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

JANUARY 1 23.H 39.M 6.S EPICENTRE 56.57-157.56 DEPTH= 51.KM

A=-0.51164 B=-0.21125 C= 0.83282 D=-0.3816 E= 0.9243
G=-0.7698 H=-0.3178 K=-0.5535 HT= -7.8

DEPTH OF FOCUS= 0.003R

SE= 1.94

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
COLLEGE	9.59	25.7	2	18	0	3	58	-8			3	18	
SITKA	12.19	78.4	2	53	0	4	56	-13					
PORT HARDY	18.66	95.5	4	17K	1								
VICTORIA	22.08	96.8	4	54A	2								
YELLOWKNIFE	22.22	56.8	4	53K	-1								
KLYUCHI	22.73	286.9	5	1	2	9	9	10					
SEATTLE	23.19	97.6	5	13	10						9	35	
PENTICTON	23.74	91.6	5	1UK	2								
MOULD BAY	24.11	21.3	5	12A	0	9	25	2					
BANFF	25.05	84.5	5	21K	0								
PETROPAVLOVK	25.16	280.6	5	23A	1						5	59	PP
MAGADAN	26.91	298.1	5	39	1	10	12	2			6	20	PP
HUNGRY HORSE	27.36	88.8	5	43	1				6	1	11	1	
BLUE MTS.	27.64	97.8	5	46K	1	10	20	-2					
MINERAL	28.42	109.4	5	52K	0								
UKIAH	28.49	113.1	5	54	1				6	10	9	16	PCP
CALISTOGA	29.18	113.0	5	58A	-1						9	4	
RESOLUTE	29.49	28.7	6	1A	-1								
BUTTE	29.53	91.6	6	2	0	10	58	6	6	19	9	5	PCP
BERKELEY	29.93	113.6	6	6K	1	11	1	3	6	22	7	15	PP
BOZEMAN	30.58	90.8	6	12	1	11	41	33	6	29	7	27	PP
LICK	30.66	113.5	6	12K	0				6	30			
EUREKA	32.03	104.4	6	25	1				6	42	7	19	PP
PRIEST	32.08	113.8	6	25K	1						6	46	
TIKSI	32.91	326.0	6	30	-2						7	46	PP
SALT LAKE C.	33.35	98.5	6	36	1				6	52	7	33	PP
FLAMING GRGE	34.59	96.0	6	46	0						17	36	
PASADENA	34.90	113.1	6	49	0	12	14	-2	7	4	12	57	SCP
UINTA BASIN	34.92	97.0	6	50	1	12	20	4					
ALERT	35.02	13.2	6	49A	-1	12	13	-4					
KIPAPA	35.10	180.7	6	50	0	12	24	5	8	8	12	47	
HONOLULU	35.22	180.9	6	52	1	12	25	4	8	10			
BOULDER CITY	35.22	107.4	6	53	1						8	26	PP
KURILSK	35.31	275.0	6	51A	-1								
YAKUTSK	35.71	309.5	6	55A	-1						8	20	PP
THULE	35.81	23.8	7	6	9								
UGLEGORSK	36.15	284.4	7	UA	1	12	33	-2					
GLEN CANYON	36.22	102.9	7	U	0				7	18	10	22	
LARAMIE	36.44	92.2	7	3	1						8	31	
Y.-SAKHLINSK	37.03	281.1	7	7A	0	12	44	-4			8	28	PP
GOLDEN	37.66	93.9	7	13	1						8	44	
NEMURO	37.79	274.3	7	12A	-1	12	55	-5					
ABASHIRI	38.06	276.2	7	15	0						7	48	
WAKKANAI	38.59	279.8	7	21A	1						8	37	
KUSIRO	38.67	274.8	7	19A	-1	13	8	-5					
ASAHIGAWA	39.26	277.3	7	26K	1	13	23	1					
OBIHIRO	39.37	275.7	7	26	0	13	24	0					
HIROO	39.73	274.8	7	29	0								
URAKAWA	40.11	275.1	7	32	0								
TUCSON TELE.	40.19	106.9	7	34	1				7	52	8	25	
TUCSON	40.21	107.1	7	34	1	13	41	5					
SAPPORO	40.29	277.2	7	34A	0	13	35	-2					
TOMAKOMAI	40.45	276.6	7	34	-1								
NORD	40.48	8.2	7	35A	0								
ALBUQUERQUE	40.50	100.1	7	36	0	13	44	3			9	58	
MURORAN	40.99	276.7	7	40	0	13	45	-3			9	39	
SUTTSU	41.08	277.8	7	40	0								
MORI	41.36	276.7	7	43A	0	13	52	-1					
HAKODATE	41.46	276.3	7	43A	0	13	53	-2					
HATINOHE	41.90	274.3	7	38	-9								
AOMORI	42.12	275.2	7	51	2	14	3	-2					
MORIOKA	42.68	273.7	7	54A	0	14	11	-2					
GODHAVN	43.09	30.4	7	57A	0	14	17	-2					
MIZUSAWA	43.10	273.1	7	58	1						13	24	
AKITA	43.26	274.5	7	51	-7								
ISINOMAKI	43.49	272.2	8	0A	0								
SENDAI	43.83	272.4	8	3A	0								
SAKATA	43.98	273.9	8	6	2								
YAMAGATA	44.15	272.8	8	6A	1								

HUKUSIMA	44.44	272.2	8	9	1							
ONAHAMA	44.78	271.1	8	11	1							
WICHITA MTS.	44.99	93.2	8	12	0	14	47	1	8	30	15 20	PPS
SHIRAKAWA	45.03	271.8	8	12	-1							
MITO	45.43	270.9	8	15	-1	14	52	-1				
AIKAWA	45.48	274.3	8	16A	0							
CHIHUAHUA	45.57	105.6									12 54	
UTUNOMIYA	45.64	271.5	8	18	1						8 44	
TULSA	45.67	89.7	8	17	-1	14	56	0	8	35	18 39	SS
KAKIOKA	45.70	271.0	8	19	1							
TYOSI	45.70	269.9	8	19	1							
TUKUBASAN	45.75	271.0	8	18A	0	14	54	-3	8	25	9 59	PP
CHICAGO CGS.	46.00	77.6	8	18	-2							
TAKADA	46.14	273.4	8	16	-5	15	1	-2			8 45	
MAEBASI	46.19	272.1	8	20	-2						8 54	
KUMAGAYA	46.20	271.6	8	22	0							
TOKYO C.M.O.	46.34	270.8	8	24	1							
FAYETTEVILLE	46.42	88.2	8	22K	-2	15	1	-6			10 17	PP
NAGANO	46.48	273.0	8	25	1						14 6	
OIWAKE	46.53	272.4	8	25	1						13 53	
MATUSIRO	46.56	272.9	8	24A	-1	15	6	-3				
ST. LOUIS 1	46.77	82.7	8	25	-1	15	9	-3				
MERA	46.85	270.0	8	28	1							
KOHU	47.01	271.8	8	28	0	15	14	-1				
TOYAMA	47.01	273.8	8	29	1							
HUNATU	47.01	271.5	8	29	1	15	14	-1				
AJIRO	47.16	270.8	8	29	0							
MISIMA	47.19	271.0	8	30A	0	15	17	-1				
OSIMA	47.21	270.3	8	32A	2	15	18	0				
DALLAS	47.39	93.4	8	31	0							
IIDA	47.52	272.2	8	33A	1	15	22	0				
SCHEFFERVLLE	47.56	51.6	8	33K	1							
OMAESAKI	47.98	271.1	8	34	-2							
HUKUI	48.02	274.0	8	35	-1							
HAMAMATU	48.17	271.6	8	38A	1	15	32	1				
GIHU	48.19	273.0	8	37	0	15	30	-2				
NAGOYA	48.25	272.6	8	38A	0						10 3	
CHANGCHUN	48.40	289.3	8	37A	-2							
TSURUGA	48.40	273.8	8	40	1							
LONDON ONT.	48.56	71.9	8	39	-1							
HIKONE	48.58	273.3	8	42	2	15	37	0				
KAMEYAMA	48.76	272.7	8	44	2							
KYOTO	49.05	273.5	8	44A	0	15	42	-2				
TOYOOKA	49.17	274.7	8	44A	-1	15	44	-2				
NARA	49.24	273.1	8	45	0	15	46	0				
ABUYAMA	49.25	273.5	8	46A	0	15	47	0				
SCORESBY SD.	49.35	18.1	8	45	-1	15	47	-1				
OSAKA	49.43	273.3	8	48	1						9 34	
CLEVELAND	49.46	73.6	8	46K	-1	15	46	-4				
TOTTORI	49.54	275.2	8	48	0							
OTTAWA	49.73	66.1	8	47K	-2							
SUMOTO	50.00	273.5	8	50	-1							
YONAGO	50.06	275.7	8	52	0							
TAKAMATU	50.49	274.2	9	6A	11	16	4	0				
BREBEUF	50.72	64.6	8	55K	-2	16	4	-3	9	14	16 34	PP
KOTI	51.36	274.0	9	2	0						9 34	
CUMBERLAND	51.54	81.9	9	1	-2							
ASHIZURI	52.27	273.7	9	8	0							
IRKUTSK	52.48	309.9	9	10A	0	16	30	-1			11 3	PP
OOITA	52.65	275.2	9	11	0							
ASOSAN	53.20	275.4	9	15	0							
KUMAMOTO	53.46	275.6	9	18	1							
GUADALAJARA	53.47	109.0	9	18	1							
GEORGETOWN	53.69	72.8	9	18	-1	16	45	-3				
MIYAZAKI	53.75	274.3	9	21	-4							
PALISADES	53.79	68.8	9	18	-2	16	48	-1	9	39	17 12	*SS
KEVO	53.93	358.0	9	19	-2	16	48	-3			13 3	
NAGASAKI	53.98	276.2	9	22A	1	16	54	2				
TROMSOE	54.08	1.5	9	21	-1						10 1	PCP
KAGOSIMA	54.49	274.7	9	26	1							
ULAN-BATOR	54.53	304.7	9	26	1	17	0	1				
REYKJAVIK	54.92	22.0	9	28A	0							
COLUMBIA	55.21	79.7	9	29	-1	17	5	-3				
PEKING	55.86	292.2	9	35A	0	17	17	0	10	2	19 15	SCS
KIRUNA	55.91	0.9	9	34A	-1	17	14	-3			19 18	SCS
APATITY	55.93	354.9	9	35A	0	17	15	-3	10	32	11 44	PP
SIDA	56.00	20.4	9	36A	0						9 56	
HALIFAX	56.24	59.0	9	36K	-2							

SODANKYLA	56.34	358.1	9	36	-2	17	22	-1			39	36 PKPPKP
TACUBAYA	56.70	105.9	9	35	-6	17	24	-4			11	41 PP
VERA CRUZ	58.51	103.2	9	56	3	18	6	15			29	56
PAOTOW	58.54	296.9	9	53A	-1	17	51	-1	10	23	19	34 SCS
KAJAANI	59.61	357.3	10	UA	-1	18	4	-2			10	46 PCP
SKALSTUGAN	59.93	5.2	10	2A	-1						11	52
UMEA	59.93	1.1	10	2A	-1	18	8	-2			39	32 PKPPKP
ZO-SE	59.98	281.7	10	3A	-1	18	11	0				
ESEN BULAK	60.37	310.1	10	7A	1	18	19	3				
NANKING	60.54	284.2	10	6	-1	18	17	-1				
GUAM	61.29	249.7	10	9	-4	18	22	-5				
BERGEN	62.59	9.5	10	2U	-1						11	1 PCP
SVERDLOVSK	62.83	337.5	10	22K	-1	18	46	-1			12	41 PP
COMITAN	63.09	101.6									10	46
SEMIPALATNSK	63.18	322.6	10	25A	0	18	51	0			11	2 PCP
NURMIJARVI	63.25	358.8	10	24	-2	18	48	-4			39	39 PKPPKP
KONGSBERG	63.68	7.2	10	29A	1	18	58	1	10	44	11	5 PCP
PULKOVO	63.84	355.6	10	29	0	18	57	-2	10	39	14	17 PPP
UPPSALA	63.87	2.7	10	28A	-2	18	56	-4			39	17 PKPPKP
SIAN	64.00	293.1	10	31A	1							
ABERDEEN	64.91	14.5				19	17	5			23	54 SS
LANCHOW	65.11	298.0	10	37A	-1	19	12	-3				
GOTEBORG	65.78	6.1	10	41A	-1						39	16 PKPPKP
DURHAM	67.31	14.8	10	52K	0	19	42	0	11	14	13	5 PP
MOSCOW	67.38	350.8	10	51A	-1	19	39	-3			13	20 PP
COPENHAGEN	67.82	6.1	10	54A	-1	19	49	1				
CHENGTU	69.35	294.4	11	5A	1	20	5	-1				
HOPE	70.13	87.3	11	9	0							
WITTEVEEN	70.21	10.1	11	11A	1							
CANTON	70.56	282.5	11	12A	0	20	21	1			21	9 SCS
KEW	70.70	14.9	11	13A	0	20	23	1			20	47
HONG KONG	70.75	281.3	11	13A	0	20	24	2			21	10 SCS
DE BILT	70.77	11.2	11	13A	0	20	24	2			11	46
WARSAW	71.56	0.9	11	18A	0	20	30	-2	11	52	14	18 PP
FRUNSE	71.67	322.3	11	19	1	20	35	2			15	43 PPP
BENSBERG	72.10	10.1	11	21A	0	20	37	-1	11	39	13	49 PP
JENA	72.49	7.2	11	23	0	20	41	-1			25	36 SS
JERSEY	72.66	16.6	11	25	1	20	42	-2				
DOURBES	72.67	11.9	11	25	1	20	41	-3				
MANILA	73.14	271.1	11	24	-3						14	2 PP
CHORZOW	73.47	2.3	11	29A	0				12	11	14	7 PP
RACIBORZ	73.66	2.8	11	29	-1				13	4	14	14 PP
PARIS	73.69	13.6	11	31A	1	20	58	2			14	7
KRAKOW	73.73	1.7	11	31	1	20	56	0	13	9	14	13 PP
HEIDELBERG	73.79	9.3	11	31A	0							
KASPERSKE H.	74.41	6.0	11	35	1	21	4	0			14	8 PP
STUTTGART	74.46	9.0	11	34A	-1	21	3	-1			25	51 SS
KUNMING	74.51	292.0	11	35A	0	21	4	-1				
STRASBOURG	74.51	10.0	11	36A	1	21	7	2	11	53	14	14 PP
WELSCHBRUCH	74.54	11.0	11	36	1							
TUBINGEN	74.68	9.2	11	36A	0							
TASHKENT	74.78	325.3	11	38A	1	21	10	2			22	0 PS
EBINGEN	75.02	9.3	11	39A	1							
UZHGOROD	75.17	0.1	11	38A	-1	21	13	1				
FELDBERG	75.23	10.0	11	40A	1							
GARCHY	75.26	13.5	11	39A	0	21	12	-1			16	39 PP
VIENNA-H.	75.43	4.2	11	41	1	21	15	0				
RAVENSBURG	75.47	8.9	11	41A	0							
BESANCON	75.64	11.5	11	41	0						13	59
SAN JUAN	75.65	78.5	11	41	-1						12	0
BALBOA HTS.	75.96	95.0	11	42	-1							
LHASA	76.47	303.5	11	48A	2	21	28	2	12	18		
GALERAZAMBA	76.84	90.4	11	47	-1							
BACAU	77.17	356.8	10	51	-59	22	3	29				
ROSELEND	77.25	11.3	11	50	-1						14	41 PP
KHOROG	77.51	322.0	11	53	1	21	38	0			21	59 SKS
LJUBLJANA	77.54	5.6	11	52A	0				12	8	14	43 PP
ZAGREB	77.84	4.6	11	54	0	21	40	-1				
TRIESTE	77.89	6.2	11	54	0	21	39	-3			22	2 *SS
PADOVA	78.01	7.6	11	55A	0	21	39	-4			15	7 PP
PAVIA	78.01	9.6				21	40	-3			12	46
FOCSANI	78.02	356.6	12	0	5							
TIMISOARA	78.05	0.9	10	56	-59	21	1	-43				
SIMFEROPOL	78.38	351.6	11	57A	0	21	44	-3			14	54 PP
CAMPULUNG	78.51	358.1	12	0	2	22	6	18				
BELGRADE	78.97	1.4	12	0	0	21	53	0			22	9 SKS
MONACO	79.28	11.0	12	2	0				12	21		
SHILLONG	79.52	300.7	12	0A	-3	21	53	-6			15	3 PP

FLORENCE X.	79.58	8.2	12	6	3	22	12	12			12 39	15 19 PP
PORT MORESBY	79.87	235.5	12	5A	0	22	3	0				
SARAJEVO	79.88	2.9	12	4	-1							
TIFLIS	80.27	343.2	12	9A	2	22	8	1				22 19 SKS
WARSAK DAM	80.65	320.5	12	8	-1							
ASHKABAD	81.05	332.0	12	10A	-1	22	15	0				23 2 PS
SOFIA	81.10	359.3	12	13	2	22	16	0				22 58 PS
TORTOSA	81.22	16.7	12	13	1	22	17	0				
TITOGRAD	81.34	2.4	12	13	0	22	18	0				22 58 PS
TOLEDO	81.34	20.3	12	14A	1	22	21	3				15 22 PP
CHINCHINA	81.43	94.0	12	25	12	22	27	8				23 3 PPS
DEHRA DUN	81.49	313.8	12	11K	-2	22	13	-7				15 53 PP
ROME	81.54	7.5	12	14A	0	22	19	-1	12	47		15 22 PP
CARACAS	81.68	83.7	12	14	0	22	13	-9				
LAHORE	81.84	317.3	12	16	1	22	22	-1				
FUQUENE	82.07	92.1	12	16	0	22	15	-11				
GORIS	82.18	341.6	12	18A	1	22	28	1				15 23 PP
CHITTAGONG	82.27	299.0	12	18	1	22	28	0				
BOGOTA	82.58	92.9	12	19	0	22	25	-6				15 28 PP
ISTANBUL UN.	82.60	355.0	12	19	0	22	31	0				
TARANTO	83.23	4.0	12	24	2							23 34 PS
NEW DELHI	83.37	313.7	12	21A	-2	22	33	-6				15 30 PP
ALICANTE	83.47	17.9	12	26A	2	22	42	2				15 38 PP
CALCUTTA	83.77	301.9	12	27	2	22	43	0				
BOKARO	83.84	304.6	12	27	2	22	42	-1				15 40 PP
GRANADA	84.04	20.6	12	26K	0	22	50	5				15 44 PP
TRINIDAD	84.57	79.0	12	28K	-1							22 42
TEHERAN	84.82	336.7	12	34	4	22	50	-3				15 52 PP
MESSINA	85.42	5.4	12	32A	-1	23	3	4	12	53		22 55 SKS
QUETTA	85.71	322.5	12	35	0	23	8	6				
ATHENS	85.82	359.0	12	35A	0	22	50	-13				
AVERROES	86.96	24.7	12	42A	1				13	3		
KSARA	89.24	348.8	12	51A	-1	23	43	8	13	20		16 20 PP
CHARTERS TS.	89.70	231.3	12	54	0	23	39	0				
VISHAKHAPTNM	90.28	303.6	12	57	0	23	51	7				23 28 SKS
SHIRAZ	90.40	334.1	12	58A	1	23	43	-3	13	19		16 32 PP
PORT BLAIR	90.89	292.7	13	0A	0	23	48	-2				18 18 PPP
JERUSALEM	91.33	349.1	13	2	0							
HYDERABAD	92.72	307.6	13	8A	0	24	3	-3				16 50 PP
BRISBANE	93.58	222.8	13	11	-1							23 25
POONA	93.70	312.0	13	12A	0	24	13	-1				16 58 PP
BOMBAY	93.79	313.0	13	11	-2	24	13	-2				16 56 PP
MEDAN	94.57	283.5	13	17A	1							
HUANCAYO	95.71	103.1	13	23	1							
MADRAS	95.84	304.0	13	23	1	23	53	0				17 10 PP
LEMBANG	98.31	270.2	13	30K	-3							
TANGERANG	98.31	271.4	13	31K	-2							
RIVERVIEW	99.98	221.3				25	17	63				25 52
WELLINGTON	100.24	200.8										26 36 SP
AREQUIPA	101.43	102.4	13	47	0							
M.BOUR	102.06	39.0				25	28	64				18 21 PP
CANBERRA	102.10	222.2	14	4	14	25	32	68				33 6 SS
LA PAZ	103.29	99.7	13	55	-1	24	29	-1				
ROXBURGH	105.41	203.5				24	40	1				33 30 SSS
TOOLANGI	105.41	223.7										18 19 PP
ADELAIDE	105.89	230.0										18 30 PP
LWIRO	125.60	352.2	18	58A	2							20 48 PP
LUANDA	131.86	12.3										22 29 SKP
BROKEN HILL	137.71	351.3	19	21	2							
BANDEIRA	137.83	13.2	19	19	0							22 6 PP
BYRD STATION	138.07	170.7	19	12	-7							
CHILEKA	138.09	341.7	19	11	-8							
ARGENTINE I.	140.25	138.9	18	56	-27							
BULAWAYO	143.33	350.3	19	30A	1							
SOUTH POLE	146.39	180.0	19	31	-3							
KIMBERLEY	152.15	355.6	19	44	1							

JANUARY 2 14.H 56.M 3.S EPICENTRE -4.01 135.16 DEPTH= 0.KM

A=-0.70736 B= 0.70342 C=-0.06953 D= 0.7051 E= 0.7091
G= 0.0493 H=-0.0490 K=-0.9976 HT= 7.1

SE= 3.89

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

DARWIN	9.35	207.0	2	16	-3									
PORT MORESBY	13.05	114.8	3	5	-4	5	47	10						
RABAUL	16.97	91.2	4	0	0									
CHARTERS TS.	19.30	146.8	4	25	-4	8	0	-1						
HONIARA	25.19	103.6	5	27	-2	10	5	13						
LEMBANG	27.56	263.0	5	49A	-1									
DJAKARTA	28.30	264.5										6	33	
BRISBANE	28.69	145.9	6	0	-1	10	45	-4						
NHATRANG	30.42	302.3	6	14	-2							6	55	PP
ADELAIDE	30.98	174.3	6	17A	-4	11	17	-9	6	27	12	9		
MUNDARING	33.01	210.4	6	36	-3									
PERTH	33.19	210.9	6	43	3	11	59	-1				7	48	PP
RIVERVIEW	33.20	155.2	6	37	-3	11	55	-5				6	58	
HONG KONG	33.25	322.8	6	45	4	12	4	3				7	50	PP
CANBERRA	33.68	159.3	6	44	-1	12	6	-2						
TOOLANGI	34.71	165.5	6	51	-3	12	26	2				8	24	PPP
PORT VILA	35.22	115.3	6	57	-1									
NOUMEA	35.34	123.7	6	56	-3									
SAVANNAH	39.06	165.7	7	41	11									
TARRALEAH	39.43	166.8	7	40	7									
MOORLANDS	39.74	166.0	7	46	10									
TUKUBASAN	40.29	6.2				13	42	-7				17	6	
MATUSIRO	40.44	3.8	7	37	-5	13	44	-7						
KUNMING	42.78	314.3	8	2	1	14	33	7						
PORT BLAIR	44.99	290.8										10	10	
SIAN	45.39	329.0	8	22	0	15	11	8						
PEKING	47.18	340.1	8	36	0	15	35	6						
LANCHOW	49.47	326.3	8	55	1	16	8	7						
PAOTOW	50.00	335.0	9	1	3	16	17	8						
CHATEAU	50.64	139.4	9	1	-2									
ROXBURGH	50.94	149.4	9	14	9							20	39	SS
SHILLONG	51.25	307.4	9	6A	-1	16	20	-6				16	26	PS
WELLINGTON	51.32	142.0	9	17	9	16	17	-10				20	39	SS
CALCUTTA	52.77	302.2										16	47	
AFIAMALU	53.22	104.3	9	26	4	16	45	-8						
LHASA	53.90	311.4	9	27K	0	17	6	4						
VISHAKHAPTNM	55.51	294.6	9	20	-19	16	50	-34						
CHATRA	55.57	306.4	9	38	-1									
MADRAS	57.15	288.2	9	54	3	17	48	3				11	56	PP
ULAN-BATOR	57.34	337.8	9	51	-1	17	56	8						
ESEN BULAK	60.86	330.2	10	20	4	18	46	12						
DEHRA DUN	64.31	306.3	10	32	-7	19	10	-7						
POONA	64.38	292.6	10	37	-3									
NEW DELHI	64.38	304.2	10	37K	-3	19	11	-7						
BOMBAY	65.41	292.8	10	49	2	19	25	-6				13	11	PP
YAKUTSK	65.98	357.2	10	44	-6									
LAHORE	67.73	306.3	10	58	-3	20	3	4						
HONOLULU	69.99	65.8	11	19	4	20	33	8				28	34	
KIPAPA	70.08	65.6	11	18	2									
ALMATA	70.34	318.8	11	5K	-12									
WARSAK DAM	70.75	308.0	11	19	-1									
SEMIPALATNSK	71.72	326.5	11	29	3									
QUETTA	73.39	303.0	11	35	-1	21	10	5						
DUZHANBE	74.33	311.8	11	21	-20									
TASHKENT	74.85	314.6				21	25	4						
TIKSI	75.61	357.9	11	48	0	21	34	5						
VANNOVSKAYA	82.30	309.0	12	24	-1									
SVERDLOVSK	84.94	327.9	12	37K	-1									
SHIRAZ	85.58	300.0	12	47A	6							14	30	PP
SOUTH POLE	86.01	180.0	12	41	-3									
TEHERAN	87.27	305.9	12	50	0	23	28	-1						
COLLEGE	88.12	24.6	12	53	-1							13	47	
BYRD STATION	88.71	170.3	12	56	-1									
MOULD BAY	97.55	13.5	13	29	-8									
UMEA	104.40	335.5										33	13	SS
BLUE MTS.	105.22	44.7	14	14	777	26	27	96						
EUREKA	107.08	50.0	14	26	777									
UINTA BASIN	111.74	48.1										19	6	PP
JENA	113.77	324.8	19	39	58							19	49	PP
ALBUQUERQUE	115.41	53.1	18	44	0									
WICHITA MTS.	121.69	51.3	18	58	2							20	34	PP
TULSA	123.42	49.1	19	1	2							30	45	PS
CUMBERLAND	131.03	44.8	19	15	1									
BALBOA HTS.	145.17	80.1	19	40	1									
HUANCAYO	145.74	118.1	19	41	1									
AREQUIPA	146.71	128.4	19	45	3									
LA PAZ	149.25	132.1	19	53	7									
CHINCHINA	149.30	87.0										20	14	PKP2
BOGOTA	150.85	87.7	19	53	4									

FUQUENE 151.17 86.0 19 51 2

JANUARY 3 3.H 5.M 8.S EPICENTRE 29.42 130.24 DEPTH= 80.KM

A=-0.56356 B= 0.66603 C= 0.48867 D= 0.7634 E= 0.6459
G=-0.3156 H= 0.3730 K=-0.8725 HT= 2.0

DEPTH OF FOCUS= 0.007R

SE= 3.33

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S
YAKUSIMA	1.05	12.5	0	16	-4	0	33	-3				
KAGOSIMA	2.16	7.1	0	32A	-3	0	55	-6				
MIYAZAKI	2.69	21.9	0	49A	7	1	15	1				
UNZENDAKE	3.30	0.2	0	49	-2	1	44	15				
NAGASAKI	3.32	354.8	0	39A	-12	1	24	-5				
KUMAMOTO	3.41	6.6	0	51	-1	1	33	1				
HUKUE	3.49	340.1	0	59	6	1	41	7				
ASOSAN	3.54	11.4	0	51	-3	1	33	-2				
SAGA	3.82	0.8	0	57	-1	1	39	-3				
MAWASHI	3.89	2?6.0	1	0	1	1	50	6				
OOITA	3.98	17.0	1	0	0	1	55	9				
ASHIZURI	4.06	35.1	1	1	0	2	26	38				
UWAZIMA	4.28	26.9	0	57	-7						2	5
SIMONOSEKI	4.56	7.3	1	5	-3	1	59	-1				
MATUYAMA	4.91	25.6	1	15	2	1	59	-10				
KOTI	4.99	33.5	1	14	0						1	43
MUROTO	5.10	40.5	1	10	-5	2	3	-11				
HIROSIMA	5.28	20.1	1	22	4	2	27	9				
TSURUGISAN	5.47	35.?	1	29	9							
HAMADA	5.68	15.4	1	36	13	2	37	9				
TAKAMATU	5.87	32.6	1	27	1	2	25	-8				
TOKUSIMA	5.93	37.5	1	31	4	2	29	-5				
OKAYAMA	6.11	29.8	1	29	0	2	38	-1				
SIOMISAKI	6.21	48.2	1	24	-7						4	30
SUMOTO	6.31	37.8	1	29	-3						3	20
WAKAYAMA	6.37	39.9	1	39	6							
MATSUE	6.47	21.0				2	41	-7				
YONAGO	6.55	22.9									3	47
KOBE	6.72	37.4									3	41
OSAKA	6.88	39.4	1	48	8	3	0	2			3	45
TOTTORI	6.93	27.7	1	38	-3							
ABUYAMA	7.07	38.4	1	36A	-7							
NARA	7.07	40.7	1	42	-1							
TOYOOKA	7.22	31.2	1	55	10							
KYOTO	7.27	38.4	1	41	-4						3	35
TU	7.49	43.7	1	48	0							
KAMEYAMA	7.57	42.7	1	49	0						4	13
HIKONE	7.74	39.5	1	48	-4						4	17
ZO-SE	8.01	284.3	1	55A	-1	3	43	18				
NAGOYA	8.08	43.1	1	52	-5	3	37	10				
GIHU	8.13	41.1	1	53	-4							
HAMAMATU	8.26	48.3	2	2	3							
OMAESAKI	8.52	50.6	2	2	0							
IIDA	8.84	44.6	2	6	-1						4	53
SHIZUOKA	8.86	49.2	1	59	-8						4	28
MISIMA	9.31	50.1									3	9
TOYAMA	9.32	37.0	2	35	22	4	44	47				
AJIRO	9.37	50.9	2	7	-7							
KOHU	9.39	46.3	2	17	3							
OSIMA	9.41	53.1	2	15	0							
MATUMOTO	9.42	41.7	2	33	18							
MATUSIRO	9.76	41.2	2	14	-5	4	1	-7				
OIWAKE	9.81	43.2	2	25	5	4	27	18				
NAGANO	9.84	40.7	2	31	11						5	27
YOKOHAMA	9.96	50.6	2	21	-1						2	50
NANKING	10.20	287.8	2	26A	1	4	32	13			2	38 *SP
KUMAGAYA	10.21	46.5	2	22	-3						2	48
SHIRAKAWA	11.34	44.8	2	45	4							
CHANGCHUN	14.91	346.0	3	28	1	6	25	14			3	42 *SP
PEKING	15.66	316.3	3	39A	2	6	45	17			7	1 *SS
MANILA	16.94	211.9	3	53	0	7	6	9				
SIAN	18.73	290.3	4	15	1	7	53	16			4	28 *SP
PAOTOW	19.90	309.4	4	27	0	8	11	9			4	44 *SP
Y.-SAKHLINSK	20.08	25.5	4	29	0							

CHENGTU	22.72	279.7	4 55	-1	9 6 12						
LANCHOW	23.14	293.5	5 0	0	9 12 11					5 15	*SP
KUNMING	24.79	266.6	5 17	2	9 46 17						
ULAN-BATOR	25.78	322.2	5 24	-1	10 14 28						
ESEN BULAK	31.42	312.1	6 15	0							
PETROPAVLOVK	31.46	33.4	6 16	0	11 25 8						
YAKUTSK	32.61	359.5	6 22A	-4							
SHILLONG	34.15	272.9	6 37K	-2							
CHATRA	37.91	276.8	7 13	2							
PORT BLAIR	39.09	251.1								21 40	
PORT MORESBY	41.89	154.5	7 40	-4							
LEMBANG	42.10	214.7	7 47	2							
TIKSI	42.27	359.4	7 45	-2				7 53		18 4	SSS
SEMIPALATNSK	42.74	313.8	7 51	0							
ALMATA-2	44.07	303.2	8 1	0						18 9	SCS
DEHRA DUN	44.93	284.7	8 11	3							
NEW DELHI	46.06	282.6	8 18K	1							
FRUNSE	46.09	302.6	8 19K	1							
LAHORE	47.78	287.3	8 30	-1							
WARSAK DAM	49.56	291.2	8 45	1							
TASHKENT	50.17	301.0	8 49	0							
CHARTERS TS.	51.59	160.7	8 57	-3							
POONA	52.22	271.4	9 2	-3							
BOMBAY	52.97	272.3								16 25	
QUETTA	54.26	287.7	9 18	-2							
SVERDLOVSK	54.88	321.0	9 24	0							
KHEYS	58.28	349.4	9 46K	-2				9 55		10 20	PCP
COLLEGE	60.39	29.1	10 2	-1				10 16		12 0	PP
BRISBANE	60.47	156.9	10 2	-1	18 16 5						
HONOLULU	64.38	79.0			19 10 10						
ADELAIDE	64.54	172.3	10 40	10							
APATITY	65.70	335.3	10 37K	-1							
RIVERVIEW	65.94	161.0			19 34 15					29 10	
SHIRAZ	66.29	291.7	10 42A	0	19 29 6					13 9	PP
MOULD BAY	66.33	14.2	10 40A	-2							
CANBERRA	66.78	163.4	10 44A	-1				10 55			
KEVO	67.13	338.4			19 28 -5						
MOSCOW	67.63	322.3	10 50	0				11 0			
TIFLIS	67.92	306.4	10 52	0						20 41	SCS
ALERT	68.15	1.8	10 53	0							
TOOLANGI	68.15	167.0	10 52	-1						11 22	PCP
SODANKYLA	68.21	336.1	10 52	-2							
KAJAANI	69.16	332.7	10 58	-2							
KIRUNA	70.13	337.7	11 4	-1							
NURMIJARVI	72.02	329.9	11 16	-1	20 46 15					25 44	55
HELSINKI	72.04	329.5	11 16	-1							
RESOLUTE	72.09	11.4	11 16A	-1							
UMEA	72.21	334.0	11 16	-2	20 43 10						
THULE	73.78	4.5	11 25	-2							
SKALSTUGAN	75.28	335.9	11 35	-1							
UPPSALA	75.37	331.2	11 35A	-1							
KSARA	77.55	301.8	11 49	0							
BACAU	77.59	316.6								12 23	
SCORESBY SD.	78.41	350.8								11 56	
ISTANBUL UN.	78.99	310.9	11 56	0	22 2 15						
GOTEBORG	79.02	331.2	11 56	-1							
UZHGOROD	79.20	320.0	11 59	1							
KRAKOW	79.72	322.1	12 1A	1						12 40	
PENTICTON	80.04	38.6	12 4	2							
CHATEAU	80.26	145.9	12 2	-1							
BANFF	81.12	35.5	12 8	0							
ROXBURGH	82.58	153.4	12 16	1							
PRUHONICE	82.59	324.1	12 17	2							
VIENNA-H.	82.67	322.0	12 17	1						12 58	
JENA	83.48	326.0	12 20	0	22 40 7					15 31	PP
KASPERSKE H.	83.61	323.8	12 21	0						13 4	
CHEB	83.62	325.0	12 13	-8						12 58	
MINERAL	83.84	46.9	12 22K	0							
BLUE MTS.	83.89	41.4	12 23	1							
ATHENS	84.07	310.4	12 20	-3						22 49	
CALISTOGA	84.14	48.8	12 24K	1							
BERKELEY	84.78	49.3	12 28	2						37 52	
LJUBLJANA	85.01	321.0	12 29	1							
LICK	85.48	49.5	12 32A	2							
BUTTE	85.83	38.4	12 34	2							
STUTTGART	86.01	325.3	12 34	2	23 9 11						
PRIEST	86.80	50.0	12 39A	3							
BOZEMAN	86.88	38.0	12 38	1							

EUREKA	87.88	45.1	12	43	1						
FLORENCE X.	88.24	320.7							26	32	
WOODY	88.25	49.5	12	44	1						
ROME	88.75	318.6							26	33	
PARIS	89.22	328.5	12	50	2				13	20	
BOULDER CITY	90.72	47.4	12	58	3						
FLAMING GRGE	90.88	40.8	12	57	1						
UINTA BASIN	91.18	41.4	12	58	1				14	0	
GLEN CANYON	92.14	45.0	13	3	2						
GOLDEN	93.98	39.7	13	11	1						
TUCSON	95.63	48.2	13	21	4						
ALBUQUERQUE	96.60	43.7	13	22	0						
LWIRO	101.06	273.7							14	11	
WICHITA MTS.	101.31	39.2	13	54	11				17	52	PP
TULSA	101.91	36.7				25	32	75			
PALISADES	106.44	18.8				25	0	22			
HUANCAYO	150.61	59.3	19	48	11						
LA PAZ	158.79	56.7	19	54	6						

JANUARY 3 9.H 39.M 46.S EPICENTRE -5.34 151.70 DEPTH= 69.KM

A=-0.87673 B= 0.47203 C=-0.09236 D= 0.4741 E= 0.8805
G= 0.0813 H=-0.0438 K=-0.9957 HT= 7.0

DEPTH OF FOCUS= 0.006R

SE= 2.74

	DELTA DEG.	AZ. DEG.	P M	S	O-C S	S M	S	O-C S	*PP M	S	SUPP. M	S	
RABAUL	1.22	22.5	0	23	1								
PORT MORESBY	6.06	227.9	1	27K	-2	2	40	2					
HONIARA	9.13	116.9									2	31	
CHARTERS TS.	15.59	199.4	3	36K	-1	6	32	5					
GUAM	19.91	339.7	4	30	2	8	6	3					
DARWIN	21.77	249.8	4	48	1	8	40	2					
BRISBANE	21.96	177.4	4	50	1	8	50	8					
RIVERVIEW	28.36	181.0	5	54	5	10	34	4					
CANBERRA	29.94	184.4	6	4K	0	11	2	7					
ADELAIDE	31.84	200.5	6	16	-4	11	22	-3					
TOOLANGI	32.58	189.2	6	26	-1	11	42	6	6	47	7	40	PP
AFIAMALU	36.95	106.0	6	56	-8	12	46	2					
TARRALEAH	37.10	186.5	7	6	1								
MOORLANDS	37.17	185.5	7	7	1								
CHATEAU	40.02	150.8	7	31	2								
WELLINGTON	41.31	153.4	7	52	12	13	52	3			9	30	PP
MUNDARING	42.46	227.0	7	48	-2								
PERTH	42.73	227.2	8	5	13	14	11	1			17	19	SS
ROXBURGH	42.83	161.7				14	20	9			17	38	SS
MATUSIRO	43.53	344.2	7	57	-1	14	13	-9					
LEMBANG	43.85	265.7	8	3	2								
NHATRANG	45.70	292.7	8	19	3						10	21	
HONG KONG	45.86	308.2	8	18	1	14	48	-7	8	32	10	10	PP
ZO-SE	46.50	323.1	8	22A	0	15	5	1	8	36			
CANTON	46.93	308.5	8	27A	2				8	40			
NANKING	48.63	322.1	8	39A	0	15	35	1	8	53			
MACQUARIE I.	49.37	174.4							9	0			
CHANGCHUN	54.42	336.7	9	20	-2				9	34			
PEKING	55.74	327.3	9	30	-2	17	10	-1	9	45			
HONOLULU	55.87	59.9				17	32	19					
KIPAPA	55.99	59.8	9	35	2								
KUNMING	56.38	304.8	9	36A	0				9	51			
SIAN	56.38	317.5	9	36	0				9	50			
CHENGTU	57.95	311.2	9	46A	-1	17	41	1	10	0			
PAOTOW	59.56	324.0	9	58	0				10	12			
LANCHOW	60.85	316.5	10	7A	0	18	22	4	10	21			
SHILLONG	65.65	301.0	10	37A	-2								
ULAN-BATOR	65.99	328.7	10	39	-2	19	23	1					
LHASA	67.71	304.9	10	52A	0				11	7			
CAPE HALLETT	67.88	174.0	10	53	0								
ESEN BULAK	71.09	322.9	11	13	0								
VISHAKHAPTNM	71.25	290.6	11	28	15						20	53	
TIKSI	78.27	352.8	11	53	-1	21	43	1					
DEHRA DUN	78.70	302.2	12	5	9								
NEW DELHI	79.04	300.3	11	57A	-1								
POONA	80.23	289.7	12	2	-2								
LAHORE	82.08	302.7	12	12	-2								

SEMIPALATNSK	82.43	322.3	12 16	0						
ALMATA	82.63	314.7	12 16	-1						
COLLEGE	82.76	22.0	12 16	-2					13 31	
FRUNSE	84.19	313.9	12 25	0	22 48	5				
MAWSON	84.65	202.6	12 42A	15						
SOUTH POLE	84.70	180.0	12 28	1						
ANDIJAN	85.41	311.5	12 32	1						
TASHKENT	87.81	311.7	12 43	0						
QUETTA	88.13	300.4	12 44	0						
CALISTOGA	89.95	51.3	12 51A	-2						
BERKELEY	90.12	52.1	12 56K	3					24 44	
LICK	90.55	52.7	12 58K	3						
PRIEST	91.20	54.0	13 1A	2						
PASADENA	93.06	56.2	13 9	2			13 24			
PENTICTON	93.14	40.9	13 8	1						
BLUE MTS.	94.42	45.5	13 14	1						
MOULD BAY	94.90	13.9	13 14	-1						
SVERDLOVSK	95.01	326.5	13 14	-2						
EUREKA	95.15	50.9	13 18	1			13 34		17 36	PP
BANFF	95.85	39.2	13 19A	-1						
BOULDER CITY	95.90	54.5	13 22	2			13 38		17 33	PP
YELLOWKNIFE	96.40	27.8	13 26	4						
GLEN CANYON	98.54	53.5	13 34	2						
BOZEMAN	98.86	44.7	13 35	2			13 51			
N-LAZARVSKYA	99.50	192.5	13 36	0						
UINTA BASIN	100.08	50.1	13 40	1	25 28	78				
FLAMING GRGE	100.20	49.5	13 30	-9						
SHIRAZ	100.59	299.0	13 40	-1					17 43	
ALBUQUERQUE	102.74	55.5	13 53	2					18 12	PP
GOLDEN	103.33	50.6	13 55	2					18 9	
KIROVOBAD	105.12	310.5							18 33	PP
TIFLIS	106.14	311.8							18 38	PP
WICHITA MTS.	109.21	55.2	18 24	777					19 4	PP
TULSA	111.31	53.6	18 45	19					29 32	PKKP
NURMIJARVI	112.15	334.8	18 37	10					35 36	SS
FAYETTEVILLE	112.56	53.2							29 27	
CHILEKA	113.98	250.3	18 44	13						
KSARA	114.35	304.7							19 32	
ISTANBUL UN.	117.87	313.9							19 47	
KIMBERLEY	118.75	233.2	18 43	3						
CUMBERLAND	119.49	52.0	18 43	1			20 13			
BROKEN HILL	120.38	249.9	18 46	3						
OTTAWA	122.70	38.1	18 49	1						
PRUHONICE	122.81	328.5	18 50	2						
VIENNA-H.	122.82	326.0	18 48	0					19 27	
COLUMBIA	123.53	52.5	18 53	4						
JENA	123.72	330.8	18 54	4						
KASPERSKE H.	123.82	328.1	18 51A	1						
SHAWINIGAN	123.86	35.6	18 51	1						
BREBEUF	123.92	37.1	18 51A	1						
LJUBLJANA	125.10	324.7	18 53	1						
PALISADES	125.98	41.9							20 48	PP
STUTTGART	126.25	330.0	18 55	0						
STRASBOURG	127.12	330.6	18 57	1						
DOURBES	127.52	333.8	19 14	17						
HUANCAYO	130.15	110.5	19 8	6						
GARCHY	130.28	332.3	19 4	2						
AREQUIPA	132.11	117.7	19 9	3						
CHINCHINA	132.88	88.2	19 13	6						
BANDEIRA	134.12	243.4	19 13K	3			19 29		21 52	PP
BOGOTA	134.40	88.8	19 29	19						
FUQUENE	134.78	87.6	19 25	14						
LA PAZ	135.03	119.6	19 13	2					22 37	PKS
SAN JUAN	140.88	67.4	19 24	2			19 40			
CARACAS	141.42	79.9	19 19	-4						
TRINIDAD	146.81	78.8	19 36A	4					19 52	PKP2

JANUARY 4 0.H 23.M 50.S EPICENTRE 0.93 -27.66 DEPTH= 0.KM

A= 0.88564 B=-0.46409 C= 0.01620 D=-0.4641 E=-0.8858
G= 0.0144 H=-0.0075 K=-0.9999 MT= 7.2

SE= 2.08

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

M.BOUR	17.03	37.8	4	0	-1				6	26
TRINIDAD	34.89	287.3							16	30
SAN JUAN	41.54	297.0	7	51	1					
GRANADA	42.35	28.9	8	6K	9				10	6
LA PAZ	43.52	244.7	8	7	0	14	31	-5		
TOLEDO	44.33	26.2	8	14A	1	14	55	7	10	3 PP
BOGOTA	46.49	275.4	8	28	-2					
HUANCAYO	49.06	253.2	8	51	1					
BALBOA HTS.	52.27	280.6	9	15	0	16	40	1		
GARCHY	53.34	25.7	9	24	1					
ROSELEND	53.80	29.3	9	27	1					
HALIFAX	53.88	328.7	9	24	-3					
PARIS	54.29	24.1	9	30	0				9	55
FLORENCE X.	54.92	33.8	9	40	6					
KEW	55.37	20.4	9	37A	-1					
DOURBES	56.16	24.4	9	49	6					
LWIRO	56.53	93.3	9	46K	0					
STUTTGART	57.25	28.2	9	49	-2			9	56	
TRIESTE	57.48	33.4	9	52	-1					
BROKEN HILL	57.60	107.7	9	53	-1					
BENSBERG	57.88	25.2	9	55	-1			10	2	
LJUBLJANA	58.15	33.4	9	58	1					
KIMBERLEY	58.16	125.0	9	56	-1					
BULAWAYO	58.92	114.2	10	3	0					
KASPERSKE H.	59.59	30.1	10	7	0				12	18
JENA	59.82	27.6	10	7	-2					
BREBEUF	59.98	324.3	10	12K	2					
SHAWINIGAN	60.09	325.7	10	9	-2					
VIENNA-H.	60.49	32.3	10	13	-1					
PRUHONICE	60.62	29.8	10	13	-2				12	26
MORGANTOWN	61.15	315.8	10	24K	6					
OTTAWA	61.17	323.3	10	18	0					
SCHEFFERVLLE	62.48	335.7	10	26	-1					
RACIBORZ	62.55	31.4	10	27	0				11	15 PCP
CHORZOW	63.08	31.5	10	30	-1					
KRAKOW	63.44	32.1	10	33	0				11	0 PCP
CUMBERLAND	63.75	309.6	10	34	-1				10	53
UZHGOROD	63.97	34.4	10	36	-1					
ISTANBUL UN.	64.76	44.3	10	42K	0	19	24	2		
LWOW	65.55	33.9	10	46	-1					
KSARA	67.67	53.7	11	8	7	20	11	13		
UPPSALA	68.34	22.7	11	3A	-2					
SKALSTUGAN	69.06	17.9	11	13	4					
SCORESBY SD.	69.53	2.0	11	12	0					
FAYETTEVILLE	70.61	308.0	11	17	-2					
HELSINKI	71.49	24.8	11	21	-3					
NURMIJARVI	71.55	24.4	11	23	-1					
UMEA	71.83	20.3	11	26	0					
TULSA	71.83	307.5	11	24	-2					
VIBORG	73.40	25.3	11	34	-1					
PULKOVO	73.60	26.6	11	37	1	21	14	7		
WICHITA MTS.	73.85	305.8	11	36	-2	21	8	-1	14	24 PP
KIRUNA	74.42	17.0	11	41A	0					
KAJAANI	74.67	22.0	11	41	-2					
MOSCOW	75.53	32.1	11	48	0					
SODANKYLA	76.07	18.9	11	50A	-1					
TIFLIS	76.33	47.3	11	52	0					
GORIS	77.07	49.7	11	56A	0	21	50	5		
KIROVOBAD	77.27	48.6	11	57K	0	21	53	6		
KEVO	77.50	16.9	11	58	-1					
APATITY	78.43	20.1	12	3K	-1				12	10 PCP
THULE	78.75	351.0	12	3	-3					
GOLDEN	79.95	310.0	12	12	0					
ALBUQUERQUE	80.29	305.2	12	14	0					
TEHERAN	80.56	54.1	12	17	2					
NORD	80.77	1.6	12	14	-2					
SHIRAZ	81.00	60.3	12	18K	0					
ALERT	82.86	355.7	12	27	0					
RESOLUTE	83.20	345.7	12	28K	-1					
UINTA BASIN	83.23	310.3	12	29	0	22	54	5		
TUCSON	83.73	302.2	12	32	0					
BOZEMAN	84.71	315.6	12	37	0					
SALT LAKE C.	84.99	310.7	12	38	0					
BUTTE	85.79	315.9	12	42	0				13	33
VANNOVSKAYA	86.08	52.2	12	46	3					
ASHKABAD	86.27	52.2	12	43	-1					
HUNGRY HORSE	86.89	318.2	12	48	1					
BOULDER CITY	87.17	305.8	12	50	1				16	13 PP
EUREKA	88.11	309.3	12	53	0					

SVERDLOVSK	88.28	33.3	12	55	1							
KHEYS	88.38	9.4	12	56	1							
BLUE MTS.	89.10	314.7	12	57	-1	23	58	12				
MOULD BAY	89.50	346.1	12	59	-1							
WOODY	90.44	305.5	13	5	1							
NEW DELHI	102.58	60.6									21	34
ADELAIDE	143.83	160.9	20	17	40							
CANBERRA	145.65	175.1	19	42A	2							
PORT MORESBY	170.13	148.6	20	12	3						25	18

JANUARY 4 5.H 42.M 30.5 EPICENTRE 29.71 142.25 DEPTH= 0.KM

A=-0.68789 B= 0.53257 C= 0.49313 D= 0.6122 E= 0.7907
G=-0.3899 H= 0.3019 K=-0.8700 HT= 1.9

SE= 1.65

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S
MATUSIRO	7.61	334.6	1	55	0	3	10	-13				
MIZUSAWA	9.44	354.7				4	2	-6				
GUAM	16.34	171.4	3	54	1							
Y.-SAKHLINSK	17.28	1.1	4	3	-2							
ZO-SE	18.23	279.6	4	16	0							
CHANGCHUN	19.51	320.8	4	30	-2							
NANKING	20.28	282.6	4	38A	-2	8	28	5				
PEKING	23.67	302.8	5	14	0						9	32
MANILA	24.60	237.1	5	24	1	9	58	16				
HONG KONG	26.25	260.3				9	45	-25				
PAOTOW	28.35	301.2	5	58	0							
SIAN	28.56	287.8	6	0	0							
MAGADAN	30.40	8.6	6	18	2	11	16	-1				
ULAN-BATOR	32.63	313.8	6	36	0							
LANCHOW	32.73	291.3	6	35	-2	11	56	3				
CHENGTU	32.97	281.4	6	36	-3							
YAKUTSK	33.35	349.3	6	42A	0							
KUNMING	35.25	272.2	6	59	0							
PORT MORESBY	39.17	172.3	7	30	-2							
ESEN BULAK	39.27	308.1	7	35	3	13	39	5				
TIKSI	42.61	353.8	7	58	-2	14	24	1				
LHASA	44.19	283.2	8	14	1							
SHILLONG	44.55	277.3	8	15	-1							
CHARTERS TS.	49.66	175.1	8	54	-2							
SEMIPALATNSK	50.19	312.6	9	U	0							
ALMATA	52.97	303.8	9	19	-2							
DEHRA DUN	54.90	287.9	10	35K	60							
COLLEGE	55.01	29.3	9	35	-1							
NEW DELHI	56.12	286.2	9	43K	-1						10	40
ANDIJAN	56.77	301.5	9	49A	1							
BRISBANE	57.67	168.9	9	55	0						24	28
TASHKENT	58.92	302.8	10	3A	-1							
KHEYS	59.94	349.1	10	11	0							
DUZHANBE	60.00	299.8	10	12A	1							
SVERDLOVSK	61.21	321.6	10	18	-1							
POONA	62.64	276.6	10	27K	-2							
MOULD BAY	63.37	15.4	10	33	-1							
ADELAIDE	64.42	183.2	10	40	-1							
CANBERRA	65.00	173.9	10	44	0							
TOOLANGI	67.00	177.2	10	57	0						11	45
ALERT	67.38	3.4	11	U	0							
ASHKABAD	67.97	302.0	11	3	0							
VANNOVSKAYA	68.16	302.1	11	6	2							
RESOLUTE	69.52	13.8	11	12	-1							
APATITY	69.67	337.2	11	13K	-1							
YELLOWKNIFE	69.82	28.8	11	14	-1							
KEVO	70.54	340.5	11	17	-2							
SODANKYLA	71.99	338.5	11	27A	-1						11	50 PCP
PENTICTON	73.00	42.6	11	34	0							
KAJAANI	73.49	335.4	11	35	-2							
KIRUNA	73.61	340.4	11	37	0							
TEHERAN	73.97	302.2	11	41	2	21	16	5				
PULKOVO	74.88	330.9	11	44A	-1							
VIBORG	74.98	332.2	11	45	0							
CHATEAU	75.25	153.8	11	46	-1							
KIROVOBAD	75.42	308.6	11	48	0	21	27	-1				
SHIRAZ	75.75	296.1	11	50A	0							

GORIS	75.94	307.5	11	52K	1							
UMEA	76.27	337.2	11	55	2							
BLUE MTS.	76.44	46.0	11	54	1							
NURMIJARVI	76.75	333.2	11	55	0							
HELSINKI	76.84	332.8	11	53	-3							
BUTTE	78.76	43.3	12	2	-4					13	11	
SKALSTUGAN	78.99	339.6	12	8	0							
WOODY	79.80	54.8	12	11	-1							
BOZEMAN	79.84	43.0	12	10	-2					13	15	
UPPSALA	79.85	335.0	12	12	0							
EUREKA	79.93	50.3	12	13	0							
GOTEBORG	83.45	335.6	12	39	8					13	6	
UINTA BASIN	83.67	47.0	12	32	0	23	20	26				
UZHGOROD	85.36	324.8	12	42	1							
KRAKOW	85.58	326.9	12	42	0					12	52	PCP
LARAMIE	85.58	44.4	12	43	1							
KSARA	86.04	306.8	12	47	3	23	14	-4		24	12	PS
ISTANBUL UN.	86.41	315.9	12	50	4	23	36	15				
GOLDEN	86.66	45.6	12	49	2							
TUCSON	87.28	54.3	12	51	1							
PRUHONICE	88.10	329.3	12	55	1							
ALBUQUERQUE	88.75	50.0	12	57	0							
WICHITA MTS.	93.99	46.1	13	22	1					26	9	PS
TULSA	94.93	43.7	13	27	1							
FAYETTEVILLE	95.76	42.7	13	30	0							
LA PAZ	149.22	71.5	19	51	5							

JANUARY 4 12.H 16.M 44.S EPICENTRE -5.13 153.51 DEPTH= 90.KM

A=-0.89151 B= 0.44421 C=-0.08885 D= 0.4460 E= 0.8950
G= 0.0795 H=-0.0396 K=-0.9960 HT= 7.0

DEPTH OF FOCUS= 0.009R

SE= 3.13

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
RABAUL	1.63	304.6	0	27	-1								
PORT MORESBY	7.60	235.7	1	53K	3	3	22	7					
HONIARA	7.68	124.2	1	48	-3	3	6	-11					
CHARTERS TS.	16.46	204.8	3	49	3	7	0	15					
GUAM	20.42	334.8	4	23	-9								
BRISBANE	22.15	181.7	4	49	0	8	42	0					
DARWIN	23.53	250.7	5	4	2	9	26	20					
RIVERVIEW	28.64	184.1	5	51A	1	10	33	3					
CANBERRA	30.33	187.3	6	4	-1	11	3	6			6	44	
ADELAIDE	32.69	202.8	6	25A	0	11	35	1			12	4	*SS
TOOLANGI	33.11	191.7	6	28	-1						7	47	PP
SAVANNAH	36.87	187.9	7	1	0								
TARRALEAH	37.54	188.6	7	6	-1								
MOORLANDS	37.57	187.7	7	7	0								
MANILA	37.70	301.9	7	10	2	12	50	-1					
CHATEAU	39.34	152.6	7	22	1						7	42	
WELLINGTON	40.71	155.2	7	28	-5	14	8	32			9	9	PP
ROXBURGH	42.49	163.5	7	46	-1	14	34	32			17	28	SS
MATUSIRO	43.86	342.1	7	57	-1	14	16	-6					
MUNDARING	43.93	227.9	7	59	0								
PERTH	44.20	228.2	8	4	3	14	50	23			9	57	PP
LEMBANG	45.66	265.5	8	12	-1								
TANGERANG	46.66	266.4	8	23A	2								
HONG KONG	47.17	306.8	8	25	0	15	13	4	8	33			
NHATRANG	47.30	291.7	8	26	0								
MACQUARIE I.	49.42	175.8	8	41	-1								
HONOLULU	54.21	59.3	9	24	6	16	47	0			19	11	SCS
KIPAPA	54.33	59.2	9	18	-1	16	52	4					
PEKING	56.56	326.1	9	30	-5								
KUNMING	57.76	303.9	9	45	2	17	41	7					
LANCHOW	61.95	315.6	10	10	-2	18	25	-2					
SHILLONG	67.10	300.4	10	42A	-3								
CAPE HALLETT	67.90	174.6	10	50	0								
WILKES	67.96	197.3	10	45	-6	19	40	-1					
LHASA	69.08	304.3	10	58	0	19	58	4					
CHATRA	71.50	300.3	11	9	-3								
DEHRA DUN	80.12	301.8	13	5	64								
NEW DELHI	80.50	300.0	12	6A	3	21	57	-4					
POONA	81.87	289.5	12	12	2								

COLLEGE	81.90	21.6	12	3	-8	22	12	-3			13	45	
BOMBAY	82.88	289.7	12	16	0						23	16	
LAHORE	83.49	302.4	12	15	-4								
SOUTH POLE	84.90	180.0	12	26	0								
WARSAK DAM	86.20	304.5	12	30	-2								
BERKELEY	88.57	52.0	12	48K	5	22	58	-22			24	25	
LICK	88.99	52.6									14	59	
QUETTA	89.58	300.2	12	34	-14								
PASADENA	91.45	56.0	13	1	4	23	48	2			23	16	SKS
PENTICTON	91.81	40.8	12	46	-13								
BLUE MTS.	93.00	45.4	12	59	-5	23	32	-27					
EUREKA	93.62	50.8	13	2	-5				13	29	16	29	PP
MOULD BAY	94.27	13.9	13	6	-4								
BOULDER CITY	94.32	54.4	13	14	4				13	38	17	18	
YELLOWKNIFE	95.38	27.8	13	10	-5								
UINTA BASIN	98.57	50.1	13	38	9	23	52	-6			20	7	PP
ALERT	101.21	4.5									24	10	
WICHITA MTS.	107.61	55.3	18	43	777						20	10	
TULSA	109.73	53.8				24	46	-3			28	11	SP
KSARA	115.71	305.1									19	34	
LWIRO	124.29	263.8									20	40	PP
PALISADES	124.62	42.6				25	40	-2					
LA PAZ	133.55	118.4	19	7	1						39	26	SS
TOLEDO	139.92	332.9	19	15	-2						22	9	PP
M.BOUR	166.88	315.1	19	50	-4						24	47	PP

JANUARY 5 13.H 16.M 38.S EPICENTRE -10.09 123.92 DEPTH= 0.KM

A=-0.54945 B= 0.81720 C=-0.17405 D= 0.8299 E= 0.5580
G= 0.0971 H=-0.1444 K=-0.9847 HT= 6.5

SE= 2.14

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
LEMBANG	16.44	280.1	3	54K	0	7	6	9					
DJAKARTA	17.35	281.6	4	7	1	7	31	13					
TANGERANG	17.55	281.5	4	6	-2	7	30	8					
PORT MORESBY	22.91	90.3	5	6	-1								
MUNDARING	22.91	197.0	5	4	-3								
PERTH	23.01	197.8	5	10	2	9	17	2			5	33	PP
CHARTERS TS.	23.73	117.4	5	15	0	9	38	10					
MANILA	24.76	353.4	5	28	3	9	28	-17					
BAGUIO CITY	26.54	352.8	5	19	-23	10	29	14					
NHATRANG	26.55	326.3	5	42	0								
ADELAIDE	28.21	153.6	5	56K	-1	10	45	3			6	24	
MEDAN	28.57	297.1	5	57	-3	10	46	-2					
BRISBANE	32.17	126.3	6	33	1								
TOOLANGI	33.56	148.1	6	44A	0	11	51	-15	6	54	7	52	PP
HONG KONG	33.58	343.5	6	55	11	12	8	1					
CANBERRA	33.95	141.6	6	47A	-1	12	12	0			9	31	PCP
RIVERVIEW	34.38	137.6	6	52A	1	12	22	3			12	45	
TARRALEAH	37.68	152.3	7	20	1						9	16	
PORT BLAIR	37.80	304.1									8	42	
MOORLANDS	38.13	151.7	7	25	2								
KUNMING	40.63	329.8	7	46A	2	13	48	-6					
SIAN	46.34	342.8	8	30	0								
SHILLONG	47.22	319.2	8	36A	-1	15	28	-2			10	27	PP
MATUSIRO	48.29	15.4	8	45	0								
MADRAS	49.11	297.0	8	52	0	15	49	-8			10	47	PP
LANCHOW	49.65	338.6	8	56A	0	15	55	-9					
BOKARO	50.24	312.7	9	1	1						16	19	
PEKING	50.38	352.3	9	0	-1								
LHASA	50.63	322.3	9	5A	2	16	15	-3					
MACQUARIE I.	52.29	155.0	9	16	0								
CHATEAU	54.23	131.3	9	30	0								
WELLINGTON	54.34	134.0	9	29	-2	17	42	34			21	28	SS
WILKES	56.92	186.4	9	47	-3								
ULAN-BATOR	59.69	346.8	10	7	-2								
ESEN BULAK	61.45	338.5	10	21	0	18	46	4					
LAHORE	62.97	313.1	10	29	-2	18	52	-9					
IRKUTSK	64.36	346.8	10	34	-6	19	12	-6					
WARSAK DAM	66.25	314.0	10	52	0								
QUETTA	67.80	308.4	11	1	-1	20	6	6					
KHOROG	68.12	317.2	11	5	1	20	3	-1					
ALMATA	68.16	324.9	11	3K	-2								

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FRUNSE	69.23	323.4	11	11A	0							
DUZHANBE	70.54	317.0	11	18	-1	20	28	-4				
SEMIPALATNSK	71.21	332.2	11	22	-1							
TASHKENT	71.65	319.7	11	26A	0							
YAKUTSK	72.03	2.9	11	28A	0							
MAGADAN	72.69	14.0	11	32	0							
VANNOVSKAYA	77.74	312.4	12	1	0							
SHIRAZ	79.17	302.9	12	9A	0	22	3	-5	12	30	14 51	PP
SOUTH POLE	79.98	180.0	12	13	0							
TIKSI	81.60	1.6	12	20A	-2	22	29	-5				
TEHERAN	81.99	308.4	12	25	1	22	37	-1				
SVERDLOVSK	84.38	330.4	12	36K	0							
BYRD STATION	84.57	171.0	12	38	1							
CHILEKA	86.31	254.8	12	48	3							
KIROVOBAD	87.24	311.9	12	50	0	23	27	-2				
N-LAZARVSKYA	87.62	197.9	12	52	0	23	32	-1				
TIFLIS	88.64	312.7	12	59	2	23	39	-3				
BULAWAYO	91.49	249.4	13	13A	3							
BROKEN HILL	92.72	254.9	13	17	1							
LWIRO	94.64	266.9									11 9	PP
KHEYS	96.06	351.3	13	30	-1							
MOSCOW	96.17	325.4	13	31	0							
COLLEGE	98.32	25.6	13	45	4						17 42	PP
PULKOVO	100.45	329.1									21 46	PP
SODANKYLA	102.05	336.9	13	54	-4							
NURMIJARVI	103.27	329.9									27 32	PS
UMEA	105.03	333.5				24	57	6				
MOULD BAY	105.97	12.9	14	16	777							
ALERT	107.55	0.9									28 16	
PRUHONICE	110.10	319.6	18	50	16						19 8	PP
VICTORIA	112.48	41.6	18	42	4							
YELLOWKNIFE	113.13	25.5	18	41	1							
PENTICTON	114.76	40.2	18	46	3							
MINERAL	115.10	50.2	18	46A	2							
LICK	115.46	53.5	18	48A	4							
PRIEST	116.39	54.7	18	50K	4							
BANFF	116.76	37.4	18	48	1							
BLUE MTS.	117.36	44.6	15	33	-195						20 4	PP
PASADENA	118.66	56.6	18	55	4						20 8	
EUREKA	119.51	50.3	18	54	2						29 7	PKKP
BUTTE	120.25	42.3	18	56	2							
BOULDER CITY	121.08	54.1	18	59	4							
BOZEMAN	121.36	42.3	18	59	3						20 14	
SALT LAKE C.	122.27	48.0	19	1	3							
GLEN CANYON	123.43	52.3	19	5	5							
FLAMING GRGE	124.02	47.1	19	4	3							
UINTA BASIN	124.07	47.9	19	4	3						20 18	PP
TOLEDO	125.26	312.0									22 51	PKS
GOLDEN	127.32	47.3	19	11	4							
WICHITA MTS.	13 .16	50.9	19	18	-2						21 51	PP
TULSA	135.78	48.0	19	27	4							
FAYETTEVILLE	136.86	47.0	19	0	-25						23 0	PP
CUMBERLAND	143.08	41.9	19	35	-1						20 22	
MORGANTOWN	143.71	31.9	19	39K	2							
PENNSYLVANIA	143.85	28.5	19	37	-1							
HALIFAX	144.99	9.4	19	41	1							
WESTON	145.17	19.9	19	42	2						20 56	
PALISADES	145.41	24.1	19	43	3						20 57	PKP2
FORDHAM	145.56	24.2	19	42	1							
GEORGETOWN	145.72	29.7	19	43	2							
CHAPEL HILL	146.89	35.4	19	47	4							
HUANCAYO	150.85	138.5	20	0	11							
LA PAZ	151.02	155.6	19	59	10						42 22	SS

JANUARY 5 17.H 43.M 36.S EPICENTRE -7.44 -71.97 DEPTH= 598.KM

A= 0.30686 B=-0.94302 C=-0.12863 D=-0.9509 E=-0.3094
G=-0.0398 H= 0.1223 K=-0.9917 HT= 6.8

DEPTH OF FOCUS= 0.089R

SE= 1.99

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S
HUANCAYO	5.65	215.6	1	38	-1	2	56	-1				
LA PAZ	9.76	157.7	2	15	-2	4	5	-2				

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BOGOTA	12.16	350.0	2	42	1	4	50	1						
CHINCHINA	12.85	343.5										3	35	
GALERAZAMBA	18.39	349.7		.		6	44	6						
CARACAS	18.52	15.8	3	46K	4	7	18	38						
TRINIDAD	20.83	30.5	4	3	0	7	30	12						
SAN JUAN	26.30	12.6	4	48	-4									
CUMBERLAND	44.67	344.2	7	21	-2							9	17	PP
FAYETTEVILLE	48.07	335.7	7	47	-2									
PALISADES	48.24	358.0	7	54	4									
TULSA	48.59	334.1	8	22	29	14	9	-2	9	7				
WICHITA MTS.	48.90	330.7	7	54K	-1	14	16	1	9	39		9	44	PP
LAWRENCE	50.98	336.6	8	7	-3	14	38	-5						
BREBEUF	52.72	358.5	8	21K	-1									
ALBUQUERQUE	53.26	324.5	8	26	0				10	11		12	29	SCP
SHAWINIGAN	53.75	359.3	8	28	-2									
GOLDEN	56.16	329.3	8	47	1									
M.BOUR	58.71	68.3	9	4	0									
UINTA BASIN	58.81	327.0	9	5	1	16	29	4						
SALT LAKE C.	60.37	325.9	9	15	0							9	54	PCP
WOODY	61.51	317.5	9	24	2							9	57	
EUREKA	61.92	322.5	9	26	1	17	9	6	11	19		12	3	PP
BLUE MTS.	66.08	326.4	9	51	0	18	4	11						
PENTICTON	70.13	329.1	10	16K	1									
AVERROES	73.35	52.1	10	36K	2									
BYRD STATION	75.91	187.6	10	50	2									
YELLOWKNIFE	77.01	341.2	10	53K	-1									
TOLEDO	78.19	46.8	11	2K	2	20	14	7	13	2		29	4	
SIDA	81.71	21.3	11	19K	1									
BAGNERES	82.21	44.7	11	22	1									
RESOLUTE	83.17	354.0	11	25K	-1									
KEW	84.56	36.6	11	31	-2									
SCORESBY SD.	84.66	15.0	11	34	1									
DOURBES	87.14	38.8	11	45	0									
ROSELEND	87.39	43.5	11	46	0									
MONACO	87.50	45.5	11	39	-8									
MOULD BAY	87.93	349.8	11	49K	0									
STUTTGART	89.81	40.8	11	56	-1									
ALERT	89.92	1.3	11	58K	0									
COLLEGE	90.73	335.5	12	2	0				13	55				
JENA	91.67	39.0	12	5	-1									
KIMBERLEY	92.34	119.2	12	9	0									
SKALSTUGAN	94.05	26.5	12	17A	0									
BULAWAYO	97.30	111.4	12	34K	3									
CANBERRA	122.56	219.5	17	52K	3									
SHIRAZ	123.52	59.4	17	53K	2							19	35	
ADELAIDE	128.83	212.6	18	4	3									
CHARTERS TS.	133.49	233.3	18	13	3									
QUETTA	135.37	54.1	18	16	3							20	54	
PORT MORESBY	137.58	247.4	18	11	-6									
DARWIN	149.97	229.2	18	49	11							31	26	
HONG KONG	164.08	338.8	18	57	1							20	10	PKP2

JANUARY 6 19.H 47.M 3.S EPICENTRE -8.88 124.01 DEPTH= 66.KM

A=-0.55274 B= 0.81911 C=-0.15341 D= 0.8289 E= 0.5594
G= 0.0858 H=-0.1272 K=-0.9882 HT= 6.7

DEPTH OF FOCUS= 0.005R

SE= 1.56

	DELTA DEG.	AZ. DEG.	P M	S	O-C S	S M	S	O-C S	*PP M	S	SUPP. M	S	
DARWIN	7.55	118.0	1	48	-2	2	59	-16					
LEMBANG	16.37	276.0	3	49A	2	6	59	13					
TANGERANG	17.44	277.7	4	0K	0	8	27	77					
PORT MORESBY	22.85	93.1	5	0	2								
MUNDARING	24.09	196.4	5	9	-1								
CHARTERS TS.	24.22	119.8	5	12K	0								
ADELAIDE	29.25	154.7	5	57K	-1						6	23	
BRISBANE	32.82	127.9	6	31	2						13	34	
TOOLANGI	34.53	149.1	6	45K	1						8	4	PP
CANBERRA	34.84	142.8	6	47K	0								
RIVERVIEW	35.21	138.8	6	51K	1						14	42	
SAVANNAH	38.58	151.8	7	18	0								
TARRALEAH	38.70	153.1	7	20	1						8	50	
MOORLANDS	39.14	152.5	7	21	-2								

KUNMING	39.65	329.0	7	30	3						
CHENGTU	43.75	334.8	8	4	3						
CHITTAGONG	44.27	315.0	8	6	1	14	33	0			
SHILLONG	46.38	318.4	8	20A	-2						
MATUSIRO	47.11	15.6	8	27	0						
LANCHOW	48.57	338.1	8	40A	1	15	36	2			
PEKING	49.20	352.0	8	44	0						
LHASA	49.74	321.6	8	49A	1	15	49	-1			
CHATRA	50.37	315.9	8	52A	-1						
CHATEAU	54.95	132.0	9	26	-1						
NEW DELHI	58.55	311.3	9	48A	-4						
DEHRA DUN	58.87	313.4	9	55	1						
LAHORE	62.23	312.6	10	14	-3						
WARSAK DAM	65.49	313.6	10	38	0						
QUETTA	67.14	307.9	10	48A	-1						
ALMATA	67.24	324.6	10	49	0						
FRUNSE	68.33	323.1	10	55A	-1						
ANDIJAN	68.52	320.2	10	57	0						
DUZHANBE	69.73	316.6	11	4	-1	20	4	-3			
TASHKENT	70.80	319.4	11	11	0						
YAKUTSK	70.82	2.8	11	11A	-1						
MAWSON	71.06	200.8	11	11A	-2						
VANNOVSKAYA	77.00	312.2	11	45	-2						
SHIRAZ	78.61	302.6	11	55A	-1	21	45	-1	12	9	
TIKSI	80.40	1.6	12	5	-1						
TEHERAN	81.32	308.2	12	11	0						
SVERDLOVSK	83.38	330.3	12	20K	-1						
BYRD STATION	85.74	171.0	12	34	1						
GORIS	86.22	310.8	12	35A	0						
KIROVOBAD	86.51	311.9	12	37A	0						
CHILEKA	86.72	254.7	12	41	3						
TIFLIS	87.89	312.6	12	45	1						
N-LAZARVSKYA	88.79	197.9	12	47	-1						
BULAWAYO	92.00	249.4	13	5	2						
BROKEN HILL	93.12	254.9	13	10	2						
COLLEGE	97.19	25.5	13	27	1						
SODANKYLA	100.99	337.0	13	41	-3						
PRUHONICE	109.25	319.9	18	57	777						19 20
BLUE MTS.	116.43	44.2	18	38	2						19 44 PP
PASADENA	117.92	56.1	18	41	2						
EUREKA	118.67	49.8	18	43	2						
UINTA BASIN	123.19	47.3	18	52	3						
GOLDEN	126.44	46.7	18	58	2						
ALBUQUERQUE	127.17	52.7	19	1	4						22 13 SKP
WICHITA MTS.	133.33	50.0	19	10	1						21 37 PP
SCHEFFERVLLE	133.38	8.6	19	8	-1						22 30
SHAWINIGAN	139.81	18.0									22 49
BREBEUF	140.48	19.6	19	19	-3						22 52 PKS
CUMBERLAND	142.12	40.9	19	23	-2						20 55 SKP
HUANCAYO	151.68	136.9	19	52	12						
LA PAZ	152.06	154.5	19	51	10						

JANUARY 6 21.H 20.M 54.S EPICENTRE 47.58 156.08 DEPTH= 13.KM

A=-0.61885 B= 0.27454 C= 0.73597 D= 0.4055 E= 0.9141
G=-0.6727 H= 0.2985 K=-0.6770 HT= -4.5

SE= 2.35

	DELTA DEG.	AZ. DEG.	P M	S	O-C S	S M	S	O-C S	*PP M	S	SUPP. M	S
PETROPAVLOVK	5.69	15.9	1	25K	-1	2	26	-6			1	48
Y.-SAKHLINSK	9.10	271.4	2	15	1	3	57	0				
KLYUCHI	9.24	16.9	2	19	3	3	55	-6				
UGLEGORSK	9.45	284.3	2	22A	3	4	16	10				
OKHA	10.27	310.4	2	33	3							
MAGADAN	12.39	347.4	2	58	-1							
MATUSIRO	17.21	236.6	3	59	-2							
YAKUTSK	20.76	323.8	4	40	-3	8	31	2				
CHANGCHUN	21.74	271.5	4	50	-3							
TIKSI	27.26	341.6	5	47	1	10	21	-2			9	5 PCP
PEKING	29.51	270.0	6	6	0							
ULAN-BATOR	32.62	289.2	6	31	-2							
IRKUTSK	33.06	297.8	6	39	2							
COLLEGE	34.24	39.1	6	48	1							
SIAN	37.47	266.7	7	15	0							

LANCHOW	39.90	272.8	7 37K	2	13 39	-1		
ESEN BULAK	39.94	291.3	7 42	7				
HONG KONG	41.90	247.8	7 55	4				
CHENGTU	42.94	266.1	8 2	2	14 24	0		
MOULD BAY	43.13	20.4	8 3K	1				
HONOLULU	45.11	109.3			15 18	19		
KUNMING	47.38	261.2	8 38	3				
SEMIPALATNSK	47.81	303.1	8 38	-1				
ALERT	48.72	6.3	8 46K	0				
YELLOWKNIFE	49.04	37.9	8 48K	0				
RESOLUTE	49.40	19.3	8 52K	1				
LHASA	52.35	274.5	9 16	2	16 40	3		
THULE	53.07	11.9	9 19	0				
PENTICTON	53.09	54.5	9 19	0				
BANFF	54.28	50.8	9 27	-1				
SHILLONG	54.41	270.1	9 28A	-1				
SVERDLOVSK	54.59	317.8	9 29	-1				
FRUNSE	55.07	297.5	9 34	0				
CHATRA	56.76	274.6	9 45K	-1				
BLUE MTS.	56.93	57.9	9 48	1				
MINERAL	57.06	64.5	9 49	1				
KEVO	57.22	341.3	9 48	-1				
APATITY	57.37	337.4	9 49A	-1	17 34	-11		
CALISTOGA	57.49	66.6	9 52A	1				
BERKELEY	58.16	67.2	9 57A	1			10 48	
LICK	58.87	67.3	10 1K	0				
BUTTE	58.89	54.5	10 1	0			10 40	PCP
TROMSOE	58.96	343.9	10 1	0				
TASHKENT	59.16	298.9	10 4	1				
SODANKYLA	59.19	339.6	10 2K	-1				
BOZEMAN	59.94	54.0	10 9	1				
KIRUNA	60.19	342.2	10 9K	-1	18 22	1		
KHOROG	60.19	294.1	10 11	1	18 26	5		
PRIEST	60.24	67.8	10 11A	1				
EUREKA	61.00	62.2	10 16	1			12 44	PP
KAJAANI	61.55	336.9	10 18	-1				
LAHORE	62.21	287.2	10 23	0				
NEW DELHI	62.28	282.9	10 21K	-3	18 45	-3		
WARSAK DAM	62.40	291.1	10 24	-1				
SALT LAKE C.	62.60	58.7	10 26	0				
PASADENA	63.08	68.1	10 29	0			10 50	
UMEA	63.63	339.8	10 33	0	19 0	-5		
FLAMING GRGE	63.91	57.2	10 36	1				
BOULDER CITY	63.95	64.5	10 36	1				
UINTA BASIN	64.21	57.9	10 38	1			10 59	
PULKOVO	64.24	332.9	10 37K	0				
MOSCOW	64.88	326.7	10 39K	-2	19 18	-2		
GLEN CANYON	65.25	61.8	10 44	1				
NURMIJARVI	65.29	335.9	10 43K	-1	19 28	3	23 46	SS
HELSINKI	65.49	335.5	10 45	0				
SKALSTUGAN	65.55	343.1	10 45	0				
LARAMIE	65.80	54.8	10 48	1				
UPPSALA	67.69	338.8	10 58K	-1	19 56	1		
ASHKABAD	67.74	302.2	10 59	0				
QUETTA	67.85	290.8	11 0	0				
CHARTERS TS.	67.93	190.0	11 0	0				
TUCSON	68.91	65.1	11 8	2				
KONGSBERG	69.67	342.6	11 12	1		11 15	11 42	PCP
ALBUQUERQUE	69.67	60.3	11 12	1				
GOTEBORG	70.95	340.5	11 19	0				
POONA	71.38	277.2	11 22	1				
SCHEFFERVLLE	71.76	24.5	11 24K	0				
BOMBAY	71.81	278.2	11 26	2	20 51	8		
TIFLIS	72.30	312.9	11 29	2			11 46	PCP
COPENHAGEN	72.68	339.4	11 29	0				
GORIS	73.19	310.5	11 34K	2				
TEHERAN	73.24	304.7	11 34	2	21 7	8		
WICHITA MTS.	74.35	55.6	11 40	1			12 22	
TULSA	75.01	53.0	11 44	1				
KRAKOW	75.65	332.5	11 44	-2			12 3	PCP
FAYETTEVILLE	75.73	51.9	11 47K	0				
OTTAWA	76.86	34.6	11 53	0				
SHAWINIGAN	76.99	32.2	11 54	0				
SHIRAZ	77.05	299.7	11 55K	1	21 33	-8		
JENA	77.23	337.9	11 51	-4			12 14	
PRUHONICE	77.30	335.7	11 57	1				
BREBEUF	77.57	33.3	12 57	60				
BENSBERG	78.26	340.5	12 6	5				
KASPERSKE H.	78.34	335.9	12 3	2			12 22	

KEW	79.27	345.2	12	11	5							
STUTTGART	79.80	338.4	12	10	1							
ISTANBUL UN.	80.06	322.2	12	11	0	22	12	-1				
STRASBOURG	80.35	339.3	12	18	6							
CUMBERLAND	80.54	46.6	12	14	1						12	35
WELSCHBRUCH	80.84	340.1	12	21	6							
LJUBLJANA	80.86	334.0	12	16	1							
GARCHY	82.63	341.8	12	29	5							
KSARA	82.86	313.5	12	27	2							
ROSELEND	83.32	339.0	12	38	10							
JERUSALEM	84.84	312.8	12	36	1							
MONACO	84.96	337.7	12	45	9							
KARAPIRO	86.89	164.7	12	47	2							
BROKEN HILL	125.64	289.2	19	4	3							
LA PAZ	132.32	64.8	19	18	4							

JANUARY 7 11.H 48.M 15.S EPICENTRE 0.42 126.20 DEPTH= 0.KM
A=-0.59053 B= 0.80699 C= 0.00729 D= 0.8070 E= 0.5905
G=-0.0043 H= 0.0059 K=-1.0000 HT= 7.2

SE= 2.37

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
DARWIN	13.52	160.3	3	20	4						9	3	PS
MANILA	15.03	340.6	3	36	0	6	50	26					
LEMBANG	19.88	248.4	4	34K	-2	8	20	5					
DJAKARTA	20.41	251.0	4	31	-10	8	25	-1					
TANGERANG	20.60	251.2	4	43	0						7	46	
PORT MORESBY	23.03	115.6	5	11A	3	9	19	4					
HONG KONG	24.70	332.5	5	20	-4	9	37	-7			6	9	PP
CANTON	25.77	331.9	5	35	1	9	58	-4					
RABAUL	26.36	100.3	5	43	3								
MEDAN	27.67	276.9	5	50A	-2						7	2	
CHARTERS TS.	28.32	137.2	6	0	2	10	48	5					
KUNMING	33.42	319.1	6	44	1	11	57	-7					
MUNDARING	33.57	195.5	6	47	3								
PERTH	33.66	196.0	6	50	5	12	10	2			8	8	PP
PORT BLAIR	35.06	289.8									8	24	
CHENGTU	36.72	327.0	7	16	5								
ADELAIDE	37.10	162.8	7	17A	3	13	2	1					
SIAN	37.34	336.1	7	16	0								
MATUSIRO	37.63	15.9	7	18	0								
BRISBANE	37.65	139.3	7	15	-4	13	3	-6					
CHITTAGONG	39.93	305.5	7	37	-1	13	48	4					
PEKING	40.47	348.1	7	42	0	13	47	-5					
LANCHOW	41.09	332.0	7	48	1								
RIVERVIEW	41.35	147.9	7	50	1	14	3	-2			17	10	SS
CANBERRA	41.44	151.4	7	53	3	14	12	6			9	29	PP
SHILLONG	41.50	309.8	7	47K	-4	14	0	-7					
TOOLANGI	41.80	156.8	7	57	4	14	18	7			9	31	PP
CALCUTTA	42.86	303.5	8	9	7								
CHANGCHUN	43.23	359.1	8	6	1								
LHASA	44.33	314.2	8	14A	0	14	42	-6					
VISHAKHAPTNM	45.54	294.6	8	26	3						16	52	
BOKARO	45.55	303.8	8	24	1	15	0	-6			10	13	PP
CHATRA	45.78	308.3	8	23K	-2								
SAVANNAH	46.05	158.1	8	30	3								
TARRALEAH	46.29	159.2	8	32	3								
MOORLANDS	46.67	158.6	8	35	3								
MADRAS	47.27	287.3	9	0	23	15	25	-6			10	38	PP
Y.-SAKHLINSK	48.61	15.0	8	47	0								
ULAN-BATOR	50.19	343.2	8	58	-2	16	8	-3					
ESEN BULAK	52.78	334.3	8	58	-21	16	8	-39					
POONA	54.42	292.5	9	30K	-1								
DEHRA DUN	54.51	307.7	9	30	-2						17	11	
NEW DELHI	54.51	305.4	9	29A	-3	16	50	-20			16	54	PS
IRKUTSK	54.83	343.7	9	34A	0								
BOMBAY	55.45	292.7	9	37	-2	17	15	-8			13	7	PPP
LAHORE	57.93	307.6	10	35	39	17	48	-8					
PETROPAVLOVK	58.96	22.2	10	3	-1								
KARAPIRO	59.29	135.8	10	7	1						10	59	
ROXBURGH	59.45	146.0				18	17	1			24	59	
WELLINGTON	60.40	139.5				18	27	-1					
WARSAK DAM	61.00	309.2	10	17	-1								

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.

MACQUARIE I.	61.01	158.9	10	21	3							
ALMATA	61.20	320.8	10	17	-2							
MAGADAN	62.01	13.9	10	24	-1							
KHOROG	62.32	312.9	10	26	-1	18	46	-6				
FRUNSE	62.48	319.5	10	27A	-1	18	55	1				
AFIAMALU	63.01	105.8	10	32	1	18	54	-7				
SEMIPALATNSK	63.22	329.0	10	31	-2							
QUETTA	63.49	303.7	10	33	-1	19	4	-3				
DUZHANBE	64.75	313.1	10	45A	2	19	25	2				
TASHKENT	65.42	316.1	10	47	0	19	25	-6				
ASHKABAD	72.39	309.8	11	28	-2							
VANNOVSKAYA	72.58	309.8	11	31	0							
SHIRAZ	75.63	300.4	11	48K	-1	21	20	-10	12	15	15 1	*PPP
SVERDLOVSK	76.50	329.0	11	53	-1	21	32	-7				
HONOLULU	76.53	68.3				21	50	11			31 35	
KIPAPA	76.62	68.2									22 51	
TEHERAN	77.44	306.5	12	0	1	21	46	-3				
CAPE HALLETT	77.71	167.4	12	3	3							
MAWSON	80.48	200.3	12	17	2							
GORIS	81.91	309.7	12	24A	1							
KIROVOBAD	82.03	310.9	12	24A	0							
TIFLIS	83.29	311.8	12	32	2	22	50	-1				
KHEYS	86.09	351.2	12	45K	1	23	11	-7				
COLLEGE	87.91	25.2	12	52	-1							
MOSCOW	88.84	325.6	12	57K	0	23	41	-3				
KSARA	90.03	303.6	13	3	0	23	58	3	13	20	16 34	PP
SOUTH POLE	90.42	180.0	13	7	2							
JERUSALEM	90.61	301.6	13	8	2							
APATITY	90.68	337.4	13	6K	0	23	57	-4				
SIMFEROPOL	91.18	314.8	13	11	3	24	3	-2				
CHILEKA	91.28	254.4	12	16	-53							
PULKOVO	92.61	329.7	13	16	1	24	19	1				
KEVO	92.79	339.9	13	17	1							
VIBORG	93.26	330.8	13	17	-1							
SODANKYLA	93.30	337.5	13	19	1							
KAJAANI	93.34	334.2	13	18	0							
BYRD STATION	94.53	170.8	13	30	6							
KISHINEV	94.73	317.1	13	20	-5							
ISTANBUL UN.	95.17	311.1	13	27	0	24	0	-2				
MOULD BAY	95.29	12.6	13	26	-1							
NURMIJARVI	95.31	330.9	13	26	-1						17 20	PP
KIRUNA	95.53	338.5	13	28	0							
NORD	96.32	354.9	13	32	0							
UMEA	96.63	334.6	13	31	-2	24	44	34				
ALERT	97.07	1.1	13	39	4							
BULAWAYO	97.27	249.9	13	39	3							
LWIRO	97.41	267.8	13	46	9	24	18	4			26 14	PS
BROKEN HILL	97.59	255.6	13	39	1							
N-LAZARVSKYA	98.25	197.8	13	43	2							
ATHENS	99.57	308.5	13	45	-2						26 45	
KRAKOW	100.08	321.1	13	51	2							
RESOLUTE	101.15	10.3	13	54A	0							
YELLOWKNIFE	102.71	24.6	14	1	0							
PRUHONICE	103.45	321.9	14	10	6						18 35	
TARANTO	104.06	311.9									25 22	
JENA	104.95	323.5	14	10	-1						17 54	
MESSINA	105.86	310.0									24 53	
SCORESBY SD.	106.18	349.4	14	17	777							
BERKELEY	106.63	50.2									19 1	
STUTTGART	107.10	321.9									18 52	PP
ROME	107.18	314.3									28 4	PS
LICK	107.23	50.6	18	29A	777							
FLORENCE X.	107.49	316.5									28 37	
BLUE MTS.	108.19	42.1	14	29	777						18 59	PP
PASADENA	110.78	53.1	14	35	-240	25	27	11			18 38	
BUTTE	110.86	39.6	18	13	-22						18 56	
EUREKA	110.90	47.1	18	39	4						14 40	P
GLEN CANYON	115.00	48.4	18	35	-8							
FLAMING GRGE	115.05	43.6	18	47	4							
UINTA BASIN	115.18	44.3	15	8	-216						19 32	PP
GOLDEN	118.36	43.4	18	52	2						20 9	
TOLEDO	119.50	317.6									21 9	
ALBUQUERQUE	119.61	48.7	18	55	3							
WICHITA MTS.	125.49	45.5	19	5	1						20 54	PP
TULSA	126.81	42.7									21 15	PP
FAYETTEVILLE	127.78	41.6	19	10	2						21 4	
SHAWINIGAN	130.35	17.1	19	15	2							
OTTAWA	130.42	20.2	19	15	2							
CUMBERLAND	133.53	36.3	19	22	3						22 52	SKP

PALISADES	134.90	21.5	19	25	4									
ANTOFAGASTA	151.80	146.3	20	1A	11									
BALBOA HTS.	152.71	69.4	19	51	-1									
HUANCAYO	155.71	119.2	20	11	15									
SAN JUAN	157.74	32.3	20	33	35									
LA PAZ	158.68	139.2	20	5	5									
BOGOTA	159.14	75.9	20	6	6								20	44 PKP2
CARACAS	163.03	49.9	20	24A	20	27	38	31						
TRINIDAD	166.66	34.3	20	12	5								21	14 PKP2

JANUARY 8 15.H 46.M 46.S EPICENTRE 31.27 130.19 DEPTH= 177.KM

A=-0.55256 B= 0.65412 C= 0.51653 D= 0.7639 E= 0.6453
G=-0.3333 H= 0.3946 K=-0.8563 HT= 1.4

DEPTH OF FOCUS= 0.023R

SE= 2.36

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S
KAGOSIMA	0.43	45.9	0	23A	-3	0	39	-6				
YAKUSIMA	0.86	161.8	0	23A	-4	0	40	-8				
MIYAZAKI	1.23	58.1	0	27A	-3	0	48	-5				
UNZENDAKE	1.46	2.0	0	30	-2	0	49	-8				
NAGASAKI	1.48	349.8	0	32K	0	0	54	-3				
KUMAMOTO	1.60	15.6	0	32A	-2	0	55	-5				
ASOSAN	1.79	24.5	0	33	-2	0	58	-5				
NOBOEKA	1.83	44.0				0	56	-7				
HUKUE	1.83	321.3	0	35K	-1	1	4	1				
SAGA	1.98	2.7	0	36A	-1	1	6	0				
OOITA	2.30	31.5	0	38A	-3	1	8	-5				
HUKUOKA	2.31	4.0	0	42	1	1	12	-1				
SIMONOSEKI	2.74	13.0	0	45A	-1	1	17	-5				
ASHIZURI	2.79	58.1	0	42A	-5	1	13	-10				
UWAZIMA	2.80	45.1	0	41	-6	1	14	-9				
ITUHARA	3.02	345.5	0	49	-1	1	21	-7				
MATUYAMA	3.37	39.8	0	46	-8	1	22	-14				
HIROSIMA	3.62	30.8	0	54	-3	1	32	-9				
KOTI	3.63	50.3	0	54A	-3	1	34	-7				
MUROTO	3.91	58.7	0	57A	-4	1	41	-7				
HAMADA	3.95	23.1	1	1	0	1	44	-5				
TSURUGISAN	4.13	50.4	1	4	0	1	50	-3				
TAKAMATU	4.45	45.9	1	7A	-1	1	55	-5				
OKAYAMA	4.62	41.7	1	7A	-3	1	57	-7				
TOKUSIMA	4.64	51.8	1	6	-4	1	56	-8				
HIMEJI	4.79	46.6	1	18	6	2	15	7				
MATSUE	4.81	29.3									1	50
YONAGO	4.92	31.7	1	11	-3	2	3	-8				
SUMOTO	5.02	51.2	1	12	-3	2	6	-7				
WAKAYAMA	5.13	53.6	1	14	-3	2	8	-8				
SIOMISAKI	5.20	63.8	1	12	-6	2	9	-9				
TOTTORI	5.39	37.2	1	16	-4	2	15	-7				
KOBE	5.40	49.7	1	18	-2	2	15	-7				
SAIGO	5.57	27.2				2	30	4				
OSAKA	5.61	51.7	1	23K	0	2	34	7			2	54
TOYOOKA	5.75	41.1	1	21	-4	2	25	-5				
ABUYAMA	5.77	50.1	1	21A	-4							
OWASE	5.79	59.6	1	23	-2	2	26	-5				
NARA	5.83	52.9	1	23	-3	2	26	-6				
KYOTO	5.96	49.7	1	25	-3	2	29	-7				
MAIZURU	6.04	44.7	1	26	-3	2	30	-7				
TU	6.32	55.6	1	33	1							
KAMEYAMA	6.37	54.2	1	31	-2							
HIKONE	6.45	50.2	1	33	-1	2	41	-6				
TSURUGA	6.57	46.8	1	33	-3	2	44	-6				
GIHU	6.87	51.5	1	38	-2	2	51	-6				
NAGOYA	6.88	53.8	1	40	0	2	51	-6				
HAMAMATU	7.20	59.5	1	46	2	3	5	0				
OMAESAKI	7.52	61.7									2	6
IIDA	7.67	54.4	1	50	0	3	1	-15				
ZO-SE	7.72	271.1	1	52	1	3	20	3				
MATUMOTO	8.16	50.4	2	0	3	3	24	-3				
KOHU	8.25	55.7	2	1	3	3	29	-1				
MISIMA	8.28	60.1	2	1	3	3	17	-13				
HUNATU	8.32	57.3				3	36	5			3	17
HATIDYOZIMA	8.34	74.9	2	0	1							

AJIRO	8.37	60.9	1	57	-2						
MATUSIRO	8.49	49.6	1	58	-3	3	27	-8			
NAGANO	8.56	48.9	2	19	17	3	25	-12			
OIWAKE	8.59	51.8	2	2	0	3	25	-13			
YOKOHAMA	8.93	59.8				3	53	9			
MAEBASI	8.98	52.9				4	0	13			
KUMAGAYA	9.07	55.1	2	10	1	3	53	4			
TOKYO C.M.O.	9.11	58.6				3	54	5			
UTUNOMIYA	9.61	54.2				4	21	19			
NANKING	9.76	277.6	2	19	2	4	12	7			
SHIRAKAWA	10.15	52.2	2	23	0						
CHANGCHUN	13.12	344.3	3	3	2	5	32	9			
PEKING	14.35	311.4	3	19	3	6	0	9			
HONG KONG	16.85	241.9	3	47A	0	6	57	10			
CANTON	17.05	245.6	3	51	2	7	2	10			
SIAN	18.13	285.1	4	2A	0						
MANILA	18.51	208.9	4	5	0	7	26	4			
PAOTOW	18.75	305.3	4	9A	1	7	37	10			
LANCHOW	22.42	289.4	4	45A	0	8	45	11			
CHENGTU	22.44	275.3	4	46A	1	8	45	11			
ULAN-BATOR	24.32	319.8	5	3	0	9	21	15			
KUNMING	24.92	262.6	5	11	3						
ESEN BULAK	30.18	309.8	5	56A	0						
LHASA	33.67	277.5	6	28	2						
SHILLONG	34.06	270.2	6	28K	-1						
CHATRA	37.69	274.4	7	1K	1						
CALCUTTA	38.11	267.2									
TIKSI	40.42	359.4	7	22	-1						
SEMIPALATNSK	41.45	312.3	7	31	0						
ALMATA-2	43.05	301.5	7	45K	1						
TANGERANG	43.51	215.3	7	49K	1						
PORT MORESBY	43.58	155.3	7	47	-1						
LEMBANG	43.60	213.5	7	49A	1						
DEHRA DUN	44.45	282.9	7	57	2						
NEW DELHI	45.64	280.8	8	4A	-1						
LAHORE	47.22	285.7	8	31	14						
WARSAK DAM	48.87	289.6	8	31	1						
TASHKENT	49.21	299.6	8	33A	1						
POONA	52.16	269.9	8	55	0						
CHARTERS TS.	53.35	161.1	9	2	-1						
SVERDLOVSK	53.42	320.1	9	3K	-1						
QUETTA	53.69	286.4	9	6A	0						
ASHKABAD	58.18	297.9	9	35	-3						
VANNOVSKAYA	58.37	297.9	9	39	0						
BRISBANE	62.19	157.3	10	4A	-1	18	17	2			
APATITY	64.01	334.9	10	15A	-2						
TEHERAN	64.17	297.5	10	26	8						
MOULD BAY	64.55	14.4	10	18A	-2					10	57
KEVO	65.40	338.1	10	24K	-2						
SHIRAZ	65.58	290.9	10	27A	0	18	58	2	10 55	12	58 PP
NORD	66.08	355.0	10	27	-3						
KIROVOBAD	66.12	304.2	10	31	0						
MOSCOW	66.15	321.8	10	30A	-1						
ALERT	66.30	1.8	10	30	-2					11	12
ADELAIDE	66.38	172.4	10	32	0						
SODANKYLA	66.51	335.8	10	31K	-2					11	1 PCP
GORIS	66.54	303.0	10	34A	1						
TIFLIS	66.80	305.7	10	35A	0						
KAJAANI	67.50	332.3	10	37	-2						
RIVERVIEW	67.70	161.2				19	28	6		20	32 *SS
TROMSOE	67.97	339.4	10	41	-1						
KIRUNA	68.41	337.4	10	43A	-2						
VIBORG	68.49	328.8	10	43	-2						
CANBERRA	68.56	163.5	10	46	0					11	6 PCP
TOOLANGI	69.96	167.1	10	54	0					11	19 PCP
RESOLUTE	70.29	11.5	10	55A	-1						
NURMIJARVI	70.40	329.6	10	56K	-1					11	39
HELSINKI	70.43	329.2	10	56K	-1						
UMEA	70.53	333.8	10	56A	-2						
THULE	71.94	4.5	11	2	-4						
YELLOWKNIFE	73.25	26.0	11	12	-2						
SKALSTUGAN	73.58	335.7	11	13	-3						
UPPSALA	73.74	330.9	11	15A	-2						
KISHINEV	74.85	316.0	11	22	-1						
KSARA	76.55	301.4	11	29	-3	21	16	14	11 57	14	26 PP
GOTEBORG	77.38	331.0	11	35	-2						
UZHGOROD	77.76	319.8	11	39	0						
JERUSALEM	78.02	299.8	11	42	1						
KRAKOW	78.24	321.8	11	42A	0					11	53 PCP

COPENHAGEN	78.47	329.2	11	43K	0							11	43	
PENTICTON	78.63	38.8	11	44	0									
RACIBORZ	79.14	322.5	11	47	0							11	53	PCP
KARAPIRO	80.81	145.3	11	56	0							12	35	
COLLMBERG	81.00	325.6	11	56	-1					12	42			
PRUHONICE	81.07	323.9	11	57	0									
VIENNA-H.	81.19	321.8	11	59	1									
HALLE	81.38	326.2	11	58	-1									
JENA	81.92	325.9	12	2	1					12	44	12	29	
KASPERSKE H.	82.09	323.6	12	2A	0							12	47	
HUNGRY HORSE	82.16	37.3	12	3	0					12	42			
BLUE MTS.	82.53	41.5	12	4	0	22	11	6						
MUNSTER	83.07	328.3	12	8	1									
LJUBLJANA	83.55	320.8	12	10A	0									
BENSBERG	83.97	327.8	12	12	0									
TRIESTE	84.22	320.9	12	16	3									
HEIDELBERG	84.32	325.9	12	14	1									
BUTTE	84.41	38.5	12	4	-10					12	54			
STUTTGART	84.47	325.2	11	14	-60									
DURHAM	84.81	334.3	12	18K	2									
STRASBOURG	85.33	325.8	12	19	1							12	53	
PRIEST	85.65	50.1	12	17K	-3									
DOURBES	85.74	328.3	12	21	1									
WELSCHBRUCH	86.13	326.3	12	21	-1									
EUREKA	86.60	45.2	12	25	0					13	5			
KEW	86.84	331.6	12	27	1									
WOODY	87.08	49.6	12	27	0					13	7			
ROSELEND	87.90	324.2	12	31	0									
GARCHY	88.48	327.1	12	33	-1							13	16	
FLAMING GRGE	89.51	40.8	12	39	1					13	18			
UINTA BASIN	89.82	41.3	12	41	1	23	1	-13						
SCHEFFERVLLE	93.02	9.7	12	54	-1									
SOUTH POLE	121.10	180.0	18	32	0									
HUANCAYO	149.66	56.6	19	29	5									
LA PAZ	157.76	52.8	19	40	5									

JANUARY 9 3.H 13.M 26.S EPICENTRE 18.60 145.48 DEPTH= 190.KM

A=-0.78142 B= 0.53747 C= 0.31703 D= 0.5667 E= 0.8239
G=-0.2612 H= 0.1797 K=-0.9484 HT= 5.0

DEPTH OF FOCUS= 0.025R

SE= 1.39

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
GUAM	5.16	188.0	1	16	-1								
ABUYAMA	18.44	333.4	4	5A	1								
MATUSIRO	18.98	341.7	4	9	0								
RABAUL	23.59	163.1	4	55	0								
MANILA	23.70	264.2	4	58	2	8	58	4					
ZO-SE	25.25	304.2	5	14	4								
PORT MORESBY	27.87	176.5	5	31	-3	10	1	-1					
PEKING	33.06	316.4	6	20	0	11	25	1					
DARWIN	34.00	206.2	6	29	1								
CHARTERS TS.	38.46	178.8	7	5	0								
KUNMING	40.07	287.1	7	22	3								
LANCHOW	40.53	304.0	7	24	2								
MAGADAN	41.08	4.1	7	27	0								
ULAN-BATOR	42.84	321.9	7	43	2								
BRISBANE	46.26	171.0	8	10	2								
ESEN BULAK	48.89	315.9	8	30	1								
SHILLONG	49.89	288.1	8	36K	0								
LHASA	50.49	293.4	8	44A	3	15	45	6					
ADELAIDE	53.66	186.9	9	5	1								
CANBERRA	53.73	176.4	9	4A	-1								
TIKSI	53.93	353.6	9	4	-2								
CHATRA	54.02	290.0	9	9	2							9	56
TOOLANGI	55.87	180.0	9	20A	0				10	4	10	19	PCP
ALMATA	61.96	309.6	10	1	-1								
NEW DELHI	62.64	293.1	10	5A	-2								
TUAI	64.35	152.9	9	46	-32								
WARSAK DAM	66.76	299.7	10	34	1								
POONA	67.43	282.8	10	38K	1								
QUETTA	71.22	296.3	11	1	1								
KHEYS	71.35	350.0	11	1	0								

SVERDLOVSK	71.84	324.8	11	4A	0							
MOULD BAY	73.31	14.4	11	11	-2	20	22	-2			11	54
PORT HARDY	73.97	41.3									12	55
VANNOVSKAYA	76.80	305.8	11	34	2							
SEATTLE	77.95	43.7	11	42	3							
YELLOWKNIFE	78.17	27.9	11	39A	-1							
ALERT	78.24	3.6	11	40A	0							
PENTICTON	79.24	41.6	11	45	-1							
RESOLUTE	79.57	13.6	11	47A	-1							
NORD	79.58	357.4	11	47	-1							
CALISTOGA	80.10	52.6	11	50A	0							
MINERAL	80.36	50.7	11	52K	0							
BERKELEY	80.55	53.3	11	53A	0						12	38
APATITY	81.03	338.9	11	54A	-1	22	2	15				
LICK	81.17	53.7	11	56A	0						12	41
RENO	81.91	51.1	12	1K	1						12	48
KEVO	81.96	342.0	11	59K	-1				12	44		
BLUE MTS.	82.06	45.4	12	0	-1	22		3				
PRIEST	82.27	54.6	12	2A	0							
TEHERAN	82.57	305.1	12	2	-1							
THULE	83.01	7.6	12	5	-1							
HUNGRY HORSE	83.05	41.4	12	6	0				12	53		
SODANKYLA	83.38	340.0	12	6	-1				12	53		
SHIRAZ	83.49	299.0	12	8A	0						15	34 SKP
TROMSOE	84.31	343.6	12	11	-1							
MOSCOW	84.43	327.2	12	12	-1							
EUREKA	84.74	50.2	12	15	1				13	1		
KIROVOBAD	84.78	311.0	12	14	0							
KAJAANI	84.80	337.0	12	13	-1				12	56		
BUTTE	84.81	43.2	12	15	0				12	59		
PASADENA	84.83	55.9	12	15	0				13	0		
KIRUNA	85.03	341.8	12	15	-1				12	57		
GORIS	85.17	310.0	12	17K	1							
TIFLIS	85.49	312.4	12	17	-1							
BOZEMAN	85.92	43.1	12	21	1				13	7		
BOULDER CITY	86.79	53.2	12	25	1				13	9		
SALT LAKE C.	87.24	47.9	12	26	0				13	13	13	29 *SP
UMEA	87.63	338.7	12	26	-2				13	15		
NURMIJARVI	87.99	334.8	12	28	-2							
HELSINKI	88.06	334.5	12	29	-1							
GLEN CANYON	88.86	51.3	12	34	0				14	19		
FLAMING GRGE	88.89	47.0	12	35	1				13	16		
UINTA BASIN	89.01	47.6	12	36	1	23	5	1				
SKALSTUGAN	90.40	341.0	12	40	-1							
UPPSALA	91.15	336.5	12	43	-2							
TUCSON	91.25	55.4	12	47	2							
TUCSON TELE.	91.30	55.3	12	47	2				13	32		
LARAMIE	91.34	45.5	12	47	1						13	34
GOLDEN	92.20	46.8	12	51	1						13	36
ALBUQUERQUE	93.48	51.5	12	57	2				13	43		
GOTEBORG	94.77	337.0	12	59	-2							
KSARA	95.12	308.1									25	22
COLLMBERG	98.94	332.0	13	20	0							
PRUHONICE	99.15	330.4									17	27 PP
WICHITA MTS.	99.32	48.7	13	22	0				14	8	17	22 PP
JENA	99.83	332.4									17	34 PP
KASPERSKE H.	100.20	330.2									17	30 PP
TULSA	100.66	46.4				23	47	0				
HUANCAYO	140.17	86.6	19	6	0							
AREQUIPA	144.72	92.4	19	17	2							
LA PAZ	147.91	91.6	19	23	3							

JANUARY 11 12.H 12.M 12.S EPICENTRE -44.91 -75.96 DEPTH= -0.KM

A= 0.17244 B=-0.68940 C=-0.70356 D=-0.9701 E=-0.2427
G=-0.1707 H= 0.6825 K=-0.7106 HT= -3.5

SE= 1.50

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S
SANTA LUCIA	12.17	21.6	2	54	-3						6	24
ANTOFAGASTA	21.63	13.9	4	52A	-1	8	52	3				
AREQUIPA	28.61	9.0	6	0	0							
LA PAZ	29.08	15.6	6	6	2	10	58	3				
BYRD STATION	38.50	191.1	7	24	-1							

SOUTH POLE	45.29	180.0	8	20	-1						
N-LAZARVSKYA	47.71	153.4								10	35
CHINCHINA	49.65	0.4								10	6
FUQUENE	50.19	2.9	8	59	0						
BALBOA HTS.	53.71	355.6	9	28	3						
CAPE HALLETT	54.40	200.1	9	31	0						
CARACAS	55.75	10.8	9	42K	2	17	27	1			
TRINIDAD	56.84	17.2	9	48	0	17	46	5			
ANTIGUA	63.07	15.2								10	54
MAWSON	63.59	163.6	10	34	0						
SAN JUAN	63.61	10.4	10	33	-2						
ROXBURGH	73.09	221.9	11	34	0	21	12	11		21	48 SP
WELLINGTON	73.40	227.9	11	36	1					21	35 SP
KIMBERLEY	77.27	117.8	11	57	0						
BANDEIRA	79.13	100.1	12	7A	-1				12	17	
M.BOUR	79.56	57.6	12	12	2	22	16	5			
CUMBERLAND	80.59	352.1	12	14	-1	22	21	-1			
LUBBOCK	81.58	338.4	12	20	-1						
BLACKSBURG	81.84	356.4	12	22	0						
WICHITA MTS.	81.87	341.3	12	22	0	22	35	0		15	31 PP
FAYETTEVILLE	82.29	345.2	12	23K	-1						
TULSA	82.42	343.9	12	24	-1	23	33	52			
TUCSON	83.08	330.8	12	29	1						
TUCSON TELE.	83.13	330.9	12	30	1						
CHANGALANE	83.61	120.9	12	33	2					12	42 PCP
ALBUQUERQUE	84.16	335.2	12	29	-5						
MORGANTOWN	84.23	356.9	12	34A	0						
AFIAMALU	84.37	256.1	12	36	1	23	0	-1			
MOORLANDS	84.88	210.5	12	36	-1						
TARRALEAH	85.27	210.1	12	39	0						
LAWRENCE	85.29	345.0	12	39	-1						
PALISADES	85.55	1.6	12	42	1	23	20	8			
BULAWAYO	85.82	114.2	12	44	2						
PASADENA	87.51	326.1	12	51	1	23	37	6			
LONDON ONT.	87.68	356.2	12	52A	1						
BOULDER CITY	87.87	329.4	12	53	1						
GOLDEN	88.28	337.7	12	54	0					37	8
TOOLANGI	89.78	211.7	12	59	-2					13	2 PCP
BROKEN HILL	89.83	110.2	13	3	2						
LARAMIE	89.84	338.1	13	2	0						
OTTAWA	89.92	0.2	13	1	-1						
BREBEUF	90.04	1.6	13	2A	0						
UINTA BASIN	90.05	335.0	13	3	0	24	0	5			
PRIEST	90.24	325.3	13	6A	3						
CANBERRA	90.36	215.3	13	4A	0						
FLAMING GRGE	90.56	335.3	13	5	0						
RIVERVIEW	90.73	217.6	13	5	-1	24	6	5		23	40 SKS
SHAWINIGAN	91.11	2.2	13	9	2						
SALT LAKE C.	91.17	333.6	13	7	-1						
EUREKA	91.39	330.1	13	9	0					30	32 PKKP
BERKELEY	92.38	325.1	13	16A	3	24	24	9		34	18 SSS
CHILEKA	93.19	115.7	13	20	3						
MINERAL	94.25	326.8	13	19	-3						
ADELAIDE	94.50	208.0	13	24	1						
BOZEMAN	95.39	336.1	13	27	0						
BUTTE	96.15	335.3	13	31	0						
BLUE MTS.	96.61	331.8	13	31	-2	25	4	55			
LWIRO	98.83	102.1	13	43	0	24	31	10		17	46 PP
HONOLULU	99.41	290.6				25	40	76		32	26 SS
GRANADA	104.56	51.8								28	6 PS
TOLEDO	106.23	49.6				24	56	0		18	36 PP
YELLOWKNIFE	111.43	341.8	18	34	-2						
PORT MORESBY	113.44	227.3								19	2
MESSINA	116.62	61.8								19	59 PP
ROME	116.98	56.9								19	55 PP
PAVIA	117.04	52.3								29	15
FLORENCE X.	117.39	54.6								19	58 PP
TARANTO	119.02	60.6	18	44	-6					27	34
STUTTGART	119.24	49.1	18	54	3					20	20 PP
BENSBERG	119.42	46.1								20	22
ATHENS	121.70	66.3								20	27
COLLMBERG	122.65	48.2	19	12	15					20	48
COLLEGE	122.80	331.1	18	57	-1						
MOULD BAY	124.01	348.6	18	58	-2						
RACIBORZ	124.84	51.5								19	56
KONGSBERG	125.33	38.4	19	3	0				19	11	
KRAKOW	125.79	52.2	19	4	1					20	29
JERUSALEM	125.97	78.9	19	6	2						
ALERT	127.33	2.2	19	5	-1						

KSARA	127.58	77.2	19	8	1			21	14 PP
LWOW	128.01	54.1	19	11	3				
KISHINEV	129.58	59.1						22	34 SKP
NORD	129.98	9.5	19	10	-2				
UMEA	131.65	36.2	19	15	0			22	39 PKS
SIMFEROPOL	131.96	63.8	19	16	1			22	42 SKP
NURMIJARVI	132.55	41.3	19	16	0			22	45 PKS
HELSINKI	132.58	41.8	19	16	0				
KIRUNA	132.92	31.0	19	16	-1			22	55 PKS
VIBORG	134.56	41.9	19	12	-8				
SODANKYLA	135.13	32.4	19	23	2				
SHIRAZ	136.98	92.6	19	26	1	19	29	22	9 PP
TIFLIS	137.61	72.6	19	26	0			23	1 PKS
GORIS	137.68	76.3	19	27	1			27	55 PKKS
APATITY	137.75	32.6	19	38K	12				
MOSCOW	137.82	50.5	19	15	-11				
KIROVOBAD	138.19	74.8	19	20	-7			23	3 PKS
TEHERAN	139.45	84.2	19	31	2			22	25 PP
BOMBAY	143.31	124.8	19	35	-1				
POONA	143.61	126.5	19	35A	-1				
VANNOVSKAYA	145.24	85.1	19	39	0				
ASHKABAD	145.41	85.3	19	42	3			25	26 PP
QUETTA	147.43	104.0	19	45	2				
SVERDLOVSK	150.63	50.4	19	49	1				
TIKSI	150.66	344.2	19	44	-4				
TUKUBASAN	151.46	265.0						44	14 PSS
WARSAK DAM	152.82	102.3	19	52	1				
MATUSIRO	152.95	264.0	19	59	8				
DUZHANBE	153.08	91.1	19	54A	3				
NEW DELHI	153.19	118.3	19	50K	-2			23	23 PP
DEHRA DUN	154.92	116.6	19	56	2			20	21
HONG KONG	155.97	203.6	20	15	20				
ANDIJAN	156.49	89.0	19	58K	2				
YAKUTSK	157.29	328.0	19	52A	-5				
SHILLONG	158.34	148.9	20	0A	2				
FRUNSE	158.74	85.2	20	1	2				
KUNMING	160.23	176.5	20	4	3			24	23 PP
LHASA	161.62	141.6	20	5	3			24	31 PP
NANKING	162.78	226.9	20	5	2			24	38 PP
SEMIPALATNSK	163.09	62.6	20	4	1				
SIAN	168.72	201.1	20	10	2				
PEKING	169.80	245.7	20	8	-1			25	15 PP
LANCHOW	171.15	178.9	20	11K	2			25	19 PP
PAOTOW	173.83	227.6	20	12	1			25	33 PP
ESEN BULAK	174.34	72.0	20	11	0			25	40 PP
ULAN-BATOR	176.40	327.8	20	15	4			25	53 PP

JANUARY 12 3.H 40.M 34.S EPICENTRE 4.74 -76.72 DEPTH= 87.KM

A= 0.22893 B=-0.96998 C= 0.08210 D=-0.9733 E=-0.2297
G= 0.0189 H=-0.0799 K=-0.9966 HT= 7.0

DEPTH OF FOCUS= 0.009R

SE= 1.73

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S
CHINCHINA	1.12	78.2	0	19	-2	0	35	-2				
BOGOTA	2.64	92.5	0	43K	2	1	15	2				
FUQUENE	3.07	76.2	0	47	0							
BALBOA HTS.	5.05	326.2	1	16	2	2	13	1				
GALERAZAMBA	6.17	13.4				2	45	5			1	38 P*
CARACAS	11.26	58.9	2	39K	0	4	41	-3				
TRINIDAD	16.27	68.0	3	45	1							
HUANCAYO	16.74	175.3	3	50	0							
SAN JUAN	17.06	36.5	3	53	-1	7	6	7				
ANTIGUA	19.09	48.7	4	18	0							
AREQUIPA	21.69	166.3	4	45	0							
LA PAZ	22.75	158.3	5	10	15	8	56	3				
CHAPEL HILL	31.10	356.3	6	10	-2							
CUMBERLAND	31.77	346.2	6	18	0						7	14 PP
BLACKSBURG	32.49	354.5	6	24	0							
MORGANTOWN	34.85	355.6	6	45	1							
FAYETTEVILLE	35.10	335.0	6	45A	-1				7	7		
TULSA	35.65	332.9	6	50	-1							
PENNSYLVANIA	35.91	358.5	6	54	1							

WICHITA MTS.	36.06	328.6	6 53A	-1			8 19	PP
LUBBOCK	37.02	323.9	7 2	0				
WESTON	37.79	6.5	7 10	1				
LONDON ONT.	38.34	354.7	7 13A	0				
SANTA LUCIA	38.41	171.8	7 14	0				
BREBEUF	40.69	3.3	7 34A	1			29 33	PCP
ALBUQUERQUE	40.74	321.4	7 34	1	7 53			
HALIFAX	41.36	14.2	7 39	1				
SHAWINIGAN	41.79	4.1	7 43A	1				
TUCSON	42.03	314.8	7 45	1				
GOLDEN	43.36	327.4	7 55	0			9 43	
LARAMIE	44.64	328.8	8 6	1				
GLEN CANYON	45.25	319.9	8 11	1				
UINTA BASIN	46.13	324.9	8 17	0			10 11	PP
FLAMING GRGE	46.43	325.6	8 20	1				
SALT LAKE C.	47.74	323.8	8 30	0	8 55		10 29	PP
PASADENA	48.29	312.7	8 34	0	10 0			
EUREKA	49.51	319.9	8 44	1			10 3	PCP
BOZEMAN	50.53	329.2	8 51	0				
SCHEFFERVLLE	50.57	7.4	8 51A	0				
PRIEST	51.02	313.7	8 54A	-1				
BUTTE	51.55	328.6	9 0	1	9 23		10 14	PCP
RENO	52.06	317.9	9 3A	0				
LICK	52.26	314.6	9 5A	1				
BERKELEY	52.94	314.9	9 9A	0				
BLUE MTS.	53.41	324.8	9 11	-2			11 10	PP
CALISTOGA	53.52	315.7	9 13A	0				
BANFF	56.45	331.7	9 33A	-2				
PENTICTON	57.33	328.1	9 40A	-1				
VICTORIA	58.95	325.6	9 52A	0				
PORT HARDY	62.36	326.2	10 14A	-1				
YELLOWKNIFE	64.03	341.5	10 24A	-2				
RESOLUTE	70.68	355.0	11 5A	-3				
THULE	71.78	2.1	11 19	5				
TOLEDO	73.69	49.9	11 26A	0	11 54			
GRANADA	73.71	52.8	11 28A	2				
MOULD BAY	75.20	350.3	11 32A	-2				
BAGNERES	77.19	47.0	11 45	-1			12 17	
COLLEGE	77.75	335.6	11 48	-1	12 12			
KEW	77.84	38.5	11 48A	-1				
ALERT	77.96	1.9	12 49A	59				
DOURBES	80.81	40.2	12 6	1				
NORD	81.12	7.4	12 5	-2				
ROSELEND	81.98	44.7	12 11	0				
WITTEVEEN	82.25	37.5	12 17	4				
BENSBERG	82.49	39.4	12 14	0				
STUTTGART	83.83	41.6	12 20	-1				
JENA	85.28	39.4	12 28	0			14 45	
GOTEBORG	85.33	32.6	12 28	0				
COLLMBERG	86.16	39.0	12 33	1				
KASPERSKE H.	86.65	41.1	12 35A	0			12 57	
KARLSKRONA	87.39	34.0	12 28	-10				
LJUBLJANA	87.48	44.2	12 37	-2			13 0	
KIRUNA	88.35	22.1	12 43K	0				
UMEA	88.85	26.1	12 45K	0				
NURMIJARVI	91.49	29.0	12 56	-1				
HELSINKI	91.71	29.3	12 57	-1				
SOUTH POLE	94.71	180.0	13 12	0				
SHIRAZ	120.56	51.5	18 41	0				
CANBERRA	128.04	228.0	18 57	1				
TOOLANGI	129.52	223.8	19 0	2				
SHILLONG	147.90	19.6	19 32K	0				
DARWIN	151.74	252.7	19 44	7				

JANUARY 12 6.H 20.M 14.S EPICENTRE 35.93 69.86 DEPTH= 123.KM

A= 0.27949 B= 0.76202 C= 0.58414 D= 0.9388 E=-0.3443
G= 0.2011 H= 0.5484 K=-0.8117 HT= -0.2

DEPTH OF FOCUS= 0.014R

SE= 2.22

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S
KULYAB	1.97	357.5	0	36A	2	0	59	-1				

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KHOROG	2.05	40.4	0	40	5	1	7	5				
WARSAK DAM	2.37	143.6	0	36	-4							
OBI-GARM	2.77	357.4	0	46K	1	1	16	-2				
DUZHANBE	2.78	342.1	0	45K	0	1	15	-4				
GARM	3.09	6.4	0	49K	0	1	21	-5				
DZERGETAL	3.46	17.9	0	55	1	1	29	-6				
SAMARKAND	4.38	329.5	1	4	-2							
FERGANA	4.70	18.2	1	11K	0	2	1	-4	1	42	*SP	
ANDIJAN	5.21	21.5	1	18K	1	2	13	-4	1	51	*SP	
NAMANGAN	5.24	15.2	1	18K	0				2	4		
TASHKENT	5.41	355.4	1	18	-2	2	13	-9	2	35		
LAHORE	5.74	138.3	1	29	4	2	34	4				
QUETTA	6.23	203.9	1	36	5	2	45	3				
TCHIMKENT	6.37	358.3	1	32	-1	2	36	-9	2	3	*SP	
NARYN	7.30	39.3	1	46	0	3	4	-4	2	41		
FRUNSE	7.82	26.7	1	53	0	3	14	-6	2	29	*SP	
FABRICHNAYA	8.80	33.2	2	6K	0							
DEHRA DUN	8.85	126.8	2	9K	2	3	51	6	2	16	PP	
ALMATA	9.15	34.6	2	11K	0	3	51	-1	3	17		
PRZHEVALSK	9.31	42.8	2	13	0	3	56	0	3	16		
ALMATA-2	9.34	36.0	2	12	-1	3	53	-4	3	10		
ASHKABAD	9.43	285.8	2	11K	-3	3	54	-5				
NEW DELHI	9.60	137.6	2	20K	3	4	7	4	2	25	PP	
KURMENTY	9.60	40.1	2	14	-3							
CHILIK	10.08	38.2	2	23	0							
KIZYL-ARVAT	11.27	290.9	2	35	-4	4	37	-6	4	14		
SEHORE	14.17	151.8	3	19	2							
TEHERAN	14.99	274.7	3	28	1							
SHIRAZ	15.86	251.7	3	36	-2				5	34		
SEMIPALATNSK	16.31	24.3	3	40	-3							
BOMBAY	17.16	170.5	3	47	-7				7	4		
SHEMAKHA	17.31	292.1	3	55	-1							
CHATRA	17.32	116.7	3	58A	2	6	59	-4				
POONA	17.68	167.4	4	5	5	7	23	12	7	59	SSS	
BOKARO	18.31	126.8	4	13	6	7	25	1	4	30	PP	
MAKHACH-KALA	18.62	299.0	4	12	1	7	35	4				
GORIS	18.94	287.9	4	16K	2	7	40	2	8	42	PCP	
KIROVOBAD	19.04	291.4	4	14	-1	7	39	-1				
NAKHICHEVAN	19.65	286.9	4	23	1							
GROZNY	19.94	299.1	4	25	0				5	5	*SP	
TIFLIS	20.33	294.1	4	30A	1				5	14	PPP	
EREVAN	20.39	289.7	4	30A	1				8	57		
DUZHETI	20.46	295.1	4	32	2	8	1	-6				
STEPANAVAN	20.55	292.0	4	33A	2							
GORI	20.87	294.6	4	36	2							
CALCUTTA	20.91	124.7	4	39	4	8	26	11				
BAKURIANI	21.28	293.8	4	40	2							
SHILLONG	21.51	112.6	4	45K	4	8	39	13	5	9	PP	
VISHAKHAPTNM	21.70	143.2	4	17	-25	8	9	-21	11	17		
ABASTUMANJ	21.80	293.7	4	45	2							
SVERDLOVSK	21.82	346.3	4	43K	-1				8	42	PCP	
ESEN BULAK	22.36	54.0							6	45		
CHITTAGONG	23.40	119.3	5	6	7	9	11	12				
MADRAS	24.65	155.2							6	6		
JERUSALEM	28.97	271.9	5	52	2							
MOSCOW	29.53	322.3	5	53	-2				6	35	*SP	
ULAN-BATOR	29.77	54.7	6	1	3							
PULKOVO	34.86	325.7	6	42	0							
UZHGOROD	36.83	305.2	6	59	1							
HELSINKI	37.50	324.6	7	3K	-1							
NURMIJARVI	37.76	325.0	7	6K	0				7	36	8	26 PP
APATITY	37.80	338.2	7	6	0							
KAJAANI	37.89	331.3	7	6	-1						8	25 PP
KRAKOW	38.43	307.5	7	12A	0				7	46		
SODANKYLA	39.87	335.6	7	23K	-1						8	12
VIENNA-H.	40.78	304.7	7	32	1						9	6 PP
UMEA	40.82	328.9	7	31	0						8	5 PP
UPPSALA	40.96	322.5	7	32	0						9	7 PP
KARLSKRONA	41.47	316.7	7	33	-4							
PRUHONICE	41.90	307.4	7	41	1						9	20
KIRUNA	42.20	334.6	7	42	-1							
LJUBLJANA	42.21	301.5	7	43	0				7	17		
KASPERSKE H.	42.57	306.1	7	44	-2						9	22
COLLMBERG	42.84	309.4	7	48	0							
GOTEBORG	43.57	318.7	7	52	-2						9	31 PP
JENA	43.75	308.9	7	55	0						9	37 PP
SKALSTUGAN	44.18	327.2	7	58	-1							
KONGSBERG	44.94	321.4	8	5	0						10	18 PPP
YAKUTSK	44.99	35.2	8	6	1						8	33

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STUTTGART	45.43	306.0	8	9	0								10	11	
TIKSI	46.65	22.0	8	18	0										
WITTEVEEN	46.65	311.9	8	18	0										
ROSELEND	47.71	302.2	8	26	-1				8	56					
DOURBES	48.27	308.4	8	32	1										
GARCHY	49.79	305.0	8	42	-1										
KEW	51.10	310.9	8	52	-1										
LWIRO	53.93	234.3	9	15K	2										
SIDA	57.56	328.3	9	40K	1										
ALERT	59.53	353.5	9	52	-1										
CHILEKA	61.02	219.0	10	5K	2										
THULE	64.87	350.0	10	25	-4										
MOULD BAY	67.96	2.4	10	48A	0										
COLLEGE	75.29	15.7	11	32	0										
YELLOWKNIFE	81.86	2.1	12	8K	1										
PENTICTON	94.71	6.2	13	10	1										
BLUE MTS.	99.34	5.2											17	35	PP

JANUARY 14 18.H 33.M 24.5 EPICENTRE 45.84 26.78 DEPTH= 122.KM

A= 0.62414 B= 0.31502 C= 0.71499 D= 0.4506 E=-0.8927
G= 0.6383 H= 0.3222 K=-0.6991 HT= -3.9

DEPTH OF FOCUS= 0.014R

SE= 2.44

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
FOCSANI	0.32	114.7	0	18	-1	0	31	-2					
BACAU	0.74	6.3				0	35	-3			1	20	
CAMPULUNG	1.35	245.9	0	28	1	0	53	6					
BUCHAREST	1.50	199.1	0	28	-1	0	48	-2					
KISHINEV	1.85	49.4	0	33	0	0	58	1					
TIMISOARA	3.89	270.7	0	59	-1	1	42	-3					
SOFIA	4.00	219.6	1	1	0	1	41	-7			1	56	SG
UZHGOROD	4.14	314.1	1	3K	0	1	44	-7			1	32	*SP
LWOW	4.40	336.1	1	9	2	1	57	0			1	35	*SP
BELGRADE	4.58	259.4	1	7K	-2						2	25	SG
ISTANBUL KA.	5.05	159.9	1	14	-1								
ISTANBUL UN.	5.06	160.7	1	14	-1	1	58	-15					
SIMFEROPOL	5.24	97.1	1	16K	-2	2	15	-3			1	49	
YALTA	5.39	101.7	1	19K	-1	2	19	-2					
ALUSHTA	5.51	99.2	1	21	-1						1	47	
NIEDZIKA	5.65	311.7	1	24	1						2	12	
THEODOSIA	6.11	94.6	1	30	0	2	38	-1					
KRAKOW	6.24	315.0	1	35	4						4	19	SG
SARAJEVO	6.25	254.7	1	40	8						3	30	
TITOGRAD	6.39	240.5	1	32	-1	2	54	8			3	25	
CHORZOW	6.86	313.3	1	40	0	2	56	-1			1	49	PP
RACIBORZ	7.16	309.5	1	43	-1	3	12	8			1	52	PP
WARSAW	7.43	331.5				3	9	-2			2	26	PG
VIENNA-H.	7.51	292.5	1	50	1						3	55	SG
ZAGREB	7.55	273.7	1	46	-3						5	7	
ATHENS	8.18	197.3	1	55A	-3								
LJUBLJANA	8.55	275.8	2	1	-2				2	15	4	39	
TRIESTE	9.12	273.5	2	10	0	3	54	2	2	24	4	13	*SS
PRUHONICE	9.20	301.2	2	11	0	4	2	8					
PRAGUE	9.31	301.5	2	13	0						5	15	
KASPERSKE H.	9.53	295.0	2	16	0						3	42	
PADOVA	10.46	273.0	2	29	1						3	25	
COLLMBERG	10.64	305.9	2	30	0						5	42	SG
FLORENCE X.	11.23	265.0	2	36	-2						3	21	
JENA	11.32	302.2	2	41	2	4	46	2			3	44	PG
HALLE	11.32	305.4				4	59	15			3	1	PP
ZUGDIDI	11.34	101.6	2	40	0								
PIATIGORSK	11.69	93.1	2	42	-2						5	14	
MOSCOW	12.04	30.7	2	47K	-2						4	56	
STUTTGART	12.24	290.2	2	52	0								
ABASTUMANJ	12.29	103.7	2	50A	-2	5	1	-6			3	19	
KARLSKRONA	12.49	329.9	3	4	9						5	56	
BAKURIANI	12.77	102.8	2	58	-1								
AKHALKALAKI	12.88	104.2	3	0	0								
STRASBOURG	13.21	288.8	3	4	0	5	31	2			3	44	*SP
COPENHAGEN	13.37	322.7	3	21K	15								
DUZHETI	13.44	99.8	3	6	-1								
TIFLIS	13.65	101.1	3	13	3								

STEPANAVAN	13.67	104.4	3	12	2									
GROZNY	13.75	93.8	3	11A	0							6	20	
KSARA	13.88	146.7	2	59	-14	5	31	-13						
BENSBERG	13.99	298.6	3	15	1									
ROSELEND	14.07	276.6	3	16A	1							3	54	*SP
PULKOVO	14.12	7.4				6	0	10						
EREVAN	14.13	107.3	3	17K	1							6	1	
BESANCON	14.39	283.1	3	18	-1									
HELSINKI	14.40	356.4	3	16K	-3									
NURMIJARVI	14.75	355.9	3	21K	-3	5	52	-13				3	43	
GOTEBORG	14.96	327.9	3	29	2	6	19	10						
UPPSALA	15.06	342.0	3	27A	-1	6	2	-10				6	22	
MAKHACH-KALA	15.08	93.5	3	31	3									
KIROVABAD	15.15	103.1	3	31	3	6	23	10						
NAKHICHEVAN	15.23	109.2	3	31	1	6	23	8						
DOURBES	15.44	294.0	3	36	3									
JERUSALEM	15.48	152.1	3	35	2									
GORIS	15.69	106.8	3	38K	2							3	55	PP
GARCHY	16.36	283.6	3	45	1							4	30	
SHEMAKHA	16.73	100.3	3	51	2									
KONGSBERG	17.22	329.6	3	54	-1							4	18	PP
KAJAANI	18.29	1.3	4	5K	-2	7	16	-8						
UMEA	18.39	350.8	4	8A	0	7	41	15						
SKALSTUGAN	19.57	340.5	4	22	1	8	8	18	4	45		10	10	
DURHAM	20.08	306.7	4	30	4									
TEHERAN	21.11	109.8	4	39	2	8	29	10						
SODANKYLA	21.59	359.8	4	41	0	8	49	21						
APATITY	22.05	6.8	4	48A	2	8	42	6	5	11		9	23	*SS
KIRUNA	22.30	353.6	4	49	1				5	19		11	29	
TOLEDO	23.28	266.2	4	58A	0				5	2		5	39	PP
SVERDLOVSK	23.59	49.9	5	2	1	9	7	4						
ALMERIA	23.62	258.1	5	3A	2							5	35	PP
KEVO	23.99	0.2	5	5K	0	9	28	18				5	36	
TROMSOE	24.18	353.3	5	8	2									
ASHKABAD	24.66	97.4	5	13	2							6	19	PPP
SHIRAZ	25.83	119.8	5	23A	1	9	55	15				5	47	
KULYAB	32.64	88.5	6	26	3									
FERGANA	32.96	83.1	6	28	3							7	38	PP
DZERGETAL	33.07	85.4	6	29	3									
ANDIJAN	33.22	82.2	6	31	3									
FRUNSE	33.95	77.5	6	36A	2				7	3				
KHOROG	34.08	88.0	6	43	8									
QUETTA	34.89	102.5	6	37	-5									
ALMATA-2	35.65	75.5	6	50	2									
WARSAK DAM	35.87	93.2	6	55	5									
PRZHEVALSK	36.66	76.2	7	1	4							15	12	55
DEHRA DUN	42.49	93.0	7	47	2									
NEW DELHI	42.94	95.7	7	51K	2							8	17	
ALERT	44.76	349.2	8	4	1									
ESEN BULAK	46.70	62.9	8	20	1									
LWIRO	47.91	177.3	8	28	0									
TIKSI	50.83	23.6	8	50	0				9	16				
CHATRA	50.97	90.1	8	47A	-5							9	14	
ULAN-BATOR	52.43	56.7	9	4	2									
RESOLUTE	53.73	343.7	9	12	0									
SHILLONG	55.05	88.0	9	19A	-3									
MOULD BAY	56.28	350.8	9	30	0									
BROKEN HILL	60.02	178.1	9	56	-1									
BULAWAYO	65.68	178.1	10	33	-1									
YELLOWKNIFE	67.69	341.7	10	45	-2									
KIMBERLEY	74.25	181.8	11	55	29									
HUNGRY HORSE	80.14	334.7	11	58	0									
TULSA	83.57	316.5	12	16	0									
BLUE MTS.	84.28	335.2	12	19	-1				12	50				
UINTA BASIN	85.75	328.0	12	28	1				13	1				
EUREKA	88.74	332.1	12	37	-4									
WOODY	93.12	332.6	12	56	-6									
CHARTERS TS.	124.58	83.6	18	48	3									
SOUTH POLE	135.64	180.0										19	31	

JANUARY 15 1.H 32.M 16.S EPICENTRE 68.91 -17.11 DEPTH= 0.KM

A= 0.34591 B=-0.10646 C= 0.93221 D=-0.2941 E=-0.9558
G= 0.8910 H=-0.2742 K=-0.3619 HT=-11.5

SE= 3.01

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
SCORESBY SD.	2.31	315.2	0	37	-3								
AKUREYRI	3.28	187.2	0	51	-2	1	31	-3					
SIDA	5.17	184.7	1	22	2						2	4	
REYKJAVIK	5.17	204.0	1	20A	0								
NORD	12.76	0.3	3	2	-3								
SKALSTUGAN	12.89	100.2	3	5	-2								
GODHAVN	12.89	288.5				5	34	1					
ABERDEEN	13.54	143.0									7	2	
KIRUNA	13.74	76.8	3	19	1						3	26	PP
KEVO	15.34	66.3	3	46A	7	6	32	1					
UMEA	15.61	90.9	3	47	4	6	27	-10			6	18	
DURHAM	15.88	145.5	3	56K	10								
SODANKYLA	16.10	74.7	3	48K	-1								
THULE	16.38	319.2	3	47	-6								
ALERT	16.74	341.0	3	50	-7								
GOTEBORG	17.01	116.8	4	9	8								
UPPSALA	17.28	104.5				7	5	-11					
KAJAANI	18.16	83.7	4	12	-3								
APATITY	18.37	70.2	4	14	-4						7	40	
COPENHAGEN	18.81	126.0	4	21	-2								
KEW	19.25	146.8	4	33	5								
NURMIJARVI	19.32	95.1	4	29	0	7	58	-4					
VIBORG	20.68	90.6	4	44A	0								
BENSBERG	21.45	134.7	4	50K	-2						5	31	
DOURBES	21.61	139.7	4	51	-2						5	20	PP
PULKOVO	21.88	91.1	4	54K	-2	8	48	-6					
HALLE	22.27	126.8	4	58	-2						6	0	
JENA	22.67	128.0	5	1	-3	9	1	-7			5	25	PP
COLLMBERG	22.76	125.5	5	3	-2						6	50	
RESOLUTE	23.22	318.8	5	9K	0								
HEIDELBERG	23.28	133.9	5	9	-1								
STRASBOURG	23.79	136.2	5	13	-2						6	8	
GARCHY	23.93	144.6	5	14	-2						5	45	
STUTTGART	24.00	133.7	5	16	-1								
TUBINGEN	24.17	134.3	5	18	-1								
PRAGUE	24.27	124.9	5	19	-1								
PRUHONICE	24.38	124.8	5	19	-2	9	48	10					
WARSAW	24.48	113.6	5	20	-2						9	1	PCP
BESANCON	24.60	140.1	5	21	-2						6	20	
KASPERSKE H.	24.86	127.1	5	24A	-1						7	23	
RAVENSBURG	25.00	134.1	5	28	1								
RACIBORZ	25.41	119.8	5	29	-1								
KRAKOW	25.99	117.6	5	36	0						15	32	
ROSELEND	26.22	140.3	5	35	-3						6	4	
MOSCOW	27.51	90.7	5	54K	4								
LWOW	27.53	112.8	5	51	1								
MOULD BAY	27.54	329.6	5	50	0	10	40	9					
LJUBLJANA	27.92	128.7	5	58	4								
UZHGOROD	27.99	116.2	5	53	-1								
ROME	31.22	134.7	6	16	-7								
YELLOWKNIFE	36.52	309.3	7	7	-2								
ATHENS	38.04	123.0									16	8	
PALISADES	40.60	256.7				13	58	5					
TIFLIS	41.79	97.6	7	55	2								
COLLEGE	42.09	331.1	7	55	0						10	11	
EREVAN	43.03	99.0	8	2	-1								
KIROVOBAD	43.28	96.9	8	8	3								
MORGANTOWN	43.96	261.8	8	14A	4								
GORIS	44.29	97.7				14	40	-7					
KSARA	45.75	111.9	8	19	-6						9	56	PP
BANFF	46.30	300.5	8	28	-1								
SEMIPALATNSK	46.63	80.8	8	33	1								
JERUSALEM	47.39	113.7	8	40	2								
HUNGRY HORSE	48.29	297.5	8	43	-2								
PENTICTON	49.19	302.4	8	52	0								
TEHERAN	49.46	95.1	8	57	3						19	43	
CUMBERLAND	49.58	264.8	8	57	2								
BOZEMAN	49.66	293.4	8	56	0								
VANNOVSKAYA	49.91	87.5	9	2	5								
ASHKABAD	50.00	87.3	9	0	2								
LAWRENCE	50.07	275.8	8	59	1								
FRUNSE	51.43	70.1	9	10	1								
LARAMIE	51.66	286.2	9	14	4								
ALMATA	51.83	67.9	9	11	-1								
FAYETTEVILLE	52.25	273.2	9	16	1								
BLUE MTS.	52.44	298.0	9	14	-2	16	48	6					

TULSA	52.99	274.5	9	22	2	16	49	0	20	19	SS
FLAMING GRGE	53.31	289.2	9	26	3						
UINTA BASIN	53.92	289.1	9	27	0	17	10	8			
WICHITA MTS.	55.06	276.4	9	35	-1	17	21	4	11	38	PP
SHIRAZ	55.35	97.3	9	32	-6						
EUREKA	56.83	294.0	9	48	0						
GLEN CANYON	57.62	289.0	9	55	1						
ALBUQUERQUE	57.66	283.5	9	56	2						
MINERAL	57.86	299.1	9	56K	0						
WARSAK DAM	58.27	77.6	9	57	-2						
BOULDER CITY	59.62	291.3	10	8	0				10	30	
CALISTOGA	59.73	299.1	10	6	-3						
QUETTA	60.08	83.5	10	13	2						
BERKELEY	60.33	298.5							27	44	
LICK	60.62	297.7	10	15	0						
PRIEST	61.40	296.3	10	17	-3						
TUCSON	61.63	286.1	10	22	0						
PASADENA	62.40	293.3	10	23	-4						
DEHRA DUN	63.89	73.6	10	39	2						
NEW DELHI	65.18	75.1	10	44K	-1						
CARACAS	66.52	235.0	10	57	3	19	58	14			
BOGOTA	74.26	240.2	11	41	0						
CHINCHINA	74.42	241.9	11	39	-2						
LWIRO	77.57	132.7	12	5	6						

JANUARY 15 2.H 32.M 40.S EPICENTRE 13.39 145.21 DEPTH= 35.KM

A=-0.79924 B= 0.55524 C= 0.23003 D= 0.5705 E= 0.8213
G=-0.1889 H= 0.1312 K=-0.9732 HT= 6.0

DEPTH OF FOCUS= 0.000R

SE= 2.01

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S
GUAM	0.47	279.2	0	11	-1							
RABAUL	18.79	158.0	4	22	3							
PORT MORESBY	22.72	175.0	4	54K	-6	8	53	-9				
MANILA	23.45	276.0	5	8	1	9	16	1				
MATUSIRO	23.90	346.0	5	12	0	9	29	6				
CHARTERS TS.	33.28	178.2	6	33	-4							
PEKING	36.81	321.5	7	7	0							
SIAN	38.87	308.6	7	26	2							
PETROPAVLOVK	40.96	12.4	7	41	0							
PAOTOW	40.98	318.0	7	43	1							
BRISBANE	41.19	169.8	7	49	6	13	32	-22				
TANGERANG	42.96	245.5	7	57A	-1							
LANCHOW	43.40	308.8	8	3	2							
MAGADAN	46.27	3.9	8	27	3							
ULAN-BATOR	46.85	325.1	8	30	1							
RIVERVIEW	47.29	173.3									18	29
ADELAIDE	48.48	187.1	8	40	-2							
CANBERRA	48.57	175.9	8	50	8							
YAKUTSK	49.82	350.5	8	50	-2	15	56	-2				
TOOLANGI	50.68	179.7	8	58	-1						9	48
SHILLONG	51.43	292.1	9	3K	-1							
LHASA	52.47	297.1	9	15	3							
ESEN BULAK	52.54	318.9	9	12	0							
KIPAPA	54.52	73.2	9	32	5							
CHATRA	55.70	293.4	9	36K	0							
KARAPIRO	58.44	152.1	9	51	-4							
TIKSI	59.05	354.0	9	57	2							
DEHRA DUN	63.76	297.3	10	31	0							
SEMIPALATNSK	63.87	319.8	10	32	0							
ALMATA	65.14	311.6	10	38	-2							
FRUNSE	66.81	311.0	10	52	1							
COLLEGE	68.25	25.0	10	57	-3							
POONA	68.42	284.8	11	0K	-1							
DUZHANBE	71.24	306.4	11	19	1							
QUETTA	73.35	297.8	11	31	1							
SVERDLOVSK	75.96	325.7	11	45K	0							
MOULD BAY	78.39	14.1	11	57A	-2							
VANNOVSKAYA	79.65	306.6	12	7	1							
VICTORIA	81.00	42.3	12	16	3							
YELLOWKNIFE	82.68	27.4	12	21A	-2							
PENTICTON	83.30	41.0	12	24	-1							

ALERT	83.43	3.5	12 25	-1						
CALISTOGA	83.47	52.0	12 26A	0						
MINERAL	83.86	50.1	12 27K	-1						
BERKELEY	83.88	52.7	12 28A	0	22 52	5			34 8	
LICK	84.47	53.1	12 31K	0						
RESOLUTE	84.67	13.4	12 31A	-1						
NORD	84.75	357.4	12 31	-1						
TEHERAN	85.35	305.5	12 37	2						
RENO	85.38	50.6	12 36A	1						
BANFF	85.40	38.6	12 34	-1						
PRIEST	85.51	54.1	12 36K	0						
APATITY	85.77	339.0	12 37	0	23 6	0				
SHIRAZ	85.79	299.3	12 38K	1	23 0	-6			13 28	
BLUE MTS.	85.89	45.0	12 37	-1	23 7	0				
KEVO	86.81	342.1	12 42K	0						
HUNGRY HORSE	87.12	41.0	12 44	0						
PASADENA	87.96	55.5	12 47	-1	23 25	-2				
KIROVOBAD	88.00	311.2	12 48	0						
SODANKYLA	88.17	340.1	12 48K	-1						
THULE	88.18	7.5	12 49	0						
EUREKA	88.27	49.9	12 49	0					16 19	PP
GORIS	88.31	310.1	12 50K	0	23 33	3				
MOSCOW	88.66	327.4	12 51K	0						
BUTTE	88.77	42.9	12 54	2					14 9	
KAJAANI	89.48	337.1	12 54	-1						
KIRUNA	89.88	341.8	12 56K	-1						
BOZEMAN	89.89	42.9	13 0	3					16 31	PP
PULKOVO	90.51	332.7	12 59	-1						
VIBORG	90.72	333.9	12 59A	-2						
SALT LAKE C.	90.91	47.8	13 3	1						
GLEN CANYON	92.30	51.3	13 8	0						
UMEA	92.37	338.7	13 7K	-2	23 42	-25				
NURMIJARVI	92.57	334.8	13 9	-1	24 8	0			30 54	SS
FLAMING GRGE	92.62	47.0	13 9	-1						
UINTA BASIN	92.70	47.6	13 9	-1	23 44	-26				
TUCSON	94.40	55.6	13 18	0						
SKALSTUGAN	95.21	340.8	13 20	-2						
ALBUQUERQUE	96.90	51.8	13 29	0						
UZHGOROD	100.29	325.5	13 44	-1						
WICHITA MTS.	102.91	49.3	13 54	-2					18 18	PP
COLLMBERG	103.38	331.4							18 19	PP
CUMBERLAND	111.61	42.8	18 36	5					34 53	SS
BROKEN HILL	118.77	260.7	18 47	2						
BULAWAYO	119.22	254.3	18 48	2						
AREQUIPA	144.43	99.6	19 32	-1						
ANTOFAGASTA	144.79	112.2	19 33	-1						
LA PAZ	147.66	99.7	19 39	0					19 54	

JANUARY 15 5.H 23.M 6.S EPICENTRE 69.00 -16.82 DEPTH= 0.KM

A= 0.34507 B=-0.10430 C= 0.93276 D=-0.2893 E=-0.9572
G= 0.8929 H=-0.2699 K=-0.3605 HT=-11.5

SE= 3.14

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S
SCORESBY SD.	2.33	312.2	0	36	-4							
AKUREYRI	3.38	189.0	0	53	-2	1	30	-6				
SIDA	5.27	186.0	1	21	0							
REYKJAVIK	5.29	204.9	1	20	-2							
TROMSOE	12.54	70.5	3	0	-2							
NORD	12.67	0.1	3	1	-3							
SKALSTUGAN	12.80	101.0	3	6	0							
GODHAVN	12.97	288.3				5	41	7				
ABERDEEN	13.55	143.8	3	13	-3	5	42	-6			6	37 SS
KIRUNA	13.62	77.3	3	10	-6	5	48	-2			3	19 PP
KONGSBERG	14.66	116.7	3	32	2						3	43 PP
KEVO	15.21	66.7	3	38A	1	6	30	3				
UMEA	15.51	91.5	3	43	2	6	20	-14			6	42 SS
DURHAM	15.90	146.2	3	46	0						8	3
SODANKYLA	15.98	75.2	3	47	0							
THULE	16.38	319.0	3	49	-3							
ALERT	16.69	340.9	3	50	-6							
GOTEBORG	16.96	117.5	4	5	5							
UPPSALA	17.20	105.1	4	6A	3	7	6	-8			4	42
KAJAANI	18.05	84.2	4	13	0	7	43	10				

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APATITY	18.24	70.6	4	14K	-2	7	29	-8			
COPENHAGEN	18.77	120.6	4	21	-1	8	1	12			
NURMIJARVI	19.23	95.7	4	27	-1	7	50	-9			
KEW	19.27	147.4	4	37	9						
HELSINKI	19.58	96.1	4	29	-3						
WITTEVEEN	19.61	133.9	4	38	6						
DE BILT	19.89	137.2	4	34	-1	8	18	4			
VIBORG	20.57	91.1	4	40A	-2						
MUNSTER	20.63	133.4	4	42	-1						
BENSBERG	21.44	135.3	4	50A	-1					5	34
DOURBES	21.61	140.3	4	51	-2	8	50	2			
PULKOVO	21.78	91.6	4	54	-1	8	48	-4			
HALLE	22.24	127.4	4	58	-1					5	23 PP
JENA	22.65	128.6	5	2	-1	9	15	8		5	23 PP
COLLMBERG	22.72	126.1	5	3	-1	9	21	12			
RESOLUTE	23.22	318.7	5	9K	0						
HEIDELBERG	23.26	134.5	5	9	0						
STRASBOURG	23.78	136.8	5	16	1					6	22
GARCHY	23.94	145.2	5	16A	0						
STUTTGART	23.99	134.3	5	16	0	9	36	5			
PRAGUE	24.23	125.5	5	16	-3					9	59
PRUHONICE	24.35	125.4	5	20	0	9	46	9			
WARSAW	24.42	114.1	5	21	0					5	50 PP
BESANCON	24.60	140.6	5	23	1						
KASPERSKE H.	24.83	127.7	5	25A	0					6	8
RAVENSBURG	24.99	134.7	5	28	2						
RACIBORZ	25.37	120.3	5	30	0						
KRAKOW	25.94	118.1	5	34	-1	10	13	9		11	59
ROSELEND	26.22	140.9	5	38	0					6	6
SCHEFFERVLLE	26.51	263.1	5	40	0						
BRATISLAVA	26.72	123.8	5	14	-28					6	15 PP
PAVIA	27.30	137.5								14	9
MOSCOW	27.41	91.2	5	51	2	10	30	2			
LWOW	27.47	113.3	5	48	-1						
MOULD BAY	27.51	329.6	5	49	-1	10	38	8			
PADOVA	27.77	133.5	6	1	9					6	39
LJUBLJANA	27.90	129.3	5	57	4						
UZHGOROD	27.93	116.7	5	52	-1						
TRIESTE	28.05	130.7	5	54	0						
MONACO	28.26	141.0	5	54	-2						
FLORENCE X.	29.13	135.6	5	54	-10	11	24	28		7	8 PP
TOLEDO	29.98	160.1								13	0 SS
BELGRADE	30.75	122.5	6	8	-11					7	2 PP
ROME	31.21	135.2	6	22	-1	11	37	8		7	36 PP
GRANADA	32.69	160.2								14	35
SVERDLOVSK	34.69	70.5	6	52	-1	12	21	-2			
MESSINA	35.48	133.4								12	33
YELLOWKNIFE	36.54	309.4	7	7A	-2						
BREBEUF	36.69	260.1	7	15	5					15	42 SS
ISTANBUL UN.	36.85	115.3	7	11	0	13	0	4			
TIKSI	37.79	17.0	7	20	1						
ATHENS	38.00	123.5								13	15
PALISADES	40.72	256.9				14	4	9			
TIFLIS	41.69	98.0	7	52	0						
COLLEGE	42.06	331.2	7	55	0						
EREVAN	42.95	99.4	8	2	0						
KIROVOBAD	43.18	97.3	8	3	-1	14	29	-2			
GORIS	44.20	98.0	8	13	1						
KSARA	45.68	112.2	8	23	-1	15	14	7		10	10 PP
YAKUTSK	47.10	20.8	8	38	3						
JERUSALEM	47.33	114.1	8	36	-1						
HUNGRY HORSE	48.34	297.6	8	44	-1						
PENTICTON	49.23	302.6	8	50	-2						
CUMBERLAND	49.69	265.0	8	54	-1	16	16	12			
BOZEMAN	49.73	293.6	8	56	1						
BUTTE	49.92	295.0	9	2	5						
FRUNSE	51.31	70.4	9	11	4						
LARAMIE	51.74	286.4	9	15	4						
FAYETTEVILLE	52.35	273.3	9	13	-2						
ANDIJAN	52.38	73.5	9	18	2						
BLUE MTS.	52.49	298.1	9	15	-1	16	49	7			
DUZHANBE	53.07	77.9	9	25	4						
TULSA	53.08	274.7	9	22	1	16	50	0		20	22 SS
FLAMING GRGE	53.38	289.4	9	24	1						
UINTA BASIN	53.99	289.2	9	26	-1						
SALT LAKE C.	54.36	291.4	9	50	20						
M.BOUR	54.58	180.2				17	21	10			
ESEN BULAK	54.86	51.1	9	34	0	16	25	-49			
WICHITA MTS.	55.16	276.6	9	35	-1	17	24	6		10	40 PCP

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SHIRAZ	55.26	97.6	9	36	-1	17	22	2			11	36 PP
ULAN-BATOR	56.25	42.3	9	48	4	17	43	10				
EUREKA	56.89	294.2	9	48	0						10	38 PCP
GLEN CANYON	57.69	289.2	9	54	0							
ALBUQUERQUE	57.74	283.7	9	55	1							
MINERAL	57.91	299.3	9	54A	-2							
CALISTOGA	59.78	299.3	10	8A	-1							
QUETTA	59.97	83.9	10	9	-1							
BERKELEY	60.38	298.7	10	15A	2	18	34	7				
LICK	60.67	297.9	10	14	-1							
PRIEST	61.45	296.5	10	22A	2							
TUCSON	61.71	286.3	10	22	0							
NEW DELHI	65.06	75.4									19	29
PEKING	65.87	38.0	10	52	3							
LANCHOW	66.57	49.4	10	56	2	19	52	8				
CARACAS	66.66	235.3	10	56	2	19	50	5				
LHASA	68.73	62.8	11	12	5	20	20	10				
CHATRA	70.07	67.3	11	15	0							
FUQUENE	73.49	240.5	11	44	8							
BOGOTA	74.39	240.5	11	41	0	21	24	9				
CHINCHINA	74.56	242.1	11	31	-11							
LWIRO	77.55	133.0	12	3	4							

JANUARY 15 19.H 26.M 34.S EPICENTRE -20.42-177.92 DEPTH= 494.KM

A=-0.93730 B=-0.03412 C=-0.34684 D=-0.0364 E= 0.9993
G= 0.3466 H= 0.0126 K=-0.9379 HT= 4.6

DEPTH OF FOCUS= 0.073R

SE= 1.55

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
AFIAMALU	8.73	43.1	2	5	-1	3	41	-4					
KARAPIRO	18.35	196.6	3	46	2						10	35	SCP
WELLINGTON	21.70	195.0	4	13	-3	7	31	-10			10	43	SCP
ROXBURGH	27.12	199.9	5	4	0						8	8	PP
BRISBANE	27.63	249.8	5	7	-2	9	11	-5					
RIVERVIEW	30.47	237.5				9	57	-3			7	3	
CANBERRA	32.62	235.9	5	52A	0						7	23	PP
RABAUL	33.28	295.0	5	57	0								
CHARTERS TS.	33.57	264.2	6	1K	1	10	39	-8					
PORT MORESBY	35.41	282.8	6	16K	1	11	11	-4			8	32	PCP
TOOLANGI	36.01	233.7	6	20	0	11	20	-4	7	44	8	5	PP
MOORLANDS	36.62	225.2	6	31	6								
TARRALEAH	37.04	225.8	6	25	-4						11	34	
MACQUARIE I.	38.30	201.7	6	39	0								
ADELAIDE	40.72	239.8	6	58K	0	12	28	-6			11	48	
WILKES	64.08	205.2	9	44	-3								
BYRD STATION	64.71	170.5	9	56	5								
SOUTH POLE	69.71	180.0	10	20	-1						18	42	
MATUSIRO	70.19	323.6	10	24	0								
ABUYAMA	70.53	320.7	10	27A	1								
Y.-SAKHLINSK	75.93	333.4	10	57K	0								
ZO-SE	77.70	309.9	11	7K	0								
PRIEST	78.05	44.1	11	9K	1								
BERKELEY	78.07	41.9	11	9K	1						11	57	
LICK	78.14	42.6	11	9K	0								
UKIAH	78.25	40.4	11	11	2								
CALISTOGA	78.34	41.1	11	10K	0								
PASADENA	78.57	47.0	11	11	0				11	34	13	18	
HONG KONG	78.71	298.9	11	12K	0								
CANTON	79.76	299.3	11	18K	1								
NANKING	79.95	309.6	11	19K	1								
MINERAL	79.99	40.2	11	18K	-1								
RENO	80.60	41.7	11	23K	1								
MAWSON	81.67	199.8	11	25K	-2								
BOULDER CITY	81.87	46.9	11	29	1	21	2	2			12	7	
CHANGCHUN	82.38	322.4	11	30K	-1	21	5	0	13	31			
TUCSON	82.80	51.9	11	35	2								
EUREKA	83.01	43.5	11	34	0						16	47	
MAGADAN	83.70	344.6	11	36	-1								
VICTORIA	84.08	33.0	11	39K	0								
GLEN CANYON	84.61	47.5	11	43	1								
BLUE MTS.	85.20	38.5	11	45	0	21	33	1					

PEKING	85.89	315.3	11	48K	0				13	47	
SALT LAKE C.	86.37	44.1	11	50	0						
PENTICTON	86.54	33.9	11	51K	0						
UINTA BASIN	87.65	45.3	11	56	0				13	55	
FLAMING GRGE	88.06	44.9	11	58	0	22	2	3			21 38 SKS
COLLEGE	88.11	12.4	11	57	-2	21	57	-2	13	54	15 38 PP
SIAN	88.24	307.5	12	1K	2				14	2	
BUTTE	88.63	39.3	12	1	0				14	3	
N-LAZARVSKYA	88.80	183.2	12	0	-2						
HUNGRY HORSE	89.03	36.8	12	2	-1						
BOZEMAN	89.36	40.2	12	5	1						
KUNMING	89.38	297.0	12	6K	1				14	7	
BANFF	89.75	33.9	12	5	-1						
CHENGTU	90.51	302.5	12	8K	-2				14	8	
YAKUTSK	92.05	338.1	12	15K	-2						
LANCHOW	92.78	307.4	12	21	1						
WICHITA MTS.	93.07	54.2	12	20	-2	22	50	7	14	18	15 59 PP
TULSA	95.64	53.9	12	32	-1	22	18	-3			29 50 SS
YELLOWKNIFE	96.40	24.7	12	35A	-2						
FAYETTEVILLE	96.91	54.2	12	38	-1						
TIKSI	98.68	345.1	12	44	-3						
SHILLONG	98.75	294.0	12	47A	0						
MOULD BAY	102.69	12.1	12	58	-7						17 19 PKP
CHATRA	103.15	293.9	17	23A	256						
RESOLUTE	107.70	16.1	17	28A	777						
DEHRA DUN	111.77	295.4	17	38A	0						
NEW DELHI	112.15	293.4	17	40K	1						
ALERT	113.39	7.4	17	40A	-1						
ALMATA	114.57	309.2	17	42A	-2						
SHAWINIGAN	114.84	47.2	17	43	-1						
SAN JUAN	116.07	79.0	17	47	0						
FRUNSE	116.23	308.5	17	46K	-1						
WARSAK DAM	117.80	298.4	17	49	-1						
TRINIDAD	118.38	88.7	17	51	0						
SCHEFFERVLLE	118.59	37.9	17	50	-1						
QUETTA	121.23	293.5	17	57K	0						
SVERDLOVSK	123.97	325.6	18	0	-2						
KIMBERLEY	126.43	204.9	18	6	-1						
SCORESBY SD.	127.92	10.0	18	8	-1						
KEVO	128.40	349.2	18	9	-1						21 32 PKS
ASHKABAD	128.62	302.7	18	11	0						
VANNOVSKAYA	128.82	302.7	18	11	0						
APATITY	128.90	345.1	18	10A	-1						
TROMSOE	129.73	352.4	18	12	-1						
SODANKYLA	130.54	347.8	18	6	-8						20 50 SKP
KIRUNA	131.21	350.9	18	0	-16						18 14
CHILEKA	131.72	224.5	18	16	-1						
BULAWAYO	132.05	214.4	17	58	-19						18 16
SHIRAZ	133.69	291.9	18	1	-19						20 49 PP
TEHERAN	134.36	300.4	18	21	-1						21 55
VIBORG	135.55	341.6	18	21	-3						
PULKOVO	135.83	339.9	18	23K	-1						21 56 PKS
MOSCOW	135.87	331.8	18	28	4						21 7 PP
SKALSTUGAN	136.32	353.4	18	12	-13						18 24
BROKEN HILL	136.72	218.9	18	12	-14						
NURMIJARVI	136.88	343.9	18	15	-11						21 11 SKP
HELSINKI	137.09	343.4	18	18	-9						
KIROVOBAD	137.42	308.3	18	21	-6						
UPPSALA	139.07	348.1	18	21	-9						22 5 PKS
KONGSBERG	140.44	354.0	18	26K	-7						
GOTEBORG	142.07	351.4	18	30	-7						
KARLSKRONA	142.91	347.5	18	30	-8						
BANDEIRA	143.21	198.3	18	36K	-2						21 55 PP
COPENHAGEN	143.94	350.0	18	38K	-1						
SIMFEROPOL	143.98	320.2	18	39K	0						
LWIRO	145.45	232.4	18	43A	1						
DURHAM	145.59	3.8	18	44	2						
LWOW	145.87	334.4	18	41	-1						20 46
KRAKOW	147.21	338.6	18	44	0						18 49 PKP2
KSARA	147.25	301.1	18	45	1				20	52	21 51 *SPKP
CHORZOW	147.32	339.8	18	44	-1						18 48 PKP2
WITTEVEEN	147.47	354.8	18	49K	4						
UZHGOROD	147.50	334.7	18	44	-1						
RACIBORZ	147.76	340.4	18	46	1						18 53 PKP2
COLLMBERG	148.01	347.0	18	45	0						22 20 PP
HALLE	148.03	348.3	18	45	0				20	57	
JERUSALEM	148.28	297.7	18	46	0						21 51
JENA	148.65	348.4	18	51	5				20	53	22 23 PP

