

SEISMOLOGICAL DEPARTMENT  
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SEISMOLOGICAL BULLETIN  
 UPPSALA, KIRUNA, UMEÅ, UDDEHOLM

DELARY and MYRVIKEN

Uppsala	(UPP)	59°51.5'N,	17°37.6'E;	h = 14 m
Kiruna	(KIR)	67°50.4'N,	20°25.0'E;	h = 390 m
Umeå	(UME)	63°48.9'N,	20°14.2'E;	h = 16 m
Uddeholm	(UDD)	60°05.4'N,	13°36.4'E;	h = 240 m
Delary	(DEL)	56°28.2'N,	13°52.2'E;	h = 150 m
Myrviken	(MYV)	62°56.5'N,	14°20.8'E;	h = 345 m

JANUARY, 1 - 31, 1996

1996				1996			
Jan.	1	UPP iPKP	08 06 08.2	Jan.	1	UPP iP	10 08 15.1
		South of Fiji Islands (h = N).				i	10 08 21.7
							micr sec
"	1	UPP iP	08 18 35.6			P	Z' 0.2 1.2
			micr sec			i	Z' 0.6 1.7
		P	Z' 0.4 1.5			KIR iP	10 07 19.6
		Mx	Z 252 21				micr sec
		KIR iP	08 18 23.5			P	Z' 0.7 1.8
			micr sec				Near east coast of Kamchatka (h = N).
		P	Z' 1.0 1.8				m = 6.4 (UPP,KIR).
		Mx	Z 58 15	"	1	UPP iP	11 16 39.7
		Minahassa Peninsula, Sulawesi					Mariana Islands (h = 50 km).
		(h = 25 km).					
		m = 6.8, M = 7.4 (UPP,KIR).		"	1	UPP iP	13 46 17.7
"	1	UPP iP	09 08 05.9				Near east coast of Kamchatka
		Near east coast of Kamchatka					(h = N).
		(h = N).		"	1	UPP ipP	21 50 47.1
"	1	UPP iP	09 27 56.5				Minahassa Peninsula, Sulawesi
		i	09 28 10.4				(h = N).
			micr sec	"	2	UPP eP	09 14 29
		i	Z' 0.2 1.5				Near east coast of Kamchatka
		Minahassa Peninsula, Sulawesi					(h = N).
		(h = N).		"	2	UPP eP	11 06 04
"	1	UPP iP	09 49 59.2				Hokkaido, Japan region (h = 90 km).
			micr sec	"	2	UPP iP	11 47 13.9
		P	Z' 0.1 0.9				Gansu, China (h = N).
		Windward Islands (h = 70 km).		"	2	UPP iP	13 24 07.5

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1996				1996			
Jan.	2	UPP iP	18 22 14.7 C	Jan.	6	UPP iP	05 39 49.2
		Mindanao, Philippine Islands				Ryukyu Islands (h = N).	
		(h = 70 km).					
"	2	UPP iP	21 44 01.0	"	6	UPP iP	10 14 59.2
		Kuril Islands (h = N).				Northern Sumatera, Indonesia	
						(h = 170 km).	
"	2	UPP iP	22 16 25.9	"	6	UPP iP	10 55 08.6
		Kuril Islands (h = N).				Ryukyu Islands (h = N).	
"	2	UPP iP	22 19 39.7	"	6	UPP iP	11 04 10.0
		Kuril Islands (h = N).				Ryukyu Islands (h = N).	
"	3	UPP iP	04 07 38.0	"	6	UPP iP	15 39 03.1
		i	04 08 10.8			micr sec	
			micr sec			P Z' 0.1 1.0	
		P Z' 0.1 1.4				KIR iP	15 38 17.2
		Near east coast of Kamchatka				micr sec	
		(h = 140 km).				P Z' 0.1 1.0	
"	3	UPP iP	08 48 16.5			Kuril Islands (h = N).	
		Armenia-Azerbaijan-Iran bord reg.				m = 5.9 (UPP,KIR).	
		(h = 55 km).		"	6	UPP iP	15 50 24.1
"	3	UPP iP	22 19 12.7			Kuril Islands (h = N).	
		Northeast of Taiwan (h = 60 km).		"	6	UPP ipP	18 37 32.3
"	3	UPP iP	23 25 39.7			Ryukyu Islands (h = N).	
		Nicobar Islands, India (h = N).		"	7	UPP iP	02 20 07.4
"	4	UPP iP	03 59 05.6			Near east coast of Kamchatka (h = N).	
		Western Nel Mongol, China (h = N).		"	7	UPP iPKP	13 33 14.2
"	4	UPP iP	10 38 31.7			Solomon Islands (h = 45 km).	
		Western Iran (h = N).		"	8	UPP iP	10 14 48.0
"	4	UPP iP	19 54 07.1			i	10 14 50.3
		Fox Islands, Aleutian Islands (h = N).				i	10 14 53.4
"	4	UPP iP	20 01 23.2			micr sec	
		Kuril Islands (h = N).				P Z' 0.1 0.7	
"	4	UPP iP	20 23 55.8			i Z' 0.2 0.8	
		Hokkaido, Japan region (h = N).				Mx Z 9.4 15	
"	5	UPP iPKP1	09 53 59.6			KIR iP	10 13 58.4
		iPKP2	09 54 06.9			micr sec	
		Kermadec Islands region				P Z' 0.3 1.5	
		(h = 400 km).				Mx Z 6.8 17	
						Sakhalin Island (h = 10 km).	
						m = 6.1, M = 5.8 (UPP,KIR).	
"	8	UPP iP	11 27 16.1	"	8	UPP iP	11 27 16.1
		Sakhalin Island (h = 10 km).				Sakhalin Island (h = 10 km).	

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1996				1996			
Jan.	8	UPP iP	13 40 50.1	Jan.	12	UPP iP	04 52 09.1
		Sakhalin Island (h = 10 km).				Kuril Islands (h = 120 km).	
"	8	UPP iP	14 10 42.7	"	12	UPP iP	10 08 30.3
		Kuril Islands (h = N).				Myanmar (h = 80 km).	
"	9	UPP iP	06 35 51.4	"	13	UPP iSg1	02 46 19.5
		i	06 36 15.8			UDD iPg1	02 45 14.1
		Northern Xinjiang, China (h = N).				iSg1	02 45 27.8
"	9	UPP iP	09 41 35.4			DEL iSg1	02 46 20.7
		Hokkaido, Japan region (h = 130 km).				Värmland-Dalsland, Sweden, 59.2°N, 12.3°E.	
"	10	UPP iP	05 53 43.0			Origin time = 02 44 52.	
		Mariana Islands (h = 70 km).				M <sub>L</sub> (UPP) = 2.1 1.	
"	10	UPP iP	05 59 27.3			By combination with Finnish station readings.	
		Sakhalin Island (h = 10 km).		"	13	UPP iP	12 16 12.7
"	10	UPP iP	06 26 26.0	"	13	UPP iP	12 49 11.5
		Sakhalin Island (h = 10 km).				Kuril Islands (h = N).	
"	10	UPP iP	14 45 53.5	"	13	UPP iP	13 05 10.3
		South of Honshu, Japan (h = 410 km).				Kuril Islands (h = N).	
"	10	UPP iP	17 32 45.7	"	13	UPP iP	22 38 37.7
		Mariana Islands (h = 70 km).				Dodecanese Islands (h = 10 km).	
"	10	UPP iP	22 09 34.1	"	14	UPP iP	02 07 26.9
		Azores Islands region (h = 10 km).				Southern Greece (h = 100 km).	
"	10	UPP iP	22 50 20.6	"	14	UPP iP	06 39 19.7
		Aru Islands region, Indonesia (h = 40 km).				micr sec	
						P Z' 0.1 1.0	
						Kuril Islands (h = 60 km).	
"	11	UPP eP	04 10 44	"	14	UPP iP	06 40 01.2
						Tajikistan (h = N).	
"	11	UPP iP	04 25 17.4	"	14	UPP iPKP	13 43 31.8
		Halmahera, Indonesia (h = 70 km).				ipPKP	13 43 58.8
"	11	UPP iP	07 30 10.8			micr sec	
		Kuril Islands (h = N).				PKP Z' 0.2 1.1	
						South of Fiji Islands (h = 110 km).	
"	11	UPP iPKP1	12 02 03.5	"	14	UPP iP	13 50 00.6
		Kermadec Islands region (h = N).				Mindoro, Philippine Islands (h = 220 km).	
"	11	UPP iPKP1	22 00 26.4	"	15	UPP iP	06 22 06.1
		Kermadec Islands region (h = 370 km).				Southwestern Siberia (h = N).	

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Jan.	16	UPP iPKPK	04 47 06.2	Jan.	20	UPP iP	07 27 35.2
		South of Fiji Islands (h = 500 km).					micr sec
"	16	UPP i(PKP)	05 34 05.6			P Z' 0.1 1.0	
		Fiji Islands region (h = 360 km).				Andreanof Islands, Aleutian Is.	
						(h = N).	
"	16	KIR iSg1	15 10 05.5	"	21	UPP iPn	02 18 51.6 C
		UME iSg1	15 10 09.4			i	02 18 52.6
		Eastern Finland, 65.6°N, 29.2°E.				eSn	02 20 39
		Origin time = 15 07 58.				iSg1	02 21 39.9
		Felt.				KIR iPg1	02 17 06.0
		By combination with Finnish station readings.				i	02 17 06.6
						i	02 17 14.2
"	16	UPP iP	21 33 55.1			iSg1	02 17 31.1
		Rat Islands, Aleutian Islands (h = N).				i	02 17 31.8
"	17	UPP iP	12 56 14.0			UME iPn	02 17 56.1
		Afghanistan-Tajikistan bord reg. (h = 100 km).				i	02 17 57.7
"	17	UPP iP	13 59 03.8			iPg1	02 18 14.9
		Hindu Kush region, Afghanistan (h = N).				iSn	02 19 06.0
"	18	UPP iP	09 41 25.9 C			iSg1	02 19 30.7
			micr sec			UDD iPn	02 18 55.5
			P Z' 0.1 1.0			i	02 19 05.8
		KIR iP	09 41 22.9			iSn	02 20 44.8
			micr sec			iSg1	02 21 44.4
			P Z' 0.1 0.5			DEL iPn	02 19 40.5
		Kyrgystan-Xinjiang border reg. (h = N).				iSn	02 23 33.1
		m = 5.7 (UPP,KIR).				MYV iPn	02 18 19.4
						iSn	02 19 41.0
"	18	UPP iPKP2	15 22 42.3			Finnmark, Norway, 69.4°N, 24.1°E.	
		Macquarie Islands region (h = 10 km).				Origin time = 02 16 33.	
"	19	UPP iP	02 16 02.3			M <sub>L</sub> (UPP) = 4.0 (0.15) 5.	
		Kuril Islands (h = 10 km).				Felt.	
"	19	UPP eP	20 55 14			By combination with Finnish and Norwegian station readings.	
		Near east coast of Kamchatka (h = N).		"	21	UPP eP	02 53 05
"	20	UPP iPKP1	04 13 40.9 C			Southern Greece (h = 50 km).	
		i	04 13 55.7	"	21	UPP iP	12 21 15.7
			micr sec			Tyrrhenian Sea (h = 460 km).	
		PKP1 Z' 0.2 0.9		"	22	UPP iP	00 21 21.9
		South of Fiji Islands (h = 50 km).				Kuril Islands (h = 45 km).	
				"	22	UPP iP	00 57 19.8
						Pakistan (h = N).	
				"	22	UPP iPg1	01 31 04.4
						iSg1	01 31 28.6
						iRg	01 31 36.3

(cont.)

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1996			1996		
Jan.	22	(cont.) UDD iSg1 01 31 23.9 DEL iSg1 01 31 49.4 Närke, Sweden, 58.8°N, 15.1°E. Origin time = 01 30 32. M <sub>L</sub> (UPP) = 1.8 1. Rockburst at the Zinkgruvan mine.	Jan.	26	UPP iP 02 30 46.8 i 02 30 51.2 micr sec P Z' 0.1 0.6 i Z' 0.1 1.0 Xizang (h = N).
"	22	UPP iPdiff 09 14 16.8 Near N. coast of New Guinea, PNG. (h = 35 km).	"	26	UPP iP 13 18 27.1 Southern Iran (h = N).
"	22	UPP iP 13 26 08.6 Near east coast of Honshu, Japan (h = 60 km).	"	27	UPP iP 18 01 11.8 iSKS 18 11 50 iS 18 12 14 micr sec Mx Z 5.4 19 KIR Mx 18 46 micr sec Mx Z 3.1 17 Mindanao, Philippine Islands (h = N). M = 5.8 (UPP,KIR).
"	22	UPP iPKP 23 38 57.7 micr sec PKP Z' 0.1 0.7 Mx Z 3.4 18 KIR Mx 24 36 micr sec Mx Z 6.6 20 South Sandwich Islands region (h = 10 km). M = 6.1 (UPP,KIR).	"	27	UPP iP 21 59 56.8 Kuril Islands (h = N).
"	23	UPP iPKP 17 46 05.2 South of Fiji Islands (h = 70 km).	"	28	UPP iP 02 34 25.5 Kuril Islands (h = N).
"	23	UPP iPKP2 20 34 56.3 Kermadec Islands region (h = N).	"	28	UPP iP 05 40 00.7 Near east coast of Kamchatka (h = 60 km).
"	24	KIR iPn 09 10 10.6 UME iPn 09 10 59.6 Norwegian Sea, 73.7°N, 8.3°E. Origin time = 09 08 27. By combination with Finnish station readings.	"	28	UPP iP 08 49 38.3 C Western Iran.
"	24	UPP iPKP 11 44 50.3 South of Fiji Islands (h = 520 km).	"	29	UPP iP 10 37 54.4 North of Ascension Island (h = 20 km).
"	25	UPP iP 07 24 46.6 Xizang (h = N).	"	29	UPP iP 12 51 06.8
"	25	UPP iP 12 57 50.4 Michoacan, Mexico (h = 80 km).	"	29	UPP iP 13 19 11.4 C Samar, Phillipine Islands (h = 100 km).
"	25	UPP iP 18 19 38.5 Kuril Islands (h = 45 km).	"	29	UPP iPKP 13 43 22.9 South of Fiji Islands (h = 560 km).
			"	29	UPP iP 14 00 21.4 Kuril Islands (h = N).
			"	29	UPP iP 14 48 01.9

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1996				1996			
Jan.	29	UPP iPKP1	21 45 34.1	Jan.	31	UPP iPKP1	06 39 02.5
		South of Fiji Islands (h = 200 km).				South of Kermadec Islands (h = 20 km).	
"	29	UPP iPKP	22 52 04.6	"	31	UPP iP	09 22 43.6
		Fiji Islands region (h = 400 km).					
"	29	UPP iPKP1	23 22 59.3	"	31	UPP iPKP1	10 44 37.6
		iPKP2	23 23 03.8			South of Kermadec Islands (h = 450 km).	
		Kermadec Islands region (h = 200 km).					
"	30	UPP iP	02 39 21.3 C	"	31	UPP iP	12 50 51.7
			micr sec	"	31	UPP ePKP1	16 37 14
		- P	Z' 0.1 0.8			South of Kermadec Islands (h = N).	
		KIR iP	02 38 33.1	"	31	UPP iP	19 32 27.4
			micr sec			i	19 32 29.0
		P	Z' 0.3 0.8				micr sec
		Kuril Islands (h = 130 km). m = 6.1 (UPP,KIR).				i	Z' 0.1 1.0
"	30	UPP iP	04 40 27.3			Kuril Islands (h = 20 km).	
		Romania (h = 100 km).		"	31	UPP iP	20 41 44.7
"	30	UPP iP	05 54 10.7			P	Z' 0.3 1.2
		Greece (h = 10 km).				Mx	Z 11 18
"	30	UPP iPKP2	14 19 45.7			KIR Mx	21 12
		West of Macquarie Island (h = 10 km).					micr sec
						Mx	Z 15 19
						Kuril Islands (h = 20 km). M = 6.1 (UPP,KIR).	
"	30	UPP iP	21 25 38.7	"	31	UPP iP	20 50 25.7
			micr sec			Northern Iran (h = 70 km).	
		P	Z' 0.1 1.0	"	31	UPP iP	21 44 46.6
		Sea of Japan (h = 360 km).				Kuril Islands (h = 50 km).	
"	30	UPP iPKP1	22 20 01.5				
		iPKP2	22 20 10.0				
		South of Kermadec Islands (h = 15 km).					
"	30	UPP iPKP1	22 49 46.0			September 23, 1997	
		iPKP2	22 49 54.1			Conny Holmqvist	
			micr sec			Ota Kulhánek	
		Mx	Z 16 21				
		South of Kermadec Islands (h = N).					
"	31	UPP iPKP1	03 45 39.6				
		i	03 45 45.3				
		South of Kermadec Islands (h = N).					

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DELARY and MYRVIKEN

Uppsala	(UPP)	59°51.5'N,	17°37.6'E;	h = 14 m
Kiruna	(KIR)	67°50.4'N,	20°25.0'E;	h = 390 m
Umeå	(UME)	63°48.9'N,	20°14.2'E;	h = 16 m
Uddeholm	(UDD)	60°05.4'N,	13°36.4'E;	h = 240 m
Delary	(DEL)	56°28.2'N,	13°52.2'E;	h = 150 m
Myrviken	(MYV)	62°56.5'N,	14°20.8'E;	h = 345 m

FEBRUARY 1 - 29, 1996

1996					1996				
Feb.	1	UPP	iP	07 28 41.2	Feb.	2	UPP	eP	18 49 47
			i	07 29 05.6					micr sec
			iS	07 37 20			Mx	Z 4.3	17
				micr sec			KIR	Mx	19 37
			P	Z' 0.1 0.7					micr sec
				Kuril Islands (h = 170 km).			Mx	Z 3.1	17
"	1	UPP	iP	18 02 52.5 C					Western Caroline Islands (h = N).
			iS	18 06 58					M = 5.9 (UPP,KIR).
				micr sec	"	2	UPP	i(PKP)	21 06 42.2
			P	Z' 0.3 0.8				iPKP	21 06 47.3
			Mx	Z 7.7 13					South of Fiji Islands (h = 600 km).
		KIR	iP	18 04 06.6 C	"	3	UPP	iPKP	01 38 41.4
				micr sec				iPKP2	01 38 55.2
			P	Z' 0.1 0.9					South of Kermadec Islands (h = N).
			Mx	Z 4.9 12	"	3	UPP	iP	09 08 12.2
				Ionian Sea (h = 30 km).					Philippine Islands region (h = 30 km).
				m = 5.7, M = 5.3 (UPP,KIR).	"	3	UPP	iP	11 24 49.3
"	2	UPP	iPKP1	00 00 04.8				i	11 24 55.1
				South of Kermadec Islands (h = N).				iS	11 33 24
"	2	UPP	iP	00 52 18.2					micr sec
				South of Honshu, Japan				P	Z' 1.4 1.1
				(h = 370 km).				i	Z' 2.3 1.1
"	2	UPP	iP	05 03 35.2				Mx	Z 35 12
				Ionian Sea (h = 20 km).			KIR	iP	11 24 36.5 C
									micr sec
"	2	UPP	iP	17 05 18.6				P	Z' 2.1 1.4
			i	17 05 27.2				Mx	Z 34 14
				Taiwan region (h = N).					Yunnan, China (h = 10 km).
									m = 7.2, M = 6.6 (UPP,KIR).

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1996				1996			
Feb.	3	UPP iP	11 50 13.6	Feb.	5	UPP iP	08 35 10.2
			Yunnan, China (h = 10 km).				Northern Iran (h = N).
"	3	UPP iP	12 08 54.5	"	5	UPP iP	10 37 30.0
			Yunnan, China (h = 10 km).				Bonin Islands region (h = N).
"	3	UPP iP	12 18 45.3	"	5	UPP iP	16 30 56.9
			Yunnan, China (h = 10 km).				Kuril Islands (h = N).
"	3	UPP iP	12 25 24.1	"	6	UPP iP	07 46 44.3 D
			Yunnan, China (h = 10 km).			i	07 46 50.0
"	3	UPP iP	19 49 30.9				micr sec
			Yunnan, China (h = 10 km).			P	Z' 0.2 0.7
"	3	UPP iP	20 30 38.1			KIR eP	07 46 31 D
			Kuril Islands (h = N).				micr sec
"	4	UPP iP	06 05 40.2			P	Z' 0.1 1.2
			Southwest of Sumatera, Indonesia				Yunnan, China (h = 10 km).
			(h = 60 km).				m = 6.1 (UPP,KIR).
"	4	UPP iP	12 08 17.7	"	6	UPP iP	08 58 20.0
			micr sec				East of Kuril Islands (h = N).
		P	Z' 0.1 1.0	"	6	UPP iPKP1	10 27 37.1
			Kuril Islands (h = N).				Kermadec Islands region (h = N).
"	4	UPP iP	17 08 37.6 D	"	6	UPP iP	20 19 28.4
			micr sec				micr sec
		P	Z' 0.3 1.0 D			P	Z' 0.1 1.0
		Mx	Z 1.8 15				Yunnan, China (h = 10 km).
		KIR iP	17 08 24.5 D	"	6	UPP iP	20 25 26.7
			micr sec				micr sec
		P	Z' 0.4 1.0			P	Z' 0.1 0.9
		Mx	Z 3.4 17			KIR iP	20 24 40.5
			Yunnan, China (h = 10 km).				micr sec
			m = 6.5, M = 5.4 (UPP,KIR).			P	Z' 0.1 1.0
"	4	UPP iPKP	23 16 40.2				Kuril Islands (h = 60 km).
		iPKP1	23 16 45.3				m = 5.8 (UPP,KIR).
		iPKP2	23 16 53.4	"	7	UPP iP	01 44 39.6
			South of Kermadec Islands				Western Honshu, Japan (h = 40 km).
			(h = 30 km).	"	7	UPP iPKP	02 01 29.0
"	4	UPP iP	23 08 20.7				South of Fiji Islands (h = 650 km).
			Yunnan, China (h = 10 km).	"	7	UPP iP	05 17 07.3
"	4	UPP iPKP2	23 54 47.5				Mongolia (h = 10 km).
			South of Kermadec Islands	"	7	UPP iP	07 30 12.7
			(h = 100 km).				Yunnan, China (h = 10 km).



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1996				1996					
Feb.	7	UPP	eP	08 10 44	Feb.	9	UPP	iP	00 22 49.6
				micr sec					Greece (h = 10 km).
			Mx	Z 3.4 18					
		KIR	Mx	09 03	"	9	UPP	iP	17 16 39.2
				micr sec					Crete (h = N).
			Mx	Z 3.7 21					
		Minahassa Peninsula, Sulawesi (h = 15 km). M = 5.8 (UPP,KIR).							22 53 45.0
									Cyprus (h = N).
"	7	UPP	iP	14 30 16.8	"	11	UPP	iP	07 10 01.0
									Hokkaido, Japan region (h = N).
"	7	UPP	iP	21 29 47.2	"	11	UPP	iP	09 39 47.8
				South of Alaska (h = 20 km).					Kuril Islands (h = N).
"	7	UPP	iP	21 40 01.2	"	11	UPP	iP	14 54 23.4
				Celebes Sea (h = 610 km).					Russia-Mongolia border region (h = N).
"	7	UPP	iP	21 47 41.2	"	11	UPP	iP	18 22 21.3
			i	21 47 45.8					Kuril Islands (h = N).
			iP'P'	22 15 56.6	"	11	UPP	iP	18 46 42.0
			iS	21 56 34					Kuril Islands (h = N).
				micr sec	"	11	UPP	iP	18 46 42.0
			i	Z' 0.3 1.0					Kuril Islands (h = N).
			Mx	Z 332 25	"	12	UPP	iP	00 01 35.6
		KIR	iP	21 46 54.8				i	00 01 43.9
			i	21 47 00.0				i	00 01 48.1
				micr sec					micr sec
			i	Z' 0.3 1.0				P	Z' 0.3 1.2
			Mx	Z 90 18			KIR	iP	00 00 42.8
		Kuril Islands (h = 45 km). m = 6.3, M = 7.2 (UPP,KIR).							micr sec
"	7	UPP	iP	23 04 43.5				P	Z' 0.2 1.3
				micr sec					Off coast of Kamchatka (h = N). m = 6.1 (UPP,KIR).
			P	Z' 0.1 0.7	"	12	UPP	iP	03 09 51.1
		KIR	iP	23 03 57.2					Kuril Islands (h = N).
				micr sec	"	12	UPP	iP	05 30 07.2
			P	Z' 0.1 1.2				i	05 30 17.9
		Kuril Islands (h = N). m = 5.9 (UPP,KIR).			"	12	UPP	Mx	10 10
"	8	UPP	iP	22 22 36.6					micr sec
		Central Mid-Atlantic Ridge (h = 10 km).						Mx	Z 6.3 25
"	8	UPP	iP	22 32 48.0			KIR	Mx	10 14
		Greece (h = 10 km).							micr sec
"	8	UPP	iP	22 57 13.7				Mx	Z 7.3 21
		Yunnan, China (h = 10 km).							South of Sumbawa, Indonesia (h = 10 km). M = 6.1 (UPP,KIR).



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1996						1996				
Feb.	17	(cont).				Feb.	17	(cont).		
		KIR	Mx	15 23				KIR	i	00 01 01.1
				micr sec						micr sec
			Mx	Z 15 18					i	Z' 4.1 2.3
		Irian Jaya region, Indonesia							Mx	Z 18 14
		(h = 20 km).						North of Ascension Island		
		M = 6.6 (UPP,KIR).						(h = 10 km).		
								m = 6.9, M = 6.5 (UPP,KIR).		
"	17	UPP	ePdiff	20 32 13				Double shock, small and large,		
				micr sec				on average 2.7 s apart.		
			Mx	Z 38 20						
		KIR	Mx	21 20		"	19	UPP	iP	02 39 17.7
				micr sec						micr sec
			Mx	Z 30 20					P	Z' 0.1 1.0
		Irian Jaya region, Indonesia						KIR	iP	02 40 04.8
		(h = 30 km).							i	02 40 06.1
		M = 6.8 (UPP,KIR).								micr sec
									i	Z' 0.2 1.1
"	18	UPP	iP	01 50 10.6				North of Ascension Island		
		Pyrenees (h = 10 km).						(h = 10 km).		
								m = 6.1 (UPP,KIR).		
"	18	UPP	eP	02 39 44						
				micr sec		"	19	UPP	iP	12 25 43.5
			Mx	Z 13 19				Near east coast of Honshu (h = N).		
		KIR	Mx	03 29				Late arrival when compared with the		
				micr sec				NEIC solution.		
			Mx	Z 16 22						
		Irian Jaya region, Indonesia				"	19	UPP	iP	14 59 48.2
		(h = 10 km).								
		M = 6.4 (UPP,KIR).				"	19	UPP	i(PKP)	23 46 19.3
								South of Fiji Islands (h = 610 km).		
"	18	UPP	iP	10 09 23.0						
		Mindoro, Philippine Islands				"	19	UPP	ePKP	00 07 51.8
		(h = 240 km).						Vanuatu Islands (h = 45 km).		
"	18	UPP	iPdiff	19 54 26.9						
		Irian Jaya region, Indonesia (h = N).				"	20	UPP	iP	03 03 55.2
		Late arrival when compared with the						Pakistan (h = 20 km).		
		NEIC solution.				"	20	UPP	iP	14 15 55.5
								Northwestern Balkan region		
"	19	UPP	iP	00 00 14.5				(h = 10 km).		
			i	00 00 17.9						
			iS	00 09 00		"	21	UPP	iP	05 06 26.5
				micr sec					i	05 06 35.8
			P	Z' 0.1 1.0				Egypt (h = 25 km).		
			i	Z' 0.6 1.2						
			Mx	Z 40 19		"	21	UPP	iP	13 04 56
		KIR	iP	00 00 59.2					iSKS	13 15 32
										micr sec
									Mx	Z 24 19
		(cont).						(cont).		

