19 0	2				
KEVO	123.88	351.6	18 59	-1				
APATITY	124.74	347.9	19 2	0	26 6	1	20 47 PP	
TROMSOE	124.93	354.8	19 2	0				
SODANKYLA	126.13	350.6	19 3	-1				
KIRUNA	126.53	353.6	19 5	0			21 0 PP	
KAJAANI	128.93	348.3	19 10	0			22 34 PKS	
UMEA	130.40	352.1	19 14	1			21 23 PP	
KIZYL-ARVAT	130.48	308.9	19 15	2				
SKALSTUGAN	131.39	356.7	19 13	-1			22 42 PKS	
VIBORG	131.68	345.6	19 16	1				
PULKOVO	132.12	344.1	19 16	0			28 31 SKKS	
NURMIJARVI	132.78	348.0	19 16	-1			21 39 PP	
MOSCOW	132.98	336.6	19 18	1			21 35 PP	
HELSINKI	133.03	347.6	19 19	1				
UPPSALA	134.57	352.3					22 49 PKS	
TEHERAN	135.13	305.8	19 22	1			22 56 PKS	
KONGSBERG	135.44	357.9	19 30	8			22 57 PKS	
SHIRAZ	135.48	297.0	19 23	1			21 57 PP	
KIROVOBAD	137.19	314.4	19 18	-7			21 56	
GOTEORG	137.26	355.8	19 24	-1			22 15 PP	
TIFLIS	137.75	316.6	19 28	2			23 4 PKS	
DURHAM	139.87	7.4	19 32	2				
WARSAW	141.21	345.9	19 30	-2		19 43	23 11 PKS	
SIMFEROPOL	142.25	327.7	19 31	-3			32 52 PS	
DE BILT	143.04	1.5	19 32	-4			22 51 PP	
HALLE	143.42	354.5	19 36	0			22 48 PP	
CHORZOW	143.48	346.7	19 35	-1			20 25	
KRAKOW	143.49	345.6	19 36	0			23 12 PKS	
COLLMBERG	143.51	353.3	19 35	-1			23 13	
BROKEN HILL	143.60	217.3	19 34K	-2				
RACIBORZ	143.85	347.4	19 37	0			22 19	
JENA	144.02	354.7	19 35	-2			22 54 PP	
BENSBERG	144.20	359.5	19 38K	0				
UCCLE	144.32	2.5	19 38	0		19 46		
PRAGUE	144.53	351.4	19 39	1			22 52	
PRUHONICE	144.60	351.2	19 39	1				
DOORBES	145.03	2.3	19 41	2		19 51		
KASPERSKE H.	145.57	352.0	19 41A	1			21 19	
HEIDELBERG	145.73	357.6	19 43	3				
FOLINIERE	145.89	8.4	19 42	2				
BRATISLAVA	145.89	347.5	19 41A	1			20 54	
HURBANOVO	145.93	346.1	19 39	-2			19 53 PKP2	
VIENNA-H.	145.96	348.4	19 44	3				
KARLSRUHE	146.13	358.0	19 44K	3				
PARIS	146.18	5.0	19 44	3				
STUTTGART	146.33	356.9	19 43	2				
STRASBOURG	146.58	358.7	19 45A	3			22 39 PP	
TUBINGEN	146.58	357.1	19 45	3				
WELSCHBRUCH	146.76	0.4	19 46	4				
EBINGEN	146.93	357.2	19 45	3				
FELDBERG	147.27	358.3	19 47	4				
RAVENSBERG	147.30	356.3	19 46	3				
ISTANBUL UN.	147.68	327.5	19 46	3				
KSARA	147.69	310.5	19 47	4			23 11 PP	
GARCHY	147.75	4.6	19 48	4				
BESANCON	147.91	0.9	19 47	3				
ADDIS ABABA	148.07	262.9	19 51	7				
BELGRADE	148.13	341.3	19 50	6			23 35 PP	
CHUR	148.23	356.3	19 53	9				
ZAGREB	148.36	347.6	19 58	13				
LJUBLJANA	148.42	349.5	19 47K	2			20 5 PKP2	
TRIESTE	148.94	350.4	19 48	3			20 6 PKP2	

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SOFIA	148.97	335.8	19 52	6	
JERUSALEM	149.11	307.6	19 53A	7	
CLERMONT-FD.	149.25	4.9	19 53	7	
PADOVA	149.44	352.8	19 46	0	22 11
ROSELEND	149.48	0.1	19 53	7	
PAVIA	149.92	356.5	19 55	8	27 3
ISOLA	150.99	359.4	19 57	8	
BAGNERES	151.54	10.1	19 58	9	23 43
LWIRO	152.15	233.7	20 0A	10	23 38 PP
AQUILA	152.21	349.3	19 53	3	26 56
ATHENS	152.66	329.7	19 51	0	23 39
ROME	152.80	350.5			19 54 PP
TOLEDO	153.56	18.8	19 54	2	23 47 PP
MESSINA	155.66	342.8	20 15	20	23 57
GRANADA	156.16	20.6	20 15K	19	24 10 PP

JUNE 2 10.H 0.M 0.S EPICENTRE -6.01 154.45 DEPTH= 43.KM

A=-0.89735 B= 0.42890 C=-0.10400 D= 0.4312 E= 0.9022
G= 0.0938 H=-0.0448 K=-0.9946 HT= 7.0

DEPTH OF FOCUS= 0.002R

SE= 2.65

	DELTA DEG.	AZ. DEG.	P		O-C S	S			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
RABAU	2.90	308.2	0	47K	2							
HONIARA	6.42	122.3	1	34A	-1	2	50	2				
PORT MORESBY	7.98	244.6	1	54	-3	3	28	1				
PORT VILA	17.87	131.9	4	7	0							
NOUMEA	19.91	145.6	4	29	-2							
BRISBANE	21.32	184.1	4	42	-4	8	33	-2				
DARWIN	24.15	253.1	5	13	0	8	54	-32				
RIVERVIEW	27.85	185.9	5	53	5	10	26	-1			6	37 PP
CANBERRA	29.60	189.1	6	5	1	10	51	-4				
ADELAIDE	32.27	204.7	6	26	-1	11	52	16	6	39	13	30 SS
TOOLANGI	32.46	193.3	6	36	7				6	46	9	14 PCP
AFIAMALU	34.14	105.9	6	24	-19	11	56	-9			14	22 SS
TARRALEAH	36.83	189.9	7	10	4							
MOORLANDS	36.85	189.0	7	12	6						9	28
KARAPIRO	37.11	151.9	7	14	5							
WELLINGTON	39.53	155.7	7	28	-1							
BAGUIO CITY	40.24	304.1	7	34	-1	13	42	3				
MONOWAI	41.23	166.0	7	40	-3				7	51		
ROXBURGH	41.39	164.2	7	39	-5	13	48	-8				
MUNDARING	44.05	229.2	8	6	0	14	32	-3				
PERTH	44.33	229.4	8	25	17	14	40	1			10	35 PPP
MATUSIRO	44.98	341.4	8	12K	-1	15	20	32				
HONG KONG	48.44	306.8	8	43	3	15	44	7				
ZO-SE	48.71	321.2	8	43A	0	15	44	3				
CANTON	49.50	307.2	8	50A	1	15	59	7				
NANKING	50.87	320.3	8	59A	0	16	16	5				
HONOLULU	53.87	58.3	9	23	2	17	11	19				
CHANGCHUN	56.16	334.9	9	36	-2							
PEKING	57.80	325.8	9	48A	-2	17	43	-1				
SIAN	58.75	316.2	9	57A	1							
PETROPAVLOVK	58.91	3.0	9	58	0							
KUNMING	59.02	303.9	10	0A	2	18	8	8				
CHENG TU	60.46	310.2	10	9A	1	18	22	3				
PAOTOW	61.73	322.7	10	16A	-1	18	37	2				
LANCHOW	63.23	315.4	10	28A	1	18	59	5				
CAPE HALLETT	66.94	174.8	10	49	-2							
SHILLONG	68.35	300.4	10	59A	0							
LHASA	70.35	304.2	11	13	1	20	25	6				
YAKUTSK	70.47	347.9	11	10	-2							
CHATRA	72.75	300.3	11	27A	1							
MIRNY	73.41	201.5	11	27	-3						12	34
TIKSI	79.29	352.0	12	1A	-2	22	1	2				
NEW DELHI	81.75	299.9	12	15A	-1							
COLLEGE	82.37	21.4	12	17	-2							
POONA	83.04	289.4	12	22A	-1							
BYRD STATION	83.43	169.9	12	23	-2							
SOUTH POLE	84.03	180.0	12	25	-3							
ALMATA	85.06	314.3	12	31K	-2							
MAWSON	85.09	202.6	12	30A	-3							
FRUNSE	86.64	313.5	12	40A	-1	23	15	2				

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KHOROG	88.03	307.8	12 49	2					
PARAISO	88.05	53.3	12 53	6					
CALISTOGA	88.24	51.0	12 50K	2					
BERKELEY	88.37	51.8	12 51A	-2	23 44	15			
LICK	88.78	52.4	12 52A	1					
MINERAL	89.25	49.5	12 53A	0					
PRIEST	89.39	53.7	12 56K	2					
TASHKENT	90.31	311.4	12 57	-1	23 53	6			
QUETTA	90.83	300.1	13 0A	-1					
PASADENA	91.17	56.0	13 2	0	23 47	-7		25 18	
PENTICTON	91.86	40.8	12 56	-9					
BLUE MTS.	92.94	45.4	13 10	0	24 16	6		17 0 PP	
EUREKA	93.45	50.8	13 13	0				14 7	
BOULDER CITY	94.07	54.4	13 17	2					
MOULD BAY	94.89	13.9	13 17	-2					
HUNGRY HORSE	95.45	42.1	13 20	-2					
YELLOWKNIFE	95.72	27.8	13 24	1					
EDMONTON	96.08	37.0	13 23	-2					
TONTO FOREST	96.88	56.3	13 30	2			13 42	30 12 PKKP	
SVERDLOVSK	97.08	326.4	13 26	-3					
UINTA BASIN	98.41	50.2	13 36A	1				17 42 PP	
ALBUQUERQUE	100.86	55.7	13 48	2				17 55 PP	
SHIRAZ	103.31	298.9						18 30	
TEHERAN	104.09	305.2						18 19 PP	
WICHITA MTS.	107.33	55.6	14 19	777				18 47 PP	
KIROVOBAD	107.63	310.6						18 42 PP	
GORIS	107.77	309.4						18 48 PP	
KEVO	107.94	343.1						28 10 PS	
TULSA	109.49	54.1			26 35	96		34 10 SS	
KIRUNA	111.01	343.0						29 3 PS	
NURMIJARVI	113.91	335.4						19 30 PP	
KSARA	116.98	304.9						19 45 PP	
CUMBERLAND	117.73	52.9	18 47	5				19 57 PP	
KIMBERLEY	120.52	231.7	18 49	1					
BULAWAYO	120.77	242.4	18 49	1					
BROKEN HILL	122.71	248.7	18 53K	1					
BREBEUF	122.77	38.5						38 6 SS	
PALISADES	124.61	43.4						22 17 PKS	
COLLMBERG	124.70	331.6						19 20	
LWIRO	125.12	263.0						20 44 PP	
ATHENS	125.22	312.9						20 52	
KASPERSKE H.	125.82	329.3	18 58	0					
HUANCAYO	127.35	110.0	19 3	2					
STRASBOURG	129.03	332.0						32 29 SP	
AQUILA	130.03	322.5						21 22 PP	
CHINCHINA	130.16	88.6	18 25	-41				21 46 PP	
BOGOTA	131.68	89.2	19 16	7				21 31 PP	
FUQUENE	132.07	88.1						21 27 PP	
LA PAZ	132.31	118.6	19 13	3					
CARACAS	138.83	81.0	19 12	-10				22 16 PP	
TOLEDO	141.13	333.3	19 20	-6				22 30 PP	
M. BOUR	168.15	315.3	20 3	1				21 19 PKP2	

JUNE 2 21.H 4.M 24.S EPICENTRE -58.52 -15.78 DEPTH= 46.KM

A= 0.50501 B=-0.14274 C=-0.85123 D=-0.2720 E=-0.9623
G=-0.8191 H= 0.2315 K=-0.5248 HT= -8.4

DEPTH OF FOCUS= 0.002R

SE= 2.20

	DELTA DEG.	AZ. DEG.	P		O-C S	S			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
G. G. VIDELA	22.74	234.2	5	1	2							
ARGENTINE I.	23.28	232.9	5	5	0	9	25	15				
HERMANUS	33.46	59.4	6	40	3	11	48	-6			7	43 PP
MAWSON	34.33	138.2	6	41	-3	12	5	-3				
BYRD STATION	35.27	197.1	6	53	0							
GRAHAMSTOWN	37.80	67.0									7	59
KIMBERLEY	40.77	61.0	7	35A	-3							
SANTA LUCIA	43.99	280.1	8	4	-1	14	38	5	8	20	10	2 PP
MIRNY	44.56	147.3	8	7A	-2	14	42	1	8	51	9	47 PP
CHANGALANE	46.34	67.2	8	20K	-3	15	6	-1	8	32	15	18 PS
WILKES	49.20	154.6	8	45	-1	15	56	9			10	38 PP
CAPE HALLETT	49.39	182.4	8	50	3							
BULAWAYO	49.93	59.2	8	47K	-4							

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ANTOFAGASTA	51.78	287.9	9	4	-1						
LUANDA	54.29	36.2	9	22K	-2					11	14
BROKEN HILL	54.88	55.7	9	24	-4						
CHILEKA	56.74	63.1	9	38	-4						
LA PAZ	56.78	294.8	9	43	1	17	19	-11			
AREQUIPA	58.44	291.5	9	52	-2						
TANANARIVE	60.18	77.2	10	5	-1						
HUANCAYO	64.10	290.4	10	33	1						
NANA	64.90	289.0	10	37	0	19	26	13			
LWIRO	66.00	50.2	10	42K	-2	19	31	4		23	57 SS
M. BOUR	72.64	358.8	11	29	4	20	47	2			
ROXBURGH	76.28	183.7								29	36 SSS
BOGOTA	78.06	299.9	11	56A	0	21	51	6		14	56 PP
FUQUENE	78.66	300.6	11	58A	-1					14	54 PP
CHINCHINA	79.08	298.7	12	0A	-1	22	14	18		15	9 PP
WELLINGTON	80.18	188.1								35	36
CARACAS	80.23	309.0	12	7A	-1	22	12	4			
ADDIS ABABA	80.33	54.7	12	9	1						
PERTH	81.26	140.0	12	16	3					15	25 PPP
FORT FRANCE	81.86	315.9	12	16	0	22	35	10			
ST. CLAUDE	83.25	315.9	12	23	0	22	36	-3			
KARAPIRO	83.45	189.0	12	25	1						
BALBOA HTS.	84.41	297.1	12	29	0						
ADELAIDE	84.45	159.2	12	30A	1	22	56	5		27	56 SS
CANBERRA	85.65	167.6	12	36	1	23	3	1			
SAN JUAN	87.06	312.9	12	40	-2	23	26	10			
RIVERVIEW	87.35	169.1				23	25	6		24	30 PS
AVERROES	91.74	7.0	13	8K	4	24	38	39		17	50 PP
GRANADA	95.70	9.7				24	50	56		30	24 SS
TOLEDO	98.52	9.1	13	45	10	24	16	8		17	42 PP
BERMUDA	99.31	319.8	13	40	1	24	10	-2			
MESSINA	99.85	24.6	13	41	0	24	17	2		17	45 PP
KSARA	101.57	41.8	13	53	4	24	29	6		18	0 PP
ATHENS	101.62	30.9	13	51K	2					14	26
ROME	102.78	21.3				25	49	80		18	7 PP
AQUILA	103.40	21.8								18	7 PP
ISOLA	104.07	16.7								18	16 PP
SHIRAZ	104.48	56.7								17	47 PP
BOMBAY	105.19	78.7	18	22	777					27	43
AFIAMALU	105.20	204.2								33	18 SS
PAVIA	105.38	18.0	18	27	777					27	57
ISTANBUL UN.	105.96	33.6	14	8	777						
SOFIA	105.96	28.9	18	23	777						
PADOVA	106.07	19.9								20	6
GARCHY	106.58	13.3								18	36 PP
TRIESTE	106.64	21.2								18	31 PP
LJUBLJANA	107.17	21.6								18	36 PP
BELGRADE	107.26	26.1	18	52	777					31	17
STRASBOURG	108.48	16.2								19	7 PP
STUTTGART	108.89	17.2								18	52 PP
TEHERAN	109.23	52.6	18	10	777	25	4	7		18	59 PP
DOURBES	109.54	13.8								18	51 PP
VIENNA-H.	109.65	22.2								18	54 PP
BRATISLAVA	109.72	22.7	18	54	777						
KASPERSKE H.	109.96	20.0								18	49 PP
UCCLE	110.19	13.5								29	47 PS
CUMBERLAND	110.21	305.4	14	30	-237	25	0	-1		19	2 PP
PALISADES	110.29	316.8	14	28	-239	25	2	0			
GORIS	110.45	46.9	18	35	8					28	36 PS
PORT MORESBY	110.91	161.9								19	4 PP
PRUHONICE	110.96	20.4	18	10	-18					19	9 PP
PRAGUE	111.02	20.3								18	57
SIMFEROPOL	111.06	35.6	18	44	16	25	12	7		19	12 PP
JENA	111.36	18.2				25	8	2		19	1 PP
DE BILT	111.57	13.7								19	6 PP
RACIBORZ	111.76	22.8								19	12 PP
TIFLIS	111.80	44.6								19	12 PP
COLLMBERG	111.95	19.0	18	33	3	25	5	-3			
HALLE	111.97	18.3								19	6 PP
KRAKOW	112.09	24.0				25	16	7		19	16
LWOW	112.79	26.7								19	21 PP
DURHAM	113.51	8.9								19	34 PP
BREBEUF	114.12	319.3	18	46	11					35	22 SS
WARSAW	114.38	23.9								19	52 PP
SCARBOROUGH	114.59	314.5								19	33
LONDON ONT.	114.75	312.8	18	43	7						
OTTAWA	114.76	317.8								19	32
TULSA	115.03	298.1	18	34	-2					19	23 PP

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WICHITA MTS.	115.37	295.2	18 38	1					19 36 PP
NEW DELHI	115.41	76.5	18 39A	2					
ABERDEEN	115.85	8.2							27 44
KARLSKRONA	117.06	19.1							19 48
LAWRENCE	117.28	300.4	18 36	-5					
ALBUQUERQUE	119.37	289.5	18 44	-1					28 57 PKKP
TUCSON	119.42	284.3	18 44	-1					
KHOROG	119.75	66.2							20 15 PP
SCHEFFERVILLE	120.20	328.6	18 47	1					
SHILLONG	120.61	90.5	18 47	0					
UPPSALA	120.91	18.9	18 51	3					36 35 SKKS
TOMTO FOREST	121.26	285.4	18 49	1			18 53		20 36 PP
MOSCOW	121.67	32.3	18 55	6	25 52	8			20 22 PP
TASHKENT	121.73	61.9	18 51	2					20 23 PP
HELSINKI	122.58	22.8	18 53	2					
NURMIJARVI	122.83	22.5	18 49	-2					20 28 PP
PULKOVO	123.37	25.9	18 52	0					20 37 PP
SKALSTUGAN	123.65	14.6	18 52	-1					
LARAMIE	123.94	294.8	18 53	-1					20 41
BOULDER CITY	124.39	283.9	18 55	1					
PASADENA	124.68	279.9	19 0	5					20 45 PP
UMEA	125.07	18.6	18 53	-3					20 53 PP
UINTA BASIN	125.11	291.2	18 55	-1	26 4	10			20 41 PP
FRUNSE	125.40	64.5	18 59	3					
SALT LAKE C.	126.57	289.9	18 38	-21					19 12
KAJAANI	126.68	22.2	18 58	-1					
EUREKA	127.65	285.8	18 49	-12					20 53 PP
PARAISO	128.54	278.3	19 7	5					
SCORESBY SD.	128.78	357.3	19 11	8					
KIRUNA	128.82	16.7	19 1A	-2					21 14
HONG KONG	129.29	113.5							21 13 PP
SODANKYLA	129.42	19.7	19 3	-1					21 12 PP
SVERDLOVSK	130.04	44.3	19 5	0					
GODHAVN	130.35	343.4							21 15 PP
BUTTE	130.83	293.9	19 5	-2					
APATITY	130.86	22.6	19 10K	3	26 20	10			24 15 PPP
KEVO	131.61	18.4	19 19	11					21 42 PP
SHASTA	131.83	282.1	19 11	2					
BLUE MTS.	132.29	289.6	19 5	-5					21 35 PP
HUNGRY HORSE	133.19	295.1	19 10	-1					
SEMIPALATNSK	133.58	61.5	19 36	24					
HONOLULU	134.00	232.4							22 42
SPOKANE	134.34	292.4	19 13	0					21 50
LANCHOW	135.14	92.7	19 15	0					
EDMONTON	136.31	300.7	19 5	-12					
SIAN	136.42	99.0	19 13	-4					
PENTICTON	136.54	292.5	18 58	-19					
SEATTLE	136.72	289.0							22 2 PP
NANKING	139.67	110.8							22 16 PP
ZO-SE	140.04	114.3	19 25	1					
PAOTOW	141.76	93.6	19 20	-7					
YELLOWKNIFE	142.31	311.4	19 25	-3					
RESOLUTE	142.58	334.6	19 22K	-6					
PEKING	144.56	100.0	19 28	-4					
KHEYS	144.66	15.8	19 30	-2					25 49 PPP
COPPERMINE	145.06	319.2	19 30A	-3					
IRKUTSK	146.44	74.1	19 33	-2					20 25 PKP2
MOULD BAY	148.86	333.2	19 34	-5					
CHANGCHUN	152.00	104.5	19 44	0					23 23 PP
MATUSIRO	152.18	130.8	19 50A	6					37 30 PPS
TUKUBASAN	152.64	134.0	19 43A	-1					26 56 PPP
COLLEGE	156.89	306.1	19 47	-3					23 53 PP
TIKSI	160.57	33.5	19 52	-3					24 28 PP
YAKUTSK	162.67	63.7	19 56	-1					
Y.-SAKHLINSK	162.72	122.4	20 0	3					
MAGADAN	173.00	75.8	20 8	4					
PETROPAVLOVK	173.66	148.0	20 4	0					

JUNE 2 22.H 21.M 59.S EPICENTRE 13.16 -91.39 DEPTH= 100.KM

A=-0.02366 B=-0.97379 C= 0.22623 D=-0.9997 E= 0.0243
G=-0.0055 H=-0.2262 K=-0.9741 HT= 6.1

DEPTH OF FOCUS= 0.010R

SE= 3.20

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	DELTA DEG.	AZ. DEG.	P		O-C S	S			#PP		SUPP.	
			M	S		M	S	S	M	S	M	S
SAN SALVADOR	2.19	76.1	0	28K	-8	0	51	-12				
SANTIAGO MA.	2.86	83.1	0	39	-6	1	4	-15				
COMITAN	3.15	347.0	0	53	4	1	29	3				
OAXACA	6.46	307.1				2	49	2			3	9
VERA CRUZ	7.53	323.5				3	7	-4			4	31
MERIDA	7.93	12.1	1	52	-3	3	22	-1			2	52
TACUBAYA	9.73	310.6	2	22	3	4	21	14			4	41
BALBOA HTS.	12.34	108.6	2	51	-3							
CHINCHINA	17.56	116.2	4	2A	2							
FUQUENE	19.02	112.1	4	19A	2							
BOGOTA	19.09	114.8	4	21K	3							
WICHITA MTS.	22.43	344.3	4	49	-3				5	10		
LUBBOCK	22.45	336.6	4	52	0				4	56		
COLUMBIA	22.79	22.7	4	51	-4							
CUMBERLAND	22.94	12.2	4	55	-2						9	35 PCP
TULSA	23.00	350.8	4	55A	-2							
CARACAS	24.08	93.7	5	9	1							
FLORISSANT	25.55	1.9	5	19	-3							
ALBUQUERQUE	25.62	330.4	5	23	1						8	56 PCP
LAWRENCE	25.93	353.1	5	23	-2							
TUCSON	26.04	320.0	5	29	3							
TONTO FOREST	27.71	322.7	5	45	4						7	33
HUANCAYO	29.68	146.9	6	6	7							
PENNSYLVANIA	29.98	20.8	5	58	-4							
LARAMIE	30.66	338.8	6	8	0						7	12
BOULDER CITY	31.00	321.2	6	15	4						9	10 PCP
UINTA BASIN	31.42	332.8	6	16	2						9	9 PCP
PALISADES	31.68	25.7	6	19	3							
PASADENA	32.05	315.2	6	23	3						6	54 *SP
SCARBOROUGH	32.20	16.7	6	17	-4							
SALT LAKE C.	32.83	330.7	6	39	13							
EUREKA	34.02	324.9	6	39	2							
OTTAWA	34.78	19.5	6	39	-4							
PRIEST	34.85	316.2	6	48A	4							
AREQUIPA	35.40	145.7	6	55	7							
BREBEUF	35.59	21.6	6	47	-3							
LICK	36.17	317.1	6	59A	4							
BUTTE	37.33	335.5	7	6	1						9	26 PCP
LA PAZ	37.38	141.4	7	10	5							
CALISTOGA	37.51	318.2	7	10A	4							
MINERAL	37.88	321.2	7	13A	4							
BLUE MTS.	38.54	330.1	7	16	1						9	36 PCP
HUNGRY HORSE	39.80	336.4	7	26	1						9	23 PCP
SPOKANE	40.69	333.1	7	29	-4						7	43
SEPT ILES	42.22	23.9	7	40	-5							
BANFF	42.66	337.7	7	49	0							
PENTICTON	42.89	333.0	7	52	1							
EDMONTON	43.76	341.1	7	56A	-2							
VICTORIA	44.11	329.6	8	2	2							
SCHEFFERVILLE	45.81	19.6	8	11A	-3							
YELLOWKNIFE	51.97	346.6	9	0	-1							
COPPERMINE	56.78	349.5	9	35A	-1							
RESOLUTE	61.54	358.9	10	7K	-2							
COLLEGE	64.24	336.7	10	27	0							
MOULD BAY	64.80	352.9	10	29A	-2							
ALERT	70.34	3.9	11	2A	-3							
BAGNERES	82.26	47.7									15	50
GARCHY	83.45	43.1									16	5
SKALSTUGAN	84.30	25.9	12	22	0							
KIRUNA	85.88	20.7	12	30	0							
STUTTGART	87.12	40.6	12	37	1							
UMEA	87.51	24.4	12	39	1							
JENA	87.89	38.1	13	4	24						13	36
SODANKYLA	88.19	20.0	12	36	-5							
COLLMBERG	88.62	37.5	12	44	1						13	41 PP
BROKEN HILL	121.73	99.0	18	49	6							
SHIRAZ	125.02	38.8	18	53A	4							
CHILEKA	128.11	99.7	19	2	7							
QUETTA	132.13	25.5	19	9	6							
NEW DELHI	137.06	14.8	19	18A	6							
SHILLONG	141.37	355.3	19	26A	6							
MUNDARING	148.53	229.0	19	24	-8							

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JUNE 3 7.H 35.M 48.S EPICENTRE 34.03 138.76 DEPTH= 0.KM

A=-0.62452 B= 0.54750 C= 0.55697 D= 0.6592 E= 0.7520
G=-0.4188 H= 0.3672 K=-0.8305 HT= 0.5

SE= 2.77

	DELTA DEG.	AZ. DEG.	P			S			*PP		SUPP.	
			M	S	S	M	S	S	M	S	M	S
NAGATURO	0.58	7.4	0	13K	-2	0	21	-4			2	7
OMAEAKI	0.73	322.2	0	16A	-1	0	27	-2				
SHIZUOKA	0.99	342.6	0	24K	3	0	34	-2				
AJIRO	1.06	15.3	0	20K	-2	0	32	-6				
MISIMA	1.10	8.1	0	22K	-1	0	37	-2				
HAMAMATU	1.10	309.2	0	22A	-1	0	36	-3				
MERA	1.26	44.4	0	24K	-1	0	40	-3				
HATIDYOZIMA	1.26	136.7	0	26	1	0	44	1				
HUNATU	1.47	0.3	0	28	0	0	48	0				
YOKOHAMA	1.58	27.4	0	29	0	0	48	-3				
KOHU	1.65	354.3	0	30K	0	0	51	-2				
IIDA	1.68	333.1	0	30	-1	0	52	-1				
TOKYO C.M.O.	1.84	26.0	0	33K	0	0	57	-1				
NAGOYA	1.87	308.2	0	33A	-1	0	57	-1			1	30
HONGO	1.87	26.0	0	34	0	1	1	3				
TITIBU	1.97	7.6	0	38	3	1	4	3				
TU	1.97	290.6	0	35A	0	1	19	18				
KAMEYAMA	2.06	294.1	0	36A	0	1	0	-3				
OWASE	2.13	271.9	0	37A	0	1	1	-4				
GIHU	2.14	310.5	0	39A	2	1	4	-1				
KUMAGAYA	2.18	13.3	0	48K	10	1	9	3				
OIWAKE	2.31	355.8	0	42K	2	1	12	3				
MATUMOTO	2.31	344.0	0	42	2	1	11	2				
MAEBASI	2.38	6.0	0	42K	1	1	14	3				
TYOSI	2.41	44.9	0	40K	-1	1	4	-8				
HIKONE	2.41	301.7	0	42A	1	1	17	5				
TUKUBASAN	2.45	26.3	0	41K	-1	1	13	0				
TAKAYAMA	2.45	330.1	0	43	1	1	31	18				
KAKIOKA	2.49	27.5	0	42K	0	1	11	-3				
NARA	2.51	285.9	0	42	-1	1	20	5				
MATUSIRO	2.55	350.0	0	44K	1	1	16	1				
SIOMISAKI	2.56	257.9	0	42	-1	1	10	-6				
UTUNOMIYA	2.68	19.5	0	45K	0	1	13	-6				
NAGANO	2.68	350.3	0	47K	2	1	21	2				
KYOTO	2.69	292.5	0	44A	-1	1	14	-5				
MITO	2.74	30.3	0	45K	-1	1	34	14				
TSURUGA	2.74	307.0	0	46A	0	1	16	-4				
OSAKA	2.74	284.0	0	46A	0	1	21	1				
ABUYAMA	2.77	288.6	0	45A	-1							
HUKUI	2.90	314.9	0	48	0	1	25	1				
TOYAMA	2.96	334.9	0	54	5	1	36	10				
WAKAYAMA	2.98	274.9	0	50	0	1	23	-4				
KOBE	3.03	283.4	0	50A	0	1	25	-3				
KANAZAWA	3.04	326.0	0	52	2	1	37	9				
TAKADA	3.10	352.4	0	51	0	1	31	2				
SUMOTO	3.21	276.7	0	53A	0	1	40	8				
SHIRAKAWA	3.31	20.7	0	53	-1	1	29	-6				
ONAHAMA	3.40	30.3	0	54	-1	1	39	2				
TOKUSIMA	3.47	271.9	0	55A	-1	1	41	2				
TOYOOKA	3.57	295.9	0	58A	0	1	58	17			6	55
HIMEJI	3.64	278.7	0	56	-3	2	15	32				
WAZIMA	3.67	336.2	1	12	13	1	48	4				
TORISIMA	3.77	159.3	1	3	2	1	58	12				
NIIGATA	3.89	3.4	1	4K	2	2	2	12				
MUROTO	3.90	259.8	1	3K	0	2	1	11				
TAKAMATU	3.92	275.6	1	2A	-1	1	56	6				
TSURUGISAN	3.95	268.8	1	4	1	2	19	28				
HUKUSIMA	3.97	20.0	1	4K	1							
AIKAWA	4.01	354.2	1	11	7	2	4	12				
OKAYAMA	4.06	280.6	1	3	-2	1	56	2				
KOTI	4.38	265.2	1	8	-1	2	0	-2				
YAMAGATA	4.41	16.5	1	10K	0	2	11	8				
SENDAI	4.58	21.6	1	12	0	2	6	-1				
YONAGO	4.67	289.0	1	12	-1	2	14	5				
ISINOMAKI	4.86	24.5	1	15K	-1	2	18	4				
MATSUE	4.90	288.5	1	15	-2	2	10	-5				
SAKATA	4.94	9.7	1	18	1	2	19	3				
SAIGO	4.95	297.5	1	24	7	2	43	27				
MATUYAMA	4.97	269.5	1	18	0	2	26	9				
ASHIZURI	4.99	256.5	1	17A	-1							

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UWAZIMA	5.24	263.0	1 20	-2	2 22	-2					
HIROSIMA	5.26	275.5	1 21A	-1	2 36	12					
MIZUSAWA	5.44	19.8	1 24	0	2 38	9					
HAMADA	5.59	280.8	1 26A	-1	2 29	-3					
AKITA	5.78	10.3	1 33	4	2 38	1					
MORIOKA	5.98	18.1	1 31	-1	2 40	-2				3 5	
OOITA	6.01	264.4	1 34	2	2 58	15					
MIYAKO	6.18	23.7	1 35	0	3 8	21					
SIMONOSEKI	6.50	271.5	1 40K	1							
MIYAZAKI	6.52	253.2	1 39	-1						4 9	
ASOSAN	6.52	262.2	1 39	-1						3 49	
KUMAMOTO	6.85	262.1	1 44A	0	2 55	-9					
HATINOHE	6.86	18.0	1 41	-3	2 58	-6					
AOMORI	6.97	12.7	1 41	-5	3 3	-4					
HUKUOKA	6.99	268.7	1 47K	1	3 12	5					
SAGA	7.10	266.1	1 48K	0						4 25	
KAGOSIMA	7.33	252.7	1 54	3							
NAGASAKI	7.54	262.6	1 52A	-2	3 34	13				4 29	
ITUHARA	7.86	273.9	1 56	-2	3 38	9					
HAKODATE	7.93	10.9	2 0K	1	3 37	6					
MORI	8.19	9.5	2 8	5							
HUKUE	8.41	263.7	2 7	1	3 53	10					
MURORAN	8.46	11.3	2 15	8							
URAKAWA	8.71	20.1	2 9K	-1	3 51	1					
SUTTSU	8.84	7.1	2 17	5							
TOMAKOMAI	8.87	13.6	2 25	13							
HIROO	8.99	22.2	2 10	-4							
SAPPORO	9.26	11.9	2 20	2	4 21	17					
OBIHIRO	9.54	20.1	2 19	-3							
KUSIRO	9.97	24.6	2 28	0	4 27	5					
ASAHIKAWA	10.14	15.0	2 27	-3						2 54	
VLADIVOSTOK	10.54	331.5	2 35	-1	4 28	-8					
NEMURO	10.71	27.8	2 34	-4	4 47	7					
ABASHIRI	10.86	21.6	2 36A	-4						5 40	
WAKKANAI	11.60	10.3	2 42	-8	4 56	-5					
Y.-SAKHLINSK	13.32	11.8	3 8A	-5	5 32	-11				3 43	
CHANGCHUN	14.32	317.1	3 28K	2	6 16	9					
ZO-SE	15.11	263.7	3 36A	0							
NANKING	16.87	268.9	4 0	1			4 7				
PEKING	18.98	295.0	4 24A	-1	7 58	3				4 41 PP	
PETROPAVLOVK	23.70	30.8	5 14K	0							
PAOTOW	23.71	294.4	5 12	-2	9 30	3					
BAGUIO CITY	23.97	227.5	5 16	-1							
HONG KONG	24.56	248.0	5 25K	2	9 46	5	5 38			6 6 PP	
SIAN	24.66	279.0	5 24A	0	9 46	3	5 31				
CANTON	24.78	250.6	5 26A	1	9 50	5				10 2 *SS	
MANILA	25.04	224.0	5 27	0	9 45	-5					
MAGADAN	26.74	13.7	5 41K	-2							
LANCHOW	28.58	284.1	5 59A	-1	10 45	-3					
YAKUTSK	28.60	351.1	5 57K	-3							
CHENGTU	29.47	273.2	6 6	-2	10 59	-3					
IRKUTSK	30.65	317.0	6 24	6							
KUNMING	32.43	263.8	6 32A	-2	11 47	-1					
NHATRANG	34.57	238.2	7 2	10						7 27	
LHASA	40.49	277.3	7 43A	1	13 52	0					
SHILLONG	41.26	271.1	7 47K	-1						9 30 PP	
PORT MORESBY	43.91	168.0	8 15K	5	14 34	-8					
CHATRA	44.67	275.1								8 59	
SEMIPALATNSK	45.12	309.6	8 19	-1	14 57	-3					
BOKARO	47.01	272.1	8 34	-1							
MEDAN	48.03	239.8	8 46A	3						10 32	
TANGERANG	50.22	223.5	8 58K	-2	16 24	12	9 3			29 20	
DEHRA DUN	50.87	283.5	9 3	-2							
NEW DELHI	52.20	281.8	9 13K	-2							
COLLEGE	52.78	30.9	9 18	-1						11 18 PP	
KHOROG	53.62	294.3	9 25A	0	17 0	2					
TASHKENT	54.15	299.5	9 28A	-1	17 7	2					
CHARTERS TS.	54.28	171.3	9 29	-1	16 54	-13					
WARSAK DAM	54.74	290.3	9 32	-2							
KHEYS	55.15	348.6	9 35	-2						13 2 PPP	
SVERDLOVSK	56.00	319.5	9 40A	-3	17 29	-1					
HONOLULU	56.56	85.5			17 49	11				21 6	
KIPAPA	56.57	85.3	9 51	4	17 50	12					
POONA	59.33	272.5	10 4A	-2							
QUETTA	59.80	287.8	10 7A	-2	18 21	1					
BOMBAY	60.01	273.5	10 23	12							
MOULD BAY	60.02	15.7	10 8K	-3							
BRISBANE	62.51	165.9	10 26	-2	18 26	-29					
ALERT	63.25	3.1	10 31K	-2							

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APATITY	64.54 335.8	10 39A -2	19 14 -6 23 20 SS
COPPERMINE	64.69 23.8	10 39K -3	
KEVO	65.48 339.2	10 45 -2	
RESOLUTE	66.04 13.6	10 48K -3	
SODANKYLA	66.89 337.1	10 54 -2	
AFIAMALU	66.97 126.7	10 58K 1	19 56 6
YELLOWKNIFE	67.49 28.8	10 58K -2	
TROMSOE	67.85 340.9	11 1 -1	
KAJAANI	68.33 333.8	11 4 -1	13 34 PP
MOSCOW	68.37 323.3	11 3 -2	13 38 PP
RIVERVIEW	68.49 168.9		19 49 -19 20 39 PS
KIRUNA	68.55 339.0	11 5 -2	19 55 -13 20 17
ADELAIDE	68.63 180.0	11 6K -1	20 30 20 11 17 30 48
TEHERAN	69.21 299.6	11 11 0	20 18 2
CANBERRA	69.65 171.1	11 16 3	11 34 *SP
PULKOVO	69.67 329.2	11 18 5	20 16 -6
VICTORIA	70.07 44.5	11 15 -1	
TIFLIS	70.95 307.8	11 20 -1	20 37 0 11 33 PCP
GORIS	71.00 305.2	11 21 -1	20 39 2
UMEA	71.14 335.7	11 20 -2	20 36 -3 14 0 PP
SEATTLE	71.15 44.9		20 52 13
SHIRAZ	71.24 293.5	11 20K -3	20 38 -2 13 50 PP
TOOLANGI	71.50 174.4	11 24 -1	
NURMIJARVI	71.57 331.6	11 23 -2	20 40 -4 24 46 SS
HELSINKI	71.65 331.2	11 23 -2	
PENTICTON	71.84 42.4	11 25 -2	
EDMONTON	72.95 36.6	11 32K -1	
BANFF	73.07 39.3	11 33 -1	
SKALSTUGAN	73.91 338.0	11 39 0	
SHASTA	74.65 51.2	11 43K 0	
UPPSALA	74.69 333.4	11 42 -1	21 13 -6
SCORESBY SD.	74.87 353.4	11 51 7	
HUNGRY HORSE	75.46 41.2	11 49 1	
BLUE MTS.	75.57 45.5	11 48A 0	21 32 3 26 37 SS
CALISTOGA	75.62 53.1	11 46K -3	
SIMFEROPOL	75.93 314.9	11 50 0	21 32 -1
BERKELEY	76.24 53.6	12 1K 9	
LICK	76.94 53.8	12 1K 5	
PARAISO	76.99 55.0	12 0 4	
BUTTE	77.63 42.5	12 0 0	
KONGSBERG	77.66 336.2	12 2 2	
KARLSKRONA	78.03 331.4	12 6 4	
PRIEST	78.25 54.4	12 3A 0	
GOTEBORG	78.30 333.9	12 2 -1	
WARSAW	78.38 326.2	12 12K 8	21 59 0 12 24 PCP
BERGEN	78.47 338.4	12 7 3	
LWOW	78.50 323.1	12 5 0	21 58 -3
KARAPIRO	79.33 151.2	12 11 2	
EUREKA	79.43 49.4	12 10 0	15 9 PP
COPENHAGEN	79.60 332.4	12 17 6	22 11 -1
KRAKOW	80.35 329.0	12 23 8	22 18 -2 30 53 PKKP
PASADENA	81.06 54.9	12 18 0	22 27 -1
KSARA	81.12 304.8	12 19K 0	22 30 2 12 45 15 25 PP
RACIBORZ	81.15 325.8	12 18 -1	14 12
SALT LAKE C.	81.21 46.5	12 20 1	
ISTANBUL UN.	81.27 313.9	12 20 1	
BOULDER CITY	82.21 51.7	12 25 1	
COLLMBERG	82.60 329.1	12 24 -2	15 42 PP
JERUSALEM	82.74 303.4	12 27 0	
UINTA BASIN	82.85 45.7	12 28 0	22 44 -2 15 38 PP
PRUHONICE	82.88 327.4	12 28 0	22 45 -1
BRATISLAVA	83.00 325.0	12 30 2	
VIENNA-H.	83.29 325.4	12 30 0	22 47 -3
JENA	83.48 329.5	12 32 1	22 48 -4 15 47 PP
SOFIA	83.49 317.9	12 31 0	
MONOWAI	83.62 160.1	12 55 23	
BELGRADE	83.63 320.9	12 40 8	22 53 -1 30 38
KASPERSKE H.	83.94 327.3	12 32 -1	15 50 PP
WITTEVEEN	83.98 333.1	12 40 7	
LARAMIE	84.53 43.0	12 37 1	
DE BILT	85.11 333.4	12 42 3	22 42 -26 15 50 PP
DURHAM	85.21 338.2	12 40A 0	23 9 0
BENSBERG	85.25 331.7	12 45 5	
TONTO FOREST	85.56 51.3	12 42 1	15 58 PP
LJUBLJANA	85.74 324.7	12 42 0	13 12
STUTTGART	86.08 329.2	12 43 -1	16 6 PP
KARLSRUHE	86.27 329.8	12 48 3	
ATHENS	86.36 314.2	12 42 -3	

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TRIESTE	86.40	324.9				23	20	-1	
STRASBOURG	86.87	329.9	12	54	6	23	25	0	28 59 SS
TUCSON	87.11	52.7	12	48	-1				
PADOVA	87.47	325.7				24	22	51	22 52
ALBUQUERQUE	88.19	48.3	12	55	1				
BESANCON	88.66	330.0	13	0	4				
SCHEFFERVILLE	88.82	14.5	12	56	-1				
ROSELEND	89.62	328.7	13	10	9				
ROME	89.79	323.0							16 42 PP
GARCHY	89.81	331.6	13	4	2				
MESSINA	90.88	318.8	13	8	1				37 10
WICHITA MTS.	93.06	44.0	13	17	0				17 1 PP
TULSA	93.77	41.5	13	19	-1				24 27
BREBEUF	95.59	22.2	13	31	3				35 32 SS
CUMBERLAND	99.30	35.2	13	49	4	24	12	-12	17 51 PP
PALISADES	99.50	24.5				24	24	-1	25 24 S
LWIRO	107.76	279.5	18	50	777				
CHINCHINA	129.42	46.7	19	17	6				22 31 PKS
FUQUENE	130.14	44.4							22 37 PKS
BOGOTA	130.62	45.4	19	15	2				22 39 PKS
HUANCAYO	142.03	63.0	19	35	1				
LA PAZ	150.21	60.8	19	52	4				

JUNE 3 11.H 31.M 48.5 EPICENTRE 5.41 -73.19 DEPTH= 0.KM

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G= 0.0271 H=-0.0896 K=-0.9956 HT= 7.0

SE= 3.29

	DELTA DEG.	AZ. DEG.	P		O-C S	S			#PP		SUPP.	
			M	S		M	S	S	M	S	M	S
FUQUENE	0.54	276.6	0	17	3							
BOGOTA	1.17	228.2	0	26K	3	0	42	2				
CHINCHINA	2.46	259.9	0	46K	5	1	16	3				
BALBOA MTS.	7.24	299.6	1	51	2	2	49	-24				
CARACAS	8.00	50.4	1	57	-3	3	26	-6				
SAN JUAN	14.63	27.6	3	28	-2							
FORT FRANCE	15.04	51.1	3	30	-5	6	31	8				
ST. CLAUDE	15.45	46.0	3	40	0	6	37	4				
HUANCAYO	17.47	187.0	4	6	0							
NANA	17.66	191.8	4	7	-1	7	28	4				
LA PAZ	22.33	167.1	4	58	-2	9	5	3				
COLUMBIA	29.37	346.6	6	11	5	11	2	2				
CUMBERLAND	32.13	340.8	6	32	1	11	48	5			7	52 PP
GEORGETOWN	33.52	354.5	6	47	4							
PALISADES	35.45	359.1	7	3	4	12	34	-1				
PENNSYLVANIA	35.49	353.9	7	2	2							
FLORISSANT	36.71	337.3	7	10	0						12	34
TULSA	36.79	328.6	7	10A	-1	12	53	-2			17	23 SC5
WICHITA MTS.	37.45	324.5	7	16	0	13	5	0			16	2 SS
LONDON ONT.	38.14	350.5	7	28	6							
LUBBOCK	38.66	320.1	7	27	1							
SANTA LUCIA	38.71	176.6	7	25	-2	13	15	-10			9	10
LAWRENCE	38.93	332.2	7	22	-7							
OTTAWA	39.90	357.2	7	38	1							
BREBEUF	39.94	359.5	7	38	1	13	44	1			9	15 PP
HALIFAX	39.95	10.7	6	49	-48							
SHAWINIGAN	40.99	0.4	7	49A	3							
ALBUQUERQUE	42.51	318.2	7	59	1							
TUCSON	44.13	312.0	8	11	0							
SEPT ILES	45.01	6.2	8	17	-1							
TONTO FOREST	45.46	314.2	8	23	1	15	6	2			13	34
LARAMIE	45.98	325.9	8	26	0						9	2
UINTA BASIN	47.68	322.2	8	39	-1	15	35	-1			19	36 SS
BOULDER CITY	48.83	314.3	8	50	1							
SALT LAKE C.	49.35	321.3	8	52	-1							
SCHEFFERVILLE	49.54	4.9	8	53	-1							
PASADENA	50.48	310.5	9	1	0	16	15	0			9	59 PCP
EUREKA	51.33	317.7	9	8	0						11	10 PP
BUTTE	52.89	326.3	9	18	-1							
PRIEST	53.15	311.8	9	20K	-1							
LICK	54.35	312.8	9	30K	0							
PARAISO	54.49	311.4	9	25	-6							
BLUE MTS.	54.95	322.8	9	32	-3	17	25	9			20	58 SS
BERKELEY	55.01	313.1	9	34A	-1							
CALISTOGA	55.55	313.9	9	38A	-1							

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MINERAL	55.57	316.1	9	38K	-1						
M. BOUR	55.98	76.4	9	46	4	17	29	0			
SHASTA	56.26	316.2	9	42	-2						
EDMONTON	57.95	332.9	9	52A	-4						
PENTICTON	58.68	326.3	9	59	-2						
VICTORIA	60.44	324.0	10	7	-6						
YELLOWKNIFE	64.56	340.1	10	38	-3						
COPPERMINE	68.41	344.2	11	2	-3						
RESOLUTE	70.36	354.0	11	14	-3						
TOLEDO	70.57	49.7	11	17	-1	20	30	-2		13 41 PP	
BAGNERES	74.17	46.9	11	36	-4					12 37	
FOLINIÈRE	74.58	40.9	11	39	-3						
DURHAM	75.03	34.7	11	35K	-10	21	21	-1			
MOULD BAY	75.16	349.7	11	44A	-1						
GARCHY	76.73	42.8	11	52	-2						
ALERT	77.19	1.4	11	55A	-2						
DOURBES	78.04	40.0								12 38	
DE BILT	78.61	38.0	12	12	7	23	0	59			
COLLEGE	78.62	335.2	12	2	-3						
ROSELEND	79.04	44.6	12	11	4					12 59	
I SOLA	79.26	46.2	12	7	-1					13 30	
MONACO	79.51	46.7	12	17	7						
BENSBERG	79.75	39.3	12	12	1					13 9	
STRASBOURG	79.99	41.8	12	12	0	22	10	-6		13 16	
KARLSRUHE	80.43	41.3	12	18	4						
STUTTGART	81.00	41.6	12	17	0						
JENA	82.54	39.5	12	26	1	22	32	-10		15 39 PP	
HALLE	82.77	38.9	12	26	-1					15 36 PP	
GOTEBORG	82.88	32.6								12 59	
SKALSTUGAN	83.17	26.7	12	33	4					13 21	
ROME	83.20	48.6	12	29	0	22	42	-7			
HONOLULU	83.33	290.7				22	59	9			
COLLMBERG	83.43	39.1	12	31	1					13 23	
KASPERISKE H.	83.83	41.3	12	31	-1					13 58	
AQUILA	83.87	48.1	12	32	0	22	54	-2		28 27 SS	
TRIESTE	84.03	44.8	12	32	-1	22	54	-3		15 50 PP	
PRUHONICE	84.44	40.4	12	34	-1	22	56	-5			
LJUBLJANA	84.56	44.4	12	33	-3					13 54 PP	
MESSINA	85.71	52.2	13	40	58					24 4 PS	
TROMSOE	85.71	20.5	12	41	-1					13 2	
UPPSALA	85.78	30.4	12	52	10					22 46	
KIRUNA	86.40	22.3	12	36	-9	23	6	-14			
UMEA	86.71	26.3	13	3	17	23	4	-19			
KRAKOW	87.90	40.1				23	13	-22		23 34 SKKS	
KEVO	88.49	20.0								13 27	
SODANKYLA	88.82	22.4	12	55	-2						
NURMIJARVI	89.19	29.4	12	55	-3	23	46	-1		18 32 PPP	
KAJAANI	89.92	25.6	12	59	-3					13 33	
ATHENS	92.14	51.7								14 52	
SOUTH POLE	95.37	180.0	13	23	-4						
LWIRO	102.14	91.1								27 8 PS	
KSARA	102.65	53.7	14	1	1					18 13 PP	
SHIRAZ	117.37	52.7								19 50	
MATUSIRO	128.97	327.3	19	5	-5					20 2	
CANBERRA	131.08	226.8	19	15	1					22 35	
TOOLANGI	132.41	222.3	19	14	-2					22 40	
NEW DELHI	135.79	38.5	20	1	39						
ADELAIDE	138.37	220.8	19	16	-11						
CHARTERS TS.	138.98	245.5	19	19	-9					23 0	
SHILLONG	145.96	24.6	19	40A	0						
MUNDARING	152.15	197.3	19	54	4						

JUNE 4 11.H 54.M 11.5 EPICENTRE -30.61-177.79 DEPTH= 65.KM

A=-0.86150 B=-0.03325 C=-0.50667 D=-0.0386 E= 0.9993
G= 0.5063 H= 0.0195 K=-0.8621 HT= 1.6

DEPTH OF FOCUS= 0.005R

SE= 3.02

	DELTA DEG.	AZ. DEG.	P		O-C S	S O-C			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
RAOUL ISLAND	1.36	355.2	0	16	-8							
ONERAHI	8.34	229.9	2	4	3							
KARAPIRO	9.15	215.3	2	11	-1						4	6
TUAI	9.17	205.6	2	9	-3	3	50	-5				

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CHATEAU	10.16	210.8	2 22 -4	4 17 -2			3 3
WELLINGTON	12.23	207.4	2 56 2	4 58 -11			
COBB RIVER	12.96	213.7	3 15 12	5 16 -11			
KAIMATA	14.69	213.1	3 28 2				6 3
GEBBIES PASS	15.11	207.5	3 30 -1	6 3 -14			
NOUMEA	16.35	296.7	3 52A 5	7 14 28			
AFIAMALU	17.52	19.7	4 6 4	6 51 39			
ROXBURGH	17.95	210.6	4 4A -3	7 15 -7			
PORT VILA	18.01	312.3	4 9 1				
MONOWAI	18.95	212.9	4 14K -5	7 39 -5			
KOUMAC	19.00	297.6	4 21 2				8 22
BRISBANE	25.91	269.7	5 30 2	10 18 27			
RIVERVIEW	26.42	254.8	5 36 3	10 2 2			6 24
CANBERRA	28.18	251.5	5 51 2				
HONIARA	29.57	310.8	5 59 -2	11 5 15			
MOORLANDS	30.31	237.3	6 9 1				9 8
TARRALEAH	30.82	237.8	6 14 2				9 9
TOOLANGI	31.05	247.1	6 15A 1				9 19
CHARTERS TS.	34.01	279.4	6 42 2	12 22 23		6 24	
ADELAIDE	36.61	251.4	7 3K 1				9 25
RABAUL	38.63	306.9	6 43 -36				
PORT MORESBY	38.87	295.4	7 22K 1	13 56 42			9 2 PCP
CAPE HALLETT	42.25	185.4	7 52 3				
SCOTT BASE	47.84	184.4	8 37 4				
DARWIN	50.68	279.3	8 56 1				
BYRD STATION	54.69	169.5	9 28 3				
HONOLULU	54.97	22.6		17 19 17			
WILKES	55.05	207.9	9 26 -2	17 12 9			
KIPAPA	55.11	22.6		17 10 6			
MUNDARING	55.60	250.2	9 30 -2				
MIRNY	62.03	206.9	10 16 0				
MAWSON	72.17	200.5	11 21A 1				
TANGERANG	74.48	272.0	11 32 -2				
MATUSIRO	78.52	325.2	11 56 0				
PARAISO	84.48	41.9	12 32 5				
Y.-SAKHLINSK	85.08	334.1	12 30K 0				
PRIEST	85.34	43.0	12 33A 1				
PASADENA	85.50	45.9	12 34 2	23 4 7			
LICK	85.60	41.6	12 35A 2				
BERKELEY	85.62	40.9	12 35K 2	23 7 9			
PETROPAVLOVK	85.78	346.0	12 33 -1				
CALISTOGA	85.98	40.1	12 35A 0				
MINERAL	87.71	39.5	12 44A 1				
BOULDER CITY	88.77	46.3	12 51 3				
TUCSON	89.03	51.2	12 50 1				30 30 PKKP
TONTO FOREST	89.98	49.4	12 54 0			13 3	30 28 PKKP
BLUE MTS.	93.09	38.3	13 8 0	23 53 -13			17 6 PP
ALBUQUERQUE	93.57	51.2	13 11 1				30 18 PKKP
UINTA BASIN	94.70	45.4	13 16 0	24 34 14			23 55 SKS
COLLEGE	98.00	12.4	13 29 -2				
WICHITA MTS.	98.87	55.0	13 33 -1	24 19 13			25 7 S
TULSA	101.45	55.1					24 24
CUMBERLAND	108.71	59.3					28 17 PS
MOULD BAY	112.57	12.8	18 28 -1				
CARACAS	113.18	91.3					19 47 PP
RESOLUTE	117.39	17.3	18 38K -1				
PALISADES	119.19	57.3		25 13 -18			
ALMATA	120.78	304.9	18 46K 1				
QUETTA	124.89	287.3	18 56K 3				
SCHEFFERVILLE	126.31	42.1	18 55 -1				
KIZYL-ARVAT	135.41	296.4	19 15 2				
SHIRAZ	136.77	282.0	19 17K 1				22 50 SKP
KEVO	138.36	347.3	19 21 3				
LWIRO	138.64	222.6	19 22A 3				21 52 PP
APATITY	138.68	342.5	19 13 -6				
TROMSOE	139.79	351.0	19 22 1				
SODANKYLA	140.44	345.5	19 17 -5				
KIRUNA	141.22	349.1	19 20 -4				
TIFLIS	144.20	300.0	19 28 -1				
MOSCOW	144.61	325.5	19 27 -3				
UMEA	144.86	346.2	19 27 -3				
VIBORG	145.11	337.4	19 30 0				
BAKURIANI	145.16	300.1	19 32A 1				
PULKOVO	145.27	335.3	19 30 -1				
SKALSTUGAN	146.40	351.9	19 33 0				20 28
NURMIJARVI	146.57	339.9	19 34 1				23 22 SKP
HELSINKI	146.75	339.3	19 34 1				
UPPSALA	148.97	344.9	19 41 4				

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BERGEN	150.14	356.9	19 47	8	
KONGSBERG	150.53	352.3	19 49K	10	19 56 PKP2
SIMFEROPOL	151.22	308.8	19 48A	8	
KSARA	151.41	285.3	19 49	9	
JERUSALEM	151.80	281.0	19 51K	10	
GOTEBORG	152.08	348.8	19 47	6	
KARLSKRONA	152.77	343.6	19 49	7	
COPENHAGEN	153.91	346.8	19 54	10	
UZHGOROD	156.39	325.3	19 59	12	
JENA	158.53	343.6	20 25	35	
PRUHONICE	158.54	337.8	20 13	23	20 27 PKP2
KASPERSKA H.	159.59	338.2	19 51	0	20 31 PKP2
DOURBES	160.45	355.4			24 23 PP
ATHENS	160.80	298.2	19 53	0	
STUTTGART	161.08	345.5	20 37	44	24 13 PP
STRASBOURG	161.56	348.3	19 53	0	24 21 PP
LJUBLJANA	161.85	331.5	19 57	3	
GARCHY	163.34	358.0	19 55	0	
ROSELEND	164.55	348.3			20 54 PKP2
CLERMONT-FD.	164.85	357.6			21 4 PKP2
AQUILA	165.24	325.6	19 58	1	41 34 SSS
ISOLA	165.92	345.5			21 0 PKP2
TOLEDO	169.43	27.2	20 7	7	25 4 PP

JUNE 4 19.H 21.M 54.S EPICENTRE 18.91 146.18 DEPTH= 87.KM

A=-0.78651 B= 0.52696 C= 0.32206 D= 0.5566 E= 0.8308
G=-0.2676 H= 0.1793 K=-0.9467 HT= 4.9

DEPTH OF FOCUS= 0.009R

SE= 1.61

	DELTA DEG.	AZ. DEG.	P		O-C S	S O-C			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
GUAM	5.59	194.5	1	22	0							
ABUYAMA	18.48	331.5	4	11K	0							
MATUSIRO	18.91	339.9	4	15A	-1	7	16	-25				
RABAUL	23.71	165.0	5	4	-1							
MANILA	24.39	263.9	5	26	15							
BAGUIO CITY	24.51	268.2	5	19	7							
ZO-SE	25.64	303.1	5	22	-1							
KURILSK	26.29	2.7	5	29	0							
VLADIVOSTOK	26.98	336.5	5	36K	0							
PORT MORESBY	28.14	178.0	5	46	0	10	21	-2				
Y.-SAKHLINSK	28.18	355.0	5	45K	-1							
HONTARA	31.26	153.1	6	12	-2							
PEKING	33.30	315.6	6	30	-1	11	44	0				
DARWIN	34.57	207.1	6	42	0							
PETROPAVLOVK	35.40	13.0	6	50K	1							
NHATRANG	36.18	264.9	7	4	8				7	21		
PAOTOW	37.72	312.8	7	9	0							
CHARTERS TS.	38.75	179.9	7	17	0	13	5	-3				
KUNMING	40.61	286.8	7	35	2							
MAGADAN	40.73	3.6	7	34K	0	13	39	2				
LANCHOW	40.91	303.5	7	37	2							
KOUMAC	43.05	154.8	7	53K	0							
YAKUTSK	44.59	349.0	8	5K	0							
NOUMEA	45.50	153.3	8	13	1							
TANGERANG	46.26	241.2	8	19A	1						9	24
BRISBANE	46.46	171.9	8	20A	0						15	46
IRKUTSK	46.58	325.6	8	21K	0	15	5	3				
MEDAN	48.83	257.8	8	58	20						10	7
SHILLONG	50.42	287.9	8	51A	0							
LHASA	50.98	293.2	8	56	1							
RIVERVIEW	52.65	174.8									9	31
TIKSI	53.70	353.3	9	14K	-1							
CANBERRA	53.99	177.1	9	17K	0						10	19 PCP
ADELAIDE	54.04	187.6	9	16A	-2				9	42		
CHATRA	54.54	289.9	9	21	0							
TOOLANGI	56.17	180.7	9	32A	-1				9	56	10	6 *SP
MUNDARING	58.17	210.0	9	46	-1				10	9		
SEMIPALATNSK	60.36	317.8	10	0	-2							
TARRALEAH	60.90	179.8	10	5	-1						10	29
MOORLANDS	61.04	179.1	10	30	23							
ALMATA-2	61.97	309.5	10	13K	0							
COLLEGE	62.89	26.0	10	19	0							

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KARAPIRO	62.91	154.2	10 20	1			10 42		
NEW DELHI	63.13	293.0	10 20A	-1				10 44	
CHATEAU	64.00	154.9	10 27	1			10 51		
TUAI	64.32	153.5	10 27	-2					
LAHORE	65.20	296.7	10 33	-1					
WELLINGTON	65.49	156.6	10 34	-2			10 58		
WARSAK DAM	67.19	299.7	10 47	0					
MONOWAI	67.26	163.9	10 46K	-1			11 10		
ROXBURGH	67.44	162.6					11 12		
TASHKENT	68.07	307.7	10 51	-1					
DUZHANBE	68.79	304.9	10 56	-1					
KHEYS	71.17	350.0	11 11K	0					
QUETTA	71.68	296.4	11 14K	0					
SVERDLOVSK	71.97	324.8	11 15	-1					
MOULD BAY	72.85	14.5	11 21K	0					
COPPERMINE	75.92	22.8	11 38K	-1					
ASHKABAD	76.96	305.8	11 45	0					
YELLOWKNIFE	77.59	28.0	11 48K	0					
ALERT	77.89	3.7	11 51K	1					
KIZYL-ARVAT	78.23	307.5	11 54	2					
PENTICTON	78.57	41.7	11 54K	0					
SHASTA	78.98	50.7	11 56	0					
RESOLUTE	79.12	13.7	11 57A	0					
CALISTOGA	79.39	52.8	11 59K	1					
MINERAL	79.65	50.9	12 0K	1					
BERKELEY	79.84	53.5	12 1K	1				35 36	
PARAISO	80.18	55.0	12 7	5					
LICK	80.46	53.9	12 5K	1					
SPOKANE	80.48	42.9	12 4	0					
APATITY	80.98	339.0	12 6K	-1	22 6	-1		22 43 PS	
BLUE MTS.	81.37	45.6	12 9K	0			12 31	13 7	
PRIEST	81.56	54.8	12 11K	1					
KEVO	81.87	342.1	12 11K	0				13 34	
TEHERAN	82.93	305.2	12 17	0					
SODANKYLA	83.32	340.2	12 18	-1				13 28	
SHIRAZ	83.92	299.1	12 21	-1	22 42	5		30 4 PKPPKP	
EUREKA	84.04	50.4	12 23	1					
PASADENA	84.11	56.1	12 23	0			12 53		
TROMSOE	84.20	343.7	12 21	-2					
MOSCOW	84.54	327.4	12 25K	0	22 41	-2		12 46	
KIRUNA	84.95	342.0	12 26	-1				12 51	
KIROVOBAD	85.08	311.2	12 26	-1					
BOZEMAN	85.25	43.3	12 29	1				13 2	
PULKOVO	86.05	332.8	12 31	-1	22 55	-2			
BOULDER CITY	86.08	53.4	12 35	3				13 4	
VIBORG	86.19	334.1	12 31	-2	22 57	-2			
UMEA	87.58	338.9	12 36K	-2				16 6 PP	
NURMIJARVI	87.99	335.0	12 40K	-2	23 12	-4		16 5 PP	
HELSINKI	88.07	334.7	12 40	-2				13 5	
TONTO FOREST	89.41	53.9	12 50	2				13 22	14 18
SKALSTUGAN	90.32	341.2	12 51K	-2				13 16	16 16 PP
SCORESBY SD.	90.46	356.0	12 53	0					
TUCSON	90.53	55.7	12 55	2					
UPPSALA	91.13	336.7	12 54K	-2				13 19	16 20 PP
GOLDEN	91.51	47.1	13 0	2					
ALBUQUERQUE	92.77	51.7	13 5	1				13 33	
KARLSKRONA	94.45	334.8	13 11K	0					17 0 PP
GOTEBORG	94.74	337.3	13 11	-2				13 35	
WICHITA MTS.	98.62	48.9	13 30	0				14 0	17 32 PP
COLLMBERG	98.98	332.4	13 31	-1					17 34 PP
PRAGUE	99.20	330.9							17 36 PP
PRUHONICE	99.21	330.7	13 32	-1					17 36
BRATISLAVA	99.22	328.2							17 36 PP
VIENNA-H.	99.53	328.6							17 37 PP
JENA	99.86	332.8	13 34	-2				14 0	17 39 PP
KASPERSKE H.	100.26	330.6	13 37	-1				14 2	17 44 PP
BENSBERG	101.68	334.9							17 55 PP
ATHENS	101.79	317.1							23 49
GARCHY	106.24	334.8	18 24	777					
CUMBERLAND	106.93	42.0	14 7	777					18 42 PP
BULAWAYO	121.46	257.5	18 45	2					
AREQUIPA	144.07	92.1	19 28	2					
SANTA LUCIA	144.13	121.2	19 26	0					
ANTOFAGASTA	145.63	104.5	19 32A	4					
LA PAZ	147.26	91.3	19 35	4				20 3	

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JUNE 4 21.H 4.M 38.S EPICENTRE -1.14 127.34 DEPTH= 0.KM