PRAGUE	148.83	344.6	18	51	4				19	16	
PRUHONICE	148.88	344.4	18	46	-1						
KEW	148.96	2.9	18	47A	0				18	52	PKP2
BENSBERG	149.26	353.7	18	47	0	21	0				
HURBANOVO	149.67	338.3	18	52	4	21	4				
BRATISLAVA	149.78	339.8	18	46	-2				20	55	
KASPERSKE H.	149.91	344.9	18	53K	5	20	54				
VIENNA-H.	149.94	340.8	18	49	1				21	0	
DOURBES	150.32	356.7	18	48	-1				22	28	PP
HEIDELBERG	150.60	351.2	18	49	0				19	11	
STUTTGART	151.13	350.1	18	50	0	21	6				
BELGRADE	151.30	332.2	18	58	8				21	3	
TUBINGEN	151.40	350.3	18	50	-1						
SOFIA	151.50	326.0	18	51	0				19	11	
STRASBOURG	151.54	352.1	18	51	0						
PARIS	151.67	359.4	19	0	9				19	10	PKP2
EBINGEN	151.75	350.2	18	50	-1						
RAVENSBURG	152.03	349.1	18	51	0						
LJUBLJANA	152.47	341.1	18	51K	-1	21	0		19	12	PKP2
BESANCON	153.05	354.1	18	53	0				19	14	
TRIESTE	153.06	341.8	18	53	0	21	3		19	15	PKP2
GARCHY	153.19	358.5	19	1K	8	21	2		22	55	PP
PADOVA	153.80	344.3							19	21	
ATHENS	154.36	317.7	18	54	-1						
ROSELEND	154.52	352.6	18	56	1				19	22	
FLORENCE X.	155.48	343.9	18	55	-1						
MONACO	156.33	350.3	18	56	-1						
TOLEDO	159.90	13.8	19	2A	0	21	1		23	30	PP
M.BOUR	160.86	105.2	19	3	1				36	16	*PPP
ALICANTE	161.99	6.5	19	3	-1						
GRANADA	162.58	15.3	19	44A	40						

JANUARY 15 22.H 17.M 54.S EPICENTRE -31.32 -13.43 DEPTH= 56.KM

A= 0.83243 B=-0.19878 C=-0.51725 D=-0.2323 E=-0.9727
G=-0.5031 H= 0.1201 K=-0.8558 HT= 1.4

DEPTH OF FOCUS= 0.004R

SE= 2.01

	DELTA DEG.	AZ. DEG.	P M	S	O-C S	S M	S	O-C S	*PP M	S	SUPP. M	S	
HERMANUS	27.54	105.2	5	46	3	10	20	1					
BANDEIRA	29.41	62.3	6	1A	1								
KIMBERLEY	33.07	95.5	6	30	-2								
LUANDA	33.39	53.7	6	34A	-1								
BULAWAYO	39.26	83.8	7	23	-1								
BROKEN HILL	41.81	76.0	7	46	1								
M.BOUR	45.56	355.2	8	15	-1	15	0	7					
CHILEKA	46.67	82.0	8	24	-1								
LWIRO	49.20	62.5	8	45A	1	15	52	7					
ANTOFAGASTA	50.64	263.8	8	55	0	16	11	6					
AREQUIPA	54.54	271.5	9	25	1								
SOUTH POLE	58.85	180.0	9	54	-1								
HUANCAYO	59.89	274.0	10	4	2								
TRINIDAD	62.08	304.3	10	18	1	18	54	18					
CARACAS	65.98	300.1	10	42	0	19	56	32					
BOGOTA	67.86	290.3	10	50	-4								
FUQUENE	68.09	291.2	10	57	1								
ALMERIA	68.59	9.4	10	54	-5								
GRANADA	68.76	8.4	11	3K	3						13	7	PP
CHINCHINA	69.31	289.6	11	2	-1	20	24	20					
ALICANTE	70.35	10.8	11	17	8						16	37	
TOLEDO	71.37	7.6	11	15A	-1						11	25	PCP
MESSINA	74.26	23.4									21	13	
BAGNERES	75.07	10.3	11	38	1								
ROME	76.67	19.6	11	47	1						12	34	
JERUSALEM	77.85	40.8	11	54	1								
FLORENCE X.	78.07	18.0	11	49	-5						12	20	
ROSELEND	78.78	14.2	11	57	-1								
GARCHY	79.64	11.3	11	58	-5								
KSARA	79.75	39.9	12	4	1	21	59	-1			14	58	PP
BESANCON	80.14	13.3	12	6	1								
TRIESTE	80.48	19.0	12	9	2						14	3	
PARIS	81.03	10.6	12	11	1								
SOFIA	81.03	26.5	12	11	1								

LJUBLJANA	81.06	19.3	12	11	1							
ZAGREB	81.28	20.3	12	15	4							
STRASBOURG	81.77	14.0	12	13	-1					13	52	
BELGRADE	81.82	23.6	12	14A	0	22	30	8		12	25	PCP
ISTANBUL UN.	81.98	31.0	12	14	-1					15	39	PP
ISTANBUL KA.	82.04	31.1	12	14	-1					22	26	PCP
STUTTGART	82.27	14.9	12	16	-1							
DOURBES	82.62	11.6	12	19	1							
HEIDELBERG	82.75	14.4	12	18	-1							
VIENNA-H.	83.59	19.5	12	23	0					14	17	
KASPERSKE H.	83.64	17.5	12	22K	-1					15	33	PP
BRATISLAVA	83.73	20.0	12	23	-1							
BENSBERG	83.92	12.9	12	25A	0							
PRAGUE	84.72	17.6	12	29	0							
JENA	84.82	15.6	12	29	0					16	4	PP
HALLE	85.43	15.6	12	33	1					15	49	PP
COLLMBERG	85.50	16.3	12	33	0					15	50	PP
KRAKOW	86.25	20.8	12	36	0							
SHIRAZ	87.19	52.7	12	41	0					15	15	PP
TEHERAN	90.26	47.4	12	57	1	24	3	20		16	27	PP
CHAPEL HILL	90.88	312.3	13	1	3							
PALISADES	91.09	318.8				23	36	-14				
CUMBERLAND	94.92	308.9	13	17	0	23	24	1				
QUETTA	97.75	59.5	13	32	2							
UMEA	98.49	14.4				25	12	67				
TULSA	102.10	304.6								27	11	SP
WICHITA MTS.	103.52	302.4	14	2	6					18	11	PP
NEW DELHI	104.74	65.4								18	37	
UINTA BASIN	113.79	303.8	18	34	2					19	32	PP
CHINA LAKE	118.14	296.7								20	0	
BLUE MTS.	120.64	306.6	18	47	2					20	1	PP
YELLOWKNIFE	122.35	327.4	18	49	0							
ESEN BULAK	124.95	52.7								20	45	
ULAN-BATOR	132.33	51.8								21	44	
COLLEGE	136.33	333.8	19	17	2							

JANUARY 16 5.H 44.M 53.S EPICENTRE 51.48-179.84 DEPTH= 38.KM

A=-0.62542 B=-0.00179 C= 0.78029 D=-0.0029 E= 1.0000
G=-0.7803 H=-0.0022 K=-0.6254 HT= -6.0

DEPTH OF FOCUS= 0.001R

SE= 1.33

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
PETROPAVLOVK	13.27	285.1	4	15A	67								
COLLEGE	21.25	38.7	4	44	-1	8	24	-10			12	22	SCP
YAKUTSK	28.85	311.1	5	55A	-2								
MATUSIRO	33.16	259.8	6	34	-1								
MOULD BAY	33.76	22.0	6	42A	2								
VICTORIA	35.62	72.0	6	57A	1								
YELLOWKNIFE	35.63	46.4	6	56A	0								
PENTICTON	37.50	68.9	7	12A	0								
BANFF	39.01	64.3	7	23	-1								
RESOLUTE	39.93	24.4	7	33A	1								
MINERAL	40.99	82.2	7	44A	3								
BLUE MTS.	41.09	73.8	7	42	0	13	57	5					
HUNGRY HORSE	41.21	67.5	7	43	0								
CALISTOGA	41.40	84.9	7	44A	0								
BERKELEY	42.07	85.6	7	50K	0						8	12	
RENO	42.58	81.9	7	55K	1								
ALERT	42.65	9.9	7	56	2								
LICK	42.78	85.8	7	55A	-1								
BUTTE	43.27	69.6	8	0	0								
PRIEST	44.15	86.4	8	7A	0								
BOZEMAN	44.36	69.2	8	9	1								
PEKING	44.73	281.3	8	11	0								
EUREKA	44.98	79.4	8	13	0	15	0	12			8	27	
ULAN-BATOR	45.69	295.8	8	18	-1								
SALT LAKE C.	46.72	75.3	8	27	0								
NORD	46.86	3.3	8	29	1								
PASADENA	46.99	86.7	8	33	4								
BOULDER CITY	47.88	82.4	8	36	0								
FLAMING GRGE	48.10	73.6	8	38	0								
PAOTOW	48.13	285.8	8	38A	0								

UINTA BASIN	48.37	74.3	8 40	0	15 40	3				
GLEN CANYON	49.24	79.1	8 46	-1						
LARAMIE	50.14	70.9	8 53	-1						
GOLDEN	51.27	72.3	9 2	0						
ESEN BULAK	52.47	299.8	9 14A	3						
ALBUQUERQUE	53.70	77.6	9 2U	0			9 33			
LANCHOW	54.77	285.4	9 29A	1						
LUBBOCK	57.44	75.7	9 46	-1						
LAWRENCE	57.67	66.7	9 47	-2						
TROMSOE	58.43	352.4	9 53	-1						
WICHITA MTS.	58.61	72.5	9 55	0	18 15	20		12	9	PP
APATITY	58.70	345.7	9 5UA	-6						
TULSA	59.45	69.6	9 59	-2						
SODANKYLA	59.81	348.5	10 3A	-1						
KIRUNA	60.05	351.3	10 5	0						
SCHEFFERVLLE	60.36	37.8	10 6A	-2						
SVERDLOVSK	61.16	326.9	10 13K	0						
KUNMING	63.07	277.1	10 25	-1						
SHAWINIGAN	64.02	47.2	10 30K	-2						
BREBEUF	64.41	48.5	10 13	-21						
ALMATA-2	64.42	307.8	10 35K	0						
PRZHEVALSK	64.49	306.6	10 36A	1						
SKALSTUGAN	64.89	354.0	10 37A	-1						
CUMBERLAND	65.53	63.3	10 40	-2						
VIBORG	65.82	345.0	10 42	-2						
FRUNSE	66.09	309.2	10 46	1						
NURMIJARVI	66.64	347.1	10 48A	-1						
LHASA	66.91	288.9	10 52	2						
HELSINKI	66.92	346.8	10 50	-1						
PALISADES	67.66	51.9			20 11	23				
UPPSALA	68.14	350.6	10 57A	-1						
MOSCOW	68.74	338.3	11 2A	0						
TASHKENT	69.80	311.4	11 9A	1						
GOTEBORG	70.76	353.3	11 14A	0						
CHATRA	71.27	289.6	11 18A	1						
CHITTAGONG	71.83	283.1	11 20	-1						
DUZHANBE	72.20	310.0	11 25	2						
DEHRA DUN	73.83	298.3	11 33A	1						
NEW DELHI	75.64	297.8	11 43A	0						
HALLE	76.92	352.5	11 50	0						
COLLMBERG	77.03	351.8	11 51	0				11	6	PCP
CHARTERS TS.	77.21	212.5	11 50	-2						
KRAKOW	77.46	347.1	11 53	0				12	8	PCP
JENA	77.51	352.6	11 52	-1				14	52	PP
PRUHONICE	78.18	350.6	11 58	1						
UZHGOROD	78.49	345.2	11 59	0						
DOURBES	78.73	357.1	12 2	2						
KASPERSKE H.	79.12	351.1	12 2A	0						
QUETTA	79.82	306.0	12 7A	1						
KIROVOBAD	79.82	326.1	12 6	0						
STUTTGART	79.83	353.9	12 7	1						
GARCHY	81.59	358.0	12 16	1						
TEHERAN	82.23	320.2	12 18	-1						
ROSELEND	83.06	355.4	12 24	1				12	53	
SHIRAZ	87.05	316.4	12 43A	0				15	58	PP
KARAPIRO	89.12	183.7	12 51	-2						
SAN JUAN	89.67	60.4	12 57	2						

JANUARY 16 21.H 8.M 33.S EPICENTRE -11.11 111.51 DEPTH= 38.KM

A=-0.35983 B= 0.91315 C=-0.19149 D= 0.9304 E= 0.3666
G= 0.0702 H=-0.1782 K=-0.9815 HT= 6.4

DEPTH OF FOCUS= 0.001R

SE= 2.41

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S
LEMBANG	5.73	317.6	1	27	2	2	35	4				
DJAKARTA	6.74	316.3	1	38	-1	2	42	-14				
TANGERANG	6.88	315.1	1	41	-1	2	53	-6				
DARWIN	18.96	95.7	4	22	1							
PERTH	21.12	169.8	4	43	-1	8	43	11				
NHATRANG	23.29	354.3	5	7	1	9	28	16				
BAGUIO CITY	28.79	18.3	6	3	6	10	41	-2				
ADELAIDE	34.30	138.2	6	48	3	12	15	6				

CHARTERS TS.	34.58	109.3	6	46	-2				14	7
PORT MORESBY	35.10	90.6	6	47	-5					
KUNMING	37.01	346.7	7	11	3	12	55	4		
CHITTAGONG	38.46	329.9	7	20	0					
MADRAS	39.25	306.8	7	28	1				8	6
TOOLANGI	40.28	136.6	7	35	0				9	16
SHILLONG	41.17	332.5	7	40K	-3					
CANBERRA	41.66	131.5	7	47	0					
BRISBANE	41.97	118.7	7	51	2	14	15	10		
CHENGTU	42.15	350.4	7	52	1	14	8	0		
RIVERVIEW	42.67	128.4							17	21
ZO-SE	42.98	12.2	7	59	1	14	20	0		
LHASA	45.06	334.5	8	16K	2	14	52	2		
SIAN	45.18	357.0	8	16	1					
POONA	47.41	308.1	8	32K	-1					
LANCHOW	47.46	351.6	8	34	1	15	26	2		
PEKING	51.06	4.6	8	59	-2					
PADTOW	51.45	358.6	9	3	-1	16	20	0		
NEW DELHI	51.54	320.7	9	2K	-3					
DEHRA DUN	52.27	322.9	9	10K	0					
MATUSIRO	53.66	26.7	9	17	-3					
LAHORE	55.39	321.2	9	30	-3					
ESEN BULAK	58.86	347.7	9	59	1					
ULAN-BATOR	58.91	356.4	9	55	-3					
QUETTA	59.35	315.1	10	0K	-1	18	12	7		
ALMATA-2	62.44	332.5	10	22A	0					
KARAPIRO	62.80	126.9	10	23	-2					
FRUNSE	63.40	330.4	10	29K	1					
DUZHANBE	63.50	323.5	10	27	-2					
Y.-SAKHLINSK	64.24	23.2	10	38K	4					
SEMIPALATNSK	67.06	338.9	10	50	-2					
ASHKABAD	69.64	317.6	11	8	0					
SHIRAZ	69.76	307.3	11	9K	0	20	15	1	39	16 PKPPKP
VANNOVSKAYA	69.80	317.4	11	9	0					
TEHERAN	73.35	312.6	11	29	-1					
YAKUTSK	74.28	8.8	11	34K	-2	21	3	-2		
AFIAMALU	74.65	101.5	11	43	5					
GORIS	78.61	314.2	12	0	0					
SOUTH POLE	78.96	180.0	12	0	-2					
KIROVOBAD	79.09	315.3	12	2	-1					
SVERDLOVSK	79.60	334.3	12	5A	0					
BULAWAYO	79.65	251.4	12	6	0					
TIFLIS	80.58	315.8	12	17	6					
BROKEN HILL	80.63	257.1	12	11	0					
LWIRO	82.42	269.2	12	23A	3					
N-LAZARVSKYA	82.76	199.2	12	21	-1					
TIKSI	83.37	5.5	12	18K	-7					
JERUSALEM	84.39	303.8	12	32	2					
KSARA	84.45	305.9	12	34	4				14	26
BYRD STATION	85.36	172.2	12	35	0					
MOSCOW	90.21	327.1	12	59	1					
KAJAANI	97.20	333.9	13	30	0					
COLLMBERG	103.90	320.2	17	59	239					
YELLOWKNIFE	119.05	22.5	18	46	1					
PENTICTON	123.22	37.5	18	53	0					
BLUE MTS.	126.46	41.7	19	2	2				21	59 PP
HUNGRY HORSE	126.96	36.6	19	3	2					
WOODY	128.38	53.1	19	7	4					
EUREKA	129.40	47.6	19	8	3					
UINTA BASIN	133.56	43.9	19	16	3				21	49 PP
GOLDEN	136.68	42.4	19	24	5					
WICHITA MTS.	143.91	44.5	19	31	-1				22	50 SKP
SHAWINIGAN	144.50	5.1	19	34	1					
TULSA	145.07	40.6	19	36	2					
ANTOFAGASTA	145.35	176.9	19	47	13					
BREBEUF	145.45	6.4	19	47A	12					
FAYETTEVILLE	145.96	38.9	19	38	3					
LONDON ONT.	146.33	16.9	19	40A	4					
HALIFAX	146.35	353.7	19	41	5					
MORGANTOWN	149.83	17.8	19	44A	2					
PALISADES	149.84	8.2	19	49	7					
CUMBERLAND	151.12	29.7	19	52	8				20	8 PKP2
AREQUIPA	152.44	173.8	19	34	-11					
LA PAZ	152.56	180.8	19	54	8	20	6			

JANUARY 17 20.H 41.M 12.5 EPICENTRE 25.67 125.41 DEPTH= 113.KM

A=-0.52289 B= 0.73552 C= 0.43081 D= 0.8150 E= 0.5794
G=-0.2496 H= 0.3511 K=-0.9024 HT= 3.2

DEPTH OF FOCUS= 0.013R

SE= 2.06

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
ZO-SE	6.57	326.4	1	36	0	2	48	-2					
NANKING	8.62	319.1	2	6K	3	3	47	8					
BAGUIO CITY	10.25	207.0	2	22	-3	4	18	-1					
MATUSIRO	15.40	42.2	3	35	3	6	29	9					
PEKING	16.27	333.9	3	45K	2	6	51	12	4	6			
SIAN	16.64	304.8	3	50K	2				4	10	4	21	*SP
CHANGCHUN	18.12	359.8	4	5K	0	7	30	10					
VLADIVOSTOK	18.20	15.4	3	59	-7								
CHENGTU	19.50	289.6	4	20K	-1	7	55	6	4	40	4	50	*SP
PAOTOW	19.63	323.0	4	23K	1	8	0	8					
KUNMING	20.49	273.4	4	32K	1	8	20	12			4	57	*SP
LANCHOW	21.18	304.4	4	38K	0	8	27	6	4	59	5	6	*SP
Y.-SAKHLINSK	25.35	28.4	5	17	-1								
ULAN-BATOR	26.57	331.5	5	27K	-2	9	49	-4					
SHILLONG	30.20	277.2	6	0K	-2								
LHASA	30.63	285.3	6	6K	0	11	8	10					
CHITTAGONG	30.81	271.0	6	8	1								
IRKUTSK	30.99	334.6	6	7	-2	11	5	1					
ESEN BULAK	31.09	319.2	6	19K	9								
CHATRA	34.23	280.5	6	37K	0								
YAKUTSK	36.46	3.4	6	50K	-6								
PETROPAVLOVK	36.94	33.4	7	0K	0								
RABAUL	39.44	135.0	7	22	2								
PORT MORESBY	40.78	146.0	7	32A	1	14	8	35			9	32	PP
DEHRA DUN	41.84	287.5	7	41K	1						13	18	
SEMIPALATNSK	42.41	317.7	7	44K	-1								
NEW DELHI	42.78	285.1	7	47K	-1	14	2	-1			13	18	
FRUNSE	44.64	305.8	8	3K	0								
LAHORE	44.90	289.8	8	5	0	14	42	9					
WARSAK DAM	47.00	293.5	8	22	0								
POONA	48.06	272.4	8	30K	0								
TASHKENT	48.53	303.4	8	32K	-1								
DUZHANBE	48.97	299.8	8	37K	0								
CHARTERS TS.	49.79	154.0	8	43	0						10	4	
SVERDLOVSK	55.16	322.7	9	21A	-2								
ASHKABAD	57.19	300.0	9	39	2								
VANNOVSKAYA	57.38	300.0	9	39	0								
ADELAIDE	61.61	167.6	10	6A	-2						10	33	
TEHERAN	63.09	298.7	10	19	1								
SHIRAZ	63.69	291.9	10	19K	-3	18	42	-3	10	36	12	46	PP
RIVERVIEW	64.03	156.3									19	29	
CANBERRA	64.64	158.8	10	28A	0				11	0	10	54	PCP
TOOLANGI	65.67	162.6	10	34A	0								
COLLEGE	65.72	27.9	10	34	-1	19	13	3	11	10	19	56	
KIROVOBAD	65.82	305.0	10	35K	0	19	15	4					
GORIS	66.10	303.8	10	35K	-2								
TIFLIS	66.68	306.5	10	40	-1								
APATITY	67.31	335.4	10	43K	-2						11	12	PCP
MOSCOW	67.97	322.4	10	47K	-2								
SODANKYLA	69.88	336.0	10	59	-2								
KAJAANI	70.50	332.5	11	3K	-1								
PULKOVO	70.67	327.7	11	5K	0								
MOULD BAY	70.97	13.2	11	6K	-1	20	15	3					
NORD	71.25	354.5	11	7	-2								
KIRUNA	71.94	337.3	11	12K	-1								
ALERT	71.98	1.1	11	12K	-1								
HELSINKI	73.06	329.1	11	19	0						11	36	PCP
NURMIJARVI	73.08	329.5	11	19K	-1						11	35	PCP
UMEA	73.66	333.5	11	22K	-1								
UPPSALA	76.54	330.4	11	39	0								
RESOLUTE	76.56	10.2	11	39K	-1								
SKALSTUGAN	76.90	335.0	11	40K	-1								
JERUSALEM	77.10	299.1	11	44	2								
LWOW	77.71	319.5	11	46	0								
UZHGOROD	79.25	318.9	11	55	1								
YELLOWKNIFE	80.09	24.1	11	59K	0								
GOTEBORG	80.17	330.0	11	59K	0								
RACIBORZ	80.94	321.5	11	59	-4						12	18	PCP
SCORESBY SD.	81.36	349.4	12	6	1								

BELGRADE	82.13	316.0	12	10	0	21	21	-52			12	50
VIENNA-H.	82.90	320.5	12	15	2							
PRUHONICE	83.02	322.6	12	15	1							
COLLMBERG	83.15	324.2	12	15	0						15	27 PP
HALLE	83.59	324.8	12	19	2							
VICTORIA	83.97	38.6	12	20K	1							
KASPERSKE H.	84.01	322.2	12	18	-1						13	16
JENA	84.10	324.4	12	19	0				12	54		
LJUBLJANA	85.12	319.2	12	26	1							
MUNSTER	85.52	326.7	12	28	2							
PENTICTON	85.61	36.5	12	28	1							
BENSBERG	86.35	326.1	12	31K	0							
STUTTGART	86.55	323.5	12	32	0							
DOURBES	88.17	326.4	12	45	6							
HUNGRY HORSE	89.15	35.1	12	47	3							
BLUE MTS.	89.51	39.2	12	47	1				13	13		
ROSELEND	89.84	322.1	12	49	2						13	28
MONACO	90.58	320.2	12	51	0							
BUTTE	91.40	36.2	12	57	3	23	50	9			13	21
EUREKA	93.54	42.9	13	6	2						16	50 PP
WOODY	93.93	47.3	13	7	1							
UINTA BASIN	96.79	39.1	13	23	4						17	20 PP
SCHEFFERVLLE	99.16	7.1	13	30K	0							
WICHITA MTS.	106.89	36.7	18	35	777						19	34
CUMBERLAND	112.40	27.0									19	10 PP

JANUARY 18 3.H 12.M 7.S EPICENTRE 33.12 135.96 DEPTH= 444.KM

A=-0.60326 B= 0.58339 C= 0.54382 D= 0.6952 E= 0.7188
G=-0.3909 H= 0.3780 K=-0.8392 HT= 0.8

DEPTH OF FOCUS= 0.065R

SE= 1.84

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S
SIOMISAKI	0.36	334.3	0	54	-1	1	36	-3				
OWASE	0.97	11.9	0	56	0	1	38	-2				
WAKAYAMA	1.29	329.5	0	58	0	1	42	-1				
TOKUSIMA	1.49	309.8	0	59	0							
MUROTO	1.50	275.4	0	59A	0	1	44	0				
SUMOTO	1.50	324.6	0	57A	-2	1	42	-2				
NARA	1.56	356.1	0	58	-1	1	43	-2				
OSAKA	1.57	346.9	1	3	4	1	44	-1				
KOBE	1.68	337.6	0	59	0	1	44	-2				
ABUYAMA	1.77	349.6	0	58A	-2	1	44	-3				
KAMEYAMA	1.78	13.7	0	58	-2	1	44	-3				
KYOTO	1.90	354.3	1	0	0	1	45	-3				
TAKAMATU	1.99	307.5	1	2	1							
KOTI	2.08	282.6	1	1A	0	1	49	0				
HIKONE	2.16	6.3	1	1	-1	1	50	0				
HAMAMATU	2.17	42.1	1	0A	-2	1	50	0				
NAGOYA	2.21	22.0	1	0	-2	1	49	-2				
OKAYAMA	2.30	313.1	1	3	0	1	54	2				
GIHU	2.37	16.2	1	2	-1	1	50	-3				
MAIZURU	2.39	348.8	1	2	-1	1	51	-2				
OMAESAKI	2.39	51.3	1	4	1	1	54	1				
ASHIZURI	2.52	261.7	1	3	-1	1	52	-3				
TOYOOKA	2.58	338.9	1	9	4	1	58	3				
SHIZUOKA	2.74	47.0	1	5K	-1	1	56	-1				
MATUYAMA	2.75	286.0	1	6	0	1	59	2				
TOTTORI	2.80	328.8	1	5	-1	1	57	-1				
IIDA	2.85	32.4	1	6K	-1	1	58	-1				
UWAZIMA	2.86	273.1	1	6	-1	1	58	-1				
HUKUI	2.93	4.3	1	5	-2	1	57	-3				
YONAGO	3.16	317.6	1	6A	-3	2	1	-2				
MISIMA	3.18	50.4	1	7K	-2	2	1	-2				
HIROSIMA	3.19	293.9	1	8	-1	2	3	0				
HATIDYOZIMA	3.21	89.3	1	9	0							
AJIRO	3.24	52.7	1	8	-1	2	2	-2				
OSIMA	3.28	59.0	1	8K	-2	2	2	-3				
HUNATU	3.32	43.6	1	11	1	2	3	-2				
KOHU	3.33	39.5	1	8	-2	2	2	-3				
MATSUE	3.33	315.0	1	11	1	2	5	0				
MATUMOTO	3.53	27.4	1	14	2	2	8	0				
OOITA	3.64	272.9	1	15	2	2	12	2				

MERA	3.68	59.8	1	12	-1	2	7	-4			
HAMADA	3.69	299.9	1	13	0	2	9	-2			
TOYAMA	3.71	15.6	1	20	7	2	11	0			
YOKOHAMA	3.83	52.0	1	12	-2	2	9	-4			
TITIBU	3.84	41.2	1	13	-2	2	11	-2			
OIWAKE	3.85	33.0	1	13	-2	2	10	-3			
MATUSIRO	3.88	27.9	1	13K	-2	2	10	-4			
NAGANO	3.99	26.8	1	16	0	2	10	-5			
MIYAZAKI	4.02	253.9				2	8	-7			
TOKYO C.M.O.	4.04	49.8	1	15	-1	2	12	-4			
HONGO	4.07	49.6	1	13	-4	2	13	-4			
KUMAGAYA	4.13	42.1	1	15K	-2	2	13	-5			
MAEBASI	4.15	37.2	1	16K	-1	2	13	-5			
SIMONOSEKI	4.28	282.5	1	15	-3						
WAZIMA	4.32	10.0	1	24	5	2	16	-5			
TAKADA	4.39	24.7	1	19	-1	2	14	-8			
KUMAMOTO	4.43	267.5	1	19	-1	2	23	0			
KAKIOKA	4.66	47.1	1	19K	-3	2	20	-6			
HUKUOKA	4.69	277.1	1	24	2	2	28	1			
UTUNOMIYA	4.70	42.1	1	20	-2	2	20	-7			
SAGA	4.75	273.1				2	37	9			
TYOSI	4.80	56.0	1	21A	-2	2	24	-5			
KAGOSIMA	4.83	252.8				2	28	-1			
MITO	4.94	47.5	1	21K	-4	2	26	-5			
NAGASAKI	5.13	267.3	1	27	0	2	36	2			
AIKAWA	5.23	20.3	1	26K	-2	2	29	-7			
SHIRAKAWA	5.30	40.0	1	25K	-3	2	31	-7			
ONAHAMA	5.57	45.3	1	28K	-3	2	35	-7			
HUKUSIMA	5.91	37.3	1	32	-2	2	43	-6			
YAMAGATA	6.24	33.7	1	35K	-3	2	49	-6			
SENDAI	6.52	36.6	1	38A	-3	2	53	-7			
SAKATA	6.56	27.4				2	57	-4			
ISINOMAKI	6.86	37.9	1	40K	-5	2	58	-9			
MIZUSAWA	7.31	33.4	1	52	3	3	8	-8			
AKITA	7.38	25.7				3	14	-6			2 47
MORIOKA	7.79	31.1	1	52	-3	3	19	-6			
MIYAKO	8.12	34.9	2	1	3	3	23	-9			
AOMORI	8.60	25.3				3	37	-5			
HATINOHE	8.64	29.5									2 39
HAKODATE	9.47	22.3				3	51	-10			
MORI	9.68	20.8				3	57	-7			
TOMAKOMAI	10.48	23.4				4	11	-10			
SAPPORO	10.80	21.6	2	26	-2	4	22	-4			
HIROO	10.84	30.4	2	26	-3						
OBIHIRO	11.32	28.1				4	34	-2			2 56
ASAHIGAWA	11.76	23.4	2	37K	-2	4	41	-4			
KUSIRO	11.87	31.6	2	38	-2	4	45	-2			
ABASHIRI	12.67	28.4				5	2	-1			
NEMURO	12.68	33.7	2	48	-1	5	4	1			
ZO-SE	12.69	264.8	2	45K	-4						
CHANGCHUN	13.55	325.2	2	57A	-1	5	21	1			
NANKING	14.52	270.5	3	6K	-2	5	40	1			
PEKING	17.31	299.1	3	36K	0	6	34	3			
BAGUIO CITY	21.67	223.6	4	16	-2						
PAOTOW	21.99	297.2	4	21K	0	7	50	-1			
CANTON	22.27	249.1	4	24	0						
SIAN	22.51	280.4	4	26K	0	7	57	-3			
ULAN-BATOR	26.38	312.7	5	0	-1	9	2	0			
LANCHOW	26.55	285.4	5	1K	-1	9	2	-3			
CHENGTU	27.18	273.5	5	7K	-1						
KUNMING	30.00	263.3	5	32	-1						
ESEN BULAK	32.93	305.6	5	58	0	10	45	1			
LHASA	38.29	277.2	6	43	1	12	5	1			
PORT MORESBY	43.61	163.9	7	25	0						
DEH-A DUN	48.81	283.2	8	5	0						
NEW DELHI	50.03	281.5	8	15	1						
CHARTERS TS.	53.82	168.0	8	40	-2						
COLLEGE	54.75	30.5	8	46	-3						
MOULD BAY	61.51	15.3	9	34A	0						
ALERT	64.27	2.6	9	52A	0						10 48
NORD	64.64	355.7	9	53	-2						
SODANKYLA	66.80	336.6	10	7	-1						
RESOLUTE	67.46	12.9	10	12A	0						
KAJAANI	68.10	333.3	10	15	-1						
KIRUNA	68.54	338.4	10	18A	-1						
CANBERRA	69.17	168.6	10	23A	1						
YELLOWKNIFE	69.39	27.9	10	23A	-1						
SHIRAZ	69.44	292.5	10	24K	0	18	54	-1	10	35	12 58 PP
THULE	69.66	5.9	10	23	-2						

TOOLANGI	70.89	172.0	10	33	0							
UMEA	70.98	335.0	10	32A	-1							
NURMIJARVI	71.23	330.9	10	34A	-1							
HELSINKI	71.30	330.5	10	35	0							
VICTORIA	72.34	43.3	10	42A	1							
SKALSTUGAN	73.85	337.2	10	48A	-2							
UPPSALA	74.43	332.5	10	52A	-1							
SCORESBY SD.	75.48	352.5	10	59	0							
HUNGRY HORSE	77.67	39.9	11	12	1						13	6
MINERAL	77.73	49.8	11	12A	1							
BLUE MTS.	77.86	44.2	11	13	1			11	50			
CALISTOGA	78.02	51.7	11	14A	1							
GOTEBORG	78.06	332.9	11	11	-2							
BERKELEY	78.65	52.2	11	17A	1							
RENO	79.32	49.7	11	17A	-3							
LICK	79.35	52.4	11	21A	1							
BUTTE	79.86	41.2	11	24	1						13	18
PRIEST	80.67	52.9	11	28A	1							
CHATEAU	80.78	149.9	11	28	1							
BOZEMAN	80.92	40.8	11	28	0							
EUREKA	81.78	48.0	11	34	1			13	13			
COLLMBERG	82.15	327.9	11	34	0							
PRUHONICE	82.36	326.2	11	36A	1							
JENA	83.04	328.3	11	38	-1			13	20			
PASADENA	83.48	53.4	11	42	1							
SALT LAKE C.	83.51	45.1	11	43	2						13	39
ROXBURGH	83.88	157.1	11	43	0							
UINTA BASIN	85.14	44.3	11	51	2						14	56 PP
GLEN CANYON	86.05	47.9	11	54	0							
ROSELEND	89.14	327.2	12	7	-1							
ALBUQUERQUE	90.52	46.7	12	16	1							
WICHITA MTS.	95.31	42.4	12	37	0						16	34 PP
BROKEN HILL	112.28	266.9									26	15
SOUTH POLE	122.94	180.0	18	5	0							
CARACAS	131.44	30.7									21	11
HUANCAYO	144.52	61.1	18	48	3							
AREQUIPA	150.20	62.9	19	3	9							
LA PAZ	152.68	58.6	19	2K	4							

JANUARY 24 9.H 29.M 20.S EPICENTRE -6.24 113.23 DEPTH= 599.KM

A=-0.39207 B= 0.91358 C=-0.10796 D= 0.9190 E= 0.3944
G= 0.0426 H=-0.0992 K=-0.9942 HT= 6.9

DEPTH OF FOCUS= 0.089R

SE= 2.47

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S
LEMBANG	5.60	263.7	1	37	-1	2	55	-1				
DJAKARTA	6.36	270.2	1	26	-18	3	4	-4				
DARWIN	18.40	110.6	3	44	4	6	42	5				
BAGUIO CITY	23.66	17.8	4	29	1	7	58	-4				
MUNDARING	25.75	174.2	4	48	2							
KUNMING	32.80	342.3	5	49K	3	10	24	0				
PORT MORESBY	33.74	97.5	5	58K	4	10	42	4			9	19 PPP
CHARTERS TS.	34.89	116.4	6	8	4	10	59	4				
CHITTAGONG	35.32	324.2	6	7	0	10	58	-4				
ADELAIDE	37.01	144.0	6	24A	3	11	28	1			8	5 PP
CHENGTU	37.74	347.0	6	27K	0	11	33	-4				
SHILLONG	37.82	327.6	6	28K	0	11	33	-6				
ZO-SE	37.90	11.1	6	30K	2	11	38	-2				
NANKING	38.45	7.6	6	34K	1	11	48	0				
CHATRA	41.45	323.6				12	26	-4				
LHASA	41.56	330.3	6	58K	0	12	29	-3				
TOOLANGI	42.82	141.4	7	12A	4						9	8 PP
LANCHOW	42.98	348.8	7	10K	1	12	51	-1				
BRISBANE	43.03	123.9									9	14
CANBERRA	43.80	136.3	7	18A	3						10	44 SCP
PEKING	46.12	3.1	7	32K	-1							
PAOTOW	46.68	356.7	7	36	-1							
MATUSIRO	48.57	27.0	7	50	-1	14	9	-1				
NEW DELHI	49.02	316.8	6	51K	-64							
DEHRA DUN	49.58	319.1	7	59A	0							
CHANGCHUN	51.02	11.2	8	7	-2							

ULAN-BATOR	54.21	354.8	8	31K	-1	15	23	-2			
ESEN BULAK	54.54	345.6	8	34K	0						
WARSAK DAM	56.17	318.3	8	43	-3						
QUETTA	57.25	311.9	8	50K	-3	16	0	-4			
ALMATA-2	59.02	330.1	9	9	4						
Y.-SAKHLINSK	59.11	23.1	9	5K	0						
ANDIJAN	59.93	324.9	9	10K	-1						
FRUNSE	60.11	328.0	9	10K	-2						
DUZHANBE	60.71	321.0	9	13	-3						
TASHKENT	62.09	323.7	9	23K	-2						
SEMIPALATNSK	63.21	337.0	9	30K	-2						
ASHKABAD	67.29	315.5	9	48	-9						
SHIRAZ	68.27	305.2	10	1K	-2	18	10	-8			
YAKUTSK	69.24	8.2	10	9K	0					12	6 PP
TEHERAN	71.40	310.8	10	20	-2	18	49	-4			
SVERDLOVSK	76.01	333.3	10	46	-2						
GORIS	76.50	313.0	10	49A	-1						
TIFLIS	78.34	314.7	11	0	0						
TIKSI	78.40	5.0	10	59K	-1						
BULAWAYO	82.84	250.5	11	24K	1						
BROKEN HILL	83.41	256.2	11	27K	1						
SOUTH POLE	83.80	180.0	11	29	1						
HELSINKI	94.50	329.9	12	17	-1						
NURMIJARVI	94.68	330.2	12	17	-1						
KIRUNA	96.79	337.6	12	26A	-2						
UMEA	96.88	333.5	12	26	-2						
COLLEGE	99.42	25.3	12	42	2					16	7
PENTICTON	118.33	36.3	17	41	1						
MINERAL	120.48	46.5	17	46A	2						
LICK	121.41	49.8	17	49K	3						
BLUE MTS.	121.69	40.2	17	48	2					20	24 PP
HUNGRY HORSE	122.04	35.3	17	49	2						
RENO	122.05	46.8	17	54K	7						
BUTTE	124.09	37.1	17	53	2						
PASADENA	125.08	52.4	17	56	3	19	50			20	18
BOZEMAN	125.18	36.8	17	56	3						
BOULDER CITY	127.02	49.1	18	0	4	20	14			19	59 PP
SALT LAKE C.	127.12	42.4	17	59	2						
FLAMING GRGE	128.67	41.1	18	3	3						
UINTA BASIN	128.85	41.8	18	3	3					21	28 PKS
ALBUQUERQUE	133.63	46.4	18	9	0					20	46 SKP
WICHITA MTS.	139.21	41.7	18	13	-6					21	20 PP
TULSA	140.25	38.0	18	17	-4						
FAYETTEVILLE	141.09	36.4	18	20	-4					21	30
MORGANTOWN	144.70	17.7	18	31K	2						
PALISADES	144.80	9.4	18	31	1						
CUMBERLAND	146.06	28.1	18	33	2						

JANUARY 24 22.H 27.M 38.S EPICENTRE 8.05 126.98 DEPTH= 113.KM

A=-0.59566 B= 0.79110 C= 0.13913 D= 0.7989 E= 0.6015
G=-0.0837 H= 0.1111 K=-0.9903 HT= 6.8

DEPTH OF FOCUS= 0.013R

SE= 2.20

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S
MANILA	8.76	319.2	2	8	3	4	0	17				
BAGUIO CITY	10.40	323.7	2	28	1	4	50	28				
CANTON	19.88	320.3	4	21	-3	8	1	4				
DARWIN	20.65	169.3	4	32	0	8	16	5				
ZO-SE	23.56	347.5	5	1A	0	9	18	15				
LEMBANG	24.31	233.1	5	8	0	9	32	16				
NANKING	25.08	343.4	5	15A	0	9	43	14				
PORT MORESBY	26.54	130.4	5	28K	-1							
RABAUL	27.92	115.0	5	44	3							
KUNMING	28.68	309.2	5	47A	-1							
MATUSIRO	30.15	18.2	6	0	-1	10	43	-8				
TUKUBASAN	30.49	21.2				11	6	10			12	28
CHENGTU	31.10	319.4	6	9	-1							
PEKING	33.28	344.8	6	27	-1	11	47	8				
CHARTERS TS.	33.79	146.1	6	33	0	11	53	6				
PORT BLAIR	33.93	278.9	6	37	3						11	4
LANCHOW	34.97	326.2	6	43	0							
VLADIVOSTOK	35.20	6.3	6	46	1	12	19	10				

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.

CHANGCHUN	35.67	357.9	6	49A	0	12	31	15					
CHITTAGONG	36.67	296.8	6	57	0	12	44	13					
HONIARA	37.15	117.2	6	54	-7	12	48	9					
SHILLONG	37.68	301.8	7	3A	-3	13	13	26			15	24	SS
CALCUTTA	39.78	295.6	7	24	1	13	24	5			9	1	PP
LHASA	39.96	307.3	7	26A	1	13	30	9					
Y.-SAKHLINSK	41.10	16.4	7	35	1								
MUNDARING	41.10	194.0	7	33	-1	13	33	-5					
PERTH	41.18	194.5	7	35	0	13	45	6			16	52	SS
BOKARO	42.40	296.6	7	44	-1	14	6	9			16	40	SS
BRISBANE	43.19	145.6	7	47	-4								
ULAN-BATOR	43.23	340.3	7	50	-1	14	30	21					
ADELAIDE	44.20	166.1	7	29K	-30	14	29	6			13	11	
MADRAS	46.22	280.3	8	15	0	15	2	10			10	5	PP
ESEN BULAK	46.41	330.8	8	16	-1	15	15	20					
RIVERVIEW	47.55	152.5	8	31	5	15	12	1			18	46	SS
IRKUTSK	47.83	341.4	8	28A	0								
TOOLANGI	48.57	160.3	8	34	0	15	34	9			19	9	SS
DEHRA DUN	50.77	302.7	8	52	2	16	7	11			15	11	
NEW DELHI	51.05	300.3	8	50A	-2						10	52	
POONA	52.58	287.1	9	3K	-1								
BOMBAY	53.57	287.5	9	8	-3	16	54	20			11	8	PP
YAKUTSK	53.90	1.6	9	13	-1	16	39	1					
LAHORE	54.17	303.2	9	14	-2								
MAGADAN	54.47	14.6	9	13	-5								
ALMATA	55.97	317.5	9	27K	-2								
WARSAK DAM	57.03	305.4	9	23	-13								
SEMIPALATNSK	57.23	326.3	9	36	-2	17	31	8					
FRUNSE	57.37	316.2	9	42A	3	17	37	13					
KHOROG	57.92	309.3	9	43	1	17	45	13					
QUETTA	60.13	300.1	9	57A	-1	18	7	7					
DUZHANBE	60.31	309.9	9	58A	-1	18	14	12					
TASHKENT	60.65	313.1	10	UA	-1								
KARAPIRO	64.34	138.9	10	28	2								
AFIAMALU	64.57	109.5	10	36	9	19	12	16					
ROXBURGH	65.41	148.6									23	50	55
ASHKABAD	68.25	307.6	10	51	1								
SVERDLOVSK	70.45	327.7	11	2	-2	20	15	9					
SHIRAZ	72.58	298.5	11	15A	-1	20	36	6	11	53	14	5	PP
HONOLULU	73.11	70.2				21	39	3					
TEHERAN	73.66	304.8	11	23	0								
KIROVOBAD	77.72	309.8	11	45	-1								
GORIS	77.72	308.6	11	46A	0								
TIFLIS	78.86	310.9	11	53	1								
EREVAN	79.12	309.3	11	54A	1								
COLLEGE	80.72	25.5	12	3	1						17	13	
MOSCOW	83.04	325.3	12	10	-4								
APATITY	83.98	337.3	12	19A	0	22	41	9					
SIMFEROPOL	86.39	314.7	12	34	3								
PULKOVO	86.45	329.8	12	33	2	23	7	11					
SODANKYLA	86.59	337.6	12	32	0								
VIBORG	87.02	330.8	12	34	0	23	6	5					
MOULD BAY	87.72	12.7	12	39	2						17	49	
KIRUNA	88.76	338.7	12	42	0	23	16	-1					
NORD	88.83	355.0	12	42	0								
HELSINKI	89.00	330.7	12	45	2								
NURMIJARVI	89.06	331.1	12	44	1	23	36	16			16	2	PP
ALERT	89.47	1.2	12	48	3						16	14	
KISHINEV	89.69	317.4	12	46	0								
UMEA	90.10	334.9	12	49	1	23	20	-10			16	26	PP
LWOW	92.16	320.8	13	0	2	23	41	-7					
UPPSALA	92.61	331.5	12	59	-1	23	36	-16					
WARSAW	93.31	323.7	13	2	-1						13	34	
SKALSTUGAN	93.48	336.0	13	4K	0								
RESOLUTE	93.55	10.2	13	6	2								
UZHGOROD	93.58	320.0	13	7	3								
KRAKOW	94.63	321.8	13	10	1						13	16	PCP
YELLOWKNIFE	95.48	24.2	13	15	2								
GOTEBORG	96.16	330.7	13	16	0								
PRUHONICE	97.91	323.0	13	26	2								
COLLMBERG	98.30	324.6	13	27	1						17	34	PP
LWIRO	98.41	268.9	13	30	4						17	30	PP
KASPERSKE H.	98.82	322.4	13	29	1								
JENA	99.27	324.6	13	31	1						17	52	PP
STUTTGART	101.55	323.3									17	48	
BLUE MTS.	101.99	40.9	13	51	9						17	44	PP
ROME	102.36	315.9									33	50	
STRASBOURG	102.53	323.6									15	48	

EUREKA	105.10	45.6	14 2	777				
UINTA BASIN	109.13	42.5						20 21
ALBUQUERQUE	113.91	46.2	18 31	6				
TOLEDO	114.29	320.4	19 24A	58				28 27
WICHITA MTS.	119.48	42.5	18 40	4				20 11 PP
TULSA	120.59	39.8						29 57 PS
CUMBERLAND	126.85	33.2	18 54	4				20 55 PP
SAN JUAN	150.73	26.1	19 42	9				
CARACAS	156.95	37.1	20 17	35	27 32	58		
LA PAZ	163.03	121.1	19 55	7				

JANUARY 25 0.H 16.M 5.S EPICENTRE -20.38 169.64 DEPTH= 129.KM

A=-0.92288 B= 0.16874 C=-0.34615 D= 0.1799 E= 0.9837
G= 0.3405 H=-0.0623 K=-0.9382 HT= 4.6

DEPTH OF FOCUS= 0.015R

SE= 1.30

	DELTA DEG.	AZ. DEG.	P M S	O-C S	S M S	O-C S	*PP M S	SUPP. M S
PORT VILA	2.91	334.4	0 46	0	1 21	-1		
NOUMEA	3.53	236.7	0 55	0	1 37	1		
KOUMAC	5.03	267.0	1 15	1	2 13	1		
BRISBANE	16.92	242.4	3 49	-1				
KARAPIRO	18.23	164.9	4 6	1				
AFIAMALU	18.88	73.0	4 14	1				
CHATEAU	19.44	166.1	4 17	-1				
CHARTERS TS.	21.94	266.7	4 45	1	8 41	8		
CANBERRA	23.48	226.3	5 1K	2			5 31	
PORT MORESBY	24.28	293.4	5 7K	1				
ROXBURGH	25.04	180.5	5 12	-1				
TOOLANGI	27.08	225.6	5 33K	1			6 1	6 22 *SP
ADELAIDE	30.85	235.4	6 6	0				
DARWIN	38.00	275.9	7 8	1				
MUNDARING	48.89	244.9	8 34	0				
BAGUIO CITY	60.48	303.6	9 55	-3				
MATUSIRO	63.93	332.1	10 20	-1				
CHANGCHUN	75.71	328.5	11 32K	-1				
PEKING	78.05	320.9	11 46K	0				
KUNMING	79.19	301.9	11 53K	1				
LANCHOW	83.76	312.0	12 18	2				
BERKELEY	86.25	47.4	12 29K	1				13 1
CALISTOGA	86.41	46.6	12 29K	0				13 1
LICK	86.43	48.1	12 29K	0				13 2
PRIEST	86.55	49.5	12 31K	2				13 2
PASADENA	87.45	52.2	12 34	0			13 6	
MINERAL	87.91	45.5	12 37K	1				
SHILLONG	88.23	298.0	12 35K	-3				
LHASA	90.51	301.4	12 50	2				
BOULDER CITY	90.71	51.8	12 50	1			13 22	
COLLEGE	91.02	16.8	12 48	-3			13 20	
EUREKA	91.37	48.2	12 53	1			13 25	
TUCSON	92.26	56.5	12 57	1				
BLUE MTS.	92.79	42.9	12 58	-1			13 31	
PENTICTON	93.40	38.2	13 1	-1				
GLEN CANYON	93.49	51.9	13 2	0				
UINTA BASIN	96.22	49.4	13 14	0			13 46	
MOULD BAY	105.25	13.6	18 6	777				
SHIRAZ	122.86	292.7	18 41K	0				19 12
BULAWAYO	124.53	225.8	18 45A	1				
SAN JUAN	127.57	82.1	18 50	0				
UMEA	131.95	342.3	18 57A	-1				
NURMIJARVI	132.92	337.2	19 0	0				
COLLMBERG	144.11	334.9	19 19	-1			19 52	
HALLE	144.36	336.0	19 20	-1				
PRUHONICE	144.46	332.1	19 21	0				
JENA	144.96	335.7	19 22	0				20 1
DURHAM	145.02	351.1	19 22K	0				
WITTEVEEN	145.04	341.9	19 22K	0				
KASPERSKE H.	145.51	331.9	19 24K	1				19 56
ATHENS	145.71	308.2	19 24	1				
BENSBERG	146.50	339.8	19 26K	2				
LJUBLJANA	147.26	327.2	19 29	3				20 2
STUTTGART	147.58	335.5	19 29	3				20 2
DOURBES	148.05	341.7	19 31	4				

STRASBOURG	148.31	336.8	19	32	5					20	43
WELSCHBRUCH	148.96	338.2	19	33	5					20	5
GARCHY	151.03	340.9	19	38	7						
ROSELEND	151.14	334.9	19	39	7						
ISOLA	152.19	332.5	19	40	7						

JANUARY 25 12.H 49.M 51.S EPICENTRE 21.75 143.77 DEPTH= 270.KM

A=-0.74987 B= 0.54949 C= 0.36846 D= 0.5911 E= 0.8066
G=-0.2972 H= 0.2178 K=-0.9296 HT= 4.2

DEPTH OF FOCUS= 0.037R

SE= 2.99

	DELTA DEG.	AZ. DEG.	P M	S	O-C S	S M	S	O-C S	*PP M	S	SUPP. M	S
GUAM	8.30	173.4	1	48	-10				3	25		
OSIMA	13.53	344.4				5	23	-5				
MERA	13.57	346.1	2	58	-5							
SIOMISAKI	13.63	330.4	3	1	-3	5	31	1				
OMAESAKI	13.70	340.3	3	1	-4							
AJIRO	13.87	343.8	3	1	-6	5	33	-2				
OWASE	13.97	333.1				5	41	4			5	0
HAMAMATU	13.97	338.9	3	3	-5	5	35	-2				
MISIMA	13.97	343.4	3	4	-4	5	34	-3				
SHIZUOKA	13.99	341.5	3	4	-4	5	47	9				
YOKOHAMA	14.10	346.1	3	5A	-5	5	38	-2				
TYOSI	14.15	350.2	3	6	-4	5	37	-4				
MUROTO	14.26	325.5	3	11	0	5	48	5				
TOKYO C.M.O.	14.31	346.7	3	11	-1	5	42	-3				
HONGO	14.34	346.8				5	55	10				
HUNATU	14.38	343.4	3	9	-4	5	45	-1				
ASHIZURI	14.51	321.1	3	15	0	5	54	5				
KAMEYAMA	14.54	335.4	3	19	4	5	54	4				
KOHU	14.59	342.9	3	12	-4	5	48	-3				
NAGOYA	14.64	337.4	3	13	-3	5	53	1				
NARA	14.65	333.3	3	15	-1	5	56	4				
IIDA	14.67	340.5	3	13	-3	5	53	1				
OSAKA	14.75	332.4	3	17	0	5	53	-1				
TITIBU	14.75	344.9	3	16	-1	5	50	-4				
KAKIOKA	14.76	348.5	3	15	-3	5	56	1				
TUKUBASAN	14.77	348.3	3	12K	-6	5	47	-8				
SUMOTO	14.77	330.0	3	15K	-3	5	56	1				
KOTI	14.83	324.6	3	16	-2	6	0	4				
KUMAGAYA	14.85	346.0	3	14K	-5	5	51	-5				
MITO	14.86	349.6	3	16A	-3	5	55	-2				
ABUYAMA	14.92	332.9	3	16A	-3	6	7	9				
MIYAZAKI	14.95	315.2	3	20	0	6	11	12				
KYOTO	14.98	333.6	3	41	21	5	57	-2				
HIKONE	14.99	335.6	3	18	-2	6	6	6				
MAEBASI	15.16	345.4	3	18	-4	6	9	6				
TAKAMATU	15.16	327.7	3	19	-3	6	7	4				
OIWAKE	15.22	343.8	3	20	-3	6	6	1				
MATUMOTO	15.30	342.0	3	21	-3	6	10	4				
ONAHAMA	15.35	351.3	3	21K	-3	6	6	-1				
MATUYAMA	15.46	323.5	3	25	-1	6	20	10				
MATUSIRO	15.51	343.0	3	22A	-4	6	8	-3				
MAIZURU	15.51	333.6				6	17	6				
SHIRAKAWA	15.62	349.4	3	25	-3	6	17	4				
NAGANO	15.63	343.2	3	27	-1	6	19	5				
HUKUI	15.69	336.9	3	25	-3	6	14	-1				
OOITA	15.70	319.3	3	26K	-2	6	28	13				
TOYOOKA	15.80	332.2	3	27	-3	6	24	7				
ASOSAN	15.81	317.3	3	29	-1							
TOYAMA	15.95	340.5	3	39	8	6	24	4				
KUMAMOTO	16.00	316.3	3	30	-2	6	31	10				
TAKADA	16.02	343.8				6	30	9				
HUKUSIMA	16.20	350.6	3	31	-3	6	22	-3				
YONAGO	16.40	328.5	3	31	-5	6	33	4				
NAGASAKI	16.48	314.5	3	35A	-2	6	39	8				
SAGA	16.53	316.7	3	36	-2	6	41	9				
SIMONOSEKI	16.61	319.7	3	35	-3							
HAMADA	16.64	324.4	3	36K	-3	6	42	8				
SENDAI	16.65	352.1	3	35	-4	6	36	2				
HUKUOKA	16.70	317.7	3	39	0	6	44	9				
YAMAGATA	16.70	350.6	3	37	-3	6	37	1				

ISINOMAKI	16.75	353.3	3	37K	-3	6	39	2			
AIKAWA	16.90	344.9	3	41	-1	6	42	2			
MIZUSAWA	17.47	353.2	3	47	-1	6	58	7			
MIYAKO	17.91	355.5	3	52	0	7	4	5			
MORIOKA	18.03	353.5	3	53	0	7	8	6			
AKITA	18.18	350.9				7	15	10			
AOMORI	19.18	353.1				7	33	9			
HAKODATE	20.16	353.5	4	16	1	7	51	10			
MORI	20.46	353.2	4	36	18				8	0	
HIROO	20.47	359.1							8	14	
HWALIEN	20.53	280.4	4	21	3						
TAIPEI	20.67	283.4	4	30	10						
HSINKONG	20.75	277.9	4	22	1						
TOMAKOMAI	20.90	355.5	4	22	0						
TAITUNG	20.96	277.0	3	49	-34						
OBIHIRO	21.11	358.8	4	3U	6	8	30	32			
KUSIRO	21.17	1.3	4	27	2	8	12	13			
SUTTSU	21.19	352.8	4	18	-7	8	8	9			
ALISHAN	21.27	279.1	3	47	-39						
SAPPORO	21.35	355.1	4	26	0	8	7	5			
NEMURO	21.57	3.6	4	29	0	8	13	7			
ASAHIGAWA	22.00	357.3	4	33A	0	8	21	8			
ABASHIRI	22.21	1.0	4	35	0	8	23	6			
ZO-SE	22.23	299.4	4	32A	-3						
BAGUIO CITY	22.53	260.4	4	35	-3	8	37	15			
MANILA	22.66	255.7	4	39	0	8	32	8			
NANKING	24.48	304.1	4	53A	-3						
Y.-SAKHLINSK	25.22	358.3	5	1	-2						
CHANGCHUN	26.82	329.5	5	14	-3	9	38	6			
RABAUL	27.07	161.3							5	54	
CANTON	28.14	278.5	5	26	-3						
PEKING	29.70	314.1	5	40	-3	10	21	3			
PORT MORESBY	31.14	173.5	5	50K	-5	10	33	-7	12	5	
SIAN	33.03	299.7	6	9A	-3						
PETROPAVLOVK	33.24	16.4	6	13K	-1						
PAOTOW	34.15	311.1	6	20A	-1	11	31	4			
CHENGTU	36.60	292.4	6	39A	-3						
LANCHOW	37.48	301.3	6	49A	0						
KUNMING	37.69	283.3	6	50A	-1						
MAGADAN	38.09	5.8	6	54	0	12	32	5			
ULAN-BATOR	39.38	320.5	7	3A	-2	12	49	3			
YAKUTSK	41.39	350.0	7	20A	-1	13	20	4			
CHARTERS TS.	41.66	176.5	7	20	-4	13	31	12			
ESEN BULAK	45.53	314.3	7	55A	1	13	59	-16			
SHILLONG	47.45	285.2	8	12	3						
LHASA	47.82	290.8	8	12	0						
BRISBANE	49.62	169.5	8	14	-12						
KIPAPA	53.84	78.8	8	57	0				9	43	
AFIAMALU	56.19	125.1								9	59
ADELAIDE	56.61	185.0	9	14	-3					10	2 PCP
SEMIPALATNSK	56.74	316.8	9	15A	-3	16	51	3			
CANBERRA	56.98	174.9	9	16	-3				10	0	10 22 *SP
ALMATA-2	58.43	308.2	9	30K	1						
TOOLANGI	59.03	178.4	9	31	-2						10 19 PCP
NEW DELHI	59.97	291.2	9	38A	-2						
COLLEGE	61.37	26.9	9	48	-1						10 45
LAHORE	61.93	295.0	9	51	-2						
WARSAK DAM	63.83	298.2	9	55	-10						
TASHKENT	64.56	306.5	10	10A	0	18	33	7			
DUZHANBE	65.33	303.6	10	13A	-2						
KARAPIRO	66.46	153.0								11	6
CHATEAU	67.53	153.7								11	17
SVERDLOVSK	68.35	324.0	10	32K	-2						
QUETTA	68.41	294.9	10	33A	-1	19	19	6			
WELLINGTON	69.00	155.4								11	34
MOULD BAY	70.67	14.6	10	48A	0					11	34
VANNOVSKAYA	73.67	304.8	11	5	-1						
ALERT	75.21	3.4	11	14A	0					12	5
VICTORIA	75.82	43.2	11	17A	-1						
YELLOWKNIFE	76.15	27.9	11	19A	-1						
NORD	76.37	357.1	11	18	-3						
SEATTLE	76.80	43.9	11	26	3						
RESOLUTE	76.90	13.5	11	23A	-1						
APATITY	77.52	338.4	11	26A	-1	20	56	2			
PENTICTON	77.96	41.7	11	29A	-1						
KEVO	78.48	341.5	11	31	-1						
TEHERAN	79.46	304.2	11	38	0	21	25	10			
CALISTOGA	79.47	52.6	11	38A	0					12	25
MINERAL	79.62	50.8	11	39A	1					12	25

BANFF	79.77	39.0	11	38A	-1							
SODANKYLA	79.88	339.5	11	38A	-2				12	21	12	49 *SP
BERKELEY	79.96	53.3	11	41A	1						12	26
THULE	80.10	7.3	11	40	-1							
SHIRAZ	80.58	298.1	11	43	-1	21	29	3	12	8	14	39 PP
LICK	80.61	53.6	11	44A	0						12	31
TROMSOE	80.84	343.1	11	43	-2							
MOSCOW	80.93	326.6	11	44A	-1	21	34	4				
BLUE MTS.	81.00	45.4	11	46	0	21	38	7				
RENO	81.19	51.0	11	47A	0							
KIROVOBAD	81.52	310.3	11	48	0	21	40	4				
KIRUNA	81.55	341.3	11	47A	-2				12	40		
HUNGRY HORSE	81.75	41.2	11	50	0				12	35		
PRIEST	81.76	54.5	11	51A	1						12	37
GORIS	81.93	309.2	11	51	0							
TIFLIS	82.19	311.7	11	52	0							
PULKOVO	82.49	332.1	11	52	-1	21	50	4				
VIBORG	82.65	333.3	11	53A	-1	21	49	2				
BUTTE	83.61	42.9	11	59	0				12	46	14	41
EUREKA	83.97	50.0	12	1	0				12	48	13	4 *SP
UMEA	84.12	338.2	11	59A	-3						12	45
CHINA LAKE	84.19	53.9									20	36
PASADENA	84.39	55.6	12	3	0				12	49		
NURMIJARVI	84.47	334.3	12	1A	-2				12	54	13	22 *SP
HELSINKI	84.54	333.9	12	2A	-2						13	22 *SP
BOZEMAN	84.72	42.8	12	5	0				12	55		
BOULDER CITY	86.19	52.8	12	12	0				13	0	21	31 SCS
SALT LAKE C.	86.31	47.5	12	13	1				13	0	13	29 *SP
SKALSTUGAN	86.90	340.4	12	13	-2				13	9		
UPPSALA	87.63	335.9	12	16	-3				13	8		
FLAMING GRGE	87.92	46.5	12	20	0				13	6		
UINTA BASIN	88.07	47.1	12	21	0	22	46	7				
TUCSON	90.78	54.8	12	34	1							
KARLSKRONA	90.92	333.9	12	29	-5							
LWOW	91.03	325.8	12	33	-2							
GOLDEN	91.20	46.1	12	36	1						13	24
GOTEBORG	91.25	336.4	12	33	-3							
COPENHAGEN	92.52	334.8	12	40K	-2							
UZHGOROD	92.65	325.5	12	42	0							
ALBUQUERQUE	92.76	50.7	12	43	0				13	30		
KRAKOW	92.98	327.6	12	42	-2						16	24 PP
COLLMBERG	95.41	331.5	12	53	-2						16	48 PP
PRUHONICE	95.63	329.8	12	54	-2						16	49
HALLE	95.73	332.1	12	55	-1						16	49 PP
JENA	96.30	331.9	12	56	-3						17	1
KASPERSKE H.	96.67	329.7	12	59	-1						16	56
BENSBERG	98.15	334.0	13	6	-1							
WICHITA MTS.	98.42	47.5	13	7	-1				14	0	15	54
STUTTGART	98.90	331.5									17	14 PP
LWIRO	113.98	277.5	18	9	2							
BROKEN HILL	118.44	264.9	18	17	2							
BULAWAYO	119.83	258.6	18	19A	1							
KIMBERLEY	124.88	249.4	18	25	-3							
BANDEIRA	132.64	269.5	18	42A	-1						21	49 SKP
LA PAZ	149.45	85.7	19	14	2				20	8		

JANUARY 27 1.H 6.M 52.S EPICENTRE 25.41 128.43 DEPTH= 41.KM

A=-0.56209 B= 0.70851 C= 0.42670 D= 0.7834 E= 0.6215
G=-0.2652 H= 0.3343 K=-0.9044 HT= 3.2

DEPTH OF FOCUS= 0.001R

SE= 1.72

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S
NANKING	10.75	310.3	2	33	-2							
BAGUIO CITY	11.56	220.8	2	45	-1	4	54	0				
MATUSIRO	13.90	34.7	3	17	0	5	45	-6				
PEKING	17.83	327.8	4	6A	-1	7	25	3				
VLADIVOSTOK	17.90	8.3	4	14	6	7	25	2				
CHANGCHUN	18.55	352.9	4	14A	-2	7	37	-1				
SIAN	19.06	302.1	4	21	-1							
PAOTOW	21.54	319.1	4	47	-1	8	40	1				
CHENGTU	22.16	289.2	4	53	-1	8	52	1				
KUNMING	23.22	274.8	5	6K	1	9	15	5				

LANCHOW	23.59	302.6	5	8	0	9	19	3			
Y.-SAKHLINSK	24.38	24.2	5	15K	-1						
ULAN-BATOR	28.16	328.5	5	51A	0	10	45	13			
ESEN BULAK	33.09	317.5	6	36A	2	11	50	0			
LHASA	33.33	285.8	6	39	3	11	57	4			
YAKUTSK	36.61	1.0	7	3K	-1	12	43	-1			
CALCUTTA	36.62	274.1								12	51
CHATRA	36.96	281.5	7	9K	2						
RABAUL	37.38	138.6	7	12	1						
MAGADAN	37.52	18.6	7	14	2						
SEMIPALATNSK	44.45	317.1	8	8	-1						
DEHRA DUN	44.52	288.2	8	11	1	14	51	9			
ALMATA-2	45.04	306.6	8	15	1						
NEW DELHI	45.48	285.9	8	27K	10	14	57	2			
TIKSI	46.26	0.2	8	22K	-2	15	5	-2			
FRUNSE	47.01	305.7	8	30A	1						
LAHORE	47.55	290.4	8	33	-1						
CHARTERS TS.	48.43	157.4	8	40	-1						
ANDIJAN	48.62	302.9	8	43	1	15	43	3			
WARSAK DAM	49.60	294.0	8	50	0						
POONA	50.79	273.8	8	56K	-1						
TASHKENT	50.95	303.6	9	0	0	16	17	5			
DUZHANBE	51.46	300.1	9	4	0	16	24	5			
QUETTA	54.03	289.9	9	22K	-1	16	58	4			
SVERDLOVSK	57.02	322.6	9	43	-1						
CANBERRA	63.46	161.3	10	27	-1						
TOOLANGI	64.66	165.1	10	36K	0				10	51	11 17 PCP
COLLEGE	64.67	28.0	10	35	-1						
TEHERAN	65.59	299.5	10	41	-1						
SHIRAZ	66.31	292.8	10	46K	-1	19	36	4	11	3	13 32 *PPP
KIROVOBAD	68.19	305.7	10	59K	0	20	0	6			
APATITY	68.67	335.7	11	0K	-2						
TIFLIS	69.02	307.2	11	4	0						
MOSCOW	69.83	322.9	11	8K	-1						
KEVO	70.26	338.8	11	10	-1						
MOULD BAY	70.59	13.6	11	12K	-1						
SODANKYLA	71.22	336.4	11	16K	-1						
ALERT	72.18	1.5	11	22	-1						
PULKOVO	72.33	328.3	11	24	0						
VIBORG	72.71	329.5	11	25K	-1						
TROMSOE	72.90	339.8	11	26	-1						
KIRUNA	73.22	337.9	11	28K	-1				11	41	
HELSINKI	74.67	329.7	11	37	0						11 50 PCP
NURMIJARVI	74.67	330.1	11	36K	-1						11 50 PCP
UMEA	75.10	334.1	11	38K	-2				11	51	
RESOLUTE	76.32	10.8	11	46K	-1						
KARAPIRO	76.97	143.5	11	51	1						
THULE	77.88	4.0	11	55	0						
UPPSALA	78.10	331.2	11	56K	-1				12	8	
SKALSTUGAN	78.27	335.8	11	56K	-2				12	10	
YELLOWKNIFE	79.19	24.9	12	2K	-1						
ROXBURGH	79.76	15 .1	12	4	-2						
KARLSKRONA	80.95	328.5	12	12	0				12	27	
UZHGOROD	81.22	319.8	12	14	1						
KONGSBERG	81.58	333.3	12	21	6						
GOTEBORG	81.74	330.9	12	15K	-1				12	30	
KRAKOW	81.88	321.9	12	16	-1						12 31 PCP
SCORESBY SD.	82.09	350.3	12	19	1						
VICTORIA	82.45	39.6	12	20K	0						
COPENHAGEN	82.69	329.1	12	22	1						
RACIBORZ	82.83	322.5	12	24	2						12 28 PCP
PENTICTON	84.18	37.6	12	29	0						
VIENNA-H.	84.81	321.5	12	34K	2				12	48	
PRUHONICE	84.86	323.6	12	33	1						
COLLMBERG	84.93	325.3	12	33	1						15 51 PP
BANFF	85.32	34.6	12	33	-1						
HALLE	85.35	325.8	12	35	1				12	49	
KASPERSKE H.	85.86	323.3	12	37	0						13 41
JENA	85.88	325.5	12	38	1						15 53 PP
LJUBLJANA	87.08	320.4	12	41	-2						
MINERAL	87.76	46.0	12	46K	0						
BLUE MTS.	87.96	40.5	12	47	0	23	29	3			
CALISTOGA	88.00	47.8	12	48A	1						
STUTTGART	88.36	324.7	12	49	0						
BERKELEY	88.62	48.3	12	51A	1						
PRIEST	90.62	49.1	13	2A	2						
ROSELEND	91.70	323.4	13	4	-1						
EUREKA	91.85	44.3	13	6	1						
GARCHY	92.51	326.2	13	7	-1						

PASADENA	93.41	49.7	13 12	-1							
BOULDER CITY	94.62	46.6	13 19	1						17	4 PP
FLAMING GRGE	94.96	40.1	13 20	0							
UINTA BASIN	95.25	40.6	13 21	0				13 37			
WICHITA MTS.	105.43	38.7								18	29 PP
HUANCAYO	153.93	63.7	19 51	4							

JANUARY 27 11.H 47.M 37.S EPICENTRE 59.43-153.34 DEPTH= 89.KM

A=-0.45676 B=-0.22936 C= 0.85952 D=-0.4487 E= 0.8937
G=-0.7681 H=-0.3857 K=-0.5111 HT= -8.7

DEPTH OF FOCUS= 0.009R

SE= 1.98

	DELTA DEG.	AZ. DEG.	P M S	O-C S	S M S	O-C S	*PP M S	SUPP. M S	
COLLEGE	6.04	23.0	1 29	1	2 33	-3			
SITKA	9.79	96.3	2 13	-6	3 58	-10			
YELLOWKNIFE	18.85	64.1	4 13K	-2					
VICTORIA	20.52	108.9	4 30	-3					
MOULD BAY	20.61	22.4	4 33K	-1					
SEATTLE	21.66	109.2	4 53	9					
PENTICTON	21.85	102.6	4 45	-1					
BANFF	22.77	94.5	4 54	-1					
HUNGRY HORSE	25.29	98.5	5 22	3			5 36		
RESOLUTE	25.88	31.3	5 25K	0					
BLUE MTS.	26.08	107.9	5 25	-2			5 45		
PETROPAVLOVK	26.94	277.6	5 34	0					
MINERAL	27.56	119.7	5 39A	-1			5 58		
BUTTE	27.60	100.8	5 40	0			5 58		
MAGADAN	27.65	294.7	5 40	-1					
CALISTOGA	28.54	123.1	5 47K	-2			6 6		
BOZEMAN	28.61	99.8	5 49	0			6 8		
BERKELEY	29.33	123.5					6 13		
LICK	30.04	123.2	6 1A	-1			6 19		
EUREKA	30.83	113.6	6 9	0			6 28	9 3	PCP
PRIEST	31.47	123.2	6 14K	-1			6 33		
ALERT	31.69	14.5	6 16	-1				6 36	
FLAMING GRGE	32.89	104.4	6 26	-1			6 45	19 31	
UINTA BASIN	33.26	105.3	6 30	0			6 49		
BOULDER CITY	34.19	116.0	6 38	0			6 57	9 36	PP
PASADENA	34.23	121.9	6 38	-1			6 57		
GLEN CANYON	34.91	111.3	6 44	0					
YAKUTSK	35.67	308.0	6 50A	-1					
ALBUQUERQUE	39.00	107.7	7 18	-1			7 38	13 8	SCP
TUCSON	39.13	114.9	7 20	0					
LAWRENCE	41.50	92.9	7 39	0					
WICHITA MTS.	43.09	100.0	7 52	0				13 22	SCP
TULSA	43.57	96.3	8 12	16					
FAYETTEVILLE	44.24	94.7	8 19	17					
SCORESBY SD.	45.90	20.6	8 16	1					
SHAWINIGAN	47.17	68.2	8 44	19					
BREBEUF	47.53	69.7	8 27	-1					
MATUSIRO	48.65	273.7	8 36	0				9 59	PCP
CUMBERLAND	49.03	87.6	8 40	1			8 57		
PALISADES	50.74	73.9			16 43	44			
KIRUNA	52.96	3.0	9 29	20					
SODANKYLA	53.51	0.0	9 12	-1			9 33	9 49	*SP
UMEA	56.97	3.4	9 36	-2				10 31	PCP
VIBORG	60.17	358.8	10 1	1					
NURMIJARVI	60.38	1.1	10 0	-2			10 22	10 38	*SP
KONGSBERG	60.51	9.8	10 4	1				10 44	PCP
HELSINKI	60.73	1.0	10 3	-1					
UPPSALA	60.85	5.2	10 46	41					
GOTEBORG	62.64	8.8	10 17	0					
HALLE	68.78	9.8	10 55	-1					
BENSBERG	68.83	13.1	11 33	37					
COLLMBERG	69.07	9.1	10 56	-2			11 20		
JENA	69.32	10.1	10 59	0			11 34		
ALMATA-2	69.48	322.9	11 0	0					
PRUHONICE	70.50	8.3	11 7	0				11 44	
STUTTGART	71.23	12.0	11 10	-1				11 48	
KASPERSKE H.	71.27	9.0	11 11	0				11 49	
ROSELEND	73.95	14.5	11 28	1				12 13	
KIROVOBAD	78.96	344.9	11 55	0					

CARACAS	79.22	87.7	12	17	21					12	25	PCP
SHILLONG	79.90	303.6	12	UA	0							
DEHRA DUN	81.03	316.8	12	7K	1					15	12	
NEW DELHI	82.92	316.8	12	22A	6							
PORT MORESBY	83.32	238.9	12	17	-1							
QUETTA	84.70	325.8	12	23	-2							
BROKEN HILL	135.07	357.5								29	41	
SOUTH POLE	149.26	180.0	19	36	3							

JANUARY 27 19.H 35.M 15.S EPICENTRE 41.06 49.78 DEPTH= 44.KM

A= 0.48831 B= 0.57748 C= 0.65427 D= 0.7636 E=-0.6457
G= 0.4225 H= 0.4996 K=-0.7563 HT= -2.1

DEPTH OF FOCUS= 0.002R

SE= 2.11

	DELTA DEG.	AZ. DEG.	P M	S	O-C S	S M	S	O-C S	*PP M	S	SUPP. M	S	
SHEMAKHA	0.97	244.4									0	18	PG
LENKORAN	2.40	198.1	0	40	3	1	5	-1					
MAKHACH-KALA	2.56	319.1	0	43K	3	1	16	6			1	39	
KIROVOBAD	2.65	262.3	0	41	0	1	11	-1					
GORIS	3.06	240.6	0	46A	-1	1	22	-1					
GROZNY	3.75	308.4	1	0	3						1	41	
TIFLIS	3.81	281.7	0	59K	2	1	42	0					
NAKHICHEVAN	3.84	242.5	0	57A	-1	1	40	-2					
DUZHETI	3.95	286.7	1	1K	2						2	1	S*
STEPANAVAN	4.09	271.0	1	0A	-1	1	46	-3					
EREVAN	4.11	259.4	1	2	0						1	37	
GORI	4.35	284.1	1	6	1						2	13	S*
BAKURIANI	4.76	280.2	1	12	1	2	7	1					
ABASTUMANJ	5.27	279.8	1	18K	0	2	16	-2					
KIZYL-ARVAT	5.31	108.3	1	18A	-1						1	47	
TEHERAN	5.46	166.1	1	20	-1	2	18	-5					
PIATIGORSK	5.78	303.2	1	24	-1						3	3	
KRASNAYA	7.56	293.4	1	52	2								
SOTCHI	7.87	292.0	1	58	4	3	30	7					
THEODOSIA	11.26	295.4	2	42	1								
SHIRAZ	11.60	168.1	2	44A	-1	4	55	1			5	15	SS
ALUSHTA	11.84	293.0	2	49	0								
SIMFEROPOL	12.11	293.9	2	51K	-1	5	7	0			5	29	
KSARA	13.19	241.2	3	10A	3	5	41	8					
SAMARKAND	13.19	90.4	3	3	-4						4	42	
TASHKENT	14.69	82.6	3	23	-3	6	9	1			3	53	
DUZHANBE	14.80	93.5	3	28K	0	6	19	8					
TCHIMKENT	14.86	78.7	3	26A	-2						6	25	
JERUSALEM	14.92	236.3	3	21	-8								
ISTANBUL UN.	15.69	276.8	3	39K	0						6	40	PP
KULYAB	15.74	95.0	3	38	-2	6	49	16			6	35	
KISHINEV	16.18	298.6	3	42	-3	6	43	0					
NAMANGAN	16.52	83.1	3	50K	0	6	51	0					
FERGANA	16.69	85.1	3	49A	-3	7	0	5					
MOSCOW	16.72	335.5	3	50	-2	7	3	8			4	8	PP
FOCSANI	17.04	293.3	4	14	18								
ANDIJAN	17.08	83.6	3	55	-2	7	10	6			7	40	
KHOROG	17.21	94.9	3	57	-1	7	15	8					
SVERDLOVSK	17.28	20.4	3	57K	-2						6	58	
BACAU	17.39	296.1	3	58	-2	7	22	11					
QUETTA	17.65	122.5	4	5K	1	7	21	4					
BUCHAREST	17.70	288.8	4	8	4	7	40	22					
CAMPULUNG	18.52	291.4	4	18	4	8	10	34					
FRUNSE	18.55	76.3	4	14	-1	7	42	5			10	34	
WARSAK DAM	18.62	105.2	4	13	-3	7	53	15					
RAKHOV	19.47	299.3	4	21	-4						8	4	
SOFIA	19.74	283.6	4	46	18	8	25	22			5	3	PP
FABRICHNAYA	19.86	75.2	4	29A	-1								
LWOW	20.00	304.6	4	30A	-1						4	48	PP
ALMATA	20.23	74.7	4	33A	-1	8	16	3			5	3	PPP
ATHENS	20.32	269.8	4	34K	0	8	20	5					
UZHGOROD	20.83	300.6	4	37	-3	8	32	7					
SKOPJE	21.21	281.9	4	42	-2								
TIMISOARA	21.22	292.3	4	43	-1	8	43	11					
PRZHEVALSK	21.35	76.7	4	45A	0	8	40	5					
BELGRADE	21.75	285.8	4	49	0	8	48	6			5	12	PP

LAHORE	21.88	107.9	4	50	0	8	48	4				
NIEDZIKA	22.26	302.0	4	54K	0	9	2	11				
SKALNATE PL.	22.26	301.4	4	57	3	8	55	4			5	26 PP
PULKOVO	22.31	333.6	4	56	1	8	54	2			5	30 PP
WARSAW	22.54	309.4	4	56	-1	8	59	3	5	1	5	26 PP
KRAKOW	22.63	303.5	4	56	-2	9	6	8			5	33 PP
TITOGRAD	22.76	283.6	5	3	4	9	5	5			5	29 PP
BUDAPEST	22.85	296.7	5	0	0	9	4	2				
SEMIPALATNSK	23.09	55.8	5	4A	2	9	13	7				
SARAJEVO	23.23	287.4	5	4	0	9	13	4				
CHORZOW	23.27	303.8	5	4	0	9	28	19			5	38 PP
HURBANOVO	23.43	297.5	5	3	-3	9	5	-7			5	36 PP
RACIBORZ	23.73	303.0	5	8	0	9	15	-2	5	15	5	31 PP
BRATISLAVA	24.20	298.1	5	11	-2						6	14
HELSINKI	24.52	329.6	5	16K	0							
TARANTO	24.58	279.4	5	25	8							
VIENNA-H.	24.69	298.2	5	18K	0	9	42	8				
NURMIJARVI	24.86	330.0	5	19K	0	9	37	0				
ZAGREB	24.89	292.4	5	23	3	9	45	8				
DEHRA DUN	25.23	106.1	5	25K	2	9	56	13			5	59 PP
NEW DELHI	25.61	110.4	5	28K	2	9	51	2			6	4 PP
LJUBLJANA	25.90	293.0	5	28	-1				5	44	6	17 PP
PRUHONICE	26.04	302.0	5	30	-1	9	54	-2				
MESSINA	26.42	275.1	5	33	-1	10	4	2			6	14 PP
TRIESTE	26.45	292.1	5	35	1	10	4	1	6	0	6	26 PP
KASPERSKE H.	26.60	299.9	5	34K	-2						6	21 PP
KARLSKRONA	26.84	315.9	5	37	-1	10	39	30				
COLLMBERG	27.19	304.6	5	41	0						6	22 PP
UPPSALA	27.38	324.3	5	42	-1	10	19	1			10	46
CHEB	27.45	301.9	5	51	8							
ROME	27.82	284.2	5	46	-1						11	35
HALLE	27.86	304.9	5	47	0						6	41 PP
APATITY	28.02	346.7	5	48K	-1	10	31	3			6	33 PP
JENA	28.03	303.6	5	46	-3	10	25	-4			6	23 PP
COPENHAGEN	28.38	313.7	5	52	0	10	36	2				
FLORENCE X.	28.41	288.5	5	35	-17	10	5	-30			6	27 PP
UMEA	28.57	332.8	5	52	-2	10	33	-4			11	23
RAVENSBURG	29.21	296.9	5	58	-1							
GOTEBORG	29.21	317.6	5	58	-1	11	31	44			6	24
SODANKYLA	29.26	341.9	6	0K	0							
STUTTGART	29.42	299.0	6	0	-1	10	51	0				
TUBINGEN	29.56	298.5	6	2	0							
BOMBAY	29.59	131.4	6	3	0	10	56	3			11	21
EBINGEN	29.63	297.8	6	1	-2							
STRASBOURG	30.42	298.6	6	11	1						7	17 PP
POONA	30.48	130.3	6	11	0	11	8	1				
MUNSTER	30.59	305.3	6	12	1							
BENSBERG	30.82	303.3	6	14	0						6	48
KONGSBERG	31.00	320.5	6	14A	-1	11	15	-1			7	13 PP
KEVO	31.12	344.9	6	16	0	11	19	1			12	20
KIRUNA	31.18	338.9	6	16	-1	11	18	0			13	4 SS
WITTEVEEN	31.23	306.9	6	18	1							
ISOLA	31.34	290.2	6	18	0						7	27 PP
WELSCHBRUCH	31.37	298.4	6	13								
SKALSTUGAN	31.40	328.5	6	18	-1	12	16	54			7	25 PP
ROSELEND	31.42	293.1	6	18A	-1	11	22	0			7	33 PP
DE BILT	32.10	305.4	6	26	1							
DOURBES	32.45	301.6	6	29	1	11	42	4				
TROMSOE	32.84	340.7	6	30	-1							
BERGEN	33.30	320.7	6	36	1						6	47 PP
ESEN BULAK	33.62	65.0	6	42A	4	11	59	3				
GARCHY	33.67	296.6	6	37	-1						9	17 PP
CHATRA	33.83	103.0	6	40K	0	12	1	1				
PARIS	33.90	299.4	6	39	-1						9	19
BOKARO	34.61	108.6	6	46K	0	12	11	-1			9	17 PCP
LHASA	35.23	95.6	6	53	1	12	23	2	8	11	12	55 *SS
KEW	35.52	304.3	6	55	1	12	25	-1			9	25
DURHAM	36.21	310.0	6	59	-1	12	37	1			8	22 PP
ABERDEEN	36.59	314.0				12	45	3			14	55
TORTOSA	36.83	286.3	7	3	-2							
VISHAKHAPTNM	36.98	119.0	7	25	18	13	18	30			8	55 PP
CALCUTTA	37.27	107.8	7	12	3	12	44	-9				
SHILLONG	38.02	100.7	7	34	19	13	34	30			8	54 PP
IRKUTSK	38.21	54.0	7	16	-1	13	8	1			8	44 PP
ALICANTE	38.34	282.9	7	7	-11							
MADRAS	38.55	127.7	7	23	3	13	15	3			8	53 PP
KABANSK	39.66	54.1	7	31	2	13	34	5			9	6 PP
KYAKHTA	39.77	56.8	7	30	0							
CHITTAGONG	39.88	104.8	7	32	1	13	29	-3				

ALMERIA	40.35	281.6	7 35A	0					7 58	
TOLEDO	40.42	286.7	7 35A	0	13	27	-13		9 11	PP
ULAN-BATOR	40.51	60.4	7 36A	0	13	43	1			
GRANADA	41.06	282.6	7 43K	3	14	11	21		17 35	SS
LANCHOW	42.00	78.6	7 51A	3	14	7	3		14 40	*SS
CHENGTU	44.53	85.6	8 9	0	14	42	2	8 27	15 15	*SS
LISBON	44.53	287.2	8 9	0						
PAOTOW	44.78	69.8	8 13	2	14	48	4		15 17	*SS
SCORESBY SD.	45.90	333.6	8 21	1	15	35	35			
KUNMING	46.43	93.0	8 25K	1	15	9	1	8 41	15 42	*SS
SIAN	46.54	78.4	8 26	1	15	13	4		15 46	*SS
LWIRO	47.15	209.2	8 30K	1	15	21	3		11 9	PPP
PORT BLAIR	47.64	115.4							9 28	PPP
TIKSI	48.25	24.7	8 40	2	15	35	2		10 38	PP
PEKING	49.33	68.1	8 47	1	15	53	5			
YAKUTSK	50.26	37.1	8 53	-1						
ALERT	52.34	351.1	9 9	0	16	32	2			
CHANGCHUN	53.96	60.1	9 22	1						
NANKING	54.85	75.8	9 29	1	17	7	3	9 47	17 40	*SS
CANTON	55.58	88.2			17	13	-1			
THULE	56.52	345.5	9 38	-2						
ZO-SE	57.10	75.5	9 44	0	17	36	2	10 1	18 9	*SS
CHILEKA	58.09	196.9	9 50	-1						
BROKEN HILL	58.65	204.4	9 54K	-1						
OKHA	59.98	43.5	10 9	5	18	17	6		10 17	PP
MAGADAN	60.70	35.0			18	25	4		13 53	PPP
RESOLUTE	62.18	350.0	10 18	-1						
MOULD BAY	62.79	357.1	10 22K	-1						
M.BOUR	63.21	265.9	10 25	-1	18	47	-5			
Y.-SAKHLINSK	63.22	49.9	10 26K	0						
BULAWAYO	63.98	202.2	10 30K	-1						
BANDEIRA	65.12	219.3	10 37	-1						
MATUSIRO	66.14	61.7	10 43	-2	19	27	-1			
TUKUBASAN	67.57	61.0			19	44	-2		23 54	
CHANGALANE	68.96	196.9	11 1	-1						
SCHEFFERVLLE	70.25	326.6	11 10K	0						
KIMBERLEY	73.22	202.8	11 27	-1						
COLLEGE	73.51	7.7	11 30	0	20	53	-2		11 51	
YELLOWKNIFE	76.04	352.6	11 43K	-1						
BREBEUF	80.08	323.4	12 7A	1						
HERMANUS	80.20	205.2			22	12	5			
OTTAWA	81.09	324.5	12 12K	0						
PALISADES	83.67	320.7	12 26	1	22	46	3	12 42	23 12	SCS
LONDON ONT.	85.33	326.3	12 34	1						
BANFF	87.26	350.8	12 43	0						
PENTICTON	89.52	353.1	12 54	1						
HUNGRY HORSE	89.83	349.3	12 55	0				13 8		
VICTORIA	90.60	355.5	12 59	0						
BUTTE	91.89	347.8	13 5	1					16 56	PP
BOZEMAN	91.97	346.7	13 6	1						
CUMBERLAND	93.41	325.0	13 11	0					26 3	PPS
BLUE MTS.	93.70	350.8	13 13	0	24	13	-2			
LAWRENCE	9 .20	333.4	13 15	0					13 49	
LARAMIE	95.03	341.6	13 20	1						
FAYETTEVILLE	96.41	331.4	13 24	-1						
GOLDEN	96.50	341.0	13 26	1						
UINTA BASIN	96.86	344.2	13 27	0	24	24	25			
SALT LAKE C.	96.86	346.1	13 18	-9						
TULSA	97.14	332.4	13 29	1	23	55	-6	13 43		
MINERAL	98.60	353.3	13 36K	1						
EUREKA	98.80	348.9	13 37	1				13 51		
WICHITA MTS.	99.18	334.1	13 38	0					17 44	PP
CALISTOGA	100.38	353.9	13 45A	2						
ALBUQUERQUE	101.27	340.3	13 49	2						
LICK	101.59	353.0							17 2	PP
PORT MORESBY	101.65	92.3	12 49A	-60						
BOULDER CITY	102.05	347.3	13 53	2					18 22	PP
CHINA LAKE	102.63	349.5	13 55	2						
PRIEST	102.68	352.1	13 57A	4						
CHARTERS TS.	107.67	101.4	14 17	777						
TOOLANGI	117.19	117.3	18 41	1					19 1	
RIVERVIEW	119.12	110.9							29 45	PS
AREQUIPA	124.12	277.8	18 57	3						
SOUTH POLE	130.86	180.0	19 5	-1					22 24	
KARAPIRO	138.59	104.0	19 11	-10					19 38	

JANUARY 28 4.H 5.M 27.5 EPICENTRE 43.63 144.83 DEPTH= 0.KM

A=-0.59350 B= 0.41821 C= 0.68760 D= 0.5760 E= 0.8175
G=-0.5621 H= 0.3960 K=-0.7261 HT= -3.0

SE= 2.88

	DELTA DEG.	AZ. DEG.	P M S	O-C S	S M S	O-C S	*PP M S	SUPP. M S
ABASHIRI	0.56	314.2	0 13K	-2	0 18	-7		
NEMURO	0.62	118.9	0 15K	-1	0 25	-2		
KUSIRO	0.73	205.9	0 14A	-3	0 24	-5		
OBIHIRO	1.39	239.7	0 26A	-1	0 44	-2		
HIROO	1.75	219.9	0 30	-2	0 54	-1		
ASAHIGAWA	1.79	275.5	0 34A	1	0 52	-4		
RUMOE	2.35	278.9	0 41	0	1 20	9		
TOMAKOMAI	2.58	248.3	0 45K	1				
SAPPORO	2.60	258.7	0 46A	2	1 22	5		
WAKKANAI	2.88	309.5	0 50A	2	1 24	0		
MURORAN	3.12	246.4	0 51	-1	1 27	-3		
SUTTSU	3.47	257.7	0 58	1	1 45	6		
MORI	3.49	245.4	0 59	2	1 39	-1		
HAKODATE	3.51	240.1	0 58K	1	1 42	2		
Y.-SAKHLINSK	3.70	337.0	0 59A	-1	1 41	-4		
HATINOHE	3.96	219.5	1 2	-2	1 46	-5		
AOMORI	4.12	228.3	1 7	1	1 56	1		
MIYAKO	4.52	209.3	1 16	4	1 56	-10		
MORIOKA	4.79	216.1	1 12	-3	2 4	-9		
AKITA	5.28	223.8	1 29	7	2 29	4		
MIZUSAWA	5.29	213.0	1 21	-1	2 18	-7		
ISINOMAKI	5.84	208.2	1 27A	-3	2 29	-10		
SENDAI	6.13	210.4	1 32	-2	2 40	-6		
YAMAGATA	6.36	213.8	1 35	-3				
HUKUSIMA	6.75	210.9	1 39	-4				
NIIGATA	7.20	219.5			2 59	-14		
ONAHAMA	7.32	205.5	2 3	12				
SHIRAKAWA	7.40	210.0	1 49	-3	3 15	-3		
MITO	7.98	206.2	1 56	-4			2 22	
UTUNOMIYA	8.03	209.9	1 57	-4	3 2	-32		
KAKIOKA	8.21	207.3	2 1	-3				
TAKADA	8.23	219.8	1 54	-10	3 37	-2		
MAEBASI	8.47	213.4	2 4	-3			3 59	
TYOSI	8.48	202.5	2 4	-3				
KUMAGAYA	8.57	211.1	2 7	-1	3 50	3		
NAGANO	8.61	218.3	2 7	-2				
MATUSIRO	8.71	217.8	2 7A	-3	3 51	0		
OIWAKE	8.74	215.6	2 12	1	4 5	14		
TOKYO C.M.O.	8.85	207.9			3 42	-12	5 18	
YOKOHAMA	9.12	207.7			3 50	-10		
KOHU	9.30	213.4	2 20	1				
HUNATU	9.37	212.0					3 4	
VLADIVOSTOK	9.43	271.3	2 21A	1	4 13	.5		
MISIMA	9.64	210.1			3 52	-20		
IIDA	9.74	216.0	2 23	-2				
GIHU	10.31	219.8	2 30	-3				
NAGOYA	10.41	218.3	2 17	-17	4 27	-5		
HIKONE	10.66	221.3	2 41	4				
KYOTO	11.11	222.3	2 40	-4	5 46	56		
ABUYAMA	11.31	222.4	2 43A	-3				
KOBE	11.66	223.2					6 24	
PETROPAVLOVK	13.12	39.5	3 15K	4			3 50	
CHANGCHUN	14.12	277.5	3 25	1	6 8	6		
OOITA	14.65	229.3	3 1	-30				
HUKUOKA	15.09	233.2					7 36	
MAGADAN	16.35	10.8	3 53	0				
YAKUTSK	20.46	339.4	4 41A	-1	8 30	3		
PEKING	21.61	270.3	4 52	-2	8 50	1		
ZO-SE	22.49	244.1	5 2	-1	9 9	4		
NANKING	23.50	249.3	5 12	0	9 27	4		
PAOTOW	25.89	275.3	5 35	0	10 5	1		
ULAN-BATOR	26.62	292.6	5 43	1	10 17	1		
TIKSI	29.14	349.7					7 10 PPP	
LANCHOW	32.12	270.5	6 31	0	11 47	3		
ESEN BULAK	34.03	292.0	6 50	2	12 16	3		
BAGUIO CITY	34.05	224.7	6 52	4	12 12	-2		
CHENGTU	34.68	261.9	6 52	-2	12 25	2		
KUNMING	38.86	255.6	7 28	-1	13 26	-2		
COLLEGE	42.17	35.9	7 56	0				
SEMIPALATNSK	43.30	302.6	8 5	0				

LHASA	44.62	270.3	8	18	2						
SHILLONG	46.36	265.1	8	25K	-5						
CHITTAGONG	48.36	261.7	8	45	-1						
FRUNSE	49.72	294.8	8	56	0						
SVERDLOVSK	52.07	316.1	9	13	-1						
PORT MORESBY	52.82	177.1	9	37A	17						
ALERT	53.38	4.3	9	21	-3						
DEHRA DUN	53.64	279.3	9	26	0						
TASHKENT	53.93	295.5	9	27	-1					17	9 PS
NEW DELHI	55.23	278.1	9	36A	-1						
RESOLUTE	55.56	16.2	9	37	-3						
WARSAK DAM	56.20	286.8	9	43	-1						
YELLOWKNIFE	56.83	33.1	9	47	-2						
SODANKYLA	59.92	336.8	10	14	4					10	57 PCP
VICTORIA	60.07	50.1	10	11	0						
KIRUNA	61.29	339.1	10	36A	16						
QUETTA	61.58	285.7	10	19	-3						
PENTICTON	61.70	47.7	10	19	-4						
BANFF	62.76	44.3	10	29	-1						
ASHKABAD	62.85	297.5	10	25	-5						
CHARTERS TS.	63.42	178.5	10	32	-2						
MOSCOW	63.54	322.9	10	26	-9						
POONA	63.79	271.1	10	34	-2						
PULKOVO	63.86	329.1	10	37K	0						
UMEA	64.32	336.1	10	43	3						
HUNGRY HORSE	65.25	46.1	10	46	0						
NURMIJARVI	65.36	331.9	10	45	-2					26	53 SSS
HELSINKI	65.50	331.5	10	46	-1						
BLUE MTS.	65.63	50.7	10	48	0	19	43	10			
MINERAL	65.86	56.7	10	50A	0						
CALISTOGA	66.30	58.7	10	54A	1						
BERKELEY	66.97	59.2	10	57K	0						
RENO	67.45	56.5	11	3K	3						
LICK	67.69	59.3	11	2A	1						
UPPSALA	68.16	334.3	11	6	2						
BOZEMAN	68.53	46.9	11	7	0						
TEHERAN	68.63	299.3	11	7	0						
TIFLIS	68.83	307.8	11	9	0						
PRIEST	69.05	59.8	11	11K	1						
EUREKA	69.78	54.5	11	15	1					13	53 PP
SALT LAKE C.	71.32	51.3	11	25	1						
GOTEBORG	71.64	335.5	11	26	0						
SHIRAZ	71.76	293.7	11	25A	-1	21	33	47		12	21 •SP
PASADENA	71.89	60.0	11	28	1						
BOULDER CITY	72.75	56.7	11	33	1						
LWOW	73.56	324.5	11	38	1						
GLEN CANYON	74.03	54.1	11	39	-1						
COLLMBERG	76.63	331.3	11	53	-2					12	6 PCP
HALLE	76.83	331.9	11	49	-7	12	7				
PRUHONICE	77.17	329.7	11	57	-1						
JENA	77.43	331.8	11	58	-1						
BRATISLAVA	77.68	327.2	12	2	2						
KASPERSKE H.	78.23	329.7	12	3	0						
SCHEFFERVLLE	78.29	18.0	12	3	-1						
ALBUQUERQUE	78.42	52.6	12	5	1						
BENSBERG	78.86	334.3	12	17	10						
STUTTGART	80.06	331.9	12	15	2						
JERUSALEM	81.21	305.7	12	22	3						
PARIS	82.19	335.9	12	28	4						
WICHITA MTS.	82.98	47.9	12	28	-1					16	6
GARCHY	83.38	334.9	12	43	12						
TULSA	83.55	45.4	12	31	0						
BREBEUF	84.90	26.0	12	38	0						
CUMBERLAND	88.79	38.9	12	57	0					24	54
TOLEDO	92.25	336.5	13	15	2						

JANUARY 28 12.H 12.M 23.S EPICENTRE -2.85 149.85 DEPTH= 44.KM

A=-0.86369 B= 0.50161 C=-0.04932 D= 0.5022 E= 0.8647
G= 0.0427 H=-0.0248 K=-0.9988 HT= 7.1

DEPTH OF FOCUS= 0.002R

SE= 3.69

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

RABAUL	2.68	120.2	0	37	-5							
PORT MORESBY	7.04	202.3	1	45A	1	3	5	2				
GUAM	16.98	342.7	3	52	-4							
CHARTERS TS.	17.49	191.3	4	4	1	7	24	10				
BRISBANE	24.57	173.7	5	19	2	9	43	11				
RIVERVIEW	30.85	177.9	6	14A	-1	11	22	8			7 16	PP
CANBERRA	32.32	181.3	6	27A	0	11	43	6			7 35	PP
MANILA	33.40	302.2	6	35	-2						10 15	
ADELAIDE	33.60	196.7	6	37A	-1	12	1	4			7 51	PP
BAGUIO CITY	34.68	304.4	6	44	-4	12	13	-1				
TOOLANGI	34.79	186.1	6	48A	-1	12	24	9	6	59	8 27	PPP
YAKUSIMA	37.92	332.2	7	16	1	13	3	0				
SIOMISAKI	38.47	340.9	7	25	5						15 33	
OSIMA	38.69	346.1									8 49	
MERA	38.73	346.8									8 17	
MIYAZAKI	38.76	334.6	7	29	7	13	16	0				
SAVANNAH	38.77	183.2	7	22	0						8 56	
ASHIZURI	38.81	337.0	7	24	1	13	11	-6				
KAGOSIMA	38.84	333.3	7	28	5						7 44	
OWASE	38.91	341.8	7	23	0							
SHIZUOKA	39.12	345.0	7	31	6						18 28	
MISIMA	39.13	345.8	7	11	-14							
YOKOHAMA	39.26	346.8	7	39	13						17 16	
KOTI	39.34	338.3	7	24	-3	13	15	-10				
TARRALEAH	39.40	184.0	7	29	2						9 33	
AFIAMALU	39.45	108.4	7	26A	-2						7 58	
TOKYO C.M.O.	39.47	347.0				13	11	-16			8 38	
MOORLANDS	39.49	183.1	7	32	4						9 5	
HUNATU	39.53	345.7	7	13	-16	14	0	32				
KAMEYAMA	39.55	342.6									9 9	
SUMOTO	39.57	340.4	7	24	-5						9 20	
OSAKA	39.65	341.4									8 45	
KOHU	39.75	345.6	7	29	-1							
IIDA	39.79	344.6	7	27	-4							
KOBE	39.79	341.0									13 26	
OOITA	39.81	335.8				13	32	0			8 4	
KUMAMOTO	39.84	334.5	7	28	-3	13	32	0				
ABUYAMA	39.84	341.5	7	14A	-17							
TAKAMATU	39.85	339.4	7	39	8	13	30	-2				
MATUYAMA	39.88	337.6	7	28	-3	13	18	-15				
TITIBU	39.92	346.3	7	29	-3							
TUKUBASAN	39.92	347.7	7	24A	-8	13	24	-9			9 30	PPP
KYOTO	39.93	341.8	7	32	0	13	26	-8				
GIHU	39.97	343.3	7	48	16							
MITO	39.99	348.2	7	29	-3							
HIKONE	40.00	342.6	7	22	-10							
KUMAGAYA	40.01	346.8	7	28	-5						16 42	
NAGASAKI	40.12	333.5	7	30	-3	13	37	0				
MAEBASI	40.32	346.5									7 59	
OIWAKE	40.38	345.9	7	39	3						9 27	
SAGA	40.38	334.3	7	43	7						9 8	
ONAHAMA	40.46	348.9	7	31	-5							
HIROSIMA	40.49	337.6	7	38	2	13	40	-2				
HUKUOKA	40.63	334.7	7	45	7	13	45	1				
MATUSIRO	40.66	345.6	7	32	-6	13	24	-21			9 9	PP
SHIRAKAWA	40.76	348.2	7	33	-6							
NAGANO	40.79	345.6	7	35	-4							
HAMADA	41.09	337.5	7	39	-2	13	51	0				
HUKUSIMA	41.32	348.7	7	44	1							
SENDAI	41.74	349.4	7	43	-4						9 54	
ISINOMAKI	41.82	349.9	7	38	-9						9 51	
YAMAGATA	41.83	348.8	7	47	0							
KARAPIRO	42.10	149.3	7	50	0				8	11	9 33	PP
LEMBANG	42.25	263.0	7	49	-2	14	0	-8				
MIZUSAWA	42.54	350.0	7	58	5	14	4	-8				
MUNDARING	42.89	223.8	7	54	-2						11 37	
DJAKARTA	43.01	264.0	7	48	-9						9 42	
CHATEAU	43.08	150.5	7	57	-1				8	17		
MORIOKA	43.08	350.2									9 57	
PERTH	43.14	224.1	8	0	2	14	28	7			9 49	PP
TANGERANG	43.20	264.1	7	58A	-1						15 8	
AKITA	43.30	349.0									10 19	
ZO-SE	43.42	323.2	7	57A	-4	14	22	-3				
CANTON	43.95	307.9	8	3A	-2	14	33	0			9 48	PP
AOMORI	44.24	350.1	8	8	1							
WELLINGTON	44.35	153.0	8	10	2	14	41	2			10 9	PP
NANKING	45.55	322.1	8	14A	-4	14	57	1				
ROXBURGH	45.77	160.9	8	24	5	15	7	8	8	48	10 7	PP
KUSIRO	45.88	354.4	8	16	-4							

TOMAKOMAI	45.88	351.5	8	36	16					
OBIHIRO	45.95	353.2	8	18	-3					
NEMURO	46.13	355.7	8	17	-5	15	2	-2		
SAPPORO	46.34	351.4	8	22	-2	14	14	-53		
ASAHIGAWA	46.90	352.6	8	25	-3					
ABASHIRI	46.92	354.5	8	24	-4					
VLADIVOSTOK	48.54	342.5	8	36	-5	15	27	-11	15	41 PS
Y.-SAKHLINSK	50.05	353.6	8	48K	-5	15	53	-6		
CHANGCHUN	51.43	337.4	8	58A	-5	16	17	-1		
MACQUARIE I.	52.02	173.3	9	11	3					
PEKING	52.66	327.6	9	8	-4	16	34	-1		
SIAN	53.32	317.4	9	13A	-4					
KUNMING	53.46	304.2	9	16A	-2	16	49	3		
CHENGTU	54.93	310.9	9	26A	-3	17	5	-1		
PETROPAVLOVK	56.15	6.4	9	33	-5	17	21	-1	11	35 PP
HONOLULU	56.29	62.1	9	43	4	17	17	-7	21	21 SS
KIPAPA	56.40	62.0	9	41	1	17	29	4		
PAOTOW	56.47	324.2	9	37	-3	17	32	6		
LANCHOW	57.78	316.4	9	46	-3	17	49	5		
PORT BLAIR	58.60	285.4	9	57	2				12	10 PP
CHITTAGONG	61.91	297.1	9	51	-27	18	42	5		
MAGADAN	62.21	0.5	10	15	-5	18	42	1		
SHILLONG	62.80	300.6	10	20	-4	18	49	1	12	42 PP
ULAN-BATOR	62.92	329.0	10	21A	-4	18	47	-2		
LHASA	64.79	304.6	10	35A	-2	19	16	3		
CALCUTTA	65.03	296.3	10	43	5	19	31	15	13	9 PP
YAKUTSK	66.50	349.8	10	43A	-5					
IRKUTSK	66.98	331.5	10	46	-5	19	39	0		
CHATRA	67.21	300.6	10	50K	-2	19	44	2	13	11 PP
BOKARO	67.64	297.1	10	53	-2	19	48	1	14	59 PPP
ESEN BULAK	68.00	323.1	10	54A	-3	19	52	0		
WILKES	69.09	195.9	11	1	-3	20	7	3	11	19
CAPE HALLETT	70.54	173.5	11	15	2					
MADRAS	70.90	284.7	11	16K	1	20	36	10	14	6 PP
HYDERABAD	73.18	289.0	11	31	3	20	55	3	26	26 SS
KODAIKANAL	73.21	281.5	11	28	-1	21	8	16	23	44
TIKSI	75.59	353.3	11	39K	-3	21	12	-7	21	50 PS
DEHRA DUN	75.82	302.1	11	44K	0	21	32	11	22	14 PS
NEW DELHI	76.21	300.2	11	45A	-1	21	26	1	14	30 PP
POONA	77.66	289.5	11	51	-3	21	40	-1	14	39 PP
BOMBAY	78.68	289.8	11	55	-5	21	53	1	14	49 PP
LAHORE	79.19	302.7	11	59	-3	21	58	1		
SEMIPALATNSK	79.35	322.4	12	2A	-1	21	57	-2	12	7 PCP
FRUNSE	81.15	314.0	12	11A	-2	22	22	4		
COLLEGE	81.17	22.5	12	8	-5	22	13	-5		
WARSAK DAM	81.91	304.7	12	15	-2					
KHOROG	82.48	308.2	12	17A	-3	22	32	1	15	31 PP
TASHKENT	84.79	311.7	12	30A	-1	23	1	7	12	34 PCP
QUETTA	85.29	300.4	12	32	-2	23	3	4		
MAWSON	86.23	202.6	12	39A	1	23	13	5		
BYRD STATION	87.33	169.9	12	44	0					
UKIAH	89.39	51.0	12	57	3					
CALISTOGA	89.86	51.5	12	54K	-2					
BERKELEY	90.06	52.3	12	55K	-2	23	31	-13	18	28
LICK	90.52	52.8	13	2K	3				16	41 PP
MINERAL	90.71	49.8	12	58A	-2				13	3 PCP
PRIEST	91.24	54.1	13	3K	1					
SVERDLOVSK	91.93	326.6	13	4	-1	23	35	-26		
PENTICTON	92.48	40.9	13	6	-2					
ASHKABAD	92.92	307.7	13	12	2	24	19	10	16	49 PP
MOULD BAY	92.94	13.9	13	7	-3					
PASADENA	93.22	56.1	13	10	-1	24	21	9	23	41 SKS
BLUE MTS.	94.00	45.4	13	12	-3	23	13	-66		
EUREKA	95.02	50.8	13	18	-2				17	9 PP
YELLOWKNIFE	95.07	27.6	13	17	-3					
BANFF	95.10	39.1	13	18	-2					
HUNGRY HORSE	96.19	41.8	13	24	-1					
BUTTE	97.30	44.1	13	31	1				17	27 PP
SHIRAZ	97.77	299.4	13	30	-2	24	9	4	13	43 17 24 PP
TEHERAN	98.53	305.5							17	57
GLEN CANYON	98.54	53.2	13	35	0					
ALERT	99.22	4.1	13	35	-4					
RESOLUTE	99.25	14.1	13	37	-2					
TUCSON	99.39	57.9	13	43	4					
UINTA BASIN	99.90	49.7	13	39	-3	25	17	62		
FLAMING GRGE	99.99	49.1	13	43	1					
GORIS	102.24	309.7	13	52	0				17	55 PP
APATITY	102.49	339.4	13	53	0	24	24	-4	17	53 PP

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ALBUQUERQUE	102.84	54.9	13	55	0					
TIFLIS	103.11	312.1	13	55	-1				18	17 PP
KEVO	103.58	342.5				24	45	12	26	53 PS
MOSCOW	104.74	327.2							18	17 PSP
SODANKYLA	104.91	340.4	14	5	1					
KIRUNA	106.64	342.2							18	36 PP
PULKOVO	106.96	332.6				24	53	5	18	41 PP
UMEA	109.07	338.8	18	28	777	24	57	0	18	45 PP
NURMIJARVI	109.13	334.7	17	53	777	24	59	2	18	53 PP
WICHITA MTS.	109.28	54.3	14	27	777	25	14	16	18	57 PP
SIMFEROPOL	110.04	317.1				25	3	2	18	49 PP
TULSA	111.30	52.5							19	8 PP
KSARA	111.42	305.2	18	6	-24	25	14	7	19	19 PP
GODHAVN	111.89	8.8							19	14 PP
UPPSALA	112.42	336.1				26	35	84	19	7 PP
BACAU	114.24	320.6				26	45	87	29	19
LWOW	114.60	324.7							19	40 PP
ISTANBUL UN.	114.82	314.3	14	52	-224				19	28 PP
ST. LOUIS 1	114.88	48.4							19	35 PP
KRAKOW	116.80	326.4	18	28	-12				26	18
COPENHAGEN	117.20	334.5							19	55 PP
BULAWAYO	118.03	245.5	18	46	4					
BELGRADE	119.07	321.0							19	14
CUMBERLAND	119.38	50.4							20	1 PP
BROKEN HILL	119.45	251.8	18	49	4					
ATHENS	119.71	312.7							20	0
COLLMBERG	119.73	330.4	18	47	1				20	21 PP
PRUHONICE	119.74	328.5	18	49	3					
VIENNA-H.	119.74	326.0	18	43	-3					
PRAGUE	119.75	328.6							20	15
HALLE	120.12	331.0	18	48	2				20	13 PP
HERMANUS	120.65	226.8							30	23 SKSP
JENA	120.66	330.7	18	50	2				20	20 PP
KASPERSKE H.	120.75	328.1	18	49	1				20	19
LWIRO	120.86	265.7	18	52	4	25	57	16	20	19 PP
ABERDEEN	121.44	342.5							32	25
WITTEVEEN	121.63	334.7	18	53	4					
MUNSTER	121.82	333.5	18	54	4					
LJUBLJANA	122.01	324.7	18	51	1					
TRIESTE	122.68	324.7				26	5	18	38	13 SS
BENSBERG	122.72	332.9	18	53	1				20	47
DE BILT	122.78	334.9							19	45 PP
BREBEUF	123.01	35.2	19	1	9				37	13
STUTTGART	123.19	329.9	18	54	2					
DURHAM	123.26	340.6							30	13 PS
STRASBOURG	124.06	330.5	19	0	6				25	27
DOURBES	124.49	333.6	18	56	1					
WELSCHBRUCH	124.87	331.1	18	57	1					
FLORENCE X.	125.22	324.1	18	55	-1				20	47 PP
PALISADES	125.32	39.9							31	38 PS
KEW	125.48	337.5							20	48 PP
ROME	125.55	321.6	18	48	-9				21	13 PP
ROSELEND	126.58	328.5	19	1	2					
GARCHY	127.23	332.1	18	44	-16				19	2
ISOLA	127.35	326.8	19	2	2					
SANTA LUCIA	127.45	136.8							22	21
HUANCAYO	132.72	109.2	19	17	6					
BANDEIRA	133.50	246.5	19	13A	1					
CHINCHINA	134.59	85.9	19	37K	23				22	15 PP
LUANDA	135.23	254.5							22	6 PP
TOLEDO	136.20	330.7	19	23	6	26	12	-9	21	58 PP
FUQUENE	136.46	85.1	19	19	1					
GRANADA	138.01	327.8							30	12
SAN JUAN	141.54	63.7	19	28	1					
CARACAS	142.72	76.4	19	30K	1				41	37 SS
AVERROES	142.99	327.5	19	31	2				22	23 PP
ST. KITTS	144.93	63.5							20	29
TRINIDAD	148.04	74.4	19	43	5					
LOME	148.57	277.0	19	45	6				19	50 PKP2
M.BOUR	162.66	312.1	20	5	8				24	38 PP

JANUARY 28 13.H 0.M 46.S EPICENTRE 54.69-161.62 DEPTH= 0.KM

A=-0.55093 B=-0.18306 C= 0.81422 D=-0.3153 E= 0.9490
G=-0.7727 H=-0.2567 K=-0.5806 HT= -7.1

SE= 2.35

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
COLLEGE	12.31	28.5	2	59	-1	5	6	-13					
SITKA	14.91	70.2	3	34	0								
PETROPAVLOVK	23.28	282.3	5	10A	0						5	59	PP
VICTORIA	24.28	88.9	5	21K	1								
YELLOWKNIFE	25.19	53.0	5	29A	0								
MAGADAN	25.82	300.3	5	39	4								
PENTICTON	26.10	84.4	5	36	-1								
MOULD BAY	26.70	21.0	5	43A	0								
BANFF	27.61	78.1	5	52	1								
BLUE MTS.	29.80	90.7	6	11	0	10	57	-10					
HUNGRY HORSE	29.80	82.3	6	11	0						9	50	
UKIAH	30.04	105.2	6	13	0	11	16	5					
MINERAL	30.13	101.7	6	14K	0						7	3	
CALISTOGA	30.74	105.2	6	17K	-2								
BERKELEY	31.46	105.9	6	26K	0								
RENO	31.69	101.1	6	30K	2								
BUTTE	31.88	85.2	6	31	2	11	38	-2			7	24	PP
LICK	32.19	106.0	6	32A	0						7	39	
RESOLUTE	32.23	27.3	6	33A	1								
BOZEMAN	32.96	84.6	6	40	1						8	13	
TIKSI	33.21	327.2	6	40A	-1						9	21	PCP
KIPAPA	33.33	173.9	6	44	2	12	2	-1					
PRIEST	33.60	106.5	6	46K	2								
EUREKA	33.93	97.5	6	48	1	12	26	14			7	37	PP
Y.-SAKHLINSK	35.13	280.9	6	57K	-1	12	30	-1					
YAKUTSK	35.15	310.3	6	55A	-3						15	20	SSS
SALT LAKE C.	35.47	92.1	7	1	1						7	57	PP
NEMURO	35.62	273.7	6	59	-3								
ABASHIRI	35.96	275.6	7	3A	-2	12	38	-5					
PASADENA	36.44	106.2	7	8	-1	12	52	1			13	15	SCP
KUSIRO	36.52	274.1	7	6	-3	12	44	-8					
WAKKANAI	36.63	279.4	7	15	5								
FLAMING GRGE	36.79	89.9	7	12	0	13	17	21			17	24	SCS
UINTA BASIN	37.08	90.8	7	14	0	13	11	10					
ASAHIGAWA	37.21	276.7	7	16K	1								
OBIHIRO	37.25	275.0	7	14	-1								
ALERT	37.36	12.4	7	17A	1								
HIROO	37.58	274.0	7	16	-2								
GLEN CANYON	38.16	96.6	7	25	2	13	22	5					
SAPPORO	38.23	276.5	7	22	-2	13	30	12					
TOMAKOMAI	38.37	275.8	7	19	-6								
THULE	38.44	22.3	7	26	1								
MURORAN	38.91	275.9	7	28	-1								
MORI	39.28	275.9	7	38	5						17	35	
HAKODATE	39.36	275.4	7	33	0								
AOMORI	39.98	274.2	7	39	1								
MIYAKO	40.05	271.9	7	40	1						17	43	
MORIOKA	40.48	272.6	7	40	-2								
MIZUSAWA	40.88	272.0	7	47	1	13	51	-7					
AKITA	41.09	273.4	7	52	5						17	48	
ISINOMAKI	41.24	271.0	7	47	-2								
SENDAI	41.59	271.2	7	54	2								
YAMAGATA	41.93	271.6	7	54	0								
TUCSON	41.98	101.0	7	54	-1								
HUKUSIMA	42.20	270.9	7	57	1								
ONAHAMA	42.49	269.7	8	0	1								
ALBUQUERQUE	42.54	94.3	8	1	2						9	52	PCP
NORD	42.65	7.2	8	0	0								
SHIRAKAWA	42.77	270.5	8	1	0								
MITO	43.14	269.5	8	3	-1								
AIKAWA	43.30	273.0	8	6	1								
KAKIOKA	43.41	269.6	8	7	1								
TUKUBASAN	43.46	269.6	8	6A	-1	14	35	-1	8	16	9	46	PP
VLADIVOSTOK	43.60	283.2	8	7	-1	14	34	-4					
TAKADA	43.93	272.0	8	2	-9								
KUMAGAYA	43.93	270.1	8	10	-1								
MAEBASI	43.94	270.6	8	10A	-1								
TOKYO C.M.O.	44.04	269.3	8	15	3						13	58	
TITIBU	44.22	270.2	8	15	2								
NAGANO	44.25	271.6	8	14	1								

YOKOHAMA	44.28	269.2	8	14	1			18	42	
OIWAKE	44.29	271.0	8	15	2	14	44 -4	10	1	PP
MATUSIRO	44.34	271.5	8	12A	-2	14	42 -7	18	9	SCS
MERA	44.53	268.5	8	15	0					
MATUMOTO	44.68	271.4	8	18	1					
HUNATU	44.74	270.0	8	20	3					
KOHU	44.74	270.3	8	19	2	15	11 17			
AJIRO	44.86	269.2	8	17	-1					
MISIMA	44.90	269.4	8	18	0					
IIDA	45.27	270.7	8	22	1					
SHIZUOKA	45.32	269.7	8	25	3					
OMAESAKI	45.69	269.5	8	24	-1					
HUKUI	45.83	272.5						8	52	
HAMAMATU	45.90	270.0	8	26	0					
GIHU	45.97	271.5	8	29	2					
NAGOYA	46.01	271.1	8	26	-1					
HIKONE	46.36	271.8	8	32	2					
TU	46.61	271.0	8	33	1					
CHANGCHUN	46.82	288.3	8	32A	-2					
KYOTO	46.84	271.9	8	33	-1	15	20 -5			
NARA	47.02	271.5	8	31	-4					
ABUYAMA	47.04	271.9	8	34A	-1					
OSAKA	47.22	271.7	8	37	0	15	39 9			
OWASE	47.24	270.6	8	36	-1					
WICHITA MTS.	47.27	88.1	8	36	-1	15	22 -9	39	20	PKPPKP
KOBE	47.40	272.0	8	41	3					
CHIHUAHUA	47.40	100.0						15	29	
SUMOTO	47.80	271.9	8	44	3					
YONAGO	47.93	274.2	8	39	-3					
SIOMISAKI	47.93	270.4	8	42	0			18	27	
TULSA	48.06	84.7	8	42	-1	15	36 -6			
MATSUE	48.08	274.4	8	48	4					
TAKAMATU	48.31	272.6	8	48	3	15	49 4			
CHICAGO CGS.	48.70	73.2	8	46	-2					
FAYETTEVILLE	48.85	83.3	8	48	-2			11	38	PPP
HAMADA	49.05	274.7	8	52	1	15	54 -2			
KOTI	49.16	272.3	8	52K	0	15	57 0			
HIROSIMA	49.21	273.9	8	45	-7					
MATUYAMA	49.39	273.2	8	40	-14					
SCHEFFERVLLE	50.53	48.3	9	2K	0					
HUKUOKA	50.97	274.8	9	9	3	16	22 0			
SAGA	51.25	274.6	9	4	-4			10	19	
KUMAMOTO	51.33	273.9	9	9	1					
LONDON ONT.	51.36	67.8	9	8	-1					
MAZATLAN	51.43	104.8						22	14	
MIYAZAKI	51.56	272.5	9	12	2	16	31 0			
SCORESBY SD.	51.82	16.1	9	13	1	16	55 21			
NAGASAKI	51.87	274.4	9	14A	1	16	35 0			
IRKUTSK	51.90	308.8	9	13	0	16	35 0	14	33	PCS
CLEVELAND	52.24	69.4	9	15K	0					
KAGOSIMA	52.32	272.9	9	13	-3			9	38	
OTTAWA	52.62	62.2	9	17	-1					
YAKUSIMA	53.18	272.0	9	23	1					
SHAWINIGAN	53.33	59.4	9	22	-1					
BREBEUF	53.62	60.8	9	24K	-2	16	55 -4			
ULAN-BATOR	53.67	303.4	9	24A	-2	16	58 -1			
CUMBERLAND	54.14	77.4	9	27	-2					
PEKING	54.41	290.7	9	30	-1	17	4 -5			
KEVO	55.70	356.4	9	39	-2					
BLACKSBURG	55.86	72.4	9	41	-1	17	30 1			
TROMSOE	55.99	359.8	9	43	0					
PALISADES	56.65	64.9	9	47	-1	17	25 -14			
FORDHAM	56.78	65.0	9	47	-2			17	33	
PAOTOW	57.29	295.2	9	51	-1	17	47 -1			
REYKJAVIK	57.49	19.7	9	56	2					
APATITY	57.56	353.2	9	52A	-2	17	47 -4	12	0	PP
KIRUNA	57.79	359.1	9	54A	-2					
COLUMBIA	57.86	75.5	9	54	-2	17	53 -2			
MAWASHI	57.97	270.9	10	3	6					
ZO-SE	58.07	279.7	9	56A	-2	17	56 -2			
SODANKYLA	58.10	356.2	9	57A	-1			39	42	PKPPKP
SIDA	58.53	18.0	10	6	5		10 22			
NANKING	58.73	282.3	10	0	-2					
HALIFAX	59.20	55.4	10	5K	-1					
ESEN BULAK	59.78	308.5	10	9	-1	18	33 13			
VERA CRUZ	60.41	98.6						11	26	
UMEA	61.81	359.1	10	22A	-1			39	34	PKPPKP
SKALSTUGAN	61.97	3.1	10	23A	-1					
SIAN	62.57	291.1	10	27A	-1					

MERIDA	62.80	91.9								18	59	
SEMIPALATNSK	63.23	320.8	10	31	-2							
LANCHOW	63.91	295.9	10	36A	-1	19	9	-3				
BERGEN	64.78	7.1	10	42	-1							
NURMIJARVI	65.04	356.6	10	43A	-2	19	26	0		39	21	PKPPKP
COMITAN	65.05	97.1								19	22	
HELSINKI	65.37	356.4	10	46	-1					39	25	PKPPKP
PULKOVO	65.49	353.4	10	48A	1	19	31	-1		13	12	PP
KONGSBERG	65.79	4.9	10	49A	0				10 52	12	19	PP
UPPSALA	65.81	0.4	10	48A	-2					39	27	PKPPKP
ABERDEEN	67.26	11.9	11	17	18	19	53	0		24	22	SS
GOTEBORG	67.84	3.7	11	1A	-1					39	12	PKPPKP
CHENGTU	67.97	292.1	11	3A	0	20	0	-2				
CANTON	68.67	280.0	11	7A	-1							
MOSCOW	68.82	348.5	11	7A	-2	20	12	0				
AFIAMALU	68.87	190.6	11	7	-2							
KARLSKRONA	69.48	1.7	11	11A	-2					39	28	PKPPKP
DURHAM	69.67	12.2	11	15K	1	20	26	4		11	41	PCP
BAGUIO CITY	69.73	269.9	11	12	-2	20	14	-9				
COPENHAGEN	69.88	3.6	11	15K	0							
RABAUL	70.03	230.0	11	14	-2							
MANILA	70.83	268.4	11	23	2	20	37	1				
FRUNSE	71.69	319.9	11	26A	0	20	47	1		14	11	PP
WITTEVEEN	72.42	7.4	11	31A	1							
HOPE	72.57	83.4	11	31	0							
DE BILT	73.01	8.5	11	34A	0					14	26	PP
KUNMING	73.02	289.4	11	33A	-1	20	58	-3				
KEW	73.06	12.1	11	29	-5							
MUNSTER	73.33	6.9	11	37	1							
HALLE	74.04	4.2	11	39	-1	21	12	0				
COLLMBERG	74.28	3.5	11	41	0	21	16	1				
BENSBERG	74.30	7.3	11	41A	0	21	10	-5		12	5	
JENA	74.60	4.5	11	44	1	21	22	4		14	34	PP
DOURBES	74.94	9.1	11	46	1					14	32	PP
TASHKENT	74.94	322.7	11	45A	0					12	0	PCP
JERSEY	75.08	13.7	11	40	-6							
CHORZOW	75.39	359.6	11	49	1					11	59	PCP
LHASA	75.52	300.9	11	49A	1	21	28	-1				
PRAGUE	75.56	2.6	11	50	1					21	31	
RACIBORZ	75.60	0.1	11	49	0					14	40	PP
KRAKOW	75.62	359.0	11	48A	-1	21	53	23		12	7	PCP
PRUHONICE	75.65	2.6	11	49	0							
HEIDELBERG	75.96	6.5	11	51	0							
KASPERSKE H.	76.47	3.2	11	54A	0					13	50	
SKALNATE PL.	76.49	358.7	11	28	-26					14	2	PP
STUTTGART	76.63	6.2	11	54A	-1							
STRASBOURG	76.71	7.2	11	55A	0					14	48	PP
WELSCHBRUCH	76.77	8.2	11	57	2							
TUBINGEN	76.85	6.3	11	56	0							
PORT MORESBY	76.90	232.2	11	54A	-2							
EBINGEN	77.19	6.4	11	58	0							
VIENNA-H.	77.42	1.4	12	0A	1					14	55	PP
KHOROG	77.51	319.3	11	58A	-1	21	51	1				
BRATISLAVA	77.51	0.9	11	59A	0					14	13	
GARCHY	77.58	10.6	12	0A	0	21	50	-1		22	48	SKS
RAVENSBURG	77.63	6.0	12	0	0							
HURBANOVO	77.81	0.1	11	54	-7					14	1	
BALBOA HTS.	78.16	91.2	12	3	0							
BUDAPEST	78.20	359.6	12	1	-2							
SAN JUAN	78.33	74.8	12	4	0	21	58	-1				
SHILLONG	78.43	297.9	12	2	-3	21	55	-5		15	2	PP
BACAU	78.85	354.0	12	9	2					12	30	
ROSELEND	79.50	8.3	12	11A	1					13	48	
LJUBLJANA	79.58	2.7	12	10A	-1					15	12	PP
NHATRANG	79.66	276.5	12	11	0	21	55	-18				
FOCSANI	79.70	353.7	12	22	11	22	35	21				
CHATRA	79.76	302.2	12	12A	0	22	10	-4				
SIMFEROPOL	79.83	348.7	12	12A	0					22	26	SCS
ZAGREB	79.84	1.7	12	14	2	22	32	17				
TIMISOARA	79.90	358.0	12	13	0							
TRIESTE	79.96	3.3	12	14	1					31	8	SSS
PADOVA	80.12	4.7	12	15	1	22	12	-6		22	57	PS
PAVIA	80.19	6.6				22	34	15		13	19	
CAMPULUNG	80.25	355.2	12	17	3	22	24	5				
PONTA DELGDA	80.48	34.0	12	18A	2	22	28	6				
WARSAK DAM	80.56	317.6	12	14	-2							
BELGRADE	80.85	358.5	12	18	0					22	46	SCS
ISOLA	81.03	8.2	12	19	0					14	33	PP

BUCHAREST	81.04	354.4	12	22	3	22	36	8			
ST. KITTS	81.05	72.8	12	17	-2						
DEHRA DUN	81.06	310.9	12	20A	1	22	28	0		17	14 PPP
CHITTAGONG	81.10	296.1	12	19	0	22	27	-1			
TIFLIS	81.34	340.3	12	22	2	22	35	4		12	29 PCP
LAHORE	81.58	314.4	12	20	-1	22	30	-3			
FLORENCE X.	81.71	5.2	12	33A	11	22	46	11		16	5 PP
SARAJEVO	81.81	360.0	12	23	0	22	38	2			
NEW DELHI	82.93	310.7	12	29A	1					15	45 PP
BOKARO	82.94	301.6	12	27	-1	23	42	55		15	38 PP
GORIS	83.16	338.6	12	30	0	22	51	2		15	44 PP
TITOGRAD	83.25	359.3	12	34	4	22	51	1		18	37
BARCELONA	83.26	12.2				23	14	24		29	2
ROME	83.65	4.4	12	33A	1	22	45	-9		16	5 PP
CHINCHINA	83.66	90.4	12	51K	19						
TOLEDO	83.85	17.2	12	34A	1						
LISBON	84.00	21.3	11	49	-45	22	16	-42	12 1	30	56 SSS
ISTANBUL UN.	84.21	352.0	12	34	-1						
CARACAS	84.22	80.1	12	35K	0	22	55	-5			
FUQUENE	84.35	88.6	12	37	1						
ST. LUCIA	84.70	73.3								32	14
CUGLIERI	85.13	7.5								42	4
TARANTO	85.21	0.9				22	23	-47			
TEHERAN	85.56	333.6	12	43	1	23	11	-2			
QUETTA	85.72	319.4	12	42	0					39	14
ALICANTE	85.92	14.8	12	47A	4					16	6 PP
GRANADA	86.56	17.4	12	53	6	23	28	5		15	44 PP
CHARTERS TS.	86.73	228.0	12	46	-1	23	1	-23			
TRINIDAD	87.23	75.6	12	48A	-2						
MESSINA	87.45	2.2	12	52K	1					13	57
ATHENS	87.59	355.8	12	52K	0						
VISHAKHAPTNM	89.33	300.3	13	2	2	23	50	1		24	59 PS
PORT BLAIR	89.42	289.4	13	5K	5	23	47	-3		16	43 PP
AVERROES	89.59	21.4	13	3	2					16	36 PP
KSARA	90.57	345.5	13	6	0	23	59	-1		16	45 PP
BRISBANE	90.65	219.4	13	7	1					24	1
SHIRAZ	91.00	330.8	13	8	0	24	3	-1		16	45 PP
HYDERABAD	91.96	304.1	13	15	3					25	16 PS
JERUSALEM	92.67	345.7	13	13	-2						
POONA	93.16	308.5	13	16A	-2					24	13
BOMBAY	93.30	309.5	13	14	-4	24	4	-20		25	14 PPS
KARAPIRO	94.32	197.9	13	24	1						
MADRAS	94.90	306.4	13	30	4	24	0	-38		17	21 PP
CHATEAU	95.55	197.6	13	30	1						
LEMBANG	95.96	266.7	13	30K	0					14	22
RIVERVIEW	97.07	218.0	13	40A	5	25	2	49		31	38 SS
WELLINGTON	97.71	197.7				23	30	-46		17	14 PP
CANBERRA	99.18	219.0	13	45	0	25	19	56			
ROXBURGH	102.80	200.5				24	34	-7		27	26 PS
M.BOUR	104.95	35.5	14	12	1	26	10	79			
LWIRO	127.03	346.9	19	8K	1					21	3 PP
LUANDA	134.10	7.1								21	55 PP
WILKES	137.41	216.6	19	27	1						
CHILEKA	138.99	335.2	19	18	-11						
BROKEN HILL	139.08	345.0	19	22	-7						
BANDEIRA	140.10	7.7	19	26A	-5				19 35	22	28 PP
BULAWAYO	144.64	343.2	19	36A	-3						
KIMBERLEY	153.66	347.3	19	54	1						
MAWSON	155.61	220.6	19	58	2					20	21 PKP2

JANUARY 29 9.H 21.M 17.S EPICENTRE 49.80 155.02 DEPTH= 150.KM

A=-0.58737 B= 0.27369 C= 0.76164 D= 0.4224 E= 0.9064
G=-0.6904 H= 0.3217 K=-0.6480 HT= -5.3

DEPTH OF FOCUS= 0.019R

SE= 1.44

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
PETROPAVLOVK	3.95	33.8	1	0A	-1	1	46	-1					
KURILSK	6.66	229.3	1	35A	-2	2	49	-3			2	15	*SP
UGLEGORSK	8.47	270.1	2	5A	4	3	44	9					
Y.-SAKHLINSK	8.64	255.9	2	4K	1	3	42	3					
MAGADAN	10.07	347.6	2	22A	0	4	16	3			3	22	

MIZUSAWA	14.54	228.0	3 24	4	5 59	2				
MATUSIRO	18.00	228.9	3 59	-3	7 16	1				
YAKUTSK	18.57	320.7	4 8A	0	7 34	7				
ABUYAMA	20.63	231.0	4 29A	0						
CHANGCHUN	21.10	265.0	4 30A	-4			5 1			
TIKSI	24.94	340.6	5 10A	-1	9 24	3			10 32	*SS
PEKING	28.90	265.2	5 46A	-1	10 24	-1	6 17			
ULAN-BATOR	31.29	285.3	6 6A	-2						
ZO-SE	31.44	246.3	6 9A	-1	11 6	1	6 40		11 57	*SS
IRKUTSK	31.45	294.3	6 9A	-1	11 7	2	6 40		7 16	PP
NANKING	32.21	250.3	6 15A	-1	11 17	0	6 50		12 4	*SS
PAOTOW	32.58	271.0	6 18A	-1			6 48			
COLLEGE	32.99	41.2	6 23	0	11 30	1				
SIAN	36.97	262.9	6 57A	0						
ESEN BULAK	38.53	288.2	7 11	1						
LANCHOW	39.16	269.3	7 15A	0	13 1	-2	7 44		13 55	*SS
SITKA	40.45	52.2	7 27	2	13 29	7			17 19	SCS
MOULD BAY	41.30	21.2	7 33A	1	13 38	3				
CANTON	42.04	246.1	7 39A	1	13 44	-2	8 7		14 38	*SS
CHENGTU	42.45	262.8	7 42A	0	13 50	-2			17 28	SCS
BAGUIO CITY	43.37	232.2	7 49	0	14 7	2				
MANILA	44.60	230.3	7 59	0	14 28	5				
KIPAPA	46.48	110.1	8 14	0			8 48			
HONOLULU	46.52	110.3			15 7	17			19 28	
ALERT	46.59	6.3	8 15A	0	14 53	2				
KUNMING	47.08	258.3	8 19A	0	15 1	3	8 49		17 59	SCS
RESOLUTE	47.54	19.8	8 22A	0						
YELLOWKNIFE	47.73	38.9	8 24A	0						
VICTORIA	50.79	58.1	8 47A	0						
THULE	51.05	12.0	8 58	9						
LHASA	51.52	272.0	8 54A	1	16 3	3	9 24		16 56	*SS
ALMATA-2	51.58	294.4	8 53K	0						
SEATTLE	51.91	58.4	8 57	1	16 21	16				
PENTICTON	52.40	55.4	8 59	0						
SVERDLOVSK	52.48	316.3	8 59K	-1	16 8	-5			11 2	PP
BANFF	53.44	51.6	9 5A	-2						
FRUNSE	53.46	295.5	9 7A	0			9 38			
SHILLONG	53.75	267.7	9 8A	-1	16 31	1			28 3	SS
RABAUL	53.84	183.5	9 9	-1						
KEVO	54.89	340.4	9 15A	-2					17 33	PPS
APATITY	55.05	336.5	9 16A	-3	16 45	-2	9 44		12 31	PPP
CHATRA	55.93	272.4	9 26A	1						
HUNGRY HORSE	55.93	53.6	9 25	0						
CHITTAGONG	56.04	265.0	9 27	1						
BLUE MTS.	56.36	58.6	9 28	0	17 12	7				
UKIAH	56.57	67.3	9 30	1			10 0			
TROMSOE	56.64	343.1	9 28	-2						
MINERAL	56.75	65.2	9 31K	0						
SODANKYLA	56.87	338.8	9 30A	-2					11 32	PP
CALISTOGA	57.27	67.3	9 34	0						
TASHKENT	57.50	297.1	9 36A	0	17 23	3	10 11		11 49	PP
KIRUNA	57.86	341.4	9 36A	-2						
BERKELEY	57.96	67.8	9 39K	0	17 33	7			10 13	
CALCUTTA	58.15	267.8	9 43	2	17 31	3				
BUTTE	58.18	55.0	9 40	-1			10 24		12 1	PP
RENO	58.33	64.9	9 42K	0						
KHOROG	58.67	292.3	9 44A	0	17 34	-1	10 18			
LICK	58.68	67.9	9 44K	0						
BOKARO	58.90	270.9	9 45A	-1	17 37	-1			14 34	PPP
BOZEMAN	59.21	54.5	9 48	0			10 17		10 53	
PORT MORESBY	59.35	189.0	9 47K	-2	17 46	2				
DEHRA DUN	59.41	281.9	9 49A	0	17 45	1			10 24	PP
DUZHANBE	59.59	294.9	9 52A	2	17 49	2				
SCORESBY SD.	60.01	358.8	9 53	0					19 32	
PRIEST	60.06	68.4	9 52K	-2						
EUREKA	60.60	62.7	9 58	1					12 28	PP
LAHORE	60.92	285.4	9 58	-1						
NEW DELHI	61.14	281.0	10 0A	-1	18 5	-1			10 36	PP
UMEA	61.31	339.0	10 0A	-2	18 4	-4			12 12	PP
PULKOVO	61.95	331.9	10 5A	-1	18 15	-2			13 55	PPP
SALT LAKE C.	62.06	59.1	10 7	0						
MOSCOW	62.65	325.6	10 10	-1					12 27	PP
PASADENA	62.91	68.5	10 12	-1	18 33	4	10 21		10 45	PCP
NURMIJARVI	62.98	335.0	10 11A	-2	18 37	7	10 44		12 27	PP
HELSINKI	63.18	334.6	10 13A	-2					10 48	PCP
SKALSTUGAN	63.23	342.3	10 13A	-2						
FLAMING GRGE	63.31	57.6	10 16	1						
PORT BLAIR	63.37	256.0	9 44	-32	18 33	-1			12 23	PP
UINTA BASIN	63.63	58.2	10 18	1	18 44	6				

BOULDER CITY	63.64	64.9	10	18	1				10	52	12 45 PP
GLEN CANYON	64.83	62.1	10	25	0						
VISHAKHAPTNM	64.90	268.0	10	30A	4	19	4	11			12 57 PP
LARAMIE	65.10	55.0	10	27	0						
UPPSALA	65.37	337.9	10	27A	-2				11	0	19 40 *SS
ASHKABAD	65.99	300.7	10	32	-1	19	11	5			12 55 PP
GOLDEN	66.35	56.1	10	35	0						
REYKJAVIK	66.39	358.5	10	36A	1						
QUETTA	66.43	289.2	10	35	0	19	16	4			
SIDA	66.63	356.7	11	38K	61						
KONGSBERG	67.34	341.8	10	40A	-1						11 8 PCP
HYDERABAD	68.26	271.5	10	46A	-1						11 15 PCP
TUCSON	68.61	65.2	10	49	0						
GOTEBORG	68.62	339.7	10	48A	-1						11 12
KARLSKRONA	69.15	337.1	10	51A	-1						
ALBUQUERQUE	69.18	60.4	10	53	1				11	23	
DJAKARTA	69.63	232.2				20	0	10			
TANGERANG	69.72	232.4									12 49
LEMBANG	69.78	231.2	10	56	0						
AFIAMALU	69.84	145.5	10	55	-2	19	52	0			
CHARTERS TS.	70.01	188.8	10	56	-2						11 31
SCHEFFERVLLE	70.03	24.2	10	58A	0						
TIFLIS	70.29	311.7	11	1	2	20	3	6	11	32	13 36 PP
COPENHAGEN	70.35	338.6	10	59A	-1						20 51
MADRAS	70.40	267.0	11	1A	1	20	3	4			11 27 PCP
POONA	70.43	275.7	11	0A	0	20	1	2			20 50 SKS
BOMBAY	70.82	276.7	11	3	1	20	8	4			20 51 SKS
WARSAW	71.11	332.1	11	4	0						13 29 PP
GORIS	71.22	309.3	11	5A	0	20	15	7			16 0
TEHERAN	71.42	303.5	11	7	1	20	17	7			15 32
LWOW	72.24	329.1	11	11A	0						
SIMFEROPOL	72.54	320.3	11	11A	-2				11	49	15 41 PPP
KRAKOW	73.36	331.6	11	16	-1	20	34	2			12 35
CHORZOW	73.43	332.3	11	18A	0						11 29 PCP
WICHITA MTS.	73.67	55.4	11	19	0	20	43	7	11	51	14 5 PP
RACIBORZ	73.85	332.7	11	21	1				11	45	11 27 PCP
DURHAM	73.97	346.1	11	21K	0	20	30	-9			21 15 SKS
SKALNATE PL.	74.02	331.0	11	21	0				13	19	12 23
COLLMBERG	74.21	336.3	11	22	0						14 8 PP
TULSA	74.23	52.8	11	23	1	20	46	4			
HALLE	74.29	337.0	11	23	0	20	47	4			
WITTEVEEN	74.30	340.7	11	24A	1						
ST. LOUIS 1	74.86	47.5	11	26	0	20	52	3			
MUNSTER	74.89	339.8	11	27	1						
JENA	74.91	337.0	11	26	0	20	53	4	11	57	14 14 PP
FAYETTEVILLE	74.91	51.7	11	26A	0				11	45	
PRAGUE	74.94	334.9	11	27	1	20	58	8			14 14 PP
PRUHONICE	74.99	334.8	11	27	0	20	52	2			
DE BILT	75.29	341.3	11	31A	3	21	2	8			14 15 PP
LONDON ONT.	75.31	39.0	11	29A	0						
SHIRAZ	75.36	298.5	11	30A	1	20	54	0	12	6	14 23 *PPP
OTTAWA	75.43	34.3	11	28A	-1						
CHEB	75.48	336.2	11	35	6						15 0
SHAWINIGAN	75.48	31.9	11	29A	0						
BRATISLAVA	75.88	332.4	11	33A	1						15 0
BUDAPEST	75.91	330.9	11	32	0						
BENSBERG	75.93	339.7	11	32A	0						14 58
KASPERSKE H.	76.03	335.0	11	33A	0						14 13 PP
VIENNA-H.	76.03	332.9	11	33A	0	21	13	11			
BREBEUF	76.10	32.9	11	33A	0						
CLEVELAND	76.46	40.2	12	35A	60						21 9
BRISBANE	76.87	182.0	11	37	0						12 9
KEW	76.94	344.5	11	37A	-1	21	15	3	12	9	
HEIDELBERG	77.03	338.2	11	39A	1						
DOURBES	77.30	341.0	11	39	-1	21	20	4			
STUTTGART	77.48	337.6	11	41A	0	21	23	6	12	24	31 27
TUBINGEN	77.75	337.6	11	42A	0						
BELGRADE	77.79	328.8	11	43	1	21	27	6			15 1 PP
ISTANBUL UN.	77.89	321.3	11	43A	0	21	28	6			
STRASBOURG	78.02	338.5	11	44K	0	21	35	12			14 39 PP
EBINGEN	78.10	337.5	11	45A	1						
RAVENSBURG	78.31	337.0	11	46A	1						
ZAGREB	78.33	332.1	11	43	-2						22 51 SP
WELSCHBRUCH	78.51	339.3	11	46	0						
PENNSYLVANIA	78.53	38.2	11	46	0						
LJUBLJANA	78.56	333.1	11	48	1						14 46 PP
SOFIA	78.64	325.2	12	4	17						
TRIESTE	79.15	333.5	11	50	0	21	37	2			22 47 *SS

SARAJEVO	79.31	329.6	11	50	-1						
CUMBERLAND	79.52	46.2	11	52	0	21	38	-1			
WESTON	79.63	33.0	11	53	1	21	45	5			
PALISADES	79.88	35.4	11	53	-1	21	44	1	12 1	22 4	SCS
PADOVA	79.90	334.6	11	55	1					22 53	PS
HALIFAX	80.12	26.9	11	55A	0						
GARCHY	80.30	341.0	11	57A	1	21	52	5			
GEORGETOWN	80.47	38.6	11	57	0	22	24	35			
BLACKSBURG	80.50	41.8	11	57	0	22	24	35			
KSARA	80.83	312.6	11	58A	-1	22	4	11	12 31	15 6	PP
ROSELEND	81.00	338.2	12	1	1	22	0	6			
FLORENCE X.	81.57	334.4	12	9	6	22	28	28	12 55	15 22	PP
ISOLA	82.32	337.4	12	7	1	22	15	7			
ATHENS	82.61	323.?	12	7A	-1						
MONACO	82.64	336.9	12	9	1						
JERUSALEM	82.82	311.8	12	10A	1						
COLUMBIA	82.92	44.0	12	11	1	22	17	3			
ROME	82.95	332.8	12	11A	1	22	27	13	12 55	15 21	PP
RIVERVIEW	83.33	183.2				22	26	8		22 23	SKS
CANBERRA	84.91	184.9	12	20	1						
MESSINA	85.35	329.1	12	20A	-2	22	43	5	12 52	15 47	PP
ADELAIDE	85.63	193.4	12	24	1					22 39	
TOOLANGI	87.40	187.6	12	33A	1				13 9	12 40	PCP
PERTH	88.52	212.5				23	14	6		22 58	
TOLEDO	88.82	344.0	12	39A	1	23	2	-8	13 6	16 11	PP
KARAPIRO	89.22	163.9	12	40	0				13 13		
CHATEAU	90.45	164.2	12	44	-2				13 18		
GRANADA	91.35	343.1	12	50A	0					16 42	PP
WELLINGTON	92.34	165.2				23	11	-31		25 3	SP
ROXBURGH	95.71	169.9				23	39	9		24 27	S
BOGOTA	111.23	53.9								21 5	PPP
LWIRO	114.35	297.8	18	24A	2					19 15	PP
M.BOUR	115.71	351.4								19 32	PP
CHILEKA	121.13	283.0	18	38	3						
BROKEN HILL	124.24	289.7	18	44	3						
BULAWAYO	128.47	285.0	18	38	-11						
KIMBERLEY	137.05	280.3	18	55	-10						

JANUARY 30 4.H 39.M 51.S EPICENTRE 54.59-161.69 DEPTH= 0.KM
A=-0.55263 B=-0.18284 C= 0.81312 D=-0.3141 E= 0.9494
G=-0.7720 H=-0.2554 K=-0.5821 HT= -7.1

SE= 1.66

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
COLLEGE	12.43	28.4	2	59	-2								
PETROPAVLOVK	23.26	282.5	5	11	1								
VICTORIA	24.33	88.6	5	22A	2								
YELLOWKNIFE	25.28	52.8	5	30A	1								
PENTICTON	26.15	84.1	5	39	2								
MOULD BAY	26.81	21.0	5	45A	2								
BANFF	27.67	77.9	5	52	1								
BLUE MTS.	29.84	90.5	6	11	0	11	7	0					
HUNGRY HORSE	29.86	82.1	6	11	0								
RESOLUTE	32.34	27.2	6	32A	-1								
EUREKA	33.96	97.3	6	48	1						9	24	PCP
WOODY	34.93	104.9	6	55	0				7	4			
YAKUTSK	35.19	310.4	6	58K	0								
FLAMING GRGE	36.84	89.7	7	12	1								
UINTA BASIN	37.12	90.6	7	15	1						8	42	PP
ALERT	37.47	12.3	7	17A	0								
THULE	38.56	22.2	7	25	-1								
TUCSON	42.00	100.8	7	55	1								
ALBUQUERQUE	42.58	94.1	7	59	0						9	52	PCP
NORD	42.76	7.1	8	1A	0								
MATUSIRO	44.30	271.5	8	14	1	14	42	-6					
CHANGCHUN	46.82	288.4	8	33	0								
WICHITA MTS.	47.32	87.9	8	37	0						10	6	PCP
TULSA	48.11	84.6	8	42	-1								
FAYETTEVILLE	48.91	83.2	8	47A	-2								
SCHEFFERVLLE	50.63	48.2	9	2A	-1								
SCORESBY SD.	51.94	16.0	9	13	0								
OTTAWA	52.71	62.1	9	16	-2								
SHAWINIGAN	53.42	59.2	9	21	-3								
BREBEUF	53.71	60.7	9	24	-2								

CUMBERLAND	54.20	77.3	9	27	-2				10	9 PCP
PEKING	54.40	290.7	9	31	0					
PENNSYLVANIA	54.77	67.5	9	33	-1					
TROMSOE	56.09	359.7	9	43	0					
PALISADES	56.73	64.7				17	21	-19		
APATITY	57.66	353.2	9	53	-1					
KIRUNA	57.89	359.0	9	55A	-1					
ZO-SE	58.05	279.8	9	48	-9					
SODANKYLA	58.21	356.2	9	58A	0					
UMEA	61.92	359.0	10	22A	-2					
SKALSTUGAN	62.08	3.0	10	24A	-1					
SVERDLOVSK	63.73	335.6	10	34	-2					
LANCHOW	63.92	295.9	10	37A	0					
VIBORG	64.74	354.3	10	40A	-2					
NURMIJARVI	65.14	356.5	10	44A	-1					
HELSINKI	65.47	356.3	10	47	0					
PULKOVO	65.59	353.4	10	47	-1					
UPPSALA	65.91	0.4	10	49A	-1					
GOTEBORG	67.95	3.7	11	2A	-1					
CHENGTU	67.98	292.0	11	4A	1					
COPENHAGEN	69.99	3.5	10	15	-60					
ALMATA	70.48	318.6	11	18K	0					
FRUNSE	71.74	319.9	11	27	1					
HALLE	74.15	4.1	11	40	0				12	12
COLLMBERG	74.39	3.5	11	41	0					
BENSBERG	74.41	7.3	11	42A	1					
JENA	74.71	4.4	11	44	1				12	16
TASHKENT	75.00	322.7	11	46	1					
LHASA	75.54	300.8	11	50	2					
PRUHONICE	75.76	2.5	11	50	1					
KASPERSKE H.	76.58	3.2	11	54A	0					
STRASBOURG	76.83	7.2	11	55	0				12	29
WELSCHBRUCH	76.89	8.1	11	57	2					
SAN JUAN	78.40	74.8	12	7	3					
SHILLONG	78.45	297.8	12	2A	-2					
ROSELEND	79.61	8.3	12	13	3				12	51
CHATRA	79.78	302.1	12	12A	:					
DEHRA DUN	81.09	310.9	12	19A	1					
ISOLA	81.14	8.2	12	20	1					
TIFLIS	81.43	340.3	12	22	2					
VANNOVSKAYA	81.70	329.2	12	23	2					
GORIS	83.25	338.5	12	31A	2					
TOLEDO	83.97	17.1	12	35A	2					
TEHERAN	85.64	333.6	12	44	3					
CHARTERS TS.	86.63	227.9	12	44	-2					
SHIRAZ	91.08	330.7	13	8A	1	25	12	68		
LWIRO	127.13	346.8	19	9	3					
SOUTH POLE	144.40	180.0	19	35	-3					
BULAWAYO	144.73	343.1	19	39A	0					

JANUARY 30 10.H 10.M 0.S EPICENTRE -55.58 -28.18 DEPTH= 0.KM

A= 0.50056 B=-0.26812 C=-0.82314 D=-0.4722 E=-0.8815
G=-0.7256 H= 0.3887 K=-0.5678 HT= -7.4

SE= 3.40

	DELTA DEG.	AZ. DEG.	P M	P S	P O-C S	S M	S S	S O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
ARGENTINE I.	19.98	226.5	4	37	1								
BUENOS AIRES	29.58	302.5	6	5	-3								
CONCEPCION	34.94	283.9	7	0	5						15	0	
BYRD STATION	36.08	197.2	7	5	0								
HERMANUS	38.66	77.0	7	27	0	13	23	-1			9	2	PP
ANTOFAGASTA	44.41	298.3	8	11A	-3						14	44	
KIMBERLEY	46.03	76.9	8	1K	-26								
AREQUIPA	51.08	302.2	9	5	-1								
CHANGALANE	52.07	81.6	9	13K	0	16	42	5	9	20	11	16	PP
WILKES	54.48	160.9	9	32	1	17	6	-4					
BULAWAYO	54.97	73.7	9	32K	-3								
HUANCAYO	56.74	300.9	9	47	-1								
LUANDA	56.86	51.3	9	48K	0	17	40	-1	9	55	12	3	PP
BROKEN HILL	59.56	69.8	10	6K	-1								
CHILEKA	62.09	76.6	10	24	-1								
LOME	66.12	32.3	10	53	2	19	45	6					
LWIRO	70.04	63.0	11	16K	1	20	26	0			25	10	55
MACQUARIE I.	70.13	184.4	11	15	-1				11	25			

M.BOUR	70.33	11.5	11	16	-1	20	28	-1			
TRINIDAD	71.59	325.4	11	33	8	20	40	-4			
CHINCHINA	71.83	309.4	11	19A	-7	20	43	-4		14	9 PP
CARACAS	73.35	320.0	11	32	-3					14	22 PP
BALBOA HTS.	77.13	307.6	11	56	-1	21	44	-2			
ROXBURGH	78.23	192.5	12	6	3	21	56	-2		15	12 PP
ST. KITTS	78.30	326.4	11	56	-7						
SAN JUAN	80.37	323.7	12	12	-2	22	16	-4			
WELLINGTON	81.55	197.3	12	25	4	22	28	-4		27	50 SS
MOORLANDS	82.27	176.5	12	22	-2						
TARRALEAH	82.39	176.0	12	22	-3						
CHATEAU	83.44	198.3	12	28	-2					13	1
KARAPIRO	84.68	198.6	12	34	-3					13	8
SANTIAGO MA.	85.24	302.0	12	40	1						
SAN SALVADOR	85.76	301.5	12	45	3						
TOOLANGI	87.06	175.0	12	47	-1	23	26	-1	12 58	13	6 *SP
PERTH	87.54	150.0	12	59	8	23	31	0		16	5 PP
MUNDARING	87.63	150.3	12	50	-1	23	28	-4			
ADELAIDE	89.12	169.3	12	58	0	23	43	-3		16	37 PP
COMITAN	89.39	300.3	13	20	20	23	32	-17		29	24
CANBERRA	89.43	177.7	12	59K	-1	23	33	-16		24	6 *SS
AVERROES	90.29	17.3	13	6	2					16	41 PP
RIVERVIEW	90.95	179.4	13	6A	-1	23	55	-8		16	46 PP
MERIDA	92.23	304.8	13	15	2	23	45	-29		30	21
PONTA DELGDA	92.97	2.0				24	7	-13		25	41 PS
VERA CRUZ	93.88	298.6	13	24	4	24	0	-28		37	8
ALMERIA	94.65	20.4	13	27A	3	24	33	-2		17	15 PP
GRANADA	94.75	19.5	13	33K	9	24	53	17		17	2 PP
LISBON	95.33	14.8	13	31	4	24	52	49		17	19 PP
TACUBAYA	95.59	296.2	13	32	4	24	12	8		17	24 PP
ALICANTE	96.50	21.6	13	51	19	25	5	56		26	17
TOLEDO	97.29	18.5	13	38K	2	24	13	0		17	33 PP
BRISBANE	97.36	184.9	13	34	-2	24	53	40			
GUADALAJARA	98.78	293.7								24	20
COLUMBIA	99.98	317.7	13	50	2					17	34 PP
BARCELONA	100.01	22.7								24	30
MESSINA	100.58	33.6								17	44
JERUSALEM	102.41	51.2	14	15	16					29	16
ROME	103.07	30.0	14	11	9	24	50	9		18	20 PP
ATHENS	103.14	39.7	14	4K	2					18	13 PP
CUMBERLAND	103.15	315.2	14	2	0	25	40	58			
MONACO	103.43	25.7								18	29 PP
ISOLA	103.76	25.3	14	27	22					18	25 PP
PALISADES	103.78	326.1	14	2	-3	24	40	-5	14 24	18	22 PKP
AFIAMALU	104.31	216.5				24	46	-1		18	32 PP
KSARA	104.43	50.6	14	16	8	24	56	8		18	33 PP
FLORENCE X.	104.47	28.4	14	8	0					18	15 PP
CHARTERS TS.	104.49	174.6	14	13	5					29	55
ROSELEND	105.09	24.5								18	43 PP
PAVIA	105.23	26.4								18	39 PP
TITOGRAD	105.60	34.5	18	37	777	25	47	54		28	58 PS
GARCHY	105.80	21.5	17	52	777					18	37 PP
SKOPJE	105.91	36.2	18	30	777						
PADOVA	106.14	28.2								20	30 PPP
SARAJEVO	106.64	33.3	18	36	777					33	46
ROCHESTER	106.69	324.8				25	58	60		18	40 PP
CHIHUAHUA	106.72	296.2								24	45
CLEVELAND	106.77	321.0	18	4	777	25	0	2			
TRIESTE	106.88	29.3	18	41	777	25	5	6		18	49 PP
PARIS	107.14	20.7								18	58 PP
FAYETTEVILLE	107.20	309.2	14	33	777	24	59	-1		17	55 PP
KODAIKANAL	107.22	97.1	18	1	777					25	4
LJUBLJANA	107.46	29.7	18	45	777					19	0 PP
ZAGREB	107.67	30.7								18	57 PP
BREBEUF	107.76	328.2	18	31	777	25	3	1		21	12 PPP
TULSA	107.76	308.0	17	48	777	25	0	-2		18	44 PP
ISTANBUL UN.	107.79	41.9	14	26	777	24	57	-5			
ISTANBUL KA.	107.84	41.9	18	38	777						
LEMBANG	107.88	133.3	18	45	777					24	6
LONDON ONT.	108.01	322.0	18	48	777						
WICHITA MTS.	108.05	305.3	14	22	777	25	3	-1		18	47 PP
TANGERANG	108.06	132.1	18	34	777						
STRASBOURG	108.07	24.2	14	24	777	25	8	4		18	50 PP
BELGRADE	108.13	34.2	18	30K	777	26	4	60		29	26
DJAKARTA	108.13	132.3	19	15	777						
OTTAWA	108.31	326.8	18	36	777						
STUTTGART	108.60	25.1	14	28	777	24	56	-10		18	48 PP
LUBBOCK	108.66	302.3	18	3	777					19	2 PP

