

SEISMOLOGICAL SECTION  
 BOX 12019  
 S-750 12 UPPSALA  
 SWEDEN

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SEISMOLOGICAL BULLETIN

UPPSALA, KIRUNA, SKALSTUGAN, UMEÅ,

UDDEHOLM and DELARY

Uppsala	(Up):	59°51.5'N,	17°37.6'E;	h = 14 m
Kiruna	(Ki):	67°50.4'N,	20°25.0'E;	h = 390 m
Skalstugan	(Sk):	63°34.8'N,	12°16.8'E;	h = 580 m
Umeå	(Um):	63°48.9'N,	20°14.2'E;	h = 16 m
Uddeholm	(Ud):	60°05.4'N,	13°36.4'E;	h = 240 m
Delary	(De):	56°28.2'N,	13°52.2'E;	h = 150 m

JANUARY 1 - 31, 1979

1979					1979				
Jan.	1	Um	iP	00 32 49.5	Jan.	1	(cont.)		
		Ud	iP	00 33 16.8 C			Ud	iPKP1	13 48 41.8
		South of Honshu, Japan					Kermadec Islands region		
		(h = 30 km).					(h = 50 km).		
"	1	Ud	i(P)	04 54 07.3	"	1	Up	iPKP	16 14 27.6
"	1	Up	iSgl	07 19 24.2			Ki	iPKP	16 14 43.8
		Sk	iPgl	07 18 03.4			Um	iPKP	16 14 36.6
			iSgl	07 18 21.2			Ud	iPKP	16 14 26.6
		Um	iPgl	07 18 07.2			South Sandwich Islands		
			iSgl	07 18 28.4			region (h = 290 km).		
		Ud	iSgl	07 19 20.9	"	1	Up	iP	19 01 46.3 C
		Jämtland-Ångermanland,					i	19 01 57.9	
		Sweden, 63.5°N, 16.0°E.					iP	19 02 03.2	
		Origin time = 07 17 29.						micr sec	
		M <sub>L</sub> = 2.4 (Sk).					i	Z' 0.1 1.0	
		Felt.					Ki	iP	19 01 42.6
"	1	Sk	i(P)	09 11 27.3			iP	19 01 59.5	
"	1	Sk	i(P)	11 15 59.2			Um	iP	19 01 40.1
"	1	Sk	i(P)	11 59 33.3			i	19 01 51.5	
"	1	Up	iPKP	12 42 42.3			iP	19 01 57.0	
		Ki	iPKP	12 42 28.2 D			Ud	iP	19 01 59.2 C
		Sk	iPKP	12 42 39.6			iP	19 02 16.6	
		Um	iPKP	12 42 34.4 D			De	iP	19 02 17.1
		Ud	iPKP	12 42 44.2			Burma.		
			iSKP1	12 45 51.9			h = 60 km (Up,Ki,Um,Ud).		
		De	iPKP	12 42 50.7	"	1	Um	iPKP	20 48 56.7
		New Hebrides Islands					De	iPKP1	20 49 05.6
		(h = 190 km).					Fiji Islands region		
"	1	Sk	i(P)	13 23 53.6			(h = 560 km).		
"	1	Up	iPKP1	13 48 39.8	"	1	Um	iP	21 37 23.4
			micr sec				Ud	iP	21 37 42.7
			PKP1 Z' 0.1 0.8				Afghanistan-USSR border		
		Um	iPKP1	13 48 27.2			region (h = 50 km).		
		(cont.)			"	1	Ud	iP	22 02 19.6
					"	1	Up	iP	23 26 47.4
							(cont.)		



Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979					1979				
Jan.	3	Up	iRg	11 51 44.6	Jan.	4	(cont.)		
		Ud	iSgl	11 52 00.4			Um	iPKP	09 44 09.2
				East-central Sweden.			Ud	iPKP1	09 44 10.4
				Near-surface event.			De	iPKP1	09 44 22.1 D
"	3	Ki	iP	12 36 51.9					Fiji Islands region
		Um	iP	12 37 18.9					(h = 530 km).
		Ud	iP	12 37 45.2	"	4	Um	iRg	12 45 39.5
				Andreanof Islands, Aleutian					Local near-surface event.
				Is. (h = N).	"	4	Ud	iP	19 20 15.8
"	3	Ki	iP	13 19 51.4	"	4	Ki	iP	19 49 45.4
		Um	iP	13 19 57.6			Um	iP	19 49 55.7
		Ud	iP	13 20 16.8					South of Mariana Islands
				Mindanao, Philippine					(h = 40 km).
				Islands (h = 80 km).	"	4	Up	il	20 56 41.2
"	3	Ud	iRg	14 35 56.3			Ki	eI	20 57 17
				Local near-surface event.			Um	iP	20 56 47.5
"	3	Ud	i(P)	15 27 22.1				i	20 56 53.0
"	3	Ki	iP	19 56 35.5				il	20 56 56.9
		Um	iP	19 56 32.1			Ud	iP	20 56 52.3
		Ud	iP	19 56 45.5				i	20 56 56.5
		De	iP	19 56 44.5				il	20 56 59.5
				Northern Sumatera					Eastern Caucasus (h = 35 km).
				(h = 130 km).	"	5	Um	iP	01 39 32.0
"	3	Um	iP	20 44 58.0	"	5	Um	iPKP	02 29 35.3
"	3	Um	iP	21 16 12.1					South Sandwich Islands
"	3	Ki	iP	21 59 04.1					region (h = N).
		Um	iP	21 59 27.2	"	5	Up	iP	09 32 08.1
		Ud	iP	21 59 59.5			Ki	iP	09 31 32.2
		De	iP	22 00 18.8				i	09 31 44.4
				Kuril Islands (h = N).			Sk	eP	09 32 05
"	4	Um	eP	02 24 24			Um	iP	09 31 47.6
				Bismarck Sea (h = 20 km).				i	09 32 00.0
"	4	Ki	iP	02 27 30.6			Ud	iP	09 32 15.7
		Um	iP	02 27 57.4					South of Honshu, Japan
		Ud	iP	02 28 22.2					(h = 30 km).
				Alaska Peninsula (h = N).	"	5	Sk	eP	10 09 19
"	4	Up	iP	02 41 28.4			Um	eP	10 09 12
		Ki	iP	02 40 44.6					Aegean Sea (h = 10 km).
		Um	iP	02 41 04.2	"	5	Ki	eP	17 10 47
		Ud	iP	02 41 35.8			Um	iP	17 10 56.6
				Hokkaido, Japan region			Ud	iP	17 11 22.6
				(h = 210 km).					Southwestern Ryukyu
"	4	Ud	i(P)	03 32 39.6					Islands (h = 45 km).
"	4	Ki	iPKP	09 44 01.1	"	5	Ki	eP	20 08 33
		Um	i(PKP)	09 44 03.3			Um	iP	20 08 12.6
				(cont.)			Ud	iP	20 08 15.5
							De	iP	20 08 01.5
									Southern Iran (h = N).