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1996				1996			
Feb.	21	(cont). KIR Mx	13 50 micr sec	Feb.	24	KIR iSg1	02 01 51.9
		Mx Z	12 18			UME iSg1	02 02 34.2
		Off coast of northern Peru (h = 10 km). M = 6.6 (UPP,KIR).				West coast of Norway, 66.9°N, 14.4°E. Origin time = 02 00 30. By combination with Finnish station readings.	
"	21	UPP iPKP1	20 01 52.4	"	24	UPP iPdiff	16 07 05.6
		iPKP2	20 02 01.4			Iria Jaya region, Indonesia (h = N).	
		South of Kermadec Islands (h = 150 km).		"	24	UPP iP	16 23 08.4
"	22	UPP iP	02 06 33.0	"	24	UPP iP	20 45 40.7
		Kuril Islands (h = N).				South of Honshu, Japan (h = 40 km).	
"	22	UPP iP	06 13 10.2	"	24	UPP iP	22 51 06.5
		Costa Rica (h = N).				Kuril Islands (h = N).	
"	22	UPP iP	08 51 24.3	"	25	UPP iP	01 24 29.8
		Near coast of central Chile (h = 45 km).				iS	01 28 10.0
"	22	UPP iPKP	13 59 36.1			Sicily (h = 200 km).	
		Kuril Islands (h = 120 km). m = 6.8, M = 5.5 (UPP,KIR). M uncorrected for focal depth.		"	25	UPP iP	03 21 07.1
"	22	UPP iP	14 09 58.2			i	03 21 18.6
		i	14 10 12.1			iPP	03 24 36.5
"	22	UPP iP	15 09 52.8 C			iSKS	03 31 20
		i	15 18 38			micr sec	
		iS	15 19 24			i	Z' 0.1 0.9
		iP'P'	15 38 09.6			Mx	Z 71 19
		micr sec				KIR iP	03 20 53.7
		P	Z' 0.9 0.8			i	03 20 59.4
		Mx	Z 5.4 20			micr sec	
		KIR iP	15 09 06.3 C			i	Z' 0.2 1.5
		micr sec				micr sec	
		P	Z' 1.1 0.8			Mx	Z 79 21
		Mx	Z 2.3 18			Off coast of Guerrero, Mexico (h = 20 km). m = 6.1, M = 7.0 (UPP,KIR).	
"	23	UPP iP	21 36 23.4	"	25	UPP iP	04 29 59.3
		Ionian Sea (h = 50 km).				Near coast of Oaxaca, Mexico (h = N).	
"	24	UPP iP	01 08 06.6	"	25	UPP i(PKP)	04 36 31.8 C
		Yunnan, China (h = N).				Tonga Islands region (h = N).	
"	24	UPP iP	01 08 06.6	"	25	UPP iP	09 30 48.9
		Yunnan, China (h = N).				Oaxaca, Mexico (h = 10 km).	

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1996					Feb. 26	(cont).			
Feb.	25	UPP	iP	09 41 19.7		KIR	iP	08 16 33.7	
		Southeast of Ryukyu Islands (h = 35 km).						micr sec	
							P	Z' 0.1	1.1
		Southern Iran (h = 30 km). m = 5.5 (UPP,KIR).							
"	25	UPP	eP	14 30 09	"	26	UPP	iP	08 33 21.8
		Off coast of Central America (h = 10 km).							
"	25	UPP	eP	14 40 20	"	26	UPP	iPKP	10 10 17.3
		Oaxaca, Mexico (h = N).					South of Fiji Islands (h = 500 km).		
"	25	UPP	iP	15 22 10.7	"	26	UPP	iP	10 31 49.7
		Near coast of Oaxaca, Mexico (h = N).						i	10 31 56.5
		Northern Molucca Sea (h = 90 km).							
"	25	UPP	iP	16 21 02.2	"	26	UPP	iP	21 43 44.2
		Northern Iran (h = N).					Greece (h = 10 km).		
"	25	UPP	eP	17 48 56	"	27	UPP	iP	19 16 43.6
		Northern Iran (h = N).							
"	25	UPP	iP	23 26 32.0	"	28	UPP	iP	02 03 55.9
		Kuril Islands (h = 25 km).					Kuril Islands (h = N).		
"	26	UPP	iP	01 50 27.4	"	28	UPP	iP	09 57 32.9
		Near coast of Oaxaca (h = N). Late arrival, when compared with the NEIC solution.						iSKS	10 07 59
								iS	10 08 44
								micr sec	
							Mx	Z 8.4	22
"	26	UPP	iP	00 33 30.0			KIR	Mx	10 46
		Kuril Islands (h = N).						micr sec	
								Mx	Z 4.4
									17
		Northern Molucca Sea (h = 120 km). M = 6.0 (UPP,KIR). M uncorrected for focal depth.							
"	26	UPP	iP	02 08 57.6	"	28	UPP	iPdiff	10 21 43.9
		Near coast of Oaxaca (h = N).					Prince Edward Islands region (h = 10 km).		
"	26	UPP	iP	06 32 22.4	"	28	UPP	iP	10 28 25.7
			i	06 32 33.6			Eastern Kashmir (h = N).		
		Luzon, Philippine Islands (h = 30 km).							
"	26	UPP	iP	07 24 03.2	"	28	UPP	iPKP	11 24 47.7
			i	07 24 10.6			South of Tonga Islands (h = N).		
		Egypt (h = 25 km).							
"	26	UPP	iP	08 16 02.9 D	"	28	UPP	iP	11 32 32.6
			i	08 16 13.2			Sichuan, China (h = N).		
				micr sec					
		P	Z'	0.1					1.4
					"	28	UPP	iP	11 55 20.3

(cont).

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1996

Feb.	28	UPP	iP	13 21 50.3
				Greece (h = 40 km).
"	28	UPP	iPKP2	14 43 18.3
				South Island, New Zealand (h = 120 km).
"	28	UPP	iP	21 30 23.0
				Kuril Islands (h = N).
"	29	UPP	iP	01 56 45.8
				South of Honshu, Japan (h = 60 km).
"	29	UPP	iP	09 12 03.6
				Hokkaido, Japan region (h = 120 km).
"	29	UPP	iP	12 07 20.4
				Andaman Islands, India (h = 30 km).
"	29	UPP	iP	14 17 26.4
				Luzon, Philippine Islands (h = 60 km).
"	29	UPP	iP	14 30 31.9

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SEISMOLOGICAL BULLETIN

UPPSALA, KIRUNA, UMEÅ, UDDEHOLM

DELARY and MYRVIKEN

Uppsala	(UPP)	59°51.5'N,	17°37.6'E;	h = 14 m
Kiruna	(KIR)	67°50.4'N,	20°25.0'E;	h = 390 m
Umeå	(UME)	63°48.9'N,	20°14.2'E;	h = 16 m
Uddeholm	(UDD)	60°05.4'N,	13°36.4'E;	h = 240 m
Delary	(DEL)	56°28.2'N,	13°52.2'E;	h = 150 m
Myrviken	(MYV)	62°56.5'N,	14°20.8'E;	h = 345 m

MARCH 1 - 31, 1996

1996				1996			
Mar.	1	UPP iP	06 54 26.7	Mar.	3	UPP Mx	03 46
		Crete (h = N).					micr sec
						Mx	Z 4.3 20
"	1	UPP iP	20 35 22.1			KIR Mx	03 44
		Philippine Islands region (h = N).					micr sec
						Mx	Z 3.0 19
"	1	UPP iP	20 43 25.5			Irian Jaya region, Indonesia (h = N).	
		Central Mediterranean Sea (h = N).				M = 5.9 (UPP,KIR).	
"	2	UPP iPKP	02 08 36.8	"	3	UPP iPg1	06 10 31.9
		i	02 09 02.7			iSg1	06 11 11.6
		i	02 09 29.9			UME iSg1	06 12 14.8
			micr sec			UDD iPg1	06 09 57.5
		Mx	Z 3.6 19			iSg1	06 10 13.0
		KIR Mx	02 57			MYV iPg1	06 10 20.8
			micr sec			iSg1	06 10 56.2
		Mx	Z 3.4 18			Southeastern Norway, 60.9°N, 10.8°E.	
		Eastern New Guinea reg.				Origin time = 06 09 39.	
		(h = 60 km).				M <sub>L</sub> (UPP) = 3.0 (0.65) 2.	
		M = 5.9 (UPP,KIR).				By combination with Finnish and	
		M uncorrected for focal depth.				Norwegian station readings.	
"	2	UPP iP	06 31 33.6	"	3	UPP iP	15 07 57.4
		East of Kuril Islands (h = 80 km).				iS	15 18 38
							micr sec
"	2	UPP iP	17 40 58.6			Mx	Z 33 23
		Crete (h = N).				KIR Mx	15 44
							micr sec
"	2	UPP iP	17 56 09.2			Mx	Z 36 21
		Crete (h = 100 km).				Near coast of Nicaragua (h = N).	
						M = 6.7 (UPP,KIR).	

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1996				1996					
Mar.	3	UPP	iP	16 50 14.7	Mar.	5	UPP	iP	15 12 07.4
			iS	17 00 58					
				micr sec	"	5	UPP	iP	17 43 57.8 C
		Mx	Z	68 23					micr sec
		KIR	Mx	17 27			P	Z'	0.1 0.8
				micr sec			Mx	Z	21 18
		Mx	Z	37 19			KIR	iP	17 43 33.4
									micr sec
				Near coast of Nicaragua (h = N).			P	Z'	0.6 2.0
				M = 6.8 (UPP,KIR).			Mx	Z	5.1 14
"	3	UPP	iP	19 35 24.2					Taiwan region (h = N).
				Pakistan (h = N).					m = 6.1, M = 6.2 (UPP,KIR).
"	3	UPP	iP	23 55 04.7	"	6	UPP	i(PKP)	01 54 04.3
				Kodiak Island region (h = N).					Tonga Islands (h = 130 km).
"	4	UPP	iP	01 43 15.3	"	6	UPP	iP	07 54 11.2
				Southern Iran (h = N).					Near coast of Venezuela (h = N).
"	4	UPP	iP	08 50 47.3	"	6	UPP	iP	09 35 04.7
				Near east coast of Honshu, Japan				i	09 35 33.4
				(h = N).					Turkmenistan (h = N).
"	4	UPP	iP	16 12 16.5	"	6	UPP	iP	12 24 27.5
			i	16 13 30.0	"	6	UPP	iP	14 46 57.7
				Talau Islands, Indonesia					micr sec
				(h = 150 km).			Mx	Z	1.8 19
"	5	UPP	iP	14 56 09.3			KIR	Mx	15 18
				micr sec					micr sec
		P	Z'	0.1 0.9			Mx	Z	2.7 18
		KIR	iP	14 56 09.7					Eastern Honshu, Japan (h = N).
			i	14 56 10.6					M = 5.4 (UPP,KIR).
				micr sec	"	7	UPP	iP	02 10 23.5
		P	Z'	0.2 0.6					South of Honshu, Japan
				Eastern Kashmir (h = N).					(h = 500 km).
				m = 5.9 (UPP,KIR).	"	7	UPP	iPKP	06 15 54.0
"	5	UPP	iP	15 04 16.3 C				iSKP	06 18 45.8
			iS	15 13 58					South of Fiji Islands (h = 540 km).
				micr sec	"	7	UPP	iP	09 31 33.7
		P	Z'	0.8 1.5					Tajikistan-Xinjiang border reg.
		Mx	Z	123 1.5					(h = 150 km).
		KIR	iP	15 03 51.9 C	"	7	UPP	iP	18 25 50.4
				micr sec					Southwestern Ryukyu Islands
		P	Z'	1.9 2.1					(h = N).
		Mx	Z	31 15					
				Taiwan region (h = 30 km).					
				m = 6.6, M = 6.9 (UPP,KIR).					



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1996				1996			
Mar.	7	UPP	iP	23 39 15.8	D		
				micr	sec		
		P	Z'	0.1	0.6		
		Bonin Islands region (h = 380 km).					
"	8	UPP	iP	00 48 43.2			
		Southern Alaska (h = 60 km).					
"	8	UPP	iP	01 56 24.4			
		Southern Iran (h = N).					
"	8	UPP	iP	06 14 26.4			
		Northwest of Kuril Islands (h = 350 km).					
"	8	UPP	iP	15 02 51.7			
"	8	UPP	iP	17 28 37.7			
		Andreanof Islands, Aleutian Is. (h = N).					
"	9	UPP	iPKP1	04 57 44.0			
		Kermadec Islands, New Zealand (h = N).					
"	9	UPP	iP	16 26 40.1			
		i		16 26 42.7			
		iS		16 35 46			
				micr	sec		
		P	Z'	0.1	0.7		
		i	Z'	0.2	1.0		
		KIR	iP	16 25 53.9			
				micr	sec		
		P	Z'	0.4	1.0		
		Mx	Z	1.9	15		
		East of Kuril Islands (h = N). m = 6.3 (UPP,KIR).					
"	9	UPP	iP	16 28 18.9			
				micr	sec		
		P	Z'	0.4	1.1		
		KIR	iP	16 27 32.6			
				micr	sec		
		P	Z'	0.5	1.0		
		Kuril Islands (h = N). m = 6.5 (UPP,KIR).					
"	9	UPP	iP	16 35 15.3			
		Kuril Islands (h = N).					
Mar.	9	UPP	iP	16 51 05.3			
		Kuril Islands (h = N).					
"	9	UPP	iP	16 52 16.8			
		i		16 52 27.9			
				micr	sec		
		P	Z'	0.1	1.0		
		Kuril Islands (h = N).					
"	9	UPP	iP	16 55 25.9			
"	9	UPP	iP	17 13 48.4			
				micr	sec		
		P	Z'	0.1	1.0		
		KIR	iP	17 13 01.8			
				micr	sec		
		P	Z'	0.1	1.0		
		Kuril Islands (h = N). m = 5.9 (UPP,KIR).					
"	9	UPP	iP	17 16 34.4			
		Kuril Islands (h = N).					
"	9	UPP	iP	18 13 15.8			
		Kuril Islands (h = N).					
"	9	UPP	iP	20 33 26.8			
		Kuril Islands (h = N).					
"	9	UPP	iP	22 42 31.6			
		i		22 42 33.6			
		iS		22 48 04			
		Azores Islands region (h = 10 km).					
"	10	UPP	iP	06 17 13.8			
		Azores Islands region (h = 10 km).					
"	10	UPP	iP	09 10 03			
		i		09 10 14.2			
		Central Peru (h = N).					
"	10	UPP	iP	13 50 44.9			
		Kuril Islands (h = N).					
"	11	UPP	iP	06 26 12.5			
		Off east coast of Kamchatka (h = N).					
"	12	UPP	iP	03 57 26.0			
		Mindanao, Philippine Islands (h = 55 km).					

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1996				1996					
Mar.	12	UPP	iP	18 51 24.7	Mar.	16	UPP	iP	14 41 34.8
			i	18 51 28.6					micr sec
			P	Z' 0.1 0.9				P	Z' 0.1 0.7
			P	Z' 0.4 1.1			KIR	iP	14 42 38.1
		KIR	iP	18 51 02.5					micr sec
				micr sec				P	Z' 0.1 0.9
			P	Z' 0.3 1.0					Turkey (h = 80 km).
				Mongolia (h = 15 km).					m = 5.5 (UPP,KIR).
				m = 6.0 (UPP,KIR).	"	16	UPP	iP	15 48 09.7
"	12	UPP	iP	21 29 47.2					Kuril Islands (h = N).
				Xizang (h = 10 km).	"	16	UPP	iP	16 51 51.4
"	12	KIR	iPg1	22 05 53.1					Near east coast of Honshu, Japan
			iSg1	22 06 28.1					(h = N).
		UME	iSg1	22 07 10.1	"	16	UPP	iP	20 25 48.4
		MYV	iSg1	22 07 06.0					Southern Iran (h = N).
				West coast of Norway, 66.8°N,	"	16	UPP	iP	22 15 21.6 D
				13.9°E.				iS	22 24 36
				Origin time = 22 05 05.					micr sec
				$M_L(\text{UPP}) = 2.4$ 1.				P	Z' 0.5 0.5
				By combination with Finnish and				Mx	Z 7.7 17
				Norwegian station readings.			KIR	iP	22 14 49.0
"	13	UPP	iP	04 02 43.1					micr sec
				Yunnan, China (h = N).				P	Z' 0.6 0.9
"	13	UPP	iPKP	13 34 04.6				Mx	Z 6.3 15
				Fiji Islands region (h = 200 km).					Bonin Islands region (h = 480 km).
"	14	UPP	iP	21 24 36.4					m = 6.2, M = 6.0 (UPP,KIR).
				Northern Mid-Atlantic Ridge					M uncorrected for focal depth.
				(h = 10 km).	"	16	UPP	iPKP2	23 13 18.4
"	15	UPP	iP	09 49 18.4					Kermadec Islands, New Zealand
				micr sec					(h = N).
			P	Z' 0.1 1.0	"	17	UPP	iP	00 15 12.3
		KIR	iP	09 49 31.6					Afghanistan-Tajikistan (h = 120 km).
				micr sec	"	17	UDD	iPg1	03 30 34.6
			P	Z' 0.1 1.2					Off coast of southwestern Norway,
				Northern Mid-Atlantic Ridge					60.2°N, 5.1°E.
				(h = 10 km).					Origin time = 03 28 20.
				m = 5.5 (UPP,KIR).					$M_L(\text{UPP}) = 2.7$ 1.
"	15	UPP	iPKP1	22 36 30.1					Felt.
				Kermadec Islands region (h = N).					By combination with Finnish and
"	16	UPP	iP	06 57 22.3					Norwegian station readings.
				Yunnan, China (h = N).	"	17	UPP	iP	06 43 06.6
									Greece (h = N).

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1996				1996			
Mar.	17	UPP	iP	09 10 32.0	Mar.	17	(cont.)
				Near east coast of Kamchatka (h = 90 km).			KIR Mx 19 02
							micr sec
							Mx Z 4.7 25
"	17	UPP	iPg1	10 14 22.4			Eastern New Guinea reg., P.N.G.
			iSg1	10 15 17.7			(h = N).
		KIR	iPn	10 14 04.5			M = 5.8 (UPP,KIR).
			iPg1	10 14 07.5	"	17	UME iPn 23 20 29.9
			iSn	10 14 41.1			iSn 23 20 41.9
		UME	iPg1	10 13 09.8			Norwegian Sea, 64.0°N, 4.8°E.
			iSg1	10 13 15.1			Origin time = 23 18 50.
		UDD	eSg1	10 15 40			By combination with Finnish and
		MYV	iPn	10 13 49.2			Norwegian station readings.
			i	10 14 14.6			
			eSn	10 14 21	"	18	UPP iP 02 17 49.6
				Västerbotten, Sweden, 64.2°N, 20.3°E.			Near east coast of Honshu, Japan
				Origin time = 10 13 01.			(h = N).
				$M_L(UPP) = 2.8 (0.11) 3.$			
				Felt.			
				By combination with Finnish and			
				Norwegian station readings.	"	18	KIR iPg1 07 32 35.6
							iSg1 07 32 41.6
							UME iSg1 07 34 40.3
							Lapland, Sweden, 68.1°N, 19.8°E.
							Origin time = 07 32 27.
							$M_L(UPP) = 2.5 1.$
							By combination with Finnish and
							Norwegian station readings.
"	17	KIR	iPg1	12 47 31.1	"	18	UPP eP 08 12 49
			iSg1	12 47 59.4			Vancouver Island region (h = 10 km).
		UME	iSg1	12 47 58.1			
				Norrbottn, Sweden, 65.8°N, 21.6°E.			
				Origin time = 12 46 55.			
				By combination with Finnish station			
				readings.			
"	17	UPP	eP	14 17 55	"	18	KIR iPg1 08 16 22.9
				Turkey (h = 15 km).			iSg1 08 16 59.0
"	17	UPP	i(PKP)	15 07 34.1			UME iPg1 08 15 56.5
			iPKP	15 07 47.8			iSg1 08 16 11.9
			iSKP1	15 10 55.9			i 08 16 16.3
				micr sec			iRg1 08 16 19.4
				Mx Z 3.8 23			Västerbotten, Sweden, 65.0°N, 20.2°E.
		KIR	Mx	15 58			Origin time = 08 15 34.
				micr sec			Near surface event.
				Mx Z 2.6 19			By combination with Finnish station
				Vanuatu Islands (h = 160 km).			readings.
				M = 5.9 (UPP,KIR).	"	18	UPP i(PKP) 09 23 24.9
				Very strong SKP1 phase.			Fiji Islands region (h = 400 km).
				M uncorrected for focal depth.	"	18	UPP iPdiff 10 48 53.9
							micr sec
							Mx Z 2.4 22
"	17	UPP	Mx	19 04			(cont.)
				micr sec			
				Mx Z 2.7 22			
				(cont.)			

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1996				1996			
Mar.	18	(cont.) KIR Mx	11 34 micr sec Mx Z 2.8 24	Mar.	19	(cont.) KIR iP	15 08 06.3 micr sec P Z' 0.5 1.1 Mx Z 21 9
		Eastern New Guinea reg. (h = N). M = 5.7 (UPP,KIR).				Southern Xinjiang, China (h = 30 km). m = 6.2 (UPP,KIR).	
"	18	UPP iP	20 09 18.7	"	19	UPP iP	15 44 12.8
		Luzon, Philippine Islands (h = N). Late arrival when compared with the NEIC solution.				Gulf of California (h= 10 km).	
"	18	UPP iP	22 16 10.0	"	19	UPP iP	17 25 31.5 micr sec P Z' 0.1 1.1 Mx Z 2.1 22
		i 22 16 28.3				KIR Mx	18 05 micr sec Mx Z 2.3 18
		Kuril Islands (h = N).				Near coast of Oaxaca, Mexico (h = 10 km). M = 5.5 (UPP,KIR).	
"	19	UPP iP	07 36 54.4	"	19	UPP iP	17 28 58.6
		Taiwan region (h = N).				UPP iP	19 42 29.5
"	19	UPP iP	07 45 15.8	"	20	UPP iP	00 22 37.6
		Taiwan region (h = N).				Kyrgystan-Xinjiang, border reg. (h = 20 km).	
"	19	UPP iP	10 24 31.5	"	20	UPP iP	01 45 37.0
"	19	UPP eP	10 59 05	"	20	UPP iP	02 19 37.6 C i 02 19 44.9
		Myanmar (h = N).				Northern Xinjiang, China (h= 25 km).	
"	19	UPP iSg1	11 41 15.4	"	20	UPP iP	05 06 14.8 C
		KIR iSg1	11 41 21.8			Near coast of Oaxaca, Mexico (h = N).	
		UME iPg1	11 39 26.5 C	"	20	UPP iP	11 54 15.5
		i	11 39 33.8			Jordan-Syria region (h = 10 km).	
		iSg1	11 39 34.7	"	20	UPP iP	13 08 09.0
		UDD iSg1	11 41 27.8			South of Kermadec Islands (h = 500 km).	
		MYV iPg1	11 39 50.0	"	20	UPP iP	18 21 30.9
		iSg1	11 40 17.2			Near coast of Oaxaca, Mexico (h = N).	
		Ångermanland, Sweden. 63.7°N, 18.7°E.					
		Origin time = 11 39 11.					
		$M_L(UPP) = 2.9 (0.12) 3.$					
		Felt.					
		By combination with Finnish and Norwegian station readings.					
"	19	UPP iP	15 08 10.6	"	20	UPP iP	15 08 10.6
		iPP	15 09 54.6				
		iS	15 14 10				
			micr sec				
		P Z' 0.4 0.9					
		Mx Z 28 9					
		(cont.)					

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1996				1996			
Mar.	20	UPP iP	19 25 51.3	Mar.	22	(cont.)	
		Ryukyu Islands (h = N).				KIR iP	03 34 27.1
							micr sec
"	20	UPP iP	22 28 34.0			P	Z' 0.1 1.0
			micr sec			Mx	Z 37 19
		Mx	Z 2.6 19				
		Northern Mid-Atlantic Ridge					
		(h = 10 km).					Rat Islands, Aleutian Islands
							(h = 20 km).
							m = 6.1, M = 6.5 (UPP,KIR).
"	20	UPP iP	22 31 18.8	"	22	UPP iP	03 39 31.8
		Southern Iran (h = N).					Rat Islands, Aleutian Is. (h = N).
"	21	UPP iPKP2	04 40 36.2	"	22	UPP iP	04 12 41.2
		Kermadec Islands region					Rat Islands, Aleutian Islands (h = N).
		(h = 430 km).					
"	21	UPP iP	05 12 58.9	"	22	UPP iP	04 32 20.8
		Northern Mid-Atlantic Ridge					Rat Islands, Aleutian Islands (h = N).
		(h = 10 km).					
"	21	UPP iP	08 54 01.0	"	22	UPP iP	04 57 05.6
		Mindanao, Philippine Islands					Rat islands, Aleutian Islands (h = N).
		(h = 90 km).					
"	21	UPP iP	12 22 08.8	"	22	UPP iP	05 37 57.7
		Andreanof Islands, Aleutian Is.					Rat Islands, Aleutian Islands (h = N).
		(h = N).					
"	21	UPP iP	13 08 03.8				
		Turkey (h = 10 km).					
"	21	UPP iP	14 16 50.5				
"	21	UPP iP	21 56 29.0				
		Mindanao, Philippine Islands					
		(h = 70 km).					Kyrgystan-Xinjiang border reg.
							(h = N).
							m = 5.7, M = 5.6 (UPP,KIR).
"	21	UPP iP	21 58 10.6	"	22	UPP iP	09 17 47.3
		Sakhalin Island (h = N).					
"	21	UPP iP	22 44 34.3				
		Myanmar-China border region					
		(h = 10 km).					
"	22	UPP iP	03 35 19.8	"	22	UPP iP	15 49 19.7
		iS	03 44 16				Rat Islands, Aleutian Islands (h = N).
		iP'P'	04 03 36.8				
			micr sec				
		P	Z' 0.2 1.0				
		Mx	Z 33 22	"	22	UPP iPKP	17 50 54.3
						iPKP1	17 51 01.5
							East of North Island, N.Z. (h = N).
		(cont.)					

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1996				1996			
Mar.	22	UPP iP	23 11 45.3	Mar.	24	UPP iP	08 34 34.4
		Southern Greece (h = 10 km).				Uganda (h = 10 km).	
"	23	UPP iP	04 09 36.2	"	24	UPP iP	11 06 48.9
		Southern Iran (h = N).				Mindanao, Philippine Islands (h = 10 km).	
"	23	UPP iP	07 43 50.4	"	24	UPP iP	14 37 44.8
		Andreanof Islands, Aleutian Is. (h = 50 km).				East of Kuril Islands (h = N).	
"	23	UME iSn	07 51 08.2	"	24	UPP iP	21 02 21.6
		iSg1	07 51 39.9			Rat Islands, Aleutian Islands (h = N).	
		Norwegian Sea, 67.0°N, 10.0°E. Origin time = 07 48 51. $M_L(\text{UPP}) = 3.1$ 1. By combination with Finnish and Norwegian station readings.		"	24	UPP iPKP1	22 38 59.6
						micr sec	
						Mx Z 2.7 20	
						West of Macquarie Island (h = 10 km).	
"	23	UPP Mx	12 27	"	24	UPP iP	00 54 14.3
			micr sec			Near east coast of Kamchatka (h = 70 km).	
		Mx	Z 1.6 20				
		KIR Mx	12 19	"	25	UPP iP	04 02 48.8 C
			micr sec			Kuril Islands (h = N).	
		Mx	Z 1.9 20				
		Balleny Islands region (h = 10 km). M = 5.9 (UPP,KIR).		"	25	UPP eP	05 13 52
"	23	UPP iP	14 03 47.2			Mindanao, Philippine Islands (h = 90 km).	
"	23	UPP iP	19 35 40.1	"	25	UPP iPn	20 33 49.0
		Fox Islands, Aleutian Islands (h = N).				iLg	20 36 16.6
"	23	UPP iP	23 33 11.1			Poland (h = 10 km).	
		Greece-Albania border region (h = 10 km).		"	25	UPP iP	21 06 02.6
"	24	UPP iP	00 58 49.8			Kuril Islands (h = 60 km).	
		Luzon, Philippine Islands (h = N).		"	26	UPP iPKP	02 10 33.9
"	24	UPP iP	03 05 50.3			micr sec	
		Northern Mid-Atlantic Ridge (h = 10 km).				P Z' 0.1 0.9	
"	24	UPP iP	03 31 16.7			South of Fiji Islands (h = 540 km).	
		i	03 31 36.8	"	26	UPP iP	08 39 14.3
		Near coast of Venezuela (h = 10 km).				Xizang-India border region (h = 45 km).	
"	24	UPP iP	06 26 14.2	"	26	UPP iP	21 36 39.0
		Azores Islands (h = 10 km). Late arrival when compared with the NEIC solution.				Fox Islands, Aleutian Islands (h = N).	