DOURBES	108.80	21.6				27	1	114		18 56	PP
SHIRAZ	108.98	65.3	15	0	777					17 43	PP
KEW	109.16	18.0				24	59	-9		18 49	PP
TIMISOARA	109.20	34.3	18	24	777						
VIENNA-H.	109.99	29.9	18	8	777	25	3	-9			
KASPERSKE H.	110.02	27.7	15	0	-213					19 10	
LAWRENCE	110.07	310.1								17 52	
BRATISLAVA	110.12	30.4	18	20	-13					28 36	PS
BENSBERG	110.16	22.9								19 12	PP
HURBANOVO	110.17	31.3								28 39	
DE BILT	110.81	21.3	14	30	-245	25	6	-9		19 13	PP
MADRAS	110.99	97.7	19	23	48					29 29	PS
PRAGUE	111.11	27.9	18	45	10					15 12	P
JENA	111.17	25.7								19 18	PP
BOMBAY	111.57	87.9	19	24	48					19 45	PP
HALLE	111.78	25.7	18	29	-7					19 28	PP
POONA	111.86	89.0	18	41	4					19 26	
COLLMBERG	111.86	26.4	18	29	-8					19 10	PP
ALBUQUERQUE	112.01	299.8	18	50	13	27	30	130		20 30	PP
DURHAM	112.13	16.3				25	25	4		19 38	PP
RACIBORZ	112.16	30.2								19 27	PP
KRAKOW	112.63	31.3	18	42	4	25	26	3		19 41	PP
SIMFEROPOL	113.09	43.1	18	43	4	25	28	4		19 35	PP
TEHERAN	113.27	60.6	18	29	-10					19 32	PP
HYDERABAD	113.59	93.5	19	36	56					34 51	SS
LWOW	113.69	34.0								29 16	PS
GORIS	113.83	54.6				25	29	2		19 44	PP
ABERDEEN	114.36	15.2				25	33	4		27 38	S
SCHEFFERVLLE	114.49	336.6	18	40	-2						
WARSAW	114.88	30.9				25	36	5		19 44	PP
TIFLIS	114.91	52.1	18	34	-9					19 46	PP
PORT MORESBY	115.14	174.9	18	42	-1					19 50	PP
GOLDEN	115.25	303.7	18	45	2						
COPENHAGEN	115.74	24.2								19 50	PP
GLEN CANYON	116.15	297.6	18	44	-1						
VISHAKHAPTNM	116.56	97.4								20 10	
LARAMIE	116.62	304.7	18	44	-2						
PORT BLAIR	116.81	109.6								20 13	
KARLSKRONA	116.93	25.7	18	50	4						
BOULDER CITY	117.04	294.6	18	48	1					20 9	PP
QUETTA	117.11	75.7	18	48	1						
PASADENA	117.38	290.9	18	52	5					29 50	PS
GOTEBORG	117.48	23.0	18	48	0					20 10	PP
UINTA BASIN	117.75	301.3	18	46	-2	25	41	-1		15 10	P
FLAMING GRGE	118.13	301.9	18	50	1					29 15	PKKP
SALT LAKE C.	119.20	300.1	18	53	2					20 7	PP
PRIEST	120.21	290.6	18	58K	5						
RABAUL	120.43	180.4	15	20	-213					20 16	
UPPSALA	120.71	24.9	18	52	-2	25	52	0		28 57	PKKP
NEW DELHI	121.61	84.7	18	57	1					20 32	PP
LICK	121.63	290.9	18	56K	0						
LAHORE	122.25	80.2	18	57	0						
RENO	122.31	293.9	19	0A	3						
BERKELEY	122.36	290.9	18	58K	1						
BOZEMAN	122.51	304.4	19	0	3					20 35	PP
WARSAK DAM	122.54	76.2	18	59	2						
BOKARO	122.82	95.3	19	9	11						
HELSINKI	122.86	28.4	18	57	-1						
SKALSTUGAN	122.88	20.2	18	58	0						
NURMIJARVI	123.06	28.1	18	57	-1	26	6	6		20 30	PP
CALISTOGA	123.09	291.2	18	58K	0						
MOSCOW	123.17	38.1	18	58	-1					20 41	PP
CALCUTTA	123.25	98.5								20 46	
DEHRA DUN	123.41	84.1	19	1A	2					19 26	
BUTTE	123.49	303.7	18	59	0				19 18	20 39	PP
UKIAH	123.79	291.2	19	3	3						
MINERAL	123.83	293.3	19	0K	0						
PULKOVO	124.04	31.4	19	3	3	25	56	-7		20 45	PP
UMEA	124.79	23.8	19	0	-2					20 48	PP
BLUE MTS.	124.92	299.8	19	1	-1	26	16	11		15 40	P
CHITTAGONG	125.04	101.7	19	5	3						
KHOROG	125.09	73.4	19	7	5					21 4	PP
NHATRANG	125.57	125.5	19	16	13					19 28	
SCORESBY SD.	125.84	2.6	19	4	0						
HUNGRY HORSE	125.86	304.8	19	3	-1						
CHATRA	125.93	94.2	19	5	1					21 26	
TASHKENT	126.65	68.6	19	5	0					21 11	PP
SPOKANE	126.98	302.3	19	7	1						
SHILLONG	127.60	99.3	19	6A	-1					21 40	

KIRUNA	128.25	21.3	19	7	-1					28	0 SKKS
BANFF	128.54	306.5	19	8	-1						
PENTICTON	129.18	302.4	19	9	-1						
SODANKYLA	129.22	24.1	19	8	-2					21	13 PP
TROMSOE	129.47	19.4	19	10	-1						
LHASA	130.26	95.3	19	14	2					21	34 PP
VICTORIA	130.49	299.5	19	13	0						
FRUNSE	130.55	70.8	19	14	1	26	19	-2		21	37 PP
APATITY	131.02	26.6	19	14A	0	26	29	7		21	33 PP
KEVO	131.21	22.3	19	14A	0					21	36 PP
MANILA	132.80	137.6	19	20	3					26	51
SVERDLOVSK	132.93	48.6	19	17	0					21	40 PP
KUNMING	133.21	110.0	19	20	2	26	33	6		21	51 PP
BAGUIO CITY	134.20	136.0	19	30	10					22	53 PKS
THULE	134.20	347.7	19	18	-2						
YELLOWKNIFE	135.45	318.7	19	6	-16						
CANTON	136.91	123.0	19	27	2						
NORD	137.09	2.5	19	16	-9						
RESOLUTE	137.21	338.9	19	15	-10						
CHENGTU	138.27	106.4	19	29	2					22	24 PP
SEMIPALATNSK	138.36	66.0	19	25	-2					22	25
ALERT	138.95	353.5	19	19	-9						
LANCHOW	142.21	100.7	19	34	0					22	40 PP
MOULD BAY	143.31	336.4	19	31	-5						
SIAN	143.68	107.8	19	36	-1						
ESEN BULAK	144.72	81.3	19	38	0						
NANKING	147.03	121.7	19	45	3						
ZO-SE	147.37	125.8	19	47	4						
PAOTOW	148.85	101.1	19	49	4						
COLLEGE	149.80	312.5	19	42	-5	26	52	-1		29	4 SKKS
ULAN-BATOR	151.59	86.6	19	54	5						
PEKING	151.84	108.5	19	51	1					23	38 PP
IRKUTSK	152.26	76.8	19	51	1					20	15 PKPZ
ABUYAMA	156.45	144.8	20	3A	7						
MATUSIRO	158.81	148.4	20	3	4					44	17 SS
TUKUBASAN	159.04	152.6	20	5K	6					32	33 PPP
CHANGCHUN	159.35	113.6	20	0	0						
TIKSI	161.17	22.5	19	58	-4	26	53	-12		23	28 PKS
VLADIVOSTOK	162.08	125.8	20	2	-1					24	8 PP
YAKUTSK	166.90	51.5	20	4	-3						
Y.-SAKHLINSK	169.71	142.7	20	10	1	27	14	3		25	21 PP
PETROPAVLOVK	175.25	240.1	20	10	-1					25	44 PP
MAGADAN	175.98	7.5	20	9	-2					25	48 PP

JANUARY 31 5.H 6.M 44.S EPICENTRE 27.11 126.79 DEPTH= 40.KM

A=-0.53381 B= 0.71383 C= 0.45332 D= 0.8008 E= 0.5989
G=-0.2715 H= 0.3630 K=-0.8913 HT= 2.7

DEPTH OF FOCUS= 0.001R

SE= 2.80

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S
MAWASHI	1.19	137.3	0	22A	1	0	40	4				
YAKUSIMA	4.65	43.5	1	10K	0	2	43	39				
TAIPEI	5.17	247.5	1	19	2	2	40	23				
KAGOSIMA	5.52	35.6	1	25A	3	2	56	31				
HWALIEN	5.62	237.3	1	26A	2							
HSINCHU	5.72	247.6									2	1
HUKUE	5.84	17.2	1	31	4	3	6	33				
NAGASAKI	6.21	24.9	1	34K	2	2	56	14				
TAICHUNG	6.25	243.2	1	36	4							
MIYAZAKI	6.26	39.0	1	34K	1	3	1	17				
ZO-SE	6.31	310.3	1	30A	-3							
HSINKONG	6.33	232.0	1	31	-3							
UNZENDAKE	6.35	27.4	1	28	-6	3	1	15				
YUSHAN	6.40	236.9	1	39	4							
ALISHAN	6.49	237.9	1	35	-1							
KUMAMOTO	6.62	29.9	1	41A	3	3	15	22				
TAITUNG	6.71	230.9	1	44	5							
SAGA	6.83	25.6	1	42K	1						4	26
ASOSAN	6.86	31.7	1	45	4						4	54
TAWU	7.15	229.7	1	43	-2							
HUKUOKA	7.15	24.8	1	49A	4	3	30	24				
TAINAN	7.23	236.9	1	51	5							

ITUHARA	7.38	16.3	1	50	2	3	36	24		
OOITA	7.39	33.3	1	53A	5	3	30	18	8	1 PCP
PENGHU	7.46	243.0	1	16	-33	2	46	-28		
HENGCHUN	7.49	228.5	1	48	-2					
SIMONOSEKI	7.69	26.6	1	56	3				4	38
ASHIZURI	7.76	42.5	1	49	-4	4	5	44		
UWAZIMA	7.87	37.9	2	1	6	3	49	25		
MATUYAMA	8.46	36.2	2	5	2				4	52
NANKING	8.54	307.2	1	59	-5					
KOTI	8.66	40.6	2	5	-1				4	49
HIROSIMA	8.71	32.5	2	10A	3	3	58	13		
MUROTO	8.85	44.5	2	7K	-2				5	4
HAMADA	8.99	29.0	2	14A	4	3	56	5		
TSURUGISAN	9.16	41.1	2	10	-3					
TAKAMATU	9.52	39.2	2	17	-1				4	46
TOKUSIMA	9.65	42.2	2	18	-2					
OKAYAMA	9.71	37.3	2	23	3	4	29	20		
MATSUE	9.89	31.3	2	26	3				5	46
SIOMISAKI	10.00	48.7	2	24	0	4	33	16		
YONAGO	10.01	32.5	2	28	3	4	39	22		
SUMOTO	10.03	42.1	2	22	-3	4	34	17		
KOBE	10.43	41.6	2	31	1	4	29	2		
TOTTORI	10.48	35.2	2	28	-3					
OSAKA	10.62	42.8	2	29	-4	4	37	6	6	45
SAIGO	10.63	30.0							6	26
OWASE	10.66	47.2	2	32K	-1				7	35
ABUYAMA	10.79	42.1	2	33A	-2					
NARA	10.82	43.6	2	21	-15					
TOYOOKA	10.84	37.3	2	36	0	5	2	25		
KYOTO	10.99	42.0	2	29	-9	4	56	15		
MAIZURU	11.11	39.3	2	30	-10	4	21	-22		
TU	11.26	45.5	2	43	1					
KAMEYAMA	11.33	44.8	2	41	-2	5	0	11		
HIKONE	11.47	42.6	2	43	-1					
NAGOYA	11.85	44.9	2	48K	-2	5	20	19		
GIHU	11.87	43.5	2	48	-2					
HUKUI	12.00	39.7	2	54	2				7	37
HAMAMATU	12.06	48.4	2	51	-1				8	36
BAGUIO CITY	12.10	209.7	2	50	-3	4	34	-33		
IIDA	12.61	45.7	3	0	0				7	31
SHIZUOKA	12.66	49.0	2	59	-1				8	50
TAKAYAMA	12.66	42.1							3	39
CANTON	12.83	254.7	2	59	-4	5	30	5		
TOYAMA	13.01	40.2	3	4	-1				7	53
MISIMA	13.11	49.6	3	4	-2	5	57	25		
MATUMOTO	13.17	43.5	3	9	2					
KOHU	13.18	46.8	3	7	0				7	29
AJIRO	13.18	50.1	3	7	0	6	6	33		
HUNATU	13.21	47.8	3	8	0				7	57
OSIMA	13.22	51.7	3	7A	-1	6	8	34		
WAZIMA	13.33	37.3	3	10	1				8	48
MANILA	13.48	204.4	3	9	-2	5	49	8		
MATUSIRO	13.50	43.1	3	10K	-1	5	59	18		
OIWAKE	13.58	44.5	3	13	1	5	31	-12		
NAGANO	13.58	42.6	3	19	6				7	37
MERA	13.61	52.0	2	54	-19					
TITIBU	13.70	46.8	3	11	-3	6	20	34		
YOKOHAMA	13.76	49.8	3	14	-1				8	32
TAKADA	13.90	41.4	3	16	-1	6	7	16		
MAEBASI	13.95	45.4	3	13	-4	6	25	33		
TOKYO C.M.O.	13.97	49.1	3	19	1	6	11	19		
KUMAGAYA	14.00	46.8	3	18	0				6	34
HONGO	14.00	49.1							7	32
TUKUBASAN	14.51	48.0	3	23K	-2	6	15	10	3	41 PPP
AIKAWA	14.53	38.7							7	33
UTUNOMIYA	14.55	46.5	3	23	-2	6	29	23		
KAKIOKA	14.57	48.1	3	23	-2	5	59	-7		
SHIRAKAWA	15.12	45.4	3	32	-1					
ONAHAMA	15.45	47.1	3	37A	0	6	46	19		
PEKING	15.61	328.3	3	39A	0	6	44	13		
HUKUSIMA	15.66	44.0	3	41A	1					
YAMAGATA	15.91	42.3	3	42	-1					
SAKATA	16.03	39.6							10	46
SENDAI	16.25	43.3	3	45	-2	7	20	34		
ISINOMAKI	16.61	43.6	3	47	-5					
CHANGCHUN	16.72	356.3	3	54A	1	7	13	17		
AKITA	16.75	38.0	3	56	3				9	31
SIAN	16.93	299.2	3	56	0					

MIZUSAWA	16.94	41.4	3 53	-3	7 11	9			
MORIOKA	17.34	40.0	3 59	-2					
MIYAKO	17.77	41.5	4 2	-4					
AOMORI	17.90	36.7	4 10	2					
HAKODATE	18.61	34.4	4 37	21					
MORI	18.73	33.5	4 40	22					
SUTTSU	19.10	31.5	4 33	11					
PAOTOW	19.30	318.4	4 25	1	8 10	15			
SAPPORO	19.84	32.9	4 27	-3	8 22	16			
CHENGTU	20.25	285.4	4 33K	-2					
HIROO	20.28	37.5						11	17
OBIHIRO	20.66	36.0	4 39	0					
ASAHIGAWA	20.86	33.1	4 45	4					
KUSIRO	21.34	37.6	4 43	-3	8 49	13			
LANCHOW	21.45	300.2	4 48K	1	8 55	17			
GUAM	21.59	125.4	4 48	0	8 48	8			
KUNMING	21.68	270.2	4 50K	1	8 58	16			
WAKKANAI	21.80	29.2	4 56	6	8 55	11			
ABASHIRI	21.99	35.4	4 49	-3					
NHATRANG	22.17	231.5	4 57	3				5	22 PP
NEMURO	22.22	38.4	4 52	-3	9 4	12			
Y.-SAKHLINSK	23.50	28.1	5 5K	-2				9	22
KURILSK	24.71	37.5	5 19A	0	9 38	3		5	56 PP
UGLEGORSK	24.92	24.3	5 21	0				8	30
ULAN-BATOR	25.94	328.5	5 29K	-2	10 16	20			
IRKUTSK	30.25	332.2	6 9	-1				7	19 PP
ESEN BULAK	30.85	316.7	6 15K	0	11 17	2			
SHILLONG	31.27	275.2	6 15K	-4	11 26	5		9	0 PCP
LHASA	31.48	283.1	6 19A	-1					
PETROPAVLOVK	35.05	33.7	6 50	-1					
CALCUTTA	35.08	271.1	6 50	-1				8	10
CHATRA	35.21	278.8	6 53K	0	12 21	-1		8	8 PP
PORT BLAIR	35.47	251.0	7 0	5	12 41	15		8	19 PP
MAGADAN	36.41	20.4	7 2	-1				8	21 PP
BOKARO	37.04	274.3	7 8K	0	12 58	7		8	37 PP
DJAKARTA	38.32	213.2	7 14A	-5	13 20	10			
TANGERANG	38.41	213.5	7 19	-1				13	30
RABAUL	39.63	137.9	7 30K	0	13 30	0		18	38
VISHAKHAPTNM	41.10	266.2	7 43	1				9	41
PORT MORESBY	41.32	148.7	7 43K	-1	13 59	4		9	43
SEMIPALATNSK	42.21	316.3	7 50K	-1	14 11	3			
DEHRA DUN	42.61	286.2	7 56A	2	14 21	7		9	37 PP
NEW DELHI	43.62	283.9	8 2K	0	14 31	2		9	38 PP
TIKSI	44.57	0.9	8 8A	-2	14 45	3		9	51 PCP
FRUNSE	44.83	304.5	8 12K	0				18	14 SCS
HYDERABAD	45.53	268.2	8 18K	0	15 4	8		10	15 PP
LAHORE	45.60	288.6	8 18	0					
MADRAS	45.72	261.6	8 17K	-2	15 1	2		10	6 PP
KHOROG	47.25	297.1	8 31	0				10	22 PP
WARSAK DAM	47.58	292.4	8 33	-1					
TASHKENT	48.79	302.4	8 43K	0				10	43 PP
POONA	49.24	271.7	8 46A	-1	15 57	8		16	5 PS
KODAIKANAL	49.32	259.9	8 46	-1				20	1
BOMBAY	50.03	272.6	8 51	-2	16 11	11		10	45 PP
CHARTERS TS.	50.57	156.1	8 56	-1	16 5	-2			
QUETTA	52.08	288.4	9 8	0	16 34	6			
SVERDLOVSK	54.78	322.0	9 26A	-2	17 8	4		11	27 PP
ASHKABAD	57.55	299.4	9 48K	0				13	20 PPP
PERTH	59.66	190.8	10 2	-1	18 21	12		13	50 PPP
ADELAIDE	62.77	169.0	10 23	-1	18 54	6		25	44
TEHERAN	63.49	298.4	10 28	-1	19 5	8		14	22 PPP
COLLEGE	63.86	28.3	10 29	-2	19 34	32			
SHIRAZ	64.31	291.6	10 34A	0	19 2	-5	10 42	12	53 PP
RIVERVIEW	64.87	157.7	10 38K	0	19 24	10		23	41 SS
CANBERRA	65.55	160.1	10 42K	0	19 31	8		13	5 PP
GORIS	66.33	303.6	10 45K	-2				13	7 PP
APATITY	66.52	335.3	10 47A	-1	19 45	11		13	11 PP
TOOLANGI	66.69	163.9	10 50	1	19 44	8		13	36 PP
TIFLIS	66.83	306.3	10 50A	0				15	12 PPP
MOSCOW	67.59	322.3	10 52K	-3				13	20 PP
KEVO	68.14	338.3	10 56	-2	19 58	4		13	26 PP
SODANKYLA	69.07	335.9	11 3	-1				13	33 PP
NORD	69.94	354.7	11 6	-3					
PULKOVO	70.11	327.7	11 11K	1	20 16	-1		15	31 PPP
ALERT	70.52	1.3	11 13	0					
TROMSOE	70.80	339.3	11 33	18					
KIRUNA	71.09	337.4	11 16	0	20 34	6	11 36	13	39
AFIAMALU	72.20	116.4	11 26	3	20 46	5			
HELSINKI	72.46	329.1	11 24	0					

NURMIJARVI	72.47	329.5	11	22	-2	20	46	2			14	8	PP
UMEA	72.92	333.6	11	25	-2	20	51	* 1	11	47	25	41	SS
SIMFEROPOL	73.16	312.2	11	29A	0						14	13	PP
RESOLUTE	74.93	10.6	11	37	-2								
UPPSALA	75.90	330.6	11	42	-2	21	21	-2	12	9	14	33	PP
SKALSTUGAN	76.11	335.2	11	55	9								
KSARA	76.15	301.0	11	44	-2	21	42	17			14	41	PP
THULE	76.28	3.6	11	45	-2								
LWOW	77.42	319.7	11	54A	1	21	58	19			16	32	PPP
JERUSALEM	77.48	299.3	11	54	1						14	53	PP
WARSAW	77.97	322.8	11	57	1	21	59	14			12	11	PCP
ISTANBUL UN.	78.17	310.0	11	56K	-1	21	51	4					
YELLOWKNIFE	78.27	24.6	11	56K	-2								
KARLSKRONA	78.73	327.9									14	56	PP
KARAPIRO	79.21	142.8	12	4	1						15	8	PP
KONGSBERG	79.46	332.6	12	1	-3	22	0	0					
GOTEBORG	79.54	330.3	12	4	-1				12	29			
KRAKOW	79.64	321.2	12	6	1	22	22	19			13	51	
CHATEAU	80.14	143.6	12	9	1								
SCORESBY SD.	80.16	349.8	12	7	-1								
COPENHAGEN	80.47	328.4	12	9K	-1	22	25	13					
RACIBORZ	80.58	321.8	12	11	1						13	7	
TIMISOARA	81.02	316.9	12	10	-2						33	0	
SOFIA	81.18	313.5	12	25	12						15	31	
WELLINGTON	81.27	145.5	12	8	-6				12	23	27	12	SS
BUDAPEST	81.46	319.2	12	15	0								
HURBANOVO	81.73	319.8	12	30	14								
BELGRADE	81.95	316.4	12	17	0						15	29	PP
ROXBURGH	81.95	151.3	12	20	3						22	28	
VICTORIA	82.07	39.2	12	18A	0								
BRATISLAVA	82.20	320.5	12	20A	1						15	22	
VIENNA-H.	82.57	320.8	12	20	0						15	27	PP
PRUHONICE	82.62	322.9	12	22	1	22	29	-5					
PRAGUE	82.64	323.1	12	23	2	22	41	7			15	33	PP
COLLMBERG	82.70	324.6	12	22	1	22	42	8					
SKOPJE	82.76	313.5									23	41	
SEATTLE	83.17	39.5	12	28	4								
ATHENS	83.20	309.2									12	22	PP
KASPERSKE H.	83.62	322.6	12	26	0						15	31	
JENA	83.64	324.8	12	25	-1	22	43	-1			15	39	PP
CHEB	83.72	323.8	12	36	10						15	46	PP
PENTICTON	83.72	37.1	12	26K	0								
GODHAVN	83.92	6.1	12	27K	0	23	7	20					
ZAGREB	84.11	318.9									15	44	PP
LJUBLJANA	84.83	319.7	12	32	0						15	47	PP
WITTEVEEN	84.90	328.2	12	32	0								
MUNSTER	84.99	327.2	12	34	1								
TRIESTE	85.50	319.6	12	36	1	23	4	2			15	54	PP
ABERDEEN	85.68	334.8				23	2	-2			15	57	PP
BENSBERG	85.84	326.5	12	38	1						15	57	PP
MACQUARIE I.	85.88	161.9	12	40	3								
DE BILT	86.07	328.2	12	38	0	23	4	-4			16	4	PP
STUTTGART	86.13	324.0	12	37	-1	23	2	-6			16	0	PP
PADOVA	86.72	320.2				23	26	12			15	46	PP
STRASBOURG	87.03	324.4	12	42	-1	23	11	-6			16	3	PP
DURHAM	87.20	332.9	12	49	6						16	11	PP
HUNGRY HORSE	87.26	35.7	12	45	1								
BLUE MTS.	87.61	39.8	12	46	1	24	11	49					
MINERAL	87.62	45.3	12	46K	0								
DOURBES	87.65	326.9	12	50	4	23	32	9					
CALISTOGA	87.94	47.2	12	49A	2								
FLORENCE X.	88.04	319.2	12	56	8	23	2	-24			16	20	PP
PAVIA	88.38	321.2									26	33	
ROME	88.41	317.1	12	47K	-2	23	43	13			16	17	PP
BERKELEY	88.57	47.7	12	54K	4								
MESSINA	88.58	312.7	12	50	0	23	37	6			16	21	PP
KEW	89.01	330.1				23	21	-14			16	24	PP
RENO	89.22	45.2	12	55K	2								
LICK	89.28	47.8	12	56A	3								
BUTTE	89.51	36.8	12	55	1	23	48	8			17	29	
BOZEMAN	90.54	36.4	13	0	1						16	24	PP
PRIEST	90.60	48.4	13	3A	3								
EUREKA	91.64	43.5	13	6	2								
CUGLIERI	91.81	317.5									41	46	
SALT LAKE C.	93.29	40.5	13	14	2						13	35	
PASADENA	93.42	48.8	13	14	1						13	41	
UINTA BASIN	94.90	39.7	13	20	1	24	48	21					
SCHEFFERVLLE	97.57	7.9	13	33	2								

LWIRO	98.13	271.6	13	34	0				17	41 PP
CHILEKA	98.56	256.8	13	35	-1					
TOLEDO	99.15	323.9	13	41	2	24	10	-2	16	2 PP
ALBUQUERQUE	100.35	42.0	13	45	1					
ALMERIA	100.47	320.8	13	48	3					
GRANADA	100.87	321.7							19	39 PPP
LISBON	102.63	326.1							18	13 PP
BROKEN HILL	103.73	260.7	13	59	0					
WICHITA MTS.	104.99	37.4	14	7	2	24	51	11	18	23 PP
BREBEUF	105.38	14.7							33	36 SS
TULSA	105.55	34.8				26	1	78	18	18 PP
BULAWAYO	105.92	255.3	14	10	777					
PALISADES	109.55	16.5				25	10	10		
CUMBERLAND	110.55	27.8	19	6	38				28	24 SP
KIMBERLEY	112.32	248.2	18	5	-27					
BYRD STATION	120.59	169.3							20	19 PP
CARACAS	140.31	21.4	19	21	-4				21	48 PP
CHINCHINA	141.44	37.5	19	29	2				23	8 PKS
TRINIDAD	141.63	13.0	19	28	1					
FUQUENE	142.01	34.5	19	26	-2				23	20 PKS
BOGOTA	142.56	35.7	19	26	-3				23	6 PKS
HUANCAYO	154.40	58.5	19	54	6					
LA PAZ	162.60	55.7	20	2	5				20	50
ANTOFAGASTA	164.08	81.5	20	2	3				20	58

JANUARY 31 15.H 7.M 4.S EPICENTRE 35.92 21.86 DEPTH= 62.KM

A= 0.75334 B= 0.30218 C= 0.58409 D= 0.3723 E=-0.9281
G= 0.5421 H= 0.2174 K=-0.8117 HT= -0.2

DEPTH OF FOCUS= 0.005R

SE= 3.00

	DELTA DEG.	AZ. DEG.	P M	S	O-C S	S M	S	O-C S	*PP M	S	SUPP. M	S	
ATHENS	2.53	35.6	0	39A	-1	1	12	2			0	47	PG
REGGIO CALA.	5.42	295.5				2	6	-16					
MESSINA	5.53	296.1	1	19	-3	2	17	-8					
SKOPJE	6.05	357.0	1	27	-2	2	36	-2					
TITOGRAD	6.80	343.6	1	37	-3	3	11	14			1	56	P*
SOFIA	6.86	9.1	1	52	11	3	19	21					
ISTANBUL KA.	7.64	45.6	1	49	-3								
SARAJEVO	8.36	342.7									3	52	
BELGRADE	8.95	353.6									2	58	PG
BUCHAREST	9.09	19.6				4	48	55			2	57	
ROME	9.43	312.1									6	25	
ZAGREB	10.84	337.6									4	23	
FLORENCE X.	11.31	317.2	2	32	-10						5	26	
TRIESTE	11.49	330.2	2	42	-2	4	47	-5			3	53	PGPG
LJUBLJANA	11.53	333.6	2	43A	-2	4	45	-8			3	54	PGPG
KSARA	11.71	96.3	2	44	-3						7	23	
JERUSALEM	11.85	106.6	2	48	-1								
KISHINEV	12.25	23.0	3	2	8								
UZHGOROD	12.70	1.3	2	58	-2								
VIENNA-H.	12.97	343.5	3	1	-3								
SIMFEROPOL	12.97	42.2	3	9	5								
MONACO	13.54	309.5	3	7	-4	6	40	59					
LWOW	13.98	5.8	3	19	2						9	38	
ISOLA	14.01	310.6	3	20	3								
KRAKOW	14.19	354.9	3	18	-2						3	24	PP
RACIBORZ	14.40	350.5	3	27	5						4	8	
KASPERSKE H.	14.53	337.9	3	20	-4						5	57	
PRUHONICE	15.02	341.5	3	29	-1	6	39	23					
ROSELEND	15.08	315.0	3	32	1						6	25	
PRAGUE	15.14	341.4									8	56	
EBINGEN	15.52	326.1	3	37	0								
STUTTGART	15.82	328.1	3	40	-1								
STRASBOURG	16.36	325.0				7	6	20			4	15	
COLLMBERG	16.64	340.3	3	52	1	7	29	36					
JENA	16.73	336.9	3	53	1						4	29	
GARCHY	18.01	314.8	4	10	2								
BENSBERG	18.38	329.4	4	14	2								
DOURBES	18.91	323.9	4	21	2	8	1	17					
MUNSTER	18.98	332.1	4	21	2								
GORIS	19.67	72.2	4	23	-4								

KARLSKRONA	20.69	350.0	4 32A	-6							
COPENHAGEN	20.78	344.9	4 38	-1	8 38	16					
TOLEDO	20.80	288.7	4 38	-1							
KEW	22.20	321.3	4 54	1							
MOSCOW	22.55	23.6	4 54	-2							
GOTEBORG	22.76	346.2	4 58	0							
TEHERAN	23.91	81.7	5 10	1						9 27	
UPPSALA	24.10	354.8	5 10A	-1	9 30	8					
HELSINKI	24.35	3.8	5 13	-1	9 32	6					
NURMIJARVI	24.67	3.3	5 15	-2	9 34	3				10 30	
KONGSBERG	25.04	345.3	5 20K	0			5 34				
SHIRAZ	26.46	94.9	5 32K	-2	10 21	20				5 56	*SP
UMEA	27.95	358.5	5 46	-1							
SKALSTUGAN	28.30	351.0	5 48A	-2							
SODANKYLA	31.61	3.5	6 18K	-2							
KIRUNA	31.97	359.0	6 22A	-1							
APATITY	32.36	8.3	6 25A	-1	12 0	25				14 19	SS
SVERDLOVSK	33.30	38.8	6 32	-2							
KEVO	34.01	3.2	6 39K	-1							
LWIRO	38.52	168.8	7 17K	-1							
REYKJAVIK	38.55	330.9	7 20	1							
SCORESBY SD.	41.67	339.5	6 57	-47							
ALMATA-2	42.72	62.5	7 51K	-2							
NEW DELHI	46.85	82.6	8 25K	-1							
NORD	47.85	352.9	8 32	-2							
CHATRA	55.59	79.8	9 29K	-3							
SHILLONG	59.91	78.8	10 9	7							
SCHEFFERVLLE	60.82	318.5	10 8	-1							
RESOLUTE	62.23	344.4	10 18K	0							
MOULD BAY	65.44	350.5	10 38	-1							
COLLEGE	79.21	355.5	12 0	0							
CUMBERLAND	81.94	308.2	12 16	1							
FAYETTEVILLE	86.91	313.2	12 41	1							
HUNGRY HORSE	87.34	332.3	12 43	1							
PENTICTON	88.50	335.9	12 49	2							
WICHITA MTS.	90.44	314.8	12 59	3						16 34	PP
BLUE MTS.	91.51	332.3	13 2	1						16 53	PP
UINTA BASIN	91.96	325.0	13 5	1							

JANUARY 31 17.H 6.M 4.S EPICENTRE 41.05 49.85 DEPTH= 53.KM

A= 0.48769 B= 0.57804 C= 0.65424 D= 0.7643 E=-0.6448
G= 0.4219 H= 0.5000 K=-0.7563 HT= -2.1

DEPTH OF FOCUS= 0.003R

SE= 2.50

	DELTA DEG.	AZ. DEG.	P M S	O-C S	S M S	O-C S	*PP M S	SUPP. M S
SHEMAKHA	1.01	245.8						0 20 PG
LENKORAN	2.41	199.2	0 36	-2	1 7	0		
KIROVOBAD	2.70	262.6	0 42	-1	1 12	-2		
GORIS	3.11	241.2	0 47A	-1	1 20	-5		
GROZNY	3.79	308.0	1 2	4	1 46	4		1 24
TIFLIS	3.85	281.6	1 0A	1	1 42	-1		
NAKHICHEVAN	3.88	242.9	0 58A	-1	1 44	0		
DUZHETI	3.99	286.6	1 1	0				2 5 SG
EREVAN	4.16	259.6	1 1	-2				2 9 SG
GORI	4.40	284.0	1 7	1	1 57	0		
BAKURIANI	4.81	280.2	1 12	0	2 5	-2		
KIZYL-ARVAT	5.26	108.5	1 19	1	2 16	-3		3 14
ABASTUMANJ	5.32	279.8	1 19A	0				
TEHERAN	5H44	166.6	1 20	-1	2 19	-4		
PIATIGORSK	5.82	303.0	1 24	-2	2 26	-7		
ZUGDIDI	6.13	286.4	1 38	7				
ASHKABAD	7.27	112.5	1 44	-3	3 4	-5		
KRASNAYA	7.61	293.3	1 54	3				
SHIRAZ	11.58	168.3	2 45K	-1				7 9
YALTA	12.02	291.8	2 52	1				
KSARA	13.23	241.4	3 8	1	5 47	13		3 33
TASHKENT	14.64	82.6	3 25	-1				
TCHIMKENT	14.82	78.7	3 28	0				
JERUSALEM	14.96	236.4	3 33	3				
KISHINEV	16.23	298.6	3 48	2	6 50	6		6 56 SS
FERGANA	16.64	85.1	3 50	-1				4 6 PP
MOSCOW	16.74	335.4	3 50	-3				4 12 PPP

ANDIJAN	17.03	83.6	3 57	1					9 39	
KHOROG	17.16	94.9	4 0	2	7 12	7				
SVERDLOVSK	17.27	20.3	3 56K	-3					7 1	
QUETTA	17.61	122.6	4 5K	2						
FRUNSE	18.50	76.3	4 14	0					4 29	PP
WARSAK DAM	18.57	105.3	4 14	-1						
FABRICHNAYA	19.81	75.2	4 29	0						
LWOW	20.04	304.6	4 3[illegible]	-2						
ALMATA	20.18	74.7	4 33	0					8 44	S
ATHENS	20.37	269.9	4 35A	0						
UZHGOROD	20.87	300.5	4 38	-2						
PRZHEVALSK	21.31	76.7	4 45	0	8 41	8				
LAHORE	21.83	107.9	4 5[illegible]	0						
KRAKOW	22.67	303.5	4 56A	-2	9 23	25				
SEMIPALATNSK	23.05	55.8	5 5	3						
RACIBORZ	23.77	303.0	5 13	4			5 2[illegible]		5 35	PP
HELSINKI	24.55	329.6	5 16K	0						
VIENNA-H.	24.73	298.2	5 19	1					6 0	PP
NURMIJARVI	24.88	336.0	5 19K	-1	9 42	6			7 22	
DEHRA DUN	25.19	106.2	5 24A	2						
NEW DELHI	25.56	110.5	5 27K	1						
LJUBLJANA	25.94	293.0	5 30	2						
PRUHONICE	26.09	302.0	5 3[illegible]	2					6 8	
KASPERSKE H.	26.64	299.0	5 34	-2					7 45	
KARLSKRONA	26.88	315.8	5 36	-2						
COLLMBERG	27.23	304.6	5 44	3						
UPPSALA	27.41	324.2	5 42	-1	10 53	35				
HALLE	27.90	304.0	6 9	21					6 58	PP
APATITY	28.03	346.6	5 48K	-1					6 36	PP
JENA	28.07	303.6	5 5[illegible]	:					6 28	
UMEA	28.59	332.7	5 53K	-1	11 23	46				
GOTEBORG	29.25	317.6	5 51	-8					6 25	
SODANKYLA	29.28	341.8	5 59	-1					6 32	
STUTTGART	29.46	299.0	6 3	2						
KONGSBERG	31.03	320.5	6 14	-1			6 25		7 31	PPP
KEVO	31.14	344.9	6 15	-1					7 17	PP
KIRUNA	31.2[illegible]	338.9	6 16K	-1	12 4[illegible]	82			10 30	
ISOLA	31.39	29[illegible].2	6 18	[illegible]						
SKALSTUGAN	31.43	328.5	6 17K	-2						
ROSELEND	31.47	293.1	6 18	-1						
ESEN BULAK	33.57	65.[illegible]							7 57	
CHATRA	33.79	103.[illegible]	6 4[illegible]K	1						
SHILLONG	37.98	100.7	7 15K	0						
CHITTAGONG	39.83	104.9	7 33	3						
SIDA	44.56	324.1	8 11A	2						
NORD	46.26	349.2	8 21	-1						
LWIRO	47.17	209.3	8 3[illegible]	1						
THULE	56.54	345.5	9 29	-11						
CHILEKA	58.1[illegible]	196.9	9 5[illegible]	-1						
RESOLUTE	62.19	359.[illegible]	1[illegible] 19K	[illegible]						
MOULD BAY	62.79	357.1	1[illegible] 22K	-1						
Y.-SAKHLINSK	63.18	56.[illegible]	10 26	1						
BULAWAYO	64.[illegible]	202.3	10 29	-2						
SCHEFFERVLLE	70.28	326.7	11 1[illegible]	[illegible]						
KIMBERLEY	73.23	202.9	11 28K	[illegible]						
COLLEGE	73.51	[illegible].8	11 3[illegible]	[illegible]						
YELLOWKNIFE	76.[illegible]5	352.6	11 44K	0						
BANFF	8[illegible].27	35[illegible].8	12 43K	1						
PENTICTON	89.53	353.[illegible]	12 43	-1[illegible]						
HUNGRY HORSE	89.84	349.[illegible]	12 56	[illegible]						
CUMBERLAND	[illegible]3.44	325.[illegible]	13 12	[illegible]						
BLUE MTS.	93.71	35[illegible].9	13 13	[illegible]					16 17	PP
UINTA BASIN	96.87	344.3	13 28	1						
WICHITA MTS.	99.2[illegible]	334.[illegible]	13 3[illegible]	[illegible]					17 44	PP

FEBRUARY 3 12.H 52.M 14.5 EPICENTRE 7.6[illegible] -72.17 DEPTH= 35.KM

A= 0.30357 B=-0.94373 C= 0.13141 D=-0.9520 E=-0.3[illegible]62
G= 0.0402 H=-0.1251 K=-0.9912 MT= 6.8

DEPTH OF FOCUS= 0.000R

SE= 1.15

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

FUQUENE	2.63	216.3	0	44	3						
BOGOTA	3.51	212.7	0	55A	1	1	39	4	1	4	P*
CHINCHINA	4.31	232.9	1	3	-2	1	55	0	1	13	P*
GALERAZAMBA	4.40	316.1							1	17	P*
CARACAS	5.92	60.5	1	29K	1				3	23	SG
BALBOA HTS.	7.44	281.0	1	48A	-1	3	12	-1			
TRINIDAD	11.06	73.3	2	38	-1	4	37	-6			
HOPE	11.26	337.1	2	42	0						
SAN JUAN	12.22	28.2	2	52	-3	5	2	-9			
FORT FRANCE	12.92	55.8	3	2	-2	5	46	18			
ST. CLAUDE	13.23	49.8	3	21	13						
ST. KITTS	13.36	42.7	3	14	4						
HUANCAYO	19.77	189.2	4	29	-1						
AREQUIPA	23.92	178.4	5	11	-1						
LA PAZ	24.28	170.5	5	16	1	9	35	6			
CUMBERLAND	30.44	338.1	6	13	1						
FAYETTEVILLE	34.77	327.8	6	49	0						
TULSA	35.50	325.9	6	56K	0						
WICHITA MTS.	36.31	321.8	7	2	-1				8	33	PP
LAWRENCE	37.51	329.9	7	12	-1						
OTTAWA	37.78	355.9	7	15	0						
MADISON	38.83	339.4	7	24	0				16	23	
ALBUQUERQUE	41.61	315.8	7	48	1						
TUCSON	43.47	309.7	8	2	0						
LARAMIE	44.78	323.9	8	14	2						
RAPID CITY	45.31	328.5	8	16	-1						
UINTA BASIN	46.62	324.3	8	28A	1				10	1	PCP
FLAMING GRGE	46.85	321.1	8	30	1						
SCHEFFERVLLE	47.28	4.2	8	32	0						
BOULDER CITY	48.08	312.4	8	36	0						
SALT LAKE C.	48.32	319.5	8	41	1						
EUREKA	50.43	316.0	8	58	1						
BOZEMAN	50.59	325.3	8	58	2						
WOODY	50.96	319.3	9	1	2				10	16	
BUTTE	51.66	324.8	9	5	-1						
PRIEST	52.49	314.2	9	12A	0						
LICK	53.64	311.2	9	21A	0						
HUNGRY HORSE	53.81	326.5	9	22	2						
BLUE MTS.	53.86	321.4	9	21	-1						
BERKELEY	54.29	311.6	9	26A	1						
MINERAL	54.73	314.7	9	28K	-1						
CALISTOGA	54.80	312.4	9	28A	-1						
PENTICTON	57.45	325.1	9	48K	0						
YELLOWKNIFE	62.86	339.4	10	24A	-2						
RESOLUTE	68.3-	353.7	10	59	-1						
FOLINIERE	72.27	41.3	11	24	2						
MOULD BAY	72.2-	349.4	11	29A	0						
ALERT	74.99	1.3	11	39	-1						
DOURBES	75.72	46.3	11	46	2						
COLLEGE	--.--	334.9	11	51	-1						
STUTTGART	78.69	41.9	11	59	-2						
JENA	80.21	39.7	12	9	0						
SKALSTUGAN	80.77	26.8	12	12	2						
COLLMBERG	81.1-	39.3	12	13A	-1				12	18	PCP
PRUHONICE	82.13	40.6	12	20	1						
TROMSOE	83.31	20.6	12	25	2						
UPPSALA	83.38	30.5	12	25	2						
KIRUNA	84.--	22.4	12	29	1						
UMEA	84.3-	26.-	12	3-	-						
SODANKYLA	86.42	22.5	12	41K	1						
NURMIJARVI	86.6-	29.5	12	42K	2						
HELSINKI	87.-1	25.8	12	43	2						
SOUTH POLE	9-.55	180.-	13	32	0				18	6	
CHARTERS TS.	142.70	24-.5	19	2-	2						
SHILLONG	143.55	24.-	19	29A	-2						

FEBRUARY 4 1H 17M 9.5 EPICENTRE -6.49 149.89 DEPTH= 65.KM

A=-0.85961 B= 0.49845 C=-0.11236 D= 0.05016 E= 0.6651
G= 0.0972 H=-0.0564 K=-0.9937 M*= 6.9

DEPTH OF FOCUS= 0.035R

SE= 5.16

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

RABAUL	3.22	45.0	0 51	1								
PORT MORESBY	3.96	223.1	0 49A	-11	1 31	-15						
HONIARA	10.38	107.0	2 24	-5						5 5		
CHARTERS TS.	13.97	194.3	4 16	60						7 47		
KOUMAC	19.75	136.4	4 34K	7								
BRISBANE	20.96	172.8	4 36A	-4	8 38	13						
PORT VILA	21.17	123.5	4 43K	1								
NOUMEA	22.41	136.2	4 55K	1	9 21	30						
CANBERRA	28.7[illegible]	181.5	5 52	-1						17 4		
ADELAIDE	30.15	198.5	6 [illegible]	-6								
TOOLANGI	31.19	186.8	6 11	-4					6 19	6 27	*SP	
SAVANNAH	35.16	183.5	6 53	3								
TARRALEAH	35.79	184.4	6 51	-4								
MOORLANDS	35.88	183.4	6 59	3								
AFIAMALU	38.39	104.1	7 2[illegible]	3	13 9	2						
KARAPIRO	39.0[illegible]	147.1	7 22	0						9 30		
MUNDARING	40.36	226.7	7 26	-7								
TUAI	40.51	146.6	7 35	1								
PERTH	40.63	227.0	7 43	8	13 40	0				16 36	55	
MATUSIRO	44.19	346.5	7 5[illegible]	-5						19 9		
SHILLONG	64.72	302.1	10 24K	-10								
ULAN-BATOR	66.06	329.9	10 41	-1								
ESEN BULAK	70.94	323.9	11 2[illegible]	7								
NEW DELHI	78.08	30[illegible].9	11 46A	-8								
SOUTH POLE	83.55	180.0	12 2[illegible]	-3								
BYRD STATION	83.75	169.9	12 22	-2								
WARSAK DAM	84.02	305.1	11 59	-26								
COLLEGE	84.51	22.3	12 24	-3						21 18		
QUETTA	87.16	300.6	12 35	-5								
PASADENA	95.20	56.3	13 2[illegible]	2								
BLUE MTS.	96.52	45.7	13 25	1						30 5	PKKP	
SHIRAZ	99.57	298.9			24 11	2						
UINTA BASIN	102.20	50.3	13 51	2						18 11	PKP	
KIRUNA	110.10	341.8	18 22	-2								
WICHITA MTS.	111.34	55.4	18 28	1						36 51	SKKS	
NURMIJARVI	112.41	334.1	18 27	-2								
UMEA	112.46	338.3	18 27A	-2								
TULSA	113.44	53.7								29 21		
MADISON	116.30	44.6	18 36	0								
BROKEN HILL	118.29	249.9	18 40K	0								
LWIRO	120.56	263.6	18 43A	-2								
CUMBERLAND	121.62	52.0	18 45	-2						32 31	PKKS	
COLLMBERG	122.88	329.3	18 47	-2								
SCHEFFERVLLE	123.56	24.5	18 50A	0								
KASPERSKE H.	123.83	326.9	18 49	-2								
OTTAWA	124.71	37.8	18 52	-1								
BREBEUF	125.92	36.7	18 55K	0								
STUTTGART	126.32	328.6	18 54	-2								
PARIS	129.62	332.5	19 1	-1								
ISOLA	130.38	325.2	19 3	-1								
GARCHY	130.43	330.7	19 2	-2								
FOLINIERE	130.97	334.3	19 3	-2								
HUANCAYO	131.40	112.2	19 10	4								
AREQUIPA	133.14	119.6	19 12	3								
CHINCHINA	134.70	89.4	19 9K	-3						22 40	PKS	
LA PAZ	135.99	121.7	19 15	1								
BOGOTA	136.21	90.1	19 17	3						21 59	PP	
FUQUENE	136.61	88.9	19 17A	2								
TOLEDO	139.35	328.7	19 14	-6						22 3	PP	
SAN JUAN	142.99	68.0	19 24	-3								
CARACAS	143.38	81.2	19 27A	0						35 32		
ST. KITTS	146.37	68.4	19 36	3								
FORT FRANCE	148.44	72.4	19 42	6								
TRINIDAD	148.79	80.2	19 42	6								

FEBRUARY 4 23.H 21.M 9.S EPICENTRE 48.60 155.07 DEPTH= 75.KM

A=-0.60200 B= 0.27984 C= 0.74785 D= 0.4215 E= 0.9068
G=-0.6782 H= 0.3152 K=-0.6639 HT= -4.9

DEPTH OF FOCUS= 0.007R

SE= 1.77

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S
PETROPAVLOVK	4.98	25.8	1	13	-1	2	7	-3				

KURILSK	5.97	238.4	1	28	1					2	27
Y.-SAKHLINSK	8.46	263.9	2	5A	3	3	39	3			
UGLEGORSK	8.59	278.1	2	8	5	3	53	13			
MAGADAN	11.25	346.8	2	4	1					3	17
MIZUSAWA	13.79	231.8	3	4	-9	5	37	-8			
MATUSIRO	17.26	231.9	3	56	-1	7	14	9			
YAKUTSK	19.54	322.9	4	22A	-2	7	57	2		8	27 55
ABUYAMA	19.92	233.7	4	27A	-1						
CHANGCHUN	21.06	268.1	4	36A	-3	8	20	-5			
TIKSI	26.09	341.4	5	26A	-2	9	49	-3			
PEKING	28.86	267.4	5	52A	-1	10	36	0			
ZO-SE	31.01	248.2	6	13A	1	11	11	1			
ULAN-BATOR	31.66	287.3	6	16A	-2						
NANKING	31.85	252.2	6	19A	-1						
IRKUTSK	31.99	296.1	6	19A	-2						
PAOTOW	32.66	272.9	6	25A	-2						
COLLEGE	33.88	40.2	6	37	0					7	36 PP
ESEN BULAK	38.95	289.5	7	20	0						
LANCHOW	39.20	270.9	7	23A	1	13	15	-1			
CANTON	41.60	247.4	7	43A	1						
CHENGTU	42.35	264.2	7	49A	1	14	3	0	8 21		
MOULD BAY	42.42	20.7	7	49A	1						
BAGUIO CITY	42.67	233.3	7	50	0				8 16		
KIPAPA	46.05	109.1	8	16	-2						
SEMIPALATNSK	46.69	301.9	8	21A	-2						
KUNMING	46.88	259.4	8	25A	1	15	10	2			
ALERT	47.78	6.2	8	31A	0						
YELLOWKNIFE	48.65	38.2	8	38K	0						
RESOLUTE	48.66	19.4	8	38A	0						
HAWAII V.OB.	49.24	108.3	8	42	0						
NORD	49.98	358.4	8	46	-2						
VICTORIA	51.41	57.3	8	58	-1						
LHASA	51.61	273.0	9	2A	2	16	18	4	9 34		
ALMATA	52.37	295.5	9	4K	-2						
NHATRANG	52.46	242.2	9	7	0					16	11
SEATTLE	52.51	57.7	9	13	6						
PENTICTON	53.06	54.7	9	10K	-1						
SVERDLOVSK	53.38	316.9	9	12K	-2						
SHILLONG	53.75	268.6	9	13A	-3						
FRUNSE	54.01	296.3	9	18A	0						
BANFF	54.16	50.9	9	18K	-1						
CHITTAGONG	55.98	265.8	9	33	0						
CHATRA	56.02	273.2	9	34	1						
KEVO	56.04	346.7	9	31	-2					10	29 PCP
APATITY	56.17	336.8	9	31A	-3	17	13	-3	9 54		
HUNGRY HORSE	56.62	53.0	9	37	0						
BLUE MTS.	56.96	58.0	9	39	-1					11	47 PP
MINERAL	57.23	64.5	9	41A	0					10	32
CALISTOGA	57.71	66.7	9	44K	-1						
TROMSOE	57.80	343.3	9	43	-2						
SODANKYLA	58.00	339.1	9	45	-2					10	37 PCP
TASHKENT	58.09	297.8	9	47A	0					10	38 PCP
BERKELEY	58.39	67.2	9	49K	-1					17	51
RENO	58.81	64.2	9	53K	1						
BUTTE	58.85	54.4	9	53	0				10 8	10	29
KIRUNA	59.01	341.6	9	53A	-1					10	40 PCP
LICK	59.10	67.3	9	53A	-1						
DEHRA DUN	59.70	282.6								11	21
BOZEMAN	59.89	54.0	10	1	1						
DUZHANBE	60.14	295.6	10	1A	-1					19	44 SCS
KAJAANI	60.35	336.3	10	0	-3					10	46 PCP
PRIEST	60.48	67.8	10	4K	0						
EUREKA	61.13	62.1	10	9	1					12	24 PP
SCORESBY SD.	61.22	358.9	10	10	1						
LAHORE	61.28	286.1	10	9	0						
NEW DELHI	61.41	281.7	10	7A	-3						
WARSAK DAM	61.41	289.9	10	30	20						
UMEA	62.44	339.2	10	15A	-2	18	37	0			
SALT LAKE C.	62.65	58.6	10	19	0				10 39		
PULKOVO	63.03	332.2	10	20	-1	18	39	-5			
PASADENA	63.32	67.9	10	23	0				10 37	10	43 *SP
MOSCOW	63.66	325.9	10	23	-2					12	42 PP
NURMIJARVI	64.09	335.2	10	26K	-2	18	57	0		11	2 PCP
BOULDER CITY	64.12	64.4	10	28	0				10 49		
UINTA BASIN	64.24	57.7	10	29K	0	19	5	6	10 49	12	51 PP
HELSINKI	64.28	334.9	10	28K	-1						
SKALSTUGAN	64.38	342.5	10	28	-2					11	6 PCP
RAPID CITY	65.09	51.1	10	35	1						
UPPSALA	66.50	338.1	10	42A	-1					11	14 PCP

ASHKABAD	66.64	301.2	10	45	1						
QUETTA	66.86	289.8	10	47	1					13	10
REYKJAVIK	67.59	358.6	10	51K	1						
SIDA	67.84	356.7	10	54A	2						
KONGSBERG	68.49	342.0	10	56	0					11	22 PCP
BERGEN	68.63	344.4	10	56	-1						
AFIAMALU	68.83	145.3	10	56	-2					13	43
TUCSON	69.09	64.8	10	59	-1						
ALBUQUERQUE	69.75	60.0	11	4	0				11 24		
GOTEBORG	69.76	339.9	11	2	-2						
KARLSKRONA	70.27	337.3	11	10	3						
POONA	70.59	276.2	11	9A	0						
BOMBAY	71.00	277.2	11	12	1						
SCHEFFERVLLE	71.11	24.1	11	12A	0						
TIFLIS	71.12	312.1	11	13K	1	20	24	3			
COPENHAGEN	71.49	338.7	11	14A	0						
GORIS	72.02	309.6	11	17A	0						
TEHERAN	72.11	303.8	11	20	2					13	42
LAWRENCE	72.89	50.2	11	21	-1						
LUBBOCK	73.37	58.1	11	25	0						
SIMFEROPOL	73.49	320.6	11	26A	0						
WICHITA MTS.	74.33	55.2	11	31	0	21	4	7	11 52	14	23 PP
KRAKOW	74.43	331.8	11	31A	0					11	42 PCP
TULSA	74.93	52.6	11	35A	1	21	5	1			
RACIBORZ	74.94	332.9	11	35	1				11 53	11	43 PCP
DURHAM	75.15	346.3	11	41A	6						
COLLMBERG	75.32	336.5	11	36A	0				11 56		
HALLE	75.42	337.2	11	37	0				12 8		
WITTEVEEN	75.45	340.8	11	39A	2						
FAYETTEVILLE	75.63	51.4	11	37K	-1						
SHIRAZ	75.96	298.9	11	41A	1	21	15	-1	11 57	14	27 PP
MUNSTER	76.03	339.9	11	42	2						
PRAGUE	76.05	335.1	11	41	0						
PRUHONICE	76.09	335.0	11	41	0					16	5
OTTAWA	76.41	34.2	11	43	0						
SHAWINIGAN	76.49	31.7	11	43	0						
BENSBERG	77.08	339.8	11	46A	0				12 7	12	19 *SP
BREBEUF	77.09	32.8	11	42	-4						
VIENNA-H.	77.12	333.1	11	47A	0					12	2 PCP
KASPERSKE H.	77.13	335.2	11	48	1						
KEW	78.11	344.6	11	53A	1						
HEIDELBERG	78.16	338.3	11	53A	1						
DOURBES	78.45	341.1	11	55	1					13	9
STUTTGART	78.60	337.7	11	55	0						
TUBINGEN	78.88	337.7	11	57	1						
STRASBOURG	79.15	338.6	11	59	1					12	51
EBINGEN	79.23	337.7	11	59A	1						
RAVENSBURG	79.43	337.1	12	0A	1						
LJUBLJANA	79.65	333.3	12	0A	0						
SOFIA	79.66	326.0	12	2	2					12	33
PARIS	80.12	342.0	12	3	0						
TRIESTE	80.24	333.6	12	3	-1						
CUMBERLAND	80.33	46.1	12	4	0	22	4	2		27	55 SS
FOLINIERE	80.74	343.9	12	7	1						
PALISADES	80.85	35.3	12	11	4						
GARCHY	81.45	341.1	12	11	1					14	5
KSARA	81.68	312.7	12	12A	1					13	23
ROSELEND	82.13	338.3	12	17	4					12	43
ATHENS	83.59	323.3	12	20A	-1						
JERUSALEM	83.65	312.0	12	22A	1						
MONACO	83.76	337.0	12	26	4	22	41	4			
ADELAIDE	84.46	193.4	12	26	1						
TOOLANGI	86.21	187.6	12	35	1				12 54	12	42 PCP
MUNDARING	87.40	212.3	12	39	-1				12 58		
KARAPIRO	88.05	163.9	12	43	0				13 2		
TOLEDO	89.98	344.1	12	52	0					16	26 PP
SAVANNAH	90.20	185.9								13	12
TARRALEAH	90.83	186.4	12	57	1						
BOGOTA	111.91	54.3				25	16	15		21	41 PPP
CHILEKA	121.43	282.4	18	47	3						
BROKEN HILL	124.67	289.0	18	53	2						
BULAWAYO	128.80	284.1	18	57	-2						
LA PAZ	132.48	62.9	19	10	4						
BYRD STATION	136.65	165.3	19	15	2					22	39

FEBRUARY 5 20.H 39.M 16.S EPICENTRE -38.40 -73.51 DEPTH= 0.KM

A= 0.22303 B=-0.75345 C=-0.61853 D=-0.9589 E=-0.2838
G=-0.1756 H= 0.5931 K=-0.7858 HT= -1.1

SE= 1.58

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
CONCEPCION	1.95	37.0	0	32K	-2	1	18	18					
SANTA LUCIA	5.47	26.1	1	24A	0								
SANTIAGO	5.47	26.0	1	24	0								
BUENOS AIRES	12.67	77.2	3	4	0								
LA PLATA	12.99	79.2	3	10A	2	5	44	9					
ANTOFAGASTA	14.89	11.1	3	33A	0	6	14	-6			7	14	
AREQUIPA	21.93	5.2	4	59	3								
LA PAZ	22.32	13.7	5	3	3	9	11	9					
HUANCAYO	26.29	356.0	5	40	2								
BOGOTA	42.80	359.2	8	2A	1	14	48	22			9	48	PP
CHINCHINA	43.19	356.9	8	5A	1	14	54	23			9	57	PP
BYRD STATION	45.23	190.2	8	19	-1								
BALBOA HTS.	47.45	351.9	8	39A	1								
GALERAZAMBA	48.95	357.7	9	2	13	16	9	16			11	39	PPP
CARACAS	49.03	8.6	8	50A	0	16	5	10					
TRINIDAD	50.09	15.6	8	57	-1	16	10	1			10	56	PP
SOUTH POLE	51.79	180.0	9	8	-3						16	40	
N-LAZARVSKYA	52.79	155.5	9	16	-3						16	45	PS
FORT FRANCE	54.10	14.8	9	27	-1	17	5	1					
ST. CLAUDE	55.26	13.9	9	34	-3	17	18	-2					
SAN JUAN	56.90	8.4	9	47	-2	17	38	-4					
COMITAN	57.09	338.6									17	44	
MERIDA	60.94	342.7									18	29	
VERA CRUZ	61.10	335.5									18	32	
CAPE HALLETT	61.15	198.2	10	17	-1								
TACUBAYA	62.34	332.5									18	24	
HOUSTON	70.78	339.9	11	20	0								
HERMANUS	71.52	119.5	11	27	3	20	46	3					
CHIHUAHUA	73.30	330.4									20	44	
CUMBERLAND	74.46	349.8	11	40A	-1	21	16	0			14	20	PP
WILKES	75.55	181.7	11	47	-1	21	26	-2					
WICHITA MTS.	76.38	338.9	11	50	-2	21	38	1			14	37	PP
FAYETTEVILLE	76.54	342.9	11	51K	-2								
TULSA	76.76	341.6	11	53K	-1	21	39	-2			22	22	
GRAHAMSTOWN	77.11	122.3	11	56	0								
MORGANTOWN	77.87	354.9	11	59K	-2								
TUCSON	78.40	328.4	12	3	-1	22	4	5					
BANDEIRA	78.45	99.9	12	5A	1				12	22	12	14	PCP
KIMBERLEY	78.67	117.6	12	4A	-1								
FORDHAM	78.87	359.7	12	5	-1	22	5	1					
PALISADES	79.03	359.7	12	7A	0	22	7	1					
ALBUQUERQUE	79.11	332.9	12	7	0								
WELLINGTON	79.20	225.5	12	11	3	22	7	-1			27	20	SS
ROXBURGH	79.22	219.6				22	4	-4			26	44	SS
CLEVELAND	79.83	353.9	12	11K	0	22	12	-2					
CHATEAU	80.15	227.4	12	13	0								
KARAPIRO	81.00	228.4	12	17	-1								
LONDON ONT.	81.35	354.3	12	17A	-2								
LUANDA	82.03	94.9	12	24A	1								
HALIFAX	83.12	7.1	12	29	0								
PASADENA	83.23	324.1	12	31	2	22	52	3					
BOULDER CITY	83.29	327.4	12	29	0						12	58	
OTTAWA	83.44	358.4	12	30K	0								
BREBEUF	83.52	359.9	12	31K	0	22	53	1			28	26	SS
LARAMIE	84.56	336.3	12	37	1								
SHAWINIGAN	84.57	6.5	12	34	-2								
UINTA BASIN	85.01	333.1	12	38A	0	22	59	-8			16	8	PP
FLAMING GRGE	85.48	333.5	12	41	0								
PRIEST	86.02	323.5	12	45K	2								
SALT LAKE C.	86.23	331.8	12	43	-1								
EUREKA	86.73	328.4	12	46	-1								
BULAWAYO	86.75	113.1	12	47A	0								
LICK	87.45	323.6	12	52	2								
AFIAMALU	87.82	254.1	12	56K	4	23	22	-12					
BERKELEY	88.17	323.5	12	56K	2	23	24	-13			28	56	SS
RENO	88.42	326.0	12	55A	0								
CALISTOGA	88.94	323.7	12	57A	0								
MINERAL	89.87	325.3	13	2	0								
BOZEMAN	90.23	334.7	13	4	1								
BROKEN HILL	90.27	108.6	13	5A	2								

BUTTE	91.06	333.9			13	8	1					
BLUE MTS.	91.79	330.5			13	10	-1	24	6	-4	16	55 PP
HUNGRY HORSE	93.57	334.3			13	18	-1					
AVERROES	94.09	50.1			13	20A	-1					
CHILEKA	94.24	113.6			13	25	3					
SEATTLE	96.07	329.2						24	0	-6		
CANBERRA	96.76	213.8									27	38
RIVERVIEW	97.04	216.1			13	38	3	24	9	-3	24	56 S
LWIRO	98.24	99.4			13	42A	2	24	30	12	17	41 PP
HONOLULU	98.87	290.0						24	30	9	17	58 PP
KIPAPA	98.89	290.2						24	32	11	25	24 S
GRANADA	99.01	49.4			13	46A	3	25	27	65	18	4 PP
ALMERIA	99.47	50.3									18	1 PP
TOLEDO	100.54	47.1			13	47A	-3	24	31	2	17	58 PP
ADELAIDE	101.13	206.5			13	56	3	24	30	-2	25	28 S
CLERMONT-FD.	108.33	45.8									19	51
MUNDARING	109.41	188.8						25	8	-1	19	8 PP
PERTH	109.48	188.4		19	9	777					34	34 SS
KEW	109.90	39.6									28	35
HONIARA	111.16	238.2									19	2 PP
DURHAM	111.28	36.2									23	35
PAVIA	111.50	48.9									40	46
DOURBES	111.65	42.7									20	1 PP
ROME	111.75	53.3									19	21 PP
MESSINA	111.76	58.0						25	22	3	19	24 PP
STRASBOURG	112.54	45.3									19	50 PP
STUTTGART	113.49	45.7						27	30	124	19	32 PP
TRIESTE	114.49	50.3									19	46 PP
LJUBLJANA	115.15	50.3									19	46 PP
JENA	115.87	44.5									20	0 PP
HALLE	116.35	44.1		18	46	1					19	58 PP
COLLMBERG	116.83	44.6									19	48 PP
PRUHONICE	117.08	46.4									19	58 PP
ATHENS	117.20	61.8									19	51 PKP2
SKOPJE	117.56	56.9									30	7
COLLEGE	117.94	332.3		18	47	-1						
BELGRADE	118.24	53.7									20	9 PP
PORT MORESBY	119.20	227.4						25	44	-3	20	14 PP
RABAUL	120.17	235.6									19	56
KRAKOW	120.21	48.1									30	24 SKSP
ISTANBUL UN.	122.22	60.8						25	55	-2	15	26
UPPSALA	122.81	36.9		18	56	-2					37	19 SS
KSARA	124.05	71.4		19	1	1					20	43 PP
UMEA	125.25	32.8		19	1	-1					20	54 PP
KIRUNA	126.35	28.0		19	4	-1					21	1 PP
NURMIJARVI	126.35	37.5		19	4	-1	26	2	-7		20	58 PP
SIMFEROPOL	127.19	58.2		19	5	-1					21	3 PP
KAJAANI	128.52	33.4		19	7	-2						
SODANKYLA	128.60	29.2		19	8	-1						
KEVO	129.03	26.1		19	8	-2	26	16	-1		21	20 PP
APATITY	131.23	29.2		19	11	-3					21	32 PP
MOSCOW	132.09	45.3		19	14	-2					21	38 PP
TIFLIS	133.56	65.4									22	44 SKP
GORIS	133.98	68.8		19	18	-1	26	21	-8		21	49 PP
SHIRAZ	134.97	84.3		19	22	1					21	56 PP
TEHERAN	136.50	75.8		19	14	-10					22	3 PP
PETROPAVLOVK	141.64	309.8		19	30	-3						
ASHKABAD	142.50	75.3		19	30	-4						
TIKSI	144.78	347.9		19	35	-3					29	31 SKKS
SVERDLOVSK	144.84	43.2		19	37	-1						
BOMBAY	144.91	114.1		19	37	-2					33	14 PS
MAGADAN	144.95	321.7		19	37	-2					23	6 PKS
POONA	145.40	115.7		19	39A	0					23	3 PP
MADRAS	145.57	130.2		19	56A	16	26	43	-4		42	40 SS
QUETTA	146.52	92.1		19	44	3						
PORT BLAIR	150.68	151.6		19	56	8						
VISHAKHAPTNM	151.11	129.0									29	29
TASHKENT	151.43	72.3		19	50	1					23	35 PKS
WARSAK DAM	151.57	88.1		19	49	0						
Y.-SAKHLINSK	152.22	299.8		19	50	0					23	34 PP
KHOROG	152.51	80.9		19	52	1					23	42 PP
LAHORE	152.87	94.8		19	52	1						
MANILA	153.08	212.6		19	52	1						
TUKUBASAN	153.26	275.8		19	54K	2					23	46 PP
NEW DELHI	153.78	103.1		19	53A	1					23	51 PP
MATUSIRO	154.82	275.7		20	6	12					29	45
BAGUIO CITY	154.85	213.4		19	54	0						
DEHRA DUN	155.25	100.4		19	55	1					23	41 PP
FRUNSE	155.49	69.4		19	56	1					24	0 PP

BOKARO	157.17	123.5	20	27	30				24	2	PP	
CALCUTTA	157.84	130.3	19	50	-8							
SEMIPALATNSK	157.87	48.7	19	58	0				24	10	PP	
CHITTAGONG	159.66	137.6	20	2	2							
CHATRA	160.10	119.7	20	1	1				24	23	PP	
VLADIVOSTOK	160.21	291.9	19	58	-3				28	10	PPP	
SHILLONG	162.22	131.7	20	3K	0				24	36	PP	
CANTON	163.66	203.0	20	5A	1				24	43	PP	
LHASA	164.51	119.7	20	8A	3				24	48	PP	
CHANGCHUN	164.82	296.9	20	2	-3				21	5	PKP2	
ZO-SE	165.91	243.3	20	6A	0				24	55	PP	
IRKUTSK	166.04	5.5	20	5	-1				24	55	PP	
KUNMING	166.39	165.4	20	8A	1				24	53	PP	
NANKING	168.13	241.5	20	8A	0				21	22	PKP2	
ESEN BULAK	169.00	40.1	20	9A	1				21	12	PKP2	
ULAN-BATOR	170.48	358.3	20	8	-1				21	8	PKP2	
CHENGTU	172.02	164.4	20	11	1							
PEKING	172.31	285.3	20	10A	0				25	29	PP	
SIAN	175.42	206.1	20	12A	1				25	38	PP	
PAOTOW	176.50	309.6	20	11A	0							
LANCHOW	176.84	137.0	20	13A	1				25	46	PP	

FEBRUARY 6 1.H 21.M 24.S EPICENTRE -38.42 -73.41 DEPTH= 0.KM

A= 0.22427 B=-0.75280 C=-0.61887 D=-0.9584 E=-0.2855
G=-0.1767 H= 0.5931 K=-0.7855 HT= -1.1

SE= 1.75

	DELTA DEG.	AZ. DEG.	P M	S	O-C S	S M	S	O-C S	*PP M	S	SUPP. M	S	
CONCEPCION	1.92	34.6	0	34K	0	1	19	20					
SANTA LUCIA	5.46	25.2	1	24	0								
SANTIAGO	5.46	25.0	1	23	-1								
BUENOS AIRES	12.60	76.9	3	5	2								
ANTOFAGASTA	14.90	10.7	3	32	-1								
AREQUIPA	21.94	4.9	4	58	1								
LA PAZ	22.33	13.4	5	2	2	9	24	22					
HUANCAYO	26.32	355.8	5	41	2								
BOGOTA	42.83	359.0	8	2A	1	14	29	3			9	46	PP
CHINCHINA	43.22	356.8	8	6	2	14	33	1			9	48	PP
BYRD STATION	45.22	190.2	8	19	-1								
BALBOA HTS.	47.48	351.7	8	38A	0								
GALERAZAMBA	48.97	357.6	9	2	12	16	3	9					
CARACAS	49.04	8.5	8	51	1	15	54	-1					
TRINIDAD	50.09	15.5	8	59	1						10	56	PP
SOUTH POLE	51.77	180.0	8	40	-31								
N-LAZARVSKYA	52.73	155.5	9	16	-2	16	44	-2			19	3	SCS
FORT FRANCE	54.10	14.7				17	5	0					
SAN JUAN	56.91	8.3	9	48	-1								
CAPE HALLETT	61.15	198.2	10	22	4								
HERMANUS	71.44	119.4				20	46	4					
CUMBERLAND	74.50	349.7	11	41	-1	21	14	-3			14	23	PP
WICHITA MTS.	76.43	338.9	11	51	-2	21	36	-2			32	31	
FAYETTEVILLE	76.59	342.8	11	52	-2								
TULSA	76.80	341.5	11	54	-1	21	40	-2					
GRAHAMSTOWN	77.03	122.2	11	55	-1								
BANDEIRA	78.37	99.8	12	3A	-1								
PALISADES	79.05	359.6	12	5A	-2	22	8	2					
ALBUQUERQUE	79.17	332.9	12	8	0								
WELLINGTON	79.24	225.4	12	12	4	22	8	0			27	36	SS
ROXBURGH	79.25	219.5				22	10	2			27	18	SS
CHATEAU	80.19	227.4	12	12	-1								
KARAPIRO	81.04	228.3	12	15	-3								
LONDON ONT.	81.39	354.2	12	19A	-1								
LUANDA	81.95	94.9	12	24A	1								
MADISON	82.75	348.1	12	26	-1	22	40	-5			15	40	PP
GOLDEN	83.08	335.7	12	28	-1								
PASADENA	83.30	324.0	12	31	1						22	56	
OTTAWA	83.47	358.4	12	31K	1								
SHAWINIGAN	84.59	0.4	12	37A	1								
UINTA BASIN	85.06	333.1	12	37	-2						13	3	
PRIEST	86.09	323.4	12	40K	-4								
SALT LAKE C.	86.29	331.8	12	45	0								
BULAWAYO	86.67	113.0	12	45	-1								
EUREKA	86.80	328.4	12	47	0								

AFIAMALU	87.89	254.0				23	26	-9			
BERKELEY	88.24	323.4	12	58A	4	23	32	-6			
BROKEN HILL	90.18	108.6	13	5A	2						
BOZEMAN	90.29	334.6	13	5	1						
BUTTE	91.12	333.9	13	8	0						
BLUE MTS.	91.85	330.4	13	10	-1	24	16	5	25	52	SP
HUNGRY HORSE	93.63	334.2	13	18	-1						
CHILEKA	94.16	113.6	13	22	0						
RIVERVIEW	97.06	216.1				24	13	1	24	1	
LWIRO	98.16	99.4	13	41	1				17	22	PP
GRANADA	98.97	49.4	14	42	59				28	12	PS
TOLEDO	100.50	47.1	13	56	6				18	0	PP
BENSBERG	113.46	42.9							25	34	
JENA	115.83	44.5							29	48	
ATHENS	117.14	61.8							20	0	PKPZ
MOULD BAY	118.03	348.8	18	48	-1						
ISTANBUL UN.	122.17	60.8							20	28	PP
UPPSALA	122.78	36.9							32	3	
KSARA	123.98	71.4	18	59	-1				20	44	PP
UMEA	125.23	32.8	19	1	-2				37	46	SS
NURMIJARVI	126.33	37.4	19	3	-2				20	58	PP
KIRUNA	126.34	28.0							38	7	SS
SIMFEROPOL	127.14	58.1							21	2	PP
KAJAANI	128.50	33.4	19	7	-2						
SODANKYLA	128.58	29.2	19	9	0						
PULKOVO	128.91	39.2							21	18	PP
KEVO	129.02	26.1							38	46	SS
APATITY	131.21	29.3	19	22	8				21	38	PP
MOSCOW	132.06	45.3	19	14	-2				22	52	PKS
TIFLIS	133.49	65.4							22	46	SKP
GORIS	133.91	68.8	19	13	-6	26	17	-12	21	48	PP
SHIRAZ	134.90	84.3	19	22K	1				21	55	PP
TEHERAN	136.43	75.8	19	26	2				22	7	PP
ASHKABAD	142.43	75.3	19	30	-4				22	44	SKP
SVERDLOVSK	144.80	43.3	19	46	7						
TIKSI	144.83	348.0	19	35	-4				22	55	PP
BOMBAY	144.83	114.0	19	38	-1						
MAGADAN	145.02	321.7	19	37	-2						
POONA	145.32	115.6	19	41	2						
MADRAS	145.49	130.1	19	42	2						
QUETTA	146.44	92.1	19	44	3						
TASHKENT	151.36	72.3	19	50	1				23	38	PP
WARSAK DAM	151.49	88.0	19	46	-3						
KHOROG	152.43	80.9	20	0	9						
TUKUBASAN	153.34	275.7	19	55	3				49	26	SSS
MATUSIRO	154.90	275.6	20	23	29				30	46	SKKS
FRUNSE	155.42	69.5	19	57	2				24	0	PP
SEMIPALATNSK	157.83	48.8	19	57	-1						
VLADIVOSTOK	160.29	291.8	20	48	47				24	20	PP
CANTON	163.66	202.6							24	49	PP
LHASA	164.43	119.6	20	8	3						
CHANGCHUN	164.90	296.9	20	3	-2						
ZO-SE	165.97	243.0	20	7	1				31	39	SKKS
IRKUTSK	166.06	5.8	20	6	0				24	55	PP
KUNMING	166.34	165.1							24	53	PP
NANKING	168.19	241.2	20	8	0				25	19	PP
ESEN BULAK	168.96	40.5	20	2	-6						
ULAN-BATOR	170.50	358.7	20	11	2						
CHENGTU	171.97	163.9	20	11	1				25	30	PP
PEKING	172.39	285.2	20	10	0				32	17	SKKS
SIAN	175.43	205.0	20	13	2				25	44	PP
PAOTOW	176.58	310.1							25	49	PP
LANCHOW	176.77	136.2							25	56	PP

FEBRUARY 6 10.H 20.M 22.S EPICENTRE -3.45 146.05 DEPTH= 0.KM

A=-0.82809 B= 0.55740 C=-0.05976 D= 0.5584 E= 0.8296
G= 0.0496 H=-0.0334 K=-0.9982 HT= 7.1

SE= 1.92

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S
PORT MORESBY	6.01	169.6	1	32	0	2	38	-5			2	58
RABAUL	6.15	97.2	1	35A	1	2	48	2				
HONIARA	15.03	113.9	3	35	0	6	31	8				
CHARTERS TS.	16.54	179.3	3	54	-1	7	6	7				

DARWIN	17.48	238.7	4	6	0	7	19	-1			
KOUMAC	24.59	135.2	5	25A	3						
BRISBANE	24.66	165.5	5	23K	0	9	46	3			
NOUMEA	27.25	135.2	5	49K	2						
RIVERVIEW	30.60	171.6				11	4	-15		11	54
MANILA	30.60	306.6	6	18	1	11	26	7			
CANBERRA	31.83	175.4	6	28	0						
BAGUIO CITY	32.00	308.8	6	50	20	11	38	-3			
ADELAIDE	32.09	191.4	6	30	-1	11	34	-9			
TOOLANGI	33.96	180.8	6	48	1				6	56	8 8 PP
MUNDARING	39.88	221.3	7	35	-2	13	42	U			
PERTH	40.12	221.6				13	48	2			9 14 PP
MATUSIRO	40.45	350.2	7	40	-1	13	48	-3			
CANTON	41.40	311.2	7	51	2	14	12	7			
ZO-SE	41.74	327.2	7	52	0						
AFIAMALU	42.88	106.7	8	23	22	14	28	1			17 56
KARAPIRO	43.64	145.7	8	8	0						
NANKING	43.80	325.8	8	9	0	14	43	3			
CHATEAU	44.54	147.0	8	15	0						
WELLINGTON	45.65	149.6				15	6	-1			
VLADIVOSTOK	48.09	346.1	8	42A	-1	15	38	-3			
Y.-SAKHLINSK	50.34	357.0	8	59	-1	16	13	0			
CHANGCHUN	50.63	340.6	9	0	-2	16	15	-2			
KUNMING	50.72	306.5	9	5K	2	16	21	3			
PEKING	51.22	330.6	9	8	1	16	30	5			
SIAN	51.26	320.1	9	7	0						
CHENGTU	52.52	313.3	9	16	-1	16	39	-4			
PAOTOW	54.82	326.8	9	33	-1	17	14	0			
PORT BLAIR	55.12	286.7									13 30
LANCHOW	55.67	318.7	9	40	0						
SHILLONG	59.87	302.1	10	7A	-3	18	21	0			
ULAN-BATOR	61.55	331.1	10	20	-1	18	42	0			
LHASA	62.04	306.1	10	25	1	18	53	5			
CHATRA	64.27	301.9	10	36K	-3						
VISHAKHAPTNM	65.32	291.2	9	55	-51						
IRKUTSK	65.76	333.3	10	39	-10	19	34	0			
ESEN BULAK	66.25	324.7	10	51	-1	19	43	2			
YAKUTSK	66.48	351.7	10	52A	-1	19	42	-1			
POONA	74.30	290.2	11	40	-1						
TIKSI	75.78	354.5	11	47A	-2						
ALMATA-2	77.04	315.7	11	57	1						
SEMIPALATNSK	77.53	323.3	12	2	3						
FRUNSE	78.85	314.7	12	8K	2						
WARSAK DAM	79.15	305.4	12	7	-1						
ANDIJAN	79.97	312.2	12	14	2	22	18	2			
QUETTA	82.33	306.9	12	26	1						
TASHKENT	82.37	312.3	12	25	0						
BYRD STATION	87.40	170.0	12	49	-1						
MOULD BAY	94.43	13.9	13	23	0						
SHIRAZ	94.76	299.3	13	26	2						
WOODY	96.13	54.6	13	31	0						
BLUE MTS.	97.13	45.4	13	36	1						26 24 SP
KEVO	102.98	341.8									32 58 SS
UINTA BASIN	103.18	49.5									27 32 PS
NURMIJARVI	108.01	333.6				24	58	-5			33 58 SS
UMEA	108.22	337.7									34 5 SS
KSARA	108.65	304.4									18 57 PP
ISTANBUL UN.	112.50	313.2									28 59
WICHITA MTS.	112.71	53.8									29 6 PS
TULSA	114.66	52.0									28 53
MADISON	116.74	42.5				25	26	-12			29 28 PS
CUMBERLAND	122.66	49.4									37 45 SS
CHINCHINA	138.42	86.4	19	27	0						
BOGOTA	139.96	86.9									41 6 SS
SAN JUAN	145.19	62.4	19	42	3						

FEBRUARY 6 18.H 17.M 14.S EPICENTRE 55.81 166.08 DEPTH= 54.KM

A=-0.54794 B= 0.13581 C= 0.82542 D= 0.2406 E= 0.9706
G=-0.8012 H= 0.1986 K=-0.5645 HT= -7.5

DEPTH OF FOCUS= 0.003R

SE= 1.90

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

KLYUCHI	2.97	282.1	0	46	0				2	52	
PETROPAVLOVK	5.16	240.3	1	13A	-3	2	11	-5			
MAGADAN	9.00	300.9	2	9	-1				4	15	
UGLEGORSK	16.06	255.2	3	44	1				4	12	PPP
Y.-SAKHLINSK	16.95	248.5	3	52	-3				7	16	SS
YAKUTSK	19.57	303.4	4	25A	-1				8	9	
TIKSI	22.27	329.6	4	54A	1				5	26	PPP
COLLEGE	24.00	49.2	5	10	0						
VLADIVOSTOK	25.29	254.3	5	21A	-2	9	41	-1	6	19	PPP
MATUSIRO	26.97	236.1	5	38A	0	10	27	17			
CHANGCHUN	28.47	262.4	5	50A	-2						
ABUYAMA	29.58	237.7	6	2K	0						
MOULD BAY	33.14	25.0	6	37	4						
IRKUTSK	35.38	290.8	6	52A	0	12	29	7			
PEKING	36.10	265.5	6	58A	0						
ULAN-BATOR	36.36	283.0	7	0	0						
KHEYS	38.23	345.4	7	17	1						
PAOTOW	39.20	271.3	7	25A	1	13	29	9			
RESOLUTE	39.45	24.4	7	27	1						
ALERT	39.74	8.9	7	29A	0						
ZO-SE	39.89	250.8	7	30	0	13	38	7			
NANKING	40.44	254.2	7	35A	1	13	47	8			
ESEN BULAK	43.07	288.0	7	57	1						
PENTICTON	43.60	66.0	8	0	0						
SIAN	44.27	265.5	8	6A	0						
BANFF	44.53	61.6	8	6	-2						
LANCHOW	45.84	271.5	8	20	2	15	7	9			
HUNGRY HORSE	47.08	63.7	8	28	0						
BLUE MTS.	47.69	69.3	8	32A	-1	15	34	10	10	9	PCP
MINERAL	48.44	76.7	8	38K	-1						
SEMIPALATNSK	48.66	301.8	8	40A	0						
CALISTOGA	49.10	79.0	8	43K	-1						
BUTTE	49.37	65.2	8	47	1						
CHENGTU	49.71	266.5	8	49A	1	16	0	8			
BERKELEY	49.82	79.5	8	57A	8						
RENO	49.99	76.2	8	51A	0						
BOZEMAN	50.39	64.6	8	54	0						
LICK	50.55	79.5	9	3A	8						
KEVO	51.29	343.0				16	16	2			
LLANADA	51.45	79.6	9	1	-1						
PRIEST	51.96	79.8	9	5A	0						
APATITY	52.03	339.0	9	6	0	16	27	3			
EUREKA	52.13	73.5	9	6	-1				10	26	PCP
SVERDLOVSK	52.64	318.2	9	11K	0						
SODANKYLA	53.48	341.8	9	16	-1						
SCORESBY SD.	53.88	3.3	9	20	0						
KIRUNA	54.07	344.7	9	21	0						
PASADENA	54.79	79.6	9	26	1						
UINTA BASIN	54.94	68.4	9	27A	0	17	16	13	9 36	21	4 SS
ALMATA	55.25	297.3	9	29	-1						
BOULDER CITY	55.29	75.7	9	28	-2						
KAJAANI	56.22	339.4	9	36	-1						
LARAMIE	56.28	64.9	9	37	0						
FRUNSE	56.73	298.4	9	40A	0						
GOLDEN	57.58	66.0	9	47	1				24	21	
LHASA	57.79	276.3	9	49A	1						
UMEA	57.82	342.9	9	47	-1						
SKALSTUGAN	59.23	346.7	10	10A	12						
PULKOVO	59.52	335.8	10	0A	0				18	24	PS
NURMIJARVI	60.07	339.1	10	3	-1	18	6	-5			
TUCSON	60.27	75.6	10	4	-1						
HELSINKI	60.32	338.8	10	5	0						
SHILLONG	60.46	272.6	10	4A	-2						
TASHKENT	60.49	300.7	10	6A	0	18	12	-4	10	16	
ALBUQUERQUE	60.58	70.4	10	7	0						
RABAUL	60.89	195.9	10	7	-2						
MOSCOW	61.18	329.6	10	11	0						
SCHEFFERVLLE	61.58	31.6	10	11	-3						
UPPSALA	61.99	342.5	10	15	-2						
CHATRA	62.12	277.2	10	18A	1						
KHOROG	62.32	296.4	10	19	0						
MADISON	62.35	53.0	10	16	-3	18	42	2			
MANHATTEN	62.39	60.4	10	48	29						
DUZHANBE	62.86	299.1	10	22A	0						
DEHRA DUN	64.44	286.7	10	32A	-1						
WICHITA MTS.	64.86	65.0	10	34	-1				10	43	11 52
GOTEBORG	64.93	345.0	10	35A	-1						
WARSAK DAM	65.01	294.0	10	27	-9						
LAHORE	65.48	290.3	10	39	0						

KARLSKRONA	65.84	342.4	10 40	-2							
LONDON ONT.	66.34	47.6	10 43	-2							
SHAWINIGAN	66.69	40.0	10 46	-1							
PORT MORESBY	66.86	200.4	10 46	-2							
BREBEUF	67.27	41.2	10 48	-3							
ASHKABAD	68.31	305.9	10 58	1							
MORGANTOWN	69.68	48.8	11 5K	-1							
QUETTA	70.41	294.8	11 11A	1							
CUMBERLAND	70.53	55.1	11 9	-2	20 22	3				28 36 SSS	
KRAKOW	70.81	337.7	11 13	1						12 15	
TIFLIS	70.86	317.4	11 13	0							
COLLMBERG	70.95	342.5	11 13	0							
RACIBORZ	71.14	338.8	11 16	2						12 12	
JENA	71.54	343.3	11 16	-1							
SIMFEROPOL	71.75	326.2	11 17	-1							
PRUHONICE	71.94	341.1	11 20	1						11 50	
GORIS	72.17	315.1	11 20	-1						14 3 PP	
KASPERSKE H.	72.94	341.5	11 26	1							
VIENNA-H.	73.25	339.4	11 29	2							
TEHERAN	73.25	309.5	11 28	1						14 13 PP	
DOURBES	73.34	347.7	11 28	1							
STUTTGART	74.00	344.3	11 34	3							
ROSELEND	77.40	345.4	11 52	1							
CHARTERS TS.	77.45	199.1	11 49	-2							
SHIRAZ	77.89	305.3	11 54A	1	21 55	14	12	4		14 47 PP	
KSARA	81.15	319.9	12 12	1							
JERUSALEM	83.22	319.6	12 23	1							
RIVERVIEW	90.19	192.4								30 22 SS	
SAN JUAN	94.01	48.8	13 14	1							
SOUTH POLE	145.63	180.0	19 30	-2							

FEBRUARY 9 3.H 53.M 8.S EPICENTRE 36.39 137.86 DEPTH= 38.KM

A=-0.59835 B= 0.54140 C= 0.59065 D= 0.6709 E= 0.7415
G=-0.4380 H= 0.3963 K=-0.8069 HT= -0.4

DEPTH OF FOCUS= 0.001R

SE= 3.56

	DELTA DEG.	AZ. DEG.	P M	P S	P O-C S	S M	S S	S O-C S	#PP M	#PP S	SUPP. M	SUPP. S
MATUMOTO	0.16	147.2	0	0K	-8	0	4	-10				
MATUSIRO	0.32	61.5	0	3K	-7	0	9	-8				
NAGANO	0.39	44.0	0	7A	-4	0	12	-6				
TAKAYAMA	0.55	244.5	0	2A	-10	0	8	-14				
OIWAKE	0.56	95.7	0	8	-5	0	19	-3				
TOYAMA	0.62	300.6	0	6K	-7	0	15	-8				
TAKADA	0.78	23.6	0	12A	-3	0	25	-1				
IIDA	0.87	181.7	0	10A	-6	0	33	5				
KOHU	0.91	141.4	0	12K	-5	0	34	5				
MAEBASI	0.98	88.9	0	17	0	0	33	2				
KANAZAWA	0.99	278.7	0	15	-3	0	29	-2				
TITIBU	1.07	112.0	0	17	-2	0	42	9				
HUNATU	1.15	139.9	0	17	-3	0	38	3				
KUMAGAYA	1.25	100.5	0	20	-1	0	46	9				
GIHU	1.32	222.3	0	18A	-4	0	42	3				
HUKUI	1.36	256.2	0	18K	-5	0	36	-4			1	9
NAGOYA	1.41	211.1	0	20A	-4	0	39	-2				
SHIZUOKA	1.48	162.6	0	24A	-1	0	46	3				
MISIMA	1.54	144.7	0	24K	-1	0	45	0				
TSURUGA	1.63	243.6	0	22	-5	0	43	-4				
UTUNOMIYA	1.63	83.7	0	26	-1	0	54	7				
AIKAWA	1.66	10.7	0	25	-2	0	48	1				
HAMAMATU	1.67	184.0	0	24A	-3	0	44	-4				
AJIRO	1.67	142.6	0	26K	-1	0	52	4				
TOKYO C.M.O.	1.69	114.2	0	30K	3	0	56	8				
HONGO	1.69	113.0	0	30	3	0	56	8				
HIKONE	1.72	230.0	0	25A	-3	0	47	-2				
YOKOHAMA	1.74	122.8	0	29A	1	0	58	9				
OMAESAKI	1.81	170.6	0	29A	0	0	53	2				
KAKIOKA	1.88	94.1	0	29	-1	0	57	4				
KAMEYAMA	1.91	216.9	0	27A	-4	0	50	-4			2	6
NAGATURO	1.96	155.4	0	31	0	0	58	3				
TU	2.01	213.4	0	29	-3	0	56	0				
SHIRAKAWA	2.03	68.2	0	33	1	1	5	8				
OSIMA	2.03	142.1	0	32K	0	1	4	7				

MITO	2.11	89.4	0	33K	0	1	7	8			
MERA	2.17	131.8	0	35K	1	1	8	8			
MAIZURU	2.20	246.2	0	35A	0	1	3	2			
KYOTO	2.21	232.4	0	33K	-2	0	59	-2			
NARA	2.38	224.8	0	34	-3	1	7	1			
ABUYAMA	2.40	231.6	0	34A	-4	1	6	0			
HUKUSIMA	2.49	56.1	0	41	2	1	15	7			
ONAHAMA	2.51	76.2	0	41A	2	1	19	10			
TYOSI	2.51	104.5	0	43	4	1	18	9			
OSAKA	2.57	228.3	0	37	-3	1	5	-6			
TOYOOKA	2.61	251.8	0	36	-5	1	13	2			
OWASE	2.68	210.9	0	41	-1	1	18	5			
YAMAGATA	2.72	46.1	0	42	0						
KOBE	2.77	232.9	0	43	0	1	23	7			
SAKATA	2.96	31.3	0	52	6	1	42	22			
SENDAI	3.07	51.3	0	54	7	1	39	16			
WAKAYAMA	3.08	226.4	0	51	4	1	35	12			
TOTTORI	3.11	254.7	0	44	-4	1	26	2			
SUMOTO	3.16	230.6	0	46	-2	1	33	8			
SIOMISAKI	3.40	211.0	0	53	1	1	31	0			
ISINOMAKI	3.43	52.5	0	53	1	1	48	16			
TOKUSIMA	3.54	230.2	0	55	1						
OKAYAMA	3.64	243.2	0	53	-2	1	48	11			
HATIDYOZIMA	3.64	153.6	1	2	7						
TAKAMATU	3.74	237.6	1	2	5	1	49	9			
AKITA	3.77	27.3	1	4	7	1	59	18			
MIZUSAWA	3.77	42.4	1	8	11	1	58	17			
YONAGO	3.78	256.7	0	57	0					1	31
MATSUE	4.00	257.9	1	21	21	2	27	40			
TSURUGISAN	4.05	232.4	0	52	-9	1	55	7			
MORIOKA	4.21	37.3	1	7	4	2	4	12			
MUROTO	4.35	225.1	1	2	-3	1	59	3			
KOTI	4.54	232.7	1	18	10	2	16	16			
MIYAKO	4.60	43.7	1	13	4	2	4	2			
HIROSIMA	4.87	247.2	1	26	13						
MATUYAMA	4.88	240.1	1	7	-6	2	29	20			
HAMADA	4.94	254.2				2	23	12		1	57
AOMORI	4.98	26.4	1	9	-5						
UWAZIMA	5.39	235.7	1	18	-2	2	53	32			
ASHIZURI	5.43	229.0	1	12	-8	2	40	17			
HAKODATE	5.87	21.7	1	31	4						
OOITA	6.02	240.3	1	30	1	3	9	32			
MORI	6.08	19.4	1	35	5						
SIMONOSEKI	6.18	248.8	1	47	16						
ASOSAN	6.59	240.1	1	34	-3	3	20	28			
HUKUOKA	6.75	247.7	1	57	18	3	26	31			
TOMAKOMAI	6.86	23.6	1	42	1						
KUMAMOTO	6.89	241.0	1	39	-2	3	25	26			
MIYAZAKI	6.95	232.0								5	18
SAGA	6.96	245.5				3	36	35		2	56
SAPPORO	7.19	20.9	1	48	3	3	21	14			
UNZENDAKE	7.26	242.0								3	50
NAGASAKI	7.53	243.3	1	55	5	3	24	9			
OBIHIRO	7.71	30.6	1	56	4						
KAGOSIMA	7.74	233.7				3	47	27		4	4
VLADIVOSTOK	8.14	327.5	2	0	2						
ASAHIGAWA	8.15	23.7	2	0K	2						
KUSIRO	8.29	35.4	2	2	2	3	47	13			
NEMURO	9.12	38.2	2	11	-1					4	57
WAKKANAI	9.47	16.6	2	20	3	3	8	-55			
Y.-SAKHLINSK	11.22	17.3	2	37	-4						
CHANGCHUN	12.14	311.6	2	51K	-2						
ZO-SE	14.84	254.0	3	3	1	6	21	8			
NANKING	16.36	260.2	3	51	3	6	57	9			
PEKING	17.42	288.6	4	0	-1	7	24	12			
PETROPAVLOVK	22.12	34.7	4	55	2						
PAOTOW	22.14	289.4	4	51	-3	8	53	3			
SIAN	23.68	273.4	5	8	-1	9	23	5			
MAGADAN	24.65	15.9	5	18	0						
BAGUIO CITY	25.12	222.2	5	21	-2						
ULAN-BATOR	25.51	306.5	5	26	0	10	5	16			
YAKUTSK	26.16	351.3	5	30	-2						
LANCHOW	27.38	279.5	5	41	-3	10	27	8			
ESEN BULAK	32.45	301.1	6	43	14						
TIKSI	35.62	355.1	6	51K	-5						
SHILLONG	40.55	267.9	7	34K	-3						
FRUNSE	48.14	298.1	8	37A	-1						
DEHRA DUN	49.64	281.2	8	46	-4						
ANDIJAN	50.33	296.1	8	54	-1						

NEW DELHI	51.04	279.6	8	58A	-2				
COLLEGE	51.15	31.9	9	1	0				
SVERDLOVSK	53.74	318.3	9	17	-3				
MOULD BAY	57.95	16.0	9	48	-3				
RESOLUTE	63.92	13.6	10	28A	-3				
SODANKYLA	64.43	336.4	10	32	-2				
BRISBANE	64.97	165.4	10	35	-3				
KAJAANI	65.90	333.1	10	42	-2				
MOSCOW	66.05	322.5	10	45	0				
KIRUNA	66.09	338.4	10	42	-3				
PULKOVO	67.27	328.5	10	56K	3				
KIROVOBAD	68.48	305.2	10	59	-1				
UMEA	68.69	335.0	10	59K	-2	19	46	-14	
NURMIJARVI	69.15	330.9	11	1	-3				
SHIRAZ	69.65	292.3	11	5	-2				12 24
SKALSTUGAN	71.45	337.4	11	16K	-2				
UPPSALA	72.26	332.7	11	20	-3				
HUNGRY HORSE	74.17	41.2	11	34	0				
BLUE MTS.	74.44	45.5	11	35	-1				11 50 PCP
GOTEBORG	75.86	333.3	11	45	1				
LWOW	76.18	322.4	11	45	-1				
BUTTE	76.39	42.5	11	52	5				
UZHGOROD	77.82	322.2	11	58	3				
KRAKOW	78.00	324.4	11	55	-1				
EUREKA	78.46	49.3	11	59	1				
CHINA LAKE	79.66	53.1	12	5	0				
COLLMBERG	80.20	328.5	12	6	-2				12 14 PCP
PRUHONICE	80.50	326.8	12	9	0				
JENA	81.07	328.9	12	11	-1				
KASPERSKE H.	81.56	326.7	12	11	-4				
UINTA BASIN	81.73	45.5	12	16K	0				
STUTTGART	83.69	328.6	12	25	-1				
TUCSON	86.26	52.3	12	38	-1				
WICHITA MTS.	91.86	43.4	13	5	0				13 37

FEBRUARY 9 16.H 4.M 58.5 EPICENTRE 43.95 150.41 DEPTH= 0.KM

A=-0.62804 B= 0.35663 C= 0.69165 D= 0.4938 E= 0.8696
G=-0.6014 H= 0.3415 K=-0.7222 HT= -3.2

SE= 1.87

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S
KURILSK	2.22	306.0	0	43A	4	1	10	3				
Y.-SAKHLINSK	6.21	302.2	1	38K	2	2	45	-3				
MIZUSAWA	8.46	238.5	2	4	-3	3	30	-14				
PETROPAVLOVK	10.58	28.1	2	36	0							
MATUSIRO	11.90	235.7	2	53	-1							
VLADIVOSTOK	13.46	272.9	3	18	3	5	48	1				
ABUYAMA	14.61	236.6	3	28K	-2							
MAGADAN	15.62	0.7	3	43	0							
CHANGCHUN	18.08	278.4	4	16	2	7	37	3				
YAKUTSK	21.79	333.3	4	54	-2							
PEKING	25.64	273.1	5	34	1							
ZO-SE	26.35	250.7	5	42	2	10	18	6				
NANKING	27.44	255.1	5	53	3							
TIKSI	29.66	346.4	6	7	-3							
ULAN-BATOR	30.22	293.0	6	16A	1	11	16	2				
LANCHOW	36.15	273.7	7	8K	2	12	49	3				
BAGUIO CITY	37.29	232.0	7	16	0							
CHENGTU	38.73	265.9	7	30	2							
COLLEGE	39.53	36.2	7	35	0							
SEMIPALATNSK	46.50	303.9	8	34	3							
KHEYS	47.36	347.1	8	40	2							
MOULD BAY	47.88	18.8	8	43	1							
SHILLONG	50.41	268.8	9	3K	2							
ALMATA-2	51.22	296.3	9	10A	2							
ALERT	52.72	5.1	9	20	1							
CHATRA	53.05	273.3	9	23K	2							
PORT MORESBY	53.18	184.0	9	22A	0							
FRUNSE	53.21	297.1	9	24K	1							
RESOLUTE	54.09	17.4	9	29A	0							
YELLOWKNIFE	54.31	34.7	9	30K	-1							
SVERDLOVSK	54.60	317.6	9	33	0							
TASHKENT	57.40	297.9	9	58	5	17	53	4				

PENTICTON	58.45	50.2	10	0A	0					
APATITY	59.15	336.5	10	6	1					
DUZHANBE	59.22	295.5	10	8	2					
KEVO	59.33	340.2	10	6	0					
WARSAK DAM	59.94	289.6	10	11	0					
SODANKYLA	61.16	338.5	10	21	2				10	55
TROMSOE	61.29	342.6	10	22	2		10	32		
HUNGRY HORSE	62.06	48.7	10	25	0					
BLUE MTS.	62.24	53.4	10	26	0				11	5 PCP
MINERAL	62.26	59.6	10	25K	-1					
KIRUNA	62.37	340.8	10	29A	2					
KAJAANI	63.27	335.5	10	33	0					
CHARTERS TS.	63.84	184.3	10	35	-2					
BUTTE	64.24	50.2	10	41	2				11	9
BOZEMAN	65.30	49.8	10	47	1					
VIBORG	65.40	332.6	10	48	1					
UMEA	65.59	338.1	10	48	0					
SCORESBY SD.	65.75	357.2	10	51	2					
EUREKA	66.25	57.5	10	53	1					
NURMIJARVI	66.90	334.1	10	59	1					
HELSINKI	67.07	333.8	10	59	1					
CHINA LAKE	67.50	61.5	10	59	-1					
SKALSTUGAN	67.79	341.2	11	4	2					
POONA	67.81	274.7	11	3	1					
BOULDER CITY	69.15	59.9	11	11	0					
UPPSALA	69.55	336.7	11	14	1				11	43 PCP
BRISBANE	71.03	177.8	11	22	0					
LARAMIE	71.15	50.6	11	22	-1					
TIFLIS	71.76	310.6	11	28	2					
TEHERAN	71.94	302.3	11	31	4					
GOLDEN	72.35	51.7	11	30	0					
GORIS	72.41	308.1	11	32A	2					
GOTEBORG	72.94	338.1	11	34A	1					
TUCSON	74.09	60.6	11	40	0				12	11
COPENHAGEN	74.56	336.8	11	46	3					
ALBUQUERQUE	74.95	55.9	11	46	1					
SHIRAZ	75.28	296.9	11	48K	1	21 33	7	12 0		
LWOW	75.55	327.4	11	50	2					
SCHEFFERVLLE	76.64	21.1	11	57	2					
KRAKOW	76.91	329.8	11	57	1				12	41
UZHGOROD	77.19	327.6	11	58	0					
COLLMBERG	78.20	334.3	12	4A	1				14	52 PP
PRUHONICE	78.84	332.7	12	8	1					
CANBERRA	78.91	181.2	12	8K	1					
JENA	78.96	334.9	12	8	1					
ADELAIDE	79.27	189.8	12	10K	1					
BRATISLAVA	79.50	330.3	12	16	6					
WICHITA MTS.	79.69	51.4	12	11	0				12	58
KASPERSKE H.	79.89	332.8	12	13	1				13	36
BENSBERG	80.22	337.4	12	20	6					
TULSA	80.37	48.9	12	15K	0					
TOOLANGI	81.27	184.0	12	20K	0				12	54
STUTTGART	81.57	335.2	12	24	3					
DOURBES	81.70	338.5	12	41	19					
LONDON ONT.	81.87	35.5	12	23	0					
BREBEUF	82.73	29.5	12	27	0		12	39		
WELSCHBRUCH	82.75	336.8	12	27	0					
FOLINIERE	84.19	341.1	12	36	1					
JERUSALEM	84.22	309.2	12	36	1					
KARAPIRO	84.62	160.3	12	37	0					
GARCHY	84.69	338.3	12	39	2				13	0
ROSELEND	85.13	335.4	12	42	3					
MORGANTOWN	85.21	36.6	12	41	1					
CUMBERLAND	85.91	42.6	12	43	0					
ISOLA	86.37	334.5	12	48	2					
MESSINA	88.59	326.0							26	42
SOUTH POLE	133.76	180.0	19	20	1					
N-LAZARVSKYA	146.31	203.3	19	43	1					

FEBRUARY 10 15.H 5.M 19.5 EPICENTRE 53.63 -33.22 DEPTH= 0.KM

A= 0.49826 B=-0.32631 C= 0.80328 D=-0.5479 E=-0.8366
G= 0.6720 H=-0.4401 K=-0.5956 HT= -6.7

SE= 2.38

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
SIDA	12.83	31.6	3	8	2	5	23	-8			4	16	
SCORESBY SD.	17.66	12.5	4	13	4								
SCHEFFERVLLE	19.55	287.1	4	31A	-1								
FOLINIERE	20.97	90.1	4	47	0								
HALIFAX	21.68	257.8	4	55	1								
BERGEN	21.78	56.5	4	59	4								
PARIS	22.72	87.7	5	7	2								
DOURBES	23.43	83.2	5	21	9								
GARCHY	23.77	90.7	5	16	1						5	51	
KONGSBERG	23.97	58.2	5	20	3								
TOLEDO	24.05	113.0									9	54	
SKALSTUGAN	25.15	48.7	5	30A	2								
WELSCHBRUCH	25.19	85.7	5	36	7						5	59	
GOTEBORG	25.44	62.5	5	35	4								
STRASBOURG	25.96	84.4	5	39	3								
SHAWINIGAN	26.07	270.5	5	37	0								
ROSELEND	26.69	91.0	5	44	1								
STUTTGART	26.76	83.0	5	47	4								
BREBEUF	27.12	269.1	5	45	-2								
COLLMBERG	27.88	75.8	5	56A	3								
UPPSALA	27.96	56.6	5	55	1								
UMEA	28.69	47.9	6	1	0								
KIRUNA	28.70	39.5	6	2	1								
ALERT	30.14	352.7	6	14	0								
SODANKYLA	31.08	40.4	6	22	0								
NURMIJARVI	31.27	53.8	6	24	0								
HELSINKI	31.50	54.4	6	21	-5								
RESOLUTE	31.84	333.7	6	30A	1								
MOULD BAY	37.85	337.1	7	22A	2								
MADISON	37.90	277.9	7	21	0								
CUMBERLAND	40.36	265.1	7	43	2								
YELLOWKNIFE	41.16	315.8	7	48	0								
FAYETTEVILLE	45.15	272.7	8	19	-1								
TULSA	46.23	273.8	8	28K	-1								
LARAMIE	48.38	286.2	8	46	0								
HUNGRY HORSE	48.56	298.5	8	47	0								
WICHITA MTS.	48.71	274.7	8	47	-1								10 13 PCP
BUTTE	49.24	295.3	8	53	1								
GOLDEN	49.31	284.4	8	53	0								
FLAMING GRGE	50.79	288.3	9	5	1								
PENTICTON	50.81	302.6	9	4	0								
UINTA BASIN	51.30	287.8	9	8A	0								
COLLEGE	51.65	330.3	9	11	0								
BLUE MTS.	52.54	297.0	9	16A	-1								10 26 PCP
ALBUQUERQUE	53.19	280.8	9	23	1								
EUREKA	55.47	291.3	9	39	0								
TUCSON	57.67	281.6	9	54	-1								
MINERAL	57.93	295.6	9	56A	0								
WOODY	59.77	290.1	10	9	0								
LWIRO	75.65	114.4	11	49A	0								
NEW DELHI	78.49	57.3	12	5K	0								
CHARTERS TS.	146.52	0.9	19	45	3								
MUNDARING	149.22	57.6	19	51	5								
BRISBANE	153.41	348.9	20	2	10								

FEBRUARY 10 21.H 35.M 57.S EPICENTRE 44.82 148.07 DEPTH= 125.KM

A=-0.60401 B= 0.37636 C= 0.70252 D= 0.5288 E= 0.8487
G=-0.5962 H= 0.3715 K=-0.7117 HT= -3.5

DEPTH OF FOCUS= 0.015R

SE= 4.53

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S
KURILSK	0.43	340.6	0	16K	-3	0	31	-3				
NEMURO	2.34	231.2	0	29K	-10	0	52	-16				
ABASHIRI	2.83	254.9	0	39	-6	1	13	-6				
KUSIRO	3.23	236.5	0	42K	-8	1	16	-13				
ASAHIGAWA	4.22	257.7	0	59A	-5	1	47	-6				
HIRO	4.29	235.3	0	56	-9	1	42	-12				
Y.-SAKHLINSK	4.33	302.4	1	5K	0	1	54	-1				
WAKKANAI	4.56	279.8	1	8	0	2	0	-1				
RUMOE	4.71	261.6	1	0	-10							

SAPPORO	5.16	252.5	1	11	-5	2	19	4				
TOMAKOMAI	5.19	247.3	1	19	2							
MURORAN	5.73	246.6				2	18	-10				
UGLEGORSK	5.92	318.2	1	28	2	2	42	8				
SUTTSU	6.02	253.1	1	24	-4							
MORI	6.10	246.1	1	23	-6	2	28	-10				
HAKODATE	6.13	243.1	1	22	-7	2	24	-15				
HATINOHE	6.45	230.6	1	22	-12							
AOMORI	6.69	235.8	1	30	-7	2	36	-16				
MIYAKO	6.87	223.3	1	30	-9	2	36	-21				
MORIOKA	7.24	227.4	1	35	-9	2	46	-20				
MIZUSAWA	7.69	224.7	1	40	-10	2	54	-22				
AKITA	7.80	232.0									2	45
ISINOMAKI	8.14	220.7	1	43A	-14	3	5	-22				
SENDAI	8.47	221.9	1	53	-8	4	14	39				
SAKATA	8.53	228.9	1	54	-8	3	23	-14				
YAMAGATA	8.75	224.1	1	53	-12	3	20	-22				
HUKUSIMA	9.09	221.6	1	58	-11	3	30	-20				
OKHA	9.36	340.8	2	15	2	4	8	11				
ONAHAMA	9.55	217.1				3	38	-23			2	59
NIIGATA	9.67	227.6				3	43	-22				
SHIRAKAWA	9.71	220.3	2	7	-11	3	45	-20				
MITO	10.22	217.0	2	14	-10	3	56	-21				
UTUNOMIYA	10.34	219.8	2	15	-11	4	1	-19				
KAKIOKA	10.47	217.7	2	15	-13							
TYOSI	10.63	213.7	2	25	-5	4	7	-20				
TAKADA	10.70	227.3	2	18	-13							
MAEBASI	10.84	222.2	2	23	-9	4	15	-17				
KUMAGAYA	10.90	220.3	2	20	-13	4	13	-20				
NAGANO	11.06	226.0	2	28	-7	4	41	4				
TOKYO C.M.O.	11.12	217.7				4	17	-21				
OIWAKE	11.15	223.7	2	29	-7	4	21	-18				
MATUSIRO	11.15	225.5	2	26A	-11	4	17	-22				
TITIBU	11.17	220.9				4	19	-21				
YOKOHAMA	11.38	217.3				4	22	-23			3	56
MATUMOTO	11.50	225.3									3	40
KOHU	11.67	221.7	2	38	-5	4	34	-18				
HUNATU	11.71	220.5	2	52	8	4	35	-18				
MERA	11.74	215.4									4	22
AJIRO	11.94	218.2	2	35	-12	4	37	-21				
MISIMA	11.94	218.9				4	31	-26				
IIDA	12.14	223.6	2	41	-9	4	44	-19				
SHIZUOKA	12.32	220.3				4	42	-23				
OMAESAKI	12.71	219.9				5	3	-13				
NAGOYA	12.85	225.2	2	50	-9	4	31	-48				
KYOTO	13.61	228.2	3	0	-9							
ABUYAMA	13.81	228.2	3	2K	-9							
OSAKA	14.00	227.8				6	18	32			3	47
MAGADAN	14.84	5.4	3	26A	2	6	16	10				
HAMADA	15.76	236.5	3	1	-35							
MATUYAMA	16.10	232.3	3	23	-17							
CHANGCHUN	16.31	274.5	3	39	-4	6	37	-2				
YAKUTSK	20.27	334.6									5	5 PP
PEKING	23.94	269.7	5	2	-1	9	10	2	5	21		
PAOTOW	28.10	274.8				10	19	3	6	2		
ULAN-BATOR	28.34	291.1	5	42A	-2	10	23	3				
TIKSI	28.43	347.3	5	42A	-3						6	31 PP
LANCHOW	34.44	270.9	6	36	-1	11	55	0				
ESEN BULAK	35.75	291.4	6	47K	-1	12	18	3				
BAGUIO CITY	36.56	228.1	6	50	-5							
CHENGTU	37.14	263.0	6	57	-3	12	34	-3				
COLLEGE	39.83	36.9	7	24	2	13	26	9				
KUNMING	41.40	257.1	7	33	-2	13	41	1	7	55		
MOULD BAY	47.60	18.9	8	25	0							
SHILLONG	48.77	266.4	8	31K	-3							
ALMATA-2	49.34	294.7	8	39K	1							
FRUNSE	51.32	295.4	8	53A	0	16	8	7				
CHATRA	51.35	271.0	8	52K	-1							
ALERT	52.01	4.9	8	57	-1							
SVERDLOVSK	52.82	316.4	9	3K	-1							
RESOLUTE	53.75	17.1	9	11A	0							
PORT MORESBY	53.97	181.1	9	8K	-5							
YELLOWKNIFE	54.54	34.4	9	17K	0							
TASHKENT	55.51	296.3	9	24A	0	17	2	4			17	27 PS
DEHRA DUN	55.73	280.5	9	24K	-2							
KHOROG	56.12	291.3	9	30	2	17	10	4				
THULE	56.82	9.6	9	29	-4							
DUZHANBE	57.33	293.8	9	37	0	17	27	5				

NEW DELHI	57.36	279.3	9	35K	-2					
VICTORIA	57.51	52.0	9	38	0					
LAHORE	57.60	283.9	9	37	-2					
APATITY	57.68	335.6	9	38K	-1					
KEVO	57.94	339.4	9	39	-2					
WARSAK DAM	58.07	287.8	9	42	0					
PENTICTON	59.17	49.6	9	50A	0					
SODANKYLA	59.73	337.5	9	52K	-2				12	55
TROMSOE	59.95	341.7	9	54	-1					
BANFF	60.27	46.1	9	57	0					
KIRUNA	60.99	339.9	10	1	-1					
KAJAANI	61.78	334.5	10	6K	-1					
HUNGRY HORSE	62.73	48.0	10	14	0			10	51	
BLUE MTS.	63.06	52.7	10	16	0			10	27	10 52 PCP
MINERAL	63.26	58.8	10	17A	0					
QUETTA	63.48	287.0	10	18	-1					
PULKOVO	64.01	330.1	10	22A	0	18	54 7			
UMEA	64.15	337.1	10	22	-1					
ASHKABAD	64.35	298.7	10	25	1					
CHARTERS TS.	64.62	181.9	10	21	-5					
SCORESBY SD.	64.78	356.3	10	27	0					
RENO	64.84	58.6	10	28K	0					
BUTTE	64.96	49.4	10	28	0			11	0	11 25 *SP
NURMIJARVI	65.38	333.0	10	30K	-1	19	7 4			10 53
HELSINKI	65.54	332.6	10	31K	-1					
POONA	66.08	272.7	10	34	-1					
SKALSTUGAN	66.42	340.1	10	37	-1					
EUREKA	67.19	56.6	10	42	0					
UPPSALA	68.07	335.5	10	47A	-1					
ISABELLA	68.11	61.2	10	51	3					
SALT LAKE C.	68.75	53.4	10	52	0					
NOUMEA	68.87	161.8	10	50A	-3					
FLAMING GRGE	70.04	51.9	11	0	0					
TEHERAN	70.05	306.7	11	0	0	20	7 8			
BOULDER CITY	70.15	58.8	11	1	0					
UINTA BASIN	70.35	52.5	11	2	0			11	14	
GORIS	70.55	306.5	11	5A	2	20	14 9			
RAPID CITY	71.20	46.1	11	6	-1					
GOTEBORG	71.50	336.9	11	8	-1					
BRISBANE	71.99	175.6	11	9	-3				11	33
COPENHAGEN	73.09	335.5	11	18A	0					
GOLDEN	73.11	50.6	11	19	1					
SHIRAZ	73.39	295.3	11	19K	-1	20	37 0	11	42	21 18 *SS
KISHINEV	74.07	321.6	11	24	0					
TUCSON	75.11	59.4	11	20	-10			11	43	11 35 PCP
KRAKOW	75.30	328.4	11	31K	0			11	52	11 42 PCP
ALBUQUERQUE	75.83	54.7	11	35	1					
RACIBORZ	75.92	329.4	11	36	2					
SCHEFFERVLLE	76.41	19.9	11	38	1					
COLLMBERG	76.67	332.9	11	39	0	21	58 45			
HALLE	76.84	333.6	11	41	2					
PRUHONICE	77.29	331.3	11	43	1					
JENA	77.45	333.5	11	44	1				12	11
BRATISLAVA	77.91	328.9	11	46	1				13	2
VIENNA-H.	78.11	329.3	11	49	3					
MADISON	78.21	39.1	11	47	0					
KASPERSKE H.	78.34	331.4	11	48	0				12	31
ISTANBUL UN.	78.59	317.6	12	15A	26	21	44 10			
BENSBERG	78.76	336.0	11	51	1					
LAWRENCE	78.99	45.2	11	51	0					
BELGRADE	79.38	325.0	11	55K	2	21	52 10			22 17 SCS
CANBERRA	79.77	179.2	11	54K	-1				12	1 PCP
ADELAIDE	79.87	187.8	11	53A	-3					
STUTTGART	80.06	333.7	11	58K	1					
DOURBES	80.26	337.1	12	1	3					
WICHITA MTS.	80.44	50.1	11	59	0			12	11	
KSARA	80.48	308.6	12	2	3					
LJUBLJANA	80.64	329.2	12	1K	1					
STRASBOURG	80.70	334.5	12	3	3					13 50
TULSA	81.04	47.5	12	3	1			12	14	
TRIESTE	81.26	329.5	12	6K	3					
WELSCHBRUCH	81.28	335.3	12	3	0					
FAYETTEVILLE	81.74	46.4	12	6K	0					
PARIS	82.01	337.8	12	9	2					
TOOLANGI	82.05	182.1	12	5	-2					
BREBEUF	82.78	28.1	12	12A	1					
FOLINIERE	82.81	339.6	12	12	1					
GARCHY	83.25	336.8	12	35	21					13 16

ROSELEND	83.63	333.9	12	17	2							
ISOLA	84.85	333.0	12	24	2							
MORGANTOWN	85.49	35.2	12	27A	2							
KARAPIRO	86.03	158.6	12	25	-2						12	51
CUMBERLAND	86.38	41.1	12	29	0				12	41		
LA PAZ	138.52	58.8	19	14	3							

FEBRUARY 12 23.H 7.M 30.S EPICENTRE -18.09-178.40 DEPTH= 596.KM

A=-0.95080 B=-0.02657 C=-0.30868 D=-0.0279 E= 0.9996
G= 0.3086 H= 0.0086 K=-0.9512 HT= 5.1

DEPTH OF FOCUS= 0.089R

SE= 1.42

	DELTA DEG.	AZ. DEG.	P M	S	O-C S	S M	S	O-C S	*PP M	S	SUPP. M	S	
AFIAMALU	7.60	57.8	1	54K	-2	3	26	-2					
NOUMEA	14.82	251.1	3	7K	1	5	40	4					
KOUMAC	16.53	258.7	3	26K	3	6	11	5					
ONERAHI	18.74	198.6	3	47	4								
KARAPIRO	20.46	193.8	4	0A	1						7	35	
CHATEAU	21.68	192.8	4	8	-2	7	34	3					
HONIARA	22.70	289.4									7	16	
WELLINGTON	23.84	192.8	4	28	-2	8	0	-6					
ROXBURGH	29.16	197.9	5	15	-1	9	32	3	6	53			
RIVERVIEW	31.39	234.1	5	36A	1	10	2	-1					
RABAUL	31.93	292.1	5	37	-3	10	8	-3					
CHARTERS TS.	33.42	260.8	5	51	-1	10	30	-4					
CANBERRA	33.60	232.8	5	54K	1	10	36	-1	7	31			
PORT MORESBY	34.51	279.8	6	2K	1	10	51	1					
TOOLANGI	37.06	231.0	6	22K	0	11	27	-1	8	1	9	11	*SP
ADELAIDE	41.54	237.4	6	59K	1	12	32	-1			8	42	PP
HONOLULU	43.91	27.8	7	17	0	13	9	3					
KIPAPA	44.05	27.8	7	17	-1								
DARWIN	49.19	269.1	7	54	-3						11	51	
MUNDARING	60.05	243.1	9	11	-1								
MATUSIRO	68.06	323.4	10	1	-2	19	15	59					
BAGUIO CITY	69.17	296.1	10	9	0								
LEMBANG	72.72	268.3	10	29	-1								
TANGERANG	73.85	268.7	10	35A	-1								
BERKELEY	76.66	42.5	10	53K	1								
PRIEST	76.72	44.7	10	53A	1						12	54	
LICK	76.75	43.2	10	54A	2						11	35	
CALISTOGA	76.91	41.7	10	53K	0						12	52	
PASADENA	77.34	47.5	10	55	0				12	59	13	59	*SP
NHATRANG	77.50	287.4	10	55	-1								
NANKING	78.12	309.5	10	59K	-1								
MINERAL	78.52	40.7	11	4A	2						13	7	
RENO	79.19	42.2	11	7K	2								
CHANGCHUN	80.27	322.4	11	10K	-1	20	31	3					
BOULDER CITY	80.63	47.4	11	14	1				13	19	14	26	*SP
EUREKA	81.65	43.9	11	18	0								
TUCSON	81.74	52.3	11	19	1				13	25			
BLUE MTS.	83.68	38.8	11	27	-1	20	55	-6	13	36	14	49	PP
MAWSON	83.69	199.8	11	28A	0								
PEKING	83.92	315.4	11	29K	0	21	5	1					
PENTICTON	84.88	34.2	11	34A	0								
COLLEGE	85.95	12.6	11	37	-2	21	18	-5	13	47			
ALBUQUERQUE	86.20	51.5	11	41	1						12	23	
UINTA BASIN	86.35	45.6	11	41A	0	21	14	-12	13	49	15	9	PP
SIAN	86.47	307.6	11	42K	1								
FLAMING GRGE	86.75	45.1	11	44	1				13	52	13	25	
BUTTE	87.13	39.5	11	43	-2				13	54	15	16	PP
HUNGRY HORSE	87.45	37.0	11	43	-3				13	53			
BOZEMAN	87.89	40.4	11	50	2				13	57	15	22	PP
KUNMING	87.92	297.1	11	50K	2								
BANFF	88.09	34.1	11	49	0								
PAOTOW	88.34	313.7	11	51	1								
CHENGTU	88.88	302.7	11	53	0	21	55	6					
GOLDEN	88.98	47.6	11	54	1						12	36	
LARAMIE	89.50	46.0	11	56	0								
YAKUTSK	89.73	338.2	11	55A	-2								
LANCHOW	91.01	307.6	12	3	0	22	15	7					
N-LAZARVSKYA	91.08	183.4	12	2	-1								
WICHITA MTS.	92.09	54.2	12	7	0	22	30	13	14	15	15	56	PP

YELLOWKNIFE	94.49	24.7	12	16A	-2						
TULSA	94.64	53.9							22	0	
SHILLONG	97.38	294.4	12	30A	-1						
MOULD BAY	100.52	12.1	12	43	-3						
CUMBERLAND	102.54	56.5				22	36	-1	17	11	PP
NEW DELHI	110.79	294.3	17	27A	1						
ALMATA-2	112.43	310.0	17	29	0						
KEVO	126.04	349.4	17	55	0						
APATITY	126.54	345.4	17	56	0						
ASHKABAD	126.96	304.2	17	57	0						
VANNOVSKAYA	127.16	304.2	17	56	-1						
SODANKYLA	128.18	348.0	17	57	-2				20	26	SKP
KIRUNA	128.85	351.0	18	0A	-1				20	28	SKP
KAJAANI	130.74	345.2	18	3	-1				20	35	SKP
SHIRAZ	132.37	293.9	17	57K	-10				20	39	
UMEA	132.57	348.9	17	58	-10				20	41	SKP
TEHERAN	132.77	302.2	18	5	-3						
VIBORG	133.21	342.0	18	4	-5						
BULAWAYO	133.68	216.2	17	56	-14						
SKALSTUGAN	133.96	353.4	18	3	-7				20	46	SKP
NURMIJARVI	134.53	344.2	17	58	-13				20	47	PP
HELSINKI	134.74	343.8	18	12	0						
UPPSALA	136.71	348.3	18	3	-12						
BROKEN HILL	138.20	221.1	18	10	-8						
GOTEBORG	139.71	351.4	18	13	-8						
KARLSKRONA	140.55	347.7	18	22	-1						
KISHINEV	143.49	328.2	18	26	-2						
LWOW	143.58	335.4	18	27	-1						
KRAKOW	144.89	339.4							23	31	
WITTEVEEN	145.12	354.6	18	33A	2						
UZHGOROD	145.21	335.7	18	32	1						
BANDEIRA	145.24	200.1	18	32	1	20	52		21	59	PP
RACIBORZ	145.42	341.1	18	32	1				19	59	
SKALNATE PL.	145.52	338.2	18	36	5				19	15	
KSARA	145.62	303.9	18	34	2						
COLLMBERG	145.65	347.3	18	32	0				18	43	PKP2
HALLE	145.67	348.5	18	32	0	20	58				
MUNSTER	145.86	353.4							18	35	
JENA	146.29	348.6	18	32	-1				21	53	PP
LWIRO	146.44	235.7	18	36A	3				21	59	SP
PRUHONICE	146.53	344.8	18	33	0				19	54	
KEW	146.66	2.2	18	34	1						
BENSBERG	146.91	353.5	18	37A	4	20	52				
ISTANBUL UN.	147.22	320.0	18	37	3						
BRATISLAVA	147.45	340.6	18	38	4				19	18	
KASPERSKE H.	147.56	345.3	18	35	1	20	57				
VIENNA-H.	147.60	341.5	18	36A	2						
DOURBES	147.98	356.4	18	41	6	21	2				
STUTTGART	148.77	350.2	18	37	1				19	24	
BELGRADE	149.03	333.5	18	43	6				26	8	PPP
STRASBOURG	149.18	352.0	18	38	1	20	57				
SOFIA	149.31	327.7	18	45	8				18	51	PKP2
PARIS	149.35	358.8	18	44A	7				20	58	
FOLINIERE	149.35	2.7	18	38	1				18	43	PKP2
EBINGEN	149.39	350.3	18	43	6						
WELSCHBRUCH	149.51	353.8	18	38	1				19	26	
LJUBLJANA	150.13	341.8	18	44	6	21	2		21	22	
TRIESTE	150.72	342.4	18	46	7	21	2				
GARCHY	150.87	357.9	18	48A	9	21	10				
ROSELEND	152.17	352.4	18	48	7	21	6				
ATHENS	152.32	320.2	18	49	8						
CLERMONT-FD.	152.37	357.7	18	37	-4						
ISOLA	153.59	351.2	18	47	4				21	13	

FEBRUARY 13 0.H 22.M 50.S EPICENTRE 13.70 -90.86 DEPTH= 81.KM

A=-0.01459 B=-0.97179 C= 0.23541 D=-0.9999 E= 0.0150
G=-0.0035 H=-0.2354 K=-0.9719 HT= 6.0

DEPTH OF FOCUS= 0.008R

SE= 2.56

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S
SAN SALVADOR	1.61	90.7	0	30	2	0	59	10				

SANTIAGO MA.	2.33	95.0	0	42	4	1	12	7			
COMITAN	2.81	334.3	0	42	-2	1	18	1			
OAXACA	6.58	300.8	1	38	2	2	42	-9			
MERIDA	7.30	9.2								2	2
										2	31
VERA CRUZ	7.44	317.9								2	42
PUEBLA	8.81	307.9								3	50
TACUBAYA	9.80	306.4								3	14
CHINCHINA	17.35	118.6	4	11	13	7	10	3			
FUQUENE	18.76	114.2	4	20A	5						
BOGOTA	18.86	117.0	4	20A	4					4	36 PP
WICHITA MTS.	22.06	342.8	4	47	-2					5	12 PP
CUMBERLAND	22.31	11.4	4	53	1	9	0	13		5	14 PP
FAYETTEVILLE	22.49	352.9	4	52	-2	8	48	-2		17	24
TULSA	22.55	349.5	5	3	9	9	2	11			
CARACAS	23.61	95.1	5	13K	9						
ST. LOUIS 1	24.84	1.2	5	16	0						
BLACKSBURG	25.20	19.9	5	21	1						
ALBUQUERQUE	25.42	329.0	5	22	0						
TUCSON	25.97	318.6	5	27	0						
GOLDEN	28.87	336.4	5	53	0					9	3
MADISON	29.58	1.6	5	59	0	11	30	43	6 20		
LARAMIE	30.35	337.7	6	4	-2					9	7
LONDON ONT.	30.40	14.1	6	5K	-2					6	28
BOULDER CITY	30.91	320.1	6	11	0					9	8 PCP
PALISADES	30.97	25.4				11	51	42			
UINTA BASIN	31.18	331.7	6	14	0					7	18 PP
FLAMING GRGE	31.59	332.6	6	17	0						
PASADENA	32.04	314.2	6	20	-1						
SALT LAKE C.	32.61	329.7	6	26	0					9	14 PCP
EUREKA	33.88	323.9	6	38	1					7	8
OTTAWA	34.10	19.2	6	39A	0						
PRIEST	34.82	315.2	6	46K	1						
BREBEUF	34.90	21.4	6	41K	-5						
SHAWINIGAN	36.10	21.3	6	56	0						
BOZEMAN	36.15	335.8	6	58	2					9	24 PCP
BERKELEY	36.83	316.5								17	22
BUTTE	37.06	334.7	7	4	0					9	25 PCP
SEVEN FALLS	37.29	22.7	7	7K	1						
CALISTOGA	37.46	317.4	7	8K	1						
LA PAZ	37.48	142.5								9	6
MINERAL	37.79	320.4	7	11K	1						
BLUE MTS.	38.33	329.3	7	14	-1					13	18 SCP
HUNGRY HORSE	39.52	335.6	7	25	1					9	32 PCP
BANFF	42.36	337.0	7	48	0						
PENTICTON	42.65	332.3	7	51K	1						
SEATTLE	42.77	328.7	7	45K	-6						
VICTORIA	43.91	328.9	8	0K	0						
SCHEFFERVLLE	45.13	19.5	8	10K	0						
YELLOWKNIFE	51.57	346.2	8	59A	-1						
RESOLUTE	61.01	358.8	10	5	-2						
COLLEGE	63.95	336.5	10	26	-1					11	1
MOULD BAY	64.33	352.7	10	28	-1						
ALERT	69.76	3.8	11	2	-2						
SKALSTUGAN	83.59	26.0	12	22	1						
UMEA	86.80	24.5	12	37	0						
SODANKYLA	87.51	20.1	12	40	0						
COLLMBERG	87.88	37.6	13	49	67						
NURMIJARVI	90.15	26.5	12	53	0						
TARANTO	94.49	46.7								21	13
SHIRAZ	124.27	38.9	18	54A	4						
QUETTA	131.41	25.9	19	9	6						
NEW DELHI	136.41	15.3	19	18K	5						

FEBRUARY 13 1.H 34.M 50.S EPICENTRE 12.98 57.99 DEPTH= 128.KM

A= 0.51663 B= 0.82661 C= 0.22318 D= 0.8480 E=-0.5300
G= 0.1183 H= 0.1893 K=-0.9748 HT= 6.1

DEPTH OF FOCUS= 0.015R

SE= 2.61

	DELTA DEG.	AZ. DEG.	P M	S	O-C S	S M	S	O-C S	*PP M	S	SUPP. M	S
BOMBAY	15.42	65.7	3	22	-9	6	35	17			3	49 PPP
POONA	16.22	68.1	3	33K	-8	6	19	-18				
SHIRAZ	17.35	343.8	3	52K	-3						7	12 SKP

QUETTA	19.02	24.4	4	12	-2					7	53
MADRAS	21.62	87.4	4	35K	-5	8	44	18		5	4 PP
TEHERAN	23.43	346.4	5	0	2	8	12	-46			
NEW DELHI	23.68	46.1	5	1A	1						
LAHORE	23.82	36.5	5	U	-1						
WARSAK DAM	24.29	28.3	5	8	2						
VISHAKHAPTNM	24.84	75.9	4	40	-31						
VANNOVSKAYA	24.87	0.2	5	12	0						
ASHKABAD	24.87	0.7	5	11	-1						
DEHRA DUN	25.33	43.9	5	15A	-1						
KIZYL-ARVAT	26.16	357.0	5	23	-1						
KHOROG	27.23	24.0	5	36A	3	10	17	16			
GORIS	28.35	340.8	5	45K	2						
KSARA	28.90	319.6	5	14	-34						
KIROVOBAD	29.40	341.7	5	54	1						
EREVAN	29.58	338.8	5	56K	2						
TASHKENT	29.91	17.2	5	57	0					10	55 P
ANDIJAN	30.40	21.9	6	3	1						
CHATRA	30.60	58.8	6	1A	-2						
TIFLIS	30.86	340.5	6	7	1						
LWIRO	32.69	244.5	6	22A	0						
FRUNSE	33.04	22.7	6	26A	1						
PORT BLAIR	33.94	88.3				12	8	21		13	27
ALMATA-2	34.50	25.3	6	37	0						
CHILEKA	36.46	219.3	6	54	0						
ISTANBUL UN.	37.73	323.2	7	6A	2	13	0	15			
SIMFEROPOL	37.80	332.0	7	6K	1						
BROKEN HILL	39.97	228.0	7	23	0						
BULAWAYO	43.81	221.8	7	54	0						
MOSCOW	45.49	344.0	8	8K	0						
UZHGOROD	46.20	327.6	8	15	2						
KRAKOW	48.29	327.8	8	30	1						
BRATISLAVA	48.77	324.4	8	33	0					10	30
RACIBORZ	49.22	327.0	8	38	1					9	19
VIENNA-H.	49.23	324.1	8	37K	0						
LJUBLJANA	49.25	320.8	8	37	0						
TRIESTE	49.54	320.0	8	52	13						
PRUHONICE	51.15	325.2	8	51	0						
KASPERSKE H.	51.27	323.9	8	51K	-1						
BANDEIRA	52.19	239.4	8	59A	0				9	9	
VIBORG	52.22	342.3	8	59K	0						
COLLMBERG	52.66	326.1	9	3A	0					10	41
JENA	53.27	325.1	9	5	-2						
HALLE	53.34	325.9	9	8	0				11	13	
NURMIJARVI	53.35	340.2	9	7A	-1					11	3 PP
ISOLA	53.35	315.9	9	6	-2						
KARLSKRONA	54.01	332.2	9	16	4						
ROSELEND	54.14	317.5	9	13	0						
STRASBOURG	54.48	321.2	9	26	10						
KAJAANI	55.22	344.3	9	20A	-1					9	40
WELSCHBRUCH	55.29	320.5	9	16	-6					10	58
UPPSALA	55.42	336.6	9	21	-2						
BENSBERG	55.78	323.6	9	20	-5					9	40
CLERMONT-FD.	56.50	316.6	10	27	57						
GOTEBORG	56.51	332.4	9	30	-1						
DOURBES	56.97	321.9	9	35	1						
GARCHY	56.99	318.4	9	32	-2						
UMEA	57.19	341.1	9	34	-1	17	33	14			
SODANKYLA	58.14	346.3	9	41A	-1						
SKALSTUGAN	59.73	338.2	9	52	-1						
KIRUNA	60.02	344.5	9	54	-1						
KHEYS	67.66	0.0	10	45	0						
YAKUTSK	70.06	28.5	10	57A	-2						
TIKSI	71.76	18.4	11	9A	-1						
ALERT	81.01	353.4	12	3	2						
N-LAZARVSKYA	89.25	193.8	12	43	1						
MOULD BAY	90.95	359.4	12	51K	1						
CHARTERS TS.	92.78	109.9	12	57	-1						
BLUE MTS.	122.29	356.1	18	42	3					20	8 PP
UINTA BASIN	125.73	348.3	18	49	3					20	51 PP
EUREKA	127.51	354.1	18	53	4						
WICHITA MTS.	127.61	335.6	18	53	3					22	49

FEBRUARY 13 8.H 50.M 5.5 EPICENTRE 24.41 122.09 DEPTH= 53.KM

A=-0.48437 B= 0.77233 C= 0.41095 D= 0.8472 E= 0.5313
G=-0.2183 H= 0.3481 K=-0.9117 HT= 3.5

DEPTH OF FOCUS= 0.003R

SE= 2.84

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S
ILAN	0.48	318.9	0	10K	-3	0	13	-10				
HWALIEN	0.62	224.8	0	15K	0	0	25	0				
TAIPEI	0.81	319.9	0	17K	0	0	29	0				
HSINCHU	1.09	291.0	0	54	34	1	5	30				
TAICHUNG	1.32	259.0	0	25A	2	0	43	3				
YUSHAN	1.40	228.8	0	27	3							
HSINKONG	1.46	207.1	0	23A	-2	0	42	-2				
ALISHAN	1.48	233.5	0	20K	-5							
TAITUNG	1.87	207.9	0	25K	-6							
ISIGAKIZIMA	1.89	92.0	0	31K	0	0	45	-9				
TAINAN	2.22	231.1	0	35K	-1	1	5	3				
TAWU	2.33	208.4	0	34K	-3							
PENGHU	2.49	249.9	0	47	8	1	18	9				
HENGCHUN	2.70	207.5	0	42	0	1	20	6				
MAWASHI	5.38	69.1	1	24A	4	2	32	11				
ZO-SE	6.71	353.3	1	36K	-3	2	55	0				
BAGUIO CITY	8.07	190.4	1	53	-4							
CANTON	8.13	262.5	1	57	-1							
NANKING	8.16	339.8	1	55K	-4							
YAKUSIMA	9.59	49.3	2	21K	3	4	18	12				
MANILA	9.74	185.8	2	17	-3	4	27	18				
HUKUE	10.16	34.1	2	25K	-1	4	28	8				
KAGOSIMA	10.33	44.4	2	30K	2	4	34	10				
UNZENDAKE	10.95	39.0	2	42	5	4	53	14				
MIYAZAKI	11.12	45.6	2	42K	3	5	23	40				
KUMAMOTO	11.28	40.1	2	44K	3	5	8	21				
SAGA	11.37	37.4	2	53K	11	5	21	32				
ASOSAN	11.56	40.9	2	50	5	5	12	19			6	12
HUKUOKA	11.66	36.5	2	48K	2	5	4	8				
NOBOEKA	11.72	43.9	2	52K	5	5	17	20				
OOITA	12.12	41.4	2	57K	5	5	11	4			7	49 PCP
SIMONOSEKI	12.24	37.0	2	58	4	5	32	22				
ASHIZURI	12.66	46.7	3	1	1	5	30	10				
UWAZIMA	12.69	43.8	3	1	1	5	22	1				
MATUYAMA	13.24	42.4	3	9	2	5	51	17				
HIROSIMA	13.40	39.8	3	11K	2	5	48	11				
KOTI	13.52	45.1	3	8	-3	5	48	8				
HAMADA	13.57	37.4	3	14K	2	5	43	1				
MUROTO	13.77	47.5	3	8A	-6	6	6	20			10	43
TSURUGISAN	14.02	45.2	3	22	4	6	14	22				
TAKAMATU	14.35	43.8	3	21	-1	6	13	13				
OKAYAMA	14.50	42.4	3	24	0	6	6	2				
TOKUSIMA	14.53	45.7	3	22	-2							
MATSUE	14.53	38.3	3	27	3	6	19	15				
YONAGO	14.68	39.0	3	29K	3	6	38	30				
HIMEJI	14.68	44.0	3	33	7							
SUMOTO	14.91	45.5	3	29	0	6	34	21				
SIOMISAKI	14.97	49.9	3	23	-7	6	4	-11				
WAKAYAMA	15.01	46.4	3	34	4	6	6	-10				
SIAN	15.09	313.5	3	34A	3							
TOTTORI	15.22	40.6	3	35	2	6	58	38				
SAIGO	15.22	36.9	3	48	15	6	42	21				
KOBE	15.30	45.0	3	36	2							
OSAKA	15.50	45.8	3	35	-2	6	5	-22				
OWASE	15.61	48.7	3	42	4	6	51	21				
TOYOOKA	15.62	41.9	3	42	4	6	39	9			5	29
ABUYAMA	15.67	45.2	3	35K	-4							
NARA	15.72	46.2	3	43	4							
KYOTO	15.86	45.1	3	45A	4	6	52	17				
MAIZURU	15.93	43.2	3	46	4						7	38
TU	16.19	47.4	4	0	15							
KAMEYAMA	16.24	46.9	3	50	4	6	2	-42				
HIKONE	16.35	45.3	3	51	4	7	17	30				
PEKING	16.35	343.7	3	51K	3	6	45	-2				
TSURUGA	16.47	43.9	3	50	1						8	10
NAGOYA	16.76	46.8	3	51	-2	6	43	-13				
GIHU	16.77	45.8	3	50	-3	7	11	15				
HUKUI	16.82	43.1	3	54	1						8	38
HAMAMATU	17.02	49.3	3	53	-3						8	43

CHENGTU	17.20	295.2	3	57A	-1					
NHATRANG	17.20	227.5	4	0	2	7	18	12		
TORISIMA	17.25	65.5	4	3	4	7	20	13		
OMAESAKI	17.30	50.4	4	1	2					
KANAZAWA	17.39	42.6	3	57	-3					
TAKAYAMA	17.53	44.6	3	50	-12	7	30	17		
IIDA	17.54	47.2	3	59	-3	7	33	19		
KUNMING	17.59	276.3	4	3A	0	7	23	8		
SHIZUOKA	17.62	49.6	4	2	-1	7	44	28		
TOYAMA	17.84	43.1	4	8K	2	7	1	-19		
MISIMA	18.09	50.0	4	8A	-1	7	34	8		
WAZIMA	18.10	40.9	4	11K	2	7	37	11		
KOHU	18.11	47.9	4	10	1	7	55	28		
AJIRO	18.15	50.4	4	9	-1	7	42	15		
HUNATU	18.16	48.7	4	11	1	7	44	16		
OSIMA	18.21	51.5	4	9A	-2	7	36	7		
MATUSIRO	18.38	45.1	4	10A	-3	7	33	0		
NAGANO	18.46	44.8	4	14	0	7	44	10		
OIWAKE	18.48	46.2	4	11	-3	7	50	15	4	33 PP
MERA	18.61	51.7	4	13	-2					
TITIBU	18.64	47.9	4	15	-1	8	2	24		
YOKOHAMA	18.74	50.1	4	15K	-2	8	4	24	14	5 SCS
TAKADA	18.75	43.8	4	23	6	7	51	10		
MAEBASI	18.87	46.8	4	14A	-4	7	58	15		
KUMAGAYA	18.93	47.8	4	21	2				8	9
TOKYO C.M.O.	18.94	49.5	4	16A	-3	7	33	-12		
HONGO	18.97	49.5	4	20	0	7	55	9	8	14 *SS
PAOTOW	19.03	330.8	4	22A	2	7	57	10		
AIKAWA	19.32	41.6	4	18	-6				8	12
TUKUBASAN	19.46	48.6	4	19A	-6	7	47	-9		
UTUNOMIYA	19.48	47.5	4	25	0	8	8	11		
KAKIOKA	19.52	48.7	4	19	-7	7	37	-21		
LANCHOW	19.55	310.6	4	28A	2	8	4	6		
CHANGCHUN	19.55	7.0	4	26A	0	8	0	2		
TYOSI	19.73	50.8	4	26	-2	8	2	0		
SHIRAKAWA	20.03	46.5	4	32	1	7	59	-10		
VLADIVOSTOK	20.34	21.0	4	34	0					
ONAHAMA	20.40	47.8	4	28	-7	8	22	7		
HUKUSIMA	20.55	45.4	4	39	2	8	14	-5		
YAMAGATA	20.77	44.1	4	40	1	8	48	25		
SAKATA	20.84	41.9							5	29
SENDAI	21.13	44.7	4	40	-3	8	49	19		
ISINOMAKI	21.49	44.9	4	45K	-1	8	40	4		
AKITA	21.52	40.5	4	44	-2	9	36	59	5	26
MIZUSAWA	21.78	43.1	4	45	-4	8	48	6		
MORIOKA	22.15	42.0	4	49	-4	8	54	6		
MIYAKO	22.62	43.0	4	54	-3	8	49	-8		
AOMORI	22.63	39.2	4	48	-9				7	46
HATINOHE	22.88	40.7	4	55	-5					
HAKODATE	23.27	37.3	5	2	-2					
MORI	23.37	36.5	5	3	-2	8	49	-21		
SUTTSU	23.67	34.8	5	5	-3					
MURORAN	23.74	36.6	5	6	-2					
GUAM	23.99	112.9	5	13	2	9	23	2		
TOMAKOMAI	24.27	36.8	5	11K	-2				11	3
SAPPORO	24.45	35.7	5	11A	-4	9	29	0	5	29 PP
TOCKLAI	24.74	281.3	5	24	6					
HIROO	25.03	39.4	5	9	-12					
RUMOE	25.20	34.5	5	19	-3					
OBIHIRO	25.35	38.1	5	20	-4					
ASAHIGAWA	25.48	35.7	5	23A	-2	9	50	4		
KUSIRO	26.09	39.3	5	28A	-3	10	11	15		
WAKKANAI	26.28	32.2	5	30K	-2					
ULAN-BATOR	26.38	336.6	5	32A	-1					
ABASHIRI	26.67	37.4	5	35	-1					
NEMURO	26.98	39.9	5	36A	-3	10	37	26		
SHILLONG	27.39	278.8	5	40A	-3	10	21	4	6	11 PP
CHITTAGONG	27.84	272.0	5	48	1					
Y.-SAKHLINSK	27.94	31.0	5	44	-3				6	48 PP
ESEN BULAK	30.18	323.1	6	11	4	11	17	15		
PORT BLAIR	30.59	250.8	6	8	-3	11	9	1	7	4 PP
IRKUTSK	30.94	338.6	6	13A	-1	11	11	-3		
CALCUTTA	30.95	273.5	6	18	4	11	18	4		
CHATRA	31.53	281.9	6	20A	1	11	20	-3	7	22 PP
BOKARO	33.07	276.6	6	32	-1	11	51	4	7	45 PP
DJAKARTA	33.85	208.0	6	43	3	11	43	-16		
TANGERANG	33.93	208.4	6	40K	0				10	10
LEMBANG	34.11	206.3	6	41	-1					

VISHAKHAPTNM	36.72	267.2	7	5K	1	12	47	4			8	47 PP
YAKUTSK	37.95	5.8									13	20 PCS
DEHRA DUN	39.37	288.6	7	26A	0	13	25	2			8	59 PP
PETROPAVLOVK	39.66	34.3	7	27A	-1							
NEW DELHI	40.22	286.0	7	33A	0	13	12	-24			9	9 PP
MAGADAN	40.45	22.2	7	33A	-2	13	19	-21			9	12 PP
RABAUL	40.81	130.1	7	37K	-1						8	18
SEHORE	41.07	277.8	7	40	0	13	50	1				
MADRAS	41.14	261.8	7	43A	2	13	59	9			9	22 PP
HYDERABAD	41.22	268.9	7	41	0	13	53	2			9	20 PP
SEMIPALATNSK	41.37	319.8	7	43A	0						9	21 PP
PORT MORESBY	41.56	141.0	7	45K	1	13	57	1			13	27 SCP
LAHORE	42.51	290.7	7	40	-12	13	50	-20				
FRUNSE	42.97	307.3	7	57A	1	14	43	26			9	48 PP
KODAIKANAL	44.67	259.6	7	45	-24						13	28 PCS
WARSAK DAM	44.76	294.4	8	11	1							
KHOROG	44.79	299.3	8	12A	2						10	2 PP
POONA	45.10	272.3	8	13A	0	14	50	2			9	59 PP
BOMBAY	45.94	273.2	8	15	-4	15	2	3			10	10 PP
TASHKENT	46.74	304.5	8	26A	0	15	19	8			10	22 PP
QUETTA	48.95	289.6	8	45A	2							
CHARTERS TS.	50.10	149.9	8	51	-1	15	48	-10				
SVERDLOVSK	54.36	323.5	9	22K	-2						11	20 PP
ASHKABAD	55.22	300.3	9	30	0	17	14	6			17	30 PS
MUNDARING	56.34	186.0	9	38	0						9	50
PERTH	56.36	186.4	9	40	2	16	35	-48			11	30 PP
KIZYL-ARVAT	56.72	302.0	9	42A	1	17	31	3			11	51 PP
BRISBANE	59.40	148.2	10	0	1	18	2	-1				
KOUMAC	60.69	133.8	10	9K	1	18	28	9				
TEHERAN	61.05	298.7	10	11	0	18	20	-4				
ADELAIDE	61.12	164.4	10	11A	0	18	24	-1			19	25
SHIRAZ	61.37	291.7	10	12A	-1	18	29	1			12	34 PP
KHEYS	61.91	350.4	10	15	-2	18	31	-4			12	33 PP
NOUMEA	63.34	133.6	10	27K	1	18	59	6				
KIROVOBAD	64.07	304.9	10	30A	-1	19	6	4				
RIVERVIEW	64.17	153.3	10	33A	2	19	9	6	10	42	14	26 PPP
GORIS	64.29	303.7	10	34A	2	19	11	7			13	0 PP
CANBERRA	64.64	155.8	10	35A	1	19	11	2			14	35 PPP
TIFLIS	65.00	306.3	10	36	-1	19	11	-2			13	15 PP
TOOLANGI	65.46	159.7	10	40	0	19	23	4			13	5 PP
MOSCOW	67.13	322.3	10	49A	-1	19	37	-2				
APATITY	67.20	335.4	10	49A	-2	19	38	-2			13	19 PP
COLLEGE	68.22	27.4	10	55	-2	19	55	3			13	25 PP
KEVO	69.07	338.2	11	1A	-1	20	1	-1			13	34 PP
SODANKYLA	69.80	335.8	11	5A	-2	20	11	0			13	40 PP
PULKOVO	70.11	327.5	11	8A	-1	20	13	-1			15	17 PPP
KAJAANI	70.21	332.2	11	8	-1	20	14	-2			13	40 PP
TROMSOE	71.81	339.0	11	19	0						14	15 PP
SIMFEROPOL	71.81	311.7	11	19A	0	20	35	1			14	1 PP
KIRUNA	71.93	337.0	11	18A	-2	20	33	-2			13	58 PP
NORD	72.20	354.2	11	20	-1							
HELSINKI	72.58	328.7	11	23A	-1							
HONOLULU	72.61	74.1	11	25	1	20	49	6				
NURMIJARVI	72.62	329.1	11	22A	-2	20	42	-1			14	3 PP
KIPAPA	72.64	74.0	11	25	1	20	51	7				
MOULD BAY	72.87	12.7	11	23K	-2	20	45	-1				
ALERT	73.28	0.6	11	27A	-1	20	51	0				
UMEA	73.43	333.1	11	27A	-1	20	49	-3			14	3 PP
KSARA	73.87	300.1	11	30A	-1	21	20	23			14	27 PP
AFIAMALU	74.92	113.1	11	39A	2	21	18	9				
JERUSALEM	75.07	298.3	11	39	1						21	47 PP
BACAU	76.08	314.9	12	1	17	21	37	15				
UPPSALA	76.13	329.8	11	42A	-2	21	20	-2			14	35 PP
FOCSANI	76.19	314.0	11	49	5							
SITKA	76.37	33.3	11	45	0	21	26	1				
ISTANBUL UN.	76.62	309.1	11	47	0	21	30	2				
SKALSTUGAN	76.74	334.4	11	46A	-2						12	53
BUCHAREST	77.38	313.1	11	52	1	21	36	0				
WARSAW	77.51	321.8	11	51	-1	21	41	4			14	49 PP
ONERAHI	77.61	138.8				21	46	8				
CAMPULUNG	77.77	314.2	11	53	0							
RESOLUTE	78.31	9.4	11	54K	-2							
AUCKLAND	78.61	139.4	12	0	2	21	50	1				
KARLSKRONA	78.71	326.8	11	53A	-5							
KRAKOW	79.03	320.1	12	0	0	21	50	-4			15	2 PP
SKALNATE PL.	79.20	319.2	12	8	7	22	6	11			15	11 PP
CHORZOW	79.47	320.5	12	2	-1						15	15 PP
GOTEBORG	79.73	329.2	12	2A	-2						15	4 PP

KARAPIRO	79.76	139.8	12	4	0						15	19	PP
KONGSBERG	79.80	331.5	12	3A	-1	22	0	-2			15	6	PP
SOFIA	79.91	312.3	12	6	1	22	6	3			15	9	PP
TARATA	79.93	141.4	12	6	1								
RACIBORZ	80.02	320.6	12	5A	0	22	13	9			15	5	PP
TIMISOARA	80.04	315.7	12	5	-1	22	12	8			40	35	
ADDIS ABABA	80.28	275.5	12	9	2						22	9	
COBB RIVER	80.32	143.6	12	14	7	22	10	3			23	0	PS
COPENHAGEN	80.50	327.3	12	10	2	22	9	0					
TONGARIRO	80.60	140.8	12	3	-6	22	12	2					
BELGRADE	80.92	315.1	12	9A	-1						15	18	PP
HURBANOVO	81.00	318.6	12	14	3	22	27	13			19	43	
BERGEN	81.22	333.4	12	12	0								
TUAI	81.28	139.6	12	12	0								
SKOPJE	81.48	312.2	12	15	2	22	17	-2			15	21	PP
BRATISLAVA	81.52	319.2	12	14A	1						23	21	PPS
ATHENS	81.56	307.8	12	11A	-3						22	35	SCS
WELLINGTON	81.57	142.7	12	12	-2	22	19	-1			27	19	SS
ROXBURGH	81.75	148.5	12	16A	1	22	27	5			23	33	PS
VIENNA-H.	81.92	319.5	12	16A	1	22	30	6			15	22	PP
SCORESBY SD.	82.01	348.5	12	14	-2								
GEBBIES PASS	82.12	145.6	12	18	2	22	29	3			23	20	PS
PRUHONICE	82.16	321.6	12	17	0	22	27	1					
PRAGUE	82.18	321.7	12	18	1	22	29	3			15	27	PP
COLLMBERG	82.38	323.2	12	17	-1						15	48	PP
YELLOWKNIFE	82.44	23.1	12	17A	-1								
SARAJEVO	82.64	314.9	12	18	-1	22	30	-1					
TITOGRAD	82.74	313.3	12	17	-3	22	32	0			15	28	PP
HALLE	82.85	323.7	12	20	0	22	33	0					
KASPERSKE H.	83.12	321.1									15	33	PP
ZAGREB	83.29	317.4	12	22A	0	22	39	2					
JENA	83.34	323.4	12	23	0	22	38	0			15	35	PP
LJUBLJANA	84.08	318.1	12	26A	0	22	42	-3			15	37	PP
MACQUARIE I.	84.74	159.4	12	32	2				12	46	15	52	PP
TRIESTE	84.74	318.0	12	30A	0	22	47	-5			15	46	PP
MUNSTER	84.88	325.6	12	31	1								
WITTEVEEN	84.89	326.6	12	32A	2								
TARANTO	84.98	312.2	12	41	10						23	31	
BENSBERG	85.68	324.9	12	34A	0	22	52	-9			15	53	PP
HEIDELBERG	85.71	323.0	12	34A	-1						15	53	
STUTTGART	85.74	322.3	12	35	0						28	55	SS
TUBINGEN	85.99	322.2	12	36A	0						15	55	
PADOVA	86.00	318.5	12	37A	1	22	57	-7			16	11	PP
DE BILT	86.05	326.5	12	35A	-1	23	16	11			15	54	PP
RAVENSBURG	86.08	321.3	12	36	0								
EBINGEN	86.23	321.9	12	37A	0						15	57	
ABERDEEN	86.24	333.2	12	37K	0	23	7	1			15	57	PP
GODHAVN	86.56	358.4	12	38A	-1	23	37	28					
STRASBOURG	86.68	322.7	12	39A	0	23	5	-6			16	0	PP
SIDA	86.72	343.4	12	40	1						16	3	PP
BOLOGNA	86.80	317.9	12	46	6						23	17	
VICTORIA	86.80	37.3	12	40A	0								
REGGIO CALA.	87.20	310.7	12	42A	0	23	13	-3			16	2	
MESSINA	87.22	310.9	12	41A	-1	23	15	-1	13	1	16	7	PP
REYKJAVIK	87.38	345.0	12	43	0								
ROME	87.42	315.3	12	43A	0	23	19	1	12	55	16	10	PP
DOURBES	87.52	325.1	12	44	1	23	24	5					
WELSCHBRUCH	87.56	323.1	12	43	-1						16	4	PP
DURHAM	87.59	331.1	12	43K	-1	23	24	5			16	11	PP
PAVIA	87.74	319.3	12	47A	3	23	12	-9			16	6	PP
SEATTLE	87.91	37.6	12	50	5	23	11	-11					
PENTICTON	88.39	35.2	12	48A	0								
ROSELEND	88.95	320.7	12	50A	0						16	13	PP
KEW	89.14	328.1	12	49A	-2	23	31	-3			24	40	PS
BANFF	89.31	32.1	12	52A	0								
PARIS	89.39	324.9	12	52	0	23	13	-23			16	24	PP
ISOLA	89.56	319.3	12	53	0	23	16	-21					
MONACO	89.58	318.8	12	52A	-1						16	17	PP
GARCHY	90.01	323.5	12	55A	0	23	20	-22			16	11	PP
SPOKANE	90.57	35.5	12	58	0	23	26	-21					
CUGLIERI	90.84	315.4									29	35	SS
CLERMONT-FD.	90.89	322.2	12	59	0	23	38	-11					
FOLINIERE	90.95	326.1	12	59	-1								
JERSEY	91.50	327.1				24	25	30			14	40	
HUNGRY HORSE	91.88	33.7	13	5	1	23	12	-46					
UKIAH	92.17	45.0	13	5	0								
BLUE MTS.	92.36	37.8	13	7A	1	24	3	1			16	57	PP
MINERAL	92.51	43.3	13	7A	0								
CALISTOGA	92.86	45.1	13	9A	1								

BERKELEY	93.50	45.6	13	12A	1	24	11	-1			16	15	
CHILEKA	93.79	254.6	13	14	1								
LWIRO	93.92	269.3	13	14A	1	23	49	-27			17	4	PP
RENO	94.10	43.1	13	15A	1								
BUTTE	94.17	34.7	13	15	1				13	29	17	20	PP
LICK	94.21	45.8	13	15A	1						13	43	
BOZEMAN	95.19	34.3	13	20	1	24	29	40			38	30	PKPPKP
TORTOS	95.44	319.5									17	27	PP
PRIEST	95.54	46.3	13	22A	1								
EUREKA	96.49	41.4	13	26	1	24	48	52			17	18	PP
ALICANTE	97.59	318.1	13	30	0	25	8	67			17	26	PP
SALT LAKE C.	98.06	38.3	13	33	1	24	8	4					
PASADENA	98.36	46.7	13	33	0	24	10	5			17	35	PP
TOLEDO	98.70	321.0	13	34A	-1	24	9	2			17	36	PP
BROKEN HILL	99.08	258.3	13	35	-2								
FLAMING GRGE	99.32	36.9	13	38	0								
BOULDER CITY	99.39	43.5	13	39	1				13	55	17	29	PP
UINTA BASIN	99.64	37.5	13	39A	0	24	13	1			17	35	PP
ALMERIA	99.76	317.9	13	39A	-1						17	40	PP
RAPID CITY	100.21	31.4	13	41	-1								
GRANADA	100.23	318.8	13	43A	1	24	32	17			17	56	PP
CHANGALANE	100.35	245.9	13	42	0	24	13	-2			17	48	PP
SCHEFFERVLLE	100.73	5.2	13	43A	-1								
LARAMIE	101.08	34.6	13	46	0	24	22	3					
BULAWAYO	101.11	252.9	13	47	1								
GOLDEN	102.36	35.6	13	52	1						16	59	
LISBON	102.37	323.0				24	29	4			17	51	PP
TUCSON	104.33	44.2	14	1	1	24	40	6					
AVERROES	105.14	318.0	18	23K	777								
ALBUQUERQUE	105.15	39.6	14	5	777								
MADISON	106.47	23.7	14	7	777						18	32	PP
KIMBERLEY	107.37	245.9	17	55	777						29	52	
SEVEN FALLS	107.86	9.2	18	22	777								
LAWRENCE	107.91	29.8	14	15	777								
OTTAWA	108.66	13.1	14	17	777								
LUBBOCK	108.77	37.7	14	20	777	25	0	6					
BREBEUF	108.97	11.6	14	20	777	24	55	1			34	1	SS
WICHITA MTS.	109.66	34.8	14	24	777	25	5	8			18	47	PP
CHIHUAHUA	109.79	44.1	19	28	777						31	45	
TULSA	110.13	32.1	14	27	-239	25	17	18			19	0	PP
ST. LOUIS 1	110.35	26.5	14	27	-239								
LUANDA	110.74	269.5	19	2K	35						28	55	PS
FAYETTEVILLE	110.75	30.8	14	36	-231						28	24	SS
CLEVELAND	110.88	18.8									19	5	PP
PONTA DELGDA	111.17	333.0	14	37	-231	25	7	4			19	9	PP
WESTON	112.40	10.7	14	37	-233						19	2	PP
MORGANTOWN	113.05	18.4									18	30	PP
PALISADES	113.24	13.1	18	26A	-6	25	18	6			14	40	P
FORDHAM	113.40	13.1	14	43	-229						18	26	
HERMANUS	113.52	241.5									19	21	PF
GEORGETOWN	114.52	16.4	14	46	-228								
CUMBERLAND	114.84	24.6	14	47	-228	25	40	22			19	35	PP
BLACKSBURG	115.15	19.7	14	27	-248								
HOUSTON	115.25	35.8	14	53	-223								
CHAPEL HILL	116.75	19.1	18	39	-1						28	47	
COLUMBIA	117.89	21.7	18	44	3								
N-LAZARVSKYA	119.50	200.9	18	44	0	25	36	1			20	11	PP
TACUBAYA	120.72	46.4	19	17	31						26	17	
VERA CRUZ	122.85	44.1									20	3	
MERIDA	125.37	37.1									33	25	
COMITAN	127.57	43.0									20	59	
SAN SALVADOR	131.35	42.3	20	5	58								
SANTIAGO MA.	131.94	41.7	20	1	53								
ST. KITTS	138.24	6.9	19	15	-5								
ST. CLAUDE	139.64	5.6	19	17	-5						22	7	PP
FORT FRANCE	140.97	5.0	19	27	2						22	26	PP
GALERAZAMBA	141.13	27.9	19	29	4						29	52	SKKS
CARACAS	144.20	15.3	19	33A	3						23	12	PP
TRINIDAD	144.99	6.0	19	32	1						23	9	PP
CHINCHINA	146.08	32.9	19	34A	1						22	58	PP
FUQUENE	146.54	29.5	19	36	2								
BOGOTA	147.13	30.8	19	37	2						23	5	PP
LA PAZ	167.61	52.5	20	5	5						31	44	SKKS
ANTOFAGASTA	168.54	89.0	20	4A	3						25	4	
BUENOS AIRES	169.83	177.3	20	5	4								