A=-0.60649 B= 0.79484 C=-0.01973 D= 0.7950 E= 0.6066
G= 0.0120 H=-0.0157 K=-0.9998 HT= 7.2

SE= 2.28

	DELTA DEG.	AZ. DEG.	P O-C			S O-C			*PP		SUPP.	
			M	S	S	M	S	S	M	S	M	S
DARWIN	11.69	163.0	2	51	-1	4	55	-9				
MANILA	16.89	338.7	4	2	2	7	12	5				
BAGUIO CITY	18.68	339.3	4	21	-1	7	50	2				
LEMBANG	20.47	253.4	4	40A	-2	8	40	13			5	8 PP
DJAKARTA	21.07	255.7	4	50A	1	8	39	0			5	5 PP
TANGERANG	21.26	255.9	4	50A	-1	8	50	7			8	44 PCP
PORT MORESBY	21.35	113.3	4	49	-2	8	42	-2				
NHATRANG	22.37	306.9	5	0	-2	8	59	-4				
RABAU	24.98	97.5	5	29	2							
CHARTERS TS.	26.40	136.7	5	39	-1	10	14	1				
HONG KONG	26.61	331.9	5	43	1	10	18	2				
CANTON	27.67	331.3	5	52	0	10	32	-1				
MEDAN	29.03	279.4	6	5A	1	10	56	1			7	5 PP
MUNDARING	32.42	197.8	6	33	-1	11	42	-7				
PERTH	32.52	198.4	6	37	2	11	52	2			7	38 PP
ZO-SE	32.59	350.2	6	36K	0	11	49	-2				
HONIARA	33.47	105.4	6	43K	0	12	4	-1				
NANKING	34.00	346.9	6	48K	0	12	13	0				
ADELAIDE	35.29	163.7	6	57K	-2	12	30	-3			14	42 SS
KUNMING	35.34	319.3	7	1K	2	12	35	1			8	24 PP
BRISBANE	35.72	139.2	7	1	-2						11	24
ABUYAMA	36.64	11.4	7	9K	-1							
MATUSIRO	38.82	14.0	7	27K	-2	13	4	-23				
SIAN	39.22	335.5	7	33K	1	13	34	1				
RIVERVIEW	39.43	148.1	7	34	0	13	35	-1			9	4 PP
CANBERRA	39.53	151.7	7	35A	0	13	35	-3				
TOOLANGI	39.92	157.3	7	38A	0	13	44	0			17	0
KOUMAC	40.91	120.7	7	46K	0							
PEKING	42.23	347.2	7	56K	-1	14	14	-4				
LANCHOW	43.00	331.7	8	5K	2	14	31	2			9	51 PP
SHILLONG	43.37	310.2	8	6K	0	14	31	-4			9	56 PCP
NOUMEA	43.45	121.9	8	14K	7							
PORT VILA	43.50	114.8	8	9K	2							
VLADIVOSTOK	44.25	4.8	8	9	-4	14	38	-9				
PAOTOW	44.42	341.1	8	14K	-1	14	48	-2				
TARRALEAH	44.43	159.7	8	15	0							
CALCUTTA	44.67	304.2	8	19	2	14	52	-2				
HOWRAH	44.72	304.2	8	31	14	15	3	9				
CHANGCHUN	44.80	357.9	8	16K	-2	14	50	-6				
MOORLANDS	44.81	159.1	8	18	0							
LHASA	46.23	314.5	8	31K	2	15	17	1				
VISHAKHAPTNM	47.23	295.5	8	30K	-7	15	23	-7				
BOKARO	47.37	304.4	8	40A	2	15	32	0			10	34 PP
CHATRA	47.64	308.7	8	40K	0	15	32	-4				
MADRAS	48.84	288.3	8	58K	8	16	6	13			10	49 PP
KURILSK	49.63	19.0	8	57	1							
Y.-SAKHLINSK	49.82	13.7	8	56K	-1							
KODAIKANAL	50.90	284.1	9	10K	5	15	27	-54				
HYDERABAD	51.56	293.3	9	11A	1	16	28	-3			11	14 PP
SEHORE	54.52	299.6	9	33	1	17	11	0				
POONA	56.08	293.2	9	43K	-1	17	31	-1			17	35 PS
NEW DELHI	56.35	305.8	9	44K	-2	17	30	-5				
DEHRA DUN	56.36	308.1	9	51	5	17	45	10			17	55 PS
IRKUTSK	56.64	343.3	9	47K	-1							
MONOWAI	56.78	147.3	9	47	-2							
BOMBAY	57.11	293.3	9	51	0	17	40	-5			11	43 PP
KARAPIRO	57.38	135.6	9	53A	0							
ROXBURGH	57.52	146.1				17	52	1				
CHATEAU	57.98	136.9	9	59	2							
GEBBIES PASS	58.43	142.8	10	3	3							
WELLINGTON	58.48	139.4	9	57	-4	18	2	-1			21	52 SS
TUAI	58.90	135.8	10	2	-2							
MACQUARIE I.	59.16	159.1	10	7A	2							
LAHORE	59.78	307.9	10	8	-2	18	11	-9				
AFIAMALU	61.49	105.1	10	23A	2	18	49	7				
ALMATA-2	62.86	321.1	10	32K	2							
WARSAK DAM	62.87	309.5	10	29	-2							
YAKUTSK	63.02	1.3	10	29K	-2	19	0	-1				
MAGADAN	63.24	13.1	10	32K	-1							
KARACHI	63.78	298.4	10	41	4							

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KHOROG	64.22	313.0	10 39K	0				
FRUNSE	64.40	319.5	10 39K	-2				
SEMIPALATNSK	65.14	328.9	10 43	-2	19 23	-5		
QUETTA	65.30	304.0	10 45K	-1	19 27	-3		
WILKES	66.15	187.3	10 51	-1	19 38	-2	11 12	
TASHKENT	67.33	316.2	10 58K	-1	19 53	-1		
MIRNY	69.61	193.9	11 13	0	20 16	-5	11 50	
TIKSI	72.65	0.5	11 29	-3	20 50	-7		
CAPE HALLETT	75.95	167.6	11 51	0				
HONOLULU	76.04	67.8	11 56	5	21 41	6		
KIPAPA	76.13	67.7	11 55	3	21 42	6		
KIZYL-ARVAT	76.14	310.8	11 51K	-1	21 34	-2		
SHIRAZ	77.40	300.6	11 57K	-2	21 32	-17	12 6	14 48 PP
SVERDLOVSK	78.42	329.0	12 2A	-3	21 54	-6		
HAWAII V.OB.	78.49	70.0	12 8	3				
TEHERAN	79.28	306.6	12 10	1	22 6	-3		
MAWSON	79.43	200.6	12 8	-2	22 6	-5		
SCOTT BASE	79.46	172.1	12 9	-1				
TANANARIVE	79.98	251.1	12 15	2			12 39	
KIROVOBAD	83.91	310.9	12 32K	-2	22 52	-5		
TIFLIS	85.18	311.8	12 39	-1	23 1	-9		
COLLEGE	88.82	25.2	12 57	-1			16 24 PP	
MOSCOW	90.77	325.5			23 58	-4		
KSARA	91.85	303.6	13 9	-3	24 24	13		16 59 PP
JERUSALEM	92.40	301.6	13 15	1				
APATITY	92.55	337.4	13 16K	1	24 15	-3		16 48 PP
BYRD STATION	92.81	170.8	13 12	-4				
SIMFEROPOL	93.09	314.8	13 19	2	24 21	-1		
CHANGALANE	94.13	243.7	13 22A	0			13 31	
PULKOVO	94.52	329.7	13 25A	1	24 36	1		
KEVO	94.64	339.9	13 26	1	24 33	-3		17 4 PP
SODANKYLA	95.17	337.6	13 27	0				17 20 PP
VIBORG	95.18	330.8	13 25	-2				
MOULD BAY	96.54	12.8	13 32	-1				
HELSINKI	97.13	330.5	13 30	-6				
NURMIJARVI	97.23	330.9	13 33	-3	24 10	-3		17 31 PP
KIRUNA	97.39	338.5	13 34	-3	24 11	-3		17 38 PP
TROMSOE	97.42	340.4	13 37	0				
BULAWAYO	97.81	249.6	13 39	0				
BROKEN HILL	98.31	255.3	13 41	0				
LWIRO	98.49	267.6	13 52	10	25 25	65		17 54 PP
UMEA	98.52	334.6	13 38	-4	24 13	-7		17 43 PP
UPPSALA	100.79	331.1	13 57	5	24 25	-6		18 3 PP
WARSAW	100.86	323.1			24 37	5		18 5 PP
ATHENS	101.43	308.4	13 57	2				18 12
SKALSTUGAN	101.95	335.5	14 2	4				18 0 PP
SKALNATE PL.	101.99	320.1						17 51 PP
KRAKOW	102.00	321.0	14 33	35				18 16 PP
RESOLUTE	102.46	10.5	13 58	-2				
BELGRADE	102.75	315.7						18 39
KARLSKRONA	102.92	327.8	17 27	205				18 18 PP
RACIBORZ	103.08	321.3	17 36	213				18 19 PP
YELLOWKNIFE	103.64	24.9	14 5	0				
HERMANUS	104.23	234.2			24 51	3		25 31
BRATISLAVA	104.26	319.6	17 41	213	24 50	2		18 37 PP
GOTEBORG	104.28	330.0						18 33 PP
VIENNA-H.	104.71	319.8	17 56	226				18 32 PP
PRUHONICE	105.38	321.9	17 44	777				
PRAGUE	105.42	322.0						18 14
ZAGREB	105.59	317.5	18 22	777				
COLLMBERG	105.91	323.5	14 32	777				18 40 PKP
KASPERSKE H.	106.23	321.2	14 26	777				18 45 PP
CALISTOGA	106.32	50.0						18 43 PP
HALLE	106.46	323.9						18 42 PP
LJUBLJANA	106.52	318.0	18 18	777				18 50 PP
MINERAL	106.69	48.1						18 43 PP
BERKELEY	106.73	50.8						18 44 PP
JENA	106.88	323.4	18 20	777				18 53 PP
PARAISO	106.95	52.4						18 53 PP
TRIESTE	107.14	317.7			25 1	1		18 38 PP
LICK	107.32	51.2						18 41 PP
SPOKANE	107.65	39.8						18 50 PP
MESSINA	107.74	309.8			25 2	-1		18 55 PP
AQUILA	108.30	314.5						18 57 PP
PRIEST	108.34	52.3						18 58 PP
BLUE MTS.	108.56	42.7	14 29	777	25 11	4		18 50 PP
WITTEVEEN	108.98	326.5						19 2 PP
STUTTART	109.03	321.9	18 48	777	26 38	89		19 5 PP
ROME	109.09	314.2						18 17 PP

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BENSBERG	109.46	324.6	18 33	777						19 4 PP
STRASBOURG	110.03	322.1	14 34	-240	25 22	9				19 10 PP
DE BILT	110.11	326.2								19 4 PP
PAVIA	110.35	318.3								18 55 PP
PASADENA	110.77	53.8								28 45
EUREKA	111.10	47.8	14 44	-232	24 56	-21				19 16 PP
UCCLE	111.15	325.2			25 25	8				19 16 PP
ABERDEEN	111.26	333.2			25 4	-14				19 4 PP
DOURBES	111.31	324.5	18 40	4						19 40 PP
BESANCON	111.65	321.3								19 23 PP
ROSELEND	111.84	319.5								19 18 PP
ISOLA	112.12	317.9								19 25 PP
DURHAM	112.34	330.8			25 18	-4				19 30 PP
BOZEMAN	112.42	40.2	18 41	3						19 26 PP
BOULDER CITY	112.96	51.2	19 8	29						19 32 PP
KEW	113.42	327.3								19 31 PP
CLERMONT-FD.	114.06	320.7								19 29 PP
TONTO FOREST	116.24	52.0	18 48	2			18 59			19 51 PP
TUCSON	117.21	54.0	18 50	2						19 59 PP
VALENTIA	118.20	331.7								20 12 PP
GOLDEN	118.67	44.4	18 52	1						20 10
ALBUQUERQUE	119.75	49.8	18 55	2						
TOLEDO	121.42	317.4			26 0	5				20 25 PP
SCHEFFERVILLE	125.26	10.0	19 5	2						
WICHITA MTS.	125.73	46.8	19 4	0	26 22	13				20 53 PP
LAWRENCE	125.88	40.6	19 4	-1						
TULSA	127.14	44.1	19 7	0						21 3 PP
LONDON ONT.	131.11	27.7	19 16K	1						
SEVEN FALLS	131.54	16.5	19 14	-1						22 37
BREBEUF	132.12	19.8	19 18	1						21 38 PP
CUMBERLAND	134.07	38.1	19 21	1	26 32	2				21 44 PP
PENNSYLVANIA	134.39	26.9	19 24	3						
PALISADES	135.89	23.2								22 6 PKS
BLACKSBURG	135.91	32.3	19 25	1						22 59
COLUMBIA	137.89	36.1	19 25	-2						22 13 PP
SANTA LUCIA	141.66	155.4	19 36	2						33 8
M. BOUR	142.36	292.2	19 43	8						22 47 PP
ANTOFAGASTA	149.87	146.1	19 56	8						
BALBOA HTS.	152.12	72.9	19 54	3						
NANA	152.67	119.2	19 55	3						
HUANCAYO	153.94	120.8	20 0	6						
AREQUIPA	154.48	134.0	20 7	13						
LA PAZ	156.75	139.6	20 2	5			20 12			
CHINCHINA	156.76	80.1	19 58A	1						24 7 PP
BOGOTA	158.34	80.4	20 3K	4						23 30 PKS
FUQUENE	158.53	78.0	20 1A	1						20 35 PKP2
CARACAS	163.04	56.2	20 7	3						24 38 PP

JUNE 4 22.H 11.M 30.S EPICENTRE 38.93 20.51 DEPTH= 8.KM

A= 0.73060 B= 0.27324 C= 0.62575 D= 0.3503 E=-0.9366
G= 0.5861 H= 0.2192 K=-0.7800 HT= -1.3

SE= 2.97

	DELTA DEG.	AZ. DEG.	P		O-C S	S O-C			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
ATHENS	2.70	109.7	0 43		-2	1 15		-3				
TARANTO	2.95	302.6									1 48	
SKOPJE	3.12	12.9	0 48		-3							
TITOGRAD	3.63	345.3	0 56		-2	1 43		1			1 8 PG	
REGGIO CALA.	3.90	259.3	1 0		-2	1 41		-7			1 37	
MESSINA	3.95	261.0	1 3		0	1 41		-9			1 53 S*	
SOFIA	4.34	28.7	1 11		3	2 5		5			2 29 SG	
BELGRADE	5.89	359.6	1 29K		-1	2 40		1			1 51 PG	
AQUILA	6.40	304.6	1 37		0							
ROME	6.81	298.4	1 42		-1	3 0		-2				
TIMISOARA	6.84	4.2	2 11		28	3 47		45				
ISTANBUL UN.	6.85	69.4	1 45		2	3 3		0				
BUCHAREST	6.90	35.5				3 18		13			4 12	
ZAGREB	7.66	335.5	1 53		-2	3 30		7				
TRIESTE	8.38	325.5	2 3A		-2						3 49	
LJUBLJANA	8.38	330.1	2 2A		-3	3 43		2			4 49	
FOCSANI	8.39	34.1									4 47	
HURBANOVO	9.10	350.1									4 47 SG	
PADOVA	9.11	318.1									2 36 P*	

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BRATISLAVA	9.56	346.2	2 28	7			3 6 PG
UZHGOROD	9.79	7.0			4 22	6	
VIENNA-H.	9.79	343.5	2 23	-1	4 22	6	
NIEDZIKA	10.49	359.3	2 32	-2			2 45 PP
KRAKOW	11.13	358.1	2 42	-1			6 39
RACIBORZ	11.27	352.4	2 42	-3			2 54 PP
CHUR	11.28	318.1	2 44	-1	4 56	4	
KASPERSKE H.	11.35	336.3	2 42A	-4	5 2	8	3 52
ISOLA	11.36	301.8	2 47	1	4 47	-7	
SIMFEROPOL	11.78	54.9	2 52	0			
PRUHONICE	11.84	340.9	2 50	-2			7 3
PRÁGUE	11.95	340.8	2 52	-2			6 57
ROSELEND	12.29	307.8	2 57	-1	5 9	-8	
EBINGEN	12.46	321.7	2 59	-2			
TUBINGEN	12.66	323.0	3 0	-3			
STUTT GART	12.73	324.2	3 1	-3			
FELDBERG	12.74	318.7	3 4	0			
KARLSRUHE	13.31	323.2	3 11A	-1			10 0
WARSAW	13.31	1.4	3 17	5	5 37	-4	3 29 PP
STRASBOURG	13.32	320.5	3 12	0			4 42
KSARA	13.39	107.6	3 12	-1			
HEIDELBERG	13.44	325.0	3 10	-4			
COLLMBERG	13.45	339.4	3 11	-3	5 32	-13	
BESANCON	13.47	312.8	3 12	-2	5 48	3	
JENA	13.55	335.2	3 12	-3	5 57	10	7 48
HALLE	13.93	337.3	3 21	1			3 28
WELSCHBRUCH	13.94	317.4	3 12	-8	5 40	-16	
JERUSALEM	13.96	116.2	3 14	-7			
CLERMONT-FD.	14.55	303.6	3 34	6			4 44
GARCHY	15.20	308.9	3 35	-2			
BENSBERG	15.26	326.4	3 37K	-1	6 20	-8	8 45
MUNSTER	15.84	329.6	3 50	5			
DOURBES	15.88	319.8	3 46	0			4 1 PP
BAGNERES	15.91	291.6	3 46	0			4 22
PARIS	16.28	313.2	3 52	1			13 30
KARLSKRONA	17.55	350.9	4 6	-1			
BAKURIANI	17.76	73.6	4 10	1			
TOLEDO	18.99	280.7	4 22K	-3			4 30 PP
GRANADA	19.05	272.3	3 29K	-56			
KEW	19.22	317.5	4 26	-1			
GROZNY	19.49	68.9	4 30	0			
GOTEBORG	19.59	346.3	4 30	-1			4 54 PP
KIROVOBAD	19.90	76.8	4 32	-3	8 15	2	
MOSCOW	20.33	28.6	4 36	-4			
UPPSALA	21.02	356.0	4 44A	-3			
HELSINKI	21.45	6.1	4 47	-4			
DURHAM	21.75	324.0	4 53	-1			
NURMIJARVI	21.76	5.5	4 50	-4	8 53	3	
KONGSBERG	21.87	345.1	4 57K	2			
VIBORG	22.43	10.7	4 57	-4			
BERGEN	23.53	341.0	5 23	11			
TEHERAN	24.70	87.7	5 23	0			
UMEA	24.93	359.7	5 23A	-2			
VALENTIA	24.98	311.4	5 24	-2			
SKALSTUGAN	25.18	351.3	5 25A	-2			
SHIRAZ	27.91	99.6	5 49K	-4			6 36 13 45
SODANKYLA	28.70	4.9	5 57	-3			
KIRUNA	28.96	359.9	5 59A	-3			
ASHKABAD	29.52	79.8	6 5	-2			
APATITY	29.57	10.0	6 5A	-3			
TROMSOE	30.78	358.9	6 15	-3			
KEVO	31.09	4.4	6 17	-4			10 13
SVERDLOVSK	31.72	42.4	6 23A	-4			
ADDIS ABABA	33.98	146.4	6 45	-1			
QUETTA	38.89	88.5	7 26	-2			
LWIRO	41.68	167.5	7 55	4			
ALMATA	42.07	65.3	7 53K	-1			
SCHEFFERVILLE	57.88	317.0	9 52	-3			
TIKSI	58.97	20.6	9 58K	-5			
RESOLUTE	59.05	343.7	10 0	-3			
MOULD BAY	62.31	350.0	10 22A	-3			
BREBEUF	66.09	309.9	10 49	-1			
OTTAWA	67.39	310.6	10 57	-1			
COLLEGE	76.14	354.9	11 53	3			
CUMBERLAND	79.25	307.1	12 6	-2			
LAWRENCE	82.66	314.9	12 24	-2			
TULSA	85.13	313.1	12 37	-1			
BOZEMAN	85.22	328.2	12 38	0			

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WICHITA MTS. 87.57 313.9 12 48 -2
 BLUE MTS. 88.36 331.5 12 52 -2
 EUREKA 92.38 327.8 13 12 -1

14 6

JUNE 5 10.M 12.M 8.5 EPICENTRE -14.83 166.87 DEPTH= 27.KM

A=-0.94181 B= 0.21971 C=-0.25441 D= 0.2272 E= 0.9739
 G= 0.2478 H=-0.0578 K=-0.9671 HT= 5.8

SE= 2.28

	DELTA DEG.	AZ. DEG.	P		O-C S	S			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
PORT VILA	3.20	154.4	0	50	0	1	28	0				
KOUMAC	6.21	203.1	1	29K	-4	2	35	-9				
NOUMEA	7.44	183.0	1	48K	-2	3	8	-6				
HONIARA	8.64	307.7	2	6A	0							
RABAU	17.92	304.7	4	10	1	7	30	4				
BRISBANE	18.11	224.1	4	11	-1						6	44
PORT MORESBY	20.02	283.4	4	23	-1	8	16	4				
CHARTERS TS.	20.34	252.2	4	36	-1	8	26	7				
AFIAMALU	20.70	90.1	4	45	4	8	30	4				
RIVERVIEW	23.66	214.2				9	32	12			5	36
KARAPIRO	24.25	163.1	5	21	5							
CHATEAU	25.44	164.2	5	31	4							
TUAI	25.54	161.1	5	27	-1							
CANBERRA	25.95	215.0	5	33	1	10	0	1			6	16 PP
WELLINGTON	27.23	166.9	5	43	-1	10	22	2				
TOOLANGI	29.54	216.0	6	3	-2						7	0 PP
ROXBURGH	30.62	176.6	6	12	-2	11	16	2				
MONOWAI	30.85	179.0	6	13K	-3							
ADELAIDE	32.28	226.5	6	37	8						16	16
DARWIN	35.09	269.5	6	52	-1							
MUNDARING	49.07	240.5	8	46	-1	15	46	-3				
HONOLULU	49.72	44.6									16	28
MATUSIRO	57.82	332.8	9	51A	-1							
SCOTT BASE	63.03	180.0	10	26	-1							
Y.-SAKHLINSK	65.28	342.1	10	41A	-1							
NANKING	65.54	316.0	11	23	39							
VLADIVOSTOK	65.98	332.6	10	42	-4							
PETROPVLOVK	67.94	354.7	10	58	-1							
CHANGCHUN	69.63	329.2	11	8A	-1							
MIRNY	70.08	204.1	11	10	-2							
BYRD STATION	72.66	169.9	11	25	-2							
SIAN	73.58	313.0	11	33A	0							
KUNMING	74.03	302.0	11	37A	2	21	12	7				
SOUTH POLE	75.26	180.0	11	41	-2							
CHENG TU	75.46	307.6	11	44A	0							
PAOTOW	76.23	319.0	11	49	1							
LANCHOW	78.10	312.4	12	1A	3	21	55	5				
YAKUTSK	82.00	343.3	12	18A	-1							
SHILLONG	83.29	298.5	12	31A	5							
LICK	84.78	49.4	12	33A	0							
LHASA	85.36	302.1	12	37A	1	23	9	5				
SHASTA	85.57	46.0	12	36A	-1							
MINERAL	85.98	46.6	12	38K	-1							
COLLEGE	86.54	17.7	12	40	-2							
BOULDER CITY	89.41	52.6	12	56	0						16	28
EUREKA	89.70	49.0	12	57	0						16	28 PP
TIKSI	89.98	348.7	12	56A	-3							
BLUE MTS.	90.59	43.6	13	0	-1						16	39 PP
PENTICTON	90.73	38.9	13	1	-1							
TUCSON	91.45	57.1	13	5	0							
TONTO FOREST	91.68	55.1	13	6	0						30	27 PKKP
UINTA BASIN	94.65	49.7	13	20	0						17	3 PP
BOZEMAN	95.05	44.2	13	17	-5							
ALBUQUERQUE	95.68	55.5	13	23	-2							
YELLOWKNIFE	97.81	27.3	13	32A	-2							
MOULD BAY	100.51	13.5	13	47	0							
RESOLUTE	106.38	15.9	18	21	777							
CUMBERLAND	112.66	57.4	18	33	-1						35	39 SS
LA PAZ	117.41	117.7	18	45	1							
APATITY	119.36	341.3	18	50	3							
KEVO	119.72	345.0	18	47	-1							
BREBEUF	121.06	45.6	18	49	-2							
SODANKYLA	121.49	343.1	18	51	0						19	26
TROMSOE	121.69	347.4	18	52	0							

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KIRUNA	122.77	345.6	18 53	-1	
UMEA	125.89	342.5	18 59	-1	
NURMIJARVI	126.81	337.7	19 1	-1	20 56 PP
SKALSTUGAN	128.19	345.9	19 4	0	
UPPSALA	129.73	340.4			22 33
UZHGOROD	135.49	326.7	19 18	0	
COLLMBERG	138.00	335.6	19 22	-1	22 13 PP
PRUHONICE	138.35	333.2	19 30	7	23 5
JENA	138.85	336.3	19 23	-1	22 4 PP
KASPERSKE H.	139.40	333.0	19 24	-1	23 8 PKS
BENSBERG	140.42	339.9	19 31	4	
STUTTGART	141.47	336.1	19 32	3	
AQUILA	144.31	325.4	19 33	-1	20 34
FOLINIÈRE	144.59	345.5	19 33	-1	
GARCHY	144.95	340.7	19 36A	1	
ROME	145.12	325.6	19 35	0	
ISOLA	146.08	333.6	19 39	2	
CLERMONT-FD.	146.26	339.3	19 35	-2	20 25
TOLEDO	153.81	344.0	19 57	8	23 40 PP

JUNE 5 22.H 54.M 21.S EPICENTRE -2.99 119.78 DEPTH= 0.KM

A=-0.49607 B= 0.86673 C=-0.05187 D= 0.8679 E= 0.4967
G= 0.0258 H=-0.0450 K=-0.9987 HT= 7.1

SE= 2.70

	DELTA DEG.	AZ. DEG.	P		O-C S	S		O-C S	*PP		SUPP.	
			M	S		M	S		M	S	M	S
LEMBANG	12.70	252.1	3	5	1	5	47	19			3	17 PP
DJAKARTA	13.29	255.8	3	11A	-1	5	33	-9			3	31 PPP
TANGERANG	13.49	256.0	3	14K	-1	5	34	-12			3	23 PP
DARWIN	14.37	131.0	3	26	0							
MANILA	17.60	4.2	4	11	3	7	23	0				
NHATRANG	18.41	325.4	4	16	-2	7	56	15				
BAGUIO CITY	19.30	2.3	4	30	1	8	7	6				
MEDAN	22.08	287.1	5	0A	2	8	49	-8	5	22		
PORT MORESBY	27.93	104.4	5	47K	-6						8	53
CHARTERS TS.	30.92	125.4	6	19	-1	11	24	0				
RABAU	32.34	93.1	6	33	0							
KUNMING	32.47	330.3	6	36	2	11	57	8				
ZO-SE	33.93	2.1				12	11	0				
NANKING	34.87	358.5	6	54	-1	12	31	5				
ADELAIDE	36.35	153.3	7	9K	2							
CHENGDU	36.70	336.9	7	10	0	12	58	4			8	38 PP
SIAN	38.43	345.5	7	22	-3							
SHILLONG	39.22	318.0	7	29K	-2							
BRISBANE	39.78	130.8	7	38	2						9	8
HONIARA	40.41	101.0	7	41	0	13	45	-5				
LANCHOW	41.61	340.4	7	50	-1							
TOOLANGI	41.71	148.8	7	53	1	14	15	5			10	8 PPP
CANBERRA	42.04	143.4	7	54K	0							
RIVERVIEW	42.39	140.0	8	0A	3	14	16	-3			14	54
LHASA	42.54	321.7	8	0	1	14	25	3				
MATUSIRO	42.92	21.9	8	1	-1	14	27	0				
PEKING	42.94	355.9	7	59	-3							
CHATRA	43.25	315.3	8	4	0	14	35	3				
PAOTOW	44.27	349.3	8	13	0	14	49	2				
TARRALEAH	45.83	152.3	8	25	0							
MOORLANDS	46.28	151.9	8	30	1							
CHANGCHUN	46.87	5.5	8	30	-3							
VLADIVOSTOK	47.19	12.1	8	37A	1	15	28	-1				
POONA	50.01	297.2				16	17	9				
NEW DELHI	51.54	310.5	9	8A	-1	16	27	-2				
DEHRA DUN	51.80	312.9									17	32
LAHORE	55.17	312.2	9	32	-4							
IRKUTSK	56.59	348.7	9	45	-1							
ALMATA-2	59.79	325.2	10	6K	-3							
KHOROG	60.16	316.8	10	11	0							
QUETTA	60.23	307.4	10	9	-3							
ROXBURGH	60.47	142.0				18	43	15			25	39
FRUNSE	61.13	323.4	10	19	1							
KARAPIRO	61.57	132.0	10	20	-1							
WELLINGTON	62.23	135.8				18	39	-12				
SEMIPALATNSK	63.06	332.8	10	33	2							
TASHKENT	63.62	319.5	10	36K	1							

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CANTON	7.37	297.0	1 42	-6			
ZO-SE	11.20	3.2	2 38	-3			
NANKING	12.23	353.2	2 51	-4	5 4	-7	
NHATRANG	13.22	236.6	3 5	-3	5 32	-2	
KAGOSIMA	14.76	35.9	3 35	7			
NAGASAKI	15.32	31.4	3 32	-3	6 38	14	
KUMAMOTO	15.81	33.3	3 44	2			
SAGA	15.95	31.4	3 53	10	5 55	-44	
HUKUOKA	16.26	30.9	3 45	-2	6 56	10	
OOTA	16.61	34.5	3 53	1	7 4	10	
KUNMING	17.19	290.9	3 57A	-2	7 20	13	
SIAN	17.61	326.8	4 3A	-1			
KOTI	17.91	37.9	4 19	11	7 30	7	
HAMADA	18.15	32.1					7 48
CHENGTU	18.33	309.1	4 11A	-2	7 38	5	
TAKAMATU	18.77	37.2	4 35	17	8 4	21	
TOKUSIMA	18.90	38.7	4 19	-1			
MATSUE	19.09	33.0					7 49
SIOMISAKI	19.20	42.1	4 25	2			
SUMOTO	19.28	38.7	4 22K	-2	8 2	8	
KOBE	19.68	38.4	4 29	0			
OSAKA	19.86	39.1	4 31	0			5 18
OWASE	19.88	41.5	4 32	1	8 19	12	
ABUYAMA	20.04	38.7	4 31K	-2	8 24	14	
NARA	20.06	39.5	4 32	-1			
TOYOOKA	20.08	36.1	4 33	0	8 23	12	
KYOTO	20.24	38.7	4 32	-3	8 20	6	
PEKING	20.43	350.5	4 35	-2	8 26	8	
TU	20.49	40.6	4 29	-8			
KAMEYAMA	20.56	40.2	4 40	2	7 40	-41	
HIKONE	20.72	39.0	4 37	-3	8 29	5	
TSURUGA	20.88	37.9	4 40	-1			
NAGOYA	21.08	40.3	4 40	-3	8 40	9	
GIHU	21.11	39.5	4 42	-2			
HAMAMATU	21.25	42.4	4 44A	-1	8 42	8	
OMAESAKI	21.50	43.3	4 58	11	9 10	32	
LANCHOW	21.76	321.2	4 51A	1	8 50	7	
IIDA	21.84	40.9	4 50	-1	8 52	7	
SHIZUOKA	21.84	42.8	4 52	1			
TOYAMA	22.26	37.6	4 52	-3			
MISIMA	22.29	43.2	4 55	0			
KOHU	22.39	41.6	4 48	-8	8 58	3	
MATUMOTO	22.41	39.6	5 2	5	9 1	6	
HUNATU	22.41	42.2	4 56	-1	8 57	2	
PAOTOW	22.49	338.9	4 58K	1	9 6	9	
MATUSIRO	22.74	39.4	4 56	-4	9 7	6	
OIWAKE	22.81	40.3	5 0	-1	9 10	8	
NAGANO	22.83	39.1	5 0	-1	9 24	21	
TITIBU	22.91	41.7	5 2	0			
TOKYO C.M.O.	23.15	43.1					5 57
MAEBAST	23.17	40.8	5 16	12			
KUMAGAYA	23.21	41.7	5 5	1			
TUKUBASAN	23.71	42.5	5 6	-3			5 15
CHANGCHUN	24.23	8.6	5 12K	-2	9 26	-1	9 24 *55
SHIRAKAWA	24.34	40.9	5 12	-3			
HUKUSIMA	24.90	40.1	5 20	-1			
YAMAGATA	25.15	39.1	5 21	-2	9 45	2	
SENDAI	25.49	39.7	5 33	7			
AKITA	26.00	36.2	5 32	1			6 16
MIZUSAWA	26.19	38.5	5 32A	-1	9 59	-1	
MORIOKA	26.59	37.5	5 36	-1			
MEDAN	26.72	235.5	5 38K	0			
SHILLONG	26.95	287.5	6 1	21	10 17	5	6 26 PP
HATINOH	27.35	36.6	5 39	-5			
HAKODATE	27.83	33.7	5 45	-3			10 30
LHASA	28.37	295.8	5 54K	1	10 42	7	
SAPPORO	29.04	32.6	5 56	-3	11 35	49	
URAKAWA	29.14	35.4	5 55	-5			
DJAKARTA	29.16	208.8	5 32K	-28	10 5	-43	6 11 PP
TANGERANG	29.24	209.1	6 5K	5	10 56	7	6 31 PP
LEMBANG	29.39	206.7	6 2K	0	10 56	5	6 29 PP
OBIIHIRO	29.89	34.7	6 5	-1			
ASAHIKAWA	30.06	32.6	6 6K	-2			
WAKKANAI	30.93	29.7	6 16	1			
CHATRA	31.28	289.1	6 19K	0	11 27	6	
BOKARO	32.37	283.4	6 28	0	11 41	3	7 57 PPP
Y.-SAKHLINSK	32.60	28.7	6 27K	-3	11 31	-11	
IRKUTSK	34.70	342.5	6 47K	-1	12 17	3	
VISHAKHPTNM	35.21	272.8	6 43K	-10	12 18	-4	8 3 PP

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ATHENS	83.13	307.8	12 22K	-1					
HURBANOVO	83.39	318.5	12 29	4				15 34	PP
COPENHAGEN	83.48	327.2	12 26	1					
COPPERMINE	83.65	18.4	12 24	-2					
BRATISLAVA	83.95	319.1	12 32K	5	22 53	6		15 43	PP
VIENNA-H.	84.37	319.4	12 31K	2	23 0	9			
BERGEN	84.57	333.2	12 31	0					
TITograd	84.74	313.2	12 33	2				15 56	PP
PRAGUE	84.79	321.5	12 32	0	23 0	5			
COLLMBERG	85.09	323.1	12 33K	0					
HALLE	85.59	323.5	12 36	0	22 45	-18			
ZAGREB	85.59	317.2	12 37	1	23 4	1			
KASPERSKA H.	85.69	320.9	12 36K	0				15 50	PP
JENA	86.05	323.1	12 38	0	23 13	6		15 54	PP
SCORESBY SD.	86.13	348.1	12 39	1	23 14	6			
WILKES	86.27	184.0	12 39	0	23 12	3			
TARANTO	86.89	311.9						23 23	
TRIESTE	87.08	317.7	12 42	-1	23 31	14		6 23	PP
YELLOWKNIFE	87.19	22.4	12 43	0					
MUNSTER	87.74	325.2	12 46	0					
WITTEVEEN	87.82	326.2	12 47	1					
PADOVA	88.37	318.1	12 50	1	23 44	15		16 14	PP
STUTT GART	88.38	321.9	12 49	0	23 26	-3			
BENSBERG	88.49	324.5	12 50K	0	23 34	4		16 18	PP
MIRNY	88.59	190.6	12 51	1	23 37	6		16 28	PP
RAVENSBERG	88.65	320.9	12 50	0					
AQUILA	88.74	314.9	12 52	1	23 37	4		16 24	PP
EBINGEN	88.84	321.5	12 51	0					
DE BILT	88.97	326.1	12 51	-1	23 26	-9		16 13	PP
MESSINA	89.01	310.4	12 51	-1	23 41	6	13 5	16 25	PP
STRASBOURG	89.34	322.2	12 54K	0	23 41	3		16 27	PP
FELDBERG	89.55	321.5	12 54	-1					
ROME	89.55	314.8	12 56K	1	23 37	-3		16 28	PP
ABERDEEN	89.58	332.7						16 27	PP
PAVIA	90.17	318.8	12 59K	1				16 28	PP
DOURBES	90.34	324.6	13 0	2	23 42	-5			
DURHAM	90.80	330.6	13 1K	0	24 4	13		16 38	PP
GODHAVN	91.02	357.9	13 0A	-2					
BESANCON	91.05	321.7	13 2	0				16 32	PP
CHILEKA	91.11	253.8	13 2K	0					
VICTORIA	91.32	36.7	13 3	0					
ROSELEND	91.47	320.1	13 3K	-1				16 36	PP
ISOLA	91.97	318.7	13 7	1				16 47	PP
KEW	92.16	327.5	13 5	-2	23 38	-25		16 45	PP
LWIRO	92.32	268.5	13 8A	0				16 54	PP
SEATTLE	92.42	37.0	13 13A	5					
PENTICTON	92.96	34.6	13 10	0					
EDMONTON	93.56	29.0	13 14K	1					
BANFF	93.94	31.5	13 16	1					
SPOKANE	95.13	35.0	13 22	2					
SHASTA	96.14	42.9	13 25K	0					
HUNGRY HORSE	96.48	33.1	13 31	5					
VALENTIA	96.59	331.8	13 27	0					
BROKEN HILL	96.64	257.1	13 27	0					
MAWSON	96.82	199.0	13 27	-1					
MINERAL	96.84	42.8	13 29K	1					
BLUE MTS.	96.86	37.3	13 28	0	24 5	5		17 29	PP
CAPE HALLETT	97.81	166.4	13 33	1					
BULAWAYO	98.30	251.6	13 34	-1					
BUTTE	98.74	34.3	13 37	0					
BOZEMAN	99.77	33.8	13 41	0					
EUREKA	100.88	41.0	13 46	0				18 2	PP
TOLEDO	101.22	319.7	13 49K	1	24 20	-2		17 53	PP
ALMERIA	102.05	316.5	14 7	15	24 33	7		21 3	
MALAGA	103.37	317.3	14 0	3				18 14	PP
UINTA BASIN	104.15	37.2	14 2	1				18 19	PP
SCHEFFERVILLE	105.35	4.3	17 49	777					
LARAMIE	105.66	34.3	14 18	777					
TONTO FOREST	107.04	42.8	14 15	777			14 28	18 46	PP
TUCSON	108.62	44.2	18 8	777					
ALBUQUERQUE	109.59	39.6	18 31	777					
SOUTH POLE	109.75	180.0						18 20	
BREBEUF	113.69	10.8	18 24	-10					
WICHITA MTS.	114.23	34.7	18 37	2				19 30	PP
BYRD STATION	114.51	170.4						19 32	
N-LAZARVSKYA	114.74	200.2	18 37	1					
TULSA	114.76	31.9	18 38K	2				19 44	PP
FLORISSANT	114.87	26.2	18 38	1					

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SIMFEROPOL	91.52	330.5	13 12	2	24 10	2		
MATUSIRO	92.67	44.4	13 13	-2			25 30	
LJUBLJANA	101.17	320.6					18 6 PP	
TRIESTE	101.28	319.9					18 6 PP	
STRASBOURG	106.28	319.4					27 56	
AVERROES	106.37	299.5					15 36	
NURMIJARVI	107.38	335.4					33 40 SS	
TOLEDO	107.88	306.8					34 30 SS	
COLLEGE	142.09	29.9	19 30	-4			22 41 PP	
COPPERMINE	149.18	9.7	19 49	3				
SCHEFFERVILLE	150.83	316.8	19 55	6				
YELLOWKNIFE	154.24	13.5	20 0	6				
EDMONTON	162.68	23.4	19 54	-10				
BLUE MTS.	166.60	54.2	20 9	2			45 40 SS	
CUMBERLAND	166.62	264.9					45 51 SS	
EUREKA	168.97	77.7	20 13	4			25 18 PP	
TONTO FOREST	171.65	113.1	20 13	3			20 45	
UINTA BASIN	173.65	65.8	20 14	3			46 59 SSS	
TULSA	174.63	249.6					47 2 SS	
ALBUQUERQUE	175.32	128.4	20 14	2			25 42 PP	
WICHITA MTS.	175.77	221.5	20 13	1			25 45 PP	
GOLDEN	176.84	55.4	20 14	2			25 54	

JUNE 6 17.H 42.M 49.S EPICENTRE -14.36 167.20 DEPTH= 174.KM

A=-0.94510 B= 0.21467 C=-0.24638 D= 0.2215 E= 0.9752
G= 0.2403 H=-0.0546 K=-0.9692 HT= 5.9

DEPTH OF FOCUS= 0.022R

SE= 1.22

	DELTA DEG.	AZ. DEG.	P		O-C S	S			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
PORT VILA	3.52	162.4	0	53	-3	1	33	-5				
NOUMEA	7.93	185.1	1	55A	2	3	23	1				
HONIARA	8.62	303.8	2	2K	0	3	40	2				
BRISBANE	18.68	223.8	4	8	1						7	41
PORT MORESBY	20.23	281.9	4	23A	0	8	5	10				
AFIAMALU	20.39	91.3	4	28K	3	8	1	3				
CHARTERS TS.	20.79	251.2	4	29	0	8	13	8				
RIVERVIEW	24.24	214.1	5	3A	1						5	52 *SP
KARAPIRO	24.62	164.0							5	40		
TOOLANGI	30.11	215.9	5	55A	0				6	29	7	14 PPP
ROXBURGH	31.07	177.1	6	2K	-2							
SAVANNAH	32.32	208.6	6	15	1							
ADELAIDE	32.84	226.2	6	19A	0							
MOORLANDS	32.89	207.8	6	20	1							
TARRALEAH	33.11	208.8	6	22	1							
MUNDARING	49.59	240.2	8	34	-1							
BAGUIO CITY	55.28	301.9	9	17	0							
MATUSIRO	57.54	332.4	9	32	-1							
CAPE HALLETT	57.96	178.9	9	35	-1							
SCOTT BASE	63.51	180.1	10	13	-1							
Y.-SAKHLINSK	64.93	341.8	10	22A	-1							
PETROPAVLOVK	67.50	354.4	10	39K	0							
CHANGCHUN	69.38	328.9	10	50A	-1							
MIRNY	70.65	204.1	10	58	0							
PEKING	71.93	321.1	11	5A	-1							
SIAN	73.50	312.7	11	15A	0							
KUNMING	74.05	301.7	11	17A	-1				11	57		
CHENGTU	75.43	307.4	11	27A	1				12	4		
PAOTOW	76.08	318.7	11	31A	1				12	8		
LANCHOW	78.02	312.2	11	42A	2				12	19		
YAKUTSK	81.64	343.1	11	58A	-2							
MAWSON	82.20	202.0	12	2A	-1							
SHILLONG	83.35	298.4	12	10K	1							
LHASA	85.38	302.0	12	21A	2				12	59		
COLLEGE	85.99	17.6	12	20	-2				13	3		
CHATRA	87.75	298.3	12	32A	2							
EUREKA	89.15	48.9	12	36	-1				13	16		
TIKSI	89.58	348.7	12	39A	0							
BLUE MTS.	90.02	43.5	12	40	-1				13	19		
TUCSON	90.92	57.0	12	45	0							
N-LAZARVSKYA	93.41	188.0	12	55A	-1							
UINTA BASIN	94.09	49.6	13	0	1							
SHIRAZ	118.27	296.1	18	25K	-1							

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SODANKYLA	121.12	343.3	18 26	-6		
TIFLIS	123.51	310.7	18 38	1		
MOSCOW	123.53	328.5	18 38	1		
BAKURIANI	124.45	310.9	18 40	2		
PULKOVO	124.78	335.1	18 40	1		
UMEA	125.54	342.7	18 41	1		
NURMIJARVI	126.50	338.0	18 43	1		
HELSINKI	126.61	337.6	18 44	2		
SKALSTUGAN	127.81	346.1	18 45A	0		
UPPSALA	129.39	340.7	18 48	0	21 59	SKP
KONGSBERG	131.85	344.9	18 54	2	22 13	SKP
GOTEBORG	132.87	342.1	18 56A	2		
KARLSKRONA	132.94	338.7	18 58A	3	22 14	SKP
JERUSALEM	132.94	300.1	18 59	4		
UZHGOROD	135.27	327.2	19 2	3		
COLLMBERG	137.70	336.1	19 5A	2	19 42	
HALLE	137.94	337.0	19 4	0		
PRUHONICE	138.07	333.7	19 6	2	22 24	
JENA	138.54	336.8	19 6	1	19 50	
KASPERSKE H.	139.12	333.5	19 7A	1	22 1	PP
LJUBLJANA	140.94	329.5	19 6	-3		
STUTT GART	141.16	336.6	19 6	-4		
FOLINIERE	144.21	346.0	19 15	0		
GARCHY	144.61	341.3	19 17A	1		
ROME	144.90	326.3	19 18	2		
ISOLA	145.79	334.2	19 19	1	20 28	
MONACO	145.99	333.4	19 21	3		
TOLEDO	153.44	344.8	19 31	2	19 53	PKP2
AVERROES	160.52	346.4			21 25	

JUNE 17 15.H 50.M 1.S EPICENTRE 18.89 121.83 DEPTH= 61.KM

A=-0.49939 B= 0.80436 C= 0.32188 D= 0.8496 E= 0.5275
G=-0.1698 H= 0.2735 K=-0.9468 HT= 4.9

DEPTH OF FOCUS= 0.004R

SE= 2.72

	DELTA DEG.	AZ. DEG.	P		O-C S	S			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
BAGUIO CITY	2.74	206.1	0	42	0	1	12	-3				
HENGCHUN	3.25	342.0	0	49	-1	1	41	13				
TAWU	3.55	345.9	0	52	-2	1	39	4				
TAITUNG	3.89	350.6	0	57	-2	1	46	*2				
HSINKONG	4.21	354.2	0	59	-4	1	48	-3				
MANILA	4.26	189.9	1	5	1	1	55	2				
TAINAN	4.35	340.0	1	15	10							
YUSHAN	4.64	349.9	1	11	2	2	7	5				
ALISHAN	4.70	348.3	1	18	8	2	23	19				
HWALIEN	5.05	357.8	1	12	-3	2	14	1				
TAICHUNG	5.34	348.6	1	22	3							
TAIPEI	6.11	357.3	1	36	7	2	37	-2				
ANPU	6.26	357.4	1	27	-5							
HONG KONG	7.94	296.6	1	47A	-8	2	51	-33				
CANTON	8.96	299.2	1	59	-10							
NANKING	13.40	348.7	3	5	-4							
NHATRANG	13.85	243.2	3	13	-1						3 20	*SP
KUNMING	18.75	292.7	4	16A	0	7	45	6				
SIAN	19.14	325.6	4	21A	1							
CHENG TU	19.95	309.4	4	29A	0	8	7	2				
ABUYAMA	20.05	34.7	4	31A	1	8	22	15				
PEKING	21.62	348.1	4	44	-2	8	43	6			5 10	PP
MATUSIRO	22.72	36.0	4	57	0	9	4	7				
LANCHOW	23.32	320.8	5	5A	2	9	19	12			16 11	SCS
PAOTOW	23.87	337.4	5	9A	1							
CHANGCHUN	25.03	6.0	5	18	-2	9	35	-2				
VLADIVOSTOK	25.60	17.2	5	27	2	9	53	7				
MEDAN	27.28	238.9	5	41K	1	10	19	6			6 26	PP
SHILLONG	28.48	288.9	5	53	2							
PORT BLAIR	28.96	259.9				10	56	16			15 14	
TANGERANG	29.07	212.5	5	55K	-1	10	45	3			6 49	PP
LHASA	29.96	296.8	6	5A	1	10	58	2			16 42	SCS
DARWIN	32.32	163.4	6	25	0							
CHATRA	32.82	290.3	6	29A	0	11	53	12				
Y.-SAKHLINSK	32.86	26.7	6	3v	0							

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IRKUTSK	36.02	341.7	6 57	0	12 31	0					
PORT MORESBY	37.60	136.2	7 8	-2	13 13	18					
RABAUL	37.67	124.5	7 11	0	12 25	-31				17 57	
DEHRA DUN	41.17	294.7								13 57	
NEW DELHI	41.78	292.0	7 43	-2						16 43	
YAKUTSK	43.44	5.4	7 56	-2							
PETROPAVLOVK	44.41	31.2	8 6	0							
LAHORE	44.47	296.0	8 5	-1							
ALMATA-2	44.49	313.1	8 8	1							
SEMIPALATNSK	45.53	323.5	8 15A	0							
CHARTERS TS.	45.55	147.0	8 14	-1							
MAGADAN	45.66	20.2	8 16	0							
FRUNSE	46.28	311.7	8 23A	2	15 7	5					
WARSAK DAM	47.02	299.1	8 28	1							
KHOROG	47.46	303.8	8 31A	1							
TASHKENT	49.81	308.5	8 49A	1							
QUETTA	50.76	293.9	8 28	-28	16 13	8					
TIKSI	52.90	2.8	9 8K	-4							
BRISBANE	54.92	146.0	9 22	-4							
ADELAIDE	55.92	163.3	9 33K	-1					9 42		
KOUMAC	57.16	131.2	9 46A	3							
VANNOVSKAYA	58.11	303.4	9 51	2							
SVERDLOVSK	58.70	325.7	9 52K	-1						17 56	
RIVERVIEW	59.41	151.7	10 2	4							
KIZYL-ARVAT	59.54	304.8	10 4	5						18 13	
CANBERRA	59.76	154.4	9 59	-2						10 21	
TOOLANGI	60.42	158.5	10 6	1						10 55	PCP
SHIRAZ	63.29	294.3	10 23A	-1	18 53	3				39 34	PKPPKP
TEHERAN	63.58	301.1	10 25	-1	19 4	10					
KIROVOBAD	67.10	306.9	10 48A	-1	19 41	4					
GORIS	67.21	305.7	10 50K	0	19 46	8					
KHEYS	67.29	350.8	10 49K	-1	19 41	2					
TIFLIS	68.13	308.2	10 55	0							
MOSCOW	71.37	323.6	11 12A	-3	20 28	1					
APATITY	72.10	336.2	11 22K	3	20 45	10					
COLLEGE	73.22	26.5	11 25	-1							
KEVO	74.09	338.9	11 30	-1	21 9	11					
HONOLULU	74.42	72.5								22 8	
PULKOVO	74.63	328.4	11 36	2							
SODANKYLA	74.72	336.5	11 34	-1							
KAJAANI	74.98	333.0	11 36	0	21 22	14				14 23	PP
VIBORG	75.19	329.5	11 41	4							
KARAPIRO	75.75	138.9	11 44	3							
KSARA	76.47	301.3	11 44K	-1	21 35	11				14 39	PP
CHATEAU	76.53	139.9	11 47	2							
MONOWAI	76.58	149.0	11 43	-2							
TROMSOE	76.85	339.5	11 46	-1							
KIRUNA	76.89	337.5	11 46	-1	21 30	1					
HELSINKI	77.16	329.4	11 49	1							
NURMIJARVI	77.22	329.8	11 47	-2	21 33	1				14 43	PP
JERUSALEM	77.51	299.4	11 52	2							
UMEA	78.23	333.6	11 53A	-1	21 41	-2					
MOULD BAY	78.28	12.4	11 53K	-2							
ISTANBUL UN.	79.92	309.9	12 4	0							
UPPSALA	80.76	330.3	12 7A	-1	22 8	-2					
SKALSTUGAN	81.60	334.8	12 9	-3						12 48	
TANANARIVE	82.01	247.0	12 18	3						13 9	
UZHGOROD	82.14	318.7	12 11	-4							
KRAKOW	83.10	320.6	12 20	0	22 29	-4				15 29	PP
KARLSKRONA	83.19	327.3	12 19A	-2							
SKALNATE PL.	83.22	319.7	12 22	1	22 41	6				15 44	PP
SOFIA	83.44	312.8	12 23	1							
RESOLUTE	83.77	9.2	12 22	-1							
RACIBORZ	84.12	321.0	12 26	1						12 41	PCP
COPPERMINE	84.17	18.6	12 24K	-1							
GOTEBORG	84.32	329.5	12 26	0						15 44	PP
KONGSBERG	84.51	331.8	12 31	4	22 31	-17	12 52				
ATHENS	84.75	308.2	11 59	-29							
WILKES	85.40	184.6	12 38	6							
BRATISLAVA	85.53	319.5	12 33	1						15 51	
VIENNA-H.	85.95	319.8	12 36	2						13 6	
BERGEN	86.02	333.6	12 30K	-5						12 36	PCP
PRUHONICE	86.32	321.9	12 37	1	23 0	-5					
PRAGUE	86.35	322.0	12 38	2							
COLLMBERG	86.64	323.5	12 37	-1						16 5	PP
HALLE	87.14	323.9	12 34	-6	23 5	-8					
KASPERSKE H.	87.25	321.4	12 40	-1						16 11	PP
YELLOWKNIFE	87.59	22.8	12 43	1							
JENA	87.60	323.5	12 47	5	23 23	6				16 16	PP

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KOUMAC	22.43	253.4	5 5A	4			
KARAPIRO	24.70	202.6	5 23A	0			
CHATEAU	25.83	201.2	5 33	-1			
HONIARA	27.30	279.4	5 42	-6	10 35	8	
BRISBANE	34.12	243.8	6 47	-1			
MONOWAI	34.47	204.6	7 49	58			
RABAU	36.26	284.2					8 29
RIVERVIEW	37.34	234.0			12 49	-15	
CHARTERS TS.	39.25	257.0	7 26	-5			12 55
KIPAPA	39.36	21.9	7 33	1			
CANBERRA	39.52	232.7	7 29	-5			
PORT MORESBY	39.58	273.9	7 31	-3			
TOOLANGI	42.94	231.0	7 59	-3			
ADELAIDE	47.53	236.5	8 38	0			
CAPE HALLETT	57.76	186.1	9 56	1			
BYRD STATION	68.85	171.4	11 9	1			
MATUSIRO	69.36	319.5	11 8	-3			
SOUTH POLE	74.68	180.0	11 42	-1			
BOULDER CITY	74.87	45.4	11 45	1			
TUCSON	75.85	50.4	11 50	1			
EUREKA	76.01	41.9	11 51	1			
TONTO FOREST	76.52	48.4	11 53	0			12 45
BLUE MTS.	78.26	36.7	12 3	0			
PENTICTON	79.69	32.1	12 10	-1			
ALBUQUERQUE	80.33	49.7	12 13	-1			
UINTA BASIN	80.65	43.7	12 17	1	22 28	5	15 22 PP
CHANGCHUN	81.61	319.8	12 20	-1			
BUTTE	81.68	37.7	12 23	2			17 54
HUNGRY HORSE	82.11	35.1	12 23	0			
BOZEMAN	82.40	38.5	12 27	2			18 2
LARAMIE	83.79	44.3	12 33	1			
EDMONTON	85.25	31.2	12 38A	-1			
PEKING	85.94	313.3	12 42A	-1	23 23	7	
WICHITA MTS.	86.15	52.6	12 44	0	23 19	1	13 23
MAWSON	87.98	198.5	12 52	-1			
SIAN	89.23	305.8	13 0	1			
YELLOWKNIFE	89.86	23.2	13 1	-1			
PAOTOW	90.50	312.0	13 4A	-1	24 9	11	
FLORISSANT	93.72	50.9	13 20	1			18 37
LANCHOW	93.74	306.2	13 20	1			
CUMBERLAND	96.56	55.0	13 32	0			
MOULD BAY	96.82	11.2	13 30	-4			
LA PAZ	99.14	109.9					19 28
QUETTA	123.61	296.1	19 0	1			
UMEA	130.82	352.4					22 38 PKS
NURMIJARVI	133.23	348.3	19 19	1			22 43 PKS
DURHAM	140.14	8.0	19 51	21			
BROKEN HILL	143.66	216.3	19 34	-2			
COLLMBERG	143.91	353.9	19 36	-1			
RACIBORZ	144.30	347.9	19 38	1			
BENSBERG	144.55	0.1	19 38K	0			
UCCLE	144.63	3.2	19 40	2			
SKALNATE PL.	144.69	345.2	19 41	3	26 42	-4	
PRAGUE	144.95	351.9	19 38	-1			
DOURBES	145.34	3.0	19 39	0			
KASPERSKE H.	145.98	352.6	19 41	1			
HEIDELBERG	146.09	358.3	19 43	2			
FOLINIERE	146.14	9.2	19 42	1			
BRATISLAVA	146.35	348.1	19 44K	3			
VIENNA-H.	146.41	349.0	19 44	3			
PARIS	146.47	5.7	19 45	4			
KARLSRUHE	146.49	358.6	19 46K	5			
STUTTGART	146.70	357.6	19 44	2			
STRASBOURG	146.93	359.4	19 45A	3			
EBINGEN	147.30	357.9	19 47	4			
GARCHY	148.04	5.4	19 51	7			
BESANCON	148.24	1.7	19 49	5			
KSARA	148.34	310.6	19 50	6			23 17 PP
ADDIS ABABA	148.58	262.1	19 52	7			
ZAGREB	148.82	348.2	19 53	8			
LJUBLJANA	148.86	350.2	19 47K	2			
TRIESTE	149.37	351.0	19 52K	6			
SOFIA	149.51	336.3	19 53	7			
CLERMONT-FD.	149.54	5.7					20 10 PKP2
JERUSALEM	149.76	307.5	19 54	7			
ROSELEND	149.82	0.9	19 59	12			
ISOLA	151.33	0.3	19 57	8			25 40 PP
BAGNERES	151.78	11.1	20 9	19			20 43

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LWIRO 152.39 232.3 20 3K 13
 ATHENS 153.24 330.2 19 51 -1
 TOLEDO 153.70 19.9 20 15A 23 27 7 9 30 0 SKKS

JUNE 7 22.H 37.M 26.S EPICENTRE -15.49-173.03 DEPTH= 0.KM

A=-0.95701 B=-0.11702 C=-0.26542 D=-0.1214 E= 0.9926
 G= 0.2635 H= 0.0322 K=-0.9641 HT= 5.7

SE= 2.71

	DELTA DEG.	AZ. DEG.	P		O-C S	S O-C			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
AFIAMALU	1.98	37.7	0	25K	-10							
PORT VILA	18.01	260.3	4	18A	5							
NOUMEA	20.55	247.6	4	44A	2							
KOUMAC	22.15	253.5	4	58K	-1							
KARAPIRO	24.53	202.2	5	23	1							
CHATEAU	25.66	200.8	5	32	-1							
WELLINGTON	27.79	200.0	5	50	-2							
ROXBURGH	33.38	202.8									7	7
BRISBANE	33.84	243.8	6	45	-1						9	17
MONOWAI	34.29	204.3	6	49	-1							
RIVERVIEW	37.08	233.9	7	9	-4	13	13	13				
CHARTERS TS.	38.97	257.1	7	27	-2						16	32
CANBERRA	39.26	232.7	7	29	-3	13	40	7			9	10 PP
PORT MORESBY	39.31	274.0	7	32	0	13	46	12				
HONOLULU	39.39	22.2	7	39	6	13	35	0			9	6 PP
KIPAPA	39.53	22.3	7	32	-2	13	32	-5				
TOOLANGI	42.69	230.9	7	58	-2						8	47 PP
MOORLANDS	43.37	223.6	8	13	8							
ADELAIDE	47.26	236.5	8	36K	0	15	38	8			19	10 SS
DARWIN	54.45	265.7	9	31	0							
CAPE HALLETT	57.66	186.0	9	56	2							
MUNDARING	65.80	241.6	10	48	-1	19	54	19				
TUKUBASAN	67.86	320.4	11	1A	-1	20	4	4			15	14 PPP
BYRD STATION	68.82	171.3	11	7	-1							
MATUCIRO	69.24	319.6	11	7	-3	20	31	15				
PARAISO	70.31	41.6	11	22	5							
WILKES	70.49	204.6	11	18	0	20	40	9				
PRIEST	71.30	42.6	11	24A	1							
BERKELEY	71.32	40.3	11	24K	1	20	44	3				
CALISTOGA	71.59	39.5	11	20A	-5							
PASADENA	71.82	45.5	11	24	-2							
PETROPAVLOVK	72.47	342.5	11	28A	-2	20	57	3				
SHASTA	72.99	37.9	11	35K	2							
Y.-SAKHLINSK	73.80	330.2	11	35	-3	21	10	1				
SOUTH POLE	74.61	180.0	11	41	-1							
BOULDER CITY	75.12	45.5	11	46	1							
TUCSON	76.11	50.5	11	51	0						12	39
EUREKA	76.25	42.0	11	54	2							
TONTO FOREST	76.77	48.5	11	53	-2						14	4
VLADIVOSTOK	77.09	322.0	11	58	2	21	47	2				
VICTORIA	77.46	31.2	12	1	3							
SEATTLE	77.46	32.4	11	59A	0	21	47	-2				
MIRNY	77.50	204.1	11	58	-1	21	48	-2	12	23		
LEMBANG	77.98	266.2	12	18	17							
ZO-SE	78.30	307.0	12	0	-3	22	6	8				
BLUE MTS.	78.48	36.9	12	4	0	21	59	-1			15	16 PP
PENTICTON	79.90	32.3	11	55	-17							
MAGADAN	80.33	342.2	12	10	-4							
NANKING	80.56	307.0	12	15A	0	22	33	11				
ALBUQUERQUE	80.59	49.8	12	15	0							
UINTA BASIN	80.89	43.8	12	17	0	22	22	-3			13	0
CHANGCHUN	81.49	319.9	12	21A	1	22	36	4				
CANTON	81.56	296.7	12	22	1	22	46	14				
LUBBOCK	83.48	52.7	12	35	4							
LARAMIE	84.03	44.4	12	34	1							
EDMONTON	85.45	31.2	12	36	-4							
PEKING	85.79	313.4	12	43A	1	23	21	6				
WICHITA MTS.	86.41	52.7	12	42	-3	23	16	-5			13	21
MAWSON	87.82	198.5	12	52	0	23	31	-3				
TULSA	88.97	52.4	12	57	-1						23	29
SIAN	89.05	305.9	13	0A	2							
YELLOWKNIFE	90.03	23.3	13	2	-1							
PAOTOW	90.35	312.1	13	5A	1	24	9	12			23	36 SKS
LAWRENCE	90.41	49.6	13	6	2							

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KUNMING	91.39	295.6	13 12	3	24 23	16				
CHENG TU	91.88	301.2	13 13	2	24 20	9				
COPPERMINE	92.95	18.8	13 15	-2						
LANCHOW	93.57	306.3	13 18	-1	24 37	11			23 54	SKS
N-LAZARVSKYA	93.89	181.6	13 21K	1	24 23	-5				
TIKSI	95.17	344.3	13 23	-3						
CUMBERLAND	96.83	55.1	13 34	0	24 11	0			24 56	S
MOULD BAY	96.95	11.2	13 30	-4						
IRKUTSK	97.68	322.0	13 34	-4						
CHINCHINA	98.44	87.2			24 23	4			17 46	PP
BOGOTA	99.84	87.9							17 53	PP
FUQUENE	100.38	87.2			24 41	12			18 0	PP
LHASA	102.55	297.5			24 47	8				
PALISADES	106.81	51.3			25 3	-74				
BREBEUF	107.43	46.7							28 4	PS
SEMIPALATNSK	112.43	318.5							19 21	PP
BERMUDA	113.47	61.1							19 48	PP
ALMATA	114.99	310.8							19 42	PP
SVERDLOVSK	122.40	328.4	18 57	0						
QUETTA	123.40	296.1	19 0	1						
KIRUNA	126.97	353.7							20 59	PP
KAJAANI	129.40	348.4	19 13	2						
UMEA	130.85	352.3							21 27	PP
KIZYL-ARVAT	130.97	308.7							21 29	PP
PULKOVO	132.60	344.2							21 36	PP
NURMIJARVI	133.25	348.1	19 18	0					21 42	PP
MOSCOW	133.47	336.6	19 20	2					21 44	PP
UPPSALA	135.03	352.4							22 45	PKS
TEHERAN	135.61	305.5	19 20	-2					22 57	PKS
SHIRAZ	135.92	296.7	19 14	-9					21 59	PP
KIROVOBAD	137.68	314.2	19 27	1						
GORIS	138.15	312.7	19 29	2						
TIFLIS	138.25	316.4	19 29	2						
BULAWAYO	138.70	211.7	19 28	0						
DURHAM	140.24	7.7							23 8	PP
WARSAW	141.68	346.1	19 25	-8					22 32	PP
SIMFEROPOL	142.76	327.6	19 33	-2					22 40	PP
BROKEN HILL	143.44	216.6	19 34	-2						
DE BILT	143.45	1.9	19 34	-2						
COLLMBERG	143.95	353.6	19 36	-1					23 12	PKS
KRAKOW	143.96	345.8	19 36	-1					20 36	
RACIBORZ	144.32	347.6	19 38	0					20 36	
JENA	144.46	355.0	19 38	0					21 54	PP
BENSBERG	144.62	359.8	19 38A	0					20 29	
UCCLE	144.72	2.9	19 39	1						
PRAGUE	144.98	351.6	19 39	0						
KASPERSKE H.	146.02	352.2	19 40	-1					20 49	
HEIDELBERG	146.15	357.9	19 42	1						
FOLINIERE	146.25	8.9	19 42	1						
BRATISLAVA	146.36	347.7	19 43	2						
VIENNA-H.	146.43	348.6	19 43	2						
KARLSRUHE	146.55	358.3	19 45	3						
PARIS	146.57	5.4	19 45A	3					26 34	
STUTTGART	146.76	357.2	19 44	2						
STRASBOURG	147.00	359.0	19 44A	2					23 11	PP
FELDBERG	147.69	358.7	19 47	4						
GARCHY	148.14	5.0	19 48	4						
KSARA	148.18	310.2	19 50	6	26 10	-41			23 16	PP
ISTANBUL UN.	148.18	327.5	19 48	4						
BESANCON	148.32	1.3	19 49	5					20 40	
BELGRADE	148.62	341.4	19 32A	-13					21 43	
ZAGREB	148.83	347.8	19 56	11						
LJUBLJANA	148.88	349.8	19 47	2					20 11	PKP2
TRIESTE	149.40	350.6	19 52A	6					20 10	PKP2
SOFIA	149.46	335.9	19 52	6						
JERUSALEM	149.59	307.2	19 54	8						
CLERMONT-FD.	149.64	5.3	19 53	7						
PADOVA	149.89	353.1	20 19	32					22 24	
ROSELEND	149.89	0.5	19 53	6					20 19	
PAVIA	150.35	356.9	19 50	2					32 14	
BAGNERES	151.90	10.6	19 56	6					20 43	
LWIRO	152.13	232.6	19 58K	8					43 15	SS
AQUILA	152.67	349.6							30 4	SKKS
ATHENS	153.16	329.7	19 51A	-1					22 44	
ROME	153.26	350.8							23 43	PP
TOLEDO	153.86	19.5	20 13	20						
MESSINA	156.15	343.1	19 49	-7					43 55	SSP
GRANADA	156.45	21.5							20 35	