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1996				1996					
Mar.	27	UPP	iPKP1	03 16 41.9	Mar.	28	UPP	iP	07 38 10.4 D
			iPKP2	03 16 50.7				iS	07 46 00
				South of Kermadec Islands (h = N).					micr sec
"	27	UPP	iP	09 10 24.1				P	Z' 0.3 1.4
"	27	UPP	iP	12 47 38.0			KIR	iP	07 38 42.9 D
				micr sec					micr sec
			P	Z' 0.1 0.9				P	Z' 0.6 1.8
				Near coast of Guerrero, Mexico (h = 30 km).					Arabian Sea (h = 10 km). m = 6.3 (UPP,KIR).
"	27	UPP	iP	15 07 49.1	"	28	UPP	iP	10 03 52.4
				Fox Islands, Aleutian Islands (h = N).				P	Z' 0.2 1.0
"	27	UPP	iP	15 49 42.7 C			KIR	iP	10 03 06.9
				Fox Islands, Aleutian Islands (h = N).					micr sec
"	27	UPP	iP	16 10 40.0				P	Z' 0.2 1.0
"	27	UPP	iP	16 54 46.0					Kuril Islands (h = N). m = 6.2 (UPP,KIR).
"	27	UPP	iP	21 04 55.9	"	28	UPP	iP	11 37 17.8
				micr sec					Fox Islands, Aleutian Islands (h = N).
			Mx	Z 3.5 20	"	28	UPP	iP	12 14 06.1
		KIR	Mx	21 43					Fox Islands, Aleutian Islands (h = N).
				micr sec	"	28	UPP	iP	20 02 04.1
			Mx	Z 2.7 18				P	Z' 0.3 1.1
				Near coast of Nicaragua (h = N). M = 5.7 (UPP,KIR). Late arrival when compared with the NEIC solution.				Mx	Z 2.9 21
"	28	UPP	iP	01 59 19.1 C			KIR	iP	20 01 10.4
				micr sec					micr sec
			P	Z' 0.1 1.0				P	Z' 0.5 1.0
		KIR	iP	01 52 25.8 C				Mx	Z 1.7 19
				micr sec					Fox Islands, Aleutian Islands (h = N). m = 6.4, M = 5.3 (UPP,KIR).
			P	Z' 0.1 0.7	"	28	UPP	iPg1	20 56 55.0
				Fox Islands, Aleutian Islands (h = N). m = 5.9 (UPP,KIR).				iSn	20 57 23.7
"	28	UPP	iP	02 07 15.3 C				iSg1	20 57 27.2
				Fox Islands, Aleutian Islands (h = N).			UME	iSg1	20 59 32.9
"	28	UPP	iP	04 07 44.2			UDD	iSg1	20 57 42.3
				Kuril Islands (h = N).			DEL	iPg1	20 56 37.8
								iSg1	20 56 59.6
								i	20 57 01.0
								i	20 57 04.6
									Småland, Sweden, 57.4°N, 16.4°E. Origin time = 20 56 07. M <sub>L</sub> (UPP) = 2.2 (0.16) 3. Felt. By combination with Finnish station readings.





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1996

Mar.	30	(cont.) Kuril Islands (h = 50 km). M = 5.2 (UPP,KIR).			
"	30	UPP iP Kuril Islands (h = N).	23 42	11.3	
"	31	UPP eP	03 45	56	
"	31	UPP iP Southern Iran (h = 10 km).	15 19	31.5	
"	31	UPP iP Southern Iran (h = 35 km).	21 20	36.1	
"	31	UPP iPKP Mx Z KIR Mx Mx Z Santa Cruz Islands (h = N). M = 6.0 (UPP,KIR).	24 00	42.4	
			micr	sec	
			6.1	19	
			24 58		
			micr	sec	
			2.4	17	

November 21, 1997

Conny Holmqvist  
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SEISMOLOGICAL BULLETIN

UPPSALA, KIRUNA, UMEÅ, UDDEHOLM

DELARY and MYRVIKEN

Uppsala	(UPP)	59°51.5'N,	17°37.6'E;	h = 14 m
Kiruna	(KIR)	67°50.4'N,	20°25.0'E;	h = 390 m
Umeå	(UME)	63°48.9'N,	20°14.2'E;	h = 16 m
Uddeholm	(UDD)	60°05.4'N,	13°36.4'E;	h = 240 m
Delary	(DEL)	56°28.2'N,	13°52.2'E;	h = 150 m
Myrviken	(MYV)	62°56.5'N,	14°20.8'E;	h = 345 m

APRIL 1 - 30, 1996

1996					1996				
Apr.	1	UPP	iP	03 55 45.8	Apr.	2	UPP	iP	08 04 28.6
				Oaxaca, Mexico (h = 55 km).				i	08 04 58.3
"	1	UPP	iP	05 18 55.7				iS	08 08 32
				Near coast of Chiapas, Mexico (h = N).					micr sec
								P	Z' 0.1 1.5
								Mx	Z 9.6 13
"	1	UPP	iP	06 23 39.5			KIR	iP	08 05 35.8
			eS	06 34 14					micr sec
				micr sec				P	Z' 0.2 1.0
			Mx	Z 4.0 21				Mx	Z 2.4 10
		KIR	Mx	07 01					Dodecanese Islands (h = N).
				micr sec					m = 5.5, M = 5.2 (UPP,KIR).
			Mx	Z 3.0 19	"	2	UPP	iP	19 04 02.6
				Near coast of Chiapas, Mexico (h = 45 km).				i	19 04 12.0
				M = 5.7 (UPP,KIR).					Talaud Islands (h = 40 km).
"	1	UPP	iP	08 16 25.8	"	3	UPP	iP	13 09 01.8
			ipP	08 16 37.0					Southern Italy (h = 10 km).
			iS	08 23 06	"	3	UPP	eP	23 13 34
				micr sec					Near coast of Chiapas, Mexico (h = N).
			pP	Z' 0.1 1.0	"	4	UPP	iPKP	00 52 46.1
		KIR	iP	08 16 34.7					South of Fiji Islands (h = 170 km).
			ipP	08 16 46.6	"	4	UPP	iP	11 24 45.2
				micr sec					micr sec
			pP	Z' 0.1 1.0				P	Z' 0.1 1.3
				Pakistan (h = 45 km).					(cont.)
				m = 5.7 (UPP,KIR).					
"	2	UPP	iP	03 08 33.3					
				Mariana Islands (h = 30 km).					

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1996				1996			
Apr.	4	(cont.) KIR iP	11 24 29.5 micr sec	Apr.	6	UPP iP	12 59 10.9
		P	Z' 0.1 1.0			Crete (h = 55 km).	
		Talaud Islands, Indonesia (h = N). m = 6.2 (UPP,KIR).			6	UPP iP	17 15 26.4
"	4	UPP iP	11 28 41.3	"	6	UPP iP	21 35 32.5
		Talaud Islands, Indonesia (h = 40 km).				iS	21 39 19
						P	Z' 0.1 1.0
						Greenland Sea (h = 10 km).	
"	4	UPP iP	13 23 53.1	"	6	UPP iP	22 15 41.4
		Talaud Islands, Indonesia (h = 45 km).				i	22 15 43.6
"	4	UPP iP	14 22 30.8			i	Z' 0.1 0.8
		Rat Islands, Aleutian Islands (h = N).				Mx	Z 4.4 19
						KIR Mx	22 46
							micr sec
"	4	UPP iP	14 56 17.2			Mx	Z 6.4 19
		Kuril Islands (h = 120 km).				Kuril Islands (h = N). M = 5.7 (UPP,KIR).	
"	5	UPP iP	00 31 06.1	"	6	UPP iP	23 46 09.2
		Southern Greece (h = N).				Kuril Islands (h = N).	
"	5	UPP iP	01 20 05.4	"	7	UPP iP	00 18 26.6
		Kuril Islands (h = N).					micr sec
"	5	UPP iP	04 50 54.3			P	Z' 0.2 0.9
						Kuril Islands (h = N).	
"	5	UPP eP	12 28 11	"	7	UPP iP	04 37 04.9
"	5	UPP iP	20 23 55.0			Northern Mid-Atlantic Ridge (h = 10 km).	
		Near east coast of Honshu, Japan (h = 70 km).		"	7	UPP iP	06 09 03.4
"	6	UPP iP	04 17 32.6			i	06 09 04.3
		Leyete, Philippine Islands (h = 45 km).					micr sec
						i	Z' 0.2 0.9
						Kuril Islands (h = N).	
"	6	UPP iP	04 28 08.1	"	7	UPP iP	06 13 06.1 C
		Philippine Islands region (h = 60 km).					micr sec
"	6	UPP iP	09 01 21.4			P	Z' 0.1 1.0
		Greece (h = N).				Kuril Islands (h = N).	
"	6	UPP iPKP	12 36 50.3	"	7	UPP iP	06 20 11.5 C
		Off coast of southern Chile (h = 10 km).					micr sec
						P	Z' 0.1 1.2
						Kuril Islands (h = N).	

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1996				1996			
Apr.	7	UPP iP	14 29 22.3	Apr.	11	UPP iP	19 36 11.2
			Near east coast of Kamchatka			i	19 36 20.5
			(h = 50 km).				Nicobar Islands, India (h = N).
"	7	UPP iPKP1	15 03 48.2	"	12	UPP iP	09 57 02.5
			South of Kermadec Islands (h = N).			iS	10 06 46
							micr sec
"	7	UPP iP	15 57 55.5			P	Z' 0.2 1.0
			Bonin Islands region (h = N).			Mx	Z 3.8 19
						KIR iP	09 57 04.0
"	7	UPP iP	16 32 11.7				micr sec
		i	16 32 17.4			P	Z' 0.1 1.1
			Luzon, Philippine Islands (h = N).			Mx	Z 4.3 19
							Nicobar Islands, India (h = N).
"	8	UPP iP	11 15 02.5				m = 5.9, M = 5.7 (UPP,KIR).
			Afghanistan-Tajikistan (h = 250 km).	"	12	UPP iP	10 26 58.9
"	8	UPP iP	17 06 11.6				Jan Mayen Island region (h = 10 km).
			Leeward Islands (h = 180 km).	"	12	UPP iP	15 44 10.6 C
"	8	UPP iP	18 33 32.8				micr sec
			Pakistan (h = N).			P	Z' 0.3 0.9
"	8	UPP iP	18 42 35.2			KIR iP	15 45 21.4 C
			Northern Mid-Atlantic Ridge				micr sec
			(h = 10 km).			P	Z' 0.4 0.7
							Dodecanese Islands (h = 160 km).
"	11	UPP iP	05 20 06.7				m = 6.0 (UPP,KIR).
		i	05 20 13.7	"	12	UPP Mx	20 00
			Nicobar Islands, India (h = N).				micr sec
"	11	UPP iP	08 46 34.0			Mx	Z 1.9 20
		i	08 46 40.6			KIR Mx	19 58
			Nicobar Islands, India (h = N).				micr sec
"	11	UPP Mx	12 35			Mx	Z 1.7 19
			micr sec				Solomon Islands (h = 55 km).
							M = 5.6 (UPP,KIR).
		Mx	Z 2.5 23	"	12	UPP iP	22 36 48.0
		KIR Mx	12 33				North Atlantic Ocean (h = 10 km).
			micr sec	"	13	UPP iP	10 57 12.2
		Mx	Z 2.3 22				micr sec
			Solomon Islands (h = 250 km).			P	Z' 0.1 1.0
			M = 5.7 (UPP,KIR).				Nicobar Islands, India (h = N).
			M uncorrected for focal depth.	"	14	UPP iP	00 47 42.5
"	11	UPP iP	10 56 52.0				Nicobar Islands, India (h = N).
			micr sec	"	14	UPP iP	08 35 41.4
		P	Z' 0.1 1.0				Turkey (h = 10 km).
			North Atlantic Ocean (h = 10 km).				

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1996				1996			
Apr.	14	UPP iP	21 55 10.6 C	Apr.	16	UPP iP	21 39 01.0
		Hokkaido, Japan region (h = 60 km).				Philippine Islands region (h = 45 km).	
"	15	UPP iP	00 06 28.0	"	16	KIR iSg1	22 18 19.7
		Mindoro, Philippine Islands (h = 170 km).				MYV iPn	22 17 44.0
						iSn	22 18 34.0
						Norwegian Sea, 67.8°N, 10.1°E. Origin time = 22 16 17. By combination with Finnish station readings.	
"	15	UPP iP	09 26 36.1				
		Kuril Islands (h = N).					
"	15	UPP iPKP	10 09 37.9	"	17	UPP ipP	00 33 02.0
		South of Fiji Islands (h = 500 km).				Andreanof Islands, Aleutian Is. (h = 70 km).	
"	15	UPP eP	12 40 50				
		Off coast of Oregon (h = 10 km).					
"	15	UPP iPKP	15 14 11.4	"	17	UPP iP	00 55 20.9
		Solomon Islands (h = 55 km).				Bonin Islands region (h = N).	
"	15	UPP iP	20 14 37.1	"	17	UPP iP	04 22 58.0
		Central Mid-Atlantic Ridge (h = 10 km).				Central Mid-Atlantic Ridge (h = 10 km).	
"	16	UPP iPKP	00 50 10.6 C	"	18	UPP iP	00 09 12.2
			micr sec			Philippine Islands region (h = 55 km).	
		PKP	Z' 0.4 0.9	"	18	UPP iP	01 02 51.3
		Mx	Z 37 22			Kuril Islands (h = 80 km).	
		KIR Mx	01 44	"	18	UPP iPKP	04 07 15.2
			micr sec			South of Fiji Islands (h = 110 km).	
		Mx	Z 18 20	"	18	UPP iP	06 25 41.7 C
		South of Fiji Islands (h = 110 km). M = 6.9 (UPP,KIR). M uncorrected for focal depth.				iS	06 36 18
"	16	UPP iSg1	10 30 17.0				micr sec
		KIR iSg1	10 31 34.2			P	Z' 0.3 1.3
		UME iSg1	10 30 38.9			Mx	Z 2.6 19
		UDD iPg1	10 28 21.9			KIR iP	06 25 23.4
		iSg1	10 29 18.7				micr sec
		DEL iSg1	10 30 38.2			P	Z' 0.3 1.1
		MYV iPg1	10 28 08.8			Samar, Philippine Islands (h = N). m = 6.4 (UPP,KIR).	
		iSg1	10 29 14.0	"	18	UPP iP	17 19 18.4
		Coast of southwestern Norway, 62.0°N, 5.4°E. Origin time = 10 27 03. M <sub>L</sub> (UPP) = 3.1 (0.19) 5. Felt. By combination with Finnish station readings.					micr sec
						P	Z' 0.4 0.8
						KIR iP	17 18 28.2
							micr sec
						P	Z' 0.1 0.8
						Kuril Islands (h = N). m = 6.2 (UPP,KIR).	
"	16	UPP iP	14 59 20.4				



UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1996				1996			
Apr.	24	UPP iP	19 07 41.1	Apr.	26	UPP iP	17 14 46.0
		Dominican Republic region (h = 80 km).				East of Kuril Islands (h = 50 km).	
"	25	UPP iPKP	06 08 23.9	"	26	UPP i(PKP)	18 47 16.6
		South of Fiji Islands (h = 640 km).				Fiji Islands region (h = 540 km).	
"	25	UPP iPKP1	18 05 04.0	"	27	UPP iP	00 26 43.8
		Kermadec Islands region (h = N).				Near east coast of Kamchatka (h = N).	
"	25	UPP iP	18 18 10.4	"	27	UPP iP	00 43 02.5
		Central Mediterranean Sea (h = N).				micr sec	
						P Z'	0.1 1.0
						Southern Italy (h = N).	
"	25	UPP iP	19 47 47.1	"	27	UPP iP	01 09 33.8
		i	19 48 13.3			Kyrgyzstan-Xinjiang border reg. (h = N).	
"	26	UPP iP	05 20 41.0	"	27	UPP iP	03 06 48.7
			micr sec			Northern Mid-Atlantic Ridge (h = 10 km).	
		P Z'	0.3 1.0				
		Southwestern Ryukyu Islands (h = N).		"	27	UPP eP	08 53 48
"	26	UPP iP	07 06 39.2			iS	09 04 46
		i	07 06 51.7				micr sec
		iS	07 10 52			Mx Z	6.1 19
			micr sec			KIR Mx	09 30
		P Z'	0.1 1.0				micr sec
		Mx Z	1.9 14			Mx Z	4.3 20
		KIR iP	07 07 45.4			South of Panama (h = 10 km). M = 5.9 (UPP,KIR).	
			micr sec	"	28	UPP iP	08 29 35.7
		P Z'	0.1 0.9			i	08 29 47.9
		Mx Z	0.9 13				micr sec
		Dodecanese Islands (h = 80 km). m = 5.4, M = 4.6 (UPP,KIR). M uncorrected for focal depth.				i Z'	0.1 1.0
"	26	UPP iP	12 17 32.4			KIR iP	08 28 43.6
		Fox Islands, Aleutian Islands (h = N).				i	08 28 55.9
"	26	UPP iP	14 18 11.8				micr sec
		Kuril Islands (h = N).				P Z'	0.2 1.0
						i Z'	0.1 0.9
						South of Alaska (h = N). m = 6.1 (UPP,KIR).	
"	26	UPP iP	16 40 37.9	"	29	UPP iP	10 46 21.4
			micr sec			i	10 46 29.8
		P Z'	0.1 1.0			Kuril Islands (h = 25 km).	
		Nepal (h = N).					

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1996

Apr.	29	UPP	ePdiff	14 55 38	
			iPKP	14 59 22.7	
			iPP	15 00 36	
				micr	sec
			PKP	Z' 0.1	1.0
			Mx	Z 28	22
		KIR	Mx	15 44	
				micr	sec
			Mx	Z 26	25
		Solomon Islands (h = 45 km).			
		M = 5.9 (UPP,KIR).			
"	29	UPP	iP	20 08 48.4	
		Northern Algeria (h = N).			

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SEISMOLOGICAL BULLETIN

UPPSALA, KIRUNA, UMEÅ, UDDEHOLM

DELARY and MYRVIKEN

Uppsala	(UPP)	59°51.5'N,	17°37.6'E;	h = 14 m
Kiruna	(KIR)	67°50.4'N,	20°25.0'E;	h = 390 m
Umeå	(UME)	63°48.9'N,	20°14.2'E;	h = 16 m
Uddeholm	(UDD)	60°05.4'N,	13°36.4'E;	h = 240 m
Delary	(DEL)	56°28.2'N,	13°52.2'E;	h = 150 m
Myrviken	(MYV)	62°56.5'N,	14°20.8'E;	h = 345 m

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1996					1996					
May	1	UPP	iPKP	09 40 06.6	May	2	(cont.)			
				micr sec			KIR	Mx	06 32	
			Mx	Z 2.6 19					micr sec	
		KIR	Mx	10 34				Mx	Z 1.2 14	
				micr sec					Kyushu, Japan (h = 40 km).	
			Mx	Z 1.7 19					M = 5.3 (UPP,KIR).	
		Solomon Islands (h = N).				"	2	UPP	iP	06 42 43.2
		M = 5.7 (UPP,KIR).						Luzon, Philippine Islands (h = N).		
"	1	UPP	iPKP	10 23 53.3	"	2	UPP	iPKP	13 52 13.2	
		Solomon Islands (h = N).						i	13 53 28	
"	1	UPP	iP	18 01 55.9				i	13 58 16	
		Near east coast of Honshu, Japan						i	13 59 32	
		(h = N).							micr sec	
"	2	UPP	iPKP	02 51 16.9			KIR	Mx	Z 2.9 21	
				micr sec					14 35	
			Mx	Z 2.3 19				Mx	Z 1.9 15	
		KIR	Mx	03 45					Solomon Islands (h = 500 km).	
				micr sec					M = 5.8 (UPP,KIR).	
			Mx	Z 1.9 20					M uncorrected for focal depth.	
		Solomon Islands (h = N).			"	2	UPP	iP	14 02 46.4	
		M = 5.7 (UPP,KIR).			"	2	UPP	iP	14 31 16.6	
"	2	UPP	iP	05 56 42.3					Near s. coast of Honshu, Japan	
			i	05 56 54.1					(h = 10 km).	
				micr sec						
			i	Z' 0.2 1.3	"	2	UPP	eP	16 01 41	
			Mx	Z 1.6 17					Kuril Islands (h = 120 km).	
		(cont.)								

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1996				1996					
May	2	UPP	iP	18 13 30.8	May	4	KIR	iSg1	04 56 56.7
				micr sec					Off coast of northwestern Norway,
			P	Z' 0.1 0.9					67.1°N, 13.5°E.
									Origin time = 04 55 28.
									By combination with Finnish station
									readings.
"	2	UPP	iP	19 47 49.2	"	4	UPP	iP	07 11 02.5
									Northeastern China (h = 10 km).
"	3	UPP	iP	02 34 50.4 C	"	4	UPP	iP	11 22 04.1
				micr sec					Greece (h = N).
			P	Z' 0.1 0.8					
"	3	UPP	iP	03 42 29.0	"	4	UPP	iP	16 26 25.9
			ipP	03 42 37.5				iSKS	16 37 04
			iS	03 50 20					micr sec
				micr sec					Mx Z 2.4 18
			P	Z' 0.2 1.5			KIR	Mx	17 10
			pP	Z' 0.3 1.1					micr sec
			Mx	Z 20 13				Mx	Z 1.7 17
		KIR	iP	03 42 01.2					South of Marina Islands (h = N).
			ipP	03 42 09.3					M = 5.6 (UPP,KIR).
				micr sec					
			P	Z' 0.2 1.3	"	4	UPP	iP	17 02 49.8
			pP	Z' 0.9 1.8					micr sec
			Mx	Z 7.3 10				P	Z' 0.1 1.5
								Mx	Z 2.9 18
								KIR	iP
									17 02 20.3
									micr sec
								P	Z' 0.1 1.0
								Mx	Z 2.1 17
									South of Mariana Islands (h = N).
									m = 5.9, M = 5.7 (UPP,KIR).
"	3	UPP	iP	04 15 16.8	"	5	UPP	iP	00 33 04.6
				Washington (h = 5 km).					
"	3	UPP	iP	08 00 33.3	"	5	UPP	ePKP	00 53 20
								i	00 53 23.8
"	3	UPP	iP	18 50 39.1					Kermadec Islands region
				micr sec					(h = 150 km).
			P	Z' 0.1 0.9					
		KIR	iP	18 49 54.9					
				micr sec					
			P	Z' 0.1 1.0					
					"	6	UPP	iP	08 32 25.3
									Hokkaido, Japan region (h = 90 km).
"	3	UPP	iP	21 05 37.3	"	6	UPP	iPKP	12 29 56.3
			i	21 05 43.9					micr sec
								PKP	Z' 0.3 1.4
									South of Fiji Islands (h = 560 km).
"	3	UPP	iP	22 17 47.5					
				Kuril Islands (h = N).					

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1996				1996						
May	7	UPP	iP	08 58 10.2	May	10	UPP	iP	04 36 18.4	
				micr sec					Xizang (h = N).	
			Mx	Z 4.9 25						
		KIR	Mx	09 48	"	10	UPP	iP	09 16 31.1	
				micr sec					Xizang (h = N).	
			Mx	Z 3.3 20						
		Northern Molucca Sea (h = N).								
		M = 5.8 (UPP,KIR).								
"	7	UPP	iP	09 01 25.4	"	11	UPP	iP	04 08 19.3	
		France (h = 10 km).							Xizang (h = N).	
"	7	UPP	iP	13 38 35.1						
		Andreanof Islands, Aleutian Is. (h = N).								
"	7	MYV	iPg1	20 03 55.2						
			iSg1	20 04 09.0						
		Jämtland, Sweden, 62.8°N, 16.1°E. Origin time = 20 03 42. By combination with Finnish station readings.								
"	7	UPP	iP	23 31 00.1 C	"	11	UPP	Mx	10 40	
			iS	23 39 58					micr sec	
				micr sec						
			P	Z' 1.1 1.0						
			Mx	Z 16 28						
		KIR	iP	23 30 14.5			KIR	Mx	10 38	
				micr sec					micr sec	
			P	Z' 1.5 0.7						
			Mx	Z 15 19						
		Kuril Islands (h = 55 km). m = 7.0, M = 6.1 (UPP,KIR). First onset at KIR contaminated by a signal from a local mine explosion.								
"	9	UPP	iPKP1	04 55 46.3						
			iPKP2	04 55 52.9						
		South of Kermadec Islands (h = 80 km).								
"	9	UPP	iP	18 02 54.9	"	11	UPP	iP	16 47 30.5	
		Fox Islands, Aleutian Islands (h = N).							Northern Mid-Atlantic Ridge (h = 10 km).	
"	9	UPP	iP	20 14 05.6	"	12	UPP	iP	10 41 35.2	
		Crete (h = N).							Philippine Islands region (h = N).	
"	10	UPP	iP	02 22 56.6						
		Near east coast of Honshu, Japan (h = N).								

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1996				1996			
May	12	UPP	iP	15 22 28.1 C	May	15	(cont.)
			i	15 22 45.9			Irian Jaya region, Indonesia (h = N).
				micr sec			M = 5.7 (UPP,KIR).
			P	Z' 0.1 1.0			
				Philippine Islands region	"	16	KIR iSg1 00 08 14.9
				(h = 70 km).			UME iSg1 00 09 02.9
"	13	UPP	iP	02 07 05.6			Off coast of northwestern Norway,
				South of Honshu, Japan (h = 50 km).			67.2°N, 13.4°E.
"	13	UPP	iP	04 41 48.7			Origin time = 00 06 47.
				East of Kuril Islands (h = N).			$M_L(\text{UPP}) = 2.6 (0.06) 2.$
"	13	UPP	iPKP	10 17 32.2			By combination with Finnish station
				Near n. coast of New Guinea	"	17	UPP iP 17 13 14.8
				(h = 200 km).			Xizang (h = N).
"	13	UPP	iP	19 02 07.2	"	17	UPP iP 17 14 08.8
				Andreanof Islands, Aleutian Is.			Xizang (h = N).
				(h = N).	"	17	UPP iP 17 15 08.7
"	14	UPP	iP	10 25 22.1			Xizang (h = N).
				Fox Islands, Aleutian Islands (h = N).	"	18	UPP iP 00 11 39.5
"	14	UPP	iP	12 52 57.0			South of Honshu, Japan (h = 370 km).
				Kyrgyzstan (h = N).	"	18	UPP iP 03 40 44.2
"	14	UPP	e(PKP)	12 55 04			iS 03 49 12
			iPKP	12 55 13.9			Komandorsky Islands region
			iSKP1	12 57 51.9			(h = 30 km).
				Fiji Islands region (h = 610 km).	"	18	UPP iP 19 26 55.0
"	14	UPP	iPKP1	17 53 20.3			i 19 26 56.7
				South of Fiji Islands (h = 170 km).			Hokkaido, Japan region (h = 100 km).
"	14	UPP	ipP	19 15 42.7	"	19	UPP iP 03 21 01.5
				Northeastern India (h = 35 km).			i 03 21 07.3
"	14	UPP	iP	19 20 13.8	"	19	UPP iP 03 22 56.2
				Ryukyu Islands (h = N).			Hindu Kush region, Afghanistan
"	14	UPP	iP	19 37 39.1			(h = 210 km).
				Ryukyu Islands (h = N).	"	19	UPP iP 21 30 32.5 D
"	15	UPP	Mx	17 31			iS 21 39 58
				micr sec			P Z' 0.3 0.8
			Mx	Z 2.9 21			KIR iP 21 30 00.2 D
		KIR	Mx	17 30			micr sec
				micr sec			P Z' 0.4 0.9
			Mx	Z 2.1 21			Bonin Islands region (h = 380 km).
							m = 6.2 (UPP,KIR).