FEBRUARY 13 18.H 13.M 51.S EPICENTRE -9.86 160.84 DEPTH= 0.KM

A=-0.93082 B= 0.32344 C=-0.17018 D= 0.3282 E= 0.9446
G= 0.1607 H=-0.0559 K=-0.9854 HT= 6.6

SE= 2.24

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
RABAUL	10.28	302.6	2	33K	1	4	34	5					
PORT VILA	10.67	137.9	2	34	-3								
KOUMAC	11.14	163.1	2	44A	1	5	25	35					
NOUMEA	13.49	157.2	3	15	0	6	27	40					
PORT MORESBY	13.51	270.8	3	17K	2	6	3	16					
CHARTERS TS.	17.35	232.5	4	3	-2	7	23	6					
BRISBANE	19.02	202.5	4	26	1						5	15	
RIVERVIEW	25.46	199.0	5	30A	-1	9	53	-3			10	57	SS
AFIAMALU	27.09	101.2	5	47A	1	10	26	3					
CANBERRA	27.55	201.3	5	49	-1	10	31	0	5	56	6	41	PP
GUAM	28.15	325.1	5	57	1								
TOOLANGI	30.86	204.2	6	19A	-1	11	24	0			14	4	
KARAPIRO	30.92	157.0	6	19	-1						9	19	PCP
CHATEAU	32.03	158.2	6	27	-3								
ADELAIDE	32.13	215.5	6	29	-2	11	25	-18					
WELLINGTON	33.62	160.9	6	43	-1	12	1	-6					
ROXBURGH	36.23	169.9	7	5	-1	12	45	-2					
MACQUARIE I.	44.54	181.6	8	24	9								
MANILA	46.34	301.2	8	33	4	15	23	6					
MUNDARING	46.71	235.1	8	33	1	15	17	-5					
PERTH	47.01	235.3	8	39	4	15	26	0			10	34	PP
BAGUIO CITY	47.63	302.9	8	39	0	15	34	-1			10	34	PP
TUKUBASAN	49.83	338.0	8	56A	0	16	4	-2			10	36	PP
ABUYAMA	50.51	332.9	9	2A	0								
MATUSIRO	50.83	336.4	9	3A	-1	16	19	-1					
HONOLULU	50.85	52.2	9	5	1								
KIPAPA	50.97	52.1	9	5	0	16	16	-6					
MIZUSAWA	52.08	340.6	9	28	14	16	34	-3					
HAWAII V.OB.	52.13	56.0	9	14	0	16	31	-7					
LEMBANG	52.70	268.9	9	19	1								
DJAKARTA	53.56	269.6	9	31	6								
ZO-SE	55.72	318.5	9	40A	0	17	25	-1					
NHATRANG	55.79	292.1	9	41	0								
CANTON	56.86	305.8	9	49	0	17	44	3					
NANKING	57.90	317.8	9	56A	0	17	55	0					
Y.-SAKHLINSK	58.89	345.6	10	3	0	18	7	-1					
VLADIVOSTOK	58.97	335.6	10	2	-1	18	9	0			25	3	SSS
UGLEGORSK	60.97	346.0	10	18	1								
CHANGCHUN	62.42	331.7	10	26A	-1	18	53	0					
CAPE HALLETT	62.66	176.8	10	39	11								
PETROPAVLOVK	62.66	358.5	10	28A	0	18	59	3					
PEKING	64.59	323.3	10	39A	-2	19	18	-2					
WILKES	65.82	199.9	10	49	0	19	33	-2	11	30			
SIAN	65.91	314.4	10	49A	-1	19	36	0					
KUNMING	66.41	302.9	10	53A	0	19	44	2					
CHENGTU	67.77	308.8	11	1A	0	19	57	-2					
PAOTOW	68.65	320.7	11	7A	0	20	11	2					
MAGADAN	69.65	354.6	11	12A	-1	20	21	0			21	12	SCS
LANCHOW	70.42	313.8	11	18A	0	20	31	1					
PORT BLAIR	71.00	286.0	11	25	4	20	33	-4					
ULAN-BATOR	74.68	325.7	11	43	0	21	22	3					
CHITTAGONG	74.80	296.4	11	40	-4								
YAKUTSK	75.65	345.4	11	47K	-1	21	29	-1					
SHILLONG	75.74	299.6	11	46A	-3	21	28	-2			14	40	PP
CALCUTTA	77.90	295.6	12	0	-1	21	57	3					
IRKUTSK	78.47	328.5	12	3A	-1	22	0	0			22	36	PS
CHATRA	80.14	299.5	12	13	0	22	14	-4					
SOUTH POLE	80.20	180.0	12	12	-2								
ESEN BULAK	80.22	320.6	12	13	-1	22	19	0					
BOKARO	80.53	296.2	12	14A	-1	22	20	-2			15	21	PP
MADRAS	83.23	284.4	12	31	2	23	14	25			16	9	PP
COLLEGE	83.74	19.6	12	31	-1	22	54	-1			13	34	
MAWSON	83.98	202.4	12	32	-1								
TIKSI	84.05	350.3	12	32A	-1	22	58	0			15	45	PP
SITKA	84.55	29.5	12	37	1	23	18	15					
UKIAH	85.46	49.2	12	43	2						13	8	
HYDERABAD	85.76	288.4	12	45	3	23	3	-11			27	51	
CALISTOGA	85.80	49.8	12	44A	2								
BERKELEY	85.83	50.6	12	44A	2	23	21	6			16	3	PP
LICK	86.16	51.3	12	46A	2								

PRIEST	86.61	52.6	12	49A	3					
MINERAL	86.99	48.4	12	49A	1					
VICTORIA	88.04	40.1	12	54	1					
RENO	88.11	49.5	12	56A	3					
PASADENA	88.12	55.0	12	55	2	23	21	-16	13 22	16 21 PP
DEHRA DUN	88.77	300.9	12	54	-3	23	22	-21		23 37 SCS
NEW DELHI	89.14	299.1	12	56A	-2	23	46	0		16 38 PP
POONA	90.27	288.6	13	2	-2	23	54	-3		
PENTICTON	90.67	40.1	13	5	-1					
EUREKA	90.99	50.2	13	8	1					16 44 PP
BLUE MTS.	91.16	44.8	13	7A	-1	24	19	14		16 42 PP
BOULDER CITY	91.18	53.8	13	9	1					16 44 PP
BOMBAY	91.29	288.8	13	12	4	24	3	-3		
SEMIPALATNSK	91.58	320.8	13	9A	-1	23	33	-35		16 51 PP
LAHORE	92.14	301.5	13	10	-2					
ALMATA	92.27	313.4	13	12K	-1					
BANFF	93.63	38.8	13	17	-2					
FRUNSE	93.87	312.6	13	20A	0	24	33	5		19 13 PPP
HUNGRY HORSE	94.07	41.8	13	21	0	23	28	-62		
SALT LAKE C.	94.34	49.5	13	23	1					17 22 PP
BUTTE	94.66	44.3	13	25	1					14 22
WARSAK DAM	94.85	303.5	13	20	-5					
ANDIJAN	95.20	310.3	13	26	0	24	0	-2		
KHOROG	95.37	307.0	13	25A	-2	24	41	38		17 22 PP
BOZEMAN	95.66	44.8	13	30	2					
UINTA BASIN	95.99	50.2	13	31A	1	24	14	8		17 25 PP
YELLOWKNIFE	96.16	27.7	13	29	-2					
N-LAZARVSKYA	96.85	189.9	13	31	-3					31 21 SS
MOULD BAY	97.10	13.7	13	34	-1					
CHIHUAHUA	97.34	62.3								26 45
TASHKENT	97.59	310.6	13	37A	0	24	4	-11		24 54 SCS
DUZHANBE	97.67	307.8	13	38K	0	24	59	44		
ALBUQUERQUE	97.77	55.9	13	39	1					17 35 PP
QUETTA	98.22	299.2	13	41	1					
LARAMIE	99.11	49.6	13	47	3					
GOLDEN	99.12	51.2	13	47	3					24 49
LUBBOCK	101.44	57.7	13	54	-1	24	34	0		
KHEYS	101.75	350.6	13	56	0					
RESOLUTE	103.21	15.3	14	3K	1					
SVERDLOVSK	103.78	326.1	14	2	-3	25	1	16		18 11
WICHITA MTS.	104.21	56.6	14	10	3	24	52	5		18 28 PP
ALERT	105.26	5.4	14	5	777					
MANHATTEN	105.90	52.0	18	41	777					
TULSA	106.52	55.5	14	16	777	24	59	2		18 34 PP
FAYETTEVILLE	107.82	55.3	18	45	777					
SHIRAZ	110.69	297.9	14	49	-225	25	11	-4		18 29 SKP
MADISON	110.80	47.4	18	17	-18	25	3	-12		19 9 PP
ST. LOUIS 1	110.87	52.4	14	36	-239					
TEHERAN	111.46	304.5	18	28	-8				19 17	14 44 P
APATITY	112.77	340.7				25	2	-21		19 25 PP
KEVO	113.39	344.1								19 27 PP
CUMBERLAND	114.84	55.4	18	44	2	25	31	0		19 37 PP
GORIS	115.09	309.0								19 42 PP
TIFLIS	115.89	311.6	15	5	-220					19 51 PP
MOSCOW	116.46	328.1								19 58 PP
KIRUNA	116.47	344.3	18	48	2					19 54 PP
GODHAVN	116.67	13.0								19 51
KAJAANI	116.68	339.0	18	48	2					
CLEVELAND	117.11	48.4								19 55
PULKOVO	118.08	334.2	15	9A	-220	25	35	-8		20 5 PP
VIBORG	118.20	335.5	18	47	-2					22 41 PPP
CHANGALANE	118.52	232.9								40 27 SSS
BLACKSBURG	118.74	53.0	15	33	-197					29 59
UMEA	119.36	341.2	18	50	-1					20 10 PP
SCORESBY SD.	119.41	1.1								20 12
ANTOFAGASTA	119.82	124.5								20 13
NURMIJARVI	119.98	336.7	18	51	-1	25	47	-3		20 21 PP
HELSINKI	120.07	336.3	18	55	2					
OTTAWA	120.22	42.9	18	57	4					
GEORGETOWN	120.99	50.5								20 19 PP
SCHEFFERVLLE	121.55	30.1	19	1	6					
BREBEUF	121.59	42.2	19	2K	6	25	55	0		20 27 PP
SHAWINIGAN	121.78	40.8	19	1	5					
SKALSTUGAN	121.89	344.0	18	59	3					
SIMFEROPOL	122.56	317.5	19	3	6					20 40 PP
KIMBERLEY	122.79	226.5	19	55	-3					
PALISADES	122.80	47.3	19	11	13	26	0	1		15 32 P
SEVEN FALLS	122.80	39.6	19	0	2					
FORDHAM	122.86	47.5								19 59

HERMANUS	122.87	217.7								20	39 PP
JPPSALA	123.04	338.9	18	59	1					20	29
CHINCHINA	123.86	90.6	19	2	2					20	48 PP
WESTON	124.21	45.0								20	47 PP
BULAWAYO	124.34	237.4	19	3	2						
KSARA	124.36	304.3	19	2	1					20	55 PP
GALERAZAMBA	124.86	83.7								20	48 PP
LA PAZ	124.93	118.0	19	5	3					22	57 PS
JERUSALEM	125.31	302.0	19	3	0						
BOGOTA	125.33	91.3	19	7	4					20	49 PP
FUQUENE	125.79	90.3	19	5	1					20	59 PP
KONGSBERG	125.81	342.4	19	15	11					20	59 PP
KARLSKRONA	126.44	336.6	19	6	1						
GOTEBORG	126.61	339.8	19	9	4						
WARSAW	126.67	330.3								21	5 PP
BROKEN HILL	126.95	243.6	19	7	1						
ISTANBUL UN.	127.49	314.8	19	9	2	26	16	3			
COPENHAGEN	127.99	337.9	19	13	5						
UZHGOROD	128.12	326.1	19	11	3						
KRAKOW	128.55	328.7	19	16	7					21	16 PP
CHORZOW	128.87	329.4	19	18	8					21	18 PP
RACIBORZ	129.40	329.6	19	11	0					21	15 PP
TIMISOARA	130.32	323.5								22	41
SOFIA	130.59	319.0	19	14	1					22	40
LWIRO	130.75	258.4	19	14A	1					21	35 PP
COLLMBERG	131.01	333.7	19	14	0					21	37 PP
PRAGUE	131.23	331.7								21	32
PRUHONICE	131.24	331.5	19	14	0					38	39 SS
BELGRADE	131.29	322.9	19	33K	19					20	1 PP
HALLE	131.32	334.5	19	15	1					21	33 PP
VIENNA-H.	131.50	328.8	19	16K	1	26	30	7			
JENA	131.89	334.2	19	15	0					21	34 PP
SKOPJE	132.17	319.1								22	40
KASPERSKE H.	132.28	331.3	19	15	-1					21	37 PP
ATHENS	132.45	313.2	19	15K	-1					33	46
MUNSTER	132.68	337.7	19	17	0						
CARACAS	133.01	84.8	19	37	20					28	15
DURHAM	133.08	346.1								21	54 PP
ZAGREB	133.25	326.5								23	56
DE BILT	133.45	339.5	19	18	0					21	48 PP
BENSBERG	133.66	337.2	19	28	9					21	49 PP
SAN JUAN	133.79	74.0	19	23	4					21	47
LJUBLJANA	133.88	327.6	19	20	1					21	49 PP
STUTTGART	134.50	333.8	19	21	1					21	49 PP
TRIESTE	134.55	327.7	19	21	1					21	54 PP
STRASBOURG	135.29	334.7	19	26	4					22	3 PP
DOURBES	135.32	338.3	19	34	12					22	1 PP
PADOVA	135.69	328.7								22	49 PP
KEW	135.74	343.2								22	2 PKS
WELSCHBRUCH	136.01	335.6	19	25	2					22	1 PP
PAVIA	137.20	330.4	19	23	-2					23	8 PKS
ROME	137.69	324.4	19	17	-9					22	17 PP
MESSINA	137.99	317.9	19	24	-3	26	29	-7	19 35	22	18 PP
ROSELEND	138.01	332.9	19	30	3					22	21 PP
FOLINIERE	138.18	341.5	19	22	-5						
GARCHY	138.22	337.3	19	24	-3					23	4 PP
TRINIDAD	138.45	85.1	19	27	0					22	17 PP
FORT FRANCE	138.74	78.9	19	28	0					22	21 PP
ISOLA	138.96	331.1	19	27	-1					22	24 PP
MONACO	139.11	330.3	19	39	10						
CLERMONT-FD.	139.44	335.9	19	30	1					20	0
LUANDA	142.78	241.1	19	32A	-3						
TORTOSA	144.60	333.8								19	41 PKP2
ALICANTE	147.05	332.4	19	43K	1					19	51 PKP2
TOLEDO	147.22	338.3	19	40A	-3	26	55	5		23	5 PP
ALMERIA	149.18	333.3	19	48A	2					20	12 PKP2
GRANADA	149.38	335.1	19	53K	7	26	20	-33		23	35 PP
LISBON	149.90	344.3	19	53	6					20	4 PKP2
PONTA DELGDA	151.64	10.9	19	55	5					23	42 PKS
AVERROES	154.29	336.9	20	3A	10						

FEBRUARY 14 7.H 4.M 51.S EPICENTRE -7.19 127.85 DEPTH= 261.KM

A=-0.60880 B= 0.78352 C=-0.12431 D= 0.7896 E= 0.6136
G= 0.0763 H=-0.0.82 K=-0.9922 HT= 6.9

DEPTH OF FOCUS= 0.036R

SE= 3.85

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
DARWIN	5.94	150.6	1	15	-13								
PORT MORESBY	19.23	97.9	3	55A	-11								
DJAKARTA	20.90	271.5	4	26A	3	8	36	41					
TANGERANG	21.10	271.5	4	20K	-5								
CHARTERS TS.	21.98	127.5	4	27	-6	8	15	1					
MANILA	22.73	342.8	4	40	0	8	45	18					
RABAUL	24.38	84.3	4	47	-9						11	56	
GUAM	26.50	39.3	5	12	-3						6	9	
MUNDARING	26.94	202.2	5	14	-5	9	39	3					
PERTH	27.07	202.9	5	32	12	9	51	13	6	2	6	39	PP
ADELAIDE	29.40	161.6	5	35K	-6	11	6	51			10	13	
BRISBANE	31.03	133.3	6	26	31	10	43	3					
MAWASHI	33.22	359.7	5	13	-61								
CANTON	33.27	335.1	6	15A	0								
CANBERRA	34.08	148.2	6	17A	-5	11	29	2	6	25	7	29	PP
RIVERVIEW	34.16	144.1	6	18	-4	11	31	2			7	25	PP
TOOLANGI	34.23	154.6	6	18K	-5	11	33	3	6	53	8	0	PPP
YAKUSIMA	37.51	3.8	6	49	-1						10	46	
ZO-SE	38.60	350.8	6	58A	-1	12	41	5			7	9	*SP
KAGOSIMA	38.63	3.7	7	4	4						8	4	
MIYAZAKI	39.04	4.8	7	4	1	12	45	3					
PORT BLAIR	39.65	297.9	7	8	0	12	58	7			8	36	PP
NAGASAKI	39.74	2.7	7	8A	-1	12	48	-5					
KUMAMOTO	39.88	3.7	7	11	1								
NANKING	39.98	348.0	7	11A	0	13	3	7			7	22	*SP
ASHIZURI	39.99	6.8	7	16	5	13	3	7					
NOUMEA	40.09	116.2	6	46A	-26	12	33	-25					
SAGA	40.28	3.2	7	23	10						8	14	
OOITA	40.35	4.9	7	18	4	13	19	17					
KUNMING	40.36	323.6	7	16A	2	13	13	11			7	27	*SP
HUKUOKA	40.61	3.2	7	13	-3	13	12	6					
PORT VILA	40.80	108.8	7	12A	-5								
KOTI	40.87	7.3	7	16	-2	13	15	6					
MATUYAMA	41.07	6.3	7	19	-1	13	28	16					
SIOMISAKI	41.11	10.1									10	50	
TOKUSIMA	41.52	8.4	7	23	0								
HIROSIMA	41.56	5.7	7	23	-1								
SUMOTO	41.84	8.8	7	25	-1						9	8	
HAMADA	42.05	5.2	7	26K	-2	13	38	11					
OSAKA	42.24	9.4	7	29	0						8	29	
NARA	42.32	9.8	7	18	-12								
ABUYAMA	42.46	9.4	7	29A	-2								
KAMEYAMA	42.60	10.5									8	30	
KYOTO	42.63	9.6	7	32	0	13	41	6					
HIKONE	42.97	10.1	7	35	0	13	47	7					
NAGOYA	43.00	11.0	7	32	-3								
MISIMA	43.36	13.3									8	28	
IIDA	43.51	11.9	7	39	0								
HUNATU	43.69	12.9	7	39	-2						12	50	
KOHU	43.81	12.6	7	40	-2								
CHENGTU	44.03	329.9	7	44A	1						7	55	*SP
TOKYO C.M.O.	44.09	14.0									8	24	
MATUMOTO	44.24	11.7	7	44	-1								
OIWAKE	44.44	12.4	7	49	2	13	11	-50					
TOYAMA	44.53	10.7	7	51	4								
MATUSIRO	44.57	11.9	7	44A	-4	14	4	1					
TUKUBASAN	44.69	14.1	7	44	-5						8	27	
NAGANO	44.69	11.9	7	50	1						14	17	
KAKIOKA	44.71	14.2	7	29	-20								
MITO	44.93	14.5	7	49	-2						14	17	
SIAN	44.94	337.6	7	51A	0	14	15	7			8	2	*SP
SHIRAKAWA	45.57	13.9	7	55	-1	14	22	5					
ONAHAMA	45.58	14.7	8	0	4								
HUKUSIMA	46.23	13.9	8	5	4								
TOCKLAI	46.54	317.8	8	9	6								
YAMAGATA	46.68	13.5	8	3	-1	14	43	10					
SENDAI	46.83	14.1	8	4	-1	14	46	11					
ISINOMAKI	47.08	14.5	8	4	-3								
MIZUSAWA	47.70	14.0	8	22	10								

SHILLONG	47.79	314.2	8	11A	-2	15	2	14			10	2 PP
AKITA	48.03	12.7	8	27	12						10	13
PEKING	48.20	348.0	8	16A	0	15	1	7			8	26 *SP
MORIOKA	48.25	13.8	8	11	-5	15	12	17				
LANCHOW	48.57	333.9	8	21A	2	15	8	9			8	31 *SP
CALCUTTA	48.64	308.4	9	16	57							
HAKODATE	50.17	12.6	8	30	-1						9	57
VLADIVOSTOK	50.20	3.9	8	30	-1	15	29	7	9	17	10	21 PP
PAOTOW	50.29	342.4	8	31A	-1						8	42 *SP
MORI	50.41	12.3	8	41	8							
VISHAKHAPTNM	50.48	299.9	8	35K	2	15	42	17			10	31 PP
CHANGCHUN	50.83	357.6	8	34A	-2						8	45 *SP
SUTTSU	51.01	11.7	8	35	-2							
BOKARO	51.33	308.2	8	39	-1	15	44	7			11	25 PPP
MADRAS	51.43	292.8	8	40A	0	15	47	9			10	33 PP
SAPPORO	51.50	12.6	8	32	-9	15	23	-17				
OBIHIRO	51.79	14.3	8	42	-1							
CHATRA	51.93	312.3	8	44A	0						19	28 SS
KUSIRO	52.15	15.4	8	43A	-3	15	54	6				
ROXBURGH	52.31	143.9	8	42	-5	16	9	19			9	46
NEMURO	52.80	16.2	8	48A	-2	16	3	6				
KARAPIRO	52.83	132.8	8	46A	-5							
CHATEAU	53.33	134.2	8	50A	-4							
MACQUARIE I.	53.38	157.9	8	51	-4							
WELLINGTON	53.67	136.9	8	51	-6	16	9	0			9	42
HYDERABAD	54.59	297.2	9	0A	-3	16	32	11			11	8 PP
Y.-SAKHLINSK	55.56	12.3	9	9A	-1						16	49
SEHORE	58.07	302.9	9	27	-1	17	23	16				
POONA	59.06	296.5	9	34A	-1	17	25	6			17	34 PS
AFIAMALU	59.60	101.9	9	34	-4	17	40	14				
BOMBAY	60.10	296.5	9	51	9	17	37	4			17	44 PS
WILKES	60.26	188.0	9	43	0				10	24		
ESEN BULAK	60.32	335.3	9	44	1	17	50	15				
NEW DELHI	60.38	308.5	9	43A	-1	17	40	4			12	2 PP
DEHRA DUN	60.?7	310.7	9	43A	-2	17	50	11			11	56 PP
IRKUTSK	62.55	344.0	9	58A	0	18	16	13	10	46		
LAHORE	63.96	310.2	10	7	0	18	35	14				
PETROPAVLOVK	65.43	19.9	10	15A	-2							
WARSAK DAM	67.16	311.4	10	18	-9							
KARACHI	67.18	300.6	10	22	-6							
KHOROG	68.75	314.7	10	38A	1						19	35
MAGADAN	69.00	12.3	10	38A	-1							
YAKUTSK	69.02	0.9	10	37A	-2	19	31	10				
QUETTA	69.16	305.9	10	41A	1							
FRUNSE	69.34	321.0	10	42A	1	19	36	11			13	26 PP
CAPE HALLETT	69.97	167.3	10	43	-2							
SEMIPALATNSK	70.57	329.9	10	48A	0	19	48	9			13	35 PP
TASHKENT	72.06	317.5	10	58A	1						13	45 PP
MAWSON	73.99	201.2	11	7	-2	20	23	5				
HONOLULU	77.92	66.5	11	30	0	21	7	7			27	13 SS
KIPAPA	78.02	66.4	11	30	-1	21	19	18				
TIKSI	78.66	0.3	11	31A	-3	21	11	3			22	25 PS
HAWAII V.OB.	80.13	68.9	11	41	-1							
SHIRAZ	80.93	301.5	11	47A	1	21	41	9			14	58 PP
SOUTH POLE	82.86	180.0	11	53	-3							
TEHERAN	83.30	307.2	11	59	0	22	17	22	15	21	38	25 PKPPKP
SVERDLOVSK	83.84	329.4				22	13	12			15	29 PP
BYRD STATION	86.80	170.7	12	34	18							
GORIS	88.02	310.0	12	22A	0	22	50	9			16	4 PP
TIFLIS	89.57	312.0	12	30	1						16	4 PP
CHILEKA	90.83	254.2	12	36A	1							
N-LAZARVSKYA	91.54	197.3	12	36	-2	23	16	4			24	39 *SS
CHANGALANE	91.89	243.4	12	40A	0	22	54	-21			16	25 PP
KHEYS	93.81	351.1	12	46	-2						13	52
COLLEGE	94.05	25.2	12	46	-3				13	46		
GRAHAMSTOWN	95.42	235.6	12	57	1							
KSARA	95.58	303.3	12	57	1	24	25	79			16	56 PP
JERUSALEM	95.96	301.2	12	59	1							
MOSCOW	96.01	325.3	12	58	0	24	4	56	13	50	16	55 PP
BULAWAYO	96.15	248.9	12	59A	0							
BROKEN HILL	97.23	254.5	13	4	0							
SIMFEROPOL	97.66	314.4									17	13 PP
KIMBERLEY	97.90	239.7	13	8A	1							
APATITY	98.29	337.2	13	4	-5	23	36	16			17	25 PP
LWIRO	98.69	266.6	13	11	0	23	43	21			17	23 PP
PULKOVO	99.96	329.4	13	22	6						17	31 PP
KEVO	100.45	339.7									29	38 PKKP
KAJAANI	100.86	333.9	13	19	-1	23	41	10			29	29 PKKP

SODANKYLA	100.91	337.3	13	19	-2				17 34 PP
ISTANBUL UN.	101.35	310.3	13	31	8				23 46
MOULD BAY	102.29	13.1	13	25	-2				17 50 PKP
HELSINKI	102.60	330.0	13	28	0				
NURMIJARVI	102.71	330.4	13	27	-2	23	52	12	17 57 PP
KIRUNA	103.16	338.2	13	29A	-2	23	51	8	17 51 PP
TROMSOE	103.24	340.1	13	32	1				13 56 PP
NORD	103.99	355.0	13	22	-12				
UMEA	104.16	334.1	13	33A	-2	24	8	20	17 53
SOFIA	105.51	312.2	16	58	777				17 52
WARSAW	105.94	322.2	18	23	777				
UPPSALA	106.28	330.4	13	42	777				17 54 PKP
KRAKOW	106.97	320.1	17	3	777				18 6
BELGRADE	107.37	314.6	18	8	777				18 33 PP
CHORZOW	107.52	320.5	17	1	777				17 56
SKALSTUGAN	107.62	334.9	13	49	777				17 44 PKP
VICTORIA	107.74	41.4	13	50	777				17 57 PKP
RACIBORZ	108.06	320.3	17	21	777				18 15
KARLSKRONA	108.26	327.0	13	48	777				18 22 PP
SEATTLE	108.63	42.2	17	58	777	24	49	42	
YELLOWKNIFE	108.85	25.8	13	53	777				17 58 PKP
UKIAH	109.18	51.2	18	10	777				19 35 PP
VIENNA-H.	109.59	318.7	14	4	777	24	10	-1	
GOTEBORG	109.71	329.1	14	0	777				18 41 PP
CALISTOGA	109.73	51.6	14	0K	777				18 0 PKP
PENTICTON	110.05	40.0	14	1	-239				
BERKELEY	110.07	52.4	14	3K	-237				18 2 PKP
COPENHAGEN	110.09	327.0	17	37	-23				
KONGSBERG	110.20	331.5	14	7	-233				18 41 PP
MINERAL	110.27	49.7	14	4	-236				18 6 PKP
ZAGREB	110.32	316.2	18	50	50				
PRUHONICE	110.38	320.8	14	15	-226				18 3 PKP
PRAGUE	110.44	320.9	18	3	2				14 18 P
LICK	110.62	52.9	14	6A	-235				18 3 PKP
COLLMBERG	111.01	322.4	14	7	-235	24	36	19	
KASPERSKE H.	111.20	320.0	18	3	1				18 59
LJUBLJANA	111.28	316.7	18	4	2				18 49 PP
BANDEIRA	111.51	251.0	18	8	5			18 53	29 9 PKKP
PRIEST	111.55	54.1	14	0K	-243				18 5 PKP
RENO	111.75	50.4	14	10K	-233				18 6 PKP
TRIESTE	111.89	316.4	18	14	10				18 56 PP
MESSINA	111.91	308.2	18	9	5			18 46	18 55 PP
JENA	111.97	322.3	14	20	-224				18 57 PP
BANFF	112.11	37.4	18	4	0				
BLUE MTS.	112.58	44.4	18	6	1	24	41	18	18 58 19 1 PP
PADOVA	113.23	316.4							18 39
ROME	113.58	312.6							21 27
PASADENA	113.82	55.9	18	9	2	24	47	19	19 11 PP
SCORESBY SD.	113.91	349.3	18	15	7				
MUNSTER	114.00	324.2	18	10	2				
STUTTGART	114.02	320.5	18	9	1				19 20 PP
BENSBERG	114.61	323.3	18	10	1				19 25 PP
EUREKA	114.68	49.8	14	22	-227				28 50 PKKP
STRASBOURG	115.04	320.6	18	19	9			19 17	19 28 PP
PAVIA	115.13	316.7							28 51 PS
BUTTE	115.50	42.2	14	26	-225	24	48	13	19 16 PP
WELSCHBRUCH	115.98	320.8	18	12	0				19 19
BOULDER CITY	116.24	53.5	14	36	-216				28 54 PKKP
DOURBES	116.45	323.0	18	15	3				
BOZEMAN	116.62	42.2	14	32	-221				19 21 PP
ROSELEND	116.69	317.9	18	14	1				19 24 PP
MONACO	116.73	315.6	18	19	6				
ISOLA	116.86	316.1	18	15	2				19 38 PP
SALT LAKE C.	117.46	47.6	18	11	-3				19 34 PP
DURHAM	117.81	329.6	18	27K	12				
GODHAVN	118.01	0.6							19 44
PARIS	118.22	322.3	18	18	2				
GARCHY	118.45	320.5	18	19	3				19 47 PP
KEW	118.72	325.9	18	18	1				29 46
CLERMONT-FD.	118.98	318.9	18	26	9				
UINTA BASIN	119.25	47.6	18	20A	2	25	7	19	19 40 PP
FOLINIERE	120.02	323.2	18	20	1				
TUCSON	120.20	56.9	18	20	0				21 47
LARAMIE	121.81	45.4	18	24	1				28 24
RAPID CITY	122.40	41.6	18	25	1				
GOLDEN	122.51	47.1	18	26	2				29 47
ALBUQUERQUE	123.12	52.8	14	10	-255				21 11 PP
ALICANTE	124.10	311.9	18	28	1				20 23 PP

ALMERIA	126.10	310.8	18	32K	1					20	38 PP
TOLEDO	126.11	314.9	18	33K	2	25	40	30	19 37	20	35 PP
GRANADA	126.83	311.6								20	48
LUBBOCK	127.17	53.0	18	28	-5						
WICHITA MTS.	129.33	50.5	18	30	-7	25	41	22		20	47 PP
LAWRENCE	129.99	44.0	18	37	-2					21	47
TULSA	130.96	47.9	18	33	-7					20	54 PP
SCHEFFERVLLE	131.07	11.2	18	34	-7						
MADISON	131.17	36.2	18	28	-13	25	33	10		20	55 PP
FAYETTEVILLE	132.05	46.9	18	31	-12					31	20 SPP
CHICAGO CGS.	133.40	36.7	18	33	-12						
HOUSTON	133.63	55.4	18	48	3						
LONDON ONT.	136.11	30.9	18	39	-11						
OTTAWA	136.80	24.3	18	41	-10						
SHAWINIGAN	136.96	20.9	18	46	-6						
CLEVELAND	137.03	32.7	18	47	-5					22	18 PP
SEVEN FALLS	137.12	18.7	18	40	-12						
BREBEUF	137.55	27.4	18	45K	-8					21	51 SKP
CUMBERLAND	138.34	42.5	18	44	-10					21	42 PP
MORGANTOWN	139.19	33.4	18	48	-8					22	14
PENNSYLVANIA	139.43	30.4	18	48	-8						
BLACKSBURG	140.59	36.5	18	52	-6						
WESTON	141.07	22.8	18	55	-5					22	21
PALISADES	141.14	26.6	18	56	-4						
GEORGETOWN	141.25	31.7	18	52	-8						
PONTA DELGDA	141.26	325.6	18	51	-9	25	30	-12		22	17 PP
FORDHAM	141.28	26.7	18	57	-3					22	49
HALIFAX	141.40	13.1	18	56	-4						
CHAPEL HILL	142.27	36.9	18	58	-4					22	58
COLUMBIA	142.28	41.0	18	57	-5					22	30
SAN SALVADOR	143.03	76.9	18	59	-4						
SANTIAGO MA.	143.76	77.0	19	3	-1						
ANTOFAGASTA	144.49	150.4	19	5A	0					32	17
AREQUIPA	149.70	141.0	19	17	4						
HUANCAYO	150.06	129.5	19	18	4						
LA PAZ	151.65	146.2	19	20	4				20 17		
BALBOA HTS.	152.81	84.4	19	19	1						
HOPE	153.74	63.5	19	27	8						
CHINCHINA	156.56	94.1	19	26A	3					23	43 PP
GALERAZAMBA	156.89	79.4	19	44	20					33	33
BOGOTA	158.05	95.5	19	28A	3					23	53 PP
FUQUENE	158.49	93.3	19	27	1						
SAN JUAN	162.43	49.4	19	30	0				20 20	24	8
CARACAS	165.03	76.2	19	34A	2					24	12 PP
ST. KITTS	165.56	44.7	19	23	-10						
ST. CLAUDE	167.17	45.9	19	36	2						
FORT FRANCE	168.42	48.9	19	37	2					31	7 PPP
TRINIDAD	170.24	68.7	19	38	2					24	45 PP

FEBRUARY 14 12.H 9.M 7.S EPICENTRE 0.85 -30.07 DEPTH= 0.KM

A= 0.86533 B=-0.50099 C= 0.01467 D=-0.5010 E=-0.8654
G= 0.0127 H=-0.0074 K=-0.9999 HT= 7.2

SE= 2.64

	DELTA DEG.	AZ. DEG.	P M	P S	P O-C S	S M	S S	S O-C S	*PP M	*PP S	SUPP. M	SUPP. S
TRINIDAD	32.62	288.5	6	44	9	11	57	6				
FORT FRANCE	33.67	295.7	6	46	1	12	16	8				
ST. CLAUDE	34.64	297.5	6	53	0	12	27	4				
ST. KITTS	36.06	298.9	6	58	-7							
CARACAS	37.87	286.0	7	28	8	13	28	16				
AVERROES	38.66	31.1	7	28K	1						9	4 PP
SAN JUAN	39.44	298.4	7	44	11							
LA PAZ	41.31	243.6	7	50	1	14	7	3				
GRANADA	43.64	31.1	8	27A	19						9	57 PP
FUQUENE	43.82	277.0	8	9	0							
ALMERIA	43.98	32.4	8	12K	1						10	1 PP
AREQUIPA	44.33	245.3	8	12	-1							
TOLEDO	45.51	28.2	8	23A	0	15	12	7			10	5 PP
BANDEIRA	45.66	111.8	8	26K	2				8	39		
CHINCHINA	45.66	276.1	8	23	-1	15	5	-2			10	14 PP
ALICANTE	46.15	32.6	8	29A	1						10	24 PP
ANTOFAGASTA	46.16	235.4	8	27A	-1	15	11	-3			10	16 PP
HUANCAYO	46.73	252.6	8	32	-1							
HALIFAX	52.73	330.3	9	23	4							

CLERMONT-FD.	53.40	28.5	9	2	-22				9	24
FOLINIERE	54.11	23.8	9	28	-1					
MONACO	54.18	33.0	9	33	4					
ISOLA	54.28	32.3	9	31	1				10	13
GARCHY	54.49	27.2	9	32K	0					
ROSELEND	55.08	30.7	9	36	0				10	17
PARIS	55.38	25.6	9	38	0					
MESSINA	55.94	42.8	9	42	0	17	34	5	9 54	12 35 PP
PAVIA	56.08	32.6								17 34 PS
FORDHAM	56.16	320.8	9	47	3	17	35	3		
PALISADES	56.26	320.9	9	46	2	17	26	-8		19 4 SCS
KEW	56.33	21.9				17	34	-1		21 14 SS
WELSCHBRUCH	56.84	28.2	9	51	2					
GEORGETOWN	57.23	317.3	9	49	-2					
CHAPEL HILL	57.23	313.3	9	52	1					
STRASBOURG	57.63	28.8	9	53	-1					10 51
COLUMBIA	57.90	310.4	9	55	-1					17 49
HERMANUS	57.94	132.3								18 1 PS
SEVEN FALLS	58.13	328.3	9	57	-1					
STUTTGART	58.50	29.5	10	1	1	18	7	4		
HEIDELBERG	58.65	28.6	10	1	0					
BREBEUF	58.66	325.4	10	2	1	18	9	4		24 17 SSS
PENNSYLVANIA	58.71	318.8	10	1	-1					
SHAWINIGAN	58.82	326.8	10	2	-1					
TRIESTE	58.90	34.6	10	3	0					12 12 PP
LWIRO	58.94	93.1	10	2A	-1	18	13	4		12 23 PP
BENSBERG	59.02	26.5	10	5	1					
MORGANTOWN	59.54	316.8	10	5A	-3					
LJUBLJANA	59.57	34.5	10	6	-2					12 19 PP
OTTAWA	59.81	324.3	10	12	3					
BROKEN HILL	59.87	107.2	9	53	-17					
MUNSTER	59.93	25.9	10	11	1					
ZAGREB	60.28	35.4	10	15	2					
KASPERSKE H.	60.90	31.3	10	15	-2					12 23
JENA	61.04	28.7	10	17	-1	18	43	7		12 25 PP
BULAWAYO	61.10	113.5	10	20A	2					
CLEVELAND	61.46	318.0	10	20K	-1	18	45	4		
SCHEFFERVLLE	61.58	336.8	10	23	2					
ATHENS	61.59	46.5	10	13A	-8					18 47
HALLE	61.59	28.4	10	22	1	17	58	-45		
VIENNA-H.	61.87	33.3	10	23	0					11 25
PRUHONICE	61.92	30.9	10	22	-2	18	54	7		
LONDON ONT.	61.95	319.7	10	24K	0					
CUMBERLAND	61.96	310.4	10	23	-1	18	50	2		23 3 SS
COLLMBERG	61.97	29.1	10	24	0					12 42 PP
BELGRADE	62.43	38.3	10	26	-1					12 42 PP
CHORZOW	64.43	32.5	10	40	0					11 9 PCP
SKALNATE PL.	64.53	34.0	10	8	-33					
COPENHAGEN	64.56	25.1	10	42	1	19	37	17		
KRAKOW	64.81	33.1	10	43	0					11 12 PCP
BERGEN	65.32	18.4								13 48
UZHGOROD	65.42	35.3	10	47	0					
CHANGALANE	65.71	119.3	10	47	-2					
CHICAGO CGS.	65.72	316.2	10	47	-2					
GOTEBORG	65.73	23.2	10	48	-1					
KONGSBERG	66.21	20.8	10	52	0	20	5	25		
KARLSKRONA	66.23	25.9	10	52	0					
ST. LOUIS 1	66.50	312.2	10	52	-2	19	45	1		
LWOW	66.99	34.8	10	58	1					
MADISON	67.79	317.2	11	1	-1	20	0	1		24 13 SS
JERUSALEM	68.67	56.2	11	7	0					
FAYETTEVILLE	68.77	308.6	11	6A	-2					
UPPSALA	69.37	23.5	11	9	-3	20	16	-2		21 15 SCS
KSARA	69.67	54.2	11	15	2	20	24	2	11 46	13 46 PP
SKALSTUGAN	69.90	18.7	11	15	0					
TULSA	69.98	308.0	11	13A	-2	20	25	0		24 41 SS
LAWRENCE	70.34	311.3	11	14	-3					
SIMFEROPOL	71.37	42.4	11	23K	-1					
WICHITA MTS.	71.95	306.3	11	25	-2	20	53	5		14 13 PP
HELSINKI	72.59	25.4	11	31	0					
NURMIJARVI	72.64	25.0	11	30	-1	20	49	-7		21 31 PS
UMEA	72.76	20.9	11	30	-2	20	58	1		
LUBBOCK	74.39	304.6	11	41A	0	21	18	2		
VIBORG	74.52	25.9	11	41A	-1					
KIRUNA	75.23	17.6	11	47	1					26 20 SS
KAJAANI	75.67	22.6	11	49	0					
N-LAZARVSKYA	76.54	166.8	11	54	0					
MOSCOW	76.89	32.5	11	55K	-1					

SODANKYLA	76.94	19.4	11	55	-1					
TIFLIS	78.16	47.6	12	3	0					
GOLDEN	78.17	310.3	12	3	0	22	3	6		
KEVO	78.29	17.4	12	7	4				21	57 PS
ALBUQUERQUE	78.37	305.4	12	4	0					
LARAMIE	78.57	311.9	12	6	1					
GORIS	78.98	50.0	12	8K	1					
KIROVOBAD	79.14	48.9	12	6	-2					
APATITY	79.34	20.5	12	9	0	22	10	0	16	57 PPP
MAKHACH-KALA	80.33	46.6	12	16	2	22	25	5		
NORD	80.94	2.0	12	16	-2					
FLAMING GRGE	81.37	311.1	12	19	-1					
UINTA BASIN	81.44	310.5	12	21	1	22	38	7	15	10 PP
TUCSON	81.73	302.3	12	21	-1					
TEHERAN	82.57	54.2	12	20	-6	22	49	6	15	40 PP
RESOLUTE	82.69	346.0	12	26	-1					
ALERT	82.77	355.9	12	27	0	22	45	0		
BOZEMAN	83.09	315.8	12	29	0				15	33 PP
SHIRAZ	83.14	60.4	12	29A	0	22	55	6	15	41 PP
SALT LAKE C.	83.22	310.8	12	29	0					
BUTTE	84.18	316.0	12	37	3				16	4 PP
BOULDER CITY	85.26	305.9	12	41	1					
HUNGRY HORSE	85.35	318.3	12	40	0					
EUREKA	86.30	309.3	12	42	-3					
YELLOWKNIFE	86.72	332.4	12	45	-2					
BLUE MTS.	87.45	314.7	12	51	0	23	27	-4	24	37 PS
PASADENA	87.96	304.0	12	59	6	23	43	7	23	23 SKS
ASHKABAD	88.24	52.2	12	55	1					
MOULD BAY	89.01	346.1	12	57A	-1	23	41	-4		
PENTICTON	89.07	319.1	12	57	-1					
RENO	89.27	309.3	13	6A	7					
SVERDLOVSK	89.68	33.3	13	3	2					
PRIEST	89.98	306.0	13	8A	5					
LLANADA	90.20	306.4	13	8	4					
MINERAL	90.63	310.2	13	13K	7					
LICK	90.74	307.2	13	14A	8					
SOUTH POLE	90.84	180.0	13	7	0					
SEATTLE	90.89	317.5	13	11	4				30	18
BERKELEY	91.22	307.7	13	15K	7	23	53	-12	25	25
CALISTOGA	91.44	308.5	13	17K	8					
TASHKENT	96.47	48.4	13	31	-1					
COLLEGE	100.69	337.4	13	59	8					
MATUSIRO	141.24	15.1	19	32	-1				41	11 SS
TUKUBASAN	142.00	13.0							41	20 SS
ADELAIDE	144.48	164.1	19	46	8					
CANBERRA	145.69	178.6	19	43	3					
RIVERVIEW	147.17	181.9	19	53	10				43	23 SS
PORT MORESBY	171.06	162.1	20	17	7					
RABAUL	175.99	213.8	20	55	43					

FEBRUARY 14 13.H 18.M 57.S EPICENTRE 44.33 15.12 DEPTH= 50.KM

A= 0.69283 B= 0.18716 C= 0.69639 D= 0.2608 E=-0.9654
G= 0.6723 H= 0.1816 K=-0.7177 HT= -3.3

DEPTH OF FOCUS= 0.003R

SE= 3.03

	DELTA DEG.	AZ. DEG.	P M	S	O-C S	S M	S	O-C S	*PP M	S	SUPP. M	S	
ZAGREB	1.61	22.0									0	27	PG
TRIESTE	1.64	324.1	0	27A	0						0	52	SG
LJUBLJANA	1.77	346.4	0	30A	1	0	53	2			0	34	PG
SARAJEVO	2.43	99.8									0	35	PG
PADOVA	2.55	296.2	0	46	6	1	15	5			0	53	PG
ROME	3.10	219.4									1	40	S*
TITOGRAD	3.57	120.7	0	56	2	1	44	8			1	7	PG
BELGRADE	3.84	80.8	0	56A	-2						1	9	PG
VIENNA-H.	4.01	12.0	1	0	-1	1	48	1			2	12	SG
HURBANOVO	4.14	30.1									2	20	SG
TARANTO	4.17	157.0	1	1	-2	1	46	-5					
PAVIA	4.32	283.4	0	53	-12						1	44	SG
TIMISOARA	4.55	69.7	1	11	3						2	12	S*
KASPERSKE H.	4.92	348.1	1	12	-1						1	32	
RAVENSBURG	5.15	314.0	1	19	2	2	21	6			2	46	

SKOPJE	5.19	114.8	1	20	3	2	18	1	2	50	SG
MONACO	5.58	266.5							1	20	PG
PRUHONICE	5.66	356.3	1	22A	-2				3	3	SG
EBINGEN	5.74	314.3	1	24A	-1	2	28	-2	1	50	PG
PRAGUE	5.76	355.6	1	25	0				3	7	
ISOLA	5.80	271.3	1	24	-1				2	54	SG
TUBINGEN	5.92	317.3	1	26	-1	2	32	-3	3	11	SG
STUTTGART	5.99	319.9	1	27	-1	2	38	2	1	54	PG
SKALNATE PL.	6.00	34.2							1	37	PG
RACIBORZ	6.12	19.0	1	31	1	2	57	17	1	41	PP
MESSINA	6.13	176.8	1	30	0	2	44	4			
ROSELEND	6.17	285.7	1	31	0	2	39	-2			
SOFIA	6.19	102.4	1	33	2	2	45	4	3	16	
NIEDZIKA	6.21	33.2	1	31	0				1	52	P*
CHORZOW	6.52	22.4	1	35	-1				3	46	SG
UZHGOROD	6.56	46.5	1	40	4						
KRAKOW	6.59	28.1	1	42	5				1	48	PP
STRASBOURG	6.62	312.5	1	39	2	3	0	8	2	8	PG
HEIDELBERG	6.70	321.4	1	37	-1	2	53	-1	3	38	SG
JENA	7.02	341.4	1	41	-2	2	51	-11	3	47	SG
COLLMBERG	7.12	349.2	1	42	-2				3	50	SG
WELSCHBRUCH	7.31	307.0	1	37	-10				4	4	
HALLE	7.48	344.6	1	48	-1						
LWOW	8.19	44.8	2	2	3						
BENSBERG	8.53	323.9	2	3A	0	3	33	-6	2	23	P*
CLERMONT-FD.	8.62	283.8	2	5	0				4	50	SG
WARSAW	8.83	24.3							4	27	S*
ATHENS	9.08	131.5	2	11K	0	3	48	-5			
MUNSTER	9.13	329.4	2	13	1						
DOURBES	9.19	312.6	2	18	5						
ISTANBUL UN.	10.73	103.0				5	3	30			
COPENHAGEN	11.49	352.4	2	42	-2				7	33	
FOLINIERE	11.62	298.0	2	43	-3						
KARLSKRONA	11.85	1.3	2	48A	-1				6	37	
GOTEBORG	13.53	352.8	3	9	-2						
UPPSALA	15.62	4.7	3	40	2						
KONGSBERG	15.70	349.7	3	43	4						
HELSINKI	16.94	17.1	3	52	-3						
NURMIJARVI	17.19	16.1	3	57	-1						
PULKOVO	17.99	25.4	4	8K	0						
MOSCOW	18.32	43.5	4	10A	-2						
VIBORG	18.34	21.7	4	10	-2						
KSARA	19.18	116.1	4	21	-1						
SKALSTUGAN	19.36	356.2	4	22A	-2						
UMEA	19.75	6.7	4	27A	-1	8	15	12			
JERUSALEM	20.13	121.7	4	29	-3						
KAJAANI	21.04	15.5	4	40	-2						
KIROVOBAD	23.23	88.2	4	59	-4						
KIRUNA	23.72	5.0	5	8	0						
SODANKYLA	23.90	11.0	5	10	0						
APATITY	25.22	16.5	5	23A	0						
KEVO	26.20	9.3	5	33	1						
SVERDLOVSK	30.89	49.8	5	59	-15						
SHIRAZ	32.96	103.6	6	30A	-2				15	33	
NORD	38.87	352.9	7	21	-1						
ALMATA-2	43.97	68.6	8	3K	-1						
ALERT	44.70	349.5	8	10	0						
NEW DELHI	51.18	86.0	8	49A	-11						
MOULD BAY	56.24	348.1	9	36A	-1						
YAKUTSK	61.76	29.1	10	14K	-2						
COLLEGE	70.32	352.4	11	10	0						
CUMBERLAND	72.84	303.0	11	26	1						
HUNGRY HORSE	77.49	328.0	11	53	1						
PENTICTON	78.69	331.7	12	0	2						
WICHITA MTS.	80.96	310.2	12	13	2				13	15	
FLAMING GRGE	81.58	320.9	12	16	2						
BLUE MTS.	81.66	327.9	12	16K	2						
UINTA BASIN	82.15	320.6	12	19	2						
ALBUQUERQUE	84.93	315.4	12	34	3						
EUREKA	85.64	324.2	12	39	5						

FEBRUARY 14 22.H 7.M 54.S EPICENTRE -4.94 144.59 DEPTH= 77.KM

A=-0.81198 B= 0.57737 C=-0.08561 D= 0.5795 E= 0.8150
G= 0.0698 H=-0.0496 K=-0.9963 HT= 7.0

DEPTH OF FOCUS= 0.007R

SE= 2.01

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
PORT MORESBY	5.11	150.3	1	14A	-2								
RABAUL	7.60	84.7	1	52	1						3	56	
CHARTERS TS.	15.14	174.0	3	31	0						18	39	
DARWIN	15.47	240.6	3	34	-1								
GUAM	18.28	0.5	4	12	2								
BRISBANE	23.65	161.6	5	7	2	9	20	4					
KOUMAC	24.65	130.8	5	15	0								
NOUMEA	27.30	131.2	5	38A	-2								
RIVERVIEW	29.38	168.8	5	57K	-1						6	48	
MANILA	30.38	310.2	6	12	5						14	36	
CANBERRA	30.50	172.9	6	8	0	11	13	10			6	42	*SP
BAGUIO CITY	31.85	312.3	6	21	1	11	21	-3					
TOOLANGI	32.48	178.7	6	26A	0				6	41	9	12	PCP
DJAKARTA	37.59	266.3	6	46	-23	12	54	2					
MUNDARING	37.80	221.2	7	10	-1	12	58	2					
PERTH	38.04	221.6	7	13	0	13	2	3			8	56	PP
ABUYAMA	40.50	348.6	7	32K	-1								
TUKUBASAN	41.16	354.5	7	50K	11	13	38	-8			10	9	
CANTON	41.32	313.7				13	51	3			7	57	*SP
MATUSIRO	41.70	352.3	7	41K	-2	13	47	-7					
ZO-SE	42.24	329.5	7	47K	-1	14	3	1			17	45	SCS
KARAPIRO	43.28	143.6	7	58A	2						9	46	
AFIAMALU	43.89	104.9	8	0A	-1	14	37	11					
MIZUSAWA	43.97	356.1	8	15	13	14	28	1					
CHATEAU	44.13	145.0	8	3	0								
NANKING	44.24	328.0	8	4A	0	14	34	3			8	21	*SP
WELLINGTON	45.14	147.7	8	10A	-1								
ROXBURGH	45.77	155.7	8	21	5								
KUNMING	50.45	308.3	8	54A	2	16	5	6			9	10	*SP
MACQUARIE I.	50.76	169.2	8	54	-1								
SIAN	51.50	321.9	9	0K	0	16	16	3			9	16	*SP
CHANGCHUN	51.57	342.2	8	59K	-2	16	14	0			9	16	*SP
Y.-SAKHLINSK	51.76	358.4	9	1	-1	16	15	-2					
PEKING	51.83	332.3	9	2K	-1	16	19	1			18	47	SCS
CHENGTU	52.51	315.1	9	7	-1	16	29	2			18	52	SCS
PAOTOW	55.28	328.3	9	27	-1	17	7	3			19	11	SCS
LANCHOW	55.84	320.3	9	33K	1	17	16	4			19	17	SCS
CHITTAGONG	58.28	300.0	9	52	3	17	49	5					
SHILLONG	59.44	303.4	9	57K	0	18	0	1			19	31	SCS
CALCUTTA	61.34	298.9	10	9	-1	18	24	1					
LHASA	61.75	307.4	10	14K	1	18	33	5			10	30	*SP
HONOLULU	61.91	62.8	10	16	2								
KIPAPA	62.02	62.7	10	16	1								
ULAN-BATOR	62.16	332.3	10	14K	-2	18	35	2					
CHATRA	63.83	303.0	10	27K	0	18	43	-11					
BOKARO	63.99	299.4	10	27A	-1	19	1	5			11	22	PCP
MAGADAN	64.48	3.5	10	30	-1	19	5	3					
VISHAKHAPTNM	64.51	292.2	10	33K	2	19	8	5			10	56	PCP
MADRAS	66.40	286.4	10	43	0	19	24	-2			13	11	PP
IRKUTSK	66.44	334.3	10	43	-1	19	27	1					
ESEN BULAK	66.64	325.7									17	34	
CAPE HALLETT	69.14	171.9	11	1	1								
DEHRA DUN	72.54	303.7	11	21A	0	20	41	3			13	47	PP
NEW DELHI	72.77	301.8	11	23A	1	20	40	0			21	11	SKS
POONA	73.45	290.9	11	27A	1	20	49	1					
LAHORE	75.95	304.1	11	40	-1								
ALMATA-2	77.09	316.3	11	48A	1								
TIKSI	77.12	354.9	11	44K	-3	21	25	-4					
WARSAK DAM	78.82	305.9	11	58	1								
FRUNSE	78.87	315.2	11	56	-1	21	51	4					
ANDIJAN	79.89	312.7	12	3	1	22	1	3					
QUETTA	81.84	301.3	12	14	1	22	22	4					
DUZHANBE	82.05	309.9	12	15K	1	22	23	3					
TASHKENT	82.30	312.7	12	15K	0	22	26	3					
SOUTH POLE	85.09	180.0	12	29	0								
COLLEGE	85.14	23.3	12	28	-1				12	47	30	35	PKKP
ASHKABAD	90.04	307.9	12	51	-2								
VANNOVSKAYA	90.24	307.9	12	53	-1								
SVERDLOVSK	90.79	326.9	12	54	-2								

SHIRAZ	94.21	299.3	13	12A	0	24	0	-14	14	16	17	10 PP
KHEYS	94.28	350.5	13	10	-2							
UKIAH	94.79	51.3	13	16	1				13	35	17	17 PP
VICTORIA	94.99	41.8	13	16	0							
CALISTOGA	95.27	51.8	13	17K	0						13	35
TEHERAN	95.45	305.3	13	17	-1	24	36	55			26	4
BERKELEY	95.49	52.5	13	19K	1	23	46	1			16	6
LICK	95.97	53.1	13	22A	2						17	32
MINERAL	96.08	50.1	13	21A	1							
MOULD BAY	96.22	13.9	13	20	-1							
PRIEST	96.73	54.3	13	24K	1						13	44
RENO	97.44	50.9	13	27K	0							
PENTICTON	97.50	41.0	13	26	-1							
PASADENA	98.75	56.3	13	33	0	24	6	4	13	51	17	56 PP
BLUE MTS.	99.21	45.5	13	35	0	24	10	5	13	53	17	42 PP
YELLOWKNIFE	99.35	27.5	13	34	-1							
KIROVOBAD	99.46	310.2	13	42	6							
GORIS	99.49	309.1	13	35	-1	24	10	4				
EUREKA	100.41	50.9	13	41	1						18	10 PP
TIFLIS	100.57	311.4	13	46	5							
HUNGRY HORSE	101.24	41.8	13	45	1							
BOULDER CITY	101.45	54.4	13	47	2						17	52 PP
BUTTE	102.46	44.1	13	51	2	24	24	4	14	8	18	20 PP
RESOLUTE	102.53	13.6	13	50	0							
APATITY	102.54	338.5	13	50	0	24	23	2			25	27 S
BOZEMAN	103.55	44.3	13	55	1							
MOSCOW	103.59	326.2	13	59	5							
KEVO	103.93	341.5				24	29	2			18	30 PP
TUCSON	104.95	58.1	17	37	217						18	13 PP
SODANKYLA	105.05	339.3	14	12	777							
UINTA BASIN	105.26	49.7	14	2	777	24	40	7	14	27	18	22 PP
KAJAANI	105.95	335.9	14	4	777						18	17 PKP
PULKOVO	106.32	331.3	14	16	777	24	39	1				
VIBORG	106.71	332.5	18	16	777	24	43	3				
ARGENTINE I.	106.84	167.7									19	52
KIRUNA	106.95	340.8	14	20	777	24	41	0			18	30 PKP
CHANGALANE	107.64	240.6	18	23A	777						18	45 PP
LARAMIE	108.12	48.2	18	40	777							
KSARA	108.27	303.9	14	14	777				14	49	19	3 PP
ALBUQUERQUE	108.34	54.9	14	12	777						18	39 PP
GOLDEN	108.54	49.9	18	28	777						28	10
NURMIJARVI	108.68	333.1	18	23	777	24	48	0			18	41 PP
UMEA	109.03	337.2	18	22	777	24	46	-4			18	51 PP
JERUSALEM	109.04	301.8	14	10	777							
UPPSALA	112.10	334.2	18	28	1						19	31 PP
SKALSTUGAN	112.12	339.1	18	28	1							
LUBBOCK	112.31	55.8									19	14 PP
BULAWAYO	112.38	246.0	18	30	3							
LWOW	113.16	322.7									18	54
KIMBERLEY	113.20	236.0	18	34	5							
SCORESBY SD.	113.97	355.1	16	28	-3							
UZHGOROD	114.65	321.9	18	35	3							
WICHITA MTS.	114.77	54.1	18	36	4	25	19	7	19	0	19	32 PP
KARLSKRONA	114.94	331.3									19	51
HERMANUS	115.37	228.3				25	25	10			29	15 PS
LWIRO	115.45	265.2	18	38K	5						19	39 PP
KRAKOW	115.51	324.0	18	35	1						19	46 PP
GOTEBORG	115.74	334.0	18	32	-2							
LAWRENCE	116.35	48.8									18	36 PP
COPENHAGEN	116.69	332.0									18	38 PP
TULSA	116.73	52.2	18	38	2						20	1
FAYETTEVILLE	117.94	51.6	19	44	66						29	4
VIENNA-H.	118.40	323.3	18	39	0						20	35
PRUHONICE	118.63	325.7	18	42	2							
COLLMBERG	118.80	327.6	18	42	2						20	41
KASPERSKE H.	119.60	325.2	18	42	1						20	42
JENA	119.76	327.8	18	43	1						20	41
ST. LOUIS 1	120.19	47.8									20	8
MUNSTER	121.18	330.4	18	47	2							
BENSBERG	122.02	329.7	18	48	2							
STUTTGART	122.19	326.6	18	48	2						19	20
STRASBOURG	123.12	327.1	18	51	3							
DOURBES	123.84	330.1	19	14	24							
WELSCHBRUCH	123.99	327.6	18	52	2							
SCHEFFERVLLE	124.21	21.4	18	51A	1							
LONDON ONT.	124.60	39.7	18	51	0							
CUMBERLAND	124.74	49.6	18	52	1	25	49	3			20	42 PP
ROSELEND	125.43	324.8	18	55	2							

PARIS	125.73	330.0	18 56	3	
ISOLA	126.03	323.1	18 56	2	19 40
MONACO	126.05	322.4	18 50	-4	19 14
GARCHY	126.42	328.2	18 57A	2	19 26
OTTAWA	126.59	34.6	18 55	0	
MORGANTOWN	127.08	42.8	18 57	1	20 55 PP
FOLINIERE	127.20	331.6	18 58	2	
CLERMONT-FD.	127.35	326.7	19 18	22	
BREBEUF	127.70	33.3	18 58K	1	38 18 SS
BANDEIRA	127.85	246.9	19 0K	3	21 0 PP
PENNSYLVANIA	127.86	40.5	18 58	1	
SEVEN FALLS	128.10	30.2	18 58A	0	
GEORGETOWN	129.38	42.1			21 10 PP
CHAPEL HILL	129.44	46.5	19 3	3	
PALISADES	130.25	38.1	19 6	4	15 28 P
HALIFAX	133.40	27.7	19 10	2	
HUANCAYO	136.87	113.3	19 19	5	
AREQUIPA	138.47	121.6	19 10	-7	
CHINCHINA	139.95	88.2	19 27	7	22 31 PP
LA PAZ	141.26	124.0	19 26	4	41 6 SS
BOGOTA	141.48	88.8	19 26	3	22 42 PP
FUQUENE	141.84	87.5	19 24	1	22 54 PP
SAN JUAN	147.17	63.4	19 35	2	23 9
CARACAS	148.30	78.1	19 41	7	23 42 SKP
ST. KITTS	150.56	63.1	19 44	6	
TRINIDAD	153.65	76.0	19 45	3	

FEBRUARY 15 10.H 18.M 26.S EPICENTRE 40.35 19.70 DEPTH= 41.KM

A= 0.71957 B= 0.25761 C= 0.64488 D= 0.3371 E=-0.9415
G= 0.6071 H= 0.2174 K=-0.7643 HT= -1.8

DEPTH OF FOCUS= 0.001R

SE= 2.91

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
TARANTO	1.87	274.6				1	5	12					
SKOPJE	2.09	38.5	0	34	1	0	57	-1			0	37	PG
TITOGRAD	2.11	351.2									0	34	PG
SOFIA	3.60	48.1	0	53	-2	1	36	-1			1	51	SG
SARAJEVO	3.64	345.4	0	58	3	1	42	4					
REGGIO CALA.	3.86	235.8									1	53	
MESSINA	3.87	237.7	0	55	-4	1	40	-3			1	10	PG
ATHENS	3.93	125.9	0	54A	-5						1	54	SG
BELGRADE	4.50	6.8	1	9	1						1	24	PG
TIMISOARA	5.51	11.2									1	43	
ROME	5.64	288.3	1	34	11						3	18	S*
ZAGREB	6.11	334.8									1	46	P*
BUCHAREST	6.25	47.3									3	4	
LJUBLJANA	6.84	328.1	1	42A	2	3	5	7			4	11	
TRIESTE	6.86	322.5	1	39	-2	2	58	0			3	28	S*
ISTANBUL UN.	7.10	81.4									3	7	
HURBANOVO	7.60	352.4	0	47	-64						4	11	
PADOVA	7.66	313.9				3	17	-1					
VIENNA-H.	8.25	344.3	2	2	2	3	43	10					
UZHGOROD	8.49	11.8	2	3	0								
NIEDZIKA	9.08	2.6	2	12	0								
KRAKOW	9.70	0.9	2	22	2						5	15	SG
RACIBORZ	9.79	354.3									2	32	PP
KASPERSKE H.	9.80	335.7	2	19	-2	4	6	-5			4	57	
LWOW	9.95	16.4	2	27	4								
ISOLA	10.13	296.4	2	33	7								
PRUHONICE	10.29	341.1	2	27	-1	4	53	30					
PRAGUE	10.41	340.9									4	54	
ROSELEND	10.95	303.5	2	36	-1	4	39	0					
EBINGEN	10.97	319.1	2	36	-1								
STUTTGART	11.22	322.1	2	36	-5						6	30	
STRASBOURG	11.84	318.0	2	51	2	4	57	-4			7	34	
COLLMBERG	11.90	339.2	2	50	0	5	3	1					
HEIDELBERG	11.93	323.0	2	49	-1								
JENA	12.00	334.6	2	49	-2	5	17	12			6	39	SG
BESANCON	12.07	309.4	2	54	2	5	4	-2			7	9	
HALLE	12.38	336.9				5	16	2			3	9	PP
WELSCHBRUCH	12.48	314.6	2	49	-9						7	8	
BENSBERG	13.74	324.7	3	14	0	5	40	-7			3	43	

GARCHY	13.85	305.5	3	19	3				3	48
KSARA	14.46	111.7	3	28	4					
KARLSKRONA	16.05	351.7	3	41	-3					
COPENHAGEN	16.08	345.0	3	50	5					
GOTEBORG	18.07	346.6	4	11	1					
EREVAN	18.92	82.4	4	21	1					
TIFLIS	18.97	77.7	4	16	-5					
MOSCOW	19.42	31.6	4	23	-2					
UPPSALA	19.57	356.9	4	25	-2					
HELSINKI	20.12	7.7	4	31	-2					
KIROVOBAD	20.23	80.5	4	31	-3					
KONGSBERG	20.33	345.2	4	36	1					
NURMIJARVI	20.42	7.0	4	34	-2	8	26	8		
GORIS	20.42	85.7	4	40	4	8	28	10		
PULKOVO	20.56	15.4	4	36K	-2					
VIBORG	21.16	12.4	4	42	-2					
BERGEN	21.98	340.7	4	52	0					
UMEA	23.51	0.6	5	7A	0	9	22	8		
SKALSTUGAN	23.68	351.7	5	9A	0					
KAJAANI	24.23	8.6	5	13	-1					
TEHERAN	25.30	90.3	5	23	-1					
SODANKYLA	27.35	5.8	5	43	0					
SVERDLOVSK	31.12	44.2	6	14	-3					
FRUNSE	40.54	67.9	7	35K	-2					
ALMATA	42.06	66.5	7	49	0					
NORD	43.25	352.7	7	59	0					
ALERT	49.22	350.1	8	46	0					
RESOLUTE	57.51	343.3	9	48	0					
MOULD BAY	60.80	349.6	10	10	0					
YAKUTSK	63.56	29.7	10	26	-3					
COLLEGE	74.66	354.5	11	38	1					
CUMBERLAND	77.90	306.5	11	54	-5					
LAWRENCE	81.22	314.3	12	15	2					
HUNGRY HORSE	82.65	330.9	12	11	-9					
BOZEMAN	83.69	327.7	12	29	3					
TULSA	83.71	312.5	12	28	2					
PENTICTON	83.78	334.6	12	27	1					
BUTTE	84.01	328.8	12	31	4					
LARAMIE	84.75	321.9	12	34	3					
MATUSIRO	84.94	45.3	12	32	0					
WICHITA MTS.	86.14	313.4	12	40	2					
BLUE MTS.	86.81	330.9	12	42	1					
UINTA BASIN	87.38	323.7	12	45A	1					

FEBRUARY 16 10.H 46.M 26.S EPICENTRE -7.20 117.39 DEPTH= 605.KM

A=-0.45643 B= 0.88102 C=-0.12443 D= 0.8879 E= 0.4600
G= 0.0572 H=-0.1105 K=-0.9922 HT= 6.9

DEPTH OF FOCUS= 0.090R

SE= 1.86

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
LEMBANG	9.70	271.5	2	16	0								
DJAKARTA	10.53	274.7				4	19	-1					
TANGERANG	10.73	274.8	2	29K	3	4	29	6					
DARWIN	14.21	112.3	3	0	0	5	20	-5					
NHATRANG	20.93	337.1	4	6	-3						5	9	
BAGUIO CITY	23.68	7.6	4	24	-3								
MUNDARING	24.67	182.4	4	36	0								
PORT MORESBY	29.53	96.3	5	18	0						14	48	
CHARTERS TS.	30.78	117.5	5	29	0	9	52	0					
PORT BLAIR	30.88	307.2				9	45	-6			14	50	
KUNMING	35.14	336.5	6	6A	1	10	55	-4					
ZO-SE	38.25	5.3	6	29	-2								
CHITTAGONG	38.60	320.2	6	33	-1	11	46	-3					
TOOLANGI	39.56	144.0	6	42K	1						8	34	PCP
CHENGTU	39.76	341.8	6	41A	-2	12	0	-6					
CANBERRA	40.30	138.5	6	46K	1	12	16	2			8	36	PCP
RIVERVIEW	40.92	135.1	6	53A	1	12	27	4			15	52	
SHILLONG	40.94	323.6	6	50A	-2	12	19	-4			14	38	SS
CALCUTTA	40.99	316.9				12	23	-1					
SIAN	41.99	349.5	7	0A	-1	12	33	-3					
BOKARO	43.61	315.9	7	9	-4	12	53	-6					

LHASA	44.53	326.6	7	21A	0	13	11	-3				
LANCHOW	44.86	344.4	7	22A	-1	13	16	-2				
ABUYAMA	45.23	21.2	7	24A	-2							
PEKING	47.00	358.7	7	37	-2	13	44	-4				
KOUMAC	47.25	111.3	7	40A	-1							
MATUSIRO	47.69	22.8	7	41A	-3	13	44	-13				
PAOTOW	48.02	352.5	7	44A	-3							
NOUMEA	49.53	113.1	7	58K	0							
POONA	49.97	301.4	7	59	-2	14	21	-7				
CHANGCHUN	51.29	7.3	8	7A	-4							
NEW DELHI	52.59	314.4				14	54	-9			17	1
DEHRA DUN	53.05	316.7	7	20A	-63							
ULAN-BATOR	55.65	351.5	8	38	-4	15	39	-4				
ESEN BULAK	56.59	342.6	8	47	-1							
Y.-SAKHLINSK	58.48	20.1	8	58A	-3							
ROXBURGH	58.74	139.6	9	1	-2						9	42 PCP
KARAPIRO	60.65	129.6	9	16K	1				11	17	9	52 PCP
CHATEAU	60.98	131.0	9	17	0							
QUETTA	60.99	310.2	9	16A	-1	16	46	-4				
WELLINGTON	61.00	133.5	9	16K	-1							
KHOROG	61.68	319.6	9	21	-1	16	55	-4				
ALMATA-2	61.96	327.8	9	23K	-1							
ANDIJAN	63.13	323.0	9	30A	-1	17	8	-8				
FRUNSE	63.15	326.0	9	30A	-1	17	16	-1				
TASHKENT	65.34	321.9	9	43	-2	17	40	-3				
SEMIPALATNSK	65.76	334.9	9	46A	-2	17	44	-4				
PETROPAVLOVK	69.43	25.2	10	9A	-1							
YAKUTSK	69.67	6.2	10	13A	2	18	30	-3				
AFIAMALU	69.75	102.1	10	13	1							
MAGADAN	71.65	17.2	10	22A	-1	18	54	-1				
SHIRAZ	72.21	304.1	10	25K	-1	18	50	-11	10	42	10	50 *SP
TEHERAN	75.17	309.8	10	42	-1	19	32	-1				
SVERDLOVSK	78.75	332.0	10	59K	-3							
TIKSI	79.03	3.7	11	1A	-2							
SOUTH POLE	82.85	180.0	11	22	-1							
BULAWAYO	86.42	250.3	11	41K	1							
BROKEN HILL	87.19	255.9	11	43	-1							
KIPAPA	87.60	68.2	11	49	3							
LWIRO	88.32	268.0	11	49K	0							
BYRD STATION	88.39	171.6	11	51	2							
KIMBERLEY	88.86	241.3	11	51K	-1							
HELSINKI	97.39	329.8	12	29	-1							
NURMIJARVI	97.56	330.1	12	29	-2							
COLLEGE	98.51	25.5	12	36	1				14	39	13	43
KIRUNA	99.25	337.6	16	45	246				14	47		
UMEA	99.57	333.5	16	47	247						15	47 *SP
UPPSALA	101.09	329.5	16	43	236						16	58 PP
MOULD BAY	104.55	11.9	17	12	250							
RESOLUTE	110.06	8.7	17	23K	0							
PENTICTON	116.59	37.9	17	37	1							
CALISTOGA	117.79	50.0	17	40K	2							
MINERAL	118.10	47.9	17	40A	1							
BERKELEY	118.22	50.8	17	41A	2							
LICK	118.82	51.3	17	43A	3							
BLUE MTS.	119.69	41.9	17	42K	0	23	45	2	20	22	19	1 PP
PRIEST	119.88	52.4	17	45K	3							
HUNGRY HORSE	120.36	37.2	17	44	1							
WOODY	121.40	52.5	17	47	2				19	24	20	25 *SP
PASADENA	122.34	54.0	17	49	2						20	27 *SP
EUREKA	122.49	47.4	17	49	2							
BOZEMAN	123.39	38.9	17	51	2							
BOULDER CITY	124.46	51.0	17	54	3				20	12		
FLAMING GRGE	126.59	43.4	17	57	2						19	17
UINTA BASIN	126.73	44.2	17	57	2				20	18	19	56 PP
TUCSON	128.78	54.1	18	2	3				20	20		
LARAMIE	128.96	41.3	18	2	2						20	27
GOLDEN	129.88	43.0	18	3	2							
ALBUQUERQUE	131.21	49.1	18	6	2				20	36		
SCHEFFERVLLE	132.39	3.3	18	6	0							
LUBBOCK	135.24	48.6	18	1	-10							
MADISON	136.80	29.1	17	41	-33						20	28
WICHITA MTS.	137.05	45.3	18	5	-10				20	22	27	51 PKKP
TULSA	138.32	41.9	18	10K	-7						20	57 SKP
FAYETTEVILLE	139.26	40.5	18	12	-7							
SEVEN FALLS	139.60	8.7	18	13	-6							
OTTAWA	140.28	14.5	18	14	-7						21	1
BREBEUF	140.67	12.2	18	17	-5							
MORGANTOWN	144.15	23.1	18	28K	0							
CUMBERLAND	144.76	33.4	18	29	0				21	12		

PALISADES	144.85	14.9	18 32	3		18 47 PKP2
AREQUIPA	154.91	159.6	18 48	4		
LA PAZ	155.83	167.0	18 49	4		21 19 PKP2
HUANCAYO	157.08	146.4	18 52	5		

FEBRUARY 16 12.H 19.M 30.S EPICENTRE 36.48 70.45 DEPTH= 205.KM

A= 0.26971 B= 0.75948 C= 0.59198 D= 0.9423 E=-0.3346
G= 0.1981 H= 0.5579 K=-0.8060 HT= -0.4

DEPTH OF FOCUS= 0.027R

SE= 1.68

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
KHOROG	1.32	40.7	0	35	2	1	2	3					
KULYAB	1.52	338.7	0	35A	0	1	1	-1					
OBI-GARM	2.29	345.2	0	43K	0	1	15	0					
DUZHANBE	2.47	327.9	0	44K	-1	1	18	-1					
GARM	2.52	357.4	0	45K	0	1	17	-3					
WARSAK DAM	2.64	159.7	0	45	-1	1	16	-6					
DZERGETAL	2.80	12.5	0	48	0	1	22	-4					
MURGAB	3.35	54.7	0	58	3	1	39	2					
FERGANA	4.03	14.6	1	3	0	1	50	-2					
SAMARKAND	4.20	320.4	1	5K	0	1	53	-3					
ANDIJAN	4.52	18.9	1	9K	0	2	1	-2					
NAMANGAN	4.59	11.6	1	10	0	2	2	-2					
TASHKENT	4.92	349.7	1	14K	0	2	10	-2			1	58	*SP
TCHIMKENT	5.85	353.8	1	26	0	2	29	-4			2	12	*SP
LAHORE	5.88	145.7	1	28	1	2	26	-8					
NARYN	6.57	39.5	1	33	-2						2	42	
QUETTA	6.93	206.0	1	41	1	2	56	-2					
FRUNSE	7.11	25.6	1	42K	0	3	0	-2			2	34	
FABRICHNAYA	8.08	32.9	1	55	0	3	24	-1					
ALMATA	8.42	34.4	2	0K	0	3	34	1			2	53	
PRZHEVALSK	8.58	43.3	2	2K	0	3	35	-2			2	53	*SP
ALMATA-2	8.61	36.0	2	1	-1								
DEHRA DUN	8.84	131.9	2	4K	-1	3	37	-6			2	11	PP
KURMENTY	8.87	40.4	2	5	0								
CHILIK	9.35	38.4	2	11	-1						3	44	
NEW DELHI	9.72	142.2	2	15K	-1	3	56	-7			2	22	PP
ASHKABAD	9.76	282.2	2	12	-5								
KIZYL-ARVAT	11.54	287.9	2	40	0	4	38	-7					
SEHORE	14.45	154.8	3	20	4	5	53	2					
TEHERAN	15.43	272.9	3	29	1	6	29	16			14	50	SCS
SEMIPALATNSK	15.61	23.9	3	30	0	6	15	-2					
SHIRAZ	16.49	250.7	3	41K	0	6	42	5			4	24	*SP
CHATRA	17.16	119.4	3	49	0	6	46	-5					
BOMBAY	17.64	172.6	3	54	0	7	8	7			4	17	PP
POONA	18.13	169.6	3	59K	0	7	17	6					
BOKARO	18.28	129.4	4	1K	0	7	15	1					
LHASA	18.54	105.7	4	6	3	7	24	5			15	20	SCS
GORIS	19.23	286.3	4	11	1								
KIROVOBAD	19.30	289.8	4	10	-1								
GROZNY	20.10	297.5	4	20	1						5	25	*SP
HYDERABAD	20.26	157.4	4	22K	1	8	8	17			5	26	
TIFLIS	20.55	292.6	4	25	1						8	5	
EREVAN	20.66	288.2	4	28	3								
CALCUTTA	20.8	126.9	4	24	-3	7	55	-7					
SHILLONG	21.29	114.7	4	31K	0	8	16	6			4	53	PP
SVERDLOVSK	21.40	345.1	4	33	1	8	16	4	5	7			
ESEN BULAK	21.65	54.7	4	36	2								
VISHAKHAPTNM	21.87	145.3	4	39K	2	8	30	10			5	6	PP
CHITTAGONG	23.27	121.3	4	52	2	8	49	5					
MADRAS	24.96	157.0	5	7	1	9	14	2			5	48	PP
LANCHOW	26.85	80.9	5	24	1	9	48	5			15	51	SCS
KODAIKANAL	26.90	164.6									11	16	
CHENGTU	28.47	91.9	5	41	3	10	11	2					
MOSCOW	29.39	321.3	5	45A	-1				6	26			
KUNMING	29.83	103.2				10	32	2					
PORT BLAIR	31.83	135.3									11	4	
PULKOVO	34.67	335.0	6	32A	0						7	40	
PEKING	35.78	70.1	6	42	1	12	8	6			13	27	*SS
UZHGOROD	36.90	304.6	6	51	1				7	39			
HELSINKI	37.32	324.0	6	54A	0						7	22	
APATITY	37.46	337.7	6	56A	1						14	33	

NURMIJARVI	37.58	324.4	6	56A	0				7	39	8	16 PP
KAJAANI	37.64	330.8	6	56	-1				7	39	8	2 *SP
KRAKOW	38.4	306.9	7	4	0				7	48		
SODANKYLA	39.5	335.1	7	13A	0						8	46 PP
UMEA	40.59	328.4	7	21A	0						8	29 *SP
KEVO	40.66	338.5	7	22A	0							
UPPSALA	40.81	322.0	7	22A	-1	13	11	-7				
VIENNA-H.	40.86	304.2	7	24	1						9	5 PP
KARLSKRONA	41.39	316.2	7	27A	-1				8	10		
KIRUNA	41.91	334.2	7	32A	0							
PRUHONICE	41.94	306.9	7	33	1						9	14
KASPERSKE H.	42.63	305.7	7	37	-1						9	21
COLLMBERG	42.86	308.9	7	39	0						9	26 PP
TROMSOE	43.10	336.4	7	42	1							
COPENHAGEN	43.13	315.4	7	42	0							
GOTEBORG	43.47	318.3	7	44	0						9	28 PP
HALLE	43.51	309.3	7	45	0						9	32 PP
JENA	43.78	308.5	7	47	0				8	42	9	41 PP
SKALSTUGAN	43.98	326.8	7	48A	0						9	35 PP
YAKUTSK	44.26	35.5	7	50	-1	14	6	-2				
KHEYS	44.51	357.1	7	53	0				8	38		
KONGSBERG	44.80	321.0	7	55	0						10	41 PP
STUTTGART	45.49	305.6	8	0	0						9	36 PCP
TIKSI	45.95	22.1	8	2A	-2	14	32	0	8	49		
VLADIVOSTOK	46.75	62.0	8	12	2	14	44	1			16	6
ROSELEND	47.82	301.9	8	15	-4							
GARCHY	49.86	304.7	8	33	-1							
CLERMONT-FD.	50.19	302.8	8	41	4							
FOLINIERE	51.82	307.3	8	58	9							
Y.-SAKHLINSK	53.16	54.5	8	59	0							
MATUSIRO	53.37	68.3	8	59A	-1						13	41 SCP
NORD	53.74	349.5	9	3	0							
SCORESBY SD.	56.89	336.4	9	26	1							
ALERT	59.03	353.5	9	40A	0							
BROKEN HILL	64.30	226.0	10	14	-1							
MOULD BAY	67.39	2.5	10	34A	-1	19	14	1				
BULAWAYO	68.80	222.2	10	43K	-1							
COLLEGE	74.63	15.9	11	18	0				12	2	14	10 PP
KIMBERLEY	77.80	220.0	11	36A	0							
MUNDARING	80.45	141.9	11	49	-1							
YELLOWKNIFE	81.29	2.4	11	54A	-1							
SCHEFFERVLLE	81.93	336.6	11	58	0							
CHARTERS TS.	90.94	114.3	12	41A	-1							
PENTICTON	94.11	6.6	12	51	-5							
BLUE MTS.	98.74	5.6	13	21	4	23	36	2			17	9 PP
MINERAL	102.74	9.4									17	28
UINTA BASIN	103.57	0.0	13	42	3						17	48 PP
WICHITA MTS.	108.43	350.5	18	5	777				18	58	18	24 PP

FEBRUARY 17 20.H 12.M 20.S EPICENTRE 44.26 17.25 DEPTH= 88.KM

A= 0.68621 B= 0.21303 C= 0.69551 D= 0.2965 E=-0.9550
G= 0.6642 H= 0.2062 K=-0.7185 HT= -3.3

DEPTH OF FOCUS= 0.009R

SE= 4.27

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S
SARAJEVO	0.94	114.2	0	6	-13	0	23	-11				
ZAGREB	1.80	330.5				0	56	3			0	22 PG
TITOGRAD	2.35	140.6									0	26 PG
BELGRADE	2.36	75.2									0	33 PG
LJUBLJANA	2.63	313.8	0	37A	-4	1	8	-5			0	44 PG
TRIESTE	2.84	300.4				1	7	-11			0	39 PG
TIMISOARA	3.19	60.8	0	58	9						1	46
BUDAPEST	3.45	20.4	0	51	-2							
HURBANOVO	3.67	10.1									1	1 PG
TARANTO	3.79	180.0									1	15
SKOPJE	3.83	125.3	0	50	-8	1	48	.6				
BRATISLAVA	3.91	358.6	0	58	-1						2	26
PADOVA	3.99	288.6	1	5	5	2	5	19				
VIENNA-H.	4.04	351.6	0	59	-2	1	52	5				
ROME	4.21	237.6	1	10	7						2	13 SS
SOFIA	4.69	107.3	1	16	6	2	14	10			2	27 S*
KASPERSKE H.	5.48	333.9	1	17	-4	2	23	0				

NIEDZIKA	5.57	21.1	1	23	1				1	46 PG
UZHGOROD	5.59	36.8	1	24	2					
RACIBORZ	5.86	6.0	1	23	-3	2	48	16	1	33 PP
PRUHONICE	6.01	343.1	1	27	-1	2	50	14		
KRAKOW	6.07	16.6	1	28	-1	2	44	6	1	38 PP
PRAGUE	6.12	342.7							2	14
MESSINA	6.19	192.5	1	32	2				2	16
RAVENSBURG	6.37	306.2	1	28	-5					
EBINGEN	6.95	307.2	1	35	-6	2	58	-1	3	48 SG
TUBINGEN	7.08	309.9	1	36	-7					
STUTTGART	7.11	312.2	1	37	-6	3	0	-3	4	2 SG
LWOW	7.24	37.4	1	46	1					
ISOLA	7.33	272.9	1	35	-11				3	50 SG
COLLMBERG	7.60	339.4	1	47	-3				4	17 SG
ROSELEND	7.66	284.5	1	43	-8	3	8	-9		
JENA	7.69	332.2	1	48	-3	3	19	2	2	26 PG
HEIDELBERG	7.78	314.3	1	47	-5					
STRASBOURG	7.84	306.7	1	47	-6	3	14	-7	3	48
ATHENS	7.96	139.9							3	5 SG
HALLE	8.07	335.7							2	24 PG
BESANCON	8.43	294.7	2	4	3				4	0
WELSCHBRUCH	8.60	302.7	1	49	-15	3	17	-23		
BENSBERG	9.55	318.1	2	13K	-3	3	59	-4	5	4
MUNSTER	10.04	323.6	2	20	-3					
CLERMONT-FD.	10.12	283.5							4	44
GARCHY	10.36	291.9	2	20	-7	4	16	-6	2	48
DOURBES	10.40	308.6	2	27	-1	4	24	1		
GOTEBORG	13.85	348.1	3	21	8					
UPPSALA	15.62	0.7	3	40	4					
KONGSBERG	16.09	345.9	3	44K	2					
HELSINKI	16.60	13.6	3	49	1					
NURMIJARVI	16.87	12.7	3	51	-1					
KSARA	17.80	119.5	3	59	-4					
SKALSTUGAN	19.57	353.4	4	23	0					
UMEA	19.67	3.9	4	25	1					
KAJAANI	20.73	13.0	4	37	2					
KIROVOBAD	21.71	89.4	4	43K	-2					
MAKHACH-KALA	21.89	82.8	5	7	20					
KIRUNA	23.69	3.0	5	7	3					
SODANKYLA	23.70	9.0	5	7	3					
SVERDLOVSK	29.77	49.5	5	59	-1					
SHIRAZ	31.47	105.6	6	10	-5					
BULAWAYO	64.92	168.2							22	40
COLLEGE	70.58	353.3	11	7	-1					
HUNGRY HORSE	78.35	329.2	11	53	1					
PENTICTON	79.47	332.9	11	59	1					
WICHITA MTS.	82.16	311.5	12	12	0					
BLUE MTS.	82.52	329.3	12	14	0					
UINTA BASIN	83.16	321.9	12	17	-1					

FEBRUARY 18 14.H 25.M 19.S EPICENTRE 36.47 70.79 DEPTH= 220.KM

A= 0.26528 B= 0.76118 C= 0.59180 D= 0.9443 E=-0.3291
G= 0.1948 H= 0.5588 K=-0.8061 HT= -0.4

DEPTH OF FOCUS= 0.030R

SE= 1.38

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S
KHOROG	1.17	30.4	0	35K	2	1	1	2				
KULYAB	1.65	330.2	0	37A	0	1	5	-1				
OBI-GARM	2.39	339.1	0	45K	1	1	17	-2				
WARSAK DAM	2.54	165.5	0	46	0	1	16	-6				
GARM	2.56	351.5	0	46	0						1	17
DUZHANBE	2.64	323.2	0	46K	-1	1	21	-3				
DZERGETAL	2.77	7.2	0	49	0	1	25	-1				
MURGAB	3.14	51.9	0	55	2	1	35	1				
FERGANA	3.98	11.0	1	2K	-1	1	49	-2				
SAMARKAND	4.38	317.9	1	7K	-1						1	54 *SP
ANDIJAN	4.45	15.7	1	9K	0	2	0	-2			1	51 *SP
NAMANGAN	4.56	8.5	1	11K	1	2	3	-1				
TASHKENT	4.98	346.8	1	15K	0	2	11	-3			2	0 *SP
LAHORE	5.72	148.0	1	24	-1							
TCHIMKENT	5.89	351.4	1	26	-1	2	31	-3			1	57

NARYN	6.41	37.8	1	31	-2						
FRUNSE	7.01	23.8	1	41K	0	2	59	-1			
QUETTA	7.05	208.2	1	41A	-1	2	58	-3			
FABRICHNAYA	7.94	31.4	1	53	0						
ALMATA	8.28	33.0	1	58K	1	3	27	-2		2	59
PRZHEVALSK	8.40	42.1	1	59K	0	3	31	-1		3	17
ALMATA-2	8.47	34.7	1	59K	-1	3	32	-2			
DEHRA DUN	8.63	133.2	2	1K	-1	3	33	-5		2	8 PP
KURMENTY	8.71	39.2	2	3	0					3	20
CHILIK	9.18	37.2	2	9	0						
NEW DELHI	9.55	143.7	2	11K	-3	3	41	-18		4	12 SS
ASHKABAD	10.03	282.2	2	18	-2	4	7	-3			
KIZYL-ARVAT	11.80	287.7	2	43	1	4	48	-3			
SEHORE	14.33	155.9	3	15	1	5	49	1		3	25 PP
TEHERAN	15.70	273.1	3	32	1	6	28	10			
SHIRAZ	16.74	251.3	3	43K	0	6	47	6		8	13 PCP
BOMBAY	17.59	173.6	3	52	0	7	2	3			
BOKARO	18.06	130.1	3	58	1	7	10	2			
POONA	18.07	170.6	3	56K	-1	7	11	3			
LHASA	18.28	106.1	4	2	3	7	22	10			
GORIS	19.50	286.3	4	12K	0						
KIROVOBAD	19.56	289.8	4	12	0						
GROZNY	20.35	297.3	4	22	2	7	55	4		5	27 *SP
CALCUTTA	20.62	127.5	4	44	21	8	21	25			
TIFLIS	20.80	292.5	4	26	1						
EREVAN	20.93	288.2	4	28K	2						
SHILLONG	21.04	115.2	4	27K	0	8	10	7			
ESEN BULAK	21.43	54.5	4	32	1	8	17	7		4	50 PP
SVERDLOVSK	21.48	344.7	4	32K	0	8	17	6			
VISHAKHAPTNM	21.71	146.1	5	13	39	8	47	32			
CHITTAGONG	23.03	121.9	4	49	2				5	31	
MADRAS	24.85	157.8	5	8	4	9	15	7		5	48 PPP
LANCHOW	26.58	81.0	5	20	1						
KSARA	28.57	275.1	5	39	2						
ULAN-BATOR	28.84	55.3	5	41	1						
MOSCOW	29.57	321.2	5	46K	0				6	30	
PULKOVO	34.84	324.9	6	32	0						
PEKING	35.53	70.2	6	38	1						
UZHGOROD	37.13	304.6	6	52	1						
HELSINKI	37.49	323.9	6	54	0					8	5 *SP
APATITY	37.58	337.5	6	55A	0	12	31	4		15	20 SS
NURMIJARVI	37.75	324.4	6	56A	0	12	28	-2		8	28 PP
KAJAANI	37.78	330.7	6	57	1				7	42	8 28 PP
KRAKOW	38.70	306.9	7	3	-1						8 35 PP
SODANKYLA	39.69	335.0	7	12A	0				7	58	8 51 PP
ADDIS ABABA	39.88	234.8	7	10	-4						
UMEA	40.75	328.3	7	20A	-1	13	14	0			9 4 PP
KEVO	40.77	338.4	7	21	0						
UPPSALA	40.99	322.0	7	22A	-1						9 2 PP
KARLSKRONA	41.59	316.2	7	24	-4						
KIRUNA	42.04	334.1	7	31A	0						
PRUHONICE	42.17	306.9	7	33	1						9 15
LJUBLJANA	42.57	301.1	7	36A	0						7 44 PP
KASPERSKE H.	42.86	305.7	7	43	5						9 20 PP
COLLMBERG	43.08	309.0	7	39	-1						9 21 PP
TROMSOE	43.23	336.3	7	41	0						9 31 PP
COPENHAGEN	43.33	315.4	7	42A	0						
GOTEBORG	43.66	318.3	7	43	-1				8	28	9 33 PP
HALLE	43.72	309.3	7	46	1						9 37 PP
JENA	44.00	308.5	7	47	0				8	47	9 32 PP
YAKUTSK	44.11	35.5	7	46A	-2	14	4	1			12 58
SKALSTUGAN	44.14	326.8	7	46	-2						8 41 PP
KONGSBERG	44.98	321.0	7	54	-1						9 43 PP
STUTTGART	45.72	305.7	8	1	0						
TIKSI	45.86	22.0	8	1	-1	14	28	0	8	50	
HEIDELBERG	45.99	306.6	8	3	0						
ROSELEND	48.06	302.0	8	20	1						9 1
ISOLA	48.11	299.9	8	19	0						10 15 PP
BAGUIO CITY	48.27	100.8	8	19	-1						
DOURBES	48.52	308.1	8	26	4						
FOLINIERE	52.04	307.4	8	48	-1						
MATUSIRO	53.13	68.4	8	55K	-2						9 48
NORD	53.80	349.5	9	1A	-1						
LWIRO	54.86	234.8	9	10A	1						
TOLEDO	57.30	298.0	9	26K	-1				10	15	
ALERT	59.07	353.6	9	39	0						
BROKEN HILL	64.49	226.3	10	14A	-1						
MOULD BAY	67.39	2.6	10	31A	-2						
RESOLUTE	68.73	356.0	10	41	0						

BULAWAYO	68.98	222.5	10	43A	0							
BANDEIRA	74.47	237.8	11	16K	0				12	9		
COLLEGE	74.57	16.0	11	15	-1				12	9		
KIMBERLEY	77.97	220.2	11	35A	0							
YELLOWKNIFE	81.29	2.5	11	52A	-1							
SCHEFFERVLLE	82.05	336.8	11	57	0							
CHARTERS TS.	90.69	114.5	12	37	-2							
BLUE MTS.	98.73	5.8	13	18	3				14	31	16	57 PP
RIVERVIEW	102.45	122.8									28	5

FEBRUARY 21 2.H 33.M 36.S EPICENTRE 33.40 139.58 DEPTH= 172.KM

A=-0.63686 B= 0.54248 C= 0.54783 D= 0.6484 E= 0.7613
G=-0.4170 H= 0.3552 K=-0.8366 HT= 0.7

DEPTH OF FOCUS= 0.022R

SE= 1.54

	DELTA DEG.	AZ. DEG.	P M	S	O-C S	S M	S	O-C S	*PP M	S	SUPP. M	S
HATIDYOZIMA	0.35	148.6	0	22	-2	0	39	-4				
OSIMA	1.38	353.3	0	30	0	1	4	10				
MERA	1.53	7.8	0	28A	-4	0	52	-5				
OMAESAKI	1.65	317.2	0	33A	0	0	58	-1				
AJIRO	1.70	346.7	0	33A	-1	0	59	-1				
MISIMA	1.80	343.4	0	34A	-1	1	0	-2				
SHIZUOKA	1.85	328.5	0	34A	-1	1	1	-1				
YOKOHAMA	2.03	1.7	0	37	0	1	6	0				
HUNATU	2.20	342.6	0	40	1	1	9	0				
TOKYO C.M.O.	2.28	3.6	0	40A	0	1	11	0				
HONGO	2.31	3.9				1	12	0				
KOHU	2.42	340.0	0	42	0	1	15	1				
TYOSI	2.55	24.0	0	43	0	1	17	0				
IIDA	2.56	326.2	0	43	0	1	17	0				
TITIBU	2.61	351.1	0	44	0	1	17	-1				
KUMAGAYA	2.75	356.7	0	45K	-1	1	21	0				
NAGOYA	2.79	310.1	0	45A	-1	1	21	-1				
TU	2.85	298.0	0	48	1	1	24	1				
KAKIOKA	2.87	9.8	0	48	1	1	23	-1				
OWASE	2.89	284.4	0	46	-1	1	22	-2				
KAMEYAMA	2.96	300.2	0	48A	0	1	25	0				
TORISIMA	2.97	167.8	0	48	0	0	50	-36				
MAEBASI	3.03	352.3	0	51	2	1	27	0				
OIWAKE	3.05	344.2	0	50	1	1	29	2				
GIHU	3.06	311.5	0	49	0	1	27	-1				
MITO	3.07	13.6	0	49A	0	1	27	-1				
MATUMOTO	3.14	335.6	0	52A	2	1	32	3				
UTUNOMIYA	3.16	4.3	0	50	-1	1	26	-4				
SIOMISAKI	3.18	272.0	0	50A	-1	1	27	-3				
HIKONE	3.33	305.1	0	54	1	1	34	0				
MATUSIRO	3.33	340.7	0	52K	-1	1	30	-4				
NARA	3.36	293.4	0	52	-1	1	32	-2				
NAGANO	3.46	341.3	0	56	2	1	38	1				
KYOTO	3.57	298.0	0	54	-2	1	39	0				
OSAKA	3.58	291.5	0	56A	0	1	38	-1				
ABUYAMA	3.63	295.0	0	56A	-1	1	38	-3				
TSURUGA	3.66	308.8	0	58	1	1	41	0				
ONAHAMA	3.71	16.6	0	57	-1	1	38	-4				
SHIRAKAWA	3.75	7.9	0	58	0	1	40	-3				
WAKAYAMA	3.76	284.0	0	58	0	1	41	-2				
HUKUI	3.82	314.8	1	0	1	1	45	0				
TOYAMA	3.83	330.1	1	1	2							
TAKADA	3.85	344.0	0	56	-3	1	43	-3				
KOBE	3.87	290.6	1	0	0	1	45	-1				
SUMOTO	3.99	284.9	1	1A	0	1	48	-1				
TOKUSIMA	4.22	280.6	1	4	0	1	55	1				
HUKUSIMA	4.41	9.3	1	7	0	1	53	-5				
TOYOOKA	4.47	299.8	1	9	2	1	59	-1				
MUROTO	4.52	269.6	1	8	0	1	59	-2				
WAZIMA	4.54	332.0	1	9	1	2	13	12				
TAKAMATU	4.69	282.9	1	9	-1	2	2	-3				
AIKAWA	4.74	347.2	1	11	0							
YAMAGATA	4.88	7.2	1	12	-1	2	5	-4				
TOTTORI	4.93	296.8	1	14	1	2	9	-1				
SENDAI	4.98	12.1	1	12	-2	2	7	-5				

ISINOMAKI	5.22	15.2	1	15K	-2	2	12	-5			
YOMAGO	5.53	293.2				2	27	2			
ASHIZURI	5.56	264.8	1	20	-2	2	23	-2			
MATUYAMA	5.69	276.3	1	25	2	2	29	1			
MIZUSAWA	5.86	11.9	1	24	-2	2	27	-5			
AKITA	6.33	3.7				2	41	-2			
HAMADA	6.40	285.6				2	48	3			
MORIOKA	6.42	11.1	1	31	-2	2	40	-6			
MIYAKO	6.53	16.5				2	42	-6			
ODITA	6.66	270.8	1	43	7						
KUMAMOTO	7.47	268.0	1	49	2	3	12	2			
HAKODATE	8.45	6.0				3	30	-4			
MORI	8.72	4.9				3	18	-22			
HIROO	9.35	17.4	3	11	59	3	48	-7			
KUSIRO	10.29	20.2	3	24	60	4	9	-8			
NEMURO	10.98	23.6				4	26	-7			4 16
ABASHIRI	11.22	17.7				4	30	-9			
CHANGCHUN	15.24	317.3	3	26	-1						
ZO-SE	15.73	266.6	3	32	-1	6	31	9			
UGLEGORSK	15.78	6.0	3	34	0	6	36	13			
NANKING	17.55	271.3	3	54	-1						
PEKING	19.87	296.2	4	17	-2						
ULAN-BATOR	28.47	310.4	5	38	-3						
YAKUTSK	29.33	350.5	5	48K	0						
TIKSI	38.72	354.6	7	9K	1						
PORT MORESBY	43.16	169.0	7	44A	-1						
ALMATA-2	48.77	300.8	8	30K	1						
COLLEGE	52.97	30.7	9	2	2						
NEW DELHI	53.00	282.6	8	58A	-3						
CHARTERS TS.	53.57	172.2	9	4	-1						
SVERDLOVSK	56.92	319.9	9	29A	0						
HAWAII V.OB.	59.14	86.0	9	47	3						
MOULD BAY	60.44	15.7	9	53K	0						
BRISBANE	61.74	166.7	10	2	0						
ALERT	63.84	3.1	10	16K	0						
NORD	64.58	356.2	10	20	0						
APATITY	65.39	336.1	10	25K	-1						
AFIAMALU	66.05	127.1	10	32A	2						
RESOLUTE	66.49	13.6	10	33K	0						
SODANKYLA	67.73	337.4	10	40A	0						13 10 PP
CANBERRA	68.92	171.7	10	48	0						
KAJAANI	69.20	334.1	10	49	0						13 23 PP
MOSCOW	69.28	323.7	10	49K	-1						
KIRUNA	69.38	339.3	10	51K	0						
VICTORIA	70.04	44.6	10	57	2						
TEHERAN	70.12	300.2	10	55	0						
VIBORG	70.66	330.8	10	57	-1						
TOOLANGI	70.82	175.0	11	0	1						
KIROVOBAD	71.37	306.7	11	3K	0						
PENTICTON	71.84	42.6	11	7	2						
GORIS	71.92	305.6	11	5K	-1						
UMEA	71.99	336.0	11	6K	0						
SHIRAZ	72.12	294.0	11	6K	-1						11 44
NURMIJARVI	72.44	331.9	11	9K	0						13 45 PP
HELSINKI	72.52	331.5	11	10	1						
SKALSTUGAN	74.74	338.4	11	21	-1						
HUNGRY HORSE	75.49	41.4	11	29	3						
BLUE MTS.	75.52	45.7	11	29A	2				12	10	11 43 PCP
UPPSALA	75.55	333.7	11	26	-1						14 15 PP
SCORESBY SD.	75.57	353.7	11	28	1						
KARAPIRO	78.46	151.7	11	44	1						
KISHINEV	78.65	319.3	11	44	0						
KARLSKRONA	78.90	331.8	11	46	1						
GOTEBORG	79.16	334.3	11	46	-1						
EUREKA	79.32	49.7	11	41	-6				12	37	
CHATEAU	79.55	152.4	11	50	1						
COPENHAGEN	80.47	332.7	11	54	0						
UINTA BASIN	82.80	46.1	12	9	3				12	50	14 24 PP
COLLMBERG	83.49	329.5	12	8K	-1						12 16 PCP
JERUSALEM	83.66	303.9	12	10	0						
PRŁHONICE	83.78	327.9	12	12K	1						
JENA	84.36	329.9	12	14	0						
KASPERSKE H.	84.83	327.7	12	17	1						13 6
WICHITA MTS.	93.03	44.5	12	57	2						
LA PAZ	149.90	62.8	19	35	11						

FEBRUARY 21 14.H 28.M 25.S EPICENTRE -20.52-173.96 DEPTH= 0.KM

A=-0.93211 B=-0.09865 C=-0.34848 D=-0.1052 E= 0.9944
G= 0.3465 H= 0.0367 K=-0.9373 HT= 4.5

SE= 1.94

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	C-C S	*PP M	*PP S	SUPP. M	SUPP. S	
AFIAMALU	6.90	17.9	1	43A	-1	2	43	-22					
PORT VILA	16.97	276.4	4	4K	4								
NOUMEA	18.33	260.9	4	20A	3								
KARAPIRO	19.59	205.5	4	31	-1								
WELLINGTON	22.80	202.3	5	6	1								
BRISBANE	31.09	250.8	6	20	-2	11	23	-4					
RIVERVIEW	33.58	239.4	6	47	3	12	3	-3			12	35	
CANBERRA	35.67	237.7	7	0A	-1				7	6			
RABAUL	36.72	291.6	7	6	-4						12	55	
CHARTERS TS.	37.25	263.5	7	12	-3	13	15	13					
TOOLANGI	38.97	235.2	7	28K	-1						7	55	
PORT MORESBY	39.07	280.6	7	28A	-2	13	32	?					
ADELAIDE	43.89	240.6	8	8	-2						18	3	
DARWIN	53.36	269.6	9	13	-10								
MUNDARING	62.72	243.8	10	28	-1						29	0	
BYRD STATION	64.01	170.9	10	38	1								
SOUTH POLE	69.61	180.0	11	13	0								
MATUSIRO	72.53	321.3	11	30A	0	21	3	9					
BERKELEY	75.72	39.9	11	45A	-4	21	35	5			12	8	
LICK	75.75	40.6	11	50K	1								
PASADENA	75.98	45.0	11	51	1	21	39	6					
CALISTOGA	76.03	39.1	11	49A	-1								
MINERAL	77.72	38.3	12	1K	1								
TANGERANG	77.97	267.9	12	2	1								
BOULDER CITY	79.26	45.1	12	10	2								
TUCSON	79.98	50.1	12	14	2								
EUREKA	80.57	41.7	12	15	0						12	53	
ZO-SE	80.65	308.1	12	17	1								
SEATTLE	82.16	32.4	12	22	-2								
NANKING	82.90	307.9	12	29	1								
BLUE MTS.	83.01	36.8	12	28	0	22	51	4			15	52	PP
ALBUQUERQUE	84.49	49.7	12	37	1								
PENTICTON	84.60	32.3	12	36	0								
CHANGCHUN	84.77	320.7	12	38A	1								
UINTA BASIN	85.11	43.8	12	40	1	23	15	7			28	50	SS
FLAMING GRGE	85.55	43.3	12	42	1								
HUNGRY HORSE	86.92	35.3	12	43	-5								
COLLEGE	87.47	10.9	12	50	0								
LARAMIE	88.22	44.5	12	55	1								
PEKING	88.60	313.8	12	56	0								
WICHITA MTS.	90.15	52.8	13	3	0	24	2	7			13	56	
SIAN	91.27	306.1	13	12	4								
TULSA	92.72	52.7				24	26	8					
KUNMING	92.75	295.7	13	17	2								
YELLOWKNIFE	94.98	23.6	13	25	0								
LANCHOW	95.81	306.2	13	32	3								
CUMBERLAND	100.39	55.9				25	33	64			32	25	SS
QUETTA	124.68	293.1	19	4A	3								
SHIRAZ	137.17	291.8	19	27	2						23	1	SKP
NURMIJARVI	137.93	346.4	19	19	-7								
GOTEBORG	142.61	354.8	19	34	-1								
KARLSKRONA	143.70	351.0	19	45	8								
BANDEIRA	144.08	192.0	19	38K	1								
LWIRO	148.22	227.2	19	47	3								
KRAKOW	148.54	342.8	19	50	5								
COLLMBERG	148.80	351.6	19	50A	5						20	45	
RACIBORZ	148.96	344.7	19	53	8								
NIEDZIKA	148.99	341.8	19	51	6								
JENA	149.34	353.1	19	50	4						20	22	
BENSBERG	149.61	358.6	19	53	7						20	22	
PRUHONICE	149.84	349.0	19	54	7								
KSARA	150.45	302.9	19	55	7						23	35	PP
DOURBES	150.46	1.9	19	57	9								
KASPERSKE H.	150.82	349.8	19	56	8								
VIENNA-H.	151.11	345.6	19	51	2								
FOLINIERE	151.33	9.0	19	57	8								
JERUSALEM	151.60	299.2	19	58	9								
PARIS	151.63	4.9									20	10	
STUTTGART	151.70	355.5	19	57	7								
STRASBOURG	151.97	357.6	20	1	11								

GARCHY 153.20 4.5 19 56 4

FEBRUARY 21 17.H 14.M 31.S EPICENTRE 32.69 20.97 DEPTH= 0.KM

A= 0.78737 B= 0.30185 C= 0.53752 D= 0.3580 E=-0.9337
G= 0.5019 H= 0.1924 K=-0.8433 HT= 0.9

SE= 2.66

	DELTA DEG.	AZ. DEG.	P M S	O-C S	S M S	O-C S	*PP M S	SUPP. M S
ATHENS	5.73	22.3	1 25K	-3	2 29	-7		
REGGIO CALA.	6.93	322.6	1 46	1	3 2	-4		3 20 SS
MESSINA	7.06	322.7	1 44K	-3	3 3	-6		1 57 PP
TARANTO	8.32	340.0	2 4	-1				
SKOPJE	9.27	2.2	2 12	-6	3 55	-9		
TITOGRAD	9.82	352.5	2 23	-2	4 22	5		3 11 PG
SOFIA	10.16	9.9	2 28	-2	4 21	-5		2 36 PP
ISTANBUL UN.	10.51	35.3	2 32	-3	4 27	-8		
SARAJEVO	11.34	350.6	2 40	-6	4 44	-11		
JERUSALEM	12.10	90.5	2 52	-4	4 58	-15		
BELGRADE	12.12	358.2	3 3	6				3 45
KSARA	12.53	80.8	2 59	-3	5 17	-7		
TIMISOARA	13.04	0.8			5 17	-19		7 16
ZAGREB	13.67	345.1	3 19K	2	6 7	16		5 46
TRIESTE	14.09	338.8	3 23	0	5 59	-2		7 39 SGSGSG
LJUBLJANA	14.24	341.4	3 22	-3	5 58	-7		3 33 PP
PADOVA	14.52	333.6	3 41	12	6 59	48		6 6
MONACO	15.30	320.0						3 51 PP
PAVIA	15.47	327.1	3 40	-1	7 10	36		
KISHINEV	15.52	20.5	3 47	5	6 43	8		
ISOLA	15.81	320.5	3 46	1	6 39	-3		
VIENNA-H.	15.93	348.7	3 47	0	6 40	-5		4 4 PP
SIMFEROPOL	15.94	36.0	3 53	6	6 53	8		
UZHGOROD	15.95	3.2	3 54	7				
SKALNATE PL.	16.48	358.3	4 9	15	7 23	26		4 27 PP
NIEDZIKA	16.72	358.5	3 55	-2				
ROSELEND	17.06	323.7	4 2	1				4 57
LWOW	17.26	6.7	4 7	3	7 28	13		
KASPERSKE H.	17.33	343.5	4 5	0				7 18
RAVENSBURG	17.36	333.6	4 6	1				
KRAKOW	17.36	357.7	4 8	3	7 28	10		5 1
RACIBORZ	17.50	354.0	4 8	1				4 20 PP
CHORZOW	17.65	355.8	4 8	-1				4 32 PPP
PRUHONICE	17.92	346.4	4 11	-1	7 29	-1		
EBINGEN	17.93	333.1	4 11	-1				
PRAGUE	18.03	346.3	4 12	-1	7 48	15		
TUBINGEN	18.19	333.9	4 15	0				
STUTTGART	18.31	334.7	4 13K	-4	7 41	2		
ALICANTE	18.34	293.9	4 16A	-1	7 36	-4		4 41 PPP
BESANCON	18.49	326.2	4 18	-1				5 15
STRASBOURG	18.73	331.8	4 23	1	8 3	14		4 41 PP
CLERMONT-FD.	18.97	318.7	4 26A	1	8 11	17		
HEIDELBERG	19.04	334.8	4 26	0				
WELSCHBRUCH	19.18	329.2	4 21	-6				
JENA	19.49	342.0	4 30	-1	8 20	14		5 37
COLLMBERG	19.50	344.9	4 31K	0	7 56	-10		
WARSAW	19.53	0.1	4 28	-3	8 12	6		8 42 SS
ALMERIA	19.69	288.7	4 32A	-1	8 27	17		4 51 PP
GARCHY	19.94	322.1	4 33K	-3	8 20	4		5 5
EREVAN	20.31	61.8	4 39	-1	8 29	6		
GRANADA	20.62	289.4	4 52K	9	8 35	6		5 33 PP
BENSBERG	20.89	335.0	4 46K	0	8 48	13		5 9 PP
TIFLIS	20.96	57.7	4 47	0	8 40	4		
DOURBES	21.21	329.9	4 50	1	8 43	2		
TOLEDO	21.37	296.7	4 50K	-1	8 48	4		5 13 PP
GORIS	21.55	64.5	4 53	0	8 55	8		
MUNSTER	21.58	337.1	4 53	0				
KIROVOBAD	21.78	61.4	4 53	-2	8 53	1		
UCCLE	21.85	330.8	4 56	0	9 0	7		
GROZNY	22.14	54.2	5 1	2	9 2	3		
DE BILT	22.54	334.0	5 4	1	9 14	8		
WITTEVEEN	22.61	337.0	5 4	1				
FOLINIERE	22.74	321.2	5 3	-2				
MAKHACH-KALA	23.24	56.2	5 14K	4				
COPENHAGEN	23.75	348.0	5 15	1	9 31	4		

KARLSKRONA	23.76	352.5	5	16	1	9	38	10				
AVERROES	23.80	279.2	5	15A	0	9	35	7			5	38 PP
KEW	24.38	326.6	5	21	0	9	53	15			5	58 PP
LISBON	25.12	292.4	5	28K	0	10	2	11				
TEHERAN	25.29	74.6	5	32	3	10	5	11				
GOTEBORG	25.75	348.9	5	33	-1							
MOSCOW	25.81	21.9	5	34A	0	10	7	5				
SHIRAZ	27.11	88.0	5	47A	1	10	41	17			6	33 PP
DURHAM	27.21	330.9	5	48	1	10	34	9				
UPPSALA	27.26	356.3	5	46	-2	10	25	-1			11	8
HELSINKI	27.61	4.3	5	51A	0							
PULKOVO	27.79	10.2	5	53	1	10	36	1				
NURMIJARVI	27.93	3.9	5	53A	-1	10	39	2			8	57 PCP
KONGSBERG	28.00	347.7	5	55	1						6	22
VIBORG	28.51	8.1	5	58	-1							
ADDIS ABABA	28.73	141.1	6	3	2	11	15	25				
ABERDEEN	29.15	334.0									20	16
KIZYL-ARVAT	29.17	67.1	6	5A	0	10	59	2				
VANNOVSKAYA	30.61	69.6	6	17	-1							
UMEA	31.16	359.4	6	21	-1	11	22	-6				
SKALSTUGAN	31.39	352.5	6	25	0							
KAJAANI	31.69	5.6	6	26	-1							
SODANKYLA	34.88	3.8	6	55A	0	12	21	-5				
KIRUNA	35.18	359.6	6	57	0	12	36	5			14	53 SS
LWIRO	35.53	166.5	6	59A	-1	12	38	2				
APATITY	35.65	8.2	7	1A	0	12	39	1			8	18 PP
SVERDLOVSK	36.30	36.3	7	7	0	12	49	1				
TROMSOE	37.01	358.8	7	12	-1							
KEVO	37.27	3.5	7	15	0	13	3	0			8	35 PP
QUETTA	39.08	81.0	7	31	1	13	29	-1				
TASHKENT	39.10	63.1	7	31A	1	13	32	1				
REYKJAVIK	41.05	333.0	7	50A	3							
KHOROG	41.25	68.7	7	52A	4	14	8	5				
ANDIJAN	41.48	63.7	7	52A	2	14	12	6				
FRUNSE	42.96	60.4	8	3A	1							
SCORESBY SD.	44.46	340.9	8	16	2	15	7	17				
LAHORE	44.80	76.4	8	17	0							
ALMATA-2	44.93	59.5	8	18K	0							
BANDEIRA	47.88	190.0	8	39K	-3						10	34 PP
NEW DELHI	48.08	79.3	8	43A	0	15	41	-1			10	39 PP
DEHRA DUN	48.22	76.7	8	45K	1	15	52	9				
POONA	49.26	93.1	8	51A	-1	16	2	4				
KHEYS	50.16	7.4	9	0	1							
BULAWAYO	53.04	171.0	9	19	-2							
HYDERABAD	53.64	91.8	9	22	-3	17	3	5			21	7 SS
GODHAVN	54.37	335.0	9	30A	-1	17	31	23				
ALERT	56.93	351.0	9	48	-1	17	48	6				
BOKARO	57.01	81.1	9	47	-3							
MADRAS	57.25	95.4	9	52	1	17	44	-3			11	56 PP
LHASA	59.02	72.7	10	4	0	18	15	5				
CHANGALANE	59.62	168.3	10	6	-2							
CALCUTTA	59.70	81.3									13	58
IRKUTSK	61.05	44.2	10	17A	-1							
KIMBERLEY	61.21	176.2	10	16K	-3							
SHILLONG	61.31	76.6	10	16A	-3							
CHITTAGONG	62.65	79.9	10	28	0	19	1	5				
SCHEFFERVLLE	62.78	319.4	10	28	-1							
ULAN-BATOR	64.02	48.3	10	38	1	19	19	6				
HALIFAX	64.33	307.9	10	39A	0							
TIKSI	64.68	19.5	10	40A	-2							
RESOLUTE	65.14	344.7	10	44K	-1							
LANCHOW	66.43	61.3	10	53	0	19	47	4				
HERMANUS	66.78	181.6									16	9
SEVEN FALLS	68.01	312.6	11	2	-1							
PORT BLAIR	68.48	89.7				20	9	-1			18	36
MOULD BAY	68.50	350.5	11	5	-1	20	13	5				
CHENGTU	68.85	66.5	11	8	0	20	16	4				
SHAWINIGAN	69.45	312.7	11	12A	0							
YAKUTSK	69.75	28.4	11	12A	-2	20	21	-1				
KUNMING	70.34	72.3	11	17	0	20	32	3				
WESTON	70.37	308.2	11	17	0							
BREBEUF	70.45	311.9	11	18	0							
SIAN	70.96	61.1	11	22	1							
OTTAWA	71.81	312.6	11	26A	0	20	51	5				
PALISADES	72.72	307.8	11	33	1	21	6	9				
PEKING	73.40	52.9	11	35	-1	21	7	3				
LONDON ONT.	76.39	312.5	11	52K	-1							
CHANGCHUN	77.30	46.0	11	58	0							
SAN JUAN	77.93	284.1	12	1	0						12	25

YELLOWKNIFE	78.68	340.6	12	5	0					
MAGADAN	79.19	23.5	11	58	-10					
COLLEGE	82.37	355.2	12	25	0					
CARACAS	82.67	277.7	12	31	5	22	55	11		
CUMBERLAND	83.36	308.1	12	30	0	22	57	6	28	26 SS
ST. LOUIS 1	84.53	312.8	12	38	2					
Y.-SAKHLINSK	84.93	35.7	12	39	1					
PETROPAVLOVK	87.04	24.0	12	52	4					
BANFF	88.14	334.3	13	3	9					
RAPID CITY	88.21	323.4	12	56	2					
MATUSIRO	89.55	45.7	13	0	0	23	54	4		
TULSA	89.68	313.5	13	2	1	23	39	-12		
HUNGRY HORSE	89.85	331.9	13	1	-1					
BOZEMAN	90.72	328.6	13	8	2					
BUTTE	91.10	329.7	13	9	1				16	50 PP
PENTICTON	91.14	335.5	13	8	0					
LARAMIE	91.43	322.7	13	12	3					
BOGOTA	91.77	276.6	13	3	-8					
WICHITA MTS.	92.18	314.2	13	13	0	24	24	10	16	30 PP
GOLDEN	92.50	321.5	13	15	1					
CHINCHINA	92.88	277.7	13	23	7					
VICTORIA	93.11	337.2	13	18A	1					
FLAMING GRGE	93.61	324.7	13	20	1					
BLUE MTS.	94.01	331.7	13	21	0	24	1	-29	17	7 PP
UINTA BASIN	94.17	324.4	13	22A	0	23	59	-32	25	55 PS
EUREKA	97.84	327.8	13	41	3					
TUCSON	101.00	320.0	13	54	1					
SOUTH POLE	122.51	180.0	18	50	-7					
BYRD STATION	130.00	188.3	19	13	1					
KOUMAC	145.21	78.9	19	41K	2					

FEBRUARY 21 20.H 26.M 39.S EPICENTRE 32.66 21.10 DEPTH# 0.KM

A= 0.78697 B= 0.30374 C= 0.53705 D= 0.3601 E=-0.9329
G= 0.5010 H= 0.1934 K=-0.8436 HT= 0.9

SE= 2.41

	DELTA DEG.	AZ. DEG.	P M	S	O-C S	S M	S	O-C S	#PP M	S	SUPP. M	S
ATHENS	5.71	21.2	1	27K	-1	2	31	-5				
MESSINA	7.15	322.2	1	48	-1	3	4	-8			8	39
TARANTO	8.39	339.4				3	36	-7				
TITOGRAD	9.86	352.0				4	9	-10			4	39
SOFIA	10.18	9.3	2	30	-1	4	20	-7			3	8
ISTANBUL UN.	10.48	34.8	2	32A	-3	4	28	-6				
SARAJEVO	11.39	350.2									4	41
JERUSALEM	11.99	90.4	2	52	-3	5	0	-11				
BELGRADE	12.15	357.8									3	49 PG
KSARA	12.43	80.6	2	58	-3	5	15	-7				
LJUBLJANA	14.30	341.1	3	25	-1	6	0	-7			3	35 PP
KISHINEV	15.51	20.1	3	47	5							
ISOLA	15.90	320.4	3	54	7							
VIENNA-H.	15.98	348.4	3	48	0							
UZHGOROD	15.98	2.9	3	44	-4							
NIEDZIKA	16.76	358.2	4	0	2							
ROSELEND	17.15	323.5	4	3	0						4	30
LWOW	17.28	6.4	4	9	4							
KASPERSKE H.	17.39	343.3	4	5	-1						7	7
KRAKOW	17.40	357.5	4	9	3						4	38 PPP
RACIBORZ	17.54	353.8	4	8	0						4	25 PP
CHORZOW	17.69	355.5	4	11	1						4	25 PP
PRUHONICE	17.98	346.2	4	13	0							
STUTTGART	18.39	334.5	4	17	-1	7	53	12				
BESANCON	18.57	326.1	4	18	-3							
STRASBOURG	18.81	331.6	4	24	1							
WELSCHBRUCH	19.27	329.1	4	23	-6							
COLLMBERG	19.55	344.7	4	31	-1						8	30
JENA	19.56	341.8	4	31	-1	8	23	15			5	24
ALMERIA	19.80	288.7	4	37K	2						5	8 PPP
HALLE	19.99	343.1	4	36	-1	8	22	5				
GARCHY	20.04	322.0	4	35	-3							
EREVAN	20.23	61.6	4	41	1	8	29	7				
TIFLIS	20.88	57.6	4	47	1							
BENSBERG	20.97	334.8	4	43	-4						5	18
DOURBES	21.30	329.8	4	50	-1							

PARIS	21.34	324.6	4	51	0						
GORIS	21.46	64.3	4	53A	1						
TOLEDO	21.48	296.7	4	51A	-2	8	51	4		5	9 PP
MUNSTER	21.66	337.0	4	56	2						
KIROVOBAD	21.70	61.3	4	55	0						
FOLINIERE	22.83	321.1	5	5	-1						
COPENHAGEN	23.80	347.8	5	16	1						
KARLSKRONA	23.81	352.3	5	19	3						
KEW	24.47	326.5	5	23	1	9	52	12			
TEHERAN	25.19	74.6	5	32	3						
MOSCOW	25.80	21.7	5	35	0	10	7	4			
GOTEBORG	25.81	348.7	5	35	0						
SHIRAZ	27.00	88.0	5	47A	1	10	44	22		6	46 PP
UPPSALA	27.30	356.2	5	49	1						
HELSINKI	27.64	4.2	5	52	0						
PULKOVO	27.80	10.0	5	56A	3	10	39	4			
NURMIJARVI	27.96	3.8	5	54	0	10	45	7		8	9
KONGSBERG	28.06	347.6	5	48	-7						
VIBORG	28.52	7.9	6	0	0				6	57	
ADDIS ABABA	28.64	141.3	6	2	1					18	3
UMEA	31.19	359.3	6	23	0					6	51
SKALSTUGAN	31.44	352.4	6	27	2						
KAJAANI	31.71	5.5	6	28	0						
SODANKYLA	34.90	3.7	6	57	1						
KIRUNA	35.21	359.6	7	0	2						
LWIRO	35.47	166.7	7	4A	4	12	38	2			
APATITY	35.67	8.1	7	2A	0						
SVERDLOVSK	36.26	36.3	7	7	0						
KEVO	37.30	3.4	7	18	2						
QUETTA	38.97	81.0	7	31	1						
TASHKENT	39.02	63.1	7	31	1	13	33	3			
WARSAK DAM	41.82	73.9	7	54	1						
SCORESBY SD.	44.52	340.9	8	17	2						
ALMATA-2	44.85	59.5	8	19	1						
BULAWAYO	52.99	171.2	9	20	-1						
CHATRA	56.85	77.3	9	46	-3						
SHILLONG	61.22	76.7	10	16A	-3						
CHITTAGONG	62.55	79.9	10	29	1						
SCHEFFERVLLE	62.87	319.5	10	29	-1						
ULAN-BATOR	63.96	48.3	10	29	-9						
TIKSI	64.68	19.5	10	41	-1						
RESOLUTE	65.20	344.7	10	45	-1						
PORT BLAIR	68.37	89.8	11	24	18						
MOULD BAY	68.55	350.6	11	5	-2						
SAN JUAN	78.05	284.2	12	4	2						
COLLEGE	82.41	355.3	12	26	0						
CUMBERLAND	83.46	308.2	12	34	-1						
RAPID CITY	88.30	323.4	12	53	-2						
HUNGRY HORSE	89.93	331.9	13	2	-1						
BOZEMAN	90.81	328.7	13	7	0						
WICHITA MTS.	92.28	314.3	13	14	1						
BLUE MTS.	94.09	331.7	13	21	-1						

FEBRUARY 22 7.H 10.M 23.S EPICENTRE 84.95 100.78 DEPTH= 0.KM

A=-0.01658 B= 0.08706 C= 0.99607 D= 0.9823 E= 0.1871
G=-0.1864 H= 0.9785 K=-0.0886 HT=-14.1

SE= 2.58

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S
KHEYS	6.66	253.7	1	40	-2	2	49	-10			6	5
NORD	11.70	319.9	2	53	2							
ALERT	12.52	349.9	2	56	-7	5	11	-13				
TIKSI	14.20	142.5	3	20	-5							
MOULD BAY	18.04	29.9	4	13	-1							
KEVO	19.54	267.6	4	29	-3	8	1	-6			8	25
RESOLUTE	20.36	11.9	4	40	-1							
TROMSOE	20.38	275.5	4	41	0							
APATITY	21.13	259.5	4	46A	-3	8	39	-1	5	0	5	11 PP
SODANKYLA	21.90	266.4	4	56A	-1	8	52	-3				
KIRUNA	22.00	272.9	4	56	-2	9	0	3			5	28 PP
SCORESBY SD.	22.78	313.1	5	9	3	9	34	23				
KAJAANI	25.04	263.5	5	28	1	9	44	-6				
GODHAVN	25.55	339.0	5	24	-8	10	9	11				
UMEA	25.95	270.9	5	35A	-1	10	5	0			6	6

SKALSTUGAN	26.89	278.6	5	44A	-1				6	31 PP
COLLEGE	27.52	59.4	5	52	2	10	27	-4		
MAGADAN	27.60	122.6	5	53	2					
NURMIJARVI	28.82	265.1	6	1	-1	10	45	-7	9	10 PCP
PULKOVO	29.06	259.1	6	4A	0	10	56	0		
HELSINKI	29.13	264.7	6	3	-2				9	11 PCP
SVERDLOVSK	29.62	225.8	6	8K	-1	11	1	-3		
UPPSALA	30.10	271.9	6	13A	-1	11	10	-2		
KONGSBERG	31.00	279.7	6	21	-1	11	25	-1		
YELLOWKNIFE	31.94	30.6	6	29A	-1					
MOSCOW	32.43	250.2	6	33A	-1	11	49	0		
GOTEBORG	32.72	276.8	6	36A	-1					
IRKUTSK	32.84	176.0	6	37	-1	11	57	2		
KARLSKRONA	33.93	272.7	6	48A	1				8	6 PP
COPENHAGEN	34.68	275.7	6	53	-1					
DURHAM	36.79	289.1	7	15K	3					
WARSAW	37.34	266.3	7	17	1	13	6	2	15	13
WITTEVEEN	38.02	280.6	7	18	-4					
ESEN BULAK	38.73	185.0	7	29	1	13	27	1		
DE BILT	38.86	281.9	7	33	4				9	9 PP
COLLMBERG	38.97	274.1	7	29A	-1				8	57 PP
CHORZOW	39.44	267.9	7	33	-1				9	10 PP
LWOW	39.46	262.7	7	35	1	13	39	2		
JENA	39.46	275.4	7	34	0	13	43	6	9	9 PP
Y.-SAKHLINSK	39.51	134.1	7	36K	2	13	39	2	9	12 PP
KRAKOW	39.60	266.9	7	35	0	13	40	1	20	34
RACIBORZ	39.72	268.7	7	36	0				9	7 PP
BENSBERG	39.82	279.7	7	37	0				9	18 PP
KEW	39.96	287.1	7	47	9	13	50	6	16	36 SS
PRAGUE	40.06	272.4	7	40	1	13	51	5	9	17 PP
PRUHONICE	40.14	272.3	7	40	0	13	52	5		
UCCLE	40.23	282.5	7	43	3					
SCHEFFERVLLE	40.34	348.9	7	41	0					
SKALNATE PL.	40.43	266.4	7	41	-1				9	19 PP
DOURBES	40.90	282.1	7	47	1				9	32 PP
KASPERSKE H.	41.07	273.0	7	48	1				9	17 PP
HEIDELBERG	41.23	277.9	7	49	1					
VIENNA-H.	41.70	270.1	7	54	2	14	10	0		
CHANGCHUN	41.78	153.2	7	53	0				9	28 PP
STUTTGART	41.81	277.2	7	54A	1	14	17	5	9	42 PCP
TUBINGEN	42.07	277.4	7	57	2					
STRASBOURG	42.13	278.7	7	58A	2				9	45 PP
EBINGEN	42.42	277.4	7	59	1					
WELSCHBRUCH	42.42	280.0	7	59	1					
FOLINIERE	42.65	286.7	8	0	0					
RAVENSBURG	42.76	276.7	8	2	1					
FRUNSE	42.84	208.5	8	3A	1				9	37 PP
BANFF	43.20	33.0	8	4A	-1					
SIMFEROPOL	43.43	251.5				14	38	3	9	57 PP
BESANCON	43.61	280.2	8	9	1				9	57 PP
GARCHY	43.83	283.0	8	9	-1				9	57 PP
LJUBLJANA	44.04	271.5	8	12	1					
TASHKENT	44.60	214.1	8	17	1					
PAOTOW	44.60	170.0	8	15	-1					
BELGRADE	44.74	265.4	8	18A	2	14	48	-6	12	16
PENTICTON	44.84	37.0	8	18	0					
ROSELEND	45.10	279.2	8	20	0				8	56
PEKING	45.27	163.3	8	23	2	15	3	1		
VICTORIA	45.43	40.6	8	23	0					
TIFLIS	45.77	240.0	8	26	1	15	13	4	10	11 PP
HUNGRY HORSE	46.09	31.9	8	27	-1					
SEATTLE	46.36	39.7	8	38A	8	15	35	17		
ISOLA	46.56	278.6	8	33	2				8	55
SOFIA	46.59	262.1	8	31	-1	15	33	12	10	22 PP
MONACO	46.97	278.1	8	35	0					
ISTANBUL UN.	47.74	256.1	8	41K	0					
GORIS	47.86	238.1	8	42A	0	15	41	2	10	37 PP
SEVEN FALLS	48.11	352.3	8	43	-1					
KHOROG	48.32	211.4	8	47A	2	15	49	4		
BUTTE	48.48	30.8	8	47	0	15	51	3	10	42 PP
ASHKABAD	48.57	225.4	8	48	1	15	52	3		
SHAWINIGAN	48.70	354.1	8	52	4					
BOZEMAN	48.90	29.4	8	52	2				10	53 PP
LANCHOW	49.06	176.7	8	52	1					
BLUE MTS.	49.42	35.3	8	54	0	16	7	6	10	44 PP
MATUSIRO	49.67	140.1	8	54	-2	16	8	4		
BREBEUF	49.76	354.8	9	0	4	16	10	5	20	1 55
OTTAWA	49.87	356.8	8	55	-2	16	7	0		
RAPID CITY	50.79	22.2	9	4	0					

SIAN	50.90	171.3	9	14K	9						
TEHERAN	51.23	232.4	9	7	-1					11	6 PP
TOLEDO	51.78	288.8	9	7K	-5	16	45	12		20	23 SS
MADISON	51.83	9.8	9	12	0	16	35	1		11	12 PP
NANKING	53.29	160.9	9	24A	1						
CHICAGO CGS.	53.45	7.8	9	21	-3						
MINERAL	53.68	39.7	9	26K	0						
FLAMING GRGE	53.70	28.2	9	26	0						
SALT LAKE C.	53.75	30.5	9	25	-1						
CLEVELAND	53.79	2.2	9	35	8					19	6
LAHORE	54.10	208.0	9	28	-1	17	8	3			
PALISADES	54.25	355.1	9	22	-8	17	16	9		18	54 SCS
UINTA BASIN	54.30	28.4	9	30	-1	17	13	5		20	49 SS
ZO-SE	54.32	158.4	9	30K	-1	17	3	-5			
KSARA	54.33	248.1	9	33	2	17	13	5		11	37 PP
CHENGTU	54.43	176.6	9	31K	0	17	10	1			
RENO	54.58	38.1	9	34A	1						
EUREKA	54.84	34.5	9	35	0					10	50 PCP
DEHRA DUN	55.18	204.0	9	36K	-1	17	21	2		19	40 SCS
CALISTOGA	55.32	40.8	9	38A	0						
LHASA	55.52	190.3	9	40	1						
QUETTA	55.81	215.7	9	41	-1	17	34	6			
MANHATTEN	55.86	16.3	9	48A	6						
BERKELEY	56.11	40.6	9	40K	-4	17	37	5			
JERUSALEM	56.41	248.6	9	46	0						
LICK	56.67	40.1	9	48A	0						
NEW DELHI	56.94	204.8	9	46K	-4	17	41	-2		12	7 PP
SHIRAZ	57.21	230.6	9	51A	-1	17	47	1		11	56 PP
BOULDER CITY	58.39	33.7	9	58	-2						
CHATRA	58.39	194.3	9	47A	-13						
FAYETTEVILLE	59.02	14.1	10	1A	-3						
TULSA	59.16	15.6	10	3K	-2	18	7	-5		22	2
SHILLONG	59.56	189.3	10	6A	-2						
CUMBERLAND	59.65	6.0	10	7	-2	18	21	3		12	15 PP
ALBUQUERQUE	59.78	25.8	10	12	3	18	29	9			
KUNMING	59.95	178.0	10	10	-1	18	21	-1			
PASADENA	60.04	37.0	10	12	1	18	29	6		12	38 PP
WICHITA MTS.	60.27	18.3	10	11	-2	18	30	4		12	38 PP
BOKARO	61.41	195.6	10	28	7					14	8 PPP
TUCSON	62.29	30.1	10	26	0	18	57	5			
POONA	67.07	207.8	10	56A	-2	19	49	-2			
BAGUIO CITY	68.91	159.6	11	9	0						
MADRAS	72.33	201.1	11	43	13					25	33 SS
PORT BLAIR	73.37	188.2	11	37	1					15	52 PPP
SAN JUAN	76.69	347.2	11	56	1						
ADDIS ABABA	78.67	242.8	11	9	-57						
CARACAS	84.54	347.9	12	40	4	23	0	-3			
BALBOA HTS.	86.18	0.3	12	43	-2						
FUQUENE	89.63	354.5	13	2	1	23	50	-1		24	59 SKKS
CHINCHINA	90.14	356.4	12	59A	-5					24	2 PS
BOGOTA	90.48	354.9	13	7	2	23	41	-18			
LWIRO	90.66	251.9	13	7K	1	23	50	-11		25	10 PS
LA PAZ	111.38	348.6	18	25	-11						

FEBRUARY 22 7.H 58.M 55.5 EPICENTRE -17.91-178.67 DEPTH= 517.KM

A=-0.95188 B=-0.02205 C=-0.30569 D=-0.0232 E= 0.9997
G= 0.3056 H= 0.0071 K=-0.9521 HT= 5.2

DEPTH OF FOCUS= 0.076R

SE= 1.15

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S
AFIAMALU	7.73	60.0	1	54K	-1	3	21	-6				
PORT VILA	12.39	268.8	2	43K	0	5	4	10				
NOUMEA	14.64	250.2	3	7A	1	5	45	9				
KOUMAC	16.31	258.0	3	24K	1	6	18	11				
KARAPIRO	20.58	193.1	4	5K	1				5	22		
CHATEAU	21.80	192.2	4	14	-1							
HONIARA	22.40	289.3	4	22	2							
WELLINGTON	23.96	192.2	4	34	0						14	34 SCS
BRISBANE	27.93	245.1	5	10	1	9	13	-4				
ROXBURGH	29.25	197.4	5	20	-1							
RIVERVIEW	31.29	233.7	5	39	1						6	12

CHARTERS TS.	33.19	260.5	5	54	0	10	33	-5		
CANBERRA	33.50	232.4	5	57K	0	10	41	-2	7	28 PP
PORT MORESBY	34.22	279.7	6	4A	1					
TOOLANGI	36.97	230.7	6	26A	0	11	33	-2	7	22
ADELAIDE	41.41	237.2	7	2K	0					
HAWAII V.OB.	43.65	32.9	7	19	0					
HONOLULU	43.87	28.2	7	22	1					
KIPAPA	44.02	28.2	7	22	0					
DARWIN	48.94	269.0	7	59	-1					
MUNDARING	59.90	243.0	9	16	-1					
BYRD STATION	67.28	170.7	10	4	0					
MATUSIRO	67.76	323.5	10	5A	-2					
BAGUIO CITY	68.86	296.1	10	13	-1					
SOUTH POLE	72.20	180.0	10	33	0					
Y.-SAKHLINSK	73.37	333.5	10	39A	-1					
BERKELEY	76.70	42.6	10	59K	1					
PRIEST	76.77	44.9	11	0A	1					
LICK	76.80	43.4	11	0A	1				12	56
CALISTOGA	76.95	41.9	10	58A	-2					
PASADENA	77.41	47.7	11	1	-1					
MINERAL	78.56	40.9	11	8A	0					
RENO	79.23	42.4	11	13A	1					
CHANGCHUN	79.97	322.5	11	15A	-1	20	32	-5		
EUREKA	81.70	44.0	11	25	0					
TUCSON	81.84	52.4	11	27	2	21	1	6	13	25
VICTORIA	82.39	33.4	11	28	0					
SEATTLE	82.46	34.6	11	27	-2					
PEKING	83.61	315.5	11	34A	0					
BLUE MTS.	83.70	38.9	11	35A	0	21	8	-6	13	31
PENTICTON	84.88	34.3	11	40A	-1					
SALT LAKE C.	85.08	44.5	11	42	1					
COLLEGE	85.84	12.7	11	43	-2				13	42
ALBUQUERQUE	86.30	51.6	11	52	5					
UINTA BASIN	86.41	45.7	11	48A	0	21	26	-13	13	45
FLAMING GRGE	86.81	45.2	11	51	1					
HUNGRY HORSE	87.46	37.1	11	51	-2					
BOZEMAN	87.92	40.5	11	56	1					
BANFF	88.09	34.2	11	55A	-1					
GOLDEN	89.05	47.7	12	1	1					
LUBBOCK	89.26	54.4	12	1	0					
LANCHOW	90.69	307.7	12	8	0					
N-LAZARVSKYA	91.25	183.5	12	9	-1					
WICHITA MTS.	92.19	54.3	12	15	0	22	5	-26	14	12
YELLOWKNIFE	94.44	24.8	12	23A	-2					
TULSA	94.75	53.9	12	27	1					
TIKSI	96.09	345.5	12	28	-5					
MOULD BAY	100.40	12.1	12	49	-3					
NORD	115.82	2.9								
KEVO	125.82	349.3	18	0	-2					
SODANKYLA	127.95	347.9								
KIMBERLEY	128.37	206.5	18	19K	12					
KIRUNA	128.63	350.9	18	7	-1					
KAJAANI	130.50	345.1	18	11	0					
SHIRAZ	132.06	294.0								
UMEA	132.34	348.8	18	13	-2					
CHILEKA	132.95	226.8								
VIBORG	132.96	341.9	18	11	-5					
PULKOVO	133.24	340.3								
MOSCOW	133.33	332.6								
BULAWAYO	133.67	216.5								
SKALSTUGAN	133.76	353.2								
NURMIJARVI	134.28	344.1	18	5	-13					
HELSINKI	134.49	343.7	18	12	-7					
UPPSALA	136.48	348.1								
BROKEN HILL	138.16	221.5								
GOTEBORG	139.49	351.2								
KARLSKRONA	140.32	347.5								
LWOW	143.31	335.3	18	38	3					
UZHGOROD	144.94	335.6	18	39	1					
RACIBORZ	145.17	340.9	18	39	1					
COLLMBERG	145.42	347.1	18	38	-1					
MUNSTER	145.66	353.1	18	39	0					
JENA	146.06	348.4	18	40	0					
PRAGUE	146.24	344.8	18	40	0					
PRUHONICE	146.29	344.6	18	42A	2					
LWIRO	146.32	236.2	18	45K	5					
KEW	146.49	1.9	18	42	2					
BENSBERG	146.70	353.3	18	43A	2					
KASPERSKE H.	147.32	345.0	18	42	1					

CHARTERS TS.		
CANBERRA		
PORT MORESBY		
TOOLANGI		
ADELAIDE		
HAWAII V.OB.		
HONOLULU		
KIPAPA		
DARWIN		
MUNDARING		
BYRD STATION		
MATUSIRO		
BAGUIO CITY		
SOUTH POLE		
Y.-SAKHLINSK		
BERKELEY		
PRIEST		
LICK		
CALISTOGA		
PASADENA		
MINERAL		
RENO		
CHANGCHUN		
EUREKA		
TUCSON		
VICTORIA		
SEATTLE		
PEKING		
BLUE MTS.		
PENTICTON		
SALT LAKE C.		
COLLEGE		
ALBUQUERQUE		
UINTA BASIN		
FLAMING GRGE		
HUNGRY HORSE		
BOZEMAN		
BANFF		
GOLDEN		
LUBBOCK		
LANCHOW		
N-LAZARVSKYA		
WICHITA MTS.	16 2	PP
YELLOWKNIFE		
TULSA		
TIKSI		
MOULD BAY		
NORD	12 43	
KEVO		
SODANKYLA	20 37	SKP
KIMBERLEY		
KIRUNA		
KAJAANI	20 47	SKP
SHIRAZ	20 51	
UMEA	20 52	SKP
CHILEKA	20 57	
VIBORG		
PULKOVO	20 56	
MOSCOW	20 57	PP
BULAWAYO	20 58	
SKALSTUGAN	20 57	SKP
NURMIJARVI	21 48	PKS
HELSINKI		
UPPSALA	21 5	SKP
BROKEN HILL	21 12	
GOTEBORG	21 14	SKP
KARLSKRONA	21 18	SKP
LWOW		
UZHGOROD		
RACIBORZ		
COLLMBERG		
MUNSTER		
JENA	19 30	
PRAGUE		
PRUHONICE		
LWIRO		
KEW		
BENSBERG		
KASPERSKE H.		