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MALAGA	156.56	23.5	19 54	-2	24 6 PP
M. BOUR	156.84	89.6	19 59	2	24 6 PP

JUNE 8 1.H 1.M 47.S EPICENTRE -15.35-172.81 DEPTH= 0.KM

A=-0.95722 B=-0.12071 C=-0.26298 D=-0.1251 E= 0.9921
G= 0.2609 H= 0.0329 K=-0.9648 HT= 5.7

SE= 2.07

	DELTA DEG.	AZ. DEG.	P		O-C S	S O-C			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
AFIAMALU	1.74	35.2	0	28K	-4	0	45	-10				
KOUMAC	22.39	253.2	4	59	-2							
KARAPIRO	24.74	202.4	5	25	1							
CHATEAU	25.87	201.1	5	36	1							
HONIARA	27.23	279.3	5	45	-2	10	37	11				
BRISBANE	34.09	243.7	6	33	-15						7	32
RIVERVIEW	37.33	233.9									9	7 PPP
HONOLULU	39.17	22.0				13	38	6			16	19
CHARTERS TS.	39.20	257.0	7	37	6	13	23	-9				
KIPAPA	39.31	22.1	7	34	2							
PORT MORESBY	39.51	273.8	7	33	-1	13	53	16				
CANBERRA	39.51	232.6	7	33	-1							
TOOLANGI	42.94	230.9	7	59	-3						8	12 *SP
ADELAIDE	47.51	236.5	8	37K	-2						22	49
DARWIN	54.67	265.6	9	30	-3							
SCOTT BASE	63.35	184.7	10	33	0							
BYRD STATION	68.93	171.4	11	9	0							
MATUSIRO	69.26	319.5	11	11K	0							
BOULDER CITY	74.87	45.4	11	45	1							
TUCSON	75.86	50.5	11	51	1							
EUREKA	76.00	41.9	11	51	0							
TONTO FOREST	76.52	48.5	11	54	0						12	10 PCP
BLUE MTS.	78.24	36.8	12	3	0							
PENTICTON	79.67	32.2	12	11	0							
UINTA BASIN	80.64	43.8	12	17	1	22	33	10				
NANKING	80.64	306.9				22	39	16				
CHANGCHUN	81.51	319.8	12	22A	1	22	39	7				
BOZEMAN	82.38	38.6	12	26	1							
LARAMIE	83.78	44.3	12	27	-5							
EDMONTON	85.22	31.2	12	38	-2							
PEKING	85.84	313.3	12	43A	0	23	24	9				
WICHITA MTS.	86.16	52.6	12	45	1	23	20	2			29	20 SS
TULSA	88.72	52.3									23	29
SIAN	89.13	305.8	13	1A	2							
YELLOWKNIFE	89.82	23.2	13	2	0							
PAOTOW	90.40	312.0	13	6	1	24	10	12				
KUNMING	91.51	295.5	13	12	2	24	19	11			23	43 SKS
CHENG TU	91.99	301.1				24	28	16			23	50 SKS
LANCHOW	93.65	306.2	13	21	2	24	40	13			23	55 SKS
CUMBERLAND	96.58	55.0	13	33	0	24	11	1			31	18 SS
LA PAZ	99.23	109.9									17	49 PP
BREBEUF	107.18	46.6									34	13 SS
QUETTA	123.52	296.2	19	2K	3							
NURMIJARVI	133.15	348.3									31	53 SKSP
SHIRAZ	136.04	296.9	19	24	1							
DURHAM	140.07	7.9	19	37	6							
BROKEN HILL	143.68	216.4	19	36K	-1							
COLLMBERG	143.83	353.8	19	36	-1						20	12
BENSBERG	144.48	0.0	19	39	1							
UCCLE	144.56	3.1	19	39	1							
PRAGUE	144.87	351.9	19	39	0							
PRUHONICE	144.94	351.7	19	40	1							
DOURBES	145.27	2.9	19	41	1							
KASPERSKE H.	145.90	352.5	19	43A	2							
HEIDELBERG	146.01	358.2	19	43	2							
FOLINIERE	146.08	9.1	19	43	2							
BRATISLAVA	146.26	348.0	19	44	3							
VIENNA-H.	146.33	348.9	19	45	4							
KARLSRUHE	146.41	358.5	19	45A	3							
STUTT GART	146.62	357.5	19	44	2							
STRASBOURG	146.86	359.3	19	45A	3							
GARCHY	147.98	5.3	19	48	4							
BESANCON	148.17	1.6	19	49	5						20	37
KSARA	148.24	310.6	19	51	6						23	17 PP
ADDIS ABABA	148.52	262.2	19	53	8							

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BELGRADE	148.55	341.8	19 52	7	20 44
LJUBLJANA	148.78	350.1	19 51A	6	20 11 PKP2
TRIESTE	149.29	351.0	19 52A	6	20 11 PKP2
SOFIA	149.42	336.2	19 52	6	
JERUSALEM	149.67	307.6	19 55K	8	
ROSELEND	149.75	0.8	19 54	7	20 59
ISOLA	151.26	0.2	19 58	9	20 21 PKP2
LWIRO	152.38	232.5	19 56	5	
TOLEDO	153.66	19.7	19 56	3	20 21 PKP2
MALAGA	156.34	23.7	20 28	32	24 24 PP

JUNE 9 20.H 37.M 59.S EPICENTRE 10.81 -41.90 DEPTH= 101.KM

A= 0.73126 B=-0.65616 C= 0.18634 D=-0.6679 E=-0.7443
G= 0.1387 H=-0.1244 K=-0.9825 HT= 6.4

DEPTH OF FOCUS= 0.011R

SE= 2.25

	DELTA DEG.	AZ. DEG.	P		O-C S	S			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
FORT FRANCE	19.17	283.7	4	20	2	7	50	5				
ST. CLAUDE	19.94	287.2	4	32	6	8	9	9				
M. BOUR	24.58	79.1	5	14	2	9	41	18				
CARACAS	24.60	271.6	5	10K	-2	9	37	14				
FUQUENE	31.94	263.0	6	18	0							
BOGOTA	32.45	261.6	6	22	-1							
CHINCHINA	33.88	262.8	6	34	-1	12	3	12				
LA PAZ	37.54	224.1	7	7	1	12	57	10				
AVERROES	38.73	49.3	7	14A	-2							
AREQUIPA	39.89	227.6	7	24	-2							
HUANCAYO	40.23	236.6	7	28	0							
PALISADES	41.21	322.5				13	57	15				
NANA	41.44	237.8	7	36	-2							
CHAPEL HILL	41.88	312.8	7	43	1							
COLUMBIA	42.53	309.1	7	48	1							
GRANADA	43.29	46.2	8	3A	9	14	21	8				
BLACKSBURG	43.45	313.7	7	56	1							
SEVEN FALLS	43.67	331.4	7	55	-2							
BREBEUF	43.92	327.8	7	53	-6							
ALMERIA	43.95	47.2	8	UA	1							
TOLEDO	44.28	42.6	8	1A	-1	14	38	11			9	50 PP
OTTAWA	44.98	326.3	8	7	0							
CUMBERLAND	46.59	309.2	8	20	0	15	11	11			10	11 PP
SCHEFFERVILLE	48.10	340.9	8	30	-2							
VALENTIA	48.38	25.8	8	35	1	15	29	4				
BAGNERES	48.59	40.9	8	35	0						9	1
FOLINIERE	51.16	34.2	8	52	-3							
FLORISSANT	51.30	311.4	8	56	0							
GARCHY	52.43	37.4	9	3	-2							
PARIS	52.85	35.5	9	8	0							
ISOLA	53.59	42.4	9	12	-1						9	40
ROSELEND	53.92	40.5	9	15	-1						9	41
DURHAM	54.13	27.6	9	22	5	17	1	17				
BESANCON	54.18	38.6	9	19	2							
TULSA	54.63	306.5	9	19A	-2	16	56	5				
DOURBES	54.69	34.9	9	19	-2	17	0	8				
UCCLE	54.89	34.1									14	0
LAWRENCE	54.98	310.2	9	21	-2							
PAVIA	55.36	42.0									17	27 PPS
STRASBOURG	55.84	37.7	9	28K	-1						10	11
DE BILT	55.99	33.0				17	26	17				
KARLSRUHE	56.40	37.5	9	33	-1							
BENSBERG	56.54	34.9	9	33	-1						10	9
ROME	56.56	46.7									17	31 PPS
WICHITA MTS.	56.63	304.5	9	33	-2	17	36	19			21	5 SS
STUTTGART	56.83	38.0	9	34	-3							
WITTEVEEN	57.14	32.8	9	42	3							
AQUILA	57.34	46.4									17	31 PPS
MESSINA	57.91	51.6	9	58	14							
TRIESTE	58.56	42.8	9	49	0							
JENA	59.05	36.4	9	50	-2	18	6	17			12	6 PP
LJUBLJANA	59.19	42.5	9	52A	-1							
CHEB	59.20	37.5	9	54	1							
KASPERSKE H.	59.59	38.9	9	53A	-3						10	43
COLLMBERG	60.02	36.4	9	57	-2						10	41 PCP

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PRUHONICE	60.47	38.2	10 2	0			
VIENNA-H.	61.06	40.5	10 5	-1			
KONGSBERG	61.91	26.8	10 19	8			
GOTEBORG	62.09	29.4	10 11	-2			
RACIBORZ	62.74	38.9	10 16	-1		10 42	
GOLDEN	62.80	309.1	10 16	-1			
ALBUQUERQUE	63.07	303.7	10 19	0			
LARAMIE	63.21	310.8	10 21	1			
KARLSKRONA	63.27	31.9	10 21	1			
ATHENS	64.24	53.1	10 30	3			
SKALSTUGAN	64.92	23.6	10 33	2			
UZHGOROD	64.97	41.2	10 31	-1			
UPPSALA	65.65	28.5	10 34A	-2	19 24	12	
UINTA BASIN	66.08	309.3	10 39K	0	19 49	32	
TUCSON	66.53	300.5	10 41	0			
TONTO FOREST	66.98	302.7	10 45	1		11 22	
BOZEMAN	67.79	314.9	10 52	3			
UMEA	68.24	25.0	10 47	-5			
ISTANBUL UN.	68.58	50.2	10 53	-1			
BUTTE	68.88	315.2	10 57	1			
NURMIJARVI	69.19	29.1	10 56	-2	20 7	13	24 13 55
HELSINKI	69.25	29.5	10 58	0			
KIRUNA	69.78	21.0	11 1	-1	20 17	16	
BOULDER CITY	69.94	304.4	11 4	1			
TROMSOE	69.99	19.0	11 2	-1			
HUNGRY HORSE	70.13	317.5	11 2	-2			
RESOLUTE	70.32	347.0	11 8	3			
EUREKA	70.93	308.1	11 9	0		11 37	
BANFF	71.40	320.4	11 15	4			
KAJAANI	71.47	25.8	11 11	-1			
LWIRO	71.51	96.0	11 13A	1		13 56 PP	
PULKOVO	71.79	30.5	11 12	-2			
SODANKYLA	71.88	22.3	11 12	-2			
BLUE MTS.	72.12	313.7	11 15	-1			
YELLOWKNIFE	72.50	332.3	11 16	-2			
SIMFEROPOL	72.56	46.2	11 22	4			
KEVO	72.68	19.9	11 18	-1			
JERUSALEM	73.49	60.0	11 25	1			
COPPERMINE	73.72	337.8	11 24	-1			
PENTICTON	73.88	318.3	11 25	-1			
KSARA	73.96	57.8	11 28	2			
BROKEN HILL	74.13	108.4	11 26	-1			
APATITY	74.48	22.7	11 30	1			
PRIEST	74.67	304.6	11 32A	2			
MOSCOW	75.25	35.1	11 33	-1			
MINERAL	75.26	309.0	11 35K	1			
KIMBERLEY	75.38	123.6	11 33K	-2			
LICK	75.40	305.9	11 40K	5			
BULAWAYO	75.87	114.0	11 36	-1			
BERKELEY	75.87	306.4				36 1	
MOULD BAY	76.58	346.1	11 42	1			
BAKURIANI	79.50	49.4	12 0	3			
CHANGALANE	80.81	119.0	12 5A	1		12 29	
TEHERAN	86.42	54.5	12 35	2			
COLLEGE	86.94	335.7	12 35	0			
SVERDLOVSK	87.80	32.5	12 39	0			
SHIRAZ	88.52	60.2	12 44A	1	23 33	15	13 4
N-LAZARVSKYA	89.04	164.5	12 46A	1			
MUNDARING	150.81	139.5	19 43	8			
TOOLANGI	152.54	192.8	19 52	14		20 43	
CANBERRA	153.66	200.4	19 56	17			

JUNE 10 4.4H 16.4M 33.5 EPICENTRE -55.39 146.34 DEPTH= 0.4KM

A=-0.47498 B= 0.31628 C=-0.82120 D= 0.5542 E= 0.8324
G= 0.6835 H=-0.4551 K=-0.5706 HT= -7.4

SE= 1.77

	DELTA DEG.	AZ. DEG.	P		O-C S	S			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
MACQUARIE I.	7.32	88.2	1	46K	-5	3	10	-5				
MOORLANDS	12.97	2.8	3	9	1							
ROXBURGH	17.60	65.3	4	6	-2	7	13	-10				
TOOLANGI	17.89	357.8	4	10	-1	7	31	3			4	27 PP
CAPE HALLETT	19.71	158.5	4	32	-1							

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CANBERRA	20.15	6.3	4 37A	-1	8 26	6				4 59	PP
WILKES	20.27	223.0	4 37	-3	8 25	3				5 1	PP
ADELAIDE	21.09	342.4	4 48A	0	8 43	4					
RIVERVIEW	21.81	10.8	4 54	-1	8 58	6	5	2		9 11	*SS
WELLINGTON	23.37	64.7	5 10A	-1	9 31	10					
SCOTT BASE	23.67	169.4	5 14	0							
CHATEAU	25.31	62.4	5 31	1							
KARAPIRO	26.29	60.6	5 44	5							
MIRNY	27.26	224.5	5 46	-2	10 33	7					
BRISBANE	28.36	12.1	5 58	0							
MUNDARING	31.55	305.4	6 24	-2	11 36	2					
PERTH	31.75	304.9	6 31	3	11 47	10				7 38	PP
CHARTERS TS.	35.24	359.9	6 56	-2	12 33	1					
NOUMEA	36.29	32.5	7 7K	0	12 59	11					
BYRD STATION	36.73	163.1	7 11	0							
KOUMAC	37.30	28.4	7 14A	-1	13 14	11					
MAWSON	38.43	217.8	7 24A	-1	13 17	-4				8 54	PP
PORT VILA	41.16	32.8	7 47K	0	14 8	6					
DARWIN	44.59	338.1	8 15	0						10 1	
PORT MORESBY	45.87	1.1	8 26K	0	15 14	4					
N-LAZARVSKYA	50.04	198.0	8 57A	-1	16 14	5					
RABAUL	51.25	7.5	9 7	0	16 22	-4					
AFIAMALU	52.50	54.8	9 16A	-1	16 47	4					
LEMBANG	57.38	312.5	9 50K	-2	17 55	7				12 4	PP
ARGENTINE I.	57.44	165.3	9 55	2							
DJAKARTA	58.30	312.0	9 57A	-2	17 54	-6				10 41	PCP
TANGERANG	58.39	311.8	9 57K	-2	18 11	10				12 10	PP
GUAM	68.59	358.3	11 8	1	20 17	8					
MANILA	72.97	334.4	11 32	-1	20 58	-2					
NHATRANG	74.21	322.2	11 42	2						14 28	PP
BAGUIO CITY	74.78	334.4	11 44	0	21 23	3					
TANANARIVE	79.51	252.1	12 12	2						12 49	
HERMANUS	79.78	222.1			22 19	5				23 9	PPS
HONG KONG	82.10	330.1	12 23	0	22 39	1				15 35	PP
KIMBERLEY	82.49	229.0	12 26K	0							
CANTON	83.08	329.7	12 28K	-1	22 51	3					
MADRAS	87.64	296.8			23 34	2				25 6	PPS
BULAWAYO	88.19	236.3	12 55	1							
KUNMING	88.40	321.3	12 56	1	23 45	5					
ZO-SE	88.80	338.6	12 56	-1	23 42	-1					
CHILEKA	88.83	243.8	12 58	1							
HAWAII V.OB.	89.38	53.5	13 0	0							
HONOLULU	89.75	50.3	13 7	6	23 59	7					
KIPAPA	89.89	50.3	13 3	1							
NANKING	90.24	336.9	13 3A	-1	23 59	.3				23 36	SKS
ABUYAMA	90.37	351.2	13 5A	1							
TUKUBASAN	91.40	355.0	13 10A	1	24 10	3				16 53	PP
MATUSIRO	91.83	353.5	13 11A	0	24 17	6					
CHENG TU	93.05	324.5	13 16K	-1	23 50	-31					
BROKEN HILL	93.14	239.1	13 18	1							
SIAM	94.86	329.7	13 26	1	24 40	3				23 57	SKS
POONA	95.54	294.6			23 50	-14				31 19	
CHATRA	96.16	309.5	13 31	0						24 1	
BOMBAY	96.38	294.0			23 50	-18				31 35	
LHASA	96.96	313.9	13 36	2	24 11	0					
LANCHOW	98.06	326.4	13 40A	1	24 17	0				25 7	S
PEKING	98.47	337.0	13 42	1	24 20	1				25 12	S
CHANGCHUN	100.44	344.7	13 50	0	25 27	58					
PAOTOW	100.48	332.7	13 51	1	24 28	-1				25 27	S
LA PAZ	102.68	146.2	14 2	2	24 34	-6					
DEHRA DUN	103.30	304.4			24 42	-1				32 41	
LWIRO	103.39	245.6			26 6	83				18 18	PP
IRKUTSK	112.79	333.5	19 7	29							
SHIRAZ	115.93	285.0	18 49	4						19 44	
TASHKENT	116.35	305.0								19 55	PP
SEMIPALATNSK	118.88	318.1	18 50	0							
VANNOVSKAYA	119.28	295.1	18 53	2							
PASADENA	120.27	72.9	18 57	4						20 19	PP
PRIEST	120.42	69.6								20 21	
LICK	120.80	68.0	18 56A	2							
BERKELEY	120.86	67.2								20 20	
KIZYL-ARVAT	121.16	294.8	18 57	2							
TEHERAN	121.17	288.7	18 56	1						20 26	PP
CALISTOGA	121.27	66.4								20 18	
SHASTA	122.89	64.9	18 59A	1							
TUCSON	122.92	79.8	18 59	1							
MINERAL	123.04	65.7	18 59	1							
TONTO FOREST	124.19	77.8	19 2	1						20 49	PP
EUREKA	125.39	70.2	18 54	-9						20 53	PP

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GORIS	126.06	288.2	19 7	2	
JERUSALEM	127.27	273.4	19 7	0	
TIKSI	127.32	353.1	19 5K	-2	
ALBUQUERQUE	127.37	80.9	19 4	-3	
KIROVOBAD	127.47	289.3	19 6	-1	
SEATTLE	127.89	58.9	19 6	-2	38 11 SS
CARACAS	128.16	136.7			21 13 PP
KSARA	128.39	275.6	19 14	5	21 17 PP
BLUE MTS.	128.47	64.5	19 6	-3	21 13 PP
SALT LAKE C.	128.53	71.9	19 10	1	
TIFLIS	129.04	289.2	19 11	1	
UINTA BASIN	129.46	73.8	18 59	-12	21 23 PP
BAKURIANI	129.74	288.3	19 12	1	
COLLEGE	130.00	30.6	19 10	-2	21 21 PP
PENTICTON	130.34	58.9	19 11	-1	
GOLDEN	131.35	77.4	19 15	1	22 42
SVERDLOVSK	131.49	313.0	19 14K	-1	
WICHITA MTS.	131.66	87.2	19 16	1	22 40 SKP
BUTTE	131.72	66.4	19 4	-11	22 43 SKP
BOZEMAN	132.29	67.7	19 19	3	22 58 SKP
LARAMIE	132.33	75.6	19 19	3	
HUNGRY HORSE	132.49	63.1	19 6	-11	22 47 SKP
TULSA	134.11	88.3	19 13	-6	22 49 SKP
ST. CLAUDE	135.21	140.1			22 7 PP
RAPID CITY	135.48	74.4	19 15	-7	
SAN JUAN	135.61	133.2	19 22	0	
EDMONTON	135.94	58.0	19 11	-12	
LAWRENCE	136.55	85.6	19 19	-5	
SIMFEROPOL	137.01	285.4	19 31	6	
ISTANBUL UN.	137.34	277.4	19 28	3	
ATHENS	138.27	270.0	19 16	-11	19 30
CUMBERLAND	139.70	97.3	19 21	-9	22 27 PP
YELLOWKNIFE	140.26	45.8	19 23	-8	
COLUMBIA	141.09	103.3	19 28	-4	
MOSCOW	141.33	301.0	19 31	-2	
COPPERMINE	142.38	37.9	19 29	-5	
MESSINA	143.08	263.2	19 45	9	23 7 PP
CHAPEL HILL	143.60	103.1	19 31	-6	
BLACKSBURG	143.76	100.3	19 34	-3	
KHEYS	143.83	343.9	19 35	-2	
MOULD BAY	143.86	23.9	19 33K	-4	
BELGRADE	144.58	275.8	19 37A	-1	20 1 PKP2
ANN ARBOR	145.37	90.9	19 37	-3	
UZHGOROD	145.73	282.5	19 41	1	
CLEVELAND	146.05	93.8	19 50A	9	
PULKOVO	146.61	304.3	19 45K	3	19 53 PKP2
GEORGETOWN	146.83	101.4	19 42	0	
AQUILA	147.07	266.7			42 37 SSP
LONDON ONT.	147.24	92.0	19 42A	-1	
ROME	147.31	265.2	19 46	3	42 37 SSP
APATITY	147.52	318.8	19 45K	2	23 38 PKS
PENNSYLVANIA	147.67	98.1	19 43	0	
ZAGREB	147.72	273.9	19 51	7	
WARSAW	148.26	287.5	19 49	5	24 4 PKS
BRATISLAVA	148.40	278.4	19 59	14	
CHORZOW	148.44	283.1	19 50	5	20 3 PKP2
RACIBORZ	148.77	282.2	19 51	6	20 3 PKP2
SCARBOROUGH	148.78	92.6	19 49	4	
VIENNA-H.	148.85	278.0	19 44	-1	19 51 PKP2
TRIESTE	148.89	271.9	19 50	5	30 15
KAJAANI	149.07	311.4	19 49	3	21 22
HELSINKI	149.29	303.3	19 52	6	
NURMIJARVI	149.53	303.9	19 44	-2	27 7 14
RESOLUTE	149.84	27.6	19 45	-2	
PALISADES	150.04	101.7	19 52	5	26 59 5
SODANKYLA	150.07	317.6	19 51	4	
KEVO	150.13	322.5	19 52	5	
PRUHONICE	150.77	279.7	19 54	6	
KASPERSCHE H.	150.89	277.6	19 47	-2	30 7 SKKS
PAVIA	151.23	267.3	19 54	5	24 49
AVERROES	151.33	230.5	19 55	6	23 46 PP
MONACO	151.34	263.3	19 50	1	
OTTAWA	151.79	93.0	19 48	-2	
ISOLA	151.83	263.7	19 53	3	
ALMERIA	151.88	241.8	19 56A	6	26 59 3
ALICANTE	152.00	246.4	19 46	-4	23 41 PP 23 28 PP
COLLMBERG	152.26	281.2	19 50	-1	20 1 PKP2
UMEA	152.27	309.6	19 52	1	43 20 SS

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KIRUNA	152.47	318.3	19 58A	7	
GRANADA	152.70	240.7	19 59A	8	23 52 PP
UPPSALA	152.75	300.6	19 52	1	23 53 PP
KARLSKRONA	152.75	292.2	19 56	5	23 58 PP
JENA	152.89	279.6	19 51	0	23 45 PP
HALLE	152.94	280.9	19 50	-2	23 46 PP
TROMSOE	152.95	322.3	19 58	6	
ROSELEND	152.97	266.0	20 4	12	20 57
BREBEUF	153.05	94.7	19 50	-2	
STUTTGART	153.15	273.8	19 52	0	20 15
NORD	153.19	354.5	19 50	-2	
TORTOSA	153.27	251.3	20 5	13	
FELDBERG	153.41	271.2	19 50	-2	
KARLSRUHE	153.76	273.6	20 6	13	
HEIDELBERG	153.78	274.6	19 54	1	
STRASBOURG	153.91	272.3	19 54	1	43 27 SS
BESANCON	154.23	268.3	19 53	0	20 53
COPENHAGEN	154.27	289.9	19 54	1	
TOLEDO	154.99	244.1	19 55A	1	23 57 PP
BAGNERES	154.99	254.7	19 55	1	23 48
GOTEBORG	155.10	294.3	19 58	4	24 5 PP
BENSBERG	155.39	276.8	19 54	-1	20 36
SEVEN FALLS	155.56	94.2	19 55	0	
SKALSTUGAN	155.78	308.4	20 0	5	24 3 PP
GARCHY	155.90	265.8	19 55	0	20 26 PKP2
WITTEVEEN	156.45	280.6	20 0	4	
DOURBES	156.46	273.1	19 58	2	
KONGSBERG	156.69	298.4	20 35A	38	24 19 PP
UCCLE	156.92	274.5	19 58	1	
DE BILT	157.00	278.0	19 59	2	42 33 SS
PARIS	157.04	268.5	20 2	5	20 29 PKP2
FOLINIERE	158.71	265.8	20 2	3	
KEW	159.87	272.7	19 59	-1	20 44 PKP2
SCHEFFERVILLE	161.14	78.0	20 5	3	
DURHAM	161.71	281.4	20 48K	46	24 41 PP
ABERDEEN	162.47	288.9			26 59 -8
VALENTIA	165.72	265.7	20 5	-1	24 34 PP

JUNE 10 6.H 39.M 1.S EPICENTRE -55.31 146.21 DEPTH= 0.KM

A=-0.47518 B= 0.31803 C=-0.82040 D= 0.5562 E= 0.8310
G= 0.6818 H=-0.4563 K=-0.5718 HT= -7.3

SE= 1.66

	DELTA DEG.	AZ. DEG.	P			O-C			*PP		SUPP.	
			M	S	S	M	S	S	M	S		
MACQUARIE I.	7.39	89.0	1	44K	-8	3	21	4				
MOORLANDS	12.89	3.3	3	10	3							
ROXBURGH	17.64	65.7	4	9K	1	7	23	-1				
TOOLANGI	17.75	358.1	4	9	-1	7	28	2		4	24 PP	
CAPE HALLETT	19.81	158.5	4	34	-1							
CANBERRA	20.08	6.7	4	37A	-1	8	25	6		8	57 SSS	
WILKES	20.27	222.8	4	40	0	8	32	10		5	3 PP	
ADELAIDE	20.99	342.6	4	46A	-1	8	39	2		5	57	
RIVERVIEW	21.75	11.2	4	55	0	8	59	8		9	31 SS	
WELLINGTON	23.41	65.1	5	11K	0	9	23	2				
SCOTT BASE	23.77	169.4	5	16	1							
CHATEAU	25.35	62.8	5	34	4							
KARAPIRO	26.32	60.9	5	41	2							
MIRNY	27.27	224.4	5	48	0	10	31	5		6	30 PP	
BRISBANE	28.30	12.4	5	56	-1							
MUNDARING	31.44	305.5	6	24	-1	11	33	0				
SOUTH POLE	34.88	180.0	6	53	-2							
CHARTERS TS.	35.16	0.1	6	56	-1					14	57	
NOUMEA	36.26	32.8	7	8K	1	12	58	10				
BYRD STATION	36.83	163.1	7	13	2							
KOUMAC	37.27	28.7	7	15	0	13	17	14				
MAWSON	38.44	217.8	7	26A	1	13	23	2		8	53 PP	
PORT VILA	41.13	33.1	7	47	0	14	7	6				
DARWIN	44.49	338.3	8	14	-1					10	0	
PORT MORESBY	45.79	1.3	8	25K	0	15	13	4				
HONIARA	47.04	18.7	8	34	-1	15	29	2				
N-LAZARVSKYA	50.09	198.0	8	58A	-1	16	15	5		10	56 PP	
RABAU	51.18	7.6	9	5	-2							
AFIAMALU	52.52	55.0	9	18A	1	16	39	-4				
LEMBANG	57.27	312.6	9	50	-2	17	55	8		12	6 PP	

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ARGENTINE I.	57.54	165.3	9 52	-1				
DJAKARTA	58.18	312.1	9 58	0	18 1	2	12 5	PP
TANGERANG	58.28	311.9	9 57K	-2	17 52	-8	10 42	PCP
GUAM	68.51	358.5	11 7	1				
MANILA	72.87	334.5	11 33	1	20 59	0		
NHATRANG	74.10	322.3	11 41	1			14 28	PP
BAGUIO CITY	74.67	334.5	11 55	12	21 19	0		
TANANARIVE	79.46	252.2	12 11	1			13 1	
CHANGALANE	81.23	236.1	12 19	0	22 35	6	12 25	
HONG KONG	81.99	330.3	12 23	0	22 37	0	15 30	PP
KIMBERLEY	82.49	229.1	12 25A	-1				
CANTON	82.97	329.8	12 29K	1	22 46	-1		
KODAIKANAL	86.60	293.2					23 13	
MADRAS	87.53	296.9	12 51	0	23 26	-5	23 20	SKS
BULAWAYO	88.17	236.4	12 54A	0				
KUNMING	88.29	321.4	12 55	1	23 44	5	23 24	SKS
ZO-SE	88.70	338.7	12 54	-2	23 42	0		
CHILEKA	88.80	243.9	12 57K	0				
HAWAII V.OB.	89.40	53.6	13 3	3				
HONOLULU	89.76	50.4			24 6	14	25 9	
KIPAPA	89.90	50.4	13 3	1	23 42	-11	24 10	
VISHAKHAPTNM	90.00	301.9	13 5K	2	23 57	3		
NANKING	90.14	337.0	13 1A	-2	23 55	-1	23 35	SKS
ABUYAMA	90.28	351.3	13 4K	0				
TUKUBASAN	91.31	355.1	13 8A	-1	23 54	-12	16 52	PP
MATUSIRO	91.74	353.6	13 10K	-1	24 18	8		
SHILLONG	92.93	312.7	13 15A	-1				
CHENG TU	92.94	324.6	13 17K	1	24 23	3	23 48	SKS
BROKEN HILL	93.12	239.2	13 18A	1				
SIAN	94.75	329.8	13 23A	-1	24 39	3	23 57	SKS
POONA	95.43	294.7			24 5	2	31 37	
CHATRA	96.05	309.6	13 33K	3	24 8	1		
BOMBAY	96.28	294.1			24 7	-1		
LHASA	96.85	314.0	13 33	-1	24 6	-5	17 31	PP
LANCHOW	97.95	326.5	13 39	0	24 16	-1	25 5	S
PEKING	98.37	337.1	13 42	1	24 13	-6	25 12	S
CHANGCHUN	100.34	344.8	13 51	1	24 28	-1	25 28	S
PAOTOW	100.37	332.8	13 49	-1	24 26	-3	25 27	S
Y.--SAKHLINSK	101.99	357.6			24 37	0		
NEW DELHI	102.14	302.9					18 7	
LA PAZ	102.79	146.3	14 1	0	24 48	8		
DEHRA DUN	103.19	304.5					23 43	
LWIRO	103.36	245.7	14 12A	9	24 52	9	26 10	S
LAHORE	105.98	302.4	17 49	777				
QUETTA	108.55	296.2	14 30	777				
KHOROG	112.14	304.1	18 49	12				
IRKUTSK	112.68	333.6	18 37	-1				
MAGADAN	114.56	2.6					19 52	PP
SHIRAZ	115.84	285.2	18 31	-14			35 47	SS
TASHKENT	116.24	305.1			25 39	3	19 51	PP
YAKUTSK	117.70	351.3	18 45	-3				
SEMIPALATNSK	118.77	318.2	18 48	-2				
CHINCHINA	119.68	130.1	18 53	1			20 16	PP
BOGOTA	120.03	131.9	18 51	-2			20 19	PP
PRIEST	120.47	69.7					20 24	
BERKELEY	120.90	67.2					20 27	
FUQUENE	120.94	131.8	19 2	8			20 21	PP
TEHERAN	121.07	288.8	18 54	-1	25 58	5	20 18	PP
SHASTA	122.93	64.9	18 43K	-15				
TUCSON	122.98	79.9	18 58	0			28 51	PKKP
MINERAL	123.08	65.7	18 59A	0				
BOULDER CITY	123.51	73.9	19 0	1			31 41	PP
TONTO FOREST	124.24	77.9	19 0	-1			19 7	20 47
GORIS	126.56	288.4	19 7	2			22 40	SKP
JERUSALEM	127.18	273.6	19 9	3				
TIKSI	127.23	353.2	19 3	-4	26 10	-2	21 8	PP
ALBUQUERQUE	127.43	80.9	19 6	-1			28 3	PKKP
VICTORIA	127.97	57.5	19 7	-1				
CARACAS	128.27	136.8	19 9	0	26 15	0		
KSARA	128.31	275.8	19 10	1	26 18	3	21 14	PP
BLUE MTS.	128.50	64.6	19 7	-2			21 13	PP
TIFLIS	128.95	289.3	19 10	0			21 18	
UINTA BASIN	129.51	73.9	18 55	-16			21 20	PP
COLLEGE	129.97	30.6	19 9	-3			22 34	SKP
PENTICTON	130.36	58.9	19 10	-3				
SVERDLOVSK	131.38	313.1	19 13	-1				
GOLDEN	131.40	77.4	19 15	0			22 48	SKP
WICHITA MTS.	131.74	87.2	19 14	-1			22 41	PKS
BUTTE	131.76	66.4	19 16	1				

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LARAMIE	132.39	75.7	19 17	1		
HUNGRY HORSE	132.52	63.1	19 10	-7		22 46 SKP
TULSA	134.19	88.3	19 15	-5		22 48 SKP
FORT FRANCE	134.32	141.6	19 22	2		
FAYETTEVILLE	135.23	89.4	19 20	-2		
RAPID CITY	135.54	74.4	19 16	-6		
SAN JUAN	135.72	133.3	19 23	0		
EDMONTON	135.96	58.0	19 15	-8		
LAWRENCE	136.62	85.6	19 24	0		
SIMFEROPOL	136.91	285.6	19 25	0		22 19 PP
M. BOUR	137.13	204.3	19 25	0		22 0 PP
ISTANBUL UN.	137.26	277.6	19 25	0		
CUMBERLAND	139.79	97.3	19 20	-10		22 32 PP
YELLOWKNIFE	140.26	45.8	19 22A	-9		
COLUMBIA	141.18	103.3	19 25	-7		
MOSCOW	141.22	301.1	19 33	0		22 33 PP
COPPERMINE	142.36	37.9	19 28	-6		
MESSINA	143.01	263.4	19 43	7		23 3 PP
CHAPEL HILL	143.70	103.2	19 35	-2		
TITOGRAD	143.70	271.9	19 36	-1		22 47 PP
KHEYS	143.73	343.9	19 34	-3		22 48 PP
MOULD BAY	143.82	23.9	19 33A	-4		
BLACKSBURG	143.85	100.3	19 34	-3		
BELGRADE	144.50	276.0	19 37A	-1	27 13 27	23 10 PP
TIMISOARA	144.62	277.8	19 37	-1		
LWOW	145.31	285.6	19 38	-2		33 8 SKSP
ANN ARBOR	145.45	90.9	19 37	-3		
CLEVELAND	146.13	93.8	19 43K	2		
PULKOVO	146.51	304.4	19 41	-1		19 50 PKP2
WASHINGTON	146.92	101.5	19 45	3		
GEORGETOWN	146.92	101.5	19 42	0		
AQUILA	147.00	266.9	19 44	2		
ROME	147.23	265.5	19 44A	1	26 44 -6	
LONDON ONT.	147.32	92.0	19 42	-1		
APATITY	147.40	318.9	19 43K	0	26 32 -18	23 14 PKS
HURBANOVO	147.53	278.9	19 44	1		22 42
ZAGREB	147.64	274.1	19 46	3		
KRAKOW	147.70	283.4	19 45	1		26 38 PPP
PENNSYLVANIA	147.76	98.1	19 43	-1		
WARSAW	148.16	287.7	19 47K	3	20 5	23 18 PP
BRATISLAVA	148.31	278.6	19 42	-3		22 39 PP
CHORZOW	148.34	283.3	19 48	3		20 46
BERMUDA	148.48	123.8	19 44	-1		23 20 PKS
LJUBLJANA	148.60	273.3	19 45A	0		23 29 PP
RACIBORZ	148.68	282.4	19 47	2		23 27 PKS
VIENNA-H.	148.77	278.2	19 45	0		19 53 PKP2
TRIESTE	148.81	272.1	19 46	1		33 37 SKSP
SCARBOROUGH	148.86	92.6	19 44	-1		
KAJAANI	148.96	311.5	19 46	0		22 13
HELSINKI	149.18	303.5	19 50	4		
NURMIJARVI	149.42	304.0	19 45	-1		36 4 PPS
PADOVA	149.75	270.2	19 53	6		23 39 PPP
RESOLUTE	149.81	27.6	19 44K	-3		
SODANKYLA	149.96	317.7	19 46	-1		
KEVO	150.02	322.6	19 51	4		23 31
PALISADES	150.13	101.7	19 41	-6		
PRUHONICE	150.68	280.0	19 50	2		30 23 SKKS
PRAGUE	150.79	280.0	19 47	-1		23 6
KASPERSKE H.	150.80	277.8	19 48	0		23 29 PP
PAVIA	151.15	267.6	19 50	1		33 41 PS
MONACO	151.28	263.6	19 43	-6		
AVERROES	151.32	230.8	19 51K	2		24 19 PP
ISOLA	151.76	264.0	19 51	1		20 13 PKP2
ALMERIA	151.85	242.1	19 51K	1		20 10 PKP2
OTTAWA	151.88	93.0	19 48	-2		
CHEB	151.95	278.7	19 55	5		21 44
ALICANTE	151.96	246.7	19 51K	1		20 14 PKP2
UMEA	152.16	309.8	19 47	-3		23 41 PKS
COLLMBERG	152.17	281.4	19 52	2		23 38 PP
RAVENSBURG	152.36	272.5	19 51	0		
KIRUNA	152.36	318.4	19 49	-2		30 28
UPPSALA	152.65	300.8	19 57	6		23 36 PKS
KARLSKRONA	152.65	292.4	19 47	-4		23 41 PP
GRANADA	152.67	241.0	19 52A	1		23 49 PP
JENA	152.80	279.8	19 49	-2		23 44 PP
TROMSOE	152.84	322.4	19 57	6		
HALLE	152.85	281.2	19 52	1		23 43 PP
ROSELEND	152.90	266.2	19 59	7		24 5 PP

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EBINGEN	152.94	272.7	19 52	0		
TUBINGEN	153.06	273.5	19 52	0		
STUTT GART	153.06	274.1	19 51	-1		20 11
NORD	153.10	354.5	19 50	-2		
BREBEUF	153.13	94.7	19 52	0		
TORTOSA	153.22	251.6	19 56	4		20 11
FELDBERG	153.33	271.4	19 53	1		
KARLSRUHE	153.68	273.9	20 4	11		
HEIDELBERG	153.70	274.9	19 52	-1		
STRASBOURG	153.83	272.6	19 53A	0		23 49 PP
BESANCON	154.15	268.6	19 53	0		23 52 PP
COPENHAGEN	154.17	290.1	19 53A	0		
BAGNERES	154.94	255.0	19 54	0		23 55
CLERMONT-FD.	154.95	263.1	19 58	4		23 27
TOLEDO	154.95	244.4	19 55A	1	26 17 -42	24 4 PP
GOTEBORG	154.99	294.5	19 53	-1		23 57 PP
BENSBERG	155.31	277.0	19 54K	-1		23 56 PP
SEVEN FALLS	155.64	94.1	19 54	-1		
SKALSTUGAN	155.67	308.6	19 53	-2		24 5 PP
GARCHY	155.83	266.1	19 54	-1		20 25 PKP2
WITTEVEEN	156.36	280.9	19 59	3		
DOURBES	156.38	273.3	19 56	0		
LISBON	156.58	235.2	20 28K	32		
KONGSBERG	156.58	298.6	20 1	5		24 14 PP
UCCLE	156.84	274.7	19 56	-1		
DE BILT	156.92	278.3	19 57	0		23 29 PP
PARIS	156.96	268.8	19 57	0		24 6 PP
HALIFAX	158.22	106.9	19 59	0		
FOLINIERE	158.64	266.1	19 59	0		
KEW	159.79	273.0	19 59	-1		24 41 PP
SCHEFFERVILLE	161.19	77.8	20 1	-1		
DURHAM	161.61	281.7	20 2A	2		24 35 PP
ABERDEEN	162.37	289.1	20 51	48	27 6 -1	24 36 PP
VALENTIA	165.65	266.1	19 39	-27		31 43

JUNE 10 10.H 47.M 0.S EPICENTRE 50.97 160.06 DEPTH= 47.KM

A=-0.59435 B= 0.21558 C= 0.77477 D= 0.3410 E= 0.9401
G=-0.7283 H= 0.2642 K=-0.6322 HT= -5.8

DEPTH OF FOCUS= 0.002R

SE= 2.03

	DELTA DEG.	AZ. DEG.	P		O-C S	S			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
PETROPAVLOVK	2.23	337.5	0	35A	0	1	3	1				
KLYUCHI	5.38	4.8	1	20	1	2	21	0				
MAGADAN	10.08	332.1	2	15	-10						4	52
OKHA	10.81	290.4	2	39	4							
UGLEGORSK	11.73	267.7	2	51	4						3	10 *SP
Y.-SAKHLINSK	12.05	257.6	2	51	0						6	18
YAKUTSK	19.86	315.5	4	27A	-2	8	5	0				
VLADIVOSTOK	20.64	258.6	4	33	-5						4	46 *SP
MATUSIRO	21.27	235.7	4	42A	-2	8	41	8				
ABUYAMA	23.93	237.2	5	10A	0							
CHANGCHUN	24.41	266.6	5	14	-1	9	31	2				
TIKSI	25.00	337.1	5	20A	-1	9	42	3			6	5 PP
COLLEGE	29.96	42.4	6	6	0							
PEKING	32.20	267.5	6	26	1	11	34	0				
IRKUTSK	33.91	294.4	6	38	-2	12	1	1				
ZO-SE	34.88	250.3	6	48	0	12	20	5				
NANKING	35.64	254.0	6	54	-1	12	28	1				
PAOTOW	35.77	273.0	6	59	3							
MOULD BAY	39.02	22.0	7	24K	1							
SIAN	40.31	265.7	7	35	1							
KHEYS	42.04	346.1	7	49K	1	14	9	5			9	33 PP
LANCHOW	42.38	271.8	7	52	1	14	13	4				
COPPERMINE	42.41	34.1	7	50K	-1							
YELLOWKNIFE	44.76	41.1	8	11	1							
RESOLUTE	45.31	21.2	8	15K	0							
CANTON	45.47	250.1	8	16	0							
CHENG TU	45.79	265.8	8	18	0	15	1	3				
VICTORIA	47.41	61.4	8	31	0							
SEMIPALATNSK	48.17	302.3	8	37	0							
SEATTLE	48.52	61.8	8	35	-5							

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PENTICTON	49.05	58.7	8 44K	0			
EDMONTON	49.98	51.3	8 52K	1			
BANFF	50.15	54.7	8 52	0			
KUNMING	50.47	261.6	8 55	0	16 10	6	
HUNGRY HORSE	52.61	56.9	9 11	0			
SHASTA	52.63	69.1	9 11K	0			
BLUE MTS.	52.97	62.1	9 12K	-2	16 52	14	9 34
MINERAL	53.32	69.0					10 6
SVERDLOVSK	53.83	317.8	9 19A	-1	16 53	3	
CALISTOGA	53.83	71.2	9 25A	5			
ALMATA-2	53.99	296.4	9 21A	0			
BERKELEY	54.52	71.7	9 25A	0			
LHASA	54.67	274.9	9 28	2	17 9	8	
KEVO	54.82	341.9	9 26	-1	17 6	3	17 28 PPS
BUTTE	54.83	58.4	9 26	-1			
APATITY	55.22	338.0	9 30A	0	17 13	5	
LICK	55.24	71.8	9 30K	0			
PARAISO	55.46	73.2	9 36	4			
FRUNSE	55.82	297.6	9 35A	1			
TROMSOE	56.40	344.7	9 38	-1			
PRIEST	56.62	72.3	9 40K	0			
SODANKYLA	56.89	340.4	9 41	-1			
SHILLONG	57.00	270.8	9 42K	-1			
KIRUNA	57.73	343.1	9 47	-1	17 46	4	
SALT LAKE C.	58.67	62.7	9 55	0			
CHATRA	59.07	275.4	10 0	3			
KAJAANI	59.42	337.8	9 59	-1			10 22
PASADENA	59.47	72.3	10 0	0	18 24	20	
TASHKENT	59.80	299.4	9 58	-4			18 14 PS
BOULDER CITY	60.20	68.6	10 5	0			
UINTA BASIN	60.25	61.7	10 6K	1	18 25	11	25 18
RAPID CITY	61.08	54.9	10 11	0			
KHOROG	61.16	294.8	10 9K	-3			18 33 PS
UMEA	61.31	341.0	10 11	-2	18 31	3	
LARAMIE	61.75	58.5	10 17	1			
PULKOVO	62.37	334.0	10 20	0			
GOLDEN	62.99	59.7	10 25	1			
SKALSTUGAN	63.02	344.5	10 23	-1			
NURMIJARVI	63.22	337.1	10 24	-1	18 50	-2	12 47 PP
HELSINKI	63.44	336.8	10 27	0			
MOSCOW	63.44	327.7	10 26	-1	18 59	4	
TONTO FOREST	63.47	67.7	10 27	0		10 40	12 47 PP
NEW DELHI	64.04	283.9	10 29	-2			
TUCSON	65.18	69.0	10 37	-1			
UPPSALA	65.43	340.2	10 35	-5	19 22	3	
ALBUQUERQUE	65.77	64.0	10 43	1			
KONGSBERG	67.16	344.2	11 3	12			13 22 PP
SCHEFFERVILLE	67.57	27.2	10 53K	0			
ASHKABAD	68.10	303.5	10 57	0	19 59	8	
GOTEBORG	68.56	342.2	10 59	0			13 30 PP
LAWRENCE	68.88	53.9	10 59	-2			
QUETTA	69.04	292.2	11 3K	1	20 8	6	
KARLSKRONA	69.25	339.7	11 1	-3			
WICHITA MTS.	70.32	59.1	11 10	0			11 49 PP
COPENHAGEN	70.36	341.2	11 11	1			
TULSA	70.92	56.4	11 13K	-1			
FLORISSANT	71.46	50.9	11 17	0			
WARSAW	71.51	334.8	11 19	2	20 34	3	11 35 PCP
FAYETTEVILLE	71.62	55.2	11 17K	-1			11 30 PP
CHARTERS TS.	71.79	193.7	11 17	-2			
TIFLIS	71.84	314.6	11 20	1			
LWOW	72.81	331.9	11 24	-1	20 51	5	14 3 PP
GORIS	72.91	312.2	11 26K	0	20 48	1	11 40 PCP
BREBEUF	73.30	36.3	11 27A	-1			
TEHERAN	73.39	306.5	11 28	0	21 1	8	18 43
SIMFEROPOL	73.62	323.2	11 31K	1	21 1	6	
KRAKOW	73.77	334.5	11 32	1	21 3	6	14 19 PP
WITTEVEEN	74.18	343.6	11 35	2			
RACIBORZ	74.21	335.6	11 36	3			12 12
COLLMBERG	74.34	339.2	11 34	0			14 18 PP
HALLE	74.38	339.9	11 33	-1			
JENA	75.00	340.0	11 36	-2	21 20	9	14 27 PP
PRAGUE	75.16	337.9	11 45	6			
PENNSYLVANIA	75.55	41.6	11 40	-1			
BENSBERG	75.66	342.7	11 42	-1			14 36 PP
KASPERSKE H.	76.24	338.1	11 46K	1			14 34 PP
BRATISLAVA	76.25	335.5	11 46	1			
CUMBERLAND	76.33	49.8	11 44	-1			36 0
VIENNA-H.	76.36	336.0	11 47	1			

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DOURBES	77.15	344.1	11 54	4				22	9
STUTT GART	77.53	340.7	11 56	4					
SHIRAZ	77.56	301.8	11 52K	0	21 43	4		15 19	PP
STRASBOURG	78.02	341.6	11 56	1	21 54	10		22	30
BRISBANE	78.28	186.6	11 56	0					
BELGRADE	78.37	331.9	12 13	16				12	40
ZAGREB	78.71	335.3	12 0	1					
PARIS	78.76	345.1	12 0	1					
LJUBLJANA	78.88	336.3	11 59	-1					
ISTANBUL UN.	78.90	324.5	11 57	-3					
BESANCON	79.64	342.4	12 4	0					
COLUMBIA	79.79	47.6	12 5	1					
GARCHY	80.14	344.3	12 7	1				15	7 PP
ROSELEND	81.01	341.5	12 13	2					
CLERMONT-FD.	81.60	343.9	12 17	3					
KSARA	82.33	316.0	12 20	2					
ISOLA	82.37	340.8	12 19	1				12	47
AQUILA	82.62	335.7	12 20	1	22 55	24		28	40 PPS
ROME	83.28	336.2	12 16A	-7				28	40 SS
ATHENS	83.50	326.7	12 10	-14					
JERUSALEM	84.35	315.4	12 29	1					
BAGNERES	84.72	345.4	12 28	-2					
MESSINA	85.90	332.7	12 38	2				15	10
CANBERRA	86.47	189.0	12 38	-1					
ADELAIDE	87.62	197.4	12 44A	0					
TOLEDO	88.46	347.8	12 49A	1					
TOOLANGI	89.09	191.5	12 52A	1				13	3 *SP
LA PAZ	128.54	66.1	19 4	2					

JUNE 10 23.H 58.M 48.5 EPICENTRE -4.56 152.98 DEPTH= 108.KM

A=-0.88805 B= 0.45291 C=-0.07897 D= 0.4543 E= 0.8908
G= 0.0703 H=-0.0359 K=-0.9969 HT= 7.1

DEPTH OF FOCUS= 0.012R

SE= 1.80

	DELTA DEG.	AZ. DEG.	P		O-C S	S O-C			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
RABAUL	0.88	293.9	0	22	1	0	23	-13				
PORT MORESBY	7.52	229.9	1	44A	-5	3	6	-7				
HONIARA	8.44	125.3	2	0	-1	3	34	-1				
CHARTERS TS.	16.77	202.4	3	47	-2	7	2	11				
KOUMAC	19.33	146.3	4	18K	-1	7	54	7				
GUAM	19.68	335.5	4	25	2	8	8	14				
PORT VILA	19.92	132.3	4	26K	1							
NOUMEA	21.94	144.7	4	45K	-1	8	46	10				
BRISBANE	22.70	180.5	4	53	0						5	49
RIVERVIEW	29.17	183.1	5	53	0						6	17
CANBERRA	30.83	186.4	6	7K	-1						7	22 PPP
TOOLANGI	33.56	190.8	6	30	-2				6	48	9	10 PCP
AFIHALU	35.96	107.4	6	53A	1	12	38	16				
MOORLANDS	38.07	187.0	7	12	2						9	28
BAGUIO CITY	38.22	303.8	7	10	-1	13	1	5				
KARAPIRO	39.08	151.2	7	19A	1						9	28 PCP
CHATEAU	40.09	152.4	7	28A	2						9	30 PCP
TUAI	40.54	150.5	7	31	1							
WELLINGTON	41.45	155.0	7	38	0	14	12	28			9	36
MATUSIRO	43.15	342.5	7	50	-1							
ROXBURGH	43.19	163.2	7	53	1							
MUNDARING	43.92	227.2	7	56	-2							
LEMBANG	45.18	264.9	8	5K	-3							
ZO-SE	46.67	321.6	8	20	1	15	6	6				
CANTON	47.46	307.1				15	16	5				
VLADIVOSTOK	51.15	340.2	8	54	0							
SIAN	56.69	316.4	9	34	-1	17	21	4			9	51 *SP
KUNMING	57.00	303.8	9	37	0							
PETROPAVLOVK	57.56	4.1	9	40	-1							
CHENGTU	58.41	310.3	9	46	-1	17	42	3				
PAOTOW	59.70	323.1	9	55	0	17	59	3			10	11 *SP
LANCHOW	61.17	315.6	10	6K	1	18	22	7			10	24 *SP
SHILLONG	66.35	300.3	10	39A	0							
LHASA	68.32	304.2	10	51	-1							
YAKUTSK	68.76	348.5	10	54A	0							
TIKSI	77.67	352.4	11	45	-1	21	33	5				

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NEW DELHI	79.76	300.0	11 58	0					
COLLEGE	81.57	21.8	12 6	-1					
SEMIPALATNSK	82.60	322.0	12 13	1					
ALMATA-2	82.70	314.5	12 14K	1					
MAWSON	85.85	202.6	12 28K	-1			12 46		
TASHKENT	88.25	311.5	12 42A	2	23 3	-11			
DUZHANBE	88.29	308.7	12 43	3					
QUETTA	88.84	300.2	12 43	0	23 12	-7			
PENTICTON	91.73	40.8	12 58	1					
BLUE MTS.	92.98	45.4	13 3	1				17 4	PP
EUREKA	93.68	50.8	12 57	-8				17 4	PP
MOULD BAY	93.84	13.9	13 6A	0					
COPPERMINE	94.93	22.4	13 12	1					
SVERDLOVSK	95.07	326.5	13 7	-5					
EDMONTON	95.81	36.9	13 17A	2					
UINTA BASIN	98.61	50.1	13 30	2				14 8	
SHIRAZ	101.33	299.2						29 52	
KIROVOBAD	105.58	310.8			24 35	8		18 18	PP
TIFLIS	106.57	312.1						18 33	PP
MOSCOW	107.85	327.5						18 40	PP
KAJAANI	108.90	337.7	18 18	777				14 12	P
UMEA	111.77	339.5	18 24	2	25 0	6		19 20	PP
NURMIJARVI	111.99	335.2	18 27	5	24 54	0		19 20	PP
HELSINKI	112.04	334.9						29 27	PKKP
UPPSALA	115.22	336.9	18 32	3					
CUMBERLAND	118.02	52.0	18 37	3				19 50	PP
ISTANBUL UN.	118.24	314.6	18 36	1					
KARLSKRONA	118.42	334.5	18 53	18					
UZHGOROD	119.35	324.7	18 40	3					
BULAWAYO	120.11	243.7	18 41K	3					
OTTAWA	121.31	38.3	18 43	3					
BREBEUF	122.54	37.3	18 46K	3					
COLLMBERG	122.73	331.3	18 47	4			19 2		
PRUHONICE	122.81	329.4	18 48	5					
VIENNA-H.	122.88	326.9	18 47	4					
HALLE	123.10	332.0	18 47	3				18 39	PP
SEVEN FALLS	123.30	34.4	18 46	2					
JENA	123.65	331.7	18 47	2			19 4	20 35	PP
LWIRO	123.81	264.3	18 48	3					
KASPERSCHE H.	123.83	329.0	18 49K	4					
LJUBLJANA	125.19	325.6	18 51	3					
BENSBERG	125.64	334.1	18 52	3					
STUTTART	126.21	331.0	18 52	2					
DOURBES	127.38	334.9	19 1	9					
HUANCAYO	129.22	109.5	18 13	-43					
PARIS	129.25	335.1	19 2	6					
GARCHY	130.17	333.5	19 1	3					
ISOLA	130.46	328.0	19 3	5				22 20	PKS
FOLINIERE	130.48	337.1	19 2	4					
CLERMONT-FD.	131.29	332.1	19 21	21				25 57	
AREQUIPA	131.33	116.5	19 6	6					
LA PAZ	134.29	118.2	18 58	-7				22 37	PP
TOLEDO	139.17	332.7	19 20	6			19 35	22 51	PP
SAN JUAN	139.41	67.0	19 19	4			19 42		
CARACAS	140.03	79.2	19 20	4					
ALMERIA	140.76	328.2	19 26	9				24 25	PKS
MALAGA	141.85	330.0	19 42	23				22 54	PP

JUNE 11 3.H 25.M 36.S EPICENTRE 37.02 69.90 DEPTH= 0.KM

A= 0.27507 B= 0.75161 C= 0.59951 D= 0.9391 E=-0.3437
G= 0.2060 H= 0.5630 K=-0.8004 HT= -0.6

SE= 2.63

	DELTA DEG.	AZ. DEG.	P		O-C S	S O-C			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
KULYAB	0.89	352.4									0 17	PG
KHOROG	1.38	70.1									0 26	PG
OBI-GARM	1.68	354.7	0 32K	1							0 57	SG
DUZHANBE	1.79	330.3									0 35	PG
GARM	2.00	9.0	0 36A	0							1 5	SG
DZERGETAL	2.43	25.2	0 43	1							1 16	S*
FERGANA	3.66	23.1	1 1	2	1 46	2						
ANDIJAN	4.19	26.6	1 7K	0							2 9	S*
TASHKENT	4.32	353.8	1 9	0	2 0	-1					2 20	
TCHIMKENT	5.28	357.6	1 22	0							2 59	SG

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NARYN	6.47	45.2	1 38	-1			2 4
LAHORE	6.57	144.8	1 43	2	2 46	-11	
FRUNSE	6.84	30.5	1 44A	0			3 26 S*
QUETTA	7.25	200.7	1 54A	4	3 10	-4	
RYBACHE	7.27	39.8	1 54	4			4 2
ALMATA	8.25	38.7	2 4K	0			4 37
ALMATA-2	8.46	40.2	2 2A	-5			3 42
PRZHEVALSK	8.52	47.6	2 6K	-2	3 42	-4	2 40
KURMENTY	8.77	44.5	2 9	-2			4 35
CHILIK	9.22	42.2	2 15	-3			4 48
ASHKABAD	9.23	279.3	2 13	-5			
DEHRA DUN	9.53	132.2	2 28	6	4 24	13	4 6
NEW DELHI	10.42	141.8	2 33K	-1	4 33	0	
KIZYL-ARVAT	10.96	285.6	2 38	-3			6 19
TEHERAN	14.97	270.6	3 37	2	6 40	18	
SEHORE	15.13	153.8	3 35	-2			8 18
SEMIPALATNSK	15.30	25.8	3 33	-6			
SHIRAZ	16.26	248.2	3 54	-2			7 16 SKP
CHATRA	17.81	119.8	4 6	-5	7 19	-9	
MAKHACH-KALA	18.14	296.1	4 13K	-2			
GORIS	18.66	284.8	4 22A	0			
KIROVOBAD	18.70	288.4	4 20K	-2			
POONA	18.75	168.3					8 27
BOKARO	18.96	129.4	4 27K	2			4 54 PPP
LHASA	19.12	106.5	4 26A	-1	7 55	-3	
GROZNY	19.46	296.4	4 32	1	8 13	8	9 12
TIFLIS	19.94	291.4	4 37	0			8 59 PCP
SVERDLOVSK	20.77	345.5	4 41K	-4	8 30	-3	
SHILLONG	21.92	115.1	4 54	-3	8 45	-10	
VISHAKHAPTNM	22.56	144.8	5 5	2	9 7	0	
MADRAS	25.63	156.3	5 3	-30	10 18	19	13 0
LANCHOW	27.20	81.7	5 46	-2	10 19	-7	
KODAIKANAL	27.54	163.7					13 5
KSARA	27.82	273.7	6 4	11			6 48 PP
SIMFEROPOL	27.97	297.7	5 55	1	10 38	0	
MOSCOW	28.69	321.0	6 0K	-1			
CHENG TU	28.93	92.6	6 1	-2	10 50	-3	
JERUSALEM	28.98	270.0	6 6	2			
KUNMING	30.38	103.6	6 20	4			
PAOTOW	31.29	71.0	6 23	-1			
ISTANBUL UN.	31.82	290.0	6 30	1			
PULKOVO	33.98	324.8	6 46A	-2	12 8	-5	
LWOW	35.14	306.1	6 58A	0	12 32	1	
PEKING	36.01	70.7	7 3	-2			
UZMGOROD	36.23	304.0	7 7	0			
ATHENS	36.36	285.9	7 10K	2			
HELSINKI	36.63	323.7	7 11	1			
APATITY	36.80	337.6	7 10A	-2	12 57	1	15 22 S5
NURMIJARVI	36.89	324.2	7 12	0	12 54	-4	8 42 PP
KAJAANI	36.95	330.6	7 12	-1	12 56	-3	9 20
WARSAW	37.21	310.0	7 16	1		7 21	8 37 PP
KRAKOW	37.80	306.4	7 22	2			8 43 PP
SODANKYLA	38.89	335.0	7 29K	0			
RACIBORZ	38.91	306.4	7 30	1			8 59 PP
BRATISLAVA	39.71	303.4	7 35	-1			19 25
UMEA	39.90	328.2	7 36A	-2	13 40	-3	16 29 S5
KEVO	39.99	338.4	7 37K	-1			9 12 PP
UPPSALA	40.11	321.7	7 38A	-1			9 12 PP
KARLSKRONA	40.70	315.8	7 45A	1			
KIRUNA	41.23	334.0	7 48A	0			16 50 S5
PRUHONICE	41.27	306.4	7 50	1			9 32 PP
PRAGUE	41.34	306.5	7 51	2			
LJUBLJANA	41.68	300.5	7 53A	1			
KASPERSKE H.	41.96	305.2	7 55A	1			9 37 PP
COLLMBERG	42.18	308.4	7 56K	0			9 38 PP
TROMSOE	42.44	336.2	7 57	-1			9 42 PCP
COPENHAGEN	42.44	315.0	8 0A	2			
ZO-SE	42.47	82.4	7 57	-2			
MESSINA	42.55	288.8	8 3	4			
GOTEBORG	42.78	317.9	8 0A	-1			9 40 PP
HALLE	42.82	308.8	8 1	-1			9 37 PP
JENA	43.10	308.0	8 3	-1	14 30	-1	9 43 PP
SKALSTUGAN	43.29	326.6	8 4A	-1			9 47 PP
KHEYS	43.95	357.2	8 11K	0			9 54 PCP
YAKUTSK	44.08	35.9	8 10K	-2			
KONGSBERG	44.11	320.7	8 16A	4			10 0 PP
STUTTGART	44.82	305.1	8 19	1			
TIKSI	45.62	22.3	8 21A	-3	15 1	-6	
FELDBERG	45.80	304.1	8 26	1			

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STRASBOURG	45.84	305.1	8 26K	0			18 44 SS
BENSBERG	45.87	308.4	8 26K	0			10 16 PP
VLADIVOSTOK	46.89	62.3	8 32	-2			
ISOLA	47.22	299.3	8 38	1			11 12
BESANCON	47.27	303.6	8 35	-2			
DOURBES	47.62	307.6	8 41	1			
GARCHY	49.19	304.2	8 51	-1			
PARIS	49.23	306.3	8 53	1			
CLERMONT-FD.	49.53	302.3	8 59	4			9 57 P
ABERDEEN	50.39	317.7					20 24
KEW	50.42	310.2	9 2	1	16 6	-9	
DURHAM	50.51	314.6	9 3	1	16 23	7	
BAGNERES	52.34	299.7	9 16	0			10 21
NORD	53.13	349.4	9 20	-2			
Y.-SAKHLINSK	53.20	54.7	9 21A	-1			
MATUSIRO	53.59	68.4	9 22	-3			
LWIRO	54.60	233.7	9 35A	2			
TOLEDO	56.42	297.4	9 46A	0	17 36	0	21 33 SS
ALERT	58.44	353.4	9 59	-1			
PETROPAVLOVK	60.77	43.8	10 11	-5			
CHILEKA	61.89	218.7	10 23	-1			
BROKEN HILL	64.36	225.3	10 40K	0			
MOULD BAY	66.87	2.4	10 54	-2			
RESOLUTE	68.12	355.7	11 2	-2			
BULAWAYO	68.91	221.6	11 8	-1			
COLLEGE	74.23	15.8	11 39	-2			
DARWIN	75.39	118.1	11 44	-4			
COPPERMINE	75.40	2.0	11 46	-2			
YELLOWKNIFE	80.77	2.1	12 23	6			
EDMONTON	89.93	2.0	13 3A	0			
BANFF	92.05	3.4	13 14	2			
PENTICTON	93.62	6.2	13 20K	0			
HUNGRY HORSE	94.94	2.6	13 25	-1			
BLUE MTS.	98.25	5.2					17 48 PP
UINTA BASIN	103.03	359.6	14 1	-1			18 18 PP
CUMBERLAND	104.25	339.6					18 24 PP
WICHITA MTS.	107.83	350.1	18 18	777			18 53 PP
LA PAZ	137.74	287.5	19 29	2			
AREQUIPA	140.26	290.5	19 32	1			

JUNE 11 13.H 8.M 26.S EPICENTRE 63.15-151.43 DEPTH= 0.KM
 A=-0.39873 B=-0.21713 C= 0.89099 D=-0.4782 E= 0.8782
 G=-0.7825 H=-0.4261 K=-0.4540 HT= -9.9