(cont.)

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1996				1996					
May	19	UPP	Mx	24 28	May	23	UPP	iPKP	08 03 21.6
				micr sec				iPKP1	08 03 28.4
			Mx	Z 2.0 17			South of Kermadec Islands (h = 450 km).		
		KIR	Mx	24 22					
				micr sec					
			Mx	Z 3.1 18	"	23	KIR	iPg1	09 07 30.9
		Minihassa Peninsula, Sulawesi (h = 30 km). M = 5.7 (UPP,KIR).						iSg1	09 07 57.9
"	20	UPP	iP	09 39 48.3			UME	iPg1	09 07 31.1
		Northwest of Kuril Islands (h = 430 km).						iSg1	09 07 58.4
"	21	UPP	iP	14 57 19.7				i	09 08 01.1
		Dodecanese Islands (h = 160 km).						iRg	09 08 17.5
"	21	UPP	iPKP	20 58 32.0			Norrbotten, Sweden, 65.9°N, 21.5°E. Origin time = 09 06 54. M <sub>L</sub> (UPP) = 2.6 1. Near-surface event. By combination with Finnish station readings.		
		South of Fiji Islands (h = 580 km).			"	23	UPP	eP	09 47 51
"	21	UPP	iP	23 15 28.7			Near east coast of Honshu, Japan (h = N).		
		Ionian Sea (h = 45 km).			"	23	UPP	iP	10 47 33.6
"	22	UPP	iP	10 57 28.1	"	23	UPP	iP	23 05 08.1
"	22	UPP	iP	12 03 41.2			South of Honshu, Japan (h = 380 km).		
"	22	UPP	iP	12 13 47.3	"	24	UPP	iP	06 43 33.3
							Southern Iran (h = N).		
"	22	UPP	i(PKP)	20 44 58.4	"	24	UPP	iP	23 01 26.1
		Fiji Islands region (h = 440 km).					Myanmar (h = 130 km).		
"	23	UPP	iP	02 10 05.1	"	25	UPP	iP	17 08 32.0
			i	02 10 16.1			Southern Iran (h = N).		
			iS	02 20 44	"	26	UPP	Mx	02 57
				micr sec					micr sec
			P	Z' 0.1 1.0				Mx	Z 2.3 24
			Mx	Z 1.3 23			KIR	Mx	02 54
		KIR	iP	02 10 10.3					micr sec
				micr sec				Mx	Z 1.7 22
			P	Z' 0.2 0.9			Loyalty Islands region (h = 110 km). M = 5.7 (UPP,KIR).		
			Mx	Z 1.4 20	"	26	UPP	iP	04 55 16.0
		Near west coast of Colombia (h = N). m = 6.3, M = 5.3 (UPP,KIR).					Kyushu, Japan (h = 70 km).		
"	23	UPP	iPKP	03 57 14.6	"	26	UPP	iP	06 19 43.9
		South Sandwich Islands region (h = 140 km).					South of Honshu, Japan (h = 360 km).		

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1996				1996			
May	26	UPP eP	09 08 00	May	28	UPP iP	18 24 23.3
			Sea of Okhotsk (h = 460 km).			i	18 24 29.9
"	26	UPP iP	09 08 34.8				micr sec
"	26	UPP iP	15 10 52.8			P Z' 0.1 1.0	
			South of Honshu, Japan (h = N).	"	28	UPP iP	22 05 09.8
"	26	UPP iP	21 49 08.8				Taiwan (h = 50 km).
			Greece (h = 10 km).	"	29	UPP iP	05 17 49.3
"	27	UPP iP	03 30 44.3				Myanmar-China border region
			East of Kuril Islands (h = N).				(h = N).
"	27	UPP iPKP1	04 58 52.2	"	30	UPP iPKP	03 23 19.8
			East of North Island, N.Z.				micr sec
			(h = 100 km).			Mx Z 3.6 28	
"	27	UPP iP	05 58 21.5				South Sandwich Islands region
			Mindanao, Philippine Islands				(h = 80 km).
			(h = 70 km).	"	30	UPP iP	10 08 48.0
"	27	UPP iPKP2	06 17 59.5			i	10 08 50.6
			East of North Island, N.Z. (h = N).				Mongolia (h = N).
"	27	UPP iP	09 39 03.9	"	30	UPP iSg	11 08 34.8
		i	09 39 10.9				Poland (h = 25 km).
"	27	UPP iP	11 53 18.4	"	31	KIR iPg1	07 14 50.6
						iSg1	07 15 12.9
"	27	UPP iP	14 30 48.4				Northern Norway, 70.0°N, 20.4°E.
			Dodecanese Islands (h = 80 km).				Origin time = 07 14 13.
"	27	UPP iPKP	18 06 11.0				$M_L(\text{UPP}) = 2.9$ 1.
			South of Fiji Islands (h = 500 km).				By combination with Finnish station
"	27	UPP iP	20 16 12.1				readings.
			Kamchatka (h = 100 km).	"	31	UPP iP	09 31 02.5
"	28	UPP iP	01 13 07.9			i	09 31 05.6
			Kuril Islands (h = N).				Eastern Caucasus (h = N).
"	28	UPP iP	03 15 27.3	"	31	UPP iP	10 28 06.6
		i	03 15 38.7				micr sec
"	28	UPP eP	04 55 19			P Z' 0.1 1.0	
			Northwestern Caucasus (h = N).				Leyte, Philippine Islands
							(h = 100 km).

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SEISMOLOGICAL BULLETIN  
 UPPSALA, KIRUNA, UMEÅ, UDDEHOLM  
 DELARY and MYRVIKEN

Uppsala	(UPP)	59°51.5'N,	17°37.6'E;	h = 14 m
Kiruna	(KIR)	67°50.4'N,	20°25.0'E;	h = 390 m
Umeå	(UME)	63°48.9'N,	20°14.2'E;	h = 16 m
Uddeholm	(UDD)	60°05.4'N,	13°36.4'E;	h = 240 m
Delary	(DEL)	56°28.2'N,	13°52.2'E;	h = 150 m
Myrviken	(MYV)	62°56.5'N,	14°20.8'E;	h = 345 m

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1996					1996				
June	1	UPP	iP	12 58 53.6	June	2	(cont.)		
				Gansu, China (h = 10 km).			KIR	iP	09 49 03.3 C
									micr sec
"	2	UPP	iP	02 28 17.1				P	Z' 0.5 1.0
				Northern Mid-Atlantic Ridge				Mx	Z 1.7 19
				(h = 10 km).					Ryukyu Islands (h = 40 km).
									m = 6.3, M = 5.5 (UPP,KIR).
"	2	UPP	eP	02 57 34	"	2	UPP	eP	12 49 18
				Northern Mid-Atlantic Ridge					Northern Iran (h = N).
				(h = 10 km).					
"	2	UPP	iP	03 02 55.8	"	3	UPP	Mx	09 27
			i	03 03 07.2					micr sec
			iS	03 11 42				Mx	Z 4.4 23
				micr sec			KIR	Mx	09 26
			P	Z' 0.2 1.0					micr sec
			Mx	Z 126 21				Mx	Z 4.7 21
		KIR	iP	03 03 21.7					Solomon Islands (h = N).
				micr sec					M = 6.0 (UPP,KIR).
			P	Z' 0.2 1.0	"	3	UPP	Mx	11 58
			Mx	Z 35 16					micr sec
				Northern Mid-Atlantic Ridge				Mx	Z 5.4 21
				(h = 10 km).			KIR	Mx	11 58
				m = 6.4, M = 6.8 (UPP,KIR).					micr sec
"	2	UPP	iP	09 49 32.1 C				Mx	Z 5.9 19
				micr sec					Solomon Islands (h = 10 km).
			P	Z' 0.3 1.0					M = 6.1 (UPP,KIR).
			Mx	Z 4.9 20	"	3	UPP	iP	12 07 44.1
				(cont.)					Chiapas, Mexico (h = 70 km).

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1996				1996						
June	3	UPP	iP	20 06 26.9 C	June	6	UPP	iP	16 30 32.4	
			i	20 06 31.5					micr sec	
			i	20 06 37.6			Mx	Z	0.9 10	
			iS	20 15 28			KIR	Mx	16 45	
				micr sec					micr sec	
			P	Z' 0.5 1.0				Mx	Z 0.6 10	
			Mx	Z 3.8 20			Southern Greece (h = N).			
		KIR	iP	20 06 38.6 C			M = 4.5 (UPP,KIR).			
				micr sec						
			P	Z' 0.7 1.1	"	6	UPP	Mx	18 41	
			Mx	Z 4.8 17					micr sec	
		Kuril Islands (h = N).					Mx	Z	3.6 19	
		m = 6.8, M = 5.6 (UPP,KIR).					KIR	Mx	18 44	
"	4	UPP	iP	00 48 13.9					micr sec	
			i	00 48 24.2			Mx	Z	5.5 19	
		Kuril Islands (h = N).					Mid-Indian Ridge (h = 20 km).			
							M = 6.0 (UPP,KIR).			
"	4	UPP	eP	23 35 09	"	7	UPP	iP	05 10 24.1	
			iSKS	23 45 38				i	05 12 49.0	
				micr sec			Northern Iran (h = N).			
			Mx	Z 2.3 19						
		KIR	Mx	24 22	"	7	UPP	iP	05 12 48.7	
				micr sec			Romania (h = 140 km).			
			Mx	Z 2.4 16	"	8	UPP	iP	03 04 24.4 C	
		Mariana Islands (h = 60 km).						i	03 04 50.1	
		M = 5.6 (UPP,KIR).							micr sec	
"	5	UPP	iP	13 18 52.5				P	Z' 0.2 0.6	
		Jordan-Syria region (h = 10 km).					KIR	iP	03 04 09.6 C	
"	5	UPP	iPKP	14 46 11.1					micr sec	
		South of Fiji Islands (h = 150 km).						P	Z' 0.3 0.7	
"	6	UPP	iSg1	06 51 56.5			Southern Xinjiang, China.			
		UME	iSg1	06 52 11.2			m = 6.3 (UPP,KIR).			
		UDD	iPg1	06 49 56.0			Probable underground explosion.			
			iSg1	06 50 56.9	"	8	UPP	iP	05 31 34.8	
		DEL	iSg1	06 52 25.8			North Atlantic Ocean (h = 10 km).			
		MYV	iPn	06 49 33.0	"	8	UPP	eP	05 51 00	
			iSg1	06 50 41.0			North Atlantic Ocean (h = 15 km).			
		Off coast of southwestern Norway,								
		62.6°N, 5.4°E.				"	8	UPP	iP	06 00 23.8
		Origin time = 06 48 30.					North Atlantic Ocean (h = 15 km).			
		M <sub>L</sub> (UPP) = 3.0 (0.15) 3.				"	8	UPP	iP	06 03 49.6
		By combination with Finnish and							micr sec	
		Norwegian station readings.					Mx	Z	2.1 22	
							(cont.)			



UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1996				1996			
June				June			
8	(cont.)			9	UPP	iP	23 35 05.7
	KIR	Mx	06 11				Eastern Xizang-India border reg.
			micr sec				(h = 80 km).
		Mx	Z 1.5 18	"	10	UPP	iPKP
	North Atlantic Ocean (h = 15 km).						01 23 30.6
	M = 4.5 (UPP,KIR).						i
							01 25 38
"	8	UPP	iP				i
			23 30 13.4				01 26 50
			i				micr sec
			23 30 19.3				Mx
			i				Z 2.8 23
			23 30 29.9			KIR	Mx
			iS				02 13
			23 39 08				micr sec
			iScS				Mx
			23 40 08				Z 3.5 22
			micr sec				Vanuatu Islands (h = 200 km).
		P	Z' 0.2 1.0				M = 5.9 (UPP,KIR).
		Mx	Z 13 21				M uncorrected for focal depth.
	KIR	iP	23 30 20.0	"	10	UPP	iP
			micr sec				04 14 33.4
		P	Z' 0.3 1.3				iS
		Mx	Z 1.5 18				04 23 44
	Andreanof Islands (h = N).						micr sec
	m = 6.1, M = 6.0 (UPP,KIR).						Mx
							Z 447 20
"	9	UPP	iP			KIR	Mx
			01 25 10.3				04 40
			iSKS				micr sec
			01 35 23				Mx
			iS				Z 230 19
			01 35 52				Andreanof Islands, Aleutian Islands
			micr sec				(h = N).
		Mx	Z 4.2 22				M = 7.5 (UPP,KIR).
	KIR	Mx	02 04	"	10	UPP	eP
			micr sec				04 27 55
		Mx	Z 5.9 22				Andreanof Islands, Aleutian Islands
	Mariana Islands (h = 150 km).						(h = N).
	M = 5.9 (UPP,KIR).			"	10	UPP	iP
	M uncorrected for focal depth.						04 32 56.0
"	9	UME	iSg1				Andreanof Islands, Aleutian Islands
			02 20 41.8				(h = N).
	Ångermanland, Sweden, 63.5°N,			"	10	UPP	eP
	20.0°E.						04 42 45
	Origin time = 02 20 31.						Fox Islands, Aleutian Islands (h = N).
	M <sub>L</sub> (UPP) = 1.6 1.			"	10	UPP	iP
	By combination with Finnish station						04 50 27.6
	readings.						Andreanof Islands, Aleutian Islands
							(h = N).
"	9	UPP	Mx	"	10	UPP	iP
			09 41				05 00 32.2
			micr sec				Andreanof Islands, Aleutian Islands
		Mx	Z 2.6 19				(h = N).
	KIR	Mx	09 43	"	10	UPP	iP
			micr sec				05 04 44.7
		Mx	Z 1.3 13				Andreanof Islands, Aleutian Islands
	Southwestern Ryukyu Islands						(h = N).
	(h = N).						
	M = 5.4 (UPP,KIR).						

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1996				1996			
Month	Day	Station	Time	Month	Day	Station	Time
June	10	UPP iP	05 40 15.3	June	10	UPP iP	17 55 14.8
		Andreanof Islands, Aleutian Islands (h = N).				Andreanof Islands, Aleutian Is. (h = N).	
"	10	UPP iP	05 45 51.0	"	11	UPP iP	10 51 07.6
		Andreanof Islands, Aleutian Islands (h = N).				iS	11 00 08
							micr sec
						P	Z' 0.3 1.0
						Mx	Z 3.4 17
"	10	UPP eP	09 52 07			KIR iP	10 50 14.6
			micr sec			iPcP	10 51 00.0
		Mx	Z 3.1 19				micr sec
		KIR Mx	10 29			P	Z' 0.2 1.0
			micr sec			Mx	Z 3.1 17
						Andreanof Islands, Aleutian Is. (h = N).	
						m = 6.2, M = 5.5 (UPP,KIR).	
						Andreanof Islands, Aleutian Is. (h = N).	
						M = 5.5 (UPP,KIR).	
"	10	UPP iP	12 07 01.9	"	11	UPP iP	10 59 18.5
		Andreanof Islands, Aleutian Is. (h = N).				Andreanof Islands, Aleutian Is. (h = N).	
"	10	UPP eP	15 35 57	"	11	UPP eP	11 08 24.
		i	15 36 01.0			Andreanof Islands, Aleutian Is. (h = N).	
		iS	15 45 00				
			micr sec				
		Mx	Z 252 21	"	11	UPP iP	11 11 46.2
		KIR Mx	16 01				micr sec
			micr sec			P	Z' 0.1 1.1
		Mx	Z 147 20			Andreanof Islands, Aleutian Is. (h = N).	
		Andreanof Islands, Aleutian Is. (h = 25 km).					
		M = 7.2 (UPP,KIR).					
"	10	UPP iP	15 47 31.4	"	11	UPP iP	13 14 03.6
		Andreanof Islands, Aleutian Is. (h = N).					micr sec
						P	Z' 0.1 0.8
						Andreanof Islands, Aleutian Is. (h = N).	
"	10	UPP iSn	17 22 09.0	"	11	UPP iP	16 49 34.9
		iSg1	17 23 31.5			Andreanof Islands, Aleutian Is. (h = N).	
		KIR iPn	17 19 48.5				
		iSn	17 22 06.2	"	11	UPP iP	17 03 42.2
		i	17 22 21.3			Andreanof Islands, Aleutian Is. (h = N).	
		UME iPn	17 19 31.7				
		iSn	17 21 40.6				
		iSg1	17 22 46.5				
		UDD iSn	17 22 49.7	"	11	UPP iP	18 35 41.7
		Northwestern Russia, 59.9°N, 43.2°E.				iPP	18 39 12.3
		Origin time = 17 16 52.				iSKS	18 46 08
		M <sub>L</sub> (UPP) = 4.0 1.					
		By combination with Finnish station readings.					

(cont.)

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1996				1996			
June				June			
11	(cont.)			14	UPP	iP	15 17 26.8
		micr	sec			ipP	15 17 35.0
		P	Z' 0.7 1.5			iPP	15 20 52.0
		Mx	Z 55 15			iSKS	15 27 51
	KIR	iP	18 35 22.0			iS	15 28 04
			micr sec				micr sec
		P	Z' 0.5 1.3			P	Z' 0.1 1.0
		Mx	Z 61 15			pP	Z' 0.2 1.0
	Samar, Philippine Islands (h = N).					Mx	Z 9.0 19
	m = 6.7, M = 7.0 (UPP,KIR).				KIR	iP	15 17 07.7
"	11	UPP	iP 18 46 59.3			ipP	15 17 15.6
		Samar, Philippine Islands (h = N).					micr sec
"	12	UPP	iP 02 27 46.8			P	Z' 0.8 2.0
			i 02 28 10.8			Mx	Z 5.3 13
			micr sec			Samar, Philippine Islands.	
		P	Z' 0.1 0.9			h = 25 km (UPP,KIR).	
		Mx	Z 2.2 18			m = 6.4, M = 6.1 (UPP,KIR).	
	KIR	Mx	02 58	"	14	UPP	iPKP 17 14 31.9
			micr sec			South of Fiji Islands (h = 400 km).	
		Mx	Z 1.5 18	"	14	UPP	iP 22 52 52.3
	Andreanof Islands, Aleutian Is.						i 22 54 16.8
	(h = N).					Kyrgyzstan (h = N).	
	M = 5.3 (UPP,KIR).			"	15	UPP	iP 04 47 08.5
"	12	UPP	iP 03 20 21.1			East of Kuril Islands (h = N).	
		Andreanof Islands, Aleutian Is.		"	16	UPP	iP 13 10 29.9
		(h = N).				Kuril Islands (h = N).	
"	12	UPP	iP 14 43 49.7	"	16	UPP	iP 19 42 14.7
			micr sec				micr sec
		P	Z' 0.1 0.9			P	Z' 0.1 0.9
		Mx	Z 1.8 22			Andreanof Islands, Aleutian Is.	
	KIR	Mx	15 13			(h = 30 km).	
			micr sec			m = 6.0 (UPP).	
		Mx	Z 1.4 17	"	17	UPP	iP 11 35 17.7
	Andreanof Islands, Aleutian Is.						i 11 35 20.1
	(h = N).						i 11 35 24.2
	M = 5.2 (UPP,KIR).						i 11 38 33.3
"	13	UPP	iP 00 44 22.2				iPP 11 39 50.7
		Andreanof Islands, Aleutian Is.					iSKS 11 45 07
		(h = N).					micr sec
"	14	UPP	iP 09 28 34.4				i Z' 0.3 1.0
		East of Kuril Islands (h = 60 km).			KIR	iP	11 35 05.8
							i 11 35 08.1
							micr sec
							i Z' 1.1 1.0

(cont.)



UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1996				1996			
June	22	(cont.)		June	23		
			micr sec			UPP iP	11 07 29.9
			P Z' 0.3 1.1				Off east coast of Kamchatka (h = N).
			Mx Z 27 17		"	UPP iP	11 51 33.6
			Off east coast of Kamchatka (h = N).				Off east coast of Kamchatka (h = N).
			m = 6.2, M = 6.5 (UPP,KIR).		"	UPP iP	12 55 42.0
"	22	UPP iP	16 54 37.3			iS	13 04 20
		i	16 56 49.4				micr sec
			micr sec			P Z' 0.1 0.8	
			P Z' 0.2 1.0			Mx Z 12 17	
			Mx Z 9.4 18			KIR iP	12 54 49.2
		KIR iP	16 53 29.5				micr sec
			micr sec			P Z' 0.3 0.8	
			P Z' 0.6 1.0			Mx Z 8.3 16	
			Mx Z 8.1 19				Off east coast of Kamchatka (h = N).
			Laptev Sea (h = 10 km).				m = 6.1, M = 6.0 (UPP,KIR).
			m = 6.1, M = 5.5 (UPP,KIR).	"	23	UPP iP	12 57 54.4
"	22	UPP eP	22 58 35.6				Off east coast of Kamchatka (h = N).
			Kamchatka (h = N).	"	23	UPP iP	12 59 31.3
"	23	UPP iP	01 28 32.3				Off east coast of Kamchatka (h = N).
			micr sec	"	23	UPP iP	13 01 01.5
			P Z' 0.1 0.9				Near east coast of Kamchatka (h = N).
			Mx Z 4.0 16	"	23	UPP iP	13 15 19.9
		KIR iP	01 27 39.0				Off east coast of Kamchatka (h = N).
			micr sec	"	23	UPP eP	14 45 02
			P Z' 0.4 1.0				Off east coast of Kamchatka (h = N).
			Mx Z 3.1 16	"	23	UPP eP	15 01 28
			Off east coast of Kamchatka (h = N).				Off east coast of Kamchatka (h = N).
			m = 6.1, M = 5.6 (UPP,KIR).	"	23	UPP iP	15 09 06.6 C
"	23	UPP eP	01 31 57				micr sec
			Off east coast of Kamchatka (h = N).			P Z' 0.2 1.2	
"	23	UPP iP	01 38 56.4			KIR iP	15 08 14.2 C
			Off east coast of Kamchatka (h = N).				micr sec
"	23	UPP iP	01 58 19.2			P Z' 0.2 0.8	
			Off east coast of Kamchatka (h = N).				Off east coast of Kamchatka (h = N).
"	23	UPP iP	02 06 59.4				m = 6.1 (UPP).
			Off east coast of Kamchatka (h = N).	"	23	UPP iP	15 46 01.5
"	23	UPP iP	05 23 32.7				micr sec
			Kuril Islands (h = 50 km).			Mx Z 2.0 17	
"	23	UPP iP	06 53 37.4				(cont.)
			Off east coast of Kamchatka (h = N).				

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1996				1996					
June	23	(cont.)		June	24	(cont.)			
		KIR	Mx	16 15		KIR	iP	11 39 25.4	
				micr sec				micr sec	
			Mx	Z 2.6 21			P	Z' 0.2 1.0	
		Off east coast of Kamchatka (h = N).					Mx	Z 2.1 17	
		M = 5.3 (UPP,KIR).				Off east coast of Kamchatka (h = N).		m = 6.1, M = 5.3 (UPP,KIR).	
"	23	UPP	eP	15 50 50	"	24	UPP	iP	14 33 23.8
		Arabian Sea (h = 10 km).						micr sec	
"	23	UPP	eP	17 24 04				P	Z' 0.2 1.3
		Off east coast of Kamchatka (h = N).				KIR	iP	14 32 30.9	
"	23	UPP	iP	20 30 04.3 C				micr sec	
				micr sec				P	Z' 0.1 0.9
			P	Z' 0.2 1.1			Off east coast of Kamchatka (h = N).		
			Mx	Z 1.4 15			m = 5.9 (UPP).		
		KIR	iP	20 29 11.8 C	"	24	UPP	iP	22 27 44.1
				micr sec			Off east coast of Kamchatka (h = N).		
			P	Z' 0.3 1.0					
			Mx	Z 2.1 16	"	25	UPP	iPn	03 39 15.2
		Off east coast of Kamchatka (h = N).					i	03 40 48.8	
		m = 6.2, M = 5.3 (UPP,KIR).					iSg1	03 41 12.5	
"	23	KIR	iPn	21 01 13.2			KIR	iPn	03 39 46.8
			iSn	21 02 32.4				iSn	03 41 26.6
		UME	iPn	21 02 08.3				iSg1	03 42 26.2
		Greenland Sea (h = 10 km).				UME	iPn	03 39 26.8	
"	23	UPP	iP	22 43 44.0 C				iSn	03 40 52.5
				micr sec				iSg1	03 41 39.6
			P	Z' 0.1 1.1		DEL	iPn	03 39 18.0	
		KIR	iP	22 42 51.5			i	03 39 25.0	
				micr sec			iSn	03 40 37.7	
			P	Z' 0.2 1.0			iSg1	03 41 21.3	
		Off east coast of Kamchatka (h = N).				MYV	iPn	03 38 48.8	
		m = 6.0 (UPP).				Norwegian Sea, 61.6°N, 3.4°E.			
"	23	UPP	iP	23 46 39.7			Origin time = 03 37 30.		
		Off east coast of Kamchatka (h = N).				M <sub>L</sub> (UPP) = 3.7 (0.21) 4.			
"	24	UPP	iP	06 29 14.9			By combination with Finnish and Norwegian station readings.		
		Off east coast of Kamchatka (h = N).		"	25	UPP	eP	07 40 44	
"	24	UPP	iP	11 39 17.6 C			Nicobar Islands, India (h = 25 km).		
				micr sec	"	25	UPP	ePKP	20 27 51
			P	Z' 0.2 1.2			South of Fiji Islands (h = 600 km).		
			Mx	Z 2.0 17	"	25	UPP	iP	21 48 12.2
		(cont.)					Near east coast of Honshu (h = 45 km).		