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1979				1979								
Jan.	6	Up	iP	01 45	28.2	Jan.	7	Up	iP	03 44	53.1	
			ipP	01 45	38.2			Ud	iP	03 45	06.4	
			eS	01 57	01			Szechwan Province, China (h = 60 km).				
					micr sec							
			Mx	E	1.1 19							
			Mx	Z	2.6 21		"	7	Up	iP	07 54 07.5 C	
		Ki	eP	01 45	35			Ki	iP	07 53	39.8 C	
					micr sec							
			Mx	N	1.1 20				P	Z'	0.1 0.6	
		Um	iP	01 45	33.0			Sk	iP	07 54	05.1	
			iS	01 57	07			Um	iP	07 53	51.6	
		Ud	iP	01 45	19.2			Ud	iP	07 54	14.3	
			ipP	01 45	29.5			Mariana Islands (h = 410 km).				
		De	iP	01 45	18.8							
		Peru.					"	7	Up	iPKPl	11 10	40.1
		h = 35 km (Up,Ud).									micr sec	
		M = 5.4 (Up,Ki).							PKPl	Z'	0.2 0.9	
"	6	Up	iP	07 51	51.4			Ki	iPKP	11 10	25.7	
		Ud	iP	07 51	55.3			Sk	iPKPl	11 10	30.8	
"	6	De	i(P)	08 08	31.6			Um	iPKPl	11 10	27.3	
"	6	Up	iP	09 34	29.9			Ud	iPKPl	11 10	41.4	
		Um	iP	09 34	24.5			De	iPKPl	11 10	50.7	
		Near coast of Chiapas, Mexico (h = 120 km).					"	7	Um	iP	12 27	17.3
"	6	De	i(P)	09 38	11.7				i	12 27	20.4	
"	6	De	i(P)	10 51	32.2		"	7	Ud	iPKPl	23 15	51.3
"	6	Up	iP	12 04	20.5			De	iPKPl	23 16	01.7	
		Ki	iP	12 04	05.4			South of Fiji Islands (h = 450 km).				
		Sk	eP	12 04	02		"	8	Up	iP	00 50	50.1
		Um	iP	12 04	14.2			Sk	iP	00 50	42.9	
			ipP	12 04	23.9			Um	iP	00 50	26.6	
		Ud	iP	12 04	12.1			Ud	iP	00 50	56.8	
		De	iP	12 04	21.7 C			De	iP	00 51	14.4	
			ipP	12 04	31.7			Hokkaido, Japan region (h = 70 km).				
		Michoacan, Mexico. h = 35 km (Um,De).					"	8	Up	iP	02 16	30.0
"	6	Ud	iP	13 03	38.2			Sk	iP	02 17	09.3	
		Colombia (h = 35 km).						Um	iP	02 17	08.9	
"	6	Ud	iP	21 22	15.3			Ud	iP	02 16	34.8	
		De	iP	21 21	44.8			De	iP	02 15	59.6	
		Dodecanese Islands (h = 140 km).					"	8	Up	iP	02 49	07.5
"	7	Up	iPKPl	00 44	46.7			Sk	eP	02 49	31	
		Ki	ePKP	00 44	38			Um	iP	02 49	03.3	
		Um	iPKP	00 44	45.5			Ud	iP	02 49	24.1	
		Ud	iPKPl	00 44	47.8			De	iP	02 49	22.6	
		De	iPKPl	00 44	59.3 C			Tadzhik-Sinkiang border region (h = 100 km).				
		Tonga Islands region (h = N).					"	8	Up	eP	12 23	26
								Um	iP	12 23	00.2	
								Ud	iP	12 23	31.3	

(cont.)