SE= 1.92

	DELTA DEG.	AZ. DEG.	P		O-C S	S O-C			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
COLLEGE	2.34	41.1	0	43	3	1	16	6				
SITKA	10.08	120.0	2	28	-1	4	20	-4				
COPPERMINE	15.61	56.7	3	40	-3						8 26	
YELLOWKNIFE	16.69	75.7	3	48	-9							
MOULD BAY	16.83	26.1	3	59	0	7	9	3				
VICTORIA	21.24	120.5	4	51	1							
EDMONTON	21.94	98.7	4	59A	2							
PENTICTON	22.15	113.8	5	0A	1							
RESOLUTE	22.26	35.8	5	0K	0							
SEATTLE	22.39	120.2				9	25	22				
BANFF	22.51	105.4	5	4	1							
HUNGRY HORSE	25.26	108.3	5	29	0						11 25	
BLUE MTS.	26.67	117.3	5	42	0	10	31	14			9 5 PCP	
PETROPAVLOVK	27.55	271.9	5	51	1							
BUTTE	27.70	109.8	5	52	0						14 35	
ALERT	27.84	16.4	5	55	2							
SHASTA	28.29	128.9	5	57A	0							
BOZEMAN	28.63	108.5	6	0	0						15 31	
MINERAL	28.88	128.1	6	13K	11							
TIKSI	29.45	320.6	6	6	-2							
CALISTOGA	30.06	131.0	6	13A	0							
BERKELEY	30.86	131.2	6	21A	1							
LICK	31.55	130.8	6	27K	1							
EUREKA	31.74	121.4	6	28	0						9 19 PCP	
SALT LAKE C.	32.29	115.1	6	33	0							
LLANADA	32.44	130.5	6	35	1							
PRIEST	32.97	130.5	6	40K	1							

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RAPID CITY	33.32	101.9	6 42	0					
UINTA BASIN	33.61	112.8	6 44A	0	12 27	20		8 14	PP
YAKUTSK	34.20	304.6	6 49	0	12 15	-1			
LARAMIE	34.49	107.4	6 53	1					
BOULDER CITY	35.24	123.0	6 59	1				9 29	PCP
KHEYS	35.50	352.0	7 2	2					
TONTO FOREST	38.10	120.1	7 23	1	13 14	-2	7 33	8 59	PP
Y.-SAKHLINSK	39.02	277.5	7 30K	0	13 29	-1			
ALBUQUERQUE	39.47	114.0	7 32	-2				9 43	PCP
TUCSON	40.07	121.1	7 39	0				9 43	PCP
LAWRENCE	40.97	99.0	7 46	0					
LUBBOCK	42.59	110.1	7 59	0					
WICHITA MTS.	43.02	105.8	8 2	-1	14 54	25		9 56	PP
TULSA	43.26	102.1	8 4A	-1	14 49	16			
ST. LOUIS 1	43.50	94.5	8 7	0					
FAYETTEVILLE	43.82	100.3	8 8	-1				9 54	
SEVEN FALLS	45.45	71.0	8 21	-2					
BREBEUF	45.51	74.5	8 22K	-1					
TROMSOE	47.32	4.6	8 37	0					
KEVO	47.36	0.7	8 37	-1					
CUMBERLAND	48.12	92.6	8 42	-2				10 38	PP
PALISADES	48.95	78.4			16 14	20		16 48	SS
KIRUNA	49.18	4.1	8 51	-1					
CHANGCHUN	49.20	288.3	8 51	-1					
MATUSIRO	49.38	272.1	8 53A	0	16 6	6			
APATITY	49.54	357.5	8 58	3	16 4	2			
SODANKYLA	49.76	1.0	8 56	0					
IRKUTSK	50.64	309.6	9 3A	0					
COLUMBIA	51.50	89.7	9 9	-1					
SKALSTUGAN	52.99	9.0	9 19	-2					
KAJAANI	53.07	0.5	9 23	2					
UMEA	53.18	4.6	9 22	0					
PEKING	56.21	292.6	9 44	0	17 34	1			
NURMIJARVI	56.62	2.3	9 47	0	17 33	-5		21 54	SS
KONGSBERG	56.67	11.4	9 52	5					
HELSINKI	56.97	2.1	9 49	-1					
UPPSALA	57.04	6.6	9 53	3					
SVERDLOVSK	57.81	339.8	9 54	-2					
PAOTOW	58.27	297.7	9 57	-2					
GOTEBORG	58.80	10.3	10 2	0					
DURHAM	60.09	19.6	10 15K	4					
KARLSKRONA	60.59	8.3	10 12	-3					
MOSCOW	61.24	354.2	10 20	1					
NANKING	61.83	285.6	10 22	-1					
LANCHOW	64.63	299.8	10 42K	0					
HALLE	64.94	11.4	10 42	-2	19 22	-3			
BENSBERG	64.99	14.8	10 44	0				11 14	
COLLMBERG	65.23	10.7	10 45	-1				11 24	PCP
JENA	65.47	11.7	10 46	-1				11 38	
DOURBES	65.51	16.7	10 47	0					
FOLINIERE	66.08	20.6	10 50	-1					
CHORZOW	66.65	6.7						15 28	
RACIBORZ	66.81	7.2						15 59	
KRAKOW	66.94	6.0						15 36	
ALMATA-2	67.04	323.4	10 56	-1					
STUTTGART	67.38	13.7	11 3	4					
KASPERSKE H.	67.43	10.6	10 59	-1				13 20	
GARCHY	68.07	18.4	11 2	-2					
FRUNSE	68.18	325.2	11 4	0					
UZHGOROD	68.45	4.5	11 7	1					
VIENNA-H.	68.52	8.7	11 6	0					
BRATISLAVA	68.65	8.2	11 6	-1					
CHENG TU	69.28	296.9	11 11	0	20 16	-1			
CLERMONT-FD.	69.55	18.7	11 14	1					
ROSELEND	70.11	16.2	11 16	0				11 45	PCP
TASHKENT	70.92	328.7	11 21	0	20 37	1			
ISOLA	71.65	16.1	11 26	1				12 26	
SAN JUAN	71.67	85.6	11 23	-3					
SINFEROPOL	72.15	355.9	11 28	0	20 51	0			
TOLEDO	74.05	25.6	11 40K	0				12 27	
TIFLIS	74.67	347.5	11 45	2					
KUNMING	74.70	295.3	11 44	1					
ISTANBUL UN.	76.15	359.7	11 52	0					
MALAGA	77.03	26.7	11 58	1				14 49	PP
DEHRA DUN	78.90	317.9						18 38	
CHATRA	79.13	309.0	12 8	0					
TEHERAN	79.77	341.3	12 13	1					
NEW DELHI	80.79	318.0	12 16K	-1					

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QUETTA	82.10	327.1	12 21	-3					
SHIRAZ	85.56	339.2	12 42K	1	23	2	-11		
KIMBERLEY	145.50	5.9						19 40	PKP2
WILKES	147.23	227.6	19 44	1					

JUNE 11 18.H 7.M 19.S EPICENTRE 30.93 87.27 DEPTH= 0.KM

A= 0.04090 B= 0.85831 C= 0.51149 D= 0.9989 E=-0.0476
G= 0.0243 H= 0.5109 K=-0.8593 HT= 1.5

SE= 2.76

	DELTA DEG.	AZ. DEG.	P M	O-C S	S M	O-C S	*PP M S	SUPP. M S
LHASA	3.50	110.6	1	2A	5			1 7 PG
CHATRA	4.09	181.3	1	11K	5	2 1 6		
BOKARO	7.20	190.8	1	5UA	1	3 10 -3		1 55 PP
DEHRA DUN	7.97	268.0						2 34
CALCUTTA	8.43	173.1	2	4	-3	3 40 -4		
NEW DELHI	9.06	257.5	2	15A	0	3 54 -5		
CHITTAGONG	9.46	153.5	2	20	-1	4 5 -4		
LAHORE	11.10	276.5	2	41	-2	4 43 -6		
VISHAKHAPTNM	13.64	196.3						5 28
CHENG TU	14.39	86.8	3	26	-1	6 11 2		
KHOROG	14.56	300.9	3	26	-4	6 7 -6		
ALMATA-2	14.61	330.1	3	32K	2			
LANCHOW	14.72	65.3	3	29	-3			
KUNMING	14.83	109.2	3	32	-1	6 21 2		
ANDIJAN	15.54	313.2	3	41	-1	6 30 -6		
FRUNSE	15.58	323.1				6 39 2		
DUZHANBE	16.99	301.6	3	58	-3			
POONA	17.33	227.7						6 42
QUETTA	17.52	272.8	4	5K	-3	7 20 -2		
BOMBAY	17.74	230.9				7 15 -12		8 41
TASHKENT	17.82	310.5	4	7	-4			
SIAN	18.53	74.0	4	18	-2			
MADRAS	19.01	201.7						7 51
PORT BLAIR	19.82	164.1						8 33
SEMIPALATNSK	20.14	346.9	4	40	1			
PAOTOW	20.78	56.2	4	45	0	8 35 2		
KODAIKANAL	22.53	205.9						11 36
CANTON	24.46	102.3				9 41 1		
IRKUTSK	24.72	25.5	5	30K	6			
VANNOVSKAYA	24.99	294.2	5	29	2			
PEKING	25.13	60.9	5	29	1	9 51 -1		
KIZYL-ARVAT	26.58	296.6	5	44	2			
SHIRAZ	29.97	276.6	6	12A	-1	11 27 17		12 16
TEHERAN	30.25	288.8	6	24	9	11 45 30		
SVERDLOVSK	31.84	332.1	6	29	0			
CHANGCHUN	32.57	55.9	6	31	-4			
TIFLIS	35.55	299.6	7	2	1			
BAKURIANI	36.51	299.5	7	14A	5			
VLADIVOSTOK	37.24	58.2	7	14	-1			
YAKUTSK	41.40	28.8	7	48	-2			
MOSCOW	42.56	320.4	8	2	3			
KSARA	43.13	287.9	8	7	3			
JERUSALEM	44.10	285.2	8	14	2			
TIKSI	46.46	16.9	8	31	0			
ISTANBUL UN.	47.45	299.1	8	38	-1			
VIBORG	48.22	325.8	8	45	0			
KAJAANI	49.40	330.1	9	4	10			
HELSINKI	50.01	324.7	8	56	-2			
NURMIJARVI	50.20	325.1	8	58	-2	16 5 -7		19 53 SS
SODANKYLA	50.60	334.1	9	2	-1			9 35
KEVO	51.11	337.2	9	7	0			
KHEYS	51.13	354.1	9	8	1			
UZHGOROD	51.40	309.7	9	9	0			
UMEA	52.62	329.1	9	17A	-1			
KIRUNA	53.02	334.1	9	23	2			
UPPSALA	53.67	324.0	9	23	-3			
KARLSKRONA	54.90	319.5	9	35	0			
SKALSTUGAN	56.15	328.6	9	43	-1			
PRUMONICE	56.26	312.2	9	46	1			
GOTEBORG	56.73	321.6	9	47	-1			10 18
COLLMBERG	57.02	313.9	9	53	3			
KASPERSCHE H.	57.03	311.3	9	49	-1			
HALLE	57.63	314.3	9	55	0		10 5	

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PALISADES	80.31	19.0				22 15	-5		
MOORLANDS	81.08	223.3	12 19	1					
BOZEMAN	82.31	351.5	12 27	2					
BLUE MTS.	82.45	347.0	12 26	1	22 47	5		27 54	55
BUTTE	82.85	350.5	12 29	1					
RIVERVIEW	84.35	231.9	12 42	7	22 59	-2		28 9	55
BREBEUF	84.59	17.6	12 36	0	23 1	-2		28 33	55
CANBERRA	84.73	229.6	12 36K	-1					
SPOKANE	85.24	347.7	12 44	4				22 48	
TOOLANGI	85.32	226.0	12 39	-1			12 50		
HUNGRY HORSE	85.33	350.0	12 41	1					
SEATTLE	86.13	344.5	12 44	0					
PENTICTON	87.18	346.7	12 47	-2					
BRISBANE	87.40	237.7	12 50	0				29 20	
EDMONTON	90.17	351.5	13 1	-2					
YELLOWKNIFE	99.25	352.7	13 46	1					
PONTA DELGDA	100.11	50.5						32 13	55
COLLEGE	107.80	340.3	14 30	777					
MOULD BAY	113.00	354.8	18 38	-1					
MALAGA	113.77	61.1	19 5	24				19 39	PP
TOLEDO	115.48	58.1	18 51	7				19 54	PP
LWIRO	118.16	116.4						36 37	55
GARCHY	123.15	52.7						19 1	PP
STUTTART	127.57	52.4						19 12	PP
JENA	129.51	50.2	19 21	10				19 45	
KASPERSCHE H.	130.41	52.8	19 14	1				21 17	
COLLMBERG	130.46	49.9	19 26	13					
KIRUNA	134.11	27.4	19 29	9					
MATUSIRO	134.55	288.1	19 24	4	26 27	-3			
UMEA	134.70	33.0	19 30	9				22 49	PKS
SODANKYLA	136.52	27.2	19 37	13					
TIKSI	136.95	339.8	19 28	3				23 42	SKP
NURMIJARVI	137.21	37.3	19 9	-16				22 5	PP
KAJAANI	137.88	31.7	19 30	3					
KSARA	143.25	80.3	19 39	3					
SIMFEROPOL	143.82	61.4	19 38	1					
MOSCOW	144.92	42.5	19 41	2					
CHANGCHUN	145.59	296.5	19 39	-1					
ZO-SE	146.33	273.0	19 44	3					
NANKING	148.58	273.4	19 51A	6					
BAKURIANI	150.55	67.8	19 59	11					
TIFLIS	151.51	67.9	20 1	11					
PEKING	152.20	288.5	19 57	6					
SHIRAZ	155.27	97.3	19 54	-1					
SVERDLOVSK	155.33	27.3	20 0	5					
TEHERAN	156.09	82.5	20 5	9					
IRKUTSK	157.04	321.4	20 5	8					
KUNMING	158.28	245.2	20 36	37					
LANCHOW	161.56	276.0	20 11	9					
ASHKABAD	161.88	78.0	20 6	3					
SHILLONG	165.81	224.1	21 6	60					
QUETTA	166.77	113.4	20 9	2					
ALMATA-2	172.50	20.7	20 16K	5					

JUNE 17 18.H 30.M 51.5 EPICENTRE -65.95-178.87 DEPTH= 0.KM

A=-0.40973 B=-0.00809 C=-0.91217 D=-0.0197 E= 0.9998
G= 0.9120 H= 0.0180 K=-0.4098 HT=-10.7

SE= 4.32

	DELTA DEG.	AZ. DEG.	P		O-C S	S O-C			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
CAPE HALLETT	7.47	206.4	1	50	-3							
SCOTT BASE	12.69	193.9	3	2	-3							
MACQUARIE I.	15.79	306.0	3	50	5							
BYRD STATION	20.83	155.0	4	46	0							
ROXBURGH	21.50	336.9	4	47	-5	8	49	2				
MONOWAI	21.50	333.5	4	50K	-2							
GEBBIES PASS	22.79	344.0	5	2	-3							
SOUTH POLE	24.19	180.0	5	20	1							
WELLINGTON	24.98	348.6	5	17A	-10	9	49	0				
WILKES	27.19	236.4	5	52	5	10	33	8			6	41 PP
KARAPIRO	28.25	350.6	5	53A	-4						7	38 PP
MIRNY	32.72	227.7	6	36	0	11	38	-15			9	0 PCP
TOOLANGI	35.07	306.3	6	52	-5	12	31	2	7	5		
CANBERRA	36.02	312.3	7	1K	-4	12	45	1			12	5

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RIVERVIEW	36.78	316.0	7 6	-5	12 57	1				8 38 PP
ADELAIDE	39.74	300.0	7 33A	-3	13 45	4				9 5 PP
MAWSON	39.81	211.8	7 37A	0	13 48	6				9 12 PP
ARGENTINE I.	40.92	144.2	7 45	-1						
BRISBANE	42.43	321.3	7 54	-4	14 19	-2				
NOUMEA	44.66	340.5	8 12K	-4	14 57	4				
KOUMAC	46.69	338.1	8 27K	-5						
PORT VILA	48.93	343.7	8 46	-4						
MUNDARING	51.08	278.3	9 1	-5	16 22	-1				
CHARTERS TS.	51.14	316.4	9 1	-6	16 19	-5				
PERTH	51.25	278.0	9 4	-3	16 25	-1				11 0 PP
AFIAMALU	52.21	8.7	9 11	-4	16 33	-6				
HONIARA	58.30	335.2	9 53A	-6	17 57	-3				
PORT MORESBY	61.10	321.0	10 14A	-4	18 39	2				
RABUL	64.91	327.8	10 39	-4						19 27
LEMBANG	77.10	282.4	11 56K	-1	21 50	4				14 46 PP
DJAKARTA	78.01	281.9	12 7	5						22 55
TANGERANG	78.10	281.7	12 1A	-1						
HERMANUS	78.98	195.2			22 11	5				
AREQUIPA	81.99	112.4	12 23	0						
LA PAZ	83.21	115.4	12 30	1	22 56	7				
KIMBERLEY	83.87	200.7	12 33	0						
HUANCAYO	84.53	107.2	12 39	3						
CHANGALANE	85.03	207.7	12 41	2						
MEDAN	90.16	278.3	11 56A	-67						
BAGUIO CITY	93.61	303.1	13 31	12						
CHINCHINA	99.91	100.1								18 0 PP
BOGOTA	100.21	101.7								17 58 PP
LUANDA	104.87	192.4								19 23
TUKUBASAN	106.66	326.4			25 14	16				18 21 PP
CARACAS	108.40	106.0								17 24
TONTO FOREST	112.47	55.9	18 37	-1						
WICHITA MTS.	117.40	66.1	18 56	8						
UINTA BASIN	118.50	54.5	18 50	0						36 35 SS
BLUE MTS.	120.15	46.3								36 59 SS
LAWRENCE	122.40	66.6	19 9	12						
WASHINGTON	129.49	81.8	19 8	-3						
PENNSYLVANIA	130.77	79.8	19 20	7						
OTTAWA	135.48	78.1	19 24	2						
KSARA	141.78	230.1	19 31	-3						22 47 PP
MOULD BAY	146.70	22.1	19 40A	-2						
AVERROES	146.91	166.8	19 40	-2						
ATHENS	149.08	216.2	19 58	12						
ISTANBUL UN.	150.54	225.9	19 53	5						
ALMERIA	150.78	174.1	19 49	0						20 9 PKP2
MESSINA	150.98	203.9	20 3	14	26 9	-46				44 20 SS
GRANADA	151.05	172.2	20 1A	12						
ALICANTE	152.34	177.3	19 51	0						20 21 PKP2
TOLEDO	153.72	171.0	19 53A	0						23 57 PP
TORTOSA	154.82	178.9								20 41
ROME	155.07	200.4	19 59	4						23 35 PKS
AQUILA	155.38	202.2	19 57	2						23 39 PKS
BAGNERES	157.06	178.2	19 55	-2						20 39
ISOLA	157.94	191.4								20 32 PKP2
TRIESTE	158.53	204.8	20 0	1						20 34 PKP2
PADOVA	158.60	201.1	20 9	10						26 9
PAVIA	158.73	195.8								24 33 PP
LJUBLJANA	158.79	206.5	19 59	0						
CLERMONT-FD.	159.74	184.0	19 59	-1						
VIENNA-H.	160.52	211.8	20 18	17						20 41 PKP2
BESANCON	161.07	190.2	19 58	-4						24 29 PP
GARCHY	161.25	184.1	20 5	3						
KASPERSKE H.	161.92	207.2	19 59	-4						24 39 PP
STRASBOURG	162.24	194.6	20 2	-1						51 31
STUTTART	162.25	197.9	20 3	0						21 5 PKP2
PRUMONICE	162.55	210.0	19 59	-4						
PARIS	162.80	183.0	20 1	-3						
JENA	164.01	204.6	20 3	-2						31 27
COLLMBERG	164.11	208.1	20 2	-3						24 47 PP
KEW	165.46	176.4								21 4 PKP2
DE BILT	165.96	190.3	20 14	7						25 5 PP
NURMIJARVI	168.13	253.7								25 40 PP
DURHAM	168.70	172.0	20 15	7						

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JUNE 17 18.H 32.M 10.S EPICENTRE 60.50-140.80 DEPTH* 0.KM

A=-0.38358 B=-0.31287 C= 0.86889 D=-0.6321 E= 0.7749
G=-0.6733 H=-0.5492 K=-0.4950 HT= -9.1

SE* 2.17

	DELTA	AZ.	P O-C			S O-C			*PP		SUPP.	
	DEG.	DEG.	M	S	S	M	S	S	M	S	M	S
SITKA	4.48	138.1	1	7	-3							
COLLEGE	5.45	326.7	1	26	2	2	30	2				
YELLOWKNIFE	12.63	69.6	3	4A	1							
COPPERMINE	13.31	45.7	3	10A	-2						7	0
VICTORIA	15.61	132.4	3	43	0							
PENTICTON	16.45	123.4	3	53	0							
EDMONTON	16.48	103.4	3	54	0							
SEATTLE	16.75	131.9	4	10K	13	7	30	27				
BANFF	16.88	112.3	3	55	-4							
MOULD BAY	17.46	17.0	4	5A	-1							
SPOKANE	18.64	122.7	4	21	0	7	47	1				
HUNGRY HORSE	19.59	116.3	4	31	-1	8	16	8				
BLUE MTS.	20.99	127.7	4	45	-2	8	48	11				
RESOLUTE	21.69	31.1	4	54A	0							
BUTTE	22.01	118.4	4	59	2							
BOZEMAN	22.95	116.8	5	7	1	9	23	10				
MINERAL	23.42	140.8	5	12K	1							
UKIAH	24.06	144.8	5	26	9							
CALISTOGA	24.69	144.1	5	23K	0							
BERKELEY	25.50	144.2	5	30K	-1	10	2	5			6	2
EUREKA	26.11	132.4	5	36	-1							
LICK	26.18	143.6	5	37A	0							
SALT LAKE C.	26.59	124.8	5	37	-4							
PARAISO	26.91	145.7	5	47	3							
PRIEST	27.58	143.0	5	51A	1							
UINTA BASIN	27.91	122.1	5	53A	0	10	43	7			6	41 PP
ALERT	29.02	15.4	6	4A	1							
BOULDER CITY	29.64	134.1	6	8	-1						9	15 PCP
PASADENA	30.18	140.6	6	14	0							
GOLDEN	30.23	117.3	6	14	0							
TONTO FOREST	32.45	130.5	6	34	0						9	24 PCP
PETROPVLOVK	32.92	284.5	6	38A	0							
ALBUQUERQUE	33.77	123.5	6	46	1							
TUCSON	34.43	131.5	6	49	-2							
TIKSI	34.60	326.1	6	52A	0							
NORD	35.05	12.2	6	57A	1							
LAWRENCE	35.47	106.5	6	59	-1							
CHICAGO JSA.	36.89	95.7	7	11	-1							
LUBBOCK	36.90	119.1	7	13	1	13	1	4				
WICHITA MTS.	37.38	114.3	7	15	-1	13	8	4			8	54 PP
TULSA	37.68	110.1	7	18	0	13	9	0				
SCHEFFERVILLE	38.05	64.5	7	22	1							
FAYETTEVILLE	38.28	108.2	7	34A	11							
KHEYS	38.72	355.1	7	29A	2							
YAKUTSK	39.80	312.5	7	35A	-1							
CLEVELAND	40.23	90.6	7	42K	2							
KIPAPA	40.89	204.9	7	45	0							
HONOLULU	41.02	205.0	7	45	-1	14	4	5				
BREBEUF	41.17	80.0	7	47	0	14	0	-2			17	1 5S
SEPT ILES	41.31	69.7	7	53A	5							
HAWAII V.OB.	42.30	200.5	7	56	-1							
MORGANTOWN	42.42	91.1	7	58A	0							
CUMBERLAND	42.82	99.9	8	0	-1	14	28	2			9	44 PP
BLACKSBURG	44.07	93.7	8	10	-1						18	0
PALISADES	44.36	84.6	8	15	2	14	48	0			18	20 SCS
WASHINGTON	44.41	89.2									23	5
Y.-SAKHLINSK	44.53	288.5	8	14	-1							
COLUMBIA	46.32	97.0	8	29	0	15	18	2			24	16
HALIFAX	46.64	73.3	8	32	1							
TROMSOE	49.36	9.2	8	53	0				9	3	10	22
KEVO	49.74	5.5	8	55	-1	16	4	-1			10	52 PP
KIRUNA	51.24	9.0	9	6A	-1						30	46
SODANKYLA	52.10	6.1	9	13A	-1							
APATITY	52.19	2.8	9	13A	-1	16	30	-8			16	58
VLADIVOSTOK	52.49	292.8	9	17	1	16	41	-2				
SKALSTUGAN	54.57	14.4	9	31A	-1							
MATUSIRO	54.73	283.0	9	31A	-2	17	2	-11				
CHANGCHUN	54.88	298.0	9	34	0							
UMEA	55.18	10.1	9	35A	-1	17	15	-4			24	36
KAJAANI	55.44	6.1	9	38A	0						10	46 PCP

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IRKUTSK	56.12	317.8	9 42A	-1				
BERGEN	56.61	19.4	9 47	0				
KONGSBERG	58.00	17.2	10 4K	8	18 10	14		10 40 PCP
ABERDEEN	58.26	25.0						29 20
NURMIJARVI	58.80	8.4	10 1A	-1	18 3	-4		12 12 PP
UPPSALA	58.82	12.5	10 1A	-1	18 6	-1		
HELSINKI	59.16	8.2	10 4A	0				
PULKOVO	59.87	5.2	10 8	-1				
GOTEBORG	60.22	16.4	10 11A	-1				10 56 PCP
DURHAM	60.60	25.8	10 6K	-8				
VALENTIA	61.12	32.5	10 16	-2	18 38	2		
PEKING	61.90	302.0	10 22	-1	18 32	-14	10 32	18 50 *SS
KARLSKRONA	62.20	14.7	10 18A	-7				
COPENHAGEN	62.24	16.7	10 25A	0	19 2	11		
PAOTOW	63.95	306.8	10 36	-1				
KEW	63.95	26.3	10 36	-1				23 25 SS
WITTEVEEN	64.07	21.3	10 38	0				
MOSCOW	64.11	1.0	10 36A	-2				
DE BILT	64.48	22.5	10 40	0	19 24	5		
SEMIPALATNSK	64.61	332.3	10 39	-2				
MUNSTER	65.05	20.9	10 43	-1				
UCCLE	65.56	23.5	10 48	1				
BENSBERG	65.94	21.6	10 50A	0				11 34
HALLE	66.22	18.2	10 52	1	19 45	5		
DOURBES	66.28	23.5	10 52	0				
FOLINIERE	66.45	27.4	10 52K	-1				
COLLMBERG	66.58	17.6	10 53A	-1				11 28 PCP
WARSAW	66.68	12.1	10 55K	1			11 0	20 16 PPS
JENA	66.72	18.6	10 53	-2	19 50	4		12 57 PP
PARIS	67.07	25.4	10 58	1				
NANKING	67.48	295.3	11 0	1				
HEIDELBERG	67.72	21.0	11 1	0				
PRAGUE	67.99	16.9	11 3	0				22 31 SS
PRUHONICE	68.09	16.9	11 3	0	20 14	11		
STRASBOURG	68.34	21.9	11 6A	1	20 0	-5		13 40 PP
CHORZOW	68.37	13.8						11 6 PCP
STUTTGART	68.43	20.8	11 5	0				
RACIBORZ	68.48	14.4	11 5	-1				11 28 PCP
GARCHY	68.64	25.5						11 36
KRAKOW	68.71	13.2	11 7	0			11 11	11 34 PCP
KASPERSKE H.	68.78	17.7	11 8A	0				
FELDBERG	69.05	21.9	11 9	0				
BESANCON	69.27	23.5	11 11	0				
RAVENSBURG	69.44	20.8	11 11	-1				
SIAN	69.84	304.1	11 13	-1			11 22	
VIENNA-H.	70.04	16.0	11 16	1				
CLERMONT-FD.	70.09	26.0	11 17	1				
BRATISLAVA	70.22	15.5	11 16	0				12 2 PKP2
LANCHOW	70.29	308.9	11 17A	0				
UZMGOROD	70.37	11.8	11 17	0				
ROSELEND	70.89	23.5	11 21	1				
LJUBLJANA	71.92	17.8	11 25	-2				
BAGNERES	71.97	29.0	11 25	-2				
ALMATA-2	71.99	331.7	11 26A	-1				
TRIESTE	72.20	18.5	11 30	2				
ISOLA	72.43	23.7	11 31	1			11 38	
FRUNSE	73.04	333.5	11 33	0				
TOLEDO	73.89	33.3	11 40K	2	21 18	8		14 32 PP
BELGRADE	73.93	13.8	11 38	0				
SIMFEROPOL	74.83	3.7	11 44	0				
CHENG TU	74.97	306.2	11 45	1				
TASHKENT	75.59	337.1	11 47	-1	21 20	-9		
ALICANTE	76.27	31.1	11 53A	1				12 5 PCP
GRANADA	76.54	33.9	11 55A	2	21 56	17		
MALAGA	76.75	34.7	11 55	1	21 50	9		
ALMERIA	77.16	33.2	12 UK	3				
TIFLIS	78.04	355.7	12 2	0				
BAKURIANI	78.07	356.7	12 3K	1				
ISTANBUL UN.	78.47	7.9	12 4	0				
KIROVOBAD	79.04	354.5	12 7A	0				
AVERROES	79.04	38.3	12 5	-2				13 7
KIZYL-ARVAT	79.67	346.6	12 14K	3				
GORTS	80.19	354.4	12 14A	1				
KUNMING	80.39	304.6	12 16	2	22 21	1	12 25	
VANNOVSKAYA	80.68	345.0	12 16	0				
LHASA	80.72	316.1	12 18	2			12 28	
WARSAK DAM	82.17	333.3	12 22	-2				
TEHERAN	83.59	350.0	12 33	2	21 58	-55		15 47
LAHORE	83.87	330.4	12 32	0				

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SHILLONG	84.15	313.8	12 34	0	
CHATRA	84.61	318.2	12 38K	2	
NEW DELHI	85.96	327.1	12 42K	-1	
KSARA	85.99	2.8	12 43	0	16 5 PP
QUETTA	86.83	336.2	12 47A	0	
NHATRANG	89.01	293.2	12 59	1	
SHIRAZ	89.52	348.4	12 58A	-2	16 32
LWIRO	121.36	12.2	19 7K	12	33 16
CHILEKA	135.14	5.8	19 22	1	
CHANGALANE	145.47	11.1	19 31A	1	
KIMBERLEY	146.80	23.5	19 44A	2	
PIETERMZBURG	148.56	14.7	19 47	2	
WILKES	149.20	228.3	19 50	4	
SOUTH POLE	150.33	180.0	19 52	5	

JUNE 17 20.H 8.M 34.S EPICENTRE -20.44-174.09 DEPTH= 6.KM

A=-0.93284 B=-0.09661 C=-0.34709 D=-0.1030 E= 0.9947
G= 0.3452 H= 0.0358 K=-0.9378 HT= 4.6

SE= 2.48

	DELTA DEG.	AZ. DEG.	P		O-C S	S O-C			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
AFIAMALU	6.85	19.1	1	40	-4	2	46	-17				
PORT VILA	16.85	276.2	4	2K	4							
NOUMEA	18.22	260.7	4	16K	1							
KARAPIRO	19.62	205.1	4	32	0							
KOUMAC	20.27	265.8	4	41	2							
COBB RIVER	23.44	205.7	5	14	3							
GEBBIES PASS	25.71	202.6	5	40	7	10	2	3				
MONOWAI	29.42	206.6	6	3K	-3							
BRISBANE	31.00	250.6	6	18	-3							
CANBERRA	35.61	237.5	6	58K	-3						8 15 PP	
CHARTERS TS.	37.14	263.4	7	11	-2	13	17	17				
TOOLANGI	38.92	235.1	7	26K	-2				7 35		8 34	
PORT MORESBY	38.93	280.5	7	26K	-2							
ADELAIDE	43.83	240.5	8	8A	-1							
CAPE HALLETT	52.66	186.0	9	17	.0							
DARWIN	53.24	269.6	9	19	-3							
MUNDARING	62.65	243.8	10	24	-4							
BYRD STATION	64.11	170.9	10	36	-2							
WILKES	65.61	205.4	10	48	1							
SOUTH POLE	69.69	180.0	11	11	-2							
MATUSIRO	72.39	321.3	11	28A	-1							
MIRNY	72.60	204.8	11	28	-2							
PRIEST	75.61	42.2	11	49K	1							
LICK	75.76	40.7	11	49K	1							
PASADENA	76.00	45.1	11	49	-1							
CALISTOGA	76.04	39.2	11	52K	2							
LEMBANG	76.71	267.6	11	53A	-1							
MINERAL	77.72	38.3	11	59K	0							
TANGERANG	77.85	267.9	12	0	-1							
BOULDER CITY	79.29	45.2	12	8	0							
TUCSON	80.02	50.2	12	12	0							
EUREKA	80.59	41.8	12	15	0							
TONTO FOREST	80.79	48.3	12	17	1				12 28		12 24 PCP	
SEATTLE	82.15	32.4	12	22	-1							
MAWSON	82.84	198.9	12	26A	-1							
BLUE MTS.	83.02	36.8	12	27	-1							
SALT LAKE C.	83.91	42.5	12	33	1							
ALBUQUERQUE	84.53	49.7	12	35	0							
PENTICTON	84.60	32.3	12	35	-1							
CHANGCHUN	84.63	320.7	12	36	0							
UINTA BASIN	85.14	43.8	12	39A	1						15 51 PP	
HUNGRY HORSE	86.92	35.4	12	46	-1							
COLLEGE	87.40	10.9	12	49	0						13 13	
GOLDEN	87.60	46.0	12	51	1							
BANFF	87.80	32.5	12	51	0							
PEKING	88.45	313.9	12	55	0							
EDMONTON	90.18	31.5	13	2A	-1							
WICHITA MTS.	90.19	52.9	13	2	-1						13 36	
SIAN	91.12	306.2	13	17	10							
KUMMING	92.61	295.7	13	16	2							
LANCHOW	95.66	306.2	13	29	1							
QUETTA	124.53	293.1	19	1	0							

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SODANKYLA	131.26	349.5	19 13	-1	
KAJAANI	133.99	346.9	19 16	-3	
SHIRAZ	137.03	291.9	19 10	-15	
NURMIJARVI	137.82	346.3	19 22	-4	
HELSINKI	138.05	345.9	19 27	1	
DURHAM	145.25	7.6	19 39A	-1	
WITTEVEEN	147.67	359.1	19 49	6	
LWIRO	148.19	227.5	19 50A	6	
KRAKOW	148.42	342.7	19 48	4	20 14
CHORZOW	148.46	343.9	19 49	5	20 14
MUNSTER	148.50	358.0	19 48	4	
HALLE	148.64	352.7	19 59	14	
COLLMBERG	148.70	351.4	19 49A	5	20 0 PKP2
RACIBORZ	148.85	344.6	19 51	6	20 1 PKP2
JENA	149.24	353.0	19 46	1	20 34
BENSBERG	149.52	358.4	19 51A	5	
PRAGUE	149.66	349.1	19 52	6	
UCCLE	149.67	2.0	20 0	14	
PRUHONICE	149.73	348.9	19 51	5	23 34
KSARA	150.30	302.9	19 54	7	
DOURBES	150.38	1.7	19 54	7	
KASPERSKE H.	150.72	349.7	19 54	6	
BRATISLAVA	150.89	344.5	19 46	-2	
VIENNA-H.	151.00	345.5	19 49	1	19 59 PKP2
HEIDELBERG	151.01	356.2	19 54	6	
FOLINIÈRE	151.27	8.8	19 55	7	
PARIS	151.56	4.8	19 57	7	
STUTT GART	151.60	355.3	19 56	1	20 31
STRASBOURG	151.88	357.4	19 57	8	20 29
GARCHY	153.12	4.3	19 59	7	
BESANCON	153.25	359.9	20 11	20	20 21 PKP2
LJUBLJANA	153.49	346.5	20 0A	8	
ROSELEND	154.81	358.8			20 21 PKP2
ISOLA	156.30	358.0	20 26	31	20 36
TOLEDO	158.82	21.6	20 1	2	20 36 PKP2
MALAGA	161.44	26.9			20 49 PKP2

JUNE 17 23.H 2.M 7.S EPICENTRE -4.12 102.24 DEPTH= 69.KM

A=-0.21154 B= 0.97477 C=-0.07129 D= 0.9773 E= 0.2121
G= 0.0151 H=-0.0697 K=-0.9975 MT= 7.1

DEPTH OF FOCUS= 0.006R

SE= 2.04

	DELTA DEG.	AZ. DEG.	P		O-C S	S			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
TANGERANG	4.82	115.2	1	13K	2						16	6
DJAKARTA	5.01	114.4	1	12	-2	3	7	56			9	22 PCP
LEMBANG	5.99	117.0	1	28K	0						8	45 PCP
MEDAN	8.43	335.0	1	59K	-2	3	16	-20			8	28 PCP
NHATRANG	17.64	23.0	3	5	-57						3	19 PP
PORT BLAIR	18.32	329.0	4	41	31						7	31
MANILA	26.40	44.6	5	31	0							
BAGUIO CITY	27.30	41.2	5	39	-1	10	29	17				
MADRAS	27.74	308.1	5	43	-1	10	22	3			6	30 PP
VISHAKHAPTM	28.64	319.8	5	57	5	10	36	2			6	42 PP
HONG KONG	28.73	23.5	5	59	7						11	45
KUNMING	29.06	0.9	5	57A	2	10	43	2	6	19		
DARWIN	29.43	107.9	5	59	0	11	34	48				
MUNDARING	30.65	156.3	6	8	-2						9	5 PCP
SHILLONG	31.18	341.7	6	13A	-1	11	11	-3				
BOKARO	32.07	330.8	6	23	1	11	28	0				
CHATRA	34.04	335.5	6	41A	2	11	59	1				
CHENG TU	34.62	2.7	6	43A	-1	12	6	-1	7	5	16	58 SCS
LHASA	35.24	343.0	6	49A	0	12	16	-1			16	58 SCS
POONA	35.90	309.7	6	18K	-37							
BOMBAY	36.91	309.2				13	41	58			9	26
SIAN	38.68	8.9	7	19A	1				7	39	7	45 *SP
NANKING	39.26	22.4	7	24A	1	13	21	3				
ZO-SE	39.41	26.0	7	25A	1	13	23	3	7	49		
LANCHOW	39.98	2.0	7	31A	2	13	29	0	7	52	17	29 SCS
NEW DELHI	40.46	325.0	7	34A	1	13	37	1				
DEHRA DUN	41.33	327.5	7	44	4	13	48	-1				
LAHORE	44.33	325.1	8	3	-1	14	29	-4				
PORT MORESBY	44.87	99.1	8	8A	-1	14	40	-1				

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PAOTOW	45.05	8.4	8 11A	1	14 46	3	8 32	
ADELAIDE	45.62	136.9	8 10	-5			21 41	
CHARTERS TS.	45.69	114.1	8 15	0	14 52	0		
PEKING	45.76	14.9	8 17A	1	14 57	4	15 27	*SS
WARSAK DAM	47.71	325.0	8 32	1	15 21	0		
QUETTA	47.99	317.7	8 33	0	15 22	-3		
ABUYAMA	49.86	36.2	8 48A	0				
TOOLANGI	51.64	136.0	9 2A	1			9 19	10 14 PCP
CHANGCHUN	52.05	21.1	9 4A	0	16 21	0		
ALMATA-2	52.24	337.1	9 6A	0				
MATUSIRO	52.56	36.6	9 7A	-1	16 28	0		
CANBERRA	53.14	131.9	9 13A	1			9 29	9 35 *SP
BRISBANE	53.39	121.2	9 14	0	16 45	6		
VLADIVOSTOK	54.12	26.6	9 19	-1	16 39	-10		
RIVERVIEW	54.18	129.3	9 20A	0			9 37	9 44 *SP
TASHKENT	54.30	329.7	9 20A	-1	16 51	-1		
TARRALEAH	54.68	140.6	9 24	0				
MOORLANDS	55.21	140.5	9 28	0				
TANANARIVE	55.34	249.9	9 30K	2				
IRKUTSK	56.20	1.5	9 34	-1	17 17	0		
SEMIPALATNSK	57.51	343.5	9 42	-2	17 33	-1		
SHIRAZ	58.25	308.6	9 48A	-1	17 36	-8		10 34 PCP
VANNOVSKAYA	58.52	319.8	9 51	0				
KIZYL-ARVAT	60.41	320.0	10 2A	-2	18 8	-4		
TEHERAN	61.91	314.3	10 14	0	18 32	1	39 28	PKPPKP
WILKES	62.38	176.2	10 17	0	18 37	0		
KOUMAC	62.41	111.0	10 18A	1				
MIRNY	62.66	184.2	10 30	11			11 47	
NOUMEA	64.61	112.6	10 31A	-1				
PORT VILA	65.98	107.5	10 40A	-1				
CHILEKA	67.02	254.8	10 46A	-1				
GORIS	67.21	316.0	10 48K	0	19 36	0		
KIROVOBAD	67.72	317.1	10 51A	-1	19 42	0		
MAWSON	68.81	195.1	10 58	0			11 18	39 1 PKPPKP
TIFLIS	69.23	317.6	11 1	0				
YAKUTSK	69.24	13.5	10 59A	-2	19 56	-4		
MONOWAI	70.02	137.4	11 6A	0			11 23	
CHANGALANE	70.31	243.7	11 7A	-1			11 26	11 27 PCP
ROXBURGH	71.09	136.8	11 14	2			11 31	
PIETERMZBURG	72.20	240.3	11 20A	1				
KSARA	72.94	307.1	11 15	-8	20 46	3	11 48	14 5 PP
BULAWAYO	73.23	250.3	11 24K	-1				
BROKEN HILL	73.28	256.2	11 24K	-1				
LWIRO	73.33	268.9	11 26K	1	20 53	6		
PETROPVLOVK	73.94	31.6	11 28A	-1				
MAGADAN	74.04	23.4	11 30A	0				
WELLINGTON	74.18	131.7	11 29	-1				
KARAPIRO	74.31	128.1	11 32A	1			11 49	
CHATEAU	74.48	129.4	11 32A	0			11 48	
KIMBERLEY	77.04	241.6	11 46K	-1				
TIKSI	77.58	8.4	11 46A	-4				
SIMFEROPOL	77.66	317.6	11 50A	0	21 33	-2		
MOSCOW	79.45	328.7	11 59A	-1	21 49	-5		
CAPE HALLETT	79.50	163.2	12 0	0				
ISTANBUL UN.	80.17	312.7	12 3A	-1	21 52	-10		
SCOTT BASE	80.76	168.8	12 7	0				
ATHENS	83.50	308.8	12 20	-1				
PULKOVO	84.54	331.1	12 26A	0	22 46	0		
AFJAMALU	85.12	103.5	12 31A	2				
VIBORG	85.55	331.8	12 31	0	22 50	-6		
APATITY	85.83	339.0	12 33A	0	22 58	0	22 47	
N-LAZARVSKYA	86.28	199.4	12 52A	17				
KAJAANI	86.97	334.9	12 38A	0	23 10	1	30 31	PKKP
HELSINKI	87.24	330.8	12 39	0			13 0	
KHEYS	87.31	353.4	12 38A	-2	22 58	-14		
NURMIJARVI	87.47	331.1	12 41A	0	23 15	1	28 27	SS
WARSAW	87.86	322.5	12 41A	-1	23 15	-3	13 2	23 0 SKS
KRAKOW	88.19	320.3	12 45	1			13 4	PCP
SODANKYLA	88.27	338.0	12 44A	0	23 23	1	30 25	PKKP
KEVO	88.76	340.3	12 46A	-1	23 26	0	16 18	PP
CHORZOW	88.83	320.4	12 48	1			13 4	PCP
RACIBORZ	89.30	320.1	12 50	1	23 17	-14	13 7	13 57
BRATISLAVA	89.80	318.2	12 49	-3			23 10	
UMEA	90.13	333.9	12 53A	0	23 38	-1	29 39	SS
VIENNA-H.	90.29	318.2	12 55	1			13 18	
ZAGREB	90.32	315.7	12 53	-1	23 19	-21		
KIRUNA	90.69	337.9	12 56A	0				
UPPSALA	90.82	329.8	12 56A	0	23 19	-26	16 35	PP

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LJUBLJANA	91.35	315.9	13 0	1			13 16	13 48
TROMSOE	91.50	339.6	12 59	-1				16 41 PP
KARLSKROKA	91.52	326.0	12 56A	-4				26 15
PRUHONICE	91.64	319.8	13 1	1	23 53	1		
PRAGUE	91.72	319.9	13 1	0				
TRIESTE	91.86	315.4	13 3	2	23 27	-27	13 19	
AQUILA	91.89	312.1			23 27	-27		23 58 S
KASPERSCHE H.	92.21	318.9	13 3A	0			13 19	16 41 PP
ROME	92.54	311.6			23 33	-27		24 3 S
COLLMBERG	92.71	321.1	13 5A	0	24 4	3		
PADOVA	93.16	315.1			23 53	-12		13 36
HALLE	93.37	321.2	13 9	1	23 35	-32		
BYRD STATION	93.42	173.3	13 9	1				
JENA	93.58	320.7	13 9	0	24 7	-2		17 0 PP
SKALSTUGAN	93.64	333.4	13 9A	0				16 33
KONGSBERG	94.85	329.4	13 22A	7				17 16 PP
STUTTART	95.02	318.5	13 16	0			13 35	14 5
BENSBERG	96.37	320.7						17 15 PP
ISOLA	96.57	313.8	13 23	0	24 29	37		
ROSELEND	96.85	315.4					13 51	17 21 PP
DOURBES	98.05	319.9			24 12	12		17 27 PP
NORD	98.13	352.5						16 52
GARCHY	99.24	317.1	13 35	0				
PARIS	99.51	318.7						17 56
COLLEGE	102.10	24.2	13 47	-1				18 0 PP
MOULD BAY	104.36	9.4	13 57	-1				
TOLEDO	105.12	310.1						24 37
MALAGA	105.78	306.9	18 25	777	24 37	1		
RESOLUTE	108.79	4.7	14 18	777				
COPPERMINE	111.53	14.3	18 26	0				
VICTORIA	121.11	33.7	18 45	1				
SEATTLE	122.22	34.1	18 50K	3				
PENTICTON	122.68	31.3	18 49A	2				
EDMONTON	122.88	24.5	18 49A	1				
HUNGRY HORSE	126.12	29.2	18 55	1			19 15	
MINERAL	126.57	41.2	18 56A	1				
BLUE MTS.	126.67	34.4	18 55	0			19 21	20 54 PP
CALISTOGA	126.75	43.6	18 57A	2				
BERKELEY	127.34	44.2	18 58	2				
PARAISO	127.98	46.0	19 1	3				
LICK	128.03	44.5	19 0A	2				
BUTTE	128.45	30.5	19 0	1				21 2 PP
SCHEFFERVILLE	128.67	351.9	19 0	1				
PRIEST	129.29	45.4	19 4K	4				
BOZEMAN	129.45	29.9	19 3	3			19 25	
EUREKA	130.67	39.1	18 52	-11				21 8 PP
PASADENA	132.04	46.4	19 7	2				22 28 SKP
SALT LAKE C.	132.36	35.2	18 56	-10				21 33 PP
BOULDER CITY	133.41	42.3	19 13	5			19 38	21 31 PP
UINTA BASIN	133.95	34.0	19 10	1			19 28	21 46 PP
GLEN CANYON	134.93	39.0	19 48	37				25 11
GOLDEN	136.66	31.4	19 3	-11				22 42 PP
TONTO FOREST	136.76	41.9	19 4	-10			19 17	21 39 PP
HALIFAX	137.78	344.9	19 17	1				
TUCSON	138.25	44.0	19 6	-11				22 48 PP
BREBEUF	138.62	355.6	19 17K	-1				
OTTAWA	138.84	357.8	18 59	-19				
ALBUQUERQUE	139.41	37.3	19 11	-8				25 17
CHICAGO JSA.	141.35	11.9	19 19	-4				
LAWRENCE	141.84	22.3	19 19	-4				
LUBBOCK	143.07	34.6	19 24	-2				
PALISADES	143.11	355.1	19 23	-3				
PENNSYLVANIA	143.48	0.1	19 24	-2				
ST. LOUIS 1	143.81	16.6	19 25	-2				
WICHITA MTS.	143.93	29.8	19 26	-1				22 44 PP
TULSA	144.25	25.5	19 28A	0				22 40 PP
MORGANTOWN	144.59	2.9	19 29A	1				
GEORGETOWN	145.37	359.1	19 31	1				
WASHINGTON	145.37	359.1	19 30	0			19 56	
BLACKSBURG	146.97	3.9	19 33	1				
CUMBERLAND	147.86	12.0	19 34	0				23 5 PP
CHAPEL HILL	148.33	2.0	19 37	3				
COLUMBIA	150.11	5.5	19 40	3				
LA PAZ	157.41	204.7	19 50	3				
AREQUIPA	158.64	196.7	19 52	3				
SAN JUAN	161.82	322.1	19 55	3				
HUANCAYO	163.76	188.5	19 59	5				
NANA	163.97	183.2	19 57	3				

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CARACAS	167.53	301.2	19 59A	2	25 7 PP
BOGOTA	176.29	277.9	20 3	2	32 26 SKKS
CHINCHINA	177.71	291.8	20 4	2	25 55 PP

JUNE 18 4.4H 2.4M 38.5 EPICENTRE 28.95 129.83 DEPTH= 88.KM

A=-0.56141 B= 0.67301 C= 0.48154 D= 0.7679 E= 0.6406
G=-0.3085 H= 0.3698 K=-0.8764 HT= 2.2

DEPTH OF FOCUS= 0.009R

SE= 3.36

	DELTA DEG.	AZ. DEG.	P		O-C S	S			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
YAKUSIMA	1.60	21.0	0	22A	-6	0	39	-9				
KAGOSIMA	2.68	13.2	0	37K	-5	1	8	-6				
MIYAZAKI	3.26	24.4	0	44	-6	1	32	4				
NAGASAKI	3.77	0.6	0	56K	-1	1	42	1				
UNZENDAKE	3.79	5.3	0	56	-1	1	27	-14				
KUMAMOTO	3.93	10.7	0	57A	-2	1	47	3				
ASOSAN	4.08	14.8	1	6	5	2	0	12				
SAGA	4.31	5.2	1	1	-3	2	9	15				
OOTA	4.53	19.3	1	4K	-4	2	1	2				
HUKUOKA	4.64	5.6	1	6	-3	2	2	0				
ASHIZURI	4.64	35.1	1	13	4						5	54
UWAZIMA	4.86	27.9	1	18	6	2	18	10				
SIMONOSEKI	5.07	10.4	1	13	-2							
MATUYAMA	5.49	26.6	1	15	-6	2	25	2				
KOTI	5.57	33.7	1	39	17	2	59	34				
MUROTO	5.68	39.9	1	25	2	2	32	4				
HIROSIMA	5.84	21.6	1	29	4	2	22	-10				
HAMADA	6.23	17.2	1	38	7	2	42	1				
TAKAMATU	6.45	32.8	1	31	-3	3	16	29				
TOKUSIMA	6.52	37.2	1	31	-4							
ISIGAKIZIMA	6.84	229.1				3	30	34				
SUMOTO	6.90	37.6	1	33K	-7						3	35
MATSUE	7.04	22.1									2	3
KOBE	7.30	37.2				3	5	-3				
OSAKA	7.47	39.0	1	51	3						3	49
ABUYAMA	7.65	38.1	1	43K	-7							
NARA	7.66	40.2	1	42	-9							
TOYOOKA	7.80	31.5	1	56	4							
ZO-SE	7.80	288.1	1	52	0	3	29	9				
SAIGO	7.8..	21.3									3	3
KYOTO	7.85	38.1	1	45	-8						4	3
KAMEYAMA	8.15	42.1	1	58	1	2	47	-41				
HIKONE	8.32	39.2	1	33	-27						4	17
NAGOYA	8.67	42.5	1	57	-7						4	12
GIHU	8.71	40.6	2	4	-1							
HAMAMATU	8.83	47.4	2	4	-2							
HUKUI	8.90	35.7	2	10	3							
IIDA	9.42	43.9	2	7	-7						2	24
HATIDYOZIMA	9.49	61.7	2	16	1							
MISIMA	9.88	49.2	2	16	-5							
TOYAMA	9.90	36.8	2	33	12	5	14	63				
AJIRO	9.94	49.9	2	13	-8							
KOHU	9.97	45.5	2	24	2						5	37
OSIMA	9.97	52.0	2	20	-2							
HUNATU	9.99	46.9	2	22	0						5	24
MATUMOTO	10.00	41.2	2	30	8							
NANKING	10.03	290.7	2	24A	1							
WAZIMA	10.28	33.3	2	26	0							
MATUSIRO	10.34	40.8	2	18K	-9	4	23	1				
NAGANO	10.43	40.3	2	36	8							
TITIBU	10.49	45.7	2	37	8							
TOKYO C.M.O.	10.74	48.8	2	47	15							
MAEBASI	10.75	43.9	2	28	-4							
KUMAGAYA	10.79	45.8	2	30	-3						5	56
UTUNOMIYA	11.34	45.5	2	46	6							
KAKIOKA	11.34	47.6									3	39
MITO	11.62	47.7	2	32	-12						2	55
ONAHAMA	12.24	46.5	3	8	16							
YAMAGATA	12.75	40.6	3	3	4							
SENDAI	13.08	41.9	3	4	1							
AKITA	13.68	35.5	3	26	15							
MIZUSAWA	13.80	39.7	3	26	13							

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AOMORI	14.85	34.2	3 24	-2			
BAGUIO CITY	15.10	216.3	3 25	-4			
CHANGCHUN	15.29	347.5	3 32A	0	6 29	10	
HONG KONG	15.60	248.5	3 38	2	6 28	2	
MAKODATE	15.60	31.8	3 30	-6			
PEKING	15.76	318.1	3 39A	1	6 43	13	
MANILA	16.36	211.5	3 42	-3	6 45	2	
URAKAWA	16.84	35.1					4 49
SAPPORO	16.87	30.3	3 45	-7			
SIAN	18.57	291.8	4 13	1			
WAKKANAI	18.92	26.5	4 12	-4			8 4
NEMURO	19.13	37.2					8 2
PAOTOW	19.93	310.8	4 26	-1			
Y.-SAKHLINSK	20.65	25.6	4 32K	-2	8 19	4	
CHENG TU	22.46	280.7	4 53	1	8 58	10	
LANCHOW	23.01	294.6	4 59A	2			
KUNMING	24.41	267.4	5 12A	1	9 41	19	
IRKUTSK	30.01	328.0	6 1	-1			
PETROPAVLOVK	32.04	33.3	6 18	-2			
YAKUTSK	33.07	359.9	6 26	-3	11 42	2	
LHASA	33.74	280.8	6 35A	0			
MAGADAN	33.77	19.1	6 33	-2			
SHILLONG	33.82	273.4	6 34A	-1			
CHATRA	37.62	277.3	7 9A	1			
TANGERANG	41.45	216.3	7 38A	-1			9 13 PP
LEMBANG	41.51	214.5	7 39	-1	13 57	9	
PORT MORESBY	41.63	153.8	7 44	3			
TIKSI	42.73	359.5	7 48A	-2			9 37 PP
SEMIPALATNSK	42.81	314.2	7 50	0			
NEW DELHI	45.82	282.9	8 14A	0			
FRUNSE	46.05	302.9	8 17A	1			
WARSAK DAM	49.40	291.4	8 43	1			
TASHKENT	50.11	301.3	8 48A	0			16 22 PS
CHARTERS TS.	51.27	160.1	8 53	-4			16 19
QUETTA	54.07	287.9	9 17	0			
SVERDLOVSK	55.02	321.2	9 24	0			
KHEYS	58.67	349.5	9 49K	-1			11 57 PP
KOUMAC	59.39	142.0	9 51A	-4			
COLLEGE	60.97	28.9	10 4	-2			
MUNDARING	61.95	193.1	10 10	-3			
ADELAIDE	64.13	171.9	10 23A	-4		10 31	
TEHERAN	64.99	298.4	10 33	1			
APATITY	65.98	335.3	10 37A	-2			
SHIRAZ	66.14	291.8	10 40A	0	19 35	15	10 51
MOULD BAY	66.87	14.1	10 43A	-1			13 11 PP
KEVO	67.43	338.4	10 47K	-1			
GORIS	67.56	303.7	10 49A	0			
TOOLANGI	67.78	166.6	10 48	-2			11 12 PCP
MOSCOW	67.79	322.4	10 49	-1			13 16 PP
TIFLIS	67.91	306.4	10 53	2			
NORD	68.36	355.0	10 52	-2			
SODANKYLA	68.50	336.1	10 54K	-1			13 14 PP
ALERT	68.62	1.7	10 55A	0			
KAJAANI	69.41	332.7	11 0	0			
PULKOVO	70.00	327.9	11 3A	-1			20 45 PS
TROMSOE	70.03	339.6	11 2	-2			
KIRUNA	70.43	337.7	11 5	-1			13 41 PP
NURMIJARVI	72.24	329.9	11 16A	-1	20 42	10	13 57 PP
HELSINKI	72.26	329.5	11 17	0			
COPPERMINE	72.27	21.2	11 15A	-2			
UMEA	72.47	334.0	11 17A	-2			
RESOLUTE	72.62	11.3	11 19A	0			
SIMFEROPOL	73.91	312.7	11 27	0			
YELLOWKNIFE	75.47	25.6	11 36A	0			
SKALSTUGAN	75.56	335.8	11 35A	-1			
UPPSALA	75.61	331.2	11 35A	-2			
KSARA	77.50	301.7	11 48A	1			
LWOW	77.75	320.4	11 49A	0			
WARSAW	78.12	323.5	11 52	1			
KARLSKRONA	78.59	328.6	11 54	1			
VICTORIA	78.94	40.4	11 54	-1			
KONGSBERG	78.99	333.4	12 3K	8			
KARAPIRO	79.09	144.8	11 55	-1			
GOTEBORG	79.26	331.1	11 56A	-1			
KRAKOW	79.88	322.0	12 0	0			12 8 PCP
CHATEAU	80.07	145.6	12 17	16			
BERGEN	80.13	335.5	12 3	1			
PENTICTON	80.63	38.4	12 3A	-1			

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RACIBORZ	80.79	322.6	12 7	2				
EDMONTON	81.44	32.7	12 8A	-1				
MONOWAI	81.91	154.3	12 16	5				
ROXBURGH	82.32	153.2	12 12	-1				
BRATISLAVA	82.47	321.5	12 12	-2	22 42	20		
COLLMBERG	82.74	325.6	12 16	1			15 31	PP
PRUHONICE	82.76	324.0	12 16	1				
PRAGUE	82.76	324.1	12 16	1				
VIENNA-H.	82.82	321.8	12 18	2				
HALLE	83.13	326.2	12 18	1			12 28	
JENA	83.67	325.9	12 21	1	22 46	12	15 38	PP
SHASTA	83.72	46.8	12 19	-1				
KASPERSKE H.	83.78	323.7	12 21A	1			15 35	PP
CHEB	83.80	324.9	12 20	-1				
ATHENS	84.10	310.2	12 34	12				
HUNGRY HORSE	84.19	37.0	12 23	1				
MINERAL	84.42	46.7					13 13	
BLUE MTS.	84.47	41.2	12 24K	0	22 52	10	15 49	PP
CALISTOGA	84.72	48.6	12 24A	-1				
WITTEVEEN	84.74	329.3	12 26	1				
MUNSTER	84.88	328.3	12 26	0				
LJUBLJANA	85.15	320.8	12 28A	1				
BERKELEY	85.35	49.1	12 28K	0				
BENSBERG	85.76	327.7	12 33A	3				
TRIESTE	85.82	320.8	12 31	0				
LICK	86.05	49.2	12 31A	-1				
STUTTGART	86.20	325.2	12 33	1			15 56	PP
BUTTE	86.42	38.2	12 34	1				
DURHAM	86.76	334.2	12 22	-13				
STRASBOURG	87.07	325.7	12 38	1	23 10	3		
UCCLE	87.17	328.8	12 38	1				
PRIEST	87.37	49.8	12 39K	1				
BOZEMAN	87.46	37.8	12 40	1				
DOURBES	87.55	328.2	12 41	2				
AQUILA	88.05	318.4			23 22	6		
EUREKA	88.46	44.9	12 43	0			16 30	PP
ROSELEND	89.60	324.1	12 49	0				
ISOLA	90.40	322.8	12 53	1			16 33	
FOLINIÈRE	90.81	329.7	12 55	1				
BOULDER CITY	91.29	47.2	12 58	1				
CLERMONT-FD.	91.31	325.9					14 23	
UINTA BASIN	91.76	41.2	12 59K	0	23 59	10	16 26	PP
RAPID CITY	92.64	35.2	13 3	0				
GOLDEN	94.56	39.5	13 12	0				
TONTO FOREST	94.62	46.7	13 13	1			13 22	17 3 PP
SCHEFFERVILLE	95.36	9.6	13 15	0				
TUCSON	96.21	48.0	13 19	0				
ALBUQUERQUE	97.18	43.5	13 24	1				
TOLEDO	99.21	325.8	13 33A	0			17 38	PP
MALAGA	101.81	324.0	18 4	260				
WICHITA MTS.	101.89	39.0	13 44	-1			17 45	PP
CUMBERLAND	107.65	29.7	18 42	777			28 2	
CARACAS	137.57	24.9	19 16	3			44 58	SSS
HUANCAYO	151.15	59.5	19 41	4				
LA PAZ	159.34	57.0	19 50	3			20 3	

JUNE 19 9.H 9.M 9.S EPICENTRE 4.47 126.34 DEPTH= 122.KM

A=-0.59082 B= 0.80307 C= 0.07750 D= 0.8055 E= 0.5926
G=-0.0459 H= 0.0624 K=-0.9970 HT= 7.1

DEPTH OF FOCUS= 0.014R

SE= 3.10

	DELTA DEG.	AZ. DEG.	P		O-C S	S O-C			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
MANILA	11.38	333.3	2	37	-3	4	51	6				
GUAM	20.23	62.6	4	24	-4	8	11	8				
HONG KONG	21.28	327.5	4	36	-2	8	27	5				
LEMBANG	21.80	239.1	4	43K	0	8	27	-5	4	53	5	13 PP
DJAKARTA	22.17	241.6	4	47A	0	8	1	-37	5	7	5	24 PP
TANGERANG	22.34	241.9	4	50A	1	8	50	9	5	7	9	41 SS
CANTON	22.37	327.0	4	48A	-1	8	47	5				
PORT MORESBY	24.90	123.6	5	9K	-4	9	24	-1				
YAKUSIMA	26.13	8.2	5	27	2							
ZO-SE	26.93	350.2	5	31	-1	10	3	5				

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RABAU	27.20	108.1	5 31	-2				
MEDAN	27.61	269.2	5 40A	2	10 31	22		6 25 PP
NANKING	28.34	346.4	5 42	-3				
OOITA	29.03	9.1	6 5	14				
KOTI	29.69	12.2	6 15	18				
MATUYAMA	29.83	10.8	5 59	1				
TOKUSIMA	30.43	13.6	6 0	-3				
TAKAMATU	30.55	12.6	5 44	-20				
KUNMING	30.58	314.5	6 4A	-1	11 1	5		
HAMADA	30.74	9.2						11 0
SUMOTO	30.76	13.9	6 3	-3				7 13
OSAKA	31.21	14.7	6 26	16				7 35
CHARTERS TS.	31.29	141.9	6 9	-2	10 59	-8		
NARA	31.32	15.2	6 9	-2				
ABUYAMA	31.43	14.6	6 9A	-3				
MATSUE	31.44	10.6	6 27	15				7 32
KYOTO	31.61	14.8	6 5	-9	11 12	0		
KAMEYAMA	31.65	16.0	6 15	1				7 30
HIKONE	31.98	15.4	6 20	3				7 45
NAGOYA	32.09	16.5	6 14	-4				7 35
GIHU	32.25	16.1	6 23	4				
MISIMA	32.65	19.4						6 45
IIDA	32.67	17.5	6 24	1				7 42
HUNATU	32.94	18.8	6 22	-3				7 42
KOHU	33.03	18.4	5 25	-1	11 34	-1		
YOKOHAMA	33.17	20.1						7 44
MATUMOTO	33.38	17.2						6 50
TOKYO C.M.O.	33.43	20.0						7 57
TITIBU	33.48	18.9	6 40	10				
CHENGTU	33.49	323.6	6 27A	-3	11 42	0		
TOYAMA	33.59	15.9	6 39	8				
MATUSIRO	33.73	17.4	6 27A	-5	11 37	-8		
KUMAGAYA	33.73	19.2	6 30	-2				8 4
SIAN	33.76	333.5	6 31A	-1				
NAGANO	33.84	17.3	6 33	0				8 23
PORT BLAIR	34.02	284.2	6 44	10	12 11	21		8 7 PP
TUKUBASAN	34.04	20.1	6 47A	12	11 41	-9		7 53 PP
WAZIMA	34.15	15.1	6 36	0				
UTUNOMIYA	34.26	19.5	6 34	-3	11 44	-10		
MITO	34.31	20.5	6 37	0	11 47	-7		
SHIRAKAWA	34.89	19.6	6 39	-3				
ONAHAMA	34.97	20.6	6 56	13				
NIIGATA	35.25	17.5						7 42
HUKUSIMA	35.55	19.4	6 48	1	12 13	1		
YAMAGATA	35.96	18.9	6 48	-3	12 19	-1		
SENDAI	36.16	19.6	6 48	-5	12 23	0		
HONIARA	36.23	112.5	6 47	-6	12 23	-1		
ISINOMAKI	36.45	20.0	6 55	0	12 25	-2		
PEKING	36.57	346.8	6 55A	-1	12 34	5		
MIZUSAWA	37.01	19.3	7 2	2	12 30	-6		
AKITA	37.23	17.6	7 13	11	12 41	2		
MUNDARING	37.50	194.2	7 4	0	12 48	5		
PERTH	37.58	194.7	7 9	4	12 55	11		8 43 PP
LANCHOW	37.65	329.5	7 5A	0	12 49	4		
VLADIVOSTOK	38.80	6.5	7 13	-2	13 5	2		
PAOTOW	38.83	340.1	7 14A	-1	13 3	0		
SHILLONG	39.14	305.9	6 15	-62	13 11	4		16 19
CHANGCHUN	39.20	358.8	7 16A	-2	13 14	5		
HAKODATE	39.35	17.1	7 16A	-3	13 9	-2		
MORI	39.56	16.7	7 21	0	13 18	4		
SUTTSU	40.11	15.9	7 31	6				
URAKAWA	40.28	19.0	7 28	1	13 29	4		
SAPPORO	40.67	16.9	7 26	-4	13 26	-5		
BRISBANE	40.68	142.6	7 28	-2	13 37	6		
ADELAIDE	40.93	164.4	7 32K	0	13 31	-3		
OBIHIRO	41.11	18.9	7 32	-2				
KUSIRO	41.56	20.1	7 35	-2	14 35	51		
ASAHIGAWA	41.62	17.5	7 36	-2				
LHASA	41.71	310.9	7 40A	1	13 51	5		17 36 SCS
NEMURO	42.28	20.9	7 41	-2	14 55	61		
WAKKANAI	42.93	15.9	7 47	-2				10 11
CHATRA	43.49	304.9	7 54A	1	14 16	4		17 45
BOKARO	43.54	300.2	7 54K	1	14 16	3		9 38 PP
VISHAKHAPTNM	44.11	290.8	8 1K	3				9 51
Y.-SAKHLINSK	44.69	15.9	7 59A	-4	14 28	-1		
RIVERVIEW	44.73	150.2	8 1	-2	14 32	2		17 51 SS
KOUMAC	44.78	125.1	8 UK	-3				
CANBERRA	44.95	153.5	8 5K	0	14 38	5	8 15	17 55 SCS
TOOLANGI	45.47	158.6	8 11	2	14 45	5		9 28