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1996				1996					
June	26	UPP	iP	00 34 07.8	June	26	UPP	iP	17 36 17.1
				Samar, Philippine Islands (h = N).					Off east coast of Kamchatka (h = N).
"	26	UPP	iP	02 37 02.5	"	26	UPP	iP	18 18 25.2
			epP	02 37 13					Off east coast of Kamchatka (h = N).
				Off east coast Kamchatka (h = N).					
"	26	UPP	iP	02 40 26.4	"	26	UPP	iP	18 32 19.8
				Off east coast Kamchatka (h = N).				ipP	18 32 27.5
"	26	UPP	iP	02 53 23.4	"	27	UPP	iP	21 34 29.9
				Off east coast of Kamchatka (h = N).					Off east coast of Kamchatka (h = N).
"	26	UPP	iP	03 33 23.6	"	28	UPP	iP	20 58 32.4
			epP	03 35 12					micr sec
			iS	03 42 47				P	Z' 0.1 1.0
				micr sec			KIR	iP	20 58 15.9
			P	Z' 0.4 0.7					micr sec
			Mx	Z 1.9 20				P	Z' 0.2 1.0
		KIR	iP	03 32 38.6					Mindanao, Philippine Islands
				micr sec					(h = 140 km).
			P	Z' 0.5 0.8					m = 6.0 (UPP,KIR).
			Mx	Z 2.4 20	"	29	UPP	eP	01 14 16
				Bonin Islands region (h = 470 km).					Southern Greece (h = 15 km).
				m = 6.0, M = 5.5 (UPP,KIR).	"	29	UPP	Mx	05 54
				M uncorrected for focal depth.					micr sec
"	26	UPP	iP	04 06 30.0 D				Mx	Z 3.1 19
				micr sec			KIR	Mx	05 51
			P	Z' 0.1 0.7					micr sec
		KIR	iP	04 06 01.0 D				Mx	Z 3.0 19
				micr sec					Near north coast of Irian Jaya
			P	Z' 0.2 0.8					(h = N).
				Bonin Islands region (h = 470 km).					M = 5.8 (UPP,KIR).
				m = 5.7 (UPP,KIR).	"	29	UPP	eP	08 20 03
"	26	UPP	iP	04 26 44.7					Turkey (h = N).
				Bonin Islands region (h = 490 km).	"	29	UPP	iP	10 36 48.7
"	26	UPP	iP	06 50 30.0					Qinghai, China (h = 80 km).
				Bonin Islands region (h = 490 km).	"	29	UPP	Mx	15 16
"	26	KIR	iSg1	13 31 40.5					micr sec
		UME	iSg1	13 31 43.0				Mx	Z 2.2 20
				West coast of Norway, 65.9°N,			KIR	Mx	15 13
				13.1°E.					micr sec
				Origin time = 13 29 50.				Mx	Z 3.3 20
				M <sub>L</sub> (UPP) = 2.6 1.					Near north coast of Irian Jaya (h = N).
				By combination with Finnish and					M = 5.7 (UPP,KIR).
				Norwegian station readings.					

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1996

June	30	UPP	iP	01 03 03.3					
				Andreanof Islands, Aleutian Is. (h = N).					
"	30	UPP	iP	06 07 24.9					
				Off east coast of Kamchatka (h = N).					
"	30	UPP	iP	07 59 53.5	C				
				micr	sec				
			Mx	Z	1.1	17			
		KIR	Mx		08 31				
				micr	sec				
			Mx	Z	1.1	15			
				Off east coast of Kamchatka (h = N). M = 5.1 (UPP,KIR).					
"	30	UPP	iP	09 49 55.5					
				Off east coast of Kamchatka (h = N).					
"	30	UPP	iP	10 03 44.3					
				Mariana Islands region (h = 270 km).					
"	30	UPP	iP	11 43 09.9					
			i	11 43 25.3					
			iS	11 51 50					
				micr	sec				
			P	Z'	0.2	0.9			
			Mx	Z	30	17			
		KIR	iP	11 42 18.0					
			i	11 42 19.8					
				micr	sec				
			P	Z'	0.2	1.2			
			i	Z'	0.3	0.8			
			Mx	Z	23	14			
				Off east coast of Kamchatka (h = N). m = 6.3, M = 6.4 (UPP,KIR).					
"	30	UPP	iP	23 52 49.5					
				micr	sec				
			Mx	Z	1.6	17			
		KIR	Mx		24 17				
				micr	sec				
			Mx	Z	3.0	19			
				Komandorsky Islands region (h = N). M = 5.3 (UPP,KIR).					

March 4, 1998

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SEISMOLOGICAL BULLETIN  
 UPPSALA, KIRUNA, UMEÅ, UDDEHOLM

DELARY and MYRVIKEN

Uppsala	(UPP)	59°51.5'N,	17°37.6'E;	h = 14 m
Kiruna	(KIR)	67°50.4'N,	20°25.0'E;	h = 390 m
Umeå	(UME)	63°48.9'N,	20°14.2'E;	h = 16 m
Uddeholm	(UDD)	60°05.4'N,	13°36.4'E;	h = 240 m
Delary	(DEL)	56°28.2'N,	13°52.2'E;	h = 150 m
Myrviken	(MYV)	62°56.5'N,	14°20.8'E;	h = 345 m

JULY 1 - 31, 1996

1996									
Jul.	1	UPP	iP	05 04 56	1996				
			iS	05 15 38	Jul.	3	UPP	Mx	17 47
				micr sec					micr sec
			Mx	Z 1.6 17				Mx	Z 3.3 20
			Samar, Philippine Islands (h = N).				KIR	Mx	17 47
									micr sec
"	2	UPP	iP	07 15 33.3				Mx	Z 2.1 21
			Yunnan, China (h = N).					Near coast of northern Chile (h = N).	
								M = 5.7 (UPP,KIR).	
"	2	UPP	iP	13 27 14.2	"	3	UPP	iP	19 10 32.3
"	2	UPP	iPKP	16 22 25.4				Near east coast of Honshu, Japan	
			Southwestern Atlantic Ocean (h = N).					(h = 50 km).	
"	3	UPP	iP	06 54 12.3 D	"	4	UPP	iP	11 49 23.3
			iS	07 01 54				i	11 54 06.6
				micr sec					micr sec
			P	Z' 0.2 0.8				P	Z' 0.1 0.9
			Mx	Z 3.6 12			KIR	iP	11 48 27.4
		KIR	iP	06 54 08.9 D					micr sec
				micr sec				P	Z' 0.2 1.1
			P	Z' 0.1 0.9				Southern Alaska (h = 55 km).	
			Mx	Z 4.8 17				m = 6.0 (UPP,KIR).	
			Xizang (h = N).		"	4	UPP	eP	15 55 07
			m = 6.0, M = 5.6 (UPP,KIR).						
"	3	UPP	iP	10 20 01.7	"	4	UPP	Mx	16 52
			Xizang (h = N).						micr sec
								Mx	Z 2.7 20

(cont.)

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1996				1996			
Jul.	4	(cont.) KIR Mx	16 50 micr sec	Jul.	6	UPP iP	11 34 25.4
		Mx Z 2.7	18			Off east coast of Kamchatka (h = N).	
		Western Caroline Islands (h = N). M = 5.7 (UPP,KIR).		"	6	UPP Mx	12 58 micr sec
"	4	UPP iP	18 20 32.0			Mx Z 1.2	18
		Xizang (h = N).				KIR Mx	12 55 micr sec
"	4	UPP eP	20 28 08			Mx Z 1.4	17
						Mariana Islands region (h = N). M = 5.4 (UPP,KIR).	
"	4	UPP iP	22 02 08.4	"	6	UPP iP	21 48 45.7
		Greece (h = 35 km).				iSKS	21 58 44
"	5	UPP iP	01 23 43.9			iS	21 58 56 micr sec
		Andreanof Islands, Aleutian Is. (h = N).				Mx Z 1.8	19
"	5	UPP iP	08 25 54.4			KIR Mx	22 25 micr sec
		Off east coast of Kamchatka (h = N).				Mx Z 3.0	19
"	5	UPP iP	12 03 31.1			Mariana Islands region (h = 240 km). M = 5.5 (UPP,KIR). M uncorrected for focal depth.	
		Off east coast of Kamchatka (h = N).		"	7	UPP iP	10 59 50.3
"	5	UPP Mx	19 44 micr sec			iS	11 07 48 micr sec
		Mx Z 1.5	26			Mx Z 6.2	12
		KIR Mx	19 45 micr sec			KIR Mx	11 24 micr sec
		Mx Z 1.9	20			Mx Z 5.9	14
		Solomon Islands (h = 80 km). M = 5.6 (UPP,KIR). M uncorrected for focal depth.				Kamchatka (h = 10 km). M = 5.8 (UPP,KIR).	
"	6	UPP Mx	06 05 micr sec	"	7	UPP iP	18 12 13.7
		Mx Z 1.2	18			Central Mediterranean Sea (h = N).	
		KIR Mx	06 03 micr sec	"	8	UPP iP	11 51 09.9
		Mx Z 1.4	17			Myanmar (h = 100 km).	
		Halmahera, Indonesia (h = N). M = 5.4 (UPP,KIR).		"	9	UPP iP	12 12 21.8
"	6	UPP iP	10 47 52.4			Sea of Okhotsk (h = 520 km).	
		Off east coast of Kamchatka (h = N).		"	9	UPP iPKP1	13 23 50.3
						South of Kermadec Islands (h = 200 km).	

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1996				1996					
Jul.	10	UPP	iP	00 15 16.8	Jul.	15	UPP	eP	00 17 13
			i	00 15 20.8			KIR	iP	00 18 44.2
		Andreanof Islands, Aleutian Is. (h = N).					UME	iP	00 18 00.7
"	10	UPP	iP	05 59 16.9			UDD	iP	00 17 06.7
			iS	06 08 02			MYV	iP	00 17 38.0
				micr sec			France (h = 5 km).		
			Mx	Z 2.3 19	"	15	UPP	iPKP2	02 28 41.6
		KIR	Mx	06 25			South of Kermadec Islands (h = N).		
				micr sec	"	15	UPP	iP	04 10 05.6
			Mx	Z 3.3 20			Off east coast of Kamchatka (h = N).		
		Fox Islands, Aleutian Islands (h = N). M = 5.4 (UPP,KIR).			"	15	UPP	iPKP1	08 13 49.5
"	10	UPP	iP	06 35 27.8				iPKP2	08 13 57.0
		Sea of Okhotsk (h = 510 km).					South of Kermadec Islands (h = N).		
"	12	UPP	iP	09 01 02.9	"	15	UPP	iP	13 00 14.5 C
		Kuril Islands (h = N).					Hindu Kush region, Afghanistan (h = 220 km).		
"	12	UPP	iPKP	13 49 27.0	"	15	UPP	iP	17 04 04.2
		South of Fiji Islands (h = 570 km).						iSKS	17 14 14
"	12	UPP	iP	20 01 42.4			Mariana Islands (h = 180 km).		
			iS	20 09 07	"	15	UPP	iP	18 40 29.3
				micr sec	"	15	UPP	iP	21 36 26.7
			Mx	Z 1.0 19				iS	21 47 03
		KIR	Mx	20 32					micr sec
				micr sec				Mx	Z 41 21
			Mx	Z 1.6 15			KIR	Mx	22 14
		Arabian Sea (h = 10 km). M = 5.0 (UPP,KIR).							micr sec
"	13	UPP	eP	15 21 29				Mx	Z 25 20
			i	15 21 29.5			Guerrero, Mexico (h = 20 km). M = 6.7 (UPP,KIR).		
		Andreanof Islands, Aleutian Is. (h = N).			"	16	UPP	iPKP	03 01 30.3
"	13	UPP	iP	19 18 06.3					micr sec
		East of Lake Baykal, Russia (h = 10 km).						PKP	Z' 0.1 0.8
"	13	UPP	iP	19 20 54.5			South of Fiji Islands (h = 650 km).		
		East of Lake Baykal, Russia (h = 10 km).			"	16	UPP	iP	03 58 41.3
"	13	UPP	iP	19 20 54.5				i	03 58 43.8
		East of Lake Baykal, Russia (h = 10 km).						iS	04 07 03
"	14	UPP	iP	17 18 15.3					micr sec
		Andreanof Islands, Aleutian Is. (h = N).						i	Z' 0.5 1.4
							Mx	Z 67 20	
							(cont.)		

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1996			1996				
Jul.	16	(cont.) KIR iP i i Mx Komandorsky Islands region (h = N). m = 6.4, M = 6.7 (UPP,KIR).	03 57 44.7 03 57 49.4 micr sec Z' 0.5 1.3 Z 60 21	Jul.	18	UPP iP eS Mx Z 6.2 16 Off east coast of Kamchatka (h = N).	23 05 38.8 C 23 14 16 micr sec
"	16	UPP iP Komandorsky Islands region (h = N).	04 57 37.8	"	19	UPP iPKP South of Fiji Islands (h = 500 km).	02 09 24.5
"	16	UPP iP Southeast of Shikoku, Japan (h = N).	05 51 13.3	"	19	UPP iP Andreanof Islands, Aleutian Is. (h = N).	08 39 55.4
"	16	UPP iP Komandorsky Islands region (h = N).	06 22 40.6	"	20	UPP iP iS Mx Z 99 11 KIR Mx micr sec Mx Z 43 12 Dodecanese Islands (h = N). M = 6.4 (UPP,KIR).	00 05 58.2 00 10 20 micr sec 00 21 micr sec
"	16	UPP iP iSKS iS micr sec Mx Z 17 25 KIR Mx micr sec Mx Z 19 19 Minahassa Peninsula, Sulawesi (h = N). M = 6.4 (UPP,KIR).	10 20 58.8 10 31 30 10 32 08 micr sec Z 17 25 11 07 micr sec Z 19 19	"	20	UPP iP iS Dodecanese Islands (h = N).	04 02 16.4 04 06 40
"	16	UPP iP Southeast of Shikoku, Japan (h = N).	05 51 13.3	"	20	UPP i(PKP) Fiji Islands region (h = 360 km).	07 59 51.0
"	17	UPP iP Ryukyu Islands (h = 25 km).	00 17 24.2	"	20	UPP iP iS micr sec Mx Z 2.0 11 KIR Mx micr sec Mx Z 1.0 12 Dodecanese Islands (h = N). M = 4.7 (UPP,KIR).	09 15 04.8 09 19 28 micr sec 09 30 micr sec
"	17	UPP iP Andreanof Islands, Aleutian Is. (h = N).	02 42 31.9	"	17	UPP iP Taiwan region (h = 45 km).	09 38 44.3
"	17	UPP iP Hokkaido, Japan region (h = 230 km).	18 36 33	"	17	UPP eP Hokkaido, Japan region (h = 230 km).	18 36 33
"	17	UPP iP Off east coast of Kamchatka (h = N).	22 56 31.4	"	17	UPP iP Mindoro, Philippine Islands (h = 110 km).	22 56 31.4
"	18	UPP iP Taiwan region (h = 45 km).	09 38 44.3	"	20	UPP iP Dodecanese Islands (h = N).	11 53 10.1
"	18	UPP iP Mindoro, Philippine Islands (h = 110 km).	22 56 31.4	"	21	UPP iP Andreanof Islands, Aleutian Is. (h = N).	06 13 55.6



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1996				1996				
Jul.	23	UPP	Mx	15 34	Jul.	24	iP	06 00 28.0
				micr sec				Dodecanese Islands (h = N).
			Mx	Z 1.4 12				
		KIR	Mx	15 38	"	24	UPP	iP 06 22 35.4
				micr sec				Andreasof Islands, Aleutian Is.
			Mx	Z 0.6 10				(h = N).
				Dodecanese Islands (h = N).	"	24	UPP	iP 08 08 05.6
				M = 4.6 (UPP,KIR).				micr sec
"	23	UPP	iP	22 07 27.2			Mx	Z 0.9 12
				micr sec			KIR	Mx 08 23
			Mx	Z 1.4 12				micr sec
		KIR	Mx	22 22			Mx	Z 0.4 8
				micr sec				Dodecanese Islands (h = N).
			Mx	Z 0.6 10				M = 4.4 (UPP,KIR).
				Dodecanese Islands (h = 45 km).	"	24	UPP	iP 13 48 45.6
				M = 4.6 (UPP,KIR).				Xizang (h = N).
"	23	UPP	iPKP	23 29 06.6	"	24	UPP	iP 17 31 31.4
				South of Fiji Islands (h = N).			i	17 31 34.5
"	24	UPP	iP	00 48 36.2			iPP	17 33 03.8
				micr sec			iS	17 37 36
			Mx	Z 2.4 13				micr sec
		KIR	Mx	01 03			Mx	Z 1.7 16
				micr sec			KIR	Mx 17 50
			Mx	Z 1.0 14				micr sec
				Dodecanese Islands (h = N).			Mx	Z 1.3 9
				M = 4.7 (UPP,KIR).				Hindu Kush region, Afghanistan
"	24	UPP	iP	01 01 14.3				(h = N).
				Near s. coast of Honshu, Japan	"	24	UPP	iP 20 27 23.9
				(h = 330 km).				micr sec
"	24	UPP	iP	02 03 19.9			Mx	Z 2.5 17
				Luzon, Philippine Islands (h = N).			KIR	Mx 20 57
"	24	UPP	iP	03 32 43.6				micr sec
				micr sec			Mx	Z 2.1 17
			Mx	Z 1.1 16				Off coast of northern California
		KIR	Mx	03 55				(h = 10 km).
				micr sec				M = 5.4 (UPP,KIR).
			Mx	Z 0.9 13	"	24	UPP	iPKP 21 19 49.9
				Pakistan (h = 10 km).				Tonga Islands (h = N).
				M = 4.8 (UPP,KIR).	"	24	UPP	iP 21 54 41.4
"	24	UPP	iPKP	04 29 00.0			i	21 54 44.9
				micr sec				Yunnan, China (h = N).
			PKP	Z' 0.1 0.9				
				South of Fiji Islands (h = N).				

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1996				1996					
Jul.	25	UPP	iP	00 04 18.0	Jul.	25	UPP	iP	20 52 02.7
				Andreanof Islands, Aleutian Is. (h = 55 km).					Caspian Sea (h = N).
"	25	UPP	iP	01 32 18.9	"	26	UPP	iPKP	13 19 02.0
									South of Fiji Islands (h = N).
"	25	UPP	iP	03 23 08.0 C	"	26	UPP	iP	13 19 29.7 C
			i	03 23 19.2				i	13 19 33.6
				micr sec				eS	13 28 00
			i	Z' 0.1 1.1					micr sec
				Off east coast of Kamchatka (h = 40 km).				P	Z' 0.1 0.8
								Mx	Z 1.4 17
"	25	UPP	iP	03 41 22.7 C			KIR	iP	13 19 22.1 C
			i	03 41 29.5					micr sec
			i	03 41 34.4				P	Z' 0.1 1.0
			iS	03 50 00				Mx	Z 1.1 13
				micr sec					Myanmar (h = N).
			P	Z' 0.3 1.2					m = 5.9, M = 5.1 (UPP,KIR).
			Mx	Z 2.0 17	"	26	UPP	iP	18 26 07.8
		KIR	iP	03 40 29.7 C					Andreanof Islands, Aleutian Is. (h = N).
			i	03 40 37.0					
			i	03 40 40.8	"	26	UPP	iP	19 00 22.6
				micr sec				i	19 00 28.2
			P	Z' 0.3 1.3				iS	19 04 08
			Mx	Z 1.5 13					micr sec
				Off east coast of Kamchatka h = 40 km (UPP,KIR). m = 6.2, M = 5.3 (UPP,KIR). Multiple P, on average 7.1 and 4.4 s apart. The third onset, when interpreted as pP, gives a focal depth of 40 km.				P	Z' 0.1 0.6
								i	Z' 0.1 0.7
								Mx	Z 5.0 13
"	25	UPP	iP	08 03 36.8 C			KIR	iP	19 01 41.1
				Off east coast of Kamchatka (h = N).					micr sec
								P	Z' 0.1 0.9
								Mx	Z 2.2 9
									Greece-Albania border region (h = 10 km). m = 5.4, M = 5.0 (UPP,KIR).
"	25	UPP	iP	09 41 21.8 C	"	27	UPP	iP	08 27 20.4
				Rat Islands, Aleutian Islands (h = N).					Bay of Bengal (h = N).
"	25	UPP	Mx	14 14	"	27	UPP	iP	08 55 49.5 C
				micr sec					micr sec
			Mx	Z 1.3 19				P	Z' 0.1 1.0
		KIR	Mx	14 14			KIR	iP	08 55 45.4 C
				micr sec					micr sec
			Mx	Z 1.5 18				P	Z' 0.1 0.5
				Southern east Pacific Rise (h = 10 km). M = 5.7 (UPP,KIR).					Myanmar (h = 110 km). m = 5.9 (UPP,KIR).

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1996				1996					
Jul.	27	UPP	iP	10 15 41.2	Jul.	29	UPP	iP	20 35 23.6
				Greece (h = 25 km).					
"	27	UPP	iPKP1	11 59 39.1	"	29	UPP	iP	21 25 04.5
			i	11 59 45.1					
				micr sec					
			i	Z' 0.1 0.8		30	UPP	iP	04 36 48.3
			Mx	Z 1.9 27					Northern Xinjiang, China (h = N).
		KIR	Mx	11 41		30	UPP	iP	17 50 54.8
				micr sec				iS	18 01 10
			Mx	Z 1.7 22					micr sec
				Kermadec Islands region (h = 50 km).				P	Z' 0.7 1.0
				M = 5.7 (UPP,KIR).				Mx	Z 6.3 18
									Luzon, Philippine Islands (h = N).
"	27	UPP	iPKP1	16 09 40.3	"	30	UPP	iP	21 50 52.4
				Kermadec Islands region (h = N).					Greece (h = 10 km).
"	27	UPP	iP	18 47 45.3	"	31	UPP	ePn	00 17 04
									Poland (h = 10 km).
"	27	UPP	iPKP1	22 44 32.3	"	31	UPP	iP	05 59 19.1
				Kermadec Islands region					Central Mid-Atlantic Ridge
				(h = 100 km).					(h = 10 km).
"	28	UPP	iP	01 07 26.6	"	31	UPP	iP	08 09 54.7
				Dodecanese Islands (h = N).				iS	08 17 38
"	28	UPP	iP	07 18 40.8					micr sec
				Myanmar-India border region				P	Z' 0.1 1.3
				(h = 55 km).				Mx	Z 1.6 11
									Xizang (h = N).
"	28	UPP	Mx	11 45	"	31	UPP	iP	08 12 20.4
				micr sec					Xizang (h = N).
			Mx	Z 2.2 20					
		KIR	Mx	11 41					
				micr sec					
			Mx	Z 2.1 17					
				Minihassa Peninsula, Sulawesi					
				(h = N).					
				M = 5.6 (UPP,KIR).					
"	28	UPP	iP	17 05 02.4	"	31	UPP	iP	22 36 44.1
				Kuril Islands (h = 80 km).					
"	29	UPP	iP	01 57 22.2					
				Southern Xinjiang, China.					
				Probable underground explosion.					
"	29	UPP	iP	20 32 31.8					
			i	20 32 34.2					
				Taiwan region (h = 70 km).					

March 23, 1998

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SEISMOLOGICAL BULLETIN

UPPSALA, KIRUNA, UMEÅ, UDDEHOLM

DELARY and MYRVIKEN

Uppsala	(UPP)	59°51.5'N,	17°37.6'E;	h = 14 m
Kiruna	(KIR)	67°50.4'N,	20°25.0'E;	h = 390 m
Umeå	(UME)	63°48.9'N,	20°14.2'E;	h = 16 m
Uddeholm	(UDD)	60°05.4'N,	13°36.4'E;	h = 240 m
Delary	(DEL)	56°28.2'N,	13°52.2'E;	h = 150 m
Myrviken	(MYV)	62°56.5'N,	14°20.8'E;	h = 345 m

AUGUST 1 - 31, 1996

1996					1996				
Aug.	1	UPP	iP	03 44 37.0	Aug.	2	UPP	iPKP	13 14 26.8
				micr sec					micr sec
			Mx	Z 2.0 9				Mx	Z 89 23
			Mongolia (h = N).				KIR	Mx	14 06
									micr sec
"	1	UPP	iP	04 21 39.1				Mx	Z 51 21
			Minahassa Peninsula, Sulawesi (h = 150 km).				Solomon Islands (h = N). M = 7.2 (UPP,KIR).		
"	1	UPP	iP	11 39 05.3	"	2	UPP	iPKP	16 43 13.2
			Kamchatka (h = N).				South of Fiji Islands (h = N).		
"	1	UPP	iPKP1	22 15 17.7	"	3	UPP	Mx	04 53
			iPKP2	22 15 23.2					micr sec
			Kermadec Islands (h = 430 km).					Mx	Z 1.6 17
"	1	UPP	iP	22 24 09.7			KIR	iPn	04 47 38.4
			ipP	22 24 21.5					micr sec
			Off east coast of Kamchatka (h = N).					Mx	Z 1.5 13
"	2	UPP	iP	03 46 42.4			UME	iP	04 48 29.0
			Near s. coast of Honshu, Japan (h = 390 km).				UDD	iP	04 49 04.1
							Greenland Sea, 73.5°N, 6.0°E. Origin time = 04 45 53. By combination with Finnish station readings.		
"	2	UPP	iP	11 44 27.4	"	3	KIR	iPn	05 26 17.4
				micr sec			Greenland Sea, 73.2°N, 6.2°E. Origin time = 05 24 34. By combination with Finnish station readings.		
			Mx	Z 0.7 10					
		KIR	Mx	12 08					
				micr sec					
			Mx	Z 0.9 11					
			Pakistan (h = N). M = 4.9 (UPP,KIR).						

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1996				1996											
Aug.	4	UPP	iP	17 46	12.1			Aug.	5	(cont.)					
			ipP	17 46	18.7						Off coast of Ecuador (h = N).				
				Southern Greece (h = N).							M = 5.8 (UPP,KIR).				
"	4	UPP	iPKP	20 18	40.0			"	5	UPP	iP	22 51	14.9		
			iPKP1	20 18	41.5								micr	sec	
				Kermadec Islands region (h = 500 km).								P	Z'	0.4	1.5
										KIR	iP	22 52	32.3		
													micr	sec	
"	5	UPP	iP	00 03	42.4						P	Z'	0.2	1.5	
			ipP	00 03	50.3								Greece-Albania border region (h = 10 km).		
													m = 5.6 (UPP,KIR).		
			P	Z'	0.1	0.9									
				Off east coast of Honshu (h = N).											
"	5	UPP	iP	00 35	35.6			"	5	UPP	iPKP	22 56	38.0		
				Near east coast of Kamchatka (h = N).								i	22 56	41.1	
												iSKP1	22 59	31.9	
														micr	sec
												Mx	Z	15	21
"	5	UPP	iPKP	02 28	13.2					KIR	Mx	23 56			
			i	02 30	40.8									micr	sec
			Mx	Z	14	25									
		KIR	Mx	03 15											
			Mx	Z	9.9	24									
				Tonga Islands (h = 40 km).											
				M = 6.4 (UPP,KIR).											
"	5	UPP	iP	04 05	04.7			"	5	UPP	iP	23 32	55.4		
			i	04 05	18.9										
				East of North Island, N.Z. (h = N).											
"	5	UPP	iPg1	13 30	03.5			"	6	UPP	iPKP	00 20	30.5		
			iSg1	13 30	06.1										
				South of Fiji Islands region (h = 210 km).											
"	5	UPP	iP	15 05	05.2			"	6	UPP	iP	00 47	23.5		
				Kamchatka (h = 140 km).											
"	5	UPP	iP	20 43	30.0			"	6	UME	iPg1	02 11	59.6	C	
			P	Z'	0.1	0.9									
				South of Honshu (h = 410 km).											
"	5	UPP	iP	21 52	42.7			"	6	UPP	iP	03 14	45.7		
			Mx	Z	3.0	20									
		KIR	Mx	22 37											
			Mx	Z	4.7	20									
				Myanmar (h = 120 km).											
				(cont.)											
								"	6	UPP	iPKP	10 32	37.1		
				Tonga Islands (h = N).											