BENSBERG	20 49
KASPERSKE H.	20 49

VIENNA-H.	147.35	341.2	18	53	12						
DOURBES	147.78	356.0	18	48	6						
HEIDELBERG	148.03	350.9	18	37	-5						
STUTTGART	148.55	349.9	18	48A	5						
TUBINGEN	148.82	350.0	18	49	5						
STRASBOURG	148.96	351.7	18	50	6						
EBINGEN	149.17	350.0	18	50	6						
FOLINIERE	149.19	2.3	18	50	6						
WELSCHBRUCH	149.31	353.4	18	50	6						
LJUBLJANA	149.88	341.5	18	51	6						
BESANCON	150.49	353.6	18	53	7						
ROSELEND	151.95	352.1	18	56	8					20	22
CLERMONT-FD.	152.18	357.3	19	52	63					20	25

FEBRUARY 22 14.H 12.M 54.S EPICENTRE 40.40 20.00 DEPTH= 44.KM

A= 0.71762 B= 0.26114 C= 0.64562 D= 0.3420 E=-0.9397
G= 0.6067 H= 0.2208 K=-0.7637 HT= -1.8

DEPTH OF FOCUS= 0.002R

SE= 3.16

	DELTA DEG.	AZ. DEG.	P M	S	O-C S	S M	S	O-C S	*PP M	S	SUPP. M	S	
SKOPJE	1.91	34.4	0	31	0						0	36	PG
TARANTO	2.10	272.7	0	44	10								
TITOGRAD	2.10	345.0									0	35	PG
SOFIA	3.40	46.4				1	16	-16			0	50	P*
SARAJEVO	3.66	341.9	1	6	10	1	44	5					
ATHENS	3.78	128.8	0	54K	-4						1	53	SG
REGGIO CALA.	4.08	237.1	1	0	-2						2	5	S*
MESSINA	4.09	238.9	1	2	0	1	53	3			1	16	PG
BELGRADE	4.43	4.2	1	8A	1						2	28	SG
TIMISOARA	5.42	9.1	1	44	23	2	30	7			1	53	P*
ROME	5.87	287.2	1	27	0	2	33	-1			1	43	P*
BUCHAREST	6.04	46.4									2	2	
ZAGREB	6.16	332.8	1	30	-1	2	44	3			3	6	S*
ISTANBUL UN.	6.86	81.8	1	45A	4	3	34	35					
LJUBLJANA	6.92	326.5	1	39	-3	3	0	0			3	20	S*
TRIESTE	6.96	321.0	1	41	-1	3	1	0			4	13	
HURBANOVO	7.58	350.8									2	20	PG
BOLOGNA	7.60	305.4				3	17	0					
PADOVA	7.78	312.7				3	15	-7					
BRATISLAVA	8.04	346.0	2	20	23						4	31	
VIENNA-H.	8.26	342.9	2	3	2	3	44	10			4	33	SG
CUGLIERI	8.74	272.2				3	24	-21			3	46	SS
SKALNATE PL.	8.78	1.1	2	18	10								
NIEDZIKA	9.02	1.3	2	15	4								
KISHINEV	9.20	41.1	2	14	1								
PAVIA	9.28	304.5				3	57	-2			4	37	S*
KRAKOW	9.65	359.7	2	21	1						4	29	SS
RACIBORZ	9.76	353.2	2	21	0						2	31	PP
LWOW	9.84	15.5	2	25	3	5	21	69					
CHORZOW	9.91	356.2	2	25	2						2	33	PP
MONACO	9.92	293.7	2	23	0								
ISOLA	10.31	295.7	2	28	-1	4	21	-3					
PRUHONICE	10.32	340.0	2	29	0								
PRAGUE	10.43	339.8									5	20	
RAVENSBURG	10.48	318.1	2	28	-3						6	1	
EBINGEN	11.08	318.2	2	36	-3						6	27	
ROSELEND	11.11	302.8	2	36	-4						4	24	
TUBINGEN	11.26	319.8	2	39	-3								
STUTTGART	11.32	321.2	2	39	-3	4	42	-7			6	22	
SIMFEROPOL	11.34	61.8	2	40	-3								
WARSAW	11.85	3.1									3	15	PPP
COLLMBERG	11.93	338.3	2	48	-3						6	43	SG
STRASBOURG	11.95	317.2	2	51	0	4	49	-15			6	36	
HEIDELBERG	12.02	322.2	2	48	-4	5	1	-5					
JENA	12.05	333.7	2	50	-2	5	12	6			5	32	
BESANCON	12.21	308.7	2	53	-1						5	7	
HALLE	12.42	336.0	2	54	-3	5	33	18					
WELSCHBRUCH	12.61	313.9	2	50	-10	4	50	-30					
BENSBERG	13.83	324.0	3	13K	-3	5	39	-10			7	51	
GARCHY	14.00	305.3	3	17A	-1	5	45	-8					
MUNSTER	14.37	327.7	3	35	12								
DOURBES	14.52	317.0	3	27	2	6	7	2					

PARIS	15.01	309.8	3	35	4			6	13	
WITTEVEEN	15.40	328.2						7	36	
ALICANTE	15.97	269.2	3	43	0			4	5	PP
KARLSKRONA	16.03	351.0	3	46K	2					
COPENHAGEN	16.08	344.4	3	51A	6					
FOLINIERE	16.78	306.7	3	54	0					
KEW	17.88	315.0	4	14	6	7	38 15			
ALMERIA	17.90	265.8	4	7	-1					
GOTEBORG	18.07	346.0	4	12	2					
TOLEDO	18.38	276.2	4	14A	0	6	57 -37	4	30	PP
GRANADA	18.66	267.7	4	18A	1	7	55 15	4	43	PP
EREVAN	18.68	82.7	4	18	1					
TIFLIS	18.74	77.9	4	19	1					
MOSCOW	19.25	31.3	4	22	-2					
GROZNY	19.38	72.9	4	27	2					
UPPSALA	19.53	356.4	4	26	-1	8	10 11			
KIROVOBAD	20.00	80.7	4	29	-3					
HELSINKI	20.03	7.3	4	31	-1					
GORIS	20.19	84.0	4	36	2					
DURHAM	20.33	322.2	4	30	-5					
NURMIJARVI	20.34	6.6	4	34	-2	8	20 4			
KONGSBERG	20.34	344.8	4	35	-1			4	54	PP
PULKOVO	20.44	15.0	4	36	-1	8	22 4			
MAKHACH-KALA	20.67	73.8	4	43	4	8	28 6			
VIBORG	21.06	12.1	4	40	-3					
BERGEN	22.00	340.4	4	52	0					
UMEA	23.46	0.3	5	6K	-1	9	26 13			
SKALSTUGAN	23.66	351.4	5	8K	-1					
KAJAANI	24.14	8.3	5	13	0					
TEHERAN	25.08	90.6	5	21	-1					
SODANKYLA	27.27	5.6	5	41	-2					
KIRUNA	27.48	0.4	5	44	-1					
KIZYL-ARVAT	27.78	80.6	5	48	1					
APATITY	28.19	10.9	5	51A	0					
SHIRAZ	28.57	101.8				10	40 2	11	7	
ASHKABAD	29.68	82.2	6	2	-2					
SVERDLOVSK	30.92	44.2	6	13	-2					
TASHKENT	36.88	72.0				12	44 -4			
SCORESBY SD.	36.97	338.1	7	9	?					
QUETTA	39.26	90.0	7	29	3					
FRUNSE	40.31	68.0	7	34A	-1					
WARSAK DAM	41.08	82.0	7	33	-8					
ALMATA-2	42.12	66.5	7	48	-2					
THEYS	42.65	8.6	7	54	0					
NORD	43.22	352.6	7	58	-1					
DEHRA DUN	47.65	83.1	8	30	-4					
ALERT	49.21	350.1	8	45	-1					
ESEN BULAK	53.73	56.5	9	24	4					
CHATRA	56.32	81.8	9	35A	-4					
SCHEFFERVLLE	56.54	316.2	9	42	1					
CHILEKA	57.51	162.8	9	48	0					
RESOLUTE	57.53	343.4	9	28	-20					
TIKSI	57.73	20.8	9	47	-2					
SHILLONG	60.55	80.3	10	4A	-5					
MOULD BAY	60.79	349.7	10	8	-2					
YELLOWKNIFE	71.17	339.6	11	17	1					
COLLEGE	74.63	354.6	11	38	1					
CUMBERLAND	78.05	306.6	11	58	2					
Y.-SAKHLINSK	79.14	35.9	12	3	1					
LAWRENCE	81.35	314.5	12	17	3					
HUNGRY HORSE	82.71	331.1	12	21	0					
BOZEMAN	83.76	327.9	12	30	4					
PENTICTON	83.83	334.8	12	27	0					
TULSA	83.84	312.7	12	28	1					
MATUSIRO	84.72	45.5	12	30	-1					
LARAMIE	84.84	322.0	12	36	4					
VICTORIA	85.72	336.6	12	39K	3					
WICHITA MTS.	86.27	313.5	12	40	1			16	0	PP
BLUE MTS.	86.87	331.1	12	46	4			14	18	
UINTA BASIN	87.47	323.8	12	47	3					
EUREKA	90.92	327.5	13	3	2					

FEBRUARY 23 17.H 12.M 45.5 EPICENTRE 49.61 158.61 DEPTH= 26.KM

A=-0.60567 B= 0.23720 C= 0.75954 D= 0.3647 E= 0.9311
G=-0.7072 H= 0.2770 K=-0.6505 HT= -5.3

SE= 2.13

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S
PETROPAVLOVK	3.41	0.4	0	54K	2	1	33	0				
KLYUCHI	6.85	10.6	1	42	1							
Y.-SAKHLINSK	10.90	262.3	2	39	2							
MAGADAN	10.93	338.6	2	40	3						6	7
MATUSIRO	19.74	236.2	4	30	0						7	27
YAKUTSK	20.22	318.8	4	33	-2	8	16	0				
TIKSI	25.92	338.9	5	33	2	10	2	4				
COLLEGE	31.60	41.0	6	23	1							
MOULD BAY	40.63	21.4	7	40	1							
KHEYS	43.14	346.4	8	1	1							
YELLOWKNIFE	46.40	39.8	8	27A	1							
ALERT	46.51	6.8	8	24	-3							
RESOLUTE	46.91	20.4	8	32K	2							
NORD	49.01	359.1	8	47	1							
HUNGRY HORSE	54.14	55.3	9	26	1							
SVERDLOVSK	54.21	317.8	9	26	1							
BLUE MTS.	54.44	60.4	9	28	1							
MINERAL	54.69	67.2	9	30K	1							
FRUNSE	55.63	297.6	9	38A	2							
KEVO	55.82	341.7	9	37	0							
SHILLONG	56.08	270.6	9	38A	-1							
RENO	56.27	66.9	9	43K	3							
LICK	56.56	70.0	9	44	2							
TROMSOE	57.47	344.4	9	50	1							
SODANKYLA	57.86	340.1	9	52A	1							
EUREKA	58.59	64.7	9	54	-3							
KIRUNA	58.75	342.8	9	58A	0							
TASHKENT	59.65	299.2	10	4	0							
KAJAANI	60.33	337.5	10	8	-1							
PASADENA	60.78	70.7	10	13	1							
BOULDER CITY	61.58	67.0	10	18	1							
UINTA BASIN	61.72	60.2	10	19	1							
DEHRA DUN	61.72	284.4	10	21	3							
UMEA	62.29	340.6	10	22A	0							
PULKOVO	63.18	333.6	10	27	-1							
SKALSTUGAN	64.08	344.0	10	35	1							
MOSCOW	64.09	327.4	10	34	0							
NURMIJARVI	64.11	336.7	10	34	0							
HELSINKI	64.32	336.3	10	35	0							
UPPSALA	66.39	339.7	10	49K	1							
TUCSON	66.55	67.5	10	50	1							
ALBUQUERQUE	67.22	62.6	10	56	2							
ASHKABAD	68.07	303.0	11	3	4							
KONGSBERG	68.21	343.6	11	1	1							
QUETTA	68.68	291.7	11	3	0							
SCHEFFERVLLE	69.20	26.2	11	7A	1							
GOTEBORG	69.57	341.6	11	10	2							
KARLSKRONA	70.19	339.0	11	17A	5							
CHARTERS TS.	70.25	192.3	11	12	0							
COPENHAGEN	71.34	340.6	11	19	0							
WICHITA MTS.	71.82	57.7	11	23	1							
TIFLIS	72.12	314.0	11	27	3							
FAYETTEVILLE	73.16	53.9	11	43A	13							
KRAKOW	74.59	333.8	11	40	2						11	51 PCP
BREBEUF	74.94	35.2	11	41	1							
COLLMBERG	75.27	338.5	11	43	1						11	57 PCP
JENA	75.95	339.2	11	47	1							
PRUHONICE	76.11	337.0	11	49	2							
BRISBANE	76.83	185.3	11	51	0							
KASPERSKE H.	77.14	337.3	11	55	2							
SHIRAZ	77.47	301.0	11	55K	1							
CUMBERLAND	77.93	48.6	11	57	0							
STUTTGART	78.50	339.9	12	10	10							
FOLINIERE	80.36	346.1	12	12	2							
GARCHY	81.19	343.4	12	17	2							
ROSELEND	82.00	340.6	12	21	2						12	41
TOOLANGI	87.58	190.4	12	51	4				13	1		

FEBRUARY 24 13.H 34.M 16.S EPICENTRE 14.60 -91.33 DEPTH= 134.KM

A=-0.02248 B=-0.96787 C= 0.25043 D=-0.9997 E= 0.0232
G=-0.0058 H=-0.2504 K=-0.9681 HT= 5.8

DEPTH OF FOCUS= 0.016R

SE= 1.94

	DELTA DEG.	AZ. DEG.	P M	S	O-C S	S M	S	O-C S	*PP M	S	SUPP. M	S	
COMITAN	1.82	335.0	0	32	-1	0	52	-6					
SAN SALVADOR	2.26	113.5	0	36	-2	1	6	-1					
SANTIAGO MA.	2.99	111.3	0	47	-1	1	24	0					
OAXACA	5.76	295.4	1	23	-1	2	23	-7					
VERA CRUZ	6.48	315.6	1	32	-2	2	40	-7			2	4	
MERIDA	6.53	14.2	1	34	-1	2	53	5					
PUEBLA	7.92	304.8	1	52	-2	3	6	-16			3	38	
TACUBAYA	8.91	303.5	2	6	-1	3	42	-4					
BALBOA HTS.	12.81	114.6	2	57	-1								
GUADALAJARA	12.93	299.6	3	0	0						6	0	
HOPE	14.40	74.4	3	21	3								
DALLAS	18.84	345.7	4	11	-1								
CHIHUAHUA	19.54	318.0	4	29	10						7	41	
FUQUENE	19.54	115.9	4	19A	0	7	53	6					
BOGOTA	19.68	118.6	4	22A	1	8	2	12	4	41	8	56	*SS
WICHITA MTS.	21.08	343.2	4	34A	-1	7	58	-18			12	8	SCP
LUBBOCK	21.17	335.0	4	35	-1	8	23	5					
COLUMBIA	21.45	24.0	4	41	2	8	36	13					
CUMBERLAND	21.54	12.9	4	41A	2	8	36	11			5	2	PP
FAYETTEVILLE	21.56	353.7	4	39	-1	8	40	15			5	24	PP
TULSA	21.60	350.1	4	39K	-1	8	32	6			15	50	SCS
ST. LOUIS 1	23.97	2.1	5	4	1	9	19	12					
CARACAS	24.16	96.9	5	8A	3								
ALBUQUERQUE	24.42	328.8	5	8	1	9	30	16					
SAN JUAN	24.46	77.7	5	8	0	8	43	-32			5	17	
LAWRENCE	24.52	352.6	5	13	5								
MANHATTEN	24.94	350.3				9	15	-7			7	2	
TUCSON	25.00	318.0	5	14	1	9	41	17			8	46	PCP
MORGANTOWN	26.87	19.7	5	31A	1								
CHICAGO CGS.	27.28	6.1	5	34	0								
GOLDEN	27.88	336.4	5	39	0	10	44	33					
CLEVELAND	28.11	15.8	5	41A	0	10	18	3					
ST. CLAUDE	28.60	83.2									6	48	
PENNSYLVANIA	28.62	21.6	5	46	0						11	44	
MADISON	28.71	2.4	5	46	-1	10	24	0			6	29	PP
LARAMIE	29.36	337.8	5	53	1								
TRINIDAD	29.46	94.1	5	55	2						8	57	PCP
LONDON ONT.	29.66	15.1	5	53A	2								
BOULDER CITY	29.93	331.6	5	58	1						8	58	PCP
UINTA BASIN	30.18	331.6	6	0A	0	10	52	4	6	33	6	52	PP
FORDHAM	30.25	26.6	6	1	1	10	49	0					
PALISADES	30.37	26.5	6	1	2	10	52	7	6	20	11	32	*SS
HUANCAYO	30.86	148.3	6	8	2								
RAPID CITY	31.08	343.3	6	6	-2								
PASADENA	31.09	313.5	6	9	1	11	10	8	6	34	7	12	PP
SALT LAKE C.	31.62	329.5	6	13	1						9	2	PCP
WESTON	32.63	24.1	6	22	1	11	28	2					
EUREKA	32.90	323.6	6	25	2						9	6	PCP
OTTAWA	33.42	20.1	6	28A	0								
PRIEST	33.87	314.7	6	34K	2						9	10	PCP
BREBEUF	34.24	22.3	6	35A	0	11	57	6			8	0	PP
BOZEMAN	35.16	335.7	6	43	0				7	8	9	12	PCP
LICK	35.18	315.7	6	45A	2						9	14	PCP
RENO	35.23	320.3	6	45K	2								
BERKELEY	35.87	316.0	6	51K	2	12	26	10			9	15	PCP
BUTTE	36.06	334.6	6	50	0	12	24	5	7	18	9	15	PCP
CALISTOGA	36.50	316.9	6	56K	2						9	16	PCP
SEVEN FALLS	36.66	23.6	6	55A	0								
MINERAL	36.82	320.0	6	57A	0						9	17	PCP
BLUE MTS.	37.34	329.1	7	0A	-1	12	42	4			8	22	PP
HALIFAX	38.07	32.6	7	9A	2								
LA PAZ	38.47	142.6	7	31	21	13	3	8					
HUNGRY HORSE	38.52	335.6	7	10	-1						9	21	PCP
BANFF	41.37	337.0	7	34	0								
PENTICTON	41.65	332.2	7	37A	0								
VICTORIA	42.91	328.8	7	47A	0								
ANTOFAGASTA	43.20	151.5	7	50	1	14	12	7			8	16	PP
SCHEFFERVLLE	44.45	20.1	7	59A	0								
PORT HARDY	46.36	328.8	8	15A	1								

YELLOWKNIFE	50.60	346.3	8	46A	-1						
RESOLUTE	60.11	358.9	9	53A	-2						
HAWAII V.OB.	61.04	284.3	10	1	-1						
COLLEGE	62.96	336.4	10	13	-1					39	5 PKPPKP
MOULD BAY	63.39	352.8	10	16A	-1					19	58
KIPAPA	63.39	286.8	10	17	0						
HONOLULU	63.48	286.7	10	16	-2	18	47	9		19	38 SCS
ALERT	68.91	3.9	10	50A	-2						
SCORESBY SD.	69.48	19.6	10	55	-1						
NORD	73.42	8.5	11	18	-1						
TOLEDO	78.74	51.6	11	49K	0	21	38	4		15	13 PP
KEW	79.36	39.5	11	51	-1						
FOLINIERE	79.73	42.2	11	53	-1						
PARIS	81.65	41.8	12	4A	-1						
ALICANTE	81.75	52.6	12	3A	-2					17	58
GARCHY	82.37	43.2	12	7A	-1					15	15
DOURBES	82.69	40.2	12	12	2						
CLERMONT-FD.	82.75	44.7	12	9	-1						
KONGSBERG	82.98	30.2	12	12A	1	22	23	6		15	23 PP
SKALSTUGAN	82.99	26.0	12	12A	1						
WITTEVEEN	83.27	37.2	12	14A	1						
TROMSOE	83.27	19.3	12	13	0				12 47		
KHEYS	83.66	4.8	12	15	0						
BENSBERG	84.06	39.0	12	17A	0						
AFIAMALU	84.48	254.2	12	20A	1	22	47	15			
KIRUNA	84.52	20.7	12	19A	0					15	32 PP
GOTEBORG	84.74	31.6	12	20A	0					12	42
STRASBOURG	85.09	41.2	12	22	0					13	0
ROSELEND	85.15	44.2	12	22	0					15	39
HEIDELBERG	85.46	40.2	12	23	-1						
COPENHAGEN	85.66	33.5	12	25A	0						
KEVO	85.71	17.9	12	24	-1	22	52	8		23	38 PS
ISOLA	85.85	45.5	12	25	-1					12	59
TUBINGEN	85.93	41.0	12	26A	0						
EBINGEN	85.97	41.3	12	26	0						
STUTTGART	85.99	40.7	12	26A	0	22	52	5		15	50 PP
UMEA	86.18	24.4	12	27A	0	22	43	-6	12 59	15	47 PP
MONACO	86.24	45.9	12	21	-6					13	48
RAVENSBURG	86.51	41.6	12	28	-1						
UPPSALA	86.71	28.6	12	29A	-1	22	58	4		15	53 PP
JENA	86.73	38.2	12	30	0	22	53	-1		28	56 SS
HALLE	86.76	37.5	12	30	0	23	30	36			
SODANKYLA	86.83	20.0	12	30A	0					15	53 PP
KARLSKRONA	87.14	32.4	12	30A	-2						
COLLMBERG	87.45	37.5	12	33A	0					15	59 PP
KASPERSKE H.	88.56	39.4	12	38	-1					16	8
PRUHONICE	88.84	38.4	12	41	1					15	11
APATITY	88.90	18.4	12	39	-1	23	18	4		24	39 PS
KAJAANI	88.95	22.6	12	39	-1					16	11 PP
NURMIJARVI	89.56	26.4	12	42	-1	23	4	-16		16	16 PP
TIKSI	89.83	348.2	12	43A	-2	23	1	-22			
HELSINKI	89.86	26.6	12	45	0					15	56
PETROPAVLOVK	90.04	325.4	12	46	0	23	36	11			
VIENNA-H.	90.60	39.6	12	36	-12						
MAGADAN	90.86	333.2	12	47	-2	23	44	12			
VIBORG	91.19	25.2	12	44	-7					16	28 PP
KRAKOW	92.00	37.0								16	35 PP
PULKOVO	92.35	25.5	12	55	-1					16	38 PP
UZHGOROD	94.02	37.5	13	4	0						
LWOW	94.46	36.0	13	6	0						
MOSCOW	97.92	26.4	13	22	0						
ATHENS	99.82	46.6								20	57
WELLINGTON	102.37	230.3								27	44 PKKP
BRISBANE	119.37	246.6	18	40	7						
LWIRO	119.69	84.2	18	38K	4				19 14		
PEKING	119.93	335.9	18	36	1						
RIVERVIEW	120.74	239.2								29	59 PS
GRAHAMSTOWN	121.08	120.2	18	39K	2						
ALMATA	121.42	10.0	18	40	3						
TASHKENT	121.54	17.1	18	41	3						
BROKEN HILL	121.88	98.1	18	41A	3						
BULAWAYO	122.66	104.7	18	42A	2						
SHIRAZ	123.87	38.2	18	43A	1					20	12 PP
ZO-SE	124.86	325.8	18	47	3						
TOOLANGI	124.96	234.2	18	48	4						
CHARTERS TS.	124.97	255.6	18	51	7						
NANKING	125.37	328.5	18	47A	2						
LANCHOW	127.63	344.5	18	52A	3						

SIAN	127.74	338.7	18	52A	2							
CHILEKA	128.28	98.6	18	54	3							
WARSAK DAM	129.00	18.3	18	54	2							
QUETTA	130.81	25.0	19	8	13							
LAHORE	132.10	16.6	19	1	3							
CHENGTU	132.65	341.9	19	2	3							
DEHRA DUN	134.19	12.8	18	59	-3							
NEW DELHI	135.67	14.5	19	3K	-2							
LHASA	135.96	357.0	19	9	4							
KUNMING	138.21	340.7	19	12	3							
CHATRA	138.80	2.0	19	6	-4							
DARWIN	138.98	267.8	15	53	-198						16	48
SHILLONG	139.96	355.5	18	35A	-37							
CHITTAGONG	143.14	355.1	19	22	4							
PODNA	143.99	24.4	19	18A	-2							
MUNDARING	149.49	230.7	19	35	6			20	2			

FEBRUARY 25 8.H 8.M 22.S EPICENTRE -28.20 -65.72 DEPTH= 44.KM
A= 0.36298 B=-0.80451 C=-0.47012 D=-0.9115 E=-0.4113
G=-0.1933 H= 0.4285 K=-0.8826 HT= 2.4

DEPTH OF FOCUS= 0.002R

SE= 2.51

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
ANTOFAGASTA	6.17	315.6	1	29	-2	2	35	-6					
SANTIAGO	6.72	217.9	1	40	2								
SANTA LUCIA	6.72	217.8	1	36	-2	2	54	-1					
LA PLATA	9.41	137.1	2	13A	-3	4	3	2					
LA PAZ	11.86	348.7	2	48	-1	4	51	-10					
AREQUIPA	12.85	334.3	2	49	-13								
HUANCAYO	18.41	328.9	4	15	2								
BOGOTA	33.61	344.8	6	42	4								
CARACAS	38.49	358.1	7	19K	0	13	9	-2					
SAN JUAN	46.31	359.5	8	20	-3						10	15	PP
N-LAZARVSKYA	59.56	158.0	10	2	1								
SOUTH POLE	61.96	180.0	10	18	1								
CUMBERLAND	66.16	342.4	10	43	-2						11	13	PCP
MORGANTOWN	68.77	348.2	11	1K	0								
FAYETTEVILLE	69.35	335.6	11	3	-2				11	9			
TULSA	69.79	334.3	11	6K	-1								
WICHITA MTS.	69.88	331.6	11	6	-2	20	16	3			11	37	PP
LUBBOCK	70.35	328.5	11	10	-1								
FLORISSANT	70.52	339.8	11	10	-2								
CLEVELAND	70.86	347.5	11	14K	0								
LAWRENCE	72.29	336.2	11	21	-1								
LONDON ONT.	72.30	348.2	11	21A	-2								
ALBUQUERQUE	73.67	326.0	11	31	0								
BREBEUF	73.70	354.2	11	31K	0								
TUCSON	73.85	321.3	11	32	0								
MADISON	74.57	342.0	11	35	-1								
SEVEN FALLS	75.11	356.4	11	38	-1								
GOLDEN	76.99	329.6	11	51	1								
MAWSON	77.10	162.1	11	52K	2								
KIMBERLEY	77.39	115.9	11	52A	0								
LARAMIE	78.39	330.5	11	58	1								
BOULDER CITY	78.64	321.3	11	58	-2								
UINTA BASIN	79.42	327.4	12	3A	0	22	36	37	12	16	15	8	PP
PASADENA	79.43	318.0	12	4	1								
RAPID CITY	79.70	333.5	12	5	1								
FLAMING GRGE	79.81	327.9	12	7	2								
EUREKA	82.01	323.1	12	17	0								
SCHEFFERVLLE	82.68	359.4	12	20	0								
LICK	83.67	318.4	12	26K	1								
RENO	84.14	321.0	12	35A	8								
BULAWAYO	84.36	109.7	12	29A	0								
BUTTE	85.22	329.3	12	33	0								
MINERAL	85.69	320.6	12	35A	0								
BLUE MTS.	86.58	326.1	12	40A	0	23	14	3					
BROKEN HILL	86.90	104.6	12	43	2								
HUNGRY HORSE	87.63	330.1	12	45	0								
TOLEDO	88.73	42.6	12	59	9								
PENTICTON	90.87	328.1	12	54	-6								
SEATTLE	91.02	325.6	12	56K	-5								

CHILEKA	91.81	108.7	13	8	4						
YELLOWKNIFE	98.45	339.3	13	33	-1						
COLLEGE	111.92	332.9	19	14	44					16	12
SHIRAZ	126.50	72.5	19	1A	3						
PORT MORESBY	130.94	225.1								22	33
ASHKABAD	132.75	63.1	19	14	4						
SVERDLOVSK	132.86	37.2	19	13	3						
TIKSI	135.78	353.4	19	9	-7						
QUETTA	138.86	75.4	19	17	-4						
WARSAK DAM	143.15	70.1	19	30	1						
FRUNSE	144.91	54.8	19	34A	2						
TANGERANG	145.04	166.6	19	35K	3						
ALMATA-2	146.78	53.2	19	38	3						
NEW DELHI	147.46	80.3	19	41K	5						
DEHRA DUN	148.40	77.3	19	42K	4						
Y.-SAKHLINSK	150.91	317.9	19	50K	8						
ESEN BULAK	156.95	33.2	20	23	33						
MATUSIRO	158.19	298.5	20	17	25						
ULAN-BATOR	159.49	14.3	19	57	4						

FEBRUARY 25 17.H 11.M 8.S EPICENTRE 24.23 123.16 DEPTH= 84.KM

A=-0.49940 B= 0.76420 C= 0.40816 D= 0.8371 E= 0.5470
G=-0.2233 H= 0.3417 K=-0.9129 HT= 3.6

DEPTH OF FOCUS= 0.008R

SE= 3.55

	DELTA DEG.	AZ. DEG.	P M	S	O-C S	S M	S	O-C S	*PP M	S	SUPP. M	S
ISIGAKIZIMA	0.92	83.8	0	12K	-7	0	22	-11				
MAWASHI	4.55	63.2	1	2K	-6	2	6	6				
ZO-SE	7.06	346.0	1	38A	-4							
BAGUIO CITY	8.14	197.8	1	54	-3	3	26	-2				
NANKING	8.70	334.6	2	1	-4	3	37	-5				
YAKUSIMA	8.99	44.9	2	7A	-2							
MANILA	9.71	192.0	2	17	-1	4	5	-2				
KAGOSIMA	9.80	40.1	2	17K	-3						2	40
NAGASAKI	10.32	33.4	2	22K	-5	3	40	-41				
UNZENDAKE	10.51	34.8	2	24	-5							
MIYAZAKI	10.57	41.7	2	5	-25						2	30
KUMAMOTO	10.82	36.0	2	34	1						4	41
SAGA	10.95	33.2	2	37	2							
ASOSAN	11.08	37.0	2	33	-4							
HUKUOKA	11.25	32.5	2	41	2	4	56	12				
OOITA	11.63	37.7	2	44	0	5	25	32				
ASHIZURI	12.09	43.4	2	51	1							
UWAZIMA	12.17	40.4	2	55	4							
MATUYAMA	12.73	39.1	2	59	0	5	42	23				
HIROSIMA	12.93	36.5	3	4	3	5	32	8				
HAMADA	13.15	34.0	3	4	0	5	34	5				
TAKAMATU	13.82	40.9	3	17	4	6	16	31				
SUMOTO	14.36	42.8	3	23	3	6	38	41				
OSAKA	14.94	43.2	3	32	5							
ABUYAMA	15.11	42.6	3	22A	-8							
TOYOOKA	15.12	39.2	3	35	5							
NARA	15.15	43.7	3	35	5							
KYOTO	15.31	42.5	3	39	7	6	31	11				
KAMEYAMA	15.67	44.5	3	47	10	6	45	17				
HIKONE	15.80	42.9	3	39	1							
SIAN	15.93	312.0	3	41A	1						3	58 *SP
NAGOYA	16.19	44.5	3	45	2						5	20
GIHU	16.21	43.5	3	51	8							
HUKUI	16.30	40.7	3	52	7							
HAMAMATU	16.41	47.1	3	41	-5							
PEKING	16.82	341.1	3	52	1	7	0	6			4	11 *SP
IIDA	16.96	45.1	3	51	-2							
HATIDYOZIMA	17.04	55.0	3	55	1							
TOYAMA	17.32	40.9	4	8	11							
MATUMOTO	17.50	43.4	4	2	3							
KOHU	17.52	45.9	3	58	-2							
AJIRO	17.53	48.4	3	56	-4	7	18	8				
NHATRANG	17.83	230.4	4	5	2							
MATUSIRO	17.83	43.1	3	57K	-7	7	6	-11				
NAGANO	17.91	42.7	4	9	5	7	23	5				

MERA	17.96	49.8	4	9	4					
YOKOHAMA	18.11	48.2	4	18	11					
MAEBASI	18.29	44.8	4	21	12					
TOKYO C.M.O.	18.32	47.7	4	20	11					
KUMAGAYA	18.34	45.9	4	7	-3					
KUNMING	18.58	277.0	4	16	4	7	46	13	4	33 *SP
UTUNOMIYA	18.90	45.6	4	22	6					
MITO	19.19	46.9	4	13	-6	7	40	-6		
SHIRAKAWA	19.46	44.7	4	15	-7	7	44	-6		
CHANGCHUN	19.63	4.6	4	10K	-14					
ONAHAMA	19.80	46.1	4	34	8					
HUKUSIMA	20.00	43.6							6	10
VLADIVOSTOK	20.17	18.8	4	25	-5					
YAMAGATA	20.23	42.3	4	29	-1					
LANCHOW	20.41	309.7	4	33A	1	8	19	8	4	55 PP
GUAM	23.03	113.8	4	58	0	9	6	8		
OBIHIRO	24.91	36.7							5	46
ULAN-BATOR	26.94	335.4	5	31	-4					
Y.-SAKHLINSK	27.59	29.6	5	38K	-3					
SHILLONG	28.39	279.3	5	47A	-1	10	31	4	6	2 PP
CHITTAGONG	28.82	272.7	5	55	3					
UGLEGORSK	28.91	26.1	6	54	61					
LHASA	29.08	287.8	5	56	2					
ESEN BULAK	30.91	322.4	6	9	-1	11	15	6		
PORT BLAIR	31.46	252.0	6	25	10				7	20 PP
CALCUTTA	31.94	274.1	6	25	6					
CHATRA	32.52	282.3	6	26A	2				11	39
BOKARO	34.06	277.1	6	38	6				12	3
TANGERANG	34.25	210.2	6	40A	1					
DARWIN	37.15	167.5	7	2	-2					
PETROPAVLOVK	39.26	33.7	7	17K	-4					
RABAUL	39.95	131.1	7	26	-1				18	57
DEHRA DUN	40.35	288.9	7	32A	1	13	39	7		
PORT MORESBY	40.82	142.1	7	34	0	13	42	3		
NEW DELHI	41.21	286.3	7	39A	1	13	48	3	9	41 PPP
ALMATA-2	41.95	308.4	7	50K	6					
MADRAS	42.08	262.5	7	47A	2	14	7	9	9	26 PP
LAHORE	43.49	290.9	7	57	1					
FRUNSE	43.86	307.3	7	59A	0					
ANDIJAN	45.27	304.0	8	12A	2					
WARSAK DAM	45.72	294.6	8	15	1					
KHOROG	45.73	299.4	8	15A	1	14	59	9		
POONA	46.08	272.9	8	18A	1	15	3	8		
BOMBAY	46.92	273.7	8	26	2	15	7	0	10	17 PP
TIKSI	47.54	2.4	8	24K	-4	15	9	-7		
TASHKENT	47.64	304.6	8	29A	0	15	26	9		
CHARTERS TS.	49.47	151.0	8	42	-1	15	46	3		
QUETTA	49.93	289.9	8	48	1	15	58	9		
SVERDLOVSK	55.08	323.5	9	23K	-2	16	54	-5		
ASHKABAD	56.15	300.5	9	33	0	17	21	7		
MUNDARING	56.28	187.1	9	33	-1	17	23	8		
BRISBANE	58.74	149.1	9	50A	-1				10	56
KOUMAC	59.87	134.6	9	58	-1					
ADELAIDE	60.70	165.4	10	4A	0					
TEHERAN	61.99	298.9	10	7	-6					
SHIRAZ	62.34	292.0	10	15A	0	18	39	5	10 46	12 29 PP
RIVERVIEW	63.58	154.1	10	24A	0	18	58	9	10 33	19 21 PS
CANBERRA	64.09	156.7	10	27A	0				11	2 PCP
TOOLANGI	64.96	160.5	10	32A	-1				10	48 *SP
KIROVOBAD	64.97	305.1	10	32A	-1					
GORIS	65.20	303.9	10	35A	1	19	17	8		
TIFLIS	65.89	306.6	10	40	1					
APATITY	67.79	335.5	10	49	-1	19	42	1	20	1
MOSCOW	67.87	322.5	10	49	-2					
COLLEGE	67.93	27.4	10	48	-3					
KEVO	69.60	338.3	11	0K	-2					
SODANKYLA	70.36	335.9	11	4	-2					
PULKOVO	70.78	327.6	11	8A	-1					
KAJAANI	70.82	332.4	11	7	-2					
TROMSOE	72.32	339.1	11	17	-1					
KIRUNA	72.47	337.2	11	17A	-2	20	32	-3		
NORD	72.47	354.3	11	15	-4					
SIMFEROPOL	72.65	311.9	11	19A	-1	20	39	2		
MOULD BAY	72.83	12.8	11	18	-3	21	16	37		
HELSINKI	73.24	328.9	11	22	-1					
NURMIJARVI	73.27	329.3	11	22A	-2	20	42	-2		
ALERT	73.45	0.8	11	22	-3					
UMEA	74.02	333.3	11	26	-2	21	0	8		
KSARA	74.80	300.5	11	35K	3					

KISHINEV	75.50	315.2	11	35	-1					
JERUSALEM	76.01	298.7	11	41A	2					
UPPSALA	76.77	330.0	11	42A	-2	21	20	-2		
SKALSTUGAN	77.32	334.6	11	45A	-2					
LWOW	77.46	319.1	11	46	-1					
ISTANBUL UN.	77.49	309.4	11	49	1					
RESOLUTE	78.32	9.6	11	50K	-2					
KARAPIRO	79.00	140.4	12	0A	4					
KARLSKRONA	79.39	327.1	11	52	-6					
KRAKOW	79.79	320.4	12	0	0				12	16 PCP
CHATEAU	79.86	141.3	12	0A	-1					
TUAI	80.52	140.1	12	2	-2					
SOFIA	80.74	312.6	12	8	3	22	36	31	15	16 PP
RACIBORZ	80.78	320.9	12	5	0				12	14 PCP
COPENHAGEN	81.17	327.6	12	8	1					
ADDIS ABABA	81.27	276.0	12	11	3					
GEBBIES PASS	81.42	146.1	12	9	0					
YELLOWKNIFE	82.22	23.4	12	11K	-2					
BRATISLAVA	82.29	319.5	12	13A	0				13	59
SCORESBY SD.	82.38	348.8	12	25	11					
ATHENS	82.43	308.1	12	13K	-1					
PRUHONICE	82.90	321.9	12	16	0					
COLLMBERG	83.10	323.6	12	15A	-2				15	26
HALLE	83.56	324.1	12	18	-2				13	7
KASPERSKE H.	83.87	321.5	12	21	0					
JENA	84.06	323.7	12	21	-1				15	36 PP
LJUBLJANA	84.86	318.5	12	26A	0					
MUNSTER	85.58	326.0	12	31	1					
VICTORIA	86.35	37.7	12	33K	-1					
BENSBERG	86.38	325.3	12	33A	-1					
HEIDELBERG	86.43	323.4	12	34	0					
STUTTGART	86.47	322.7	12	34	0					
EBINGEN	86.97	322.3	12	36	-1					
STRASBOURG	87.41	323.1	12	39K	0				13	25
SEATTLE	87.46	38.0	12	43	4					
PENTICTON	87.97	35.6	12	41	0					
MESSINA	88.07	311.3	12	33	-9	23	15	-2		
DOURBES	88.22	325.5	12	46	3					
WELSCHBRUCH	88.28	323.5	12	41	-2				13	10
BANFF	88.94	32.6	12	45	-1					
ROSELEND	89.70	321.2	12	49	-1				13	54
SPOKANE	90.14	36.0	12	53	1	23	38	2		
ISOLA	90.32	319.8	12	53	1				13	13
GARCHY	90.73	323.9	12	54K	0				15	9
WILKES	90.80	185.1	12	58	3					
HUNGRY HORSE	91.48	34.1	12	58	0			13	14	
CLERMONT-FD.	91.63	322.7	12	58	-1					
BLUE MTS.	91.90	38.3	13	0	0	24	2	11	16	19 PP
MINERAL	91.96	43.8	13	1K	1					
CALISTOGA	92.29	45.6	13	16K	14					
BERKELEY	92.92	46.1							17	11
LICK	93.63	46.3	13	9A	1					
BUTTE	93.75	35.2	13	8	0					
BOZEMAN	94.78	34.8	13	13	0					
LWIRO	94.90	269.7	13	16K	3				26	18 PPS
PRIEST	94.95	46.8	13	13A	-1					
EUREKA	95.97	41.9	13	26	2				17	29 PP
BOULDER CITY	98.84	44.1	13	35	4				17	44 PP
FLAMING GRGE	98.87	37.5	13	34	2					
UINTA BASIN	99.18	38.1	13	35	2	24	8	6	17	36 PP
TOLEDO	99.45	321.6	13	34	0					
TUCSON	103.77	44.9	18	4	251			18	19	
ALBUQUERQUE	104.66	40.3	18	15	258					
WICHITA MTS.	109.24	35.5	14	38	777				18	55 PP
CUMBERLAND	114.58	25.5	18	35	5					
CARACAS	144.10	17.1	19	26K	0				19	43 PKP2
TRINIDAD	145.05	7.8	19	28	1					
AREQUIPA	164.24	63.3	19	58	5					

FEBRUARY 25 23.H 45.M 21.S EPICENTRE 15.58 121.49 DEPTH= 61.KM

A=-0.50345 B= 0.82178 C= 0.26685 D= 0.8527 E= 0.5224
G=-0.1394 H= 0.2275 K=-0.9637 HT= 5.6

DEPTH OF FOCUS= 0.004R

SE= 1.17

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S
MANILA	0.99	203.9	0	12	-6	0	24	-8				
BAGUIO CITY	1.21	313.8	1	16	55	1	31	53				
NHATRANG	12.38	255.9	2	49	-7						3	1 PP
ZO-SE	15.45	359.0	3	34	-1							
NANKING	16.59	351.9	3	50A	0							
KUNMING	19.96	301.4	4	30	1	8	17	12				
SIAN	21.77	330.9	4	49A	1	8	54	14				
ABUYAMA	23.00	30.8	5	1A	1							
PEKING	24.80	350.2	5	18A	1	9	44	11				
MATUSIRO	25.64	32.4	5	24	-1	10	4	17				
LANCHOW	25.77	325.6	5	26A	0	10	7	18				
TANGERANG	26.15	215.4	4	49A	-41							
SHILLONG	29.40	294.6	5	57K	-2							
LHASA	31.29	301.8	6	18	2							
CHATRA	33.80	295.1	7	37K	59							
ULAN-BATOR	34.43	342.6	6	42	-1							
ESEN BULAK	37.26	330.8	7	8	1	12	55	5				
IRKUTSK	39.07	343.3	7	22A	0							
MADRAS	40.07	271.8	7	30	-1	13	39	7			9	10 PP
CHARTERS TS.	43.00	144.7	7	54	-1							
POONA	45.54	280.8	8	15A	0							
LAHORE	45.70	299.0	8	15	-1							
ALMATA-2	46.56	315.5	8	24K	1							
FRUNSE	48.29	314.0	8	37	0	15	37	6				
KHOROG	49.09	306.3	8	44K	1	15	48	6				
ANDIJAN	49.26	310.7	8	47	3	15	53	9				
TASHKENT	51.66	310.6	9	2K	0	16	25	7				
QUETTA	51.86	296.3	9	3	-1	16	26	6				
BRISBANE	52.40	144.3	9	7	-1							
ADELAIDE	52.86	162.2	9	12	1							
TIKSI	56.21	2.8				17	23	4				
CANBERRA	56.95	153.2	9	43	2							
TOOLANGI	57.48	157.5	9	44	-1						10	34 PCP
ASHKABAD	59.50	305.1	9	59	0	17	23	-39				
SVERDLOVSK	61.26	326.8	10	9K	-2	18	29	5				
SHIRAZ	64.38	295.7	10	31K	0	19	8	4	11	4	20	4 *SS
KIROVOBAD	68.84	307.9	10	59K	-1	20	1	4				
GORIS	68.90	306.7	11	0K	0							
KHEYS	70.49	351.0	11	10	0							
APATITY	75.00	336.6	11	35A	-1							
COLLEGE	76.33	26.1	11	45	1							
KEVO	77.06	339.1	11	49	1							
PULKOVO	77.28	328.8	11	48A	-1							
SODANKYLA	77.62	336.7	11	50	-1							
KAJAANI	77.77	333.3	11	51	-1							
VIBORG	77.87	329.9	11	53	1							
JERUSALEM	78.86	300.0	11	58	0							
KIRUNA	79.82	337.8	12	3	0							
HELSINKI	79.84	329.7	12	3	0							
NURMIJARVI	79.91	330.1	12	3	-1	22	1	0				
UMEA	81.04	333.9	12	8	-2	22	14	2				
MOULD BAY	81.57	12.2	12	13	1							
UPPSALA	83.47	330.4	12	22	0							
SKALSTUGAN	84.45	334.9	12	25	-2							
KRAKOW	85.44	320.7	12	32	0						12	55
SOFIA	85.44	312.9	12	35	3						16	14 PP
KARLSKRONA	85.79	327.3	12	36	2							
RESOLUTE	87.08	9.1	12	40	0							
BRATISLAVA	87.83	319.5	12	43	0						13	53
PRUHONICE	88.71	321.8	12	46	-2						13	26
COLLMBERG	89.09	323.5	12	50	1							
KASPERSKE H.	89.63	321.3	12	51	-1						13	49
BLUE MTS.	99.64	38.1	13	51	13							

FEBRUARY 26 20.H 14.M 10.S EPICENTRE -7.60 146.20 DEPTH= 182.KM

A=-0.82375 B= 0.55152 C=-0.13136 D= 0.5563 E= 0.8310
G= 0.1092 H=-0.0731 K=-0.9913 HT= 6.8

DEPTH OF FOCUS= 0.024R

SE= 1.57

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
PORT MORESBY	2.02	152.3	0	36A	-2								
RABAUL	6.83	60.7	1	40A	1	2	46	-10					
CHARTERS TS.	12.42	179.7	2	52	1	5	10	4					
HONIARA	13.72	98.6	3	8	0	5	16	-20					
BRISBANE	20.65	163.2	4	26	-1						11	53	SCP
GUAM	20.97	356.0	4	29	-1								
KOUMAC	21.73	128.2	4	37K	0								
PORT VILA	23.79	117.1	4	57K	0								
NOUMEA	24.37	129.0	5	1K	-2						10	16	
RIVERVIEW	26.50	170.7	5	22K	0	9	43	2	5	59	6	14	PP
CANBERRA	27.71	175.1	5	34K	1	10	2	2	6	10	11	14	*SS
ADELAIDE	28.09	193.1	5	37A	0	10	6	-1			6	25	PP
TOOLANGI	29.84	181.1	5	52A	0	10	37	3	6	26	6	58	PP
MANILA	33.32	311.6	6	22	0	11	32	4					
BAGUIO CITY	34.82	313.4	6	33	-2	11	50	-2			16	38	SCS
PERTH	37.22	225.3	6	55	0	12	46	18	7	35	7	57	*SP
ONERAHI	38.08	141.5	7	4	1	12	45	4			16	58	SCS
TORISIMA	38.28	351.8				12	37	-7			8	42	
HENGCHUN	38.57	320.2	7	4	-3								
TAWU	38.73	320.8	7	7	-1	12	48	-3					
TAITUNG	38.87	321.5	7	10	1								
HSINKONG	39.00	322.1	7	11	1								
DJAKARTA	39.10	269.5	7	7	-4	12	49	-7					
TANGERANG	39.30	269.5	7	10A	-3						12	46	
HWALIEN	39.50	323.3	7	18A	4	13	8	6					
YUSHAN	39.54	322.0	7	17	2	12	30	-33					
TAINAN	39.63	320.7	7	15	0								
ALISHAN	39.66	321.9	7	15	-1								
RAOUL ISLAND	40.03	127.2	7	18	-1								
TAICHUNG	40.20	322.4	7	20	0								
KARAPIRO	40.20	143.1	7	21K	1						10	7	PCP
TAIPEI	40.37	324.2	7	21	0	13	13	-2					
TARATA	40.38	145.5	7	24K	2								
PENGHU	40.44	320.6	7	28	6								
HSINCHU	40.51	323.4	7	1	-22								
YAKUSIMA	40.72	339.0	7	25	1	13	21	0					
COBB RIVER	40.84	148.9	7	26	1						13	27	PCS
TONGARIRO	41.04	144.6	7	30	3	13	31	6			16	58	SS
NHATRANG	41.71	297.9	7	31	-1				8	12			
AFIAMALU	41.71	102.3	7	33K	1	13	40	5					
KAGOSIMA	41.72	339.8	7	33A	1	13	36	1					
TUAI	41.73	142.9	7	33K	0	13	48	13			12	59	SCP
MIYAZAKI	41.75	341.0	7	34	1	13	38	2					
SIOMISAKI	42.01	346.9	7	35A	0	13	39	0					
ASHIZURI	42.02	343.3	7	35	0	13	38	-2					
WELLINGTON	42.06	147.4	7	35	0						13	40	PCS
MUROTO	42.20	344.9	7	37A	1	13	40	-2			16	40	SS
OWASE	42.51	347.7	7	39	0								
UWAZIMA	42.63	343.0	7	40	0	13	48	0					
OSIMA	42.63	351.7	7	40A	0	13	47	-1					
OMAESAKI	42.64	350.3	7	39	-1	13	47	-2					
KOTI	42.65	344.3	7	41	1	13	48	-1			16	57	SCS
ROXBURGH	42.71	156.0	7	39K	-2	13	48	-2			14	50	*SS
MERA	42.71	352.3	7	40A	-1	13	47	-3					
GEBBIES PASS	42.76	151.6	7	41	0				8	23	17	21	SCS
ASOSAN	42.77	341.1	7	42	1								
TSURUGISAN	42.81	345.0									9	42	
KUMAMOTO	42.82	340.7	7	41K	0	13	50	-1					
HAMAMATU	42.84	349.7	7	41	-1	13	42	-10					
WAKAYAMA	42.89	346.5	7	42	0	13	51	-1					
OOITA	42.90	341.9	7	43A	1	13	54	2			17	15	SCS
AJIRO	42.94	351.4	7	41	-1	13	50	-3					
SHIZUOKA	42.97	350.6	7	44	1	13	52	-1					
NAGASAKI	43.01	339.7	7	42A	-1	13	54	0					
MISIMA	43.03	351.3	7	41K	-2	13	50	-4					
TU	43.05	348.3	7	45	2								
SUMOTO	43.06	346.3	7	45A	2	13	54	-1			17	11	
MATUYAMA	43.13	343.6	7	46	2	13	56	0					
NARA	43.18	347.5	7	44	0								

KAMEYAMA	43.21	348.3	7	35A	-10	13	56	-1		
OSAKA	43.21	347.1	7	45	0	13	57	0		
YOKOHAMA	43.24	352.2	7	45K	0	13	58	1		
TAKAMATU	43.25	345.3	7	45A	0	13	57	0		
KOBE	43.32	346.7	7	45	0	13	56	-2		
HIMEJI	43.33	345.8	7	47K	2	14	1	2		
SAGA	43.34	340.5	7	47K	1	14	3	4		
HUKUE	43.35	338.5	7	46	0	14	0	1		
TYOSI	43.38	353.7	7	46A	0	13	59	0		
ABUYAMA	43.42	347.3	7	45A	-1					
NAGOYA	43.42	349.0	7	46A	0	13	59	-1		9 13 PP
HUNATU	43.43	351.2	7	46	0	13	59	-1		
TOKYO C.M.O.	43.47	352.4	7	46	-1	13	50	-11		
HONGO	43.50	352.4	7	50	3	14	1	0		
KYOTO	43.53	347.5	7	48A	1	14	0	-1		17 19 SCS
IIDA	43.61	350.1	7	47	-1	14	2	-1		
HUKUOKA	43.62	340.7	7	49A	1	14	4	1		
OKAYAMA	43.62	345.3	7	48	0					
KOHU	43.63	351.0	7	48K	0	14	1	-2		
HIKONE	43.66	348.2	7	49	1	14	4	1		
GIHU	43.68	348.8	7	49	1	14	1	-3		
HIROSIMA	43.73	343.5	7	48A	-1	14	3	-1		17 29 SS
SIMONOSEKI	43.78	341.6	7	49	0					
TITIBU	43.86	351.7	7	50	0	14	5	-1		
TUKUBASAN	43.96	352.9	7	49K	-2	13	54	-14	8 26	8 50 PP
KAKIOKA	43.96	353.0	7	50	-1	14	6	-2		
KUMAGAYA	43.98	352.0	7	51K	0	14	7	-1		
MAIZURU	44.03	347.3	7	51A	0	14	7	-2		17 31
TSURUGA	44.06	348.1	7	51	0					
MITO	44.07	353.4	7	52K	1	14	9	0		
TOYOOKA	44.22	346.7	7	54	1	14	11	0		17 32
MAEBASI	44.27	351.8	7	52A	-1	14	10	-2		
OIWAKE	44.28	351.1	7	54	1	13	10	-62		
MATUMOTO	44.29	350.5	7	53A	0	14	13	0		
CANTON	44.31	314.3	7	55A	2	14	15	2	8 34	15 26 *SS
UTUNOMIYA	44.31	352.7	7	53	0	14	11	-2		
TAKAYAMA	44.32	349.6								9 53
HAMADA	44.33	343.3	7	52A	-1	14	13	0		9 9 PP
TOTTORI	44.35	345.9	7	53	-1	14	12	-1		
HUKUI	44.42	348.4	7	54	0					8 19
YONAGO	44.48	345.0	7	54A	-1	13	14	-61		
MATUSIRO	44.54	350.8	7	54A	-1	14	6	-10		
ITUHARA	44.55	339.9	7	56A	1	14	16	0		
MATSUE	44.57	344.7	7	57	2	14	17	1		
ONAHAMA	44.59	354.0	7	56K	0	14	16	-1		
NAGANO	44.67	350.8	7	57	1	14	18	0		8 53 PP
KANAZAWA	44.80	349.1	8	0	3					
SHIRAKAWA	44.83	353.2	7	57	0	14	20	0		
TOYAMA	44.86	349.7	7	58A	0	14	21	0		17 45
TAKADA	45.08	351.0	8	0	1	14	19	-5		
SAIGO	45.21	345.3	8	1	1	14	24	-2		
ZO-SE	45.33	329.3	8	2A	1	14	29	2		9 3 *SP
HUKUSIMA	45.43	353.6	8	2	0	14	26	-3		
WAZIMA	45.58	349.6	8	6	3	14	30	-1		17 41
NIIGATA	45.77	352.1	8	20	15					
SENDAI	45.90	354.2	8	5K	-1	14	33	-2		17 59
YAMAGATA	45.94	353.6	8	6K	0	14	36	0		
AIKAWA	45.98	351.3	8	7	0	14	36	-1		
ISINOMAKI	46.02	354.7	8	7K	0	14	37	0		
SAKATA	46.64	353.2	8	13	1	14	49	3		
MIZUSAWA	46.73	354.6	8	12	0	14	33	-14		
MIYAKO	47.17	355.5	8	15	-1	14	52	-1		
MORIOKA	47.29	354.7	8	17	0	14	55	0		8 57
NANKING	47.33	327.9	8	18A	1					
AKITA	47.42	353.6	8	21	3	14	59	2		
HATINOHE	48.08	355.2	8	23K	0	15	7	1		
AOMORI	48.43	354.5	8	26K	0	15	12	1		17 58 SCS
HAKODATE	49.42	354.6	8	33K	0	15	25	0		
HIROO	49.71	357.2	8	34	-1	15	24	-5		
MORI	49.72	354.5	8	34	-1	15	28	-1		
MURORAN	49.90	354.9	8	33K	-4	15	28	-3		
TOMAKOMAI	50.16	355.6	8	39	0					
OBIHIRO	50.35	357.1	8	36	-4					
KUSIRO	50.36	358.3	8	40K	0	15	39	1		
SUTTSU	50.45	354.3	8	41A	0	15	36	-3		
SAPPORO	50.62	355.4	8	41K	-1	15	39	-2		9 22 PP
NEMURO	50.69	359.4	8	42	-1	15	43	1		
ASAHIGAWA	51.25	356.4	8	46A	-1	15	49	-1		

ABASHIRI	51.40	358.2	8	48	0	15	55	3				
RUMOE	51.47	355.8	8	48	-1							
VLADIVOSTOK	52.13	346.8	8	53A	0	16	4	2	9	33		
WAKKANAI	52.93	356.0	8	59K	0	16	12	-1				
KUNMING	53.35	309.0	9	4A	1	16	23	5	9	45	17	37 *SS
Y.-SAKHLINSK	54.46	357.1	9	9K	-2	16	33	0	9	51	12	28 PPP
SIAN	54.56	322.0	9	13A	2							
CHANGCHUN	54.57	341.5	9	16A	-1	16	34	-1	8	52	17	50 *SS
PEKING	54.91	332.0	9	13A	-1	16	40	1	9	48		
CHENGTU	55.51	315.4	9	17A	-1	16	50	3	9	55	10	18 *SP
PORT BLAIR	56.53	289.3	9	25	0						12	8 PP
LANCHOW	58.90	320.4	9	42A	0	17	35	3	10	24	18	51 *SS
CHITTAGONG	61.00	300.6	9	56	0	18	3	5				
PETROPAVLOVK	61.31	8.5	9	57K	-1	18	3	1			10	37 PCP
HONOLULU	61.74	61.0	10	1	0	18	12	4				
KIPAPA	61.85	60.9	10	2	0	18	15	6				
SHILLONG	62.24	304.0	10	4A	-1	18	15	1	11	8	12	16 PP
WILKES	63.56	195.2	10	13	0	18	31	1	10	38		
CALCUTTA	64.02	299.5	10	16	0	18	39	3	11	19	12	46 PP
LHASA	64.63	307.7	10	21A	1	18	49	5			19	59 *SS
ULAN-BATOR	65.24	332.0	10	24	0	18	31	-20				
CAPE HALLETT	66.30	172.2	10	32	1							
CHATRA	66.61	303.4	10	32A	-1	19	4	-4			12	38 PP
BOKARO	66.69	299.9	10	32A	-1	19	8	-1				
VISHAKHAPTNM	67.00	292.8	10	37K	2	18	25	-47			13	0 PP
MAGADAN	67.03	2.5	10	28	-7	19	7	-6	11	17	12	59 PP
MADRAS	68.69	287.1	10	45A	-1	19	34	2			13	2 PP
IRKUTSK	69.51	334.0	10	51A	0	19	46	4				
ESEN BULAK	69.72	325.6	10	52	0	19	44	0				
YAKUTSK	70.58	351.8	10	56K	-1							
KODAIKANAL	70.68	283.6	10	54	-4							
HYDERABAD	71.38	291.2	11	5A	3	20	6	2			13	27 PP
SEHORE	74.11	296.6	11	19	1	20	36	2				
KERGUELEN I.	75.24	221.0	11	25	1	20	52	5				
DEHRA DUN	75.34	303.9	11	26A	1	21	51	63			14	26 PP
NEW DELHI	75.52	302.0	11	26A	0	20	51	1	12	2	14	15 PP
POONA	75.89	291.2	11	27A	-1	20	55	1			14	6 PP
BOMBAY	76.93	291.4	11	34	0	21	7	2	12	31	15	7 PP
LAHORE	78.75	304.2	11	44	0	21	25	1				
TIKSI	79.89	354.5	11	49K	-1	20	34	-62			12	21
MAWSON	80.47	202.7	11	52A	-1	21	45	3				
WARSAK DAM	81.67	305.9	11	59	0							
FRUNSE	81.87	315.2	12	1A	1	22	0	3			23	14 PS
SOUTH POLE	82.45	180.0	12	3	0							
KHOROG	82.59	309.3	12	5A	1	22	6	2			13	8
BYRD STATION	83.31	169.9	12	8	0							
TASHKENT	85.26	312.6	12	18A	1	22	33	3			22	25
COLLEGE	86.93	23.0	12	23	-2	22	30	-16			16	2
SITKA	90.11	32.4	12	41	1	22	56	-19				
ASHKABAD	92.92	307.7	12	54	1							
SVERDLOVSK	93.88	326.7	12	56K	-2	23	11	-37				
CALISTOGA	95.64	51.9	13	6K	0				13	50	16	58
BERKELEY	95.82	52.7	13	8K	1				13	48	17	0
VICTORIA	95.88	41.9	13	7K	0							
N-LAZARVSKYA	96.07	193.8	13	7	-1	24	3	38	13	55	17	0 PP
LICK	96.27	53.2	13	10K	1				13	54	17	4
MINERAL	96.54	50.2	13	10K	0				13	52	17	4
SHIRAZ	96.89	299.0	13	2	-9	23	57	27	13	14	16	40 PP
PRIEST	96.96	54.5	13	13K	1							
KHEYS	97.14	350.5	13	11	-2				13	59	16	5 PS
RENO	97.86	51.1	13	18K	2				14	0	17	16
TEHERAN	98.28	305.0	13	17	-1	23	51	14			17	23 PP
MOULD BAY	98.40	14.0	13	16K	-2							
PENTICTON	98.43	41.3	13	18K	0							
PASADENA	98.86	56.6	13	21	1	23	43	3	14	0	17	19 PP
BLUE MTS.	99.91	45.8	13	25K	0	23	47	2	14	9	17	24 PP
EUREKA	100.82	51.3	13	30	1				14	9	17	21 PP
YELLOWKNIFE	100.95	27.8	13	29K	-1							
BANFF	101.06	39.4	13	29K	-1							
BOULDER CITY	101.67	54.9	13	34	1	23	57	4	14	19	17	38 PP
HUNGRY HORSE	102.13	42.3	13	34	-1	23	57	2	14	19	17	41 PP
GORIS	102.40	308.7	13	36A	0						17	48 PP
BUTTE	103.23	44.6	13	40	0	24	4	3	14	24	17	53 PP
TIFLIS	103.52	311.0				24	1	-1			25	17 S
SALT LAKE C.	103.97	50.0	13	44	1	24	5	1	14	24	17	53 PP
ALERT	104.18	3.7	13	43A	-1							
BOZEMAN	104.31	44.9	13	46	1	24	12	7	14	30	18	3 PP
RESOLUTE	104.72	13.9	13	45K	-1							

TUCSON	104.97	58.7	13	49	1	24	14	6			20	22 PPP
APATITY	105.58	338.4	13	50A	777	24	11	0	14	47	18	13 PP
UINTA BASIN	105.73	50.3	13	51K	777	24	16	4	14	35	18	9 PP
FLAMING GRGE	105.82	49.7	13	52	777						17	59 PP
MOSCOW	106.67	326.0	13	54A	777				14	48	18	14 PP
KEVO	106.94	341.5	13	55K	777	24	17	0			18	16 PP
CHANGALANE	107.71	239.4	14	2	777	24	26	6	14	44	18	34 PP
CHILEKA	108.08	250.8	14	1K	777						18	6 PP
SODANKYLA	108.09	339.3	13	59	777	24	20	-2			18	26 PP
ADDIS ABABA	108.28	277.0	14	5	777							
ALBUQUERQUE	108.52	55.8	14	5	777							
MAZATLAN	108.92	68.2									22	26
KAJAANI	109.01	335.9	14	5	777	24	23	-3			18	38 PP
CHIHUAHUA	109.14	62.4	18	0	777						23	50
PULKOVO	109.40	331.1	14	7A	777						18	44 PP
TROMSOE	109.47	342.8	14	6	777						18	42 PP
KIRUNA	109.97	340.9	14	8A	777	24	23	-7			18	39 PP
RAPID CITY	110.03	45.9	14	12	-237							
SIMFEROPOL	110.92	315.2	18	13	2	24	35	1			18	53 PP
KSARA	111.06	303.2	14	16A	-235	24	24	-10	15	15	18	31 PP
NURMIJARVI	111.76	333.0	14	16	-237	24	37	0			18	58 PP
HELSINKI	111.76	332.6	14	17	-236						18	49 PP
GUADALAJARA	111.77	70.8									19	0
JERUSALEM	111.78	301.1	14	18	-235						18	16 PP
UMEA	112.08	337.2	18	14	1	24	31	-8	19	0	18	58 PP
BULAWAYO	112.73	244.5	14	22K	-233						18	16 PP
KIMBERLEY	113.01	234.5	14	15	-240							
BROKEN HILL	114.47	250.4	14	30K	-228						18	21 PP
HERMANUS	114.77	226.7				24	57	8			19	19 PP
WICHITA MTS.	114.98	55.3	18	20	1	24	52	2			19	22 PP
SKALSTUGAN	115.16	339.1	18	20A	1	24	46	-4	19	6	14	32 P
UPPSALA	115.17	334.1	18	19	0	24	48	-2	19	5	19	18 PP
ISTANBUL UN.	115.39	311.9	18	22A	2						19	26 PP
TACUBAYA	115.65	72.2									19	11
LWOW	116.23	322.3	14	37	-225						19	31 PP
SCORESBY SD.	116.73	355.6	18	25	2							
LWIRO	116.79	263.6	14	42A	-221	25	7	11	15	31	19	33 PP
TULSA	117.04	53.6	14	43	-220	25	0	3			19	2 PP
WARSAW	117.06	325.6	18	24	1						19	30 PP
KARLSKRONA	118.03	331.2	14	46A	-219						19	43 PP
FAYETTEVILLE	118.28	53.1	18	27	2	25	3	1			19	42 PP
VERA CRUZ	118.56	72.3									20	54
KRAKOW	118.59	323.7	18	27	1						14	48 P
KONGSBERG	118.60	336.6	18	29	3	25	4	1			19	44 PP
SKALNATE PL.	118.75	322.7	18	28	2	27	22	139	19	23	19	55 PP
GOTEBORG	118.82	333.9	18	27	0				19	14	19	49 PP
CHORZOW	119.03	324.2	18	17	-10						19	58 PP
SOFIA	119.04	314.9	18	33	6	25	7	3	19	56	19	52 PP
TIMISOARA	119.45	318.8	18	30	2						21	53
RACIBORZ	119.58	324.3	18	27	-1						19	57 PP
MADISON	119.64	44.0	18	28K	0						19	46 PP
COPENHAGEN	119.77	331.9	14	54	-214							
ATHENS	120.08	309.6	14	53A	-216						15	56
BELGRADE	120.30	318.0	18	32	3						19	54 PP
HURBANOVO	120.53	322.0	18	35	5						22	49 PPP
SKOPJE	120.60	314.6	18	30	0						20	3
BRATISLAVA	121.07	322.7	18	33	2						21	44
VIENNA-H.	121.47	323.0	15	0	-212	27	52	160			19	57 PP
CHICAGO CGS.	121.68	45.2	18	32	0							
PRUHONICE	121.71	325.5	15	3	-209	27	50	157			29	52 SP
PRAGUE	121.73	325.6	18	33	1	27	50	157			29	10
COLLMBERG	121.89	327.4	15	3	-209	27	49	155				
TITOGRAD	121.96	315.8	18	46	13						20	15 PP
SARAJEVO	121.99	317.6	18	36	3						22	29
HALLE	122.34	328.0	18	35	2	25	19	4				
KASPERSKE H.	122.68	324.9	18	35	1				19	23	20	4 PP
ZAGREB	122.79	320.6	18	37K	3						20	23 PP
JENA	122.84	327.6	18	36	2	27	56	159	19	23	20	16 PP
REYKJAVIK	122.93	353.8	18	37	3				19	23	21	56
LJUBLJANA	123.60	321.4	18	37A	1				19	24	20	23 PP
TARANTO	124.08	314.2									37	18 SS
WITTEVEEN	124.20	331.6	18	39	2				19	25	20	23 PP
TRIESTE	124.26	321.2	18	39K	2	28	11	170	19	25	20	25 PP
MUNSTER	124.27	330.3	18	40	3							
MERIDA	124.56	69.9									20	5
ABERDEEN	124.72	339.6									30	58 PS
BENSBERG	125.11	329.5	18	40A	1				19	29	20	29 PP
CUMBERLAND	125.18	51.6	18	39	0	25	25	1	19	24	20	27 PP
HEIDELBERG	125.22	327.3	18	40	1						15	21 P

STUTTGART	125.28	326.4	18	28	-11						20	33 PP
DE BILT	125.36	331.6									20	35 PP
TUBINGEN	125.53	326.2	18	32	-8						20	35 PP
PADOVA	125.53	321.7	19	10	30	25	30	5			20	30 PP
RAVENSBURG	125.63	325.2	18	41	1							
EBINGEN	125.78	325.9	18	42	2							
CLEVELAND	126.00	43.4	18	42K	2	25	29	2			20	35
SCHEFFERVLLE	126.05	22.9	18	35	-5							
REGGIO CALA.	126.10	312.1	18	43	2						20	38 PP
MESSINA	126.13	312.3	18	42K	1	25	31	4	19	23	20	42 PP
STRASBOURG	126.21	326.9	18	43	2				19	24	20	40 PP
SANTA LUCIA	126.25	141.6	18	42	1						19	30
DURHAM	126.37	337.4	18	42	1	28	10	162	19	28	20	42 PP
ROME	126.79	317.6	18	45	3						20	44 PP
DOURBES	126.93	330.0	18	48	6				19	35		
WELSCHBRUCH	127.07	327.4	18	43	1						20	43 PP
PAVIA	127.29	322.7									20	42 PP
OTTAWA	127.80	36.6	18	31	-13							
MORGANTOWN	127.87	44.9	18	45A	1						21	26 SKP
BANDEIRA	128.22	244.4	18	47A	2				19	35	20	51 PP
KEW	128.29	333.9	18	46	1	28	42	189	19	35	20	52 PP
ROSELEND	128.51	324.5	18	47	2						21	2 PP
PARIS	128.81	329.9									21	52 PP
SHAWINIGAN	128.83	33.9	18	34	-12							
BREBEUF	128.97	35.4	18	34K	-12	25	36	1	19	32	25	48 PP
ISOLA	129.10	322.7	18	48	2						20	59 PP
MONACO	129.12	322.0	18	48	2						20	58 PP
COLUMBIA	129.23	51.9	18	49	2							
GARCHY	129.51	328.0	18	50	3						21	52 PP
SEVEN FALLS	129.53	32.2	18	27	-20							
CUGLIERI	130.21	317.5									28	40
FOLINIERE	130.28	331.5	18	35	-14							
LUANDA	130.36	251.6	18	51A	2				19	38	20	2 PP
CLERMONT-FD.	130.43	326.5	18	51	2						22	9 PP
PALISADES	131.27	40.4	18	36	-13	25	39	-2			15	42 P
ANTOFAGASTA	132.60	132.0	18	46	-7						22	8
BARCELONA	133.65	322.4									22	18
HUANCAYO	134.33	115.0	18	49	-7							
HALIFAX	134.94	30.1	18	44	-13							
TORTOSA	134.99	322.8	18	52	-5						20	34 PP
HOPE	136.96	71.8	18	54	-7							
ALICANTE	137.09	320.6	18	55A	-6	25	42	-10			21	46 PP
TOLEDO	138.26	325.0	18	54	-9	26	5	11	19	46	21	54 PP
CHINCHINA	138.36	91.1	18	48A	-16						22	18 PP
LA PAZ	138.44	125.4	18	56	-8						21	58
GALERAZAMBA	138.97	82.3	19	15	10							
GRANADA	139.76	321.5	19	26A	20	26	2	6			22	0 PP
BOGOTA	139.86	91.8	18	52	-14						23	32 PKS
FUQUENE	140.29	90.6	18	56	-11							
LISBON	141.87	328.1									22	21 PP
AVERROES	144.64	320.3	19	9A	-6				19	51	22	34 PP
SAN JUAN	146.80	68.0	19	21	2				20	8	22	42 SKP
CARACAS	147.17	82.4	19	20K	1						29	27 SKKS
PONTA DELGDA	149.11	347.4	19	26	4				20	16	22	56 PKS
ST. KITTS	150.18	68.3	19	28	4							
ST. CLAUDE	151.47	70.4	19	29	3							
FORT FRANCE	152.27	72.8	19	29	2						23	11 PP
TRINIDAD	152.59	81.6	19	30	3							

FEBRUARY 27 4.H 30.M 0.S EPICENTRE -5.95 149.32 DEPTH= 22.KM

A=-0.85543 B= 0.50758 C=-0.10299 D= 0.5103 E= 0.8600
G= 0.0886 H=-0.0526 K=-0.9947 HT= 7.0

SE= 3.80

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S
PORT MORESBY	4.04	211.9	1	2K	-1	1	49	-1				
CHARTERS TS.	14.36	191.7	3	22K	-2	6	5	1				
DARWIN	19.33	249.4	4	24	-3	7	49	-9				
GUAM	19.81	346.8	4	37	5							
KOUMAC	20.54	136.4	4	39K	-1							
BRISBANE	21.57	171.6	4	47	-3	8	46	3				
PORT VILA	21.95	123.9	4	53K	-1	8	56	6				
NOUMEA	23.20	136.2	5	3	-4	9	22	9				

RIVERVIEW	27.79	176.7	5	50K	0	10	18	-12	5	58	6	27 PP
CANBERRA	29.23	180.5	6	uA	-3	10	47	-6			6	54 PP
ADELAIDE	30.49	197.3	6	11	-3	11	8	-5			7	30 PP
TOOLANGI	31.67	185.8	6	22	-2	11	24	-7			8	26
MANILA	34.69	306.4									7	21
SAVANNAH	35.67	182.7	7	2	3							
BAGUIO CITY	36.09	308.4	7	0	-2	12	46	6			9	13 *SPP
TARRALEAH	36.29	183.6	7	4	0							
MOORLANDS	36.39	182.7	7	4	-1							
AFIAMALU	39.08	104.7	7	26A	-1	13	27	1				
KARAPIRO	39.77	146.9	7	33	0						9	18 PP
MUNDARING	40.32	225.8	7	36	-2	13	36	-8				
PERTH	40.58	226.1	7	46	6	13	49	1			9	10 PP
TUAI	41.27	146.4	7	49	3						9	18 PP
WELLINGTON	41.87	151.0	7	53	2						9	30 PP
DJAKARTA	42.24	267.4	8	0	6						8	35
TANGERANG	42.44	267.4	7	55	0							
ABUYAMA	42.62	343.2	7	56A	-1							
TUKUBASAN	42.83	349.0	7	57A	-1	14	36	15	8	8	17	37 SS
ROXBURGH	43.05	159.4	8	8	8	14	22	-2				
MATUSIRO	43.53	347.0	8	4A	0	14	40	9				
NHATRANG	43.77	294.4									9	23
CANTON	45.49	310.7	8	20A	0	15	11	11				
MIZUSAWA	45.49	351.1	8	32	12	15	28	28				
ZO-SE	45.62	325.5	8	19	-2							
NANKING	47.70	324.3	8	36A	-1	15	40	9				
VLADIVOSTOK	51.33	343.7	9	5A	0						11	3 PP
Y.-SAKHLINSK	53.06	354.4	9	17A	-1						16	58 PS
CHANGCHUN	54.09	338.7	9	24A	-2	17	9	10				
KUNMING	54.81	306.3	9	28	-3							
PEKING	55.01	329.2	9	32	0							
CHENGTU	56.59	312.8	9	40	-4							
HONOLULU	58.24	60.6	9	56	1	18	14	20				
KIPAPA	58.35	60.5	9	57	1	18	14	18				
PETROPAVLOVK	59.28	6.5	10	2K	-1							
LANCHOW	59.68	318.0	10	3	-2							
CHITTAGONG	62.88	298.7	10	22	-5	18	58	4				
SHILLONG	63.95	302.1	10	30A	-4	19	16	9			19	30 PS
MAGADAN	65.30	0.8	10	41	-2						19	41 PS
ULAN-BATOR	65.31	330.0	10	40	-3	19	22	-2				
CALCUTTA	65.96	297.7	11	46	59							
WILKES	65.98	196.1	10	42	-5	19	25	-7				
BOKARO	68.60	298.3	11	6	2	20	8	4			13	43 PP
VISHAKHAPTNM	69.25	291.4	11	16K	8	20	16	5			20	40 PS
YAKUTSK	69.44	350.3	11	9	0							
IRKUTSK	69.45	332.4	11	8	-1	20	25	11				
ESEN BULAK	70.17	324.0	11	11	-2	20	50	28				
MADRAS	71.20	285.8	11	26	7	20	45	11			14	14 PP
KODAIKANAL	73.33	282.5	11	37K	5	21	22	24			26	7 SS
DEHRA DUN	77.03	302.8	11	42	-11	21	25	-14			12	15 PCP
NEW DELHI	77.31	300.9	11	51A	-4	21	43	1			15	0 PP
POONA	78.21	290.2	12	1	1	22	4	12				
KERGUELEN I.	78.51	221.0	12	9	8	22	19	24				
TIKSI	78.59	353.5	12	2	0	22	13	17			15	5 PP
BOMBAY	79.24	290.4	12	3	-2	22	23	20			15	9 PP
LAHORE	80.42	303.3	12	11	-1							
FRUNSE	82.91	314.4	12	23	-2						22	56 SCS
MAWSON	83.18	202.7	12	24	-2	22	29	-15				
WARSAK DAM	83.24	305.2	12	40	14							
KHOROG	83.97	308.6	12	27	-3							
SOUTH POLE	84.09	180.0	12	28	-3							
COLLEGE	84.23	22.5	12	27	-4							
BYRD STATION	84.38	169.9	12	26	-6							
QUETTA	86.39	300.7	12	40	-2	23	39	24				
TASHKENT	86.45	312.0	12	40A	-2	22	58	-18				
CALISTOGA	92.19	51.6	13	7A	-3							
BERKELEY	92.37	52.4	13	10A	0						16	32 PP
LICK	92.81	52.9									13	43
MINERAL	93.11	49.9	13	22K	8							
PRIEST	93.49	54.2	13	4	-12							
SVERDLOVSK	94.21	326.6				23	52	-34				
RENO	94.42	50.9	13	37K	17							
PENTICTON	95.16	41.1	13	22	-1							
PASADENA	95.38	56.3	13	24	0	25	0	63			17	16 PP
MOULD BAY	96.06	13.9	13	27	0							
BLUE MTS.	96.55	45.6	13	29	0	24	25	21			17	20 PP
EUREKA	97.38	51.1	13	35	2						14	17
YELLOWKNIFE	98.05	27.8	13	37	1							

BOULDER CITY	98.19	54.6	13	34	-3					
N-LAZARVSKYA	98.38	193.1	13	34	-4	24	5	-8	36 0	SSS
SHIRAZ	98.81	299.0	12	42	-58				18 30	
HUNGRY HORSE	98.84	42.1	13	38	-2					
BUTTE	99.89	44.4	14	10	25				17 58	
BOZEMAN	100.96	44.8	13	56	7					
TUCSON	101.47	58.4	13	53	1					
UINTA BASIN	102.30	50.2	13	56	1	24	34	2	17 59	PP
ALERT	102.33	4.1	13	55	-1					
RESOLUTE	102.38	14.2	13	55	-1					
GORIS	103.78	309.1	14	3	1				18 30	PP
TIFLIS	104.77	311.5	14	1	-5	24	51	7	18 36	PP
APATITY	105.18	339.0	14	32	777	25	2	16	33 48	SS
KEVO	106.35	342.1	14	12	777	25	6	15	18 38	PP
SODANKYLA	107.63	340.0							19 8	PP
KAJAANI	108.76	336.7	18	33	777					
KIRUNA	109.41	341.7	18	35	777	25	13	9	28 22	PS
PULKOVO	109.44	332.0	14	29	777	25	10	6		
VIBORG	109.75	333.3	18	33	777					
ADDIS ABABA	111.16	277.4	18	43	11					
CHANGALANE	111.21	239.0							16 0	PS
WICHITA MTS.	111.50	55.1	18	33	0	25	30	17	19 11	PP
NURMIJARVI	111.68	334.0	14	48	-225	25	26	13	19 20	PP
HELSINKI	111.70	333.6	18	45	12				29 27	PKKP
UMEA	111.74	338.2	18	33	0				19 16	PP
SIMFEROPOL	111.91	316.2							19 28	PP
KSARA	112.73	304.1							18 57	PP
DALLAS	113.26	56.9	18	43	7					
JERUSALEM	113.57	302.0	19	37	60					
TULSA	113.58	53.5	14	55	-222	25	40	19	19 30	PP
SKALSTUGAN	114.69	340.4	18	48	9					
HOUSTON	114.86	60.1							19 49	PP
UPPSALA	115.01	335.4							19 40	PP
GODHAVN	115.02	8.8							19 42	PP
ISTANBUL UN.	116.57	313.1	15	9	-214				19 58	PP
LWOW	116.79	323.7							20 6	PP
BROKEN HILL	117.94	250.3	18	46K	1					
HERMANUS	118.14	225.8							20 10	PP
GOTEBORG	118.66	335.5	18	53A	6					
KRAKOW	119.05	325.3	18	53	5					
COPENHAGEN	119.74	333.5	18	48	-1					
LWIRO	120.05	264.0	18	50	1				20 19	PP
BELGRADE	121.10	319.7	19	7	15				30 32	PS
BRATISLAVA	121.60	324.4	19	52	59				23 5	
CUMBERLAND	121.73	51.6	18	52	-1				20 22	PP
VIENNA-H.	121.98	324.8	18	57	1					
PRUHONICE	122.06	327.3	18	53	0				30 30	PS
PRAGUE	122.08	327.4							30 40	PS
COLLMBERG	122.12	329.2	18	54	0					
HALLE	122.54	329.9	19	14	20				20 29	PP
CLEVELAND	122.67	43.8	19	24	29				16 23	P
KASPERSKE H.	123.06	326.8	18	55	0					
JENA	123.06	329.5	18	58	3				20 40	PP
SCHEFFERVLLE	123.31	24.1	18	56	0					
LJUBLJANA	124.19	323.3	18	57	-1					
MUNSTER	124.32	332.3	19	5	7					
OTTAWA	124.63	37.3	18	58	0					
BLACKSBURG	125.12	48.1							20 49	
BENSBERG	125.20	331.6	19	0	1				19 35	
PENNSYLVANIA	125.47	43.1	19	6	6					
STUTTGART	125.56	328.5	19	0	0				20 56	PP
SHAWINIGAN	125.73	34.7	19	0	0					
COLUMBIA	125.78	52.0	19	7	6					
BREBEUF	125.83	36.2	19	0	-1				21 7	PP
DURHAM	125.98	339.6	19	9	8					
STRASBOURG	126.46	329.1	19	18	16				21 9	PP
SEVEN FALLS	126.48	33.2	19	1	-1					
DOURBES	126.99	332.2	19	11	8				19 55	
MESSINA	127.27	314.4	19	10	7	26	0	-7	19 20	21 2 PP
WELSCHBRUCH	127.29	329.7	19	18	15					
ROME	127.60	319.9	19	13	9				21 15	PP
PAVIA	127.80	325.0							21 8	PP
PALISADES	128.01	41.1	19	11	6					
KEW	128.11	336.3							22 30	PKS
PARIS	128.88	332.3	19	16	9					
ROSELEND	128.90	326.9	19	13	6				22 55	
ISOLA	129.61	325.1	19	18	10				21 51	PP
GARCHY	129.68	330.6	19	15	7				19 58	
CLERMONT-FD.	130.70	329.1	20	1	51					

BANDEIRA	131.72	244.1	19	13	1					21	43 PP
HALIFAX	131.94	31.4	19	30	18						
HUANCAYO	132.14	112.0	19	16	3						
LUANDA	133.82	251.8	19	24K	8					21	51 PP
AREQUIPA	133.90	119.5	19	2	-14						
CHINCHINA	135.27	88.9	19	29	10					23	0 PKS
LA PAZ	136.76	121.6	19	12	-9					22	3 PP
BOGOTA	136.79	89.6	19	13	-8					23	5 PKS
FUQUENE	137.17	88.4	19	21	-1						
TOLEDO	138.59	328.6	19	20K	-5					22	25 PP
ALMERIA	139.87	324.0	19	28	1						
SAN JUAN	143.31	67.1	19	32	-1						
CARACAS	143.86	80.4	19	32A	-2					22	59 SKP
AVERROES	145.24	324.5	19	44	8			20	18		
ST. KITTS	146.70	67.4	19	43	4						
ST. CLAUDE	147.99	69.2	19	45	4					33	23 PPP
PONTA DELGDA	148.04	352.5	19	43A	2	26	41 -4			19	52 PKP2
FORT FRANCE	148.82	71.4	19	43	1					23	37 PP
TRINIDAD	149.26	79.2	19	47	4						

FEBRUARY 27 20.M 28.M 32.S EPICENTRE -4.50 153.31 DEPTH= 60.KM

A=-0.89077 B= 0.44774 C=-0.07787 D= 0.4491 E= 0.8935
G= 0.0696 H=-0.0350 K=-0.9970 HT= 7.1

DEPTH OF FOCUS= 0.004R

SE= 1.79

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S
RABAUL	1.18	284.4	0	20K	-1							
PORT MORESBY	7.82	231.1	1	49A	-4	3	13	-8				
HONIARA	8.21	127.0	1	59	0	3	27	-4				
CHARTERS TS.	16.95	203.3	3	51	-3	6	59	0				
GUAM	19.77	334.6	4	31	4							
BRISBANE	22.77	181.2	4	56	-2	8	53	-5				
DARWIN	23.56	249.2	5	3	-2	9	13	1				
CANBERRA	30.93	186.9	6	11A	-2							
ADELAIDE	33.20	202.2	6	29	-4	12	4	17			12	57
TOOLANGI	33.69	191.2	6	34	-3						8	10 PPP
BAGUIO CITY	38.46	303.5				13	36	28			8	35
KARAPIRO	38.97	151.6	7	22	0							
CHATEAU	39.99	152.8	7	30	0							
TUAI	40.43	150.9	7	33	-1							
MATUSIRO	43.20	342.1	7	55	-1							
MUNDARING	44.21	227.3	8	2	-3	14	28	-5				
PERTH	44.48	227.6				14	34	-6			17	58
ZO-SE	46.83	321.3	8	25	0							
NANKING	48.99	320.4	8	42	0							
VLADIVOSTOK	51.20	339.9	8	58A	-1							
Y.-SAKHLINSK	52.14	350.8	9	5	-1							
CHANGCHUN	54.32	335.3	9	21	-1							
PEKING	55.92	326.0	9	33	-1	17	38	23				
SIAN	56.87	316.2	9	41A	0							
KUNMING	57.24	303.6	9	43	0							
CHENGTU	58.62	310.1	9	52A	-1							
PAOTOW	59.85	322.8	10	1	0							
LANCHOW	61.36	315.4	10	12A	0							
CHITTAGONG	65.73	296.8	10	38	-2							
ULAN-BATOR	66.13	327.8	10	42	-1							
LHASA	68.56	304.1	10	59	1							
YAKUTSK	68.76	348.3	10	59	0							
TIKSI	77.65	352.3	11	52A	1							
DEHRA DUN	79.62	301.8	12	3	1							
NEW DELHI	80.02	299.9	12	7	3							
COLLEGE	81.39	21.7	12	9	-3							
POONA	81.47	289.4	12	10A	-2							
PRZHEVALSK	81.98	313.8	12	16A	1						15	17
BOMBAY	82.48	289.6	12	16	-1							
ALMATA-2	82.90	314.4	12	20K	1							
FRUNSE	84.78	313.6	12	30A	1							
TASHKENT	88.46	311.5	12	47	0							
QUETTA	89.09	300.2	12	48	-2	23	43	12				
PASADENA	91.27	56.0	13	2	2							
BLUE MTS.	92.69	45.4	13	7	1				13	30	29	41 PKKP
EUREKA	93.38	50.8	13	10	0							

MOULD BAY	93.70	13.9	13 8	-3						
YELLOWKNIFE	94.92	27.8	13 17	0						
SVERDLOVSK	95.20	326.5	13 16	-2						
KHEYS	95.27	350.6	13 18	0						
UINTA BASIN	98.32	50.1					14 12		26 38	PS
RESOLUTE	99.99	14.5	13 40	0						
SHIRAZ	101.59	299.2	18 10	263	24 44	25				
APATITY	105.23	339.8	14 1K	777						
SODANKYLA	107.59	341.0	14 11	777						
KAJAANI	108.97	337.8	14 18	777						
VIBORG	110.21	334.4	18 25	0						
UMEA	111.83	339.6	18 29A	1						
NURMIJARVI	112.07	335.4	14 32	-236						
HELSINKI	112.13	335.0	14 32	-236						
UPPSALA	115.30	337.0	18 34A	-1						
CUMBERLAND	117.71	52.0							29 57	SP
KARLSKRONA	118.51	334.6	18 35	-6						
GOTEBORG	118.92	337.5	18 43A	1						
COLLMBERG	122.84	331.5	18 53	4					19 39	
PRUHONICE	122.92	329.5	18 51	2						
VIENNA-H.	123.01	327.0	18 51	2						
JENA	123.76	331.9	18 52	1						
KASPERSKE H.	123.95	329.2	18 52	1						
BENSBERG	125.73	334.3	18 56	1						
STUTTGART	126.32	331.2	18 57	1						
DOURBES	127.46	335.1	19 0	2						
PARIS	129.34	335.4	19 3	1						
GARCHY	130.27	333.7	19 5K	2						
FOLINIERE	130.55	337.4	19 6	2						
ISOLA	130.59	328.3	19 7	3						
LA PAZ	134.02	118.0	19 16	6					31 29	PS
TRINIDAD	145.07	77.9	19 34	4						

FEBRUARY 28 1.H 31.M 1.S EPICENTRE -17.43 66.72 DEPTH= 0.KM

A= 0.37733 B= 0.87694 C=-0.29765 D= 0.9186 E=-0.3952
G=-0.1176 H=-0.2734 K=-0.9547 HT= 5.3

SE= 3.07

	DELTA	AZ.	P	O-C	S	O-C	*PP		SUPP.	
	DEG.	DEG.	M S	S	M S	S	M S		M S	
CHILEKA	30.46	268.6	6 15	-2						
MADRAS	33.03	24.6	6 49	10	11 57	-1			7 50	PP
CHANGALANE	33.15	248.5	6 41A	1			6 51			
BULAWAYO	36.13	259.6	6 35A	-31						
POONA	36.41	11.4	7 6	-2	12 50	0				
BOMBAY	36.59	9.7	7 12	2	12 57	4				
BROKEN HILL	36.86	269.0	7 11A	-1						
LWIRO	40.17	287.8	7 39A	-1	13 51	4			9 13	PP
BOKARO	45.04	25.0	8 22	3						
HERMANUS	45.51	238.7			15 9	4			18 35	SS
CHITTAGONG	46.55	32.7	8 33	2						
QUETTA	47.33	0.3	8 35	-2						
DEHRA DUN	48.71	13.1	8 45	-3						
SHIRAZ	48.76	343.5	8 46A	-3					15 36	
LAHORE	49.24	8.6	8 33	-19						
SHILLONG	49.25	30.4	8 4A	-48						
WARSAK DAM	51.34	5.1	9 7	-1						
LHASA	52.34	26.9	9 18K	2						
TEHERAN	54.83	344.7	9 34	0					12 22	
KUNMING	54.95	40.6	9 38	3						
VANNOVSKAYA	55.67	351.8	9 37	-3						
JERUSALEM	57.50	328.2	9 53	0						
TASHKENT	58.49	2.3	9 58	-2						
KSARA	58.83	330.1	10 12	9						
GORIS	59.75	341.8	10 9K	0	18 27	8				
CHENGTU	59.77	37.2	10 10	1						
KIROVOBAD	60.81	342.3	10 12	-4						
ALMATA	61.12	8.5	10 14	-4						
TIFLIS	62.24	341.6	10 25	-1						
N-LAZARVSKYA	62.43	197.8	10 26	-1						
LANCHOW	63.73	33.0	10 37	1						
SIAN	65.22	37.8	10 41	-5						
ADELAIDE	65.66	121.0	10 48K	0						
ATHENS	68.32	324.5							19 59	
ESEN BULAK	68.90	21.4	11 10	1						

TOOLANGI	70.83	124.4	11	22	1				11	55
SOUTH POLE	72.68	180.0	11	30	-2					
PEKING	73.39	37.5	11	36	0					
CANBERRA	73.97	122.5	11	37	-2					
SVERDLOVSK	74.15	356.5	11	37	-3					
ULAN-BATOR	74.31	26.8	11	41	0					
CHARTERS TS.	74.66	106.6	11	43	0					
UZHGOROD	76.72	331.5	12	55	60					
PORT MORESBY	78.18	96.2	11	1	-62					
BRISBANE	78.78	115.3	12	7	1					
KRAKOW	78.82	331.4	12	6	0				12	31
BRATISLAVA	78.88	328.7	12	9	2					
VIENNA-H.	79.29	328.4	12	8	-1				12	17 PCP
KASPERSKE H.	81.27	327.9	12	19	-1					
PRUHONICE	81.33	328.9	12	20	0				12	45
BYRD STATION	82.67	178.9	12	28	1					
COLLMBERG	82.94	329.3	12	28	0				12	35 PCP
STUTTGART	83.30	325.8	12	30	0					
JENA	83.40	328.5	12	30	-1					
HALLE	83.57	329.1	12	46	9					
STRASBOURG	84.00	325.1	12	48	14					
HELSINKI	84.36	340.5	12	37	2					
NURMIJARVI	84.72	340.6	12	38	1	23	11	6	28	25 SS
KARLSKRONA	84.92	334.1	12	44	6					
GARCHY	85.96	322.3	11	53K	-50					
MATUSIRO	86.12	49.9	12	50	6				33	5 SS
DOURBES	86.57	325.2	12	51	5					
KAJAANI	86.64	343.9	12	44	-3					
UPPSALA	86.64	337.5	12	47	0					
TOLEDO	87.03	313.3				23	29	2	29	41 SS
GOTEBORG	87.43	334.0	12	51	0					
UMEA	88.58	341.2				23	40	-1	29	33 SS
TIKSI	98.10	16.4	13	39	-1					
COLLEGE	127.23	17.7	19	12	5					
BOGOTA	139.57	256.3							35	13 PPS
CHINCHINA	141.13	255.9							26	29 PP
HUNGRY HORSE	149.15	1.0	19	40	-6					
CUMBERLAND	149.46	311.8	19	53	6				42	31 SS
BUTTE	151.48	359.0	20	7	17					
BOZEMAN	151.78	356.7	19	56	6					
BLUE MTS.	152.45	6.2	19	58	7				23	48 PP
TULSA	155.92	323.3	20	24	28				43	44 SS
MINERAL	156.05	15.8	20	4K	8					
UINTA BASIN	156.96	352.7	20	4	7				24	9 PP
EUREKA	157.90	5.5	20	3	5					
WICHITA MTS.	158.35	325.5	20	3	4				24	27 PP
TUCSON	165.07	351.9	20	8	2					

FEBRUARY 28 6.H 15.M 16.S EPICENTRE 38.22 141.37 DEPTH= 91.KM

A=-0.61531 B= 0.49167 C= 0.61616 D= 0.6243 E= 0.7812
G=-0.4814 H= 0.3846 K=-0.7876 HT= -1.0

DEPTH OF FOCUS= 0.009R

SE= 5.27

	DELTA DEG.	AZ. DEG.	P M	P S	P O-C S	S M	S S	S O-C S	*PP M	*PP S	SUPP. M	SUPP. S
ISINOMAKI	0.21	348.6	0	5K	-9	0	15	-10				
SENDAI	0.37	277.2	0	8K	-7	0	19	-8				
YAMAGATA	0.81	272.2	0	14K	-4	0	29	-3				
HUKUSIMA	0.86	236.7	0	12K	-7	0	27	-6				
MIZUSAWA	0.92	348.2	0	15	-4	0	30	-4				
ONAHAMA	1.33	196.6	0	6	-18	0	27	-15				
SAKATA	1.38	299.6	0	26	1	0	48	5				
SHIRAKAWA	1.43	220.0	0	18	-7	0	37	-7				
MORIOKA	1.48	353.9	0	22K	-4	0	44	-1				
MIYAKO	1.50	17.9	0	19	-7	0	40	-6				
AKITA	1.79	326.8	0	32	2	1	3	11				
NIIGATA	1.86	261.3	0	42	11							
MITO	1.98	201.6	0	23	-9	0	45	-11				
UTUNOMIYA	2.06	216.1	0	26	-7	0	51	-7				
KAKIOKA	2.21	205.9	0	27	-8	0	52	-10				
HATINOHE	2.31	3.0	0	47	10	1	16	12				
AIKAWA	2.47	266.2	0	40	1	1	15	7				
TYOSI	2.53	189.7	0	34	-6	1	2	-8				

MAEBASI	2.59	225.9	0	33	-7	1	5	-6		
KUMAGAYA	2.61	218.2	0	37A	-4	1	16	4		
AOMORI	2.63	350.2	0	46	5	1	22	10		
TAKADA	2.72	246.6	0	42	0	1	20	6		
TOKYO C.M.O.	2.85	207.6	0	43	-1	1	8	-10		
TITIBU	2.89	220.0	0	48	3					
OIWAKE	2.94	230.8	0	44	-1	1	28	8		
NAGANO	2.96	239.4	0	47	1	1	31	11		
MATUSIRO	3.03	237.2	0	42K	-5	1	27	5		
YOKOHAMA	3.11	206.9	0	35	-13	1	16	-8		
MATUMOTO	3.35	235.1	0	58	7					
KOHU	3.40	222.3	0	48	-4	1	31	0		
HUNATU	3.43	218.3	0	49	-3	1	31	-1		
MERA	3.52	201.1							1	25
HAKODATE	3.61	352.7	0	54	-1	1	39	3		
TOYAMA	3.65	246.7	1	6	11					
AJIRO	3.66	210.7	0	48	-7	1	29	-8		
MISIMA	3.66	212.9	0	57	2					
IIDA	3.92	227.5	0	57	-2	1	49	5		
MORI	3.92	351.2	1	8	9					
SHIZUOKA	4.03	217.3							1	21
MURORAN	4.10	355.9				2	0	11		
HIROO	4.32	19.6	1	0	-4					
TOMAKOMAI	4.40	2.0				1	54	-2		
OMAESAKI	4.42	216.1				2	2	6		
HAMAMATU	4.57	221.2							1	32
GIHU	4.65	234.0	1	7	-2	2	4	2		
NAGOYA	4.67	230.6	1	7	-2	2	7	4		
SAPPORO	4.84	359.8				2	11	4	1	32
OBIHIRO	4.89	15.9	1	15	3					
TSURUGA	4.96	240.4				2	16	6		
HIKONE	5.06	235.9	1	14	0	2	13	1		
KAMEYAMA	5.19	231.0				2	24	8		
HATIDYOZIMA	5.27	194.6	1	19	2					
KUSIRO	5.28	24.9	1	8	-9	2	6	-12		
KYOTO	5.55	236.5	1	23	2	2	31	7		
ASAHIGAWA	5.60	7.4	1	29	7	2	36	10		
NARA	5.70	233.3	1	29	6					
ABUYAMA	5.75	236.1	1	19K	-5					
OSAKA	5.91	234.6							2	58
NEMURO	6.02	30.7							2	21
ABASHIRI	6.19	19.8	1	40	10	2	33	-7		
VLADIVOSTOK	8.70	307.2	2	7	3					
Y.-SAKHLINSK	8.85	6.0	2	1	-5	3	39	-6		
YAKUTSK	24.89	346.9	5	14K	-1					
BAGUIO CITY	28.39	225.8	5	48	1					
TIKSI	34.09	353.0	6	35K	-2					
SHILLONG	43.41	268.1	7	48K	-7					
COLLEGE	48.11	32.8	8	29	-3					
SVERDLOVSK	54.24	318.0	9	16	-2					
MOULD BAY	55.41	16.7	9	33	6					
QUETTA	60.57	286.7	10	2	-1					
RESOLUTE	61.46	14.6	10	5A	-4					
SODANKYLA	63.86	337.0	10	15	-10					
KAJAANI	65.51	333.7	10	32	-3					
UMEA	68.19	335.9	10	49	-3					
NURMIJARVI	68.88	331.7	10	54	-2					
KIROVOBAD	69.69	306.1	11	0	-1					
BLUE MTS.	71.15	47.5	11	6	-4				11	19
SHIRAZ	71.52	293.4	11	12A	0					
EUREKA	75.13	51.4	11	30	-3					
UINTA BASIN	78.43	47.5	11	49	-3				12	1
COLLMBERG	80.06	330.0	11	59	-2					
KASPERSKE H.	81.52	328.3	12	8	0					
LA PAZ	146.26	58.3	19	30	2					

MARCH 1 10.H 45.M 57.S EPICENTRE 41.14 143.09 DEPTH= 51.KM

A=-0.60386 B= 0.45359 C= 0.65544 D= 0.6006 E= 0.7996
G=-0.5241 H= 0.3937 K=-0.7552 HT= -2.1

DEPTH OF FOCUS= 0.003R

SE= 2.94

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

URAKAWA	1.03	347.2	0	19A	0	0	33	0			
HIROO	1.15	8.6	0	19	-1	0	37	1			
HATINOHE	1.33	243.1	0	21	-2	0	39	-1			
MIYAKO	1.72	210.1	0	27K	-1	0	43	-6			
OBIHIRO	1.78	2.7	0	32	3	0	56	5			
AOMORI	1.78	260.2	0	25K	-4	0	47	-4			
TOMAKOMAI	1.86	323.3	0	31	1	0	57	4			
HAKODATE	1.87	291.6	0	31A	1	0	55	2			
MURORAN	1.97	307.4	0	31A	0				1	18	
MORIOKA	2.06	226.0	0	31A	-2				1	54	
KUSIRO	2.08	27.6	0	32	-1	0	56	-2			
MORI	2.12	297.7	0	37	3	1	4	5			
SAPPORO	2.32	326.7	0	37A	1	1	6	2			
MIZUSAWA	2.51	217.4	0	37	-2	1	9	0			
ASAHIGAWA	2.69	348.8	0	43A	1	1	17	4			
AKITA	2.69	239.0	0	42	0	1	18	5			
SUTTSU	2.70	308.8	0	44	2	1	23	9			
NEMURO	2.86	39.4	0	42	-2	1	12	-6			
ABASHIRI	3.01	16.6	0	44	-2	1	22	1			
RUMOE	3.01	339.3	0	46	0	1	24	3			
ISINOMAKI	3.03	207.2	0	44A	-3	1	20	-2			
SENDAI	3.33	211.2	0	47	-4	1	26	-4			
SAKATA	3.36	229.2	0	51	0						
YAMAGATA	3.58	217.0	0	52A	-2	1	34	-2			
HUKUSIMA	3.95	211.7	0	57	-2	1	45	0			
WAKKANAI	4.40	346.9	1	10	4	2	13	17			
ONAHAMA	4.52	202.8	1	5	-2	1	58	-2			
SHIRAKAWA	4.60	209.9	1	7	-2	2	5	4			
AIKAWA	4.87	231.7	1	13	1	2	10	2			
MITO	5.18	204.1	1	14	-3	2	10	-6			
KAKIOKA	5.41	205.8	1	17	-3	2	23	1			
TAKADA	5.52	224.5	1	30	9	2	40	16			
MAEBASI	5.68	214.8	1	23	-1						
TYOSI	5.69	198.7	1	21	-3	2	26	-3			
KUMAGAYA	5.77	211.4	1	24K	-1	2	47	16			
NAGANO	5.87	222.0	1	22	-4	2	44	11			
Y.-SAKHLINSK	5.88	357.5	1	26	0	2	28	-5			
MATUSIRO	5.97	221.2	1	26	-2	2	33	-3			
OIWAKE	5.97	217.9	1	24	-4	2	40	4			
TITIBU	6.04	212.6	1	30	1						
TOKYO C.M.O.	6.05	206.7	1	27	-2	2	31	-7			
YOKOHAMA	6.31	206.4	1	27	-6	3	2	18			
MATUMOTO	6.32	221.0	1	25	-8	3	4	20			
TOYAMA	6.38	227.9				2	50	5			
KOHU	6.52	214.5	1	38	3	3	1	12			
HUNATU	6.58	212.4	1	34	-2	3	0	9			
MERA	6.72	203.5	1	46	8						
MISIMA	6.84	209.8	1	41	1				3	38	
AJIRO	6.85	208.6	1	35	-5	2	51	-6			
IIDA	6.97	218.0	1	32	-10	2	55	-6			
SHIZUOKA	7.19	212.4	1	53	8	3	23	17			
GIHU	7.59	222.9	1	52	2						
NAGOYA	7.67	220.9	1	47	-4	2	47	-31			
HAMAMATU	7.69	215.2				3	12	7	3	36	
TSURUGA	7.77	227.4							2	13	
KYOTO	8.43	225.8	2	2	0	4	4	27			
ABUYAMA	8.62	225.8	2	3A	-2						
SUMOTO	9.38	226.2				3	55	-5	6	12	
CHANGCHUN	13.39	287.5	3	8	-1						
NAGASAKI	13.48	235.7							6	27	
MAGADAN	19.05	12.1	4	21	1						
ZO-SE	20.29	247.4	4	32	-2						
PEKING	20.45	275.8	4	32	-3						
NANKING	21.46	252.8	4	43	-3						
YAKUTSK	22.40	343.4	4	52	-3	8	52	-1			
PAOTOW	24.93	279.7	5	18	-1						
ULAN-BATOR	26.49	297.1	5	33A	-1	10	33	31			
SIAN	27.77	266.8	5	45	-1						
IRKUTSK	28.48	306.2	5	50	-2	10	39	4			
LANCHOW	30.92	273.5	6	13	-1	11	17	4			
TIKSI	31.38	351.4	6	14	-4						
BAGUIO CITY	31.38	224.9	6	23	5						
ESEN BULAK	33.83	295.0	6	39A	0	12	6	7			
KUNMING	37.01	257.1	7	6	0						
LHASA	43.38	271.7	8	0	1						
SEMIPALATNSK	43.59	304.3	8	6	6						
SHILLONG	44.88	266.2	8	9K	-2						
COLLEGE	44.95	34.4	8	12	1						
ALMATA-2	47.58	295.6	8	33A	1						

CHATRA	47.75	270.8	8	35	2					
KHEYS	48.91	347.5	8	43	1					
PORT MORESBY	50.43	174.8	8	54	0					
ANDIJAN	52.00	294.5	9	5	-1					
MOULD BAY	52.23	17.5	9	7	-1					
DEHRA DUN	52.78	280.1	9	14	2					
SVERDLOVSK	52.99	317.0	9	13	0					
HONOLULU	53.03	93.1				16	58	20		
KHOROG	54.04	291.2	9	22	1	17	2	10		
NEW DELHI	54.32	278.8	9	22	-1	17	53	57		
LAHORE	54.91	283.5	9	26	-1					
WARSAK DAM	55.70	287.5	9	33	0					
ALERT	55.95	3.9	9	34	-1					
RESOLUTE	58.30	15.4	9	50A	-2					
APATITY	59.50	335.2	9	58K	-2					
YELLOWKNIFE	59.62	31.7	10	0	-1					
KEVO	60.07	338.9	10	4	0				22	27 SS
CHARTERS TS.	60.99	176.6	10	10	0					
QUETTA	61.02	286.0	10	9	-1					
SODANKYLA	61.70	336.8	10	13K	-2					
ASHKABAD	62.86	297.8	10	17	-6					
KIRUNA	63.15	339.0	10	23	-2					
KAJAANI	63.48	333.7	10	26	-1					
PENTICTON	64.35	46.1	10	31	-1					
VIBORG	65.29	330.4	10	37	-1					
UMEA	66.06	335.9	10	42	-1				19	52 PS
NURMIJARVI	66.94	331.8	10	48	-1					
HELSINKI	67.06	331.4	10	50	0					
HUNGRY HORSE	67.92	44.6	10	55	0					
SCORESBY SD.	68.16	354.6	10	57	0					
MINERAL	68.33	55.0	10	52A	-6					
SKALSTUGAN	68.57	338.7	11	11	12					
BRISBANE	68.78	170.8	11	1	1					
KIROVOBAD	69.04	306.0	11	1A	-1					
TIFLIS	69.33	307.6	11	5	1					
BERKELEY	69.38	57.4							19	17
GORIS	69.73	305.0	11	6	0					
UPPSALA	69.84	334.0	11	5	-2					
LICK	70.09	57.6							11	28
BUTTE	70.14	45.9	11	21	12					
BOZEMAN	71.18	45.4	11	19	4					
SHIRAZ	71.57	293.4	11	17A	0	20	33	2	11 56	14 1 PP
EUREKA	72.30	52.9	11	22	0					
GOTEBORG	73.36	335.0	11	27	-1					
DUGWAY	73.71	50.7	11	30	0					
PASADENA	74.27	58.4	11	42	9					
COPENHAGEN	74.84	333.6	11	37	1					
RIVERVIEW	74.97	173.1				21	21	11		
BOULDER CITY	75.22	55.1	11	40	1					
UINTA BASIN	75.50	48.9	11	40	0	21	23	8		25 49 SS
RAPID CITY	76.38	42.8	11	45	0					
KRAKOW	76.42	326.3	11	46	1					11 55 PCP
LARAMIE	77.05	46.1	11	50	1					
COLLMBERG	78.18	330.6	11	56	1					14 49 PP
TOOLANGI	78.37	178.1	11	58	2					
PRUHONICE	78.65	329.0	11	58	0					
JENA	79.00	331.1	12	0	0					12 29
KASPERSKE H.	79.71	329.0	12	5	1					14 54
KSARA	79.80	306.1	12	6	2					
TUCSON	80.17	55.7	12	7	1					
SCHEFFERVLLE	81.06	17.0	12	10	-1					
JERUSALEM	81.60	305.0	12	16	2					
STUTTGART	81.63	331.1	12	15	1					
DOURBES	82.11	334.5	12	17	1					
PARIS	83.92	335.0	12	27	2					
LUBBOCK	64.62	49.4	12	26	-3					
FOLINIERE	84.87	336.8	12	30	0					
GARCHY	85.07	334.0	12	32	1					
ROSELEND	85.20	331.0	12	32	0					
WICHITA MTS.	85.61	46.7	12	34	0	23	8	8		14 0
TULSA	86.23	44.1	12	38A	1	23	3	-3		
ISOLA	86.33	330.0	12	39	2					13 16
FAYETTEVILLE	86.92	43.0	12	40	0					
BREBEUF	87.70	24.9	12	44K	0				12	57
CUMBERLAND	91.54	37.7	13	2	0	24	3	8		30 23 SS
PALISADES	91.61	27.1				24	23	27		

MARCH 1 19.H 14.M 9.S EPICENTRE 0.73 -29.54 DEPTH= 5.KM

A= 0.86998 B=-0.49293 C= 0.01258 D=-0.4930 E=-0.8700
G= 0.0109 H=-0.0062 K=-0.9999 HT= 7.2

SE= 3.16

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
M.BOUR	18.40	41.9	4	14	-4	7	29	-11					
CARACAS	38.41	286.0	7	25	1	13	14	-5					
LA PAZ	41.74	244.0	7	51	-1								
FUQUENE	44.37	277.0	8	18	5								
BOGOTA	44.64	275.8	8	15	0						10	16	PP
AREQUIPA	44.77	245.6	8	13	-3								
BANDEIRA	45.12	111.9	8	23K	4								
TOLEDO	45.36	27.7	8	21A	0	15	12	10			18	31	SS
ANTOFAGASTA	46.53	235.8				15	21	2					
HUANCAYO	47.20	252.9	8	33	-3								
CLERMONT-FD.	53.26	28.1	9	5	-17						10	1	
ISOLA	54.10	32.0	9	41	13								
GARCHY	54.36	26.8	9	27	-3						9	57	
ROSELEND	54.91	30.4	9	32	-2								
MESSINA	55.67	42.5									28	41	
ROME	55.74	37.2									10	41	
FLORENCE X.	56.15	34.7	10	3	20								
KEW	56.24	21.5				17	41	9					
WELSCHBRUCH	56.69	27.9	9	55	8								
PALISADES	56.69	320.7				17	41	3					
STRASBOURG	57.48	28.5	9	53	1								
STUTTGART	58.34	29.2	10	1	3								
LWIRO	58.40	93.1	9	58A	-1						21	45	SS
BREBEUF	59.06	325.2									27	21	
SHAWINIGAN	59.21	326.6	10	2	-3								
BROKEN HILL	59.33	107.2	10	4	-1								
LJUBLJANA	59.37	34.3	10	5	-1								
WITTEVEEN	60.02	24.4	10	5	-5								
KASPERSKE H.	60.73	31.0	10	14	-1						12	17	
JENA	60.89	28.4	10	8	-8								
ATHENS	61.28	46.2	10	22K	3						18	38	
VIENNA-H.	61.68	33.0	10	19	-2				10	35			
PRUHONICE	61.75	30.7	10	19	-3								
COLLMBERG	61.81	28.8	10	20	-2								
CUMBERLAND	62.44	310.3	10	22	-4	18	57	5			22	35	SS
KRAKOW	64.62	32.8	10	39	-2						10	59	
GOTEBORG	65.63	23.0	10	54	7								
KARLSKRONA	66.10	25.7	10	47	-3								
JERUSALEM	68.30	56.0	10	58	-6								
UPPSALA	69.27	23.3	11	6	-4								
KSARA	69.31	54.0	11	10	0								
SKALSTUGAN	69.84	18.5	11	11	-3								
TULSA	70.47	308.0	11	14K	-4	20	27	-3			24	49	SS
WICHITA MTS.	72.45	306.2	11	25	-4	20	51	-2			25	24	SS
NURMIJARVI	72.52	24.9	11	25	-5	21	1	8					
UMEA	72.68	20.8	11	29A	-2								
KAJAANI	75.58	22.4	11	49	1								
SODANKYLA	76.88	19.3	11	53	-2								
KEVO	78.25	17.3				21	57	0			27	9	SS
GOLDEN	78.65	310.3	12	4	-1								
UINTA BASIN	81.93	310.5	12	20	-2	22	39	4			28	3	SS
TEHERAN	82.21	54.2	12	23	-1	21	58	-40					
TUCSON	82.25	302.3	12	22	-2								
SHIRAZ	82.73	60.4	12	25K	-1				12	39	15	24	PP
ALERT	82.93	355.9	12	26	-1								
RESOLUTE	82.94	345.9	12	26	-1								
BOULDER CITY	85.76	305.8	12	42	0								
HUNGRY HORSE	85.79	318.3	12	39	-3								
EUREKA	86.78	309.3	12	46	-1								
YELLOWKNIFE	87.08	332.4	12	49	1								
BLUE MTS.	87.91	314.7	12	52	0						29	36	SS
MOULD BAY	89.25	346.1	12	56	-2								
CANBERRA	145.56	177.9	19	45	6								

MARCH 2 9.H 25.M 53.S EPICENTRE 46.14 153.21 DEPTH= 26.KM

A=-0.62069 B= 0.31334 C= 0.71873 D= 0.4507 E= 0.8927
G=-0.6416 H= 0.3239 K=-0.6953 HT= -4.0

SE= 2.92

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
Y.-SAKHLINSK	7.29	280.7	1	51	4	3	19	9					
PETROPAVLOVK	7.74	25.2	1	53	0	3	17	-4					
UGLEGORSK	8.08	295.3	2	3K	5								
OKHA	9.95	321.9	2	28	4						5	17	
MAGADAN	13.51	354.7	3	13	1						6	6	
MATUSIRO	14.78	234.8	3	27	-2	6	26	13					
VLADIVOSTOK	15.47	266.4	3	37	-1						6	37	
CHANGCHUN	19.83	273.4	4	32	1								
YAKUTSK	20.85	328.1	4	43K	1	8	28	0			4	58	PP
PEKING	27.55	270.6	5	48	2	10	29	5					
TIKSI	28.05	343.9	5	49K	-2						9	0	PCP
ZO-SE	28.95	250.0	6	0	1								
NANKING	29.94	254.2				11	2	-1					
ULAN-BATOR	31.26	290.4	6	14	-6								
PAOTOW	31.59	275.6				11	33	5					
SIAN	35.42	266.4	6	58	2								
COLLEGE	36.59	37.9	7	8	3				7	22			
LANCHOW	38.01	272.6	7	20	3								
ESEN BULAK	38.64	291.7	7	26	3								
BAGUIO CITY	40.19	233.3	7	37	1	13	43	2					
MOULD BAY	45.15	19.7	8	18A	2	14	53	0					
KUNMING	45.21	260.2	8	19	3	14	58	4					
KHEYS	45.68	346.8	8	20	0								
HONOLULU	46.56	105.3				15	31	18					
SEMIPALATNSK	46.95	303.1									10	2	PCP
RABAUL	50.13	181.4									22	45	
ALERT	50.36	5.7	8	57	0								
LHASA	50.49	273.7	9	2	4	16	15	6					
YELLOWKNIFE	51.37	36.4	9	5	1								
RESOLUTE	51.39	18.4	9	5A	1								
ALMATA-2	52.04	296.1	9	10K	1								
SHILLONG	52.44	269.1	9	14A	2								
SVERDLOVSK	54.33	317.5	9	27	1								
PENTICTON	55.53	52.4	9	36A	1								
BANFF	56.71	48.9	9	44	1								
APATITY	57.93	336.8	9	52	0								
TASHKENT	58.12	298.1	9	55A	2								
KHOROG	58.97	293.3	9	59	0								
DEHRA DUN	59.01	282.8	9	57	-3								
HUNGRY HORSE	59.13	50.9	10	1	1								
BLUE MTS.	59.36	55.8	10	4	2	18	17	10			19	56	SCS
MINERAL	59.46	62.2	10	5A	2								
SODANKYLA	59.84	338.9	10	5	0								
NEW DELHI	60.67	281.8	10	12A	1						20	2	
LAHORE	60.75	286.2	10	12	0								
KIRUNA	60.94	341.4	10	12	-1								
WARSAK DAM	61.07	290.1	10	5	-9								
LICK	61.25	64.9									10	39	
KAJAANI	62.09	336.1	10	22	1								
BOZEMAN	62.37	51.9	10	16	-6								
EUREKA	63.42	59.9	10	32	3								
SCORESBY SD.	63.64	358.2	10	42	11								
WOODY	64.02	64.8	10	34	1								
UMEA	64.28	338.9	10	35A	0								
MOSCOW	64.99	325.7	10	40	0								
SALT LAKE C.	65.03	56.6	10	43	3								
NURMIJARVI	65.78	334.9	10	44	-1								
HELSINKI	65.97	334.5	10	46	0								
FLAMING GRGE	66.34	55.1	10	51	3								
QUETTA	66.50	289.6	10	51	2								
UINTA BASIN	66.64	55.7	10	52	2	19	48	10			24	5	SS
RAPID CITY	67.63	49.2	10	58	2								
LARAMIE	68.23	52.7	11	3	3								
UPPSALA	68.30	337.7	11	0	-1								
GOLDEN	69.45	53.9	11	10	2								
KONGSBERG	70.43	341.3	11	15	1								
BERGEN	70.64	343.8	11	13	-2								
TUCSON	71.30	62.8	11	22	3						11	55	
TIFLIS	71.82	311.6	11	25	3								
ALBUQUERQUE	72.09	58.1	11	26	2								

TEHERAN	72.42	303.4	11	29	3							
GORIS	72.60	309.1	11	28A	1							
COPENHAGEN	73.30	338.0	11	33	2							
SHIRAZ	76.03	298.2	11	49A	3				12	19		
WICHITA MTS.	76.78	53.5	11	52	1	21	43	8			26	43 SS
COLLMBERG	77.06	335.7	11	55	3						13	3
TULSA	77.44	50.9	11	56K	2						21	43
PRUHONICE	77.77	334.1	11	57	1						12	38
JENA	77.79	336.3	12	5	9						12	41
FAYETTEVILLE	78.16	49.8	11	59	1							
VIENNA-H.	78.72	332.2	12	17	16							
KASPERSKE H.	78.82	334.3	12	4	2						12	44
RIVERVIEW	79.62	181.7									32	10
STRASBOURG	80.96	337.6	12	19	6							
KSARA	82.39	311.7	12	23	2							
FOLINIERE	82.73	342.8	12	25	2							
CUMBERLAND	82.95	44.6				22	46	6			38	52
GARCHY	83.35	340.0	12	28K	2						13	1
ROSELEND	83.93	337.2	12	30	1						13	11
JERUSALEM	84.33	310.9	12	34	3							
ATHENS	84.79	322.2									16	5
LWIRO	114.88	294.7									29	39 PS

MARCH 17.H 30.M 9.5 EPICENTRE 36.68 -90.17 DEPTH= 0.KM

A=-0.00233 B=-0.80390 C= 0.59475 D=-1.0000 E= 0.0029
G=-0.0017 H=-0.5948 K=-0.8039 HT= -0.5

SE= 3.31

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S
ROLLA	1.84	311.9	0	35	2							
ST. LOUIS 1	1.96	358.5	0	37	3	1	3	3				
FLORISSANT	2.12	355.7	0	39	2	1	7	3				
LITTLE ROCK	2.60	223.8	0	46	2							
FAYETTEVILLE	3.30	260.9	0	56K	2	1	46	12				
BLOOMINGTON	3.83	48.0	1	0	-1							
CUMBERLAND	3.88	104.9	1	0	-2	1	56	7				
TULSA	4.61	262.1	1	13A	1	2	30	23				
LAWRENCE	4.63	301.1	1	13	1							
CHICAGO JSA.	5.57	19.7	1	25	-1							
MANHATTEN	5.66	298.3	1	27	0							
WICHITA MTS.	7.13	256.6	1	47K	-1						1	56 PG
BLACKSBURG	7.82	83.2	1	54	-3							
COLUMBIA	7.93	107.0	1	59	0						3	19
CLEVELAND	8.25	51.9	2	1	-2	3	34	-4				
MORGANTOWN	8.57	66.8	2	7	-1	4	21	35				
CHAPEL HILL	9.01	91.5				3	37	-20			4	2
LONDON ONT.	9.38	44.6	2	14A	-5							
LUBBOCK	10.06	255.5	2	27	-1							
PENNSYLVANIA	10.45	63.1	2	30	-4							
GOLDEN	12.34	288.7	2	57	-2						6	34
RAPID CITY	12.38	310.7	2	56	-4							
LARAMIE	12.85	295.8	3	4	-2						6	50
ALBUQUERQUE	13.34	267.4	3	3	-10						5	18
FORDHAM	13.37	66.9	3	11	-2	6	45	61				
PALISADES	13.39	66.2	3	9	-4	5	38	-6				
OTTAWA	13.94	46.9	3	13	-8							
BREBEUF	15.25	49.6	3	31	-7	6	23	-5				
FLAMING GRGE	15.57	291.7	3	41	-1						7	41
WESTON	15.61	62.8	3	42	0	6	12	-25				
UINTA BASIN	15.62	289.4	3	43A	0	6	34	-3			4	50
SHAWINIGAN	16.29	47.4	3	48	-3							
PRICE	16.50	286.5	3	54	0							
SALT LAKE C.	17.40	290.2	4	5	0						7	52
TUCSON	17.60	261.5	4	7	-1							
SEVEN FALLS	17.73	47.9	4	5	-4							
BOZEMAN	18.06	306.3	4	12	-2						7	52
DUGWAY	18.07	288.1	4	12	-2							
BUTTE	19.18	306.1	4	27	0						8	4
BOULDER CITY	19.87	275.4	4	38	3							
EUREKA	20.48	285.7	4	45	3							
HUNGRY HORSE	21.01	311.2	4	46	-1	8	24	-13				
HALIFAX	21.59	60.2									10	17
BLUE MTS.	22.04	300.2	4	58	0						6	27
PASADENA	22.93	272.0									12	11

WOODY	23.15	276.2	5 12	4	
BANFF	23.16	316.7	5 14	5	
SCHEFFERVLLE	24.21	34.1	5 18K	-1	
PENTICTON	24.80	309.9	5 26	2	
YELLOWKNIFE	29.94	337.4	6 8	-4	
RESOLUTE	38.15	358.0	7 11	-11	
MOULD BAY	41.79	349.9	7 51	-1	16 56
COLLEGE	43.82	328.6	8 8	-1	
KIRUNA	63.71	23.3	10 32	-3	
UMEA	65.88	27.1	10 46A	-3	
SODANKYLA	65.91	22.2	10 46	-3	
UPPSALA	67.08	21.5	10 58	1	
KAJAANI	68.34	24.7	11 2	-3	
NURMIJARVI	69.52	28.6	11 11	-1	
COLLMBERG	69.64	40.7	11 14	1	
HELSINKI	69.86	28.8	11 15	1	
KASPERSKE H.	71.16	42.4			40 45

MARCH 3 22.H 59.M 46.5 EPICENTRE 30.69 137.00 DEPTH= 510.KM

A=-0.63003 B= 0.58748 C= 0.50787 D= 0.6820 E= 0.7314
G=-0.3714 H= 0.3464 K=-0.8614 HT= 1.6

DEPTH OF FOCUS= 0.075R

SE= 0.95

	DELTA DEG.	AZ. DEG.	P M S	O-C S	S M S	O-C S	*PP M S	SUPP. M S
ABUYAMA	4.34	344.2	1 24A	1	1 31	-57		
MATUSIRO	5.92	9.5	1 36A	-1	2 52	-2		
ZO-SE	13.60	275.8	2 54K	-2	5 18	0		
NANKING	15.63	279.7	3 16K	-1	5 59	4		
CHANGCHUN	16.06	328.0	3 22A	1	6 10	7		
Y.-SAKHLINSK	16.89	13.6	3 30A	1				
PEKING	19.34	304.5	3 54	1	7 3	3		
SIAN	23.92	285.9	4 36K	1				
PAOTOW	23.96	301.7			8 18	2		
LANCHOW	28.13	289.9	5 13K	1	9 22	0		
CHENGTU	28.32	278.5	5 13K	-1	9 23	-1		
ULAN-BATOR	28.71	315.4	5 17	0				
KUNMING	30.71	268.1	5 35	1				
YAKUTSK	31.70	353.5	5 43	0				
LHASA	39.54	280.5	6 49K	1	12 17	3		
SHILLONG	39.92	274.1	6 50A	-1				
TIKSI	41.23	356.1	7 1A	0				
LEMBANG	46.73	222.0	7 42K	-2				
ALMATA-2	48.32	302.5	7 58K	2				
DEHRA DUN	50.26	285.6	8 11K	0				12 28
NEW DELHI	51.48	283.7	8 19K	-1				
LAHORE	52.98	288.2	8 30	-1				
COLLEGE	56.40	29.7	8 53	-2				
SVERDLOVSK	57.60	320.7	9 2K	-1				
KHEYS	58.12	349.1	9 6	0				
QUETTA	59.43	289.0	9 15	0				
MOULD BAY	63.62	15.1	9 42A	0				
ALERT	66.65	2.7	10 2A	1				
APATITY	66.97	336.1	10 3A	0				
NORD	67.12	355.9	10 2	-2				
KEVO	68.06	339.4	10 9A	-1				
SODANKYLA	69.38	337.2	10 17A	-1				
RESOLUTE	69.62	12.9	10 19A	0				
PORT HARDY	70.15	42.3	10 23A	1				
MOSCOW	70.16	323.6	10 24	2				
TROMSOE	70.50	340.9	10 24	0				
KAJAANI	70.66	333.9	10 25A	0				
KIRUNA	71.12	339.0	10 28A	0				
YELLOWKNIFE	71.12	27.8	10 27A	-1				
SHIRAZ	71.21	293.8	10 29K	0	19 3	-2	10 55	19 18
KIROVOBAD	71.22	306.5	10 29	0				
GORIS	71.70	305.4	10 31A	0				
VIBORG	71.94	330.6	10 32	-1				
VICTORIA	73.50	43.1	10 42	0				
UMEA	73.55	335.6	10 41A	-1				29 50 PKKP
NURMIJARVI	73.78	331.5	10 43A	0	19 31	-2		
HELSINKI	73.84	331.2	10 44	0				
PENTICTON	75.31	41.2	10 52A	0				

			P		O-C	S		O-C	*PP		SUPP.	
	DELTA DEG.	AZ. DEG.	M	S	S	M	S	S	M	S	M	S
SKALSTUGAN	76.43	337.8	10	58	0						13	58 PP
BANFF	76.59	38.1	10	58	-1							
UPPSALA	76.99	333.2	11	1A	0	20	4	-3			30	9 PKKP
SCORESBY SD.	77.99	352.9	11	8	2							
HUNGRY HORSE	78.96	40.0	11	11	-1							
BLUE MTS.	78.97	44.2	11	12A	0						13	2
KARLSKRONA	80.23	331.0	11	16A	-2							
BUTTE	81.10	41.4	11	24	1				13	9	14	2 *SP
KSARA	81.78	304.4	11	28	2							
COPENHAGEN	81.85	331.9	11	26K	-1							
UZHGOROD	81.88	322.5	11	28	1							
BOZEMAN	82.16	41.0	11	29	1							
EUREKA	82.74	48.2	11	32	1							
WOODY	82.89	52.7	11	31	-1				13	22	14	9 *SP
DUGWAY	84.33	46.3	10	40	-59							
COLLMBERG	84.67	328.5	11	40	-1						15	4 PP
PRUHONICE	84.87	326.8	11	42	0							
KASPERSKE H.	85.91	326.7	11	47	0							
UINTA BASIN	86.25	44.7	11	49A	1							
STUTTGART	88.16	328.4	11	57	0							
GOLDEN	89.15	43.1	12	3	1							
WELSCHBRUCH	89.73	329.6	12	3	-1							
KEW	89.99	334.9	12	6	0							
PARIS	91.04	331.9	12	11	0							
GARCHY	92.00	330.6	12	16K	1							
FOLINIERE	92.25	333.4	12	15	-1							

MARCH 4 7.H 41.M 45.S EPICENTRE 83.17 -5.80 DEPTH= 0.KM

A= 0.11916 B=-0.01210 C= 0.99280 D=-0.1010 E=-0.9949
G= 0.9877 H=-0.1003 K=-0.1198 HT=-14.0

SE= 2.71

	DELTA DEG.	AZ. DEG.	P M	S	O-C S	S M	S	O-C S	*PP M	S	SUPP. M	S
NORD	2.14	228.1	0	36A	-2							
ALERT	6.86	293.0	1	41K	-4	3	7	2				
KHEYS	8.88	72.5	2	13	0	3	51	-4				
SCORESBY SD.	13.17	204.2	3	9	-2							
TROMSOE	14.52	144.3	3	31	2							
KEVO	15.03	133.4	3	31	-5							
KIRUNA	16.40	143.6	3	53K	-1	7	2	6				
RESOLUTE	16.75	292.7	3	51K	-7							
GODHAVN	17.00	244.5									4	53
SODANKYLA	17.34	135.9	4	1	-4	7	25	7				
MOULD BAY	17.74	313.9	4	8	-2	7	31	4				
APATITY	17.77	127.3	4	7A	-4	7	14	-13			7	38
REYKJAVIK	19.50	201.4	4	40K	8							
SIDA	19.70	196.3	4	39K	5							
SKALSTUGAN	20.14	156.2	4	37	-2							
UMEA	20.36	146.0	4	37A	-4	8	34	9				
KAJAANI	20.66	136.6	4	42	-2	8	32	1				
BERGEN	23.05	165.9	5	7	-1							
TIKSI	23.81	34.0	5	19A	3							
KONGSBERG	23.95	160.6	5	18	1						5	51 PP
NURMIJARVI	23.96	141.9	5	16	-1	9	32	0				
VIBORG	24.07	136.8	5	15	-3						12	40 PCS
UPPSALA	24.15	150.6	5	18A	-1	9	16	-19			8	28
HELSINKI	24.32	141.6	5	18	-3							
PULKOVO	25.14	135.4	5	27A	-2							
GOTEBORG	26.00	158.0	5	35	-2							
KARLSKRONA	27.71	154.0	5	44	-8						9	14 PCP
COPENHAGEN	28.04	157.8	5	55	0	10	37	-2				
MOSCOW	29.79	128.5	6	16A	5				7	7		
YELLOWKNIFE	30.53	300.1	6	17K	-1							
COLLEGE	30.97	329.3	6	20	-1							
SVERDLOVSK	31.17	103.2	6	23	0	11	29	0				
MUNSTER	31.56	164.1	6	27	0							
KEW	31.88	173.5	6	27	-2						12	1
WARSAW	31.95	148.4	6	30	0	11	50	9			13	16 PCS
COLLMBERG	32.44	157.8	6	34	0							
SCHEFFERVLLE	32.51	250.3	6	33	-2							
BENSBERG	32.56	164.7	6	34	-1							
JENA	32.75	159.6	6	43	6						7	39
DOURBES	33.34	167.8	6	50	8							

YAKUTSK	33.37	36.9	6 41A	-1	12	1	-2		
PRUHONICE	33.83	156.2	6 46	0				12	14
RACIBORZ	33.92	152.0	6 47	0				8	8 PP
KRAKOW	34.05	150.0	6 47	-1				17	17 SCS
HEIDELBERG	34.17	163.0	6 50	1					
LWOW	34.54	145.4	6 52	-1	12	21	-1		
FOLINIERE	34.58	173.8	6 51	-2					
PARIS	34.59	170.3	6 50	-3					
KASPERSKE H.	34.63	157.5	6 52	-1				9	32
STUTTGART	34.82	162.5	6 54	-1	12	27	1	8	34 PPP
STRASBOURG	34.96	164.2	7 21	25				8	44
WELSCHBRUCH	35.08	165.9	6 57	0				8	28
UZHGOROD	35.61	147.6	7 0	-2					
VIENNA-H.	35.65	154.4	7 3	1				8	21 PP
GARCHY	36.13	169.7	7 4A	-2				9	27 PP
MAGADAN	37.02	19.6	7 14	0	13	6	6		
CLERMONT-FD.	37.64	169.8	7 19	0					
LJUBLJANA	37.75	156.7	7 20	0					
ROSELEND	37.81	165.8	7 20	0					
TRIESTE	38.12	157.7	7 25	2				8	47 PP
ISOLA	39.33	165.4	7 33	0				8	35
MONACO	39.79	165.0	7 36	-1				8	43
FLORENCE x.	39.88	160.7	6 45	-52				11	42
SIMFEROPOL	40.16	135.0			13	50	3	9	21 PP
SEVEN FALLS	40.56	252.2	7 43A	0					
IRKUTSK	40.72	62.2	7 43	-1	14	56	0		
SHAWINIGAN	41.34	254.1	7 49A	-1					
BANFF	41.77	297.2	7 52	-1					
HALIFAX	42.22	244.1	7 59	2					
BREBEUF	42.48	254.7	7 58	-1					
OTTAWA	42.82	256.8	8 1	-1					
TOLEDO	43.43	178.0	8 7A	0	15	0	24	17	55 SS
PENTICTON	44.02	300.5	8 12	1					
VICTORIA	45.20	303.9	8 19	-2					
ULAN-BATOR	45.29	60.8	8 23	1					
WESTON	45.29	251.6	8 26	4	15	7	5		
KIROVOBAD	45.56	122.7	8 23	-1	15	11	5		
ESEN BULAK	45.63	71.2	8 27	3					
LONDON ONT.	45.79	261.8	8 25A	-1					
ALMATA	46.44	90.8	8 32	1					
ALMERIA	46.47	176.3	8 35	4					
BUTTE	46.53	293.2	8 31	0				9	12
GORIS	46.70	122.9	8 35K	2					
BOZEMAN	46.71	291.7	8 32	-1					
PALISADES	46.94	254.0	8 37	2	15	26	0	10	36 PCP
RAPID CITY	47.38	283.8	8 38	0					
TASHKENT	47.45	98.9	8 40A	1	15	36	3		
PENNSYLVANIA	47.61	258.0	8 40	0					
CHICAGO CGS.	47.80	268.0	8 36	-5					
BLUE MTS.	48.20	297.4	8 44	-1	15	44	0	10	36 PP
ANDIJAN	48.38	95.9	8 49A	3					
MORGANTOWN	49.01	259.8	8 56A	5					
ASHKABAD	49.51	110.7	8 57	2				16	8 PS
AVERROES	50.00	181.8	9 4A	6					
LARAMIE	50.39	285.5	9 2	1					
TEHERAN	50.94	118.3	9 7	1				11	26 PP
KSARA	51.36	134.9	9 14	5				11	58
MANHATTEN	51.42	276.3	9 24K	15					
LAWRENCE	51.48	275.0	9 6	-4					
KHOROG	51.51	97.4						16	49 PS
UINTA BASIN	51.82	289.2	9 12	0	16	40	6	11	13 PP
DUGWAY	52.31	292.2	9 15K	-1					
MINERAL	53.10	300.6	9 22A	0					
EUREKA	53.36	295.1	9 24	0				11	29
CUMBERLAND	53.66	264.7	9 24	-2	16	55	-4	11	31 PP
PEKING	54.03	53.6	9 29	0	16	57	-7		
FAYETTEVILLE	54.20	273.4	9 26A	-4					
TULSA	54.57	274.9	9 31K	-2	17	10	-1	21	29 SS
COLUMBIA	54.69	259.9	9 35	1					
CALISTOGA	54.89	301.3	9 36K	1					
WARSAK DAM	54.94	98.0	9 34	-1					
BERKELEY	55.62	300.9			17	15	-11		
LICK	56.08	300.2	9 47K	3					
LANCHOW	56.70	66.0	9 49	1					
BOULDER CITY	56.70	293.5	9 45	-3					
ALBUQUERQUE	56.77	285.2	9 49	0					
SHIRAZ	57.08	118.1	9 45	-6				12	1 PP
PRIEST	57.17	299.1	9 53K	2					
LUBBOCK	57.59	280.5	9 54	0					

QUETTA	58.17	103.3	9	58	0							
PASADENA	58.87	296.4	10	8	5							
SIAN	59.02	61.4	10	6	2							
MATUSIRO	59.30	33.4	10	5	-1	18	35	21				
TUCSON	59.94	289.0	10	10	-1							
NEW DELHI	60.97	93.2	10	18A	0							
LHASA	61.57	79.4	10	23	1							
CHENGTU	62.05	66.6	10	26	1							
ZO-SE	63.35	50.1	10	37	3							
CHATRA	63.89	83.6	10	36A	-1							
SHILLONG	65.69	79.2	10	47	-2							
KUNMING	67.38	68.6	10	59	-1							
CHITTAGONG	68.85	79.7	11	7	-2							
BOMBAY	70.00	99.0	11	35	19						13	52
POONA	70.49	98.0	11	20	1							
KIPAPA	74.83	333.3				22	15	54				
HONOLULU	74.95	333.3				22	14	52				
TRINIDAD	75.59	236.9	11	52	3							
CARACAS	76.31	242.4	11	53	0	21	37	0				
FUQUENE	82.02	248.7	12	25	1							
BOGOTA	82.90	248.9	12	34	6						23	28 SKKS
LWIRO	86.57	145.4	12	52	5	23	35	12				
LA PAZ	103.11	240.7									18	28 PP
BRISBANE	123.60	22.9	19	7	7							
ADELAIDE	130.28	38.7	19	13	0							
CANBERRA	131.30	27.6	19	24	9							

MARCH 4 13.H 38.M 38.S EPICENTRE 24.56 121.96 DEPTH= 0.KM

A=-0.48200 B= 0.77255 C= 0.41332 D= 0.8484 E= 0.5293
G=-0.2188 H= 0.3507 K=-0.9106 HT= 3.5

SE= 2.58

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S
ZO-SE	6.55	354.1	1	37A	-3							
NANKING	7.98	340.2	1	56	-4	3	23	-9				
CANTON	8.03	261.3	1	58	-2							
BAGUIO CITY	8.20	189.3	2	3	0	3	33	-4				
MANILA	9.87	185.0	2	26	0	4	12	-7				
SIAN	14.90	313.4	3	32A	-1							
ABUYAMA	15.65	45.8	3	38A	-5							
PEKING	16.18	343.9	3	51A	1	6	54	4				
CHENGTU	17.02	294.9	3	59A	-2	7	17	7				
NHATRANG	17.22	226.8	4	4K	1						4	44
KUNMING	17.46	275.9	4	6A	0	7	32	12				
MATUSIRO	18.37	45.7	4	20	3	7	46	6				
PAOTOW	18.84	330.8	4	25A	2	8	0	9				
LANCHOW	19.36	310.5	4	31A	2	8	11	9				
CHANGCHUN	19.42	7.3	4	31	1	8	11	7				
TUKUBASAN	19.46	49.1	4	26K	-4	8	13	8			4	57 PP
VLADIVOSTOK	20.24	21.4	4	41A	2	8	30	8			4	59 PP
MIZUSAWA	21.76	43.5	5	25	30							
GUAM	24.16	113.0	5	18	0							
TOCKLAI	24.59	280.9	5	34	12							
ULAN-BATOR	26.19	336.7	5	37	-1	10	6	-2				
SHILLONG	27.25	278.5	5	45K	-2	10	25	-1			11	41 SS
CHITTAGONG	27.71	271.7	5	52	1						14	16
Y.-SAKHLINSK	27.87	31.3	5	56	3						6	50 PP
LHASA	27.94	287.3	5	53	-1							
ESEN BULAK	29.99	323.1	6	14	2							
PORT BLAIR	30.52	250.4	6	16	-1	11	16	-2				
MEDAN	30.63	230.7	6	17K	-1	11	22	2			7	14 PP
IRKUTSK	30.76	338.6	6	18	-1	11	18	-4				
CALCUTTA	30.82	273.2	6	19	0	11	26	3				
CHATRA	31.38	281.7	6	25K	1	11	30	-1			7	26 PP
BOKARO	32.93	276.4	6	37	-1	11	59	3			7	48 PP
DJAKARTA	33.92	207.7	6	29	-17	11	23	-48				
TANGERANG	34.00	208.0	6	48	1						9	24 PCP
LEMBANG	34.19	206.0	6	47K	-2	12	17	2			8	17 PPP
VISHAKHAPTNM	36.61	266.9	7	9K	0	12	53	0			8	28 PP
YAKUTSK	37.81	6.0	7	18	-1						13	23 PCS
DEHRA DUN	39.21	288.4	7	31K	0	13	31	-1			9	5 PP
NEW DELHI	40.06	285.8	7	38A	0	13	41	-4			9	18 PP
MAGADAN	40.36	22.3	7	43	2	13	50	1			9	20 PP

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SEHORE	40.93	277.6	7	52	7					
RABAUL	41.00	130.1	7	46	0	14	2	3	19	38
MADRAS	41.04	261.5	7	47K	1	13	56	-4	9	26 PP
HYDERABAD	41.11	268.7	7	48K	1	14	1	0	9	27 PP
SEMIPALATNSK	41.18	319.7	7	48A	1				9	23 PP
PORT MORESBY	41.75	140.9	7	53A	1	14	6	-4		
FRUNSE	42.79	307.2	8	1A	0					
KODAIKANAL	44.58	259.4	8	14K	-1				14	23 PCS
WARSAK DAM	44.59	294.2	8	17	2					
KHOROG	44.61	299.2	8	17K	2				13	36
POONA	44.97	272.1	8	17K	-1	14	54	-3	18	22 SS
BOMBAY	45.81	273.0	8	25	0	15	9	0	10	17 PP
TASHKENT	46.55	304.4	8	31K	0	15	19	-1		
TIKSI	47.26	3.0	8	36A	0	15	28	-2	9	5
QUETTA	48.79	289.4	8	48A	0	15	54	3		
CHARTERS TS.	50.29	149.8	9	0	0				15	57 PP
SVERDLOVSK	54.17	323.5	9	27A	-2	16	53	-12		
ASHKABAD	55.04	300.2	9	36	1	17	22	5		
MUNDARING	56.48	185.9	9	38	-8					
PERTH	56.50	186.3	9	46	0	17	35	-1	23	57
BRISBANE	59.59	148.1	10	8	1	18	11	-6		
TEHERAN	60.87	298.6	10	16	0	18	37	4	12	33 PP
SHIRAZ	61.20	291.5	10	17K	-1	18	37	0	10 27	12 41 PP
ADELAIDE	61.30	164.3	10	16	-3	18	38	-1	11	16
KHEYS	61.74	350.4	10	20	-2	18	44	0	12	43 PP
GORIS	64.11	303.6	10	47K	9	19	21	7		
RIVERVIEW	64.36	153.2	10	40A	1	19	19	2		
TIFLIS	64.82	306.2	10	43	1	19	28	5	23	52 SS
CANBERRA	64.83	155.7	10	42	0	19	24	1	13	12 PP
TOOLANGI	65.64	159.6	10	47	-1	19	35	2	13	11 PP
MOSCOW	66.94	322.3	10	53	-3	19	47	-2	10 57	14 47 PPP
APATITY	67.01	335.3	10	56	0	19	47	-3	11	20 PCP
COLLEGE	68.15	27.4	11	2	-2				11	16 PCP
KEVO	68.89	338.2	11	9	1	20	12	0		
SODANKYLA	69.61	335.7	11	12	-1	20	16	-5	24	36 SS
PULKOVO	69.92	327.4	11	13K	-1	20	24	0		
KAJAANI	70.03	332.2	11	13	-2	20	20	-5		
SIMFEROPOL	71.62	311.6	11	22	-3	20	41	-3		
KIRUNA	71.74	336.9	11	27	1	20	31	-14		
NORD	72.04	354.1	11	28	1				12	2
HELSINKI	72.39	328.6	11	25	-4					
NURMIJARVI	72.43	329.0	11	28	-2	20	49	-4	25	28 SS
HONOLULU	72.69	74.1				21	4	8	21	56
KIPAPA	72.72	74.0				21	5	8	28	50
MOULD BAY	72.75	12.7	11	19	-13	20	53	-4	11	32
ALERT	73.14	0.6	11	33	-1					
UMEA	73.24	333.0	11	32	-2	20	57	-5	25	39 SS
AFIAMALU	75.09	113.1	11	47A	2	21	29	6		
UPPSALA	75.94	329.7	11	49	-1	21	33	1	30	23
ISTANBUL UN.	76.43	309.0	11	52	-1					
LWOW	76.50	318.7	11	58	5	21	38	-1		
SKALSTUGAN	76.56	334.3	11	54	1					
WARSAW	77.31	321.8	12	1	3	21	47	0	12	11 PCP
RESOLUTE	78.19	9.4	12	2	0					
KARLSKRONA	78.52	326.8	11	57	-7					
KRAKOW	78.84	320.0	12	0	-6	22	6	2	16	54 PPP
SKALNATE PL.	79.01	319.1	12	5	-2					
CHORZOW	79.28	320.5	12	8	0				12	17 PCP
GOTEBORG	79.54	329.1	12	8	-2					
KONGSBERG	79.61	331.5	12	10	0					
RACIBORZ	79.83	320.5	12	12	1				12	17 PCP
KARAPIRO	79.95	139.7	12	13	1					
COPENHAGEN	80.31	327.2	12	18	4	22	32	13		
BELGRADE	80.73	315.0	12	15	-1				15	26 PP
CHATEAU	80.80	140.7	12	18	1					
BRATISLAVA	81.33	319.1	12	14	-5				12	50
VIENNA-H.	81.73	319.4	12	21	0	22	23	-11		
WELLINGTON	81.77	142.7				22	27	-7	23	50 PS
SCORESBY SD.	81.84	348.5	12	23	1					
PRUHONICE	81.97	321.5	12	22	-1	22	37	1		
PRAGUE	81.99	321.6	12	28	5	22	36	-1		
COLLMBERG	82.19	323.2	12	24	0				15	41 PP
YELLOWKNIFE	82.35	23.0	12	24	-1					
HALLE	82.65	323.7	12	25	-1	22	42	-1		
KASPERSKE H.	82.93	321.1	12	26	-2				13	6
JENA	83.15	323.3	12	28	-1				12 43	15 46 PP
LJUBLJANA	83.88	318.1	12	32	0					12 53
TRIESTE	84.55	318.0	12	40	4	23	0	-2		15 57 PP
MUNSTER	84.69	325.5	12	37	0					

BENSBERG	85.49	324.8	12 42	1				
STUTTGART	85.55	322.2	12 42	1				
PADOVA	85.81	318.4			23 32 17			
STRASBOURG	86.49	322.6	12 46	1				
VICTORIA	86.76	37.3	12 48	1				
FLORENCE X.	87.04	317.3	12 47	-1			23 22	
PRATO	87.08	317.4	12 50	2				
ROME	87.23	315.2	13 7	18			16 32	PP
DOURBES	87.32	325.1	13 3	13	23 36 7			
WELSCHBRUCH	87.37	323.0	12 46	-4				
PENTICTON	88.34	35.2	12 55	1				
ROSELEND	88.76	320.7	12 57	1				
BANFF	89.25	32.1	13 0	1				
ISOLA	89.36	319.3	13 6	7			17 25	
GARCHY	89.82	323.4					14 16	
HUNGRY HORSE	91.82	33.6	13 12	1				
BLUE MTS.	92.32	37.7	13 14	1	23 55 -20		30 38	PKKP
MINERAL	92.48	43.2	13 14A	0				
BERKELEY	93.48	45.6			24 4 -21			
LWIRO	93.80	269.3			23 59 -29		17 2	PP
BUTTE	94.11	34.7	13 22	1			14 31	
LICK	94.19	45.7	13 24A	2				
BOZEMAN	95.13	34.2	13 27	1				
PRIEST	95.53	46.2	13 30A	2				
EUREKA	96.46	41.3	13 34	2			17 43	PP
WOODY	96.96	45.7	13 36	2				
DUGWAY	97.85	39.2	13 41	3				
TOLEDO	98.51	321.0					31 47	SS
UINTA BASIN	99.60	37.4			24 30 5		26 55	PS
LARAMIE	101.03	34.5	13 53	0				
WICHITA MTS.	109.61	34.6	18 52	777	25 49 39		29 48	PKKP
TULSA	110.07	31.9					28 38	PS
CUMBERLAND	114.75	24.5					29 26	PS
CARACAS	144.09	15.0	19 38	1				
TRINIDAD	144.85	5.7	19 39	0				
CHINCHINA	146.02	32.6	19 57A	16				
FUQUENE	146.47	29.2	19 47	6				
BOGOTA	147.07	30.4	19 49	7				
LA PAZ	167.61	51.6	20 12	5				

MARCH 4 15.H 10.M 17.S EPICENTRE 34.91 25.16 DEPTH= 39.KM

A= 0.74387 B= 0.34946 C= 0.56968 D= 0.4252 E=-0.9051
G= 0.5156 H= 0.2422 K=-0.8219 HT= 0.2

DEPTH OF FOCUS= 0.001R

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
ATHENS	3.27	339.6	0 51	0	1 28	-1		1 34 S*
ISTANBUL UN.	6.83	25.1	1 43	2				3 40
SOFIA	7.91	350.1	1 56	0	3 29	4		2 57 PP
REGGIO CALA.	8.30	295.3	1 59	-2	3 24	-11		3 43 SS
TARANTO	8.37	313.8						2 1 PP
MESSINA	8.40	295.8	2 0	-3	3 28	-9		2 21 P*
TITOGRAD	8.81	330.2	2 13	5				3 39
KSARA	8.93	93.9	2 5	-5	3 43	-7		
JERUSALEM	8.97	107.5	2 7	-3	3 43	-8		
SARAJEVO	10.35	331.8	2 50	21	4 59	34		
BELGRADE	10.54	341.3	2 34	2	4 41	11		4 48 SG
TIMISOARA	11.24	345.7	2 42	1				6 33
ROME	12.15	308.8	3 3	9	5 4	-5		6 13 S*
SIMFEROPOL	12.15	31.7	2 52K	-2				
ZAGREB	12.94	330.1	3 1	-3	6 12	44		
LJUBLJANA	13.75	327.2	3 11	-4	5 32	-15		3 23 PP
TRIESTE	13.80	324.4	3 15K	-1	5 50	1		6 49
FLORENCE X.	13.93	313.6	3 10	-7	5 45	-7		
HURBANOVO	13.96	340.2						4 30
SOTCHI	14.20	48.1	3 20	-1	6 4	6		
BRATISLAVA	14.55	338.0	3 32	7				3 50 PP
PADOVA	14.58	320.0	3 25	-1	6 25	18		4 37
SKALNATE PL.	14.71	347.2	3 32	4				7 22
VIENNA-H.	14.85	336.5	3 32	3	6 30	17		
LWOW	14.92	357.1	3 37	7	6 24	9		

NIEDZICA	14.93	347.6	3 31	1				4 3	
KRAKOW	15.61	347.4	3 39	0				3 49	PP
PAVIA	15.95	314.8						7 29	
RACIBORZ	16.00	343.5	3 46	2				4 2	PP
CHORZOW	16.02	345.5	3 45	1				3 51	PP
EREVAN	16.21	65.4	3 48K	1					
MONACO	16.28	308.0	3 48	0				4 2	PP
KASPERSKE H.	16.58	332.5	3 50	-2	7 6	12		4 10	
ISOLA	16.73	309.0	3 54	1				5 9	
TIFLIS	16.83	60.3	3 57	2					
PRUHONICE	16.95	335.9	3 56	0	7 11	9			
PRAGUE	17.07	335.9	3 58	0	7 11	6		4 31	
RAVENSBURG	17.32	322.6	4 1	0					
WARSAW	17.57	351.5	4 7	3	7 21	5		4 18	PP
KIROVOBAD	17.67	64.8	4 5K	0					
ROSELEND	17.73	313.0	4 7	1	7 23	3		7 50	
EBINGEN	17.91	322.6	4 7	-1					
GROZNY	18.02	56.1	4 10	1					
TUBINGEN	18.10	323.6	4 11	1					
STUTTGART	18.17	324.5	4 11A	0					
COLLMBERG	18.59	335.5	4 16	0				4 30	PP
STRASBOURG	18.78	321.9	4 19	0	7 41	-2		5 17	
JENA	18.80	332.5	4 17	-2	7 52	8		4 25	PP
HEIDELBERG	18.87	325.1	4 19	-1					
BESANCON	18.94	316.4	4 18	-3					
MAKHACH-KALA	19.11	58.4	4 24K	1					
HALLE	19.13	334.1	4 22	-1				8 8	SS
WELSCHBRUCH	19.41	319.7	4 19	-7					
CLERMONT-FD.	19.94	309.6	4 30	-2	8 24	15			
TORTOSA	20.32	294.2	4 37	1	8 26	10			
GARCHY	20.65	313.4	4 38K	-1				6 8	
BENSBERG	20.67	326.4	4 39A	0				8 33	
ALICANTE	20.84	287.0	4 40K	-1	8 39	13		5 7	PP
MUNSTER	21.19	328.9	4 45	0					
DOURBES	21.35	321.6	4 50	4	8 46	10			
TEHERAN	21.40	80.2	4 48	1	8 49	12			
PARIS	21.76	316.6	4 49A	-1				5 55	
KARLSKRONA	22.24	345.8	4 48A	-7	8 50	-3			
ALMERIA	22.45	283.0	4 57A	0	9 12	16		5 25	PP
MOSCOW	22.52	18.6	4 58	0	9 2	4			
COPENHAGEN	22.54	341.0	4 59	1	9 1	3			
TOLEDO	23.68	290.7	5 9K	0	9 25	7		5 39	PP
SHIRAZ	23.68	95.1	5 11K	2	9 29	11		39 59	PKPPKP
GOTEBORG	24.46	342.8	5 16A	-1					
JERSEY	24.60	313.8	5 4	-14				10 7	
KEW	24.70	319.9	5 20K	1	9 45	9			
PULKOVO	25.10	6.2	5 20	-3	9 42	0			
KIZYL-ARVAT	25.13	71.0	5 24K	1					
HELSINKI	25.28	359.8	5 24	-1					
UPPSALA	25.44	351.1	5 25A	-1	9 48	0			
NURMIJARVI	25.62	359.4	5 26	-2	9 56	5			
VIBORG	25.93	4.1	5 29	-2	9 48	-8			
KONGSBERG	26.76	342.4	5 36	-2	10 14	4		6 28	PPP
ASHKABAD	26.80	73.7	5 39	0					
AVERROES	26.97	276.0	5 41K	1					
DURHAM	27.18	325.2	5 44A	2	10 19	3			
LISBON	27.64	288.1	5 47	1					
BERGEN	28.57	339.3	5 53	-2					
ADDIS ABABA	28.61	151.0	5 57	2					
UMEA	29.10	355.5	5 57A	-3	10 45	-2		6 39	PP
KAJAANI	29.24	2.3	5 57	-4	10 47	-3			
SKALSTUGAN	29.78	348.4	6 4	-2					
SVERDLOVSK	32.45	36.5	6 28	-1					
SODANKYLA	32.52	1.1	6 28	-2					
APATITY	33.03	5.8	6 33A	-1	11 47	-2			
KIRUNA	33.08	356.7	6 33A	-2					
KEVO	34.92	1.1	6 50	0					
TROMSOE	34.95	356.2	6 51	0					
TASHKENT	35.00	66.1	6 50K	-1					
QUETTA	35.35	85.7	6 53K	-1	12 32	7			
LWIRO	37.12	174.0	7 9K	0					
ANDIJAN	37.38	66.7	7 13K	2	12 58	2			
WARSAK DAM	37.99	77.7	7 17	1					
ALMATA	40.50	62.1	7 40	3					
SEMIPALATNSK	42.37	51.1	7 53K	0					
SCORESBY SD.	43.57	339.1	8 3	1					
NEW DELHI	44.29	83.2	8 8	0					
DEHRA DUN	44.36	80.5	8 9K	0					
POONA	45.99	97.8	8 22A	0					

KHEYS	47.53	6.9	8	34	0	15	26	1			
NORD	49.19	352.6	8	45	-2						
CHILEKA	51.17	167.8	9	3	1						
CHATRA	53.10	80.6	9	16K	0					16	47
ESEN BULAK	53.45	54.6	9	20	1						
MADRAS	54.08	99.6	9	22	-1					18	57
BULAWAYO	54.84	176.0	9	30	1						
ALERT	55.30	350.8	9	31	-1						
SHILLONG	57.45	79.8	9	45A	-3						
TIKSI	61.41	20.5	10	13K	-2						
KIMBERLEY	63.32	180.4	10	28	0						
SCHEFFERVLLE	63.36	319.7	10	27A	-1						
RESOLUTE	63.91	345.2	10	31	-1						
HALIFAX	65.70	308.4	10	43	0						
YAKUTSK	66.11	30.0	10	44K	-2						
MOULD BAY	66.87	351.3	10	49K	-2	19	42	3			
SEVEN FALLS	69.05	313.3	11	4	0						
SHAWINIGAN	70.49	313.5	11	14	1						
BREBEUF	71.54	312.9	11	20	1						
WESTON	71.71	309.2	11	21K	1						
PENNSYLVANIA	76.70	310.5	11	50	1						
VLADIVOSTOK	77.60	45.9	11	54	0						
YELLOWKNIFE	77.69	342.1	11	55	0						
MORGANTOWN	78.67	310.5	12	1	1						
COLLEGE	80.40	357.0	12	9	0						
CUMBERLAND	84.67	310.0	12	33	2					13	15
BAGUIO CITY	85.09	73.5	12	35	2						
MATUSIRO	85.49	48.0	12	36A	1						
BANFF	87.58	336.5	12	47	1						
LEMBANG	87.72	99.9	12	46	0						
LAWRENCE	88.14	317.7	12	49K	1						
HUNGRY HORSE	89.46	334.2	12	56	1						
PENTICTON	90.49	337.8	13	1	2						
BOZEMAN	90.57	331.0	13	3	3						
VICTORIA	92.34	339.7	13	9	1						
WICHITA MTS.	93.05	316.7	13	16	5					17	13 PP
BLUE MTS.	93.63	334.3	13	14	0					16	54
UINTA BASIN	94.31	327.0	13	16	-1					16	49
SOUTH POLE	124.73	180.0	18	57	1						
CHARTERS TS.	126.40	90.3	19	2	3						
CANBERRA	134.60	107.5	19	18	3						

MARCH 4 15.H 43.M 6.S EPICENTRE -4.52 -81.75 DEPTH= 47.KM

A= 0.14297 B=-0.98663 C=-0.07825 D=-0.9897 E=-0.1434
G=-0.0112 H= 0.0774 K=-0.9969 HT= 7.1

DEPTH OF FOCUS= 0.002R

SE= 2.02

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S
CHINCHINA	11.24	33.1	2	43	2	4	49	3				
FUQUENE	12.75	39.0	2	56	-5							
AREQUIPA	15.57	140.4	3	36	-2							
SAN SALVADOR	19.53	337.9	4	28	2							
CARACAS	20.99	44.6	4	39K	-3						5	14 PP
HOPE	22.91	12.3	5	1	0							
COMITAN	23.05	333.8	5	10	8	9	30	24			12	54
TRINIDAD	25.25	53.3	5	22	-1	9	46	3				
MERIDA	26.46	343.3	5	36	1	10	27	24				
SAN JUAN	27.48	33.7	5	43	-1	10	21	1			10	42
VERA CRUZ	27.49	329.4	5	58	14	10	58	38			16	58
FORT FRANCE	27.98	46.5	5	48	-1	10	46	18				
ST. CLAUDE	28.47	43.8	5	49	-4	10	48	12				
TACUBAYA	29.32	324.7	6	3	2						13	34
GUADALAJARA	32.79	320.5									17	38
HOUSTON	36.47	339.8	7	5	2							
COLUMBIA	38.31	1.0	7	17	-1						8	48
CUMBERLAND	40.06	355.2	7	32	0	13	35	0			9	7 PP
CHAPEL HILL	40.30	3.4	7	33	-2							
CHIHUAHUA	40.42	326.1	6	34	-61						18	14
BLACKSBURG	41.53	1.6	7	43	-2							
FAYETTEVILLE	42.04	344.9	7	47	-2	14	8	4				
WICHITA MTS.	42.13	339.2	7	49	-1	14	13	7			9	44 PCP
TULSA	42.31	343.0	7	51K	0	14	12	4				

LUBBOCK	42.39	334.8	7	52	0						
ST. LOUIS 1	43.65	350.4	8	2	0	14	28	0			
MORGANTOWN	43.96	2.0	8	4K	0						
LAWRENCE	45.03	345.1	8	12	-1						
PENNSYLVANIA	45.24	4.2	8	8	:?						
MANHATTEN	45.60	343.8	8	51	33						
CLEVELAND	45.78	0.2	8	17K	-2	14	47	-11			
PALISADES	45.87	8.3	8	18	-2	14	55	-5			
LONDON ONT.	47.34	0.6	8	29A	-2				16	5	*SS
WESTON	47.63	10.5	8	33	-1	15	28	3			
GOLDEN	49.08	335.9	8	45	0						
BREBEUF	50.32	7.4	8	52A	-2	16	2	0			
LARAMIE	50.54	336.8	8	56	0						
BOULDER CITY	50.82	325.2	8	59	1				9	30	
UINTA BASIN	51.41	332.8	9	2A	-1	16	15	-2	20	10	SS
PRICE	51.43	331.3	9	2	-1						
SHAWINIGAN	51.47	7.9	9	0	-3						
PASADENA	51.57	321.1	9	3	-1						
FLAMING GRGE	51.82	333.4	9	6	0						
RAPID CITY	52.08	340.5	9	7	-1						
SEVEN FALLS	52.31	9.4	9	7	-2						
SALT LAKE C.	52.83	331.4	9	13	0						
DUGWAY	52.85	330.3	9	13	0						
EUREKA	53.95	327.4	9	22	1				11	27	PP
PRIEST	54.41	321.3	9	25A	0						
LICK	55.77	321.8	9	35A	0						
RENO	56.12	325.0	9	37A	0						
BOZEMAN	56.37	335.7	9	38	-1						
BERKELEY	56.49	321.9	9	39A	-1				10	38	PCP
CALISTOGA	57.17	322.5	9	44A	-1						
BUTTE	57.28	334.9	9	44	-1	17	40	4	10	18	
MINERAL	57.69	324.6	9	47A	-1						
UKIAH	57.87	322.5	9	47	-3						
BLUE MTS.	58.54	331.0	9	51	-3	17	57	4	11	54	PP
HUNGRY HORSE	59.74	335.6	10	1	-2						
SCHEFFERVLLE	60.42	9.9	10	4	-3						
SPOKANE	60.68	333.2	10	8	-1						
BANFF	62.56	336.8	10	20	-2						
PENTICTON	62.88	333.2	10	23A	-1						
VICTORIA	64.11	330.6	10	31A	-1						
M.BOUR	66.90	72.4	10	48	-2	19	43	5			
PORT HARDY	67.55	330.5	10	54A	0						
YELLOWKNIFE	71.36	344.6	11	15	-2						
HAWAII V.OB.	76.05	291.2	11	46	2						
KIPAPA	78.92	292.7	12	2	2	22	28	34			
HONOLULU	78.98	292.6	12	2	1	22	25	31	33	9	
AVERROES	79.47	55.1	12	5A	2						
RESOLUTE	79.47	356.5	12	1A	-2						
TOLEDO	83.49	49.2	12	25K	1	22	41	0	15	38	PP
MOULD BAY	83.49	351.5	12	23	-1	22	42	1	15	36	
COLLEGE	84.15	336.9	12	27	-1						
SCORESBY SD.	84.56	17.0	12	27	-3						
SOUTH POLE	85.51	180.0	12	33	-1						
ALICANTE	85.95	51.2	12	36K	-1						
ALERT	87.34	2.5	12	41	-2	23	6	-12			
FOLINIERE	87.63	40.9	12	45	0						
KEW	88.18	38.2	12	47K	0						
AFIAMALU	88.95	256.2	12	54K	3	23	18	-15			
CLERMONT-FD.	89.63	44.2	12	33	-21						
GARCHY	89.78	42.7	12	54K	-1				16	15	
NORD	90.90	7.7	12	59	-1						
DOURBES	91.09	40.0	13	7	6						
ROSELEND	92.07	44.5	13	6	0						
WELSCHBRUCH	92.08	41.8	13	9	3						
ISOLA	92.26	46.0	13	7	1						
MONACO	92.50	46.5	13	12	4						
BENSBERG	92.80	39.3	13	9K	0						
STUTTGART	94.05	41.5	13	15K	0						
JENA	95.58	39.4	13	21	-1	24	9	17	17	10	PP
GOTEBORG	95.79	32.6	13	22	-1						
HALLE	95.82	38.8	13	23	0	24	27	33			
COLLMBERG	96.48	39.0	13	26K	0				24	17	PP
KASPERSKE H.	96.89	41.2	13	28	0				17	20	
WELLINGTON	97.10	227.6							26	15	PS
PRUHONICE	97.49	40.3	13	30	0				17	29	
KARLSKRONA	97.83	34.1	13	28	-4						
UMEA	99.32	26.1	13	36	-3	24	10	-2			
KEVO	100.66	19.6							25	0	SKKS

NURMIJARVI	101.97	29.0	13	49	-1	24	32	7			27	5 PS
BROKEN HILL	108.33	106.7	18	25	777							
CHANGALANE	109.19	119.7									28	12 SP
LWIRO	110.29	94.1									34	29 SS
RIVERVIEW	117.20	228.3									26	42 SKKS
CANBERRA	118.08	225.9									36	48 SSP
TOOLANGI	119.36	222.0									19	8
ADELAIDE	125.32	220.8	18	57	1							
CHARTERS TS.	126.88	240.9	19	1	2							
TEHERAN	126.88	47.9	19	1	2							
SHIRAZ	130.12	54.6	19	6K	1				19	42	21	14 PP
MATUSIRO	131.43	316.4	19	8	0							
MUNDARING	139.89	204.0	19	23	0							
PEKING	141.12	337.9	19	26	0						22	27 PP
ZO-SE	145.87	323.4	19	35A	1						22	53 PP
NANKING	146.52	327.3	19	37A	2						23	0 PP
LANCHOW	148.20	351.4	19	40	2							
SIAN	148.80	342.8	19	42	3							
NEW DELHI	148.82	37.6	19	39	0							
BOMBAY	151.36	58.0	19	51	9						39	19 SS
POONA	152.39	57.7	19	46K	2							
CHENGTU	153.43	348.8	19	47	2						23	38 PP
LHASA	154.10	14.5	19	49	3						23	43 PP
CHATRA	155.42	24.4	19	49	-1							
SHILLONG	158.19	15.7	19	50A	-2							
KUNMING	159.07	348.5	19	54	1						24	11 PP
MADRAS	160.27	63.6									20	45
CHITTAGONG	161.20	18.8	19	56	1							
PORT BLAIR	171.03	37.2									20	22

MARCH 5 7.H 5.M 3.S EPICENTRE -4.51 -81.50 DEPTH= 37.KM

A= 0.14735 B=-0.98599 C=-0.07812 D=-0.9890 E=-0.1478
G=-0.0115 H= 0.0773 K=-0.9969 HT= 7.1

DEPTH OF FOCUS= 0.001R

SE= 1.62

	DELTA DEG.	AZ. DEG.	P M	S	O-C S	*PP M	S	O-C S	M	S	SUPP. M	S	
HUANCAYO	9.66	141.2	2	18	-1								
CHINCHINA	11.10	32.0	2	40	1	4	51	8					
BOGOTA	11.72	39.4	2	45	-2	5	0	2			3	32	PPP
FUQUENE	12.59	38.1	3	0	1								
BALBOA HTS.	13.52	8.2	3	11	0	5	47	6					
AREQUIPA	15.41	141.1	3	37	1								
LA PAZ	17.72	133.2	4	5	0	7	29	10					
CARACAS	20.81	44.2	4	40K	0	8	32	7					
HOPE	22.85	11.7	5	2	1								
COMITAN	23.15	333.2	5	21	17						14	17	
TRINIDAD	25.05	52.9	5	23	1	9	45	4					
MERIDA	26.53	342.8									6	27	
SAN JUAN	27.34	33.3	5	48	5	10	25	6			10	45	
VERA CRUZ	27.61	329.0	6	1	15						12	21	
FORT FRANCE	27.79	46.2				9	31	-55					
TACUBAYA	29.46	324.3	6	3	1								
HOUSTON	36.55	339.5	7	7	3								
COLUMBIA	38.30	0.6	7	19	1						8	52	
CUMBERLAND	40.07	354.8	7	32	-1	13	37	1			9	13	PP
BLACKSBURG	41.52	1.3	7	44	-1	13	37	-21					
FAYETTEVILLE	42.10	344.6	7	50A	0								
WICHITA MTS.	42.21	338.9	7	51	0	14	12	4			9	45	PCP
TULSA	42.38	342.7	7	52K	0	14	14	3			9	44	
LUBBOCK	42.50	334.5	7	54	1								
ST. LOUIS 1	43.69	350.1	8	2	-1	14	31	1					
MORGANTOWN	43.94	1.7	8	4	-1				9	49			
LAWRENCE	45.09	344.8	8	14	0						14	53	
PENNSYLVANIA	45.21	3.9	8	14	-1								
ALBUQUERQUE	45.74	331.1	8	22	3								
PALISADES	45.83	8.0	8	19	-1	15	0	0	9	56	16	28	*SS
TUCSON	45.97	324.7	8	21	0						9	57	
LONDON ONT.	47.33	0.3	8	31	-1								
GOLDEN	49.18	335.6	8	46	0								
OTTAWA	49.96	5.3	8	49	-3								
BREBEUF	50.28	7.2	8	53K	-1	15	3	-60			10	13	PCP

LARAMIE	50.63	336.6	8	58	1					
BOULDER CITY	50.96	325.0	9	0	0					
SHAWINIGAN	51.42	7.7	9	1	-2					
UINTA BASIN	51.52	332.6	9	4A	0	16 29	9		11	0 PP
PRICE	51.54	331.1	9	4	0					
PASADENA	51.72	320.9	9	5	0	16 33	10	9 22	10	18 PCP
FLAMING GRGE	51.93	333.2	9	7	0					
RAPID CITY	52.16	340.3	9	9	0					
SEVEN FALLS	52.27	9.2	9	11	2					
SALT LAKE C.	52.94	331.3	9	14	0				10	4 PCP
DUGWAY	52.97	330.1	9	15	0					
EUREKA	54.08	327.3	9	23	0				11	23 PP
PRIEST	54.56	321.1	9	26A	0					
LICK	55.93	321.7	9	37A	1					
RENO	56.26	324.8	9	39	0					
BOZEMAN	56.47	335.5	9	40	0					
BERKELEY	56.64	321.8	9	41A	0				10	38 PCP
CALISTOGA	57.32	322.3	9	46A	0					
BUTTE	57.38	334.7	9	46	-1				11	50 PP
MINERAL	57.83	324.4	9	49A	-1				10	16
UKIAH	58.02	322.4	9	49	-2					
BLUE MTS.	58.65	330.8	9	54A	-2	18 8	12		11	57 PP
HUNGRY HORSE	59.83	335.5	10	3	-1				10	48 PCP
SCHEFFERVLLE	60.37	9.7	10	6	-1					
BANFF	62.65	336.6	10	23	0					
PENTICTON	62.99	333.0	10	25A	0					
VICTORIA	64.22	330.4	10	32	-1					
M.BOUR	66.66	72.3	10	44	-5					
PORT HARDY	67.67	330.4	10	56	1					
YELLOWKNIFE	71.42	344.5	11	16	-2					
BYRD STATION	77.65	186.3	11	54	0					
KIPAPA	79.15	292.7	12	3	1					
HONOLULU	79.21	292.6	12	3	1					
RESOLUTE	79.48	356.4	12	2K	-2					
TOLEDO	83.29	49.1	12	25A	1	23 13	33		28	17 SS
MOULD BAY	83.52	351.5	12	24A	-1					
ALMERIA	83.94	52.4	12	24K	-3					
COLLEGE	84.24	336.9	12	27	-2				15	44 PP
SOUTH POLE	85.52	180.0	12	34	-1					
ALICANTE	85.75	51.1	12	40A	4					
ALERT	87.33	2.5	12	44A	0					
KEW	88.01	38.2	12	48	1					
AFIAMALU	89.20	256.2	12	55A	2					
GARCHY	89.60	42.7	12	14A	-41					
NORD	90.86	7.6	12	59	-2					
DOURBES	90.92	40.0	13	6	5					
ROSELEND	91.89	44.5	13	6	1					
WELSCHBRUCH	91.91	41.8	13	9	4					
BENSBERG	92.63	39.3	13	7	-2					
STUTTGART	93.87	41.5	13	15	1					
JENA	95.42	39.4	13	22	1				13	42
COLLMBERG	96.31	39.0	13	27K	2				17	21 PP
KASPERSKE H.	96.71	41.2	13	29	2				17	22
WELLINGTON	97.30	227.6							26	21 PS
UMEA	99.21	26.1	13	38	-1	24 18	5			
NURMIJARVI	101.84	29.0	13	49	-2				27	1 PS
RIVERVIEW	117.40	228.2							29	51 PS
TOOLANGI	119.53	221.9	18	48	2					
ADELAIDE	125.49	220.6	18	59	2					
CHARTERS TS.	127.10	240.7	19	2	2					
PORT MORESBY	129.59	254.0	19	7	2					
SHIRAZ	129.91	54.7	19	7A	1			19 39	22	17 PP
MATUSIRO	131.60	316.5	19	9	0					
MUNDARING	140.00	203.7	19	19	-5					
QUETTA	140.78	45.8	19	21	-5				23	8
WARSAK DAM	141.42	37.1	19	32	5					
DARWIN	143.75	242.1	19	31	0					
LAHORE	144.81	37.3	19	33	0					
ZO-SE	146.02	323.7	19	37A	2					
NANKING	146.65	327.6	19	39A	3					
DEHRA DUN	147.88	34.6	20	40A	62					
LANCHOW	148.23	351.8	19	41	3					
NEW DELHI	148.66	37.9	19	31K	-8					
CHATRA	155.31	24.8	20	0	11					
BAGUIO CITY	155.31	300.3	20	17	28					
SHILLONG	158.12	16.2	19	55A	3					
LEMBANG	165.52	219.0	20	1A	1				21	0
NHATRANG	166.93	306.5	20	1	0					

MARCH 7 5.H 21.M 57.S EPICENTRE -26.83-113.54 DEPTH= 0.KM

A=-0.35689 B=-0.81918 C=-0.44896 D=-0.9168 E= 0.3994
G= 0.1793 H= 0.4116 K=-0.8936 HT= 2.8

SE= 2.08

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
SANTA LUCIA	37.48	110.7	7	16	-1						16	3	
HUANCAYO	38.74	75.2	7	30	2								
ANTOFAGASTA	38.99	95.2	7	30	0								
MANZANILLO	46.48	12.1									22	48	
OAXACA	46.53	22.4									22	47	
TACUBAYA	48.02	18.3	8	44	1						15	46	
GUADALAJARA	48.26	12.9									25	3	
CHINCHINA	48.42	54.9	8	39	-7	15	47	1			10	45	PP
BALBOA HTS.	48.50	47.5	8	45	-1	15	34	-14					
VERA CRUZ	48.78	22.1	8	51	3	16	7	16			21	27	
BOGOTA	49.33	56.7	8	54A	1	16	7	8			19	36	SS
FUQUENE	50.15	56.1	8	59	0	16	20	9					
GALERAZAMBA	52.71	49.9	9	21	3	16	57	11					
BYRD STATION	53.34	181.3	9	24	1								
CHIHUAHUA	55.61	8.0									18	29	
AFIAMALU	55.67	271.1	9	41K	1	17	36	10					
CARACAS	58.51	56.9	9	58A	-2	18	5	2					
TUCSON	58.81	2.7	10	1	-1	18	8	1					
CHATEAU	59.36	238.6	10	5	-1								
WELLINGTON	59.56	236.1	10	7	-1	18	19	2			12	18	PP
KARAPIRO	59.62	240.0	10	7	-1								
PASADENA	60.81	355.6	10	15	-1	18	43	10			10	35	
SOCORRO	60.89	6.3	10	19	2								
HAWAII V.OB.	61.26	314.2	10	20	1	18	44	5					
ALBUQUERQUE	61.81	6.6	10	22	-1								
BOULDER CITY	62.49	358.8	10	28	1								
ROXBURGH	62.68	230.5	10	33	4	19	4	7					
TRINIDAD	62.83	60.7	10	28	-2	18	57	-1					
WICHITA MTS.	62.83	13.8	10	26	-4	19	1	3			23	13	SS
PRIEST	62.99	353.5	10	31K	0								
SOUTH POLE	63.32	180.0	10	30	-3								
LICK	64.28	352.8	10	39A	0								
SAN JUAN	64.32	50.9	10	43	4	19	17	0					
HONOLULU	64.43	313.5	10	42	2	19	19	1					
KIPAPA	64.47	313.7	10	41	1	19	19	0					
TULSA	64.61	15.9	10	39K	-2	19	23	2					
BERKELEY	64.88	352.4	10	43A	0	19	21	-3			11	27	PCP
FAYETTEVILLE	65.19	17.2	10	43K	-2	19	33	5	10	48			
FORT FRANCE	65.53	57.4	10	45	-2	19	32	0					
CALISTOGA	65.68	352.2	10	47K	-1								
ST. CLAUDE	65.94	55.9	10	56	6	19	34	-3					
EUREKA	66.01	357.9	10	50A	0						38	58	PKPPKP
PRICE	66.15	2.3	10	51	0								
UKIAH	66.24	351.8	10	54	2								
RENO	66.29	354.7	10	53K	1								
GOLDEN	66.62	6.9	10	55	1						19	54	
DUGWAY	66.69	0.6	10	54	-1								
UINTA BASIN	66.91	3.3	10	55	-1	19	57	8			13	31	PP
MINERAL	67.26	353.3	11	0A	2						11	24	
SALT LAKE C.	67.27	1.4	10	56	-2								
CUMBERLAND	67.47	24.4	10	57	-3	20	0	5			24	35	SS
SHASTA	67.69	352.7	11	0A	-1								
COLUMBIA	67.91	28.8	11	2	0	20	3	2					
BLUE MTS.	71.42	357.2	11	23	-1	20	50	8			14	3	PP
NOUMEA	71.76	253.8	11	25K	-1								
BOZEMAN	72.19	1.8	11	28	-1	21	3	12					
BUTTE	72.51	0.7	11	30	0	21	8	13			14	12	PP
MORGANTOWN	73.16	26.5	11	33A	-1								
CLEVELAND	74.15	24.5	11	41K	1	21	19	6					
KOUMAC	74.30	254.7	11	41K	0								
HUNGRY HORSE	74.84	359.7	11	44	0						21	22	
VICTORIA	75.53	353.2	11	48	0								
LONDON ONT.	75.64	23.9	11	49A	0								
PENTICTON	76.00	355.9	11	49	-2								
PALISADES	76.86	29.7	11	54	-1	21	46	3			22	10	SKS
PORT HARDY	78.19	351.0	12	4	1								
RIVERVIEW	79.63	237.4	12	9	-2	22	15	2			15	9	PP
OTTAWA	79.71	26.0	12	17	6	22	17	4					
CANBERRA	80.59	235.3	12	16K	0	22	21	-2	12	25	12	20	PCP
BREBEUF	80.63	27.2	12	20	4	22	28	5			22	42	SKS