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MADRAS	46.34	283.6	8 16A	0	15	4	11	10	6	PP
PORT VILA	46.93	119.2	8 19A	-1						
NOUMEA	47.39	125.8	8 22K	-2						
KODAIKANAL	48.76	279.6						10	28	
TARRALEAH	50.02	160.5	8 55	11						
MOORLANDS	50.39	160.0	8 54	7						
IRKUTSK	51.02	342.8	8 50A	-2	16	3	5			
DEHRA DUN	52.23	305.2	9 0	-1	16	11	-4			
NEW DELHI	52.37	302.9	9 0A	-2	16	11	-6	10	11	
POONA	53.10	289.7	9 9A	2						
BOMBAY	54.12	290.0						10	13	
PETROPAVLOVK	55.19	23.2	9 21K	-2	16	57	3			
LAHORE	55.65	305.4	9 25	-1						
YAKUTSK	57.47	1.9	9 33A	-6						
ALMATA-2	57.93	319.4	9 41A	-1						
MAGADAN	58.07	14.4	9 42	-1	17	36	4			
WARSAK DAM	58.62	307.3	9 46	-1						
FRUNSE	59.55	317.9	9 53	0	17	58	6			
KHOROG	59.73	311.2	9 54A	-1	17	59	5			
SEMIPALATNSK	59.86	327.8	9 53	-2	18	8	12			
QUETTA	61.42	301.9	10 5A	-1	18	20	5			
MONOWAI	62.03	148.5	10 10	0						
KARAPIRO	62.11	137.4	10 9	-2						
TASHKENT	62.66	314.6	10 13	-1	18	36	5			
ROXBURGH	62.73	147.3	10 21	6	18	41	9	22	51	SS
CHATEAU	62.78	138.6	10 18	3						
WELLINGTON	63.40	140.9	10 13	-6	18	45	5	10	37	
TUAI	63.64	137.5	10 19	-2						
AFIAMALU	64.04	107.7	10 22A	-1	18	45	-3			
TIKSI	67.09	0.9	10 40	-3	19	27	2			
VANNOVSKAYA	70.15	308.7	11 1	-1						
KIZYL-ARVAT	71.77	309.7	11 12A	1	20	29	9			
SVERDLOVSK	73.13	328.4	11 18K	-1	20	37	2			
SHIRAZ	73.74	299.4	11 22A	-1	20	45	3	11	29	11 43 PCP
MIRNY	74.79	193.2	11 29	0	21	2	8			14 16 PP
HONOLULU	74.94	69.3	11 34	4	21	5	9			
KIPAPA	75.02	69.1	11 35	5	21	5	9			
TEHERAN	75.19	305.6	11 31A	0	21	7	9	11	57	14 20 PP
HAWAII V.OB.	77.58	71.2	11 45	1						
KIROVOBAD	79.52	310.4	11 55A	0	21	51	6			
TIFLIS	80.73	311.4	12 2	1						
TANANARIVE	80.88	250.1	12 0	-2				13	1	
CAPE HALLETT	81.61	167.6	12 7	1						
KHEYS	82.13	351.1	12 9A	0	22	16	4			
COLLEGE	84.20	25.3	12 17	-2	22	35	2			
MAWSON	84.31	200.2	12 21A	1	22	41	7	12	53	*SP
SCOTT BASE	85.12	172.1	12 26	2						
MOSCOW	85.61	325.4	12 27A	1	22	55	9			
APATITY	87.01	337.4	12 32A	-1	23	8	8	22	52	SKS
KSARA	87.92	303.6	12 37A	0	23	22	14	16	6	PP
SIMFEROPOL	88.45	314.8	12 39	-1	23	19	6			
JERUSALEM	88.63	301.6	12 42	1						
KEVO	89.06	339.9	12 42A	-1	23	22	3	16	12	PP
PULKOVO	89.20	329.8	12 43	0						
SODANKYLA	89.63	337.6	12 44A	-1	23	27	3	23	8	SKS
KAJAANI	89.78	334.2	12 45A	-1	23	28	3	23	9	SKS
VIBORG	89.82	330.8	12 46	0						
MOULD BAY	91.33	12.6	12 53	0						
HELSINKI	91.79	330.6	12 55	-1						
TROMSOE	91.83	340.5	12 54	-2				16	34	PP
KIRUNA	91.84	338.6	12 54A	-2	23	46	2	16	31	PP
NURMIJARVI	91.86	331.0	12 55A	-1	23	47	3	16	39	PP
CHILEKA	92.50	254.6	12 59K	0						
ISTANBUL UN.	92.63	311.3	12 59A	0	23	25	-25			
ALERT	93.04	1.1	13 0	-1						
UMEA	93.05	334.7	12 59A	-2	23	27	-27	16	38	PP
SOUTH POLE	94.44	180.0	13 9	1				14	57	
UPPSALA	95.43	331.3	13 11A	-1	23	40	5	24	17	S
CHANGALANE	95.68	244.1	13 14	1				13	15	PCP
WARSAW	95.79	323.4	13 21	7	23	54	17	24	26	S
UZHGOROD	95.88	319.7	13 17	3						
COPPERMINE	96.28	19.6	13 14	-2						
SOFIA	96.50	313.7	13 3	-14	23	48	7			
KRAKOW	97.03	321.5	13 20A	1	23	52	8	17	19	PP
SKALNATE PL.	97.06	320.6	13 19	-1				17	26	
RESOLUTE	97.16	10.2	13 20	0						
ATHENS	97.16	309.0	13 19K	-1				23	51	
CHORZOW	97.54	321.9	13 22	0				17	7	PP

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KARLSKRONA	97.67	328.1	13 23A	1			
LWIRO	97.69	268.3	13 21A	-1			17 23 PP
BELGRADE	98.04	316.3	13 25	1			17 26 PP
RACIBORZ	98.09	321.8	13 27	3			17 33 PP
BYRD STATION	98.48	170.7	13 32	6			17 28
BROKEN HILL	98.71	256.1	13 27	0			
BULAWAYO	98.78	250.4	13 28A	1			
GOTEBORG	98.94	330.3	13 27A	-1			
YELLOWKNIFE	98.98	24.3	13 30	2			
KONGSBERG	99.25	332.6	13 38	8			
BRATISLAVA	99.34	320.2	13 31	1			17 37 PP
COPENHAGEN	99.49	328.3	13 30	-1	24 16	20	
VIENNA-H.	99.79	320.4	13 33	1	24 6	8	
PRUHONICE	100.36	322.5	13 36	2	24 8	8	32 37 SS
ZAGREB	100.79	318.1			24 9	6	
COLLMBERG	100.82	324.1	13 36A	-1			
SEATTLE	100.86	39.9	13 33	-4	24 13	10	
KASPERSKE H.	101.24	321.9	13 39A	1			17 43 PP
HALLE	101.35	324.5	13 38	-1			13 57
LJUBLJANA	101.68	318.7	13 41A	1			17 54 PP
JENA	101.79	324.1	13 41	0	24 21	14	17 53 PP
PENTICTON	101.96	37.7	13 42	0			
N-LAZARVSKYA	102.13	198.0	13 45A	3			
SCORESBY SD.	102.25	349.6	13 43	0			
TRIESTE	102.32	318.5			24 19	9	18 1 PP
SHASTA	102.98	46.6	13 47K	1			30 4
MESSINA	103.36	310.8	14 1	13	24 21	6	18 1 PP
MUNSTER	103.62	326.1	13 50	1			
PADOVA	103.65	318.7	14 11	22	24 31	15	18 21 PP
AQUILA	103.65	315.4					27 41 PS
MINERAL	103.66	46.8	13 53A	4			
EDMONTON	103.84	32.2	13 54A	4			
BERKELEY	103.92	49.4			24 27	10	18 27 PP
SPOKANE	103.97	38.6	13 59	9	24 29	12	
STUTTGART	104.00	322.6	13 56	5	24 27	9	
BENSBERG	104.32	325.3	13 52A	0			18 24 PP
ROME	104.45	315.2	13 51	-2	24 36	16	
LICK	104.54	49.8	14 2A	9			
STRASBOURG	104.99	322.9	13 54	-1			18 6 PP
BLUE MTS.	105.09	41.3	13 56	777	24 32	10	18 28 PP
HUNGRY HORSE	105.73	37.0	13 53	777			15 3
ABERDEEN	105.82	333.7					25 55
UCCLE	105.98	326.0	14 1	777			
DOURBES	106.17	325.2	14 3	777			
DURHAM	106.97	331.5					17 8
ISOLA	107.29	318.9	14 6	777			18 36 PP
BUTTE	107.65	38.8	14 9	777			17 34 PKP
EUREKA	108.03	46.1	14 9	777	26 11	96	18 49 PP
PASADENA	108.21	52.0	18 19	777	24 49	13	18 54 PP
BOZEMAN	108.75	38.6	14 19	777			18 23 PKP
BOULDER CITY	110.16	49.2	14 22	-235			18 17 PKP
FLAMING GRGE	112.01	42.5	18 38	17			
UINTA BASIN	112.17	43.1	18 22	1	25 5	13	19 5 PP
TONTO FOREST	113.50	49.7	18 23	-1	25 15	17	18 51
LARAMIE	114.35	40.6	17 55	-31			19 8 PP
TUCSON	114.63	51.6	18 27	1			29 13 PKKP
GOLDEN	115.30	42.1	18 30	3	25 2	-2	
TOLEDO	116.59	319.0	18 33	3	25 11	2	18 59
							19 43 PP
ALBUQUERQUE	116.80	47.1	14 54	-216			
ALMERIA	117.06	315.4	18 34K	3			
MALAGA	118.47	316.2	18 37	3	25 37	21	
SCHEFFERVILLE	119.92	8.7	18 39K	3			
LUBBOCK	120.81	46.4	18 41	3			28 46
LAWRENCE	122.19	37.7	18 42	1			
AVERROES	122.36	314.3	19 14	33			19 43
WICHITA MTS.	122.51	43.6	18 43	2	25 41	12	20 22 PP
TULSA	123.71	40.9	18 49	5			20 36 PP
SEPT ILES	124.45	9.9	18 47	2			
FAYETTEVILLE	124.63	39.8	18 52	6			
LONDON ONT.	126.55	24.9	18 51A	2			
OTTAWA	126.58	19.2	18 50	1			
BREBEUF	127.16	17.5	18 53	3			37 51 SS
PENNSYLVANIA	129.78	23.9	18 58	3			
MORGANTOWN	129.87	26.5	19 4A	8			
CUMBERLAND	130.16	34.3	18 58	2	25 54	2	21 17 PP
HALIFAX	130.32	9.3	19 0	4			
PALISADES	131.09	20.3	19 1	3	26 20	26	21 10 PKS
BLACKSBURG	131.61	28.7	19 0	1			22 30

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GEORGETOWN	131.72	24.5	19 2	3						22 22
COLUMBIA	133.82	32.0	19 11	8						22 29 SKP
BERMUDA	141.88	15.2	19 19	1						24 29 PP
SANTA LUCIA	147.12	153.3	19 33	6						20 22
BALBOA HTS.	150.93	62.7	19 38	5						
SAN JUAN	154.18	28.1	19 40	3						
CHINCHINA	156.14	67.1	19 44	4						30 21 SKKS
FUQUENE	157.65	64.0	19 46K	4						23 28 PKS
BOGOTA	157.70	66.4	19 47A	5						23 24 PP
ST. CLAUDE	158.13	21.2	19 51	9						20 23 PKP2
AREQUIPA	158.83	125.5	19 49	6					20 24	
CARACAS	160.10	41.6	19 47A	2						24 27 PP
LA PAZ	161.44	131.1	19 52	6						31 1 SKKS

JUNE 19 10.H 47.M 24.S EPICENTRE 24.97 92.06 DEPTH= 44.KM

A=-0.03262 B= 0.90701 C= 0.41984 D= 0.9994 E= 0.0359
G=-0.0151 H= 0.4196 K=-0.9076 HT= 3.4

DEPTH OF FOCUS= 0.002R

SE= 2.17

	DELTA DEG.	AZ. DEG.	P		O-C	S			*PP		SUPP.	
			M	S	S	M	S	S	M	S	M	S
SHILLONG	0.62	344.0	0	15	1							
CHITTAGONG	2.61	184.9	0	41	0							6 40
CALCUTTA	4.16	235.0	1	4	1							1 37
LHASA	4.74	349.2	1	13K	2	2	5	0				1 31 PG
CHATRA	4.78	293.8	1	13A	1	2	6	0				1 20 PP
BOKARO	5.82	260.0	1	25K	-1	2	29	-4				1 32 PP
KUNMING	9.69	86.9	2	20A	0	4	9	1				
VISHAKHAPTNM	10.89	230.2	2	36K	0	4	49	11				
CHENG TU	12.00	59.2				5	0	-5				
PORT BLAIR	13.25	177.2	3	10	2	5	31	-4				3 36
DEHRA DUN	13.51	296.3	3	11	0	5	32	-9				
NEW DELHI	13.75	288.4	3	10A	-4	5	31	-16				
HYDERABAD	14.74	242.0	3	25	-2	5	56	-14				
LANCHOW	14.98	39.8	3	30K	0	6	8	-8				
MADRAS	16.36	225.4	3	45K	-3	6	33	-15				3 57 PP
LAHORE	16.93	296.8	3	57	2	6	45	-16				
SIAN	17.31	53.8	3	57A	-3							
POONA	18.08	252.8				7	46	19				3 37 PP
BOMBAY	18.83	255.1				8	52	68				5 30
CANTON	19.53	91.1	4	26A	-1	8	3	4				
WARSAK DAM	19.96	301.5	4	31	0	8	5	-3				
KODAIKANAL	20.18	226.0	4	29	-5							8 11
HONG KONG	20.43	92.9	4	35	-1	8	20	3				
KHOROG	21.48	310.4	4	48A	1							
PAOTOW	21.63	39.6	4	48A	0	8	40	0				
ALMATA-2	21.87	330.2	4	52A	1							
MEDAN	22.20	162.3	4	56K	2	9	3	12				5 26 PP
QUETTA	22.83	288.8	5	1A	1	9	7	5				
FRUNSE	22.87	325.4	5	3A	2	9	11	8				
GARM	23.08	312.5	5	2A	-1							
NANKING	24.48	67.1	5	17A	1							
TASHKENT	24.98	316.3	5	23A	2							
PEKING	25.17	47.5	5	23A	0	9	51	9				
SEMIPALATNSK	26.98	343.2	5	39	-1							
IRKUTSK	28.81	15.7	5	57A	1							
VANNOVSKAYA	31.54	302.4	6	20	0							
KIZYL-ARVAT	33.24	304.0	6	36	1	11	55	4				
TANGERANG	34.05	153.5	6	42K	0							7 57 PP
SHIRAZ	35.32	286.6	6	53A	0	12	17	-6	7 11			10 13 PP
TEHERAN	36.47	296.9	7	4A	1	12	42	1				
VLADIVOSTOK	37.23	50.8	7	9A	0	13	14	21				
SVERDLOVSK	39.06	332.9	7	25K	1							
GORIS	40.87	302.2	7	39A	0	13	45	-3				
MATUSIRO	40.95	62.4	7	39A	-1	13	44	-5				
KIROVOBAD	41.02	303.9	7	42A	1	13	50	0				
TIFLIS	42.31	305.2	7	53	2							
BAKURIANI	43.26	305.1	8	2	3							
MIZUSAWA	43.42	58.8	8	1	1							
YAKUTSK	44.84	24.1	8	12A	0							
Y.-SAKHLINSK	45.59	47.8	8	18A	0	15	3	7				
KSARA	49.22	294.0	8	46	0							10 45 PP
MOSCOW	49.84	323.0	8	49	-2	15	56	0				

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JERUSALEM	50.00	291.4	8 53	1			
SIMFEROPOL	50.38	308.6	8 54A	-1	16 4	0	
TIKSI	51.05	14.1	8 58A	-2	16 9	-4	
MAGADAN	53.05	33.0	9 14A	-1	16 40	0	
ISTANBUL UN.	54.16	303.7	9 23A	0			
PULKOVO	54.58	326.8	9 25A	-1			
APATITY	55.31	336.5	9 31A	-1	17 12	1	17 23 PS
VIBORG	55.50	327.8	9 33	0	17 14	1	
PETROPAVLOVK	56.47	41.7	9 38	-2			
KAJAANI	56.65	331.7	9 40A	-1			11 46 PP
HELSINKI	57.30	326.8	9 45	-1			
KHEYS	57.48	353.8	9 46A	-1	17 40	1	
NURMIJARVI	57.49	327.2	9 46A	-1			11 55 PP
SODANKYLA	57.78	335.4	9 48	-1			
KEVO	58.21	338.2	9 51A	-1	17 50	1	
ATHENS	58.53	300.6	9 53K	-1			
WARSAW	59.18	317.4	9 58A	-1	18 9	7	18 25 PS
SKALNATE PL.	59.82	313.8	10 3	0			12 6 PP
UMEA	59.87	330.8	10 3A	-1	18 11	0	
KRAKOW	59.97	314.9	10 3A	-1			12 54
BELGRADE	60.08	308.8	10 7	2			10 50 PCP
KIRUNA	60.20	335.5	10 5A	-1	18 21	6	
CHORZOW	60.55	315.2	10 7	-1			10 33
TROMSOE	60.96	337.5	10 10	-1			
UPPSALA	60.96	326.2	10 10A	-1		10 22	
RACIBORZ	61.08	315.0	10 11	-1			10 40 PCP
MUNDARING	61.14	156.6	10 12	0		10 26	
BRATISLAVA	61.99	312.9	10 16	-2			12 22
KARLSKRONA	62.17	322.0	10 18A	-1		10 30	
VIENNA-H.	62.47	313.1	10 22A	1			
PRUHONICE	63.43	315.2	10 28	0	18 58	2	
PRAGUE	63.49	315.3	10 31A	3			
PORT MORESBY	63.62	115.4	10 44K	15			
COPENHAGEN	63.98	321.7	10 31	0			
GOTEBORG	64.01	324.0	10 30A	-1			
LJUBLJANA	64.04	310.9	10 30A	-2			
KASPERSKA H.	64.17	314.4	10 32A	0			
COLLMBERG	64.22	316.8	10 33A	0			12 56 PP
MESSINA	64.83	302.2	10 36	-1	19 12	-1	
HALLE	64.84	317.1	10 38	1	19 26	13	
KONGSBERG	65.01	326.3	10 46A	8			
JENA	65.16	316.5	10 38	-1	19 16	-1	12 58 PP
LWIRO	66.94	255.9	10 51	1			
STUTTGART	67.03	314.5	10 51A	0			11 20
TUBINGEN	67.21	314.3	10 52	0			
HEIDELBERG	67.25	315.3	10 52A	0			
EBINGEN	67.35	314.0	10 50A	-3			
MUNSTER	67.40	318.2	10 53	0			
KARLSRUHE	67.54	314.9	10 55K	1			
BENSBERG	67.89	317.2	10 56A	0			11 33
STRASBOURG	68.05	314.6	10 57A	0	19 41	-11	17 6
CHILEKA	68.75	240.2	11 2K	1			
CHARTERS TS.	69.17	125.3	11 4	0			
ROSELEND	69.50	311.8	11 6	0			11 29
BESANCON	69.54	313.5	11 5	-1			
ISOLA	69.61	310.1	10 56	-11		11 17	
DOURBES	69.69	316.7	11 9	2			
PARIS	71.37	315.8	11 17	0			
GARCHY	71.43	314.1	11 27A	9			12 29
CLERMONT-FD.	71.84	312.6	11 20	0			12 9
DURHAM	72.01	322.6	11 21A	0	20 57	19	
ALERT	72.04	356.6	11 21	0			
KEW	72.30	319.0	11 24A	1			11 47
FOLINIERE	73.25	316.4	11 28	-1			
BROKEN HILL	73.32	244.9	11 30	1			
ADELAIDE	74.22	141.6	11 35K	1		11 50	
SCORESBY SD.	74.26	341.4	11 46	12			
BAGNERES	74.72	310.6	11 37	0			
BULAWAYO	76.26	239.9	11 47	1			
ALICANTE	76.83	306.2	11 49A	0			
MOULD BAY	77.17	7.4	11 50A	-1			
VALENTIA	77.89	321.8	11 56	1			
BRISBANE	78.31	127.6	11 57	0			
TOLEDO	78.83	308.7	12 2A	2		12 15	14 56 PP
ALMERIA	78.86	305.4	12 1A	1			12 38
COLLEGE	79.33	22.1	12 3	0			
TOOLANGI	79.94	139.6	12 7	1		12 22	
MALAGA	80.33	305.9	12 8	0			

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RESOLUTE	80.49	1.9	12 9A	0			
CANBERRA	80.61	136.0	12 11	1	12 26	12 33	*SP
KIMBERLEY	83.86	234.5	12 1	-25			
AVERROES	84.02	303.8	12 37K	10	13 1	13 30	*SP
COPPERMINE	85.30	10.0	12 33	-1			
PORT VILA	85.50	111.8	12 51A	16			
SITKA	89.10	23.7	12 54	2			
YELLOWKNIFE	90.27	12.0	12 58K	0			
MIRNY	91.24	179.6	13 17	15			
MAWSON	94.82	190.8				13 35	*SP
EDMONTON	98.91	15.1	13 38K	1			
HUNGRY HORSE	103.35	17.5	13 48	-9			
BLUE MTS.	105.52	21.2	14 7	777	18 21		
BOZEMAN	106.62	16.7	18 4	777		18 42	PP
SHASTA	107.24	26.8				18 38	PP
MINERAL	107.85	26.4	18 30	777			
CALISTOGA	108.89	28.1				18 52	PP
BERKELEY	109.67	28.3				23 6	
EUREKA	110.74	22.9	18 31	3	18 49	14 38	P
PRIEST	111.81	28.1				19 18	PP
UINTA BASIN	111.99	17.7	18 32	2		19 12	PP
BOULDER CITY	114.27	23.7	18 39	4		19 34	PP
TONTO FOREST	117.04	21.6	18 43	3		19 54	PP
ALBUQUERQUE	117.87	17.2	18 44	2		29 11	PKKP
TULSA	119.00	7.3	18 43	-1			
TUCSON	119.05	22.1	18 46	2	19 2		
CUMBERLAND	119.73	357.8	18 46	0		19 59	PP
WICHITA MTS.	119.78	10.1	18 47	1		20 4	PP
FUQUENE	146.73	333.5	19 40	4			
BOGOTA	147.64	333.5	19 44A	7			
CHINCHINA	147.92	336.4	19 43	5		23 12	PP
AREQUIPA	162.45	295.7	20 1	4	20 48		

JUNE 19 18.H 22.M 10.S EPICENTRE -3.62 153.42 DEPTH= 279.KM

A=-0.89257 B= 0.44654 C=-0.06263 D= 0.4474 E= 0.8943
G= 0.0560 H=-0.0280 K=-0.9980 HT= 7.1

DEPTH OF FOCUS= 0.039R

SE= 1.77

	DELTA DEG.	AZ. DEG.	P		O-C S	S			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
RABAU	1.38	245.0	0	40	-1							
PORT MORESBY	8.48	227.0	2	3K	3	3	39	5				
HONIARA	8.68	132.0	2	2A	-1	3	38	-1				
CHARTERS TS.	17.80	202.5	3	51	0	6	56	0				
GUAM	19.03	333.2	4	4	1	7	26	7				
KOUMAC	19.89	148.7	4	10	-2	7	40	5				
BRISBANE	23.65	181.4	4	46	-2						11	39
RIVERVIEW	30.14	183.8	5	46K	0	10	26	3				
CANBERRA	31.81	186.9	6	1K	0						8	45 PCP
ADELAIDE	34.05	201.9	6	20K	0						14	18 SS
TOOLANGI	34.57	191.1	6	24	0						7	50 *SP
TARRALEAH	39.02	188.2	7	3	2	12	26	-13				
MOORLANDS	39.06	187.3	7	3	1							
KARAPIRO	39.69	152.2	7	5	-2				8	3	9	7 PCP
CHATEAU	40.72	153.4	7	17A	2						8	24
TUAI	41.15	151.5	7	19	0						7	55
ABUYAMA	41.80	337.8	7	23A	-1							
WELLINGTON	42.12	155.9									16	50 SS
MATUSIRO	42.40	341.7	7	26	-3	13	18	-11				
MUNDARING	44.88	226.8	7	47	-2							
LEMBANG	45.71	264.0	7	55K	0	14	18	2	8	55	9	43 PP
HONG KONG	46.20	305.7	7	59	0	14	12	-11				
CANTON	47.25	306.2	8	9K	2							
VLADIVOSTOK	50.42	339.6	8	30	-1	15	22	0				
Y.-SAKHLINSK	51.30	350.6	8	36A	-2							
HONOLULU	53.53	60.2	8	56	2	16	8	4				
KIPAPA	53.65	60.1	8	56	1							
PEKING	55.26	325.6	9	6K	0	16	27	0	10	3	18	14 *SS
PETROPVLOVK	56.60	3.8	9	15K	-1							
KUNMING	56.85	303.1	9	19K	1	16	52	4			18	40 *SS
CHENG TU	58.15	309.6	9	26K	-1	17	5	0			18	49 *SS
PAOTOW	59.22	322.5	9	35	1	17	21	3				
LANCHOW	60.82	315.0	9	46K	1	17	41	2				

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MAGADAN	63.01	358.5	9 59	0	18 8	2					
YAKUTSK	67.93	348.2	10 29K	-1							
LHASA	68.16	303.8	10 34K	2	19 13	5					
WILKES	69.37	197.1	10 38	-1							
CAPE HALLETT	69.41	174.6	10 40	1							
CHATRA	70.67	299.9	10 49K	2							
SCOTT BASE	74.52	177.1	11 10	0							
MIRNY	75.25	201.1	11 13	-1	20 49	20					
TIKSI	76.79	352.2	11 21K	-1	20 45	0					
NEW DELHI	79.67	299.7	11 37K	-1							
COLLEGE	80.54	21.7	11 41	-1					16 18		
SEMIPALATNSK	82.14	321.8	11 50	-1							
ALMATA-2	82.36	314.3	11 53A	1							
LAHORE	82.61	302.3	11 53	0	21 45	0					
FRUNSE	84.25	313.5	12 2K	1							
WARSAK DAM	85.28	304.4	12 6	-1							
BYRD STATION	85.95	169.9	12 10	0							
SOUTH POLE	86.41	180.0	12 9	-3					12 47		
MAWSON	86.89	202.6	12 14K	0							
PARAISO	87.46	53.5	12 22	5							
CALISTOGA	87.55	51.2	12 9A	-8							
BERKELEY	87.71	52.0							22 22		
TASHKENT	87.96	311.4	12 20K	1							
LICK	88.15	52.6	12 23A	3							
MINERAL	88.49	49.6	12 21A	-1							
QUETTA	88.75	300.2	12 23K	0	22 27	-17					
PRIEST	88.81	53.9	12 24A	1							
PASADENA	90.69	56.0	12 33	1				13 11	13 40	*SP	
PENTICTON	90.73	40.8	12 32A	0							
BLUE MTS.	92.00	45.4	12 38K	0					30 34	PKKP	
EUREKA	92.74	50.8	12 41	-1				13 52	16 23	PP	
MOULD BAY	92.83	13.9	12 40	-2							
BOULDER CITY	93.52	54.3	12 46	1				13 52			
YELLOWKNIFE	94.09	27.7	12 47A	-1							
SVERDLOVSK	94.53	326.6	12 47A	-3							
EDMONTON	94.80	36.9	12 51K	0							
VANNOVSKAYA	96.40	307.6	12 57	-1							
TONTO FOREST	96.41	56.1	13 0	2				14 8	16 56	PP	
TUCSON	96.77	58.1	13 1	1							
UINTA BASIN	97.67	50.0	13 4	0	23 16	3			17 6	PP	
RESOLUTE	99.11	14.5	13 10K	-1							
ALBUQUERQUE	100.35	55.3	13 17	1					17 26	PP	
GOLDEN	100.92	50.4	13 19	0							
SHIRAZ	101.25	299.4	13 12	-8	23 29	-2			16 0		
WICHITA MTS.	106.82	54.9	13 46	777							
UMEA	111.04	339.7							19 35		
NURMIJARVI	111.32	335.5			24 0	-13			34 0	SS	
CUMBERLAND	117.09	51.7	18 12	0					28 39	PKKP	
UZHGOROD	118.84	325.2	18 16	1							
BULAWAYO	120.92	244.1	18 20K	1							
KIMBERLEY	121.15	233.3	18 16	-4							
BREBEUF	121.52	37.1							19 53		
COLLMBERG	122.12	331.8	18 22K	1							
PRUHONICE	122.22	329.9	18 23	1							
BROKEN HILL	122.57	250.4	18 23K	1							
KASPERSCHE H.	123.25	329.6	18 24	0							
LWIRO	124.34	264.8	18 28A	2							
LJUBLJANA	124.66	326.2	18 28	2							
BENSBERG	124.98	334.6	18 29	2							
GARCHY	129.53	334.1	18 37	1							
ISOLA	129.90	328.7	18 38	2					21 36	SKP	
LA PAZ	134.33	117.2						19 39			
TOLEDO	138.54	333.6	18 54	1					22 44	PP	
ALMERIA	140.19	329.2	18 58A	2					22 9		
MALAGA	141.25	331.0	18 50	-8							
AVERROES	145.47	331.0	19 29	24				20 39			

JUNE 19 23.H 1.M 53.S EPICENTRE 31.46 140.24 DEPTH= 37.KM

A=-0.6568° B= 0.54661 C= 0.51934 D= 0.6396 E= 0.7687
G=-0.3992 H= 0.3322 K=-0.8546 HT= 1.3

DEPTH OF FOCUS= 0.001R

SE= 3.95

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	DELTA DEG.	AZ. DEG.	P		O-C S	S			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
TORISIMA	0.98	176.7	0	13K	-5	0	21	-10				
HATIDYOZIMA	1.68	347.1	0	24	-4							
OSIMA	3.38	348.0	0	51A	-1	2	7	36				
MERA	3.47	354.5	0	51	-2						2	49
OMAESAKI	3.56	332.1	0	59	4	1	49	13				
AJIRO	3.70	345.4	0	53	-4						2	22
MISIMA	3.81	343.9	0	55	-3							
HAMAMATU	3.88	327.7	0	59	0	1	50	6				
YOKOHAMA	3.99	353.1	0	57	-4						2	54
TOKYO C.M.O.	4.23	354.6	1	5	1	1	59	6				
HONGO	4.26	354.9	1	10	6						3	26
SIOMISAKI	4.26	298.9	1	6	1	1	59	5				
TYOSI	4.28	6.7	1	11	6							
OWASE	4.28	308.5	1	2	-3						3	6
KOHU	4.43	342.0	1	7	0	2	12	14				
TU	4.49	317.0	1	18	10							
IIDA	4.52	334.2	1	9	1	2	16	16				
NAGOYA	4.60	324.4	1	5	-4	2	10	8				
TITIBU	4.61	348.3	1	12	3							
KAMEYAMA	4.63	318.0	1	11	1	2	6	3				
KUMAGAYA	4.73	351.6	1	10	-1							
KAKIOKA	4.76	359.5	1	9	-3	2	8	2				
GIHU	4.88	324.5	1	10	-3							
NARA	4.90	312.1	1	9	-5							
MITO	4.91	2.2	1	13	-1	2	21	11				
MAEBASI	5.02	349.2	1	16	1	2	38	25				
HIKONE	5.06	319.8	1	18	2	2	25	11				
OIWAKE	5.06	344.4	1	15	-1	2	23	9				
OSAKA	5.07	310.1	1	23	7	2	25	11				
WAKAYAMA	5.08	304.3	1	15	-1	2	11	-3				
UTUNOMIYA	5.09	356.7	1	13	-3	1	58	-16				
MATUMOTO	5.14	339.1	1	19	2						3	0
KYOTO	5.18	314.4	1	17	0	2	31	14				
ABUYAMA	5.18	312.2	1	12A	-6							
TAKAYAMA	5.30	332.8	1	21	2							
SUMOTO	5.32	304.1	1	15	-4	2	26	6				
KOBE	5.32	308.5	1	35	16	2	58	38				
MATUSIRO	5.34	342.2	1	17A	-3	2	29	8				
MUROTO	5.43	290.8	1	11	-10	2	16	-7				
TOKUSIMA	5.43	300.1									4	46
NAGANO	5.46	342.5	1	22	1						5	2
ONAHAMA	5.50	5.6	1	19	-3							
SHIRAKAWA	5.65	359.9	1	21	-3							
HUKUI	5.66	325.0	1	35	11							
MAIZURU	5.69	315.9									3	37
TOYAMA	5.80	335.1	1	32	6	2	41	9				
TAKADA	5.86	344.3	1	27	0	2	47	13				
TAKAMATU	5.93	300.4	1	27	-1	2	51	15				
KOTI	6.04	292.0	1	46	17	3	6	28				
ASHIZURI	6.27	283.5	1	46	13	3	11	27				
HUKUSIMA	6.28	1.7	1	30	-3							
TOTTORI	6.47	310.2	1	28	-8	2	40	-9				
WAZIMA	6.52	335.9	1	38	2							
NIIGATA	6.52	351.7	1	43K	7	3	28	38				
MATUYAMA	6.72	292.6	1	39	0	2	55	0				
UWAZIMA	6.74	287.2									3	32
AIKAWA	6.75	346.5	1	40	1							
YAMAGATA	6.77	0.8	1	36	-4							
SENDAI	6.82	4.4	1	44	4	3	18	20				
ISINOMAKI	7.01	7.0	1	35K	-8	2	55	-8				
HIROSIMA	7.18	295.9	1	43	-2							
MATSUE	7.19	305.5									2	18
SAKATA	7.43	357.6	1	53	4						3	57
SAIGO	7.44	311.3	2	4	15	3	42	29				
OOITA	7.50	285.9	1	43	-7						5	37
MIYAZAKI	7.53	275.8	2	7	17	3	36	21				
HAMADA	7.66	298.8				3	45	26			2	19
MIZUSAWA	7.69	5.2	1	59	6	4	22	63				
ASOSAN	7.90	282.9									5	41
KUMAMOTO	8.20	282.0	1	50	-10							
AKITA	8.24	359.3	2	11	11	3	45	12				
MORIOKA	8.26	5.0	2	7	7							
MIYAKO	8.29	9.3	2	5	4							
YAKUSIMA	8.42	265.6	2	1	-2							
HUKUOKA	8.59	286.9	2	28	23	4	11	29				
NAGASAKI	8.88	280.9				4	15	26				

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HATINOHE	9.11	6.2	2	7	-5			
AOMORI	9.35	2.5	2	22	6			
HAKODATE	10.34	2.2	2	25	-4			
MORI	10.62	1.3					2	55
URAKAWA	10.86	10.1	2	42	6	4	32	-6
SAPPORO	11.62	4.1	2	43	-4	5	17	21
KUSIRO	11.97	14.9	2	53	2	5	43	38
NEMURO	12.58	18.2	3	2	2			
VLADIVOSTOK	13.39	332.7	3	10K	0			
WAKKANAI	13.98	4.2	3	11	-7			
Y.--SAKHLINSK	15.66	6.3	3	32K	-8			
ZO--SE	16.30	273.7	3	53	5			
NANKING	18.26	277.5	4	14K	2	7	45	13
GUAM	18.39	166.0	4	13	-1	7	32	-3
PEKING	21.28	300.4	4	42	-4	8	34	-1
MANILA	24.22	230.7	5	18	3	9	41	13
HONG KONG	24.93	254.9	5	23	2	10	2	22
CANTON	25.27	257.4	5	26	1	9	56	11
PETROPVLOVK	25.35	26.5	5	24	-1			
PAOTOW	25.97	298.9	5	29	-2	10	10	13
SIAN	26.40	284.5	5	35K	0			
MAGADAN	28.98	11.1	6	2	3	10	54	8
LANCHOW	30.50	288.6	6	8	-4			
CHENG TU	30.96	278.1	6	13	-3	11	25	8
YAKUTSK	31.33	350.5	6	15K	-4			
IRKUTSK	33.38	319.1	6	35	-2			
KUMMING	33.50	268.7	6	39	1			7 59 PP
TIKSI	40.70	354.5	7	37	-2			
LHASA	42.12	280.7	7	49	-2	14	12	5
								9 25 PP
SHILLONG	42.63	274.7	7	56	1	14	17	2
HONIARA	44.83	151.8	8	15	2			
CHATRA	46.21	278.3	8	25	1			
PORT BLAIR	47.95	256.6	8	48	11			
BOKARO	48.41	275.1	8	44A	3	15	42	4
								10 31 PP
LEMBANG	49.20	225.0	8	44	-3	15	50	1
ALMATA-2	50.25	302.3	8	51	-4			10 48 PP
CHARTERS TS.	51.58	172.8	9	7	2	16	22	0
FRUNSE	52.31	302.1	9	13A	3			
DEHRA DUN	52.72	286.0	9	18	4			
NEW DELHI	53.99	284.3	9	19A	-4			
COLLEGE	54.36	30.0	9	23	-3			
LAHORE	55.37	288.7	9	28	-5			
HONOLULU	55.54	84.5	9	29	-5	17	38	23
KIPAPA	55.56	84.4				17	41	25
KHOROG	55.84	296.4	9	34	-2			
TASHKENT	56.52	301.4	9	39	-2	17	26	-2
MARSAK DAM	56.83	292.4	9	40	-3			
MADRÁS	57.87	265.8	9	53	2	18	2	16
KHEYS	57.90	348.9	9	48	-3			12 9 PP
SVERDLOVSK	58.76	320.8	10	4	7			
BRISBANE	59.73	167.1	10	7	3			
QUETTA	61.80	289.8	10	15K	-3	18	41	4
MOULD BAY	62.15	15.5	10	16	-4			
VANNOVSKAYA	65.76	300.8	10	43	-1			
COPPERMINE	66.53	23.6	10	45	-4			
KIZYL--ARVAT	66.63	302.7	10	55A	6	19	41	5
APATITY	67.38	336.5	10	51K	-3	19	40	-5
RESOLUTE	68.24	13.6	10	55A	-4			11 25 PCP
KEVO	68.31	339.9	10	58	-2	20	11	15
								13 27 PP
YELLOWKNIFE	69.13	28.7	11	1	-4			
SODANKYLA	69.73	337.8	11	6K	-2			13 38 PP
VICTORIA	71.03	44.3	11	16	0			
MOSCOW	71.17	324.3	11	17	0	20	34	4
KAJAANI	71.18	334.6	11	13	-4	20	20	-10
								13 43 PP
TEHERAN	71.58	301.0	11	22	2	20	43	8
PULKOVO	72.50	330.1	11	26K	1	20	40	-5
PENTICTON	72.89	42.4	11	24	-3			
KIROVOBAD	72.98	307.5	11	25	-3			
SHIRAZ	73.43	294.8	11	26A	-5	20	54	-2
								21 26 SKS
GORIS	73.50	306.4	11	29	-2			
TIFLIS	73.52	309.0	11	30	-1			
UMEA	73.98	336.4	11	32K	-2	20	58	-4
EDMONTON	74.26	36.7	11	35	0			14 18 PP
NURMIJARVI	74.41	332.4	11	34	-2	21	6	-1
								25 55 SS
SPOKANE	74.99	43.0	11	41	1			
MINERAL	75.98	51.2	11	46A	1			
CALISTOGA	76.16	53.2	11	55K	9			
BLUE MTS.	76.47	45.6	11	47	-1	21	41	11
KARAPIRO	76.49	152.0	11	50	2			22 25 PPS

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HUNGRY HORSE	76.57	41.3	11 46	-3				
SKALSTUGAN	76.74	338.8	11 47K	-3				
BERKELEY	76.75	53.7	11 47A	-3	21 37	4	14 35	PP
UPPSALA	77.53	334.2	11 51	-3	21 32	-9	21 44	SKS
SCORESBY SD.	77.55	354.0	11 52	-2	21 50	9		
SIMFEROPOL	78.63	315.9	11 58	-2	21 52	-1		
PRIEST	78.73	54.6	12 2K	1				
BOZEMAN	79.75	42.4	12 5	-1				
KARLSKRONA	80.87	332.2	12 17	5				
GOTEBORG	81.14	334.7	12 8	-5				
WARSAW	81.20	327.1	12 13	-1	22 24	4	22 31	SKS
PASADENA	81.50	55.2	12 16	1	22 30	7		
SALT LAKE C.	82.06	46.9	12 14	-4			13 50	
COPENHAGEN	82.45	333.2	12 23	3	22 37	5		
BOULDER CITY	82.81	52.2	12 23	1				
UZHGOROD	82.94	323.8	12 22	-1				
KRAKOW	83.16	325.9	12 28	4	22 41	1		
SKALNATE PL.	83.59	325.1	12 21	-5			13 37	
KSARA	83.61	305.8	12 30	4	22 50	6	15 39	PP
UINTA BASIN	83.73	46.2	12 25	-2	23 21	36	22 49	SKS
ISTANBUL UN.	83.95	314.8	12 26	-2				
RACIBORZ	83.96	326.7	12 26	-2			12 40	PCP
JERUSALEM	85.20	304.4	12 32	-2				
COLLMBERG	85.43	329.9	12 33	-2	23 8	6		
PRAGUE	85.70	328.4	12 39	2				
PRUHONICE	85.71	328.3	12 35	-2	23 4	-1		
HALLE	85.73	330.5	12 36	-1			15 55	PP
BRATISLAVA	85.81	325.8	12 37	0	23 28	22	15 58	PP
VIENNA-H.	86.10	326.2	12 49	10				
ABERDEEN	86.16	340.5					23 16	SKKS
TONTO FOREST	86.17	51.9	12 38	-1			12 48	16 2
SOPIA	86.23	318.8						28 4
JENA	86.31	330.3	12 39	-1	23 10	-1	16 3	PP
GOLDEN	86.67	44.7	12 47	6				
KASPERSCHE H.	86.76	328.1	12 40	-2			16 4	PP
TUCSON	87.66	53.3	12 47	1				
DURHAM	88.05	339.0	12 34	-14	23 31	4	16 24	PP
LJUBLJANA	88.55	325.6	12 56	6				
STUTTART	88.92	330.0	12 55	3	23 41	6		
ALBUQUERQUE	88.94	49.0	12 54	2				
ATHENS	89.05	315.0	12 54	1			23 21	
TRIESTE	89.21	325.7			23 26	-12		
UCCLE	89.31	333.8	12 57	3	23 44	5		
STRASBOURG	89.71	330.7	12 59K	3	23 39	-3	16 31	PP
DOURBES	89.78	333.2	12 59	3	23 48	5		
KEW	90.43	336.6	13 3	4	23 54	5	23 32	SKS
PARIS	91.63	333.6	13 8	3	24 8	8		
PAVIA	91.71	327.8	13 14	9			25 39	PS
AQUILA	91.79	323.6	13 7	1	23 41	-20	16 47	PP
ROSELEND	92.45	329.5	13 9	0				
ROME	92.58	323.8	13 7	-2	23 37	-31	16 49	PP
GARCHY	92.66	332.4	13 8	-2				
LUBBOCK	92.76	47.6	13 16	6			16 56	
MESSINA	93.63	319.5	13 9	-5	23 40	-37	26 6	PPS
WICHITA MTS.	94.01	45.0	13 15	-1			17 14	
TULSA	94.84	42.5	13 25	5			17 15	PP
CUMBERLAND	100.64	36.5	13 44	-2			17 49	
PALISADES	101.29	25.7	13 46	-3	24 34	10	14 58	25 36
TOLEDO	101.67	332.7	13 53	3	23 55	-30	18 2	PP
M. BOUR	129.44	330.9					21 14	PP
CHINCHINA	130.19	49.8	19 8	1			21 29	PP
CARACAS	130.82	36.4	19 7	-1	25 51	-21		
FUQUENE	131.03	47.5	19 14	6			22 46	PKS
BOGOTA	131.46	48.6					21 38	PP
N-LAZARVSKYA	131.75	200.4	19 11	1				
AREQUIPA	147.53	70.0	19 44	6				
LA PAZ	150.22	66.6	19 48	6			20 0	

JUNE 20 0.H 56.M 0.S EPICENTRE 36.34 144.52 DEPTH= 0.KM

A=-0.65751 B= 0.46863 C= 0.58997 D= 0.5804 E= 0.8143
G=-0.4804 H= 0.3424 K=-0.8074 HT= -0.4

SE= 2.27

DELTA	AZ.	P	O-C	S	O-C	*PP	SUPP.
DEG.	DEG.	M S	S	M S S	M S S	M S	M S

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ONAHAMA	2.98	282.9	0 49A	0	1 24	-2
TYOSI	3.04	259.3	0 49	-1	1 24	-4
MITO	3.27	271.9	0 52A	-1	1 30	-4
ISINOMAKI	3.29	310.3	0 54A	0	1 30	-4
SENDAI	3.47	304.8	0 57	1	1 37	-2
KAKIOKA	3.51	269.5	0 54	-3	1 30	-10
HUKUSIMA	3.53	294.7	0 57A	0	1 39	-1
SHIRAKAWA	3.54	284.0	0 58	1	1 39	-2
UTUNOMIYA	3.76	274.6	1 0	0	1 34	-12
YAMAGATA	3.83	301.1	1 2	1	1 45	-3
MIYAKO	3.87	329.4	1 3	1	1 45	-4
MIZUSAWA	3.87	317.0	1 4	2	1 57	8
TOKYO C.M.O.	3.92	261.8	1 2	-1	1 48	-2
YOKOHAMA	4.06	258.5	1 4	-1	1 52	-2
MERA	4.08	251.0	1 6	1		
KUMAGAYA	4.16	268.9	1 5	-1	1 50	-6
MORIOKA	4.27	322.7	1 9	1	1 56	-3
MAEBASI	4.40	272.4	1 8A	-1	2 20	18
TITIBU	4.42	266.9	1 9	-1		
OSIMA	4.47	251.0	1 9	-2	1 56	-8
SAKATA	4.52	305.9	1 15	4	2 5	0
AJIRO	4.60	255.3	1 9	-3	1 58	-9
NIIGATA	4.65	291.5	1 15	2		
MISIMA	4.69	256.6	1 6	-8		
HUNATU	4.74	261.5	1 14	0	1 58	-13
HATINOHE	4.80	331.6	1 16	1	2 7	-5
OIWAKE	4.82	271.7	1 16	1		
AKITA	4.86	315.4	1 33	17	2 22	8
KOHU	4.88	263.9	1 17	1	2 1	-13
HATIDYOZIMA	5.06	231.7	1 14	-5	2 6	-13
MATUSIRO	5.09	274.1	1 18A	-1	2 12	-8
NAGANO	5.10	275.6	1 21	2		
SHIZUOKA	5.17	256.5	2 19	59		
AIKAWA	5.28	290.4	1 24	2		
MATUMOTO	5.29	271.0	1 20	-2	2 21	-4
AOMORI	5.35	327.9	1 26	3	2 29	3
OMAESAKI	5.43	253.2	1 31	7		
IIDA	5.49	263.4	1 24	-1	2 23	-7
HAMAMATU	5.78	255.8	1 30	1	2 29	-8
TAKAYAMA	5.88	270.3	1 31	1		
TOYAMA	5.91	275.7	1 32	1	2 59	19
URAKAWA	5.96	347.4	1 33A	2	2 39	-2
HIROO	6.01	351.4	1 32	0		
HAKODATE	6.20	333.0	1 36	1	2 43	-4
WAZIMA	6.20	281.9	1 35	0		
NAGOYA	6.25	261.5	1 33	-3	2 42	-7
GIHU	6.36	263.8	1 37	0		
MORI	6.52	333.1	1 48	9	2 55	0
MURORAN	6.57	336.4			2 53	-3
KUSIRO	6.63	359.2	1 40	-1	2 52	-6
TOMAKOMAI	6.68	341.0			2 52	-7
KANEYAMA	6.73	259.6	1 43	1	2 57	-4
HIKONE	6.81	263.4	1 42	-1		
NEMURO	7.03	6.3	1 44K	-3	3 1	-7
SAPPORO	7.15	341.0	1 47	-1	3 8	-3
KYOTO	7.27	262.2	1 47	-3	3 16	2
NARA	7.28	259.4	1 49	-1		
ABUYAMA	7.44	261.3	1 50A	-2		
OSAKA	7.53	259.7	1 52	-2	3 11	-10
ASAHIKAWA	7.61	348.2	1 55K	0		
ABASHIRI	7.67	358.7	1 54K	-2	3 17	-7
WAKAYAMA	7.93	257.3	2 0	1	3 2	-29
TOKUSIMA	8.45	257.4				
TAKAMATU	8.79	259.8	2 9	-2		
WAKKANAI	9.32	347.6	2 22	3		
Y.-SAKHLINSK	10.76	353.4	2 36K	-2		
VLADIVOSTOK	11.84	308.7	2 52	-1	5 2	-5
CHANGCHUN	16.48	302.9	3 54	0	6 57	0
ZO-SE	20.09	261.7			8 22	3
PEKING	22.55	288.0	5 3	0	9 7	1
MAGADAN	23.58	8.0	5 5K	-8		
PAOTOW	27.23	289.5	5 51	4		
YAKUTSK	27.33	344.8	5 48K	0		
LANCHOW	32.67	281.8	6 36	0	11 49	-3
KUNMING	37.36	264.5	7 22	6		
COLLEGE	48.35	31.9	8 45	0		
ALMATA-2	50.81	299.7	9 5K	1		
FRUNSE	52.86	299.9	9 20K	0		
KHEYS	53.83	348.3	9 26	-1		

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CHARTERS TS.	56.14	178.0	9 49	5				
MOULD BAY	56.49	16.6	9 45	-1				
KHOROG	56.95	294.8	9 50	1				
TASHKENT	57.11	299.8	9 50	0	17 47	2		
SVERDLOVSK	57.31	319.5	9 52A	0				
WARSAK DAM	58.34	291.1	9 57	-2				
DUZHANBE	58.53	297.0	10 0	0				
RESOLUTE	62.64	14.9	10 27K	-1				
QUETTA	63.54	289.2	10 32	-2				
APATITY	64.33	336.6	10 38K	-2				
KEVO	64.96	340.1	10 43	-1				
ASHKABAD	66.18	300.4	10 52	1				
VANNOVSKAYA	66.35	300.5	10 53	0				
SODANKYLA	66.56	338.1	10 53A	-1			13 16	PP
KIZYL-ARVAT	67.01	302.5	10 57	0				
EDMONTON	68.23	39.1	11 3K	-1				
KAJAANI	68.29	335.0	11 4K	-1				
SPOKANE	69.02	45.7	11 10	1				
MOSCOW	69.28	324.6	11 9	-2				
SHASTA	69.50	54.1	11 12K	0				
PULKOVO	70.04	330.6	11 14K	-2				
MINERAL	70.20	54.1	11 15K	-2				
CALISTOGA	70.43	56.1	11 17K	-1				
BLUE MTS.	70.55	48.3	11 18	-1				
UMEA	70.91	337.2	11 20K	-1				
BERKELEY	71.05	56.7	11 21K	-1			32 24	
MURMIJARVI	71.71	333.1	11 25	-1	20 44	-1	14 4	PP
PARAISO	71.78	58.1	11 30	4				
HELSINKI	71.83	332.8	11 26	0				
BUTTE	72.69	45.4	11 30	-1				
KIROVOBAD	72.82	308.0	11 32K	0				
PRIEST	73.05	57.5	11 34A	0				
SKALSTUGAN	73.45	339.8	11 35	-1				
GORIS	73.46	307.0	11 36K	0				
TOOLANGI	73.54	179.2	11 44	8				
BOZEMAN	73.77	45.0	11 38	0				
BAKURIANI	73.99	310.1	11 40	1				
EUREKA	74.31	52.5	11 40	-1				
SHIRAZ	74.58	295.5	11 41A	-1	21 0	-18	12 16	14 38 PP
UPPSALA	74.66	335.3	11 42	-1				
PASADENA	75.85	58.0	11 49	-1				
BOULDER CITY	77.05	54.9	11 57	1				
UINTA BASIN	77.82	48.8	12 1	0			15 14	
KARAPIRO	79.28	155.5	12 17	8				
TONTO FOREST	80.40	54.5	12 15	0			12 24	15 18 PP
GOLDEN	80.72	47.2	12 17	1				
UZHGOROD	81.04	325.4	12 18	0				
KRAKOW	81.05	327.5	12 18	0			12 27	PCP
SKALNATE PL.	81.56	326.8	12 21	0				
TUCSON	81.94	55.9	12 22	-1				
WELLINGTON	82.07	157.5					12 57	
COLLMBERG	82.92	331.7	12 27K	-1			15 38	PP
ISTANBUL UN.	82.96	316.5	12 28	0				
ALBUQUERQUE	83.09	51.5	12 29	0				
PRUHONICE	83.36	330.1	12 30	0			15 30	PP
BRATISLAVA	83.69	327.7	12 33	1				
JENA	83.76	332.2	12 33	1			15 39	
KASPERSE H.	84.42	330.1	12 35	0				
JERUSALEM	85.30	306.2	12 41	1				
STUTTGART	86.38	332.2	12 45	0				
WICHITA MTS.	88.07	47.3	12 52	-1			14 7	
FAYETTEVILLE	89.64	43.8	13 0K	-1				
CUMBERLAND	94.61	38.8	13 22	-2			30 59	SS
TOLEDO	98.82	336.0			25 11	50	31 55	SS
HUANCAYO	136.78	66.3	19 17	-7				
LA PAZ	144.96	64.3	19 40	1				

JUNE 20 19.H 47.M 34.5 EPICENTRE 35.55 -3.74 DEPTH= 0.KM

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G= 0.5776 H=-0.0377 K=-0.8155 HT= -0.1

SE= 2.84

DELTA	AZ.	P	O-C	S	O-C	*PP	SUPP.
DEG.	DEG.	M S	S	M S S	M S S	M S	M S

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MALAGA	1.29	335.6	0	27	2			
GRANADA	1.63	3.9						0 32 PG
ALMERIA	1.66	37.9						0 30 PG
ALICANTE	3.83	42.1	1	2K	1	1	41	-6
TOLEDO	4.33	356.8	1	9K	1	1	55	-5
								1 56 SS
								1 27 PG
LISBON	5.36	307.8	1	18	-5	2	14	-12
TORTOSA	6.23	31.1	2	8	33			
BAGNERES	8.09	20.7	2	0	-1	3	22	-13
CLERMONT-FD.	11.46	24.9						
ISOLA	11.95	40.6	2	56	2			
								1 45 PG
								3 23 SG
								2 14 P*
								4 18
								7 49
GARCHY	12.78	21.4	3	3	-2			
ROSELEND	12.82	34.7	3	8	2			
FOLINIERE	13.43	9.3	3	9	-5			
PARIS	14.03	17.2	3	27	5			
ROME	14.15	58.5				6	26	24
								3 16 PP
AQUILA	14.95	57.8						
MESSINA	15.66	74.6	3	45	2	6	46	8
KEW	16.10	7.7				7	4	16
UCCLE	16.33	18.5						
STUTTART	16.33	32.0	3	52	0			
								8 6
TRIESTE	16.65	47.4	3	54	-2			
BENSBERG	17.30	23.7	4	7	3			
LJUBLJANA	17.31	47.2	4	4	0			
KASPERSKE H.	18.60	37.8	4	18	-2			
JENA	18.94	31.0	4	29	5	7	56	3
								5 8
DURHAM	19.28	3.8						
HALLE	19.52	30.4	4	27	-4	7	52	-9
VIENNA-H.	19.55	43.4	4	32	0	7	53	-13
PRUHONICE	19.63	37.1	4	31	-1			
COLLMBERG	19.82	32.2	4	33	-2			
BRATISLAVA	19.92	44.3	4	34	-2	8	33	18
RACIBORZ	21.57	40.9	4	52	-1			
ABERDEEN	21.66	2.4	4	56	2			
ATHENS	22.10	75.6	4	57	-1			
SKALNATE PL.	22.23	44.8	4	45	-14	8	53	-7
								11 39
								5 11
								11 24
KRAKOW	22.49	42.6	5	2	0			
COPENHAGEN	22.99	23.8	5	8	1			
GOTEBORG	24.53	20.5	5	22	0			
UPPSALA	28.00	23.1	5	52	-2			
SKALSTUGAN	29.74	14.4	6	9	-1			
UMEA	31.87	20.0	6	27A	-2			
KAJAANI	34.35	24.0	6	48	-2			
SODANKYLA	36.30	19.3	7	5	-2			
TROMSOE	36.33	13.2	7	6	-1			
APATITY	38.37	21.9	7	32A	8			
								11 36
								7 20
SHIRAZ	47.22	80.5	8	36A	0	16	3	34
LWIRO	48.37	134.0	8	46	1			
BREBEUF	52.50	303.7	9	17K	0			
RESOLUTE	56.39	341.4	9	44	-1			
QUETTA	58.46	73.5	9	58K	-2			
MOULD BAY	61.47	345.8	10	19	-1			
BULAWAYO	63.31	145.8	10	32A	-1			
CUMBERLAND	64.55	296.7	10	40	-1			
KIMBERLEY	69.38	153.4	11	11A	0			
FAYETTEVILLE	70.47	300.8	11	26	8			
TULSA	71.68	301.3	11	24A	-1			
EDMONTON	72.59	323.7	11	30A	-1			
WICHITA MTS.	74.26	301.5	11	40	0			
LARAMIE	75.25	310.3	11	46	0			
HUNGRY HORSE	75.96	319.8	11	43	-7			
GOLDEN	76.03	308.9	12	0	9			
PENTICTON	78.19	323.0	12	3	1			
UINTA BASIN	78.29	311.3	12	3A	0			
ALBUQUERQUE	79.48	305.4	12	11	1			
BLUE MTS.	79.93	318.5	12	12	0			
								12 27
EUREKA	82.66	313.8	12	26	0			
TONTO FOREST	83.04	307.3	12	30	2			
TUCSON	84.01	305.5	12	34	1			
								12 48
								12 37 PCP

JUNE 20 22.H 46.M 18.5 EPICENTRE -27.92-176.49 DEPTH= 40.KM

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G= 0.4649 H= 0.0285 K=-0.8849 HT= 2.5

DEPTH OF FOCUS= 0.001R

SE= 2.24

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	DELTA	AZ.	P		O-C	S O-C			*PP		SUPP.	
	DEG.	DEG.	M	S	S	M	S	S	M	S	M	S
RAOUL ISLAND	1.83	223.2	0	30	0							
ONERAHI	11.02	222.5	2	44	6						3	15
KARAPIRO	12.01	211.8	2	47	-5							
TUAI	12.08	204.4				4	54	-13			3	15
CHATEAU	13.06	208.5	3	4	-1	5	26	-4			3	28
AFIAMALU	14.61	18.4	3	17K	-9	5	48	-19				
WELLINGTON	15.13	206.0				6	3	-16			3	20
NOUMEA	16.43	286.1	3	53	4						10	33
PORT VILA	17.27	302.7	4	3A	3							
KOUMAC	18.99	288.5	4	24K	3							
ROXBURGH	20.84	209.0									4	40
BRISBANE	27.19	263.9	5	42	0						7	45
RIVERVIEW	28.32	249.9	5	53	1						6	44 PP
HONIARA	28.82	305.1	5	55A	-2	11	2	20				
CANBERRA	30.19	247.1	6	8	-1	11	2	-2				
SAVANNAH	32.59	235.4	6	30	0							
MOORLANDS	32.75	234.1	6	31	0							
TOOLANGI	33.21	243.3	6	34	-1						9	17 PCP
CHARTERS TS.	34.81	274.7	6	49	0	12	27	11				
RABAUL	38.03	302.6	7	12	-4	13	20	15				
ADELAIDE	38.60	248.0	7	20K	-1	13	42	28				
PORT MORESBY	38.86	291.2	7	22	-1							
CAPE HALLETT	45.03	185.7	8	15	2							
SCOTT BASE	50.60	184.5	8	58	1							
DARWIN	51.44	276.4	9	0	-3							
HOMOLULU	52.06	21.9	9	15	7	16	36	9			19	13 SCS
KIPAPA	52.20	21.9	9	9	0	16	36	7				
BYRD STATION	57.13	170.0	9	44	-1							
MUNDARING	57.61	248.2	9	46	-2							
SOUTH POLE	62.24	180.0	10	19	-1						12	18
MIRNY	64.93	206.2	10	37	-1							
ARGENTINE I.	73.64	156.0	12	31	60							
LEMBANG	74.38	270.5	11	35K	0							
MAWSON	75.08	200.0	11	39K	0	21	14	1				
BAGUIO CITY	75.19	297.9	11	39	-1							
TANGERANG	75.56	270.6	11	41K	-1							
MATUSIRO	76.99	324.0	11	50	0	21	32	-2				
ABUYAMA	77.15	321.2	11	51A	0							
N-LAZARVSKYA	81.41	182.8	12	13K	-1							
PRIEST	82.60	42.5	12	22K	2							
PASADENA	82.81	45.3	12	22	1	22	41	6				
BERKELEY	82.84	40.3	12	22A	0	22	42	7	12	16	12	54 PCP
Y.-SAKHLINSK	83.18	333.2	12	23A	0	22	48	9				
CALISTOGA	83.19	39.6	12	24	1							
PETROPAVLOVK	83.46	345.2	12	25	0	22	49	7				
HONG KONG	83.49	299.3	12	24	-1	22	53	11				
ZO-SE	83.51	310.1	12	25A	0							
CANTON	84.56	299.5	12	31A	1							
SHASTA	84.72	38.2	12	32K	1						13	4
VLADIVOSTOK	85.12	324.8	12	31	-2							
NANKING	85.72	309.6	12	37A	1							
TUCSON	86.46	50.7	12	40	0							
MEDAN	87.10	275.6	12	42	-1							
TONTO FOREST	87.37	48.8	12	46	2	23	13	-7	12	56	16	26 PP
EUREKA	87.59	42.4	12	44	-1							
CHANGCHUN	89.08	322.0	12	52A	0							
VICTORIA	89.68	32.1	12	55	0							
BLUE MTS.	90.28	37.7	12	58	0	23	54	7			29	52 SS
SALT LAKE C.	90.87	43.3	12	44	-17						13	12
ALBUQUERQUE	90.99	50.5	13	1	0				13	15		
UINTA BASIN	92.00	44.7	13	6	0	24	12	10			16	33 PP
PENTICTON	92.05	33.3	13	6	0							
PEKING	92.10	314.8	13	7A	1	23	38	-25			24	18 S
SPOKANE	92.14	35.5	13	11	4							
BUTTE	93.61	38.8	13	13	0							
SIAM	93.80	306.8	13	14A	0							
KUNMING	93.90	296.3	13	16A	1							
BOZEMAN	94.25	39.8	12	52	-24							
GOLDEN	94.32	47.1	13	17	1							
AREQUIPA	95.08	111.5	13	22	2							
COLLEGE	95.14	11.9	13	20	0							
CHENG TU	95.59	301.6	13	24A	2							
WICHITA MTS.	96.39	54.1	13	25	-1	23	52	-6			13	48
EDMONTON	97.66	32.6	13	30	-2							
LA PAZ	97.81	113.2	13	35	3						26	20
LANCHOW	98.31	306.3	13	35	0							