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1996				1996			
Aug.	6	UPP iP	20 34 54.0	Aug.	9	UPP iP	08 20 26.4
		Southern Iran (h = N).					micr sec
"	7	UPP iP	09 08 02.4			P Z' 0.1 0.7	
		Near east coast of Kamchatka (h = 100 km).				Mindoro, Philippine Islands (h = 130 km).	
"	8	UPP iP	15 06 26.0	"	9	UPP iP	13 10 26.8
		Pakistan (h = N).		"	9	UPP iP	15 45 32.8
"	8	UPP iP	17 21 43.1			Mx Z 2.5 23	
			micr sec			KIR Mx 16 14	
		P Z' 0.2 1.0				micr sec	
		Mx Z 0.9 17				Mx Z 2.1 16	
		KIR iP	17 20 49.3			Kuril Islands (h = N).	
			micr sec			M = 5.3 (UPP,KIR).	
		P Z' 0.3 1.0		"	9	UPP ePKP	16 25 38
		Mx Z 1.9 20				Kermadec Islands, New Zealand (h = 500 km).	
		Fox Islands, Aleutian Islands (h = 45 km).		"	9	UPP iP	18 55 21.5
		m = 6.2, M = 5.1 (UPP,KIR).				Bering Strait (h = 10 km).	
"	8	UPP iP	23 25 25.8	"	10	UPP iP	04 13 15.9
		iSKS 23 35 48		"	10	UPP iP	06 34 55.0
		iS 23 36 08				iS 06 44 36	
		micr sec				micr sec	
		P Z' 0.1 1.0				P Z' 0.2 1.5	
		Mx Z 3.6 16				Mx Z 7.7 18	
		KIR iP	23 25 06.8			KIR Mx 07 10	
			micr sec			micr sec	
		P Z' 0.2 1.2				Mx Z 2.2 13	
		Mx Z 2.2 14				Taiwan region (h = 45 km).	
		Samar, Philippine Islands (h = N).				M = 5.8 (UPP,KIR).	
		m = 6.1, M = 5.7 (UPP,KIR).		"	10	UPP iPKP	11 38 57.3
"	9	UPP iP	00 32 10.7			i 11 49 50	
		Hokkaido, Japan region (h = N).				micr sec	
"	9	UPP iP	00 39 51.9			Mx Z 3.4 21	
			micr sec			KIR Mx 12 24	
		Mx Z 1.5 16				micr sec	
		KIR Mx 01 24				Mx Z 4.5 23	
			micr sec			New Britain region (h = N).	
		Mx Z 1.6 15				M = 5.9 (UPP,KIR).	
		Southern Sumatera, Indonesia (h = N).		"	10	UPP iPKP	15 26 24.5
		M = 5.5 (UPP,KIR).				Fiji Islands region (h = 500 km).	
"	9	UPP iP	06 33 13.7				
		Rat Islands, Aleutian Islands (h = N).					





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1996				1996			
Aug.	16	UPP iP	09 15 34.4	Aug.	19	UPP iP	01 10 21.8
			Kuril Islands (h = N).			ipP	01 10 25.7
							micr sec
"	16	UPP iP	13 02 41.9			Mx Z	1.2 10
							Aegean Sea (h = N).
			ipP				
			13 02 48.3				
			Carlsbergs Ridge (h = 10 km).				
"	16	UPP iP	13 07 51.0	"	19	UPP iP	04 30 14.2 C
						iS	04 39 11
			i			i	04 39 26
			13 07 57.6			iP'P'	04 58 33.4
			Carlsberg Ridge (h = 10 km).				micr sec
"	16	UPP ePKP	19 43 49			P	Z' 0.2 0.9
			Kermadec Islands region (h = N).			Mx	Z 3.8 19
"	16	UPP iPKP	19 59 16.3			KIR iP	04 29 21.5
			South of Fiji Islands (h = N).				micr sec
"	17	UPP eP	01 46 00			P	Z' 0.1 0.8
							Andeanof Islands (h = N).
			micr sec				m = 6.0 (UPP,KIR).
			Mx Z	"	19	UPP iP	20 27 17.7
			0.7 13				
			Jan Mayen Island region (h = 10 km).				
"	17	UPP eP	04 41 14	"	19	UPP eP	22 08 17
			Kuril Islands (h = N).				
"	17	UPP iP	06 50 11.8 D	"	20	UPP iP	00 15 16.2
						iS	00 18 46
			micr sec				micr sec
			P Z'			P	Z' 0.5 2.0
			0.1 0.6			Mx	Z 1.6 17
			Kuril Islands (h = N).				Svalbard region (h = 10 km).
"	17	UPP iP	12 11 43.8	"	20	UPP iP	01 31 22.9
			Near east coast of Honshu, Japan			iS	01 35 04
			(h = N).				micr sec
"	17	UPP eP	15 57 54			Mx	Z 2.5 11
			Adriatic Sea (h = N).				Greece-Albania border region
"	18	UPP iP	07 27 35.6				(h = 10 km).
				"	20	UPP iP	12 13 35.3
			eS				Andeanof Islands, Aleutian Islands
			07 36 32				(h = N).
			micr sec				
			Mx Z	"	20	UPP Mx	18 05
			3.4 18				micr sec
			Central Mid-Atlantic Ridge				
			(h = 10 km).			Mx	Z 2.4 25
"	18	UPP iP	09 46 25.9			KIR Mx	18 07
			Sea of Okhotsk (h = 400 km).				micr sec
"	18	UPP iP	15 07 30.2			Mx	Z 1.4 20
			Dodecanese Islands (h = N).				South of Panama (h = 10 km).
							M = 5.4 (UPP,KIR).

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1996				1996			
Aug.	21	UPP	iP	14 51 32.4	Aug.	27	(cont.)
				Kuril Islands (h = 160 km).			KIR Mx 03 01
							micr sec
"	21	UPP	iP	22 15 04.1			Mx Z 4.5 23
				North Atlantic Ocean (h = 10 km).			Near coast of Guatemala (h = N).
							M = 5.6 (UPP,KIR).
"	22	UPP	iP	01 50 58.3	"	27	UPP iP
				North Atlantic Ocean (h = 10 km).			i 06 42 25.9
"	22	UPP	iP	02 05 49.0			i 06 42 26.4
				Greece (h = 40 km).			i 06 45 10.6
							South of Fiji Islands (h = 580 km).
"	22	UPP	iP	05 48 42.7	"	27	UPP Mx
				Banda Sea (h = 600 km).			11 58
							micr sec
"	22	UPP	iP	08 06 01.8			Mx Z 2.0 19
				Qinghai, China (h = N).			KIR Mx 12 01
							Mx Z 2.3 18
"	22	UPP	iP	14 53 07.6			Mid Indian Ridge (h = 10 km).
				East of Kuril Islands (h = 60 km).			M = 5.7 (UPP,KIR).
"	22	UPP	iP	23 08 12.8	"	27	UPP iP
				Mariana Islands (h = 220 km).			i 14 47 57.9
							i 14 48 05.0
							micr sec
"	23	UPP	iP	05 42 16.9			i Z' 0.1 1.0
				Baufort Sea (h = 10 km).			Mx Z 1.8 22
							KIR Mx 15 20
"	23	UPP	iP	17 07 10.9			micr sec
			ipP	17 07 19.7			Mx Z 1.4 17
				Andreanof Islands, Aleutian Is.			Ascension Island region (h = 10 km).
				(h = N).			M = 5.3 (UPP,KIR).
"	23	UPP	Mx	22 56	"	28	UPP iP
				micr sec			12 27 04.4
				Mx Z 2.0 21			ipP 12 27 09.1
		KIR	Mx	22 54			Southern Greece (h = N).
				micr sec			
				Mx Z 4.2 21	"	28	UPP iP
				Central east Pacific Rise (h = 10 km).			17 29 04.0
				M = 5.8 (UPP,KIR).			ipP 17 29 15.3
"	24	UPP	iPKP1	09 10 56.0			iSKS 17 39 28
				Kermadec Island, New Zealand			iS 17 39 41
				(h = 60 km).			micr sec
							P Z' 0.1 1.0
"	25	UPP	iP	04 53 17.7			Mx Z 3.6 19
							KIR iP 17 28 59.0
							micr sec
"	27	UPP	eP	02 25 26			P Z' 0.1 1.0
			eS	02 35 56			Mx Z 3.8 17
				micr sec			Costa Rica (h = N).
				Mx Z 2.1 22			m = 6.0, M = 5.8 (UPP,KIR).
				(cont.)			

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1996

Aug.	29	KIR	iPn	06 23	57.3		
		UME	iP	06 24	46.1		
			iS	06 26	37.1		
		Greenland Sea (h = 10 km).					
"	30	UPP	iP	02 23	32.1		
		Chagos Archipelago region (h = 10 km).					
"	30	UPP	iP	09 55	53.4		
				micr	sec		
			P	Z'	0.1	1.0	
		Bonin Islands region (h = 420 km).					
"	30	UPP	Mx	12 19			
				micr	sec		
			Mx	Z	1.8	19	
		KIR	Mx	12 21			
			Mx	Z	1.4	20	
		Central Mid-Atlantic Ridge (h = 10 km).					
"	30	UPP	iP	21 23	07.7		
				micr	sec		
			P	Z'	0.1	1.0	
		KIR	iP	21 23	17.8		
				micr	sec		
			P	Z'	0.1	1.0	
		Sea of Okhotsk (h = 580 km). m = 5.9 (UPP,KIR).					
"	30	UPP	iP	23 11	26.9		
		North of Ascension Island (h = 10 km).					
"	31	UPP	iP	12 56	11.6		
				micr	sec		
			P	Z'	0.1	1.0	
		South of Honshu, Japan (h = 390 km).					
"	31	UPP	iPKP	16 17	25.6		
			iSKP1	16 20	37.9		
		Vanuatu Islands (h = 130 km).					
"	31	UPP	iP	20 58	18.8		
			ipP	20 58	29.5		
				micr	sec		
			P	Z'	0.1	1.0	
		Andreanof Islands, Aleutian Is. (h = 45 km).					

May 27, 1998

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SEISMOLOGICAL BULLETIN

UPPSALA, KIRUNA, UMEÅ, UDDEHOLM

DELARY and MYRVIKEN

Uppsala	(UPP)	59°51.5'N,	17°37.6'E;	h = 14 m
Kiruna	(KIR)	67°50.4'N,	20°25.0'E;	h = 390 m
Umeå	(UME)	63°48.9'N,	20°14.2'E;	h = 16 m
Uddeholm	(UDD)	60°05.4'N,	13°36.4'E;	h = 240 m
Delary	(DEL)	56°28.2'N,	13°52.2'E;	h = 150 m
Myrviken	(MYV)	62°56.5'N,	14°20.8'E;	h = 345 m

SEPTEMBER 1 - 30, 1996

1996				1996			
Sep.	1	UPP iPKP	07 04 23.4 D	Sep.	3	UPP iP	10 08 38.8
			Santa Cruz Islands (h = 190 km).				Near east coast of Honshu, Japan (h = N).
"	1	UPP iPKP	18 08 16.5	"	3	UPP iP	12 11 56.1
			South of Fiji Islands (h = 530 km).				
"	1	UPP iP	21 19 58.2	"	3	UPP iP	17 14 28.1
			Greece-Albania border region (h = 10 km).				Gulf of California (h = 10 km).
"	2	UPP iP	02 04 57.8	"	4	UPP iP	03 49 28.3 C
			Afghanistan-Tajikistan bord reg. (h = 110 km).			i	03 49 43.0
							micr sec
"	2	UPP iP	07 54 07.9			P	Z' 0.2 0.9
			Alaska Peninsula (h = 60 km).			KIR iP	03 48 57.4
							micr sec
						P	Z' 0.1 0.8
							Ryukyu Islands (h = 50 km). m = 5.9 (UPP,KIR).
"	2	UPP iP	07 59 03.1	"	4	UPP iP	04 19 26.2
			Kuril Islands (h = N).			iS	04 23 46
"	2	UPP iP	12 49 52.2				micr sec
			Hindu Kush region, Afghanistan (h = 220 km).			P	Z' 0.2 1.5
						Mx	Z 3.9 11
"	2	UPP iP	20 55 16.1			KIR Mx	04 36
			South of Mariana Islands (h = N).				micr sec
						Mx	Z 4.2 11
"	3	UPP i(PKP)	00 30 12.7				Northern Algeria (h = 10 km). M = 5.2 (UPP,KIR).
			Solomon Islands (h = N).				

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1996				1996					
Sep.	4	UPP	iPKP2	10 58 17.2	Sep.	5	UPP	iP	20 48 10.4 D
								iS	20 51 16
									micr sec
								P	Z' 0.9 1.1
"	4	UPP	iP	15 30 30.5				Mx	Z 51 15
							KIR	eP	20 49 34
									micr sec
"	4	UPP	iP	17 22 54.9				P	Z' 0.5 1.0
								Mx	Z 34 13
									Adriatic Sea (h = 10 km).
									m = 6.0, M = 5.9 (UPP,KIR).
"	4	UPP	iP	18 27 55.4	"	5	UPP	iP	21 47 34.1
			i	18 28 01.5				i	21 47 37.3
			iS	18 37 42					micr sec
				micr sec				P	Z' 0.1 1.0
			Mx	Z 2.8 23				i	Z' 0.2 1.2
		KIR	Mx	19 03					Adriatic Sea (h = 10 km).
				micr sec					
			Mx	Z 4.8 17	"	5	UPP	iP	23 54 03.7 C
				South of Honshu, Japan (h = N).				i	23 54 11.8
				M = 5.6 (UPP,KIR).				iS	24 03 54
"	4	UPP	iP	19 19 37.1 C					micr sec
				micr sec				P	Z' 0.4 1.0
			P	Z' 0.2 1.1				i	Z' 6.1 1.5
			Mx	Z 9.4 18				Mx	Z 102 13
		KIR	iP	19 19 32.4 C			KIR	Mx	24 31
				micr sec					micr sec
			P	Z' 0.5 1.6				Mx	Z 45 12
			Mx	Z 9.9 17					Taiwan region (h = 20 km).
				Costa Rica (h = N).					M = 7.1 (UPP,KIR).
				m = 6.5, M = 6.2 (UPP,KIR).	"	6	UPP	iP	00 38 00.5
"	5	UPP	iPP	08 35 28.9					Taiwan region (h = 20 km).
			i	08 35 33.1	"	6	UPP	iP	01 37 45.2
				micr sec					Taiwan region (h = 20 km).
			i	Z' 0.1 1.3	"	6	UPP	iP	02 16 53.7
			Mx	Z 30 22				i	02 16 56.5
		KIR	Mx	09 25					micr sec
				micr sec				P	Z' 0.1 0.8
			Mx	Z 46 19				i	Z' 0.1 1.0
				Easter Island region (h = 10 km).					Spain (h = 10 km).
				M = 7.0 (UPP,KIR).	"	6	UPP	iP	02 32 28.8
"	5	UPP	iP	13 51 45.8					micr sec
"	5	UPP	iP	14 30 40.9				P	Z' 0.1 1.0
									Taiwan region (h = 20 km).

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1996				1996			
Sep.	6	UPP iP	08 36 36.7	Sept.	8	UPP iP	12 03 52.1
		Taiwan region (h = 20 km).					
	6	UPP iP	11 46 30.1	"	8	UPP iP	17 42 00.0
		i	11 46 34.4			Myanmar (h = N).	
			micr sec	"	8	UPP iP	19 44 23.5
		i	Z' 0.3 1.3			Taiwan region (h = 20 km).	
		Mx	Z 1.7 13	"	8	UPP iP	20 25 50.4
		KIR iP	11 46 08.1			Taiwan region (h = 20 km).	
			micr sec	"	9	UPP iPKP	00 39 17.7
		P	Z' 0.2 1.4				micr sec
		Mx	Z 1.4 12			PKP	Z' 0.2 1.1
		Taiwan region (h = 20 km).				Mx	Z 3.0 22
		m = 6.1, M = 5.5 (UPP,KIR).				KIR Mx	01 27
"	6	UPP iPKP	12 58 26.9				micr se
		Solomon Islands (h = N).				Mx	Z 1.3 19
"	6	UPP iPKP	17 22 33.1			Near coast of central Chile	
			micr sec			(h = 40 km).	
		Mx	Z 4.2 22			M = 5.7 (UPP,KIR).	
		KIR Mx	18 14	"	9	UPP iPKP	03 41 09.1
			micr sec			Southern Pacific Ocean (h = 10 km).	
		Mx	Z 5.7 20	"	9	UPP eP	04 45 56
		Solomon Islands (h = N).					micr sec
		M = 6.0 (UPP,KIR).				P	Z' 0.1 1.2
"	7	UPP iP	00 39 52.1			Mx	Z 5.1 12
		Taiwan region (h = 20 km).				KIR Mx	05 21
"	7	UPP iP	05 49 28.8				micr sec
		i	05 49 34.9			Mx	Z 5.2 15
			micr sec			Kyushu, Japan (h = N).	
		i	Z' 0.1 1.0			M = 5.9 (UPP,KIR).	
		Adriatic Sea (h = 10 km).		"	9	UPP iPKP	09 50 25.4
"	7	UPP iPKP1	10 51 47.3			Fiji Islands region (h = 630 km).	
		South of Kermadec Islands (h = N).		"	9	UPP iP	12 34 03.6
"	7	UPP iPKP1	11 43 22.6			Kuril Islands (h = 45 km).	
		South of Kermadec Islands (h = N).		"	9	UPP iP	16 01 07.5
"	8	UPP iP	01 59 47.7			i	16 01 14.3
		Kuril Islands (h = N).				iS	16 04 18
"	8	UPP iP	08 26 14.7				micr sec
		Northern Molucca Sea (h = N).				P	Z' 0.1 1.1
"	8	UPP iP	11 18 13.3			i	Z' 0.1 1.0
		Andreanof Islands, Aleutian Is.				Mx	Z 3.4 13
		(h = 60 km).				(cont.)	



UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1996				1996					
Sep.	14	UPP	iPKP	13 29 46.9	Sep.	17	UPP	iP	13 49 23.4
			i	13 30 06.4				iS	13 52 30
				micr sec					micr sec
			PKP	Z' 0.1 1.0				P	Z' 0.6 1.2
			Mx	Z 10 24				Mx	Z 21 13
		KIR	Mx	14 15			KIR	iP	13 50 47.9
				micr sec					micr sec
			Mx	Z 5.2 21				P	Z' 0.2 1.1
								Mx	Z 12 11
				Santa Cruz Islands (h = 70 km).					Adriatic Sea (h = 10 km).
				M = 6.2 (UPP,KIR).					m = 5.7, M = 5.5 (UPP,KIR).
				M uncorrected for focal depth.					
"	14	UPP	iP	14 08 34.8	"	17	UPP	iP	23 20 23.9
				Kyushu, Japan (h = N).				i	23 20 33.6
									micr sec
"	14	UPP	iP	14 44 08.3				Mx	Z 2.0 19
				Bonin Islands region (h = 490 km).					Central Mid-Atlantic Ridge
									(h = 10 km).
"	15	UPP	iPKP	07 32 06.5	"	17	UPP	iP	23 58 08.5
				micr sec				i	23 58 32.9
			PKP	Z' 0.1 0.8					micr sec
				South of Fiji Islands (h = 100 km).				P	Z' 0.2 1.0
"	15	UPP	iPKP	09 44 14.1			KIR	iP	23 57 23.3
				micr sec					micr sec
			PKP	Z' 0.1 1.0				P	Z' 0.1 1.0
				South of Fiji Islands (h = 490 km).					Kuril Islands (h = N).
									m = 6.0 (UPP,KIR).
"	15	UPP	iP	17 32 14.3	"	18	UPP	iP	00 24 10.0
				Luzon, Philippine Islands (h = N).					micr sec
"	16	UPP	Mx	06 55				P	Z' 0.1 0.9
				micr sec					Kuril Islands (h = 55 km).
			Mx	Z 6.1 18	"	18	UPP	iPKP	02 27 54.0
		KIR	Mx	06 54					South of Fiji Islands (h = 550 km).
				micr sec					
			Mx	Z 3.1 17	"	18	UPP	iP	03 37 35.8
				Bismarck Sea (h = N).					South of Honshu, Japan (h = N).
				M = 6.0 (UPP,KIR).					
"	16	UPP	iP	12 28 59.7	"	18	UPP	iP	05 42 04.1
				micr sec					micr sec
			P	Z' 0.1 0.9				Mx	Z 1.7 18
		KIR	iP	12 28 40.2					Mindanao, Philippine Islands (h = N).
				micr sec	"	18	UPP	ipP	10 00 11.3
			P	Z' 0.1 0.9					Eastern Siberia, Russia (h = N).
				Philippine Islands (h = N).	"	18	UPP	iP	14 44 57.1
				m = 6.0 (UPP,KIR).					Southern Iran (h = 10 km).
"	17	UPP	iP	02 02 49.3					
				Greece (h = 10 km).					

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1996				1996					
Sep.	18	UPP	iP	16 09 39.8	Sep.	20	UPP	iP	12 37 44.4
"	18	UPP	iP	17 46 42.4				iSKS	12 48 14
			i	17 47 30.1				iS	12 48 40
			iPP	17 50 08.5					micr sec
				micr sec			KIR	Mx	Z 8.7 19
			P	Z' 0.1 1.0					micr sec
				Nicaragua (h = 190 km).				Mx	Z 9.0 20
"	18	UPP	iP	23 59 31.7					Mindanao, Philippine Islands (h = N).
				Ethiopia (h = 10 km).					M = 6.1 (UPP,KIR).
"	19	UPP	iP	01 13 56.9	"	20	UPP	iP	12 47 06.5
									Mindanao, Philippine Islands (h = N).
"	19	UPP	iP	04 57 24.0	"	20	UPP	iP	17 29 51.7
				South of Honshu, Japan (h = 20 km).					Mindanao, Philippine Islands (h = N).
"	19	UPP	iPKP	21 24 03.6 D	"	20	UPP	iP	18 36 32.7
				micr sec					Mindanao, Philippine Islands (h = N).
			PKP	Z' 0.1 0.9	"	20	UPP	Mx	18 42
				South of Fiji Islands (h = 490 km).					micr sec
"	20	UPP	iP	00 16 18.7 C				Mx	Z 2.4 22
			iSKS	00 26 58			KIR	Mx	18 46
				micr sec					micr sec
			P	Z' 0.1 0.8				Mx	Z 4.1 22
			Mx	Z 22 20					Southwest of Africa (h = 10 km).
		KIR	iP	00 16 00.7 C					M = 5.8 (UPP,KIR).
				micr sec	"	20	UPP	iP	19 04 10.7
			P	Z' 0.2 0.9					Mindanao, Philippine Islands (h = N).
			Mx	Z 13 21	"	20	UPP	iP	19 06 46.4
				Mindanao, Philippine Islands (h = N).					Mindanao, Philippine Islands (h = N).
				m = 6.3, M = 6.4 (UPP,KIR).					
"	20	UPP	iP	04 23 29.0	"	20	UPP	iP	19 37 58.7
			iSKS	04 34 06					micr sec
				micr sec				Mx	Z 3.6 19
			P	Z' 0.1 0.8			KIR	Mx	20 21
			Mx	Z 28 19					micr sec
		KIR	iP	04 23 10.2				Mx	Z 2.7 18
				micr sec					Mindanao, Philippine Islands (h = N).
			P	Z' 0.1 0.9					m = 5.8 (UPP,KIR).
			Mx	Z 11 19	"	20	UPP	iP	19 46 16.5
				Mindanao, Philippine Islands (h = N).					Mindanao, Philippine Islands (h = N).
				m = 6.1, M = 6.4 (UPP,KIR).	"	20	UPP	iP	19 52 00.5
"	20	UPP	iP	04 37 56.2					Mindanao, Philippine Islands (h = N).
				Mindanao, Philippine Islands (h = N).					

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1996				1996					
Sep.	20	UPP	iP	20 29 21.4	Sep.	21	UPP	iP	17 08 59.6
				Mindanao, Philippine Islands (h = N).					Taiwan region (h = N).
"	20	UPP	iP	21 38 22.4	"	21	UPP	eP	17 16 19
			iSKS	21 48 50					Northern Sumatera, Indonesia (h = N).
			iS	21 49 16					
				micr sec	"	21	UPP	iP	18 30 25.4
			Mx	Z 4.0 21				iSKS	18 40 57
		KIR	Mx	22 24					micr sec
				micr sec				Mx	Z 1.9 18
			Mx	Z 2.9 14			KIR	Mx	19 13
				Mindanao, Philippine Islands (h = N).					micr sec
				M = 5.8 (UPP,KIR).				Mx	Z 1.7 17
"	20	UPP	eP	21 51 20					Mindanao, Philippine Islands (h = N).
				Mindanao, Philippine Islands (h = N).					M = 5.5 (UPP,KIR).
"	21	UPP	iP	00 53 30.6	"	21	UPP	iP	22 07 21.1
				Mindanao, Philippine Islands (h = N).					Mindanao, Philippine Islands (h = N).
"	21	UPP	Mx	02 31	"	22	UPP	iP	02 40 46.2
				micr sec				i	02 40 56.9
			Mx	Z 2.4 20				ipP	02 41 01.8
		KIR	Mx	02 31					micr sec
				micr sec				P	Z' 0.2 1.2
			Mx	Z 1.7 19			KIR	iP	02 40 09.5
				Eastern New Guinea reg., P.N.G.				ipP	02 40 24.6
				(h = 10 km).					micr sec
				M = 5.7 (UPP,KIR).				P	Z 0.1 1.0
"	21	UPP	iP	03 20 51.3					Near east coast of Honshu, Japan.
				Mindanao, Philippine Islands (h = N).					h = 55 km (UPP,KIR).
"	21	UPP	iP	03 29 50.4					m = 5.8 (UPP,KIR).
				Mindanao, Philippine Islands (h = N).	"	22	UPP	eP	10 56 28
									micr sec
								Mx	Z 1.1 17
									Mindanao, Philippine Islands (h = N).
"	21	UPP	iP	03 40 58.0	"	22	UPP	iP	14 18 29.1
				Mindanao, Philippine Islands (h = N).					Mindanao, Philippine Islands (h = N).
"	21	UPP	iP	03 50 59.5	"	22	UPP	iP	20 07 48.4
				Mindanao, Philippine Islands (h = N).				i	20 08 39.3
"	21	UPP	iP	10 49 06.4				iS	20 18 06
				Mindanao, Philippine Islands (h = N).					Guatemala (h = 200 km).
"	21	UPP	iP	11 47 21.8	"	22	UPP	iP	23 34 42.2
				Mindanao, Philippine Islands (h = N).					Taiwan region (h = N).
"	21	UPP	iP	15 53 18.3					
				Taiwan region (h = N).					

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1996				1996					
Sep.	24	UPP	ipP	00 39 45.8	Sep.	24	UPP	iP	21 13 16.6
			i	00 40 08.0					Yunnan, China (h = N).
				micr sec					
			Mx	Z 6.1 19	"	25	UPP	iP	02 51 56.5
		KIR	Mx	01 18					Yunnan, China (h = N).
				micr sec					
			Mx	Z 2.7 15	"	25	UPP	iP	07 33 20.9
									Mindanao, Philippine Islands (h = N).
				Southwestern Ryukyu Islands	"	25	UPP	eP	09 39 45
				(h = 25 km).				iSKS	09 50 19
				M = 5.7 (UPP,KIR).				iS	09 50 40
"	24	UPP	iP	03 38 16.9					micr sec
				India-Bangladesh border region				P	Z' 0.1 0.9
				(h = 35 km).				Mx	Z 3.0 16
"	24	UPP	iP	11 53 24.6 D			KIR	iP	09 39 28.3
			iS	12 02 30					micr sec
				micr sec				P	Z' 0.1 1.0
			P	Z' 0.3 1.0				Mx	Z 1.9 20
		KIR	iP	11 53 34.3 D					Mindanao, Philippine Islands (h = N).
				micr sec					m = 6.1, M = 5.6 (UPP,KIR).
			P	Z' 0.7 0.9	"	25	UPP	iPKP2	10 55 05.6
				Leeward Islands (h = 150 km).					micr sec
				m = 6.3 (UPP,KIR).				PKP2	Z' 0.1 0.9
"	24	UPP	i(PKP)	13 35 41.7					North Island, New Zealand
				Fiji Islands region (h = 220 km).					(h = 230 km).
"	24	UPP	iP	19 35 16.6	"	25	UPP	iP	11 48 55.0
				micr sec					Mindoro, Philippine Islands
			P	Z' 0.2 1.1					(h = 100 km).
			Mx	Z 2.4 12	"	25	UPP	iP	11 56 33.7
				Yunnan, China (h = N).					Mindanao, Philippine Islands (h = N).
"	24	UPP	iPg1	19 43 11.6	"	25	UPP	eP	14 08 46
			iSg1	19 43 56.3					Volcano Islands region (h = N).
		KIR	iSg1	19 44 45.5	"	25	UPP	iP	17 51 02.5
		UME	i	19 42 46.5				i	17 51 08.5
			iPg1	19 42 47.7					Sikkin, India (h = N).
			i	19 43 16.0	"	25	UPP	Mx	22 19
			iSg1	19 43 17.9					micr sec
		MYV	iPg1	19 42 16.4				Mx	Z 3.4 21
			iSg1	19 42 25.0			KIR	Mx	22 19
				Jämtland, Sweden 63.3°N, 15.2°E.					micr sec
				Origin time = 19 42 08.				Mx	Z 3.0 19
				M <sub>L</sub> (UPP) = 3.0 (0.11) 3.					South of Jawa, Indonesia (h = N).
				Felt.					M = 5.8 (UPP,KIR).
				By combination with Finnish station					
				readings.					