SHAWINIGAN	81.83	27.1	12	22	0					
TOOLANGI	82.10	232.0	12	23	-1				22	42
SEVEN FALLS	83.08	27.8	12	28	-1					
SEPT ILES	87.34	28.1	12	54A	4					
ADELAIDE	88.13	231.5	12	55	1	23	43	6	24	39 PS
YELLOWKNIFE	89.01	359.5	12	56	-2					
CHARTERS TS.	89.74	247.7	13	1	0				16	30
SCHEFFERVLLE	90.68	24.9	13	5	-1					
COLLEGE	95.20	346.0	13	24	-3					
RESOLUTE	101.99	5.0	13	57	0					
M.BOUR	102.12	79.9							18	9 PP
MOULD BAY	102.88	358.6	14	1	0					
HERMANUS	104.42	141.2							33	28 SS
PERTH	104.96	221.9				26	13	83	18	34 PP
CHANGALANE	117.72	145.2							29	51 SP
TUKUBASAN	117.88	298.6							29	55 PS
MATUSIRO	119.44	298.6	19	7	15				27	19 SKKS
TOLEDO	121.07	57.9				26	11	18	20	27 PP
ABERDEEN	123.67	37.5							38	33 SS
TIKSI	123.85	340.2							20	29 PP
VLADIVOSTOK	125.29	305.3							20	49 PP
YAKUTSK	125.84	328.7	19	3A	-1					
KHEYS	126.01	1.7	19	5A	1					
PARIS	126.59	47.7	19	5	0					
BAGUIO CITY	128.96	269.9	19	26	16				21	19 PP
DJAKARTA	128.97	235.9							22	28
STRASBOURG	130.09	47.9							21	33 PP
KIRUNA	130.60	21.1	19	13	0				21	30 PP
STUTTGART	131.08	47.5	19	19	5				38	59 SS
PAVIA	131.22	52.3				26	46	23	39	20
KEVO	131.38	17.1							21	31 PP
JENA	132.29	44.4	19	21	5				21	39 PP
ZO-SE	132.33	288.7	19	24	8					
HALLE	132.43	43.6	19	23	6				21	41 PP
UMEA	132.58	25.8	19	22A	5				21	48 PP
FLORENCE X.	132.75	54.1	19	31	14				26	33 SKKS
SODANKYLA	132.81	19.7	19	17	0					
PADOVA	133.11	51.9							22	48
COLLMBERG	133.11	43.7	19	19	1				21	54 PP
UPPSALA	133.20	31.4							21	46 PP
LWIRO	133.58	122.6	19	19	0				22	55 PKS
ROME	133.71	56.6	19	21	2				22	53 PKS
KASPERSKE H.	133.85	46.6	19	20	1				21	56 PP
PRUHONICE	134.33	45.3	19	22	2				21	53 PP
TRIESTE	134.41	51.4	19	21	1				24	52 PPP
NANKING	134.50	289.6	19	23	3					
APATITY	134.61	17.1							22	58 PKS
LJUBLJANA	134.90	50.7	19	23	2				22	0
KAJAANI	135.20	23.0	19	21	-1				21	59 PP
NURMIJARVI	136.03	28.4	19	23	0				22	4 PP
MESSINA	136.09	61.8	19	23	0	26	13	-20	21	59 PP
PEKING	136.99	300.8	19	26	1					
TARANTO	137.36	58.5							29	3 SKKS
VIBORG	137.62	26.5							22	11 PP
PULKOVO	138.80	26.9	19	34	6				23	4 PKS
UZHGOROD	139.57	45.5	19	35	5				22	28 PP
LWOW	140.29	43.2	19	44	13				23	41
MEDAN	141.47	238.7	19	21	-12				23	3
PAOTOW	141.63	302.3	19	31	-2					
IRKUTSK	141.97	322.2	19	30	-4					
ULAN-BATOR	142.15	314.7	19	32	-2					
ATHENS	142.54	61.9	19	35K	0				22	36
MOSCOW	144.39	27.9	19	38	0					
CHENGTU	146.96	285.6	19	44	2					
LANCHOW	146.98	295.5	19	46	4					
KUNMING	147.41	275.2	19	46	3					
SIMFEROPOL	148.45	46.6	19	45	0					
ESEN BULAK	149.40	317.5	19	32	-14					
SVERDLOVSK	149.73	6.4	19	48	1					
PORT BLAIR	151.07	243.6	19	58	9				23	55
JERUSALEM	152.37	72.3	19	56	5					
KSARA	152.77	67.8	19	56	5				23	39 PP
SEMIPALATNSK	154.20	339.5	19	58	5					
CHITTAGONG	156.53	264.6	19	59	3					
TIFLIS	156.83	44.6	19	59	2					
SHILLONG	157.17	272.6	20	0	3				24	18
LHASA	158.17	283.1	19	56	-3					
KIROVOBAD	158.39	45.3	20	1	2					
GORIS	159.00	48.0	20	3A	3				24	21 PP

KODAIKANAL	160.49	214.2									20	51
MADRAS	161.16	225.7	20	22	20	27	31	25			24	43 PP
CHATRA	161.51	274.7	19	57	-5							
BOKARO	162.26	264.5	20	23	20						24	36
FRUNSE	162.71	339.4									24	36 PP
TEHERAN	164.37	51.7	20	9	4						32	7
TASHKENT	165.36	351.6	20	8K	2	27	13	4				
VANNOVSKAYA	166.86	30.4	20	11	4							
ASHKABAD	166.98	29.7	20	13	6							
SHIRAZ	167.39	73.9	20	10A	2	27	8	-2			25	3
KHOROG	168.55	339.3	20	13	5							
DEHRA DUN	169.24	291.5	20	10	1							
POONA	169.29	221.0	20	11A	2						21	20
BOMBAY	170.17	217.9	20	10	1						25	15
NEW DELHI	170.32	282.8	20	11K	2						46	15 SS
LAHORE	171.67	306.2	20	14	4							
QUETTA	176.64	352.7	20	14	2							

MARCH 7 12.H 16.M 22.S EPICENTRE -44.27 -75.86 DEPTH= 0.KM

A= 0.17545 B=-0.69661 C=-0.69567 D=-0.9697 E=-0.2442
G=-0.1699 H= 0.6746 K=-0.7184 HT= -3.3

SE= 2.05

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S
CONCEPCION	7.98	22.6	1	58	-2	3	57	25				
SANTA LUCIA	11.55	22.3	2	47	-2	5	46	46				
ANTOFAGASTA	21.00	14.0	4	46	-1							
AREQUIPA	27.97	9.0	5	54	0							
LA PAZ	28.45	15.7	5	58	-1	10	50	5				
BYRD STATION	39.13	191.0	7	28	-3							
SOUTH POLE	45.92	180.0	8	25	-1							
CHINCHINA	49.02	0.3	8	50	0	16	7	12			10	53 PP
BALBOA HTS.	53.09	355.4	9	20	-1							
CARACAS	55.11	10.7	9	36K	0	17	21	3				
TRINIDAD	56.22	17.2	9	46	2							
FORT FRANCE	60.23	16.4	10	14	2							
SAN JUAN	62.98	10.4	10	27	-4							
WILKES	69.61	182.7	11	15	2	20	27	6	11	32		
HERMANUS	70.20	118.9									20	36
ROXBURGH	73.61	221.7				21	16	9			25	58 SS
WELLINGTON	73.88	227.7	11	32	-6	21	15	5			25	22 SS
CHATEAU	74.94	229.7	11	44	-1							
HOUSTON	75.77	342.5	11	50	1							
KARAPIRO	75.84	230.6	11	52	2							
KIMBERLEY	77.50	117.9	11	57	-2							
COLUMBIA	78.04	355.6	12	3	1							
M.BOUR	79.17	57.6	12	11	3	22	15	7				
CUMBERLAND	79.98	352.0	12	11	-2	22	15	-1			15	13 PP
LUBBOCK	81.02	338.3	12	16	-2							
BLACKSBURG	81.21	356.3	12	20	1							
WICHITA MTS.	81.29	341.2	12	18	-2	22	35	5			15	26 PP
FAYETTEVILLE	81.70	345.1	12	20K	-2							
TULSA	81.83	343.8	12	21A	-1	22	38	3				
TUCSON	82.57	330.7	12	26	0							
ST. LOUIS 1	83.55	348.7	12	30	-1	22	56	3				
MORGANTOWN	83.60	356.8	12	33K	2							
CHANGALANE	83.88	120.9	12	32	-1				12	45	15	56 PP
AFIAMALU	84.59	256.0	12	40A	4	23	15	12				
LAWRENCE	84.69	344.9	12	35	-2							
PALISADES	84.92	1.5	12	40K	2	24	9	63			23	11 SKS
LOME	85.07	76.6	12	45	6						12	49 PCP
BULAWAYO	86.02	114.2	12	43	-1							
PASADENA	87.03	326.0	12	51	2	23	38	11				
LONDON ONT.	87.06	356.1	12	47A	-2							
BOULDER CITY	87.36	329.3	12	50	0				13	1		
GOLDEN	87.72	337.6	12	54	2						16	23
OTTAWA	89.29	0.1	12	58	-1							
BREBEUF	89.41	1.6	13	1A	1						30	6 SS
UINTA BASIN	89.51	334.9	13	0	0	23	42	-8			16	34 PP
PRIEST	89.76	325.2	13	3A	1							
BROKEN HILL	89.99	110.2	13	2	-1							
FLAMING GRGE	90.01	335.3	13	4	1							
TOOLANGI	90.35	211.7	13	2	-2				13	14	13	6 PCP

DUGWAY	90.43	332.6	13	4	-1							
SALT LAKE C.	90.63	333.5	13	7	1							
EUREKA	90.88	330.1	13	7K	0				13	18	16	43 PP
CANBERRA	90.92	215.2	13	6	-1				13	17		
SEVEN FALLS	91.12	3.4	13	7	-1							
LICK	91.19	325.2	13	10A	2						16	49 PP
RIVERVIEW	91.27	217.5	13	8	-1	24	8	2			16	56 PP
RAPID CITY	91.28	340.7	13	8	-1							
BERKELEY	91.90	325.0	13	13A	2						16	50 PP
CALISTOGA	92.69	325.2	13	16K	1							
CHILEKA	93.40	115.6	13	22	4							
MINERAL	93.75	326.7	13	24	4							
SHASTA	94.36	326.4	13	22	-1							
SEPT ILES	94.45	6.1	13	22	-1							
BOZEMAN	94.84	336.1	13	27	2							
ADELAIDE	95.09	207.9	13	28	2							
BUTTE	95.60	335.3	13	28	0							
BLUE MTS.	96.08	331.7	13	34	3	24	15	8			17	25 PP
HUNGRY HORSE	98.13	335.4	13	37	-3						30	22 PKKP
LWIRO	98.89	101.9	13	49	6	24	18	-4			17	50 PP
HONOLULU	99.25	290.6	13	49	4	24	29	6				
KIPAPA	99.28	290.7				24	33	10			26	56 SPP
TOLEDO	105.77	49.4	14	22	777	25	6	12			18	46 PP
HONIARA	106.56	238.4	13	49	777	24	29	-28				
GODHAVN	114.40	8.6									19	43
RABAUL	115.37	235.2									29	32
KEW	115.51	42.2									28	8
MESSINA	116.26	61.4	18	43	-2						19	48 PP
ROME	116.57	56.6									19	56 PP
PAVIA	116.60	52.0									19	51 PP
FLORENCE X.	116.96	54.3									19	58 PP
DURHAM	117.01	38.8									20	11 PP
PADOVA	118.28	53.1	19	4	15						20	4
STUTTGART	118.78	48.8	18	52	2						20	9 PP
BENSBERG	118.93	45.8									20	5
TRIESTE	119.50	53.7				28	14	146			20	21 PP
JENA	121.22	47.7	18	57	2						31	38
KASPERSKE H.	121.33	50.3	18	55	0						20	24
ATHENS	121.38	65.9									20	27
HALLE	121.73	47.3	19	0	4							
COLLMBERG	122.18	47.9	18	59	2							
COLLEGE	122.28	331.3	18	55	-2						18	58
PRUHONICE	122.32	49.8	18	59	2						37	32 SS
MOULD BAY	123.40	348.6	18	58	-1							
COPENHAGEN	124.15	43.2	19	3A	2							
KONGSBERG	124.79	38.1	19	2A	0							
GOTEBORG	124.92	40.9	19	4A	2							
KRAKOW	125.35	51.8	19	5	2							
JERUSALEM	125.78	78.4	19	6	2							
KARLSKRONA	125.93	43.7	19	3	-1							
UZHGOROD	126.03	54.3	19	4A	0							
ISTANBUL UN.	126.46	65.4	19	7	2						21	11 PP
ALERT	126.70	2.2	19	1	-5							
KSARA	127.37	76.7	19	10	3						21	12 PP
LWOW	127.59	53.6	19	9	2							
SKALSTUGAN	127.72	34.4	19	9	1							
UPPSALA	128.51	40.1	19	9	0							
LEMBANG	129.04	184.5	19	12K	2						19	50
NORD	129.35	9.4	19	9	-2							
DJAKARTA	129.72	183.5									21	23
TANGERANG	129.74	183.2	18	58	-14						21	22
UMEA	131.10	35.8	19	15	1						22	39 PKS
SIMFEROPOL	131.62	63.2	19	17	2						22	43 SKP
NURMIJARVI	132.03	40.9	19	13	-3						21	44 PP
TROMSOE	132.27	28.1	19	17	1							
KIRUNA	132.34	30.7	19	17A	1						22	45 PKS
VIBORG	134.04	41.4	19	19A	-1						22	50 SKP
KAJAANI	134.34	36.7	19	4	-16						22	50 PKS
PULKOVO	134.54	43.0									21	56 PP
SODANKYLA	134.56	32.0	19	16	-5						22	44 PKS
KEVO	135.06	28.7									22	52 PKS
SHIRAZ	136.94	91.9	19	27K	2						22	9 PP
APATITY	137.18	32.2	19	4	-21							
TIFLIS	137.35	71.9	19	29	3						23	6
MOSCOW	137.36	50.0	19	27	1						22	9 PP
GORIS	137.46	75.6	19	28	2						32	28 SKSP
TEHERAN	139.32	83.4	19	25	-4						22	26 PP
KHEYS	140.17	10.6	19	27	-4							

MADRAS	142.69	139.2	19	49	14		23 20	PP
BOMBAY	143.61	124.0	19	35	-2		22 53	
PETROPAVLOVK	143.74	303.7	19	36A	-1			
POONA	143.93	125.6	19	36A	-1			
VANNOVSKAYA	145.11	84.2	19	41	2		23 4	PP
PORT BLAIR	146.06	159.7	19	45	4		21 23	
QUETTA	147.51	103.0	19	44	1			
MAGADAN	148.19	315.4	19	47	3		23 20	PKS
BAGUIO CITY	148.94	211.8	19	47	1			
SVERDLOVSK	150.17	49.5	19	50	2			
TUKUBASAN	151.57	266.1	19	49K	-1		23 38	PP
MATUSIRO	153.08	265.2	20	1	9		23 42	PP
NEW DELHI	153.42	117.1	19	54K	2		23 49	PP
LAHORE	153.43	108.4	19	55	3			
UGLEGORSK	153.73	294.1	19	52	-1			
TASHKENT	154.37	84.4	19	56	2			
KHOROG	154.54	94.1	19	57	3			
BOKARO	154.68	137.7	20	6	12		24 9	
CALCUTTA	154.72	144.0	20	1	7			
DEHRA DUN	155.14	115.3	20	2K	7		20 35	
CHITTAGONG	155.90	151.1	19	58	2			
ANDIJAN	156.40	87.5	19	59K	3			
YAKUTSK	156.78	328.9	19	54	-3			
CHATRA	157.86	136.2	20	9	11			
FRUNSE	158.61	83.5	20	44	45		24 17	PP
SHILLONG	158.85	147.9	19	59K	-1			
VLADIVOSTOK	159.92	276.4	20	43	42		24 23	PP
KUNMING	160.86	176.1	20	5	3		24 28	PP
ZO-SE	161.21	231.3	20	5A	3		24 30	PP
LHASA	162.07	140.2	20	7	4		24 36	PP
SEMIPALATNSK	162.73	60.8	20	3	-1			
NANKING	163.26	228.2	20	5	1			
CHANGCHUN	164.77	275.7	20	4K	-2			
SIAN	169.33	201.9	20	12	3			
PEKING	170.11	248.8	20	11	2	27 12 0	25 18	PP
LANCHOW	171.78	178.3	20	11	1		25 25	PP
IRKUTSK	172.00	359.2	20	11	1		25 22	PP
ESEN BULAK	174.05	66.3	20	13	2			
ULAN-BATOR	175.88	333.2	20	13	1			

MARCH 7 21.H 49.M 24.S EPICENTRE 36.43 71.33 DEPTH= 93.KM

A= 0.25820 B= 0.76407 C= 0.59121 D= 0.9474 E=-0.3201
G= 0.1893 H= 0.5601 K=-0.8065 HT= -0.4

DEPTH OF FOCUS= 0.009R

SE= 1.49

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
KHOROG	1.06	8.7	0	23K	2	0	38	1					
KULYAB	1.94	319.8	0	32A	0	0	57	1					
WARSAK DAM	2.43	175.7	0	40	1								
OBI-GARM	2.61	330.8	0	41	0	1	10	-2					
GARM	2.69	342.7	0	42K	0						1	8	
DZERGETAL	2.79	358.4	0	44	0								
MURGAB	2.84	46.1	0	47	3	1	20	2					
DUZHANBE	2.95	317.2	0	45K	-1						1	9	
FERGANA	3.96	5.0	1	0K	0	1	43	-2					
ANDIJAN	4.39	10.4	1	6K	0	1	53	-3			2	14	
NAMANGAN	4.55	3.3	1	9	1	1	58	-2					
SAMARKAND	4.72	314.6	1	9K	-1						11	21	
TASHKENT	5.14	342.5	1	14K	-2						2	8	
LAHORE	5.47	152.0	1	21	1	2	20	-2					
TCHIMKENT	6.02	347.7	1	26	-2	2	30	-6			1	50	*SP
NARYN	6.18	34.7	1	30	0						2	16	
FRUNSE	6.88	20.6	1	40K	0						2	9	*SP
QUETTA	7.23	211.7	1	45	0	2	59	-7					
ALMATA	8.08	30.6	1	56K	0	3	24	-3			2	20	*SP
PRZHEVALSK	8.15	40.0	1	57	0	3	21	-7					
ALMATA-2	8.26	32.3	1	58	-1								
DEHRA DUN	8.29	135.4	1	58K	-1	3	26	-6			2	5	PP
CHILIK	8.96	35.1	2	7	-1						4	7	
NEW DELHI	9.26	146.0	2	8A	-4	3	46	-9					
ASHKABAD	10.47	282.2	2	15	-13								

KIZYL-ARVAT	12.23	287.6	2	47A	-5	4	56	-10			
SEHORE	14.12	157.8	3	13	-3	5	40	-11			
SEMIPALATNSK	15.38	22.0	3	34	1	6	28	8			
TEHERAN	16.14	273.5	3	45	3	6	46	8			
SHIRAZ	17.15	252.2	3	56	1	7	7	6	4 17	7 26	SS
BOMBAY	17.51	175.3	4	1	2					7 15	
BOKARO	17.70	131.2	3	59	-2	7	3	-10		4 20	PPP
POONA	17.97	172.2	4	4A	-1					6 14	
MAKHACH-KALA	19.43	297.0	4	21	0	7	50	0			
GORIS	19.93	286.4	4	28K	2					4 57	*SP
KIROVOBAD	19.98	289.8	4	26	-1						
SHILLONG	20.63	115.9	4	33K	-1					8 8	
GROZNY	20.76	297.2	4	34	-1					5 10	*SP
ESEN BULAK	21.10	54.1								5 48	
TIFLIS	21.22	292.5	4	40	0						
EREVAN	21.35	288.3	4	43	2					5 25	
VISHAKHAPTNM	21.43	147.2	4	45K	3	8	43	14		5 7	PP
SVERDLOVSK	21.64	343.9	4	42A	-2						
CHITTAGONG	22.63	122.6	4	55	2						
MADRAS	24.65	158.9	5	14	1	9	28	3		5 44	PP
ULAN-BATOR	28.51	55.1	5	48	0						
KSARA	29.01	275.4	5	55	2						
MOSCOW	29.88	320.9	6	0	-1					6 34	*SP
PULKOVO	35.13	324.8	6	46A	0						
LWOW	36.42	306.7	6	58	1						
UZHGOROD	37.51	304.7	7	7	1						
ATHENS	37.63	287.1	7	8A	1					7 40	
APATITY	37.79	337.4	7	8K	0						
KAJAANI	38.03	330.5	7	10	0					8 33	PP
NURMIJARVI	38.04	324.3	7	10K	-1				7 45	8 52	PP
KRAKOW	39.07	306.9	7	19	0					7 36	
SODANKYLA	39.91	334.9	7	26	0						
KEVO	40.97	338.2	7	34A	-1					8 29	*SP
UMEA	41.01	328.3	7	34	-1						
UPPSALA	41.29	321.9	7	36	-1					8 36	*SP
VIENNA-H.	41.47	304.3	7	40	1						
KARLSKRONA	41.92	316.2	7	43	0						
KIRUNA	42.27	334.0	7	45	0						
PRUHONICE	42.54	307.0	7	49	1					9 34	
LJUBLJANA	42.97	301.2	7	53	2					9 34	PP
KASPERSKE H.	43.24	305.8	7	54	1					9 37	
TROMSOE	43.44	336.2	7	53	-2						
COLLMBERG	43.45	309.0	7	55	0					9 39	PP
COPENHAGEN	43.67	315.4	7	59K	2						
YAKUTSK	43.89	35.4	7	57K	-2						
GOTEBORG	43.98	318.3	7	59	0						
HALLE	44.09	309.4	8	1	1						
JENA	44.37	308.6	8	3	1				8 45	9 51	PP
SKALSTUGAN	44.41	326.8	8	3	0						
KHEYS	44.60	356.9	8	6	2					8 39	*SP
KONGSBERG	45.29	321.0	8	10A	0					10 28	PPP
STUTTGART	46.10	305.8	8	17A	1					9 50	PCP
STRASBOURG	47.12	305.8	8	25	1						
BENSBERG	47.13	309.1	8	26	2						
BERGEN	47.48	322.0	8	27	0						
WELSCHBRUCH	48.08	305.8	8	27	-5						
ROSELEND	48.45	302.1	8	35	0					9 10	
ISOLA	48.51	300.1	8	36	1					9 11	PKP2
GARCHY	50.48	304.9	8	50	0				9 25	10 10	
PARIS	50.50	307.0	8	51	1						
FOLINIERE	52.42	307.5	9	4	-1						
ALERT	59.16	353.6	9	52	-1						
CHILEKA	62.16	220.2	10	14A	1						
BROKEN HILL	64.78	226.8	10	30	-1						
MOULD BAY	67.41	2.8	10	45	-2					11 12	
BULAWAYO	69.24	223.0	10	58A	-1						
COLLEGE	74.48	16.2	11	32	2						
KIMBERLEY	78.22	220.6	11	50	-1						
YELLOWKNIFE	81.31	2.8	12	6	-1						
SCHEFFERVLLE	82.26	337.0	12	12K	0						
PORT MORESBY	84.32	106.0	12	50A	27						
PENTICTON	94.08	7.2	13	8K	-1						

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MARCH 8 2.H 44.M 27.S EPICENTRE -19.15 169.74 DEPTH= 0.KM

A=-0.93022 B= 0.16842 C=-0.32608 D= 0.1782 E= 0.9840
G= 0.3209 H=-0.0581 K=-0.9453 HT= 4.9

SE= 1.26

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
PORT VILA	1.95	316.2	0	36	2	1	1	1					
NOUMEA	4.39	223.9	1	8A	-1	1	58	-4					
KOUMAC	5.32	253.8	1	22A	0	2	22	-3					
BRISBANE	17.59	239.1	4	10	2	7	32	9					
AFIAMALU	18.46	76.4	4	18	-1	7	51	8					
KARAPIRO	19.38	166.1	4	28	-2								
CHATEAU	20.60	167.1	4	45	2								
RIVERVIEW	22.09	224.9	5	0	2	9	1	3			5	36	
CHARTERS TS.	22.13	263.6	4	59	0	9	3	5					
RABAUL	22.69	308.7	5	3	-1	9	11	2			5	51	
PORT MORESBY	23.91	290.8	5	17K	1	9	41	11					
CANBERRA	24.40	224.5	5	21	0	9	45	6	5	31	9	54	*SS
ROXBURGH	26.26	180.7	5	38	0	10	31	21					
TOOLANGI	28.01	224.0	5	54	0				6	6	6	41	PP
MOORLANDS	30.06	214.5	6	13	0								
TARRALEAH	30.36	215.5	6	17	2								
ADELAIDE	31.64	233.8	6	26	-1								
MUNDARING	49.50	244.0	8	52	-2	16	3	2					
HONOLULU	51.06	39.7				16	33	10					
KIPAPA	51.20	39.6				16	37	12					
BAGUIO CITY	59.89	302.9	10	9	-1								
LEMBANG	61.48	272.6	10	20K	-1	18	45	4			12	33	PP
MATUSIRO	62.89	331.8	10	29	-1	19	5	6					
BYRD STATION	67.95	169.8	11	0	-3								
Y.-SAKHLINSK	70.22	340.7	11	17K	0								
NANKING	70.53	315.6	11	16	-2								
VLADIVOSTOK	71.06	331.6	11	20K	-2	20	43	5					
UGLEGORSK	72.25	341.3	11	29	0								
CHANGCHUN	74.72	328.3	11	43K	0								
PEKING	77.16	320.7	11	57	0								
SIAN	78.51	312.4	12	5K	1								
KUNMING	78.63	301.7	12	7K	2								
MAGADAN	79.93	350.3	12	10	-2								
CHENGTU	80.25	307.1	11	55K	-19								
LANCHOW	83.01	311.8	12	30	2								
BERKELEY	85.36	47.4	12	41K	1	23	15	4			28	21	SS
CALISTOGA	85.51	46.6	12	41K	0								
LICK	85.54	48.1	12	43A	2								
PRIEST	85.68	49.5	12	42K	0								
SHASTA	86.62	44.9	12	48K	2								
PASADENA	86.63	52.2	12	47	1	23	33	10					
YAKUTSK	86.91	342.3	12	46	-2								
MINERAL	86.99	45.5	12	48K	0								
SHILLONG	87.74	297.9	12	52	0								
VICTORIA	89.79	37.7	13	2	0								
COLLEGE	89.83	16.7	13	0	-2								
EUREKA	90.48	48.2	13	6K	1						16	35	PP
BLUE MTS.	91.84	42.9	13	11	0	24	28	17			16	56	PP
PENTICTON	92.38	38.2	13	14A	1								
TIKSI	94.74	348.0	13	23A	-1								
UINTA BASIN	95.35	49.3	13	28	1	24	56	53			31	29	SS
WICHITA MTS.	101.98	57.3	13	57	0						32	54	SS
TULSA	104.49	56.7									27	45	PS
CUMBERLAND	112.60	58.6									29	8	SP
SHAWINIGAN	122.49	46.5	18	56	-1								
SCHEFFERVLLE	124.59	35.9	19	1	0								
SEPT ILES	126.05	41.3	19	4	0								
NURMIJARVI	131.83	337.7	19	15	0								
KSARA	136.55	299.2	19	27	3						22	5	PP
COLLMBERG	143.04	335.6	19	33	-3						22	48	PP
HALLE	143.28	336.7	19	34	-2								
PRUHONICE	143.42	333.0	19	34	-2						22	8	
BRATISLAVA	143.54	328.8	19	34	-2						20	13	
VIENNA-H.	143.84	329.5	19	37	0								
JENA	143.88	336.5	19	36	-1						20	13	
KASPERSKE H.	144.47	332.8	19	48	10						20	13	
ATHENS	145.02	309.6	19	39A	0								
BENSBERG	145.38	340.5	19	40K	0								
LJUBLJANA	146.28	328.3	19	42A	1						20	21	
STUTTGART	146.50	336.4	19	45	3								

DOURBES	146.92	342.4	19	48	6						
TRIESTE	146.94	328.4	19	43	1					20	5
STRASBOURG	147.22	337.7	19	45	2					20	33
WELSCHBRUCH	147.86	339.0	19	47	3					20	25
PARIS	148.67	343.7	19	51	6						
BESANCON	148.98	338.3	19	50	4						
GARCHY	149.90	341.8	19	54	7					20	21
ROSELEND	150.07	335.9	19	54	7						
ISOLA	151.14	333.7	19	56	7						

MARCH 8 15.H 5.M 59.S EPICENTRE 0.89 -29.61 DEPTH= 0.KM

A= 0.86927 B=-0.49409 C= 0.01546 D=-0.4942 E=-0.8694
G= 0.0134 H=-0.0076 K=-0.9999 HT= 7.2

SE= 1.51

	DELTA DEG.	AZ. DEG.	P M	S	O-C S	S M	S	O-C S	*PP M	S	SUPP. M	S	
M.BOUR	18.33	42.4	4	16	-1	7	54	14					
TRINIDAD	33.04	288.2	6	45	6								
CARACAS	38.29	285.8	7	23K	-1	13	19	0					
AVERROES	38.39	30.6	7	23A	-1						8	57	PP
SAN JUAN	39.82	298.1	7	35	-1								
LA PAZ	41.74	243.8	7	52	0	14	10	0					
FUQUENE	44.27	276.9	8	13	0								
BOGOTA	44.55	275.6	8	16K	1	14	53	2			18	13	SS
TOLEDO	45.25	27.9	8	23	2	15	10	9			18	29	SS
BANDEIRA	45.26	112.0	8	17A	-4						10	7	PP
ALICANTE	45.87	32.2	8	26K	0								
CHINCHINA	46.11	276.0	8	23	-5	15	7	-7					
HALIFAX	52.92	330.0	9	22	2								
CLERMONT-FD.	53.15	28.2	9	22	0								
GARCHY	54.24	26.9	9	29A	-1						9	55	
ROSELEND	54.81	30.5	9	35	1						10	4	
PARIS	55.14	25.3	9	37	1								
BESANCON	55.58	28.7	9	39	0						10	12	
MESSINA	55.60	42.6	9	40	0	17	15	-10			11	40	PP
ROME	55.65	37.3	9	42	2						11	30	PP
PAVIA	55.79	32.4									13	15	
FLORENCE X.	56.06	34.8	9	41	-2						11	46	PP
KEW	56.12	21.6	9	42	-1	17	40	8					
PALISADES	56.52	320.7	9	46	0	17	40	3					
WELSCHBRUCH	56.58	28.0	9	51	4								
DOURBES	57.02	25.6	9	52	2								
STRASBOURG	57.37	28.6	9	53	1						10	33	
PADOVA	57.41	33.6	10	16	24						12	26	PP
CHAPEL HILL	57.53	313.0	9	54	1								
EBINGEN	57.68	29.6	9	54	0								
RAVENSBURG	57.74	30.3	9	55	0								
SEPT ILES	58.22	333.1	9	59	1								
STUTTGART	58.23	29.2	9	57	-1								
SEVEN FALLS	58.34	328.1	9	57	-2								
HEIDELBERG	58.39	28.4	9	59	0								
DURHAM	58.40	18.6	10	29K	30	18	29	27					
TRIESTE	58.61	34.3	10	1A	0	18	16	12			12	8	PP
BENSBERG	58.77	26.3	10	3	1						10	41	
BREBEUF	58.88	325.2	10	3K	0								
SHAWINIGAN	59.03	326.6	10	2	-2								
BLACKSBURG	59.08	313.8	10	3	-1								
LJUBLJANA	59.28	34.3	10	6A	0						12	14	PP
BROKEN HILL	59.45	107.3	10	6	-1								
KIMBERLEY	59.75	124.3	10	8A	-1								
OTTAWA	60.04	324.1	10	9	-2								
KASPERSKE H.	60.63	31.1	10	14A	-1						11	13	
BULAWAYO	60.70	113.7	10	16	1								
JENA	60.78	28.5	10	15	-1						12	22	PP
ATHENS	61.23	46.3	10	18	-1						18	48	
HALLE	61.33	28.2	10	20	0	18	52	13					
VIENNA-H.	61.58	33.1	10	21	0								
PRUHONICE	61.65	30.7	10	21	-1						18	54	
COLLMBERG	61.71	28.9	10	22	0						12	35	PP
SCHE+FERVLLE	61.72	336.6	10	21	-1								
BRATISLAVA	61.94	33.5	10	23A	-1						12	38	
BELGRADE	62.12	38.1	10	25	0						12	44	PP
LONDON ONT.	62.21	319.5	10	25	-1								
CUMBERLAND	62.28	310.3	10	25	-1	18	57	6			23	1	55

SOFIA	62.96	41.3	10	31	1				12	46
CHORZOW	64.15	32.3	10	39	1					
COPENHAGEN	64.33	24.9	10	39	0					
KRAKOW	64.53	32.9	10	41	0					
UZHGOROD	65.12	35.1	10	45	0					
GOTEBORG	65.51	23.1	10	47	0					
CHILEKA	65.85	107.5	10	50	1					
ISTANBUL UN.	66.16	44.9	10	50K	-1	19	38	-2		
LWOW	66.69	34.6	10	54	-1					
ST. LOUIS 1	66.81	312.1	10	54	-1					
FAYETTEVILLE	69.10	308.5	11	9A	-1					
UPPSALA	69.15	23.4	11	9	-1					
KSARA	69.28	54.1	11	12	1					
SCORESBY SD.	69.66	2.7	11	13	0					
SKALSTUGAN	69.71	18.6	11	13A	0					
TULSA	70.31	307.9	11	16A	-1	20	29	0		
LAWRENCE	70.66	311.2	11	17	-2					
WICHITA MTS.	72.29	306.2	11	27	-2	20	17	-35	20	58 SP
HELSINKI	72.36	25.3	11	30	1					
NURMIJARVI	72.40	24.9	11	29	-1				25	33 SS
UMEA	72.55	20.8	11	30A	-1	20	59	4		
VIBORG	74.28	25.8	11	39K	-2					
LUBBOCK	74.74	304.5	11	43	0					
KIRUNA	75.05	17.5	11	45	0				26	13 SS
TROMSOE	75.74	15.7	11	48	-1				11	58
MOSCOW	76.61	32.4	11	54	0					
SODANKYLA	76.75	19.3	11	55	0					
TIFLIS	77.80	47.5	12	1	0					
KEVO	78.12	17.3	12	6	4	22	0	4		
GOLDEN	78.48	310.3	12	6	2					
ALBUQUERQUE	78.71	305.3	12	6	0					
KIROVOBAD	78.77	48.8	12	6	0					
APATITY	79.14	20.4	11	53	-15				22	4
FLAMING GRGE	81.69	311.1	12	22	1					
UINTA BASIN	81.76	310.5	12	22	0	22	39	4	15	27 PP
SHIRAZ	82.72	60.4	12	27	0					
ALERT	82.76	355.9	12	27	0					
RESOLUTE	82.76	345.9	12	27K	0					
BOZEMAN	83.37	315.7	12	35	5					
SALT LAKE C.	83.53	310.8	12	32	1					
BUTTE	84.46	316.0	12	36	0					
BOULDER CITY	85.60	305.8	12	42	1					
HUNGRY HORSE	85.62	318.3	12	41	0					
EUREKA	86.62	309.3	12	47K	1					
BANFF	86.75	321.0	12	45	-2					
YELLOWKNIFE	86.89	332.4	12	47	-1					
BLUE MTS.	87.74	314.7	12	52	0	23	43	10	29	36 SS
MOULD BAY	89.07	346.1	12	55	-3					
SVERDLOVSK	89.39	33.3	13	1	1					
PRIEST	90.33	306.0	13	5A	1					
BYRD STATION	90.86	190.0	13	9	3					
MINERAL	90.95	310.2	13	7K	0					
LICK	91.08	307.2	13	9A	2				13	12 PCP
VICTORIA	91.87	318.4	13	13	2					
COLLEGE	100.83	337.5	14	1	9					
ADELAIDE	144.39	163.4	19	40	2					
CANBERRA	145.72	178.0	19	45	5					
BAGUIO CITY	145.93	58.4	19	44	3					

MARCH 9 2.H 17.M 39.S EPICENTRE 21.63 62.02 DEPTH= 34.KM

A= 0.43657 B= 0.82162 C= 0.36654 D= 0.8831 E=-0.4692
G= 0.1720 H= 0.3237 K=-0.9304 HT= 4.3

DEPTH OF FOCUS= 0.000R

SE= 1.80

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S
QUETTA	9.60	26.5	2	17K	-2	3	56	-11				
BOMBAY	10.50	103.1	2	33	2	4	26	-3			2	48 PPP
POONA	11.54	103.4	2	41	-4							
SHIRAZ	11.70	314.9	2	45K	-2	4	50	-8	2	54	5	3 SS
LAHORE	14.78	45.5	3	28	0							
NEW DELHI	15.39	60.3	3	37K	1	6	18	-8				

ASHKABAD	16.57	349.8	3	52	1	7	5	12		
DEHRA DUN	16.80	55.7	3	53	-1				6	23
TEHERAN	16.85	328.8	3	56	1	7	7	7		
KHOROG	17.81	25.5	4	10	3	7	35	14		
KIZYL-ARVAT	18.19	345.6	4	11	0	7	37	7		
SAMARKAND	18.47	12.2	4	16	1	7	42	6		
MADRAS	19.34	113.4	4	25A	0	8	16	20	4	47 PP
TASHKENT	20.56	15.7	4	39A	1	8	28	7		
ANDIJAN	20.98	22.4	4	42	-1					
GORIS	22.29	326.5	4	56A	0	9	4	10		
KIROVOBAD	23.16	328.5	5	5	1	9	18	9		
CHATRA	23.50	72.3	5	10	3					
MAKHACH-KALA	24.49	333.7	5	14	-3	9	43	11		
TIFLIS	24.72	328.0	5	21	2	9	43	7		
ALMATA	24.91	26.5	5	24A	3					
ADDIS ABABA	25.64	244.3	5	32	4					
JERUSALEM	25.92	298.6	5	32	1					
KSARA	26.05	303.4	5	34	2	10	17	19		
SHILLONG	27.61	76.0	5	46	0					
SEMIPALATNSK	32.09	22.1	6	27	1					
ISTANBUL UN.	33.92	312.4	6	40	-2				5	49 SS
SVERDLOVSK	35.17	358.7	6	53	0					
ATHENS	36.71	305.0	7	6	0				8	43
SOFIA	38.46	312.2	7	20	0					
MOSCOW	38.59	338.0	7	22	1					
LWIRO	40.23	238.0	7	34K	-1					
LWOW	41.04	322.6							9	36
UZHGOROD	41.49	320.2	7	46	1					
KRAKOW	43.50	321.1	8	1	-1					
PULKOVO	44.22	337.6	8	8K	0					
VIENNA-H.	44.98	317.5	8	14	0					
VIBORG	45.43	337.8	8	17	0					
LJUBLJANA	45.51	314.0	8	18A	0				9	57 PP
CHILEKA	45.59	217.8	8	20	2					
TRIESTE	45.92	313.2	8	21	0					
HELSINKI	46.47	335.5	8	26	1				9	59 PCP
PRUHONICE	46.69	319.2	8	27	0				10	31
NURMIJARVI	46.81	335.7	8	28A	0				10	1 PCP
KASPERSKE H.	47.01	317.8	8	29A	-1					
COLLMBERG	48.06	320.4	8	38A	0				10	33 PP
KAJAANI	48.16	340.6	8	38	-1					
KARLSKRONA	48.50	327.2	8	40A	-1					
BROKEN HILL	48.67	225.5	8	43A	0					
HALLE	48.74	320.4	8	46	3				8	57
JENA	48.79	319.6	8	42	-2					
APATITY	49.29	346.0	8	46	-1					
UPPSALA	49.30	332.2	8	47A	-1					
STUTTGART	49.64	316.3	8	49	-1					
COPENHAGEN	49.92	325.7	8	53K	1					
ISOLA	50.29	310.0	8	51	-4				9	16
UMEA	50.48	337.5	8	56A	-1				10	53 PP
ROSELEND	50.81	311.9	8	59	0				11	0 PP
SODANKYLA	50.84	343.2	8	59A	0				10	15 PCP
GOTEBORG	50.94	328.0	8	59A	-1					
BENSBERG	51.48	318.6	9	4	0					
WITTEVEEN	52.24	320.8	9	10	0					
BULAWAYO	52.82	220.5	9	14A	0					
KIRUNA	52.90	341.6	9	14A	-1					
DOURBES	52.91	317.1	9	18	3				10	26 PCP
SKALSTUGAN	53.36	334.8	9	17A	-1					
GARCHY	53.47	313.5	9	18A	-1				9	37
PARIS	54.06	315.3	9	22	-1					
TROMSOE	54.46	342.9	9	25	-1					
TOLEDO	58.36	304.3	9	54A	0					
KHEYS	59.08	359.2	9	59	0					
BANDEIRA	60.00	237.0	10	3A	-3				10	47 PCP
TIKSI	62.38	19.2	10	19A	-3					
MATUSIRO	66.67	58.4	10	49	0					
SCORESBY SD.	67.78	338.8	10	57	1					
ALERT	72.90	353.5	11	27A	0					
M.BOUR	74.77	279.7	11	47	9					
MOULD BAY	82.35	0.3	12	19A	-1					
RESOLUTE	82.77	354.0	12	22K	0					
COLLEGE	90.76	12.3	13	1	0					
YELLOWKNIFE	96.12	358.4	13	26K	1					
BLUE MTS.	113.84	359.5	18	37	2				19	24 PP
UINTA BASIN	117.87	352.7	18	44	1				19	49 PP
EUREKA	119.18	358.2	18	48	2				20	7 PP
WICHITA MTS.	121.00	341.4	18	51	2				20	36

TUCSON	125.99	352.5	19	1	2									

MARCH 9 6.H 44.M 29.S EPICENTRE 46.16 141.11 DEPTH= 42.KM

A=-0.54096 B= 0.43640 C= 0.71897 D= 0.6279 E= 0.7783
G=-0.5596 H= 0.4514 K=-0.6950 HT= -4.0

DEPTH OF FOCUS= 0.001R

SE= 1.39

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
Y.-SAKHLINSK	1.41	51.8	0	21K	-3	0	43	1					
UGLEGORSK	2.99	12.2	0	47K	0	1	23	1					
KURILSK	4.83	98.7	1	14	1	2	14	6					
MIZUSAWA	7.03	179.8	2	1	18	2	58	-5					
VLADIVOSTOK	7.24	248.4	1	48	2	3	12	4			3	51	
OKHA	7.49	8.4	1	48	-2						4	30	
MATUSIRO	9.86	193.8	2	21K	-1	4	15	2					
CHANGCHUN	11.43	263.9	2	46K	2								
PETROPAVLOVK	13.27	52.5	3	12K	4						5	52	
MAGADAN	14.61	19.9	3	31	5						6	19	SS
YAKUTSK	17.19	341.6	3	58K	-1						4	4	PP
PEKING	19.17	260.3	4	22	-1	7	55	3					
PAOTOW	23.18	267.3	5	4	0								
ULAN-BATOR	23.27	286.8	5	4	-1								
IRKUTSK	24.60	297.9	5	18A	0	9	27	-6					
TIKSI	26.20	351.2	5	33K	0						11	7	SS
LANCHOW	29.61	263.4	6	4	0								
ESEN BULAK	30.69	287.0	6	13	0								
BAGUIO CITY	34.24	216.7	6	43	-1								
KUNMING	37.10	248.9	7	9	0								
SEMIPALATNSK	39.73	299.0	7	30	0								
COLLEGE	41.72	37.4	7	46	-1								
LHASA	42.08	264.9	7	52	2								
KHEYS	43.70	346.4	8	3	0						9	46	PP
SHILLONG	44.07	259.6	8	6K	0								
ALMATA-2	44.30	290.3	8	9A	1								
MOULD BAY	47.90	18.6	8	36	0	15	34	4					
SVERDLOVSK	48.41	313.5	8	39	-1								
TASHKENT	50.49	291.9	8	55A	-1								
DEHRA DUN	50.69	275.0	8	59K	1								
ALERT	51.04	3.9	9	0	0								
KHOROG	51.05	286.5	9	1	0								
NEW DELHI	52.34	273.8	9	9K	-1								
RESOLUTE	53.86	15.8	9	21K	0								
KEVO	54.88	337.1	9	29	0								
SODANKYLA	56.53	335.0	9	41	0								
TROMSOE	57.05	339.3	9	45	0						9	54	
KIRUNA	57.95	337.3	9	52	1								
KAJAANI	58.36	331.7	9	54	0								
MOSCOW	59.92	320.5	10	5	1								
UMEA	60.91	334.2	10	11A	0								
NURMIJARVI	61.86	329.8	10	12	-6								
SCORESBY SD.	63.02	353.7	10	27	2								
SKALSTUGAN	63.38	337.1	10	26	-2								
UPPSALA	64.72	332.2	10	36	0								
HUNGRY HORSE	65.37	45.2	10	40	-1								
BLUE MTS.	66.04	49.7	10	45	0								
MINERAL	66.66	55.7	10	49A	0						39	20	PKPPKP
CALISTOGA	67.22	57.6	10	53A	1								
BERKELEY	67.92	58.0	10	58K	1								
GOTEBORG	68.22	333.3	10	58A	-1								
SHIRAZ	68.36	290.6	10	59K	0								
LICK	68.64	58.1	11	1A	0								
PRIEST	70.03	58.5	11	11A	1								
EUREKA	70.43	53.2	11	12	0								
DUGWAY	71.65	50.8	11	20	1								
COLLMBERG	73.12	328.9	11	28K	0								
UINTA BASIN	73.29	48.9	11	29	0								
BRISBANE	73.97	169.2	10	58	-35								
KASPERSKE H.	74.69	327.3	11	37	0								
BENSBERG	75.41	331.9	11	42	1								
STUTTGART	76.56	329.5	11	49	1								
SCHEFFERVLLE	76.66	16.2	11	48	-1								
TUCSON	78.51	55.3	11	59	0								

MADISON	80.09	35.0	12 7	0	
MANHATTEN	80.57	41.7	11 1	-69	
SEPT ILES	81.11	17.5	12 13	0	
WICHITA MTS.	83.18	45.7	12 23	0	
CUMBERLAND	88.40	36.4	12 49	0	

MARCH 9 22.H 43.M 51.S EPICENTRE -21.67-178.82 DEPTH= 532.KM

A=-0.92997 B=-0.01910 C=-0.36715 D=-0.0205 E= 0.9998
G= 0.3671 H= 0.0075 K=-0.9302 HT= 4.3

DEPTH OF FOCUS= 0.079R

SE= 1.35

	DELTA DEG.	AZ. DEG.	P M S	O-C S	S M S	O-C S	*PP M S	SUPP. M S	
AFIAMALU	10.22	42.1	2 20K	-1	4 9	-4			
NOUMEA	13.68	264.6	2 57K	1					
KOUMAC	15.81	270.9	3 20A	3	6 7	10			
KARAPIRO	16.92	195.5	3 29	1					
CHATEAU	18.13	194.2	3 39	-1					
WELLINGTON	20.29	194.0	3 59	-1	7 13	0			
BRISBANE	26.42	251.9	4 56	1					
RIVERVIEW	29.09	238.9	5 19A	0				12 35	
CANBERRA	31.22	237.1	5 37A	0					
CHARTERS TS.	32.62	266.3	5 49K	0	10 24	-4			
RABAUL	33.07	297.6						11 5	
TOOLANGI	34.59	234.7	6 5	0				8 25	
PORT MORESBY	34.89	285.1	6 7K	-1					
TARRALEAH	35.57	226.6	6 14	1					
ADELAIDE	39.37	240.9	6 44K	0					
DARWIN	48.84	272.3	7 57	-1	14 18	-4			
MUNDARING	58.13	245.1	9 3	-1					
BAGUIO CITY	70.42	297.4	10 21	-1					
MATUSIRO	70.70	324.4	10 22K	-1				18 54	
LEMBANG	72.25	269.6	10 31	-1					
LICK	79.63	42.9	11 9K	-4					
MINERAL	81.49	40.5	11 23A	1					
TUCSON	84.24	52.1	11 38	2					
EUREKA	84.49	43.8	11 38	1			13 36		
GLEN CANYON	86.08	47.8	11 48	3				13 54	
BLUE MTS.	86.70	38.8	11 48	0			13 50	37 41	PKPPKP
PENTICTON	88.05	34.2	11 54	0					
ALBUQUERQUE	88.73	51.5	11 58	1				14 1	
UINTA BASIN	89.12	45.7	12 0K	1			14 3	37 42	PKPPKP
COLLEGE	89.51	12.7	11 59	-2			13 58		
WICHITA MTS.	94.48	54.5	12 23	-1			14 26	28 51	PKKP
QUETTA	120.94	293.0	17 53	2					
KIRUNA	132.30	350.3	18 13	0					
SHIRAZ	133.35	290.8	18 14	-1				20 55	
KAJAANI	134.07	344.1	18 15	-2					
UMEA	135.97	348.0	18 14	-6					
NURMIJARVI	137.83	342.9	18 13	-10					
HELSINKI	138.03	342.4	18 19	-5					
UPPSALA	140.11	347.1	18 20	-8					
GOTEBORG	143.16	350.3	18 30K	-4					
LWIRO	144.02	232.1	18 36K	1					
COPENHAGEN	145.01	348.9	18 36	-1					
LWOW	146.61	332.8	18 41	2					
KSARA	147.14	299.1	18 44	5					
KRAKOW	148.05	336.9	18 45	4				18 50	PKP2
JERUSALEM	148.08	295.6	18 45	4					
RACIBORZ	148.63	338.8	18 49	7				18 54	PKP2
COLLMBERG	149.02	345.5	18 50K	8			21 2		
HALLE	149.07	346.9	18 48	6					
JENA	149.68	346.9	18 49	6			20 54	22 43	PP
PRUHONICE	149.84	342.7	18 50	6				21 1	
BENSBERG	150.39	352.3	18 51	6					
VIENNA-H.	150.82	338.9	18 52	7					
KASPERSKE H.	150.88	343.1	18 52	7				21 4	
DOURBES	151.50	355.4	18 57	11					
STUTTGART	152.20	348.5	18 47	0				19 27	
LJUBLJANA	153.35	339.0	18 49	0					

MARCH 10 1.H 26.M 0.S EPICENTRE 56.47-153.58 DEPTH= 0.KM

A=-0.49700 B=-0.24695 C= 0.83187 D=-0.4450 E= 0.8955
G=-0.7450 H=-0.3702 K=-0.5550 HT= -7.7

SE= 1.73

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S
COLLEGE	8.88	16.1	2	14	1							
SITKA	10.04	79.1	2	26	-3	4	13	-11				
PORT HARDY	16.46	99.5	3	54	0							
YELLOWKNIFE	20.43	56.8	4	43K	1							
PENTICTON	21.52	95.0	4	53A	0							
MOULD BAY	23.43	19.8	5	16K	4	9	30	8				
HUNGRY HORSE	25.15	91.9	5	28	0						9	1 PCP
BLUE MTS.	25.45	101.7	5	32A	1	10	6	9			9	1 PCP
SHASTA	25.67	114.6	5	33A	0							
MINERAL	26.33	114.1	5	39A	0						9	3
CALISTOGA	27.15	117.9	5	45A	-2							
BUTTE	27.32	94.9	5	49	0							
PETROPAVLOVK	27.35	283.1	5	47A	-2							
BERKELEY	27.90	118.5	5	58A	4							
BOZEMAN	28.37	94.1	5	58	0							
RESOLUTE	28.52	28.4	6	1A	2							
LICK	28.62	118.3	5	57A	-3						6	27
MAGADAN	28.90	299.6	6	2	-1							
EUREKA	29.88	108.6	6	11A	-1				6	21	9	13 PCP
PRIEST	30.05	118.6	6	12A	-1							
DUGWAY	31.05	104.1	6	21	-1							
SALT LAKE C.	31.16	102.3	6	23	0						9	16 PCP
UINTA BASIN	32.72	100.6	6	37A	0	11	57	4			9	20 PCP
PASADENA	32.87	117.7	6	37	-1	12	0	5				
BOULDER CITY	33.11	111.7	6	40	0							
GLEN CANYON	34.06	106.9							6	59	9	25 PCP
TIKSI	34.22	326.6	6	47	-3	12	10	-6				
ALERT	34.60	13.4	6	55A	2	12	25	3				
KIPAPA	35.16	187.2	7	6	8							
HONOLULU	35.28	187.3	7	8	9							
GOLDEN	35.45	97.4	7	0	0						17	44
YAKUTSK	37.46	311.0	7	16A	-1	13	1	-5				
TUCSON	38.09	111.2									9	36 PCP
UGLEGORSK	38.31	287.0	7	23A	-1	13	18	-1				
Y.-SAKHLINSK	39.20	284.0	7	31A	-1	13	29	-4				
NORD	40.25	8.9	7	42	2							
LAWRENCE	41.57	89.4	7	51	0							
MADISON	41.60	80.3	7	51	-1	14	8	-1			17	32 SS
LUBBOCK	41.85	100.8	7	52	-2						9	48
WICHITA MTS.	42.78	96.6	8	1	0	14	21	-5			9	14 PP
TULSA	43.46	93.0	8	6K	-1						14	33
ST. LOUIS 1	44.58	85.7	8	15	-1							
SCHEFFERVLLE	45.87	53.6	8	26A	0							
LONDON ONT.	46.47	74.6	8	31A	0							
OTTAWA	47.73	68.6	8	40	-1							
SHAWINIGAN	48.46	65.5	8	45	-1							
ROCHESTER	48.58	71.7	8	45	-2							
SCORESBY SD.	48.74	19.5	8	50	1							
BREBEUF	48.74	67.1	8	47A	-2				8	57	10	12 PCP
MATUSIRO	48.77	276.1	8	47	-2	15	52	0				
SEVEN FALLS	49.04	63.8	8	49	-2							
SEPT ILES	49.10	58.1	8	51A	0							
CUMBERLAND	49.36	84.9	8	52A	-1	16	0	0			10	53 PP
MORGANTOWN	49.51	77.0	8	54A	-1							
CHANGCHUN	50.50	292.1	9	0A	-2							
BLACKSBURG	51.00	79.5	9	5	-1							
ABUYAMA	51.46	276.7	9	8A	-1							
PALISADES	51.75	71.4	9	58	46	16	35	2			17	13 *SS
WESTON	52.12	68.5	9	13	-1	16	40	2				
COLUMBIA	53.04	82.7	9	19	-2							
KEVO	54.07	359.7	9	29	0							
TROMSOE	54.09	3.2	9	29	0							
KIRUNA	55.93	2.7	9	42A	0							
APATITY	56.19	356.8	9	44A	0							
ULAN-BATOR	56.37	307.2	9	45A	-1							
SODANKYLA	56.48	359.9	9	46A	0							
PEKING	57.92	295.0	9	55	-2							
KAJAANI	59.78	359.3	10	11	2						10	55 PCP
SKALSTUGAN	59.79	7.3	10	10A	1							
UMEA	59.95	3.2	10	10A	-1							

PAOTOW	60.53	299.6	10 14A	-1						
ESEN BULAK	62.09	312.7	10 25A	0						
ZO-SE	62.16	284.8	10 24A	-2						
BERGEN	62.28	11.7	10 27	1						
NANKING	62.69	287.3	10 27A	-2						
VIBORG	63.14	358.7	10 31	-1					19 12	PS
NURMIJARVI	63.36	1.0	10 34A	0	19 7	2				
KONGSBERG	63.46	9.4	10 35A	1			10 44		11 9	PCP
HELSINKI	63.70	0.8	10 36A	0						
SVERDLOVSK	63.73	339.8	10 35K	-1						
UPPSALA	63.82	4.9	10 36A	-1						
PULKOVO	64.07	357.8	10 37A	-1						
SEMIPALATNSK	64.56	325.1	10 40	-1						
GOTEBORG	65.59	8.5	10 48A	0						
SIAN	66.05	296.0	10 51A	0						
LANCHOW	67.09	300.8	10 57A	-1	19 49	-2				
KARLSKRONA	67.38	6.5	10 58A	-1						
COPENHAGEN	67.63	8.5	11 1A	0						
MUNSTER	70.82	12.2	11 23	2						
HALLE	71.73	9.5	11 27	1					14 15	PP
BENSBERG	71.76	12.7	11 26A	0						
ALMATA-2	71.77	323.3	11 25A	-1						
JENA	72.26	9.8	11 30	1					14 24	PP
DOURBES	72.26	14.6	11 33	4						
FOLINIERE	72.76	18.3	11 32	0						
FRUNSE	73.06	325.0	11 35A	1						
PARIS	73.21	16.3	11 36A	1						
PRUHONICE	73.46	8.0	11 37A	1					13 44	
SAN JUAN	73.50	81.7	11 34	-3						
RACIBORZ	73.60	5.5	11 38	1					12 7	PCP
KRAKOW	73.71	4.4	11 38	0						
LWOW	74.06	1.6	11 40	0						
WELSCHBRUCH	74.16	13.8	11 42	2					12 53	
STUTTGART	74.16	11.7	11 41A	1						
STRASBOURG	74.17	12.8	11 41	1					12 52	
BAGUIO CITY	74.20	275.8	11 38	-3						
KASPERSKE H.	74.23	8.7	11 41A	0					12 10	
GARCHY	74.79	16.2	11 45A	1					12 15	
UZHGOROD	75.21	2.8	11 47	1						
BESANCON	75.25	14.2							12 58	
VIENNA-H.	75.31	6.9	11 48A	1						
ANDIJAN	75.66	325.7	11 50	1					21 52	SKKS
TASHKENT	76.07	328.1	11 51A	0	21 37	2				
KUNMING	76.57	295.1	11 53A	-1						
ROSELEND	76.86	14.1	11 58	2					12 46	
BAGNERES	78.38	19.3	12 4	0					13 21	
ISOLA	78.40	14.1	12 6	2					12 39	
SIMFEROPOL	78.74	354.4	12 8	2						
MONACO	78.90	13.9	12 7	0					13 4	
FLORENCE X.	79.31	11.1							13 0	
TOLEDO	80.61	23.3	12 18A	2					13 38	
TIFLIS	80.95	346.2	12 19	1						
SHILLONG	81.44	303.8	12 18A	-3						
KIROVOBAD	81.79	344.8	12 23	1						
WARSAK DAM	82.08	323.5	12 23	-1						
ASHKABAD	82.12	335.0	12 25	1						
VANNOVSKAYA	82.18	335.2	12 26	2						
GORIS	82.92	344.6	12 28	0						
DEHRA DUN	83.11	316.9	12 30A	1						
LAHORE	83.37	320.4	12 30	-1						
CHITTAGONG	84.22	302.2	12 49	14						
TEHERAN	85.73	339.9	12 44	2	23 17	2			16 4	PP
ATHENS	85.90	2.1	12 43	0						
QUETTA	87.09	325.7	12 50	1	23 31	3				
LWIRO	125.91	357.1	19 6A	2					20 58	PP
BROKEN HILL	138.04	357.0	19 23	-4						
BULAWAYO	143.69	356.5	19 35A	-2						
SOUTH POLE	146.29	180.0	19 38	-4						

MARCH 10 2.H 53.M 29.5 EPICENTRE 24.74 122.21 DEPTH= 0.KM

A=-0.48461 B= 0.76940 C= 0.41616 D= 0.8461 E= 0.5330
G=-0.2218 H= 0.3521 K=-0.9093 HT= 3.4

SE= 2.76

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
TAIPEI	0.69	295.1	0	14A	-2	0	23	-5					
HWALIEN	0.93	215.0	0	19A	-1	0	26	-8					
HSINCHU	1.12	273.4	0	21	-2	0	32	-7					
TAICHUNG	1.51	247.5	0	29K	1	0	47	-2					
YUSHAN	1.70	222.7	0	34	3	0	59	5					
ALISHAN	1.77	226.9	0	26A	-6						0	32	
HSINKONG	1.80	205.3	0	31A	-1	0	57	1					
TAITUNG	2.20	206.2	0	31A	-7						1	7	
TAINAN	2.51	226.8	0	46	4	1	15	1					
TAWU	2.66	207.0	0	39	-6	1	12	-6					
PENGHU	2.71	244.2	0	48	3	1	19	0					
KAOHSIUNG	2.76	220.5	0	53	7	1	5	-15					
HENGCHUN	3.04	206.4	0	57K	7	1	35	7					
ZO-SE	6.40	352.1	1	36A	-2						1	46	*SP
NANKING	7.89	338.3	1	55	-4								
CANTON	8.28	260.4	2	3	-1								
BAGUIO CITY	8.42	190.7	2	4	-2	3	37	-6					
MANILA	10.07	186.2	2	27	-2	4	25	1					
SIAN	14.94	312.4	3	33	-1						3	44	*SP
ABUYAMA	15.36	45.8	3	43	4								
PEKING	16.07	343.0	3	51A	2	6	55	7			4	2	*SP
KUNMING	17.66	275.3	4	9A	0								
MATUSIRO	18.08	45.7	4	15K	1	7	42	8					
PAOTOW	18.80	330.1	4	25A	2	8	0	10					
TUKUBASAN	19.17	49.2	4	24K	-3	8	8	10			5	27	
CHANGCHUN	19.21	6.8	4	29	1	8	5	6					
LANCHOW	19.42	309.8	4	32A	2	8	11	7					
VLADIVOSTOK	19.99	21.1	4	37K	0						8	28	
MIZUSAWA	21.48	43.6	4	54	2	9	13	27					
GUAM	24.03	113.7	5	18	1						10	22	
ULAN-BATOR	26.12	336.2	5	37	0	10	22	15					
SHILLONG	27.44	278.2	5	47K	-2	10	27	-2			11	57	SSS
Y.-SAKHLINSK	27.60	31.2	5	52A	1						6	44	PP
CHITTAGONG	27.93	271.4	5	53	-1	10	37	0					
LHASA	28.10	287.0	5	55K	0	10	41	1					
ESEN BULAK	29.98	322.7	6	13	1								
IRKUTSK	30.67	338.3	6	7	-11	11	20	-1					
PORT BLAIR	30.79	250.4				11	30	7			7	3	
CALCUTTA	31.03	273.0	6	22	1	11	29	3			7	22	PP
BOKARO	33.14	276.2	6	39K	-1	11	58	-1			9	11	PCP
DJAKARTA	34.19	208.0	6	51	2	12	14	-1					
TANGERANG	34.26	208.3	6	49K	-1	12	17	0					
LEMBANG	34.45	206.2	6	51A	0	12	21	2					
VISHAKHAPTNM	36.84	266.8	7	11K	0	13	0	4			8	39	PP
YAKUTSK	37.61	5.8	7	16	-2	13	7	-1					
PETROPAVLOVK	39.33	34.5	7	31	-1						9	43	PCP
DEHRA DUN	39.36	288.2	7	33K	0	13	33	-2			9	3	PP
MAGADAN	40.11	22.2	7	40	1	13	46	0			9	19	PP
NEW DELHI	40.23	285.6	7	47K	7	13	52	4			9	23	PP
RABAUL	40.94	130.5	7	41	-5	14	0	2			17	5	
SEMIPALATNSK	41.19	319.5	7	47	-1								
MADRAS	41.29	261.5	7	47K	-1	14	4	1			9	25	PP
PORT MORESBY	41.75	141.3	7	53A	1	14	8	-2					
LAHORE	42.49	290.4	7	57	-1	14	18	-3					
FRUNSE	42.86	307.0	8	2K	1						10	10	PPP
WARSAK DAM	44.72	294.1	8	16	0								
POONA	45.19	272.0	8	19K	-1	14	58	-2			15	21	PPS
BOMBAY	46.02	272.9	8	28	1						10	16	
TASHKENT	46.64	304.2	8	32K	0	15	23	2					
TIKSI	47.07	2.9	8	34	-1						15	31	PS
QUETTA	48.94	289.3	8	49K	-1	15	57	3					
CHARTERS TS.	50.33	150.2	9	0	0	16	7	-6					
SVERDLOVSK	54.16	323.4	9	27A	-2						20	55	SS
ASHKABAD	55.14	300.1	9	36	0	17	22	4			11	45	PP
MUNDARING	56.68	186.1	9	44	-3								
TEHERAN	60.98	298.5	10	16	-1	18	38	3					
SHIRAZ	61.34	291.5	10	19	-1	18	38	-1			19	41	
ADELAIDE	61.41	164.6	10	18A	-2								
KHEYS	61.61	350.3	10	21	0						12	40	PP
GORIS	64.19	303.5	10	37K	-2						13	5	PP
RIVERVIEW	64.42	153.5	10	40A	0	19	24	6			23	51	SS
TIFLIS	64.89	306.2	10	43	0	19	28	4			13	8	PP
CANBERRA	64.90	156.0	10	43	0	19	40	16			13	5	PP
TOOLANGI	65.73	159.8	10	48A	0						13	10	PP
MOSCOW	66.93	322.3	10	53	-3	19	46	-3					
APATITY	66.94	335.3	10	57A	1	19	51	2			13	19	PP

COLLEGE	67.88	27.4	11	1	-1					
KEVO	68.81	338.2	11	7	-1	20	9	-2	13	35 PP
SODANKYLA	69.54	335.7	11	11A	-1					
PULKOVO	69.89	327.4	11	14	0	20	15	-9	13	48 PP
KAJAANI	69.97	332.2	11	14	-1					
SIMFEROPOL	71.66	311.6	11	23K	-2	20	43	-2	21	28 SCS
KIRUNA	71.66	337.0	11	26	1	20	46	1		
NORD	71.89	354.2	11	25	-2					
HELSINKI	72.35	328.6	11	29	0					
NURMIJARVI	72.39	329.0	11	28	-2	20	47	-6	21	21 PS
MOULD BAY	72.53	12.8	11	28	-2					
ALERT	72.96	0.6	11	32	-1					
UMEA	73.18	333.0	11	33	-1	20	56	-6		
KSARA	73.80	300.1	11	37	-1	21	18	9	14	25 PP
JERUSALEM	75.00	298.3	11	46	1					
UPPSALA	75.89	329.8	11	48A	-2				30	29
ISTANBUL UN.	76.49	309.0	11	53A	0	21	37	-2		
SKALSTUGAN	76.49	334.4	11	54	1					
LWOW	76.51	318.8	11	52	-1	21	38	-1		
WARSAW	77.31	321.8	11	49	-9	21	46	-2	14	49 PP
RESOLUTE	77.97	9.4	12	0	-1					
KRAKOW	78.84	320.1	12	7	1	22	6	2	12	24 PCP
CHORZOW	79.29	320.5	12	9	0				12	22 PCP
GOTEBORG	79.50	329.2	12	10	0					
SOFIA	79.76	312.3	12	0	-11					
RACIBORZ	79.83	320.6	12	14	2				12	24 PCP
KARAPIRO	79.94	139.9	12	13	1					
COPENHAGEN	80.28	327.3	12	16	2					
ADDIS ABABA	80.35	275.5	12	15	1					
BELGRADE	80.76	315.1	12	16	0	22	36	12	12	35
CHATEAU	80.80	140.8	12	17	0					
ATHENS	81.44	307.8	12	15	-5				22	23
VIENNA-H.	81.74	319.5	12	22	0				15	32 PP
WELLINGTON	81.77	142.8							24	19
PRUHONICE	81.97	321.6	12	23	0				15	17
YELLOWKNIFE	82.10	23.1	12	23K	0					
HALLE	82.64	323.8	12	27	1	22	22	-22		
KASPERSKE H.	82.93	321.2	12	29	1				15	38
JENA	83.14	323.4	12	29	0	22	43	-6	15	52 PP
LJUBLJANA	83.90	318.1	12	32	-1					
TRIESTE	84.57	318.1	12	39	3	23	2	-1		
BENSBERG	85.47	324.9	12	43	2					
STUTTGART	85.54	322.3	12	42	1					
STRASBOURG	86.48	322.7	12	49	3					
FLORENCE X.	87.06	317.4	12	50	2				24	38
MESSINA	87.08	310.9	12	48	-1				14	14
ROME	87.26	315.3				23	33	4	14	51
WELSCHBRUCH	87.36	323.1	12	49	-1					
PENTICTON	88.07	35.3	12	51	-2					
ROSELEND	88.76	320.8	13	1	4					
SHASTA	91.51	43.4	13	10A	1					
HUNGRY HORSE	91.55	33.7	13	11	1					
BLUE MTS.	92.04	37.8	13	12	0	24	3	-9	31	1 SS
MINERAL	92.20	43.3	13	13A	0					
CALISTOGA	92.55	45.2	13	15A	1					
BERKELEY	93.20	45.7	13	26	9					
BUTTE	93.84	34.8	13	21	1				13	51
LICK	93.91	45.8	13	22A	2					
LWIRO	94.03	269.4	13	22K	1					
PRIEST	95.24	46.3	13	28A	1					
EUREKA	96.18	41.4	13	33	2				17	22 PP
PASADENA	98.06	46.7	13	49	10					
UINTA BASIN	99.32	37.5	13	47	2				18	3 PP
WICHITA MTS.	109.34	34.8							19	16 PP
TULSA	109.80	32.1	17	56	777				19	11 PP
PALISADES	112.90	13.2							28	52 PKKP
CUMBERLAND	114.50	24.7	18	49	7				19	22 PP
CARACAS	143.86	15.4	19	31K	-6				22	57 PP
TRINIDAD	144.65	6.1	19	38	0					
FUQUENE	146.20	29.4	19	42A	1					
BOGOTA	146.80	30.7	19	38	-4	26	41	-8	23	13 PKS
LA PAZ	167.33	51.7	20	11	4				45	55 SS

MARCH 10 10.H 51.M 43.S EPICENTRE -29.94 -71.42 DEPTH= 19.KM

A= 0.27658 B=-0.82274 C=-0.49658 D=-0.9479 E=-0.3186
G=-0.1582 H= 0.4707 K=-0.8680 HT= 1.8

SE= 2.13

	DELTA DEG.	AZ. DEG.	P M S	O-C S	S M S	O-C S	*PP M S	SUPP. M S
SANTA LUCIA	3.55	169.4	0 58	3	1 53	15		
ANTOFAGASTA	6.28	8.4	1 31A	-3				
CONCEPCION	6.89	184.2	1 42	-1	3 36	34		
BUENOS AIRES	11.89	116.3	2 50	-2				
LA PLATA	12.42	116.9	2 59	0	5 17	-1		
AREQUIPA	13.42	359.7	3 10	-2				
LA PAZ	13.71	13.4	3 15	-1	5 53	4		
HUANCAYO	18.17	347.6	4 17	4				
BOGOTA	34.46	355.3	6 50A	1	12 29	14		
CHINCHINA	34.94	352.7	6 56A	3	12 38	15	7 18	
FUQUENE	35.28	356.0	6 56K	0				
ARGENTINE I.	35.61	174.8	6 58	0				
CARACAS	40.44	6.8	7 40A	1			9 23	
TRINIDAD	41.49	15.0	7 48	1	13 59	-3		9 31 PP
FORT FRANCE	45.50	14.0	8 18	-2				
ANTIGUA	47.71	12.4	8 36	-1				
SAN JUAN	48.31	6.7	8 38	-4				10 35 PP
BYRD STATION	53.84	189.3	9 22	-2				
N-LAZARVSKYA	59.85	157.6	10 5	-2	18 10	-6		
SOUTH POLE	60.23	180.0	10 7	-2				
CHAPEL HILL	65.90	353.2	10 49	2				
CUMBERLAND	66.53	347.5	10 49	-2	19 34	-5	11 5	15 1 SCP
BLACKSBURG	67.33	352.2	10 56	0				
M.BOUR	68.50	57.9	11 5	2	20 5	2		
GEORGETOWN	68.69	355.3	10 56	-8				
FAYETTEVILLE	69.08	340.4	11 5K	-2				
WICHITA MTS.	69.23	336.3	11 6	-2	20 5	-6	11 23	24 37 SS
TULSA	69.40	339.0	11 7A	-2	20 9	-4		11 24 PCP
MORGANTOWN	69.67	353.0	11 11K	1				14 29 PPP
CAPE HALLETT	69.71	196.7	11 21	11				
ST. LOUIS 1	70.45	344.5	11 14	-1			11 30	
FORDHAM	70.47	358.0	11 15	0				
PALISADES	70.63	358.0	11 16A	0	20 28	0	11 32	20 56 SCS
PENNSYLVANIA	70.64	354.8	11 15	-1				
WESTON	71.96	0.1	11 25	1	21 43	60		
LAWRENCE	72.07	340.7	11 22	-3				
TUCSON	72.27	325.6	11 25	-1				
ALBUQUERQUE	72.51	330.4	11 27	0			11 44	
ROCHESTER	72.87	355.6	11 30	1	20 51	-3		
LONDON ONT.	73.17	352.5	11 29	-2				
HALIFAX	74.54	5.8	11 39A	0				
MADISON	74.87	346.2	11 40	-1	21 11	-5		11 56 PCP
OTTAWA	75.08	356.9	11 41	-1				
BREBEUF	75.11	358.4	11 42	0	21 17	-2	11 57	14 33 PP
GOLDEN	76.14	333.7	11 48	0				
SHAWINIGAN	76.14	359.0	11 48	0				
GLEN CANYON	76.48	327.9	11 51	1				12 55
SEVEN FALLS	76.70	0.4	11 51A	-1				
MAWSON	76.92	163.6	11 50	-3				
BOULDER CITY	77.23	325.1	11 54	0				
PASADENA	77.54	321.8	11 56	0	21 47	2	12 11	
BANDEIRA	78.23	100.5	12 2A	2			12 16	
PRICE	78.29	330.0	12 1	1				
UINTA BASIN	78.36	331.2	12 0K	-1	21 52	-2	12 18	14 49 PP
FLAMING GRGE	78.79	331.6	12 2	-1				12 19
RAPID CITY	79.19	337.3	12 5	0				
DUGWAY	79.66	329.0	12 7K	-1				
SALT LAKE C.	79.70	330.0	12 8	0			12 24	
SEPT ILES	79.91	3.3	12 8	-1				
PRIEST	80.38	321.5	12 12K	0			12 29	
EUREKA	80.55	326.6	12 13K	1			12 28	30 55 PKKP
KIMBERLEY	81.07	117.9	12 15A	0				
LICK	81.79	321.8	12 19K	0				12 46
BERKELEY	82.52	321.8	12 23A	0	22 35	-2	12 40	27 53 SS
CALISTOGA	83.25	322.1	12 25K	-2			12 44	
BOZEMAN	83.41	333.2	12 27	0			12 44	
MINERAL	84.00	323.8	12 29A	-1				
BUTTE	84.30	332.6	12 32	0	22 52	-3	12 47	13 14
SCHEFFERVLLE	84.51	2.7	12 32	-1				
SHASTA	84.66	323.6	12 32K	-2				

BLUE MTS.	85.37	329.2	12	36K	-1	23	5	-1	12 51	16	5 PP
WELLINGTON	86.43	223.7	12	42	0	23	9	-7			
HUNGRY HORSE	86.78	333.1	12	43	-1				12 59		
CHATEAU	87.21	225.7	12	46	0						
AVERROES	87.29	48.9	13	5	18				13 28		
KARAPIRO	87.98	226.7	12	49	-1						
BULAWAYO	88.40	112.2	12	53	1						
BENI ABBES	88.93	54.1	12	56	2	23	41	2		14	47
PENTICTON	89.82	330.8	12	55	-4						
BROKEN HILL	91.22	107.3	13	6	1						
TOLEDO	93.45	45.4	13	31	16						
HONOLULU	97.61	290.1								26	27
LWIRO	97.73	97.1	13	37	2	25	9	59		24	40 SKKS
YELLOWKNIFE	98.39	341.3	13	36	-2						
RIVERVIEW	104.89	215.6				24	47	2		18	41 PP
JENA	108.51	41.5								18	51 PP
KASPERSKE H.	108.95	43.8								18	54 PP
HALLE	108.96	41.0								18	56 PP
PRUHONICE	109.87	43.2								19	1 PP
MOULD BAY	110.05	349.1	14	31	-239						
VIENNA-H.	110.30	45.4								19	3 PP
BRATISLAVA	110.73	45.7	19	5	34						
COLLEGE	111.22	333.6	14	34	-238					18	54 PP
ATHENS	111.45	57.8	19	15A	42					28	41
SOFIA	112.86	52.9								19	2
NIEDZIKA	113.16	45.2								31	3
UPPSALA	114.92	33.8								29	16 SKSP
ISTANBUL UN.	116.32	56.1								19	48 PP
UMEA	117.14	29.9								29	33 SKSP
NURMIJARVI	118.49	34.0	18	45	-2					29	43 PS
HELSINKI	118.58	34.5	18	47	0						
KSARA	119.34	65.8	19	6	18					20	7 PP
SODANKYLA	120.33	26.4	18	50	0						
KAJAANI	120.44	30.2	18	50	0						
VIBORG	120.54	34.2	18	46	-5					20	15 PP
SIMFEROPOL	120.98	52.9								30	12 SKSP
PULKOVO	121.18	35.4								20	21 PP
KHEYS	125.48	8.9	19	1	1						
RABAUL	126.22	238.5	19	0	-1						
TIFLIS	128.05	58.5	19	14	9						
SHIRAZ	131.78	75.6	19	13K	1					21	43 PP
TEHERAN	132.17	67.3	19	16	3					23	7 PKS
SVERDLOVSK	13 .26	37.0	19	29	7						
ASHKABAD	137.99	65.2	19	25	1					22	56 PKS
LEMBANG	143.43	178.4	19	32A	-1					20	39
TANGERANG	144.05	176.7	19	33	-1						
QUETTA	144.11	78.9	19	33	-1						
YAKUTSK	145.06	342.7	19	36K	0						
BOMBAY	145.76	100.4	19	47	10					20	40
TASHKENT	146.36	59.5	19	41A	3						
POONA	146.48	101.8	19	42K	3						
KHOROG	148.43	66.3	19	45	3					23	18 PP
WARSAK DAM	148.44	72.9	19	43	1						
Y.-SAKHLINSK	148.62	312.5	19	43	1						
ANDIJAN	148.76	59.9	19	47	5						
FRUNSE	149.99	55.3	19	51	7						
SEMIPALATNSK	150.52	38.1	19	55	10						
LAHORE	150.59	78.1	19	53	8						
ALMATA-2	151.81	53.3	19	54	7						
MEDAN	152.16	158.4								20	10
DEHRA DUN	153.63	81.4	19	53	4						
-ATUSIRO	154.42	292.7	19	57	7						
IRKUTSK	157.47	6.8	19	56	1					24	6 PP
BOKARO	158.81	101.3	20	1	5						
CHATRA	160.91	94.1	20	1	3						
ESEN BULAK	160.96	26.9	20	0	2						
ULAN-BATOR	162.00	3.7	20	0	0						
SHILLONG	164.58	102.4	20	3K	1						
PEKING	168.17	330.3	20	5	0						
LANCHOW	172.72	32.0	20	10	3						
KUNMING	172.93	131.4	20	10	2						
.IAN	175.69	356.3	20	10	2						

MARCH 10 11.H 50.M 26.S EPICENTRE 39.27 142.26 DEPTH= 54.KM

A=-0.61384 B= 0.47520 C= 0.63038 D= 0.6121 E= 0.7907
G=-0.4985 H= 0.3859 K=-0.7763 HT= -1.4

DEPTH OF FOCUS= 0.003R

SE= 2.95

	DELTA DEG.	AZ. DEG.	P M	P S	P O-C S	S M	S S	S O-C S	*PP M	*PP S	SUPP. M	SUPP. *
MIYAKO	0.44	330.1	0	12A	-1	0	21	-1				
MIZUSAWA	0.88	261.4	0	15	-2							
MORIOKA	0.94	297.6	0	17A	-1	0	28	-3				
ISINOMAKI	1.11	221.4	0	19A	-1	0	31	-4				
HATINOHE	1.38	336.4	0	24K	0	0	40	-2				
SENDAI	1.45	227.2	0	23	-2	0	36	-7				
AKITA	1.73	285.8	0	27K	-2	0	47	-3				
YAMAGATA	1.80	236.3	0	27K	-3	0	47	-5				
AOMORI	1.92	324.3	0	31K	0	0	53	-1				
SAKATA	1.92	259.8	0	31	0	0	54	-1				
HUKUSIMA	2.06	223.3	0	32	-1	0	48	-10				
ONAHAMA	2.55	205.2	0	40K	0	1	8	-2				
SHIRAKAWA	2.68	217.4	0	41	-1	1	7	-6				
HAKODATE	2.78	336.3	0	43	0	1	16	0				
NIIGATA	2.85	242.8									1	8
URAKAWA	2.91	7.7	0	48	3	1	24	5				
MORI	3.11	336.2	0	49	1	1	23	-1				
HIROO	3.12	14.7	0	49	1	1	26	2				
MURORAN	3.20	342.8	0	50	1	1	25	-2				
MITO	3.21	206.7	0	47A	-2	1	25	-2				
UTUNOMIYA	3.30	215.6	0	50	-1						1	24
AIKAWA	3.37	249.6	0	51	-1							
TOMAKOMAI	3.40	351.6	0	55	3	1	32	0				
KAKIOKA	3.45	209.1	0	53	0	1	11	-22				
TYOSI	3.71	197.9	0	55	-1							
OBIHIRO	3.72	10.8	1	3	7							
MAEBASI	3.81	222.4	0	58A	0	1	40	-2				
TAKADA	3.83	236.8	0	55	-3	1	35	-7				
SUTTSU	3.85	337.2	0	58	0							
KUMAGAYA	3.86	217.1	0	58A	0	1	43	0				
SAPPORO	3.86	350.1	0	59	1	1	40	-3				
KUSIRO	4.05	22.9	1	1	0	1	46	-2				
TOKYO C.M.O.	4.10	209.9	1	0	-2	1	43	-6				
NAGANO	4.12	232.3	1	5	3							
TITIBU	4.14	218.5	1	1	-1	1	47	-3				
MATUSIRO	4.20	230.9	1	2K	-1						1	27
YOKOHAMA	4.36	209.3	1	7	2	1	49	-7				
ASAHIGAWA	4.51	1.1	1	7K	-1	2	4	5				
MATUMOTO	4.54	229.8	1	8	0							
KOHU	4.64	220.4	1	9	0	2	1	-2				
HUNATU	4.67	217.5	1	11	1	2	7	3				
MERA	4.75	204.8									1	43
NEMURO	4.77	30.6	1	10	-1	2	2	-4				
AJIRO	4.91	211.9	1	10	-3	2	2	-7				
MISIMA	4.91	213.5	1	15	2							
ABASHIRI	4.98	17.1	1	27	13	2	12	1				
IIDA	5.14	224.7	1	18	2	2	27	12				
SHIZUOKA	5.28	216.9	1	25	7	2	22	3				
GIHU	5.83	230.2	1	28	2							
NAGOYA	5.87	227.5	1	27	0	2	33	0				
TSURUGA	6.10	235.6	1	30	0							
HIKONE	6.23	232.1	1	36	4							
KAMEYAMA	6.39	228.2	1	48	14	2	44	-2				
KYOTO	6.72	232.9	1	40	2	2	50	-4				
NARA	6.88	230.3	1	51	10							
ABUYAMA	6.91	232.7	1	39K	-2							
OSAKA	7.09	231.5									2	3
KURILSK	7.27	33.1	1	39	-7							
Y.-SAKHLINSK	7.76	2.4	1	51A	-2							
YAKUTSK	24.04	345.4	5	8K	-3	9	26	5				
BAGUIO CITY	29.61	225.8	6	2	0							
SHILLONG	44.14	267.5	8	0K	-5							
COLLEGE	46.86	33.3	8	27	1							
ALMATA-2	47.84	296.8	8	32K	-2							
KHEYS	50.60	347.8	8	58	3							
DARWIN	52.47	194.1	9	3	-6							
KIPAPA	53.59	91.0	9	20	2							
MOULD BAY	54.21	17.0	9	21A	-1							
RESOLUTE	60.28	14.9	10	3A	-2							

APATITY	60.93	335.4	10	23K	13							
SODANKYLA	63.17	337.0	10	21	-4							
KIRUNA	64.67	339.1	10	38	4							
KAJAANI	64.88	333.8	10	33	-3							
PENTICTON	66.12	45.1	10	43	-1							
VIBORG	66.61	330.6	10	59	12							
BRISBANE	67.04	169.8	10	49	0						11	18
UMEA	67.52	336.0	10	49	-3							
NURMIJARVI	68.29	331.8	10	54	-3							
HELSINKI	68.41	331.5	10	58	0							
TEHERAN	69.08	299.4	11	6	4							
SHASTA	69.24	54.0	10	54A	-9							
HUNGRY HORSE	69.71	43.7	11	7	1							
BLUE MTS.	69.94	48.1	11	8A	1				11	25		
UPPSALA	71.25	334.0	11	15	0							
SHIRAZ	71.74	293.6	11	16K	-2	20	34	1	11	30	11	39 *SP
EUREKA	73.94	52.0	11	33A	2				11	43	11	47 *SP
CANBERRA	74.48	174.3	11	34A	0							
GOTEBORG	74.79	334.9	11	48	12							
DUGWAY	75.40	49.9	11	41	1							
BOULDER CITY	76.82	54.3	11	50	2							
UINTA BASIN	77.22	48.1	11	51A	1				12	8		
RAPID CITY	78.19	42.0	11	55	0							
PRUHONICE	79.93	328.8	12	20	15							
GOLDEN	80.03	46.4	12	7	2							
JENA	80.33	330.9	12	12	5							
KASPERSKE H.	80.99	328.7	12	12	2							
TUCSON	81.76	55.0	12	16	2							
ALBUQUERQUE	82.65	50.5	12	20	1							
STUTTGART	82.96	330.8									13	36
ROSELEND	86.52	330.6	12	39	1							
WICHITA MTS.	87.37	46.1	12	42	0				13	0		
SEPT ILES	87.42	18.0	12	43	0							
BREBEUF	89.67	24.3	12	53	0							
CUMBERLAND	93.42	37.2	13	10	-1							

MARCH 10 13.H 51.M 5.S EPICENTRE 2.55 126.87 DEPTH= 41.KM

A=-0.59946 B= 0.79919 C= 0.04416 D= 0.8000 E= 0.6000
G=-0.0265 H= 0.0353 K=-0.9990 HT= 7.1

DEPTH OF FOCUS= 0.001R

SE= 2.11

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S
MANILA	13.33	334.9	3	12	3	5	38	2				
BAGUIO CITY	15.11	336.2	3	33	1	6	27	8				
DARWIN	15.34	165.2	3	34	-1	6	29	5				
LEMBANG	21.36	244.0	4	44	-1							
TANGERANG	21.99	246.7	4	53	1						5	23
PORT MORESBY	23.43	120.7	5	4A	-2							
CANTON	24.27	328.4	5	14K	0							
RABAUL	26.15	104.8	5	31	-1							
ZO-SE	28.90	349.9	5	58	1							
CHARTERS TS.	29.46	140.6	6	5	3						6	56
KUNMING	32.31	316.1	6	27	0							
MATUSIRO	35.41	15.9	6	54A	0	12	25	0				
SIAN	35.71	334.1	6	57	1							
MUNDARING	35.79	195.6	6	55	-2							
PEKING	38.55	346.8	7	20	0	13	13	0				
BRISBANE	38.85	141.7	7	21	-1						9	35
ADELAIDE	38.94	164.4	7	37K	14						8	50 PP
CHITTAGONG	39.31	302.9	7	27	1							
LANCHOW	39.57	330.1	7	30K	2	13	29	1				
SHILLONG	40.71	307.4	7	36K	-2							
CHANGCHUN	41.13	358.3	7	43	2							
RIVERVIEW	42.81	149.8	7	58	3						16	19
CANBERRA	43.00	153.1	7	56A	-1						9	35 PP
LHASA	43.38	312.1	8	1	1	14	25	1				
TOOLANGI	43.49	158.4	8	1	0							
BOKARO	44.97	301.6	8	11	-2							
CHATRA	45.04	306.2	8	13K	0							
Y.-SAKHLINSK	46.39	15.0	8	25	1							
UGLEGORSK	48.15	13.4	8	33	-5							
ULAN-BATOR	48.37	342.1	8	38	-1							

IRKUTSK	53.00	342.8	9	15	0	16	43	3			
DEHRA DUN	53.78	306.2	9	19A	-1						
POONA	54.26	291.0	9	21A	-3						
LAHORE	57.20	306.3	9	43	-2						
YAKUTSK	59.37	1.6	10	0K	0	18	4	0			
ALMATA-2	59.73	320.0	10	2K	-1						
WARSAK DAM	60.21	308.1	10	5	-1						
KHOROG	61.40	311.8	10	15	1						
ANDIJAN	62.00	315.5	10	18	0	18	40	2			
QUETTA	62.89	302.7	10	21	-3						
TASHKENT	64.38	315.2	10	33	-1						
TIKSI	68.99	0.7	10	59	-4						
ASHKABAD	71.57	309.2	11	18	0						
VANNOVSKAYA	71.76	309.1	11	20	0						
SVERDLOVSK	75.04	328.6	11	39A	0						
SHIRAZ	75.15	299.9	11	38	-1	21	9	-5	11	48	
TEHERAN	76.74	306.0	11	49	1						
HAWAII V.OB.	77.71	70.8	11	57	3						
GORIS	81.08	309.4	12	12K	0						
KIROVOBAD	81.17	310.6	12	13	0						
TIFLIS	82.39	311.6	12	20	1						
KHEYS	84.10	351.2	12	28	0						
COLLEGE	85.71	25.3	12	38	3						
MOSCOW	87.48	325.5	12	44	0						
ADDIS ABABA	87.73	278.9	12	48	3						
KSARA	89.42	303.7	12	57	4	23	49	11			
JERUSALEM	90.08	301.6	12	58	2						
PULKOVO	91.12	329.8	13	5	4						
SODANKYLA	91.61	337.6	13	5	1						
KAJAANI	91.73	334.3	13	4	0						
VIBORG	91.75	330.9	13	2	-2						
MOULD BAY	93.08	12.7	13	11	1						
HELSINKI	93.71	330.6	13	13	0						
NURMIJARVI	93.80	331.0	13	13	-1						
KIRUNA	93.81	338.6	13	15A	1						
UMEA	95.01	334.7	13	19	0						
UPPSALA	97.36	331.3	13	30	0						
UZHGOROD	97.68	319.6	13	33	2						
RESOLUTE	98.95	10.3	13	38A	1						
EUREKA	108.96	46.7	14	45	777				18	29	PKP
UINTA BASIN	113.19	43.9	18	36	3				29	22	PKKP
GOLDEN	116.35	42.9	18	42	3						
CUMBERLAND	131.42	35.7	19	10	2						
LA PAZ	159.75	134.1	19	59	5						

MARCH 11 7.H 27.M 21.S EPICENTRE 37.99 29.12 DEPTH= 31.KM

A= 0.69025 B= 0.38457 C= 0.61291 D= 0.4867 E=-0.8736
G= 0.5354 H= 0.2983 K=-0.7902 HT= -0.9

SE= 2.12

	DELTA DEG.	AZ. DEG.	P M	P S	P O-C S	S M	S S	S O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
ISTANBUL UN.	3.05	358.1	0	47	0						1	37	S*
ISTANBUL KA.	3.08	359.2	0	47	0								
ATHENS	4.27	271.4	0	59K	-5	1	51	-3			1	9	P*
SOFIA	6.46	318.6	1	36	1	2	52	3			2	7	PG
BUCHAREST	6.82	341.4				2	38	-20			2	1	PG
KSARA	6.88	125.2	1	40	-1	2	55	-4			3	36	SG
SKOPJE	7.12	306.4	1	46	2						4	32	
FOCSANI	7.84	350.1									4	13	
CAMPULUNG	7.89	338.5				2	51	-34			4	33	
SIMFEROPOL	7.90	26.7	1	55K	0	3	24	-1			2	25	
JERUSALEM	7.96	139.2	1	53K	-3	3	20	-6					
BACAU	8.73	349.8				3	21	-24					
TITOGRAD	8.75	303.5	2	7	0	3	59	13			4	50	SG
BELGRADE	9.43	319.1	2	15A	-2						5	10	
TARANTO	9.54	288.7	2	20	2						2	50	P*
TIMISOARA	9.74	325.3	2	20	-1						4	56	
MESSINA	10.70	275.3	2	33	-1	4	37	3			2	39	PP
LWOW	12.38	344.4	2	55	-2						3	38	
ZAGREB	12.52	312.8	3	1	2						6	29	
TIFLIS	12.61	67.9	3	5	5						4	27	
HURBANOVO	12.70	324.5	3	9	8						7	1	SG
SKALNATE PL.	12.89	333.0	3	6	2						3	17	PP
NIEDZIKA	13.07	333.8	3	7	1						8	27	

ROME	13.35	292.2	3	21	11	6	9	31	6	58
BRATISLAVA	13.43	323.1	3	10K	-1				3	18 PP
LJUBLJANA	13.51	311.2	3	11K	-1	5	48	6	3	56 PP
GORIS	13.52	78.3	3	16A	4	5	56	14		
KRAKOW	13.74	334.3	3	14	-1				3	21 PP
TRIESTE	13.77	308.6	3	15K	0				7	34 SG
VIENNA-H.	13.84	321.9	3	17K	1	5	47	-3		
RACIBORZ	14.40	330.6							3	38 PP
FLORENCE X.	14.70	298.8	3	1	-26					
PADOVA	14.85	305.4	3	29	0	6	29	15		
WARSAW	15.33	340.9	3	33	-3	6	34	9	3	58 PPP
KASPERSKE H.	15.81	319.7	3	42	0				8	40
PRUHONICE	15.89	323.6	3	43	0	7	5	27		
PRAGUE	16.01	323.7	3	43	-1					
PAVIA	16.55	302.1							5	54 PP
RAVENSBURG	17.28	310.7	4	1	1					
MONACO	17.37	296.1	4	3	2				7	28 PP
COLLMBERG	17.52	324.6	4	3	0					
ISOLA	17.73	297.4	4	7	1				7	58
EBINGEN	17.85	311.2	4	8	1					
JENA	17.95	321.7	4	9	0	7	44	19	8	39
STUTTGART	17.95	313.2	4	9	0	7	39	14		
TEHERAN	17.95	90.4	4	11	2	7	40	15		
TUBINGEN	17.96	312.3	4	10	1					
HALLE	18.14	323.6	4	10	-1	7	39	10		
ROSELEND	18.40	301.9	4	15	1	7	47	12		
HEIDELBERG	18.59	314.4	4	17	1					
MOSCOW	18.65	15.2	4	15K	-2				7	51 SS
STRASBOURG	18.75	311.2	4	20K	2				12	1
BESANCON	19.33	306.0	4	27	2				5	56
WELSCHBRUCH	19.53	309.5	4	21	-6				4	54
BENSBERG	20.24	316.9	4	35K	0				5	14
KARLSKRONA	20.31	337.8	4	32	-4				5	26
MUNSTER	20.55	319.8	4	41	3					
COPENHAGEN	20.96	333.0	4	42K	-1	8	49	20		
SHIRAZ	21.10	106.3	4	44K	0	8	33	1	5	9 PP
GARCHY	21.22	304.3	4	45A	0				6	25
DOURBES	21.28	312.6	4	49	3				5	58
WITTEVEEN	21.52	320.8	4	50A	2					
PULKOVO	21.81	1.6	4	51K	0	8	47	2		
PARIS	22.06	307.9	4	55A	1				12	39
HELSINKI	22.36	354.5	4	57	0					
BAGNERES	22.54	292.2	5	0	2				5	34
GOTEBORG	22.71	335.8	5	0	0				5	44
NURMIJARVI	22.72	354.3	5	0A	0	9	9	7		
ASHKABAD	23.00	81.0	5	5	2				9	20
UPPSALA	23.08	345.1	5	4	0	9	19	11		
ALICANTE	23.24	280.1	5	8K	3	9	19	8	5	41 PPP
FOLINIERE	23.92	306.3	5	13	1					
KEW	24.69	312.6	5	19	0	9	47	11		
KONGSBERG	25.01	336.4	5	23A	1	9	49	7	6	13 PPP
ALMERIA	25.06	277.2	5	23A	0				6	21 PPP
TOLEDO	25.80	284.6	5	31A	1	9	59	4	10	59 SS
KAJAANI	26.14	358.6	5	35	2					
UMEA	26.41	351.1	5	36	1	10	10	5	9	0 PCP
DURHAM	26.72	318.9	5	41A	3	10	15	5		
BENI ABBES	27.01	262.5	5	46	5	10	25	10	6	31 PP
SKALSTUGAN	27.57	343.7	5	46	0					
SVERDLOVSK	28.08	37.6	5	52K	1	10	39	7		
ABERDEEN	28.11	323.2							17	14
SODANKYLA	29.47	358.0	6	3A	0				6	28
APATITY	29.71	3.3	6	5A	0	11	0	2	11	18 PS
AVERROES	29.94	272.2	6	9A	2				6	23 *SP
KIRUNA	30.29	353.5	6	11	1	11	8	1	7	2 PP
TASHKENT	30.90	71.0	6	14K	-2				11	56
KEVO	31.85	358.6	6	24	0	11	35	3	7	19 PP
QUETTA	32.11	92.6	6	27	1					
TROMSOE	32.18	353.3	6	27	0				7	25 PP
KHOROG	33.33	77.5	6	39K	2	12	4	9		
WARSAK DAM	34.34	83.5	6	27	-19					
FRUNSE	34.65	67.3	6	49K	1	12	25	10	8	0 PP
LAHORE	37.40	86.0	7	14	2					
SEMIPALATNSK	37.97	54.1	7	15	-1				8	49 PP
LWIRO	40.04	180.5	7	35K	1	13	37	0	9	15 PP
DEHRA DUN	40.82	85.7	7	40	0					
SCORESBY SD.	41.92	337.0	7	52	3					
BOMBAY	42.42	104.2	7	52	-1	14	18	5		
POONA	43.43	103.8	8	2A	1					

KHEYS	44.11	6.5	8	8	1				9	50 PP
NORD	46.59	351.7	8	26	-1					
M.BOUR	46.98	252.7	8	23	-7	15	26	8		
CHATRA	49.55	85.1	8	49	-1					
MADRAS	51.60	104.7	9	5	0	16	26	3	10	13 PP
BROKEN HILL	52.16	180.8	9	10	1					
ALERT	52.79	350.5	9	14A	0					
ULAN-BATOR	55.52	52.9	9	36	2	17	26	10		
TIKSI	57.39	21.8	9	51K	3	17	47	6	11	43
LANCHOW	58.13	67.0	9	53	0					
PAOTOW	60.51	59.8	10	10	1					
RESOLUTE	61.75	345.5	10	17K	-1					
YAKUTSK	61.84	31.7				18	40	2		
PORT BLAIR	62.13	97.0	10	22	2				18	49
KUNMING	62.56	78.5	10	23	0	18	53	6		
SIAN	62.66	66.6	10	24	0					
SCHEFFERVLLE	63.08	319.8	10	25	-1					
MOULD BAY	64.29	352.0	10	34	0					
PEKING	64.92	57.9	10	39	1	19	24	8		
SEPT ILES	65.11	315.2	10	41A	1					
KIMBERLEY	66.51	184.2	10	49K	0					
CHANGCHUN	68.82	50.5	11	3K	0	20	9	6		
SEVEN FALLS	69.24	314.0	11	6	0					
SHAWINIGAN	70.66	314.3	11	15A	1					
MAGADAN	71.57	27.2	11	21A	1				15	45 PPP
MEDAN	71.73	100.0							12	29
BREBEUF	71.75	313.8	11	21	0					
OTTAWA	73.00	314.6	11	30A	2					
ZO-SE	73.10	63.6				20	58	5		
VLADIVOSTOK	73.17	48.2	11	28K	-1					
PALISADES	74.59	310.1				21	22	12		
YELLOWKNIFE	75.70	343.5	11	45K	1					
Y.-SAKHLINSK	76.67	40.1	11	51K	2					
PENNSYLVANIA	77.08	311.9	11	53	1					
COLLEGE	77.45	358.7	11	54	0					
LONDON ONT.	77.54	315.2	11	56A	2					
GEORGETOWN	77.80	309.9	11	58	2					
MORGANTOWN	79.05	312.0	12	4	1					
PETROPAVLOVK	79.36	28.3	12	3	-1				22	37 PS
CHAPEL HILL	80.91	308.6	12	15	2					
MATUSIRO	81.07	50.4	12	14	1	22	25	6		
BAGUIO CITY	81.20	76.1	12	15	1					
MADISON	81.89	319.8	12	18	0					
COLUMBIA	83.40	308.3	12	27	2					
TANGERANG	84.00	102.6	12	28	0					
CUMBERLAND	85.06	312.0	12	34	0	23	8	9		
LEMBANG	85.18	102.4	12	33	-1					
RAPID CITY	87.62	327.8	12	47	1					
HUNGRY HORSE	88.01	336.4	12	48	0					
PENTICTON	88.77	340.1	12	46	-6					
BUTTE	89.57	334.4	12	56	1				13	48
TULSA	90.53	318.3	13	UA	0	23	34	-17	30	22 SS
BLUE MTS.	92.15	336.8	13	7	-1				16	46 PP
FLAMING GRGE	92.78	329.8	13	11	1					
WICHITA MTS.	92.90	319.3	13	12	1	23	47	-25	16	54 PP
UINTA BASIN	93.37	329.6	13	14A	1					
SALT LAKE C.	93.87	331.4	13	15	0					
DUGWAY	94.73	331.7	13	21	2					
LUBBOCK	95.46	320.7	13	24	1					
EUREKA	96.51	333.5	13	29	2				17	31 PP
ALBUQUERQUE	96.55	324.6	13	29	1					
TUCSON	100.78	326.3	13	48	1					
CHARTERS TS.	123.23	90.5	18	57	3					
SOUTH POLE	127.80	180.0	19	3	0				21	9
ROXBURGH	149.61	117.1	19	49	7					
KARAPIRO	153.60	100.4	19	28	-19					

MARCH 12 8.H 5.M 53.S EPICENTRE 53.92 160.57 DEPTH= 67.KM

A=-0.55782 B= 0.19676 C= 0.80630 D= 0.3326 E= 0.9431
G=-0.7604 H= 0.2682 K=-0.5915 HT= -6.8

DEPTH OF FOCUS= 0.005R

SE= 2.07

	DELTA DEG.	AZ. DEG.	P M	P S	P O-C S	S M	S S	S O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
PETROPAVLOVK	1.46	232.6	0	24K	-1								
MAGADAN	7.79	320.4	1	55	2								
YAKUTSK	18.10	308.9	4	7A	-1								
TIKSI	22.44	334.1	4	54	0								
MATUSIRO	23.29	230.8	5	2K	0								
COLLEGE	27.63	46.2	5	43	0								
MOULD BAY	36.18	23.6	6	58A	1								
ALERT	42.08	7.7	7	47	1								
YELLOWKNIFE	42.36	43.3	7	49K	0								
RESOLUTE	42.45	22.4	7	50A	1								
THULE	46.25	14.3	8	8	-12								
PENTICTON	47.30	61.2	8	25	-3								
BAGUIO CITY	48.59	235.3	8	38	0								
BLUE MTS.	51.36	64.4	9	0	1						9	42	
SVERDLOVSK	51.87	316.5	9	1	-2								
KEVO	52.12	341.4	9	4	-1								
APATITY	52.61	337.3	9	9	0								
ALMATA-2	53.00	294.7	9	13	1								
TROMSOE	53.64	344.3	9	15	-1								
SODANKYLA	54.22	339.9	9	21A	0								
KIRUNA	55.00	342.7	9	25	-1								
EUREKA	55.75	68.5	9	33A	1						10	31	PCP
KAJAANI	56.81	337.4	9	38	-1								
NHATRANG	57.95	244.3	9	49	2								
UINTA BASIN	58.61	63.6	9	53A	1						10	30	
UMEA	58.62	340.6	9	51	-1								
RAPID CITY	59.16	56.6	9	56	0								
VIBORG	59.44	334.8	9	57	-1								
PULKOVO	59.86	333.5	10	1	0								
SKALSTUGAN	60.26	344.3	10	2	-1								
NURMIJARVI	60.63	336.7	10	6	0								
HELSINKI	60.86	336.4	10	7	0								
UPPSALA	62.76	340.0	10	19	-1								
TUCSON	63.87	70.7	10	29	2								
ALBUQUERQUE	64.24	65.6	10	31	1								
KONGSBERG	64.40	344.1	10	32	1								
SCHEFFERVLLE	64.81	28.1	10	32	-2								
GOTEBORG	65.85	342.1	10	40	0								
KARLSKRONA	66.59	339.5	10	42	-3								
QUETTA	68.23	291.5	10	54	-1								
WICHITA MTS.	68.56	60.4	10	57	0						11	23	
SEPT ILES	69.01	30.2	11	0	0								
TULSA	69.05	57.6	11	UK	0								
KIROVOBAD	70.22	312.5	11	6	-1								
SEVEN FALLS	70.31	34.5	11	7	-1								
DURHAM	70.68	349.2	10	48K	-22								
BREBEUF	70.74	37.2	11	10	0								
UZHGOROD	71.91	332.3	11	17	0								
JENA	72.33	340.0	11	21	1						11	42	
PRUHONICE	72.60	337.8	11	22	0						11	42	
CUMBERLAND	74.21	50.8	11	30	-1								
DOURBES	74.40	344.2	11	37	5								
CHARTERS TS.	74.73	193.9	11	33	-1								
STUTTGART	74.85	340.8	11	35	0								
STRASBOURG	75.32	341.7	11	38	1								
SHIRAZ	76.27	301.6	11	46K	3						15	5	PP
LJUBLJANA	76.30	336.4	11	44	1								
FOLINIERE	76.44	347.2	11	44	0								
ROSELEND	78.31	341.7	11	55	1								
ATHENS	81.20	326.8									15	34	
SOUTH POLE	143.74	180.0	19	23	-4								

MARCH 14 8.H 0.M 12.S EPICENTRE 19.01 120.21 DEPTH= 23.KM

A=-0.47601 B= 0.81769 C= 0.32374 D= 0.8642 E= 0.5031
G=-0.1629 H= 0.2798 K=-0.9461 HT= 4.9

SE= 2.15

	DELTA DEG.	AZ. DEG.	P M	P S	P O-C S	S M	S S	S O-C S	*PP M	*PP S	SUPP. M	SUPP. S
BAGUIO CITY	2.60	172.0	0	42	0	0	55	-18				
MANILA	4.39	168.9	1	10	3	2	18	20				
ZO-SE	12.07	4.0	2	51	-3							

NHATRANG	12.55	239.1	2	58	-2	5	11	-9		
NANKING	13.06	354.6	3	5	-2					
KUNMING	17.29	293.7	4	1A	0					
SIAN	18.20	328.7	4	13A	0					
CHENGTU	18.70	311.4	4	17A	-2	7	48	4		
ABUYAMA	20.87	37.7	4	43A	0					
PEKING	21.24	351.4	4	47A	0	8	45	8	5 4	*SP
LANCHOW	22.28	322.9	4	59A	2	9	4	8	5 13	*SP
PAOTOW	23.21	340.0	5	7A	1	9	18	5		
MATUSIRO	23.57	38.5	5	9	-1	9	28	9		
CHANGCHUN	25.12	8.7	5	25	0	9	48	2	5 40	*SP
VLADIVOSTOK	25.99	19.8	5	35A	2					
MEDAN	26.03	236.6	5	32K	-1				7 6	
CHITTAGONG	26.75	282.1	5	40	0	10	14	2		
SHILLONG	26.99	289.1	5	43A	1	10	23	7		
PORT BLAIR	27.47	258.6	5	44	-2				9 4	
DJAKARTA	28.29	209.0							9 59	
TANGERANG	28.37	209.4	5	57	2					
LEMBANG	28.51	207.0	5	52	-4	10	32	-9	6 42	PP
LHASA	28.53	297.3	5	58	2	10	43	2		
ULAN-BATOR	30.81	342.4	6	15	-1	11	20	3		
CHATRA	31.34	290.5	6	21	0					
BOKARO	32.34	284.7	6	29	-1	11	45	4	7 47	PP
DARWIN	32.90	160.6	6	34	-1					
Y.-SAKHLINSK	33.48	28.4	6	41	1	11	58	-1		
UGLEGORSK	34.79	25.4	6	52A	1					
IRKUTSK	35.45	343.1	6	59	2	12	33	3		
PORT MORESBY	38.76	134.4	7	23	-1	13	22	2		
MADRAS	38.87	267.2	7	26	1	13	25	3	9 18	PPP
RABAUL	39.01	123.0	7	26	0	13	29	5		
DEHRA DUN	39.73	294.8	7	33	1	13	34	-1	9 8	PP
NEW DELHI	40.31	292.0	7	36	-1	13	37	-6	9 16	PP
LAHORE	43.03	296.1	7	58	-2					
YAKUTSK	43.48	6.5	8	3	0	14	28	-2		
ALMATA	43.58	313.4	8	4K	0					
POONA	43.79	277.2	8	5A	-1	14	35	0		
SEMIPALATNSK	44.53	324.1	8	14	2					
BOMBAY	44.71	277.9	8	13	0	14	49	1	18 13	SS
WARSAK DAM	45.62	299.2	8	20	0					
KHOROG	46.12	304.0	8	26K	2					
ANDIJAN	46.13	308.6	8	27	3	15	13	5		
CHARTERS TS.	46.50	145.3	8	26	-1	15	12	-2		
TASHKENT	48.54	308.7	8	45	2	15	46	4		
QUETTA	49.30	293.8	8	49K	0	15	53	0		
MUNDARING	50.83	184.4	8	59	-2	16	14	0		
TIKSI	52.87	3.4	9	14K	-2					
BRISBANE	55.89	144.7	9	38	0				10 38	
ADELAIDE	56.49	161.8	9	41K	-2	17	36	5		
ASHKABAD	56.56	303.3	9	44	1	17	39	7		
VANNOVSKAYA	56.76	303.3	9	47	2					
SVERDLOVSK	57.74	325.9	9	51	0	17	49	2		
RIVERVIEW	60.26	150.5	10	9	0	18	24	4	22 26	SS
CANBERRA	60.55	153.1	10	11	0					
TOOLANGI	61.10	157.2	10	14K	-1				11 12	
SHIRAZ	61.83	294.0	10	28K	8	18	44	4	14 33	SCP
TEHERAN	62.20	301.0	10	23	1	18	9	-36		
KIROVOBAD	65.79	306.7	10	44	-1	19	31	2		
GORIS	65.90	305.5	10	38A	-8	19	36	6		
KHEYS	66.93	350.9	10	53	0					
MOSCOW	70.36	323.4	11	12	-2	20	21	-3		
APATITY	71.38	336.1	11	18A	-2	20	35	-1		
KEVO	73.43	338.7	11	31	-1	20	58	-1		
PULKOVO	73.73	328.2	11	34A	0					
COLLEGE	73.81	26.4	11	33	-1					
SODANKYLA	74.00	336.3	11	35A	-1					
SIMFEROPOL	74.11	312.6	11	47	11					
KAJAANI	74.18	332.8	11	36A	-1					
KSARA	75.09	301.0	11	43	1				14 31	PP
HONOLULU	75.86	72.1							21 54	
JERUSALEM	76.11	299.1	11	49	1					
KIRUNA	76.20	337.3	11	48	0	21	31	1	30 4	
NURMIJARVI	76.34	329.5	11	48	-1	21	27	-4	26 34	SS
KARAPIRO	76.86	138.1	11	54K	2					
NORD	77.37	354.1	11	53	-2					
UMEA	77.44	333.4	11	54	-1	21	38	-5		
CHATEAU	77.62	139.1	11	58	2					
ROXBURGH	78.13	147.1	12	0	1					
MOULD BAY	78.50	12.2	11	59K	-2					

ISTANBUL UN.	78.66	309.5	12	2	0					
ALERT	78.67	9.3	12	1K	-1					
LWOW	79.59	319.1	12	5	-2					
UPPSALA	79.89	330.0	12	7	-2	22	6	-3		
SKALSTUGAN	80.84	334.5	12	14	0					
UZHGOROD	81.03	318.3	12	15	0					
NIEDZIKA	82.00	319.5	12	39	19				13	29
GOTEBORG	83.44	329.1	12	26	-1					
RESOLUTE	83.90	8.8	12	29K	0					
COPENHAGEN	84.07	327.2	12	30	0					
VIENNA-H.	84.86	319.3	12	35	1					
PRUHONICE	85.27	321.4	12	36	0	23	0	-4		
HALLE	86.13	323.5	12	41	1					
KASPERSKE H.	86.20	320.9	12	41K	0				13	40
JENA	86.59	323.1	12	42	-1					
YELLOWKNIFE	88.08	22.3	12	50K	0					
PORT HARDY	88.75	36.0	12	54	1					
CHILEKA	90.64	253.7	13	2	0					
ROSELEND	91.97	320.0	13	3	-5				13	25
LWIRO	92.05	268.3	13	8A	0					
PENTICTON	93.81	34.5	13	17	1					
BROKEN HILL	96.20	256.9	13	26	-1					
SHASTA	96.94	42.8	13	32	1					
HUNGRY HORSE	97.34	33.1	13	33	0					
MINERAL	97.63	42.8	13	34K	0					
BLUE MTS.	97.70	37.3	13	35	1				17	41 PP
BULAWAYO	97.79	251.4	13	34	-1					
BERKELEY	98.53	45.2							26	24
EUREKA	101.69	41.0	13	54	2				14 5	17 45 PKP
WOODY	101.99	45.5	13	54	0					
UINTA BASIN	104.98	37.2	14	18	11	24	51	7	18	13
TUCSON	109.40	44.3	18	31	777				18	23 PP
ALBUQUERQUE	110.41	39.6	18	33	3					
MADISON	112.10	23.1	18	34	1				19	26 PP
WICHITA MTS.	115.08	34.7	18	41	2				19	45 PP
TULSA	115.62	31.9							29	26 PS
CUMBERLAND	120.46	24.3	18	50	0				20	19 PP
CARACAS	149.85	14.1	18	48	-55				26	43
TRINIDAD	150.49	3.2	19	52	8					
CHINCHINA	151.53	34.7	19	45	-1				19	51 PKP2
FUQUENE	152.07	30.8	19	53	6				20	4 PKP2
BOGOTA	152.63	32.3	19	51	4				19	58 PKP2

MARCH 15 0.H 3.M 57.S EPICENTRE -4.87 129.54 DEPTH= 245.KM

A=-0.63428 B= 0.76848 C=-0.08441 D= 0.7712 E= 0.6365
G= 0.0537 H=-0.0651 K=-0.9964 HT= 7.0

DEPTH OF FOCUS= 0.033R

SE= 1.22

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S
PORT MORESBY	18.04	105.4	3	55K	-1	7	18	13				
MANILA	21.15	336.8	4	30	3	8	10	8				
LEMBANG	21.89	263.8	3	33	-61							
CHARTERS TS.	22.22	134.3	4	37K	0	8	26	5				
RABAUL	22.57	89.2	4	41	0							
TANGERANG	22.83	265.7	4	41	-2							
BAGUIO CITY	22.94	337.5	4	45	1	8	35	2				
NHATRANG	26.40	310.2	5	16	0							
MUNDARING	29.71	203.3	5	43	-3							
BRISBANE	31.49	137.8	5	59	-2						8	49
RIVERVIEW	35.12	147.8	6	33K	1							
CANBERRA	35.23	151.8	6	33K	0						8	59 PCP
TOOLANGI	35.66	158.0	6	37K	0						12	24
PORT BLAIR	40.14	294.4	7	12	-2						18	41
MOORLANDS	40.57	159.8	7	18	1							
MATUSIRO	41.99	10.5	7	28	-1							
CHITTAGONG	45.75	307.8	7	58	-1							
PEKING	46.35	345.8	8	1	-2							
LANCHOW	47.30	331.4	8	12K	1	14	46	-1				
[illegible]	47.45	311.5	8	11A	-1							
LHASA	50.40	315.3	8	34	0	15	28	0				
CHATRA	51.69	309.9	8	44A	0							
MADRAS	52.14	290.5	8	47	0	15	53	2				

Y.-SAKHLINSK	52.97	11.3	8	53	0							
UGLEGORSK	54.83	10.1	9	7K	0							
ESEN BULAK	58.97	333.7	9	37	1	17	26	5				
POONA	59.58	294.7	9	39A	-1							
NEW DELHI	60.31	306.7	9	44K	-1							
DEHRA DUN	60.39	308.9	9	45A	-1							
PETROPAVLOVK	62.70	19.3	10	1	0							
LAHORE	63.80	308.6	10	7	-1							
YAKUTSK	66.70	0.1	10	27K	0							
WARSAK DAM	66.93	310.0	10	42	14							
ANDIJAN	69.17	316.9	10	43	1							
QUETTA	69.20	304.7	10	42A	0	19	29	2				
TASHKENT	71.53	316.4	10	57	1							
SHIRAZ	81.18	300.9	11	50A	0	21	25	-13			14	21 PP
SVERDLOVSK	82.73	328.9	11	58A	0							
GORIS	87.84	309.8	12	24	1							
KIROVOBAD	88.00	310.9	12	25	1							
BYRD STATION	88.80	170.6	12	29	2							
COLLEGE	91.25	25.1	12	37	-2				13	20		
BULAWAYO	98.54	248.9									14	3
SODANKYLA	99.44	337.5	13	15	-1							
BROKEN HILL	99.46	254.6	13	12	-4							
KAJAANI	99.53	334.1	13	16	-1							
MOULD BAY	99.67	13.1	13	16K	-1							
KIRUNA	101.65	338.5	13	25	-1							
UMEA	102.81	334.6	13	29	-2							
BLUE MTS.	109.76	44.0	14	3	777						18	19 PP
COLLMBERG	110.19	323.2	18	4	2						18	49
EUREKA	111.91	49.4	14	19	-227						18	52 PP
UINTA BASIN	116.46	47.1	18	17	2						19	10 PP
TUCSON	117.54	56.2	18	20	3							
ALBUQUERQUE	120.39	52.1	18	25	3						19	52 PP
WICHITA MTS.	126.57	49.8	18	37	3						20	33 PP
SEVEN FALLS	134.40	19.4	18	43	-6							
BREBEUF	134.78	22.9	18	52	2							
CUMBERLAND	135.51	42.0	18	51	0						21	19 PP
M.BOUR	145.70	288.4	19	14	4						19	24 PKP2
HUANCAYO	150.10	124.4	19	27	11							
LA PAZ	152.50	140.9	19	33	13							
SAN JUAN	159.65	47.5	20	11	42							

MARCH 15 0.H 16.M 0.S EPICENTRE 8.31 126.56 DEPTH= 106.KM

A=-0.58956 B= 0.79487 C= 0.14352 D= 0.8032 E= 0.5957
G=-0.0855 H= 0.1153 K=-0.9896 HT= 6.7

DEPTH OF FOCUS= 0.011R

SE= 2.06

	DELTA DEG.	AZ. DEG.	P M	S	O-C S	S M	S	O-C S	*PP M	S	SUPP. M	S
MANILA	8.30	320.1	1	58	-1	2	50	-42				
BAGUIO CITY	9.96	324.6	2	19	-2							
NHATRANG	17.51	284.3	3	58	-1						4	31 *SP
GUAM	18.56	72.4	4	15	4	8	13	42				
LEMBANG	24.14	232.0	5	10	3	9	17	3			5	45 PP
DJAKARTA	24.38	234.4	5	19A	10						9	50
TANGERANG	24.53	234.7	5	12K	1	9	18	-3				
NANKING	24.72	344.0	5	13	0	9	33	9				
PORT MORESBY	27.01	130.2	5	31	-3	10	25	23				
ABUYAMA	27.70	16.1	5	40A	0							
MEDAN	28.12	262.0	5	45K	1						8	45
RABAUL	28.40	115.0	5	46	0	10	30	6			6	31 PP
MATUSIRO	30.04	19.0	6	0	-1	10	17	-33				
TUKUBASAN	30.40	22.0				10	55	-1			12	38 SS
PEKING	32.93	345.2	6	24	-2	11	39	4				
CHARTERS TS.	34.23	145.7	6	35	-2	11	55	0				
LANCHOW	34.54	326.5	6	40	0	12	7	7				
VLADIVOSTOK	34.99	6.8	6	44K	0	12	8	1				
CHANGCHUN	35.40	358.4	6	47	0	12	18	5				
CHITTAGONG	36.19	296.7	6	55	1	12	57	32				
SHILLONG	37.20	301.8	7	3	1	12	35	-6			18	52
LHASA	39.48	307.3	7	24	3							
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]							
MUNDARING	41.25	221.4	[illegible]		[illegible]	13	47	5				
PERTH	41.32	193.9				13	48	5			17	15 SS

CHATRA	41.60	301.3	7	39	0					14	44
BOKARO	41.92	296.5	7	41	0	14	21	30		9	39 PP
UGLEGORSK	42.68	15.0	7	50K	2						
ULAN-BATOR	42.86	340.6	7	47	-2						
BRISBANE	43.63	145.3	7	53	-2					8	17 PP
ADELAIDE	44.55	165.7	8	0K	-3					18	54
ESEN BULAK	45.99	330.9	8	17	3						
RIVERVIEW	47.96	152.2	8	28	-2	15	21	3	8 41	18	56 SS
CANBERRA	48.28	155.3	8	31	-1	15	26	3	9 1	10	22 PP
TOOLANGI	48.95	160.0	8	36A	-1					10	38 PP
DEHRA DUN	50.29	302.6	8	47K	0	16	16	26			
NEW DELHI	50.57	300.2	8	48A	-2	16	7	13		19	59
PETROPAVLOVK	51.62	24.2	8	58	0						
POONA	52.11	287.0	9	0A	-1						
BOMBAY	53.11	287.3	9	6	-3	17	4	35		11	21 PP
YAKUTSK	53.66	1.8	9	12A	-1	16	40	4			
LAHORE	53.69	303.1	9	11	-2						
MAGADAN	54.33	14.9	9	18	0						
WARSAK DAM	56.54	305.3	9	35	1						
KHOROG	57.44	309.3	9	40	0	17	33	6			
ANDIJAN	57.78	313.3	9	43	1						
QUETTA	59.65	300.1	9	54	-1	18	26	31			
TASHKENT	60.18	313.1	9	57	-2						
KARAPIRO	64.80	138.8	10	30	1						
AFIAMALU	65.04	109.5	10	37A	6	19	34	31			
CHATEAU	65.52	139.9	10	37	3						
ROXBURGH	65.84	148.4	10	35	-1						
ASHKABAD	67.77	307.5	10	48	0	19	37	1			
VANNOVSKAYA	67.97	307.5	10	55	6						
MACQUARIE I.	68.23	160.3	10	50A	-1						
SVERDLOVSK	70.02	327.7	11	0	-2	20	6	3			
SHIRAZ	72.09	298.4	11	14K	-1					13	59 PP
TEHERAN	73.17	304.8	11	21	0	20	36	-3			
HONOLULU	73.41	70.3	11	39	17						
WILKES	75.37	186.6	11	33	0				11 46		
HAWAII V.OB.	76.17	72.0	11	42	4						
KIROVOBAD	77.24	309.8	11	44	0						
GORIS	77.24	308.6	11	44	0						
TIFLIS	78.39	310.9	11	51	1						
KHEYS	78.40	351.0	11	50	0						
MIRNY	78.55	193.0	11	50	-1						
COLLEGE	80.67	25.6	12	3	0						
MOSCOW	82.60	325.2	12	13	0						
APATITY	83.58	337.3	12	17K	-1	22	35	6		22	57 PS
KEVO	85.56	339.9	12	27	0	22	52	3			
SIMFEROPOL	85.92	314.7	12	28A	-1						
KSARA	86.01	303.4	12	31	1						
PULKOVO	86.02	329.7	12	30A	0	22	56	3			
SODANKYLA	86.20	337.5	12	29	-2				12 56	30	28 PKKP
KAJAANI	86.45	334.2	12	31	-1						
VIBORG	86.60	330.8	12	31	-1						
JERUSALEM	86.82	301.5	12	34	0						
MOULD BAY	87.56	12.6	12	37A	0						
TROMSOE	88.31	340.5	12	40	-1						
KIRUNA	88.37	338.6	12	39	-2	23	23	8			
NORD	88.55	354.9	12	42	0						
NURMIJARVI	88.64	331.0	12	42K	0	23	22	4		29	36 SS
ALERT	89.23	1.2	12	45	0						
UMEA	89.70	334.8	12	46	-1	23	32	5			
ISTANBUL UN.	90.28	311.4	12	54	4					23	33 PP
LWOW	91.71	320.8	12	58	1						
UPPSALA	92.19	331.5	12	58	-1						
SKALSTUGAN	93.08	335.9	13	1	-2						
UZHGOROD	93.12	319.9	13	4	1						
RESOLUTE	93.37	10.2	13	4A	0						
KRAKOW	94.18	321.7	13	9	1					13	32
KARLSK-ONA	94.54	328.4	13	6	-4						
RACIBORZ	95.23	322.1	13	14	1					13	22 PCP
YELLOWKNIFE	95.42	24.1	13	13	0						
GOTEBORG	95.74	330.6	13	14	-1						
KONGSBERG	95.97	332.9	13	15	-1						
VIENNA-H.	96.98	320.8	13	20	-1						
PRUHONICE	97.46	322.9	13	24	1						
COLLMBERG	97.86	324.5	13	25	0					17	23 PP
LWIRO	98.00	268.9	13	26	1					17	26
SOUTH POLE	98.25	180.0	13	27	1						
KASPERSKE H.	98.37	322.3	13	27	0					14	14
HALLE	98.37	324.9	13	31	4						
PENTICTON	98.80	37.3	13	30	1						

JENA	98.82	324.5	13	29	0				14	4	14	40
LJUBLJANA	98.96	319.2	13	29	-1							
BULAWAYO	100.24	251.0	13	35	0							
BERKELEY	101.26	48.8	13	40A	0						26	30
BLUE MTS.	102.07	40.8	13	45	1	24	23	11	14	0	17	57 PP
HUNGRY HORSE	102.55	36.5	13	47	1							
BUTTE	104.53	38.2	14	2	8							
WOODY	104.57	49.9	14	2	7						29	41 PKKP
EUREKA	105.21	45.4	14	2	777						18	20 PP
DUGWAY	107.09	43.6	18	16K	777							
UINTA BASIN	109.22	42.2	18	21	777	25	0	16	18	46	18	55 PP
TUCSON	112.06	50.4	18	27	4						29	17 PKKP
GOLDEN	112.30	41.0	18	27	4						28	38
TOLEDO	113.83	320.3									29	13 PPS
ALBUQUERQUE	114.02	45.9	18	31	5						29	10
LUBBOCK	117.99	45.0	18	38	4						19	46
MADISON	118.90	29.6	18	37	1						20	6 PP
LAWRENCE	119.02	36.5	18	38	2							
WICHITA MTS.	119.57	42.2	18	40	3						20	2 PP
SEPT ILES	120.62	9.9	18	41	-2							
TULSA	120.66	39.5	18	43A	4						20	10 PP
FAYETTEVILLE	121.54	38.3	18	42	1							
DALLAS	121.89	42.9	18	46	4							
SEVEN FALLS	122.69	14.0	18	44	1							
LONDON ONT.	122.99	24.0	18	46	2							
BREBEUF	123.45	16.9	18	46	1							
CUMBERLAND	126.86	32.8	18	53	2						20	51 PP
PALISADES	127.43	19.5	18	55	3							
HOPE	145.17	41.3	19	29	4							
BALBOA HTS.	148.83	57.2	19	37	6							
SAN JUAN	150.68	25.2	19	37	3							
CHINCHINA	154.24	60.0	19	44	5						23	52 PP
FUQUENE	155.57	56.6	19	46	5						23	43 PP
BOGOTA	155.74	58.8	19	46	5						23	49 PP
CARACAS	156.99	36.0	19	49A	6						20	31 PKP2
HUANCAYO	158.14	101.6	19	50	6							
TRINIDAD	159.57	23.0	19	50	4							
LA PAZ	163.51	121.0	19	55	5						45	0 SS

MARCH 15 5.H 46.M 37.S EPICENTRE 21.79 -45.45 DEPTH= 61.KM

A= 0.65204 B=-0.66229 C= 0.36907 D=-0.7126 E=-0.7016
G= 0.2589 H=-0.2630 K=-0.9294 MT= 4.2

DEPTH OF FOCUS= 0.004R

SE= 0.99

	DELTA DEG.	AZ. DEG.	P M	S	O-C S	S M	S	O-C S	*PP M	S	SUPP. M	S
FORT FRANCE	16.48	247.4	3	48	0						12	46
TRINIDAD	18.88	236.6	4	18	1						9	4
SAN JUAN	19.71	263.8	4	26	-1							
CARACAS	23.46	244.8	5	3A	-1	9	23	13				
M.BOUR	28.02	100.4	5	45	-2	9	57	-28				
PALISADES	30.73	315.1				11	19	11				
FUQUENE	31.82	243.5	6	21	0						7	19 PP
SEVEN FALLS	32.54	327.0	6	27	0							
BOGOTA	32.57	242.5	6	28	1	11	39	2			13	53 SS
BREBEUF	33.01	322.4	6	31K	0							
SHAWINIGAN	33.18	324.6	6	34	2							
CHINCHINA	33.67	244.6	6	35A	-2						14	17 SS
CLEVELAND	36.11	311.3	6	58	1							
LONDON ONT.	36.48	313.9	7	1K	0							
SCHEFFERVLLE	36.68	339.4	7	2	0							
CUMBERLAND	37.53	300.4	7	9	0	13	11	18			8	40 PP
BENI ABBES	39.59	68.7	7	27	1						9	3 PP
ST. LOUIS 1	41.75	304.1	7	46	2							
MADISON	42.48	311.0	7	51	1	14	11	3			17	20 SS
LA PAZ	44.07	212.1	8	4	1	14	41	10				
FAYETTEVILLE	44.53	299.7	8	5	-2							
LAWRENCE	45.67	303.7	8	15	-1							
TULSA	45.81	299.4	8	17	0	15	5	9				
GARCHY	46.41	44.8	9	22	60							
WICHITA MTS.	48.05	297.6	8	34	-1	15	39	12			10	13 PP
ROSELEND	48.42	47.7	8	41	3							

SCORESBY SD.	50.65	10.0	8	56	1					
LUBBOCK	50.76	296.1	8	55	0				11	0
STUTTGART	50.81	44.2	8	55	-1					
RAPID CITY	52.18	309.5	9	7	1					
JENA	52.71	41.9	9	10	0				9	42
HALLE	53.05	41.2	9	13	0					
TRIESTE	53.35	48.7	9	15	0					
GOLDEN	53.55	303.9	9	16	0					
COLLMBERG	53.66	41.6	9	17	0					
KASPERSKE H.	53.67	44.4	9	16	-1					
LJUBLJANA	53.93	48.2	9	18	-1					
ALBUQUERQUE	54.52	298.1	9	24	1					
SKALSTUGAN	56.49	27.0	9	38K	0					
FLAMING GRGE	56.62	305.4	9	39	0					
UINTA BASIN	56.77	304.7	9	40	0	17	38	12	11	51 PP
BOZEMAN	57.84	311.0	9	48	1					
BELGRADE	58.04	50.0	9	49	0				10	41 PCP
TUCSON	58.40	295.2	9	52	1					
SALT LAKE C.	58.49	305.3	9	51	-1					
BUTTE	58.90	311.4	9	55	0					
DUGWAY	59.25	304.7	9	56	-1					
HUNGRY HORSE	59.91	314.1	10	1	-1					
UMEA	59.97	27.8	10	1	-1					
LWOW	60.51	44.2	10	7	1					
TROMSOE	60.89	21.2	10	8	0					
KIRUNA	60.95	23.3	10	9	0					
ALERT	61.12	357.5	10	9	-1					
YELLOWKNIFE	61.29	330.3	10	9	-2					
NURMIJARVI	61.50	32.0	10	11	-1				18	47 PS
EUREKA	61.74	304.1	10	15K	1					
BLUE MTS.	62.28	310.2	10	17	-1				26	3
SODANKYLA	63.19	24.4	10	22	-2					
KAJAANI	63.26	28.1	10	24	0					
PENTICTON	63.58	315.3	10	26	0					
KEVO	63.67	21.7	10	26	-1					
WOODY	64.51	300.2	10	33	1					
MOULD BAY	65.16	345.3	10	37	1					
COLLEGE	75.60	334.5	11	38	-2					
LWIRO	76.25	98.1	11	44A	1					
BROKEN HILL	80.91	109.5	12	10	1					
KIMBERLEY	84.29	123.9	12	26	0					

MARCH 16 8.H 44.M 46.5 EPICENTRE 46.79 154.83 DEPTH= 0.KM

A=-0.62188 B= 0.29226 C= 0.72653 D= 0.4253 E= 0.9050
G=-0.6575 H= 0.3090 K=-0.6871 HT= -4.2

SE= 3.11

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S
KURILSK	5.09	254.7	1	19K	-1						2	27
PETROPAVLOVK	6.71	20.2	1	46	4	3	1	1				
NEMURO	7.40	245.5	1	49K	-3	3	8	-10				
ABASHIRI	7.92	253.4	1	58K	-1	3	10	-21				
Y.-SAKHLINSK	8.30	276.0	2	6K	1						3	20
KUSIRO	8.33	246.5	2	1	-4	3	32	-9				
UGLEGORSK	8.87	289.6	2	15K	2							
OBIHIRO	9.12	249.1	2	13	-3	3	51	-10				
WAKKANAI	9.24	266.3	2	21K	3	4	8	4				
ASAHIGAWA	9.28	255.6	2	17A	-1	4	6	1				
[illegible]IROO	9.37	245.4	2	14	-5	3	51	-16				
[illegible]UMOE	9.72	257.8	2	25	1						2	35 PP
[illegible]AKAWA	9.78	246.0	2	23K	-2	4	10	-7				
[illegible]HA	10.19	316.0	2	32	1						4	14
[illegible]YUCHI	10.25	19.2	2	33	1						3	37
SAPPORO	10.25	253.6	2	30	-2	4	11	-18				
TOMAKOMAI	10.30	251.0	2	30	-2							
MURORAN	10.84	250.7	2	37	-3	4	30	-13				
SUTTSU	11.11	254.3	2	42	-1							
MORI	11.22	250.5	2	41K	-4	4	39	-13				
HAKODATE	11.24	248.8	2	40A	-5	4	44	-9				
HAIINOHE	11.48	241.8	2	42K	-6	4	43	-16				
AOMORI	11.77	244.6	2	49	-3	4	56	-10				
MIYAKO	11.78	237.3	2	48	-4	4	54	-12				
MORIOKA	12.21	239.5	2	54K	-4	5	1	-15				

MIZUSAWA	12.61	237.5	3	1	-3	5	6	-20				
AKITA	12.84	241.9	3	4	-3	5	20	-12				
ISINOMAKI	12.98	234.8	3	2K	-7	5	21	-14				
MAGADAN	13.01	350.9	3	13	4							
SENDAI	13.33	235.3	3	10	-3	5	34	-9				
SAKATA	13.52	239.7	3	13	-3	5	34	-14				
YAMAGATA	13.65	236.5	3	12	-5	5	36	-15				
HUKUSIMA	13.93	234.7	3	17	-4	5	42	-16				
ONAHAMA	14.27	231.5	3	27A	1	5	59	-7				
SHIRAKAWA	14.52	233.5	3	27	-2	5	57	-15				
NIIGATA	14.63	238.4	3	37A	7	6	16	2				
MITO	14.93	231.0	3	38K	4	6	22	1				
AIKAWA	15.04	240.3	3	31K	-5						6	33
UTUNOMIYA	15.13	232.8	3	34	-3	6	25	-1				
KAKIOKA	15.20	231.3	3	34A	-4	6	13	-15				
TYOSI	15.23	228.4	3	45K	7	6	17	-12				
TUKUBASAN	15.25	231.4	3	33	-5						3	55 PPP
TAKADA	15.65	237.7	3	42	-2	6	27	-11				
MAEBASI	15.68	234.2	3	43K	-1	6	29	-10				
KUMAGAYA	15.69	232.9	3	40	-4	6	34	-5				
HONGO	15.81	230.9	3	44	-2	6	36	-6			4	2 PPP
TOKYO C.M.O.	15.84	230.9	3	41	-5	6	29	-14				
TITIBU	15.98	233.1	3	48	0	6	41	-5				
NAGANO	15.98	236.7	3	46	-2	6	42	-4				
OIWAKE	16.02	235.1	3	47	-1	6	43	-4				
MATUSIRO	16.06	236.3	3	45A	-4	6	45	-3				
YOKOHAMA	16.08	230.5	3	51	2	6	37	-11				
WAZIMA	16.26	241.1	3	50	-1							
MERA	16.38	229.0	4	0K	7	6	54	-1				
MATUMOTO	16.41	236.1	3	54	1							
KOHU	16.49	233.5	3	55K	1	6	49	-9				
HUNATU	16.50	232.6	3	55	0	6	54	-4				
TOYAMA	16.54	238.8	3	52	-3	7	56	57				
VLADIVOSTOK	16.62	265.6	3	53K	-3						7	8 SS
AJIRO	16.66	230.9	3	54	-3						7	45
MISIMA	16.69	231.4	4	1K	4	7	15	13				
OSIMA	16.73	229.6	4	4K	7	6	50	-13				
TAKAYAMA	16.89	237.3	3	59	0						5	0
KANAZAWA	16.98	239.4	3	59	-2							
IIDA	17.01	234.6	4	2	1	7	8	-2				
SHIZUOKA	17.10	232.2	4	2	0	7	15	3				
OMAESAKI	17.47	231.7	4	13	6							
HUKUI	17.55	239.0	4	7	-1							
HAMAMATU	17.66	233.0	4	15	6	7	38	13				
GIHU	17.69	236.4	4	10K	0	7	35	10				
NAGOYA	17.74	235.5	4	9	5	7	10	-17			7	27
TSURUGA	17.92	238.3	4	14		7	29	-2				
HIKONE	[illegible]											
KAMEYAMA	[illegible]										8	10
TU	[illegible]											
KYOTO	[illegible]											
TOYOOKA	[illegible]											
NARA	[illegible]											
ABUYAMA	[illegible]											
OSAKA	[illegible]											
OWASE	[illegible]											
KOBE	[illegible]											
TOTTORI	[illegible]											
SAIGO	[illegible]											
WAKAYAMA	[illegible]		4	32			12					
SUMOTO	[illegible]		4	32K	0							
SIOMISAKI	[illegible]		4	30	-3	8	14					
YONAGO	19.70	242.5	4	32	-2	7	59	-12				
HIMEJI	19.70	238.8	4	30	-4							
TORISIMA	19.79	219.8	4	40	5							
MATSUE	19.86	243.0	4	38	2	8	19	5				
OKAYAMA	19.86	240.0	4	44K	8	8	5	-9				
TAKAMATU	20.04	239.0	4	39	1	8	19	1				
TSURUGISAN	20.39	238.1	4	48	7	8	24	-1				
MUROTO	20.73	236.6	4	51	6	8	37	5				
HAMADA	20.83	243.4	4	46K	0	8	34	0				
KOTI	20.89	238.3	4	48	2	8	41	6				
CHANGCHUN	20.91	272.7	4	42K	-5							
YAKUTSK	20.92	325.9	4	44	-3							
HIROSIMA	20.97	241.7	4	49	2	8	40	3				
MATUYAMA	21.12	240.1	4	53	4	8	49	9				
UWAZIMA	21.69	239.3	4	58	3	8	52	1				
ASHIZURI	21.79	237.6	4	57	1	8	58	6				
SIMONOSEKI	22.17	243.2	5	1	2	9	8	9				

OOITA	22.24	240.8	5	7	7	9	13	12			11	13 PCP
NOBOEKA	22.66	239.4	5	16	12	9	16	8				
HUKUOKA	22.75	243.3	5	8K	3	9	18	8				
ASOSAN	22.80	241.0	5	6	0	9	17	6				
ITUHARA	23.03	246.0	5	10	2	9	12	-3				
SAGA	23.03	242.8	5	10	2	9	31	16				
KUMAMOTO	23.08	241.4	5	14	6	9	22	6				
MIYAZAKI	23.29	238.7	5	16	6	9	34	14				
UNZENDAKE	23.42	241.9	5	15	3	9	20	-2				
NAGASAKI	23.64	242.4	5	16A	2	9	31	5			11	58
KAGOSIMA	24.06	239.4	5	18K	0	9	40	7				
HUKUE	24.31	243.9	5	23K	3	9	45	8				
TIKSI	27.76	342.7	5	52A	0							
PEKING	28.66	270.5	5	59	-2	10	44	-5				
MAWASHI	29.70	235.8	6	16	6							
ZO-SE	30.22	250.8	6	14	-1	11	8	-6				
NANKING	31.18	254.8	6	24A	1	11	27	-2				
ULAN-BATOR	32.08	289.9	6	30	-1	11	43	0				
PAOTOW	32.63	275.6	6	36	0	11	56	4			7	48 PP
IRKUTSK	32.68	298.6	6	36K	0							
ISIGAKIZIMA	33.19	238.2	6	44	3							
TAIPEI	34.24	242.3	6	56	6						7	29
GUAM	34.29	197.6	6	45	-5							
HSINCHU	34.75	242.7	7	12	18							
HWALIEN	34.97	240.9	7	4	8						7	36
COLLEGE	35.39	38.4	7	0A	0	12	30	-4				
TAICHUNG	35.41	242.3	7	17	17							
YUSHAN	35.74	241.2	7	8	5						7	47
HSINKONG	35.78	240.3	7	5	2							
ALISHAN	35.80	241.4	6	52	-11							
TAITUNG	36.18	240.1	6	37	-29							
TAINAN	36.55	241.5	7	25	16							
SIAN	36.58	266.7	7	11	1							
TAWU	36.63	240.0	7	23	13							
KAOHSIUNG	36.80	241.0	7	28	17							
HENGCHUN	36.99	239.8	7	34	21							
LANCHOW	39.09	272.9	7	31	0	13	19	-12				
ESEN BULAK	39.43	291.6	7	32	-2	13	36	0				
CANTON	40.77	249.1	7	45	0	13	50	-6				
BAGUIO CITY	41.48	234.6	7	48	-2	14	1	-6				
CHENGTU	42.04	266.0	7	55A	0	14	12	-3				
SITKA	42.46	49.5	7	58	0	14	27	6				
MANILA	42.63	232.6	7	59	-1	14	9	-15				
MOULD BAY	44.17	20.1	8	13A	1	15	2	16				
KHEYS	45.30	346.8	8	22	1	15	2	0				
KIPAPA	45.64	107.2	8	19	-5	15	7	0			10	25
HONOLULU	45.67	107.3	8	28	4	15	14	6			10	20 PP
KUNMING	46.41	260.9	8	30	0	15	14	-4				
SEMIPALATNSK	47.53	303.2	8	38	-1						10	36 PP
HAWAII V.OB.	48.86	106.5	8	54	5	15	53	0				
PORT HARDY	49.15	55.2	8	52	0							
ALERT	49.60	6.0	8	54	-1	16	2	-1				
YELLOWKNIFE	50.18	37.2	8	59A	-1							
RESOLUTE	50.43	18.9	9	1A	0							
TOCKLAI	50.81	268.8	9	10	6	16	35	15				
RABAUL	50.82	183.4	9	2A	-2							
NHATRANG	51.49	243.2	9	8	-1	16	26	-3				
LHASA	51.56	274.3	9	12	2	16	34	4				
NORD	51.78	358.4	9	10	-2							
VICTORIA	52.54	56.0	9	16A	-1							
ALMATA-2	52.76	296.4	9	23A	4						16	55 PS
ALMATA	53.02	296.6	9	22A	1						11	28 PP
SHILLONG	53.56	269.8	9	23	-2	17	0	2				
SEATTLE	53.63	56.4	9	30A	5	17	16	17				
THULE	54.02	11.5	9	27	-1							
PENTICTON	54.25	53.5	9	29	-1							
SVERDLOVSK	54.60	317.7	9	34	1	17	6	-6			11	34 PP
FRUNSE	54.68	297.3	9	33K	0	17	14	1			11	44 PP
BANFF	55.44	49.9	9	37	-2							
CHATRA	55.97	274.3	9	52A	9						12	51 PPP
PORT MORESBY	56.35	189.1	9	42K	-3	17	30	-5	9	54	21	20 SS
SHASTA	57.48	63.4	9	53	0							
KEVO	57.69	341.0	9	52	-3	17	50	-3			12	4 PP
APATITY	57.77	337.2	9	54	-1	17	51	-3			24	28 SSS
HUNGRY HORSE	57.85	52.0	9	55	-1	17	24	-31			39	25 PKPPKP
UKIAH	57.90	65.4	9	56	0						12	11 PP
CALCUTTA	57.96	269.6	10	1	4	18	3	7				
BLUE MTS.	58.07	56.9	9	57A	0	18	6	8			12	11 PP

MINERAL	58.17	63.4	9	58A	0					39	40	PKPPKP
CALISTOGA	58.59	65.5	10	1A	0					39	25	
TASHKENT	58.80	298.6	10	1A	-2	18	3	-4		14	41	SCP
BOKARO	58.86	272.5	10	6	3							
BERKELEY	59.25	66.0	10	5A	-1					10	32	
TROMSOE	59.49	343.6	10	6	-1							
SODANKYLA	59.64	339.4	10	7A	-1	18	20	2		20	4	SCS
KHOROG	59.73	293.8	10	10A	1	18	22	3				
DEHRA DUN	59.94	283.5	10	9A	-1	18	22	0		12	24	PP
LICK	59.97	66.2	10	10K	-1					39	34	PKPPKP
BUTTE	60.04	53.5	10	11A	0	18	25	2		22	46	SS
KIRUNA	60.68	341.9	10	13A	-2	18	32	1		22	34	SS
BOZEMAN	61.10	53.0	10	19	1	18	44	7		39	31	PKPPKP
PRIEST	61.33	66.7	10	19A	-1					39	25	
NEW DELHI	61.63	282.5	10	20A	-2	18	33	-10		12	42	PP
LAHORE	61.63	286.9	10	21	-1	18	39	-5				
WARSAK DAM	61.89	290.7	10	23	-1	18	53	6				
KAJAANI	61.94	336.6	10	23	-1	18	53	5		20	31	SCS
EUREKA	62.13	61.1	10	25A	0	19	8	18		39	19	PKPPKP
GODHAVN	62.40	11.0	10	26	-1	18	56	3				
PORT BLAIR	62.55	257.3	10	32	4	18	56	1		12	52	PP
SCORESBY SD.	63.02	358.8	10	31	0	19	7	6				
DUGWAY	63.55	58.7	10	34	-1							
SALT LAKE C.	63.75	57.7	10	36A	0	19	14	4		23	20	SS
UMEA	64.08	339.4	10	35A	-3	18	52	-22		13	7	PP
PASADENA	64.17	66.9	10	38	-1	19	17	2				
PULKOVO	64.55	332.5	10	40A	-1	19	20	0				
VISHAKHAPTNM	64.70	269.3	10	45K	3	19	31	9		13	11	PP
MEDAN	64.72	246.4	10	42A	0	19	9	-13		13	4	PP
FLAMING GRGE	65.06	56.2	10	44	-1					12	6	
BOULDER CITY	65.06	63.4	10	44	-1					38	49	PKPPKP
MOSCOW	65.07	326.3	10	43	-2	19	23	-4		13	13	PP
PRICE	65.10	58.1	10	44	-1							
SEHORE	65.26	278.0	10	45	-1	19	38	9		13	18	PP
UINTA BASIN	65.36	56.8	10	46A	0	19	30	0		13	16	PP
PORT V+LA	65.36	165.8	10	44	-2	19	54	24				
NURMIJARVI	65.67	335.5	10	46	-2	19	34	0		13	13	PP
HELSINKI	65.86	335.1	10	47	-3					39	23	PKPPKP
SKALSTUGAN	66.06	342.7	10	50	-1	19	44	5		39	20	PKPPKP
RAPID CITY	66.36	50.3	10	52	-1					39	23	PKPPKP
GLEN CANYON	66.38	60.7	10	52	-1	19	47	4		39	30	PKPPKP
CHARTERS TS.	67.01	188.7	10	53	-4	19	36	-14				
QUETTA	67.33	290.3	10	59A	0	19	56	2				
ASHKABAD	67.44	301.7	11	0	0	19	59	4				
AFIAMALU	67.45	144.6	10	59A	-1	19	42	-13				
KOUMAC	67.57	170.4	10	58K	-3							
DJAKARTA	67.70	233.0	10	58	-3	20	0	2		13	31	PP
KIZYL-ARVAT	67.80	303.9	11	3A	1	20	5	5				
TANGERANG	67.80	233.2	10	58	-4	20	1	1		13	32	PP
LEMBANG	67.81	231.9	11	0	-2	20	10	10		13	37	PP
UPPSALA	68.12	338.3	11	1A	-3	20	2	-1		24	19	SS
GOLDEN	68.16	55.0	11	4A	0	20	4	0				
REYKJAVIK	69.40	358.5	11	16K	4				11 21	11	34	PCP
NOUMEA	69.56	168.5	11	13A	0	21	0	39				
SIDA	69.63	356.6	11	17	4				11 22	11	36	PCP
TUCSON	70.02	64.0	11	15	-1					39	46	PKPPKP
MADRAS	70.14	267.9	11	17A	1	20	28	1		13	54	PP
KONGSBERG	70.16	342.1	11	16	-1	20	35	7		13	55	PP
BERGEN	70.33	344.5	11	17	-1							
POONA	70.63	276.6	11	18A	-1	20	34	1		14	4	PP
ALBUQUERQUE	70.80	59.3	11	18	-2					39	11	PKPPKP
BOMBAY	71.07	277.6	11	22	0	20	38	0		14	7	PP
GOTEBORG	71.41	340.0	11	22A	-2	20	52	10		14	0	PP
KARLSKRONA	71.88	337.4	11	26A	-1	20	55	7		39	1	PKPPKP
TIFLIS	72.21	312.4	11	29	0	20	50	-1		16	5	PPP
SCHEFFERVLLE	72.83	23.7	11	31K	-2							
TEHERAN	72.99	304.2	11	34	1	21	2	2				
GORIS	73.05	309.9	11	32A	-2					16	7	PPP
COPENHAGEN	73.11	338.8	11	33A	-1	20	59	-3				
MANHATTEN	73.32	50.3	12	4	29	22	1	57				
WARSAW	73.72	332.5	11	40	2	21	10	2		11	54	PCP
BRISBANE	73.85	181.9	11	36A	-2	21	7	-3				
KODAIKANAL	73.97	267.9	11	36	-3	21	6	-5		14	15	PP
LAWRENCE	74.18	49.6	11	38	-2							
LUBBOCK	74.47	57.5	11	41	-1				11 45			
ABERDEEN	74.64	347.2	11	44A	1	21	19	0		14	44	PP
SIMFEROPOL	74.79	320.8	11	43A	-1	21	18	-2		14	43	PP
CHIHUAHUA	75.47	63.7	11	47	-1	21	32	4		26	23	

WICHITA MTS.	75.50	54.6	11	47	-1	21	32	4		15	2 PP
IASI	75.66	325.9								27	15 SS
CHICAGO CGS.	75.86	43.1	11	48	-2	21	30	-2		16	45 PPP
KRAKOW	75.95	331.9	11	52	1	21	37	4			
CHORZOW	76.04	332.4	11	50	-1	22	0	26		12	5 PCP
TULSA	76.17	52.1	11	50K	-2	21	37	1		26	14
BACAU	76.44	326.0	12	14	21	22	8	29		15	14 PP
RACIBORZ	76.48	332.9	11	53	-1	21	31	-8		12	7 PCP
SKALNATE PL.	76.60	331.3	11	52	-2	21	44	4		14	46 PP
SHIRAZ	76.70	299.1	11	54A	-1	21	44	3		14	21 PP
DURHAM	76.87	346.2	11	55	-1	21	48	5		13	52 PP
FAYETTEVILLE	76.89	50.9	11	53	-3	21	44	1			
COLLMBERG	76.92	336.5	11	54	-2	21	46	2		38	43 PKPPKP
ST. LOUIS 1	77.00	46.8	11	55	-1	21	53	8			
HALLE	77.02	337.2	11	57	0	21	49	4		39	1
SEPT ILES	77.03	25.8	11	55A	-2						
FOCSANI	77.04	325.3	12	3	6	22	8	23			
WITTEVEEN	77.11	340.8	12	0	3						
PRAGUE	77.62	335.1	12	0	0	21	52	1		15	1 PP
JENA	77.64	337.2	12	0	0	21	52	0		15	2 PP
PRUHONICE	77.66	335.0	11	59	-1	21	50	-2		38	55 PKPPKP
MUNSTER	77.67	339.9	12	1	1					21	35
LONDON ONT.	77.74	38.5	12	0	-1						
OTTAWA	78.00	33.8	13	0	58						
DE BILT	78.11	341.4	12	5	2	22	9	12		27	10 SS
SHAWINIGAN	78.11	31.4	12	2A	-1						
CAMPULUNG	78.24	326.3	12	7K	4	22	27	29		12	43
SEVEN FALLS	78.30	29.9	12	1	-3						
HURBANOVO	78.41	331.8	12	4	0	21	46	-14		14	54 PP
BRATISLAVA	78.50	332.6	12	4A	-1	22	0	-1		15	2 PP
BUCHAREST	78.54	325.2	12	11K	6	22	22	21		15	7 PP
VIENNA-H.	78.66	333.1	12	5	-1	21	54	-9		16	54 PPP
BREBEUF	78.70	32.5	12	4	-2	22	1	-2	12 13	15	6 PP
KASPERSKE H.	78.71	335.2	12	4A	-2						
BENSBERG	78.72	339.8	12	5A	-1	22	6	3		12	25
CLEVELAND	78.85	39.6	12	6K	-1	22	1	-4			
MAZATLAN	79.17	67.8								21	11
TIMISOARA	79.23	328.9	12	13	4	22	17	8	12 41	22	19 SKS
UCCLE	79.51	341.5	12	12	2	22	8	-4			
HEIDELBERG	79.78	338.3	12	11	-1					12	36
KEW	79.81	344.5	12	12	0					15	13 PP
DOURBES	80.11	341.1	12	9	-4	22	19	1		39	2
ISTANBUL UN.	80.16	321.5	12	14	0	22	27	9			
STUTTGART	80.22	337.7	12	13A	-1	22	14	-5		27	52 SS
BELGRADE	80.31	328.9	12	15A	1	22	24	4		15	23 PP
RIVERVIEW	80.32	183.1	12	14K	-1	22	22	2		15	19 PP
TUBINGEN	80.49	337.7	12	14	-1					12	50
STRASBOURG	80.78	338.5	12	17K	0	22	31	6		15	30 PP
EBINGEN	80.84	337.6	12	18	1					12	42
ZAGREB	80.94	332.2	12	14A	-4	22	38	12		26	35 SS
PENNSYLVANIA	80.98	37.7	12	17	-1					15	36
RAVENSBURG	81.04	337.1	12	18	0					12	43
MORGANTOWN	81.05	39.7	12	18A	0	22	19	-9			
SOFIA	81.07	326.0	12	22	3	22	34	6		15	44 PP
LJUBLJANA	81.19	333.2	12	18K	-1	22	31	2		15	31 PP
WELSCHBRUCH	81.29	339.4	12	19	-1					12	41
CUMBERLAND	81.70	45.7	12	20	-2					15	23 PP
TRIESTE	81.79	333.6	12	22A	0	22	35	0		27	52 SS
PARIS	81.79	341.9	12	24	2	22	34	-1		15	31 PP
SARAJEVO	81.84	329.7	12	24	1	22	39	3			
CANBERRA	81.90	184.8	12	21	-2	22	34	-2	12 28	12	38 PCP
WESTON	82.23	32.6	12	24	-1						
JERSEY	82.33	345.0	12	29	4	22	41	0			
SKOPJE	82.41	326.9	12	15	-11	22	49	7		12	46 PCP
PALISADES	82.42	35.0	12	25	-1	22	39	-3	12 33		
FOLINIERE	82.43	343.8	12	25	-1						
BESANCON	82.46	339.2	12	26	0					23	30 SP
FORDHAM	82.57	35.1	12	26	0	22	41	-2			
PADOVA	82.57	334.7	12	29	3	22	35	-8		15	35 PP
ADELAIDE	82.67	193.3	12	24K	-3					15	46 PP
KSARA	82.78	312.8	12	30	3	22	54	9		15	39 PP
PHILADELPHIA	82.81	36.4	12	30	2	22	44	-2		28	2 SS
TITOGRAD	82.81	328.5	12	28	0	22	52	6		15	47 PP
BLACKSBURG	82.83	41.4	12	27	-1						
HALIFAX	82.87	26.6	12	28	0						
WASHINGTON	82.91	38.2	12	29	1	22	37	-10		15	33 PP
GUADALAJARA	82.94	67.4	12	38	10						
GARCHY	83.11	341.1	12	29A	0	22	54	5		15	20 PP
MANZANILLO	83.49	69.2	12	35	4	22	59	7		19	2

PAVIA	83.55	336.3	12	32A	1	22	59	6			29	10 SS
ROSELEND	83.75	338.2	12	30	-2	23	3	8			13	53
PRATO	84.19	334.5	12	39	4	23	1	2				
FLORENCE X.	84.24	334.4	12	31K	-4	22	59	-1	12	49	16	1 PP
TOOLANGI	84.40	187.4	12	33	-3	23	0	-1			15	54 PP
CHAPEL HILL	84.52	41.2	12	36	0						19	6
CLERMONT-FD.	84.53	340.5	12	38	2	23	12	9				
JERUSALEM	84.74	312.0	12	38	1							
ATHENS	84.95	323.3	12	36A	-2	22	56	-11			22	58 SKS
ISOLA	85.05	337.4	12	38	-1	23	14	6				
COLUMBIA	85.18	43.6	12	40	0	23	4	-5			20	4
TARANTO	85.25	328.9	12	32	-8						22	31
MONACO	85.36	336.9	12	39	-1						15	37 PP
ROME	85.57	332.8	12	38	-4	23	6	-7	12	56	16	7 PPP
MUNDARING	85.79	212.1	12	40	-3	23	16	1				
PERTH	85.91	212.4	12	44	1	23	17	1			16	2 PP
KARAPIRO	86.36	163.7	12	43	-2							
TACUBAYA	86.48	65.4	12	55	9	23	24	2				
CHATEAU	87.59	164.0	12	49	-2						16	22 PP
BAGNERES	87.75	341.7	12	51	-1	23	43	9			16	14 PP
MESSINA	87.87	329.0	12	51	-2	23	29	-6	13	3	16	20 PP
REGGIO CALA.	87.93	328.9	12	52	-1	23	6	-29			23	36
CUGLIERI	88.33	334.8	13	4	9							
VERA CRUZ	88.53	63.3	13	2	6	23	54	13			35	22
BARCELONA	88.88	339.8	13	24	26	23	43	-1				
WELLINGTON	89.46	165.1	12	56A	-4	23	30	-20			16	35 PP
OAXACA	89.78	65.2	13	5	3						13	30
TORTOSA	89.82	340.8	13	2	0	23	35	-18				
MERIDA	91.08	57.5	13	14	6	24	5	1			23	17
TOLEDO	91.68	343.9	13	10A	-1	23	50	-20			17	3 PP
ALICANTE	92.40	340.8	13	16A	2	24	14	-2			16	55 PP
ROXBURGH	92.77	169.8	13	18	2	23	44	-35			16	54 PP
COMITAN	93.23	62.3	13	26	8						23	58
LISBON	93.67	347.5	13	17	-3	24	0	-27			30	38 SS
ALMERIA	94.28	341.9	13	25K	2	24	7	-25			17	16 PP
PONTA DELGDA	95.86	0.4	13	30A	0	24	12	6			17	28 PP
AVERROES	98.69	345.0	13	44A	1						17	23 PP
BEVERLEY	99.90	49.5	13	48	0							
ADDIS ABABA	100.65	295.5	13	54	3						18	8
SAN JUAN	105.38	40.2	14	16	777						18	32 PP
BALBOA HTS.	106.43	56.9	14	15	777							
GALERAZAMBA	107.34	52.2									18	46 PP
ANTIGUA	108.31	37.0									18	55
ST. CLAUDE	109.36	37.4	19	16	777						22	11 PP
FORT FRANCE	110.76	37.4	18	45	10						19	19 PP
CARACAS	111.87	44.9	18	14A	-23	25	24	4				
CHINCHINA	111.93	55.9	14	42	-235	25	26	6			19	28 PP
FUQUENE	112.58	53.9	14	49	-229							
BOGOTA	113.09	54.7	14	45	-234						19	30 PP
TRINIDAD	114.30	39.6	14	55	-227						19	41 PP
LWIRO	115.61	296.3	14	59A	-225	25	40	6			19	55 PP
WILKES	117.79	198.6	18	48	-1				19	8		
M.BOUR	118.67	350.9	15	22	-208						20	6 PP
CAPE HALLETT	119.29	174.7	18	53	1							
CHILEKA	121.64	281.1	18	55	-1						15	28 P
LOME	122.35	328.5									20	35 PP
MIRNY	122.41	204.7	18	55A	-3						20	41 PP
SCOTT BASE	124.58	177.0	18	58	-4							
BROKEN HILL	125.08	287.6	19	2	-1							
BULAWAYO	129.06	282.5	19	10	0							
LUANDA	130.03	306.7	19	5A	-7						21	29 PP
MAWSON	132.84	211.5	19	18	0						21	45 PP
LA PAZ	133.43	64.2	19	21	2						22	53 PP
BANDEIRA	134.88	301.9	19	17	-4						21	51 PP
BYRD STATION	134.93	165.8	19	14	-7							
ANTOFAGASTA	137.21	73.4	19	20	-6						22	15
KIMBERLEY	137.38	276.9	18	43	-43							
SANTA LUCIA	143.27	85.3	19	32	-4							
HERMANUS	144.55	274.2	19	47	8						22	47 PP
N-LAZARVSKYA	150.15	203.6	19	48	0						23	25 PP

MARCH 16 22.H 28.M 55.S EPICENTRE 38.98 71.76 DEPTH= 54.KM

A= 0.24394 B= 0.74031 C= 0.62644 D= 0.9498 E=-0.3130
G= 0.1961 H= 0.5950 K=-0.7795 HT= -1.3

DEPTH OF FOCUS= 0.003R

SE= 2.17

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
DZERGETAL	0.48	300.5									0	5	PG
GARM	1.14	271.6									0	17	PG
FERGANA	1.40	0.6									0	21	PG
KHOROG	1.51	187.0	0	25	-1						0	47	SG
OBI-GARM	1.63	260.9	0	27A	0						0	53	
MURGAB	1.80	109.0	0	30	0						0	57	SG
ANDIJAN	1.83	14.6	0	30K	0						0	53	S*
KULYAB	1.91	236.4	0	32	1						1	3	SG
NAMANGAN	2.00	358.0	0	33K	1						1	1	S*
TASHKENT	3.02	321.7	0	46K	-1						1	25	S*
TCHIMKENT	3.70	334.3	0	57	1	1	42	3					
SAMARKAND	3.77	282.1	0	57	0								
NARYN	4.07	51.6	1	1	0								
FRUNSE	4.42	28.4	1	8K	2	2	1	4					
WARSAK DAM	4.97	182.0	1	15	1	2	32	21					
FABRICHNAYA	5.45	38.9	1	21	0								
ALMATA	5.81	40.7	1	27	1						2	56	
ALMATA-2	6.03	42.8	1	27K	-2						2	58	
PRZHEVALSK	6.14	53.1	1	30K	0						3	2	
CHILIK	6.79	45.4	1	40	1						3	22	
LAHORE	7.70	163.4	1	51	-1	3	20	1					
QUETTA	9.63	205.7	2	18K	-1	4	10	4					
DEHRA DUN	10.07	147.2	2	21K	-4	4	15	-2			2	28	PP
ASHKABAD	10.57	268.6	2	30	-1	4	26	-3					
NEW DELHI	11.31	154.9	2	38K	-3	4	39	-8					
KIZYL-ARVAT	12.04	275.9	2	49	-2								
SEMIPALATNSK	12.91	25.0	3	0	-3								
TEHERAN	16.51	265.1	3	53	4						9	29	PCP
SHIRAZ	18.39	245.4	4	13K	0						4	55	
BOKARO	19.24	137.6	4	14	-8						7	54	
SVERDLOVSK	19.31	341.3	4	21A	-2								
ESEN BULAK	19.42	59.6	4	26	2	8	5	10					
KIROVOBAD	19.59	283.0	4	25	-1								
GORIS	19.69	279.6	4	26	-1								
BOMBAY	20.03	177.1									8	44	
GROZNY	20.03	290.9	4	31	0								
POONA	20.45	174.3	4	36A	1								
TIFLIS	20.70	286.2	4	38	0								
DUZHETI	20.77	287.2	4	40	1								
GORI	21.20	287.0	4	43	0								
SHILLONG	21.57	122.4	4	45	-2								
BAKURIANI	21.66	286.3	4	48	0						15	26	SCP
CALCUTTA	21.68	134.3									8	51	
ABASTUMANJ	22.17	286.4	4	55A	2								
CHITTAGONG	23.83	128.2	5	9	0	9	37	19					
ULAN-BATOR	26.84	59.0	5	37	0								
MADRAS	26.93	161.6									6	57	
MOSCOW	28.17	317.7	5	49	0						6	41	PP
PULKOVO	33.28	322.4	6	34K	0						14	41	SSS
APATITY	35.59	335.8	6	54A	0								
HELSINKI	35.97	321.7	6	58A	1						8	3	
NURMIJARVI	36.20	322.1	6	59A	0						8	15	PP
UZHGOROD	36.41	301.8	7	2	1								
SODANKYLA	37.77	333.4	7	12A	-1						8	35	
KRAKOW	37.87	304.3	7	14	1								
KEVO	38.75	337.0	7	19	-2						8	47	
UMEA	39.05	326.6	7	22A	-1								
UPPSALA	39.53	320.0	7	27A	0								
KIRUNA	40.15	332.6	7	32A	0								
KARLSKRONA	40.36	314.1	7	36A	2								
VIENNA-H.	40.37	301.9	7	36	2								
PRUHONICE	41.33	304.7	7	43	1								
YAKUTSK	41.63	37.0	7	43K	-1								
LJUBLJANA	41.99	298.9	7	49K	2								
KASPERSKE H.	42.07	303.6	7	48	0						9	32	
COLLMBERG	42.15	306.9	7	49	0						9	31	PP
GOTEBORG	42.34	316.5	7	50A	0								
SKALSTUGAN	42.50	325.2	7	51A	-1						9	28	PP
HALLE	42.78	307.3	7	54	0								