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TULSA	98.97	54.2	13 49	11	24 17	6				17 47 PP
CHINCHINA	101.91	90.7								24 36 PP
BOGOTA	103.12	91.7			24 48	17				18 23 PP
CUMBERLAND	106.34	58.1								27 48
MOULD BAY	109.71	12.3	18 26	777						
CARACAS	112.06	89.6	18 6	-25						28 54 PS
RESOLUTE	114.49	16.8	18 35K	-1						
NEW DELHI	116.12	289.9	18 39K	0						
PALISADES	116.76	55.8			25 33	5				
ALMATA-2	119.86	306.0	18 47K	1						
KIMBERLEY	120.08	201.6	18 39K	-8						
ALERT	120.62	8.0	18 47	-1						
WARSAK DAM	122.29	294.3	18 50	-1						
QUETTA	125.14	288.7	18 58	2			19 10			
DUZHANBE	125.42	299.1	18 58	1						
TASHKENT	125.45	302.5	18 58	1						
BULAWAYO	126.41	209.7	19 0K	1						
CHILEKA	127.01	219.0	19 1	1						
SVERDLOVSK	130.78	322.4	19 7	0						
BROKEN HILL	131.43	213.0	19 10	2						
ASHKABAD	133.48	297.0	19 14	2						
KIZYL-ARVAT	135.18	298.7	19 21	6						
KEVO	135.98	348.5	19 17	0						21 52 PP
APATITY	136.44	343.9	19 18K	0						
SHIRAZ	137.27	284.5	19 15	-4						22 52 PKS
TROMSOE	137.31	352.1	19 19	0						
SODANKYLA	138.11	346.8	19 18	-3						22 7
TEHERAN	138.91	293.3	19 23	1						23 1 PKS
KAJAANI	140.64	343.5	19 19	-6						21 57 PP
LWIRO	141.38	223.1	19 23	-4						23 39
UMEA	142.50	347.9	19 24A	-5						22 31 PP
KIROVOBAD	142.76	301.3	19 26K	-3						
GORIS	142.87	299.4	19 25K	-4						
MOSCOW	142.99	328.2	19 25	-5						
PULKOVO	143.26	337.6	19 27	-3						
TIFLIS	143.76	303.3	19 31	0						
SKALSTUGAN	143.88	353.4	19 28	-3						
NURMIJARVI	144.40	342.1	19 30	-2						21 50 PP
HELSINKI	144.60	341.6	19 31	-1						
UPPSALA	146.65	347.1	19 36A	0						22 4
BERGEN	147.50	358.3	19 43	6						
GOTEBORG	149.64	351.0	19 46A	5						
KARLSKRONA	150.48	346.3	19 55	13						20 18
COPENHAGEN	151.52	349.4	19 51A	8						
JERUSALEM	152.28	285.8	19 54K	9						
WARSAW	152.41	336.4	19 41	-4						20 2 PKP2
DURHAM	152.92	6.5	19 56	11						
KRAKOW	154.59	334.9	19 50	2						20 10 PKP2
SKALNATE PL.	155.17	333.3	19 52	4						23 58 PP
RACIBORZ	155.19	337.1	19 49	1						20 16 PKP2
ISTANBUL UN.	155.36	308.7								20 15 PKP2
COLLMBERG	155.57	345.5	19 50K	1	26 45	-4				
HALLE	155.61	347.2	19 50	1						20 16 PKP2
JENA	156.22	347.3	19 49	-1						24 0 PP
KEW	156.30	6.0	19 51	1						20 20 PKP2
PRAGUE	156.36	342.3								20 19 PKP2
PRUHONICE	156.41	342.0	19 50	0						27 12 SS
BENSBERG	156.82	354.1	20 21	30						
BRATISLAVA	157.19	336.1	19 52	1						23 58 PP
VIENNA-H.	157.38	337.3	19 53	2						20 26 PKP2
KASPERSCHE H.	157.45	342.6	19 53K	2						24 0 PP
BELGRADE	158.38	325.7	19 53K	0						21 1 PKP2
STUTTGART	158.71	349.4	19 53	0						20 47 PKP2
FOLINIERE	158.95	7.4								20 30 PKP2
STRASBOURG	159.11	352.1	20 6	12						20 50 PKP2
LJUBLJANA	159.92	337.2	19 55	1						20 36 PKP2
ATHENS	160.34	305.8	19 54	-1						
TRIESTE	160.53	338.0	20 37	42						24 26 PP
BESANCON	160.61	354.9								20 45 PKP2
GARCHY	160.67	0.9	19 57K	2						
ROSELEND	162.09	352.9								20 42 PKP2
AQUILA	163.51	333.4	19 58	0						24 32 PP
ISOLA	163.53	351.0								20 51 PKP2
ROME	164.25	334.6	20 44	45						24 42 PP
MESSINA	165.63	318.5	19 59	-1						24 46 PP
TOLEDO	166.53	25.8	20 4K	3	27 11	12				24 52 PP
MALAGA	168.97	35.3	20 5	3						25 7 PP
GRANADA	168.99	31.2	21 39	97						25 24 PP
ALICANTE	169.08	16.8	20 5K	3						

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PRIEST	74.96	52.5	11 46A	1					
UINTA BASIN	77.23	42.9	11 58	0				32 46	
BRISBANE	77.56	159.9	12 2	2				12 38	
PASADENA	77.79	52.3	12 0	-1					
BOULDER CITY	78.12	48.9	12 4	1					
LARAMIE	78.20	39.8	12 2	-1					
GOLDEN	79.61	40.6	12 11	0					
TOMTO FOREST	81.24	47.6	12 21	1			12 32	15 27	PP
ALBUQUERQUE	83.02	44.0	12 30	1					
TUCSON	83.09	48.6	12 29	0					
TOLEDO	83.77	326.6	12 32K	-1					
LAWRENCE	84.37	34.2	12 35	-1					
WICHITA MTS.	86.71	38.7	12 48	1	23 25	1		48 21	SKKKS
TULSA	86.83	36.1	12 47A	-1	23 25	0			
CUMBERLAND	90.80	28.8	13 5	-2				25 8	
LA PAZ	145.09	32.6	19 42	2					

JUNE 21 15.H 26.M 30.S EPICENTRE 25.13 92.09 DEPTH= 47.KM

A=-0.03298 B= 0.90583 C= 0.42235 D= 0.9993 E= 0.0364
G=-0.0154 H= 0.4221 K=-0.9064 HT= 3.3

DEPTH OF FOCUS= 0.002R

SE= 2.06

	DELTA DEG.	AZ. DEG.	P		O-C S	S			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
SHILLONG	0.48	336.0	0	13	1							
CHITTAGONG	2.77	185.1	0	40	-3							
TOCKLAI	2.91	55.7	0	38	-7							
CALCUTTA	4.28	233.5	1	1	-3	1	44	-10				
LHASA	4.59	348.5	1	11A	2	2	5	4				
CHATRA	4.74	292.0	1	13A	2	2	6	1			1 21	PP
BOKARO	5.87	258.6	1	31		2	27	-7			3 22	
KUNMING	9.66	87.8	2	24	5							
VISHAKHAPTNM	11.01	229.7	2	35K	-3	4	37	-3				
CHENG TU	11.89	59.8	2	50	0	4	55	-7				
DEHRA DUN	13.46	295.7				5	28	-12				
NEW DELHI	13.72	287.8	3	10K	-4	5	32	-14			3 21	PP
SEHORE	13.84	265.0	3	18	3	5	33	-15				
HYDERABAD	14.83	241.5	3	40	12	6	28	16				
LANCHOW	14.84	40.1	3	28A	0	6	6	-6				
MADRAS	16.48	225.1	3	45K	-4	6	40	-10			3 57	PP
LAHORE	16.88	296.3	3	53	-1							
SIAN	17.20	54.2	3	59K	1	6	59	-8				
POONA	18.15	252.4	4	33A	23	8	7	39			4 57	PP
BOMBAY	18.90	254.7	4	43	24						9 56	
CANTON	19.51	91.5				7	57	-1				
WARSAK DAM	19.90	301.1	4	31	1	8	5	-1				
HONG KONG	20.41	93.4	4	39	3	8	20	3				
KHOROG	21.39	310.0	4	47A	1							
PAOTOW	21.49	39.8	4	46A	-1	8	38	1				
ALMATA	21.94	329.3	4	52A	1							
FRUNSE	22.76	325.2	5	1A	2	9	12	12				
QUETTA	22.81	288.4	5	0	0	9	6	5				
NANKING	24.40	67.4	5	15A	0	9	41	12				
TASHKENT	24.88	316.1	5	21	1	9	47	10				
PEKING	25.04	47.7	5	23	2	9	43	3				
ZO-SE	26.30	70.3	5	30	-3	9	56	-4				
SEMIPALATNSK	26.84	343.1	5	38A	0							
BAGUIO CITY	27.97	102.5	5	52	4							
IRKUTSK	28.65	15.8	5	55A	1	10	44	6				
ASHKABAD	31.29	302.3	6	18	0							
VANNOVSKAYA	31.48	302.2	6	22	3							
CHANGCHUN	32.84	47.0	6	31	0							
KIZYL-ARVAT	33.18	303.8	6	35A	1	11	58	9				
SHIRAZ	35.30	286.4	6	52A	0				7 21		17 6	SCS
TEHERAN	36.42	296.7	7	3A	1							
VLADIVOSTOK	37.11	51.0	7	5A	-3							
SVERDLOVSK	38.93	332.8	7	25K	2							
GORIS	40.81	302.0	7	40A	2							
MATUSIRO	40.86	62.5	7	38	-1	13	45	-2				
KIROVOBAD	40.95	303.7	7	40A	0							
TIFLIS	42.24	305.1	7	52	2							
BAKURIANI	43.19	304.9	8	0A	2							
YAKUTSK	44.69	24.2	8	10A	0							

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Y.-SAKHLINSK	45.46	47.9	8 16A	0			
KSARA	49.18	293.9	8 46	1			
MOSCOW	49.73	322.9	8 50A	0	15 55	1	
JERUSALEM	49.96	291.3	8 52A	1			
TIKSI	50.90	14.2	8 57A	-1			
ISTANBUL UN.	54.09	303.6	9 22A	0			
PULKOVO	54.46	326.8	9 25A	0			
APATITY	55.18	336.4	9 30A	0			
VIBORG	55.38	327.8	9 32	0			
PETROPAVLOVK	56.33	41.8	9 36	-2			
KAJAANI	56.52	331.6	9 38A	-2			10 35 PCP
HELSINKI	57.18	326.8	9 44A	-1			
KHEYS	57.33	353.7	9 46A	0			
NURMIJARVI	57.37	327.1	9 45A	-1	17 52	15	11 53 PP
SODANKYLA	57.65	335.4	9 47A	-1			11 52 PP
KEVO	58.07	338.2	9 50A	-1			11 5
UZHGOROD	58.41	313.0	9 53	0			
UMEA	59.75	330.8	10 1A	-1			
KRAKOW	59.87	314.8	10 2	-1			10 39
BELGRADE	60.00	308.7	10 2	-2			10 49 PCP
KIRUNA	60.06	335.4	10 4A	-1			
TROMSOE	60.82	337.4	10 9	-1			10 27 PCP
UPPSALA	60.84	326.2	10 9A	-1			
MUNDARING	61.28	156.7	10 9	-4			
KARLSKRONA	62.06	322.0	10 18A	0		10 24	
SKALSTUGAN	63.29	330.5	10 25A	-1			
PRAGUE	63.39	315.2	10 27	0			
PORT MORESBY	63.66	115.5	10 42A	13			
GOTEBORG	63.90	323.9	10 29A	-1			
LJUBLJANA	63.96	310.8	10 30	-1			11 6
KASPERSKE H.	64.08	314.3	10 30A	-1			
COLLMBERG	64.12	316.8	10 31	-1			12 55 PP
TRIESTE	64.56	310.5	10 34	0			
HALLE	64.74	317.1	10 35	-1			11 9 PCP
MESSINA	64.76	302.1	10 35	-1	19 10	-1	
JENA	65.06	316.5	10 37	-1			13 3 PP
STUTTGART	66.93	314.5	10 50	0		11 2	
MUNSTER	67.30	318.1	10 53	1			
BENSBERG	67.79	317.1	10 54	-1			
STRASBOURG	67.95	314.5	10 56A	0			11 36 PCP
CHILEKA	68.85	240.1	11 1A	-1			
ROSELEND	69.42	311.7	11 6	1			
ISOLA	69.53	310.1	11 5A	-1			
DOURBES	69.59	316.6	11 6	0			
GARCHY	71.34	314.1	11 17	0			
CLERMONT-FD.	71.75	312.5	11 19	0			12 3
ALERT	71.89	356.6	11 20A	0			
KEW	72.20	319.0	11 22	0			
FOLINIERE	73.15	316.3	11 27	0			
BROKEN HILL	73.41	244.9	11 28A	-1			
ADELAIDE	74.33	141.7	11 33A	-1		11 48	
BAGNERES	74.64	310.6	11 35	-1			
BULAWAYO	76.36	239.9	11 45A	-1			
BRISBANE	78.39	127.7	12 11	14			
TOLEDO	78.74	308.7	11 59A	0		12 15	
COLLEGE	79.17	22.1	12 1	0			15 2 PP
TOOLANGI	80.04	139.6	12 6	0		12 20	13 7
MALAGA	80.26	305.9	12 7A	0			
RESOLUTE	80.33	1.9	12 7A	-1			
CANBERRA	80.70	136.0	12 12	2		12 24	
KIMBERLEY	83.97	234.5	12 24A	-2			
COPPERMINE	85.14	10.0	12 32	0			
EDMONTON	98.75	15.1	13 36A	0			
EUREKA	110.59	22.9	14 33	-234			18 30 PKP
UINTA BASIN	111.83	17.7	18 25	-5			19 11 PP
TONTO FOREST	116.88	21.6	18 42	3			19 52 PP
TUCSON	118.89	22.1	18 45	2			
CUMBERLAND	119.57	357.8	18 41	-4			
WICHITA MTS.	119.62	10.1	18 46	1			20 12 PP
BOGOTA	147.51	333.6	19 42	6			
LA PAZ	159.63	291.1	19 53	0			

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JUNE 23 3.H 49.M 34.5 EPICENTRE -29.74-177.71 DEPTH= 52.KM

A=-0.86900 B=-0.03475 C=-0.49359 D=-0.0400 E= 0.9992
G= 0.4932 H= 0.0197 K=-0.8697 HT= 1.9

DEPTH OF FOCUS= 0.003R

SE= 3.01

	DELTA DEG.	AZ. DEG.	P		O-C S	S			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
RAOUL ISLAND	0.52	339.5	0	12	-2							
ONERAHI	8.97	225.9	2	14	4							
KARAPIRO	9.91	212.7	2	26	3							
TUAI	9.98	203.8	2	16	-8	4	0	-15				
CHATEAU	10.95	208.7	2	35	-2	4	41	2				
WELLINGTON	13.03	205.9	3	9	4	5	11	-18			13	4
KAIMATA	15.46	211.5	3	41	5	6	9	-17				
GEBBIES PASS	15.91	206.3	3	43	1	6	15	-22				
NOUMEA	16.04	293.8	3	49	5							
AFIAMALU	16.68	20.5	3	45	-7	6	50	-4			6	1
KOUMAC	18.67	295.2	4	19	3							
ROXBURGH	18.73	209.5	4	11	-6						4	36
BRISBANE	25.99	267.9	5	31	1							
RIVERVIEW	26.73	253.2	5	37K	0						11	41 SSS
CANBERRA	28.53	250.0	5	52	-1						12	34 SSS
CHARTERS TS.	33.94	278.1	6	39	-1	12	1	1				
ADELAIDE	36.95	250.3	7	5K	-1						15	44 SSS
RABAU	38.17	305.9	7	14	-2						18	34
PORT MORESBY	38.57	294.4	7	19	0							
CAPE HALLETT	43.12	185.4	7	58	1							
DARWIN	50.61	278.6	8	53	-3							
HONOLULU	54.15	22.7				17	1	8			24	35
KIPAPA	54.28	22.7	9	24	1	17	11	16			24	38
BYRD STATION	55.53	169.6	9	31	-1							
MUNDARING	55.96	249.7	9	32	-3	18	4	46				
MIRNY	62.83	206.7	10	19	-4							
ARGENTINE I.	72.42	156.1	11	22	-1							
MAWSON	73.01	200.4	11	25A	-1							
BAGUIO CITY	75.11	299.0	11	32	-6							
MATUSIRO	77.84	325.0	11	52	-2	21	41	0				
PARAISO	83.79	41.9	12	32	7							
ZO-SE	83.87	310.9	12	25	0							
Y.-SAKHLINSK	84.33	334.0	12	34A	6							
CANTON	84.54	300.3	12	28A	-1							
PRIEST	84.66	43.0	12	32A	3							
BERKELEY	84.92	40.9	12	31A	0							
PETROPVLOVK	84.95	345.9	12	32K	1							
CALISTOGA	85.27	40.1	12	32A	0							
NANKING	86.06	310.4	12	36A	0							
SHASTA	86.81	38.8	12	41K	1							
MINERAL	87.00	39.4	12	42	1							
BOULDER CITY	88.12	46.2	12	49	3							
TUCSON	88.44	51.2	12	48	0							
TONTO FOREST	89.37	49.4	12	53	1				13	6	16	23 PP
EUREKA	89.65	43.0	12	54	0							
CHANGCHUN	89.86	322.6	12	54	-1							
SEATTLE	91.71	33.8	13	2	-1							
BLUE MTS.	92.37	38.2	13	5	-1						16	40 PP
PEKING	92.63	315.3	13	7	0							
ALBUQUERQUE	92.97	51.2	13	9	0				13	23		
UINTA BASIN	94.04	45.3	13	14	0	24	31	14			17	14 PP
AREQUIPA	95.40	112.3	13	22	2							
COLLEGE	97.14	12.4	13	27	-1							
LA PAZ	98.06	114.1	13	42	10							
WICHITA MTS.	98.32	54.8	13	33	0						30	3 PKKP
YAKUTSK	100.72	337.6	13	43	-1							
TULSA	100.89	54.9				24	19	1				
TIKSI	107.69	344.5	17	31	777							
CUMBERLAND	108.21	59.0									34	22 SS
MOULD BAY	111.72	12.7	18	27	-2							
NEW DELHI	115.72	289.5	18	37A	0							
RESOLUTE	116.54	17.1	18	37K	-1							
PALISADES	118.66	56.9				25	37	5				
ALMATA-2	120.04	305.4	18	43K	-2							
ALERT	122.57	8.1	18	49K	-1							
BULAWAYO	124.30	210.3	18	54	1							
QUETTA	124.69	287.9	18	54K	0							
CHILEKA	124.92	219.4	18	54	-1							
BROKEN HILL	129.32	213.5	19	4K	1							

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SVERDLOVSK	131.55	321.3	19 6	-1	
VANNOVSKAYA	133.52	295.6	19 13	2	22 43 SKP
SHIRAZ	136.65	282.9	19 14K	-3	21 54
KEVO	137.53	347.6	19 9	-9	
APATITY	137.87	342.8	19 18	-1	
TROMSOE	138.95	351.2	19 14	-7	
LWIRO	139.32	223.2	19 21	-1	22 14 PP
SODANKYLA	139.62	345.7	19 13	-9	
KIRUNA	140.38	349.3	19 18	-5	
KAJAANI	142.05	342.1	19 21	-5	23 3 PKS
TIFLIS	143.82	301.0	19 28	-1	
MOSCOW	143.93	326.2	19 28	-2	
UMEA	144.04	346.5	19 19A	-11	41 45 SS
VIBORG	144.33	337.9	19 32	2	
PULKOVO	144.51	335.8	19 28	-3	
BAKURIANI	144.77	301.2	19 31	0	
SKALSTUGAN	145.55	352.1	19 32A	-1	
NURMIJARVI	145.78	340.4	19 32A	-1	22 52 PP
HELSINKI	145.96	339.9	19 33A	0	
UPPSALA	148.15	345.3	19 38A	1	
SIMFEROPOL	150.72	310.0	19 47	6	
KSARA	151.23	286.9	19 49	7	23 29 PP
GOTEBORG	151.25	349.2	19 46A	4	
JERUSALEM	151.69	282.5	19 49	7	
KARLSKRONA	151.96	344.1	19 53A	10	
COLLMBERG	157.03	342.6	19 50	1	20 20 PKP2
HALLE	157.10	344.4	20 14	24	
JENA	157.72	344.4	19 50	0	24 14 PP
PRUHONICE	157.76	338.8	20 3	13	20 25 PKP2
BENSBERG	158.49	351.6	20 26	35	
VIENNA-H.	158.59	333.6	19 51	0	20 30 PKP2
KASPERSCHE H.	158.81	339.2	19 51	-1	24 8 PP
DOURBES	159.59	355.7	20 35	42	
STUTTGART	160.26	346.2	19 54	1	20 36 PKP2
ATHENS	160.43	300.4			29 26
STRASBOURG	160.72	348.9	19 55	1	24 21 PP
FOLINIERE	160.88	5.6	20 38	44	
PARIS	160.96	359.6	20 39	45	
LJUBLJANA	161.11	332.9	19 54	0	20 39
GARCHY	162.48	358.2	19 56K	0	20 44
ROSELEND	163.72	349.1	20 46	49	21 28
ISOLA	165.10	346.6	20 3	5	21 0 PKP2
TOLEDO	168.63	25.5	20 3K	2	26 51 -6
MALAGA	171.07	37.1	20 4	2	25 16 PP

JUNE 24 4.H 26.M 31.S EPICENTRE 59.49-152.12 DEPTH= 0.KM

A=-0.45104 B=-0.23866 C= 0.86000 D=-0.4677 E= 0.8839
G=-0.7602 H=-0.4022 K=-0.5103 HT= -8.8

SE= 2.66

	DELTA DEG.	AZ. DEG.	P		O-C S	S O-C			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
COLLEGE	5.76	18.6	1	32	3							
SITKA	9.18	98.1	2	11	-5	3	48	-14				
PORT HARDY	16.51	111.3	3	53	-1							
VICTORIA	19.95	110.7	4	34	-2							
MOULD BAY	20.33	21.9	4	39K	-1	8	22	-1				
SEATTLE	21.10	110.9	4	58	10	9	4	25				
PENTICTON	21.26	104.2	4	49A	-1							
EDMONTON	22.03	89.0	4	57A	0							
BANFF	22.15	95.8	4	57A	-2							
HUNGRY HORSE	24.68	99.8	5	22	-1	9	50	7				
RESOLUTE	25.51	31.3	5	31K	0							
BLUE MTS.	25.51	109.5	5	30K	-1	10	5	8			10	25
SHASTA	26.42	122.1	5	39A	-1	10	32	20				
BUTTE	27.00	102.2	5	43	-2	10	33	11				
MINERAL	27.05	121.4	5	45K	-1							
UKIAH	27.38	125.2	5	54	5	10	37	9				
PETROPAVLOVK	27.55	278.4	5	49K	-1	10	29	-2			6	41 PP
BOZEMAN	28.00	101.2	5	44	-10	10	35	-3				
CALISTOGA	28.06	124.8	5	54K	-1							
MAGADAN	28.20	295.2	5	58K	2	10	42	1			7	5 PPP
BERKELEY	28.84	125.2	6	3K	1	11	4	13				
EUREKA	30.29	115.2	6	14	-1	11	17	3	6	29	7	26 PP

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PRIEST	30.98	124.9	6 21K	0				
SALT LAKE C.	31.22	108.7	6 25	2	11 39	10		
ALERT	31.48	14.6	6 25K	0				
UINTA BASIN	32.68	106.7	6 35A	-1	11 59	7	8 32	
RAPID CITY	33.08	95.6	6 37	-2				
BOULDER CITY	33.66	117.6	6 45	1			9 28	PCP
PASADENA	33.74	123.5	6 44	-1	12 4	-4		
YAKUTSK	36.13	308.5	7 4K	-1	12 37	-8		
TONTO FOREST	36.69	115.0	7 10	0	13 2	8	8 31	PP
KIPAPA	38.26	188.9	7 25	2	13 23	5	9 2	PP
HONOLULU	38.39	189.0	7 25	1	13 24	4	9 6	PP
ALBUQUERQUE	38.42	109.0	7 24	-1				
TUCSON	38.59	116.3	7 25	-1				
KHEYS	39.11	352.5	7 32	2			20 41	
Y.-SAKHLINSK	39.30	281.4	7 33K	1	13 34	0	9 3	PP
HAWAII V.OB.	40.07	184.6	7 40	2	13 49	4		
NEMURO	40.44	275.1	7 42	1	13 47	-4		
WAKKANAI	40.93	280.4	7 39	-6			9 26	
WICHITA MTS.	42.48	101.3	7 57	-1	14 23	2	9 44	PP
SAPPORO	42.77	278.1	8 1	0	14 17	-8		
TULSA	42.96	97.5	7 59A	-3	14 29	1		
SCHIEFFERVILLE	43.50	56.9	8 6K	0				
FAYETTEVILLE	43.63	95.9	8 5	-3				
CHIHUAHUA	43.83	114.0	8 13	4	14 43	2	11 5	
LONDON ONT.	45.01	78.5	8 17A	-2				
SCARBOROUGH	45.48	76.4	8 22A	0				
SCORESBY SD.	45.63	21.1	8 24	0	15 6	-1		
MIZUSAWA	45.80	274.5	8 28	3				
CLEVELAND	45.98	80.2	8 30A	4	15 11	-1		
OTTAWA	45.98	72.2	8 24	-2				
SENDAI	46.57	274.0	8 28	-3				
SEPT ILES	46.90	61.4	8 30	-4				
BREBEUF	46.93	70.6	8 31	-3	15 21	-4	10 21	PP
SEVEN FALLS	47.08	67.2	8 33K	-2				
VLADIVOSTOK	47.45	285.4	8 36K	-2				
MORGANTOWN	48.16	80.7	8 42K	-2			18 31	SCS
MAZATLAN	48.36	118.2					13 49	
CUMBERLAND	48.41	88.7	8 43	-2	15 45	-1	10 29	PP
TUKUBASAN	48.55	272.8	8 46A	-1	15 40	-8	8 54	10 23
MAEBASI	48.94	273.9	8 52	2				
TOKYO C.M.O.	49.15	272.7	9 5	14	15 39	-17		
MATUSIRO	49.27	274.7	8 52K	0	15 54	-4		
BLACKSBURG	49.77	83.1	8 54	-2	16 13	8		
CHANGCHUN	50.12	290.7	8 58K	-1	16 4	-6	9 9	
PALISADES	50.13	74.9	8 58A	-1	16 4	-6	9 22	18 48
GEORGETOWN	50.16	79.0	8 56	-3	16 17	6		
FORDHAM	50.26	75.0	8 58	-2	16 5	-7		
PHILADELPHIA	50.31	76.7	8 59	-1	16 6	-7	11 0	PP
TROMSOE	51.02	4.0	9 5	0			10 25	PCP
KEVO	51.05	0.4	9 5	-1	16 21	-2	11 3	PP
KYOTO	51.71	275.5	9 9	-2	16 27	-5		
ABUYAMA	51.91	275.5	9 14K	2				
GUADALAJARA	51.93	116.5	9 17	5			29 41	
COLUMBIA	51.97	86.2	9 11	-2	16 29	-6		
HALIFAX	52.31	64.4	9 14A	-1				
IRKUTSK	52.78	311.4	9 18	-1	16 42	-5	20 41	SS
KIRUNA	52.87	3.5	9 17	-2	16 45	-3	19 8	SCS
APATITY	53.20	357.3	9 21K	-1	16 51	-1	11 35	PP
SODANKYLA	53.45	0.6	9 22	-2	16 55	-1	19 11	SCS
TACUBAYA	54.94	113.1	9 42	7	17 29	13	28 1	
VERA CRUZ	56.57	110.2	9 49	3	17 49	12	30 45	
SKALSTUGAN	56.68	8.3	9 45	-2	17 43	4	10 53	PCP
KAJAANI	56.76	0.1	9 46	-2	17 41	1	19 32	SCS
UMEA	56.88	4.0	9 46K	-3			39 47	PKPPKP
PEKING	57.37	294.3	9 51K	-1	17 40	-8	10 3	
OAXACA	58.14	112.1	9 49	-9			10 9	
MERIDA	58.27	102.9	10 9	11	18 14	14		
PAOTOW	59.73	299.1	10 8K	-1	18 6	-13	10 19	
NURMIJARVI	60.31	1.8	10 11	-2	18 25	-1	12 11	PP
HELSINKI	60.66	1.7	10 13	-2			39 34	PKPPKP
UPPSALA	60.73	5.9	10 14K	-1	18 27	-5	20 1	SCS
COMITAN	61.03	108.1	10 29	12			18 37	
PULKOVO	61.07	358.6	10 17K	-1	18 33	-3	20 3	SCS
SVERDLOVSK	61.15	340.2	10 18A	0	18 35	-2	12 32	PP
ABERDEEN	61.29	18.1	10 27A	8	18 39	0	12 38	PP
ZO-SE	62.15	284.4	10 24K	-1				
GOTEBORG	62.48	9.5	10 27K	0				
SEMIPALATNSK	62.52	325.2	10 24K	-3	18 52	-2		

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NANKING	62.54	286.9	10 27K	-1	18 51	-4	10 38				
DURHAM	63.68	18.5	10 37K	2	19 7	-2	10 47	10 52	PCP		
KARLSKRONA	64.29	7.6	10 38K	-1	19 4	-12					
COPENHAGEN	64.52	9.6	10 40	-1	19 20	1					
MOSCOW	64.87	353.9	10 41K	-2	19 17	-7				11 10	PCP
SIAN	65.42	295.9	10 45K	-1	19 17	-13	10 56				
LANCHOW	66.21	300.8	10 50K	-1	19 36	-4	11 1				
WITTEVEEN	66.75	13.8	10 56	1							
KEW	67.06	18.7	10 57	0	19 51	1				13 27	PP
DE BILT	67.26	15.0	10 59	1	19 55	2				24 47	SS
MUNSTER	67.70	13.4	11 3	2							
UCCLE	68.42	15.8	11 6	1	20 6	-1					
WARSAW	68.50	4.5	11 5K	-1	20 9	1	11 14	13 31	PP		
HALLE	68.62	10.6	11 7	0	20 14	5					
BENSBERG	68.63	13.9	11 6K	-1	20 12	3				13 29	PP
JERSEY	68.97	20.6			20 5	-8					
DOURBES	69.14	15.8	11 11	1	20 6	-9					
JENA	69.15	11.0	11 10	0	20 17	2				13 40	PP
FOLINIÈRE	69.65	19.6	11 13	0							
CHEB	70.07	10.6	11 17	1	20 28	2					
PARIS	70.09	17.5	11 17K	1	20 27	1				39 16	PKPPKP
PRAGUE	70.26	9.2	11 18	1	20 28	0				14 5	PP
CHORZOW	70.34	6.0	11 17	0	20 27	-2	11 28	12 20	PP		
HEIDELBERG	70.35	13.2	11 17	0							
PRUHONICE	70.35	9.1	11 18	1	20 31	2					
RACIBORZ	70.51	6.6	11 19	1	20 35	4	11 31	13 54	PP		
KRAKOW	70.63	5.4	10 53	-26	20 33	0				16 8	
CHENG TU	70.68	297.6	11 19K	0	20 28	-5	11 30				
LWOW	71.01	2.6	11 21K	0	20 38	1				11 41	PCP
WELSCHBRUCH	71.03	15.0	11 24	3							
STUTTGART	71.04	12.9	11 21K	0	20 39	2				25 25	SS
STRASBOURG	71.05	14.0	11 22K	0	20 41	3				14 2	PP
KASPERSKE H.	71.12	9.9	11 23K	1							
SKALNATE PL.	71.52	5.3	11 23	-1	20 39	-4				11 49	PCP
EBINGEN	71.59	13.2	11 26	1							
GARCHY	71.67	17.5	11 25K	0	20 45	0				39 9	PKPPKP
FELDBERG	71.77	13.9	11 26	0							
BESANCON	72.12	15.5	11 29	1						12 33	
VIENNA-H.	72.21	8.1	11 29K	1	20 47	-4	11 55	11 48	PCP		
SAN JUAN	72.34	83.8	11 28	-1						13 56	PP
BRATISLAVA	72.34	7.6	11 29K	0	20 53	1				14 29	PP
CANTON	72.66	285.9	11 31K	0	20 54	-2	11 42				
HURBANOVO	72.71	6.8	11 29	-2						13 57	PP
HONG KONG	72.91	284.8	11 32K	-1	21 0	1					
CLERMONT-FD.	73.15	17.8	11 35	1	21 4	2					
BALBOA HTS.	73.49	100.6	11 37	1							
PONTA DELGDA	73.52	41.7	11 38	2	21 20	14	11 48	14 26	PP		
IASI	73.68	0.2	11 58	21	21 29	22				22 28	
ROSELEND	73.74	15.3	11 39	2						12 0	PCP
TASHKENT	73.90	328.8	11 38K	0	21 10	0				14 24	PP
LJUBLJANA	74.25	9.6	11 41K	1	21 12	-2				11 53	PCP
BACAU	74.30	0.7	11 45	4	21 18	3				12 19	
PAVIA	74.57	13.6	11 38	-4						21 49	PS
TRIESTE	74.58	10.2	11 43	1	21 18	0				26 21	SS
ZAGREB	74.60	8.6	11 43A	1	21 17	-1					
PADOVA	74.64	11.6	11 45	2	21 19	1				15 59	PPP
BAGUIO CITY	74.65	276.2	11 41	-2	21 15	-3				13 48	PP
AFTAMALU	74.86	199.8	11 44	0	21 13	-8					
TIMISOARA	74.98	4.8	11 47	2	21 23	1					
FOCSANI	75.17	0.5	11 43	-3	21 17	-7				13 5	
BAGNERES	75.27	20.6	11 46	0						14 35	PP
ISOLA	75.28	15.3	11 51	5			12 5				
CAMPULUNG	75.58	2.1	11 50	2	21 33	4				12 42	
MONACO	75.77	15.2	11 50	1							
SIMFEROPOL	75.80	355.4	11 49K	0	21 30	-1				11 59	PCP
BELGRADE	75.88	5.4	11 50A	0	21 34	2				12 0	PCP
MANILA	75.88	274.9	11 50	0	21 33	1					
KUNMING	75.98	295.6	11 50K	0	21 30	-3	12 1	14 41	PP		
ST. CLAUDE	76.56	81.4	11 52	-2	22 4	25					
KHOROG	76.86	325.7	11 55K	0	21 38	-5				14 50	PP
RABAU	77.05	237.7	11 55	-1						21 29	
LHASA	77.14	307.2	11 59K	2	21 45	-1	12 10	14 49	PP		
BARCELONA	77.22	19.6	11 58	1	21 47	0					
LISBON	77.46	28.9	12 0A	1	21 50	1				22 24	PS
TORTOSA	77.52	20.9	12 1	2	21 53	3					
TOLEDO	77.53	24.6	12 1A	2	21 53	3	12 12	15 0	PP		
AQUILA	77.82	10.9	12 2	1	21 57	4	12 12	14 57	PP		
FORT FRANCE	77.94	81.6	12 2	1	21 52	-2					
SOFIA	78.11	3.4	12 5	3	21 56	0				22 9	SKS

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ROME	78.18	11.7	12	4K	2	22	0	3	12	14	14	54	PP
TIFLIS	78.19	347.1	12	4	1	21	56	-1			15	10	PP
TITograd	78.20	6.5	12	4	1	21	59	2			12	16	PCP
CARACAS	78.59	88.7	12	4K	-1	21	59	-2					
HONTARA	78.62	228.3	12	5	0	21	31	-31					
SKOPJE	78.76	4.9	12	4	-2	22	7	4					
CHINCHINA	78.89	99.2	11	59	-7	21	53	-12					
ASHKABAD	79.69	336.0	12	9	-2						15	13	PPP
ALICANTE	79.73	22.3	12	11K	0	22	10	-3			15	16	PP
ISTANBUL UN.	79.83	359.2	12	11K	-1	22	17	3					
BOGOTA	79.97	98.0	12	14K	2	22	6	-10					
WARSAK DAM	80.10	324.4	12	10	-3								
GORIS	80.20	345.6	12	15K	2	22	20	2			23	14	PS
GRANADA	80.22	25.0	12	17	3	22	20	2			15	5	PP
SHILLONG	80.39	304.6	12	13K	-1	22	17	-3			15	10	PP
MALAGA	80.48	25.8	12	18K	3	22	25	4					
ALMERIA	80.77	24.2	12	17K	0	22	28	4			15	34	PP
CHATRA	81.19	309.0	12	18	-1	22	23	-6					
DEHRA DUN	81.41	317.8	12	22K	2	22	29	-2			14	33	
LAHORE	81.51	321.3	12	20	0								
MESSINA	82.13	9.8	12	23K	-1	22	33	-5	12	33	15	36	PP
ATHENS	82.84	3.3	12	27K	0	22	45	0					
TEHERAN	83.14	340.9	12	30	1	22	50	1			15	31	PP
NEW DELHI	83.30	317.8	12	29K	-1	22	47	-3					
PORT VILA	83.42	217.7	12	29A	-1								
PORT MORESBY	83.88	240.0	12	32A	-1	22	55	-1	12	41	15	50	PP
NHATRANG	83.94	283.6	12	33	0						16	1	PP
BOKARO	84.42	308.8									22	58	
CALCUTTA	84.54	306.1	12	48	12	22	55	-7					
QUETTA	85.00	326.8	12	37K	-1	23	0	-7					
KSARA	86.80	353.3	12	48K	1	23	18	-6			16	14	PP
SHIRAZ	88.88	338.7	12	57K	0	23	39	-5	13	7	23	22	SKS
VISHAKHPTNM	90.91	308.3	13	18K	11	24	14	12			23	37	SKS
HUANCAYO	93.69	107.4	13	21	2								
POONA	93.72	316.9				25	14	47			13	47	
BOMBAY	93.73	317.9									22	59	
BRISBANE	97.70	227.4	13	41	3	24	27	12					
M,BOUR	97.95	43.6	13	45	6	25	24	68					
TANGERANG	101.00	276.6									18	5	
LA PAZ	101.04	103.6	13	55	2	24	31	-1					
WELLINGTON	104.07	205.1				24	38	-8			33	1	SS
RIVERVIEW	104.10	225.9	14	11	5	24	48	2			18	31	PP
ROXBURGH	109.29	207.7				25	11	2			34	29	SS
TOOLANGI	109.53	228.3	14	56	777						19	17	PP
ADELAIDE	109.98	234.8	19	9	777	25	17	5			28	37	PKKP
SANTA LUCIA	114.11	115.0									26	39	
MUNDARING	117.76	253.8	18	48	0								
PERTH	117.93	254.1				24	59	-43			31	20	SS
LWIRO	122.91	358.9	19	1	3						20	39	PP
CAPE HALLETT	134.05	195.1	19	27	8								
BANDEIRA	134.20	19.8	19	20	0	26	47	18			21	59	PP
BROKEN HILL	135.04	359.2	19	25	4								
CHILEKA	135.95	350.1	19	23	0								
TANANARIVE	137.06	332.1	19	30	5						23	21	
SCOTT BASE	139.38	192.4	19	25	-4								
BYRD STATION	140.52	171.5	19	28	-3								
BULAWAYO	140.70	358.9	19	28	-3								
KIMBERLEY	149.20	5.3	19	51	5								
SOUTH POLE	149.32	180.0	19	42	-4						22	0	
PIETERMZBURG	150.09	355.6	19	52A	5								
MIRNY	150.93	228.4	19	53	4								
GRAHAMSTOWN	153.81	2.5	20	2	9								
MAWSON	162.66	227.5	20	1	-2						20	52	PKP2

JUNE 24 13.M 17.M 50.S EPICENTRE -24.98-174.80 DEPTH= 50.KM

A=-0.90383 B=-0.08224 C=-0.41992 D=-0.0906 E= 0.9959
G= 0.4182 H= 0.0381 K=-0.9076 HT= 3.4

DEPTH OF FOCUS= 0.003R

SE= 4.60

	DELTA	AZ.	P	O-C	S	O-C	*PP	SUPP.
	DEG.	DEG.	M	S	M	S	M	S
AFIAMALU	11.37	15.0	2	40	4	42	-7	

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TUAI	15.37	204.4			5 56	-28		
CHATEAU	16.36	207.6	3 51	4	6 36	-11		
PORT VILA	17.29	291.4	3 56A	-3				
NOUMEA	17.39	275.0	4 6	6				
WELLINGTON	18.43	205.6	4 1	-12	6 58	-36		
KOUMAC	19.78	278.6	4 31K	3				
HONIARA	28.57	298.3	5 45	-8			6 3	
BRISBANE	29.15	258.1	5 52	-6			13 21	
RIVERVIEW	30.83	245.4			10 58	-14		
TOOLANGI	35.93	239.9	6 48	-9			7 23	
CHARTERS TS.	36.21	269.7	6 52	-8	12 50	14		
RABAU	37.87	297.7			13 15	14		
PORT MORESBY	39.34	286.4	7 19A	-7				
ADELAIDE	41.16	244.8	7 30	-11			17 4	
CAPE HALLETT	48.10	186.1	8 30	-6				
HONOLULU	48.78	20.9			15 52	12		
SCOTT BASE	53.65	184.8	9 12	-6				
SOUTH POLE	65.17	180.0	10 31	-7			10 51	
MIRNY	68.23	205.5	10 49	-8				
BAGUIO CITY	75.20	296.3	11 35	-4				
MATUSIRO	75.54	322.5	11 38	-3	21 29	13		
LEMBANG	75.91	269.0	11 38K	-5				
TANGERANG	77.08	269.2	11 45A	-4			12 38	
MAWSON	78.35	199.3	11 50K	-6				
SHASTA	81.48	37.5	12 15A	2				
MINERAL	81.68	38.2	12 16A	2				
NHATRANG	82.73	287.0	12 18	-2			12 24	PCP
ZO-SE	82.81	309.0	12 17	-3	22 36	3		
BOULDER CITY	82.95	45.0	12 23	2				
HONG KONG	83.41	298.2	12 20	-3				
TUCSON	83.43	50.0	12 25	2		12 38	12 50	*SP
TOMTO FOREST	84.29	48.1	12 29	1		12 42	12 34	PCP
EUREKA	84.40	41.7	12 29	1				
CANTON	84.46	298.5	12 27K	-1	22 57	8		
NANKING	85.04	308.6	12 31K	0	23 5	10		
BLUE MTS.	87.03	36.9	12 42	1	23 38	24		
ALBUQUERQUE	87.95	49.8	12 46	1		12 59	24 35	SP
PENTICTON	88.76	32.5	12 43	-6				
UINTA BASIN	88.85	44.0	12 52	2	23 42	11		13 17
HUNGRY HORSE	90.99	35.6	12 50	-10				
PEKING	91.12	314.2	12 58	-2	23 58	6		
GOLDEN	91.21	46.3	13 1	0				
COLLEGE	91.97	11.2	13 4	0				
SIAN	93.26	306.3	13 9	-1	24 22	11		
WICHITA MTS.	93.43	53.3	13 11	0	24 24	12		30 50 SS
KUNMING	93.97	295.7	13 13	0	24 29	12		
EDMONTON	94.37	31.8	13 16	1				
CHENG TU	95.35	301.2	13 20	0	24 38	48		
LA PAZ	97.54	112.0	13 44	14				
CUMBERLAND	103.50	56.9						33 10 SS
KIMBERLEY	123.36	200.6	18 50	-1				
QUETTA	125.59	290.3	18 55A	-1				
KIRUNA	136.13	351.7	19 29	13				
SHIRAZ	137.92	287.3	19 22	3			22 31	SKP
KAJAANI	138.22	345.4	19 18	-2				
UMEA	139.92	349.7	19 16	-7				
NURMIJARVI	142.03	344.5	19 21	-5			22 26	PP
UPPSALA	144.08	349.3	19 26	-4				
LWIRO	144.55	223.6	19 27K	-4				
GOTEBORG	146.94	353.3	19 36	1				
KARLSKRONA	147.94	349.0	19 39	3				
KSARA	151.94	295.4	19 49	6				
KRAKOW	152.48	339.2	19 50	7			20 15	
RACIBORZ	152.98	341.4	19 52	8				
COLLMBERG	153.04	349.2	19 43	-1				24 17
SKALNATE PL.	153.12	337.9	19 42	-2	20 40			
PRUHONICE	154.00	346.2	19 43	-2				20 7
KASPERSKE H.	155.01	346.9	19 46	-1				20 12
BRATISLAVA	155.02	340.9	19 46	-1				20 13
STUTTGART	156.04	353.3	19 47	-1				
LJUBLJANA	157.68	342.7	19 48	-2				
ISOLA	160.78	356.0	20 38	44				
TOLEDO	163.23	25.4	20 2	6			20 50	PKP2
MALAGA	165.69	32.8	19 58	-1			24 50	PP

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JUNE 24 15.H 1.M 43.5 EPICENTRE -15.61-177.48 DEPTH= 403.KM

A=-0.96267 B=-0.04236 C=-0.26733 D=-0.0440 E= 0.9990
G= 0.2671 H= 0.0118 K=-0.9636 HT= 5.6

DEPTH OF FOCUS= 0.058R

SE= 1.12

	DELTA DEG.	AZ. DEG.	P		O-C S	S O-C			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
AFIAMALU	5.77	73.7	1	31A	0	2	42	-1				
KOUMAC	18.02	251.4	3	48K	3							
KARAPIRO	23.08	194.2	4	33	-1							
WELLINGTON	26.45	193.2	5	1	-3							
BRISBANE	29.97	242.0	5	36	1							
CHARTERS TS.	34.76	257.2	6	16	0							
TOOLANGI	39.32	229.0	6	53	-1						7	31
HAWAII V.OB.	41.10	32.9	7	9	1							
DARWIN	50.16	266.8	8	18	-1							
CAPE HALLETT	57.15	184.4	9	10	1							
SCOTT BASE	62.76	183.7	9	47	1							
MATUSIRO	66.62	322.2	10	9	-2							
PRIEST	74.34	44.7	10	58A	2							
CALISTOGA	74.47	41.7	10	57A	0							
SOUTH POLE	74.49	180.0	10	58	1							
PASADENA	75.02	47.6	11	0	0							
SHASTA	75.78	40.0	11	4A	-1							
MINERAL	76.07	40.7	11	7K	1							
BOULDER CITY	78.30	47.4	11	20	2							
EUREKA	79.25	43.8	11	23	0							
TUCSON	79.53	52.3	11	26	1						14	31 PP
VICTORIA	79.84	33.2	11	26	0							
TONTO FOREST	80.10	50.3	11	29	1						14	35 PP
BLUE MTS.	81.20	38.6	11	33A	0						14	44 PP
PENTICTON	82.34	34.0	11	38	-1							
COLLEGE	83.35	12.3	11	43	-1				13	18		
ALBUQUERQUE	83.97	51.4	11	48	0							
UINTA BASIN	83.99	45.4	11	48	0						15	7 PP
BUTTE	84.66	39.3	11	51	0							
HUNGRY HORSE	84.94	36.8	11	51	-1							
MANSON	86.31	199.5	11	59	0							
GOLDEN	86.66	47.3	12	1	0							
EDMONTON	87.82	32.6	12	5	-1							
WICHITA MTS.	89.92	53.9	12	15	-1						15	40
MOULD BAY	97.92	11.9	12	51	-1							
CUMBERLAND	100.43	55.9	13	6	2						17	13 PP
KIRUNA	126.54	351.6	18	16	0							
UMEA	130.30	349.8	18	24	0							
NURMIJARVI	132.37	345.4	18	27	0							
COLLMBERG	143.41	349.0	18	46K	-2						21	51
SKALNATE PL.	143.52	340.4	18	49	1							
JENA	144.02	350.2	18	44	-5							
KEW	144.15	3.0	18	49	0							
PRUHONICE	144.35	346.7	18	50	0							
BENSBERG	144.54	354.9	18	50A	0							
KASPERSKE H.	145.36	347.2	18	51	0							
BRATISLAVA	145.37	342.7	18	46	-5							
VIENNA-H.	145.50	343.6	18	54	3							
DOORBES	145.55	357.6	18	55	4							
STUTTGART	146.46	351.9	18	56	3							
STRASBOURG	146.84	353.6	18	57K	3							
FOLINIÈRE	146.84	3.6	18	56	2							
PARIS	146.89	0.0	18	58	4							
LJUBLJANA	148.02	344.1	18	57	2							
BESANCON	148.32	355.5	19	1	6							
GARCHY	148.42	359.3	19	1	5							
ROSELEND	149.81	354.3	19	6	8							
CLERMONT-FD.	149.92	359.2	19	6	8						19	31
ISOLA	151.26	353.2	19	8	8							

JUNE 24 16.H 17.M 11.5 EPICENTRE 52.34-171.22 DEPTH= 0.KM

A=-0.60633 B=-0.09362 C= 0.78969 D=-0.1526 E= 0.9883
G=-0.7804 H=-0.1205 K=-0.6135 HT= -6.3

SE= 2.18

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	DELTA DEG.	AZ. DEG.	P		O-C S	S			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
COLLEGE	17.35	34.7	4	7	2	7	15	-3				
PETROPVLOVK	18.22	284.1	4	13A	-3							
SITKA	21.11	62.9	4	51	3	8	49	10				
MAGADAN	22.20	303.9	5	2A	3							
Y.-SAKHLINSK	29.86	278.4	6	11	0	11	3	-5				
VICTORIA	30.25	77.9	6	14	-1							
MOULD BAY	30.98	21.5	6	21	0	11	24	-2				
SEATTLE	31.31	78.8									11	43
PENTICTON	32.17	74.4	6	32	0							
TIKSI	32.17	329.0	6	32A	0							
YAKUTSK	32.32	310.8	6	31	-2							
KIPAPA	32.52	156.7	6	46	11	11	49	-1				
HONOLULU	32.61	156.9	6	35	0	11	49	-2				
EDMONTON	34.12	64.7	6	49	0							
SHASTA	34.92	89.7	6	54A	-1							
HAWAII V.OB.	35.13	153.2	6	56	-1	12	28	-2				
MINERAL	35.61	89.5	7	1A	0							
BLUE MTS.	35.70	80.1	7	1	-1	12	39	0			13	11 SCP
HUNGRY HORSE	35.90	73.0	7	4	0	12	40	-2			9	30 PCP
CALISTOGA	36.05	92.6	7	3	-2							
BERKELEY	36.73	93.4	7	12A	1	12	55	0				
RESOLUTE	36.89	25.5	7	11	-1							
PARISO	37.65	95.4	7	25	7							
BUTTE	37.93	75.5	7	21	0							
VLADIVOSTOK	38.44	279.4	7	24A	-1	13	15	-6				
MATUSIRO	38.56	266.3	7	27	1	13	21	-2				
PRIEST	38.82	94.2	7	30	2							
BOZEMAN	39.01	75.1	7	30	0							
EUREKA	39.58	86.4	7	23	-12						9	57 PCP
ALERT	40.82	11.0	7	46K	1							
ABUYAMA	41.27	266.5	7	49A	0							
SALT LAKE C.	41.32	81.9	7	46	-3							
PASADENA	41.66	94.4	7	52	0	14	6	-3				
BOULDER CITY	42.50	89.6	7	59	0						13	38 SCP
UINTA BASIN	42.97	80.8	8	2	0	14	27	-1			13	40 SCP
KHEYS	44.49	349.8	8	16	1							
RAPID CITY	44.53	72.4	8	14	-1							
LARAMIE	44.77	77.0	8	16	-1							
NORD	45.60	5.1	8	24A	0							
TONTO FOREST	45.80	88.7	8	25	0	15	9	0			9	17
GOLDEN	45.89	78.7	8	25	-1	15	10	-1				
TUCSON	47.45	90.4	8	36	-2							
IRKUTSK	48.75	305.6	8	48	0							
PEKING	49.71	286.1	8	55A	-1	16	1	-4	9	12		
GODHAVN	50.49	24.1	9	2A	0	16	3	-12				
LAWRENCE	52.37	72.7	9	14	-2							
ZO-SE	52.67	274.1	9	18A	0	16	41	-4	9	35	11	9 PP
WICHITA MTS.	53.23	78.9	9	20	-2	16	49	-4			11	30 PP
NANKING	53.46	276.8	9	24A	0	16	53	-3				
TULSA	54.10	75.9	9	26	-3	16	54	-11				
FAYETTEVILLE	54.93	74.7	9	43	8							
SCORESBY SD.	55.50	12.0	9	38	-1							
SCHIFFERVILLE	56.26	42.4	9	43	-1							
KEVO	57.48	352.6	9	52	-1						10	46 PCP
LONDON ONT.	57.54	60.3	9	52	-2							
SIAM	57.87	285.7	9	55A	-1						12	6 PP
TROMSOE	58.11	355.8	9	57	-1							
OTTAWA	58.74	55.1	10	0	-2							
APATITY	59.01	349.2	10	3A	-1	18	4	-6			22	6 SS
LANCHOW	59.57	290.6	10	8A	0	18	13	-4	10	26		
BREBEUF	59.72	53.8	10	7A	-2	18	14	-5				
KIRUNA	59.83	354.9	10	8	-2	18	17	-3			18	31 PS
SODANKYLA	59.86	352.1	10	9	-1						10	55 PCP
CUMBERLAND	60.30	69.3	10	10	-3	18	21	-5			18	32 SP
MORGANTOWN	60.58	62.4	10	14A	-1							
BLACKSBURG	62.05	64.6	10	23	-2							
GEORGETOWN	62.66	61.2	10	27	-2							
PALISADES	62.80	57.6	10	28	-2	18	56	-2			20	18 SCS
FORDHAM	62.93	57.7	10	29	-1	18	56	-4				
KAJAANI	62.98	350.8	10	29	-2							
SVERDLOVSK	63.17	331.0	10	32K	0	18	58	-5				
CANTON	63.26	273.6	10	33A	0	19	1	-3				
CHENG TU	63.33	286.2	10	34A	1	19	2	-3				
HONG KONG	63.34	272.4	10	34	1	19	3	-2				
UMEA	63.83	354.4	10	35	-1	19	2	-9				
BAGUID CITY	63.86	263.0	10	35	-2	19	9	-2				

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COLUMBIA	64.03	67.5	10 36	-2							
RABUL	64.29	221.3	10 37	-2	19 17	0					
SKALSTUGAN	64.39	358.3	10 39	-1						11 13	PCP
MANILA	64.91	261.4	10 43	0							
HALIFAX	65.16	48.6	10 45	0							
HONIARA	66.31	211.3	10 51	-1	18 37	-65					
NURMIJARVI	66.78	351.5	10 54	-1	19 35	-12				13 17	PP
PULKOVO	66.90	348.3	10 55	-1	19 44	-5					
HELSINKI	67.09	351.3	10 57	0						11 25	
ALMATA-2	67.93	312.8	11 3	0							
UPPSALA	67.93	355.2	11 2	-1	19 50	-11					
KUNMING	68.17	283.0	11 6A	2	20 1	-3					
FRUNSE	69.50	314.2	11 13	1	20 19	-1					
MOSCOW	69.68	343.1	11 14	1							
GOTEBORG	70.29	358.2	11 17	0							
PORT MORESBY	71.07	223.9	11 20	-2	20 34	-4					
LHASA	71.54	294.6	11 26A	1	20 39	-5					
KARLSKRONA	71.72	356.0	11 28	2							
COPENHAGEN	72.30	357.8	11 30A	1	21 44	52					
DURHAM	72.91	6.3	11 52K	19	21 5	6					
TASHKENT	73.03	316.7	11 33A	-1							
NHATRANG	74.06	269.4	11 19	-21						11 44	
BERMUDA	74.15	57.5	11 35	-5	21 7	-6					
SHILLONG	74.20	291.3	11 39A	-1							
KHOROG	75.23	313.0	11 48	2							
WARSAW	75.29	352.3	11 49	2	21 26	0				12 2	PCP
DUZHANBE	75.53	315.5	11 49	1							
CHATRA	75.86	295.5	10 51K	-59							
KEW	76.28	5.8	11 55	3							
HALLE	76.50	358.0	11 54	0			12 16			15 51	PP
COLLMBERG	76.67	357.3	11 54	0						14 24	
CHITTAGONG	76.71	289.2	11 55	0							
BENSBERG	77.06	1.0	11 57	0							
JENA	77.08	358.2	11 57	0	21 43	-2				22 22	PS
KRAKOW	77.55	352.7	11 59	0						12 19	PCP
RACTBORZ	77.64	353.8	12 1	1							
PRAGUE	77.85	356.3	12 2	1							
DOURBES	77.87	2.8	12 3	2	21 56	2					
PRUHONICE	77.94	356.2	12 2	1	21 52	-3					
SKALNATE PL.	78.38	352.3	12 6	2						14 18	
LAHORE	78.79	307.6	12 6	0							
KASPERSKE H.	78.82	356.8	12 7	1							
FOLINIERE	78.96	6.2	12 7	0							
PARIS	79.08	4.2	12 8	0							
STUTTGART	79.26	359.7	12 9	0							
STRASBOURG	79.45	0.7	12 11	1	22 11	0				23 18	SPP
BRATISLAVA	79.61	354.3	12 10	-1	22 37	25	13 3			23 18	PS
NEW DELHI	79.78	303.8	12 10K	-2							
VANNOVSKAYA	80.36	322.5	12 16	1							
GARCHY	80.64	3.9	12 16	0							
SIMFEROPOL	80.66	342.1	12 17A	1	22 24	1					
BESANCON	80.76	1.9	12 11	-6							
CHARTERS TS.	81.06	220.0	12 17	-1	22 21	-7					
TIFLIS	81.25	333.5	12 21	2							
BAKURIANI	81.59	334.5	12 22A	1							
KIROVOBAD	81.82	332.1	12 22	0							
LJUBLJANA	81.86	356.0	12 22	-1						13 0	
CLERMONT-FD.	82.15	4.0	12 24	0							
ROSELEND	82.33	1.5	12 27	2							
PAVIA	82.86	359.7	12 26	-2						30 16	
GORIS	82.88	331.6	12 27A	-1							
QUETTA	83.41	312.2	12 30A	0	22 52	1					
ISOLA	83.85	1.2	12 34	1							
SAN JUAN	84.51	67.1	12 34	-2							
BAGNERES	84.67	6.3	12 36	-1							
TEHERAN	84.73	326.4	12 38	1	23 1	-4					
ISTANBUL UN.	85.35	344.8	12 41K	1	23 2	-9					
BRISBANE	85.41	211.6	12 55	14							
AQUILA	85.60	356.6	12 41	-1	23 17	4				24 29	PS
ROME	86.08	357.2	12 45	1	23 19	1				24 34	PS
TOLEDO	87.48	9.8	12 51K	0	23 19	-12				16 17	PP
ATHENS	89.12	348.2	12 58	-1							
CHINCHINA	89.53	82.6	12 59K	-1	23 29	-21				23 49	SKKS
MESSINA	89.64	354.7	12 23	-38						23 42	
SHIRAZ	89.84	323.0	13 1A	-1	23 28	-25	13 10				
CARACAS	90.34	72.4	13 4	0	23 25	-33					
MALAGA	90.57	10.6	13 6	1	23 57	-3					
KARAPIRO	90.64	190.4	13 10	4							
BOGOTA	90.74	81.5	13 12	6	23 34	-27					

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KSARA	90.99	337.7	13	8	1					
RIVERVIEW	91.90	210.6	13	13	2	24	15	4		25 29 PS
WELLINGTON	94.03	190.5								30 49
LWIRO	127.36	334.5	19	9A	2					21 6 PP
BROKEN HILL	139.06	330.1	19	21	-8					
BANDEIRA	142.47	352.8	19	32	-3					23 21 SKP
BULAWAYO	144.35	326.8	19	37	-1					
CHANGALANE	148.57	316.8	19	48	3					
MAWSON	150.14	218.6	19	51	3					
PIETERMZBURG	152.24	316.5	19	53A	2					
KIMBERLEY	153.60	327.0	19	55	2					

JUNE 25 14.M 32.M 17.S EPICENTRE -8.45 107.08 DEPTH= 69.KM

A=-0.29048 B= 0.94568 C=-0.14601 D= 0.9559 E= 0.2936
G= 0.0429 H=-0.1396 K=-0.9893 HT= 6.7

DEPTH OF FOCUS= 0.006R

SE= 3.90

	DELTA DEG.	AZ. DEG.	P		O-C S	S O-C			#PP		SUPP.	
			M	S		M	S	S	M	S	M	S
LEMBANG	1.70	18.6	0	29A	1						8	48 PCP
DJAKARTA	2.27	353.8	0	33	-3	1	0	-3			10	33
TANGERANG	2.31	348.9	0	33A	-4						8	17 PCP
NHATRANG	20.65	5.9	4	52	16						5	12
MUNDARING	24.89	161.3	5	19	1	9	41	8				
MANILA	26.84	31.2	5	36	0	9	42	-23				
BAGUIO CITY	28.09	28.4	5	46	-1							
HONG KONG	31.34	12.7				11	24	7	6	31	7	52 *SPP
CANTON	31.94	10.9	6	23	2	11	34	8				
KUNMING	33.63	352.9	6	35	-1	11	54	1				
MADRAS	34.18	308.3				12	11	10			8	18
SHILLONG	36.91	336.8	7	0A	-4							
CHENG TU	39.00	355.8	7	19	-2	13	16	1				
ADELAIDE	39.20	137.0	7	21K	-2						22	3
PORT MORESBY	39.59	94.5	7	29	3							
CHARTERS TS.	39.59	111.3	7	28	2	13	21	-3				
CHATRA	40.04	331.8	7	26A	-4	13	35	5				
LHASA	40.90	338.4	7	35A	-2	13	43	0	7	43		
ZO-SE	41.58	18.4	7	42A	0	13	56	3	7	50		
NANKING	41.81	15.0	7	45A	1	14	2	6	7	53		
SIAN	42.50	2.3	7	49A	-1	14	13	6	7	57		
BOMBAY	43.35	309.1									18	5
LANCHOW	44.37	356.2	8	4A	-1	14	36	2	8	12		
RABAU	45.00	87.5	8	11	1						18	7
TOOLANGI	45.21	135.9	8	12	0				8	31	9	58 PP
NEW DELHI	46.77	323.0	8	17A	-7	14	56	-12				
BRISBANE	47.07	119.6	8	28	2						8	49
DEHRA DUM	47.57	325.4				15	19	-1				
RIVERVIEW	47.74	128.5									9	55
PAOTOM	48.86	3.0	8	39A	-1				8	47		
PEKING	48.97	9.3	8	40A	-1	15	44	5	8	48		
LAHORE	50.63	323.3	8	49	-5	16	1	-1				
MATUSIRO	53.46	31.2	9	12A	-3	16	40	-1				
WARSAK DAM	54.01	323.4	9	14	-5	16	47	-1				
QUETTA	54.41	316.7	9	15A	-7	16	51	-3				
CHANGCHUN	54.60	16.1	9	21A	-3	16	56	0	9	29		
VLADIVOSTOK	56.08	21.7	9	33	-1							
KHOROG	56.50	326.3	9	32A	-5	17	20	-1				
WILKES	57.85	178.4	10	2	15	17	43	4				
ALMATA	58.31	334.5	9	44K	-6							
MIRNY	58.81	186.5	9	53	0	18	39	47				
FRUNSE	58.99	332.6	9	50	-5							
TASHKENT	60.48	328.0	9	59	-6	18	11	-2				
IRKUTSK	60.53	358.1	10	4A	-1							
SEMIPALATNSK	63.08	341.1	10	17	-5							
Y.-SAKHLINSK	63.67	26.4	10	23A	-3							
ROXBURGH	64.67	136.5									26	13 SS
SHIRAZ	64.69	308.3	10	26A	-7	18	59	-7			11	2 PCP
VANNOVSKAYA	64.92	318.8	10	29	-5							
MAWSON	66.00	197.0	10	33	-8						11	2 *SP
KIZYL-ARVAT	66.80	319.1	10	41	-5	19	29	-3				
TEHERAN	68.36	313.7	10	51	-5	19	15	-35			13	21 PP
YAKUTSK	72.43	11.0	11	19	-2	20	41	3				
CAPE HALLETT	74.00	163.5	11	34	4							

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KIROVOBAD	74.15	316.4	11	26	-5	20	58	1			
PETROPAVLOVK	75.22	29.3	11	35K	-2	21	16	7			
SCOTT BASE	75.61	169.1	11	33	-6						
TIFLIS	75.66	316.8	11	36	-3						
KIMBERLEY	79.26	242.3	11	51	-8						
JERUSALEM	79.29	304.5	12	16	17						
KSARA	79.36	306.7	11	56	-4	21	48	-6	12	41	14 52 PP
SIMFEROPOL	84.08	317.0	12	21	-3	22	41	-1			
MOSCOW	85.64	327.9	12	29	-3						
BYRD STATION	88.56	172.7	12	51	5						
PULKOVO	90.64	330.5	12	52	-4	23	43	-1			
KAJAANI	92.92	334.4	13	3	-3						16 49 PP
NURMIJARVI	93.57	330.6	13	14	5	24	13	4			16 55 PP
SODANKYLA	94.08	337.5	13	8	-4						30 0 PKXP
LJUBLJANA	97.79	315.4	12	20	-69						
PRUHONICE	98.03	319.4									17 46
COLLMBERG	99.08	320.6	17	32	238						
JENA	99.96	320.2									17 43
COLLEGE	104.01	25.1	17	44	228						
SHASTA	125.71	45.4	19	7K	13						
MINERAL	126.40	45.5	19	8	13						
BLUE MTS.	127.27	38.7	18	55	-2				19	20	20 49 PP
EUREKA	130.69	44.2	19	4	1						22 25 SKP
UINTA BASIN	134.51	39.8	19	10	0				19	32	21 58 PP
TONTO FOREST	136.41	48.2	19	15	1						22 7 PP
GOLDEN	137.48	37.8	19	18	2						
TUCSON	137.64	50.6	18	52	-24						22 2
ALBUQUERQUE	139.52	44.4	19	15	-5						
LUBBOCK	143.44	42.7	19	27	0						
LONDON ONT.	144.79	10.5	19	28	-1						
WICHITA MTS.	144.82	38.3	19	29	0				19	51	41 55 SS
TULSA	145.62	34.0	19	31A	1						
ST. LOUIS 1	146.15	24.7	19	32	1						
FAYETTEVILLE	146.34	32.0	19	33	1						
PALISADES	147.57	1.4	19	36	2						20 10 PKP2
MORGANTOWN	148.32	10.4	19	38K	3						
CUMBERLAND	150.62	21.3	19	35	-3				19	56	23 17 PP
LA PAZ	154.76	190.8									20 56
CARACAS	173.75	289.5	19	47	-14	26	37	-18			