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1996				1996					
Sep.	26	UPP	iP	03 58 27.4	Sep.	29	UPP	iP	10 52 19.0
				micr sec				iS	10 55 36
			P	Z' 0.1 1.1					micr sec
				Mindanao, Philippine Islands (h = N).				P	Z' 1.2 2.2
"	26	UPP	iP	12 36 20.0				Mx	Z 8.1 20
				Greece-Albania border region			KIR	iP	10 51 58.2
				(h = 10 km).					micr sec
"	26	UPP	iP	20 33 26.2				P	Z' 0.4 1.6
								Mx	Z 11 16
"	27	UPP	iP	00 07 52.5					Iceland (h = 10 km).
				Mindanao, Philippine Islands (h = N).	"	29	UPP	iP	12 34 32.2
"	27	UPP	iPKP2	14 16 26.5					Mariana Islands (h = 100 km).
			i	14 16 32.7	"	30	UPP	iPKP1	05 36 32.3
				Kermadec Islands region				iPKP2	05 36 38.6
				(h = 500 km).					Kermadec Islands region
"	28	UPP	iP	05 48 25.8					(h = 400 km).
"	28	UPP	iP	11 08 11.8	"	30	UPP	iP	06 00 03.6
				Crete (h = N).					Near east coast of Kamchatka
"	28	UPP	iP	14 23 16.7					(h = 100 km).
			iPP	14 26 55.0	"	30	UPP	iP	11 38 50.8
			iS	14 33 44				i	11 38 55.1
				micr sec					micr sec
			P	Z' 0.2 1.2				P	Z' 0.1 0.8
			Mx	Z 4.6 18				Mx	Z 3.6 19
		KIR	iP	14 22 58.9			KIR	iP	11 38 03.0
				micr sec					micr sec
			P	Z' 0.1 1.0				P	Z' 0.2 0.8
			Mx	Z 4.2 13				Mx	Z 3.4 18
				Leyete, Philippine Islands					Kuril Islands (h = N).
				(h = 240 km).					m = 6.1, M = 5.5 (UPP,KIR).
				m = 5.8, M = 5.9 (UPP,KIR).	"	30	UPP	iP	19 03 02.9
				M uncorrected for focal depth.					micr sec
"	28	UPP	iP	17 17 43.3				P	Z' 0.2 1.0
			i	17 18 12.7				Mx	Z 3.1 17
				Off east coast of Kamchatka (h = N).			KIR	iP	19 02 15.2
"	29	UPP	iP	05 22 34.5					micr sec
				Mindanao, Philippine Islands (h = N).				P	Z' 0.2 0.9
									Kuril Islands (h = N).
									m = 6.2 (UPP,KIR).

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SEISMOLOGICAL BULLETIN

UPPSALA, KIRUNA, UMEÅ, UDDEHOLM

DELARY and MYRVIKEN

Uppsala	(UPP)	59°51.5'N,	17°37.6'E;	h = 14 m
Kiruna	(KIR)	67°50.4'N,	20°25.0'E;	h = 390 m
Umeå	(UME)	63°48.9'N,	20°14.2'E;	h = 16 m
Uddeholm	(UDD)	60°05.4'N,	13°36.4'E;	h = 240 m
Delary	(DEL)	56°28.2'N,	13°52.2'E;	h = 150 m
Myrviken	(MYV)	62°56.5'N,	14°20.8'E;	h = 345 m

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1996					1996				
Oct.	1	UPP	iP	00 36 39.3	Oct.	1	UPP	iP	16 00 02.9
				micr sec				ipP	16 00 06.6
			P	Z' 0.1 1.0				iPPP	16 03 17.1
		KIR	iP	00 35 51.3				iS	16 07 48
				micr sec					micr sec
			P	Z' 0.1 1.0				P	Z' 0.1 1.0
		Kuril Islands (h = 50 km).						Mx	Z 4.8 18
		m = 5.9 (UPP,KIR).					KIR	iP	16 00 36.0
									micr sec
"	1	UPP	iP	01 03 53.8				P	Z' 0.2 1.0
			i	01 04 05.1				Mx	Z 4.4 15
				micr sec			Arabian Sea (h = 10 km).		
			P	Z' 0.1 1.1			m = 6.0, M = 5.6 (UPP,KIR).		
		KIR	iP	01 03 00.7					
				micr sec	"	2	UPP	iP	10 00 52.1
			P	Z' 0.2 0.9				ipP	10 04 26
		South of Aleutian Islands						iS	10 11 32
		(h = 10 km).							micr sec
		m = 6.2 (UPP,KIR).						P	Z' 0.1 1.1
								Mx	Z 11 18
"	1	UPP	iP	11 12 26.4			KIR	iP	10 00 33.1
				micr sec					micr sec
			P	Z' 0.1 1.0				P	Z' 0.2 1.2
			Mx	Z 2.6 19				Mx	Z 7.0 16
		KIR	Mx	11 42			Samar, Philippine Islands (h = N).		
				micr sec			m = 6.2, M = 6.2 (UPP,KIR).		
			Mx	Z 1.9 20					
		Kuril Islands (h = N).			"	2	UPP	iP	11 35 48.7
		M = 5.3 (UPP,KIR).						ipP	11 38 21.6

(cont.)

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1996				1996				
Oct.	2	(cont.)		Oct.	6	UPP	iPKP1	05 43 07.6
		iS	11 44 48			i		05 43 14.9
			micr sec			West of Macquarie Island		
		P	Z' 0.5 0.7			(h = 10 km).		
		Mx	Z 6.7 24					
		KIR	iP	"	6	UPP	iP	20 24 08.4
			11 35 02.0			i		20 24 10.2
			micr sec			iS		20 33 10
		P	Z' 0.6 1.0					micr sec
		Mx	Z 3.5 24			P	Z' 0.4 1.2	
		Kuril Islands (h = N).				Mx	Z 8.9 17	
		m = 6.6, M = 5.6 (UPP,KIR).				KIR	iP	20 23 23.7
"	2	UPP	iP					micr sec
		Samar, Philippine Islands (h = N).				P	Z' 0.6 1.5	
			16 03 15.4			Mx	Z 6.8 15	
"	2	UPP	iP			Vancouver Island region (h = 10 km).		
			16 10 45.1			M = 5.9 (UPP,KIR).		
			micr sec					
		P	Z' 0.2 1.1					
		KIR	iP	"	7	UPP	iPKP	09 42 11.6
			16 09 51.6				iSKP1	09 44 58.9
			micr sec			South of Fiji Islands (h = 610 km).		
		P	Z' 0.1 1.0					
		Near east coast of Kamchatka						
		(h = N).		"	7	UPP	iPKP	18 42 51.4
		m = 6.0 (UPP,KIR).				Near coast of central Chile		
						(h = 20 km).		
"	2	UPP	iP					
		Bonin Islands region (h = 460 km).		"	7	UPP	iP	18 47 07.8
			17 38 36.0			i		18 47 11.9
"	2	UPP	iPKP			Vancouver Island region (h = 10 km).		
			22 10 59.4					
			iSKP1					
			22 13 40.5	"	7	UPP	iPKP	20 00 40.1
		Fiji Islands region (h = 690 km).				Kermadec Islands region		
"	3	UPP	iP			(h = 300 km).		
		Xizang (h = N).						
			01 38 39.5	"	8	UPP	eP	03 00 51
"	3	UPP	iP			Southern Greece (h = N).		
			14 43 51.9					
		Kuril Islands (h = N).		"	8	UPP	iP	08 02 18.6
"	3	UPP	iP			i		08 02 19.1
		Eastern Mediterranean Sea				i		08 02 50.8
		(h = 10 km).						micr sec
			17 38 07.0			P	Z' 0.1 0.6	
"	4	UPP	iP			Northwest of Kuril Islands		
		Hindu Kush region, Afghanistan				(h = 10 km).		
		(h = 190 km).		"	9	UPP	iP	07 23 23.7
"	5	UPP	iP			Vancouver Island region		
			07 50 22.0			(h = 10 km).		
		Caribbean Sea (h = 10 km).						

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1996				1996					
Oct.	9	UPP	iP	09 51 34.2	Oct.	9	UPP	iP	19 16 38.1
			i	09 51 46.5					Cyprus region (h = N).
				Southern Greece (h = N).					
"	9	UPP	iP	13 16 32.0 C	"	9	UPP	iP	20 04 10.6
			iS	13 21 19.7					Cyprus region (h = N).
				micr sec					
			P	Z' 9.1 1.5	"	9	UPP	iP	20 56 22.9
			Mx	Z 175 21				ipP	20 56 39.2
		KIR	Mx	13 33					micr sec
				micr sec				P	Z' 0.1 1.0
			Mx	Z 80 15					Luzon, Philippine Islands
				Cyprus region (h = N).					(h = 60 km).
				M = 6.5 (UPP,KIR).	"	10	UPP	iP	00 29 21.8
"	9	UPP	iP	14 05 50.5				i	00 29 24.5
			i	14 05 53.5					micr sec
				micr sec				i	Z' 0.1 0.9
				Z' 0.2 1.1			KIR	iP	00 30 21.2
		KIR	iP	14 06 52.7					micr sec
				micr sec				P	Z' 0.1 0.8
			P	Z' 0.2 0.8					Cyprus region (h = N).
				Cyprus region (h = N).					m = 5.7 (UPP,KIR).
				m = 5.9 (UPP,KIR).	"	10	UPP	iP	01 16 03.4 C
"	9	UPP	iP	14 25 18.7				i	01 16 06.4
			i	14 25 21.4					micr sec
				micr sec				i	Z' 0.2 0.9
				Z' 0.3 0.7			KIR	iP	01 17 03.9
		UME	iP	14 25 18.7					micr sec
				micr sec				P	Z' 0.3 0.8
			P	Z' 0.2 0.8					Cyprus region (h = N).
				Cyprus region (h = N).					m = 6.1 (UPP,KIR).
				m = 6.0 (UPP,KIR).	"	10	UPP	iP	05 00 25.9
"	9	UPP	iP	15 02 03.1					micr sec
				Cyprus region (h = N).				P	Z' 0.1 0.8
"	9	UPP	iP	15 15 22.9			KIR	iP	05 01 25.9
				Cyprus region (h = N).					micr sec
"	9	UPP	iP	16 28 18.7					Z' 0.1 0.8
				micr sec					Cyprus region (h = N):
			P	Z' 0.1 1.0					m = 5.7 (UPP,KIR).
		KIR	iP	16 29 19.8	"	10	UPP	iP	10 47 38.1
				micr sec					Southern Greece (h = N).
			P	Z' 0.2 0.8	"	10	UPP	iP	11 31 44.1
				Cyprus region (h = N).					Southern Greece (h = N).
				m = 5.8 (UPP,KIR).					

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1996				1996					
Oct.	10	UPP	iP	15 33 22.4	Oct.	13	(cont.)		
			ipP	15 33 30.0			KIR iP	21 05 50.6	
			i	15 33 38.6				micr sec	
			iS	15 43 34			P	Z' 0.2 1.0	
				micr sec				Off east coast of Kamchatka (h = N).	
			P	Z' 0.1 1.0				m = 6.2 (UPP,KIR).	
			Mx	Z 8.6 21					
		KIR	iP	15 33 23.0	"	14	UPP	iPKP	23 45 06.0
				micr sec				iPP	23 46 30
			P	Z' 0.3 1.0				iPKKP	23 55 30.7
			Mx	Z 7.2 17				iSS	24 02 58
								micr sec	
				Northern Sumatera (h = N).				PKP	Z' 0.1 1.4
				m = 6.0, M = 6.0 (UPP,KIR).				Mx	Z 20 21
"	11	UPP	iP	01 45 39.7			KIR	iPKP	23 44 54.3
			i	01 45 42.1				micr sec	
				Cyprus region (h = N).				PKP	Z' 0.1 1.4
"	11	UPP	iP	08 19 17.7				Mx	Z 27 19
				Cyprus region (h = N).					Solomon Islands (h = 25 km).
									M = 6.7 UPP,KIR).
"	12	UPP	iSg1	00 05 23.5	"	15	UPP	iP	00 33 39.7
		KIR	iPg1	00 02 22.6				micr sec	
			i	00 02 24.9				P	Z' 0.1 0.8
			iSg1	00 02 50.3			KIR	iP	00 32 54.0
		UME	iSg1	00 03 14.0				micr sec	
		UDD	iSg1	00 05 43.4				P	Z' 0.2 1.0
		MYV	iPn	00 04 03.8					Kuril Islands (h = N).
			iSg1	00 04 27.4					m = 6.0 (UPP,KIR).
				Northern Finland, 66.3°N, 24.2°E.	"	15	UPP	iP	08 15 13.6
				Origin time = 00 01 46.					Northern Sumatera (h = N).
				M <sub>L</sub> = 2.9 (0.19) 3.	"	15	UPP	iP	08 38 36.4
				Felt.					Cyprus region (h = N).
				By combination with Finnish and Norwegian station readings.					
"	12	UPP	iP	11 10 17.4	"	15	UPP	iP	09 59 41.8
				Cyprus region (h = N).				i	09 59 46.8
"	12	UPP	iP	11 47 45.6				iS	10 02 48
				Eastern Honshu, Japan (h = 100 km).				micr sec	
"	12	UPP	iP	17 56 10.0				P	Z' 0.3 1.5
				Cyprus region (h = N).				i	Z' 0.3 1.0
"	12	UPP	iP	21 06 43.4				Mx	Z 17 12
				micr sec			KIR	iP	10 01 12.1
			P	Z' 0.2 1.0				micr sec	
				(cont.)				P	Z' 0.3 1.4
								Mx	Z 4.2 11
									Northern Italy (h = 10 km).
									m = 5.4, M = 5.3 (UPP,KIR).

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1996				1996			
Oct.	15	UPP	eSg1	23 05 45.4	Oct.	18	(cont.)
		KIR	iPg1	23 02 14.1			KIR iP 16 55 15.0
			iSg1	23 02 32.7			Near s. coast of Honshu
		UME	iSg1	23 03 00.0			(h = 340 km).
		UDD	iSg1	23 06 02.7			m = 5.9 (UPP,KIR).
		MYV	iPg1	23 04 10.4	"	19	UPP iP 08 43 31.6
			iSg1	23 04 40.4			micr sec
		Norrbotten, Sweden, 66.9°N, 23.3°E.					P Z' 0.1 1.2
		Origin time = 23 01 48.					Mx Z 3.0 15
		M <sub>L</sub> (UPP) = 2.7 (0.05) 3.				KIR Mx 09 19	micr sec
		By combination with Finnish and Norwegian station readings.					Mx Z 1.8 12
"	17	UPP	iPKP	12 49 20.8			Kyushu, Japan (h = N).
				micr sec			M = 5.6 (UPP,KIR).
			PKP	Z' 0.1 0.7	"	19	UPP iP 14 12 34.6
		Kermadec Islands region					ipP 14 12 44.7
		(h = 300 km).					micr sec
"	17	UPP	iP	16 28 30.9			pP Z' 0.1 1.0
		Mindanao, Philippine Islands					Mx Z 5.0 15
		(h = 120 km).				KIR iP 14 12 02.0	
"	18	UPP	iP	09 33 57.5			ipP 14 12 12.2
			i	09 35 44.7			micr sec
		Southern Iran (h = N).					pP Z' 0.1 1.0
"	18	UPP	iP	11 02 01.1			Mx Z 2.7 12
			ipP	11 02 02.7			Kyushu, Japan (h = N).
			i	11 02 06.1			m = 5.8, M = 5.8 (UPP,KIR).
			iS	11 11 38	"	19	UPP iP 14 56 12.5
				micr sec			i 14 56 24.9
			pP	Z' 0.2 0.9			iS 15 05 40
			i	Z' 0.5 0.9			micr sec
			Mx	Z 67 23			P Z' 2.1 2.0
		KIR	iP	11 01 28.7			i Z' 1.3 1.5
			ipP	11 01 31.0			Mx Z 146 17
				micr sec			KIR iP 14 55 39.7
			pP	Z' 0.2 1.0			i 14 55 50.8
			Mx	Z 102 17			micr sec
		Kyushu, Japan (h = 10 km).					P Z' 2.4 3.2
		m = 6.5, M = 7.0 (UPP,KIR).					i Z' 2.2 2.5
"	18	UPP	iP	16 55 50.2 D			Mx Z 121 17
			i	16 55 56.5			Kyushu, Japan (h = 20 km).
			i	16 57 07.1			m = 6.8, M = 7.2 (UPP,KIR).
				micr sec	"	19	UPP iPKP 15 12 00.0
			P	Z' 0.1 0.7			iSKP1 15 14 49.9
		(cont.)					micr sec
							PKP Z' 0.5 0.8
							Fiji Islands region (h = 590 km).

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1996				1996				
Oct.	19	UPP	iP	15 48 15.7	Oct.	23	UPP iP	11 40 52.6
"	19	UPP	iP	15 55 37.0			Mindanao, Philippine Islands (h = N).	
"	19	UPP	iP	15 58 34.8	"	23	UPP iP	12 16 48.3
"	19	UPP	iP	18 57 34.0			P Z' 0.1 1.0	
"	19	UPP	iP	21 29 19.9			Kuril Islands (h = N).	
"	19	UPP	iP	21 29 31.5	"	24	UPP iP	03 24 05.1
				micr sec			i	03 24 14.2
		Mx	Z	3.8 16			Mx Z	2.2 12
		KIR	Mx	22 02			Southern Greece (h = N).	
				micr sec	"	24	UPP iP	03 31 32.0
		Mx	Z	5.0 18			Volcano Islands region (h = N).	
				Kyushu, Japan (h = N).	"	24	UPP iP	10 34 55.5
				M = 5.7 (UPP,KIR).			P Z' 0.1 1.0	
"	20	UPP	iP	15 04 02.0			Andreasof Island, Aleutian Islands	
"	20	UPP	ipP	15 04 04.3			(h = N).	
				micr sec	"	24	UPP iP	14 17 30.2
		P	Z'	0.1 1.0			iPKP1	14 17 35.8
				Adriatic Sea (h = N).			micr sec	
"	21	UPP	iP	03 29 14.4			PKP1 Z'	0.1 1.0
				Ethiopia (h = N).			Kermadec Islands region (h = N).	
"	21	UPP	iP	06 06 34.7	"	24	UPP iP	19 41 11.2
"	21	UPP	i	06 06 38.4			ipP	19 41 18.0
"	21	UPP	i	06 06 40.9			iS	19 48 40
				micr sec			micr sec	
		i	Z'	0.1 1.0			pP Z'	0.9 1.5
		KIR	iP	06 07 32.1			Mx Z	11 19
			i	06 07 38.5			KIR iP	19 41 09.2
				micr sec			micr sec	
		i	Z'	0.1 1.0			P Z'	0.5 1.0
				Cyprus region (h = N).			Mx Z	9.6 18
"	22	UPP	iP	06 53 10.2			Near n. coast of eastern Siberia	
				Southern Greece (h = N).			(h = 20 km).	
"	22	UPP	eP	22 24 43			m = 6.4, M = 5.8 (UPP,KIR).	
				micr sec	"	24	UPP iP	22 06 55.1
		Mx	Z	4.2 22			micr sec	
		KIR	Mx	22 43			P Z'	0.1 1.0
				micr sec			(cont.)	
		Mx	Z	1.5 18				
				Central Alaska (h = 5km).				
				M = 5.2 (UPP,KIR).				





UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1996					1996			
Oct.	31	(cont.)			Oct.	31	(cont.)	
			iSg1	13 01 23.0			Felt.	
		KIR	iSn	13 01 34.0			By combination with Finnish and	
			i	13 02 15.7			Norwegian station readings.	
			iSg1	13 02 32.5				
		UME	iSn	13 01 01.9				
			iSg1	13 02 45.2				
		MYV	iPn	12 58 59.6				
			iPg1	12 59 14.0				
			iSn	12 59 58.0				
			iSg1	13 00 20.0				
				Off coast of southwestern Norway, 61.7°N, 3.4°E.				
				Origin time = 12 57 41.				
				$M_L(\text{UPP}) = 4.4 (0.35) 3.$				
				Felt.				
				By combination with Finnish and Norwegian station readings.				
"	31	UPP	iP	17 48 22.5				
				micr sec				
			P	Z' 0.3 1.0				
		KIR	iP	17 47 36.4				
				micr sec				
			P	Z' 0.1 1.2				
				Kuril Islands (h = 60 km).				
				m = 6.0 (UPP,KIR).				
"	31	UPP	iP	18 55 41.5				
				Mindanao, Philippine Islands				
				(h = N).				
"	31	UPP	iPn	23 49 24.5				
			i	23 49 30.7				
			iPg1	23 49 47.0				
			iSn	23 50 49.5				
			iSg1	23 51 18.6				
		KIR	iSn	23 51 43.2				
			iSg1	23 52 28.8				
		UME	iPn	23 49 37.2				
			i	23 50 46.0				
			iSg1	23 51 41.9				
		MYV	iPn	23 48 56.0				
			iPg1	23 49 12.4				
			iSn	23 49 54.0				
			iSg1	23 50 15.0				
				Off coast of southwestern Norway, 61.7°N, 3.4°E.				
				Origin time = 23 47 37.				
				$M_L(\text{UPP}) = 4.4 (0.17) 3.$				
				(cont.)				
							June 26, 1998	
							Ronald Arvidsson	
							Conny Holmqvist	
							Ota Kulhánek	

SEISMOLOGICAL BULLETIN

UPPSALA, KIRUNA, UMEÅ, UDDEHOLM

DELARY and MYRVIKEN

Uppsala	(UPP)	59°51.5'N,	17°37.6'E;	h = 14 m
Kiruna	(KIR)	67°50.4'N,	20°25.0'E;	h = 390 m
Umeå	(UME)	63°48.9'N,	20°14.2'E;	h = 16 m
Uddeholm	(UDD)	60°05.4'N,	13°36.4'E;	h = 240 m
Delary	(DEL)	56°28.2'N,	13°52.2'E;	h = 150 m
Myrviken	(MYV)	62°56.5'N,	14°20.8'E;	h = 345 m

NOVEMBER 1-30, 1996

1996					1996				
Nov.	1	UPP	iP	20 44 11.0	Nov.	4	UPP	iP	05 44 12.2
				Mindanao, Philippine Islands (h = N).					Mindanao, Philippine Islands (h = N).
"	1	UPP	iP	20 48 20.3	"	4	UPP	iP	13 06 37.2
				Mindanao, Philippine Islands (h = N).					micr sec
							P	Z'	0.1 1.2
"	3	UPP	iP	04 05 27.8			Mx	Z	4.1 20
				Mindanao, Philippine Islands (h = N).			KIR	iP	13 06 18.7
									micr sec
"	3	UPP	iP	05 53 18.1			P	Z'	0.1 1.0
				Mindanao, Philippine Islands (h = N).					Mindanao, Philippine Islands (h = N).
									m = 6.0 (UPP, KIR).
"	3	UPP	iP	06 08 54.1	"	4	UPP	iP	13 34 16.6 C
				Mindanao, Philippine Islands (h = N).			eS		13 45 09
									micr sec
"	3	UPP	iP	07 54 36.6			P	Z'	0.2 1.0
			iS	08 05 28			KIR	iP	13 33 58.4
				micr sec					micr sec
		P	Z'	0.1 0.9			P	Z'	0.2 1.0
		KIR	iP	07 54 18.2					Mindanao, Philippine Islands (h = N).
				micr sec					m = 6.4 (UPP,KIR).
		P	Z'	0.1 1.0					
				Mindanao, Philippine Islands (h = N).					
				m = 6.1 (UPP,KIR).	"	4	UPP	iP	16 53 47.5
"	3	UPP	iP	16 15 48.1			i		16 53 54.1
				Mindanao, Philippine Islands (h = N).					Andaman Islands, India (h = N).
"	4	UPP	iP	05 28 18.3	"	4	UPP	iP	17 14 35.1
				Mindanao, Philippine Islands (h = N).			iS		17 25 28
									Mindanao, Philippine Islands (h = N).

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1996				1996					
Nov.	4	UPP	iP	17 37 41.6	Nov.	5	UPP	iP	16 44 24.8
			iS	17 48 13					Mindanao, Philippine Islands (h = N).
				micr sec					
			P	Z' 0.6 1.8	"	5	UPP	iP	17 45 31.2
			Mx	Z 8.1 20					Luzon, Philippine Islands (h = N).
		KIR	iP	17 37 38.9	"	5	UPP	iP	19 42 13.3
				micr sec					Mindanao, Philippine Islands (h = N).
			P	Z' 1.0 1.6	"	5	UPP	iP	20 48 38.5
									Off east coast of Kamchatka (h = N).
				Panama-Colombia border region (h = 15 km). m = 6.7 (UPP,KIR).					
"	4	UPP	iP	20 17 43.2	"	6	UPP	iP	06 44 43.4
				Mindanao, Philippine Islands (h = N).					Mindanao, Philippine Islands (h = N).
"	4	UPP	iP	22 26 43.2	"	6	UPP	iP	06 51 57.8
				Mindanao, Philippine Islands (h = N).					micr sec
									P Z' 0.1 0.8
"	4	UPP	iP	23 17 20.8	"	6	UPP	iP	07 00 24.4
				Norwegian Sea (h = 10 km).					Mindanao, Philippine Islands (h = N).
"	5	UPP	iPKP	10 00 31.2	"	6	UPP	iP	20 10 12.4
			iPKP1	10 00 39.4					Poland (h = 10 km).
			iPKP2	10 00 47.2	"	6	UPP	iP	20 13 19.3 D
			ipPKP	10 02 06					iS 20 23 34
			i	10 02 48					micr sec
			iPP	10 04 10	"	6	UPP	iP	20 13 19.3 D
				micr sec					iS 20 23 34
			PKP	Z' 0.4 1.5					micr sec
			PKP1	Z' 1.8 1.0					P Z' 2.5 1.3
									Mx Z 25 18
				Kermadec Islands region (h = 370 km).					Bonin Islands region (h = 10 km).
"	5	UPP	iP	12 42 46.7	"	7	UPP	iP	06 23 18.3
			iS	12 53 38.9					iSKS 06 33 51
				micr sec					iS 06 34 15
			P	Z' 0.1 1.0					micr sec
		KIR	iP	12 42 27.8					P Z' 0.2 1.2
				micr sec					Mx Z 11 18
			P	Z' 0.2 0.9			KIR	iP	06 22 56.8
									micr sec
				Mindanao, Philippine Islands (h = N). m = 6.3 (UPP,KIR).					P Z' 0.1 1.0
"	5	UPP	iP	12 48 48.5	"	7	UPP	iP	07 52 16.0
				Mindanao, Philippine Islands (h = N).					Mindanao, Philippine Islands (h = N). m = 6.2 (UPP,KIR).
"	5	UPP	iP	12 52 12.1	"	7	UPP	iP	07 52 16.0
				Mindanao, Philippine Islands (h = N).					Mindanao, Philippine Islands (h = N).
"	5	UPP	iP	13 03 05.0	"	7	UPP	iP	08 49 14.4
				Mindanao, Philippine Islands (h = N).					Bonin Islands region (h = 10 km).