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1979				1979						
Jan.	10	(cont.)		Jan.	10	Up	iP	13 36 36.3 C		
		Ud	iP				ipP	13 37 16.5		
			i					micr sec		
		De	iP				P	Z' 0.9 1.5		
			i			Sk	iP	13 36 18.0 C		
			i				ipP	13 35 58.5		
		Southern Iran (h = N).				Um	iP	13 36 32.8 C		
		m = 6.2, M = 6.4 (Up,Ki).					ipP	13 37 13.1		
"	10	Ki	iSgl	"	10	Ud	iP	13 36 27.2 C		
		Um	Sn				ipP	13 37 07.0		
			Sgl			De	iP	13 36 34.8 C		
		Coast of Nordland, Norway,					ipP	13 37 14.3		
		66.8°N, 13.7°E.				Chiapas, Mexico.				
		Origin time = 02 40 28.				h = 160 km (Up,Sk,Um,Ud,De).				
		M <sub>L</sub> = 2.6 (Ki,Um).				m = 6.6 (Up,Ki).				
"	10	Up	iP	"	10	Up	iP	15 13 59.1		
		Ki	iP				ipP	15 15 46.1		
		Um	iP				iS	15 20 34		
		Ud	iP					micr sec		
		De	iP				P	Z' 0.6 1.5		
							Mx	E 7.0 13		
							Mx	N 23 14		
							Mx	Z 15 20		
"	10	Up	iP			Ki	iP	15 14 25.4		
		Um	iP					micr sec		
							P	Z' 0.4 1.3		
							Mx	E 17 18		
							Mx	N 83 20		
							Mx	Z 30 14		
"	10	Up	eP			Sk	iP	15 14 29.8		
			i			Um	iP	15 14 07.3		
		Sk	iP				iS	15 20 47		
		Um	eP			Ud	iP	15 14 13.6		
			i			De	iP	15 13 59.3		
		Ud	iP			Southern Iran (h = N).				
		De	eP			m = 6.2, M = 6.5 (Up,Ki).				
		Lake Baikal region		"	10	Ud	iP	16 32 46.3		
		(h = N).				De	iP	16 31 58.2		
"	10	Up	iP	"	10	Up	iP	16 35 23.3		
		Ki	eP			Ki	eP	16 35 51		
		Sk	iP			Ud	iP	16 35 39.3		
		Um	iP			Iran (h = N).				
			i			"	10	Ud	iP	20 30 22.0
		Ud	iP			"	10	Up	iPKP1	21 17 01.7
		De	iP					i	21 17 05.9	
						Um	iPKP	21 16 58.4		
						Ud	iPKP1	21 17 03.2		
							i	21 17 08.2		
						De	iPKP1	21 17 14.6		
							i	21 17 19.5		
						South of Fiji Islands				
						(h = 350 km).				
"	10	Up	eP							
		Ki	eP							
			iPP							
		Sk	iP							
		Um	iP							
			i							
		Ud	iP							
			i							
		De	iP							
		Lake Baikal region								
		(h = N).								

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1979				1979								
Jan.	10	Up	iP	21 40	53.6	Jan.	12	(cont.)				
		Ki	eP	21 40	41			Ki	micr sec			
		Sk	iP	21 40	34.2			Mx	N 6.0 22			
		Um	iP	21 40	50.1			Mx	Z 9.0 23			
		Oaxaca, Mexico (h = 100 km).						Sk	iP 04 11 20.7			
"	11	Um	iP	03 02	53.7			ipP	04 11 38.4			
			i	03 02	58.0			Um	iP 04 11 35.7			
		Turkey (h = 10 km).						ipP	04 11 53.2			
"	11	Up	iP	03 41	28.1			iPP	04 14 57.5			
		Ki	iP	03 41	54.8			iSKS	04 21 57			
		Um	iP	03 41	35.5			Ud	iP 04 11 29.1			
		Ud	iP	03 41	40.7			ipP	04 11 46.5			
		Southern Iran (h = N).						De	eP 04 11 37			
"	11	Up	iP	06 41	12.6			Guatemala.				
			iSKS	06 51	57			h = 60 km (Sk,Um,Ud).				
			iS	06 52	07			M = 6.0 (Up,Ki).				
				micr sec			"	12	Um	iP 04 26 35.1		
		Mx	E	9.0	22				Ud	iP 04 26 52.3		
		Mx	N	15	23				Uzbek SSR (h = 45 km).			
		Mx	Z	16	22			"	12	Ki	iP 08 24 00.0	
		Ki	iP	06 41	13.4					Sk	iP 08 24 05.7	
			ipP	06 41	21.0					Um	eP 08 23 44	
			iS	06 52	08					Ud	iP 08 23 48.1	
				micr sec					Southern Iran (h = N).			
			pP	Z'	0.1 1.0			"	12	Up	iP 14 55 38.4	
			Mx	E	7.4 16					ipP	14 55 41.3	
			Mx	N	6.5 15					i	14 55 47.3	
			Mx	Z	6.6 15					micr sec		
		Sk	eP	06 41	26					pP	Z' 0.1 0.6	
			iPP	06 45	17.2					i	Z' 0.2 1.0	
		Um	iP	06 41	09.8				Ki	eP 14 56 26		
			ipP	06 41	18.0					ipP	14 56 29.3	
			iPP	06 44	44.7					i	14 56 34.9	
			iSKS	06 51	46					micr sec		
			iS	06 51	59					pP	Z' 0.1 6.8	
		Ud	iP	06 41	22.1					i	Z' 0.3 1.2	
			ipP	06 41	30.4				Sk	ipP 14 55 43.8		
			iPP	06 45	05.6					i	14 55 50.3	
		Southern Sumatera.							Um	iP 14 56 05.8		
		h = 25 km (Ki,Um,Ud).								ipP	14 56 08.6	
		M = 6.4 (Up,Ki).								i	14 56 15.2	
"	11	Ki	iP	07 39	57.5				Ud	iP 14 55 24.7		
		Southern Sumatera (h = N).								ipP	14 55 27.8	
"	12	Up	eP	04 11	38					i	14 55 34.0	
			iSKS	04 21	58				De	iP 14 55 08.5		
				micr sec						ipP	14 55 11.4	
		Mx	E	6.7	30					i	14 55 17.5	
		Mx	N	3.7	28				North Atlantic Ocean.			
		Mx	Z	10	28				h = 10 km (Up,Ki,Um,Ud,De).			
		Ki	iP	04 11	28.2				m = 5.9 (Up,Ki).			
				micr sec				"	12	Ki	iP 17 14 36.6	
			P	Z'	0.2 1.5				"	12	Up	iP 23 29 32.0
			Mx	E	5.0 23						Ki	iP 23 29 18.8
		(cont.)							(cont.)			