JUNE 26 9.H 41.M 37.S EPICENTRE 4.58 126.51 DEPTH= 82.KM

A=-0.59305 B= 0.80126 C= 0.07924 D= 0.8038 E= 0.5949
G=-0.0471 H= 0.0637 K=-0.9969 HT= 7.1

DEPTH OF FOCUS= 0.008R

SE= 1.65

	DELTA DEG.	AZ. DEG.	P		O-C S	S			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
MANILA	11.37	332.3	2	43	2	5	3	16				
BAGUIO CITY	13.13	334.1	3	5	1	5	43	14				
NHATRANG	18.71	295.0				7	49	13			4	45 PP
HONG KONG	21.29	327.0	4	40	-1	8	32	4				
LEMBANG	21.99	239.1	4	48K	0	8	46	5			5	15 PP
DJAKARTA	22.36	241.6	4	49K	-3	8	45	-2			5	15
CANTON	22.38	326.6	4	51	-1	8	52	5	5	9		
TANGERANG	22.53	241.9	4	53K	0						5	22 PP
PORT MORESBY	24.82	124.0	5	15	0							
ZO-SE	26.86	349.8	5	35A	1	10	7	4	5	51		
RABAU	27.08	108.4				10	13	6			13	1
MEDAN	27.77	269.0	5	42K	-1							
NANKING	28.29	346.1	5	48	1							
KUNMING	30.63	314.2	6	10	2							
CHARTERS TS.	31.27	142.3	6	13	-1	11	17	4				
CHENG TU	33.50	323.3	6	33	0							
MATUSIRO	33.58	17.2	6	31K	-3	11	52	3				
SIAN	33.74	333.2	6	35A	0							
PEKING	36.51	346.6	6	59A	0	12	37	3	7	19		
MUNDARING	37.64	194.4	7	7	-1				7	18		
LANCHOW	37.64	329.2	7	10A	2	12	54	2	7	27		
VLADIVOSTOK	38.68	6.3	7	16A	-1							
PAOTOW	38.79	339.8	7	18	0							
CHANGCHUN	39.11	358.6	7	21	1							
SHILLONG	39.21	305.7	7	21A	0	13	13	-2				

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BRISBANE	40.66	142.8	7 32	-1			
ADELAIDE	40.98	164.6	7 36	0			
CHATRA	43.57	304.7	7 59K	2	7 45	16 11	
Y.-SAKHLINSK	44.54	15.8	8 2	-3		9 47	
RIVERVIEW	44.74	150.5			14 47	10	9 56 PP
TOOLANGI	45.50	158.8	8 14	1			
NEW DELHI	52.46	302.8	9 4A	-2			10 1 PP
PETROPAYLOVK	55.04	23.1	9 26	1			
YAKUTSK	57.36	1.8	9 40	-2	17 29	-1	
ALMATA-2	57.96	319.3	9 45A	-1			
FRUNSE	59.58	317.8	9 56A	-1			
KHOROG	59.79	311.1			18 11	9	
SEMIPALATNSK	59.87	327.7	10 0	1			
QUETTA	61.51	301.9	10 9A	-1			
MONOWAI	62.03	148.6	10 8	-6			
KARAPIRO	62.08	137.5	10 13	-1			
DUZHANBE	62.20	311.5	10 14A	-1			
TASHKENT	62.70	314.5	10 17A	-1			
ROXBURGH	62.73	147.5					10 42
CHATEAU	62.74	138.7	10 21	3			
WELLINGTON	63.38	141.0	10 37	14			13 11 PP
TUAI	63.61	137.6	10 23	-1			
AFTAMALU	63.91	107.8	10 32	6			
TIKSI	66.99	0.8	10 45A	-1	19 31	0	
ASHKABAD	70.02	308.7	11 4	0	20 4	-3	
KIZYL-ARVAT	71.83	309.7	11 15A	0			
SHIRAZ	73.84	299.4	11 26A	-1	20 47	-4	14 11 PP
MIRNY	74.93	193.2	11 33	0			12 16
TEHERAN	75.26	305.6	11 37	2			
GORIS	79.53	309.2	12 0A	1	21 59	7	
KIROVOBAD	79.58	310.3	11 58	-1	21 53	0	
TIFLIS	80.78	311.4	12 8	2			
TANANARIVE	81.07	250.1	12 9	2			
BAKURIANI	81.74	311.3	12 11	0			
KHEYS	82.06	351.1	12 12	0	22 22	3	
COLLEGE	84.04	25.3	12 21	-1			
MAWSON	84.46	200.2	12 25A	1	22 39	-4	
SCOTT BASE	85.20	172.1	12 29	1			
MOSCOW	85.62	325.4	12 30	0			
APATITY	86.98	337.4	12 36K	-1	23 8	1	
KSARA	88.00	303.6	12 47	5			13 43
SIMFEROPOL	88.49	314.8	12 45	1	23 28	7	
JERUSALEM	88.71	301.6	12 48	3			
KEVO	89.02	339.9	12 46	-1			
PULKOVO	89.20	329.8	12 47	0	23 29	1	
SODANKYLA	89.60	337.6	12 50	1			
KAJAANI	89.76	334.3	12 50K	0	23 32	-1	23 22 SKS
VIBORG	89.81	330.8	12 50	0	23 38	5	
MOULD BAY	91.19	12.6	12 57	0			
HELSINKI	91.78	330.7	12 59	0			
TROMSOE	91.79	340.5	12 59	-1			
NURMIJARVI	91.86	331.0	12 59K	-1	23 47	-4	15 15
NORD	92.23	354.9	13 2	0			
UMEA	93.03	334.8	13 5K	0			
SOUTH POLE	94.55	180.0	13 13	1			
UPPSALA	95.42	331.3	13 15	-1			
SKALSTUGAN	96.44	335.8	13 20	-1			
RESOLUTE	97.03	10.2	13 24	1			
GOTEBORG	98.94	330.4	13 25	-7			
BULAWAYO	98.96	250.4	13 32	0			
PRUHONICE	100.38	322.5	13 40	1			
COLLMBERG	100.83	324.1	13 41	0			17 31
KASPERSKE H.	101.26	321.9	13 33	-10			14 2
BLUE MTS.	104.90	41.3	14 9	10			
EUREKA	107.84	46.1	14 23	777			18 22 PKP
UINTA BASIN	111.98	43.2	18 28	3			19 9 PP
TONTO FOREST	113.31	49.7	18 30	2	18 39		21 43 PPP
GOLDEN	115.11	42.1	18 34	3			
ALBUQUERQUE	116.62	47.2	18 39	5			
WICHITA MTS.	122.33	43.7	18 48	3			20 28 PP
TULSA	123.53	40.9	18 51	3			
CUMBERLAND	129.98	34.4	19 3	3			22 21 SKP
SAN JUAN	154.01	28.3	19 54	13			
HUANCAYO	157.17	110.3	19 52	6			
CARACAS	159.92	41.7	19 53	4			21 13 PKP2

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JUNE 26 14.H 9.M 19.5 EPICENTRE 36.38 76.61 DEPTH= 89.KM

A= 0.18689 B= 0.78510 C= 0.59050 D= 0.9728 E=-0.2316
G= 0.1367 H= 0.5745 K=-0.8070 HT= -0.4

DEPTH OF FOCUS= 0.009R

SE= 1.89

	DELTA DEG.	AZ. DEG.	P		O-C S	S			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
MURGAB	2.92	313.8	0	48	2							1 18
KHOROG	4.22	286.6	1	5A	1	1	56	4				
WARSAK DAM	4.77	241.7	1	13	2	2	5	-1				
DZERGETAL	5.12	305.3	1	15	-1							
ANDIJAN	5.49	324.0	1	22A	1	2	28	5				1 54
FERGANA	5.51	317.9	1	21A	0	2	24	0				
GARM	5.65	299.5	1	22A	-1							1 55
KULYAB	5.69	287.5	1	23	-1							2 11
NAMANGAN	6.00	321.4	1	29	1	2	36	0				
RYBACHE	6.07	357.0	1	26	-3							2 2
DEHRA DUN	6.16	168.3	1	32	2	2	36	-4				1 39 PP
PRZHEVALSK	6.25	12.3	1	33	2							
FRUNSE	6.62	347.2	1	38A	1							
FABRICHNAYA	6.75	358.9	1	40	2							
ALMATA-2	6.91	4.6	1	41	0							2 42
CHILIK	7.31	10.4	1	47	-1							3 23
TASHKENT	7.55	313.0	1	47A	-2	3	10	-4				2 17
NEW DELHI	7.79	176.2	1	52A	-1	3	12	-8				
TCHIMKENT	8.03	319.6	1	54	-2	3	19	-7				3 45
SAMARKAND	8.28	296.3	1	57	-2							
QUETTA	10.17	235.4	2	24	-1	4	14	-4				
CHATRA	13.09	133.7	3	4A	0							5 19
SEHORE	13.17	178.1				5	16	-13				
KARACHI	14.14	218.2	3	16K	-1	5	41	-11				
SEMIPALATNSK	14.26	9.5	3	21	2							
ASHKABAD	14.65	281.6	3	21	-3	5	56	-8				
VANNOVSKAYA	14.85	281.6	3	23	-3	6	1	-8				
KIZYL-ARVAT	16.32	286.1	3	42K	-3							
SHILLONG	16.93	125.3	3	45A	-8							6 39
POONA	17.94	188.5	4	42	37							9 22
CHITTAGONG	19.22	132.5	3	45	-35	6	40	-67				
TEHERAN	20.39	275.7	4	34	2	8	21	11				
SHIRAZ	21.26	258.5	4	41A	0	8	31	5				8 47 PCP
LANCHOW	21.94	82.7	4	47K	0	8	41	2				5 21 *SP
SVERDLOVSK	23.11	337.3	5	0A	1							
MADRAS	23.50	171.2				9	23	17				9 44
CHENG TU	23.50	96.1	5	7	4	9	8	2				5 41 *SP
KIROVOBAD	24.01	289.5	5	10A	3	9	21	6				
GORIS	24.03	286.7	5	6	-2	9	22	7				5 44 PP
KUNMING	25.03	109.3	5	19	2	9	33	1				5 52 *SP
TIFLIS	25.19	292.0	5	22	3							
IRKUTSK	25.19	42.2	5	19	0	9	44	9				
BAKURIANI	26.15	292.0	5	31	3							
SIAN	26.39	85.0	5	28	-2							6 5 *SP
PAOTOW	26.40	70.6	5	30	0	9	55	0				6 5 *SP
PEKING	31.12	71.1	6	12	0	11	14	4				
MOSCOW	32.67	318.8	6	25	-1	11	32	-2				7 28 PP
SIMFEROPOL	33.03	298.4	6	35	6							7 39 PP
PULKOVO	37.67	323.2	7	8	0							12 49
APATITY	39.53	335.6	7	23A	-1							
LWOW	39.87	306.6	7	28	1							
KAJAANI	40.22	329.1	7	30K	1	13	26	-4				9 7 PP
HELSINKI	40.38	322.8	7	31	0							8 12
NURMIJARVI	40.60	323.2	7	33K	0	13	32	-3				8 58 PP
YAKUTSK	41.48	34.7	7	39K	-1							
SODANKYLA	41.81	333.6	7	42K	0	13	51	-2				
VLADIVOSTOK	42.38	63.2	7	46K	-1							
KRAKOW	42.51	307.1	7	49	1							8 25
KEVO	42.64	337.0	7	49K	0							9 20 PP
UMEA	43.32	327.4	7	54	-1							8 30
UPPSALA	43.97	321.5	8	0	0							
KIRUNA	44.21	333.1	8	2	0	14	34	6				
TIKSI	44.22	21.1	8	2K	0							9 44 PPP
KARLSKRONA	44.91	316.1	8	11	3							8 39
KHEYS	44.93	355.8	8	8K	0							10 29 PPP
VIENNA-H.	45.01	304.9	8	10	2							8 33
TROMSOE	45.23	335.4	8	10	0							8 35
PRUMONICE	45.97	307.5	8	17	1							8 54
LJUBLJANA	46.62	302.1	8	22K	1							8 57

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KASPERSKE H.	46.71	306.5	8 23K	1		10 11
COLLMBERG	46.78	309.5	8 23	1		11 27
SKALSTUGAN	46.80	326.4	8 22	-1		
GOTEBORG	46.86	318.3	8 22	-1		
HALLE	47.40	309.9	8 27	0		9 2
JENA	47.72	309.2	8 29	-1		10 59
MATUSIRO	48.76	70.4	8 36K	-2		9 12
Y.-SAKHLINSK	49.14	55.8	8 40K	-1		
STUTTART	49.57	306.7	8 45	1		9 21
BENSBERG	50.46	309.8	9 18	27		
ROSELEND	52.06	303.4	9 3	0		9 29
ISOLA	52.20	301.4	9 5	1		
DOURBES	52.25	309.2	9 8	4		9 46
GARCHY	53.97	306.2	9 16K	-1		
CLERMONT-FD.	54.39	304.4	9 59	39		
KEW	54.91	311.9	9 23	-1		
FOLINIERE	55.80	308.8	9 29	-1		
PETROPAYLOYK	57.45	45.2	9 39	-3		
ALERT	59.66	354.3	9 57K	0		
TOLEDO	61.45	300.2	10 10K	1		10 37
MALAGA	63.07	297.1	10 20	0		10 40
CHILEKA	65.01	224.9	10 31A	-2		
MOULD BAY	67.21	4.1	10 46K	-1	19 32 -1	
RESOLUTE	69.08	357.6	10 57K	-1		
BULAWAYO	72.23	227.2	11 17	0		
COLLEGE	73.27	18.2	11 23	0		14 6 PP
MUNDARING	77.45	146.3	11 46	-1		
PORT MORESBY	80.24	109.3	12 3K	0		12 30
KIMBERLEY	81.06	224.3	12 6	-1		
SCHEFFERVILLE	83.88	339.7	12 20K	-1		
CHARTERS TS.	86.44	118.0	12 34	0		13 14
SEPT ILES	87.81	337.2	12 42	1		
ADELAIDE	91.54	133.4	12 59A	1		13 27
PENTICTON	93.47	10.6	13 2	-5		
BRISBANE	95.66	119.8	13 14	-3		
BLUE MTS.	98.17	10.0	13 28	0		17 19 PP
UINTA BASIN	103.47	4.9	13 52	0		14 23
EUREKA	103.63	10.0	13 55	2	14 27	17 26 PKP
TONTO FOREST	109.31	6.9	18 15	777	18 22	18 56 PP
SOUTH POLE	126.19	180.0	18 52	0		

JUNE 26 17.H 42.M 40.S EPICENTRE 7.08 -82.35 DEPTH= 17.KM

A= 0.13212 B=-0.98364 C= 0.12242 D=-0.9911 E=-0.1331
G= 0.0163 H=-0.1213 K=-0.9925 HT= 6.9

SE= 2.88

	DELTA DEG.	AZ. DEG.	P		O-C S	S			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
BALBOA HTS.	3.34	55.7	0	53	0							
CHINCHINA	7.01	107.0	1	42A	-3	2	56	-9				
GALERAZAMBA	7.90	61.8	2	0	3							
BOGOTA	8.59	106.1	2	8A	1	3	40	-5				
FUQUENE	8.72	100.1	2	9	1							
SAN SALVADOR	9.40	314.8	2	16	-2							
COMITAN	13.21	314.5	3	16	6	5	52	15			7	20
MERIDA	15.48	333.7	3	41	2	6	44	13				
CARACAS	15.61	76.3	3	38K	-3	6	24	-10				
OAXACA	17.20	306.3	4	4	3						9	8
SAN JUAN	19.39	53.1	4	28	0							
HUANCAYO	20.25	159.8	4	36	-1							
TACUBAYA	20.44	308.4	4	38	-1	8	30	7			5	53
ST. CLAUDE	22.08	64.4	4	56K	0	9	8	14				
FORT FRANCE	22.15	68.1	4	56	-1	9	6	11				
GUADALAJARA	24.39	305.8	5	20	1	9	52	17			13	20
HOUSTON	25.65	333.0	5	33	2							
COLUMBIA	26.82	2.4	5	42	1	10	20	5				
LA PAZ	27.33	149.1	5	46	0							
CUMBERLAND	28.53	354.5	5	56	-1	10	46	3			6	39 PP
CHAPEL HILL	28.86	5.6	6	0	0							
DALLAS	28.94	334.3	6	0	-1							
BLACKSBURG	30.04	3.1	6	11	1							
BERMUDA	30.07	30.8	6	10	-1	11	15	8				
FAYETTEVILLE	30.84	341.1	6	16A	-2	11	21	2				
CHIHUAHUA	31.01	316.6	6	10	-9	11	23	1				

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TULSA	31.23	338.7	6 20K	-1	11 28	3		7 15 PP
WICHITA MTS.	31.31	333.7	6 20	-2	11 26	-1		7 14 PP
LUBBOCK	31.96	328.2	6 26	-1	11 41	4		
WASHINGTON	32.04	7.8	6 28	0	11 20	-18		7 26 PP
GEORGETOWN	32.04	7.8	6 29	1				
ST. LOUIS 1	32.22	348.4	6 28	-2	11 44	3		
MORGANTOWN	32.48	3.5	6 33K	1				7 31 PP
LAWRENCE	33.82	341.8	6 42	-2				
CLEVELAND	34.26	1.1	7 1K	14	12 29	16		
FORDHAM	34.47	11.4	6 51	2	12 20	4		
PALISADES	34.62	11.3	6 51	1	12 23	5	6 59	9 23 PCP
ALBUQUERQUE	35.51	324.7	6 59	1				
LONDON ONT.	35.83	1.5	6 59A	-2				
TUCSON	36.47	317.2	7 7	1	12 54	7		
TONTO FOREST	38.01	319.4	7 21A	2	13 10	0	7 26	8 50 PP
GOLDEN	38.50	331.0	7 24	1	13 25	7		
OTTAWA	38.61	7.5	7 24A	0				
BREBEUF	39.02	9.8	7 28A	1	13 30	4		16 4 SS
LARAMIE	39.86	332.4	7 46	11	14 9	31		
HALIFAX	40.81	20.6	7 44A	2				
UINTA BASIN	41.09	327.8	7 45	0	13 55	-2		9 45 PCP
SEVEN FALLS	41.10	12.0	7 43	-2				
RAPID CITY	41.12	337.0	7 46	1	14 2	5		
BOULDER CITY	41.35	318.8	7 50	3				
SANTIAGO	41.79	165.3	7 52	2				
SANTA LUCIA	41.80	165.2	7 49	-1	14 12	5		
PASADENA	42.62	314.2	7 59	2	14 27	8	8 13	8 17 *SP
EUREKA	44.18	322.1	8 11	1				
SEPT ILES	45.01	14.5	8 16	-1				
PRIEST	45.39	315.2	8 22K	2				
BOZEMAN	45.76	332.0	8 24	2	15 11	6		
LLANADA	45.83	315.6	8 24	1				
BUTTE	46.73	331.2	8 30	0	15 24	5		10 22 PP
BERKELEY	47.37	316.4	8 38	3	15 34	6		21 38
CALISTOGA	47.97	317.1	8 41A	1				
MINERAL	48.22	319.6	8 42A	0				
BLUE MTS.	48.35	326.9	8 42A	-1	15 23	-18		10 37 PP
UKIAH	48.65	317.3	8 54	9				
SHASTA	48.91	319.5	8 45A	-2				10 11
HUNGRY HORSE	49.11	332.4	8 49	0	15 57	5		13 35
SCHEFFERVILLE	49.22	11.8	8 48A	-2				
SPOKANE	50.26	329.8	8 57	-1				
PENTICTON	52.45	330.0	9 14A	0				
EDMONTON	52.59	337.1	9 12A	-3				
SEATTLE	52.80	327.0	9 10	-7				
VICTORIA	53.92	327.3	9 25A	0				
PONTA DELGDA	59.54	50.2	10 6	1	18 24	12		
M. BOUR	64.48	77.5	10 36	-2	19 19	4		
GODHAVN	64.89	10.9	10 43K	2	19 14	-6		
RESOLUTE	67.94	356.4	10 58	-2				
HAWAII V. OB.	71.60	288.1	11 23	1	20 47	7		
MOULD BAY	72.01	351.3	11 23A	-2				
COLLEGE	73.34	336.1	11 32	-1				14 16 PP
ARGENTINE I.	73.37	172.2	11 33	0				
SCORESBY SD.	73.73	17.7	11 51	16	21 22	18		
KIPAPA	74.14	290.2	11 38	1	21 11	2		
HONOLULU	74.22	290.1	11 38	0	21 19	9		
ALERT	75.86	2.7	11 46A	-1				
MALAGA	76.15	54.0	11 50	1	21 30	-1		
TOLEDO	76.52	50.8	11 52A	1	21 41	6		14 39 PP
GRANADA	76.80	53.6	11 54A	1	21 48	10		22 46 PS
ABERDEEN	78.80	33.2			22 1	1		14 18
DURHAM	78.93	35.6			22 4	3		
FOLINIERE	79.36	41.8	12 6	-1				
KEM	79.54	39.0	12 7	-1	22 7	0		27 17 SS
BAGNERES	79.73	47.6	12 8	-1				12 48
TORTOSA	80.01	49.9	12 4	-6				
PARIS	81.32	41.8	12 17	0				
GARCHY	81.74	43.3	12 19	0				
CLERMONT-FD.	81.82	44.8	12 20	0				
UCCLE	82.48	39.7	12 31	8	22 50	12		
DOUBES	82.67	40.4	12 26	2	22 44	4		
DE BILT	82.95	38.4	12 36	10				23 40 PS
BESANCON	83.72	43.2	12 29	0				
WITTEVEEN	83.82	37.6	12 31	1				
BENSBERG	84.26	39.5	12 33A	1				
ROSELEND	84.28	44.8	12 33	1				
MUNSTER	84.46	38.4	12 34	1				
ISOLA	84.69	46.3	12 36	2				13 5

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STRASBOURG	84.83	41.8	12 36A	1	23 4 3	23 55 PS
FELDBERG	85.05	42.5	12 36	0		
KARLSRUHE	85.21	41.4	12 38	1		
EBINGEN	85.66	42.1	12 39	0		
TUBINGEN	85.69	41.8	12 39	0		
SKALSTUGAN	85.78	26.6	12 39A	-1		15 58 PP
STUTTGART	85.81	41.5	12 40	0	23 8 -3	28 58 SS
PAVIA	86.11	45.1	12 50	9		23 45
GÖTEBORG	86.39	32.4	12 43	0		
COPENHAGEN	86.91	34.4	12 55	10	23 50 29	
JENA	87.03	39.2	12 46	0	23 15 -8	16 9 PP
HALLE	87.19	38.6	12 47	0	23 23 -1	
TROMSØ	87.32	20.1	12 47	0		
COLLMBERG	87.87	38.7	12 50	0		16 20 PP
PADOVA	87.97	44.7	12 50	0	23 35 4	16 20 PP
KIRUNA	88.28	21.7	12 51	-1	23 23 -11	16 17 PP
KASPERSCHE H.	88.57	40.8	12 52K	-1		16 28 PP
UPPSALA	88.92	29.8	12 53A	-2	23 40 0	
PRAGUE	88.96	39.8	12 51	-4		
BYRD STATION	89.00	186.1	12 55	0		
PRUHOVICE	89.05	39.9	12 56	0	23 26 -15	
UMEA	89.21	25.7	12 55	-1	23 28 -15	16 26 PP
TRIESTE	89.24	44.2	13 1	5	23 28 -15	16 28 PP
AQUILA	89.52	47.5	13 0	2		24 54 PS
LJUBLJANA	89.70	43.7	13 0	1		
KEVO	89.98	19.2	12 58	-2	23 50 0	29 42 SS
VIENNA-H.	90.54	41.4	13 3	0		
SODANKYLA	90.69	21.5	13 2	-1		16 48 PP
BRATISLAVA	91.04	41.3	13 4	-1	24 3 4	16 27 PP
MESSINA	91.84	51.3			23 40 -26	16 40 PP
NURMIJARVI	92.14	28.3	13 7	-3	24 8 -1	16 52 PP
KAJAANI	92.27	24.4	13 10	-1		16 51 PP
KRAKOW	92.44	39.1	13 12K	1	23 45 -27	16 48 PP
WARSAW	92.56	36.8			24 14 1	16 54 PP
APATITY	93.02	20.3	13 13A	-1	23 46 -31	16 58 PP
SOUTH POLE	97.03	180.0	13 32	0		
ISTANBUL UN.	101.14	45.9	18 2	251		
HERMANUS	103.51	123.6				27 25 PS
ROXBURGH	107.85	224.6				28 20 SP
KSARA	108.85	50.8	14 36	777		19 3 PP
LWIRO	111.26	89.7				28 57 PS
TUKUBASAN	121.34	320.3				20 29 PP
MATUSIRO	122.32	321.7	18 54	-1		27 34 SKKS
SHIRAZ	123.32	47.6	19 2K	6		37 35 SS
RIVERVIEW	124.00	233.8				30 50 PS
TOOLANGI	127.13	227.6	19 16	12		
CHARTERS TS.	131.19	249.6	19 13	1		
WARSAK DAM	132.25	29.6	19 17	3		
QUETTA	132.67	37.0	19 17	3		21 36 PP
SIAN	137.53	346.1				22 17 PP
NEW DELHI	139.43	28.2	19 28	1		20 27
LHASA	142.94	9.6	19 40	7		22 52 PP
CHATRA	144.80	16.4	19 38	2		
POONA	145.38	42.4	19 38	1		
CANTON	146.32	333.3	19 43A	4		23 9 PP
HONG KONG	146.62	331.4	19 43	4		42 10 SS
SHILLONG	147.06	9.6	19 41A	1		
BAGUIO CITY	147.44	316.0	19 44	3		
KUNMING	147.61	351.4	19 46	5		
MANILA	148.27	313.0	19 49	7		
MUNDARING	149.79	212.5	19 49	5	19 56	
NHATRANG	157.65	329.0	20 1	6		20 31 PKP2

JUNE 27 7.M 7.M 57.S EPICENTRE 60.50-140.80 DEPTH= 0.KM

A=-0.38352 B=-0.31283 C= 0.86894 D=-0.6321 E= 0.7749
G=-0.6733 H=-0.5492 K=-0.4949 HT= -9.1

SE= 1.71

	DELTA DEG.	AZ. DEG.	P		O-C S	S O-C			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
SITKA	4.48	138.1	1	8	-3	1	55	-10				
COLLEGE	5.45	326.6	1	26	1	2	43	14				
VICTORIA	15.61	132.5	3	38	-5							
PENTICTON	16.45	123.4	3	54	0							
EDMONTON	16.48	103.4	3	54	0							

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SEATTLE	16.75	131.9	4 10	12	7 18	14					
BANFF	16.88	112.3	3 58	-1							
MOULD BAY	17.45	17.0	4 6	0							
SPOKANE	18.64	122.8	4 22	1	7 49	2					
HUNGRY HORSE	19.59	116.4	4 30	-2							
BLUE MTS.	20.99	127.7	4 47A	0	8 47	10			5 31	PP	
RESOLUTE	21.68	31.1	4 55	1							
BUTTE	22.01	118.4	4 57	-1							
SHASTA	22.86	141.8	5 7A	1					5 37		
BOZEMAN	22.95	116.9	5 8	1							
MINERAL	23.42	140.8	5 12K	0							
CALISTOGA	24.70	144.1	5 24K	0							
PARAISO	26.91	145.7	5 47	2							
PRIEST	27.58	143.0	5 51K	0							
RAPID CITY	27.75	109.2	5 57	5							
UINTA BASIN	27.92	122.2	5 54	0	10 43	6			6 45	PP	
LARAMIE	28.83	115.7	6 2	0					15 6		
ALERT	29.02	15.4	6 4A	0							
BOULDER CITY	29.64	134.1	6 10	1							
PASADENA	30.19	140.6	6 14	0							
GOLDEN	30.23	117.4	6 15	0						11 18	
TONTO FOREST	32.45	130.5	6 34	0			6 44		9 18	PCP	
MAGADAN	32.80	299.0	6 37	0							
ALBUQUERQUE	33.77	123.5	6 46	0							
TUCSON	34.44	131.5	6 51	0							
TIKSI	34.59	326.1	6 52A	-1							
NORD	35.05	12.2	6 58	1							
LAWRENCE	35.47	106.5	7 0	0							
LUBBOCK	36.90	119.1	7 12	0					15 46		
WICHITA MTS.	37.38	114.3	7 16	0	13 7	2			8 52	PP	
TULSA	37.68	110.1	7 18K	-1	13 10	0					
ST. LOUIS 1	38.14	101.6	7 30	7							
FAYETTEVILLE	38.28	108.2	7 23	-1					20 4		
KHEYS	38.71	355.1	7 28A	0							
YAKUTSK	39.80	312.5	7 36A	-1							
OTTAWA	40.22	81.7	7 38	-2							
HONOLULU	41.02	205.0							14 14		
BREBEUF	41.17	80.0	7 46	-2					17 3	SCS	
MORGANTOWN	42.42	91.1	7 58	0							
CUMBERLAND	42.82	99.9	8 1	0	14 27	1			9 53	PP	
BLACKSBURG	44.07	93.7	8 11	0					18 7		
PALISADES	44.35	84.6			14 52	3			18 22	SCS	
Y.-SAKHLINSK	44.53	288.5	8 14A	-1	14 51	0					
TROMSOE	49.36	9.2	8 53	0			9 4				
KEVO	49.74	5.5	8 55A	-1							
KIRUNA	51.24	9.0	9 7A	-1							
SODANKYLA	52.10	6.1	9 13A	-1							
APATITY	52.18	2.8	9 14A	-1	16 38	-1					
VLADIVOSTOK	52.49	292.8	9 15A	-2							
SKALSTUGAN	54.57	14.4	9 32A	0							
MATUSIRO	54.73	283.0	9 32A	-2	17 20	7					
CHANGCHUN	54.88	298.0	9 34	-1							
UMEA	55.17	10.1	9 36A	-1	17 28	9					
KAJAANI	55.43	6.1	9 38A	-1					10 45	PCP	
IRKUTSK	56.11	317.8	9 43A	-1							
NURMIJARVI	58.80	8.4	10 1A	-2	18 6	-1			10 43	PCP	
UPPSALA	58.82	12.5	10 1A	-2							
HELSINKI	59.16	8.2	10 4A	-1							
PULKOVO	59.86	5.2	10 8	-2							
GOTEBORG	60.21	16.4	10 12	0							
PEKING	61.90	302.0	10 23	-1	18 47	0					
KARLSKRONA	62.19	14.7	10 26	0							
PAOTOW	63.94	306.8	10 41	4							
MOSCOW	64.11	1.0	10 37A	-1							
SEMIPALATNSK	64.61	332.3	10 40	-2							
MUNSTER	65.05	20.9	10 46	2							
BENSBERG	65.94	21.6	10 50A	0							
DOURBES	66.27	23.5	10 52	0							
FOLINIERE	66.45	27.4	10 53	0							
COLLMBERG	66.57	17.6	10 54A	0					13 36		
WARSAW	66.68	12.1	10 55	0							
JENA	66.71	18.6	10 55	0					13 30	PP	
PARIS	67.06	25.4	10 59	2							
ZO-SE	67.21	292.9	10 58	0	19 54	1					
NANKING	67.48	295.3	11 0	0							
PRAGUE	67.98	16.9	11 3	0							
PRUHONICE	68.09	16.9	11 4	0	20 15	12					
STRASBOURG	68.33	21.9	11 6A	1							
CHORZOW	68.36	13.8	11 5	-1							

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STUTT GART	68.42	20.8	11 6	0				
RACIBORZ	68.48	14.4	11 6	0			11 53	
GARCHY	68.64	25.5	11 7A	0				
KRAKOW	68.71	13.2	11 7A	-1				
KASPERSCHE H.	68.77	17.7	11 8A	0			11 50	
BESANCON	69.27	23.5	11 11	0				
CLERMONT-FD.	70.09	26.0	11 16	0				
BRATISLAVA	70.21	15.5	11 16	-1			12 0	
LANCHOW	70.29	308.9	11 18A	1	20 30	1		
ROSELEND	70.89	23.5	11 23	2				
LJUBLJANA	71.92	17.8	11 27	0				
ALMATA-2	71.99	331.7	11 27A	-1				
ISOLA	72.42	23.7	11 31	1				
MONACO	72.93	23.5	11 34	1				
TOLEDO	73.89	33.3	11 39A	0	21 19	9	14 24	PP
SIMFEROPOL	74.83	3.7	11 44	0	21 23	2		
TASHKENT	75.58	337.1	11 48A	0				
MALAGA	76.74	34.7	11 56	1				
TIFLIS	78.03	355.7	11 57	-5				
BAKURIANI	78.07	356.7	12 3A	1				
DUZHANBE	78.34	336.7	12 4A	0				
KIROVOBAD	79.04	354.5	12 8A	0				
KIZYL-ARVAT	79.67	346.6	12 14A	3				
BAGUIO CITY	80.04	285.6	12 13	0				
GORIS	80.18	354.4	12 17	3				
KUNMING	80.39	304.6	12 16	1	22 21	0		
ASHKABAD	80.65	344.8	12 18	2				
VANNOVSKAYA	80.68	345.0	12 18	2				
ATHENS	81.06	12.3	12 19	1				
WARSAK DAM	82.17	333.3	12 23	-1				
TEHERAN	83.58	350.0	12 33	1			15 44	PP
SHILLONG	84.15	313.8	12 34A	0				
CHATRA	84.61	318.2	12 39A	2				
NEW DELHI	85.96	327.1	12 42A	-1				
JERUSALEM	88.00	3.4	12 54A	1				
HUANCAYO	88.81	117.1	13 6	9				
SHIRAZ	89.52	348.4	13 0A	-1	23 23	-27	17 19	PP
CHARTERS TS.	99.22	245.5	13 52	7				
CHANGALANE	145.46	11.1	19 42	2				
KIMBERLEY	146.79	23.5	19 44	2				
SOUTH POLE	150.34	180.0	19 54	6			20 24	

JUNE 27 15.H 32.M 53.S EPICENTRE 14.00 93.62 DEPTH= 41.KM

A=-0.06120 B= 0.96876 C= 0.24034 D= 0.9980 E= 0.0631
G=-0.0152 H= 0.2399 K=-0.9707 HT= 5.9

DEPTH OF FOCUS= 0.001R

SE= 2.07

	DELTA DEG.	AZ. DEG.	P		O-C S	S O-C			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
PORT BLAIR	2.47	200.8	0	40K	2	1	10	2				
CHITTAGONG	8.49	348.7	2	1	-2	3	34	-5				
VISHAKHAPTNM	10.59	291.8	2	28A	-4	4	20	-10			2 37	PP
MEDAN	11.49	153.8	2	47K	3	4	57	5			2 56	PP
SHILLONG	11.63	352.2	2	42A	-4							
BOKARO	12.26	324.1	2	54	0	4	57	-14				
MADRAS	13.10	267.2	3	1	-5	5	22	-9			3 9	PP
KUNMING	14.01	36.4	3	27A	10	6	10	18				
CHATRA	14.12	335.7	3	17A	-2	5	50	-5				
NHATRANG	15.29	94.8	3	35	1	6	22	-1				
LHASA	15.75	351.7	3	46A	6							
CHENGTU	19.15	28.3	4	23A	1	7	59	8	4	35		
POONA	19.50	286.0	4	26	0							
CANTON	20.75	61.3	4	31	-8							
NEW DELHI	21.04	316.2	4	44A	2						11 24	
HONG KONG	21.19	64.1	4	44	0	8	41	9				
DEHRA DUN	21.68	321.1									8 48	
LANCHOW	23.80	20.9	5	12A	3	9	29	10	5	24		
SIAN	24.47	31.9	5	17A	1				5	28		
LAHORE	24.86	317.9	5	20	0							
BAGUIO CITY	26.12	81.2	5	31	-1							
WARSAK DAM	28.22	318.7	5	52	1							
NANKING	29.20	47.7	6	0A	1							
QUETTA	29.38	307.6	6	2A	1				6	17		

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PAOTOW	30.12	25.4	6	8	0						
ZO-SE	30.50	51.5	6	11	0	11	10	2		6	23
KHOROG	30.55	324.0	6	13A	-2	11	12	3			
PEKING	32.62	33.1	6	30	0						
DUZHANBE	32.89	322.7	6	32	0						
FRUNSE	33.07	334.0	6	35A	1						
TASHKENT	34.48	326.8	6	46A	0	12	11	1			
SEMIPALATNSK	37.90	346.1	7	15	0						
IRKUTSK	39.13	10.4	7	26A	1						
VANNOYSKAYA	39.48	313.8	7	30	2						
SHIRAZ	40.97	299.2	7	43A	3	13	50	1		8	54 PP
KIZYL-ARVAT	41.33	314.5	7	45A	2	13	57	3			
TEHERAN	43.57	307.5	8	3	2	14	32	5			
MATUSIRO	45.64	52.3	8	17A	-1	15	35	38			
GORIS	48.57	310.7	8	42	1						
KIROVOBAD	48.93	312.1	8	44A	0						
TIFLIS	50.37	313.0	8	55	0						
MUNDARING	50.58	155.0	8	54	-2				9	5	
BAKURIANI	51.28	312.6	9	3A	1						
YAKUTSK	54.42	20.0	9	24A	-1						
KSARA	55.63	301.5	9	19	-15						
TANANARIVE	55.94	235.4	9	36	0						
JERUSALEM	56.00	299.0	9	37	1						
PORT MORESBY	57.98	110.6	9	49A	-1						
SIMFEROPOL	58.73	314.3	9	55A	-1	17	56	0			
MOSCOW	59.64	327.1	10	1	-1						
CHARTERS TS.	61.87	122.1	10	15	-2					10	56
PETROPAVLOVK	63.96	37.6	10	29	-2						
ADELAIDE	64.82	140.0	10	35K	-1						
CHILEKA	65.03	245.1	10	37A	-1						
VIBORG	65.65	330.8	10	41	-1						
APATITY	65.97	338.6	10	43A	-1						
LWIRO	66.21	261.2	10	47	2					11	19
KAJAANI	67.04	334.2	10	50A	-1						
HELSINKI	67.36	329.7	10	53	0						
NURMIJARVI	67.58	330.0	10	53	-1	19	37	-9		27	27 SSS
SODANKYLA	68.38	337.5	10	58A	-1						
KHEYS	68.49	354.1	11	0A	0	19	58	1			
KRAKOW	68.93	318.5	11	1	-1						
KEVO	68.93	340.0	11	2A	0						
RACIBORZ	70.04	318.4	11	8	-1						
UMEA	70.21	333.1	11	9A	-1	20	16	-1			
BROKEN HILL	70.39	248.9	11	12K	1						
BRISBANE	70.58	126.0	11	12	-1						
TOOLANGI	70.72	138.5	11	13	0					11	27 *SP
KIRUNA	70.80	337.4	11	13A	-1						
UPPSALA	70.97	328.8	11	14A	-1						
VIENNA-H.	71.22	316.5	11	18	2						
TROMSOE	71.65	339.2	11	18	-1						
KARLSKRONA	71.83	324.8	11	21	1						
CHANGALANE	71.88	236.0	11	21A	1				11	29	11 35 PCP
MESSINA	72.17	305.9									20 38
BULAWAYO	72.35	243.3	11	23K	0						
PRUHONICE	72.40	318.3	11	24	1						
LJUBLJANA	72.52	314.2	11	24A	0						
KASPERSKE H.	73.05	317.4	11	27	0						
COLLMBERG	73.35	319.7	11	29	0						14 15
SKALSTUGAN	73.72	332.6	11	30A	-1						
GOTEBORG	73.82	326.4	11	31	-1						
HALLE	74.00	320.0	11	33	0	21	0	-1			
JENA	74.26	319.4	11	33	-1						14 28 PP
BENSBERG	77.04	319.6	11	50	0						
ISOLA	77.95	312.7	11	56	1				12	13	
ROSELEND	78.04	314.3	11	55	-1						12 6 PCP
KIMBERLEY	78.89	236.6	11	59	-1						
MIRNY	80.32	180.2	12	15	7						
FOLINIERE	82.28	318.2	12	18	0						
ALERT	83.03	356.9	12	22A	0						
MAWSON	84.39	191.4	12	29K	0						
MOULD BAY	87.81	7.5	12	45A	-1						15 56
COLLEGE	88.90	22.0	12	50A	-1						16 16 PP
ROXBURGH	90.12	137.0	12	56	-1						
RESOLUTE	91.35	2.3	13	3	1						
KARAPIRO	92.25	128.4	13	7	0						
CHATEAU	92.60	129.6	13	7	-1						
BLUE MTS.	115.05	23.8	18	39	3						19 28 PP
SHASTA	116.16	29.9	18	50K	11						
MINERAL	116.81	29.6	18	41K	1						

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EUREKA	120.07	26.2	18 48	2	20 14 PP
WOODY	121.80	30.9	18 50	1	
UINTA BASIN	121.83	20.7	18 51	1	20 22 PP
GOLDEN	123.73	17.6	18 55	2	
TONTO FOREST	126.46	25.7	19 2	4	20 53 PP
ALBUQUERQUE	127.73	20.9	19 4	3	22 18 SKP
TUCSON	128.40	26.6	19 4	2	
WICHITA MTS.	130.18	13.2	19 7	1	21 1 PP
CUMBERLAND	130.68	359.1	19 8	1	21 22 PP
CARACAS	148.94	320.6	19 45K	6	
LA PAZ	162.21	259.6	20 0	4	

JUNE 28 2.H 28.M 53.S EPICENTRE -27.54 65.93 DEPTH= 44.KM

A= 0.36211 B= 0.81076 C=-0.45994 D= 0.9131 E=-0.4078
G=-0.1876 H=-0.4200 K=-0.8879 HT= 2.6

DEPTH OF FOCUS= 0.002R

SE= 2.40

	DELTA DEG.	AZ. DEG.	P		O-C S	S			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
KERGUELEN I.	22.01	172.8	4	53	1	9	5	18				
CHANGALANE	30.06	264.5	6	7	0				6	15		
CHILEKA	31.01	285.9	6	14	-2							
BULAWAYO	34.82	274.0	6	38	-11							
KIMBERLEY	36.18	258.2	7	0K	0							
BROKEN HILL	37.17	282.8	7	8K	-1							
MAWSON	40.12	181.8	7	33K	0	13	38	2			9	13 PP
MIRNY	42.44	164.3	7	52	0	14	16	5	8	16		
MADRAS	42.60	20.8									8	58
LWIRO	43.51	298.8	8	3A	2	14	41	15			10	7
TANGERANG	44.07	68.8	8	8A	3							
MEDAN	44.20	50.7	8	10A	4							
LEMBANG	44.54	70.3	8	11K	2	14	44	3			10	0 PP
POONA	46.44	10.4	9	3A	39						15	53
BOMBAY	46.65	9.0	8	28	2						10	17
PORT BLAIR	46.84	37.2	8	31A	4						15	25
WILKES	47.47	157.4	8	43	11	15	21	-2				
BANDEIRA	50.31	273.2	8	53A	-1	15	59	-3	9	1		
N-LAZARVSKYA	52.67	199.7				16	40	5				
CHITTAGONG	55.56	29.3	9	34	1							
QUETTA	57.40	1.0	9	46	0							
CHATRA	57.79	22.5	9	49	0							
SHIRAZ	58.30	346.3	9	51K	-2						12	48 PP
SHILLONG	58.41	27.6	9	53K	0						17	59
ADELAIDE	61.43	116.7	10	9	-5							
WARSAK DAM	61.44	5.3	10	12	-2							
LHASA	61.73	24.8	10	16K	0	18	41	7				
SOUTH POLE	62.62	180.0	10	21	-1						11	0
KUNMING	63.24	37.5	10	25	-1							
TEHERAN	64.42	346.9	10	33K	-1	19	13	5			12	57 PP
SCOTT BASE	65.53	166.8	10	41	0							
DUZHANBE	65.82	2.4	10	43A	0							
JERUSALEM	65.85	331.5	10	43A	0							
TOOLANGI	65.98	121.2	10	44	0						11	41
KIZYL-ARVAT	67.00	351.9	10	49A	-1	19	42	3				
KSARA	67.35	333.1	10	53A	0	19	35	-8			13	22 PP
CANTON	68.04	47.0	10	57K	0							
CAPE HALLETT	68.23	161.4	10	58	0							
CHENG TU	68.35	34.9	10	57	-2	19	57	2				
TASHKENT	68.58	2.7	10	59K	-1	20	2	4				
FRUNSE	70.48	6.8	11	11K	-1	20	25	5				
TIFLIS	71.63	343.5	11	19	0							
BAKURIANI	71.97	342.5	11	21A	0							
BYRD STATION	72.62	179.0	11	25	0							
LANCHOW	72.64	31.4	11	24K	-1	20	50	5				
CHARTERS TS.	72.71	104.0	11	24	-1	20	48	2				
SIAN	73.72	36.0	11	31K	0							
ATHENS	76.23	326.9	11	45	-1							
ISTANBUL UN.	76.35	332.1	11	46	0							
NANKING	77.74	43.8	11	54	0							
SIMFEROPOL	77.76	337.5	11	53K	-1	21	45	3				
PORT MORESBY	77.97	94.4	11	56A	1							
ZO-SE	78.59	46.0	11	58K	-1	21	57	6				
SEMIPALATNSK	78.63	9.3	11	58	-1							

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PAOTOM	79.18	32.7	12	1K	-1						
MESSINA	80.63	322.0	12	21A	11	23	4	52	12	24	15 27 PP
PEKING	81.87	36.6	12	16K	0	22	33	8			
BELGRADE	83.11	329.3	12	25	3						27 42
AQUILA	84.74	323.8	12	32	1	23	3	9			40 27
ROME	84.91	323.0	12	32A	0	23	3	8			15 57 PP
WELLINGTON	85.06	134.3	12	33	1						
IRKUTSK	86.28	22.5	12	37	-1	23	3	-6			
MOSCOW	86.39	344.4	12	39	0						
LJUBLJANA	86.81	327.0	12	40	-1						
TRIESTE	86.90	326.3	12	43	2	23	12	-2			
BRATISLAVA	87.16	329.7	12	41	-2						23 14
KRAKOW	87.36	332.3	12	43	-1						12 56 PCP
VIENNA-H.	87.55	329.4	12	42	-2						
PADOVA	87.67	325.2									14 7
RACIBORZ	88.11	331.5	12	46	-1						
WARSAW	88.62	334.3	12	50	0	23	38	7			13 2 PCP
ISOLA	89.38	322.0	12	55	2						
CHANGCHUN	89.43	38.5	12	52	-1						
KASPERSKE H.	89.46	328.7	12	52K	-2						16 19
PRUHONICE	89.63	329.7	12	55	1	23	29	-11			
PRAGUE	89.74	329.7	12	54	-1						
M. BOUR	90.41	285.9	12	59	1						
STUTTGART	91.26	326.4	13	3	1						
COLLMBERG	91.26	329.9	13	3A	1						16 10
JENA	91.64	329.0	13	5	1	24	7	9			30 7 SS
PULKOVO	91.80	342.9	13	4	0						16 41 PP
HALLE	91.87	329.6	13	5	0						16 24 PP
STRASBOURG	91.88	325.6	13	5K	0	24	13	13			30 33 SS
MALAGA	91.93	310.8	13	7	2						16 51 PP
BESANCON	91.94	323.8	13	6	1						
CLERMONT-FD.	92.55	321.4	13	10	2						
VLADIVOSTOK	92.78	42.0	13	9	0						
VIBORG	93.01	342.7	13	9	-1						
MATUSIRO	93.15	50.2	13	9	-2						
TOLEDO	93.43	313.6	13	13A	1	24	20	6			17 2 PP
HELSINKI	93.62	340.8	13	12	-1						
BENSBERG	93.73	327.2	13	14	1						
NURMIJARVI	93.98	340.9	13	14A	0	23	47	-31			16 44 PP
DOURBES	94.45	325.5	13	19	2	24	0	-22			
KAJAANI	96.12	344.1	13	23	-1						17 15 PP
UMEA	97.88	341.3	13	31A	-1						26 25 PS
SODANKYLA	99.10	345.6	13	37	-1						17 40 PP
SKALSTUGAN	100.13	338.5									17 46 PP
KIRUNA	100.91	344.0	13	45	-1						17 53 PP
KEVO	101.00	347.1									17 53 PP
TIKSI	107.95	17.3	14	16	777						
LA PAZ	117.55	231.0	18	46	5						
MOULD BAY	131.17	1.7	19	9	2						
RESOLUTE	131.79	353.3	19	9	0						
CARACAS	132.63	258.5	19	14	4						39 51 SS
COLLEGE	136.98	20.4	19	18	0						22 3 PP
BREBEUF	143.34	310.2	19	27K	-3						
PALISADES	144.51	302.8	19	31	-1						19 42 PKP2
OTTAWA	144.79	310.7	19	31K	-1						
GEORGETOWN	147.25	299.8	19	37	1						
PENNSYLVANIA	147.50	303.4	19	38	1						
LONDON ONT.	149.26	308.9	19	41	1						
MORGANTOWN	149.31	301.9	19	42A	2						
BLACKSBURG	150.12	297.4	19	44	3						
COLUMBIA	150.98	291.0	19	54	12						
EDMONTON	154.18	359.0	19	48	1						
CUMBERLAND	154.49	295.4	19	48	1						23 59 PP
VICTORIA	157.83	16.6	19	53	2						
PENTICTON	157.84	9.7	19	53	2						
HUNGRY HORSE	159.23	359.9	19	55	2						24 12 PP
LAWRENCE	160.61	310.8	19	58	3						
BUTTE	161.52	356.7	19	43	-13						24 25 PP
TULSA	162.37	302.8	19	58	2						24 17 PP
BLUE MTS.	162.53	7.7	19	58	1						24 29 PP
WICHITA MTS.	164.95	302.2	20	0	1						24 39 PP
SHASTA	165.19	25.5	20	OK	1						24 42
MINERAL	165.79	24.1	19	36A	-24						
SALT LAKE C.	166.68	352.7	20	3	3						21 6
UINTA BASIN	166.72	344.9	20	2	2						24 57 PP
CALISTOGA	166.84	30.6									21 6
BERKELEY	167.61	31.7									21 9
EUREKA	167.99	7.1	20	3	2	27	45	46			24 53 PP

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PRIEST	169.76	31.5								21 20
ALBUQUERQUE	170.16	320.5	20	5	2					25 11 PP
BOULDER CITY	171.56	4.2	20	8	5					25 20 PP
PASADENA	172.53	27.2	19	56	-8					21 31
TONTO FOREST	172.86	341.0	20	7	3	27	6	5	21 42	25 23 PP
TUCSON	174.53	329.9	20	8	3					25 29 PP

JUNE 28 13.H 47.M 52.S EPICENTRE 1.32 97.36 DEPTH= 76.KM

A=-0.12812 B= 0.99149 C= 0.02296 D= 0.9918 E= 0.1282
G=-0.0029 H= 0.0228 K=-0.9997 HT= 7.2

DEPTH OF FOCUS= 0.007R

SE= 2.11

	DELTA DEG.	AZ. DEG.	P M S	O-C S	S M S S	O-C S	*PP M S	SUPP. M S
MEDAN	2.60	30.4	0	39A	-2			11 38
PORT BLAIR	11.26	336.0				4 21 -25		5 11
TANGERANG	11.88	128.9	2	42	-6	4 49 -10		8 31 PCP
DJAKARTA	12.04	128.4						3 22
LEMBANG	13.05	128.5	3	5	2	5 26 -1		3 16 PP
MADRAS	20.60	305.1	4	32	-2	8 26 11		4 59 PP
VISHAKHAPTNM	21.36	320.5	4	43	1	8 40 10		
CHITTAGONG	21.59	345.9	4	44	-1			
CALCUTTA	22.82	338.1	4	55	-2	9 0 4		
KUMMING	24.22	12.0	5	12A	2	9 31 11		
HYDERABAD	24.53	311.8						9 34
SHILLONG	24.68	348.0	5	14A	-1	9 42 14		
BOKARO	25.02	334.3	5	21K	3	9 43 9		5 56 PP
HONG KONG	26.50	36.9	5	31A	-1	10 13 15		
CANTON	26.62	34.4	5	32	-1			
CHATRA	27.18	339.7	5	38	0	10 20 11		
BAGUIO CITY	27.35	55.4	5	33	-6	10 16 4		
LHASA	28.79	348.5	5	53A	1	10 41 6		
BOMBAY	29.73	307.5	5	15	-46			16 23
CHENGTU	29.85	11.6	6	1	-1	10 57 5		
NEW DELHI	33.25	326.4	6	30A	-1			
DEHRA DUN	34.17	329.4	6	41	2	12 5 6		21 31
LANCHOW	35.07	9.1	6	47A	0	12 19 6		
NANKING	36.64	31.3				12 47 10		
ZO-SE	37.22	34.9	7	6A	1	12 51 5		
WARSAK DAM	40.49	326.1	7	33	1			
QUETTA	40.71	317.8	7	34	0			
PAOTOW	40.73	14.8	7	35A	1	13 48 9		
PEKING	42.15	21.6	7	47A	1	14 11 11		
KHOROG	43.13	329.5	7	55A	1	14 21 7		
DUZHANBE	45.38	328.2	8	13A	1			
ALMATA-2	45.42	339.5	8	13	1			
FRUNSE	46.07	336.7	8	18A	0	15 4 8		
TASHKENT	47.20	331.1	8	26A	0	15 18 5		
PORT MORESBY	50.71	103.2	8	52A	-2			
SEMIPALATNSK	51.01	346.0	8	55	-1			
SHIRAZ	51.07	307.9	8	55K	-1	16 11 5	9 13	20 0 SS
IRKUTSK	51.10	5.5	8	57	1	16 17 10		
VANNOVSKAYA	51.25	320.1	8	57	-1			
MATUSIRO	51.49	42.3	8	58	-1	16 24 12		
VLADIVOSTOK	51.78	31.9	9	2A	0	16 27 11		
CHARTERS TS.	52.42	116.7	9	5	-1	16 29 4		
ADELAIDE	52.90	137.1	9	11A	1			
KIZYL-ARVAT	53.14	320.3	9	16	4	16 40 5		
RABAU	55.04	96.0	9	22	-4	16 58 -2		
TOOLANGI	58.92	136.3	9	53	0		10 6	10 47
GORIS	59.93	316.0	10	0	0	18 11 7		
Y.-SAKHLINSK	60.17	34.1	10	2K	0	18 14 6		
CANBERRA	60.38	132.5	10	3	0			
KIROVOBAD	60.44	317.2	10	2	-2			
RIVERVIEW	61.38	130.1				18 28 5		
TIFLIS	61.95	317.7	10	12	-2			
KURILSK	62.25	38.0	10	19	3			
SVERDLOVSK	62.64	338.3	10	17A	-1			
BAKURIANI	62.82	317.2	10	19A	-1			
HONIARA	63.23	101.2	10	21	-1			
CHILEKA	63.88	251.9	10	23	-3			
KSARA	65.79	306.7	10	56	17		11 16	15 20 PPP
JERUSALEM	65.80	304.4	10	40	1			

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MIRNY	67.80	181.9	10 58	7					
LWIRO	68.64	267.1	10 55	-2	20	7	15		24 22 SS
BROKEN HILL	69.94	254.2	11 3K	-2					
SIMFEROPOL	70.38	317.7	11 6	-1	20	14	2		
BULAWAYO	70.58	248.2	11 8	0					
MAGADAN	71.15	25.6	11 12	0					
NOUMEA	71.23	114.0	11 13	1					
PETROPVLOVK	72.03	33.8	11 18A	1	20	42	11		
MOSCOW	72.30	329.1	11 17	-2					
MAWSON	72.86	193.1	11 21	-1					
ISTANBUL UN.	72.92	312.6	11 20	-2					
TIKSI	73.02	10.0	11 22A	-1	20	47	4		
KIMBERLEY	75.42	240.0	11 36	-1					
MONOWAI	77.29	137.5	12 5	18					
PULKOVO	77.46	331.5	11 50	2	21	33	2		
APATITY	79.05	339.4	11 56A	-1	21	52	4		
KAJAANI	80.01	335.3	12 2	0					
HELSINKI	80.15	331.1	12 2	-1					
NURMIJARVI	80.39	331.4	12 2	-2	22	5	3		15 11 PP
WARSAW	80.60	322.7			22	9	4		12 21 PCP
KRAKOW	80.92	320.4			22	12	4		
KHEYS	81.40	354.0	12 9	0					
SODANKYLA	81.44	338.3	12 9	-1					
KARAPIRO	81.49	128.5	12 12	2					
CHATEAU	81.68	129.8	12 11	0				12 22	
KEVO	82.04	340.7	12 13	0					
MESSINA	82.74	308.2							22 29
VIENNA-H.	83.01	318.3	12 20	2				12 37	
UMEA	83.14	334.2	12 18	0	22	36	5		15 34 PP
UPPSALA	83.70	330.0	12 20	-1	22	39	3		
KIRUNA	83.86	338.2	12 22	0	22	40	2		
LJUBLJANA	84.08	316.0	12 24	1					
PRUMONICE	84.36	319.9	12 28	3	22	50	7		
AQUILA	84.64	312.2	12 16	-10					
TROMSOE	84.74	339.8	12 26	0					
KASPERSCHE H.	84.93	319.0	12 28	1					
COLLMBERG	85.44	321.2	12 32	2					13 51
GOTEBORG	86.41	327.6	12 36	1					13 19
SKALSTUGAN	86.63	333.5	12 36K	0					
N-LAZARVSKYA	89.76	199.3	12 51	0	23	43	9		
KEW	93.77	321.6			24	15	6		
TOLEDO	97.91	310.4	13 16	-12	24	53	56		16 44 PP
MOULD BAY	99.77	8.4	13 36	0					
HONOLULU	103.04	67.9							27 32
EDMONTON	119.76	20.7	18 42	1					
BLUE MTS.	124.66	29.5	18 51	1					20 41 PP
SHASTA	124.71	36.3	18 54K	3					
MINERAL	125.40	36.1	18 55A	3					
EUREKA	129.19	33.3	19 1	2					21 13 PP
WOODY	130.02	38.9	19 3	2					21 10
UINTA BASIN	131.81	27.7							21 32 PP
GOLDEN	134.17	24.6	19 4	-5					21 41
TONTO FOREST	135.53	34.5	19 12	1	25	52	-20	19 29	21 35 PP
ALBUQUERQUE	137.58	29.5	19 10	-5					
TULSA	140.98	17.1	19 20	-1					22 18 PP
WICHITA MTS.	141.15	21.2	19 16	-5					22 35 PP
CUMBERLAND	143.18	4.0	19 24	-1					22 39 PP
LA PAZ	159.23	222.7	19 58	9					
CARACAS	160.45	307.3	19 36	-14	26	16	-30		

JUNE 28 21.H 55.M 35.S EPICENTRE 46.56 153.39 DEPTH= 0.KM

A=-0.61694 B= 0.30911 C= 0.72376 D= 0.4480 E= 0.8941
G=-0.6471 H= 0.3242 K=-0.6900 MT= -4.1

SE= 2.47

	DELTA DEG.	AZ. DEG.	P		O-C S	S O-C			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
KURILSK	4.08	253.0	1	7A	2	1	7					
NEMURO	6.41	242.6	1	37A	2	51	-2					
ABASHIRI	6.91	251.7	1	46A	3	12	7					
PETROPVLOVK	7.31	25.8	1	49A	3	5	-10					
KUSIRO	7.33	244.0	1	50A	3	16	0					
Y.-SAKHLINSK	7.34	277.5	1	54A	3	25	9					
UGLEGORSK	8.02	292.4	2	5K	3	37	4					

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OBIHIRO	8.11	247.0	2 2	0	3 45	10	
WAKKANAI	8.23	266.3	2 9K	6	3 56	18	
ASAHIGAWA	8.27	254.3	2 6K	2	3 59	20	
HIROO	8.38	242.9	2 6	1	3 40	-2	
RUMOE	8.70	256.8	2 13	3	4 11	21	
URAKAWA	8.78	243.7	2 11	0	3 55	3	
SAPORO	9.24	252.2	2 19A	2	4 10	7	
TOMAKOMAI	9.29	249.3	2 12	-6			
SUTTSU	10.10	252.9			4 45	21	3 31
MORI	10.21	248.7	2 33	2	4 44	17	
HAKODATE	10.23	246.9	2 29A	-2	4 39	11	
HATINOHE	10.50	239.2	2 31	-4	4 26	-8	
AOMORI	10.78	242.4	2 40	1	5 1	20	
KLYUCHI	10.82	22.7	2 37	-2			
MIYAKO	10.83	234.5	2 37	-2	4 29	-13	
MORIOKA	11.25	236.8	2 42	-3	4 41	-12	
MIZUSAWA	11.66	234.8	2 46A	-5	4 51	-12	
AKITA	11.86	239.6	2 54	1	5 16	8	
ISINOMAKI	12.04	231.9	2 51K	-5	4 59	-13	
SENDAI	12.39	232.5	2 57	-3	5 19	-1	
SAKATA	12.56	237.3	3 2	-1	5 34	10	
YAMAGATA	12.71	233.9	3 2	-3	5 12	-16	
MAGADAN	13.11	354.2	3 10A	0			
ONAHAMA	13.37	228.5	3 13	0	5 40	-4	
SHIRAKAWA	13.60	230.8	3 14	-2	5 40	-9	
NIIGATA	13.67	236.0	3 18K	1			6 43
MITO	14.02	228.1	3 20	-2	5 48	-12	
AIKAWA	14.07	238.1	3 20	-3			7 54
UTUNOMIYA	14.21	230.1	3 23	-2	5 52	-12	
KAKIOKA	14.29	228.5	3 23	-3	5 59	-7	
TUKUBASAN	14.34	228.6	3 21	-5	6 5	-2	
TYOSI	14.35	225.5	3 36	10	5 54	-13	
TAKADA	14.70	235.4	3 12	-19	6 14	-2	
MAEBASI	14.75	231.6	3 29A	-3			7 23
KUMAGAYA	14.77	230.2	3 30	-2			
HONGO	14.90	228.2	3 32	-2	6 42	22	
TOKYO C.M.O.	14.93	228.1	3 34	0	6 53	32	
NAGANO	15.03	234.3	3 37	2	6 50	26	
TITIBU	15.06	230.5	3 36	0			
OIWAKE	15.08	232.6	3 37	1	6 25	0	
MATUSIRO	15.12	233.9	3 33A	-3	6 28	2	
YOKOHAMA	15.18	227.8	3 38	1	6 52	25	
WAZIMA	15.29	239.0	3 38	-1	6 26	-4	
MATUMOTO	15.46	233.7	3 43	2	6 46	12	
NERA	15.49	226.2	3 43	2			
KOHU	15.57	230.9	3 43	1	6 44	8	
TOYAMA	15.58	236.5	3 42	0			7 49
HUNATU	15.58	230.0	3 42	0	6 47	10	
VLADIVOSTOK	15.62	265.1	3 42A	-1	6 34	-3	
AJIRO	15.76	228.2	3 44	-1			8 3
MISIMA	15.78	228.7	3 42	-3	6 52	11	
OSIMA	15.83	226.9	3 45	-1	7 3	21	
TAKAYAMA	15.94	235.0	3 48	1			
IIDA	16.07	232.2	3 48	-1			8 52
SHIZUOKA	16.18	229.6	3 44	-6	7 7	16	
OMAESAKI	16.56	229.2	3 57	2			
HUKUI	16.59	236.9	4 0	5			
HAMAMATU	16.73	230.6	3 57	0	7 15	12	
GIHU	16.75	234.2	3 58	1	7 12	8	
NAGOYA	16.80	233.2	3 59	1	7 14	9	
TSURUGA	16.96	236.2	4 0	0			8 59
HATIDYOZIMA	16.99	222.5	4 1	1	7 4	-5	
HIKONE	17.13	234.9	4 3	1	7 31	19	
KAMEYAMA	17.32	233.5	4 6	1	7 35	18	
MAIZURU	17.48	237.1	4 7	0			
KYOTO	17.61	235.4	4 6	-2	7 36	13	
NARA	17.80	234.4	4 11	0			
ABUYAMA	17.81	235.4	4 9A	-2			
OSAKA	17.99	234.9	4 11	-2	7 55	23	
OWASE	18.05	232.4	4 12	-2	7 44	11	
TOTTORI	18.17	239.4	4 10	-5			
KOBE	18.17	235.7	4 15	0	7 45	9	
SAIGO	18.22	242.5	4 17	1	7 48	11	
WAKAYAMA	18.50	234.7	4 20	1	7 56	13	
SUMOTO	18.57	235.5	4 20	0	8 1	16	
YONAGO	18.72	240.7	4 21	-1	7 54	6	
HIMEJI	18.74	236.7	4 18	-4			
SIOMISAKI	18.75	231.9	4 26	4	7 55	6	