JENA	43.09	306.5	7	45	-11					9	38 PP
TIKSI	43.25	22.9	7	57K	-1						
STUTTGART	44.93	303.8	8	13	2						
ROSELEND	47.43	300.3	8	30	-1						
ISOLA	47.57	298.2	8	33	1						
BAGUIO CITY	48.04	103.8	8	37	1						
CLERMONT-FD.	49.75	301.3								10	7
FOLINIERE	51.17	306.0	8	59	-1						
NORD	51.48	349.2	9	1	-1						
MATUSIRO	51.52	70.6	9	1A	-1						
MOULD BAY	64.85	2.9	10	29K	-7						
RESOLUTE	66.28	356.2	10	44K	-1						
BULAWAYO	71.34	222.7	11	17	1						
YELLOWKNIFE	78.75	3.0	11	58K	0						
SCHEFFERVLLE	80.05	337.1	12	5	0						
BREBEUF	90.33	336.4	12	58	.2						
PENTICTON	91.51	7.4	13	3A	1						
BLUE MTS.	96.16	6.5	13	23	0					17	2 PP

MARCH 17 14.H 17.M 23.S EPICENTRE 39.40 20.82 DEPTH= 56.KM

A= 0.72427 B= 0.27539 C= 0.63213 D= 0.3554 E=-0.9347
G= 0.5909 H= 0.2247 K=-0.7749 HT= -1.5

DEPTH OF FOCUS= 0.004R

SE= 3.41

	DELTA DEG.	AZ. DEG.	P M	S	O-C S	S M	S	O-C S	*PP M	S	SUPP. M	S	
SKOPJE	2.61	10.2	1	45	64	2	23	71			2	32	SG
ATHENS	2.68	121.2	0	39	-3	1	12	-2			1	21	SG
TARANTO	2.95	292.5	0	52	6	1	32	11					
TITOGRAD	3.25	339.2									0	50	PG
SOFIA	3.81	29.1	1	0	2						1	47	
REGGIO CALA.	4.24	253.9	1	1	-3	1	51	-2					
MESSINA	4.29	255.5	1	2	-3	1	51	-3			1	15	PG
SARAJEVO	4.81	339.0	1	12	0						3	1	
BELGRADE	5.43	357.2	1	20A	-1	2	57	34			1	46	PG
TIMISOARA	6.36	2.5	1	43	9	3	12	26			3	43	S*
BUCHAREST	6.38	36.4	1	42K	8						3	48	
ROME	6.82	294.2	1	45	5	3	0	3			2	37	P*
ZAGREB	7.34	332.5	1	53	5	3	14	4			4	12	SG
LJUBLJANA	6.10	327.2	1	55	-3	3	27	-2			2	34	PG
TRIESTE	8.14	322.4	1	56	-3	3	31	1			2	35	PG
FLORENCE X.	8.40	304.5	2	3	1	3	32	-5			2	35	PG
PRATO	8.54	304.7	2	11	7	3	45	5					
HURBANOVO	8.68	348.2	2	4	-2						5	16	SG
PADOVA	8.94	315.1	2	22	12	4	7	17			2	37	P*
BRATISLAVA	9.17	344.2	2	10	-3						5	9	
UZHGOROD	9.29	6.1	2	14	0								
VIENNA-H.	9.41	341.5	2	13	-3	3	58	-3					
SKALNATE PL.	9.79	357.8	2	19	-2						5	7	S*
NIEDZIKA	10.03	358.1	2	23	-1								
PAVIA	10.38	307.6									7	11	
LWOW	10.67	11.3	2	36	3								
KRAKOW	10.67	356.9	2	33	0						6	33	
RACIBORZ	10.84	351.0	2	33	-3						2	45	PP
KASPERSKE H.	11.02	334.3	2	34A	-4						3	51	
CHUR	11.11	315.8	2	37	-2	4	39	-4					
SIMFEROPOL	11.32	56.4	2	49	7								
ISOLA	11.33	299.4	2	43	1						6	4	PPP
PRUHONICE	11.48	339.3	2	42	-2								
RAVENSBURG	11.66	319.6	2	44	-2								
ROSELEND	12.20	305.6	2	52	-2	5	1	-8					
EBINGEN	12.25	319.6	2	52	-2								
TUBINGEN	12.44	321.1	2	55	-2								
STUTTGART	12.50	322.3	2	54	-4	5	11	-5					
COLLMBERG	13.10	337.9	3	3	-3								
STRASBOURG	13.12	318.7	3	6	0						7	56	
HEIDELBERG	13.20	323.2	3	6	-1								
JENA	13.23	333.7	3	17	10	5	48	14			3	39	
KSARA	13.31	110.0	3	10	1								
BESANCON	13.34	310.9	3	6	-3						5	53	
HALLE	13.60	335.8	3	16	4						10	30	PP
WELSCHBRUCH	13.76	315.6	3	5	-9								

JERUSALEM	13.96	118.6	3 13	-4						
CLERMONT-FD.	14.50	301.8	3 30	6					4	32
BENSBERG	15.01	324.8	3 31	0	6	2	-14		4	14
DOURBES	15.69	318.3	3 46	7						
PARIS	16.15	311.6	3 49	4						
UCCLE	16.24	320.0	3 42	-4						
ALICANTE	16.62	273.1	3 50A	-1					4	11 PPP
KARLSKRONA	17.13	350.0	3 59	2						
FOLINIERE	17.89	308.5	4 8	1						
EREVAN	18.21	80.0	4 20	9						
KEW	19.04	316.3	4 26	5	8	8	21			
TOLEDO	19.15	279.4	4 20A	-2	8	3	13		4	29 PP
GOTEBORG	19.20	345.5	4 21	-1						
KIROVOBAD	19.56	78.2	4 24	-2	8	12	14			
GORIS	19.69	81.6	4 30	2	8	18	17			
MOSCOW	19.80	28.9	4 26K	-3						
UPPSALA	20.57	355.4	4 35	-2					4	54 PP
HELSINKI	20.96	5.8	4 38	-3						
PULKOVO	21.26	13.3	4 41	-3						
NURMIJARVI	21.27	5.2	4 42K	-2	8	33	1		5	24
KONGSBERG	21.48	344.4	4 45	-1					5	8 PP
DURHAM	21.52	323.0	4 45	-1						
VIBORG	21.92	10.5	4 48K	-2						
UMEA	24.46	359.4	5 15K	0	9	44	15			
SKALSTUGAN	24.75	350.9	5 17	-1						
SODANKYLA	28.21	4.8	5 49K	-1						
KIRUNA	28.49	359.7	5 51K	-1						
APATITY	29.06	9.9	6 0	2						
KEVO	30.60	4.2	6 10K	-1						
SVERDLOVSK	31.21	42.8	6 15	-2						
FRUNSE	40.11	67.1	7 32	0						
ALMATA	41.66	65.9	7 46K	1						
LWIRO	42.09	168.1	7 48	0						
NORD	44.30	352.6	8 6	0						
DEHRA DUN	47.14	82.7	8 6	-23						
ALERT	50.31	350.2	8 53K	0						
RESOLUTE	58.67	343.7	9 54K	0						
SHILLONG	60.09	80.2	10 1A	-3						
MOULD BAY	61.89	350.0	10 16	0						
SEVEN FALLS	63.48	310.3	10 22	-5						
BREBEUF	65.97	309.8	10 45K	2						
KIMBERLEY	67.90	176.2								30 17
YELLOWKNIFE	72.33	340.0	11 22K	0						
MORGANTOWN	73.16	307.6	11 29K	2						
COLLEGE	75.69	355.0	11 42	0						12 3
CUMBERLAND	79.16	307.2	12 2	1						
RAPID CITY	82.77	323.0	12 21	1						
HUNGRY HORSE	83.89	331.6	12 27	2						
BOZEMAN	84.95	328.4	12 35	4						
TULSA	84.99	313.2	12 33A	2						
PENTICTON	85.00	335.3	12 33	2						
BUTTE	85.27	329.5	12 34	2						
WICHITA MTS.	87.42	314.1	12 45	2						16 13
BLUE MTS.	88.06	331.6	12 46	0						
UINTA BASIN	88.65	324.4	12 50	1						
ALBUQUERQUE	91.44	319.2	13 2	0						

MARCH 20 4.H 43.M 12.S EPICENTRE -20.11-179.05 DEPTH= 668.KM

A=-0.93964 B=-0.01566 C=-0.34181 D=-0.0167 E= 0.9999
G= 0.3418 H= 0.0057 K=-0.9398 HT= 4.6

DEPTH OF FOCUS= 0.100R

SE= 2.54

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S
RAOUL ISLAND	9.16	173.8	2	13	1							
AFIAMALU	9.29	49.5	2	12K	-2	4	4	4				
PORT VILA	12.19	279.1	2	43	2							
NOUMEA	13.70	258.3	2	58K	3	5	20	5				
KOUMAC	15.65	265.5	3	16A	3	5	51	3				
ONERAHI	16.64	199.0	3	26	4							
KARAPIRO	18.37	193.7	3	40	2						5	19
TUAI	18.91	189.2	3	14	-29							
CHATEAU	19.59	192.6	3	48	-1							

TARATA	19.84	195.2	3	55	3							
WELLINGTON	21.75	192.7	4	7	-2	7	23	-5			13	58 SCS
COBB RIVER	22.05	196.7	4	12	1	7	31	-1				
HONIARA	22.89	294.6				7	28	-18			8	29
KAIMATA	23.75	197.7	4	28	2	6	58	-61				
GEBBIES PASS	24.53	194.6	4	33	0	8	10	-1				
BRISBANE	26.75	248.9	4	54	2						10	33
ROXBURGH	27.06	198.2	5	25	30							
RIVERVIEW	29.75	236.5	5	6	-12							
CANBERRA	31.92	234.9	5	38	2				7	21	7	14 PP
RABAUL	32.19	295.6	5	36	-2							
PORT MORESBY	34.31	283.1	5	56K	0	10	39	-2				
TOOLANGI	35.34	232.8	6	6	1	10	56	0	7	52		
SAVANNAH	35.76	225.4	6	13	5						7	59
TARRALEAH	36.50	224.9	6	10	-4							
HONOLULU	45.97	27.6	7	28	-1	13	29	1				
KIPAPA	46.11	27.6	7	29	-1	13	30	0				
DARWIN	48.59	271.1	7	38	-10				9	44		
SCOTT BASE	58.19	183.5	8	57	2							
MUNDARING	58.61	244.2	8	58	0							
BYRD STATION	65.18	170.5	9	40	0						11	15
MATUSIRO	69.32	324.2	10	4	-1	18	21	0				
BAGUIO CITY	69.52	297.1	10	6	0							
SOUTH POLE	70.01	180.0	10	9	0						12	22
ZO-SE	76.70	310.4	10	45K	-1							
NHATRANG	77.53	288.0	10	51	0						12	27 PP
BERKELEY	78.55	42.5	10	57A	1							
PRIEST	78.58	44.7	10	57A	1							
LICK	78.64	43.2	10	57A	0							
CANTON	78.68	299.7	10	58K	1	20	5	3	13	16		
CALISTOGA	78.81	41.7	10	58K	0							
NANKING	78.94	310.1	10	59K	1	20	6	1	13	17		
PASADENA	79.14	47.5	11	0	1	20	10	3	13	35		
MINERAL	80.44	40.8	11	6A	0							
CHANGCHUN	81.49	322.8	11	11K	-1	20	33	3	13	31		
ARGENTINE I.	81.71	157.3	11	13	0						13	48 PP
TUCSON	83.45	52.4	11	22	1				13	45		
EUREKA	83.52	44.0	11	22A	0				13	47		
PEKING	84.93	315.8	11	29	1	21	7	4	13	50	20	48 SKS
BLUE MTS.	85.62	38.9	11	32A	0	21	12	3	13	52	29	29 PKKP
DUGWAY	85.97	44.6	11	33	0							
PENTICTON	86.89	34.3	11	38A	0							
SALT LAKE C.	86.89	44.5	11	38	0				14	3		
SIAN	87.21	307.9	11	41K	2	21	31	7	14	4	21	4 SKS
ALBUQUERQUE	87.93	51.7	11	43	0				14	5		
COLLEGE	88.05	12.8	11	40	-3				14	4		
UINTA BASIN	88.19	45.8	11	44A	0	21	38	5	14	6	29	25 PKKP
KUNMING	88.30	297.4	11	46K	2	21	39	5	14	7	21	11 SKS
FLAMING GRGE	88.60	45.3	11	46	0				14	12		
BUTTE	89.07	39.7	11	49	1				14	11		
PAOTOW	89.29	314.0				21	51	9			21	14 SKS
HUNGRY HORSE	89.42	37.2	11	48	-1							
CHENGTU	89.46	302.9	11	51K	1	21	50	6	14	13	21	16 SKS
GOLDEN	90.78	47.8	11	56	0						14	31
LARAMIE	91.33	46.3	11	58	0							
LANCHOW	91.75	307.8	12	2	2	22	12	8	14	26	21	29 SKS
WICHITA MTS.	93.75	54.5	12	8	-1	22	32	11	14	34	29	12 PKKP
TULSA	96.31	54.2	12	21	0	22	50	56			27	6 *SS
YELLOWKNIFE	96.57	24.9	12	20	-2						14	33
SHILLONG	97.65	294.3									15	4
LHASA	99.61	298.0				22	11	0				
CHATRA	102.06	294.3									15	43
CUMBERLAND	104.15	57.0									17	23 PP
RESOLUTE	107.70	16.1	17	12	777							
DEHRA DUN	110.68	295.7									18	1
PALISADES	114.15	53.2									18	35
CARACAS	114.19	87.3									18	38 PP
WARSAK DAM	116C72	298.7									18	42 PP
SAN JUAN	117.05	79.1	17	32	1							
TRINIDAD	119.43	88.9	17	37	1							
QUETTA	120.13	293.8	17	39	2							
KEVO	127.90	348.8	17	52	0						20	13 SKP
TROMSOE	129.28	352.0	17	54	-1							
SODANKYLA	130.01	347.4	17	55	-2						20	19 SKP
KIRUNA	130.73	350.4	17	57	-1						20	22 SKP
KAJAANI	132.52	344.4	17	59	-2						20	29 SKP
SHIRAZ	132.59	292.2									20	28
UMEA	134.41	348.2	17	57	-8						20	35 SKP

SKALSTUGAN	135.88	352.7	17	56	-11					20	38	SKP
NURMIJARVI	136.29	343.3	17	56	-12					20	40	SKP
HELSINKI	136.49	342.8	18	8	-1					20	38	SKP
UPPSALA	138.55	347.4	18	3	-9					20	47	SKP
GOTEBORG	141.59	350.5	18	12	-7					20	55	SKP
KARLSKRONA	142.37	346.6	18	15A	-5					20	52	SKP
COPENHAGEN	143.45	349.1	18	20A	-2							
LWIRO	144.78	234.0	18	27A	3							
LWOW	145.13	333.6	18	25	1					23	30	
KSARA	146.18	301.1	18	30	4	20	58			23	30	
KRAKOW	146.53	337.7	18	29	3							
RACIBORZ	147.10	339.4	18	32	5					19	0	
JERUSALEM	147.20	297.7	18	0A	-27							
COLLMBERG	147.46	345.9	18	31	3					22	13	PP
HALLE	147.51	347.2	18	32	4	21	21					
DE BILT	147.90	355.1	18	32	4	21	2					
PRUHONICE	148.29	343.2	18	35	6							
ISTANBUL UN.	148.32	317.4	18	35A	6					21	5	PP
BENSBERG	148.83	352.4	18	35A	5							
BRATISLAVA	149.12	338.7	18	32	2							
VIENNA-H.	149.29	339.6	18	34	4							
KASPERSKE H.	149.33	343.7	18	36	6							
HEIDELBERG	150.12	349.8	18	38	6							
STUTTGART	150.63	348.7	18	34	2							
STRASBOURG	151.07	350.6	18	35	2							
PARIS	151.34	357.9	18	41	8					21	14	
FOLINIERE	151.39	2.0	18	34	1					18	41	PKP2
LJUBLJANA	151.83	339.8	18	36	2					18	42	PKP2
TRIESTE	152.43	340.4								19	27	PKP2
BESANCON	152.62	352.5	18	58	23							
GARCHY	152.85	356.8	18	45	9					21	12	
ROSELEND	154.06	350.9	18	47	10							
ISOLA	155.47	349.4	19	11	32							

MARCH 20 4.H 45.M 48.S EPICENTRE -20.26-178.88 DEPTH= 681.KM

A=-0.93873 B=-0.01829 C=-0.34416 D=-0.0195 E= 0.9998
G= 0.3441 H= 0.0067 K=-0.9389 HT= 4.6

DEPTH OF FOCUS= 0.102R

SE= 1.51

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
AFIAMALU	9.27	48.2	2	16	2	3	56	-5					
KARAPIRO	18.27	194.2	3	39	2	6	27	-4					
TUAI	18.80	189.7	3	41	-1								
TARATA	19.74	195.7	3	52	1								
WELLINGTON	21.64	193.1	4	6	-2	7	21	-4			14	2	SCS
COBB RIVER	21.95	197.2	3	40	-30	7	32	2					
KAIMATA	23.66	198.1				7	55	-2					
GEBBIES PASS	24.43	195.0				8	7	-2					
BRISBANE	26.84	249.2									10	32	
ROXBURGH	26.98	198.5	4	53	-1								
CANBERRA	31.96	235.2	5	36	0	10	4	-1	7	20	7	18	PP
PORT MORESBY	34.49	283.2				10	38	-5			5	56	
TOOLANGI	35.38	233.1	6	4	0	10	54	-2	7	49			
ADELAIDE	40.02	239.4									13	24	
HAWAII V.OB.	45.73	31.9	7	24	-2								
HONOLULU	46.03	27.4	7	27	-1	13	28	1					
KIPAPA	46.17	27.4	7	28	-1								
MUNDARING	58.68	244.3	8	57	-1								
MATUSIRO	69.52	324.2	10	3K	-2	18	5	-17					
BAGUIO CITY	69.72	297.0	9	42	-25								
BERKELEY	78.56	42.4	10	57A	1								
PRIEST	78.57	44.6	10	57A	1								
LICK	78.64	43.1	10	57A	1								
CALISTOGA	78.82	41.6	10	57A	0								
CANTON	78.88	299.7	10	58	1	20	4	2					
NANKING	79.14	310.0	10	59	0	20	5	0					
MINERAL	80.45	40.7	11	1K	-4								
CHANGCHUN	81.70	322.8	11	12	0	20	33	3					
TUCSON	83.42	52.3	11	21	1				13	44			
EUREKA	83.52	43.9	11	20	-1						13	36	
PEKING	85.14	315.7	11	28	-1								
GLEN CANYON	85.17	47.9	11	30	1								

BLUE MTS.	85.64	38.9	11	31A	0	21	14	6	13	52	27	6 SS
SALT LAKE C.	86.88	44.5	11	38	1				14	1		
SIAN	87.42	307.9	11	42	3	21	31	7	14	1		
COLLEGE	88.15	12.7	11	41	-2						14	2
UINTA BASIN	88.18	45.7	11	44A	1	21	40	9	14	4	29	25 PKKP
KUNMING	88.50	297.3	11	47K	3							
BUTTE	89.08	39.7	11	47	0				14	11		
CHENGTU	89.66	302.9				21	49	5				
LARAMIE	91.32	46.2	11	57	0							
LANCHOW	91.96	307.7				22	13	9			21	30 SKS
WICHITA MTS.	93.71	54.5	12	8	0	22	32	13	14	31	37	24 PKPPKP
TULSA	96.28	54.2	12	20	0	22	50	58			27	4 *SS
LHASA	99.81	297.9				22	11	1				
AREQUIPA	99.93	111.6	12	42	6							
CUMBERLAND	104.10	57.0									17	21 PP
SAN JUAN	116.93	79.2	17	30	0							
TRINIDAD	119.28	88.9	17	36	1							
KEVO	128.07	348.9	17	50	-2						20	13 SKP
APATITY	128.50	344.8	17	35	-18						20	10
TROMSOE	129.45	352.0	17	53	-1							
SODANKYLA	130.19	347.4	17	51	-5						21	9 PP
KIRUNA	130.90	350.4	17	56	-1						20	20 SKP
KAJAANI	132.70	344.5									20	28 SKP
SHIRAZ	132.79	292.0	17	52A	-9						20	28
UMEA	134.58	348.2									20	33 SKP
SKALSTUGAN	136.05	352.8	17	56	-11						20	38 SKP
NURMIJARVI	136.47	343.3	17	58	-9						20	39 SKP
HELSINKI	136.67	342.9									20	40 SKP
UPPSALA	138.72	347.4	18	2	-10						20	45 SKP
KONGSBERG	140.18	353.3	18	16	1						20	50 SKP
GOTEBORG	141.76	350.6	18	12	-7						20	54 SKP
KARLSKRONA	142.55	346.7									20	56 SKP
COPENHAGEN	143.62	349.2	18	19	-2						20	59
LWIRO	144.82	233.7	18	26A	3							
KRAKOW	146.72	337.7	18	24	-2							
CHORZOW	146.85	338.9	18	22	-4						20	59
RACIBORZ	147.29	339.5	18	25	-1						21	18
SKALNATE PL.	147.33	336.5	19	25	59							
COLLMBERG	147.64	346.0	18	30	3						22	8 PP
HALLE	147.68	347.3	18	33	6						19	9 PP
PRUHONICE	148.47	343.3	18	29	1							
KEW	148.83	1.7	18	29	0				21	4		
BENSBERG	148.99	352.6	18	31A	2				21	6		
BRATISLAVA	149.31	338.8	18	32	3						19	41
VIENNA-H.	149.48	339.7	18	32	2							
KASPERSKE H.	149.51	343.8	18	31	1				21	6		
BELGRADE	150.73	331.2	18	37	6						21	19
STUTTGART	150.80	348.9	18	32	0							
STRASBOURG	151.24	350.8	18	38	6							
PARIS	151.49	358.1									21	15
FOLINIERE	151.52	2.2	18	33	0							
LJUBLJANA	152.01	339.9	18	32	-1				21	11	18	44 PKP2
TRIESTE	152.62	340.5	18	40A	6				21	9	18	58 PKP2
BESANCON	152.78	352.7	18	44	10							
GARCHY	153.00	357.1									21	16
ATHENS	153.63	316.9	18	30	-6							
ROSELEND	154.23	351.1	18	47	11							
ISOLA	155.64	349.6	19	9	31							
BENI ABBES	169.74	16.2	18	53	1	25	49	57	20	30		

MARCH 20 16.H 39.M 16.S EPICENTRE -1.84 138.38 DEPTH= 194.KM

A=-0.74724 B= 0.66379 C=-0.03188 D= 0.6641 E= 0.7476
G= 0.0238 H=-0.0212 K=-0.9995 HT= 7.2

DEPTH OF FOCUS= 0.025R

SE= 3.36

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S
PORT MORESBY	11.51	131.1	2	16	-24	4	52	7				
DARWIN	12.87	215.2	2	38	-19	4	49	-28				
RABAUL	13.96	100.0	2	55A	-16	5	9	-32				
GUAM	16.46	22.3	3	41	0							
MANILA	23.72	314.3	4	56	0	9	10	16				

BAGUIO CITY	25.27	316.6	5	9	-1	9	35	16	5	57	PP
BRISBANE	28.91	152.8	5	31	-12				14	35	
NHATRANG	32.17	296.5	6	8K	-4				7	21	PP
ADELAIDE	32.96	179.5				11	26	4	23	14	
RIVERVIEW	33.99	160.8	5	49A	-38	11	37	0	12	2	
CANBERRA	34.74	164.7	6	24	-10	11	58	9	9	4	PCP
CANTON	34.77	316.9	6	34K	0	12	5	16			
TOOLANGI	36.15	170.4	6	36	-10				8	16	PPP
ABUYAMA	36.61	356.1	6	50K	1						
ZO-SE	36.62	334.8	6	49K	0	12	33	16			
PERTH	36.73	213.0							14	20	
MATUSIRO	38.18	359.8	7	2	-1	12	56	15			
NANKING	38.50	332.8	7	6K	1	13	1	15			
SAVANNAH	40.49	169.8	7	23	1				11	35	
MOORLANDS	41.19	170.1	7	20	-7						
KUNMING	43.71	310.1	7	49K	1	13	58	-4	9	36	PP
SIAN	45.33	325.0	8	2K	1	14	45	19			
CHENGTU	46.00	317.4	8	6K	0	14	52	17	9	57	PP
PEKING	46.37	336.4	8	9	0	14	58	18	15	30	*SS
CHANGCHUN	46.95	347.1	8	13K	0	15	4	16			
PORT BLAIR	47.32	287.6	8	21	5				15	40	
Y.-SAKHLINSK	48.80	3.9	8	27K	-1						
KARAPIRO	49.50	141.1	8	24	-9						
PAOTOW	49.51	331.6	8	33K	0	15	42	18			
LANCHOW	49.58	322.9	8	35K	2	15	45	20			
CHATEAU	50.28	142.4	8	31	-8						
AFIAMALU	50.68	106.4	8	36K	-6	16	38	58			
CHITTAGONG	51.39	300.7	8	46	-1	16	34	44			
SHILLONG	52.59	304.4	8	54K	-2	16	23	17			
CALCUTTA	54.43	299.4							10	17	
LHASA	54.98	308.6	9	15K	2	16	58	20			
ULAN-BATOR	56.65	335.1	9	25K	0	17	20	20			
CHATRA	56.97	303.8	9	27K	-1				17	41	
BOKARO	57.09	300.0	9	28K	0	17	22	16	11	35	PP
MADRAS	59.59	286.1	9	45K	-1	17	56	17	12	1	PP
IRKUTSK	61.08	336.8	9	57K	1	18	19	22			
MAGADAN	61.98	7.1	10	3	1	18	29	20			
YAKUTSK	64.03	355.5	10	15K	0	18	54	20			
DEHRA DUN	65.69	304.5	10	26K	0				19	13	
NEW DELHI	65.89	302.4	10	24K	-3	19	12	15	21	2	SS
HONOLULU	66.16	65.9	10	30	1				19	28	
KIPAPA	66.26	65.7	10	28	-2						
BOMBAY	67.59	291.2	10	39	1	19	32	15	12	59	PP
LAHORE	69.10	304.7	10	46	-1						
SEMIPALATNSK	71.75	325.1	11	3	0	20	22	16			
MIRNY	71.93	197.4							15	57	
KHOROG	72.95	310.1	11	10	0						
ANDIJAN	73.26	313.5	11	13K	1	20	43	20			
TIKSI	73.60	356.9	11	14	0	20	46	19			
QUETTA	74.95	301.8	11	21K	-1						
TASHKENT	75.67	313.4	11	26K	0	21	9	20			
SCOTT BASE	77.44	174.1	11	29	-7						
COLLEGE	84.82	24.3	12	14	0						
SHIRAZ	87.30	299.6	12	25K	-1	22	24	-24	12	52	15 56 *PPP
SOUTH POLE	88.17	180.0	12	25	-5						
TEHERAN	88.62	305.6	12	55	23	22	58	-2			
BYRD STATION	90.29	170.2	12	34	-6						
MOULD BAY	94.70	13.6	13	0	0						
APATITY	97.38	338.0	13	11	-2						
OELLOWKNIFE	99.44	26.8	13	24K	2						
SODANKYLA	99.95	338.6	13	25	1						
KAJAANI	100.59	335.3	13	26	-1						
RESOLUTE	100.93	12.5	13	29K	0						
KSARA	101.41	304.0	17	34	243				26	50	
BLUE MTS.	101.42	44.7	13	30	-1	24	14	24	17	32	PP
KIRUNA	101.97	340.0	13	32	-1	25	9	77	26	47	PS
NURMIJARVI	103.10	332.3	13	36	-2	24	12	14	17	57	PP
EUREKA	103.23	50.0	13	40	1				17	59	PP
UMEA	103.75	336.3	13	40	-1	24	16	15	_7	59	PP
ISTANBUL UN.	105.78	312.1							18	17	PP
UPPSALA	106.59	333.1							27	35	PS
UINTA BASIN	107.90	48.1	14	2	777	24	42	23	18	30	PP
LWIRO	109.48	267.0							27	56	PS
ATHENS	110.44	310.0							18	52	
COLLMBERG	112.84	326.3	18	16	2				19	32	
WICHITA MTS.	117.83	51.3	18	25	2				19	38	PP
TULSA	119.57	49.2							26	52	SKKS
CUMBERLAND	127.22	45.3	18	41	-1				21	10	PP
PALISADES	131.32	32.6				26	5	27			

BENI ABBES	133.22	311.0	18	56	3
CHINCHINA	145.92	83.9	19	20	4
BOGOTA	147.48	84.3	19	22	3
FUQUENE	147.75	82.7	19	22	3
LA PAZ	148.10	125.9	19	24	4
SAN JUAN	150.88	54.0	19	24	0

MARCH 21 4.H 0.M 11.S EPICENTRE 36.50 141.12 DEPTH= 53.KM

A=-0.62723 B= 0.50580 C= 0.59224 D= 0.6277 E= 0.7784
G=-0.4610 H= 0.3718 K=-0.8058 HT= -0.4

DEPTH OF FOCUS= 0.003R

SE= 2.59

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S
ONAHAMA	0.48	338.8	0	12K	-1	0	20	-3				
MITO	0.54	257.2	0	11K	-3	0	20	-4				
KAKIOKA	0.80	250.6	0	14K	-3	0	25	-4				
TYOSI	0.81	195.6	0	12A	-5	0	21	-8				
SHIRAKAWA	0.95	310.9	0	19K	1	0	32	0				
UTUNOMIYA	1.01	273.2	0	17	-2	0	30	-3				
HONGO	1.35	234.5	0	22K	-2						0	49
HUKUSIMA	1.35	337.7	0	25K	1	0	43	2				
TOKYO C.M.O.	1.38	233.9	0	22K	-2	0	41	-1				
KUMAGAYA	1.45	256.5	0	22K	-3	0	42	-1				
YOKOHAMA	1.60	228.5	0	26A	-1	0	47	0				
MAEBASI	1.65	267.1	0	24K	-4	0	45	-3				
TITIBU	1.73	253.1	0	28	-1	0	48	-2				
SENDAI	1.77	354.5	0	30K	0	0	52	1				
YAMAGATA	1.85	340.9	0	32K	1	0	57	4				
MERA	1.89	214.0	0	32	1	1	3	9				
ISINOMAKI	1.93	4.7	0	31K	-1	0	55	0				
OIWAKE	2.08	266.1	0	34	0	1	1	2				
HUNATU	2.15	243.0	0	36	1	1	1	0				
NIIGATA	2.17	311.3	0	37	2	1	9	8				
AJIRO	2.19	229.2	0	34K	-1	1	7	5				
KOHU	2.23	248.9	0	35K	-1	1	11	8				
OSIMA	2.23	219.8	0	33A	-3	1	14	11				
MISIMA	2.24	232.6	0	35	-1	1	1	-2				
MATUSIRO	2.34	271.8	0	37K	-1							
NAGANO	2.35	275.0	0	39K	1	1	7	1				
TAKADA	2.38	285.4	0	38	0	1	5	-1				
MATUMOTO	2.55	265.3	0	40	0	1	12	1				
SAKATA	2.60	337.3	0	44	3	1	18	6				
MIZUSAWA	2.62	0.2	0	43A	1	1	11	-2				
SHIZUOKA	2.69	236.2	0	41	-1	1	13	-1				
AIKAWA	2.74	304.4	0	44	1							
IIDA	2.84	250.8	0	44	-1	1	24	6				
OMAESAKI	3.03	232.1	0	50	3							
TAKAYAMA	3.14	264.7	0	54	5	1	36	10				
TOYAMA	3.16	274.8	0	50	1	1	34	8				
MORIOKA	3.19	0.7	0	50	0	1	28	1				
MIYAKO	3.22	11.8	0	50	0	1	28	1				
HAMAMATU	3.29	238.3	0	52	1	1	24	-5				
AKITA	3.31	346.3	0	57A	6	1	40	10				
WAZIMA	3.49	285.8	0	54	0							
HATIDYOZIMA	3.56	198.2	0	54	-1	1	29	-7				
KANAZAWA	3.60	271.8	0	57	2							
NAGOYA	3.62	249.7	0	56	0	1	38	0				
GIHU	3.69	254.0	0	57	0	1	46	7				
HATINOHE	4.04	4.5	1	1K	0	1	48	0				
KAMEYAMA	4.13	247.8	0	56	-7						2	10
HIKONE	4.14	254.2	1	5	2	2	2	11				
TU	4.15	245.7	1	11	8							
TSURUGA	4.18	259.8	1	4	1	1	58	6				
AOMORI	4.32	356.6	1	7	2	1	59	4				
KYOTO	4.62	252.9	1	8	-2	2	27	24				
NARA	4.68	248.7	1	8	-2	1	58	-6				
OWASE	4.70	240.3	1	13	2	2	26	21				
MAIZURU	4.76	259.2	1	14	3	2	16	10				
ABUYAMA	4.80	251.8	1	12K	0							
OSAKA	4.91	249.6	1	16	2	2	19	9				
KOBE	5.17	251.2									1	32
TOYOOKA	5.20	261.1	1	20	2							

HAKODATE	5.31	357.1	1	19K	0	2	28	8			
SIOMISAKI	5.34	236.8	1	23	3	2	27	6			
WAKAYAMA	5.36	246.7	1	22	2	2	45	24			
SUMOTO	5.51	248.8	1	21	-1	2	50	25			
MORI	5.61	355.8	1	23	0	2	20	-7			
TOTTORI	5.71	262.1	1	25	0						
URAKAWA	5.79	12.4	1	25	-1						
MURORAN	5.81	359.0				2	40	7			
HIMEJI	5.83	252.0	1	38	12						
TOKUSIMA	5.87	247.5	1	30	3						
HIROO	6.02	15.8	1	27	-2	2	32	-6			
TOMAKOMAI	6.13	3.2	1	46	15						
TAKAMATU	6.17	251.4	1	48	17	3	15	34			
SUTTSU	6.33	354.1	1	37	4						
YONAGO	6.39	262.7				3	24	37			
TSURUGISAN	6.39	247.6	1	33	-1						
MUROTO	6.56	242.4	1	38	1						
SAPPORO	6.56	1.5	1	48	11						
MATSUE	6.61	263.2				3	32	40			
OBIHIRO	6.61	13.4	1	37	0	2	51	-1			
KUSIRO	6.95	20.3	1	40	-2	2	51	-10			
MATUYAMA	7.32	251.2	1	51	4	3	41	31			
ASAHIGAWA	7.33	7.1	1	45A	-2	3	8	-2			
HAMADA	7.53	260.4									
NEMURO	7.63	25.3	1	45	-7	3	7	-11			
ABASHIRI	7.89	16.9	1	54	-1	3	18	-6			
SIMONOSEKI	8.71	256.0	2	9	3						
MIYAZAKI	9.23	243.1	2	14	1	3	44	-13			
HUKUOKA	9.27	254.8	2	17	3						
KUMAMOTO	9.33	249.9	2	16	1	3	55	-5			
SAGA	9.46	253.1	2	19	2						
VLADIVOSTOK	9.69	315.8	2	21A	1	4	20	12			
NAGASAKI	9.99	251.2	2	27	3						
KAGOSIMA	10.05	243.8	2	29	4	4	23	6			
Y.-SAKHLINSK	10.58	6.0	2	28A	-4						
YAKUSIMA	10.72	238.8	2	28	-6						
ZO-SE	17.42	257.8	3	58	-3						
NANKING	18.97	263.0	4	16	-4						
PEKING	19.88	287.8	4	27	-3						
MAGADAN	23.91	12.2	5	11	1						
SIAN	26.29	274.7	5	32A	-1						
YAKUTSK	26.52	348.0	5	34A	-1	10	4	1			
BAGUIO CITY	27.06	227.7	4	56	-44						
CANTON	27.45	248.6	5	42	-1						
ULAN-BATOR	27.57	305.2	5	42	-3						
LANCHOW	29.94	280.4	6	4	-2						
CHENGTU	31.32	270.2	6	15	-3						
KUNMING	34.65	261.8	6	45A	-2	12	10	-2			
TIKSI	35.77	353.4	6	56A	0						
NHATRANG	37.51	238.1	7	9	-2						
LHASA	42.13	275.6	7	50A	1	14	7	2			
SHILLONG	43.17	269.7	7	54A	-4						
SEMIPALATNSK	45.08	307.9	8	12	-1						
PORT MORESBY	46.01	171.7	8	31A	11						
CHATRA	46.40	274.0	8	24A	1						
ALMATA-2	48.33	298.7	8	39A	0						
BOKARO	48.87	271.1	8	40	-3						
COLLEGE	49.67	32.0	8	50	1						
PORT BLAIR	49.98	253.0	8	48	-3						
ANDIJAN	52.63	297.0	9	12A	1						
KHEYS	53.12	348.3	9	13	-2						
LEMBANG	53.33	223.1	9	16A	0					15	0
NEW DELHI	53.60	281.1	9	16K	-2						
TASHKENT	54.64	298.6	9	26A	0	17	7	7			
SVERDLOVSK	55.39	318.8	9	31K	-1						
MOULD BAY	57.11	16.3	9	43A	-1					12	54
ALERT	60.68	3.5	10	8A	-1						
QUETTA	60.88	287.5	10	9	-1						
POONA	61.15	272.4	10	12A	0						
NORD	61.57	356.4	10	14	-1						
APATITY	63.08	335.8	10	23A	-2						
RESOLUTE	63.18	14.3	10	24A	-1						
KEVO	63.85	339.3	10	28	-2					11	23
VANNOVSKAYA	63.89	299.1	10	30	0						
YELLOWKNIFE	64.39	29.9	10	32A	-1						
BRISBANE	64.49	168.5	10	33	-1						
SODANKYLA	65.36	337.2	10	39A	0					13	0 PP
THULE	65.82	7.3	10	38	-4						

TROMSOE	66.14	341.1	10 43	-1			10 55			
KIRUNA	66.93	339.2	10 48A	-1			11 0	13 15	PP	
KAJAANI	66.97	334.0	10 50A	0						
MOSCOW	67.54	323.5	10 51	-2						
SEATTLE	68.04	46.4	11 1	5						
PULKOVO	68.53	329.4	10 59A	0						
PENTICTON	68.72	43.9	11 1	0						
UMEA	69.67	336.0	11 6A	0			11 18			
NURMIJARVI	70.30	331.9	11 9A	-1				13 41	PP	
HELSINKI	70.40	331.6	11 10A	-1						
KIROVOBAD	70.54	306.5	11 11A	-1						
ADELAIDE	71.14	182.1	11 14	-1				38 13		
SHASTA	71.61	52.8	11 19	1						
CANBERRA	71.83	173.2	11 19	0			11 32	11 45	PCP	
SHIRAZ	72.02	293.8	11 21A	0	20 38	1	11 33	21 3	*SS	
MINERAL	72.31	52.7	11 22A	0						
SKALSTUGAN	72.32	338.5	11 21A	-1				14 0	PP	
HUNGRY HORSE	72.34	42.6	11 22	0						
BLUE MTS.	72.47	47.0	11 24	1				11 41	PCP	
CALISTOGA	72.60	54.7	11 25A	1						
SCORESBY SD.	72.62	354.1	11 25	1						
BERKELEY	73.23	55.2	11 29A	1						
UPPSALA	73.33	333.9	11 27A	-1			11 41	14 10	PP	
TOOLANGI	73.81	176.4	11 30	-1			11 43	11 54	*SP	
LICK	73.94	55.4	11 33A	1						
GODHAVN	74.01	5.4	11 32A	0						
VINEYARD TE.	74.43	55.8	11 23	-12			11 45			
BUTTE	74.51	43.9	11 36	1				12 5		
PRIEST	75.26	55.9	11 40A	1						
EUREKA	76.37	50.9	11 48A	2						
KARLSKRONA	76.77	332.1	11 43A	-5						
BERGEN	76.87	339.2	11 49	0						
GOTEBORG	76.91	334.7	11 47A	-2						
DUGWAY	77.88	48.8	11 55	1						
SAVANNAH	78.04	175.4	11 55	0						
PASADENA	78.07	56.4	11 58	3			12 8			
SALT LAKE C.	78.11	47.9	11 57	2						
COPENHAGEN	78.29	333.2	11 57	1						
TARRALEAH	78.58	176.0	11 58	0						
BOULDER CITY	79.18	53.2	12 2	1						
UZHGOROD	79.31	323.7	12 2	0						
KRAKOW	79.41	325.9	12 3	0				12 15	PCP	
UINTA BASIN	79.75	47.2	12 6A	2	22 16	14		12 14	PCP	
RACIBORZ	80.16	326.7	12 7	0				12 20	PCP	
RAPID CITY	80.86	41.1	12 11	1						
LARAMIE	81.41	44.4	12 14	1						
COLLMBERG	81.45	330.0	12 13	0				15 22	PP	
HALLE	81.71	330.7	12 15	0			12 35			
PRUHONICE	81.82	328.4	12 16	1						
JENA	82.30	330.5	12 17	-1			12 30	15 34	PP	
VIENNA-H.	82.32	326.3	12 20	2						
GOLDEN	82.60	45.5	12 21	2						
KASPERSKE H.	82.87	328.3	12 20A	-1				12 54		
JERUSALEM	82.97	304.4	12 21A	0						
MUNSTER	82.98	333.1	12 22	1						
DE BILT	83.74	334.4	12 20	-5						
BENSBERG	83.97	332.8	12 26A	0						
TUCSON	84.09	54.1	12 28	1						
HEIDELBERG	84.64	331.0	12 30	0			12 43			
LJUBLJANA	84.81	325.8	12 30	0						
STUTTGART	84.92	330.3	12 31A	0			12 43			
ALBUQUERQUE	85.11	49.7	12 34	2						
TUBINGEN	85.20	330.3	12 33	1			12 46			
EBINGEN	85.52	330.1	12 34	0						
DOURBES	85.61	333.6	12 35	1						
STRASBOURG	85.67	331.0	12 35	0						
SCHEFFERVLLE	85.94	15.8	12 37	1						
KEW	86.10	337.0	12 38	1						
PARIS	87.44	334.1	12 45K	2						
ROSELEND	88.48	330.0	12 49	1				13 18		
FOLINIERE	88.49	335.7	12 47	-1						
GARCHY	88.53	332.9	12 50K	2						
WICHITA MTS.	89.94	45.3	12 56	1	23 53	12		30 27	PKKP	
SEPT ILES	90.32	17.3	12 58A	1						
TULSA	90.65	42.9	12 59K	1			13 8			
FAYETTEVILLE	91.38	41.8	13 2A	0			13 14			
BREBEUF	92.56	23.7	13 9	2						
CUMBERLAND	96.16	36.6	13 25	1						

BULAWAYO	119.51	265.9	18	46K	2							
SOUTH POLE	126.32	180.0	18	56	-1						20	47
LA PAZ	147.31	60.2	19	41	5							

MARCH 24 2.H 7.M 8.S EPICENTRE -9.70 120.54 DEPTH= 0.KM

A=-0.50092 B= 0.84915 C=-0.16739 D= 0.8613 E= 0.5081
G= 0.0850 H=-0.1442 K=-0.9859 HT= 6.6

SE= 1.97

	DELTA DEG.	AZ. DEG.	P M	S	O-C S	S M	S	O-C S	*PP M	S	SUPP. M	S	
DARWIN	10.45	105.7	2	32	-2	4	20	-13					
LEMBANG	13.10	281.6	3	9A	-1	5	43	5			5	23	PP
DJAKARTA	14.02	283.4	3	21A	-1						6	43	
TANGERANG	14.21	283.3	3	24K	-1	5	59	-6			8	43	PCP
MUNDARING	22.52	189.6	5	1	-2	9	3	-3					
PERTH	22.57	190.5	5	2	-1	9	13	6			5	43	PP
MANILA	24.22	1.3	5	22	3						11	51	
MEDAN	25.46	300.2	5	32K	1								
BAGUIO CITY	25.95	0.1	5	34	-2	10	0	-5			6	37	PPP
PORT MORESBY	26.24	91.6	5	39	0	9	58	-12					
CHARTERS TS.	26.88	115.5	5	45	0	10	13	-7					
RABAUL	31.86	82.3	6	26	-3						7	30	
GUAM	33.27	46.6	6	42	1						8	3	
CANTON	33.34	347.9	6	44	2								
PORT BLAIR	34.86	306.9	6	54	-1	12	16	-10			17	16	
BRISBANE	35.11	124.4	6	58	1	12	20	-10					
TOOLANGI	35.72	145.0	7	3A	1	12	21	-19			9	30	PCP
CANBERRA	36.38	138.9	7	8A	0	12	48	-2			8	36	PP
RIVERVIEW	36.96	135.2	7	15A	2	12	56	-3	7	25	8	37	PP
KUNMING	38.71	333.7	7	30A	2	13	23	-2					
ZO-SE	40.57	0.8	7	43	0	13	44	-9					
NANKING	41.56	357.8	7	51A	0	14	0	-8					
CHITTAGONG	42.52	318.8	7	58	-1	14	19	-3					
CHENGTU	43.15	339.0	8	5A	1	14	24	-7					
KOUMAC	43.46	109.6	8	26A	19	15	6	30					
SHILLONG	44.81	322.1	8	17A	-1	14	49	-6			13	47	SCP
CALCUTTA	44.94	315.8	8	28	9	14	47	-10					
SIAN	45.08	346.4	8	18A	-2								
NOUMEA	45.70	111.7	8	26	1	15	6	-2					
VISHAKHAPTNM	45.77	306.4	8	28K	3	15	8	-1			10	24	PP
MADRAS	45.98	298.6	8	27	0	15	5	-7			10	14	PP
PORT VILA	47.00	105.2	9	37K	62								
KODAIKANAL	47.20	293.6	8	22A	-15	15	7	-23			10	55	PPP
LANCHOW	48.15	341.8	8	44A	0	15	31	-12					
LHASA	48.34	325.0	8	47A	1	15	42	-4					
CHATRA	48.65	319.1	8	49K	1	15	46	-4			10	39	PP
MATUSIRO	48.91	18.9	8	48	-2	15	45	-9					
TUKUBASAN	49.25	20.9	8	52	-1	15	49	-9					
HYDERABAD	49.56	302.8	8	54	-1	15	52	-11			18	56	SS
PEKING	49.64	355.6	8	54	-2	15	54	-10					
PAOTOW	50.96	349.7	9	5A	-1								
MIZUSAWA	52.22	20.3	9	51	36	16	27	-12					
CHANGCHUN	53.45	4.3	9	23	-1								
VLADIVOSTOK	53.58	10.3	9	20	-5	16	48	-10			12	25	PPP
POONA	53.93	301.3	9	27A	-1	16	55	-8			20	30	SS
MACQUARIE I.	54.09	153.4	9	29K	0				9	39			
ROXBURGH	54.83	139.7	9	34	0	17	13	-2			11	36	PP
BOMBAY	54.96	301.2	9	34	-1	17	8	-9			17	42	
KARAPIRO	56.66	129.2	9	48	0								
WILKES	56.98	184.8	9	48	-2	17	40	-3	9	56			
CHATEAU	56.99	130.6	9	50	0								
DEHRA DUN	57.00	315.9	9	53	3						17	31	
WELLINGTON	57.02	133.2	9	48A	-2	17	39	-5			11	59	PP
ULAN-BATOR	58.63	349.3	10	0A	-1	17	55	-10					
MIRNY	59.78	192.4	10	9A	0						12	16	PP
Y.-SAKHLINSK	59.83	17.4	10	10	0						23	37	
LAHORE	60.31	314.8	10	11	-2	18	16	-11					
IRKUTSK	63.28	348.9	10	32A	-1	18	58	-6					
QUETTA	64.97	309.7	10	42K	-2	19	14	-11					
KHOROG	65.60	318.8	10	48A	0	19	27	-6					
AFIAMALU	66.20	100.9				19	22	-19			23	58	SS
FRUNSE	66.97	325.0	10	56A	-1	19	48	-2					
MAWSON	69.10	200.3	11	9	-1								
TASHKENT	69.23	321.1	11	10A	-1	20	10	-7					

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.

CAPE HALLETT	69.24	165.6	11	11	0							
SEMIPALATNSK	69.35	333.8	11	11	-1							
PETROPAVLOVK	70.41	23.3	11	19K	1	20	28	-3				
YAKUTSK	71.86	4.5	11	26A	-1	20	42	-5			14	1 PP
SCOTT BASE	72.05	170.7	11	27	-1							
MAGADAN	73.16	15.6	11	34A	-1	21	0	-2			15	58 PPP
ASHKABAD	74.86	313.6	11	43	-1	21	17	-4				
SHIRAZ	76.18	303.8	11	51	-1	21	24	-12	11	59	26	33 SS
TEHERAN	79.15	309.3	12	10	2	22	6	-2				
SOUTH POLE	80.36	180.0	12	13	-2							
TIKSI	81.34	2.7	12	19A	-1	22	19	-12			17	10 PPP
SVERDLOVSK	82.42	331.3	12	24K	-2	22	32	-10				
CHILEKA	83.19	255.3	12	31	1							
ADDIS ABABA	83.49	280.3	12	35	4	22	51	-2				
GORIS	84.17	311.5	12	36A	1	22	56	-3				
CHANGALANE	84.30	244.4									12	38 PCP
HONOLULU	85.55	67.6	12	46	4	23	10	-3				
KIPAPA	85.65	67.5	12	46	4	23	12	-2			28	58 SS
TIFLIS	85.94	313.3	12	46	3	23	21	4			16	17 PP
N-LAZARVSKYA	86.95	198.3	12	50A	2	23	26	0				
HAWAII V.OB.	87.78	70.0	12	55	3							
BULAWAYO	88.50	249.9	12	59A	3							
BROKEN HILL	89.60	255.5	13	2A	1							
KSARA	90.93	304.0	13	7	0	24	11	8			16	51 PP
JERUSALEM	91.10	301.9	13	9	1							
LWIRO	91.34	267.5	13	12A	3	24	15	8			16	50 PP
HERMANUS	93.76	234.3				24	20	-8				
MOSCOW	93.97	325.8	13	21K	0	23	52	-38			17	6 PP
SIMFEROPOL	94.25	314.7	13	22A	-1	24	28	-4			17	16 PP
KHEYS	95.19	351.6	13	27	0	24	0	-2			19	26 PPP
ISTANBUL UN.	97.45	310.3	13	39K	2	24	31	17				
APATITY	97.78	337.2	13	33	-6	24	3	-13			17	28 PP
PULKOVO	98.41	329.2	13	41A	0	24	16	-3			18	16 PCP
COLLEGE	99.41	25.6	13	45	-1						30	11 PKKP
KAJAANI	99.89	333.5	13	48	0						17	56 PP
KEVO	100.26	339.3	13	56	6	24	23	-6			17	56 PP
SODANKYLA	100.39	336.9	13	58	8						17	54 PP
HELSINKI	101.12	329.5	13	54	0							
ATHENS	101.25	306.9	13	49	-5						18	4
NURMIJARVI	101.27	329.9	13	54	0	24	28	-5			18	6 PP
UZHGOROD	102.65	317.7	14	4	3						18	17 PP
KIRUNA	102.74	337.5	14	9	8	24	35	-5			18	7
UMEA	103.19	333.4	14	5	2	24	38	-5			18	24 PKP
WARSAW	103.43	321.4				25	49	65			18	32 PP
BANDEIRA	103.86	252.0	14	8K	2				14	18		
BELGRADE	103.91	313.8				24	50	4			18	25 PP
KRAKOW	104.18	319.2				24	41	-6			18	36 PP
CHORZOW	104.77	319.5	17	45	215						18	35 PP
UPPSALA	104.81	329.4	14	10	0	24	45	-5			18	44 PP
KARLSKRONA	106.32	325.7	14	25	777						18	35 PKP
MOULD BAY	106.32	12.5	14	17	777							
SKALSTUGAN	106.73	333.7	18	10	777						18	54 PP
PRUHONICE	107.65	319.4	14	27	777						17	42
MESSINA	107.70	307.0	18	49	777	25	7	4			28	21 PS
PRAGUE	107.71	319.5	18	43	777						25	2
LJUBLJANA	108.03	315.3	18	33	777						19	15
GOTEBORG	108.04	327.6	14	28	777						18	7
COPENHAGEN	108.14	325.5									19	0 PP
KASPERSKE H.	108.37	318.5	14	19	777						18	56
COLLMBERG	108.47	320.9	14	44	777						18	43 PKP
TRIESTE	108.60	314.9				25	9	2			34	13 SS
HALLE	109.09	321.2	18	23	777						18	55 PP
JENA	109.41	320.6	14	39	777	25	4	-6			19	5 PP
STUTTGART	111.22	318.6	18	38	2						29	0 PS
MUNSTER	111.65	322.2	18	40	3							
PAVIA	111.86	314.8									19	14 PP
RESOLUTE	112.02	9.6	14	44	-233							
WITTEVEEN	112.03	323.2	18	40	3							
BENSBERG	112.15	321.2	18	41	3						19	31 PP
STRASBOURG	112.24	318.6	18	40	2	25	21	-1			28	52 SP
DE BILT	113.09	322.7									19	34 PP
ISOLA	113.51	314.0	18	45	5						20	2
ROSELEND	113.54	315.7	18	45	5						19	46
BESANCON	113.68	317.4	18	42	1						19	40
UCCLE	113.92	321.5	19	34	53							
DOURBES	113.94	320.7	18	42	1	25	13	-15				
YELLOWKNIFE	114.20	24.7	18	40	-2							
VICTORIA	114.38	41.0	18	45	3							

SCORESBY SD.	114.87	347.0	18	47	4					
SEATTLE	115.32	41.7	18	47K	3					
PARIS	115.60	319.7	18	46	2				19	12
GARCHY	115.61	317.9	18	47K	3				20	7
DURHAM	116.11	326.9							36	0 SS
KEW	116.54	323.1	18	49	3	25	35	-3	35	43 SS
PENTICTON	116.59	39.4	18	48A	2					
CALISTOGA	116.95	51.6	18	50K	3				24	50
BERKELEY	117.32	52.4	18	51K	3				19	56 PP
MINERAL	117.39	49.6	18	50K	2				24	48
FOLINIERE	117.49	320.3	18	50	2					
LICK	117.89	52.9	18	53A	4				25	0 .
BANFF	118.45	36.5	18	51	1					
PRIEST	118.87	54.1	18	55K	4					
BLUE MTS.	119.40	43.7	18	52	0	25	45	-3	20	9 PP
WOODY	120.38	54.3	18	56	2					
HUNGRY HORSE	120.40	39.1	18	56	2				20	14 PP
PASADENA	121.21	56.0	18	59	4				20	32 PP
EUREKA	121.81	49.4	18	59	2				20	30 PP
ALMERIA	122.06	307.5	18	59K	2				20	38 PP
BUTTE	122.17	41.2	18	42	-15				20	32 PP
TOLEDO	122.52	311.3	19	1K	3	26	4	5	20	39 PP
GRANADA	122.86	308.1							19	44 PP
BOULDER CITY	123.53	53.2	19	3	3					
SALT LAKE C.	124.46	46.9	19	4	2				19	37
PRICE	125.59	47.9	19	7	3					
GLEN CANYON	125.80	51.2	19	7	3				25	53
FLAMING GRGE	126.17	45.9	19	7	2				19	40
UINTA BASIN	126.25	46.7	19	7	2	26	10	0	20	58 PP
TUCSON	127.62	56.7	19	10	2				25	41
LARAMIE	128.68	44.1	19	13	3				22	30
RAPID CITY	129.01	39.9	19	12	2					
GOLDEN	129.48	45.9	19	14	3				22	24
ALBUQUERQUE	130.38	52.1	19	2	-11					
SCHEFFERVLLE	134.62	5.9	19	23	2					
MANHATTEN	135.74	42.2	19	32	9					
WICHITA MTS.	136.46	49.0	19	16	-8	26	38	4	21	55 PP
MADISON	137.33	32.9	19	21	-5				22	17 PP
TULSA	137.95	45.9	19	22A	-5				22	12 PP
M.BOUR	138.23	280.7	19	41	13				22	23 PP
DALLAS	138.62	50.5	19	22	-6					
FAYETTEVILLE	138.98	44.7	19	24K	-5				22	20
SEPT ILES	139.22	6.8	19	37K	8					
ST. LOUIS 1	140.13	38.7	19	28	-3					
SEVEN FALLS	141.48	12.5	19	23	-10					
SHAWINIGAN	141.56	14.8	19	36	2					
LONDON ONT.	141.75	26.0	19	31K	-3					
OTTAWA	141.78	18.6	19	32	-2					
BREBEUF	142.31	16.3	19	36	1					
CUMBERLAND	144.94	38.6	19	39	0				23	18 SKP
PENNSYLVANIA	145.00	24.7	19	40	1					
HALIFAX	145.03	5.2	19	41A	1					
MORGANTOWN	145.04	28.1	19	41	1				23	24
ANTOFAGASTA	145.12	162.3	19	41	1				20	51 PP
WESTON	145.82	15.7	19	43	2				23	21
PALISADES	146.30	19.9	19	44A	2	20	20		19	52 PKP2
FORDHAM	146.45	20.0	19	43	1				23	13
GEORGETOWN	146.92	25.6	19	45	2					
CHAPEL HILL	148.40	31.3	19	48	3					
COLUMBIA	148.75	36.1	19	49	3				23	22
SAN SALVADOR	150.62	79.4	19	58	9					
SANTIAGO MA.	151.35	79.7							20	10
AREQUIPA	151.41	155.3	19	54	4					
LA PAZ	152.59	161.7	19	56	4	23	48			
HUANCAYO	153.25	143.5	19	58	6					
BALBOA HTS.	160.15	90.5	20	4	3					
CHINCHINA	163.30	105.2	20	8A	4				20	16 PKP2
BOGOTA	164.66	108.2	20	10A	4				25	27 PP
FUQUENE	165.25	105.5	20	11K	5				20	20 PKP2
SAN JUAN	169.23	36.1	20	12	3				25	19 PP
ANTIGUA	172.25	17.1	20	14	3					
CARACAS	172.60	83.2	20	14K	3				25	35 PP
ST. CLAUDE	173.34	18.9	20	13	2				25	41
FORT FRANCE	174.74	18.1	20	17	5					
TRINIDAD	177.87	63.5	20	16	4				26	1

MARCH 24 9.H 43.M 26.S EPICENTRE 9.12 125.55 DEPTH= 97.KM

A=-0.57414 B= 0.80347 C= 0.15746 D= 0.8136 E= 0.5814
G=-0.0915 H= 0.1281 K=-0.9875 HT= 6.6

DEPTH OF FOCUS= 0.010R

SE= 2.20

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S
MANILA	7.04	322.0	1	46	4	3	11	10				
BAGUIO CITY	8.72	326.8	2	4	-1	4	24	42				
CANTON	18.16	321.3	4	7K	0	7	34	11				
GUAM	19.30	75.3	4	17	-3							
DARWIN	21.99	166.1	4	44	-3	8	36	-2				
ZO-SE	22.25	350.1	4	50K	1	8	54	11	5	11		
NANKING	23.67	345.6	5	4K	1	9	18	10				
LEMBANG	23.88	229.0	4	55	-10	9	10	-1			5	17 PP
DJAKARTA	24.06	231.5	5	9	2							
TANGERANG	24.21	231.8	5	7A	-1	9	45	28			6	15
KUNMING	26.91	309.1	5	34K	0	10	9	7				
MEDAN	27.25	260.1	5	35K	-2							
PORT MORESBY	28.30	130.0	5	42	-4							
SIAN	29.31	331.0	5	54	-1							
CHENGTU	29.37	319.8	5	55	-1							
MATUSIRO	29.62	20.9	5	55	-3							
PEKING	31.90	346.3	6	17K	-1	11	25	4				
PORT BLAIR	32.38	277.4									11	52
LANCHOW	33.31	326.9	6	31K	1				6	53		
PAOTOW	34.23	338.8	6	38	0	12	7	10				
VLADIVOSTOK	34.32	8.3	6	38K	-1							
CHITTAGONG	34.93	296.1	6	45	1							
CHARTERS TS.	35.47	145.1	6	46	-3							
SHILLONG	35.92	301.4	6	51	-2	12	30	7				
LHASA	38.19	307.1	7	14K	2	13	7	10				
Y.-SAKHLINSK	40.50	18.1	7	30K	-1							
BOKARO	40.66	296.0	7	34	2						14	8
ULAN-BATOR	41.76	341.2	7	40	-1							
MUNDARING	41.82	191.9	7	40	-1				7	53		
UGLEGORSK	42.17	16.2	7	45K	1							
MADRAS	44.65	279.2	8	3	-1	14	44	11			9	47
BRISBANE	44.87	144.8	8	3	-3						9	56
IRKUTSK	46.38	342.1	8	17K	-1							
KOUMAC	48.17	128.1	9	38K	66							
DEHRA DUN	49.00	302.4	8	40A	1						16	6
RIVERVIEW	49.15	151.6	8	42	2							
NEW DELHI	49.30	299.9	8	39K	-2							
CANBERRA	49.44	154.6	8	40A	-2				8	51		
TOOLANGI	50.06	159.3	8	44	-3				8	56	10	48 PP
NOUMEA	50.81	128.5	9	23A	31							
POONA	50.92	286.4	8	52K	-1							
PETROPAVLOVK	51.30	25.0	8	57K	1							
LAHORE	52.41	302.9	9	5	1							
YAKUTSK	52.89	2.5	9	7K	-1	16	31	3				
MAGADAN	53.81	15.6	9	14	-1							
ALMATA	54.23	317.5	9	17K	-1							
WARSAK DAM	55.26	305.1	9	26	1							
SEMIPALATNSK	55.56	326.5	9	27	0							
FRUNSE	55.63	316.2	9	29K	1							
KHOROG	56.15	309.2	9	32	0	17	23	12				
ANDIJAN	56.49	313.2	9	36K	2	17	29	13				
QUETTA	58.38	299.8	9	47	0							
TASHKENT	58.89	313.0	9	52K	1							
TIKSI	62.49	1.2	10	14K	-1	18	36	3				
KARAPIRO	66.07	138.5	10	37	-2							
AFIAMALU	66.26	109.5	10	41K	1							
VANNOVSKAYA	66.68	307.3	10	43	1							
CHATEAU	66.78	139.6	10	41	-2							
ROXBURGH	67.06	148.1	10	45	0							
WELLINGTON	67.50	141.8	10	59	11							
SHIRAZ	70.83	298.2	11	8K	0	20	18	4	11	22	13	50 PP
TEHERAN	71.89	304.6	11	15	1	20	36	10				
HONOLULU	74.09	70.4	11	29	2							
KIPAPA	74.15	70.3	11	28	1							
KIROVOBAD	75.95	309.6	11	38K	0	21	20	9				
GORIS	75.95	308.4	11	39K	1							
WILKES	76.06	186.2	11	41	3							
HAWAII V.OB.	76.88	72.1	11	45	2							
TIFLIS	77.10	310.7	11	46	2							

COLLEGE	80.38	25.6	12	2	0						
MOSCOW	81.37	325.1	12	7K	0						
APATITY	82.45	337.2	12	12K	-1					22	10
KEVO	84.46	339.8	12	24A	1					12	47
SIMFEROPOL	84.64	314.5	12	24K	0						
KSARA	84.72	303.3	12	25	1	22	48	6		17	40 PPP
PULKOVO	84.82	329.6	12	25K	0	23	15	32			
SODANKYLA	85.07	337.4	12	25K	-1						
KAJAANI	85.28	334.1	12	28A	1					12	52
VIBORG	85.41	330.7	12	28	0						
JERUSALEM	85.54	301.3	12	29	1						
MOULD BAY	86.99	12.5	12	36K	1						
TROMSOE	87.21	340.4	12	36	0						
KIF !NA	87.25	338.5	12	35	-2	23	20	14			
HELSINKI	87.38	330.5	12	37A	0						
NURMIJARVI	87.45	330.9	12	37K	-1	23	14	6		16	5 PP
ALERT	88.44	1.0	12	43K	1						
UMEA	88.54	334.7	12	42	-1	23	24	5			
!STANBUL UN.	88.99	311.3	12	45	0	22	49	-34			
LWOW	90.44	320.6	12	52K	0						
UPPSALA	91.00	331.3	12	53	-1					16	15 PP
UZHGOROD	91.85	319.8	12	59	1						
SKALSTUGAN	91.93	335.7	12	58	-1						
RESOLUTE	92.75	9.9	13	2K	0						
KRAKOW	92.92	321.6	13	4	1					16	47 PP
SKALNATE PL.	92.99	320.7	13	2	-1						
KARLSKRONA	93.33	328.2	13	2	-3						
RACIBORZ	93.97	321.9	13	9	1					13	15 PCP
THULE	94.22	3.3	13	4	-5						
GOTEBORG	94.54	330.4	13	10	0						
YELLOWKNIFE	95.09	23.9	13	13K	0						
BRATISLAVA	95.29	320.4	13	14	0					17	8
VIENNA-H.	95.72	320.6	13	17	1						
PRUHONICE	96.21	322.7	13	18	0						
COLLMBERG	96.61	324.3	13	20	0					17	17 PP
LWIRO	97.01	268.8								17	18 PP
KASPERSKE H.	97.12	322.1	13	22K	0					17	18
SCORESBY SD.	97.57	349.5	13	26	2						
JENA	97.58	324.3	13	24	0					13	44
PENTICTON	98.76	36.9	13	31A	1						
SOUTH POLE	99.06	180.0	13	29	-2						
STUTTGART	99.85	323.0	13	36	1					17	44 PP
BENSBERG	100.07	325.6	13	36	0						
DOURBES	101.92	325.6	13	50	6						
BLUE MTS.	102.11	40.3	13	45	0					18	2 PP
HUNGRY HORSE	102.49	36.1	13	47	1					17	54 PP
WOODY	104.82	49.4	13	56	-1						
EUREKA	105.35	44.9	14	1	777					29	54 PKKP
UINTA BASIN	109.29	41.6	14	18	777					18	47 PP
GOLDEN	112.34	40.4	18	26	2					37	18
TOLEDO	112.57	320.1								19	15 PP
ALBUQUERQUE	114.18	45.2	18	28	0						
WICHITA MTS.	119.64	41.3	18	40	2					20	2 PP
TULSA	120.66	38.6	18	40	0						
SEVEN FALLS	122.14	13.1	18	39A	-4						
SHAWINIGAN	122.21	14.9	18	45	2						
CUMBERLAND	126.71	31.7	18	51	-1	25	55	8		20	48 PP
PALISADES	126.99	18.4	18	54	1	26	58	70			
HOPE	145.20	39.3	19	29	3						
SAN JUAN	150.35	22.8	19	42	8						
CARACAS	156.89	32.8	20	22A	39						
HUANCAYO	159.27	99.9	20	7	21						
LA PAZ	164.78	120.2	19	57	5						

MARCH 24 12.H 44.M 5.S EPICENTRE 34.44 47.80 DEPTH= 40.KM

A= 0.55516 B= 0.61224 C= 0.56299 D= 0.7408 E=-0.6717
G= 0.3782 H= 0.4171 K=-0.8265 HT= 0.3

DEPTH OF FOCUS= 0.001R

SE= 2.18

	DELTA DEG.	AZ. DEG.	P M	S	O-C S	S M	S	O-C S	*PP M	S	SUPP. M	S
TEHERAN	3.22	65.3	0	48	-1							

GORIS	5.18	347.3	1	19K	2	2	27	10			3	0	
SHIRAZ	6.24	138.7	1	28K	-4	2	45	2			3	50	SS
TIFLIS	7.64	342.9	1	55	3								
ASHKABAD	9.22	64.7	2	13	0								
KSARA	9.90	269.8	2	20	-3	4	22	8			3	10	
JERUSALEM	10.88	259.4	2	37	1								
SIMFEROPOL	14.84	319.0	3	31K	2	6	18	5			6	31	SS
ISTANBUL UN.	16.26	299.4	3	46	-1	6	52	6					
QUETTA	16.74	99.4	3	51	-2	6	58	1					
TASHKENT	18.27	61.6	4	11K	-1						7	49	SS
FOCSANI	19.30	311.8	4	31	7	8	25	31					
KHOROG	19.44	74.2	4	25K	-1						8	7	SS
BUCHAREST	19.45	307.3	4	27K	1								
WARSAK DAM	19.64	84.6	4	24	-4	8	14	12					
ATHENS	19.73	287.2	4	29A	0	8	9	5			8	2	
IASI	19.85	316.0									6	20	
BACAU	19.91	313.7	4	33	2	8	25	17			5	1	PP
CAMPULUNG	20.49	308.7	4	38	1	8	35	16			9	22	SS
SKOPJE	21.98	297.8	5	58	66						13	39	
MOSCOW	22.42	344.8	4	55A	-1	9	6	11			6	12	
LAHORE	22.42	90.0	4	57	1	9	0	5					
FRUNSE	22.49	60.2	4	59A	2						5	31	PP
TIMISOARA	23.15	307.2	5	6	2	10	18	70			6	25	PP
BELGRADE	23.37	304.5	5	9	2	9	23	10			5	51	PP
UZHGOROD	23.63	314.6	5	9	1								
TITOGRAD	23.65	298.2	5	7	-2	9	36	19			10	49	SSS
SVERDLOVSK	24.04	17.4	5	10	-2	9	26	2					
SARAJEVO	24.53	301.3	5	18	1	9	45	13					
TARANTO	24.91	293.0	5	16	-5	9	14	-25					
SKALNATE PL.	25.09	314.3	5	23	1	9	30	-12			13	46	
KRAKOW	25.66	315.9	5	28	0						10	9	
NEW DELHI	25.69	95.0	5	26A	-2	9	51	0			6	5	PP
DEHRA DUN	25.83	90.7	5	30A	1	9	57	3			9	48	
HURBANOVO	25.83	310.2	5	27	-2	9	43	-11			6	5	PP
REGGIO CALA.	26.10	287C4	5	32	0	10	12	14					
WARSAW	26.14	321.0	5	34	2	10	13	14			6	21	PPP
MESSINA	26.18	287.7	5	33	0	10	15	15	5	42	6	30	PP
ADDIS ABABA	26.62	200.2	5	39	2	10	16	9					
BRATISLAVA	26.63	310.3	5	36	-1	11	10	63			7	3	PP
RACIBORZ	26.68	314.9	5	36	-1	10	14	6			6	27	PP
ZAGREB	26.68	304.8	5	39	2	10	18	10					
BOMBAY	27.09	118.4	5	41	0	10	25	11			10	56	
VIENNA-H.	27.11	310.1	5	41K	0	10	20	5			6	35	PPP
LJUBLJANA	27.72	304.8	5	46	-1	10	39	14			6	37	PP
PULKOVO	27.81	341.0	5	47A	-1	10	25	-1					
POONA	28.08	117.7	5	49	-1								
TRIESTE	28.17	303.7	5	52K	1	10	38	6			12	31	SCP
SEMIPALATNSK	28.49	46.1	5	55	1								
ROME	28.60	295.6	5	55K	0	10	52	13			12	25	SS
PRUHONICE	28.82	312.7	5	55	-2						6	36	PP
PRAGUE	28.92	312.9	5	56	-1	11	9	25			6	36	PP
KASPERSKE H.	29.14	310.7	5	58K	-1						8	19	
PADOVA	29.42	302.7				11	3	11			7	3	PP
FLORENCE X.	29.65	299.3	5	59	-5	10	50	-5			11	23	SS
HELSINKI	29.73	337.0	6	4	-1								
PRATO	29.77	299.5	6	8	3						12	21	
NURMIJARVI	30.09	337.2	6	7	-1	10	59	-3			7	6	PP
COLLMBERG	30.20	314.6	6	8	-1						12	44	SS
HALLE	30.89	314.5	6	14	-1						7	11	PP
JENA	30.92	313.3	6	10	-5	11	19	4			7	16	PPP
KARLSKRONA	30.92	324.5	6	17K	2								
CHUR	31.26	305.0	6	17K	-1	11	23	2					
PAVIA	31.28	301.7	6	16	-2						16	25	SCS
RAVENSBURG	31.37	306.8	6	18K	-2								
CUGLIERI	31.54	292.1	6	25	4	11	5	-20					
STUTTGART	31.79	308.5	6	21	-2	11	27	-2			7	35	PPP
EBINGEN	31.87	307.4	6	22	-2								
KAJAANI	32.13	343.5	6	25	-1								
UPPSALA	32.15	331.5	6	24	-2	11	36	1			7	21	PP
COPENHAGEN	32.24	322.1	6	27	0	11	42	6					
HEIDELBERG	32.29	309.6	6	25	-2								
MONACO	32.41	298.8	6	30	2						7	31	PP
ISOLA	32.70	299.6	6	31	0	11	59	16					
STRASBOURG	32.73	307.8	6	30	-1						11	45	
ROSELEND	33.11	302.4	6	33	-1	11	51	1					
GOTEBORG	33.41	325.2	6	36K	-1						7	48	PP
MUNSTER	33.60	313.8	6	40	1								
BENSBERG	33.61	311.9	6	38A	-1						7	26	PP
WELSCHBRUCH	33.64	307.2	6	33	-6								

BESANCON	33.72	305.1	6	39	-1					11	55	
UMEA	33.94	338.4	6	41K	-1	12	2	-1		7	52	PP
APATITY	34.18	350.2	6	46K	2	12	14	8		8	0	PP
WITTEVEEN	34.39	315.0	6	46	1							
BOKARO	34.66	97.5	6	50	2	12	14	0		8	4	PP
DOURBES	35.05	309.9	6	50	-1	12	27	7				
DE BILT	35.09	313.4	6	53	2	12	30	10		8	13	PP
SODANKYLA	35.18	346.0	6	52K	0					8	17	PP
UCCLE	35.33	311.0	6	53	0	12	30	6				
KONGSBERG	35.42	327.2	6	53K	-1	12	37	12	7 1	8	13	PP
CLERMONT-FD.	35.57	302.2	6	58	3					22	4	
GARCHY	35.70	304.8	6	55K	-2	12	46	16		7	59	
VISHAKHAPTNM	35.75	108.7	7	2	5	12	42	12		8	25	PP
PARIS	36.23	307.3	6	58	-3							
MADRAS	36.28	118.1	7	0	-2	12	40	1		8	21	PP
SKALSTUGAN	36.44	334.1	7	2K	-1							
LHASA	36.76	85.2	7	6	0	12	46	0				
KIRUNA	36.92	343.1	7	7K	0	12	51	2		8	26	PP
KEVO	37.18	348.2	7	10	1	13	6	13		8	34	PP
CALCUTTA	37.35	97.6	7	7	-4	12	52	-3				
BERGEN	37.70	326.7	7	14	1							
BAGNERES	37.71	297.7	7	15	1					9	30	
FOLINIERE	38.18	307.0	7	15	-2							
KEW	38.34	311.3	7	19	0	13	16	6		8	46	PP
TROMSOE	38.67	344.3	7	21	0					8	20	PP
ALICANTE	38.71	290.2	7	23	1	13	21	5		8	53	PP
SHILLONG	38.92	91.0	7	21K	-3	13	22	3				
DURHAM	39.59	316.4								9	23	
CHITTAGONG	40.26	95.5	7	37	2							
ABERDEEN	40.35	319.9								20	37	
ALMERIA	40.54	288.4	7	35K	-2	13	53	10		9	18	PP
LWIRO	40.63	210.0	7	37	-1	13	50	5		9	18	PP
TOLEDO	41.20	293.3	7	43K	1	13	54	1		9	5	PP
GRANADA	41.36	289.2	7	52	8	13	57	2				
IRKUTSK	43.59	48.0	8	3	1	14	34	6				
VALENTIA	44.53	311.5	8	14	4	14	39	-3				
LANCHOW	45.24	71.2	8	15	0	14	54	2		10	6	PP
LISBON	45.31	292.7	8	17	1	14	44	-9				
AVERROES	45.37	284.9	8	16K	0					10	0	PP
ULAN-BATOR	45.41	54.1	8	20	3	15	3	9				
KHEYS	46.47	2.3	8	26	1					10	14	PP
PORT BLAIR	46.65	108.0								16	56	
CHENGTU	47.02	78.2	8	32	3	15	22	5				
KUNMING	48.08	85.7	8	35	-3	15	26	-6				
PAOTOW	48.85	63.5	8	45	1	15	45	2				
SIAN	49.76	71.9	8	52A	1	15	57	1		10	50	PP
SCORESBY SD.	51.22	336.1	9	3	1	16	27	11				
CHILEKA	51.31	195.9	9	2	0							
BROKEN HILL	51.98	204.0	9	7	0							
PEKING	53.52	62.6	9	21	2	16	55	8		19	5	SCS
TIKSI	54.93	22.5	9	26A	-3	17	7	1		10	37	PCP
YAKUTSK	56.55	34.0								17	29	PS
BULAWAYO	57.27	201.5	9	46	0							
CANTON	57.68	82.7	9	50	1	17	48	5				
NANKING	58.26	70.7	9	55	2	17	55	5				
ALERT	58.63	351.7	9	56	0	18	2	7				
CHANGCHUN	58.81	55.7	9	53	-4	17	52	-5				
BANDEIRA	59.02	219.7	9	59K	1				10 10			
ZO-SE	60.52	70.8	10	11	2	18	25	5				
M.BOUR	61.29	268.1	10	14	0	18	35	6				
GODHAVN	62.08	336.7	10	18K	-1	18	43	4				
CHANGALANE	62.19	195.8	10	19	-1				10 28			
THULE	62.54	346.2	10	20	-2							
VLADIVOSTOK	63.54	54.4	10	24	-5	19	2	4		20	7	SCS
BAGUIO CITY	66.86	85.5	10	50	0	19	41	3				
MAGADAN	67.06	32.6	10	54	3	19	52	11				
RESOLUTE	68.41	350.0	10	59	-1							
Y.-SAKHLINSK	68.77	47.0	11	2	0	20	6	5				
MOULD BAY	69.29	356.7	11	4	-1							
MATUSIRO	70.79	58.5	11	12	-2	20	32	7				
TUKUBASAN	72.28	58.0				20	43	1				
HERMANUS	73.55	204.3				21	5	9				
HALIFAX	79.70	317.5	12	6K	1							
COLLEGE	80.26	6.7	12	7	-1					30	48	PKKP
SEVEN FALLS	81.90	322.7	12	17	0							
YELLOWKNIFE	82.37	351.9	12	18	-1							
SHAWINIGAN	83.26	323.2	12	23	-1							
BREBEUF	84.42	322.9	12	27	-3							
WESTON	85.41	319.5	12	38	3	22	59	-2				

OTTAWA	85.53	323.9	12 36	1						
PALISADES	87.75	319.9	12 49	3	23 17	-6			23 37	*SS
PENNSYLVANIA	89.97	321.9	12 57	1						
MORGANTOWN	91.90	322.3	13 6	1						
MADISON	93.41	330.5	13 17	5					25 35	PS
BANFF	93.50	349.6	13 15	2						
PENTICTON	95.86	351.8	13 22	-1						
HUNGRY HORSE	95.99	347.9	13 24	0						
VICTORIA	97.04	354.1	13 31	2						
RAPID CITY	97.51	339.4	13 32	1						
CUMBERLAND	97.84	323.3	13 34	2	24 11	5			17 20	PP
BLUE MTS.	99.93	349.3	13 42	0	24 28	12			17 48	PP
TULSA	102.19	330.5			24 30	3			32 55	SS
UINTA BASIN	102.73	342.4	13 58	3	24 37	7			18 7	PP
CARACAS	103.77	293.1			24 49	15				
WICHITA MTS.	104.35	331.9	14 6	4	24 46	9			18 17	PP
EUREKA	104.93	347.1	14 6	2					18 29	PP
ALBUQUERQUE	106.89	338.1	17 26	777						
WOODY	109.12	348.5	18 57	777						
TUCSON	110.68	340.7							29 41	PKKP
LA PAZ	120.37	270.2	18 43	-4						
AREQUIPA	123.13	272.2	18 58	5						
WELLINGTON	138.13	115.6							22 53	SKP
KARAPIRO	138.13	110.5	19 34	13					22 53	SKP

MARCH 24 21.H 35.M 27.S EPICENTRE 51.82-178.15 DEPTH= 80.KM

A=-0.62040 B=-0.02006 C= 0.78403 D=-0.0323 E= 0.9995
G=-0.7836 H=-0.0253 K=-0.6207 HT= -6.1

DEPTH OF FOCUS= 0.007R

SE= 1.98

	DELTA DEG.	AZ. DEG.	P M S	O-C S	S M S	O-C S	*PP M S	SUPP. M S	
PETROPAVLOVK	14.20	284.0	3 19A	1	5 57	3			
MAGADAN	18.99	306.2	4 18	0					
COLLEGE	20.32	38.4	4 31	-1	8 13	3		8 41	PCP
KURILSK	23.30	267.1	5 1A	0				5 32	PP
UGLEGORSK	25.26	279.6	5 21A	1					
Y.-SAKHLINSK	25.68	274.8	5 25A	1	9 52	8			
YAKUTSK	29.42	310.7	5 57A	-1	10 46	1			
TIKSI	30.45	330.0	6 7	0				7 9	PP
MOULD BAY	33.05	22.1	6 30A	0	11 45	3			
KIPAPA	34.14	145.2	6 38	-1	12 8	9			
HONOLULU	34.22	145.4	6 38	-2	12 6	6			
MATUSIRO	34.26	260.9	6 40	0	12 3	3			
VICTORIA	34.52	73.3	6 43A	1					
YELLOWKNIFE	34.63	47.0	6 42A	-1					
SEATTLE	35.58	74.1	6 59A	7					
PENTICTON	36.40	70.1	6 58A	0					
HAWAII V.OB.	36.97	142.4	7 13	10					
ABUYAMA	36.97	261.2	6 40A	-23					
BANFF	37.91	65.5	7 9A	-2				9 23	
CHANGCHUN	37.93	280.8	7 10A	-1	11 58	-59			
RESOLUTE	39.18	24.7	7 22	0					
UKIAH	39.63	86.4	7 26	1			7 39		
MINERAL	39.90	83.7	7 28A	0				13 18	PCS
BLUE MTS.	39.98	75.2	7 29A	1	13 32	4		8 52	PP
HUNGRY HORSE	40.11	68.7	7 29	0	13 41	12		9 33	PCP
CALISTOGA	40.32	86.6	7 31A	0				13 21	
BERKELEY	41.00	87.3	7 37A	0	13 45	2		13 21	PCS
LICK	41.71	87.4	7 42A	0				13 24	PCS
ALERT	42.13	10.2	8 17A	31					
BUTTE	42.17	70.9	7 46	0	13 50	-10		9 40	PCP
PRIEST	43.08	88.0	7 54A	0				13 36	
BOZEMAN	43.25	70.5	7 56	1			8 7		
EUREKA	43.89	80.9	8 1A	1	14 28	3	8 13	13 31	SCP
KHEYS	44.21	348.7	8 3	0				14 35	PS
THULE	44.60	18.5	8 6	0					
IRKUTSK	45.50	302.7	8 11	-2				9 51	PCP
SALT LAKE C.	45.61	76.7	8 14	0	14 55	5	8 36	9 43	PCP
PEKING	45.69	282.1	8 15A	0	14 55	4		15 18	*SS
PASADENA	45.92	88.3	8 16	0	14 57	3			
NORD	46.45	3.7	9 20	59					

ULAN-BATOR	46.48	296.4	8	21	0	13	49	-73			
BOULDER CITY	46.79	83.9	8	24	1				8	37	9 53 PCP
PRICE	46.95	77.3	8	25	0						
FLAMING GRGE	46.99	75.0	8	25	0						18 13 SCS
UINTA BASIN	47.26	75.7	8	27A	0	15	18	5	8	40	39 7 PKKP
GLEN CANYON	48.14	80.6	8	33	-1						9 37
ZO-SE	48.41	269.2	8	37A	1	15	35	6			15 55 *SS
RAPID CITY	48.72	67.8	8	37	-1						
LARAMIE	49.03	72.2	8	41	0						11 5
PAOTOW	49.04	286.6	8	42A	1	15	45	7			16 9 *SS
NANKING	49.24	272.0	8	43A	1	15	46	5			16 7 *SS
GOLDEN	50.16	73.7	8	50	1						9 25
TUCSON	51.74	84.6	9	0	-1	16	20	5	9	12	10 13 PCP
ALBUQUERQUE	52.60	79.0	9	7	-1				9	20	
GODHAVN	52.64	21.7	9	6	-2						
SOCORRO	52.90	80.1	9	10	0						
SIAN	53.83	281.2	9	18A	1	16	50	6			9 37 *SP
MANHATTEN	55.65	68.6	10	20	50				10	58	
LANCHOW	55.68	286.3	9	30A	0	17	12	3			17 35 *SS
LAWRENCE	56.57	68.0	9	48	11						
MADISON	56.69	60.7	9	36	-1	17	23	1			10 33 PCP
SCORESBY SD.	56.80	9.3	9	39	1						
WICHITA MTS.	57.51	73.8	9	42	-1	17	37	4	9	56	11 53 PP
TROMSOE	58.22	353.1	9	48	0				10	5	
TULSA	58.34	71.0	9	48K	-1	17	45	1			
SEMIPALATNSK	58.50	312.7	9	50	0						
APATITY	58.62	346.4	9	50K	-1						
CANTON	59.00	268.5	9	53A	-1						
FAYETTEVILLE	59.15	69.7	9	53	-2				10	41	10 55 PP
CHENGTU	59.31	281.6	9	55A	-1	17	57	1			18 21 *SS
SCHEFFERVLLE	59.44	38.7	9	55A	-2						
BAGUIO CITY	59.56	257.5	9	56	-2						
SODANKYLA	59.68	349.2	9	57A	-1						12 21 PP
KIRUNA	59.86	352.0	9	59A	-1				10	14	39 21 PKPPKP
DALLAS	59.89	74.2	9	59	-1						
MANILA	60.62	255.8	10	5	0						
SVERDLOVSK	61.44	327.6	10	10K	0						
LONDON ONT.	61.45	55.9	10	9A	-1						
CLEVELAND	62.38	57.4	10	16K	-1						
OTTAWA	62.47	50.9	10	14A	-3						
KAJAANI	62.69	347.5	10	19	0						10 56 PCP
SHAWINIGAN	63.02	48.3	10	17	-4						
SEPT ILES	63.08	42.0	10	29	8						
BREBEUF	63.40	49.6	10	20K	-3						10 59
SEVEN FALLS	63.48	46.8	10	21	-3						
UMEA	63.81	351.0	10	25A	-1				10	39	39 8 PKPPKP
KUNMING	64.07	278.2	10	28A	0	19	2	6			19 25 *SS
CUMBERLAND	64.44	64.5	10	29	-1	19	3	2			13 9 PP
MORGANTOWN	64.55	57.8	10	31K	0						
SKALSTUGAN	64.65	354.9	10	32A	1				10	49	
ALMATA-2	65.03	308.7	10	33A	-1						
VIBORG	65.75	345.9	10	38	-1						
PULKOVO	66.41	344.7	10	42A	-1	19	28	3			
NURMIJARVI	66.53	347.9	10	42	-2	19	23	-3			11 8 PCP
PALISADES	66.61	53.1	10	43	-1	19	36	9	11	13	
HELSINKI	66.82	347.7	10	45	0						11 14 PCP
WESTON	66.84	50.5	10	43	-2						
LHASA	67.78	289.9	10	53A	2	19	48	7			
PORT MORESBY	67.89	217.3	10	50A	-2						
UPPSALA	67.96	351.5	10	51A	-1				11	9	39 1 PKPPKP
COLUMBIA	68.13	62.7	10	53	0						
HALIFAX	68.61	44.2	10	55	-1						
KONGSBERG	68.71	355.8	10	57K	0				11	13	
MOSCOW	68.80	339.2	10	58A	0						11 21 PCP
SHILLONG	70.32	286.4	11	7A	0						20 15
TASHKENT	70.35	312.4	11	8A	1						20 56 PS
GOTEBORG	70.53	354.3	11	8	0						
KARLSKRONA	71.79	352.0	11	19	3						
CHATRA	72.14	290.7	11	19	1	20	55	23			
CHITTAGONG	72.77	284.3	11	23	2	21	10	31			
KOUMAC	73.69	197.1	11	26A	-1						
DEHRA DUN	74.59	299.4	11	32A	0						26 22
NOUMEA	75.02	194.8	11	34K	-1						
WARSAK DAM	75.08	306.3	11	33	-2						
BOKARO	75.22	289.6	11	38	2						21 35
LAHORE	75.60	302.8	11	38	0						
WITTEVEEN	75.66	357.0	11	40	2						
MUNSTER	76.47	356.3	11	46	3						
HALLE	76.70	353.5	11	44	0						14 35 PP

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COLLMBERG	76.83	352.8	11	44	-1				14	38 PP
LWOW	77.00	345.5	11	45	-1					
JENA	77.30	353.7	11	47	0				14	54 PP
KRAKOW	77.35	348.2	11	48	0				12	19
BENSBERG	77.50	356.6	11	49	1	12	6		12	16 *SP
DARWIN	77.62	231.0	11	50	1					
ASHKABAD	77.92	317.6	11	51	0				22	28 PS
PRUHONICE	78.01	351.7	11	51	0					
VANNOVSKAYA	78.02	317.8	11	53	2					
CHARTERS TS.	78.07	214.0	11	50	-2				12	12
SKALNATE PL.	78.16	347.8	11	50	-2					
UZHGOROD	78.42	346.3	11	54	0					
KASPERSKE H.	78.93	352.2	11	56A	0				13	47
BRATISLAVA	79.54	349.7	12	0	0					
VIENNA-H.	79.54	350.2	12	1	1					
STUTTGART	79.59	355.0	11	59	-1					
TIFLIS	79.65	328.8	12	2	2				15	5 PP
PARIS	79.75	359.6	12	2K	1					
FOLINIERE	79.77	1.6	12	1	0					
STRASBOURG	79.85	356.0	12	2	1				13	53
WELSCHBRUCH	80.08	357.0	12	3	0					
KIROVOBAD	80.11	327.2	12	3A	0					
QUETTA	80.45	307.2	11	56	-9					
GORIS	81.14	326.7	12	9A	1	22	18	8		
BESANCON	81.25	357.2	12	9	0				12	33
GARCHY	81.28	359.2	12	9A	0					
LJUBLJANA	81.90	351.1	12	13	1					
TEHERAN	82.63	321.4	12	18A	2					
HOPE	82.87	70.1	12	19	2					
BRISBANE	82.90	205.8	12	17A	0				22	33
MEDAN	82.98	266.9							13	23
ISOLA	84.28	356.2	12	26	2					
ISTANBUL UN.	84.55	339.7	12	26	0	22	49	5		
BAGNERES	85.48	1.3	12	31	1					
LEMBANG	85.71	253.4	12	29A	-2				15	51
TANGERANG	85.77	254.6	12	31A	-1					
POONA	86.24	295.3	12	34A	0					
BOMBAY	86.51	296.3	12	36	1					
MADRAS	86.97	287.1	12	38	1				17	13
SHIRAZ	87.51	317.6	12	40A	0	23	4	-9	38	30 PKPPKP
TOLEDO	88.53	4.5	12	45A	0	23	10	-12	16	15 PP
SAN JUAN	88.59	61.7	12	47	2			13 0		
RIVERVIEW	89.44	205.2	12	49A	0				24	45
KARAPIRO	89.54	185.0	12	48	-2					
KSARA	89.65	332.2	12	51	1					
CHATEAU	90.81	184.9	12	53	-3					
ST. KITTS	91.27	59.6	12	59	1					
CANBERRA	91.42	206.3	12	59A	1			13 16	16	36 PP
WELLINGTON	92.92	185.3							26	16 PS
CHINCHINA	93.82	77.1	13	10A	1					
TOOLANGI	94.52	208.2	13	12A	-1			13 35		
CARACAS	94.53	66.9	13	16	3					
FUQUENE	94.57	75.3	13	13	0					
BOGOTA	95.04	76.1	13	16	1	23	53	11		
TRINIDAD	97.51	62.3	13	26A	0					
AREQUIPA	113.05	87.5	19	17	49					
LWIRO	125.70	326.1	18	55A	3				32	6 PPS
WILKES	129.58	209.7	19	57	57					
CHILEKA	135.34	311.5	18	53	-18					
MIRNY	135.52	214.8	19	11	0					
BROKEN HILL	137.06	320.4	19	5	-9					
SOUTH POLE	141.63	180.0	18	15	-67					
BULAWAYO	142.10	316.5	19	21	-2					
ARGENTINE I.	144.78	138.1	19	27	-1					
CHANGALANE	145.72	306.4	19	31K	2					

MARCH 25 20.H 17.M 3.S EPICENTRE -56.92 146.33 DEPTH= 0.KM

A=-0.45636 B= 0.30399 C=-0.83626 D= 0.5544 E= 0.8323
G= 0.6960 H=-0.4636 K=-0.5483 HT= -7.9

SE= 5.64

	DELTA DEG.	AZ. DEG.	P M	P S	P O-C S	S M	S S	S O-C S	*PP M	*PP S	SUPP. M	SUPP. S
MACQUARIE I.	7.53	76.5	1	20	-34							

MOORLANDS	14.51	2.5	3 24	-5				
TARRALEAH	14.64	0.4	3 22	-9			7 28	
SAVANNAH	15.23	2.4	3 29	-9				
CAPE HALLETT	18.29	156.8	4 23	6				
ROXBURGH	18.30	61.1	4 9	-8	7 29	-10		
WILKES	19.16	226.0	4 27	-1	8 15	16		
TOOLANGI	19.37	358.0	4 17	-13	8 3	0	4 29	4 42 PP
CANBERRA	21.68	5.9	4 45	-10	8 44	-7	4 51	9 36 SSS
SCOTT BASE	22.16	168.7	4 58	-1				
RIVERVIEW	23.33	10.2	5 5A	-6				6 30 PPP
WELLINGTON	24.07	61.6	5 6	-12	9 37	4		7 3
CHATEAU	26.07	59.7	5 35	-2				
MIRNY	26.18	226.7	5 46	8	10 27	18		
KARAPIRO	27.08	58.0	5 36	-10				
MUNDARING	32.46	307.4	6 34	0	11 48	-1		
PERTH	32.65	306.9			12 1	9		14 13 SS
SOUTH POLE	33.25	180.0	6 40	-1				
BYRD STATION	35.26	162.5	6 56	-3				10 50
CHARTERS TS.	36.78	359.9	7 1	-10	12 47	-9		
NOUMEA	37.60	31.5	7 10A	-8				
KOUMAC	38.67	27.5	7 15K	-12				
PORT MORESBY	47.41	1.1	8 36	-2				
HONIARA	48.55	18.1	8 42	-5	15 44	-5		
N-LAZARVSKYA	48.57	198.4	8 46A	-1				
RABAUL	52.78	7.3			16 30	-15		22 1
AFIAMALU	53.41	53.9			16 52	-4		
LEMBANG	58.42	313.2	10 4K	4	18 13	11		10 38 PCP
TANGERANG	59.42	312.5	10 7	0				10 37 PCP
NHATRANG	75.43	322.4	11 47	-1				
CHANGALANE	80.38	236.2	12 19	4				
KIMBERLEY	81.48	229.2	12 14	-7				
SANTA LUCIA	84.70	149.7						23 7
BULAWAYO	87.33	236.4	12 48	-2				
HONOLULU	90.74	50.3						25 6
KIPAPA	90.88	50.3	13 5	-2				
BROKEN HILL	92.34	239.0	13 11	-3				
TUKUBASAN	92.93	355.0						30 34 SS
MATUSIRO	93.36	353.5	13 16	-2	24 22	-2		
SHILLONG	94.08	312.5	13 15	-7				
LWIRO	102.75	245.3						27 40 PS
QUETTA	109.32	295.6	18 33	777				
SHIRAZ	116.32	284.3	18 45	-1				19 54 PP
BOGOTA	118.89	132.4						30 8 PS
TUCSON	123.18	80.8	18 59	0				
EUREKA	125.90	71.2	18 54	-10				
KSARA	128.52	274.4						22 36
BLUE MTS.	129.12	65.7	19 2	-9				21 14 PP
TIFLIS	129.53	288.0	19 13	2				
UINTA BASIN	129.87	75.1	19 5	-7				38 53 SS
COLLEGE	131.33	31.3	19 12	-3				
WICHITA MTS.	131.73	88.5	19 8	-8				22 41 SKP
TULSA	134.14	89.8	19 18	-2				39 43 SS
CUMBERLAND	139.49	99.1	19 27	-3				40 29 SS
YELLOWKNIFE	141.33	47.2	19 19	-14				
MOSCOW	142.10	299.3	19 34	0				
MADISON	142.68	86.7	19 28	-7				41 14 SS
MOULD BAY	145.27	24.8	19 29	-11				
MORGANTOWN	145.48	100.0	19 31	-9				
LWOW	145.78	283.2	19 36	-5				20 23
UZHGOROD	146.03	280.3	19 40	-1				
WASHINGTON	146.50	103.7	19 25	-17				
ROME	147.14	262.8	19 49	6				
PENNSYLVANIA	147.43	100.5	19 38	-6				
SKALNATE PL.	147.45	279.7	19 40K	-4				20 41 PKP2
PULKOVO	147.46	302.3	19 39	-5				
KRAKOW	148.11	280.8	19 48	3				20 27
BRATISLAVA	148.58	275.9	19 40	-5				20 1
APATITY	148.66	317.1	19 41	-5				
LJUBLJANA	148.73	270.6	19 44	-2				20 9
CHORZOW	148.75	280.6	19 44	-2				20 26
TRIESTE	148.90	269.3	19 50K	4				23 26 SKP
VIENNA-H.	149.03	275.4	19 44	-2				
RACIBORZ	149.06	279.7	19 51	5				20 28
FLORENCE X.	149.07	264.3	19 50	4				
PALISADES	149.70	104.3	19 43	-4				
KAJAANI	150.07	309.4	19 51	3				
HELSINKI	150.10	301.1	19 47	-1				
NURMIJARVI	150.36	301.6	19 47	-1				43 2 SS
PRUHONICE	150.99	277.0	19 49	0				

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SODANKYLA	151.19	315.8	19	47	-2							
RESOLUTE	151.20	28.9	19	46K	-3							
ISOLA	151.62	260.9	19	58	8					20	28	
COLLMBERG	152.52	278.3	19	52A	1					20	11	PKP2
ROSELEND	152.82	263.0	20	7	15							
BREBEUF	152.89	97.7	19	51	-1							
JENA	153.10	276.6	19	54	2					21	18	
ALERT	153.17	8.1	19	51	-1							
HALLE	153.19	278.0	19	53	1					20	15	PKP2
STUTTGART	153.20	270.8	19	59	7							
UMEA	153.22	307.3	19	59	7							
UPPSALA	153.50	298.0	19	59	6							
KIRUNA	153.60	316.3	20	1A	8							
SHAWINIGAN	154.01	96.7	19	54	1							
TOLEDO	154.27	241.2	20	21	27					43	39	SS
GARCHY	155.74	262.4	20	26	30					22	44	

MARCH 25 22.H 46.M 17.S EPICENTRE 0.66 96.61 DEPTH= 37.KM

A=-0.11502 B= 0.99330 C= 0.01144 D= 0.9934 E= 0.1150
G=-0.0013 H= 0.0114 K=-0.9999 HT= 7.2

DEPTH OF FOCUS= 0.001R

SE= 1.82

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
MEDAN	3.57	35.5	0	52A	-2								
TANGERANG	12.09	124.3	2	49K	-3								
DJAKARTA	12.26	123.8	2	51	-4						6	39	
LEMBANG	13.27	124.3	3	6K	-2	5	32	-3			3	16	PP
NHATRANG	16.98	46.9	3	56	0	7	15	13					
MADRAS	20.38	307.7	4	34K	-2	8	30	13			5	0	PP
VISHAKHAPTNM	21.41	323.1	4	45K	-1	8	41	4					
CHITTAGONG	22.07	348.1	4	54	1	8	59	10					
CALCUTTA	23.17	340.3	5	5	1	9	14	5					
HYDERABAD	24.43	314.0	5	19K	3	9	52	21			11	19	SS
KUNMING	25.03	13.2	5	24	2	9	48	7			5	44	*SP
SHILLONG	25.18	349.9	5	22K	-1	9	44	1			8	57	PCP
BOKARO	25.30	336.3	5	26	2	9	49	4			6	5	PP
TOCKLAI	26.00	356.3	5	28	-3								
CHATRA	27.56	341.5	5	46K	1						11	20	
CANTON	27.60	34.9	5	49	4	10	28	5					
BAGUIO CITY	28.35	55.2	5	51	-1	10	39	4					
POONA	28.54	309.8	5	55K	1	10	46	8					
LHASA	29.30	350.1	6	2K	1	10	53	3	6	12			
BOMBAY	29.55	309.3	6	4	1	11	5	11			13	20	SSS
CHENGTU	30.65	12.6	6	12K	-1	11	9	-2	7	22	7	32	*SP
NEW DELHI	33.39	327.9	6	37K	0	11	54	0			7	50	PP
DEHRA DUN	34.37	330.8	6	46	1						17	19	
SIAN	35.35	17.8	6	54K	1	12	28	4			7	12	*SP
LANCHOW	35.85	10.0	6	58	0	12	32	0	7	8			
DARWIN	36.35	112.0	7	3	1								
PERTH	37.19	152.4	7	14	5	12	53	0			8	38	PP
LAHORE	37.26	327.7	7	9	-1								
MUNDARING	37.38	152.0	7	12	1	13	1	5					
NANKING	37.60	31.7	7	14A	2	13	4	5	7	23	7	33	*SP
ZO-SE	38.19	35.2	7	19	2	13	9	1			8	46	PP
WARSAK DAM	40.63	327.3	6	54	-44								
QUETTA	40.70	318.9	7	39	1	13	33	-13					
PAOTOW	41.56	15.5	7	46	1	14	1	2	7	58			
PEKING	43.05	22.1	7	59K	2	14	22	2	8	9	9	43	PP
KHOROG	43.33	330.6	8	1K	1	14	25	1					
ANDIJAN	45.56	334.1	8	19	1	14	55	-2					
FRUNSE	46.38	337.6	8	25K	1								
TASHKENT	47.42	332.0	8	32K	0	15	23	0					
ULAN-BATOR	47.91	9.3	8	36	0	15	27	-3					
ABUYAMA	49.77	42.6	8	51A	0								
CHANGCHUN	50.01	27.0	8	51	-1	15	59	0	9	2	10	36	PP
SHIRAZ	50.89	308.7	8	58K	-1	16	17	6	9	10	11	50	PPP
ASHKABAD	51.12	321.0	9	0	-1								
VANNOVSKAYA	51.27	320.9	9	3	1								
PORT MORESBY	51.31	102.5	9	5	3								
SEMIPALATNSK	51.48	346.7	9	3K	0	16	21	1					
MATUSIRO	52.49	42.4	9	10	-1	16	36	3					
VLADIVOSTOK	52.74	32.1	9	12A	-1	16	36	-1					

CHARTERS TS.	52.80	115.9	9	13	0	15	43	-55				
TUKUBASAN	53.61	43.7				16	48	-1				
TEHERAN	54.57	314.9	9	25K	-1							
ADDIS ABABA	58.16	280.2	9	54	2							
TOOLANGI	58.97	135.7	9	59K	1				10	10	12 9	PP
GORIS	59.89	316.5	10	3K	-1							
KIROVOBAD	60.42	317.7	10	6K	-2							
CANBERRA	60.50	131.9	10	9K	1				10	20		
Y.-SAKHLINSK	61.14	34.3	10	11	-2	18	29	1				
RIVERVIEW	61.54	129.5	10	16K	1	18	38	5			23 4	
TARRALEAH	61.93	140.0	10	19	1							
TIFLIS	61.94	318.2	10	17	-1							
SAVANNAH	62.11	139.1	10	21	2							
MOORLANDS	62.47	139.8	10	23	2							
CHILEKA	62.96	252.1	10	24	-1							
SVERDLOVSK	62.97	338.7	10	23K	-2	18	47	-4				
KSARA	65.58	307.1	10	43	1	19	22	-1			12 59	PP
CHANGALANE	67.50	241.2	10	53	-1				11	4	11 20	PCP
WILKES	67.59	174.0	10	55	1							
LWIRO	67.85	267.3	10	57K	1	20	2	12			23 52	SS
BROKEN HILL	69.03	254.3	11	3K	0							
BULAWAYO	69.63	248.3	11	8K	1							
SIMFEROPOL	70.36	318.0	11	11K	-1	20	19	-1				
MAWSON	72.05	192.9	11	25	3							
MOSCOW	72.48	329.4	11	23K	-1							
ISTANBUL UN.	72.81	312.9	11	25K	-1	20	50	2				
PETROPAVLOVK	73.00	33.9	11	27K	0							
TIKSI	73.80	10.2	11	30K	-2	20	57	-2				
KIMBERLEY	74.43	240.0	11	35K	-1							
ATHENS	76.14	308.9	11	44K	-1							
SOFIA	77.30	313.6	11	52	0							
PULKOVO	77.68	331.7	11	53K	-1							
LWOW	78.31	320.9	11	58	0							
UZHGOROD	79.16	319.4	12	3	1							
APATITY	79.40	339.6	12	3K	-1	22	5	5			20 23	
BELGRADE	79.73	315.4	12	6A	1						22 49	PS
KAJAANI	80.30	335.4	12	7K	-1							
HELSINKI	80.36	331.2	12	8K	-1							
SKALNATE PL.	80.59	319.7	11	48	-22						13 9	
NURMIJARVI	80.60	331.5	12	9K	-1	22	9	-4			23 19	PPS
KRAKOW	80.95	320.6	12	11	-1						12 23	PCP
WELLINGTON	81.54	131.8	12	13	-2							
CHORZOW	81.59	320.7	12	15	0						12 26	PCP
KARAPIRO	81.68	128.3	12	17	1							
SODANKYLA	81.78	338.4	12	16K	0						17 11	PPP
CHATEAU	81.84	129.6	12	23	7							
KHEYS	81.98	354.1	12	16	-1							
RACIBORZ	82.05	320.4	12	18	0						12 29	PCP
BRATISLAVA	82.51	318.4	12	20K	0						12 58	
MESSINA	82.56	308.3	12	21	1						19 36	
ZAGREB	82.99	316.0	12	25	3							
VIENNA-H.	83.00	318.4	12	23K	1						12 34	PCP
UMEA	83.41	334.3	12	24	0	22	39	-2	12	35		
BANDEIRA	83.69	255.0	12	19K	-7						12 31	PCP
UPPSALA	83.89	330.1	12	26K	-1				12	37		
LJUBLJANA	84.02	316.1	12	29K	1						15 44	PP
KIRUNA	84.19	338.3	12	28	0				12	39		
PRUHONICE	84.38	320.0	12	31	2						13 6	
KARLSKRONA	84.44	326.3	12	27K	-3				12	38		
PRAGUE	84.46	320.1	12	31K	1							
TRIESTE	84.53	315.6	12	30K	0							
TROMSOE	85.10	339.9	12	32	-1				12	43		
ROME	85.18	311.8	12	32K	-1	22	25	-34				
COLLMBERG	85.48	321.3	12	35	0						15 55	PP
HALLE	86.15	321.4	12	38	0						15 53	PP
COPENHAGEN	86.15	325.6	12	39K	1							
FLORENCE X.	86.19	313.7	12	30	-8							
JENA	86.35	320.8	12	41	2	22	58	-12			16 2	PP
GOTEBORG	86.56	327.6	12	40K	0				12	51		
SKALSTUGAN	86.88	333.5	12	42K	0				12	52		
STUTTGART	87.74	318.6	12	46	0							
KONGSBERG	87.90	329.5	12	47K	0				12	58		
STRASBOURG	88.74	318.4	12	50	-1						14 24	
MUNSTER	88.86	321.8	12	52	1							
N-LAZARVSKYA	88.89	199.3	12	54K	3							
BENSBERG	89.14	320.8	12	54K	2				13	4	13 44	
ISOLA	89.22	314.0	12	53	0						13 47	
WITTEVEEN	89.44	322.6	12	54	0							

ROSELEND	89.52	315.5	12	54	0		14 17
WELSCHBRUCH	89.68	318.2	12	52	-3		
BESANCON	89.95	317.1	12	56	0		13 19
DOURBES	90.79	319.9	13	4	4		13 47
GARCHY	91.93	317.2	13	6K	0		
CLERMONT-FD.	91.97	315.6	13	7	1		
PARIS	92.23	318.7	13	8K	1		
NORD	92.68	352.2	13	7	-2		
KEW	93.81	321.5	13	15	1		
FOLINIERE	94.19	318.8	13	17	1		
DURHAM	94.20	324.9	13	15A	-1		
ALERT	96.41	357.3	13	26K	0		
MOULD BAY	100.53	8.2	13	45	0		
RESOLUTE	104.45	3.1	14	3	1		
YELLOWKNIFE	112.77	15.1	18	33	1		
PENTICTON	121.28	26.9	18	54K	1		
SCHEFFERVLLE	123.04	348.6	18	53	1		
HUNGRY HORSE	124.43	24.3	18	56	1		
BLUE MTS.	125.61	29.2	18	58	1		20 52 PP
SHASTA	125.69	36.1	18	59K	2		
MINERAL	126.38	36.0	19	1A	2		
CALISTOGA	126.86	38.2	19	2A	2		
BUTTE	126.88	25.1	19	0	0		20 53 PP
BERKELEY	127.53	38.8	19	4A	3		43 1 SSS
BOZEMAN	127.80	24.3	19	4	2		21 4 PP
LICK	128.24	38.9	19	5K	3		
PRIEST	129.60	39.5	19	9A	4		
EUREKA	130.16	33.0	19	8	2		21 24 PP
SEVEN FALLS	131.16	348.6	19	9A	1		
SHAWINIGAN	132.07	350.1	19	11	1		
PASADENA	132.44	39.9	19	14	4		
UINTA BASIN	132.75	27.3	19	12	1		21 40 PP
BREBEUF	133.23	350.6	19	13	1	19 24	
BOULDER CITY	133.26	35.5	19	15	3		21 39 PP
LARAMIE	133.53	23.1	19	15	2		21 54
OTTAWA	133.64	352.5	19	13	0		
GOLDEN	135.08	24.1	19	17	2		
MADISON	135.80	6.7	19	14	-3		21 39 PP
PALISADES	137.64	349.3	19	23	3		22 58 PKS
TUCSON	138.24	35.9	19	24	3		
PENNSYLVANIA	138.43	353.7	19	23	2		
ALBUQUERQUE	138.52	29.1	19	14	-8		
MORGANTOWN	139.78	355.9	19	19	-5		
WASHINGTON	140.21	352.3	19	9	-16		
ST. LOUIS 1	140.39	8.4	19	26	1		
LUBBOCK	141.77	25.3	19	24	-3		22 44
TULSA	141.83	16.4	19	25A	-3		
WICHITA MTS.	142.04	20.5	19	24	-4		22 33 PP
BLACKSBURG	142.22	356.1	19	25	-3		
CHAPEL HILL	143.38	354.1	19	29	-1		
CUMBERLAND	143.88	3.0	19	29	-2		22 46 PP
COLUMBIA	145.45	356.5	19	35	1		
ANTIGUA	152.36	310.8	19	54	9		
SAN JUAN	154.57	318.9	19	59	11		
TRINIDAD	155.41	297.8	19	54	5		
LA PAZ	158.23	222.9	20	0	8		23 58 PP
CARACAS	160.22	304.5	19	59A	4		20 28 PKP2
AREQUIPA	160.40	216.2	19	59	4		
HUANCAYO	166.14	215.0	20	4	3		
FUQUENE	168.59	302.4	20	4	2		
BOGOTA	169.31	299.5	20	5	3		20 15 PKP2
CHINCHINA	170.43	305.8	20	7K	4		20 17 PKP2

MARCH 26 9.H 48.M 14.S EPICENTRE -30.04-177.65 DEPTH= 0.KM

A=-0.86639 B=-0.03560 C=-0.49810 D=-0.0411 E= 0.9992
G= 0.4977 H= 0.0204 K=-0.8671 HT= 1.8

SE= 2.68

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
RAOUL ISLAND	0.82	343.2	0	18	-1								
ONERAHI	8.81	227.5	2	20	8								
KARAPIRO	9.69	213.9	2	23	-1								
CHATEAU	10.72	209.7	2	37	-1								
WELLINGTON	12.79	206.7	3	0	-6	5	21	-9			12	23	SCP

NOUMEA	16.21	294.7	3	57A	6	7	16	25			
AFIAMALU	16.94	19.9	3	54A	-6	6	45	-23			
PORT VILA	17.72	310.6	4	12K	2						
ROXBURGH	18.50	210.0	4	14	-5	7	35	-9			
KOUMAC	18.85	295.9	4	25	1						
RIVERVIEW	26.69	253.7	5	44A	1	10	20	3	11	32	SS
CANBERRA	28.48	250.5	6	0A	1	10	46	0	9	14	PCP
MACQUARIE I.	29.68	207.9	6	10	0						
SAVANNAH	30.58	237.9	6	18	0						
MOORLANDS	30.72	236.6	6	19	0				12	57	SCP
TARRALEAH	31.22	237.0	6	25	2				13	7	SCP
TOOLANGI	31.39	246.2	6	25K	0	11	31	-1	16	52	SCS
CHARTERS TS.	34.04	278.4	6	47A	-1				12	9	
ADELAIDE	36.91	250.7	7	12K	0	13	14	16	17	23	SCS
RABAUL	38.39	306.2	7	19A	-6	13	10	-10			
PORT MORESBY	38.74	294.6	7	26	-2						
CAPE HALLETT	42.82	185.4	8	5	4						
SCOTT BASE	48.42	184.4	8	48	2						
HAWAII V.OB.	53.70	26.5	9	28	2	17	8	19			
HONOLULU	54.40	22.6	9	28	-3	17	8	-1			
KIPAPA	54.54	22.6	9	30	-2	17	8	-3			
BYRD STATION	55.23	169.6	9	39	2				17	7	
WILKES	55.61	207.7	9	39	-1	17	20	-5			
MUNDARING	55.91	249.8	9	38	-4	17	22	-7			
PERTH	56.22	249.7	9	43	-1	17	31	-2	12	11	PP
GUAM	56.42	314.5	9	43	-3	17	49	13			
SOUTH POLE	60.13	180.0	10	11	-1						
MIRNY	62.59	206.8	10	27A	-1	18	48	-7			
MAWSON	72.75	200.4	11	31A	-1	20	50	-7	22	0	PPS
LEMBANG	73.41	271.7	11	32K	-4	20	59	-6	14	18	PP
MANILA	73.86	297.9	11	38	0	20	56	-14			
DJAKARTA	74.41	271.8	11	41	-1	20	59	-17	15	54	PPP
TANGERANG	74.59	271.8	11	38A	-5	21	8	-10	14	23	PP
BAGUIO CITY	75.30	299.1	11	43	-4	21	32	6	26	28	SS
MERA	76.04	325.1	11	47	-4						
OSIMA	76.14	324.7	11	54	3	21	36	1			
AJIRO	76.50	324.7	11	50	-3						
YOKOHAMA	76.53	325.3	11	55	1				22	41	
OMAESAKI	76.59	323.8	11	54	0						
MISIMA	76.63	324.6	11	55	1						
TOKYO C.M.O.	76.68	325.5	11	58	4	21	26	-15			
SHIZUOKA	76.79	324.2	11	56	1				19	14	
MITO	76.89	326.4	11	55	-1						
KAKIOKA	76.91	326.1	11	53	-3						
TUKUBASAN	76.94	326.1	11	52A	-4	21	38	-6	11	59	14 54 PP
HAMAMATU	76.94	323.6	11	54	-2						
SIOMISAKI	77.00	321.4	11	57	1	22	4	20			
HUNATU	77.02	324.7	11	54	-2						
ONAHAMA	77.14	327.0	11	59K	2						
KUMAGAYA	77.23	325.6	11	57A	-1	22	14	27			
OWASE	77.24	322.1	11	59	1	21	43	-4			
TITIBU	77.25	325.2	11	58	0						
KOHU	77.26	324.7	11	58	0	21	34	-13			
UTUNOMIYA	77.31	326.1	11	58	0						
IIDA	77.51	324.1	12	0	1						
SHIRAKAWA	77.60	326.7	11	59	-1						
NAGOYA	77.68	323.4	11	57	-3				14	2	
KAMEYAMA	77.70	322.8	12	1	1	21	47	-5			
OIWAKE	77.79	325.1	12	1	0	22	2	9			
YAKUSIMA	77.80	316.0	12	2	1						
NARA	77.90	322.3	11	59	-2						
GIHU	77.96	323.4	12	3	1						
ASHIZURI	77.98	319.2	12	4	2						
HUKUSIMA	77.99	327.2	12	6	4						
MATUMOTO	78.01	324.7	11	59	-3						
OSAKA	78.04	322.1	12	1	-1	21	57	1			
TOKUSIMA	78.11	321.1	12	3	1						
MATUSIRO	78.12	325.0	11	59	-3	21	38	-19			
HIKONE	78.13	323.0	12	5	2	21	54	-3			
SUMOTO	78.14	321.5	12	3	0	21	53	-4			
ISINOMAKI	78.15	328.2	12	1	-2						
ABUYAMA	78.19	322.3	11	57A	-6						
SENDAI	78.21	327.8	12	7	4						
KYOTO	78.21	322.5	12	2	-1	21	43	-15			
NAGANO	78.23	325.1	12	4	1	22	20	22			
KOBE	78.25	321.9							13	3	
MIYAZAKI	78.29	317.6	12	10	7						
KOTI	78.30	320.1	12	5	2	21	54	-4			
YAMAGATA	78.45	327.5	12	5	1						

TSURUGA	78.52	323.1	12	4	-1					
TAKADA	78.54	325.4	11	59	-6					
KAGOSIMA	78.57	316.8	12	7	2				12	55
TAKAMATU	78.59	320.9	12	4	-1				19	20
TOYAMA	78.75	324.5	12	8	2				18	57
MIZUSAWA	78.80	328.5	12	9	3	22	14	10		
MIYAKO	78.85	329.3	12	8	2					
TOYOOKA	79.08	322.2	12	7	-1	21	46	-21	30	33
OOITA	79.14	318.6	12	11	3					
MORIOKA	79.25	328.9	12	10	1					
N-LAZARVSKYA	79.25	183.2	12	8A	-1	22	7	-2	15	0 PP
AIKAWA	79.26	326.0							23	29
KUMAMOTO	79.38	317.8	12	11	2					
WAZIMA	79.43	324.7	12	7	-3					
HATINOHE	79.76	329.6	12	14	3					
NAGASAKI	79.79	317.2	12	8	-4	22	10	-4		
YONAGO	79.80	321.2	12	13	1					
SAGA	79.92	317.8	12	16	4				13	4
MATSUE	79.97	321.1	12	17	5					
HAMADA	80.11	320.1	12	15	2	22	13	-5		
HUKUOKA	80.11	318.1	12	16	3	22	17	-1		
AOMORI	80.33	329.3	12	19	5					
NEMURO	80.43	333.7	12	19A	4	22	44	23		
HIROO	80.44	331.7	12	20	5					
URAKAWA	80.56	331.3	12	19	3					
KUSIRO	80.59	332.8	12	15A	-1	22	21	-2		
OBIHIRO	81.03	332.0	12	21	3					
HAKODATE	81.14	329.9	12	18	-1	22	28	0		
TOMAKOMAI	81.46	330.8	12	23	3					
MORI	81.46	329.9	12	22	2					
NHATRANG	81.89	289.1	12	19	-4	22	38	2		
SAPPORO	81.92	330.9	12	22	-1	22	34	-2		
ASAHIGAWA	82.08	332.0	12	22	-2					
SUTTSU	82.17	330.1	12	27	3					
CONCEPCION	83.67	129.0	12	36	4					
ZO-SE	84.11	310.9	12	32	-2	22	43	-15	22	53 SKS
Y.-SAKHLINSK	84.63	334.0	12	37A	0	22	57	-7		
CANTON	84.74	300.3	12	36	-1					
PRIEST	84.84	43.0	12	37A	-1				38	54 PKPPKP
PASADENA	85.01	45.8	12	37	-2	23	6	-1	16	4 PP
LICK	85.09	41.5	12	38A	-1				38	57 PKPPKP
BERKELEY	85.11	40.8	12	38A	-1	22	16	-52	38	58 PKPPKP
PETROPAVLOVK	85.25	345.9	12	40	0					
UKIAH	85.45	39.4	12	40	-1					
CALISTOGA	85.46	40.1	12	39A	-2				38	57 PKPPKP
MANZANILLO	85.76	65.3							16	14
VLADIVOSTOK	86.27	325.5	12	45A	0				23	29 SCS
NANKING	86.30	310.4	12	43	-2					
MEDAN	86.30	276.2	12	46A	1				23	15
SHASTA	87.01	38.7	12	46	-2					
MINERAL	87.20	39.4	12	47A	-2				38	49 PKPPKP
GUADALAJARA	87.45	64.5	12	54	3	23	26	-5	13	26
BOULDER CITY	88.28	46.2	12	54	-1				30	45 PKKP
TUCSON	88.58	51.2	12	56	0				16	23 PP
CHIHUAHUA	89.79	56.5	13	24	22	23	52	-1	29	46
EUREKA	89.83	42.9	13	1A	-1				30	6 PKKP
TACUBAYA	90.03	67.6	13	17	14	24	6	11	23	38
CHANGCHUN	90.13	322.6	13	0	-3	23	44	-12		
GLEN CANYON	90.94	47.1	13	7	0				30	36 PKKP
SEATTLE	91.93	33.8	13	7	-5	23	41	-31		
VICTORIA	92.01	32.7	13	10	-2					
ANTOFAGASTA	92.08	118.8	13	15	3	23	48	-25	17	13
VERA CRUZ	92.40	69.3	13	22	8	24	26	10	13	46
BLUE MTS.	92.57	38.2	13	12A	-2	24	27	10	16	59 PP
PEKING	92.88	315.3	13	13	-3					
SALT LAKE C.	93.10	43.9	13	15	-2				30	28 PKKP
ALBUQUERQUE	93.12	51.1	13	16	-1				38	31 PKPPKP
NANA	93.23	105.7	13	20	2					
SITKA	93.83	21.6	13	25	5	24	34	6	17	10 PP
KUNMING	93.93	296.7	13	20	-1					
UINTA BASIN	94.22	45.3	13	21A	-1	24	42	10	17	9 PP
SIAN	94.26	307.2	13	21	-1					
PENTICTON	94.37	33.8	13	20	-3					
SPOKANE	94.45	36.0	13	25	2	24	1	-32		
HUANCAYO	94.45	106.5	13	26	3					
AREQUIPA	95.24	112.3	13	28	1					
PORT BLAIR	95.43	280.3	13	25	-3	23	56	-7	24	52 PS
LUBBOCK	95.54	54.4	13	26	-2	24	1	-3		

CHENGTU	95.84	302.0	13	28	-2	24	28	22	23	59 SKS
BUTTE	95.89	39.4	13	27	-3				17	33 PP
GOLDEN	96.50	47.7	13	32	-1					
BOZEMAN	96.52	40.4	13	30	-3				17	41 PP
HUNGRY HORSE	96.55	37.0	13	22	-11				38	23 PKPPKP
PAOTOW	97.02	313.0	13	39A	4					
LARAMIE	97.26	46.3	13	37	1				17	47
COLLEGE	97.42	12.4	13	33	-4				39	2 PKPPKP
BANFF	97.56	34.1	13	34	-3					
LA PAZ	97.89	114.1	13	46	7	24	58	42		
WICHITA MTS.	98.44	54.8	13	39	-2	24	20	1	17	47 PP
MERIDA	98.58	70.9	13	7	-35	24	22	2		
LANCHOW	98.74	306.5	13	47	4					
DALLAS	98.80	57.2	13	44	1					
RAPID CITY	100.24	44.9	13	48	-1					
TOCKLAI	100.97	294.5				24	30	-2		
YAKUTSK	101.01	337.6	13	52	-1					
TULSA	101.02	55.0	13	55	2	24	30	-2	18	8 PP
CHITTAGONG	101.30	289.3	13	28	-26					
BALBOA HTS.	101.40	86.2	13	56	1					
FAYETTEVILLE	102.24	55.4	13	59	1				18	0
SHILLONG	102.73	292.2	14	0	-1	25	0	20		
ULAN-BATOR	102.83	318.1	14	3	2				18	8 PP
LAWRENCE	102.86	52.4	14	6	5					
CHINCHINA	102.88	91.7	14	5	4	24	39	-2	18	32 PP
BOGOTA	104.05	92.8	14	11A	5	24	48	2	18	35 PP
FUQUENE	104.76	92.2	14	15	5					
YELLOWKNIFE	104.99	25.4	14	14	3					
LHASA	105.21	295.6	14	16	777					
VISHAKHAPTNM	106.30	281.3	14	22	777				21	12
IRKUTSK	106.41	321.2	14	16A	777					
MADRAS	106.83	275.5	17	46	777				18	38 PP
BOKARO	106.90	288.0	14	25	777	25	17	18	19	10 PP
CHATRA	107.07	291.4	18	32	777	25	14	14	19	17 PP
KODAIKANAL	107.88	271.6	14	43	777				25	19
TIKSI	107.99	344.5	14	23	777	25	8	4	17	30
CUMBERLAND	108.31	59.1	14	22	777	25	2	-3	19	3 PP
MADISON	108.51	50.2	14	27	777	25	3	-3	19	0 PP
CHICAGO CGS.	109.34	52.4				24	55	-14	19	8 PP
MOULD BAY	111.99	12.7	14	43	-234				18	34 PKP
BLACKSBURG	112.77	59.2	14	46	-233				18	32 PKP
CARACAS	113.07	91.0	14	50A	-229				26	53
CLEVELAND	113.46	54.5	18	43K	3	25	41	15		
HERMANUS	113.93	195.2							19	37 PP
MORGANTOWN	113.96	56.9	18	36	-5				19	52
POONA	114.74	277.8	18	27	-15				29	22
BOMBAY	115.78	277.8	18	40	-4				29	34
DEHRA DUN	115.81	291.4	18	39	-5				25	58
GEORGETOWN	115.83	58.5	15	1	-224				29	36
WASHINGTON	115.83	58.5	18	41	-4				19	52 PP
PENNSYLVANIA	115.85	56.2	14	58	-227					
RESOLUTE	116.81	17.2	15	2	-225					
CHANGALANE	117.12	210.1	18	50	3	25	44	4	20	8 PP
SAN JUAN	117.28	83.7	18	54	7				29	16 PKKP
KIMBERLEY	117.74	202.2	18	49	1				15	28
TRINIDAD	117.93	93.7	18	52	3				20	6 PP
OTTAWA	118.67	51.8	15	10	-220				18	49 PKP
FORDHAM	118.76	57.2	15	7	-223				20	14
PALISADES	118.78	57.0	18	50	0	26	1	15	15	15 P
LAHORE	119.24	291.5	18	52	1					
SEMIPALATNSK	119.94	313.8	18	52	-1					
FORT FRANCE	120.01	89.7	18	57	4			20	30	
BREBEUF	120.13	52.1	15	21	-212	25	48	-2	20	22 PP
ANTIGUA	120.45	86.9	18	58	4					
SHAWINIGAN	120.94	51.0	18	54	-1				29	2
WESTON	121.01	56.1	14	58	-237				18	56
FRUNSE	122.12	304.2	18	56	-1				20	37 PP
WARSAK DAM	122.21	293.4	18	56	-1					
SEVEN FALLS	122.36	50.7	18	58	1					
ALERT	122.85	8.2	18	55	-3					
KHOROG	123.16	297.3	18	58	-1				26	24
THULE	123.50	15.5	18	58	-1					
BULAWAYO	124.07	210.1	19	1A	0					
CHILEKA	124.73	219.2	19	2A	0					
QUETTA	124.84	287.6	19	1	-1				20	55 PP
KHEYS	124.86	350.5	18	59	-3	26	4	-1	30	42 PS
TASHKENT	125.70	301.4	19	1	-3				26	29
SEPT ILES	125.71	47.5	19	12A	8					

SCHEFFERVLLE	125.80	41.8	19	2	-2					
HALIFAX	126.94	54.7	19	5K	-1					
NORD	127.82	3.5	19	6	-2					
BROKEN HILL	129.11	213.3	19	4	-6					
GODHAVN	129.70	22.5	15	57	-194					
SVERDLOVSK	131.81	321.1	19	13	-2					
ASHKABAD	133.50	295.4	19	17	-2					
BANDEIRA	134.09	194.8	19	25	5			19 33	21 56	PP
SHIRAZ	136.77	282.6	19	11	-14				22 10	
SCORESBY SD.	137.29	11.8	19	27	1					
APATITY	138.17	342.7	19	16	-11				22 6	PP
TEHERAN	138.77	291.2	19	27	-1				23 5	PKS
LWIRO	139.14	222.9	19	26K	-3				22 18	PP
TROMSOE	139.25	351.2	19	20	-9					
SODANKYLA	139.92	345.7	19	20	-10				22 26	PP
LUANDA	139.94	196.8	19	39K	9				22 32	PP
ADDIS ABABA	140.08	246.0	19	36	5					
KIRUNA	140.69	349.3	19	25	-7				22 44	PP
KAJAANI	142.35	342.1	19	26	-9				22 53	PKS
REYKJAVIK	142.60	17.3	19	37A	2					
GORIS	142.97	296.9	19	33	-3				34 36	
SIDA	143.83	15.2	19	39A	2					
MOSCOW	144.21	326.0	19	37	-1				22 51	PP
UMEA	144.34	346.5	19	33A	-5				22 54	PP
PULKOVO	144.80	335.7	19	35	-4				23 4	PKS
SKALSTUGAN	145.85	352.1	19	38A	-3				29 55	
NURMIJARVI	146.08	340.3	19	39K	-2				23 6	PP
HELSINKI	146.26	339.7	19	40	-1					
UPPSALA	148.46	345.3	19	45A	0				23 20	PP
BERGEN	149.58	357.1	19	52	5				23 33	PP
KONGSBERG	149.98	352.6	19	50A	3				23 28	PP
SIMFEROPOL	150.95	309.6	19	50	1				23 27	PP
KSARA	151.37	286.3	19	53	4				23 35	PP
GOTEBORG	151.55	349.1	19	52A	2					
JERUSALEM	151.80	282.0	19	53	3					
KARLSKRONA	152.26	344.0	19	54	3					
ABERDEEN	152.70	5.3				26	25 -32		43 26	SS
COPENHAGEN	153.38	347.2	19	54	2					
LWOW	154.35	326.5	19	56	2					
BACAU	154.79	317.7	20	21	27				23 2	
FOCSANI	155.06	315.7	20	24	29				21 20	
DURHAM	155.13	5.4	20	0A	5	26	51 -9		23 59	PP
PONTA DELGDA	155.56	64.2	19	57A	2				20 23	PKP2
ISTANBUL UN.	155.80	304.2							24 2	PP
KRAKOW	156.02	331.4	20	0	4				34 13	SKSP
LOME	156.18	177.2	20	3	7				20 37	PKP2
CHORZOW	156.21	332.9	19	59	3				20 34	PKP2
VALENTIA	156.22	19.6	19	56	0				23 58	
M.BOUR	156.33	127.0	20	2A	6				24 6	PP
BUCHAREST	156.37	313.9	20	16	20				21 4	
SKALNATE PL.	156.54	329.6	19	55	-2				23 18	PKS
CAMPULUNG	156.59	316.8	20	17	20				21 34	
RACIBORZ	156.69	333.6	20	0	3				24 1	PP
WITTEVEEN	157.02	353.3	19	58	1					
COLLMBERG	157.33	342.5	19	57	-1				20 31	PKP2
HALLE	157.40	344.3	19	57	-1				20 33	PKP2
MUNSTER	157.75	351.4	20	4	6					
DE BILT	157.86	355.4	20	3A	5				24 10	PP
PRAGUE	158.02	338.9	20	0A	2				24 14	PP
JENA	158.02	344.3	19	56	-2				24 12	PP
HURBANOVO	158.42	330.0	20	1	2				26 7	
TIMISOARA	158.46	321.9	20	4	5					
KEW	158.50	4.6	20	2	3				24 9	PP
BRATISLAVA	158.65	332.1	19	57	-2				25 28	PCP
BENSBERG	158.79	351.6	20	3A	4			20 15	24 15	PP
VIENNA-H.	158.88	333.3	19	59	-1				24 32	PP
SOFIA	158.98	312.6	19	59	-1	27	12 8		24 27	PP
UCCLE	159.21	356.4	20	3	3				24 19	PP
BELGRADE	159.47	320.9	20	3K	3				27 29	PP
DOURBES	159.89	355.8	20	7	6				24 43	PP
HEIDELBERG	160.07	347.7	20	4	3					
SKOPJE	160.55	312.9							21 29	
STUTTGART	160.56	346.1	20	0A	-1				24 26	PP
ATHENS	160.63	299.8	19	59A	-2				20 10	PKP2
TUBINGEN	160.83	346.3	20	6	4					
ZAGREB	160.97	329.6	20	6A	4				31 36	
STRASBOURG	161.03	348.9	20	1	-1	27	23 17		24 29	PP
FOLINIERE	161.17	5.8	20	0	-2					
EBINGEN	161.19	346.2	20	5	3					

SARAJEVO	161.19	321.6	19	51	-11						31	28	
LJUBLJANA	161.40	332.6	19	59A	-3						24	33	PP
WELSCHBRUCH	161.40	351.6	20	3	1						24	40	PP
RAVENSBURG	161.42	344.5	20	1	-1								
TITOGRAD	161.63	316.9	20	6	4						25	12	PP
TRIESTE	162.04	333.3	20	1	-2	28	16	70			24	35	PP
BESANCON	162.59	351.7	20	6	3						25	6	PP
PADOVA	162.93	336.6	20	6	2						24	42	PP
PAVIA	163.96	342.3									46	19	SSS
TARANTO	164.01	314.6	20	6	1								
ROSELEND	164.02	349.1	20	8	3						24	51	PP
CLERMONT-FD.	164.29	358.0	20	8	3						44	31	
FLORENCE X.	164.57	335.1	20	2A	-3						24	57	PP
ISOLA	165.40	346.5	20	8	2						24	54	PP
ROME	165.62	328.1	20	5A	-1						24	57	PP
REGGIO CALA.	166.37	309.6	20	10	3						23	57	
MESSINA	166.38	310.2	20	10	3	27	8	-1	20	23	25	7	PP
BAGNERES	166.88	7.1	20	10	3								
LISBON	167.16	44.6	20	13A	6	27	7	-3	20	17	25	11	PP
BARCELONA	168.64	0.9									31	55	
TOLEDO	168.87	26.4	20	9A	1	26	53	-18			25	8	PP
TORTOSA	169.14	7.5	20	13	4						25	26	PP
AVERROES	171.06	66.2	19	55A	-15						25	20	
ALICANTE	171.39	15.0	20	14K	4	27	14	2			25	27	PP
ALMERIA	172.11	29.4	20	9K	-1						25	28	PP
BENI ABBES	176.07	87.7	20	31	19						26	6	PP

MARCH 26 13.H 25.M 0.S EPICENTRE -29.91-177.85 DEPTH= 24.KM

A=-0.86766 B=-0.03254 C=-0.49609 D=-0.0375 E= 0.9993
G= 0.4957 H= 0.0186 K=-0.8683 HT= 1.8

SE= 3.04

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
RAOUL ISLAND	0.66	354.9	0	14	0								
ONERAHI	8.77	226.2	2	15	7								
KARAPIRO	9.70	212.7	2	19	-2								
CHATEAU	10.75	208.7	2	32	-3						2	57	
WELLINGTON	12.83	205.8	3	3	-1	5	16	-11					
NOUMEA	16.00	294.6	3	55	10	7	15	33					
AFIAMALU	16.88	20.7	3	47	-9	6	50	-12					
PORT VILA	17.50	310.8	4	9K	5								
ROXBURGH	18.53	209.4	4	11	-6	7	26	-14					
KOUMAC	18.63	295.9	4	17	-1								
RIVERVIEW	26.56	253.5	5	40A	2	10	14	5			6	39	PPP
CANBERRA	28.36	250.3	5	55K	1	10	42	4			6	50	PP
HONIARA	29.08	309.9	6	0A	-1	10	43	-7					
MOORLANDS	30.65	236.3	6	15	0						9	13	
TOOLANGI	31.28	246.0	6	22	2	11	34	10			13	4	SS
ADELAIDE	36.78	250.5	7	10K	2	12	50	0			8	46	PP
PORT MORESBY	38.52	294.7	7	24	2								
CAPE HALLETT	42.94	185.3	8	2	3								
SCOTT BASE	48.54	184.3	8	43	0								
DARWIN	50.51	278.8	9	0	2						14	19	
HAWAII V.OB.	53.66	26.7	9	23	1	16	55	2					
HONOLULU	54.35	22.8	9	27	0	17	6	4					
KIPAPA	54.48	22.9	9	28	0	17	9	5					
BYRD STATION	55.39	169.6	9	34	0						17	22	
WILKES	55.64	207.6	9	36	0	17	13	-6					
MUNDARING	55.79	249.8	9	34	-3	17	17	-4					
PERTH	56.10	249.7	9	39	-1	17	25	0			12	5	PP
GUAM	56.20	314.7	9	39	-1						13	13	
SOUTH POLE	60.26	180.0	10	11	2								
MIRNY	62.63	206.8	10	22A	-3	18	43	-7					
MAWSON	72.81	200.5	11	28	0								
LEMBANG	73.22	271.7	11	30A	-1	20	56	0			14	20	PP
MANILA	73.64	298.0	11	33	0	20	53	-8					
DJAKARTA	74.22	271.9				21	4	-4			11	40	PCP
TANGERANG	74.40	271.8	11	34A	-4	21	22	12			14	16	PP
BAGUIO CITY	75.08	299.1	11	40	-2	21	20	3			22	2	SCS
TUKUBASAN	76.73	326.2	11	50A	-1	21	32	-3			15	6	PP
MATUSIRO	77.91	325.1	11	54	-3	21	32	-16					
ABUYAMA	77.97	322.4	11	54A	-4								
N-LAZARVSKYA	79.37	183.3	12	3K	-2	22	1	-2					

NHATRANG	81.68	289.2	12	17	-1					15	18 PP
ZO-SE	83.89	311.0	12	27A	-2	22	47	-3			
Y.-SAKHLINSK	84.43	334.1	12	31	-1	22	51	-4			
CANTON	84.51	300.4	12	33A	1						
PRIEST	84.86	43.1	12	35A	1					38	48 PKPPKP
PASADENA	85.05	45.9	12	35	0	23	0	-1		16	10 PP
PETROPAVLOVK	85.08	346.0	12	38K	3	22	53	-9			
LICK	85.11	41.7	12	36A	1					30	41 PKKP
BERKELEY	85.12	40.9	12	36A	1					16	10 PP
UKIAH	85.46	39.5	12	39	2					13	54
CALISTOGA	85.48	40.2	12	37A	0						
VLADIVOSTOK	86.06	325.6	12	38A	-2						
MEDAN	86.11	276.3	12	39A	-1						
SANTA LUCIA	86.72	126.9	12	44	1						
MINERAL	87.21	39.5	12	46K	1						
BOULDER CITY	88.32	46.3	12	51	0					16	25 PP
TUCSON	88.64	51.3	12	52	0					30	34 PKKP
EUREKA	89.85	43.0	12	56	-2				13 19	30	4 PKKP
CHANGCHUN	89.92	322.7	12	58A	0						
TACUBAYA	90.15	67.7	13	10	11						
GLEN CANYON	90.98	47.2	13	5	2						
SEATTLE	91.92	33.9	13	5	-3	23	40	-25			
VICTORIA	91.99	32.8	13	8	0						
SOCORRO	92.35	51.7	13	11	1						
VERA CRUZ	92.52	69.4								16	6
BLUE MTS.	92.58	38.3	13	8	-3	24	21	10		17	2 PP
PEKING	92.66	315.4	13	11	0						
MAGADAN	92.82	344.6	13	9	-3					23	41 SKKS
SALT LAKE C.	93.12	44.0	13	14	1					17	9 PP
ALBUQUERQUE	93.17	51.2	13	11	-2				13 32		
NANA	93.43	105.8	13	21	6						
KUNMING	93.71	296.8	13	16	0						
SIAN	94.03	307.3	13	23	6						
UINTA BASIN	94.25	45.4	13	17	-1	24	37	12		17	13 PP
PENTICTON	94.36	33.9	13	17	-2						
HUANCAYO	94.66	106.6	13	24	4						
PORT BLAIR	95.23	280.4	13	21	-2	23	51	-5		16	36 PP
LUBBOCK	95.61	54.5	13	23	-2	24	0	2			
CHENGTU	95.62	302.1	13	25	0						
BUTTE	95.90	39.5	13	24	-2					17	33 PP
GOLDEN	96.55	47.8	13	30	1				13 45		
HUNGRY HORSE	96.55	37.1	13	26	-3					30	13 PKKP
PAOTOW	96.80	313.1	13	33	3	24	5	1		24	54 S
LARAMIE	97.30	46.3	13	33	1					17	46
COLLEGE	97.33	12.4	13	28	-4						
BANFF	97.55	34.2	13	32	-1						
LA PAZ	98.11	114.2	13	57	21						
WICHITA MTS.	98.51	54.9	13	37	-1	24	12	-1		17	49 PP
LANCHOW	98.52	306.6	13	38	0						
RAPID CITY	100.27	44.9	13	41	-5						
YAKUTSK	100.82	337.6	13	46	-2						
TULSA	101.09	55.0	14	6	17	24	27	1		18	0 PP
SHILLONG	102.52	292.3	13	56K	0						
ULAN-BATOR	102.61	318.2	17	26	210	24	23	-10			
CALCUTTA	104.00	288.0	18	20	258					27	43
YELLOWKNIFE	104.94	25.4	14	9	3					18	28 PKP
MADRAS	106.64	275.6	18	37	777					27	58
BOKARO	106.69	288.2	18	8	777					25	15
CHATRA	106.86	291.5	17	47	777					24	54
KODAIKANAL	107.70	271.8	18	49	777					28	31
TIKSI	107.81	344.5	14	19	777	24	55	-1			
CUMBERLAND	108.40	59.1	14	26	777	24	56	-3		18	58 PP
MADISON	108.56	50.3	14	23	777					18	52 PP
MOULD BAY	111.90	12.7	14	38	-235					18	31 PKP
CARACAS	113.25	91.1				26	32	73		27	50
CLEVELAND	113.53	54.5	15	14	-202						
HERMANUS	114.02	195.4								19	31 PP
MORGANTOWN	114.04	56.9								19	46
POONA	114.54	278.0	18	40A	2					29	18 PS
BOMBAY	115.58	277.9								19	29 PP
DEHRA DUN	115.60	291.6	18	42	2					29	33
NEW DELHI	115.66	289.5	15	47	-173					25	31
PENNSYLVANIA	115.92	56.2	18	40	-1						
RESOLUTE	116.74	17.2	18	41K	-1						
CHANGALANE	117.14	210.3	18	45	2					35	42 SS
KIMBERLEY	117.80	202.5	18	46	2						
OTTAWA	118.73	51.8	18	46	0						
PALISADES	118.86	57.0	18	49	3	25	37	-2			
LAHORE	119.02	291.6	18	49	2						

SEMIPALATNSK	119.72	313.9	18	48	0			
BREBEUF	120.19	52.1	18	49	0			20 30 PP
SHAWINIGAN	120.99	51.0	18	50	-1			
WESTON	121.08	56.0						20 36
FRUNSE	121.90	304.3	18	52	0.			
WARSAK DAM	122.00	293.5	18	53	0			
ALERT	122.75	8.1	18	53	-1			
KHOROG	122.94	297.5	18	54	0			
THULE	123.42	15.5	18	55	0			
BULAWAYO	124.09	210.4	18	58	1			
QUETTA	124.63	287.8	18	57	-1			
KHEYS	124.70	350.5	18	56	-2			20 48 PP
CHILEKA	124.72	219.4	18	59	1			
TASHKENT	125.48	301.5	18	58	-1			30 54 PS
SEPT ILES	125.76	47.5	19	10	10			
SCHEFFERVLLE	125.82	41.8	18	59	-1			
HALIFAX	127.01	54.6	19	2	0			
NORD	127.70	3.4	19	2	-2			
BROKEN HILL	129.12	213.6	19	8	2			
SVERDLOVSK	131.60	321.2	19	10	-1			
BANDEIRA	134.17	195.1	19	18K	2			21 51 PP
SHIRAZ	136.57	282.8	19	13K	-7			22 58
SCORESBY SD.	137.19	11.7	19	23	2			22 3
APATITY	137.99	342.7	19	15	-8			22 14 PP
TEHERAN	138.56	291.4	19	21	-3			23 7 PKS
TROMSOE	139.09	351.1	19	18	-7			22 48 PP
LWIRO	139.12	223.2	19	20K	-5			22 12 PP
SODANKYLA	139.75	345.6	19	18	-8			22 42 PKS
ADDIS ABABA	139.97	246.4	19	26	0			
LUANDA	140.02	197.2	19	27	0			22 18 PP
KIRUNA	140.52	349.2	19	20	-7			22 24 PP
KAJAANI	142.17	342.0	19	25	-5			23 7 PKS
GORIS	142.75	297.0	19	33	2			35 13
TIFLIS	143.80	300.8	19	30	-3			
MOSCOW	144.00	326.0	19	30	-3			22 48 PP
UMEA	144.17	346.4	19	28	-6			
PULKOVO	144.61	335.6	19	32	-3			22 48 PP
SKALSTUGAN	145.69	352.0	19	34	-2			
NURMIJARVI	145.89	340.3	19	35	-2			23 36
HELSINKI	146.07	339.7	19	36	-1			
UPPSALA	148.28	345.1	19	41	0			23 12 PP
BERGEN	149.43	356.9	19	48	5			
KONGSBERG	149.83	352.4	19	45	2			23 33 PP
KSARA	151.16	286.6	19	49	4			23 30 PP
GOTEBORG	151.39	349.0	19	47	2			
JERUSALEM	151.60	282.3	19	47	1			
KARLSKRONA	152.09	343.9	19	52	6			
COPENHAGEN	153.22	347.0	19	49	1			
WARSAW	153.70	333.3	19	54	5			23 47 PP
LWOW	154.14	326.4	19	53	4			
DURHAM	155.01	5.1	19	58	8			44 5 SS
PONTA DELGDA	155.66	63.9	19	54A	3			20 17 PKP2
KRAKOW	155.82	331.3	19	57	5			21 28
CHORZOW	156.01	332.8	19	53	1			24 11 PP
RACIBORZ	156.49	333.5	19	54	2			24 4 PP
M.BOUR	156.55	127.1	19	56A	3			23 59 PP
WITTEVEEN	156.87	353.0	19	58	5			
COLLMBERG	157.15	342.3	19	54	1			20 26 PKP2
HALLE	157.23	344.0	19	55	2			20 27 PKP2
MUNSTER	157.59	351.1	19	55	1			
PRAGUE	157.83	338.7	19	56	2			24 6 PP
JENA	157.84	344.0	19	54	0			24 4 PP
PRUHONICE	157.87	338.4	19	53	-1			34 12 SKSP
KEW	158.38	4.2	19	57	2			24 9 PP
BRATISLAVA	158.45	332.0	19	54A	-1			21 39 PP
BENSBERG	158.64	351.3	19	54	-1			24 16 PP
VIENNA-H.	158.68	333.2	19	46	-9			
SOFIA	158.75	312.7	20	0	5			24 21 PP
UCCLE	159.07	356.1	19	59	3			24 10 PP
BELGRADE	159.26	320.9	19	57	1			29 8 PPP
DOURBES	159.75	355.4	20	1	5	27 1 3		
HEIDELBERG	159.90	347.4	19	57	0			20 38 PKP2
STUTTGART	160.39	345.8	19	58A	1			24 22 PP
ATHENS	160.41	299.9	19	57A	0			
TUBINGEN	160.66	346.0	20	3	6			20 42 PKP2
ZAGREB	160.77	329.5	19	57	-1			
STRASBOURG	160.86	348.6	19	56	-2			24 23 PP
FOLINIERE	161.06	5.4	19	59	1			

LJUBLJANA	161.20	332.4	19	57	-1					24	30	PP
WELSCHBRUCH	161.24	351.3	19	59	1					20	40	PKP2
RAVENSBURG	161.25	344.2	19	59	1					20	44	PKP2
TRIESTE	161.84	333.1	20	1	2					24	33	PP
CHUR	162.14	343.3	19	58	-1					20	49	
BESANCON	162.43	351.3	20	0	1					20	47	PKP2
PAVIA	163.78	342.0	19	58	-3					37	56	PPS
ROSELEND	163.86	348.6	20	2	1					24	45	PP
CLERMONT-FD.	164.15	357.5	20	2	1							
FLORENCE X.	164.37	334.8	20	1	0			21	0	24	50	PP
ISOLA	165.23	346.0	20	4	2					21	5	PP
ROME	165.41	327.9	20	1A	-1			20	30	24	50	PP
MONACO	165.58	344.5	20	4	2					21	3	
MESSINA	166.16	310.2	20	5	2	26	51 -12	20	16	24	51	PP
BAGNERES	166.77	6.4	20	4	1							
LISBON	167.19	43.7	20	9	6					25	15	PP
TOLEDO	168.83	25.4	20	7A	3	26	45 -19			25	6	PP
TORTOSA	169.03	6.6	20	35	30							
ALICANTE	171.30	13.8	20	8K	2					25	21	PP
ALMERIA	172.07	27.9	20	7K	1					25	26	PP

MARCH 26 19.H 47.M 47.S EPICENTRE 44.31 147.30 DEPTH= 123.KM

A=-0.60407 B= 0.38786 C= 0.69618 D= 0.5403 E= 0.8415
G=-0.5858 H= 0.3761 K=-0.7179 HT= -3.3

DEPTH OF FOCUS= 0.014R

SE= 2.88

	DELTA DEG.	AZ. DEG.	P M	S	O-C S	S M	S	O-C S	*PP M	S	SUPP. M	S
KURILSK	1.00	23.8	0	24A	1	0	39	-1				
NEMURO	1.59	232.2	0	27K	-2	0	46	-6				
ABASHIRI	2.19	263.3	0	37K	0	1	5	1				
KUSIRO	2.49	238.6	0	39K	-2	1	7	-4				
OBIHIRO	3.29	246.3	0	50K	-1	1	28	-2				
HIROO	3.54	236.4	0	53	-2	1	32	-4				
ASAHIGAWA	3.59	263.2	0	57	2	1	41	4				
URAKAWA	3.95	238.3	0	58K	-2	1	44	-2				
RUMOE	4.10	266.9	1	4K	2	1	53	3				
WAKKANAI	4.14	287.4	1	6K	3	1	59	8				
Y.-SAKHLINSK	4.20	311.8	1	5	2	1	49	-3				
SAPPORO	4.49	256.0	1	8K	1	2	0	1				
TOMAKOMAI	4.49	250.0	1	7K	0	1	58	-1				
MURORAN	5.02	248.8	1	14	0	2	9	-3				
SUTTSU	5.35	256.0	1	19	0	2	24	4				
MORI	5.39	248.1	1	19	0	2	17	-4				
HAKODATE	5.40	244.7	1	17K	-3	2	16	-5				
HATINOHE	5.70	230.4	1	19	-5	2	17	-11				
AOMORI	5.94	236.3	1	25K	-2	2	25	-9				
UGLEGORSK	5.97	324.8	1	30	3	2	40	5				
MIYAKO	6.12	222.2	1	24	-5	2	29	-10				
MORIOKA	6.49	226.8	1	31	-3	2	37	-10				
MIZUSAWA	6.93	223.8	1	36	-4	2	49	-9				
AKITA	7.05	231.9				2	57	-4			2	18
ISINOMAKI	7.40	219.4	1	41K	-6	2	58	-12				
SENDAI	7.72	220.7	1	46	-5	3	7	-10				
YAMAGATA	8.00	223.2	1	50K	-5	3	13	-11				
HUKUSIMA	8.34	220.5	1	54	-5	3	22	-10				
ONAHAMA	8.82	215.6	2	16	10	3	33	-11				
NIIGATA	8.91	227.1				3	46	0				
SHIRAKAWA	8.97	219.2	2	3	-5	3	37	-11				
AIKAWA	9.27	230.4	2	9A	-3	3	47	-8				
MITO	9.48	215.6	2	10	-5	3	49	-11				
UTUNOMIYA	9.60	218.6	2	11	-5	3	53	-10				
KAKIOKA	9.73	216.3	2	12	-6	3	53	-13				
TYOSI	9.90	212.1	2	15	-5	3	57	-13				
TAKADA	9.95	226.7	2	13	-8							
KUMAGAYA	10.15	219.2	2	19	-4	4	8	-8				
NAGANO	10.30	225.3	2	23	-3	4	13	-6				
TOKYO C.M.O.	10.38	216.4				4	9	-13				
OIWAKE	10.40	222.9	2	25	-2							
MATUSIRO	10.40	224.8	2	22K	-5	4	15	-7				
TITIBU	10.43	219.8				4	12	-10				
WAZIMA	10.48	232.2	2	24	-4							
YOKOHAMA	10.64	216.1									3	17

MATUMOTO	10.75	224.6	2	28	-3					
KOHU	10.92	220.7	2	34	0	4	25	-9		
HUNATU	10.96	219.5							3	47
MERA	11.00	214.0				4	27	-9		
AJIRO	11.20	217.0	2	32	-5	4	30	-11		
MISIMA	11.20	217.8	2	43	6					
VLADIVOSTOK	11.21	269.3	2	34	-4	4	39	-2		
OSIMA	11.32	215.3							3	23
IIDA	11.39	222.8	2	38	-2					
SHIZUOKA	11.57	219.3				5	0	10	4	42
OMAESAKI	11.96	218.9							4	56
GIHU	12.02	225.8	2	47	-1					
HAMAMATU	12.09	220.9							4	57
NAGOYA	12.10	224.5	2	39	-10	4	55	-7		
HIKONE	12.39	227.0	2	53	0					
KAMEYAMA	12.60	225.1	3	22	26	5	6	-8		
KYOTO	12.85	227.7	2	56	-3	5	14	-6		
ABUYAMA	13.05	227.7	2	55A	-7					
NARA	13.06	226.5	2	59	-3					
OSAKA	13.24	227.2							5	41
MAGADAN	15.41	6.7	3	31A	-1	6	23	4		
CHANGCHUN	15.81	275.9	3	35	-2					
OOITA	16.46	233.1	3	42	-3					
KUMAMOTO	17.29	234.0	3	54	-1					
YAKUTSK	20.50	336.0							4	25 PP
PEKING	23.39	270.3	4	59A	1	9	3	4		
ZO-SE	24.39	246.1	5	8	0	9	18	2		
NANKING	25.40	250.9	5	18	1	9	37	4		
PAOTOW	27.60	275.3	5	38	0					
ULAN-BATOR	28.01	291.8	5	41A	0					
TIKSI	28.81	348.0	5	45A	-4				6	37 PP
SIAN	31.11	264.5	6	9	0					
LANCHOW	33.89	271.1	6	33A	0	11	48	1		
BAGUIO CITY	35.81	227.5	6	48	-1					
CHENGTU	36.53	263.0	6	55A	0	12	27	-1		
COLLEGE	40.57	36.5	7	30	1					
KUNMING	40.75	257.0	7	31A	1	13	32	1		
SEMIPALATNSK	44.43	302.7	7	59A	-1					
NHATRANG	45.67	237.5	8	4	-6				8	37 SP
LHASA	46.39	271.3	8	18	2	14	57	4		
KHEYS	46.50	346.9	8	14K	-3				10	18
SHILLONG	48.18	266.3	8	30A	0					
MOULD BAY	48.26	18.7	8	29	-1	15	17	-2		
ALMATA	49.32	294.9	8	40A	2					
CHITTAGONG	50.21	263.0	9	36	51					
CHATRA	50.80	270.9	8	50A	0					
ALERT	52.56	4.7	9	1	-2					
SVERDLOVSK	52.81	316.5	9	4K	-1					
NORD	54.04	357.1	9	11	-3					
RESOLUTE	54.40	16.8	9	14	-2					
TASHKENT	55.24	296.2	9	23A	1					
DEHRA DUN	55.27	280.3	9	23A	0					
YELLOWKNIFE	55.27	34.0	9	22A	-1				9	50
THULE	57.42	9.4	9	37	-1					
WARSAK DAM	57.70	287.7	9	30	-10					
APATITY	57.91	335.5	9	38A	-3					
VICTORIA	58.26	51.4	9	44	0					
PENTICTON	59.92	49.0	9	55	0					
SODANKYLA	59.98	337.4	9	54	-2				10	38 PCP
TROMSOE	60.26	341.6	9	56	-2					
BANFF	61.02	45.6	10	2	-1					
KIRUNA	61.27	339.7	10	3	-1					
KAJAANI	61.99	334.3	10	7	-2					
QUETTA	63.10	286.8	10	16A	-1	18	33	-3		
SHASTA	63.31	58.3	10	18K	0					
HUNGRY HORSE	63.49	47.5	10	19	0					
BLUE MTS.	63.81	52.1	10	22	1					
MINERAL	64.00	58.2	10	22	0					
MOSCOW	64.06	323.7	10	23	0					
CHARTERS TS.	64.09	181.1	10	21	-2					
PULKOVO	64.17	329.9	10	22A	-2					
UMEA	64.40	336.9	10	23	-2				10	57 *SP
CALISTOGA	64.42	60.3	10	25A	0					
BERKELEY	65.09	60.8	10	30A	0					
NURMIJARVI	65.58	332.8	10	31A	-2				12	53 PP
HELSINKI	65.73	332.4	10	33	-1				11	3
SKALSTUGAN	66.70	339.9	10	39	-1					
PRIEST	67.17	61.4	10	43A	0					
EUREKA	67.93	56.0	10	48K	1				11	31

UPPSALA	68.31	335.3	10	49	-1				11	12		
TIFLIS	69.80	308.9	11	1	2							
TEHERAN	69.83	300.5	11	1A	2						11	36 SP
PASADENA	70.00	61.6	11	0	0							
KONGSBERG	70.72	338.8	11	5K	1							
BOULDER CITY	70.89	58.2	11	7	2						11	42
UINTA BASIN	71.10	51.9	11	7K	0				11	36	20	14
GOTEBORG	71.74	336.6	11	10	-1							
KARLSKRONA	71.95	333.9	11	7	-5							
SHIRAZ	73.11	295.0	11	19A	0	20	33	-2	11	35	14	3 PP
SIMFEROPOL	73.17	317.0	11	20	1							
COPENHAGEN	73.32	335.2	11	20	0							
GOLDEN	73.86	50.1	11	20	-3							
KRAKOW	75.44	328.0	11	33	1						12	4
RACIBORZ	76.07	329.0	11	37	1						11	50 PCP
ALBUQUERQUE	76.58	54.2	11	40	2							
COLLMBERG	76.87	332.5	11	40	0						14	51 PP
HALLE	77.04	333.2	11	39	-2				12	16		
SCHEFFERVLLE	77.08	19.4	11	41A	0							
PRAGUE	77.43	331.1	11	45	2							
PRUHONICE	77.46	330.9	11	44	1						12	30
WITTEVEEN	77.50	336.8	10	46	-57							
JENA	77.65	333.1	11	46	2						14	33
MUNSTER	77.97	335.8	11	48	2							
BRATISLAVA	78.05	328.5	11	46	-1							
VIENNA-H.	78.26	328.9	11	49A	1							
KASPERSKE H.	78.52	331.0	11	49A	0						13	53
ISTANBUL UN.	78.59	317.2	11	50	1							
BENSBERG	79.00	335.6	11	52A	0							
CANBERRA	79.27	178.6	11	54A	1							
HEIDELBERG	79.90	334.0	11	57A	0							
STUTTGART	80.27	333.3	11	59A	0							
KSARA	80.36	308.2	12	1	2							
DOURBES	80.51	336.7	12	4	4							
TUBINGEN	80.55	333.3	12	1	1							
KEW	80.56	340.1	12	1A	1							
LJUBLJANA	80.79	328.8	12	1	0							
RAVENSBURG	81.02	332.6	12	5	2							
WICHITA MTS.	81.19	49.5	12	4	1				12	32		
TRIESTE	81.42	329.1	12	7	2							
TOOLANGI	81.52	181.5	12	5	0							
TULSA	81.79	47.0	12	7	0				12	36		
JERUSALEM	82.24	307.2	12	10A	1							
FAYETTEVILLE	82.49	45.9	12	10A	0							
FOLINIERE	83.09	339.2	12	22	9							
BREBEUF	83.49	27.6	12	15A	0							
ISOLA	85.04	332.5	12	24	1						12	44
KARAPIRO	85.76	158.0	12	27	1				12	55		
MORGANTOWN	86.22	34.6	12	30K	1							
CUMBERLAND	87.13	40.6	12	33A	0							
BULAWAYO	124.20	274.7	18	47	3							