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1979				1979 (cont.)			
Jan.	14	(cont.)		Jan.	15	Ud	iP 12 35 03.6
		Sk	iP 16 10 53.5				ipP 12 35 13.0
			iPP 16 13 56.2			De	iP 12 34 49.2
		Um	iP 16 10 38.3 D			Southern Iran (h = N).	
		Ud	iP 16 11 03.7 D				
			iPP 16 14 14.5	"	15	Ki	iP 13 10 48.7
		De	iP 16 11 16.1 D			Um	iP 13 11 07.0
		South of Honshu, Japan				Ud	iP 13 11 44.5
		(h = 400 km).					
		m = 5.7 (Up,Ki).		"	15	Um	iP 13 20 03.2
"	14	Up	iP 17 08 04.8	"	15	Up	iSgl 19 45 20.7
		Um	iP 17 07 55.2			Sk	iSg2 19 45 35.2
		Ud	iP 17 08 17.6			Ud	iSn 19 44 02.1
"	14	Ki	eP 17 38 47				i 19 44 18.1
			eS 17 40 14				iSgl 19 44 24.6
		Um	iS 17 41 54.4			Coast of southwestern Norway,	
		Svalbard region, near				near 58 1/2°N, 6°E.	
		76 1/4°N, 22°E.				Origin time = 19 42 15.	
		Origin time = 17 36 40.				M <sub>L</sub> = 2.7 (Up,Ud).	
		Solution from Helsinki				By combination with Bergen	
		regional bulletin.				and Kongsberg readings.	
"	14	Up	iP 19 32 46.5	"	15	Up	iP 20 53 33.3
			ipP 19 33 31.1			Ki	eP 20 52 42
		Ki	iP 19 32 49.3			Um	ipP 20 53 20.1
		Sk	iP 19 32 33.7			Ud	iP 20 53 37.8
		Um	iP 19 32 51.1			De	iP 20 53 58.5
		Ud	iP 19 32 36.3			Near east coast of	
			ipP 19 33 21.5			Kamchatka (h = 55 km).	
		De	iP 19 32 37.8	"	16	Sk	iPKP1 01 43 49.4
		Northern Colombia.				Um	iPKP1 01 43 46.4
		h = 170 km (Up, Ud).					i 01 44 02.3
"	14	Up	iP 19 45 10.8			Ud	iPKP1 01 44 01.8
		Ki	iP 19 46 17.2	"	16	Up	iP 07 24 24.8 C
		Sk	iP 19 45 50.4				micr sec
		Um	iP 19 45 41.9			P	Z' 0.2 1.0
		Ud	iP 19 45 19.4			Ki	iP 07 23 31.9 C
		De	iP 19 44 49.8				ipP 07 23 45.5
"	14	Ud	iP 20 19 07.3				i 07 24 33.0
		Tadzhik SSR (h = 130 km).					micr sec
"	15	Up	iP 06 03 23.6			P	Z' 0.2 1.0
		Ki	iP 06 02 39.9			Sk	iP 07 24 01.6
		Sk	iP 06 03 16.9			Um	iP 07 23 58.8 C
		Um	iP 06 02 59.1				ipP 07 24 12.5
		Ud	iP 06 03 29.5			Ud	iP 07 24 24.1 C
		De	iP 06 03 48.4				ipP 07 24 38.4
		Hokkaido, Japan region				De	iP 07 24 47.2 C
		(h = 190 km).					ipP 07 24 59.3
"	15	Up	iP 12 34 48.5			Fox Islands, Aleutian	
		Ki	iP 12 35 20.9			Islands.	
		Sk	iP 12 35 22.0			h = 50 km (Ki,Um,Ud,De).	
		Um	iP 12 35 00.0			m = 6.1 (Up,Ki).	
		(cont.)		"	16	Up	iP 09 57 22.2
							i 09 57 27.7
						(cont.)	