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MATSUE	18.87	241.2	4 26	2	7 58	6	
TOKUSIMA	18.95	235.5	4 24	-1			
TORISIMA	19.00	216.9	4 26A	1	8 4	9	
TAKAMATU	19.07	237.0	4 25	-1	8 5	9	
TSURUGISAN	19.43	236.1	4 24	-6			
MUROTO	19.78	234.6	4 35	1	8 28	16	
HAMADA	19.85	241.7	4 36A	1	8 23	9	
KOTI	19.93	236.3	4 36A	0	8 29	14	
HIROSIMA	19.99	239.9	4 36A	-1	8 30	13	
MATUYAMA	20.15	238.2	4 40	1	8 29	9	
YAKUTSK	20.56	327.4	4 37	-6			
UWAZIMA	20.72	237.4	4 43	-1			7 47
ASHIZURI	20.84	235.7	4 46	0	8 51	17	
SIMONOSEKI	21.18	241.5	4 53	4			
OOITA	21.27	239.0	4 52A	2	8 49	7	
HUKUOKA	21.77	241.6	4 57A	2	9 4	12	
ASOSAN	21.83	239.2	5 1	5	9 6	13	
ITUHARA	22.03	244.5	4 58A	0	9 11	14	
SAGA	22.04	241.1	5 1	3			7 23
KUMAMOTO	22.10	239.7	5 0	2	9 12	14	
MIYAZAKI	22.33	236.9	5 1	0	9 12	10	
NAGASAKI	22.66	240.8	5 6A	2	9 19	11	
HUKUE	23.32	242.3					6 12
YAKUSIMA	23.94	235.8	5 19	3	9 42	11	
PEKING	27.67	269.9	5 51A	0			
TIKSI	27.69	343.6	5 49A	-3			
ZO-SE	29.21	249.5	6 6A	1	10 56	-2	
NANKING	30.17	253.7	6 13A	-1			
PAOTOW	31.67	275.1	6 27A	0	11 36	0	
IRKUTSK	31.92	298.6	6 27A	-2			11 26
ANPU	33.15	241.0	6 40	0			
TAIPEI	33.26	240.8	6 51	10	12 43	42	
GUAM	33.79	195.2	6 43	-3			
HWALIEN	34.00	239.5	7 16	29			
HSINKONG	34.81	238.8	6 57	3			
ALISHAN	34.83	240.0	6 52	-3			
TAITUNG	35.21	238.7	7 3	5	12 35	4	
TAINAN	35.57	240.1			12 59	22	
SIAN	35.57	265.9	7 0A	-1			
TAWU	35.66	238.5	6 47	-15			
HENGCHUN	36.02	238.3			13 25	41	
COLLEGE	36.18	38.2	7 5	-1	12 46	0	8 17 PP
LANCHOW	38.11	272.2	7 22A	0	13 12	-4	
CANTON	39.77	247.9	7 37A	1			9 16 PP
HONG KONG	39.81	246.1	7 37A	1	13 19	-23	
BAGUIO CITY	40.54	233.1	7 42	0	13 53	1	
CHENG TU	41.03	265.1	7 47A	1	14 5	5	
MANILA	41.70	231.0	7 54	2	14 9	-1	
SITKA	43.36	48.9	8 9	3	14 39	5	
MOULD BAY	44.72	19.9	8 16A	-1	14 52	-2	
KHEYS	45.30	346.7	8 19A	-2	14 54	-8	9 58 PCP
KUNMING	45.40	259.9	8 23A	1	15 4	1	
KIPAPA	46.53	105.6	8 31	0	15 19	-1	10 21 PP
HONOLULU	46.56	105.8	8 30	-1	15 20	0	9 54 PCP
SEMIPALATNSK	46.82	302.9	8 31A	-2			18 21 SCS
HAWAII V.OB.	49.75	105.1	8 47	-9	16 9	4	
ALERT	49.93	5.8	8 57A	0			
NHATRANG	50.50	242.0	9 2A	0	16 22	7	
RABAUL	50.55	181.6	9 2	0	16 25	9	
LHASA	50.59	273.5	9 5A	3			
RESOLUTE	50.96	18.5	9 5A	0			
ALMATA-2	51.97	295.9	9 12A	-1			10 24 PCP
NORD	51.98	358.2	9 10	-3			
SHILLONG	52.56	268.9	9 17A	0	16 45	1	11 15 PP
VICTORIA	53.49	55.2	9 22	-2			
FRUNSE	53.90	296.7	9 27A	0			12 45 PPP
SVERDLOVSK	54.10	317.3	9 26K	-3			
SEATTLE	54.59	55.6	9 38	6	17 22	11	
CHITTAGONG	54.70	265.9	9 34	1			
CHATRA	55.00	273.4	9 37A	2	17 21	4	11 43 PP
PENTICTON	55.18	52.7	9 36	-1			
PORT MORESBY	55.98	187.4	9 44K	2	17 29	-1	19 5 SCS
HONIARA	56.04	172.2	9 42K	-1	17 27	-4	
EDMONTON	56.21	46.0	9 43A	-1			
CALCUTTA	56.96	268.7	9 46	-3	17 36	-7	
KEYO	57.58	340.6	9 53K	-1	17 45	-6	12 11 PP
APATITY	57.59	336.8	9 52A	-2	17 45	-6	12 7 PP
BOKARO	57.88	271.7	9 58	2	18 1	6	10 44 PCP
TASHKENT	58.03	298.0	9 57A	0			12 10 PP

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SHASTA	58.47	62.6	9 59K	-1				
HUNGRY HORSE	58.77	51.2	10 2	0	18 2	-5		
UKIAH	58.89	64.5	10 4	1			39 28	PKPPKP
KHOROG	58.92	293.1	10 4A	1			18 23	PS
BLUE MTS.	59.02	56.1	10 3	-1	18 14	4	12 17	PP
DEHRA DUM	59.03	282.7	10 4A	0	18 19	9	12 19	PP
MINERAL	59.16	62.5	10 4A	-1				
TROMSOE	59.42	343.1	10 5	-2			10 25	PCP
SODANKYLA	59.50	338.9	10 5	-2				
CALISTOGA	59.59	64.6	10 9K	1				
BERKELEY	60.25	65.1	10 13K	1	18 23	-3	26 13	
KIRUNA	60.58	341.4	10 13A	-2	18 19	-11	18 37	PS
NEW DELHI	60.70	281.7	10 15A	0	18 27	-5	13 57	PPP
BUTTE	60.97	52.6	10 16	-1	18 45	10	39 45	PKPPKP
WARSAK DAM	61.04	290.0	10 17	-1	18 40	4		
PORT BLAIR	61.54	256.3	10 21A	0	18 41	-1	12 43	PP
KAJAANI	61.76	336.1	10 21A	-2	18 44	-1	20 14	SCS
BOZEMAN	62.02	52.2	10 26	2	18 48	0	39 31	PKPPKP
PRIEST	62.33	65.7	10 28K	2				
EUREKA	63.11	60.2	10 31	-1	19 2	0	39 23	PKPPKP
SCORESBY SD.	63.22	358.2	10 32	0	19 3	0		
VISHAKHAPTNM	63.71	268.3	10 36K	1	19 12	3	19 48	PS
MEDAN	63.72	245.3	10 33K	-3	18 53	-17	12 52	PP
UMEA	63.94	338.9	10 35A	-2	18 56	-16	39 36	PKPPKP
PULKOVO	64.29	331.9	10 37A	-2	19 14	-3	13 1	PP
SEHORE	64.31	277.2	10 40	1	19 21	4		
MOSCOW	64.71	325.7	10 40A	-2	19 14	-8	12 58	PP
PASADENA	65.17	66.0	10 44	-1	19 28	1		
NURMIJARVI	65.46	334.9	10 44A	-3	19 29	-2	13 10	PP
HELSINKI	65.64	334.5	10 46	-2				
SKALSTUGAN	65.98	342.1	10 48A	-2	19 37	0		
UINTA BASIN	66.31	56.0	10 53	1	19 40	-1	13 17	PP
CHARTERS TS.	66.64	187.3	10 54	0	19 41	-5		
ASHKABAD	66.71	301.0	10 55	0			11 23	PCP
DJAKARTA	66.77	231.8	10 55K	0	19 39	-8	11 21	PCP
TANGERANG	66.87	232.0	10 55A	-1			13 21	PP
LEMBANG	66.89	230.7	10 54A	-2	19 46	-2	11 3	13 23
HYDERABAD	67.25	271.6	10 56A	-2	19 55	2	13 32	PP
RAPID CITY	67.27	49.5	10 58	0				
KOUMAC	67.52	169.0	11 1K	1				
AFIAMALU	67.84	143.2	11 0	-2	20 1	1		
LARAMIE	67.88	53.0	11 2	0				
UPPSALA	67.96	337.7	11 1A	-2	19 56	-5		
GOLDEN	69.10	54.1	11 8	-2	20 16	1		
MADRAS	69.14	267.0	11 10A	0	20 21	6	13 48	PP
TONTO FOREST	69.35	61.8	11 11	0	20 18	0	11 21	13 47
NOUMEA	69.55	167.1	11 15K	2	20 10	-10		
POONA	69.66	275.7			21 25	63	11 56	
BOMBAY	70.12	276.7	11 19	3	20 34	7	14 6	PP
TUCSON	71.01	63.1	11 20	-1				
GOTEBORG	71.28	339.3	11 22A	-1	20 51	11		
TIFLIS	71.63	311.6	11 26	1	20 45	1	15 45	PPP
ALBUQUERQUE	71.77	58.4	11 26	0				
TEHERAN	72.29	303.3	11 26A	-3	21 32	40		
GORIS	72.43	309.1	11 30A	0			14 11	PP
COPENHAGEN	72.96	338.1	11 33A	0	21 0	0		
KODAIKANAL	72.96	266.9	11 50A	17			25 47	
SCHIEFFERVILLE	73.44	22.9	11 35	-1				
WARSAW	73.46	331.7	11 34	-2	21 1	-4	14 18	PP
BRISBANE	73.60	180.6	11 50	13	21 6	-1		
SIMFEROPOL	74.33	320.0	11 40A	-1			14 26	PP
LWOW	74.46	328.7	11 42	0	21 10	-6	14 26	PP
ABERDEEN	74.64	346.4	11 45	2	21 16	-2	14 31	PP
IASI	75.28	325.1	11 49	2	21 39	13	22 13	PS
KRAKOW	75.68	331.1	11 48	-1	21 29	-1		
CHORZOW	75.78	331.8	11 47	-2			12 3	PCP
SHIRAZ	75.94	298.2	11 51A	1	21 21	-12	11 58	39 12
BACAU	76.06	325.1	11 55	4	21 35	1	12 48	
WICHITA MTS.	76.44	53.7	11 53	0	21 46	8	14 44	PP
CHIHUAHUA	76.46	62.7					12 25	
FOCSANI	76.66	324.5	11 57	3			21 44	
HALLE	76.84	336.4	11 53	-2	21 42	-1		
DURHAM	76.85	345.4	11 57K	2	21 45	2	14 53	PP
WITTEVEEN	76.99	340.0	11 58	2				
TULSA	77.09	51.1	11 55A	-2	21 44	-1		
PRAGUE	77.40	334.3	11 59	1	21 44	-5	15 6	PP
PRUHONICE	77.45	334.2	11 58	-1	21 46	-3		
JENA	77.46	336.4	11 57	-2	21 43	-6	14 52	PP

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MUNSTER	77.54	339.1	11 59	0							
SEPT ILES	77.66	24.9	11 58	-2							
CAMPULUNG	77.87	325.5	12 6	5	22 19	25				12 50	
CHEB	77.99	335.5	12 9	7	22 0	5					
DE BILT	78.00	340.6	12 3	1	21 55	0				27 25	SS
HURBANOVO	78.14	331.0	12 8	6						14 50	PP
BUCHAREST	78.15	324.4	12 5A	2	21 57	0				15 11	PP
BRATISLAVA	78.24	331.8	12 3	0	22 0	2				15 11	PP
VIENNA-H.	78.41	332.3	12 5A	1	22 5	5				22 27	SCS
KASPERSKE H.	78.49	334.4	12 4A	0						15 3	PP
LONDON ONT.	78.53	37.6	12 5A	0							
BENSBERG	78.58	339.0	12 5A	0	22 3	2				14 38	PP
OTTAWA	78.73	32.9	12 3	-3							
DALLAS	78.83	53.8	12 6	0							
TIMISOARA	78.91	328.1	12 9	2	22 1	-4					
SEVEN FALLS	78.99	29.0	12 6	-1							
UCCLE	79.41	340.6	12 9	0	22 11	1					
BREBEUF	79.42	31.6	12 8	-1	22 7	-3					
CLEVELAND	79.66	38.7	12 12K	1							
ISTANBUL UN.	79.72	320.6	12 11K	0	22 14	1					
KEW	79.76	343.6	12 11A	0	22 12	-2				15 12	PP
BELGRADE	79.99	328.1	12 12A	-1	22 15	-1				15 24	PP
DOURBES	80.00	340.2	12 13	0	22 16	0					
RIVERVIEW	80.04	181.9	12 13	0	22 20	3				17 5	PPP
STUTTGART	80.04	336.8	12 13	0	22 17	0				27 57	SS
KARLSRUHE	80.06	337.4	12 14A	1	22 16	-1					
MAZATLAN	80.17	66.8								21 33	
TUBINGEN	80.32	336.6	12 15	1							
STRASBOURG	80.62	337.7	12 16A	0	22 22	-1				15 19	PP
EBINGEN	80.67	336.8	12 17	1							
ZAGREB	80.67	331.3	12 16	0	22 25	2					
SOFIA	80.70	325.1	12 16	0	22 22	-2				15 24	PP
RAVENSBERG	80.85	336.2	12 17	0							
LJUBLJANA	80.94	332.4	12 18A	0						15 33	PP
WELSCHBRUCH	81.14	338.5	12 18	-1							
FELDBERG	81.20	337.2	12 19	0							
TRIESTE	81.55	332.7	12 20A	-1	22 31	-1				17 33	PPP
PARIS	81.69	341.0	12 52	30	23 6	32					
PENNSYLVANIA	81.76	36.7	12 21	-1							
HOUSTON	81.96	55.0	12 25	2							
SKOPJE	82.05	325.9	12 25	2	22 41	3					
KSARA	82.20	311.8	12 24A	0	22 51	12				15 33	PP
ADELAIDE	82.22	192.1	12 28A	4	22 45	6				28 5	SS
JERSEY	82.29	344.1	12 36	11	22 31	-9					
BESANCON	82.31	338.3	12 26	1							
PADOVA	82.35	333.7	12 35	10	22 44	3				15 50	PP
FOLINIÈRE	82.37	342.9	12 24	-1							
TITOGRAD	82.48	327.6	12 25	-1	22 42	0				22 47	SKS
CUMBERLAND	82.57	44.8	12 25	-1	22 42	-1				15 21	PP
GARCHY	83.00	340.1	12 28A	0	22 53	6					
PALISADES	83.17	34.1	12 29A	0	22 46	-3	12 50				
PAVIA	83.35	335.4	12 35A	5	23 7	16				29 2	SS
HALIFAX	83.51	25.6	12 34	3							
BLACKSBURG	83.66	40.4	12 31	-1							
GEORGETOWN	83.69	37.3	12 31	-1							
WASHINGTON	83.69	37.3	12 29	-3							
GUADALAJARA	83.94	66.4	12 37	4	23 1	4				15 1	
TOOLANGI	84.05	186.3	12 36	2	22 58	0	12 49			32 10	SSS
JERUSALEM	84.15	311.0	12 35	1							
CLERMONT-FD.	84.41	339.6	12 35A	0	23 8	7					
ATHENS	84.53	322.3	12 34A	-2							
AQUILA	84.61	331.4	12 39	3	23 5	2				15 51	PP
ISOLA	84.87	336.4	12 39	1	23 5	-1					
TARANTO	84.93	327.9								22 14	
MUNDARING	85.07	211.0	12 39	0	23 7	-1					
PERTH	85.19	211.3	12 44	5	23 10	1				15 56	PP
ROME	85.31	331.8	12 41A	0	23 14	4				16 9	PP
CHAPEL HILL	85.34	40.2	12 40	0							
COLUMBIA	86.03	42.6	12 43	-1	23 9	-8					
KARAPIRO	86.42	162.6	12 46K	0						16 16	PP
TACUBAYA	87.48	64.4	12 45	-6	23 14	3				13 27	
MESSINA	87.55	328.0	12 49	-2	23 31	-1				16 20	FP
REGGIO CALA.	87.60	327.9	12 53	2	23 19	-13				16 17	
CHATEAU	87.65	162.9	12 54	3							
BAGNERES	87.65	140.7	12 50	-1							
CUGLIERI	88.11	133.8	12 55	1						29 25	SS
BARCELONA	88.74	326.8			23 47	4				36 31	
WELLINGTON	89.51	164.0	12 59	-1	23 21	-29				17 1	PP

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VERA CRUZ	89.52	62.3	13	5	5	23	53	3	
TORTOSA	89.71	339.8	13	0	-1	23	37	-15	
OAXACA	90.78	64.2							23 25
TOLEDO	91.61	342.8	13	10A	0	23	42	-27	16 45 PP
ALICANTE	92.29	339.7	13	15K	2	24	23	8	25 34 PS
ROXBURGH	92.72	168.9	13	31	16	23	51	-27	30 25 SS
MONOWAI	92.80	170.1	13	28	13				
LISBON	93.67	346.4				23	49	-38	17 2 PP
GRANADA	94.12	341.8	13	23A	1	24	53	22	17 11 PP
ALMERIA	94.18	340.8	13	17	-5	24	0	-31	17 11 PP
COMITAN	94.21	61.2							14 25
ANGRA DO HO.	95.17	0.5				24	56	54	
PONTA DELGDA	96.09	359.3	13	29A	-2	24	52	45	17 23 PP
AVERROES	98.64	343.8	13	42	0				17 18 PP
GALERAZAMBA	108.26	51.0							18 55 PP
FORT FRANCE	111.54	36.1							16 18 PP
CARACAS	112.73	43.6	14	45A-233		26	53	90	
CHINCHINA	112.87	54.7							19 29 PP
FUQUENE	113.51	52.7							19 36 PP
BOGOTA	114.03	53.5	14	57	-224				19 37 PP
TANANARIVE	114.30	267.8							19 38 PP
LWIRO	114.81	295.0	14	56	-227	25	38	7	19 42 PP
WILKES	117.26	198.0	15	25	-202	27	49	129	19 57 PP
M. BOUR	118.73	349.3	15	15	-215	25	50	5	
CAPE HALLETT	119.16	174.2							20 7
CHILEKA	120.70	279.8	18	54	0				
MIRNY	121.79	204.2	18	55	-1				
BROKEN HILL	124.20	286.2	19	2	1				
HUANCAYO	126.55	66.2	19	4	-1				
BULAWAYO	128.14	281.1	19	9K	1				
LUANDA	129.36	305.0							21 21 PP
CHANGALANE	129.77	272.4	19	13	2				21 23 PP
MAWSON	132.13	211.1	19	15A	-1				21 40 PP
BANDEIRA	134.15	300.1	19	19	-1	26	42	13	21 52 PP
LA PAZ	134.42	62.9	16	23	-177				22 49 PKS
BYRD STATION	134.96	165.7	19	11	-10				
SOUTH POLE	136.37	180.0							22 7
KIMBERLEY	136.42	275.5	19	15	-9				
HERMANUS	143.57	272.8	19	37	0				34 24 PPP
N-LAZARVSKYA	149.54	204.0	19	46A	-1				
ARGENTINE I.	152.44	146.2	19	56	5				

JUNE 28 22.H 56.M 59.S EPICENTRE 46.49 153.58 DEPTH= 0.KM

A=-0.61877 B= 0.30743 C= 0.72292 D= 0.4449 E= 0.8956
G=-0.6474 H= 0.3217 K=-0.6909 HT= -4.1

SE= 1.74

	DELTA DEG.	AZ. DEG.	P		O-C S	S O-C			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
PETROPAVLOVK	7.31	24.8	1	50	-1							
UGLEGORSK	8.17	292.7	2	10K	7							
MIZUSAWA	11.72	235.6	2	52	0	4	47	-18				
MATUSIRO	15.19	234.6	3	34	-4							
VLADIVOSTOK	15.74	265.5	3	45K	0							
PEKING	27.81	270.2	5	53	0							
COLLEGE	36.16	38.2	7	5	-1							
LANCHOW	38.25	272.4	7	23	-1							
CHENG TU	41.16	265.3	7	48	0							
MOULD BAY	44.74	19.9	8	17A	0							
KHEYS	45.40	346.7	8	24	2	15	1	-3				
KUNMING	45.52	260.1	8	24A	1							
RABAU	50.48	181.8	9	4	2							
NHATRANG	50.59	242.2	8	41	-22						10	47 PP
LHASA	50.72	273.7	9	7	3							
RESOLUTE	50.99	18.6	9	5	-1							
NORD	52.05	358.2	9	13	-1							
ALHATA-2	52.12	296.0	9	14K	-1							
SHILLONG	52.69	269.1	9	18A	-1							
FRUNSE	54.06	296.9	9	29A	0							
PENTICTON	55.12	52.8	9	34	-3							
CHATRA	55.14	273.6	9	37K	0							
EDMONTON	56.17	46.1	9	44	0							
KEVO	57.69	340.7	9	55	0							
APATITY	57.71	336.9	9	54K	-1							

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TASHKENT	58.18	298.1	9 58	-1					
SHASTA	58.38	62.6	10 0A	0					
HUNGRY HORSE	58.71	51.3	10 2	0					
BLUE MTS.	58.95	56.1	10 3	-1					
MINERAL	59.08	62.5	9 50A	-15					
TROMSOE	59.53	343.2	10 5	-3					
SODANKYLA	59.61	339.0	10 6	-2					
KIRUNA	60.69	341.5	10 13	-3					
NEW DELHI	60.85	281.8	10 15K	-2					
BUTTE	60.91	52.7	10 21	4					
PORT BLAIR	61.65	256.5	10 22	0					
KAJAANI	61.87	336.2	10 22	-2					
BOZEMAN	61.96	52.3	10 26	2					
EUREKA	63.03	60.3	10 32	0					
UMEA	64.05	339.0	10 35	-3					
VIBORG	64.16	333.3	10 36	-3					
PULKOVO	64.42	332.0	10 38A	-3					
MOSCOW	64.84	325.8	10 42	-1					
PASADENA	65.07	66.1	10 46	1					
NURMIJARVI	65.58	335.0	10 46K	-2	19	33	0		
HELSINKI	65.76	334.6	10 47	-2					
SKALSTUGAN	66.09	342.2	10 50	-1					
CHARTERS TS.	66.59	187.5	10 52	-3					
LEMBANG	66.95	230.9	10 56	-1					
RAPID CITY	67.21	49.6	11 0	1					
KOUMAC	67.43	169.1	11 21K	21					
LARAMIE	67.82	53.0	11 3	1					
UPPSALA	68.08	337.8	11 2A	-2					
GOLDEN	69.04	54.2	11 10	0					
TONTO FOREST	69.26	61.9	11 12	1	20	21	4	11	21
								13	58
									PP
TUCSON	70.92	63.2	11 22	1					
GOTEBORG	71.39	339.4	11 24	0					11
ALBUQUERQUE	71.69	58.5	11 27	1					47
KIROVOBAD	71.75	310.1	11 25	-1					27
KARLSKRONA	71.82	336.8	11 30	3					51
									PKKP
BAKURIANI	72.42	312.5	11 31	1					
TEHERAN	72.44	303.5	11 32K	1					
GORIS	72.58	309.2	11 31	0					
COPENHAGEN	73.08	338.2	11 35	1					
SIMFEROPOL	74.47	320.1	11 42	0					
IASI	75.42	325.3							14
CHORZOW	75.91	331.9	11 50	-1					53
SHIRAZ	76.09	298.3	11 51K	-1	21	33	-2		12
RACIBORZ	76.35	332.2	11 54	1					29
WICHITA MTS.	76.37	53.8	11 52	-1					22
									9
									13
									37
									14
									57
									PP
DURHAM	76.95	345.5	12 2	6					
HALLE	76.96	336.5	11 56	0	21	49	5		
TULSA	77.03	51.2	11 58A	1					
PRUMONICE	77.57	334.3	12 0	0					12
FLORISSANT	77.64	45.9	12 0	0					24
MUNSTER	77.66	339.2	12 3	3					
ST. LOUIS 1	77.83	46.0	12 1	0					
BRATISLAVA	78.37	331.9	11 43	-21					
KASPERSE H.	78.61	334.5	12 5	-1					
BENSBERG	78.70	339.1	12 9	3					12
									31
BREBEUF	79.41	31.7	12 9K	-1					
ISTANBUL UN.	79.86	320.8	12 13	1					
KEW	79.87	343.8	12 12	0					
DOORBES	80.11	340.3	12 16	2					
BELGRADE	80.12	328.2	12 15K	1					12
									40
STUTTGART	80.16	336.9	12 14	0					
KARLSRUHE	80.17	337.6	12 19	5					
STRASBOURG	80.74	337.8	12 18	1					12
SOFIA	80.83	325.3	12 18	0					48
WELSCHBRUCH	81.26	338.6	12 20	0					
TRIESTE	81.67	332.8	12 21A	-1	22	38	4		
PENNSYLVANIA	81.74	36.9	12 22	0					
PARIS	81.80	341.2	12 24	1					
KSARA	82.35	312.0	12 26	1					
BESANCON	82.43	338.4	12 25	-1					12
									53
PADOVA	82.47	333.9	12 26	0	23	1	19		
FOLINIERE	82.47	343.0	12 26	0					
CUMBERLAND	82.53	44.9	12 25	-1	22	41	-2		
GARCHY	83.11	340.3	12 29	0					
JERUSALEM	84.30	311.1	12 36A	1					
CLERMONT-FD.	84.52	339.7	12 37	0					12
ATHENS	84.67	322.5	12 38K	1					57
ISOLA	84.99	336.5	12 40	1	23	14	6		
COLUMBIA	85.99	42.8	12 45	1					

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KARAPIRO	86.32	162.8	12 47K	2
CHATEAU	87.54	163.1	12 51	0
WELLINGTON	89.40	164.2	13 1	1
TOLEDO	91.72	343.0	13 11	0
AVERROES	98.75	344.0	13 42	-1
BULAWAYO	128.28	281.2	19 13	4
CHANGALANE	129.91	272.5	19 14	2
LA PAZ	134.34	63.2	19 23	2
KIMBERLEY	136.56	275.6	19 20	-5

JUNE 28 23.H 54.M 4.5 EPICENTRE 47.07 153.41 DEPTH= 81.KM

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G=-0.6527 H= 0.3267 K=-0.6835 HT= -4.3

DEPTH OF FOCUS= 0.008R

SE= 4.31

	DELTA DEG.	AZ. DEG.	P		O-C S	S O-C			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
NEMURO	6.68	238.8	1	26	-12	2	37	-16				
PETROPAVLOVK	6.84	27.6	1	37	-3							
ABASHIRI	7.10	247.9	1	36K	-8	3	1	-3				
Y.-SAKHLINSK	7.30	273.5	1	44	-2							
KUSIRO	7.58	240.6	1	39	-11	3	4	-11				
UGLEGORSK	7.86	289.0	1	55	1							
WAKKANAI	8.30	262.8	2	0	0							
OBIIHRO	8.34	243.9	1	53	-8							
ASAHIGAWA	8.43	251.0	1	58	-4	3	49	13				
HIROO	8.64	240.0	1	57	-8	3	32	-9				
URAKAWA	9.03	240.9	2	1K	-9	3	39	-12				
OKHA	9.32	317.9	2	13	-1						3	37
SAPORO	9.42	249.3	2	8	-7	4	0	0				
TOMAKOMAI	9.50	246.4	2	8	-8							
MORI	10.42	246.2	2	22	-7							
HAKODATE	10.46	244.4	2	18K	-11	4	28	2				
HATINOHE	10.78	237.0	2	19	-15	4	13	-20				
AOMORI	11.04	240.1	2	31	-6	4	36	-3				
MIYAKO	11.14	232.4									4	18
MORIOKA	11.55	234.8	2	30	-14	4	30	-22				
MIZUSAWA	11.97	232.9	2	39A	-11	4	34	-28				
AKITA	12.14	237.6	3	0	8	4	56	-10				
ISINOMAKI	12.38	230.1	2	40	-15	4	47	-25				
SENDAI	12.72	230.7				4	57	-24				
SAKATA	12.85	235.4	3	24	23						5	6
YAMAGATA	13.03	232.1	2	52	-12	5	2	-25				
ONAHAMA	13.72	227.0				5	26	-18				
SHIRAKAWA	13.94	229.2									5	10
MITO	14.38	226.7	3	13	-8	5	36	-23				
UTUNOMIYA	14.55	228.6	3	23	0						3	45
KAKIOKA	14.64	227.0									5	38
MAEBASI	15.08	230.2	3	20	-10							
KUMAGAYA	15.11	228.8	3	21	-10							
TOKYO C.M.O.	15.29	226.8	3	30	-3							
NAGANO	15.35	232.8	3	21	-13							
MATUSIRO	15.44	232.5	3	23	-12	6	16	-7				
VLADIVOSTOK	15.68	263.3	3	32	-6						6	21
TOYAMA	15.88	235.1	3	51	11							
KOHU	15.90	229.6	3	32	-9	6	30	-4				
MISIMA	16.13	227.4	3	28	-15							
GIHU	17.06	232.9	3	48	-7							
HAMAMATU	17.07	229.3	3	50	-5							
NAGOYA	17.13	231.9	3	47	-9	7	5	3				
HATIDYOZIMA	17.38	221.4	3	53	-6							
HIKONE	17.44	233.6	3	54	-6							
KAMEYAMA	17.64	232.3	3	58	-4							
KYOTO	17.92	234.1	3	57	-9							
ABUYAMA	18.11	234.1	3	58A	-10							
OSAKA	18.30	233.7	4	12	2							
TOKUSIMA	19.26	234.3	4	15	-6							
HAMADA	20.11	240.5	4	26K	-4	8	10	4				
YAKUTSK	20.14	326.6	4	27	-3							
MATUYAMA	20.44	237.1	4	29	-4	8	20	7				
OITA	21.55	237.9	4	45	0							
NAGASAKI	22.92	239.7	4	55A	-3	9	12	14				

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PEKING	27.69	269.0	5 40A	-3					
PAOTOW	31.64	274.2	6 15	-3					
COLLEGE	35.77	38.7	6 54	1					
LANCHOW	38.11	271.6	7 12A	-1					
CANTON	39.98	247.3	7 27A	-2					
CHENGTU	41.09	264.5	7 36A	-2	13 52	8			
MOULD BAY	44.24	20.1	8 5A	2					
KHEYS	44.80	346.6	8 6	-2				10 44	PPP
KUMMING	45.50	259.4	8 12A	-1					
ALERT	49.42	5.8	8 44A	0					
RESOLUTE	50.47	18.7	8 53	1					
LHASA	50.57	273.1	8 54A	1					
NHATRANG	50.76	241.6	8 51A	-3				9 4	PP
NORD	51.47	358.1	9 0	0					
ALMATA-2	51.76	295.5	9 2A	0					
SHILLONG	52.59	268.5	9 6A	-2					
FRUNSE	53.69	296.4	9 15A	-1					
SVERDLOVSK	53.74	317.1	9 17K	1					
PENTICTON	54.86	53.0	9 23	-2					
CHATRA	54.99	273.1	9 25A	-1					
EDMONTON	55.85	46.3	9 31A	-1					
SPOKANE	57.02	53.6	9 40	0					
KEVO	57.10	340.5	9 40	-1					
APATITY	57.13	336.7	9 40A	-1					
TASHKENT	57.81	297.7	9 47	1					
SHASTA	58.22	62.8	9 47K	-2					
HUNGRY HORSE	58.44	51.5	9 48	-2					
BLUE MTS.	58.73	56.3	9 49	-3	17 57	8		10 14	PCP
MINERAL	58.91	62.7	9 53	0					
TROMSOE	58.94	343.0	9 53	0				10 25	PCP
SODANKYLA	59.03	338.8	9 54	0					
CALISTOGA	59.35	64.9	10 3A	7					
BERKELEY	60.03	65.4	10 13K	12					
KIRUNA	60.10	341.3	10 1A	-1					
NEW DELHI	60.61	281.4	10 3A	-2					
BUTTE	60.65	52.9	10 4	-1					
WARSZAK DAM	60.88	289.7	10 7	0					
PARAISO	60.92	66.8	10 17	10					
KAJAANI	61.29	336.0	10 9A	-1					
PORT BLAIR	61.67	256.0	10 9A	-3					
BOZEMAN	61.70	52.4	10 12	0					
PRIEST	62.11	66.0	10 28K	13					
EUREKA	62.84	60.4	10 18	-2					
UMEA	63.47	338.8	10 23A	-1					
PULKOVO	63.85	331.8	10 25A	-2					
MOSCOW	64.30	325.6	10 29A	0	19 5	6		12 49	PP
PASADENA	64.95	66.2	10 35	1					
NURMIJARVI	65.00	334.8	10 33A	-1				11 5	PCP
HELSINKI	65.19	334.4	10 34A	-1					
SKALSTUGAN	65.50	342.0	10 36A	-1					
UINTA BASIN	66.01	56.2	10 39	-2				14 32	
QUETTA	66.32	289.3	10 42	0	19 36	12			
RAPID CITY	66.93	49.6	10 46	0					
CHARTERS TS.	67.15	187.3	10 49	1					
UPPSALA	67.49	337.6	10 49A	-1					
GOLDEN	68.79	54.3	10 57	-1					
TONTO FOREST	69.09	61.9	10 58	-2	20 8	11	11 11	11 21	PCP
TUCSON	70.76	63.2	11 8	-2					
GOTEBORG	70.80	339.2	11 10A	0					
KARLSKRONA	71.24	336.6	11 16A	3					
TIFLIS	71.30	311.5	11 14	1				11 26	PCP
ALBUQUERQUE	71.49	58.5	11 14	0					
TEHERAN	72.02	303.2	11 20A	3					
GORIS	72.12	309.0	11 19	1					
COPENHAGEN	72.49	338.0	11 21	1					
SCHEFFERVILLE	72.96	23.0	11 23	0					
SIMFEROPOL	73.95	319.9	11 29	0					
LWOW	74.03	328.6	11 30	1					
IASI	74.87	325.1						16 38	
KRAKOW	75.24	331.1	11 37A	1				11 48	PCP
SHIRAZ	75.71	298.1	11 39A	0	21 14	2		14 28	PP
RACIBORZ	75.78	332.1	11 37	-2				11 54	PCP
SKALNATE PL.	75.88	330.4	11 41	1				12 32	
WICHITA MTS.	76.12	53.8	11 40	-1				12 29	
HALLE	76.38	336.4	11 43	0			11 55		
TULSA	76.75	51.2	11 44A	-1					
JENA	76.99	336.3	11 46	0					
PRUHONICE	76.99	334.2	11 48	2					
MUNSTER	77.07	339.1	11 46	0					

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FLORISSANT	77.32	45.9	11 47	-1			
ST. LOUIS 1	77.51	45.9	11 49	0			
BRATISLAVA	77.80	331.8	11 50	0			
VIENNA-H.	77.96	332.2	11 53A	2			
KASPERSKE H.	78.04	334.3	11 53	1		14 42	
BENSBERG	78.11	339.0	11 52A	0			
BREBEUF	78.98	31.6	11 56K	-1			
KEW	79.27	343.6	12 0	1			
DOURBES	79.52	340.2	12 3	3			
BELGRADE	79.56	328.0	12 0K	0	22 8 14		12 14 PCP
STUTTGART	79.58	336.8	12 0	0			
KARLSRUHE	79.59	337.4	12 3K	3			
STRASBOURG	80.15	337.6	12 4	1			
SOFIA	80.28	325.1	12 5	1			
LJUBLJANA	80.50	332.3	12 6	1			
WELSCHBRUCH	80.67	338.5	12 6	0			
TRIESTE	81.10	332.6	12 9A	1			
PARIS	81.21	341.0	12 10	1			
BESANCON	81.84	338.3	12 13	1			
KSARA	81.87	311.8	12 13	1			
FOLINIERE	81.88	342.9	12 13	1			
CUMBERLAND	82.20	44.8	12 13	-1	22 27 6		
GARCHY	82.52	340.1	12 16	0			
JERUSALEM	83.83	311.0	12 23A	1			
CLERMONT-FD.	83.93	339.6	12 25	2			13 22
ATHENS	84.13	322.3	12 22	-2			
AQUILA	84.16	331.4	12 27	3			
ROME	84.87	331.8	12 26	-1			
COLUMBIA	85.64	42.7	12 31	0			
KARAPIRO	86.91	162.6	12 36	-1			
BAGNERES	87.17	340.7	12 42	3			
WELLINGTON	90.00	164.1					13 15
TOLEDO	91.13	342.8	12 58K	1			16 48 PP
CHILEKA	120.63	280.1	18 43	0			
BROKEN HILL	124.07	286.5	18 50	0			
BULAWAYO	128.05	281.5	18 58	1			
CHANGALANE	129.76	272.9	18 57	-4			
LA PAZ	134.18	62.5	19 11	2			
KIMBERLEY	136.38	276.1	19 14	1			
SOUTH POLE	136.88	180.0					20 12
N-LAZARVSKYA	150.01	204.3	19 38	2			

JUNE 29 2.4H 21.4M 43.5 EPICENTRE 46.58 153.32 DEPTH= 0.4KM

A=-0.61628 B= 0.30974 C= 0.72406 D= 0.4491 E= 0.8935
G=-0.6469 H= 0.3252 K=-0.6897 MT= -4.1

SE= 2.36

	DELTA DEG.	AZ. DEG.	P		O-C S	S O-C			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
KURILSK	4.04	252.4	1	6	2							
Y.-SAKHLINSK	7.29	277.3	1	44	-6							
MAGADAN	13.08	354.3	3	12	3							
MATUSIRO	15.09	233.7	3	32	-4	6	40	15				
VLADIVOSTOK	15.57	264.9	3	41A	-1							
CHANGCHUN	19.88	272.2	4	33	-2							
YAKUTSK	20.52	327.4	4	40K	-2	8	33	6				
PEKING	27.62	269.8	5	50	-1							
TIKSJ	27.65	343.6	5	50K	-1							
SIAN	35.52	265.8	7	UA	0							
COLLEGE	36.19	38.2	7	5	-1							
LANCHOW	38.06	272.1	7	23A	1							
CHENGTO	40.98	265.0	7	47	1							
MOULD BAY	44.72	19.9	8	15	-1							
KUNMING	45.35	259.8	8	22A	1							
ALERT	49.91	5.8	8	57A	0							
LHASA	50.53	273.4	9	4	2							
RESOLUTE	50.95	18.5	9	4A	-1							
ALMATA-2	51.91	295.8	9	12K	0							
SHILLONG	52.51	268.8	9	17A	0							
SVERDLOVSK	54.05	317.3	9	27	-1							
CHATRA	54.95	273.4	9	37A	2							
EDMONTON	56.23	46.0	9	46	2							
APATITY	57.55	336.8	9	52K	-1							
TASHKENT	57.98	297.9	9	57K	1							

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1963					PAGE 602				
SHASTA	58.50	62.5	10	1K	1				
HUNGRY HORSE	58.79	51.2	10	0	-2				
BLUE MTS.	59.05	56.0	10	5	1	10	25		
MINERAL	59.19	62.4	10	5K	0				
SODANKYLA	59.46	338.9	10	6	-1				
DUZHANBE	59.94	295.6	10	12	2				
KIRUNA	60.55	341.4	10	13A	-1				
WARSAK DAM	60.98	289.9	10	18	1				
KAJAANI	61.71	336.1	10	21K	-1				
BOZEMAN	62.05	52.2	10	25	1				
EUREKA	63.14	60.2	10	30	-1				
WOODY	63.77	65.1	10	32	-4				
UMEA	63.90	338.8	10	35A	-1				
VIBORG	64.00	333.2	10	35	-2				
PULKOVO	64.25	331.9	10	38A	-1				
MOSCOW	64.66	325.7	10	41	0				
NURMIJARVI	65.41	334.9	10	45	-1				
HELSINKI	65.60	334.5	10	47	0				
SKALSTUGAN	65.94	342.1	10	39	-11				
UINTA BASIN	66.34	55.9	10	52	0	11	24		
QUETTA	66.42	289.5	10	53	0				
ASHKABAD	66.66	300.9	10	55	1				
KIZYL-ARVAT	67.04	303.1	10	58A	1				
UPPSALA	67.92	337.6	11	1	-1				
GOLDEN	69.13	54.1	11	12	2				
TONTO FOREST	69.38	61.7	11	11	0	19	29	-49	
TUCSON	71.04	63.0	11	21	0				
GOTEBORG	71.24	339.3	11	22	-1				
KIROVOBAD	71.55	309.9	11	25A	1				
TIFLIS	71.57	311.6	11	26	1				
BAKURIANI	72.22	312.3	11	28	0				
TEHERAN	72.24	303.3	11	31A	2				
GORIS	72.37	309.1	11	30A	1	20	54	1	
SIMFEROPOL	74.28	319.9	11	41	1				
KRAKOW	75.64	331.1	11	48	0				11 59 PCP
SHIRAZ	75.88	298.2	11	50A	0				12 23
WICHITA MTS.	76.46	53.6	11	51	-2				12 15
HALLE	76.80	336.4	11	45	-10	11	53		
TULSA	77.11	51.1	11	57	0				
PRUHONICE	77.40	334.1	11	59	1				
JENA	77.41	336.3	11	57	-1				12 41
KASPERSCHE H.	78.45	334.3	12	4	0				12 28
BENSBERG	78.54	338.9	12	5	1				
BREBEUF	79.43	31.5	12	8	-1				
STUTTART	80.00	336.8	12	13	1				
STRASBOURG	80.58	337.6	12	17	2				12 58
PARIS	81.65	341.0	12	21	0				
KSARA	82.15	311.8	12	25	1				
BESANCON	82.27	338.2	12	25	1				
FOLINIERE	82.33	342.9	12	28	3				
CUMBERLAND	82.59	44.7	12	24	-2				
GARCHY	82.96	340.1	12	34	6				
JERUSALEM	84.10	310.9	12	35	1				
ISOLA	84.83	336.3	12	39	2				
N-LAZARVSKYA	149.54	204.0	19	49	3				

JUNE 29 12.H 43.M 49.5 EPICENTRE 11.64 142.70 DEPTH= 51.KM

A=-0.77929 B= 0.59373 C= 0.20047 D= 0.6060 E= 0.7954
G=-0.1595 H= 0.1215 K=-0.9797 HT= 6.3

DEPTH OF FOCUS= 0.003R

SE= 2.39

	DELTA DEG.	AZ. DEG.	P		S			*PP		SUPP.	
			M	S	M	S	S	M	S	M	S
GUAM	2.69	47.6	0	44	2						
RABAUL	18.34	148.6	4	12	0	8	43	71			11 47
MANILA	21.26	280.5	5	5	21	8	39	7			
PORT MORESBY	21.37	167.9	4	44K	-1						
BAGUIO CITY	21.97	285.0	4	53	2	8	50	5			
ABUYAMA	24.02	345.5	5	12K	1						
MATUSIRO	25.12	351.5	5	19	-3	9	41	1			
HONIARA	27.06	140.0	5	37	-3						
20-SE	27.77	317.5	5	48	2	10	25	2			6 45 PPP
CHARTERS TS.	31.72	173.6	6	21	0	11	37	11			

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VLADIVOSTOK	32.73	345.3	6 31	1	11 42	0		
PEKING	36.73	325.0	7 4	0	12 44	0		
KOUMAC	38.40	146.3	7 20A	2				
LEMBANG	39.42	244.0	7 27A	0				
TANGERANG	40.00	245.6	7 33A	2				
CHENG TU	40.47	303.9			13 42	2		
PAOTOW	40.71	320.9	7 38	1				
LANCHOW	42.64	311.3	7 55	2	14 14	2		
PETROPAVLOVK	43.21	14.0	7 57	-1				
MEDAN	44.31	263.2	8 9	2				
RIVERVIEW	45.93	170.2	8 27	7				
ADELAIDE	46.51	184.5	8 25A	1			25 47	
CANBERRA	47.08	173.0	8 29	0			8 33	10 2 PCP
MAGADAN	48.20	5.5	8 36	-1	15 31	-1		
TOOLANGI	49.02	177.1	8 45K	1				9 27
SHILLONG	49.84	293.6	8 51A	1				
MUNDARING	50.24	209.5	8 54	1				
YAKUTSK	51.17	352.2	8 57A	-3				
CHATRA	54.16	294.7	9 23	1				
HONOLULU	57.31	72.1			17 44	8		
KARAPIRO	58.12	149.7	9 51K	0				10 45 PCP
TUAI	59.59	149.2	10 1	0				
WELLINGTON	60.40	152.6	10 0	-6				
TIKSI	60.54	355.0	10 6	-1	18 18	0		
MONOWAI	61.41	160.4	10 12K	-1				
NEW DELHI	63.08	296.2	10 24K	0				
SEMIPALATNSK	63.64	320.7	10 31	3				
ALMATA-2	64.17	312.5	10 32K	0				
WARSAK DAM	68.00	302.0	10 56	0				
KHOROG	68.10	305.8	11 0	3	19 56	5		
TASHKENT	69.97	309.8	11 10	2	20 17	4		
COLLEGE	70.86	25.0	11 13	0				
QUETTA	71.99	298.1	11 21A	1	20 41	4		
SVERDLOVSK	76.01	325.9	11 43	-1				
KHEYS	77.72	350.4	11 54	1				
VANNOVSKAYA	78.71	306.6	11 53	-6				
KIZYL-ARVAT	80.00	308.0	12 13A	7				
MOULD BAY	80.67	13.9	12 9	0				
WILKES	81.30	192.6	12 14	2				
TEHERAN	84.35	305.2	12 32	4	22 53	5		
SHIRAZ	84.49	299.0	12 30A	1	22 48	-2	12 43	23 18 PS
ALERT	85.31	3.2	12 34A	1				
MIRNY	85.99	197.8	12 37	1				
SHASTA	86.19	49.4	12 38K	1				
CALISTOGA	86.47	51.4	12 39A	1				
MINERAL	86.85	49.6	12 42A	2				
BERKELEY	86.88	52.1	12 44A	4				
RESOLUTE	86.92	13.0	12 41K	0				
PARAISO	87.12	53.7	12 48	6				
KIROVOBAD	87.28	310.8	12 43	1				
GORIS	87.54	309.7	12 45	1				
SPOKANE	88.09	41.7	12 48	2	23 30	6		
TIFLIS	88.16	312.1	12 47	0				
PRIEST	88.51	53.5	12 51A	3				
BLUE MTS.	88.86	44.5	12 53	3	23 36	5		
EDMONTON	88.90	35.6	12 51K	1				
SODANKYLA	88.95	339.7	12 50	0				
HUNGRY HORSE	90.04	40.5	12 56	1				
KAJAANI	90.10	336.5	12 55	-1				
TROMSOE	90.17	343.1	12 57	1				
KIRUNA	90.75	341.3	12 57	-2				
PASADENA	90.97	55.0	13 2	2				
VIBORG	91.18	333.3	12 55	-6				
EUREKA	91.26	49.4	13 3	2				17 21 PP
BUTTE	91.71	42.4	13 4	1				
UMEA	93.07	338.0	13 8	-2	23 39	-30		
NURMIJARVI	93.07	334.1	13 9	-1	23 39	-30		25 25 PS
HELSINKI	93.11	333.7	13 10	0				
BOULDER CITY	93.12	52.5	13 12	2				
UINTA BASIN	95.68	47.0	13 23	2				13 44
UPPSALA	96.38	335.4	13 24	-1				
TONTO FOREST	96.41	53.2	13 27	2			13 37	14 13
MAWSON	96.82	202.3	13 28	1				
TUCSON	97.41	55.0	13 31	2				
ALBUQUERQUE	99.91	51.2	13 43	2				
TULSA	107.38	46.5						33 51 SS
STRASBOURG	108.03	330.4			25 23	32		28 8 PS
CUMBERLAND	114.54	42.0	18 37	2				19 29 PP
BULAWAYO	116.38	253.2	18 42	4				

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KIMBERLEY 119.91 243.5 18 49K 4
 AREQUIPA 146.52 102.2 19 39 5
 LA PAZ 149.73 102.8 19 46 7

JUNE 30 6.H 45.M 39.S EPICENTRE -2.54 102.53 DEPTH= 176.KM

A=-0.21680 B= 0.97522 C=-0.04401 D= 0.9762 E= 0.2170
 G= 0.0096 H=-0.0430 K=-0.9990 HT= 7.1

DEPTH OF FOCUS= 0.022R

SE= 1.92

	DELTA DEG.	AZ. DEG.	P		O-C S	S O-C			*PP		SUPP.	
			M	S		M	S	S	M	S	M	S
TANGERANG	5.45	131.6	1	21K	1	2	21	-2				
DJAKARTA	5.61	130.3	1	21K	-1	2	30	4	1	26		
LEMBANG	6.62	130.2	1	36	0	3	24	34			7	59 PCP
MEDAN	7.20	327.6	1	43K	0	3	7	3			8	9 PCP
PORT BLAIR	17.16	325.5	3	43	-7	6	51	-3			4	23
MANILA	25.10	46.5	5	12	2						10	32
BAGUIO CITY	25.94	42.8	5	19	2	9	37	4				
MADRAS	27.03	305.4				9	55	5			6	2
HONG KONG	27.18	24.1	5	28	-1							
KUNMING	27.50	0.4	5	34	2	10	1	3	6	13		
VISHAKHAPTNM	27.65	317.4	5	36	3	10	4	4				
DARWIN	29.68	110.7	5	51	0	10	10	-22				
SHILLONG	29.79	340.3	5	52K	0	10	31	-3				
BOKARO	30.86	329.1									10	52
MUNDARING	31.98	157.7	6	11	0	11	9	0				
CHATRA	32.75	334.0	6	19K	1	11	20	0				
CHENG TU	33.04	2.3	6	21	1	11	25	0				
LHASA	33.84	341.8	6	29	2	11	36	-1				
ZO-SE	37.87	26.5	7	2	1	12	42	3	7	42	8	2 *SP
LANCHOW	38.41	1.7	7	9A	3				7	47	16	58 SCS
NEW DELHI	39.36	323.6	7	14A	1	12	59	-2				
LAHORE	43.22	323.9	7	43	-2	13	53	-5				
PAOTOW	43.46	8.3	7	48A	1	14	5	4	8	30	8	47 *SP
PEKING	44.17	15.1	7	54	1	14	15	3	8	34	8	54 *SP
CHARTERS TS.	46.09	115.6	8	7	-1	14	35	-4				
ADELAIDE	46.58	138.1	8	11A	-1	14	38	-8				
WARSAK DAM	46.60	323.9	8	12	0	14	45	-1				
KHOROG	49.11	327.2	8	31A	0	15	20	-1				
CHANGCHUN	50.49	21.3	8	42A	0	15	41	1	9	23	9	42 *SP
ALMATA	51.09	336.1	8	45A	-1							
MATUSIRO	51.14	37.1	8	46A	0	15	49	0				
DUZHANBE	51.41	326.1	8	48	-1							
FRUNSE	51.71	334.0	8	51A	0	15	58	1				
TOOLANGI	52.58	137.0	8	57	0						10	5 PCP
VLADIVOSTOK	52.59	26.9	8	58A	1				9	51		
TASHKENT	53.11	328.9	8	59	-2	16	15	-1				
CANBERRA	53.98	132.9	9	6A	-2						10	11 PCP
IRKUTSK	54.63	1.3	9	13A	1	16	39	3				
RIVERVIEW	54.96	130.3	9	16	1	16	40	-1			17	50
SEMIPALATNSK	56.10	343.0	9	21	-2							
TANANARIVE	56.16	249.0	9	34	11						10	5
HONIARA	57.45	99.5	9	30	-2							
SHIRAZ	57.51	307.7	9	32A	-1	17	1	-13	10	12	18	23 *SS
VANNOVSKAYA	57.52	319.0	9	32	-1							
KIZYL-ARVAT	59.41	319.3	9	52	6	17	37	-2				
Y.-SAKHLINSK	60.65	30.4	9	54A	0	17	54	-1				
TEHERAN	61.03	313.6	9	56	-1	17	58	-2			19	30 SCS
KOUMAC	62.71	111.7	10	9A	1							
WILKES	63.92	176.4	10	15	-1	18	37	1				
MIRNY	64.24	184.2	10	19	1	18	41	1	11	16		
GORIS	66.29	315.4	10	30	-1	19	2	-3				
KIROVOBAD	66.78	316.5	10	33A	-1							
YAKUTSK	67.65	13.5	10	37A	-3	19	17	-4				
CHILEKA	67.71	254.2	10	40	0							
SVERDLOVSK	68.16	336.7				19	21	-6				
TIFLIS	68.28	317.0	10	43	-1	19	27	-1				
MAWSON	70.40	195.0	10	55	-1	19	54	1				
MONOWAI	70.98	137.8	10	59A	-1							
CHANGALANE	71.27	243.2	11	3	1				11	42		
ROXBURGH	72.04	137.2	11	5	-1						22	51 SS
KSARA	72.23	306.6	11	7	0	20	14	0	11	49	20	44 SP

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JERUSALEM	72.24	304.4	11 8A	1				
PETROPAVLOV	72.46	31.7	11 8	-1				
LMIRO	73.66	268.4	11 18A	2	20 41	11		12 4
BROKEN HILL	73.94	255.8	11 18	1				
BULAWAYO	74.04	249.9	11 19	1				
TARATA	74.36	129.9	11 20	0				
WELLINGTON	75.01	132.0	11 22	-1				
KARAPIRO	75.06	128.5	11 24	0				
TIKSI	75.99	8.3	11 32	3			12 13	
TUAI	76.43	129.2	11 31	0				
MOSCOW	78.26	328.5	11 40A	-1				
ISTANBUL UN.	79.32	312.4	11 46	-1	21 28	-3		
CAPE HALLETT	80.92	163.4	11 56	0				
SCOTT BASE	82.24	168.9	12 3	0				
ATHENS	82.75	308.6	12 2	-3				12 44
VIBORG	84.30	331.7	12 13	0				
APATITY	84.48	338.9	12 13A	-1	22 17	-7	12 59	22 23 SCS
KAJAANI	85.68	334.8	12 19A	-1	22 34	-1	13 4	
KHEYS	85.78	353.4	12 18	-2			13 7	
MELSINKI	86.02	330.7	12 20	-1			13 6	
NURMIJARVI	86.24	331.0	12 22	0	22 41	0	13 6	23 51 PS
SODANKYLA	86.93	337.9	12 25	-1			13 9	13 25 *SP
KRAKOW	87.18	320.2	12 27A	0				13 10
SOUTH POLE	87.48	180.0	12 28	0				13 11
N-LAZARVSKYA	87.85	199.4	12 32K	2	23 0	4		
TARANTO	88.04	310.5						22 36
RACIBORZ	88.29	320.1	12 33	1				
BANDEIRA	88.61	255.2	12 33	-1			14 18	12 35 PCP
UMEA	88.86	333.9	12 34A	-1	23 5	0	13 18	
MESSINA	89.18	308.1						14 21
VIENNA-H.	89.32	318.2	12 38	1				
KIRUNA	89.35	337.9	12 36A	-1			13 21	
UPPSALA	89.61	329.8	12 38A	0			13 21	
TROMSOE	90.13	339.6	13 41	60				
KARLSKRONA	90.38	326.0	12 44	2				
LJUBLJANA	90.43	315.9	12 41A	-1				
PRUMONICE	90.63	319.8	12 44	1				22 44 SKKS
TRIESTE	90.95	315.5			23 23	-1		22 56 SKS
AQUILA	91.05	312.2						23 5
KASPERSKE H.	91.21	318.9	12 46A	0			13 29	
COLLMBERG	91.67	321.1	12 47A	-1				16 27
ROME	91.72	311.7			23 32	1		24 52 PS
COPENHAGEN	92.13	325.5	12 51	1				
PADOVA	92.26	315.2						23 21
SKALSTUGAN	92.37	333.4	12 51	0			13 36	
GOTEBORG	92.43	327.5	12 51	-1				
JENA	92.56	320.7	12 51	-1			13 36	14 38
STUTTART	94.04	318.5	12 59	0			13 43	
BYRD STATION	94.94	173.3	13 6	3				
STRASBOURG	95.05	318.4			23 18	-3		25 13 PS
ISOLA	95.70	314.0	13 8	2				
ROSELEND	95.94	315.5	13 8	0				
GARCHY	98.28	317.3	14 18	60				
COLLEGE	100.56	24.1	13 29	0				
MOULD BAY	102.77	9.4	13 36	-2				
RESOLUTE	107.21	4.8	14 0	777				
PENTICTON	121.19	30.9	18 32	0				
EDMONTON	121.33	24.3	18 32A	0				
SHASTA	124.50	40.7	18 37K	-1				
MINERAL	125.20	40.6	18 40A	1				
BLUE MTS.	125.21	33.9	18 40	1				20 31 PP
CALISTOGA	125.41	42.9	18 41K	1				
PARAISO	126.68	45.3	18 45	3				
PRIEST	127.98	44.7	18 47A	2				
EUREKA	129.27	38.5	18 41	-6			19 36	20 49 PP
WOODY	129.46	44.2	18 49	1				21 1
PASADENA	130.74	45.5	18 54	4				
BOULDER CITY	132.05	41.5	18 56	4				22 5
UINTA BASIN	132.49	33.4	18 54	1				21 18 PP
LARAMIE	133.85	29.5	18 57	1				
GOLDEN	135.17	30.8	18 45	-13				
TONTO FOREST	135.40	41.0	18 47	-12				21 41
TUCSON	136.92	43.0	18 52	-9				22 17 SKP
BREBEUF	137.08	356.0	19 3K	1				
ALBUQUERQUE	137.98	36.5	18 55	-8				20 46 PP
LAWRENCE	140.28	21.9	19 1	-7				
PALISADES	141.57	355.7	19 6	-4				
LUBBOCK	141.61	33.7	19 6	-4				
PENNSYLVANIA	141.91	0.5	19 6	-5				

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FLORISSANT	142.04	16.5	19 7	-4						
WICHITA MTS.	142.43	29.1	19 5	-7						22 21 SKP
TULSA	142.71	24.9	19 9A	-3				19 53		22 24 PP
GEORGETOWN	143.81	359.5	19 12	-2						
CUMBERLAND	146.27	11.9	19 19	1						22 38 SKP
COLUMBIA	148.52	5.7	19 24	2						
LA PAZ	158.95	205.7	19 40	4						
AREQUIPA	160.22	197.2	19 42	5						
HUANCAYO	165.35	188.3	19 47	4						
CARACAS	166.89	307.6	19 45A	1				26 57	29	
BOGOTA	176.03	301.5	19 49	1						
CHINCHINA	176.96	322.7	19 53	5						

JUNE 30 22.H 4.M 55.S EPICENTRE 46.57 153.31 DEPTH= 49.KM

A=-0.61640 B= 0.30990 C= 0.72388 D= 0.4492 E= 0.8934
G=-0.6467 H= 0.3252 K=-0.6899 HT= -4.1

DEPTH OF FOCUS= 0.003R

SE= 2.26

	DELTA DEG.	AZ. DEG.	P M S	O-C S	S M S	O-C S	*PP M S	SUPP. M S
KURILSK	4.03	252.5	1 1A	0	1 47	-1		
Y.-SAKHLINSK	7.28	277.4	1 49A	2	3 19	10		
PETROPAVLOVK	7.32	26.2	1 44	-3	3 6	-4		
UGLEGORSK	7.97	292.5	1 57	1				3 36
OKHA	9.66	320.1	2 21	2				4 36
KLYUCHI	10.84	23.0	2 47	11				
MIZUSAWA	11.62	234.6	2 50	4	4 43	-12		
MATUSIRO	15.08	233.7	3 26	-6	6 17	-1		
VLADIVOSTOK	15.56	265.0	3 35A	-3				6 35
ABUYAMA	17.77	235.2	4 2A	-4				
CHANGCHUN	19.88	272.3	4 27	-3				
YAKUTSK	20.53	327.4	4 33	-4				8 44 PCP
PEKING	27.62	269.9	5 45	0	10 17	-5		6 34 PP
TIKSI	27.66	343.6	5 41	-5				6 33 PP
PAOTOW	31.61	275.0	6 20A	-1	11 19	-6		
IRKUTSK	31.87	298.6	6 21	-2				
SIAN	35.52	265.9	6 54	0				
COLLEGE	36.21	38.2	6 59	-1				
LANCHOW	38.06	272.1	7 17A	1	13 7	3		
BAGUIO CITY	40.50	233.0	7 35	-1	13 44	3		
CHENG TU	40.98	265.0	7 42	2				
MOULD BAY	44.73	19.9	8 10	0	14 46	3		
KHEYS	45.28	346.7	8 12	-3				10 26
KUNMING	45.34	259.8	8 17A	2				
KIPAPA	46.58	105.6	8 24	-1	15 16	6		
HONOLULU	46.61	105.8	8 25	0	15 14	4		
SEMIPALATNSK	46.77	302.8	8 24	-3				
ALERT	49.93	5.8	8 51A	0				
LHASA	50.53	273.4	8 58A	2				
RBAUL	50.56	181.5	8 58	2				22 50
RESOLUTE	50.97	18.5	8 58K	-1				
ALMATA-2	51.91	295.8	9 7A	1				
NORD	51.97	358.1	9 5	-2				
SHILLONG	52.51	268.8	9 11A	0				
FRUNSE	53.85	296.7	9 21A	0				
SVERDLOVSK	54.06	317.3	9 21K	-1				
CHATRA	54.95	273.4	9 30A	1				
EDMONTON	56.24	46.0	9 37A	-1				
APATITY	57.56	336.8	9 46K	-1	17 42	2		19 35 SCS
TASHKENT	57.98	297.9	9 50A	0				
SHASTA	58.51	62.5	9 54K	0				10 22
KHOROG	58.86	293.1	9 57A	1				18 11 PS
BLUE MTS.	59.06	56.0	9 57	-1	18 2	3		18 15 SP
MINERAL	59.21	62.4	9 59A	0				
TROMSOE	59.40	343.1	9 59	-1				
SODANKYLA	59.47	338.9	9 59K	-2				
CALISTOGA	59.63	64.5	10 20A	18				
BERKELEY	60.30	65.1	10 7K	1				
KIRUNA	60.56	341.4	10 6A	-2	18 23	4		
NEW DELHI	60.65	281.6	10 8A	-1				
LAHORE	60.69	286.0	10 9	0				
PARAISO	61.18	66.5	10 16	4				
KAJAANI	61.72	336.1	10 15	-1				10 48

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PRIEST	62.37	65.7	10 16A	-4							
EUREKA	63.15	60.2	10 26	1							
UMEA	63.91	338.8	10 29A	-1	19 3	2					
PULKOVO	64.26	331.9	10 31A	-2	19 5	0			10 37	PCP	
MOSCOW	64.67	325.7	10 34A	-1					11 6	PCP	
SALT LAKE C.	64.74	56.8	10 34	-2							
PASADENA	65.21	65.9	10 49	10							
NURMIJARVI	65.43	334.9	10 40A	0	19 17	-2			14 40	PPP	
HELSINKI	65.61	334.5	10 40	-1							
SKALSTUGAN	65.96	342.1	10 42A	-2							
BOULDER CITY	66.09	62.5	10 46	2							
QUETTA	66.42	289.5	10 47A	1	19 39	8					
CHARTERS TS.	66.65	187.2	10 48	0					27 1		
ASHKABAD	66.66	300.9	10 51	3					12 11	PCP	
RAPID CITY	67.31	49.4	10 51	-1							
LARAMIE	67.92	52.9	10 56	0							
UPPSALA	67.93	337.6	10 55A	-1	19 50	0					
GOLDEN	69.14	54.1	11 2	-1							
TONTO FOREST	69.39	61.7	11 5	0	20 15	8	11 17	39 9	PKPPKP		
TUCSON	71.05	63.0	11 15	0							
GOTEBORG	71.25	339.2	11 15A	-1							
TIFLIS	71.58	311.6	11 19	1							
KARLSKRONA	71.67	336.6	11 20A	1							
TEHERAN	72.24	303.3	11 24A	2							
GORIS	72.38	309.1	11 24A	1							
COPENHAGEN	72.93	338.0	11 26A	0							
SCHEFFERVILLE	73.45	22.9	11 28	-1							
SIMFEROPOL	74.29	319.9	11 36	2	21 5	2					
LWOW	74.42	328.6	11 35	0							
LUBBOCK	75.46	56.5	11 40	-1							
KRAKOW	75.65	331.1	11 41	-1	21 26	8			11 52	PCP	
SHIRAZ	75.89	298.1	11 44A	1	21 20	-1			12 6	*SP	
RACIBORZ	76.19	332.1	11 45	0					11 52	PCP	
WICHITA MTS.	76.48	53.6	11 45	-2	21 30	3			26 31	SS	
COLLMBERG	76.69	335.7	11 47A	-1							
HALLE	76.81	336.4	11 49	0					20 20		
DURHAM	76.82	345.4	11 52	3	21 42	11					
WITTEVEEN	76.96	340.0	11 52	3							
TULSA	77.12	51.1	11 50A	0	21 36	2					
PRAGUE	77.37	334.3	11 53	1							
JENA	77.42	336.3	11 50	-2	21 29	-8			25 53	SS	
MUNSTER	77.52	339.1	11 48	-4							
FLORISSANT	77.72	45.8	11 52	-2							
ST. LOUIS 1	77.91	45.8	11 54	-1							
DE BILT	77.98	340.5	11 56	1	21 53	10					
BRATISLAVA	78.21	331.8	11 56	0					15 6	PP	
VIENNA-H.	78.37	332.2	11 58A	1							
KASPERSKE H.	78.46	334.3	11 58A	0							
LONDON ONT.	78.55	37.5	11 57A	-1							
BENSBERG	78.56	338.9	11 59A	1							
UCCLE	79.38	340.6	12 4	1	22 11	13					
BREBEUF	79.44	31.5	12 2	-1							
HEIDELBERG	79.59	337.4	12 5	1							
ISTANBUL UN.	79.68	320.6	12 9	5					22 11		
KEW	79.74	343.6	12 5	0	22 8	6					
DOURBES	79.97	340.1	12 6K	0	22 11	7					
STUTTGART	80.01	336.8	12 7	1							
KARLSRUHE	80.03	337.4	12 10	4							
RIVERVIEW	80.05	181.8			22 13	8			22 57	PS	
STRASBOURG	80.59	337.6	12 10A	1	22 20	9			23 8	PS	
VALENTIA	80.87	349.8	12 11	0	22 25	11					
LJUBLJANA	80.91	332.3	12 11	0					12 32		
FELDBERG	81.17	337.2	12 13	1							
PARIS	81.67	341.0	12 16A	1							
PENNSYLVANIA	81.79	36.7	12 15	0							
KSARA	82.16	311.8	12 19	2	22 30	3	12 41	15 30	PP		
FOLINIERE	82.34	342.9	12 18	0							
CUMBERLAND	82.60	44.7	12 19	-1	22 33	1			15 21	PP	
PALISADES	83.19	34.0	12 20	-3	22 38	1					
PAVIA	83.32	335.3	12 25	2					18 45		
JERUSALEM	84.10	310.9	12 29A	2							
CLERMONT-FD.	84.38	339.5	12 32	3							
ATHENS	84.49	322.3	12 28	-1							
AQUILA	84.57	331.3	12 31	1	23 9	18					
ISOLA	84.84	336.3	12 32	1					13 4		
MESSINA	87.51	328.0							20 31		
TOLEDO	91.59	342.8	13 3K	0	23 41	-16			16 45	PP	
CARACAS	112.76	43.5							34 45	SS	

The scanned images of the bulletins of the International Seismological Summary (ISS) have been obtained thanks to funding provided by the US National Science Foundation through grant EAR-9725140 (Villaseñor et al., 1997) and collected by SGA Storia Geofisica Ambiente (Bologna) on behalf of the Istituto Nazionale di Geofisica e Vulcanologia (Rome), in the frame of the EUROSEISMOS project.

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LWIRO	114.76	294.9			
CHILEKA	120.65	279.7	18 47	0	
BROKEN HILL	124.15	286.1	18 56K	2	
BULAWAYO	128.08	281.1	19 3	2	
MAWSON	132.11	211.1	19 12	3	
LA PAZ	134.47	62.8	19 16	3	
N-LAZARVSKYA	149.52	204.0	19 44	4	

29 33 PS

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A digital hypocenter file of the ISS (Villaseñor and Engdahl, 2005) can be obtained from the USGS web site: <http://earthquake.usgs.gov/scitech/iss/>

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