MARCH 26 21.H 34.M 40.S EPICENTRE 35.82 135.75 DEPTH= 28.KM

A=-0.58212 B= 0.56708 C= 0.58271 D= 0.6978 E= 0.7163
G=-0.4174 H= 0.4066 K=-0.8127 HT= -0.2

SE= 2.02

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S
TSURUGA	0.31	123.7	0	3K	-7	0	7	-9				
HUKUI	0.45	59.9	0	9A	-2	0	14	-5			1	49
MAIZURU	0.46	219.7	0	8K	-3	0	15	-5				
HIKONE	0.69	143.5	0	12	-2	0	21	-4				
KYOTO	0.80	181.2	0	15A	-1	0	26	-1				
TOYOOKA	0.81	249.0	0	14K	-2							
GIHU	0.93	116.7	0	15K	-2	0	26	-4				
ABUYAMA	0.96	188.8	0	13A	-5							
KANAZAWA	1.01	45.7	0	18A	0	0	32	0				
KAMEYAMA	1.14	148.6	0	19K	-1	0	33	-2				
NARA	1.14	176.7	0	19A	-1	0	33	-2				
OSAKA	1.19	188.8	0	21A	0							
NAGOYA	1.19	122.9	0	20K	-1	0	35	-2				
KOBE	1.23	202.4	0	22K	0	0	39	1				
TAKAYAMA	1.26	74.6	0	22K	0	0	38	0				

TU	1.29	150.5	0	22A	0	0	38	-1			
TOTTORI	1.32	256.6	0	24K	1	0	43	3	7	2	
TOYAMA	1.46	52.9	0	26A	1	0	46	3			
SUMOTO	1.63	205.2	0	29A	2	0	51	3			
WAKAYAMA	1.66	196.8	0	29A	1	0	49	1			
IIDA	1.72	99.6	0	28K	-1	0	47	-3			
HIMEJI	1.72	220.3	0	24K	-5	0	41	-9			
OWASE	1.79	167.9	0	29	-1	0	51	-1			
WAZIMA	1.81	30.5	0	29A	-1	0	53	1			
MATUMOTO	1.85	76.1	0	31	1	0	54	1			
OKAYAMA	1.88	233.2	0	31K	0	0	56	2			
HAMAMATU	1.95	123.8	0	32K	0	0	58	2			
YONAGO	1.99	259.3	0	33K	1	1	0	3			
TOKUSIMA	2.00	209.1	0	30	-3	1	0	3			
SAIGO	2.00	281.5	0	32K	-1	1	3	6			
TAKAMATU	2.05	223.4	0	36K	3	1	8	10			
MATUSIRO	2.11	69.6	0	33A	-1	1	4	4			
NAGANO	2.15	66.2	0	35A	0	1	3	2			
MATSUE	2.21	261.1	0	37	1	1	14	12			
KOHU	2.29	93.1	0	37K	0	1	6	2			
OIWAKE	2.32	76.7	0	38K	1	1	7	2			
SHIZUOKA	2.33	110.7	0	40K	3	1	9	4			
OMAESAKI	2.36	120.4	0	38K	0	1	10	4			
SIOMISAKI	2.37	179.6	0	37A	-1	1	4	-2			
TAKADA	2.38	57.0	0	38A	0	1	8	1			
TSURUGISAN	2.44	216.5	0	38	-1	1	10	2			
HUNATU	2.48	96.6	0	40	1	1	13	4			
MISIMA	2.70	104.1	0	41K	-2	1	15	0			
TITIBU	2.71	85.8	0	45	2	1	21	6			
MAEBASI	2.75	77.0	0	44A	1	1	25	9			
NAGATURO	2.82	114.8	0	49	5	1	32	14			
AJIRO	2.84	104.8	0	44K	-1	1	20	2			
MUROTO	2.88	207.2	0	47	2	1	31	12			
KOTI	2.91	219.5	0	45K	-1	1	25	5			
KUMAGAYA	2.96	82.7	0	49K	3	1	22	1			
AIKAWA	2.97	41.7	0	46A	0	1	36	14			
HIROSIMA	3.08	242.9	0	49K	1	1	31	6			
MATUYAMA	3.14	231.8	0	48K	-1	1	35	9			
HAMADA	3.15	254.0	0	49K	0	1	28	2			
OSIMA	3.15	108.5	0	48K	-1	1	33	7			
YOKOHAMA	3.20	95.9	0	51	1	1	31	3			
TOKYO C.M.O.	3.26	91.4	0	51K	0	1	35	6			
HONGO	3.27	90.8	0	52	1	1	43	14			
NIIGATA	3.37	50.7	0	53A	1	1	35	3			
UTUNOMIYA	3.41	76.5	0	54K	1	1	46	13			
MERA	3.45	104.0	0	58K	5	1	41	7			
TUKUBASAN	3.55	82.4	0	54	-1	1	43	7			
KAKIOKA	3.61	82.3	0	57K	1	1	50	12			
UWAZIMA	3.70	226.5	0	58	1	1	52	12			
SHIRAKAWA	3.83	69.0	0	59	0	1	56	13			
ASHIZURI	3.84	217.1	1	0	1	1	45	1			
MITO	3.86	80.4	1	0K	1	1	58	14			
TYOSI	4.15	90.0	1	4K	1	1	55	3			
HUKUSIMA	4.25	61.7	1	5A	0	1	59	5			
OOITA	4.28	234.0	1	6K	1	2	14	19			
ONAHAMA	4.30	73.4	1	7K	2	2	0	5			
HATIDYOZIMA	4.30	128.0	1	3	-2	2	2	7			
SIMONOSEKI	4.38	246.1	0	53K	-13	1	51	-6			
YAMAGATA	4.40	55.3	1	8A	1	2	0	2	2	24	
SAKATA	4.47	45.4	1	14	6						
NOBOEKA	4.67	227.3	1	26	15	2	25	20			
SENDAI	4.79	57.8	1	14A	2	2	17	9			
ASOSAN	4.85	234.3	1	15	2	2	34	25			
HUKUOKA	4.96	244.7	1	15K	0	2	17	5			
KUMAMOTO	5.14	235.8	1	17K	0	2	40	23			
ISINOMAKI	5.15	58.1	1	19A	2	2	25	8			
SAGA	5.18	241.8	1	20K	2	2	47	29			
AKITA	5.20	40.2	1	20A	2	2	20	2			
MIYAZAKI	5.30	224.0	1	42	22	2	53	32			
MIZUSAWA	5.40	50.8	1	22	1	2	26	3			
UNZENDAKE	5.50	237.4	1	23	1	2	32	6			
ITUHARA	5.55	254.9	1	23K	0	2	30	3	2	52	
NAGASAKI	5.76	239.3	1	26K	0	2	46	14			
MORIOKA	5.78	46.4	1	27A	1	2	44	11			
KAGOSIMA	6.06	227.1	1	32A	2	3	8	28			
MIYAKO	6.23	50.4	1	34A	1	2	50	6			
AOMORI	6.36	36.9	1	36A	2	2	55	8			
HUKUE	6.52	243.4	1	37	0	3	9	18			
HATINOHE	6.54	42.4	1	37A	0	3	0	8			

TORISIMA	6.55	143.1	1	43	6	3	5	13				
YAKUSIMA	6.94	220.9	1	42K	0	3	45	44				
HAKODATE	7.14	31.7	1	46A	1	3	20	13				
MORI	7.30	29.5	1	49	1	3	7	-4				
MURORAN	7.65	30.5	1	54	2	3	30	11				
SUTTSU	7.78	25.1	1	56A	2							
VLADIVOSTOK	7.87	339.0	1	54K	-1	3	24	-1				
TOMAKOMAI	8.16	31.9	2	2A	2							
URAKAWA	8.36	38.8	2	4A	2	3	33	-4				
SAPPORO	8.43	29.2	2	5A	2	3	48	9				
HIROO	8.73	40.1	2	8	1							
OBIHIRO	9.13	36.9	2	14	1							
RUMOE	9.28	27.3	2	19A	4							
ASAHIGAWA	9.43	30.6	2	19	2							
KUSIRO	9.79	40.5	2	21	-1	4	26	14				
ABASHIRI	10.48	36.0	2	30A	-2	4	34	5				
WAKKANAI	10.59	23.3	2	36A	3	4	59	27				
NEMURO	10.66	42.3	2	31A	-3	4	27	-7				
CHANGCHUN	11.32	318.1	2	45A	2							
MAWASHI	11.79	218.0	2	55	6							
Y.-SAKHLINSK	12.34	22.9	2	56	-1						6	3
ZO-SE	13.04	253.0	3	7K	1							
KURILSK	13.15	40.7	3	6A	-2						5	42
NANKING	14.58	259.9	3	27K	1							
PEKING	16.01	291.1	3	47K	2	6	52	11				
TAIPEI	16.30	232.6	3	48	-1	7	8	20				
ILAN	16.34	231.4									5	9
HWALIEN	17.00	229.8	4	0	3							
TAICHUNG	17.46	232.3	3	48	-15							
YUSHAN	17.77	230.2	4	30	23							
HSINKONG	17.79	228.4	4	21	14	7	53	31				
ALISHAN	17.84	230.6	3	36	-32							
TAITUNG	18.19	228.2	4	8	-4	7	57	26				
TAINAN	18.56	230.7	4	4	-13							
TAWU	18.64	227.9	4	17	-1							
HENGCHUN	19.00	227.6	4	29	7							
PAOTOW	20.73	291.0	4	42	1	8	36	10				
SIAN	22.00	273.8	4	55K	1							
CANTON	23.21	243.0	5	8K	2							
PETROPAVLOVK	23.56	36.0	5	10A	1						9	30
BAGUIO CITY	23.58	218.9	5	9	0	9	26	8			5	38 PP
GUAM	23.69	157.8	5	13	3	9	23	3				
ULAN-BATOR	24.50	308.5	5	19	1	9	35	1				
MANILA	24.83	215.7	5	25	4	9	45	5				
MAGADAN	25.69	17.8	5	28A	-1						6	16 PP
LANCHOW	25.79	280.0	5	31	1	9	53	-3				
YAKUTSK	26.49	353.6	5	35A	-2							
CHENGTU	26.97	268.1	5	41K	0	10	18	3				
IRKUTSK	27.65	316.3	5	47A	0							
KUNMING	30.26	258.6	6	11	0							
NHATRANG	33.56	232.2	6	39K	-1	11	56	-3				
TOCKLAI	35.96	267.1	7	5	5	12	51	15				
TIKSI	36.05	356.3	6	59A	-2	12	40	2				
LHASA	37.86	273.7	7	18K	2	13	10	5				
SHILLONG	38.81	267.2	7	23	-1	13	20	0			8	59 PP
CHITTAGONG	40.34	262.8	7	42	5	13	47	4				
SEMIPALATNSK	42.07	308.1	7	50A	-1	14	8	0			9	32 PP
CHATRA	42.10	271.7	7	55	4	14	12	3			9	34 PP
RABAUL	42.69	155.4	7	58K	2						18	13
CALCUTTA	43.05	265.4	8	2	3	14	27	4				
BOKARO	44.52	268.6	8	13	2	14	47	3			10	43 PPP
PORT BLAIR	45.65	249.2	8	19	-1	14	59	-1				
PORT MORESBY	46.25	164.3	8	25	0							
FRUNSE	46.89	298.1	8	30A	0						19	2 SS
MEDAN	46.90	235.5	8	35	5	15	12	-6			27	40
DEHRA DUN	48.07	280.8	8	42K	3	15	36	1			10	35 PP
NEW DELHI	49.44	279.0	8	50	0	15	56	2			19	29 SS
VISHAKHAPTNM	49.58	263.0	8	54K	3	16	6	10			10	50 PP
DJAKARTA	49.84	219.0	8	54A	1	16	0	1			11	0 PP
TANGERANG	49.93	219.2	8	53	0						9	23
LEMBANG	50.00	217.7	8	53A	-1	16	9	7			9	5 PCP
HONIARA	50.47	148.4	8	56	-1	16	9	1				
LAHORE	50.56	283.9	8	58	0	16	13	4				
KHOROG	50.64	292.1	9	0A	1	16	16	6				
TASHKENT	51.12	297.5	9	3A	1	16	23	6				
WARSAK DAM	51.82	287.9	9	8K	0	16	30	3				
COLLEGE	52.53	31.5	9	12	-1	16	40	4			9	37
KHEYS	52.90	348.4	9	14A	-2	16	39	-3			11	15 PP

SVERDLOVSK	53.02	318.3	9	15K	-2	16	43	0			
HYDERABAD	53.66	265.8	9	22K	1	16	57	5	11	23	PP
MADRAS	54.68	260.2	9	29K	0	17	9	3	11	34	PP
CHARTERS TS.	56.49	168.1	9	40K	-2	17	30	0			
POONA	56.82	269.7	9	45K	1	17	43	9	23	50	SSS
QUETTA	56.91	285.5	9	44A	-1	17	40	5			
BOMBAY	57.47	270.7	9	50	1	17	44	1	18	3	PS
KODAIKANAL	58.44	259.3	9	53K	-3	17	41	-14	12	2	PP
HONOLULU	58.88	85.1	9	58	-1	18	6	5			
KIPAPA	58.88	84.9	9	59	0	18	8	7			
MOULD BAY	58.96	15.7	9	56	-3	18	4	2			
ASHKABAD	60.20	297.2	10	6	-2	18	20	2			
ALERT	61.58	2.7	10	15A	-2						
APATITY	61.87	334.8	10	18A	-1	18	40	0	12	26	PP
NORD	61.94	355.6	10	18	-2						
KOUMAC	62.25	149.6	10	12K	-10						
SODANKYLA	64.26	336.1	10	35K	0	19	10	1			
NOUMEA	64.70	148.5	10	39K	1	19	28	13			
RESOLUTE	64.87	13.1	10	36A	-3						
TROMSOE	65.33	339.9	10	41	-1						
MOSCOW	65.44	322.0	10	42A	-1	19	21	-3	13	2	PP
KAJAANI	65.62	332.7	10	43	-1	19	27	1			
KIRUNA	65.97	337.9	10	46A	0	19	31	1			
TEHERAN	66.18	297.8	10	48A	1	19	40	7			
PULKOVO	66.85	328.0	10	50A	-2	19	42	1	13	20	PP
THULE	66.99	6.0	10	51	-1						
YELLOWKNIFE	67.09	28.3	10	52	-1						
TIFLIS	67.90	306.1	10	58	0	19	56	2	13	25	PP
GORIS	67.94	303.4	10	58A	0	19	59	5			
SHIRAZ	68.27	291.5	11	0A	0	20	0	2	11	6	13 33 PP
UMEA	68.47	334.5	11	0A	-2	19	59	-1	13	28	PP
NURMIJARVI	68.80	330.3	11	2A	-2	20	5	1	13	26	PP
HELSINKI	68.87	329.9	11	3	-1						
MUNDARING	69.89	197.6	11	8	-2	20	18	1			
PERTH	69.96	198.0	11	14	3	20	24	6	13	40	PP
AFIAMALU	70.03	125.0	11	12	1	20	24	5			
ADELAIDE	70.48	177.4	11	14	0	20	28	4	11	18	PCP
VICTORIA	70.50	43.8	11	14	0						
RIVERVIEW	70.77	166.5	11	18A	2	20	33	6	25	8	SS
SKALSTUGAN	71.30	336.8	11	18A	-1						
SEATTLE	71.61	44.2	11	25A	4	20	51	14			
CANBERRA	71.85	168.6	11	23	1				15	51	PPP
UPPSALA	71.96	332.1	11	21A	-2	20	41	0			
PENTICTON	72.16	41.7	11	23A	-1						
SCORESBY SD.	72.78	352.3	11	27	-1	21	31	40			
SIMFEROPOL	72.91	313.3	11	28A	-1	20	52	0	14	9	PP
BANFF	73.23	38.5	11	30A	0						
TOOLANGI	73.58	171.9	11	33	1				14	19	PP
KONGSBERG	75.01	334.9	11	41K	0				14	22	PP
KARLSKRONA	75.25	330.0	11	35A	-7						
WARSAW	75.50	324.8	11	40	-4	21	23	2	12	8	PCP
LWOW	75.57	321.6	11	44	0	21	23	1			
GOTEBORG	75.58	332.6	11	43A	-1						
HUNGRY HORSE	75.72	40.2	11	44	-1	21	22	-1			
UKIAH	75.80	52.0	11	47	2						
BERGEN	75.87	337.1	11	48	2						
BLUE MTS.	76.05	44.5	11	46	-1	21	31	4	14	18	PP
BACAU	76.07	317.7	12	10	23	21	56	29			
MINERAL	76.13	50.2	11	46A	-1						
FOCSANI	76.44	316.9	12	6	17	22	4	33			
CALISTOGA	76.49	52.1	11	50K	1						
COPENHAGEN	76.85	330.9	11	51A	0	21	37	1			
BERKELEY	77.14	52.6	11	53A	0	21	44	5	12	8	PCP
KRAKOW	77.45	323.5	11	56	1	21	43	1			
CHORZOW	77.74	324.1	11	57	1				14	53	PP
BUCHAREST	77.84	316.3	11	57	0	21	53	7	14	28	PP
LICK	77.85	52.7	11	57A	0						
SKALNATE PL.	77.87	322.7	11	54	-3	21	56	9	14	57	PP
SAVANNAH	77.88	171.3	11	58	1						
CAMPULUNG	77.90	317.5	12	19	22				21	45	
BUTTE	77.95	41.5	11	56	-1	21	51	3			
KSARA	78.06	303.0	11	56	-2	22	3	14	15	0	PP
ISTANBUL UN.	78.24	312.3	11	59A	0	21	55	4			
RACIBORZ	78.26	324.3	11	57	-2				14	51	PP
TARRALEAH	78.36	171.9	12	1	1						
MOORLANDS	78.59	171.4	12	2	1						
PRIEST	79.19	53.2	12	5A	1						
TIMISOARA	79.64	319.6	12	9	2	22	48	43			

JERUSALEM	79.69	301.7	12	6A	-1							
HURBANOVO	79.76	322.7	12	11	4					15	9	PP
COLLMBERG	79.77	327.6	12	6A	-1	22	8	1				
PRAGUE	80.02	326.0	12	9A	0	22	14	5		15	10	PP
PRUHONICE	80.02	325.9	12	9	0	22	12	2				
HALLE	80.08	328.2	12	9	0	22	16	6				
BRATISLAVA	80.09	323.4	12	8A	-1	22	5	-5		15	10	PP
EUREKA	80.11	48.2	12	9A	0					12	31	
VIENNA-H.	80.39	323.8	12	12	1	22	18	5		17	11	PPP
JENA	80.66	328.0	12	8	-4	22	14	-2		15	8	PP
BELGRADE	80.67	319.3	12	13K	1	22	12	-4		12	28	PCP
ABERDEEN	80.77	338.3				22	23	6		23	9	PS
KASPERSKE H.	81.07	325.7	12	13A	-1					13	1	
WITTEVEEN	81.25	331.5	12	17	2							
MUNSTER	81.52	330.5	12	17	1							
SALT LAKE C.	81.73	45.2	12	18	0							
PASADENA	82.01	53.6	12	18	-1	22	33	3		13	17	
SKOPJE	82.02	316.7	11	56	-23	22	39	9				
KARAPIRO	82.12	149.3	12	20	0							
ZAGREB	82.28	322.2	12	20	0	22	34	1				
SARAJEVO	82.38	319.6	12	22	1	22	35	1				
DE BILT	82.38	331.8	12	20	-1	22	40	6		15	20	PP
BENSBERG	82.48	330.1	12	20A	-1				12 31	12	37	*SP
DURHAM	82.61	336.7	12	22	0	22	41	5		12	40	PCP
LJUBLJANA	82.84	323.1	12	23A	0					15	38	PP
TITOGRAD	82.92	318.1	12	24	0	22	42	3		15	40	PP
BOULDER CITY	83.01	50.4	12	25	1							
HEIDELBERG	83.03	328.3	12	24	0							
STUTTGART	83.26	327.6	12	25	0	22	48	5		15	38	PP
UINTA BASIN	83.33	44.4	12	26	0	22	48	5		15	36	PP
ATHENS	83.33	312.5	12	25A	-1	22	44	1		15	38	PP
TRIESTE	83.50	323.2	12	27A	0	22	38	-7		28	2	SS
TUBINGEN	83.53	327.6	12	26	-1							
UCCLE	83.72	331.4	12	27	-1	22	46	-1				
RAVENSBURG	83.86	326.8	12	28	0							
STRASBOURG	84.06	328.2	12	31	2	22	48	-3		15	45	PP
RAPID CITY	84.15	38.4	12	31	1							
DOURBES	84.18	330.8	12	31	1	23	0	8				
GLEN CANYON	84.37	48.0	12	33	2							
KAIMATA	84.51	154.3	12	25	-7					15	43	PP
PADOVA	84.58	324.0	12	36	4	23	0	4		23	40	PS
CHUR	84.60	326.2	12	34	2	22	58	2				
WELLINGTON	84.67	151.5	12	32	-1	22	56	-1				
KEW	84.92	334.2	12	34	0	22	59	0		15	49	PP
BESANCON	85.85	328.3	12	37	-1					13	26	
PAVIA	86.02	325.3	12	40	1	23	8	-2		16	4	PP
PRATO	86.08	323.4	12	45	6	23	13	3				
FLORENCE X.	86.08	323.2	12	41A	2	23	20	10		16	8	PP
GOLDEN	86.11	42.6	12	40	0							
ROSELEND	86.78	327.0	12	44	1					13	50	
ROME	86.85	321.3	12	44A	1	23	20	2		16	8	PP
FOLINIERE	87.21	332.7	12	45	0							
SCHEFFERVLLE	87.66	12.8	12	47	0							
ISOLA	87.76	325.8	12	48	0				12 58			
MESSINA	87.89	317.0	12	47	-1	23	28	0		16	18	PP
MONACO	87.93	325.3	12	54	6							
TUCSON	87.95	51.1	12	49	0					13	9	
CLERMONT-FD.	88.23	329.0	12	50	0							
ALBUQUERQUE	88.79	46.6	12	54	1							
ADDIS ABABA	90.38	281.3	13	3	3							
MADISON	90.95	31.4	13	3	0	23	32	-24		16	35	PP
BAGNERES	91.66	329.1	13	6	0							
LAWRENCE	91.93	37.3	13	6	-1							
WICHITA MTS.	93.43	42.1	13	14	0	24	24	7		16	57	PP
TULSA	94.02	39.6	13	18A	1	24	27	5		17	5	PP
SHAWINIGAN	94.08	19.3	13	17A	0							
ST. LOUIS 1	94.58	34.4	13	20	1							
FAYETTEVILLE	94.70	38.5	13	20K	0							
BREBEUF	94.81	20.3	13	21K	1	24	37	8		30	56	SS
CLEVELAND	95.82	27.2	13	27K	2	24	0	2		17	18	PP
TOLEDO	96.06	330.0	13	27K	1	24	2	3		17	16	PP
PENNSYLVANIA	97.73	25.1	13	34	0							
MORGANTOWN	98.02	27.1	13	37K	2					17	22	PP
GRANADA	98.15	328.3	14	5	29					25	53	
WESTON	98.33	19.9	13	37	1					27	32	
PALISADES	98.83	22.3	13	37	-2	24	17	3	14 7	14	39	*SP
CUMBERLAND	99.20	33.0	13	42	2	24	17	2		17	38	PP
GEORGETOWN	99.70	25.4	13	43	0					17	47	PP
AVERROES	103.08	329.0								18	8	PP

LWIRO	105.04	278.2	14	7A	777				18	32	PP
CHILEKA	107.62	263.2	18	46	777						
SCOTT BASE	114.96	173.1	18	38	0						
BULAWAYO	115.12	262.6	18	42	3						
CHANGALANE	115.33	254.9	18	42	3				19	48	PP
KIMBERLEY	122.29	255.9	18	55K	2						
BANDEIRA	124.77	276.6	19	0K	3				20	51	PP
SOUTH POLE	125.64	180.0	18	59	0				20	45	
BYRD STATION	127.58	167.7	19	4	1				21	9	
CARACAS	129.19	29.3	19	10K	4	26	19	9			
CHINCHINA	129.88	42.5	19	11A	4				22	33	PP
BOGOTA	131.01	41.1	19	12A	3				22	38	PP
TRINIDAD	131.02	22.6	19	12	3				22	35	
N-LAZARVSKYA	134.43	202.6	19	17	1				21	51	PP
HUANCAYO	143.30	57.7	19	32	0						
LA PAZ	151.33	54.0	19	50	5				23	45	PP
ANTOFAGASTA	154.35	69.1	19	52	3				23	46	PP

MARCH 26 22.H 36.M 48.S EPICENTRE 34.00 140.16 DEPTH= 110.KM

A=-0.63790 B= 0.53219 C= 0.55665 D= 0.6406 E= 0.7679
G=-0.4274 H= 0.3566 K=-0.8307 HT= 0.5

DEPTH OF FOCUS= 0.012R

SE= 2.47

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S
HATIDYOZIMA	0.95	199.1	0	21	0	0	35	-2				
MERA	0.95	343.4	0	20A	-1	0	34	-3				
OSIMA	1.00	320.0	0	19A	-3	0	33	-5				
AJIRO	1.36	320.3	0	24	-2	0	41	-4				
YOKOHAMA	1.48	343.6	0	27K	0	0	46	-2				
MISIMA	1.50	318.4	0	25	-3	0	43	-5				
TOKYO C.M.O.	1.71	348.6	0	30K	0	0	52	-1				
OMAESAKI	1.71	290.8	0	31	1	0	52	-1				
HONGO	1.73	349.4	0	30	0	0	52	-1				
SHIZUOKA	1.75	304.0	0	39	8	0	51	-2				
TYOSI	1.80	18.1	0	32	1	0	55	0				
HUNATU	1.88	322.9	0	32	0	0	54	-2				
KOHU	2.12	322.0	0	35	0	1	0	-2				
HAMAMATU	2.14	290.2	0	35	-1	0	58	-4				
TITIBU	2.16	336.0	0	36	0	1	1	-2				
KAKIOKA	2.22	0.4	0	35	-2	0	52	-12				
KUMAGAYA	2.24	343.5	0	36K	-1	1	3	-1				
MITO	2.38	6.0	0	39	0	1	26	18				
IIDA	2.44	308.9	0	40	0	1	8	-1				
UTUNOMIYA	2.55	354.7	0	39	-2	1	9	-3				
MAEBASI	2.55	339.8	0	39	-2	1	17	5				
OIWAKE	2.67	330.8	0	43	0	1	14	-1				
MATUMOTO	2.87	321.9	0	47	2	1	21	1				
NAGOYA	2.88	294.7	0	45	-1	1	18	-2				
MATUSIRO	2.99	328.3	0	46K	-1	1	20	-2				
ONAHAMA	3.00	11.4	0	47	0							
TU	3.09	284.0	0	47	-1							
NAGANO	3.11	329.5	0	48	-1							
SHIRAKAWA	3.11	0.8	0	47	-2	1	24	-1				
GIHU	3.12	297.4	0	49	0	1	25	-1				
KAMEYAMA	3.17	286.5	0	58	9	1	14	-13				
TAKAYAMA	3.21	312.7	0	51	1	1	28	0				
OWASE	3.29	272.3	0	54	3	1	26	-4				
TAKADA	3.46	333.8	0	53	0	1	35	1				
HIKONE	3.46	292.5	0	52	-1	1	34	0				
TOYAMA	3.62	318.9	0	57	1	1	29	-9				
NARA	3.65	281.9	0	54	-2							
SIOMISAKI	3.70	262.6	0	56	-1	1	36	-4				
HUKUSIMA	3.75	3.7	0	56	-1	1	37	-4				
KYOTO	3.80	286.7	0	58	0	1	40	-2				
HUKUI	3.82	303.4	0	53	-5							
OSAKA	3.89	280.8				1	39	-5				
ABUYAMA	3.89	284.1	0	56K	-3							
NIIGATA	4.01	347.3									2	24
WAKAYAMA	4.15	274.5	1	3	0	1	48	-3				
KOBE	4.18	280.7	1	4	1	1	50	-1				
MAIZURU	4.19	291.8	1	3	0							

YAMAGATA	4.24	2.0	1	3	-1	1	48	-5						
AIKAWA	4.30	339.4	1	4	-1									
SENDAI	4.30	7.8	1	15	10									
SUMOTO	4.37	275.9	1	6	0	2	4	8						
ISINOMAKI	4.52	11.6	1	5	-3	1	46	-14						
TOKUSIMA	4.64	272.4	1	13	4									
TOYOOKA	4.65	290.6				2	8	5			1	40		
HIMEJI	4.80	277.5	1	8	-3									
MUROTO	5.05	263.1	1	10	-5	2	10	-2						
TAKAMATU	5.08	275.3	1	14	-1	2	15	2						
TOTTORI	5.15	288.7	1	17	1									
MIZUSAWA	5.18	8.4	1	22	5	2	12	-4						
KOTI	5.54	267.2	1	21	-1	2	29	4						
MORIOKA	5.74	7.8	1	21	-3	2	24	-5						
YONAGO	5.79	286.1	2	25	60	2	52	21						
MIYAKO	5.82	13.9	2	23	58									
MATUYAMA	6.14	270.5	1	33	3									
HAMADA	6.75	279.9	1	38	0	2	52	-2						
URAKAWA	8.39	13.5	2	57	57	3	27	-7						
HIROO	8.63	15.8				3	29	-11						
OBIHIRO	9.21	14.1				3	44	-10						
KUSIRO	9.56	19.1				3	48	-15						
NEMURO	10.23	22.8				4	5	-13						
SHILLONG	42.43	271.9	7	44K	-1									
COLLEGE	52.20	30.9	9	4	2									
CHARTERS TS.	54.10	172.9	9	16	0									
MOULD BAY	59.72	15.8	9	56	1									
QUETTA	60.91	288.4	10	2	-2									
BRISBANE	62.22	167.3	10	14	2									
ALERT	63.21	3.2	10	20	1									
RESOLUTE	65.79	13.8	10	36A	0									
SODANKYLA	67.36	337.4	10	45A	0						11	8		
KAJAANI	68.87	334.2	10	55	0						11	19		
KIRUNA	68.98	339.3	10	55	0									
UMEA	71.64	336.1	11	11K	0						11	35		
NURMIJARVI	72.14	332.0	11	14	0						11	38		
HELSINKI	72.22	331.6	11	15	0						11	39		
SHIRAZ	72.32	294.1	11	15K	-1									
SHASTA	73.76	51.7	11	26A	2									
SKALSTUGAN	74.36	338.5	11	27	0									
MINERAL	74.45	51.7	11	30A	2									
HUNGRY HORSE	74.71	41.7	11	32	3						11	56		
BLUE MTS.	74.75	46.0	11	32A	2						11	54		
UPPSALA	75.23	333.9	11	32K	0						11	56		
EUREKA	78.56	50.1	11	54	3									
UINTA BASIN	82.02	46.4	12	12	3						12	37		
COLLMBERG	83.21	329.7	12	16	1								12	52
PRUHON+CE	83.52	328.1	12	19	2								12	43
KASPERSKE H.	84.58	328.0	12	20	-2									
WICHITA MTS.	92.26	44.8	13	1	2						13	27		

MARCH 28 0.H 15.M 46.S EPICENTRE 66.29 -19.86 DEPTH= 0.KM

A= 0.38032 B=-0.13738 C= 0.91459 D=-0.3397 E=-0.9405
G= 0.8602 H=-0.3107 K=-0.4044 HT=-10.8

SE= 2.31

	DELTA DEG.	AZ. DEG.	P M	P S	P O-C S	S M	S S	S O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
AKUREYRI	0.95	130.1	0	15	-5								
REYKJAVIK	2.33	202.5	0	38A	-2	1	5	-5			0	40	P*
SIDA	2.63	162.3	0	42	-2						0	43	P*
SCORESBY SD.	4.28	350.6	1	6	-2								
ABERDEEN	12.38	129.2	2	53A	-7	5	13	-7			3	43	
BERGEN	12.68	105.9	3	5	1	5	33	6			7	49	
GODHAVN	12.97	298.3	3	5A	-3								
SKALSTUGAN	13.80	86.3	3	16A	-3	5	53	-1					
DURHAM	14.56	133.7	3	26A	-3	6	24	12			4	39	
RATHFARNHAM	14.66	146.2	3	29	-1	6	49	34					
KONGSBERG	14.84	102.6	3	31	-2	6	17	-2			3	42	PP
VALENTIA	15.19	156.8	3	37A	0								
NORD	15.42	1.8	3	38	-2	6	32	-1					
KIRUNA	15.59	66.0	3	41A	-1	6	44	7			7	34	
UMEA	16.88	79.7	3	56A	-3	6	51	-16					
GOTEBORG	17.06	105.0	4	0	-1								

THULE	17.81	324.7	4	23	12							
KEW	17.83	136.9	4	9K	-2	7	33	5				
UPPSALA	17.92	93.2	4	9A	-3	7	27	-3				
SODANKYLA	18.00	65.3	4	10A	-3	7	38	6				
COPENHAGEN	18.68	109.1	4	23K	2	7	48	0				
ALERT	18.94	344.1	4	20K	-5	7	21	-32				
JERSEY	19.47	143.1	4	32	1	8	14	9				
KARLSKRONA	19.55	104.1	4	32A	0							
KAJAANI	19.71	74.2	4	30	-3	8	17	7				
UCCLE	19.80	129.8	4	31	-4	8	10	-3				
MUNSTER	19.86	122.8	4	35	0							
FOLINIERE	20.25	140.6	4	36	-3							
NURMIJARVI	20.37	85.3	4	37	-4	8	25	0				
APATITY	20.40	62.0	4	38A	-3	8	23	-2			8	49
DOURBES	20.49	130.4	4	42	0	8	32	5				
BENSBERG	20.57	125.1	4	40K	-3	8	31	3				
HELSINKI	20.70	85.8	4	42	-2							
HALLE	21.77	117.3	4	55	0	8	59	7				
JENA	22.11	118.7	4	55	-3	9	2	4			9	36
COLLMBERG	22.31	116.2	5	1	1	9	6	4				
HEIDELBERG	22.42	125.0	5	2	1							
WELSCHBRUCH	22.52	129.8	5	6	3							
STRASBOURG	22.82	127.4	5	6A	1	9	17	6			6	26
PULKOVO	23.09	82.3	5	6A	-2	9	19	3				
STUTTGART	23.15	125.0	5	6	-3	9	26	9			6	55
TUBINGEN	23.29	125.6	5	10	0							
BESANCON	23.44	131.7	5	13	1	9	40	18				
EBINGEN	23.56	126.2	5	14A	1							
KHEYS	23.64	23.6	5	15K	2						5	53 PP
PRAGUE	23.84	116.1	5	18	3	9	34	5			10	44 SSS
PRUHONICE	23.96	116.0	5	17	0						5	40
CLERMONT-FD.	23.97	137.7	5	19	2	9	38	7				
RAVENSBURG	24.11	125.7	5	20	2							
KASPERSKE H.	24.32	118.5	5	18K	-2						7	43
RESOLUTE	24.57	321.9	5	22K	-1							
WARSAW	24.61	104.8	5	25	2						5	49 PP
CHUR	24.91	126.9	5	27	1	9	59	12				
ROSELEND	25.04	132.4	5	32	5	10	4	15			6	45
SCHEFFERVLLE	25.08	265.7	5	26A	-1							
RACIBORZ	25.23	111.3	5	30	1	9	47	-6			6	7 PP
CHORZOW	25.36	110.0	5	31	1						6	1 PP
BAGNERES	25.74	144.7	5	31	-3							
KRAKOW	25.91	109.2	5	36	1	10	8	4				
VIENNA-H.	26.06	116.0	5	34	-3	10	14	7			6	23 PP
PAVIA	26.28	129.2	6	34K	55						11	26
BRATISLAVA	26.40	115.1	5	43A	3						12	26
ISOLA	26.54	133.2	5	42	1	10	16	2				
SKALNATE PL.	26.74	110.0	5	38	-5						10	53
PADOVA	26.95	125.2	5	44	-1	10	8	-13			6	42 PP
LJUBLJANA	27.28	120.9	5	48	0	10	26	-1			6	36 PP
TRIESTE	27.37	122.4	5	49A	0	10	31	3			6	29 PP
BOLOGNA	27.58	126.8	6	8	17	11	14	43			7	14
LWOW	27.68	104.8	5	52	1						10	21
BARCELONA	27.78	142.8	5	49	-3	9	41	-53				
TOLEDO	27.93	153.4	5	54K	0	10	38	1			6	38 PP
TORTOSA	27.96	145.7	5	54	0	10	38	1				
ZAGREB	27.99	119.3	5	55K	1	10	40	2			6	23
ANGRA DO HO.	28.01	192.3									12	19 SS
PRATO	28.06	127.7	5	57	2	11	14	35				
FLORENCE X.	28.20	127.6	5	49A	-7	10	6	-35			6	29 PP
LISBON	28.29	162.1	5	58K	1	10	41	-2			6	44 PP
SEPT ILES	28.41	258.5	5	58	0							
MOSCOW	28.70	83.4	5	59	-2	10	41	-8			6	55 PP
PONTA DELGDA	28.80	189.6	6	3	1	10	44	-7			6	55 PP
MOULD BAY	29.30	331.1	6	6K	0	11	4	5				
TIMISOARA	29.96	112.9	6	14	2						10	27
ALICANTE	30.11	148.7	6	15K	2	11	22	10			7	8 PP
ROME	30.28	127.6	6	14K	-1	11	23	9			7	20 PP
BELGRADE	30.46	114.8	6	18	2	11	27	10			13	10 SSS
SARAJEVO	30.55	118.2	6	17	0						14	5
CUGLIERI	30.66	134.3	6	34	16						13	44
ALMERIA	31.17	152.4	6	24K	1	11	25	-3			7	20 PP
BACAU	31.44	105.5	6	51	26						11	52
CAMPULUNG	31.80	109.0	6	33	5	11	48	10			7	25 PP
HALIFAX	31.91	249.1	6	31	2							
TITOGRAD	32.11	118.5	6	31	0						7	30 PP
FOCSANI	32.28	106.1				12	8	22			8	45
BUCHAREST	32.93	108.6	6	41	3	12	0	4			7	49 PPP
TARANTO	33.14	122.7									7	39

SKOPJE	33.29	116.3	6 40	-1	12	8	6			14 33	SSS
SOFIA	33.35	113.4	6 43	1	12	7	4			7 59	PP
AVERROES	33.85	161.1	6 46A	0	12	14	4			8 8	PP
SHAWINIGAN	33.88	260.9	6 45A	-1							
MESSINA	34.62	126.5	6 52K	-1	12	4	-18	7	0	8 4	PP
BREBEUF	35.08	260.7	6 55A	-2	12	32	3			8 6	PP
SIMFEROPOL	35.63	99.6	7 3A	2	12	44	6			8 15	PP
OTTAWA	36.01	262.7	7 3A	-2							
WESTON	36.78	255.4	7 12	1	12	10	-46				
SVERDLOVSK	36.80	64.8	7 10K	-1	12	57	1				
ISTANBUL UN.	36.92	108.5	7 13	1	13	0	2				
YELLOWKNIFE	37.40	310.4	7 16A	0							
ATHENS	37.64	116.9	7 19K	1	13	9	0			8 47	PP
PALISADES	38.97	256.9	7 24	-5	13	34	5	7	36		
FORDHAM	39.09	256.8	7 27	-3	13	33	2				
PHILADELPHIA	40.37	257.4	7 42	1	13	54	4			9 15	PP
PENNSYLVANIA	40.72	260.8	7 44	0							
TIKSI	40.73	14.6	7 46K	2						14 2	
CLEVELAND	41.61	264.9	7 53A	2	14	16	8				
WASHINGTON	42.02	258.5	7 54	-1						9 42	PP
GEORGETOWN	42.02	258.5	7 55	0	14	19	5				
MORGANTOWN	42.55	261.9	8 0K	1	14	32	10				
TIFLIS	42.61	92.1	8 2	3	14	30	7			9 48	PP
MADISON	43.35	274.0	8 6	1	14	38	4			9 52	PP
CHICAGO CGS.	43.81	270.8	8 14	5	14	46	6			9 56	PP
COLLEGE	43.88	330.9	8 10	0							
BLACKSBURG	44.81	260.6	8 16	-1							
GORIS	45.11	92.4	8 23A	3						15 8	
CHAPEL HILL	45.39	258.3	8 25	3							
KSARA	45.88	106.6	8 29A	3	15	28	18			10 23	PP
BANFF	46.73	300.6	8 55K	23							
JERUSALEM	47.43	108.5	8 38A	0						10 30	
ST. LOUIS 1	47.54	270.8	8 42	3	15	49	15				
COLUMBIA	47.85	259.0	8 41	0							
RAPID CITY	48.10	285.9	8 43	0							
CUMBERLAND	48.28	264.4	8 44A	-1	15	52	8			10 27	PP
HUNGRY HORSE	48.57	297.5	8 46	-1							
SEMIPALATNSK	48.90	56.7	8 49K	0						10 43	PP
LAWRENCE	49.28	275.6	8 51	-1							
PENTICTON	49.70	302.3	8 55K	-1							
BOZEMAN	49.74	293.3	8 56	0							
BUTTE	50.01	294.7	8 59	1	16	13	4				
YAKUTSK	50.06	18.1	8 59K	1	16	11	2				
TEHERAN	50.39	90.3	9 4	3	16	8	-6			11 4	PP
PORT HARDY	51.09	308.9	9 8	2							
LARAMIE	51.38	285.9	9 8	0						20 28	
VICTORIA	51.67	304.5	9 11	0							
M.BOUR	51.90	176.4	9 14	2	16	34	-1				
TULSA	52.13	274.0	9 12K	-2	16	32	-6			20 9	
GOLDEN	52.68	284.7	9 18	0	16	52	7				
TASHKENT	52.69	71.3	9 20A	2						16 57	PS
BLUE MTS.	52.73	297.6	9 13	-6	16	45	-1			11 14	PP
FLAMING GRGE	53.17	288.8	9 21	-1							
FRUNSE	53.40	66.0	9 22A	-1						17 1	PS
UINTA BASIN	53.77	288.6	9 26K	0	17	7	7			11 30	PP
SALT LAKE C.	54.25	290.7	9 31	1	17	12	5				
MAGADAN	54.28	5.8	9 28	-2	17	6	-1				
WICHITA MTS.	54.29	275.8	9 28	-2	17	10	3			11 31	PP
IRKUTSK	54.41	38.7	9 31K	0	17	10	1				
PRICE	54.86	289.2	9 31	-3							
DALLAS	55.19	273.1	9 36	-1							
SHIRAZ	56.17	92.9	9 42K	-2	17	30	-2	9	56	13 34	
ANTIGUA	56.27	230.3	9 41	-3							
SAN JUAN	56.49	235.4	9 46	0							
KHOROG	56.88	71.7	9 49A	0						17 47	PS
EUREKA	56.92	293.3	9 49	0							
ALBUQUERQUE	57.23	282.8	9 50	-1	17	35	-11			21 6	SS
ST. CLAUDE	57.27	229.7	9 51	-1	17	53	6				
GLEN CANYON	57.46	288.3	9 52	-1							
MINERAL	58.20	298.3	9 49A	-9							
FORT FRANCE	58.33	228.6	9 58	-1	18	16	15				
ULAN-BATOR	59.07	38.9	10 5K	1	18	18	8				
BOULDER CITY	59.57	290.4	10 13	5							
WARSAK DAM	59.95	73.6	9 57	-13							
CALISTOGA	60.06	298.2	10 13A	2							
HOPE	60.59	246.2	10 13	-2							
BERKELEY	60.64	297.5	10 18A	3	18	20	-11				
LICK	60.88	296.7	10 18A	1							
PETROPAVLOVK	61.01	1.0	10 19A	2						14 7	PPP

TUCSON	61.32	285.1	10	18	-2	18	47	8		12	32 PP
QUETTA	61.51	79.6	10	19	-2					13	55
PRIEST	61.60	295.3	10	23A	2						
LOME	61.83	156.1	10	22	-1					13	37 PP
TRINIDAD	62.26	227.4	10	27	1	18	59	8			
PASADENA	62.45	292.2	10	28	1	18	58	4		12	46 PP
CHIHUAHUA	62.65	279.1	10	34	6	19	14	18		26	14
MERIDA	62.88	260.2	10	29	-1	19	2	3		15	38
LAHORE	63.19	72.6	10	30	-2						
CARACAS	64.12	233.2	10	38K	0	19	19	4			
DEHRA DUN	65.72	70.0	10	50K	2	19	42	8		13	16 PP
Y.-SAKHLINSK	66.23	12.9	10	51K	-1					19	53 PS
KARACHI	66.31	82.2	10	50	-2					14	51
GALERAZAMBA	66.70	241.7				19	57	11		24	19 SS
PAOTOW	66.73	39.5	10	56	1	19	52	6			
CHANGCHUN	66.99	26.7	10	57K	0	19	55	5			
VERA CRUZ	67.07	265.5	10	54	-3	19	58	7		20	42
MAZATLAN	67.64	276.7								31	14
COMITAN	68.12	260.4	11	6	2	20	16	13		24	42
TACUBAYA	68.12	268.4	11	6	2	20	16	13		24	26 SS
GUADALAJARA	68.64	272.7								12	18
PEKING	68.75	34.9	11	9K	1	20	19	8			
VLADIVOSTOK	68.77	21.8	11	4K	-4					20	14 PS
LANCHOW	69.26	46.1	12	12K	61						
OAXACA	69.29	265.1								20	26
ADDIS ABABA	69.48	115.8	11	13	1	20	21	2			
BALBOA HTS.	69.94	245.2	11	14	-1						
MANZANILLO	70.51	272.9								21	32
LHASA	71.07	59.3	11	24K	2						
FUQUENE	71.10	238.2	11	21K	-1						
BOGOTA	72.01	238.2	11	27A	0	20	54	5			
CHINCHINA	72.22	239.9	11	29A	0	20	56	5		25	40 SS
CHATRA	72.26	63.8	11	30K	1	20	57	5		14	22 PP
SIAN	72.39	42.6	11	31	1						
MIZUSAWA	73.89	15.3	11	37	-1	21	13	3			
CHENGTU	74.34	48.0	11	43K	2	21	22	7			
POONA	74.69	79.0	11	44	1	21	17	-2		25	54 SS
SHILLONG	75.09	60.3	11	46A	1	21	27	4		12	1 PCP
MATUSIRO	76.11	18.0	11	51	0	21	41	6			
CALCUTTA	76.62	64.5	11	57	3	21	49	9			
LWIRO	76.63	129.5	11	57K	3	21	50	10		14	49 PP
TUKUBASAN	76.65	16.5	11	54K	0	21	40	-1	12 5	15	4 PP
NANKING	76.97	35.2	11	58	2	21	51	7			
ABUYAMA	77.40	20.5	12	0K	2						
HYDERABAD	77.50	75.4	11	57K	-2	21	57	7		14	52 PP
CHITTAGONG	78.02	61.6	12	5	3						
ZO-SE	78.44	33.4	12	1	-3						
LUANDA	78.75	146.6	12	8K	2					15	2 PP
VISHAKHAPTNM	79.11	70.9	12	13K	5	22	24	17			
KUNMING	79.13	51.0	12	7K	-1						
MADRAS	82.20	75.6	12	25A	1	22	45	6		15	38 PP
KODAIKANAL	83.65	79.2	12	46	14	23	16	22		28	23
CANTON	84.16	42.4	12	36	2						
BANDEIRA	84.63	147.9	12	39	2				12 40		
KIPAPA	87.06	321.5				23	35	8		16	26 PP
HONOLULU	87.19	321.6	12	56	7	23	44	16		16	26 PP
HUANCAYO	88.02	233.7	12	55	2						
BROKEN HILL	88.07	133.6	12	56	3						
PORT BLAIR	88.18	64.8	12	56	2	23	31	-7		16	22 PP
LA PAZ	90.00	225.7	13	3	0	23	36	-18			
AREQUIPA	90.96	228.8	13	9	2						
NHATRANG	93.26	49.5	13	19	1					17	2 PP
BULAWAYO	93.50	135.2	13	22	3						
MANILA	94.23	37.7	13	24	2	24	10	-21			
ANTOFAGASTA	97.47	225.6	13	34	-3	24	19	5		16	55 PP
CHANGALANE	100.35	134.0								32	38 SS
HERMANUS	104.78	147.4								27	57 PS
SANTA LUCIA	106.73	222.6								24	54 PS
RABAUL	117.77	9.0	19	52	64					29	46
HONIARA	123.22	0.2								20	34 PP
MUNDARING	136.84	59.5	19	27	2					22	11 PP
N-LAZARVSKYA	138.50	164.8	19	27	-1	26	32	-5		22	26 PP
BRISBANE	140.81	10.4	19	34	2						
MAWSON	145.61	137.7	19	39	-1					30	59 SKKP
ADELAIDE	146.20	32.6	19	44K	3					42	18 SS
RIVERVIEW	147.07	13.8	19	47	4					23	14 PP
CANBERRA	148.30	17.5	19	52	7					28	4 PCPPKP
TOOLANGI	150.02	23.7	19	55	8				19 58	21	4

KARAPIRO	150.24	335.0	19	55	7					23	24 SKP
WELLINGTON	153.64	334.6	20	0	7					23	49 PP
SAVANNAH	154.34	22.8	20	21	28						
TARRALEAH	154.79	24.3	20	23	29						
MOORLANDS	155.04	23.2	20	23	29						
BYRD STATION	155.84	204.8	19	56	1						
SOUTH POLE	156.15	180.0	19	54	-2						
ROXBURGH	158.56	342.1								34	36 SAKS

MARCH 28 0.H 59.M 34.S EPICENTRE 66.37 -19.69 DEPTH= 0.KM

A= 0.37958 B=-0.13582 C= 0.91513 D=-0.3369 E=-0.9415
G= 0.8616 H=-0.3083 K=-0.4032 HT=-10.8

SE= 2.08

	DELTA DEG.	AZ. DEG.	P M	S	O-C S	S M	S	O-C S	*PP M	S	SUPP. M	S
AKUREYRI	0.95	136.5	0	17	-3							
REYKJAVIK	2.43	203.5	0	40	-2					1	25	P*
SIDA	2.69	164.4	0	43	-2							
SCORESBY SD.	4.22	349.6	1	9	2					3	54	
BERGEN	12.63	106.4	3	6	2					5	34	
SKALSTUGAN	13.72	86.8	3	18	0							
KONGSBERG	14.79	103.1	3	33	1							
NORD	15.34	1.7	3	40	1							
KIRUNA	15.49	66.3	3	43	2							
UMEA	16.80	80.0	3	58	0							
GOTEBORG	17.01	105.5	4	1	0							
THULE	17.79	324.5	4	8	-3							
KEW	17.84	137.4	4	11	0							
UPPSALA	17.86	93.6	4	11	0					8	3	
SODANKYLA	17.90	65.6	4	11K	-1	7	38	8				
COPENHAGEN	18.64	109.5	4	22	1							
ALERT	18.88	344.0	4	22K	-2							
KARLSKRONA	19.50	104.5	4	31	0							
KAJAANI	19.62	74.5	4	32	-1							
MUNSTER	19.85	123.3	4	36	1							
NURMIJARVI	20.30	85.6	4	38	-2							
APATITY	20.30	62.3	4	39A	-1							
DOURBES	20.49	130.8	4	45	3					5	12	
BENSBERG	20.55	125.5	4	42	-1							
HELSINKI	20.62	86.1	4	41	-3							
HALLE	21.74	117.7	4	57	2							
VIBORG	21.83	81.8	4	53	-3							
JENA	22.08	119.1	4	59	1							
COLLMBERG	22.28	116.6	5	1	1					5	32	PP
WELSCHBRUCH	22.52	130.2	5	6	3							
STRASBOURG	22.81	127.8	5	6	0					5	36	
PULKOVO	23.01	82.6	5	8K	0							
STUTTGART	23.14	125.4	5	8	-1							
BESANCON	23.44	132.1	5	24	12							
PRUHONICE	23.93	116.4	5	22	6					5	46	
CLERMONT-FD.	23.98	138.1	5	18	1							
KASPERSKE H.	24.30	118.9	5	19A	-1					6	56	
ROSELEND	25.04	132.8	5	23	-4					6	3	
SCHEFFERVLLE	25.16	265.7	5	27A	-1							
BAGNERES	25.76	145.1	5	32	-2					5	54	
ISOLA	26.54	133.6	5	42	1							
UZHGOROD	27.93	108.6	5	54	0							
MOSCOW	28.62	83.7	6	3	3							
MOULD BAY	29.27	331.1	6	7	1							
BREBEUF	35.17	260.8	6	57K	-1							
OTTAWA	36.09	262.8	7	5K	0							
YELLOWKNIFE	37.40	310.4	6	46	-30					7	17	
BAKURIANI	42.02	93.5	7	55	0							
COLLEGE	43.85	331.0	8	11	1							
KIROVOBAD	44.07	91.8	8	11	0							
KSARA	45.83	106.8	8	28	2							
CUMBERLAND	48.36	264.5	8	45	0							
HUNGRY HORSE	48.59	297.5	8	47	0							
PENTICTON	49.72	302.3	8	57	1							
BOZEMAN	49.78	293.4	8	57	1							
YAKUTSK	49.96	18.3	8	57K	-1							
TULSA	52.20	274.1	9	14	-1							
UINTA BASIN	53.81	288.7	9	27	0					10	13	
WICHITA MTS.	54.35	275.9	9	30	-1							

SHIRAZ	56.11	93.1	9	42	-1							10	2	
SAN JUAN	56.59	235.5	9	49	2							10	43	
ST. CLAUDE	57.37	229.8	10	1	9	17	55	7						
TUCSON	61.37	285.2	10	18	-2									

MARCH 28 11.H 12.M 30.S EPICENTRE -30.26-177.75 DEPTH= 35.KM

A=-0.86456 B=-0.03392 C=-0.50138 D=-0.0392 E= 0.9992
G= 0.5010 H= 0.0197 K=-0.8652 HT= 1.7

DEPTH OF FOCUS= 0.000R

SE= 2.49

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
RAOUL ISLAND	1.02	351.8	0	18	0								
ONERAHI	8.60	228.2	2	11	6								
KARAPIRO	9.46	214.2	2	15	-2								
CHATEAU	10.48	209.9	2	29	-2	4	28	0			2	50	
WELLINGTON	12.55	206.8	2	56	-3	5	7	-12					
NOUMEA	16.22	295.5	3	51	4	7	9	24					
AFIAMALU	17.18	20.0	3	50	-9	6	50	-17					
PORT VILA	17.79	311.4	4	11K	4								
ROXBURGH	18.27	210.1	4	10	-2	7	20	-12					
BRISBANE	25.94	269.0	5	33	2								
RIVERVIEW	26.55	254.1	5	39A	2	10	15	8			6	35	PPP
CANBERRA	28.32	250.9	5	54A	1				6	4	13	30	
HONIARA	29.37	310.2	5	58	-4								
SAVANNAH	30.39	238.2	6	14	3						13	11	SCP
MOORLANDS	30.53	236.8	6	13	1						12	48	SCP
TARRALEAH	31.03	237.3	6	18	1						12	51	SCP
TOOLANGI	31.22	246.6	6	19A	1				6	29	9	13	PCP
CHARTERS TS.	33.98	278.8	6	43A	1	12	3	-1					
ADELAIDE	36.75	251.0	7	6A	0	13	12	25			8	54	PP
RABAUL	38.44	306.5	6	55	-25						19	33	
PORT MORESBY	38.75	295.0	7	18K	-5								
KIPAPA	54.77	22.7	9	28	-1								
BYRD STATION	55.03	169.6	9	32	1								
WILKES	55.37	207.8	9	32	-1								
MUNDARING	55.75	250.0	9	33	-3				9	41			
SOUTH POLE	59.91	180.0	10	5	0						18	7	
MIRNY	62.35	206.9	10	21	0								
MAWSON	72.51	200.5	11	25A	0								
BAGUIO CITY	75.33	299.2	11	39	-3								
MATUSIRO	78.24	325.1	11	56K	-2								
N-LAZARVSKYA	79.03	183.2	12	2A	0	22	0	3					
NHATRANG	81.87	289.2	12	15	-2						12	33	SP
Y.-SAKHLINSK	84.78	334.1	12	31	-1								
PRIEST	85.06	43.0	12	35A	2								
PASADENA	85.23	45.9	12	35	1								
LICK	85.31	41.6	12	36A	1								
BERKELEY	85.33	40.9	12	36A	1						13	21	
PETROPAVLOVK	85.44	346.0	12	35	0								
CALISTOGA	85.69	40.1	12	38A	1								
MEDAN	86.24	276.3	12	36A	-3								
MINERAL	87.42	39.4	12	45K	0								
BOULDER CITY	88.50	46.3	12	51	1								
TUCSON	88.79	51.2	12	54	2								
EUREKA	90.05	43.0	12	58	0								
GLEN CANYON	91.16	47.1	13	5	2								
BLUE MTS.	92.80	38.3	13	10	0						17	0	PP
ALBUQUERQUE	93.32	51.2	13	14	1								
UINTA BASIN	94.43	45.4	13	18	0	24	39	15			17	7	PP
PENTICTON	94.60	33.9	13	18	0								
WICHITA MTS.	98.64	54.9	13	37	0	24	16	5			30	6	PKKP
YAKUTSK	101.18	337.6	13	47	-1								
SHILLONG	102.73	292.2	17	25	210								
YELLOWKNIFE	105.22	25.4	14	12	777						18	20	PKP
CUMBERLAND	108.50	59.2				25	2	6			34	16	SS
MOULD BAY	112.23	12.7	18	31	-1								
RESOLUTE	117.05	17.2	18	40A	-1								
KIMBERLEY	117.51	202.3	18	41	-1								
ALMATA-2	120.31	305.1	18	47A	-1								
WARSAK DAM	122.22	293.3	18	51	0								
ALERT	123.08	8.2	18	52A	-1								

BULAWAYO	123.84	210.2	18	56A	1		
CHILEKA	124.50	219.2	18	57	1		
QUETTA	124.81	287.5	18	57A	1		
KHEYS	125.05	350.5	18	56A	-1		
DUZHANBE	125.56	297.9	18	58	0		
TASHKENT	125.74	301.3	19	UA	2		
SEPT ILES	125.93	47.7	18	58K	-1		
SCHEFFERVLLE	126.02	41.9	18	58	-1		
BROKEN HILL	128.87	213.4	19	4	0		
SVERDLOVSK	131.93	321.0	19	9K	-1		
VANNOVSKAYA	133.71	295.2	19	5	-8		
KIZYL-ARVAT	135.28	296.7	19	19K	3	22 50	SKP
APATITY	138.35	342.6	19	24	2		
TEHERAN	138.77	291.0	19	24	1		
LWIRO	138.92	222.8				22 59	PP
SODANKYLA	140.11	345.6	19	19	-6		
KIRUNA	140.88	349.2	19	19	-8		
KAJAANI	142.53	341.9	19	23	-6	23 5	PKS
KIROVOBAD	142.96	298.5	19	26	-4		
MOSCOW	144.34	325.8	19	30	-3	22 45	PP
UMEA	144.53	346.3	19	30A	-3		
VIBORG	144.79	337.6	19	31	-2		
PULKOVO	144.96	335.5	19	32A	-2		
BAKURIANI	145.01	300.6	19	34A	0		
SKALSTUGAN	146.05	352.0	19	36A	0		
NURMIJARVI	146.25	340.1	19	35	-1	23 13	
HELSINKI	146.43	339.6	19	37	1		
UPPSALA	148.64	345.1	19	42A	2		
BERGEN	149.79	357.0	19	49	7		
KONGSBERG	150.19	352.5	19	47A	5		
SIMFEROPOL	151.02	309.3	19	50A	7		
KSARA	151.34	286.0	19	51	7		
GOTEBORG	151.75	348.9	19	50A	6		
JERUSALEM	151.76	281.6	19	51	7		
KARLSKRONA	152.45	343.8	19	54A	9		
COPENHAGEN	153.58	347.0	19	54	7		
LWOW	154.48	326.1	20	16	28		
DURHAM	155.35	5.3	20	17K	28		
UZHGOROD	156.12	325.8	19	51	1		
SKALNATE PL.	156.68	329.2	19	53	2		
COLLMBERG	157.51	342.2	19	52	0	20 24	PKP2
HALLE	157.59	344.0	19	51	-1	20 24	PKP2
MUNSTER	157.95	351.1				21 26	
JENA	158.20	344.0	19	52	-1	20 25	
PRUHONICE	158.23	338.2	19	52	-1	20 27	
BRATISLAVA	158.80	331.7	19	54	0	20 45	
BENSBERG	159.00	351.3	20	31	37		
VIENNA-H.	159.03	332.9	19	55	1		
KASPERSKE H.	159.28	338.6	19	54A	0	24 18	PP
DOURBES	160.10	355.5	20	0	5	20 40	PKP2
STUTTGART	160.75	345.8	19	56	0	20 39	PKP2
STRASBOURG	161.22	348.5				20 41	PKP2
FOLINIERE	161.40	5.7	19	58	1		
LJUBLJANA	161.55	332.1	19	56	-1		
WELSCHBRUCH	161.60	351.3				20 42	PKP2
BESANCON	162.79	351.4				20 47	PKP2
ROSELEND	164.22	348.6				20 54	PKP2
TOLEDO	169.11	26.5	20	6A	3	25 15	PP
AVERROES	171.23	67.3	20	22A	18	20 51	
GRANADA	171.55	33.6	21	30	85	25 24	PP
BENI ABBES	176.16	91.0	20	8	2	25 52	

MARCH 28 23.H 29.M 12.S EPICENTRE -29.81-177.32 DEPTH= 37.KM

A=-0.86821 B=-0.04057 C=-0.49454 D=-0.0467 E= 0.9989
G= 0.4940 H= 0.0231 K=-0.8692 HT= 1.9

DEPTH OF FOCUS= 0.001R

SE= 2.49

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S
RAOUL ISLAND	0.76	316.7	0	15	0							
ONERAHI	9.18	227.4	2	19	7							
KARAPIRO	10.04	214.3	2	22	-2							
TUAI	10.07	205.5	2	19	-6	4	12	-6				

CHATEAU	11.06	210.2	2	42	4									
WELLINGTON	13.13	207.2	2	4	-62	5	22	-10						
NOUMEA	16.37	293.4	3	54K	6									
AFIAMALU	16.63	19.1	3	47	-4	6	31	-23						
PORT VILA	17.79	309.3	4	8K	2									
KOUMAC	19.00	294.7	4	22A	1									
BRISBANE	26.33	267.9	5	36	2									
RIVERVIEW	27.03	253.3	5	41	1	10	10	-4				6	24	PP
CANBERRA	28.82	250.2	5	58A	2							6	49	PP
HONIARA	29.37	309.0	5	58	-3									
TOOLANGI	31.74	245.9	6	23	1							9	13	PCP
CHARTERS TS.	34.28	277.9	6	45A	1									
ADELAIDE	37.25	250.4	7	10K	1	13	27	33				9	33	PCP
RABAUL	38.48	305.5	7	14	-6							19	14	
KIPAPA	54.21	22.3	9	24	0									
BYRD STATION	55.41	169.7	9	36	4									
WILKES	55.95	207.6	9	35	-1	17	19	-1	9	52				
MUNDARING	56.25	249.6	9	37	-2	17	43	19						
MIRNY	62.92	206.7	10	24K	0									
MAWSON	73.07	200.3	11	28A	0									
LEMBANG	73.68	271.4	11	30	-1									
TANGERANG	74.86	271.5	11	36K	-2									
BAGUIO CITY	75.44	298.8	11	38	-3									
MATUSIRO	78.09	324.8	11	55	-1	21	55	9						
N-LAZARVSKYA	79.50	183.1	12	4	0	21	58	-3						
PRIEST	84.48	42.8	12	31A	1									
Y.-SAKHLINSK	84.54	333.8	12	30K	0									
PASADENA	84.65	45.7	12	31	0	23	4	10						
LICK	84.73	41.4	12	31A	0									
CALISTOGA	85.10	39.9	12	34A	1									
VLADIVOSTOK	86.24	325.4	12	38	0									
MINERAL	86.84	39.2	12	41A	0									
TUCSON	88.22	51.0	12	50	2									
EUREKA	89.47	42.8	12	54	0							31	15	PKKP
GLEN CANYON	90.58	46.9	13	2	3									
ANTOFAGASTA	91.95	118.7										23	38	
BLUE MTS.	92.21	38.1	13	6	-1	24	14	10						
ALBUQUERQUE	92.75	51.0	13	10	1									
UINTA BASIN	93.85	45.2	13	15	1	24	33	15				30	49	SS
FLAMING GRGE	94.32	44.8	13	17	1									
COLLEGE	97.13	12.2	13	28	-1									
WICHITA MTS.	98.08	54.7	13	33	0	24	9	2				30	6	PKKP
TULSA	100.65	54.8										24	13	
YAKUTSK	100.90	337.5	13	46	0									
BOGOTA	103.78	92.6				24	52	17				27	34	PS
CUMBERLAND	107.95	58.9				24	56	3				18	51	PP
MADISON	108.15	50.1				24	56	2				28	8	PS
MOULD BAY	111.70	12.6	18	29	-1									
CARACAS	112.79	90.8										19	26	
RESOLUTE	116.50	17.1	18	38K	-2									
TRINIDAD	117.67	93.4										29	56	
BREBEUF	119.76	51.9										37	0	
ALMATA-2	120.35	305.3	18	38K	-9									
WARSAK DAM	122.38	293.4	18	51	0									
ALERT	122.58	8.2	18	50K	-1									
BULAWAYO	124.41	209.9	18	57	2									
KHEYS	124.67	350.6	18	55K	0									
QUETTA	125.03	287.7	18	58	2									
SCHEFFERVLLE	125.44	41.7	18	57	0									
TASHKENT	125.82	301.5	18	57	-1									
BROKEN HILL	129.46	213.1	19	7	2									
ASHKABAD	133.65	295.5	19	14	1							22	53	PKS
VANNOVSKAYA	133.85	295.5	19	15	2									
SHIRAZ	137.00	282.7	19	20A	1							22	51	SKP
APATITY	38.03	342.9	19	18	-3									
TEHERAN	138.95	291.4	19	19	-3									
LWIRO	139.51	222.7	19	20A	-3									
SODANKYLA	139.76	345.9	19	21	-3									
KIRUNA	140.51	349.5	19	23A	-2									
KAJAANI	142.22	342.3	19	23	-5									
KIROVOBAD	143.07	299.1	19	27	-3									
GORIS	143.12	297.1	19	27	-3									
TIFLIS	144.14	301.0	19	32	1									
MOSCOW	144.17	326.4	19	28K	-3							22	39	PP
UMEA	144.17	346.8	19	28A	-3							22	34	PP
VIBORG	144.52	338.1	19	29	-3									
PULKOVO	144.70	336.0	19	31K	-1									
BAKURIANI	145.09	301.2	19	34A	1									

SKALSTUGAN	145.66	352.4	19	33	-1			
NURMIJARVI	145.95	340.7	19	34	-1		41	58 SS
HELSINKI	146.13	340.1	19	35	0			
UPPSALA	148.30	345.6	19	40	2			
BERGEN	149.35	357.4	19	46	6			
KONGSBERG	149.79	353.0	19	45K	4			
SIMFEROPOL	151.02	310.1	19	51	8			
GOTEBORG	151.37	349.6	19	49	6			
KSARA	151.57	286.7	19	47	4		24	36 PP
JERUSALEM	152.03	282.4	19	52K	8			
KARLSKRONA	152.11	344.5	19	55A	11			
COPENHAGEN	153.22	347.7	19	55	9			
LWOW	154.30	327.0	19	49	2		20	16
ISTANBUL UN.	155.89	304.8	19	51	2			
KRAKOW	155.94	332.0					20	17 PKP2
M.BOUR	156.25	126.0	19	53	3		20	23 PKP2
SKALNATE PL.	156.48	330.2	20	15	25		20	35 PKP2
WITTEVEEN	156.82	353.8	19	54	3			
COLLMBERG	157.18	343.1	19	51	0		23	59 PP
HALLE	157.25	344.9					20	23
JENA	157.87	344.9	19	52	0		20	24 PKP2
PRUHONICE	157.94	339.3	19	52	0		22	5
BRATISLAVA	158.57	332.8	19	51	-2		20	30
BENSBERG	158.60	352.2	20	30	37			
VIENNA-H.	158.79	334.1	19	55	2		20	32
KASPERSKE H.	158.99	339.7	19	53	0		20	29 PKP2
SOFIA	159.02	313.4	20	36	43			
DOURBES	159.68	356.4	20	22	28			
STUTTGART	160.40	346.9	19	56	1		20	37 PKP2
STRASBOURG	160.85	349.6					20	40 PKP2
FOLINIERE	160.91	6.4	20	39	44			
WELSCHBRUCH	161.21	352.4					20	40 PKP2
BESANCON	162.39	352.5					20	47 PKP2
ROSELEND	163.84	350.0					20	54 PKP2
ISOLA	165.24	347.6					20	59 PKP2
MONACO	165.59	346.0					21	5
TOLEDO	168.54	27.0	20	6A	4		25	16 PP

MARCH 29 3.H 9.M 15.S EPICENTRE 40.33 26.22 DEPTH= 33.KM

A= 0.68584 B= 0.33776 C= 0.64463 D= 0.4418 E=-0.8971
G= 0.5783 H= 0.2848 K=-0.7645 HT= -1.8

SE= 3.43

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
ISTANBUL UN.	2.22	70.5									0	32	PG
ISTANBUL KA.	2.29	70.2									0	32	PG
ATHENS	3.05	220.3	0	45A	-2						0	56	PG
SOFIA	3.21	318.5	0	55	6	1	37	10			1	7	PG
SKOPJE	3.96	296.0	0	59	-1						1	18	PG
BUCHAREST	4.09	358.8	1	4	2	1	53	4			1	14	P*
CAMPULUNG	5.02	350.3				2	18	6			1	37	PG
FOCSANI	5.42	7.3				2	2	-20			1	52	
TITOGRAD	5.64	294.1	1	29	5	2	44	16			1	51	PG
BELGRADE	6.19	318.4				3	9	27			1	33	P*
BACAU	6.26	4.3									3	47	SG
TIMISOARA	6.54	327.6	1	35	-1						1	48	P*
SARAJEVO	6.79	304.0	2	2	22	3	36	39					
SIMFEROPOL	7.43	49.0	1	43A	-6	3	1	-12					
MESSINA	8.55	259.0									3	45	
UZHGOROD	8.76	342.7	2	3	-4	4	36	50					
ZAGREB	9.28	309.6	2	35	21	4	45	46					
LWOW	9.62	351.5	2	17	-2	4	11	4					
SKALNATE PL.	9.81	336.4	2	21	-1	4	33	21			7	4	
NIEDZIKA	10.00	337.3	2	23	-1						5	1	S*
KSARA	10.08	127.1	2	24	-1								
BRATISLAVA	10.20	323.2	2	21	-6						6	45	
LJUBLJANA	10.28	307.7	2	24	-4						3	11	PGPG
ROME	10.49	283.1									5	47	
TRIESTE	10.57	304.3	2	31	-1	4	19	-11			5	50	SGSG
SOTCHI	10.57	67.7	2	38	6								
VIENNA-H.	10.60	321.6	2	31	-2	5	54	83					
KRAKOW	10.68	337.6	2	33	-1	4	36	3			5	45	
CHORZOW	11.18	335.4									4	54	SS
JERUSALEM	11.21	136.7	2	36	-5	4	39	-7					

HELWAN	11.24	156.6	2	37	-4						
RACIBORZ	11.27	332.6				4	57	10		5	6 SS
FLORENCE X.	11.65	292.1								5	58
PADOVA	11.69	300.5	2	46	-1						
PRATO	11.78	292.5	6	15	206					7	8 PP
KASPERSKE H.	12.56	318.6	2	55	-4					6	55
PRUHONICE	12.67	323.5	3	0	-1						
EREVAN	13.97	84.7	3	23	5						
TIFLIS	14.10	78.3	3	23	4						
COLLMBERG	14.30	324.5	3	25	3						
ISOLA	14.71	291.5	3	31	4						
STUTTGART	14.71	310.6	3	21	-6						
JENA	14.71	321.0	3	30	3	6	21	11		7	0
HALLE	14.92	323.2	3	31	1					3	45 PP
ROSELEND	15.29	297.0	3	33	-2					4	6
KIROVOBAD	15.31	82.3	3	36	1						
GORIS	15.46	86.6	3	42	5	6	35	8			
STRASBOURG	15.52	308.2	3	41	3					4	45
WELSCHBRUCH	16.31	306.3	3	43	-5						
BENSBERG	16.99	315.1	3	56	-1						
MOSCOW	17.16	22.3	3	50	-9						
KARLSKRONA	17.32	339.7	4	2	1						
WITTEVEEN	18.27	319.6	4	12	0						
PULKOVO	19.63	6.2	4	25	-3						
HELSINKI	19.88	358.2	4	25	-6						
NURMIJARVI	20.23	357.8	4	28	-7	8	32	17			
UPPSALA	20.27	347.4	4	32	-3						
TEHERAN	20.32	95.0	4	34	-2	8	24	7			
FOLINIERE	20.73	302.9	4	45	5						
KONGSBERG	21.97	337.2	4	53	0						
TOLEDO	23.11	278.8	5	5	1	9	3	-6		10	50 SS
UMEA	23.79	353.4	5	8A	-2						
KAJAANI	23.81	1.6	5	7	-4						
SHIRAZ	23.95	108.2	5	11K	-1	9	35	12		5	59 PP
SKALSTUGAN	24.71	345.1	5	17	-2						
VANNOVSKAYA	24.77	85.1	5	20	0						
ASHKABAD	24.96	85.0	5	22	0						
SODANKYLA	27.10	0.3	5	37	-5						
APATITY	27.56	6.0	5	42	-4					6	3
KIRUNA	27.74	355.3	5	48	1						
ALMATA-2	37.76	68.3	7	14	-1						
LWIRO	42.44	176.2	7	54A	1						
CHATRA	51.60	85.4	9	4	-1						
SHILLONG	55.85	83.9	9	29A	-7						
TIKSI	56.06	21.9	9	35	-3						
RESOLUTE	58.91	344.6	10	0	2						
MOULD BAY	61.65	351.1	10	18	1						
BREBEUF	68.51	311.9	11	1	0						
YELLOWKNIFE	72.80	342.1	11	27	0						
COLLEGE	75.04	357.4	11	41	1						
CUMBERLAND	81.83	310.1	12	21	4						
HUNGRY HORSE	84.94	334.6	12	36	3						
BLUE MTS.	89.10	335.0	12	54	1						
WICHITA MTS.	89.66	317.4	12	59	3						
UINTA BASIN	90.20	327.8	13	0	2						
EUREKA	93.40	331.6	13	13	0						

MARCH 30 1.H 53.M 30.5 EPICENTRE -19.11 169.01 DEPTH= 166.KM

A=-0.92824 B= 0.18023 C=-0.32542 D= 0.1906 E= 0.9817
G= 0.3195 H=-0.0620 K=-0.9456 MT= 4.9

DEPTH OF FOCUS= 0.021R

SE= 1.19

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
PORT VILA	1.52	334.3	0	30A	-1								
NOUMEA	3.98	216.6	1	1K	0	1	50	2					
KOUMAC	4.68	251.3	1	10K	0								
HONIARA	13.02	316.4	3	0	1	5	24	3					
BRISBANE	17.03	238.1	3	51	2	6	59	8					
KARAPIRO	19.60	164.5	4	17	0	7	57	13			11	52	SCP
CHATEAU	20.80	165.6	4	29	0								
CHARTERS TS.	21.46	263.6	4	36	1	8	24	6					
RIVERVIEW	21.64	223.8	4	40K	3	8	31	10	4	59	5	14	PP

RABAUL	22.14	309.9	4	40K	-2						9	13	
WELLINGTON	22.64	168.7	4	48A	1	8	42	3			12	12	PCS
PORT MORESBY	23.26	291.5	4	52K	-1	8	54	5					
CANBERRA	23.96	223.6	5	0A	0	9	6	5	5	33	10	10	SS
ROXBURGH	26.30	179.5	5	20	-1	9	42	2					
TOOLANGI	27.57	223.3	5	33K	0	10	2	2			6	32	PP
SAVANNAH	29.20	214.8	5	48	0						8	54	PCP
TARRALEAH	30.00	214.7	5	55	0						8	53	PCP
ADELAIDE	31.11	233.3	6	4K	0	10	54	-2			7	10	PP
MACQUARIE I.	36.16	189.9	6	48K	0								
DARWIN	37.30	274.6	6	58	1	12	32	0					
GUAM	40.24	321.8	7	24	3								
MUNDARING	48.90	243.9	8	29	-1	15	21	1					
PERTH	49.23	244.0	8	32	-1						10	34	PP
HONOLULU	51.47	40.3	8	50	0								
KIPAPA	51.61	40.3	8	50	-1								
CAPE HALLETT	53.21	179.5	9	3	0								
MANILA	57.91	302.0	9	36	0	17	24	3					
SCOTT BASE	58.79	180.6	9	43	0	17	39	6					
BAGUIO CITY	59.29	303.4	9	44	-2	17	40	1			10	21	SP
WILKES	60.19	203.4	9	51	-1	17	50	-1	10	30			
LEMBANG	60.79	272.8	9	55K	-1	18	2	4	10	33	12	13	PP
TUKUBASAN	61.45	333.6	10	35K	34								
DJAKARTA	61.74	273.2	10	3A	0	18	0	-10					
TANGERANG	61.93	273.2	10	2K	-2	18	14	1			12	20	
MATUSIRO	62.54	332.3	10	8	0	18	22	2					
NHATRANG	66.64	293.0	10	36	2								
MIRNY	67.06	204.9	10	36	-1	19	17	1	11	21	20	18	SCS
ZO-SE	67.84	316.6	10	41K	-1	19	25	0			20	28	SCS
BYRD STATION	68.11	169.7	10	41	-2						19	30	
Y.-SAKHLINSK	69.96	341.2	10	54	-1	19	53	3	11	31			
NANKING	70.02	316.0	10	55K	0	19	52	1			11	33	*SP
VLADIVOSTOK	70.70	332.1	11	3	4	20	4	6	11	36	13	48	PP
SOUTH POLE	71.01	180.0	10	59	-2						19	10	
PETROPAVLOVK	72.39	353.5	11	9A	0	20	20	2			13	59	PP
MEDAN	72.70	280.1	11	10A	-1	20	19	-2			11	48	
CHANGCHUN	74.33	328.7	11	19K	-1	20	42	3			21	17	SCS
PEKING	76.70	321.0	11	33	-1	21	9	4			12	12	*SP
SIAN	77.98	312.8	11	42K	1	21	24	5			12	21	*SP
KUNMING	78.02	302.0	11	42K	1	21	24	5			12	21	*SP
MAWSON	78.47	202.1	11	44A	0	21	24	0	12	24			
CHENGTU	79.68	307.5	11	50K	0	21	40	3			12	28	*SP
MAGADAN	79.78	350.7	11	49A	-2	21	36	-2					
PAOTOW	80.78	318.6	11	57	1	21	54	6			12	35	*SP
PORT BLAIR	81.14	285.6									41	43	
LANCHOW	82.47	312.1	12	4	-1	22	11	5			12	45	*SP
BERKELEY	85.84	47.7	12	22A	1						12	44	
CHITTAGONG	85.93	295.2	12	22	0	22	33	-6					
CALISTOGA	85.98	46.9	12	22A	0								
LICK	86.03	48.4	12	23A	1								
PRIEST	86.18	49.8	12	24A	1								
YAKUTSK	86.66	342.6	12	25A	0	22	23	-23					
PASADENA	87.14	52.5	12	28	0	22	40	-11					
MINERAL	87.45	45.7	12	30K	1								
N-LAZARVSKYA	88.95	187.4	12	35A	-1	23	6	-2	13	17	24	18	*SS
PORT HARDY	89.02	34.7	12	37	0								
LHASA	89.35	301.6	12	39K	1						13	19	*SP
COLLEGE	89.99	17.0	12	39	-2	23	17	0					
VICTORIA	90.18	37.9	12	43	1								
BOULDER CITY	90.39	52.0	12	44	1				13	23	16	15	PP
SEATTLE	90.42	39.0	12	42A	-1						41	5	
IRKUTSK	90.48	326.3	12	43A	-1				13	22			
EUREKA	90.97	48.4	12	46A	0	23	38	12	13	25	16	24	PP
VISHAKHAPTNM	91.78	288.0	12	52	2						23	9	
TUCSON	92.05	56.7	12	52	1								
BLUE MTS.	92.27	43.1	12	53A	1	23	40	3	13	35	16	33	PP
PENTICTON	92.77	38.4	12	54	0								
MADRAS	93.09	282.6	13	35	39						16	28	
GLEN CANYON	93.18	52.0	12	57	1						16	41	PP
SALT LAKE C.	94.38	48.4	13	2	1	23	23	-33			16	50	PP
TIKSI	94.56	348.2	13	1A	-1	23	57	0	13	45	16	47	PP
HUNGRY HORSE	95.74	40.8	13	8	0						29	57	PKKP
BUTTE	95.80	43.3	13	7	-1	23	30	3	13	49	17	0	PP
UINTA BASIN	95.85	49.5	13	8	0	23	30	3			17	0	PP
BANFF	95.93	37.8	13	8	0								
HYDERABAD	96.07	286.3	13	52	43	23	30	2					
FLAMING GRGE	96.18	48.9	13	9	-1				13	52	17	4	PP
ALBUQUERQUE	96.40	55.4	13	11	0								

BOZEMAN	96.67	44.0	13	14	2						
GOLDEN	98.70	51.1	13	21	0						
LARAMIE	99.03	49.5	13	24	1					17	26
LUBBOCK	99.63	57.9	13	26	1	23	47	1			
POONA	100.57	286.0	13	30A	0						
YELLOWKNIFE	100.65	27.3	13	28	-2					14	12
BOMBAY	101.61	286.1	14	14	40	23	57	1		17	8 PP
WICHITA MTS.	102.54	57.5	13	38	0	24	3	3		17	51 PP
SANTA LUCIA	102.77	132.3				24	2	0		17	55 PP
SEMIPALATNSK	103.71	318.8				24	5	-1		18	0 PP
MOULD BAY	104.16	13.6	13	44	-1						
TULSA	105.04	56.8	13	49	777	24	12			18	9 PP
MANHATTEN	105.15	53.4	18	35K	777					20	11
LAWRENCE	106.11	53.8	16	30	777						
FAYETTEVILLE	106.35	56.9	13	56	777						
WARSAK DAM	106.45	300.8	17	17	777						
KHOROG	107.16	304.4	17	40	777						
HUANCAYO	109.45	110.7	18	14	777						
QUETTA	109.50	296.1	17	21	777					18	13
TASHKENT	109.54	308.0				24	36	5		28	5 PS
RESOLUTE	109.90	16.3	14	10	777						
MADISON	110.91	50.0	18	13	0	24	36	-1		18	49 PP
KHEYS	112.12	350.5	18	15	0					18	57 PP
CUMBERLAND	113.17	58.7	18	9	-8	24	43	-3		19	6 PP
LA PAZ	113.60	118.4	18	22	4					19	14 PP
CHINCHINA	115.57	93.7				24	52	-3		19	24 PP
SVERDLOVSK	115.83	324.6	18	22	0	24	59	3		35	12 SS
BOGOTA	116.92	94.6	14	41	-223	25	0	0		19	37 PP
BLACKSBURG	117.46	57.4	18	26	1						
FUQUENE	117.51	93.8								19	42 PP
ASHKABAD	117.58	303.4	18	24	-2	25	7	5			
GALERAZAMBA	11 .62	87.6				25	11	9		19	57 PP
CHANGALANE	118.40	224.3	18	30	3					19	14
KIMBERLEY	121.20	216.9	18	35A	2						
SHIRAZ	121.83	293.5	18	34A	0	25	20	3	19 19	20	20 PP
BREBEUF	122.48	47.8	18	34	-1	25	20	1		20	11 PP
PALISADES	122.58	53.1	18	35	0	25	20	1		15	56 P
SHAWINIGAN	122.96	46.5	18	35	-1						
CHILEKA	123.07	235.7	18	39	3						
TEHERAN	123.09	300.6	18	39	3					35	43
APATITY	124.05	341.1	18	37K	-1				19 20	20	58 PP
SEVEN FALLS	124.20	45.6	18	37	-2					21	58
WESTON	124.42	51.3	18	39	0						
SCHEFFERVLLE	124.96	35.7	18	39	-1						
BULAWAYO	124.97	227.0	18	41	1						
CARACAS	125.43	90.6	18	42K	1	25	34	6			
SODANKYLA	125.15	343.0	18	42K	0					31	41 SKKP
TROMSOE	126.28	347.5	18	42	0						
SEPT ILES	126.47	41.1	18	43K	0					20	37
GORIS	126.96	305.4	18	46	2					20	49 PP
KIRUNA	127.40	345.6	18	44	-1					21	59 PKS
TIFLIS	127.86	308.4	18	48	2					21	53
SAN JUAN	127.98	81.3	18	45	-1					21	49 SKP
KAJAANI	128.07	339.6	18	44	-2					27	26 SKKS
MOSCOW	128.46	327.2	18	48	1				19 28	22	10 PKS
BROKEN HILL	128.80	232.2	18	50	3						
HALIFAX	129.63	47.5	18	50K	1						
PULKOVO	129.80	334.2	18	50	1	25	26	-14			
UMEA	130.57	342.4	18	42	-9					21	59 SKP
TRINIDAD	130.70	92.3	18	53K	2					21	8 PP
NURMIJARVI	131.53	337.3	18	42	-11				19 35	21	17 PP
HELSINKI	131.64	336.9	18	43	-10					22	3 SKP
ANTIGUA	131.77	83.8	18	54	1						
FORT FRANCE	131.94	87.1	18	55	2					21	16 PP
SKALSTUGAN	132.82	346.1	18	47	-8					22	7 SKP
UPPSALA	134.42	340.2	18	54	-4					22	12 SKP
SIMFEROPOL	134.67	315.0	18	59	1				19 41	31	39 PS
LWIRO	135.51	245.8	18	54K	-6				19 45	21	38 PP
KSARA	135.93	299.1	19	4	3	26	13	20	19 47	21	46 PP
JERUSALEM	136.71	296.3	19	4	2						
GOTEBORG	137.90	341.8	18	58	-6					22	22 SKP
KARLSKRONA	137.97	338.0	19	5	1					22	23 SKP
WARSAW	138.57	330.5	19	4	-2					22	27
BANDEIRA	138.59	217.0	18	59A	-7				19 50	21	58 PP
COPENHAGEN	139.43	339.7	19	8	1						
ISTANBUL KA.	139.48	311.5	19	7	0						
ISTANBUL UN.	139.55	311.5	19	9K	2					22	28 PKP1
BUCHAREST	140.13	317.6	18	52	-16					20	30

KRAKOW	140.51	328.6	19	10	1			22	31	PP
RACIBORZ	141.33	329.8	19	7	-4			22	33	PP
SOFIA	142.71	316.7	19	10	-3			22	36	
COLLMBERG	142.72	335.1	19	18	5			22	37	PP
HALLE	142.97	336.1	19	11	-3			22	38	PP
PRUHONICE	143.07	332.4	19	13	-1			20	29	
BRATISLAVA	143.15	328.3	19	3K	-11			22	55	PP
LUANDA	143.37	222.8	19	15K	1	19	57	22	41	PP
BELGRADE	143.40	321.5	19	14K	0			24	35	
VIENNA-H.	143.45	328.9	19	15	1			22	40	PP
JENA	143.57	335.9	19	12	-3	19	54	22	38	PP
WITTEVEEN	143.66	341.9	19	14	-1					
DURHAM	143.68	350.8	19	15K	0					
KASPERSKE H.	144.12	332.2	19	14	-2			22	40	
ATHENS	144.46	309.3	19	15K	-1			21	41	
DE BILT	144.72	342.7	19	6	-11	19	55	41	18	SS
BENSBERG	145.11	339.8	19	18A	1	20	1	23	29	PP
ZAGREB	145.28	326.2	19	19A	1					
TITOGRAD	145.44	318.9	19	20	2			23	21	PP
LJUBLJANA	145.88	327.7	19	19	0	20	2	22	44	PP
HEIDELBERG	145.89	336.9	19	20	1			20	2	
UCCLE	146.12	342.5	19	20	1	20	2			
STUTTGART	146.19	335.7	19	20K	1	20	2	22	45	SKP
TUBINGEN	146.46	335.6	19	21	1					
TRIESTE	146.55	327.8	19	19A	-1	20	4	28	39	SS
KEW	146.63	347.8	19	21	1	20	4	41	31	
DOURBES	146.67	341.6	19	27	7			20	10	
EBINGEN	146.79	335.4	19	22	2					
RAVENSBURG	146.85	334.3	19	21	1					
STRASBOURG	146.92	337.0	19	22	2			41	30	SS
WELSCHBRUCH	147.57	338.3	19	22	1			20	52	
PADOVA	147.65	329.2	19	25A	3	20	20	20	6	PKP2
BESANCON	148.69	337.5	19	24	1			20	56	
FLORENCE X.	149.13	327.7	19	20	-4					
FOLINIERE	149.22	346.4	19	26	2					
ROSELEND	149.75	335.1	19	31	6			20	3	
ROME	149.77	323.8	19	26A	1	19	46	20	22	
MESSINA	150.10	315.1	19	29	4	26 19 4		20	19	23 39 PP
CLERMONT-FD.	150.96	339.4	19	29	3			19	54	
MONACO	150.99	331.8	19	34	8					
TOLEDO	158.45	345.3	19	38K	1	20	14	23	55	PP
ALICANTE	158.76	336.7	19	30	-7					
AVERROES	165.51	348.0	20	4A	20			24	38	
M.BOUR	172.59	128.5	19	49	1			25	3	PP

MARCH 30 16.H 51.M 58.S EPICENTRE 44.20 148.11 DEPTH= 47.KM

A=-0.61070 B= 0.37994 C= 0.69476 D= 0.5283 E= 0.8491
G=-0.5899 H= 0.3670 K=-0.7192 HT= -3.2

DEPTH OF FOCUS= 0.002R

SE= 2.51

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S
KURILSK	1.04	350.5	0	23K	4	0	36	3				
NEMURO	2.03	245.5	0	32K	-1	0	55	-2				
ABASHIRI	2.77	267.6	0	45A	2	1	17	1				
KUSIRO	2.96	246.9	0	46K	0	1	19	-2				
OBIHIRO	3.79	252.0	0	58K	0						2	6
HIROO	3.99	242.9	1	1	0	1	46	-1				
ASAHIGAWA	4.17	266.2	1	5A	2	1	59	8				
URAKAWA	4.41	244.1	1	7	1	1	57	0				
RUMOE	4.69	269.2									1	40
Y.-SAKHLINSK	4.72	308.6	1	13K	2						2	10
WAKKANAI	4.74	287.2	1	15K	4	2	25	20				
TOMAKOMAI	5.01	254.0	1	18	3	2	15	3				
SAPPORO	5.04	259.4	1	17K	2	2	16	3				
MURORAN	5.54	252.6	1	22K	0	2	23	-2				
HAKODATE	5.90	248.6	1	26K	-1	2	37	3				
SUTTSU	5.90	259.0	1	31	4	2	53	18				
MORI	5.90	251.8	1	29A	2	2	32	-3				
HATINOHE	6.10	235.3	1	27	-3	2	30	-10				
AOMORI	6.38	240.6	1	35	1	2	50	3				
UGLEGORSK	6.41	321.7	1	36	2							
MIYAKO	6.45	227.3	1	31	-4	2	38	-10				

MORIOKA	6.85	231.4	1	37	-4	2	47	-11		
MIZUSAWA	7.28	228.3	1	44	-3	3	0	-9		
AKITA	7.46	235.9	1	44	-5	2	53	-20		
ISINOMAKI	7.70	223.9	1	47K	-5	3	3	-16		
SENDAI	8.04	225.0	1	54	-3	3	17	-11		
SAKATA	8.16	232.4	1	59	0	3	29	-2		
YAMAGATA	8.34	227.2	1	56	-5	3	25	-10		
HUKUSIMA	8.65	224.5	2	2	-4	3	32	-11		
ONAHAMA	9.08	219.6	2	30	19	3	41	-12		
SHIRAKAWA	9.27	223.0	2	11	-3	3	48	-10		
NIIGATA	9.28	230.6							2	42
AIKAWA	9.67	233.7	2	16	-4					
MITO	9.75	219.3	2	16	-5	3	56	-14		
UTUNOMIYA	9.89	222.2	2	22	-1	4	1	-12		
OKHA	9.96	341.8	2	26	3				4	28
KAKIOKA	10.00	220.0	2	20	-4	4	2	-14		
TYOSI	10.14	215.8	2	20	-6	4	5	-14		
TAKADA	10.31	229.9	2	21	-7	4	15	-9		
MAEBASI	10.41	224.6	2	26K	-4	4	17	-9		
KUMAGAYA	10.45	222.7	2	27	-3	4	24	-3		
TOKYO C.M.O.	10.65	219.8	2	33	0	4	18	-14		
NAGANO	10.65	228.5	2	40	7					
OIWAKE	10.73	226.1	2	35	1	4	32	-2		
TITIBU	10.73	223.2	2	33	-1	4	21	-13		
MATUSIRO	10.75	228.0	2	30K	-4	4	20	-14		
WAZIMA	10.89	235.1	2	35	-1	4	31	-7		
YOKOHAMA	10.91	219.4	2	43	7	4	31	-7		
MATUMOTO	11.09	227.7	2	42	3	4	37	-6		
TOYAMA	11.18	231.7	2	37	-3					
KOHU	11.23	223.9	2	43	2	4	39	-7		
PETROPAVLOVK	11.24	34.5	2	39K	-2				5	2
MERA	11.25	217.3	2	55	14					
HUNATU	11.26	222.7	2	49	8	4	38	-9		
AJIRO	11.47	220.3	2	39	-5	4	37	-15		
MISIMA	11.49	221.0	2	50	6				5	38
OSIMA	11.58	218.5	2	45	0					
IIDA	11.72	225.8	2	48	1	4	48	-10		
VLADIVOSTOK	11.80	270.4	2	48	0	4	56	-4		
SHIZUOKA	11.87	222.3	3	4	15	5	13	12		
OMAESAKI	12.26	221.9							3	15
GIHU	12.37	228.6	2	54	-2					
HAMAMATU	12.40	223.8	3	9	12					
NAGOYA	12.44	227.3	2	53	-4	5	14	-1		
HIKONE	12.75	229.6	2	59	-2					
HATIDYOZIMA	12.84	213.1							5	5
KAMEYAMA	12.95	227.8	3	6	2	5	54	27		
KYOTO	13.22	230.3	3	3	-4	5	40	6		
NARA	13.42	229.1	3	6	-4					
ABUYAMA	13.42	230.3	2	6K	-64				2	22
OSAKA	13.61	229.8	3	9	-3				3	32
TOTTORI	13.76	235.7	3	13	-2					
SUMOTO	14.18	230.5	3	26A	6	6	23	26		
SIOMISAKI	14.40	226.0	3	31	8	6	6	4		
TOKUSIMA	14.56	230.6	3	34	9					
TAKAMATU	14.68	232.5	3	22	-4	6	16	8		
HAMADA	15.45	238.5	3	49	13	6	40	14		
MAGADAN	15.46	5.1	3	36A	-1					
KOTI	15.53	231.7	3	35	-2	6	18	-10		
HIROSIMA	15.59	236.3	3	40	2					
MATUYAMA	15.75	234.2	3	51	11	6	48	15		
CHANGCHUN	16.40	276.7	3	44	-5					
OOITA	16.87	235.1	3	54	0	7	14	15		
HUKUOKA	17.37	238.4	4	1	0	7	17	6		
SAGA	17.65	237.7	4	9	5	8	0	43		
KUMAMOTO	17.70	236.0	4	3	-2	7	43	25		
MIYAZAKI	17.93	232.5	4	12	4	7	51	28		
YAKUSIMA	19.55	231.3	4	29	2				8	15
YAKUTSK	20.85	335.3	4	38A	-2	8	22	-3		
PEKING	23.97	271.1	5	10	-1	9	22	0		
MAWASHI	24.38	229.4	5	22	7					
ZO-SE	24.89	247.4	5	21A	1	9	35	-2		
NANKING	25.92	252.1	5	29	-1					
PAOTOW	28.19	276.0	5	52K	2	10	33	2		
ULAN-BATOR	28.59	292.2	5	54A	0	10	48	11		
TIKSI	29.05	347.6	5	54A	-4				6	44 PP
SIAN	31.68	265.3	6	21	0	11	29	3		
LANCHOW	34.48	271.9	6	46A	0	12	8	-2		
CANTON	35.42	245.0	6	53	-1	12	21	-3		
BAGUIO CITY	36.17	228.7	6	59	-1	12	35	-1		

CHENGTU	37.10	263.8	7 8A	0	12 48	-2		
MANILA	37.36	226.5	7 8	-2	13 8	14		
COLLEGE	40.31	36.4	7 36	2				
KUNMING	41.29	257.9	7 44A	1	13 52	-1		
SEMIPALATNSK	44.98	303.0	8 10A	-3	14 45	-2		
NHATRANG	46.11	238.4	8 22	1			13 33	
KHEYS	46.75	347.0	8 24K	-3				15 9
LHASA	46.98	272.0	8 29A	1	15 18	3		
MOULD BAY	48.18	18.7	8 37A	-1				10 5
RABAUL	48.32	174.6	8 38	-1				27 54
KIPAPA	49.65	99.1	8 49	0				
ALMATA	49.90	295.3	8 53	2	15 56	0		
CHITTAGONG	50.78	263.7	8 56	-2	16 11	2		
CHATRA	51.39	271.6	9 2A	0	16 13	-4		
FRUNSE	51.62	295.9	9 5A	1	16 21	1		
ALERT	52.62	4.8	9 9A	-3				
SVERDLOVSK	53.29	316.8	9 13K	-4	16 37	-6		
PORT MORESBY	53.35	181.2	9 17	0				
BOKARO	54.19	269.5	9 22A	-1	16 55	0		17 7 PS
NORD	54.19	357.3	9 20	-3				
RESOLUTE	54.34	17.0	9 22A	-2				
HONIARA	54.45	165.6	9 24	-1	17 12	14		
PORT HARDY	54.48	51.0	9 24A	-1				
YELLOWKNIFE	55.04	34.2	9 29A	0				
TASHKENT	55.81	296.7	9 35A	0	17 18	1		
DEHRA DUN	55.87	280.9	9 35A	0	17 18	0		
KHOROG	56.38	291.7	9 40A	1	17 26	2		
PORT BLAIR	57.33	253.3	9 47	1	17 38	1		
THULE	57.43	9.6	10 47	61				
LAHORE	57.78	284.3	9 48	-1	17 45	2		
VICTORIA	57.88	51.7	9 49	-1				
APATITY	58.26	335.8	9 49K	-3	17 41	-8		13 22
WARSAK DAM	58.29	288.2	9 54	2	17 48	-1		
DARWIN	58.47	199.9	9 53	-1				10 4 PP
KEVO	58.53	339.6	9 52	-2	17 44	-9		10 43 PCP
SEATTLE	58.98	52.1	10 2	5				26 26 SS
MEDAN	59.34	241.8	10 0K	0				11 7
PENTICTON	59.55	49.3	10 0	-1				
SODANKYLA	60.31	337.7	10 4K	-2				12 15 PP
TROMSOE	60.55	341.8	10 5	-3				11 9
BANFF	60.68	45.9	10 8	-1				
KIRUNA	61.58	340.0	10 12A	-3	18 27	-5		10 55 PCP
KAJAANI	62.35	334.7	10 18K	-2				10 58 PCP
DJAKARTA	62.41	227.7						11 7
TANGERANG	62.51	227.9	10 20A	-1				
LEMBANG	62.54	226.6	10 20	-1				
HUNGRY HORSE	63.13	47.8	10 25	0				39 24 PKPPKP
BLUE MTS.	63.42	52.5	10 27A	0	18 47	-8		12 50 PP
MINERAL	63.56	58.6	10 27A	-1				
QUETTA	63.69	287.4	10 29A	0	18 59	1		
CALISTOGA	63.97	60.6	10 30A	-1				
CHARTERS TS.	64.00	181.9	10 30	-1				19 2
MOSCOW	64.50	324.0	10 34K	0	19 4	-4	11 0	19 38 PS
PULKOVO	64.56	330.3	10 33A	-2	19 3	-6		11 8 PCP
BERKELEY	64.63	61.1	10 35A	0				11 12 PCP
ASHKABAD	64.67	299.0	10 36	1				
UMEA	64.74	337.2	10 34A	-2	19 6	-5		11 7 PCP
MADRAS	65.25	264.1	10 36	-3	19 15	-2		13 5 PP
BUTTE	65.34	49.2	10 40	0				39 24 PKPPKP
LICK	65.35	61.3	10 40A	0				
GODHAVN	65.74	8.3	10 41A	-1	19 22	-1		
NURMIJARVI	65.95	333.1	10 42K	-2	19 22	-4		12 58 PP
HELSINKI	66.10	332.8	10 43	-2				11 14 PCP
POONA	66.14	273.0	10 40	-5				
BOZEMAN	66.39	48.7	10 47	1				
BOMBAY	66.64	274.0	10 46	-2	19 33	-1		19 34 SCS
PRIEST	66.70	61.8	10 48A	0				
SKALSTUGAN	67.01	340.2	10 48	-2				11 17 PCP
EUREKA	67.51	56.4	10 53A	0				13 19 PP
NOUMEA	68.27	161.7	10 58A	0				13 39
AFIAMALU	68.39	137.7	11 3	4	20 10	15		
UPPSALA	68.65	335.7	10 58A	-3	19 54	-4		38 30 PKPPKP
SALT LAKE C.	69.10	53.2	11 3	0				11 32
PASADENA	69.54	62.0	11 5	-1	21 2	53		
TIFLIS	70.33	309.3	11 12	1	20 21	3		11 30 PCP
TEHERAN	70.40	300.9	11 12A	1	20 19	0		21 12 SCS
FLAMING GRGE	70.40	51.7	11 12	1				
UINTA BASIN	70.70	52.3	11 13A	0	20 31	9		13 50 PP
GORIS	70.94	306.7	11 16A	1				20 9

KONGSBERG	71.03	339.1	11	15K	0						11	36 PCP
BRISBANE	71.37	175.6	11	15	-2							
BERGEN	71.42	341.5	11	17	0							
RAPID CITY	71.61	46.0	11	18	0							
REYKJAVIK	71.73	355.4	11	20	1							
GLEN CANYON	71.76	56.1	11	19	0							
GOTEBORG	72.08	337.0	11	20A	-1						11	39 PCP
LARAMIE	72.26	49.4	11	23	1							
KARLSKRONA	72.31	334.4	11	22A	-1						11	40 PCP
SIMFEROPOL	73.65	317.5	11	31A	0	20	56	0			16	11 PPP
COPENHAGEN	73.67	335.6	11	30A	-1	20	56	0				
WARSAW	73.68	329.3	11	32	1	21	19	23			11	41 PCP
SHIRAZ	73.68	295.5	11	31A	0	20	55	-1	11	50	21	35
LWOW	74.44	326.2	11	35	0						21	5
TUCSON	75.40	59.2	11	41	0							
BACAU	75.77	322.5	11	58	15	21	34	14			22	30
KRAKOW	75.85	328.5	11	44	1	21	21	0			12	2 PCP
CHORZOW	76.00	329.1	11	45	1						11	56 PCP
ALBUQUERQUE	76.17	54.6	11	46	1							
SKALNATE PL.	76.43	327.8	11	47	1						13	15
RACIBORZ	76.47	329.5	11	48	1				12	5	14	40 PP
SCHEFFERVLLE	76.99	19.9	11	49	-1							
COLLMBERG	77.24	333.0	11	51	0	21	26	-10				
HALLE	77.41	333.7	11	51	-1	21	36	-2				
CAMPULUNG	77.60	322.7	11	55	2	21	46	6				
RIVERVIEW	77.71	177.4				21	50	9			26	50 SS
BUCHAREST	77.80	321.6	11	50	-4	21	37	-5				
PRUHONICE	77.84	331.4	11	55	1	21	36	-6				
JENA	78.02	333.6	11	55	0	21	38	-6	12	17	14	53 PP
DURHAM	78.09	342.6	11	57K	1	21	48	3				
BRATISLAVA	78.45	329.0	11	57A	-1							
MADISON	78.67	39.0	11	58A	-1						15	19 PP
TIMISOARA	78.83	325.2	12	0	0							
DE BILT	78.88	337.7	13	0A	60	21	54	1				
KASPERSKE H.	78.90	331.5	12	0	0						14	45
ISTANBUL UN.	79.07	317.7	12	2A	1	22	0	5				
CANBERRA	79.15	179.3	12	3K	1				12	17	12	15 PCP
ADELAIDE	79.26	187.8	12	6	4						35	44
BENSBERG	79.34	336.1	12	3A	0	21	59	1			12	30
LAWRENCE	79.41	45.1	12	6	3							
LUBBOCK	79.82	52.8	12	6	1							
BELGRADE	79.90	325.1	12	6	0	22	2	-2			12	22 PCP
HEIDELBERG	80.25	334.4	12	8A	1							
SOFIA	80.39	322.1	12	9	1						22	14
STUTTGART	80.63	333.8	12	10A	1	22	12	0				
WICHITA MTS.	80.82	50.0	12	10A	0	22	16	2			15	15 PP
ZAGREB	80.84	328.3	12	12	1							
DOURBES	80.84	337.2	12	16	5	22	12	-2				
KEW	80.87	340.6	12	11A	0	22	15	1				
KSARA	80.89	308.7	12	12	1							
TUBINGEN	80.91	333.8	12	12A	1							
LJUBLJANA	81.19	329.3	12	12A	0							
MUNDARING	81.21	207.0	12	12	0				12	22		
EBINGEN	81.25	333.7	12	14A	1							
STRASBOURG	81.27	334.6	12	14A	1	22	18	0			28	26
SEPT ILES	81.30	21.6	12	13A	0							
RAVENSBURG	81.39	333.1	12	14A	1							
TOOLANGI	81.43	182.1	12	14	0						12	31 *SP
TULSA	81.44	47.5	12	14K	0						32	50
TRIESTE	81.81	329.6	12	14A	-2	22	23	-1			23	22 SP
WELSCHBRUCH	81.86	335.4	12	15	-1						13	40
ST. LOUIS 1	82.16	42.3	12	17	0							
VALENTIA	82.44	346.7	12	19	0							
SHAWINIGAN	82.68	27.1	12	20A	0							
PADOVA	82.69	330.6									13	32
JERUSALEM	82.77	307.7	12	21	0							
SEVEN FALLS	82.79	25.6	12	20	-1							
BESANCON	83.01	335.1	12	22	0						13	12
BREBEUF	83.32	28.1	12	23A	0						15	39 PP
FOLINIERE	83.41	339.7	12	25	1							
CLEVELAND	83.77	35.2	12	26A	0							
ATHENS	84.00	319.0	12	26A	-1	22	45	-1				
ROSELEND	84.20	334.0	12	29	1						12	51
FLORENCE X.	84.33	330.2	12	12	-16	22	24	-25				
CLERMONT-FD.	85.19	336.2	12	35A	2							
ISOLA	85.41	333.0	12	34	0							
KARAPIRO	85.44	158.6	12	35	1							
SAVANNAH	85.54	180.7	12	36	2						16	41

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.

MONACO	85.69	332.6	12	36	1						
PENNSYLVANIA	85.83	33.2	12	36	0						
MORGANTOWN	85.98	35.2	12	38A	1					15	53 PP
TARRALEAH	86.13	181.2	12	40	3					16	41
MOORLANDS	86.26	180.7	12	39	1						
CUMBERLAND	86.83	41.1	12	41A	0	23	14	1	12 52	16	2 PP
WESTON	86.85	28.1	12	41	0						
PALISADES	87.15	30.5	12	42	0	23	10	-6	13 2		
HALIFAX	87.17	22.1	12	44A	2						
FORDHAM	87.30	30.5	12	43	0						
MESSINA	87.45	324.5								23	15
BLACKSBURG	87.82	36.8	12	46	0						
WELLINGTON	88.40	160.2	12	50	2	23	32	4		14	32
CHAPEL HILL	89.49	36.5	12	56	3					16	30
COLUMBIA	90.24	38.9	12	58	1						
ROXBURGH	91.26	165.3				24	2	8			
TOLEDO	92.62	338.9	13	9A	1	24	10	4		17	10 PP
ALICANTE	93.06	335.8	13	10K	0						
BENI ABBES	101.21	334.0	13	18	-29					17	52 PP
SAN JUAN	110.30	34.7	19	2	35						
LWIRO	112.27	289.7	18	34	3					19	32 PP
CHILEKA	117.31	274.5	18	42	2						
BROKEN HILL	121.12	280.4	18	50A	2						
BULAWAYO	124.79	275.3	18	55A	0						
HUANCAYO	130.92	62.9	19	10	3						
KIMBERLEY	132.80	269.3	19	8A	-2						
BYRD STATION	133.57	166.1	19	10	-2						
SOUTH POLE	134.01	180.0	19	1	-11						
ANTOFAGASTA	142.51	69.7	19	26	-2						

MARCH 31 4.H 46.M 3.S EPICENTRE -6.58 -80.95 DEPTH= 56.KM

A= 0.15636 B=-0.98111 C=-0.11389 D=-0.9875 E=-0.1574
G=-0.0179 H= 0.1125 K=-0.9935 HT= 6.9

DEPTH OF FOCUS= 0.004R

SE= 3.09

	DELTA DEG.	AZ. DEG.	P M	S	O-C S	S M	S	O-C S	*PP M	S	SUPP. M	S	
HUANCAYO	7.76	134.8	1	53	0								
CHINCHINA	12.65	25.0	2	59	-1	5	23	3					
BOGOTA	13.08	31.8	3	1A	-4	5	29	-1			3	17	PP
FUQUENE	13.97	31.2	3	17	0								
BALBOA HTS.	15.50	5.1	3	37	0								
LA PAZ	15.95	129.3	3	41	-1	6	57	20					
GALERAZAMBA	18.15	18.2	4	14A	4								
ANTOFAGASTA	19.80	150.4	4	29A	0	8	10	7					
CARACAS	21.97	39.5	4	54A	3						10	25	SS
COMITAN	25.24	334.1	5	33	10	9	47	5					
TRINIDAD	25.92	48.8	5	32K	3	10	9	16			14	26	
SANTA LUCIA	28.38	161.7									5	51	SKSP
MERIDA	28.66	342.9	5	57	3						15	57	
SAN JUAN	28.80	30.3	5	56	1								
FORT FRANCE	28.87	42.7	5	56	0	10	39	-2					
ST. CLAUDE	29.46	40.1	5	57	-4	11	1	11					
VERA CRUZ	29.67	330.0									9	29	
TACUBAYA	31.46	325.5	6	26	7						17	59	
COLUMBIA	40.36	359.9	7	32	-2						9	27	
CUMBERLAND	42.17	354.4	7	48	-1	14	2	-3			9	30	PP
CHIHUAHUA	42.58	326.5									12	27	
BLACKSBURG	43.57	0.6	7	59	-1	14	25	0					
FAYETTEVILLE	44.23	344.6	8	5A	-1						14	39	
WICHITA MTS.	44.33	339.1	8	5	-2	14	39	3			9	49	PP
TULSA	44.51	342.7	8	7K	-1	14	42	3					
WASHINGTON	45.39	4.2	8	11	-4						10	7	
ST. LOUIS 1	45.81	349.9	8	17	-1								
MORGANTOWN	45.99	1.1	8	19	-1								
LAWRENCE	47.22	344.8	8	28	-1								
PENNSYLVANIA	47.23	3.2	8	29	-1								
FORDHAM	47.64	7.3	8	32	-1								
PALISADES	47.80	7.2	8	41	7	15	29	3					
ALBUQUERQUE	47.81	331.5	8	23	-11								
CLEVELAND	47.83	359.4	8	33A	-1	15	28	2					
TUCSON	47.98	325.4	8	34	-1								

MADISON	50.36	351.7	8	48	-6	16	3	2	18	41 SCS
GOLDEN	51.29	335.9	9	0	-1				16	19
GLEN CANYON	51.95	328.8	9	5	-1					
OTTAWA	51.96	4.7	9	3	-3					
BREBEUF	52.26	6.5	9	7K	-1	16	30	3	18	54 SCS
SHAWINIGAN	53.40	7.0	9	15	-1					
UINTA BASIN	53.60	332.9	9	16	-2	16	52	6	10	29 PCP
PASADENA	53.67	321.5	9	19	0	16	55	8		
FLAMING GRGE	54.02	333.5	9	20	-1					
SEVEN FALLS	54.22	8.5	9	21	-2					
RAPID CITY	54.29	340.4	9	22	-1					
SALT LAKE C.	55.02	331.6	9	27	-1					
EUREKA	56.11	327.7	9	35	-1					
PRIEST	56.51	321.7	9	38A	-1					
LICK	57.89	322.2	9	48A	-1					
SEPT ILES	57.95	11.0	9	46	-3					
BOZEMAN	58.57	335.7	9	57	3					
BUTTE	59.48	334.9	10	0	0					
MINERAL	59.83	324.8	10	3A	1					
BLUE MTS.	60.72	331.1	10	8	0	18	25	6	10	40 PCP
HUNGRY HORSE	61.94	335.6	10	15	-2					
SCHEFFERVLLE	62.31	9.2	10	17A	-2					
PENTICTON	65.08	333.2	10	33	-4					
M.BOUR	66.78	71.4	10	50A	2	19	53	19		
YELLOWKNIFE	73.55	344.4	11	27	-2					
BYRD STATION	75.66	186.4							11	39
RESOLUTE	81.57	356.3	12	12A	-1					
SOUTH POLE	83.46	180.0	12	22	-1					
TOLEDO	84.23	48.9	12	31K	4	23	3	17	15	33 PP
MOULD BAY	85.64	351.4	12	33	-1					
COLLEGE	86.35	336.8	12	37	-1					
FOLINIERE	88.65	40.7	12	51	2					
AFIAMALU	89.25	256.2	12	52	1	23	27	-7		
ALERT	89.36	2.4	12	52	0					
DOURBES	92.15	40.0	13	11	6					
STUTTGART	95.05	41.6	13	19	1					
WELLINGTON	96.31	227.3				23	51	-3	26	17 PS
JENA	96.65	39.5	13	36	11				13	59
HALLE	96.91	39.0	13	28	1				17	11
COLLMBERG	97.56	39.2	13	33	3				17	26 PP
KASPERSKE H.	97.90	41.4							17	31
UPPSALA	99.97	30.5				24	17	4	17	44 PP
KIRUNA	100.35	22.2				24	18	3	17	50 PP
UMEA	100.81	26.3				24	22	5	17	48 PP
KEVO	102.32	19.8				24	25	1	18	3 PP
NURMIJARVI	103.37	29.3				24	31	2	18	5 PP
KAJAANI	104.00	25.4	13	31	-27					
LWOW	104.66	40.3							18	21
ATHENS	105.58	52.5	18	28A	777					
ISTANBUL UN.	109.31	48.9	18	57	777				28	21
LWIRO	109.33	94.7	18	34	777				28	24 PS
KSARA	115.87	55.7	19	41	64					
MATUSIRO	133.47	315.5	19	7	-4				21	42 PP
QUETTA	141.78	48.1	19	22	-4					
WARSAK DAM	142.70	39.3	19	24	-3					
PEKING	143.32	337.8	19	25	-3					
PAOTOW	144.75	345.4	19	31	0					
LAHORE	146.07	39.8	19	37	4					
ZO-SE	148.00	322.4	19	42	6					
NANKING	148.68	326.5	19	42	5					
DEHRA DUN	149.23	37.3	19	42	4					
LANCHOW	150.35	352.2	19	46	6					
SIAN	151.00	343.0	19	48	7					
BOMBAY	151.69	61.9	19	47	5				23	32 PP
POONA	152.73	61.9	19	47A	4				23	39 PP
CHENGTU	155.60	349.6	19	48	1					
LHASA	155.85	17.3	19	52	4					
BAGUIO CITY	156.78	296.7	19	49	0					
BOKARO	158.64	35.2							20	59
SHILLONG	159.91	19.2	19	54	1					
MADRAS	160.35	69.6							24	18
PORT BLAIR	171.96	50.6							25	25

MARCH 31 5.H 30.M 48.S EPICENTRE -30.00-177.67 DEPTH= 37.KM

A=-0.86674 B=-0.03527 C=-0.49751 D=-0.0407 E= 0.9992
G= 0.4971 H= 0.0202 K=-0.8675 HT= 1.8

DEPTH OF FOCUS= 0.001R

SE= 2.67

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
RAOUL ISLAND	0.78	343.8	0	15	0								
ONERAHI	8.82	227.2	2	17	9								
KARAPIRO	9.71	213.7	2	19	-1								
TUAI	9.76	204.6	2	17	-4	4	8	-2					
WELLINGTON	12.82	206.6	3	2	0	5	14	-10					
NOUMEA	16.18	294.6	3	51K	5	7	1	17					
AFIAMALU	16.91	20.0	3	44	-11	6	39	-22					
PORT VILA	17.68	310.6	4	8	3								
ROXBURGH	18.52	209.9	4	11	-4								
KOUMAC	18.82	295.8	4	21A	2								
BRISBANE	26.02	268.4	5	38	7								
RIVERVIEW	26.69	253.7	5	40A	3	10	16	8			10	36	
CANBERRA	28.47	250.5	5	56A	3	10	36	-1					
HONIARA	29.26	309.8	5	58	-2	10	32	-17					
MACQUARIE I.	29.71	207.8	5	46	-18								
TARRALEAH	31.23	237.0	6	19	1						9	13	SCP
TOOLANGI	31.38	246.2	6	20K	1	11	26	3	6	32	7	44	PPP
CHARTERS TS.	34.01	278.4	6	43	1	12	13	9					
ADELAIDE	36.90	250.6	7	7A	0	13	16	28			8	48	PP
RABAUL	38.35	306.1	7	17A	-2	13	22	11			16	4	SS
PORT MORESBY	38.71	294.6	7	22K	0								
CAPE HALLETT	42.86	185.4	8	0	4								
SCOTT BASE	48.45	184.4	8	43	2								
DARWIN	50.68	278.8	8	58	0								
HONOLULU	54.37	22.6	9	24	-1	17	6	7					
KIPAPA	54.51	22.6	9	24	-2								
BYRD STATION	55.27	169.6	9	31	-1								
MUNDARING	55.90	249.8	9	34	-2	17	12	-8					
PERTH	56.22	249.7	9	41	3	18	2	38			13	18	PPP
SOUTH POLE	60.16	180.0	10	7	1						18	21	
MIRNY	62.61	206.8	10	22	-1	19	4	18	10	51			
MAWSON	72.78	200.5	11	26	0								
LEMBANG	73.39	271.7	11	27	-3	20	46	-9			14	11	PP
MANILA	73.82	297.9	11	31	-1	20	31	-29					
DJAKARTA	74.39	271.8	11	40	4								
TANGERANG	74.56	271.8	11	34A	-3						14	10	PP
BAGUIO CITY	75.27	299.1	11	38	-3	22	27	71			14	38	PP
TUKUBASAN	76.90	326.1	11	47A	-3	21	25	-9			26	42	SS
MATUSIRO	78.08	325.0	11	56K	0	21	47	1					
N-LAZARVSKYA	79.29	183.2	12	3	0								
ZO-SE	84.07	310.9	12	27A	-1								
Y.-SAKHLINSK	84.58	334.0	12	30	0								
CANTON	84.70	300.3	12	31	0								
PRIEST	84.82	43.0	12	33A	1								
PASADENA	85.00	45.8	12	33	0	23	0	3	12	49			
LICK	85.08	41.6	12	34A	1								
BERKELEY	85.09	40.8	12	34A	1	22	56	-2			24	30	PPS
CALISTOGA	85.45	40.1	12	35A	0								
VLADIVOSTOK	86.23	325.6	12	34	-5	23	13	4					
NANKING	86.26	310.4	12	38A	-1								
MEDAN	86.28	276.3	12	36K	-3				13	4	13	27	
SANTA LUCIA	86.54	126.8	12	42	2								
MINERAL	87.18	39.4	12	45K	2								
TUCSON	88.57	51.2	12	51	1								
EUREKA	89.81	43.0	12	56A	0						30	2	PKKP
CHANGCHUN	90.09	322.6	12	56	-1								
GLEN CANYON	90.93	47.1	13	3	2								
PORT HARDY	91.78	29.3	13	4	-2								
SEATTLE	91.91	33.8	13	3	-3	23	45	-16					
BLUE MTS.	92.55	38.2	13	6	-2	24	17	10			17	2	PP
PEKING	92.84	315.3	13	10	0								
MAGADAN	92.95	344.5	13	11	1								
ALBUQUERQUE	93.11	51.2	13	12	1						29	26	PKKP
KUNMING	93.90	296.7	13	15	0	24	11	-8					
UINTA BASIN	94.20	45.3	13	16	0	23	53	-28			17	5	PP
SIAN	94.22	307.2	13	16	0								
PENTICTON	94.35	33.8	13	17	0								
HUANCAYO	94.48	106.5	13	21	4								
FLAMING GRGE	94.67	44.9	13	19	1						30	10	PKKP

LUBBOCK	95.54	54.4	13	22	0	23	57	3			
CHENGTU	95.80	302.0	13	23	0						
BUTTE	95.87	39.4	13	25	1						
GOLDEN	96.49	47.7	13	27	1				24	2	
HUNGRY HORSE	96.53	37.0	13	26	-1				30	2	PKKP
LARAMIE	97.25	46.3	13	31	1						
COLLEGE	97.39	12.4	13	29	-2				29	28	PKKP
WICHITA MTS.	98.44	54.9	13	35	0	23	55	-14	31	24	SS
LANCHOW	98.70	306.5	13	37	1						
RAPID CITY	100.22	44.9	13	44	1						
YAKUTSK	100.97	337.6	13	45K	-2						
TULSA	101.01	55.0	14	0	13	24	27	5	32	30	SS
SHILLONG	102.70	292.2	13	55	1				24	52	
ULAN-BATOR	102.79	318.1	13	58	3	24	33	3			
YELLOWKNIFE	104.96	25.4	14	14	10				18	22	PKP
MADRAS	106.81	275.5	18	41	777				34	15	
BOKARO	106.87	288.1	15	14	777				19	5	
CUMBERLAND	108.31	59.1	14	30	777	24	59	4	18	53	PP
MADISON	108.50	50.2				24	58	2	28	22	PS
MOULD BAY	111.96	12.7	18	30	-1						
POONA	114.71	277.9	18	40	4						
DEHRA DUN	115.78	291.5	18	39	1				25	51	
RESOLUTE	116.78	17.2	18	39A	-1						
CHANGALANE	117.14	210.2							22	36	PPP
TRINIDAD	117.95	93.7	18	46	3						
OTTAWA	118.66	51.8	18	44	0						
PALISADES	118.77	57.0	18	51	7	25	44	9			
BREBEUF	120.12	52.1	18	47	0	25	48	8	27	6	SKKS
ALMATA-2	120.22	305.2	18	47A	0						
WARSAK DAM	122.18	293.4	18	51	0						
ALERT	122.82	8.1	18	51A	-1						
THULE	123.46	15.5	18	54	1						
BULAWAYO	124.09	210.2	18	56A	1						
CHILEKA	124.75	219.2	18	57A	1						
QUETTA	124.81	287.7	18	57	1						
KHEYS	124.81	350.5	18	55	-1						
DUZHANBE	125.50	298.0	18	58	1						
TASHKENT	125.67	301.4	18	58A	1						
SCHEFFERVLLE	125.78	41.8	18	57	-1						
HALIFAX	126.94	54.7	19	2	2						
BROKEN HILL	129.13	213.4	19	7	3						
SVERDLOVSK	131.77	321.2	19	7	-2						
ASHKABAD	133.47	295.4	19	14	2				22	44	SKP
BANDEIRA	134.12	194.9	19	13	-1			19 27	21	44	PP
SHIRAZ	136.75	282.6	19	19K	1				22	0	PP
KEVO	137.79	347.5	19	15	-5				40	16	SS
APATITY	138.13	342.7	19	13	-8				29	21	SKKS
TEHERAN	138.74	291.3	19	23	1				32	27	SKSP
LWIRO	139.16	222.9	19	18	-5						
TROMSOE	139.21	351.2	19	16	-7						
SODANKYLA	139.88	345.7	19	16	-8				22	30	SKP
LUANDA	139.97	196.9							22	22	PP
KIRUNA	140.64	349.3	19	20	-6				22	22	PP
KAJAANI	142.31	342.1	19	23	-5				23	4	PKS
KIROVOBAD	142.90	298.8	19	24	-5						
GORIS	142.94	296.9	19	25	-5						
TIFLIS	143.99	300.7	19	31	0				22	54	SKP
MOSCOW	144.17	326.1	19	28	-4						
UMEA	144.29	346.5	19	28A	-4				29	41	
VIBORG	144.58	337.8	19	29	-3	26	28	-8			
PULKOVO	144.76	335.7	19	31	-2						
SKALSTUGAN	145.81	352.1	19	34A	-1						
NURMIJARVI	146.03	340.3	19	35A	0	26	24	-14	41	46	SS
HELSINKI	146.22	339.8	19	36A	1						
UPPSALA	148.41	345.3	19	38	-1				23	9	PKS
BERGEN	149.54	357.1	19	48	7						
KONGSBERG	149.94	352.6	19	44	3				23	22	PKS
SIMFEROPOL	150.91	309.7	19	51	8				23	33	PP
KSARA	151.34	286.4	19	47	4			20 14	23	27	PP
GOTEBORG	151.51	349.1	19	48A	5						
JERUSALEM	151.78	282.1	19	50	6						
KARLSKRONA	152.22	344.0	19	46	1						
ABERDEEN	152.66	5.3							22	57	
COPENHAGEN	153.34	347.2	19	47	1						
WARSAW	153.86	333.4	19	50	3				23	52	PP
LWOW	154.30	326.5	19	57	10				20	13	PKP2
DURHAM	155.09	5.4	20	29K	41				23	53	PP
PONTA DELGDA	155.56	64.2	19	56	7						

ISTANBUL UN.	155.76	304.2	19	49	0	23 57	PP
UZHGOROD	155.94	326.2	19	50	0		
KRAKOW	155.98	331.4	19	53	3	20 22	PKP2
CHORZOW	156.17	332.9	19	50	0	20 52	
M.BOUR	156.37	127.0	19	52	2	23 58	PP
SKALNATE PL.	156.50	329.6	19	49A	-1	20 34	PKP2
RACIBORZ	156.64	333.6	19	52	1	20 20	PKP2
WITTEVEEN	156.98	353.3	19	56	5		
COLLMBERG	157.28	342.5	19	52	1	20 26	PKP2
DE BILT	157.82	355.3	19	58	6	34 24	PS
JENA	157.98	344.3	19	52	0	23 57	PP
PRUHONICE	158.01	338.6	19	53	1	31 14	SKKS
KEW	158.46	4.5	20	29	36	24 5	PP
BRATISLAVA	158.61	332.1	19	52A	-1	24 15	PP
BENSBERG	158.75	351.5	24	14	3	20 29	PKP2
VIENNA-H.	158.83	333.3	19	54	1	20 33	
SOFIA	158.93	312.7	19	49	-4	21 6	
KASPERSKE H.	159.06	339.0	19	54	0	24 3	
DOURBES	159.85	355.8	19	59	5		
STUTTGART	160.52	346.1	19	55	0	24 18	PP
STRASBOURG	160.99	348.9	20	0	4	20 43	PKP2
FOLINIERE	161.13	5.8	20	39	43		
LJUBLJANA	161.36	332.6	19	55	-1	20 43	
WELSCHBRUCH	161.36	351.6	19	48	-8	20 44	PKP2
TRIESTE	161.99	333.3	19	55	-2	32 2	
BESANCON	162.55	351.7				20 46	PKP2
ROSELEND	163.98	349.0	20	12	13	21 2	PKP2
CLERMONT-FD.	164.25	358.0	21	1	62		
FLORENCE X.	164.52	335.1	19	54	-5	32 1	
ISOLA	165.36	346.5	20	6	6	20 59	PKP2
MONACO	165.71	344.9				21 0	
TOLEDO	168.85	26.2	20	8K	6	25 2	PP
GRANADA	171.30	33.1	20	11	7	21 32	PKP2
ALMERIA	172.08	29.2	20	8K	4	25 33	PP
BENI ABBES	176.09	87.2	20	7	1	23 43	PP

MARCH 31 7.H 7.M 38.S EPICENTRE -6.14 148.98 DEPTH= 72.KM

A=-0.85211 B= 0.51245 C=-0.10633 D= 0.5154 E= 0.8570
G= 0.0911 H=-0.0548 K=-0.9943 MT= 6.9

DEPTH OF FOCUS= 0.006R

SE= 1.59

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
PORT MORESBY	3.71	209.1	0	58K	2	1	42	3					
RABAUL	3.72	58.9	0	54K	-2								
HONIARA	11.35	107.4	2	39A	-2								
CHARTERS TS.	14.11	190.5	3	17	0	6	14	22					
DARWIN	18.94	249.6	4	20	3	8	8	25					
GUAM	19.93	347.8	4	33	5						8	37	
KOUMAC	20.63	135.4	4	35A	0								
BRISBANE	21.44	170.7	4	43	0	8	42	10					
NOUMEA	23.29	135.3	5	2	0	9	8	3					
RIVERVIEW	27.62	176.1	5	43A	1	10	23	6			11	41	SS
CANBERRA	29.03	180.0	5	56	1	10	41	1			6	47	PP
ADELAIDE	30.21	196.9	6	6A	1	11	11	13			13	0	SS
TOOLANGI	31.44	185.3	6	16K	0	11	24	6	6	31	7	37	PP
SAVANNAH	35.46	182.3	6	52	1								
BAGUIO CITY	35.94	309.0		54	-1	12	13	-14					
TARRALEAH	36.07	183.2	6	56	0								
MOORLANDS	36.18	182.2	6	58	1								
AFIAMALU	39.36	104.4	7	24A	0	13	24	5					
KARAPIRO	39.79	146.5	7	28	1						9	34	PCP
MUNDARING	39.95	225.8	7	29	1	13	28	0					
PERTH	40.21	226.1	7	46	15	13	37	5			9	22	PP
LEMBANG	41.09	266.7	7	39	1	13	50	5			9	23	PP
WELLINGTON	41.87	150.6	7	44	0	13	58	1			9	32	PP
DJAKARTA	41.90	267.6	7	38	-6						13	36	
TANGERANG	42.10	267.6	7	44	-2	13	59	-1					
ABUYAMA	42.71	343.7	7	50A	-1								
TUKUBASAN	42.96	349.4	7	53A	0	14	15	2			9	15	PP
ROXBURGH	42.99	159.0				14	16	3			17	52	SS
MATUSIRO	43.64	347.4	7	59A	0	14	26	3					
CANTON	45.36	311.1	8	13	1								

ZO-SE	45.58	325.9	8	15A	1						
MIZUSAWA	45.63	351.5	8	17	2	14	53	2			
NANKING	47.66	324.7	8	31A	0	15	26	6			
MACQUARIE I.	48.88	172.3	8	38	-2				8	52	
MEDAN	51.14	279.6	9	0	3						
VLADIVOSTOK	51.42	344.0	8	59A	0	16	19	7			
Y.-SAKHLINSK	53.22	354.7	9	13	0	16	42	5			
CHANGCHUN	54.15	339.0	9	19A	-1	16	51	2			
KUNMING	54.65	306.6	9	24	1	17	2	6			
PEKING	55.00	329.5	9	26A	0	17	3	2			
SIAN	55.19	319.5	9	27A	0						
CHENGTU	56.48	313.1	9	36	0	17	21	1			
PAOTOW	58.66	325.9	9	52A	0	17	52	3			
KIPAPA	58.74	60.5	9	53	1						
PETROPAVLOVK	59.51	6.8	9	59	1						
LANCHOW	59.60	318.2	9	59A	1	18	0	-1			
SHILLONG	63.76	302.3	10	24A	-2	18	53	-1			
ULAN-BATOR	65.31	330.3	9	35	-61	19	16	3			
MAGADAN	65.50	1.0	10	37	0	19	19	4			
WILKES	65.70	196.0	10	39	0						
LHASA	65.97	306.1	10	41	1	19	25	4			
CAPE HALLETT	67.38	173.1	10	51	2						
CHATRA	68.16	302.0	11	57	63	19	48	1			
BOKARO	68.40	298.5	11	20	24	19	54	4			
IRKUTSK	69.47	332.5	11	2A	0	20	5	2			
YAKUTSK	69.58	350.4	11	2	-1	20	4	0			
MADRAS	70.93	286.0	11	9	-2	20	29	9			
MIRNY	71.33	200.5	11	13	-1	20	28	4			
SCOTT BASE	72.27	176.1	11	19	0	20	45	10			
DEHRA DUN	76.85	302.9	11	47	2						
POONA	77.96	290.3	11	54K	2						
TIKSI	78.74	353.6	11	56	0	21	48	2			
BOMBAY	78.99	290.5	11	56	-1						
MAWSON	82.87	202.7	12	17	-1						
ANDIJAN	83.92	312.0	12	24	1	22	42	3			
BYRD STATION	84.25	169.9	12	25	0						
COLLEGE	84.53	22.5	12	23	-3				12	37	
DUZHANBE	86.18	309.3	12	31	-3						
QUETTA	86.20	300.7	12	34	0						
TASHKENT	86.33	312.0	12	34	-1						
LICK	93.19	53.0	13	20A	13						
MINERAL	93.49	50.0	13	11K	2						
SVERDLOVSK	94.19	326.6	13	11	-1						
PASADENA	95.77	56.4	13	32	13						
MOULD BAY	96.33	13.9	13	22	1						
BLUE MTS.	96.92	45.6	13	28	4	23	58	5			
EUREKA	97.76	51.1	13	30	2				13	43	
N-LAZARVSKYA	98.12	193.2	13	31A	1						
YELLOWKNIFE	98.38	27.8	13	31	0						
TANANARIVE	98.76	249.9	13	35	3						
HUNGRY HORSE	99.20	42.1	13	26	-8						
TUCSON	101.86	58.4	13	54	8						
ALERT	102.55	4.0	13	50	1						
UINTA BASIN	102.68	50.2	13	54	4	24	29	7			
GOLDEN	105.94	50.6									
CHANGALANE	110.82	239.0									
NURMIJARVI	111.70	333.9	18	28	2						
UMEA	111.80	338.1	18	28	2						
WICHITA MTS.	111.89	55.1	18	30	4						
TULSA	113.97	53.5	18	34	4						
SKALSTUGAN	114.76	340.3	18	30	-2						
BULAWAYO	115.84	244.3	18	37	3						
ISTANBUL UN.	116.45	313.0									
MADISON	116.68	44.2	18	37	1						
LWOW	116.74	323.5									
LWIRO	119.69	263.9	18	45	4						
PRUHONICE	122.04	327.0									
COLLMBERG	122.12	329.0	18	48	2						
CUMBERLAND	122.12	51.6	18	49	3						
KASPERSKE H.	123.04	326.6	18	50	2						
JENA	123.06	329.3	18	51	3						
OTTAWA	124.99	37.2	18	54	2						
BENSBERG	125.21	331.4	18	58A	6						
BLACKSBURG	125.50	48.1	18	55	2						
STUTTGART	125.55	328.3	18	54	1						
SANTA LUCIA	125.60	139.0	18	56	3						
PENNSYLVANIA	125.84	43.1	18	56	3						
SHAWINIGAN	126.08	34.7	18	56	2						
COLUMBIA	126.16	52.0	18	58	4						

	11	56 PCP
	13	53 PP
	22	38
	22	2
	22	57
	26	2 PS
	17	26 PP
	30	6 PKKP
	18	3 PP
	18	19 PP
	29	4 SP
	19	13
	19	31 PP
	19	58 PP
	29	9
	19	47
	19	13
	28	46 PKKP
	20	28 PP

BREBEUF	126.18	36.1	18	56	2			19	15	38	38 SS
DOURBES	127.00	332.0	19	1	5						
PALISADES	128.38	41.1	19	2	4	26	50 53				
BANDEIRA	131.34	244.1	19	5	1			19	18	22	29 SKP
ANTOFAGASTA	131.44	129.1	19	8	4					22	33
HUANCAYO	132.38	112.3	19	11	5						
LUANDA	133.44	251.8								21	50 PP
CHINCHINA	135.61	89.2	19	7	-5					19	32 PKP2
GALERAZAMBA	136.02	80.9	18	59	-14						
BOGOTA	137.12	89.8	19	12	-3					22	53 PKS
FUQUENE	137.51	88.6	19	15	0						
SAN JUAN	143.69	67.2	19	27	1						
BENI ABBES	143.88	314.8	19	27	0					20	20
CARACAS	144.22	80.6	19	29A	2					22	54 PP
LOME	147.94	271.7	20	6	32					20	24 PKP2
ANTIGUA	147.95	67.4	19	40	6						
ST. CLAUDE	148.38	69.3	19	40	6					23	6
FORT FRANCE	149.20	71.5	19	43	7					23	26 PP
TRINIDAD	149.63	79.5	19	39	3						

MARCH 31 9.H 7HM 13.S EPICENTRE -30.18-177.70 DEPTH= 0.KM

A=-0.86524 B=-0.03472 C=-0.50015 D=-0.0401 E= 0.9992
G= 0.4997 H= 0.0201 K=-0.8659 HT= 1.8

SE= 3.35

	DELTA DEG.	AZ. DEG.	P M	S	O-C S	S M	S	O-C S	*PP M	S	SUPP. M	S	
RAOUL ISLAND	0.94	348.4	0	23	3								
ONERAHI	8.68	228.0	2	17	7								
KARAPIRO	9.55	214.1	2	20	-2								
TUAI	9.59	204.9	2	19	-3	4	10	-2					
WELLINGTON	12.65	206.8	3	16	12	5	15	-12					
NOUMEA	16.23	295.2	3	57A	6								
AFIAMALU	17.09	19.9	3	55	-7	6	51	-21					
PORT VILA	17.77	311.1	4	15	5								
BRISBANE	25.99	268.8	5	38	2								
RIVERVIEW	26.61	254.0	5	45A	3								
CANBERRA	28.39	250.8	6	UA	2						9	12	PCP
SAVANNAH	30.47	238.1	6	17	0								
MOORLANDS	30.61	236.7	6	17	-1						9	17	PCP
TARRALEAH	31.11	237.2	6	21	-1						9	16	PCP
TOOLANGI	31.29	246.4	6	25A	1						9	19	PCP
CHARTERS TS.	34.01	278.7	6	48	0								
ADELAIDE	36.82	250.9	7	12K	0								
DARWIN	50.68	278.9	9	3	0								
BYRD STATION	55.10	169.6	9	37	1								
MUNDARING	55.82	249.9	9	39	-2								
SOUTH POLE	59.99	180.0	10	11	0								
MATUSIRO	78.20	325.1	12	1K	-2								
N-LAZARVSKYA	79.11	183.2	12	8	0								
Y.-SAKHLINSK	84.73	334.0	12	36	-1								
PASADENA	85.14	45.8	12	40	1								
LICK	85.22	41.6	12	41K	1								
MINERAL	87.33	39.4	12	50K	0								
BOULDER CITY	88.41	46.2	12	57	2								
TUCSON	88.70	51.2	12	59	2								
EUREKA	89.96	43.0	13	3A	0						30	35	PKKP
BLUE MTS.	92.71	38.3	13	15	0						17	4	PP
ALBUQUERQUE	93.24	51.2	13	18	0								
UINTA BASIN	94.34	45.4	13	23	0								
COLLEGE	97.56	12.4	13	36	-1								
WICHITA MTS.	98.56	54.9	13	41	-1								
MOULD BAY	112.14	12.7	18	36	-1								
RESOLUTE	116.96	17.2	18	45A	-2								
ALMATA	120.60	305.1	18	52A	-2								
BULAWAYO	123.93	210.1	19	0	0								
CHILEKA	124.59	219.2	19	2	0								
QUETTA	124.83	287.6	19	3	1								
BROKEN HILL	128.97	213.3	19	11	1								
SVERDLOVSK	131.89	321.1	19	13	-3								
SHIRAZ	136.76	282.4	19	23	-2								
KEVO	137.96	347.5	19	18	-9								
APATITY	138.29	342.6	19	27	-1								
LWIRO	139.01	222.8	19	31	2								

SODANKYLA	140.04	345.6	19 22	-9	
KIRUNA	140.81	349.2	19 26	-6	
KAJAANI	142.47	342.0	19 28	-7	
KIROVOBAD	142.96	298.6	19 31	-5	
MOSCOW	144.30	325.9	19 35A	-3	
VIBORG	144.74	337.7	19 36A	-3	
BAKURIANI	145.00	300.7	19 39	0	
SKALSTUGAN	145.98	352.0	19 40A	-1	
NURMIJARVI	146.19	340.2	19 40	-1	
HELSINKI	146.37	339.6	19 42	0	
UPPSALA	148.57	345.2	19 47	2	
BERGEN	149.71	357.0	19 52	5	
KONGSBERG	150.11	352.5	19 52A	4	
SIMFEROPOL	151.00	309.4	19 55	6	
GOTEBORG	151.67	349.0	19 55A	5	
KARLSKRONA	152.38	343.9	19 58	7	
COLLMBERG	157.44	342.3	20 1	3	20 29 PKP2
PRUHONICE	158.17	338.4			20 33 PKP2
BENSBERG	158.92	351.4	20 40	40	
KASPERSKE H.	159.22	338.8	19 58	-2	20 37
STUTTGART	160.68	345.9			20 43 PKP2
FOLINIERE	161.31	5.7	20 46	44	
BENI ABBES	176.12	89.7	20 14	2	

MARCH 31 17.H 28.M 53.S EPICENTRE 0.66 96.59 DEPTH= 35.KM

A=-0.11479 B= 0.99332 C= 0.01146 D= 0.9934 E= 0.1148
G=-0.0013 H= 0.0114 K=-0.9999 HT= 7.2

DEPTH OF FOCUS= 0.000R

SE= 1.58

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
MEDAN	3.57	35.7	0	53	-1	1	31	-5			8	26	PCP
PORT BLAIR	11.59	340.8	2	46	0	5	10	15					
TANGERANG	12.10	124.2	2	51	-1						5	24	
DJAKARTA	12.27	123.8									4	34	
LEMBANG	13.28	124.2	3	6	-2	5	33	-3					
MADRAS	20.37	307.7	4	34K	-2	8	32	15			4	58	PP
KODAIKANAL	21.26	297.2	4	50A	5	9	0	26			5	26	PPP
VISHAKHAPTNM	21.41	323.1	4	50K	4	9	2	25			5	21	PP
CHITTAGONG	22.06	348.2	4	54	1								
HYDERABAD	24.42	314.0	5	15K	-1	9	44	13					
KUNMING	25.03	13.3	5	24	2				5	34			
BOKARO	25.30	336.3	5	25K	1	9	55	10			6	6	PP
CHATRA	27.55	341.6	5	48K	3	11	27	65					
CANTON	27.60	34.9	5	45	-1	10	24	1					
BAGUIO CITY	28.36	55.2	5	53	1	10	41	6			6	52	SP
POONA	28.53	309.8	5	55K	1	10	48	10					
LHASA	29.30	350.1	6	2K	1	10	55	5					
BOMBAY	29.53	309.3	6	5	2	11	8	14			9	1	PCP
CHENGTU	30.65	12.6	6	13	0	11	12	0					
DEHRA DUN	34.36	330.8	6	45K	0						14	44	
SIAN	35.35	17.8	6	54A	0	12	28	3	7	4			
LANCHOW	35.85	10.0	6	59	1	12	35	3	7	9	8	24	PP
LAHORE	37.25	327.7	7	8	-2								
MUNDARING	37.39	152.0	7	12	1				7	22			
NANKING	37.61	31.7	7	14A	1	13	4	5					
ZO-SE	38.20	35.3	7	18A	0	13	13	5	7	28	8	54	PP
WARSAK DAM	40.62	327.3	7	37	-1								
QUETTA	40.69	318.9	7	39	1								
PAOTOW	41.57	15.5	7	46	0	14	2	3					
PEKING	43.05	22.1	7	59	1	14	26	5	8	10			
KHOROG	43.32	330.6	8	2	2	14	28	3					
ANDIJAN	45.55	334.1	8	18K	0								
ALMATA	45.92	340.0	8	21K	0								
FRUNSE	46.37	337.7	8	25K	1								
TASHKENT	47.41	332.0	8	31K	-1	15	23	0					
ULAN-BATOR	47.91	9.3	8	36	0								
CHANGCHUN	50.02	27.0	8	53	0	16	0	0			10	50	PP
SHIRAZ	50.87	308.7	8	59K	0	16	22	10			10	54	PP
ASHKABAD	51.11	321.0	8	59	-2								
PORT MORESBY	51.32	102.5	9	6	4								
SEMIPALATNSK	51.47	346.7	9	1	-3								
IRKUTSK	51.83	6.0	9	8	2								

TANANARIVE	51.92	245.3	9	9	2								
MATUSIRO	52.50	42.4	9	9	-2	16	37	3					
VLADIVOSTOK	52.75	32.1	9	14	1								
CHARTERS TS.	52.82	115.9	9	14	0							16	42
ADELAIDE	52.95	136.4	9	15K	0								
TOOLANGI	58.98	135.7	9	59	1				10	9		11	1
GORIS	59.88	316.5	10	1K	-3								
KIROVOBAD	60.41	317.7	10	6K	-2								
CANBERRA	60.51	131.9	10	9K	0				10	19		17	8
BRISBANE	60.69	122.1	10	11	1								
TIFLIS	61.93	318.2	10	18	0	18	37	-1					
CHILEKA	62.94	252.1	10	24	-1								
SVERDLOVSK	62.97	338.8	10	23A	-2	18	49	-2					
JERUSALEM	65.54	304.8	10	42	0								
KSARA	65.57	307.1	10	43	1								
YAKUTSK	66.11	16.4	10	44	-1								
LWIRO	67.84	267.3	10	57K	1								
HELWAN	68.34	301.9	10	59	0	19	59	2					
BROKEN HILL	69.01	254.3	10	58K	-6								
BULAWAYO	69.62	248.3	11	7	0								
SIMFEROPOL	70.35	318.0	11	10	-2								
MAGADAN	72.08	25.7	11	22	0								
MOSCOW	72.48	329.5	11	23K	-1	20	41	-4					
ISTANBUL UN.	72.80	312.9	11	26K	0	20	49	1					
PETROPAVLOVK	73.01	33.9	11	27A	-1								
TIKSI	73.80	10.2	11	30	-2	20	59	-1					
PULKOVO	77.67	331.7	11	54K	0	21	43	1					
LWOW	78.30	320.9	11	56	-2								
VIBORG	78.71	332.3	12	0K	0								
UZHGOROD	79.15	319.4	12	2	0								
APATITY	79.40	339.6	12	3K	-1	22	3	2					
KAJAANI	80.29	335.4	12	7	-2								
NURMIJARVI	80.60	331.5	12	9	-1	22	13	0					
SODANKYLA	81.77	338.4	12	16K	0							14	10
KEVO	82.41	340.8	12	19K	-1	22	31	-1				12	59
UMEA	83.40	334.3	12	24K	-1	22	38	-4					
BANDEIRA	83.68	255.0	12	27K	1				12	37			
UPPSALA	83.88	330.1	12	27K	0								
LJUBLJANA	84.01	316.1	12	27	-1								
KIRUNA	84.18	338.3	12	29K	0	22	52	2					
PRUHONICE	84.37	320.0	12	31	1	22	59	8					
KASPERSKE H.	84.92	319.1	12	32K	0							13	25
ROME	85.17	311.8										20	10
COLLMBERG	85.47	321.3	12	35	0							14	30
HALLE	86.14	321.4	12	38	0				12	51			
JENA	86.34	320.8	12	38	-1								
GOTEBORG	86.56	327.6	12	39	-1							13	21
SKALSTUGAN	86.87	333.5	12	41	-1								
PAVIA	87.71	315.0										24	26
STUTTGART	87.73	318.6	12	46	0								
KONGSBERG	87.89	329.5	12	47K	0								
N-LAZARVSKYA	88.89	199.3	12	53K	1								
BENSBERG	89.13	320.8	12	53	0				13	4			
SOUTH POLE	90.66	180.0	13	1	1								
DOURBES	90.78	319.9	13	5	5								
NORD	92.68	352.2	13	8	-1								
ALERT	96.41	357.3	13	26	0								
BENI ABBES	97.26	300.3										17	28
YELLOWKNIFE	112.77	15.1	18	30	-3								
PENTICTON	121.28	26.9	18	50	1								
HUNGRY HORSE	124.44	24.3	18	56	1								
BLUE MTS.	125.61	29.2	18	59	1							20	55 PP
EUREKA	130.16	33.0	19	9	3							21	24 PP
WOODY	131.02	38.7	19	10	2								
FLAMING GRGE	132.34	26.7	19	12	2								
UINTA BASIN	132.75	27.3	19	13	2							21	33 PP
TUCSON	138.25	35.9	19	15	-6								
ALBUQUERQUE	138.53	29.1	19	16	-6								
WICHITA MTS.	142.04	20.5	19	25	-3							22	26 PP
CUMBERLAND	143.88	3.0	19	30	-1								
COLUMBIA	145.45	356.5	19	36	2								
SAN JUAN	154.56	318.9	20	13	25								
TRINIDAD	155.40	297.8	19	53	4								

MARCH 31 19.H 22.M 51.S EPICENTRE -30.22-177.84 DEPTH= 35.KM

A=-0.86496 B=-0.03264 C=-0.50078 D=-0.0377 E= 0.9993
G= 0.5004 H= 0.0189 K=-0.8656 HT= 1.7

DEPTH OF FOCUS= 0.000R

SE= 2.77

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
RAOUL ISLAND	0.97	355.8	0	17	-1								
ONERAHI	8.57	227.7	2	13	8								
KARAPIRO	9.45	213.7	2	11	-6								
TUAI	9.50	204.4	2	16	-2	4	0	-5					
WELLINGTON	12.56	206.5	3	0	1	5	5	-14					
NOUMEA	16.14	295.6	3	52A	6	7	5	21					
AFIAMALU	17.17	20.3	3	50	-9	6	46	-21					
PORT VILA	17.71	311.5	4	11	5								
ROXBURGH	18.26	209.9	4	11	-2								
KOUMAC	18.78	296.7	4	22K	3								
BRISBANE	25.87	268.9	5	33	3								
RIVERVIEW	26.49	254.1	5	39A	3								
CANBERRA	28.26	250.8	5	54A	2	10	44	10	6	5	10	11	
HONIARA	29.29	310.3	5	59	-2	10	44	-7			9	2	PCP
TOOLANGI	31.16	246.5	6	19A	1						9	28	
CHARTERS TS.	33.90	278.8	6	43	1	12	4	1			7	32	PP
ADELAIDE	36.69	250.9	7	7K	1	13	13	27					
RABAUL	38.36	306.6	7	17	-3						9	27	PCP
PORT MORESBY	38.67	295.0	7	23	1						13	2	PPP
CAPE HALLETT	42.63	185.4	7	59	4								
SCOTT BASE	48.23	184.3	8	9	-31						8	41	
DARWIN	50.57	279.0	8	49	-9	15	56	-12					
HONOLULU	54.63	22.7	9	28	0								
KIPAPA	54.77	22.8	9	28	-1								
BYRD STATION	55.08	169.6	9	32	1								
MUNDARING	55.69	250.0	9	34	-1	17	9	-9					
PERTH	56.01	249.9	9	40	2								
SOUTH POLE	59.95	180.0	10	0	-5								
MIRNY	62.35	206.9	10	20	-2								
MAWSON	72.53	200.5	11	25	0								
LEMBANG	73.25	271.8	11	29K	-1	20	53	-1	11	41	14	14	PP
MANILA	73.80	298.1	11	31	-2								
TANGERANG	74.43	271.9	11	35K	-2				11	56	14	19	PP
BAGUIO CITY	75.25	299.2	11	39	-2	21	15	-2			14	42	PP
TUKUBASAN	76.99	326.2	11	46	-5	21	31	-5			26	54	SS
MATUSIRO	78.17	325.2	11	56	-2	21	41	-7					
ABUYAMA	78.22	322.4	11	57A	-1								
N-LAZARVSKYA	79.06	183.2	12	2A	-1								
ZO-SE	84.10	311.1	12	26	-3	22	46	-3					
CANTON	84.68	300.4	12	32A	0	22	55	0					
Y.-SAKHLINSK	84.71	334.1	12	32K	0	23	0	5					
PRIEST	85.08	43.1	12	35A	1								
PASADENA	85.26	45.9	12	35	0	23	9	8	12	46	15	43	PP
LICK	85.33	41.6	12	36A	1								
BERKELEY	85.35	40.9	12	37A	2	22	57	-5			28	21	SS
PETROPAVLOVK	85.39	346.0	12	36A	1								
CALISTOGA	85.71	40.2	12	37A	0								
MEDAN	86.16	276.4	12	38K	-1								
NANKING	86.29	310.5	12	40A	0								
VLADIVOSTOK	86.32	325.7	12	39A	-1								
SANTA LUCIA	86.52	126.8	12	42	1								
MINERAL	87.44	39.5	12	46K	1								
BOULDER CITY	88.53	46.3	12	51	1				13	10			
TUCSON	88.82	51.3	12	54	2				13	11			
EUREKA	90.07	43.0	12	58A	0				13	16	16	36	PP
CHANGCHUN	90.17	322.7	12	57A	-1	23	48	1					
GLEN CANYON	91.18	47.2	13	5	2				13	21			
ANTOFAGASTA	92.14	118.9	13	9	2	23	40	-24			57	9	SSS
SEATTLE	92.17	33.9	13	6A	-2	23	34	-31					
BLUE MTS.	92.81	38.3	13	10	0	24	16	6			17	3	PP
PEKING	92.89	315.4	13	11A	0	24	16	5					
MAGADAN	93.12	344.6	13	11	-1								
NANA	93.34	105.8	13	15	2								
SALT LAKE C.	93.34	44.0	13	13	0				13	31	17	12	PP
KUNMING	93.86	296.7	13	17	2								
SIAN	94.23	307.3	13	17A	0								
UINTA BASIN	94.46	45.4	13	18	0	24	34	9			17	13	PP
HUANCAYO	94.56	106.7	13	23	5								
PENTICTON	94.61	33.9	13	18A	-1								

FLAMING GRGE	94.93	45.0	13	21	1			13	38	17 24
LUBBOCK	95.78	54.5	13	24	0					17 29
CHENGTU	95.79	302.0	13	26	2					
BUTTE	96.13	39.5	13	25	-1			13	42	17 17 PP
GOLDEN	96.74	47.8	13	28	0					17 19
BOZEMAN	96.77	40.5	13	31	3					17 36 PP
LARAMIE	97.51	46.4	13	33	1					
COLLEGE	97.63	12.4	13	32	0					30 1 PKKP
LA PAZ	97.97	114.2	13	48	14					
WICHITA MTS.	98.68	55.0	13	37	0	24	13 2			17 35 PP
LANCHOW	98.72	306.6	13	41	4					
RAPID CITY	100.48	45.0	13	47	2					
TULSA	101.26	55.1	13	40	-9	24	21 -3			27 4
ULAN-BATOR	102.85	318.1	13	56	0					
CHINCHINA	103.04	91.8				24	28 -4			
BOGOTA	104.21	92.9				24	39 1			18 18 PP
FUQUENE	104.92	92.3								18 40 PP
YELLOWKNIFE	105.22	25.4	14	9	777					
MADRAS	106.68	275.5								18 37
TIKSI	108.11	344.5	14	19	777	24	52 -3			
CUMBERLAND	108.55	59.2	14	24	777	24	58 1			19 6 PP
MOULD BAY	112.20	12.7	18	31	-1					29 33
BLACKSBURG	113.00	59.3								19 37 PP
CARACAS	113.23	91.2	18	53	19					29 9 PKKP
BOMBAY	115.64	277.8								22 21
RESOLUTE	117.03	17.2	18	40A	-2					
KIMBERLEY	117.51	202.4	18	45K	2					
TRINIDAD	118.09	93.9	18	46	2					
OTTAWA	118.91	51.9	18	45	0					
PALISADES	119.01	57.1	18	46	1	25	44 7			15 28 P
LAHORE	119.15	291.5	18	46	0					
BREBEUF	120.37	52.2	18	48K	0					
ALMATA	120.52	305.1	18	47A	-1					
SHAWINIGAN	121.18	51.2	18	49	-1					
WARSAK DAM	122.13	293.3	18	51	0					
ALERT	123.05	8.2	18	52	-1					
ANDIJAN	123.25	301.3	18	55	1					
BULAWAYO	123.83	210.3	18	55	0					
CHILEKA	124.49	219.3	18	57K	1					
QUETTA	124.73	287.6	18	58	1					
KHEYS	125.00	350.5	18	58	1					
TASHKENT	125.65	301.3	18	58A	0					30 45 PS
SEPT ILES	125.96	47.6	18	58	-1					
HALIFAX	127.18	54.8	19	2K	1					
NORD	128.01	3.5	19	0	-3					
BROKEN HILL	128.87	213.5	19	7K	3					
SVERDLOVSK	131.85	321.0	19	8	-2					
ASHKABAD	133.43	295.2	19	14	1					
BANDEIRA	133.88	195.0	19	17K	3					21 45 PP
SHIRAZ	136.65	282.4	19	20	1					22 3 PP
KEVO	137.97	347.4	19	12	-9					22 19 PP
APATITY	138.29	342.6	19	14	-8					22 51 PKS
TEHERAN	138.68	291.1	19	18	-5					23 1
LWIRO	138.90	223.0	19	16	-7					22 14 PP
SODANKYLA	140.05	345.5	19	17	-8					
KIRUNA	140.83	349.1	19	19	-8					22 58 PKS
KAJAANI	142.47	341.9	19	24	-6					23 2 PKS
GORIS	142.90	296.6	19	27K	-3					
TIFLIS	143.97	300.4	19	31	-1					
MOSCOW	144.27	325.8	19	29	-4					22 44 PP
UMEA	144.47	346.3	19	30A	-3					41 52 SS
VIBORG	144.73	337.6	19	31	-2					
PULKOVO	144.89	335.5	19	32	-2					22 42 PP
SKALSTUGAN	146.00	351.9	19	35A	-1					
NURMIJARVI	146.19	340.1	19	36	0	26	15 -24			22 55 PP
HELSINKI	146.37	339.5	19	37	1					
UPPSALA	148.58	345.0	19	39	-1					
BERGEN	149.74	356.9	19	47	5					20 9
KONGSBERG	150.14	352.4	19	47A	5					23 21 PKS
SIMFEROPOL	150.94	309.3	19	43	0					
KSARA	151.26	286.0	19	51	7					23 28 PP
JERUSALEM	151.68	281.7	19	46	1					
GOTEBORG	151.69	348.9	19	44	-1					
KARLSKRONA	152.39	343.7	19	47A	1					
COPENHAGEN	153.52	346.9	19	48A	1					
WARSAW	153.98	333.0	19	48	0					20 27
LWOW	154.40	326.1	19	48	0					
DURHAM	155.32	5.2	20	18K	28					

ISTANBUL UN.	155.76	303.7	19	49A	-1					23	56
UZHGOROD	156.04	325.8	19	50	0						
KRAKOW	156.09	331.0	19	51	0					20	16 PKP2
CHORZOW	156.29	332.5	19	51	0					20	19 PKP2
M.BOUR	156.36	127.6	19	54A	3					24	13 PP
RACIBORZ	156.77	333.2	19	51	-1					20	17 PKP2
WITTEVEEN	157.18	352.9	19	54	2					20	24 PKP2
COLLMBERG	157.45	342.1	19	52	0					20	24 PKP2
HALLE	157.53	343.9	19	52	-1					20	52 PP
DE BILT	158.03	355.0	19	55	2					24	3 PP
JENA	158.14	343.8	19	52	-1					24	4 PP
PRUHONICE	158.16	338.1	19	54	1					24	5 PP
KEW	158.69	4.3	19	57	3					24	4 PP
BRATISLAVA	158.73	331.6	19	54A	0						
BENSBERG	158.94	351.2	19	55	1					20	31 PKP2
VIENNA-H.	158.96	332.8	19	55	1					21	16
SOFIA	158.97	312.1	19	52	-2					20	45
KASPERSKE H.	159.21	338.5	19	55K	0					22	50
DOURBES	160.06	355.4	20	0	5						
ATHENS	160.57	299.2	19	56A	0						
STUTTGART	160.69	345.6	19	57	1					24	18 PP
TUBINGEN	160.97	345.8								20	41
STRASBOURG	161.17	348.4	19	57	0					24	21 PP
FOLINIERE	161.36	5.5	19	28	-29					22	12 PKP2
LJUBLJANA	161.48	332.0	19	57	0						
WELSCHBRUCH	161.55	351.2	19	58	1					24	52 PP
BESANCON	162.74	351.2	19	59	1					20	48 PKP2
ROSELEND	164.16	348.5	20	2	2					20	54 PKP2
ISOLA	165.54	345.8								21	1 PKP2
MONACO	165.88	344.2	20	2	1						
BAGNERES	167.07	6.6								21	5 PKP2
TOLEDO	169.10	26.1	20	6K	3	26	57	-5	20 15	25	5 PP
GRANADA	171.56	33.1								21	47 PKP2
ALICANTE	171.60	14.4	20	4K	-1						
ALMERIA	172.34	29.1	20	6K	1	27	20	17		25	36 PP
BENI ABBES	176.24	90.4	20	9	3					25	23 PP

The scanned images of the bulletins of the International Seismological Summary (ISS) have been obtained as part of a global earthquake relocation project (Villaseñor et al., 1997) initiated with funding from the US National Science Foundation through grant EAR-9725140 and collected by SGA Storia Geofisica Ambiente (Bologna) on behalf of the Istituto Nazionale di Geofisica e Vulcanologia (Rome), in the frame of Euroseismos project.

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/

Villaseñor, A., and E.R. Engdahl, *A digital hypocenter catalog for the International Seismological Summary,* Seism. Res. Lett., vol. 76, no. 5, pp. 554-559, 2005.

Villaseñor, A., E.A. Bergman, T.M. Boyd, E.R. Engdahl, D.W. Frazier, M.M. Harden, J.L. Orth, R.L. Parkes, and K.M. Shedlock*, Toward a comprehensive catalog of global historical seismicity,* Eos Trans. AGU, vol. 78, no. 50, pp. 581, 583, 588, 1997.