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1996				1996			
Nov.	7	UPP iP	09 59 23.5	Nov.	10	UPP iP	20 52 02.5
		Mindanao, Philippine Islands (h = N).				Afghanistan-Tajikistan bord reg. (h = 200 km).	
"	7	UPP iP	10 16 15.2	"	10	UPP iP	23 27 18.5
		i	10 16 25.9			i	23 27 26.7
		Bonin Islands region (h = 10 km).				South Italy (h = 10 km).	
"	8	UPP iP	01 25 31.2	"	11	UPP iPKP1	01 07 08.6 C
		Bonin Islands region (h = 10 km).					micr sec
"	8	UPP iP	07 20 52.2			PKP1 Z'	0.3 0.9
		Near s. coast of Honshu, Japan (h = 350 km).				Mx Z	4.3 21
						South of Kermadec Islands (h = N).	
"	8	UPP i(PKP)	14 19 10.7	"	11	UPP iP	01 15 34.8
		South of Fiji Islands (h = 550 km).				i	01 15 45.8
"	8	UPP iP	17 43 44.4			Bonin Islands region (h = 10 km).	
		Bonin Islands region (h = 480 km).		"	11	UPP iP	04 02 27.8
"	9	UPP iP	01 43 15.9			Kyushu, Japan (h = N).	
		Bonin Islands region (h = 10 km).		"	11	UPP iP	09 33 14.5 C
"	9	UPP iP	06 24 04.4			iS	09 41 58
		Panay, Philippine Islands (h = N).					micr sec
						P Z'	0.3 0.7
						Mx Z	3.8 20
"	9	UPP iPKP1	08 13 06.1			KIR iP	09 33 10.2
		iPKP2	08 13 16.2				micr sec
			micr sec			P Z'	0.3 0.6
		PKP1 Z'	0.2 1.4			Myanmar (h = 80 km).	
		South of Kermadec Islands (h = 80 km).				m = 6.4 (UPP,KIR).	
"	9	UPP iP	14 07 19.2	"	11	UPP i(PKP)	12 35 02.5
			micr sec			South of Fiji Island (h = 600 km).	
		P Z'	0.1 0.9	"	11	UPP iSg1	16 44 01.0
		Mx Z	7.4 15			Southwestern Norway, 59.8°N, 6.4°E. Origin time = 16 41 06. Felt.	
		Off coast of eastern China (h = N).				By combination with Finnish station readings.	
"	9	UPP iPKP1	17 48 25.4	"	11	UPP iP	21 04 11.6
		Kermadec Islands region (h = N).		"	12	UPP iP	01 28 24.9
"	10	UPP iP	13 43 51.9			South of Honshu, Japan (h = 150 km).	
		Bonin Islands region (h = 10 km).		"	12	UPP iP	07 30 44.4
"	10	UPP iP	18 28 22.7			Kuril Islands (h = N).	
			micr sec				
		P Z'	0.1 1.0				
		Mindanao, Philippine Islands (h = N).					

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1996				1996			
Nov.	12	UPP iP	07 34 08.3	Nov.	15	UPP iP	15 42 51.1
		Kuril Islands (h = N).				micr sec	
"	12	UPP iP	10 55 31.0			P Z' 0.1 0.7	Philippine Islands region (h = N).
		Cyprus region (h = N).		"	16	UPP iP	14 06 43.3
"	12	UPP iP	14 53 13.9			Bonin Islands region (h = N).	
"	12	UPP iPdiff	17 13 48.0	"	17	UPP iPKP	17 54 19.3
		iS	17 25 39			micr sec	
		micr sec				PKP Z' 0.1 0.7	South of Fiji Islands (h = 500 km).
		Pdiff Z' 0.4 1.7					
		Mx Z 184 19		"	17	UPP Mx	20 11
		KIR iPdiff	17 13 53.4			micr sec	
		micr sec				Mx Z 5.7 17	
		Pdiff Z' 0.2 1.5				KIR Mx	20 09
		Near coast of Peru (h = N).				micr sec	
		m = 6.9 (UPP,KIR).				Mx Z 6.5 7	Near coast of Nicaragua (h = N).
"	13	UME iSg1	04 26 08.1			M = 6.0 (UPP,KIR).	
		Lapland, Sweden, 65.2°N, 19.4°E.		"	17	UPP i(PKP)	21 29 35.6
		Origin time= 04 25 24				iSKP1	21 32 24.8
		M <sub>L</sub> (UPP) = 2.2 1.				South of Fiji Islands (h = 590 km).	
		By combination with Finnish and Norwegian station readings.		"	17	UPP iP	22 59 08.1
"	13	UPP iP	09 36 28.0			micr sec	
		Ionian Sea (h = N).				P Z' 0.1 0.7	
"	14	UPP iP	03 08 09.6	"	17	KIR iP	22 59 01.6
		micr sec				micr sec	
		P Z' 0.1 0.8				P Z' 0.1 0.8	Myanmar (h = 140 km).
		Mx Z 1.4 9				m = 5.9 (UPP,KIR).	
		Greece-Albania border region (h = 10 km).		"	17	UPP iPKP1	23 46 16.3
"	14	UPP i(PKP)	14 06 35.1			iPKP2	23 46 19.6
		i	14 06 38.9			micr sec	
		micr sec				PKP1 Z' 0.1 0.9	Kermadec Islands, New Zealand (h = 55 km).
		i Z' 0.3 0.9		"	18	UPP iP	11 59 26.1
		Fiji Islands region (h = 190 km).				Southern Iran (h = N).	
"	15	UPP iPKP	10 24 59.2	"	19	UPP iP	00 02 09.3
		South of Fiji Islands (h = N).				Kuril Islands (h = 90 km).	
"	15	UPP iP	14 57 16.8				
		Andreasof Islands, Aleutian Is. (h = N).					

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1996				1996			
Nov.	19	UPP	iP	00 22 31.7	Nov.	20	(cont.)
			i	00 22 45.3			micr sec
				micr sec			P Z' 0.4 1.5
			P	Z' 0.2 1.0			Mx Z 5.6 14
		KIR	iP	00 22 27.2		KIR	iP 18 10 04.4
				micr sec			micr sec
			P	Z' 0.2 1.2			P Z' 0.5 1.5
		India-Bangladesh border region					Mx Z 2.5 11
		(h = 50 km).				Luzon, Philippine Islands (h = N).	
		m = 6.2 (UPP,KIR).				m = 6.3, M = 5.9 (UPP,KIR).	
"	19	UPP	iP	10 53 03.3	"	20	UPP iP 18 18 22.4
			i	10 53 09.2			micr sec
			iS	10 59 32			P Z' 0.1 0.7
				micr sec			Gansu, China (h = N).
			P	Z' 2.4 1.3			
			Mx	Z 219 15		"	20 UPP iP 19 55 54.9
		KIR	iP	10 53 04.5			micr sec
				micr sec			P Z' 0.1 0.9
			P	Z' 3.3 1.5			Mx Z 2.3 17
			Mx	Z 88 9		KIR	iP 19 55 36.8
		Eastern Kashmir (h = N).					micr sec
		m = 6.9, M = 7.1 (UPP,KIR).					P Z' 0.1 1.2
							Mx Z 1.0 17
"	19	UPP	iP	13 28 02.0			Philippine Islands region. (h = N).
		Eastern Kashmir (h = N).					m = 6.0, M = 5.4 (UPP,KIR).
"	19	UPP	iP	14 56 28.5	"	20	UPP iP 20 14 58.7
		Philippine Islands region (h = N).					Fox Islands, Aleutian Islands
							(h = 100 km).
"	19	UPP	iP	16 27 27.2	"	20	KIR iPn 21 52 14.5
		Eastern Kashmir (h = N).					UME iPn 21 53 00.2
"	20	UPP	iP	02 39 27.6			Norwegian Sea, 72.8°N, 4.4°E.
			iS	02 49 01			Origin time = 21 50 28.
				micr sec			By combination with Finnish and
			P	Z' 1.3 1.6			Norwegian station readings.
			Mx	Z 9.0 19		"	20 UPP iP 23 37 09.5
		KIR	iP	02 38 50.6			micr sec
				micr sec			P Z' 0.1 0.9
			P	Z' 0.9 1.7			Eastern Xizang-India border reg.
			Mx	Z 4.0 16			(h = N).
		Off east coast of Honshu, Japan					
		(h = N).					
		m = 6.6, M = 5.9 (UPP,KIR).					
"	20	UPP	iP	18 10 22.4	"	21	KIR iPn 02 02 48.4
			iSKS	18 20 34			Norwegian Sea, 72.8°N, 4.9°E.
			iS	18 20 44			Origin time = 02 01 04.
							By combination with Finnish and
							Norwegian station readings.
		(cont.)					

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1996				1996				
Nov.	21	UPP	iP	02 42 17.8	Nov.	22	UPP Mx	05 07
"	21	UPP	iP	07 56 48.4 C			Mx	Z 1.7 18
			iSKS	08 07 12			KIR iPn	05 00 47.9
			iS	08 07 44			i	05 00 49.6
				micr sec			Mx	Z 1.5 14
			P	Z' 0.1 1.0			UME iPn	05 01 36.3
			Mx	Z 0.8 19			MYV iPn	05 01 39.0
		KIR	iP	07 56 32.3 C			i	05 03 48.0
				micr sec				
			P	Z' 0.9 1.0				
		Mindanao, Philippine Islands						
		(h = 55 km).						
		m = 6.6 (UPP,KIR).						
"	21	UPP	iP	13 25 13.7	"	22	UPP iP	06 00 54.0
		Crete (h = N).					Eastern Kashmir (h = N).	
"	21	UPP	iP	13 46 07.6	"	22	UPP iP	21 10 16.5
				micr sec			Greece-Albania border region (h = N).	
			Mx	Z 2.6 21				
		KIR	Mx	14 07	"	23	UPP iP	02 07 35.7
				micr sec			Southern Xinjiang, China (h = N).	
			Mx	Z 0.9 11				
		Eastern Kashmir (h = N).			"	23	UPP Mx	11 43.
		M = 5.0 (UPP,KIR).						micr sec
"	21	UPP	Mx	22 52			Mx	Z 3.2 17
				micr sec			KIR Mx	11 42
			Mx	Z 1.8 19				micr sec
		KIR	Mx	22 51			Mx	Z 1.7 19
				micr sec			Bismark Sea (h = 10 km).	
			Mx	Z 1.4 17			M = 5.7 (UPP,KIR).	
		Bismarck Sea (h = 40 km)			"	25	UPP iP	00 36 55.9
		M = 5.6 (UPP,KIR).					Sea of Japan (h = 430 km).	
"	22	UPP	Mx	04 01	"	25	UPP iP	04 01 20.7
				micr sec			Bonin Islands region (h = N).	
			Mx	Z 1.6 17	"	25	UPP iP	11 08 01.6
		KIR	iPn	03 55 15.9			Southern Iran (h = N).	
				micr sec				
			Mx	Z 1.0 12	"	26	UPP iP	01 43 20.8
		UME	iPn	03 56 03.0			Talaud Islands (h = 120 km).	
		MYV	iPn	03 55 59.0	"	26	UPP iP	08 34 05.2
			iSn	03 58 07.0			ipP	08 34 18.7
		Norwegian Sea, 72.9°N, 4.5°E.					Taiwan (h = 45 km).	
		Origin time = 03 53 29.			"	26	UPP iP	20 38 15.4
		By combination with Finnish station readings.					Southern Xinjiang, China (h = N).	

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1996						1996				
Nov.	27	UPP	iP	00 50 04.5		Nov.	30	UPP	iP	14 13 37.7
			iS	00 54 50				Northern Xinjiang, China (h = N).		
				micr sec						
			P	Z' 0.1 0.9		"	30	UPP	iP	18 06 09.0
			Mx	Z 2.0 17				micr sec		
		KIR	iP	00 51 04.6				P	Z' 0.1 1.3	
				micr sec				Hokkaido, Japan region (h = N).		
			P	Z' 0.1 0.5						
			Mx	Z 2.2 14						
		Cyprus region (h = N).								
		m = 5.7, M = 4.8 (UPP,KIR).								
"	27	UPP	iP	04 58 53.8						
		Sea of Okhotsk (h = N).								
"	28	UPP	iP	07 52 17.1						
				micr sec						
			P	Z' 0.2 1.0						
		Near east coast of Honshu, Japan (h = 70 km).								
"	28	UPP	iS	21 46 12						
				micr sec						
			Mx	Z 6.4 19						
		KIR	Mx	22 13						
				micr sec						
			Mx	Z 2.1 16						
		Central Mid-Atlantic Ridge (h = 10 km).								
"	29	UPP	iPKP1	01 17 06.4						
			iPKP2	01 17 11.7						
		Kermadec Islands region (h = N).								
"	30	UPP	iP	08 19 03.5						
				micr sec						
			P	Z' 0.1 0.8						
		Kuril Islands (h = N).								
"	30	UPP	iP	11 10 07.9						July 15, 1998
				micr sec						
			P	Z' 0.3 1.4						Conny Holmqvist
		KIR	iP	11 10 17.9						Ota Kulhánek
			i	11 11 10.1						
				micr sec						
			P	Z' 0.1 0.8						
		Afghanistan-Tajikistan bord reg. (h = 250 km).								
		m = 5.6 (UPP,KIR).								



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SEISMOLOGICAL BULLETIN

UPPSALA, KIRUNA, UMEÅ, UDDEHOLM

DELARY and MYRVIKEN

Uppsala	(UPP)	59°51.5'N,	17°37.6'E;	h = 14 m
Kiruna	(KIR)	67°50.4'N,	20°25.0'E;	h = 390 m
Umeå	(UME)	63°48.9'N,	20°14.2'E;	h = 16 m
Uddeholm	(UDD)	60°05.4'N,	13°36.4'E;	h = 240 m
Delary	(DEL)	56°28.2'N,	13°52.2'E;	h = 150 m
Myrviken	(MYV)	62°56.5'N,	14°20.8'E;	h = 345 m

DECEMBER 1 - 31, 1996

1996					1996				
Dec.	1	UPP	iP	16 38 54.8	Dec.	3	UPP	iPKP	13 16 17.9
				Turkey (h = 10 km).					Tonga Islands region (h = N).
"	1	UPP	iPKP1	23 28 44.1 D	"	3	UPP	iP	16 00 19.9
			iPKP2	23 28 49.3				i	16 00 56.3
				Kermadec Islands region					micr sec
				(h = 360 km).				P	Z' 0.1 0.8
"	2	UPP	iP	04 14 30.1					Eastern Honshu, Japan
			i	04 14 32.6					(h = 140 km).
				Cyprus region (h = N).	"	3	UPP	iP	18 09 39.7
"	2	UPP	iP	07 12 11.1					Greece-Albania border region
				micr sec					(h = 10 km).
			P	Z' 0.1 1.0	"	4	UPP	iP	02 55 40.0
				Ryukyu Islands (h = 30 km).				i	02 56 20.3
"	2	UPP	iPKP2	12 32 15.6					Turkmenistan (h = 50 km).
				Kermadec Islands region	"	4	UPP	iP	06 14 15.3
				(h = 450 km).					Hindu Kush region, Afghanistan
"	2	UPP	iP	22 29 27.2 D					(h = N).
			iS	22 39 06	"	5	UPP	iP	00 36 11.5
				micr sec					East of Kuril Islands (h = N).
			P	Z' 0.7 1.3	"	5	UPP	iP	04 03 45.8
			Mx	Z 114 17					Near east of Chiapas, Mexico
		KIR	iP	22 28 54.9					(h = 90 km).
				micr sec	"	5	UPP	iP	10 51 12.5
			P	Z' 0.3 1.4					Luzon, Philippine Islands (h = N).
			Mx	Z 102 19					
				Kyushu, Japan (h = 50 km).					
				m = 6.3, M = 7.1 (UPP,KIR).					

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1996				1996						
Dec.	6	UPP	iP	03 42 13.4	Dec.	9	UPP	iP	17 56 44.8	
			iS	03 51 50					micr sec	
				micr sec			P	Z'	0.1 0.7	
		Mx	Z	3.1 13			Kuril Islands (h = 180 km).			
		KIR	Mx	04 16						
				micr sec						
		Mx	Z	2.8 13		9	UPP	iP	20 00 16.3	
		Off east coast of Honshu, Japan (h = N). M = 5.7 (UPP,KIR).						i	20 00 28.3	
"	6	UPP	iPKP	06 15 41.0			Mindanao, Philippine Islands (h = N).			
				micr sec						
		PKP	Z'	0.1 0.8						
		South of Fiji Islands (h = 500 km).					10	UPP	iPKP	02 33 33.6
"	6	UPP	iP	08 52 20.8					micr sec	
		Kuril Islands (h = N).						PKP	Z	0.1 0.8
"	6	UPP	iP	23 18 06.1			South of Fiji Islands (h = 600 km).			
		South of Honshu, Japan (h = 60 km).					10	UPP	iP	08 47 27.8
"	7	UPP	iPKP	02 33 02.3				i	08 47 31.9	
		South of Fiji Islands (h = 500 km).						iPP	08 50 04.9	
"	7	UPP	iP	20 43 22.0				iS	08 56 36	
		Kuril Islands (h = N).							micr sec	
"	8	UPP	iP	06 15 52.6 C				P	Z''	0.3 1.5
				micr sec				i	Z'	0.4 1.2
		P	Z'	0.2 1.4				Mx	Z	38 18
		KIR	iP	06 14 58.2 C			KIR	iP	08 48 01.7	
				micr sec				i	08 48 09.1	
		P	Z'	0.2 1.5					micr sec	
		Kodiak Islands region (h = N). m = 6.0 (UPP,KIR).						i	Z'	0.9 1.5
"	9	UPP	iP	04 07 42.9				Mx	Z	11 18
		Java, Indonesia (h = 50 km).					Central Mid-Atlantic Ridge (h = 10 km). m = 6.5, M = 6.4 (UPP,KIR).			
"	9	UPP	iP	11 37 43.3			10	UPP	iP	15 04 58.3
			iS	11 44 54						
				micr sec			10	UPP	iP	17 08 39.6
		P	Z'	0.7 1.6					micr sec	
		Mx	Z	9.7 18				P	Z'	0.1 1.1
		North Mid-Atlantic Ridge (h = 10 km).					Andreanof Islands, Aleutian Is. (h = 10 km).			
"	9	UPP	iP	11 37 43.3			10	UPP	iP	21 06 27.4
			iS	11 44 54						
				micr sec						
		P	Z'	0.7 1.6						
		Mx	Z	9.7 18						
		North Mid-Atlantic Ridge (h = 10 km).								
"	9	UPP	iP	11 37 43.3			11	UPP	iP	02 35 12.5 C
			iS	11 44 54						micr sec
				micr sec				P	Z'	0.1 0.8
		P	Z'	0.7 1.6			Andreanof Islands, Aleutian Is. (h = N).			
		Mx	Z	9.7 18						
		North Mid-Atlantic Ridge (h = 10 km).								

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1996				1996			
Dec.	11	UPP	iP	12 31 52.6	Dec.	16	(cont.)
				micr sec			By combination with Finnish and Norwegian station readings.
			P	Z' 0.1 0.9			
		KIR	iP	12 31 51.9		16	UPP iP 19 03 15.3
				micr sec			Southern Greece (h = 100 km).
			P	Z' 0.2 0.9		17	UPP iP 16 31 56.3
		Southern Sumatera, Indonesia					Afghanistan-Tajikistan bord. reg.
		(h = 60 km).					(h = 180 km).
		m = 6.4 (UPP,KIR).					
"	11	UPP	iP	16 49 24.9	"	17	UPP iSg1 18 17 51.6
		Mindanao, Philippine Islands (h = N).					UDD iSg1 18 17 33.9
"	12	UPP	iP	07 32 15.3			Skåne, Sweden, 55.6°N, 12.9°E.
				micr sec			Origin time = 18 15 14.
			P	Z' 0.1 1.1			M <sub>L</sub> (UPP) = 2.6 1.
		Kyushu, Japan (h = 30 km).					Felt.
"	12	UPP	iP	13 17 14.1			By combination with Danish station readings.
			i	13 17 42.8	"	17	UPP Mx 21 07
		Dodecanese Islands (h = 160 km).					micr sec
"	13	UPP	iP	16 57 38.2			Mx Z 2.6 19
		Southern Greece (h = N).				KIR	Mx 21 16
"	13	UPP	iP	18 53 31.5			micr sec
							Mx Z 1.9 15
		Off coast of central America (h = N).					M = 5.6 (UPP,KIR).
"	14	UPP	iP	16 38 52.4	"	18	UPP iP 11 32 16.1
		Philippine Islands region (h = N).					Taiwan region (h = 60 km).
"	15	UPP	iP	10 33 34.3	"	19	UPP iP 03 03 11.6
		Dodecanese Islands (h = 150 km).					El Salvador (h = N).
"	15	UPP	iP	20 42 58.2	"	19	UPP iP 12 20 50.8
		East of Kuril Islands (h = N).					Sea of Japan (h = 410 km).
"	16	UPP	iSg1	04 12 39.0	"	19	UPP iP 14 37 00.2
		KIR	iSg1	04 14 08.7	"	20	UPP iP 00 25 30.8
		UME	iSg1	04 13 13.0			Southern Iran (h = N).
		UDD	iPn	04 10 18.5	"	21	UPP iP 01 40 12.4
			iPg1	04 10 30.6			Eastern Honshu, Japan (h = 45 km).
			iSg1	04 11 34.2			
		MYV	iPn	04 10 23.8			
			iPg1	04 10 41.0			
			iSg1	04 11 48.2			
		Norwegian Sea, 61.0°N, 3.6°E.					
		Origin time = 04 09 02.					
		M <sub>L</sub> (UPP) = 3.6 (0.13) 4.					
		Felt.					
		(cont).					

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1996				1996					
Dec.	21	UPP	iP	08 49 48.7	Dec.	23	UPP	iP	05 59 30.1
				micr sec					North Mid-Atlantic Ridge
			P	Z' 0.1 0.8					(h = 10 km).
			Mx	Z 1.4 13					
		KIR	Mx	09 17	"	24	UPP	iP	14 20 19.5
				micr sec					Ryukyu Islands (h = N).
			Mx	Z 1.3 13					Late arrival when compared with the
									NEIC solution.
				Sichuan, China (h = 10 km).					
				M = 5.2 (UPP,KIR).					
"	21	UPP	iP	08 50 02.6	"	24	UPP	iP	22 22 25.7
			iS	08 53 15.5					micr sec
				Tyrrhenian Sea (h = 490 km).				Mx	Z 2.6 19
							KIR	Mx	22 40
									micr sec
"	21	UPP	iP	14 29 54.2 C				Mx	Z 1.8 16
			iS	14 35 54					Jordan-Syria region (h = 30 km).
				micr sec					M = 4.8 (UPP,KIR).
			P	Z' 0.1 0.9	"	25	UPP	iP	02 15 56.9
		KIR	iP	14 30 03.3 C	"	25	UPP	iPKP1	09 00 42.7
				micr sec					Kermadec Islands, New Zealand
			P	Z' 0.2 1.0					(h = 260 km).
				Hindu Kush region, Afghanistan					
				(h = 170 km).					
				m = 5.6 (UPP,KIR).	"	25	UPP	Mx	17 44
"	21	UPP	iP	18 02 11.0					micr sec
				Southeast Asia (h = N).				Mx	Z 1.9 20
"	22	UPP	iP	15 03 53.7 C			KIR	i	17 37 45.0
			iPP	15 06 19.0				iPn	17 37 58.0
			iS	15 12 18					micr sec
				micr sec				Mx	Z 1.4 15
			P	Z' 0.6 1.1			UME	iPn	17 38 32.1
			Mx	Z 7.9 20				iSn	17 40 52.3
		KIR	iP	15 03 11.4			MYV	iPn	17 38 16.8
			iS	15 11 05.1				iSn	17 40 25.4
				micr sec					Norwegian Sea, 71.0°N, 8.6°W.
			P	Z' 2.9 1.1					Origin time = 17 35 29.
			Mx	Z 4.9 14					By combination with Finnish and
				Eastern Sea of Japan (h = 230 km).					Norwegian station readings.
				m = 6.5, M = 5.8 (UPP,KIR).	"	26	UPP	iP	16 43 36.3
				M uncorrected for focal depth.	"	26	UPP	iP	17 13 05.9 D
"	22	UPP	iP	22 27 28.6					micr sec
				Kuril Islands (h = 100 km).				P	Z' 0.2 0.9
								Mx	Z 2.9 18
"	23	UPP	iPKP1	04 39 48.2			KIR	iP	17 12 38.3 D
				Kermadec Islands, New Zealand					micr sec
				(h = 170 km).				P	Z' 0.2 1.0

(cont.)

UPP = Uppsala, KIR = Kiruna, UME = Umeå, UDD = Uddeholm, DEL = Delary, MYV = Myrviken

1996				1996			
Dec.	26	(cont.) Southeast of Ryukyu Islands (h = 10 km). m = 6.2 (UPP,KIR).		Dec.	31	UPP iP	12 22 18.8 Tajikistan (h = 100 km).
"	26	UPP iPdiff	21 02 32.0 micr sec	"	31	UPP iP	12 54 16.7
		Mx Z	9.0 19			ipP	12 54 41.7
		KIR Mx	21 52			iS	13 04 30.0 micr sec
		Mx Z	4.7 20			P Z'	0.3 1.8
		Irian Jaya, Indonesia (h = N). M = 6.1 (UPP,KIR). Early arrival when compared with the NEIC solution.				KIR iP	12 54 05.0
						ipP	12 54 29.2 micr sec
						P Z'	0.7 1.8
							Mexico-Guatemala border region. h = 100 km (UPP,KIR). m = 6.2 (UPP,KIR).
"	27	UPP iP	00 36 53.7 Kodiak Island region (h = N).	"	31	UPP iSn	16 14 49.7
"	27	UPP iP	21 38 25.0 Ionian Sea (h = 45 km).			i	16 15 05.6
"	29	UPP iPKP2	03 42 12.2 South of Kermadec Islands (h = 100 km).			iSg1	16 15 31.5
"	30	UPP iP	11 17 57.3 C Nepal (h = N).			KIR iPn	16 12 40.3
"	30	UPP Mx	20 56 micr sec			iSg1	16 13 26.0
		Mx Z	3.2 17			UME iPn	16 12 56.4
		KIR Mx	20 57			iPg1	16 13 05.5
		Mx Z	1.4 17			iSn	16 13 41.9
		Seram, Indonesia (h = N). M = 5.7 (UPP,KIR).				i	16 13 45.2
						iSg1	16 13 58.4
						MYV iPn	16 12 52.0
						iSg1	16 13 49.0
							Coast of northern Norway, 66.7°N, 13.5°E. Origin time = 16 11 53. M <sub>L</sub> (UPP) = 3.6 (0.11) 4. Felt. By combination with Finnish station readings.
"	30	UPP iP	20 00 10.2 micr sec	"	31	UPP iP	23 49 22.3 Sakhalin Island (h = N).
		P Z'	0.3 1.5	"	31	UPP iP	24 05 45.4 North Mid-Atlantic Ridge (h = 10 km).
"	31	UPP iPKP1	03 25 04.9				August 28, 1998
		iPKP2	03 25 14.8				Conny Holmqvist
		South of Kermadec Islands (h = N).					Ota Kulhánek
"	31	UPP ePKP	09 02 48 Solomon Islands (h = N).				