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1979					1979				
Jan.	17	(cont.)			Jan.	18	(cont.)		
		Sk	iPKP	14 34 44.9			Ki	iP	00 32 41.3
		Um	iPKP	14 34 39.8					micr sec
		Ud	iPKP	14 34 49.1				P	Z' 0.1 1.0
		De	iPKP	14 34 55.4			Sk	iP	00 32 48.2
				Solomon Islands (h = 90 km).			Um	iP	00 32 22.6
								iPP	00 33 52.0
"	17	Ud	iP	17 20 27.1			Ud	iP	00 32 32.3
				Afghanistan-USSR border region (h = 35 km).				iPP	00 34 03.8
							De	eP	00 32 23
							Iran (h = N).		
"	17	Up	iP	18 25 28.0	"	18	Up	iP	01 29 57.2
		Ki	iP	18 25 02.6			Ki	iP	01 30 24.6
		Um	iP	18 25 13.8			Um	iP	01 30 06.9
		Ud	iP	18 25 36.0			Ud	iP	01 30 12.2
				South of Mariana Islands (h = 60 km).			De	iP	01 29 59.9
							Southern Iran (h = N).		
"	17	Ki	iP	18 50 40.7	"	18	Ki	iSgl	03 05 37.0
		Um	iP	18 50 52.1			Um	i	03 06 12.8
		Ud	iP	18 51 14.3				iSgl	03 06 16.6
				South of Mariana Islands (h = 45 km).			Coast of Nordland, Norway, 66.8°N, 13.7°E.		
							Origin time = 03 04 11.		
"	17	Up	iP	19 20 06.3	"	18	Ud	eP	05 12 19
			ipP	19 20 21.1					
				micr sec					
			P	Z' 0.1 1.0					
		Ki	iP	19 19 12.7	"	18	Um	i(P)	12 30 54.5
				micr sec					
			P	Z' 0.1 1.3	"	18	De	iP	13 47 48.0
		Sk	iP	19 19 50.2	"	18	Ki	iP	14 03 30.1
		Um	iP	19 19 38.1					micr sec
			ipP	19 19 55.6				P	Z' 0.1 0.8
		Ud	iP	19 20 10.5			Sk	iP	14 03 48.8
		De	iP	19 20 32.4			Um	iP	14 03 33.0
			ipP	19 20 47.4			Ud	iP	14 03 50.3
				Off east coast of Kamchatka.			Banda Sea (h = 580 km).		
				h = 60 km (Up,Um,De).	"	18	Um	iP	14 07 51.6
				m = 5.8 (Up,Ki).			De	iP	14 08 02.4
"	17	Up	iP	19 40 35.1	"	18	Up	i(P)	19 37 46.8
		Ki	iP	19 40 04.7	"	18	Um	iP	20 49 57.1
		Um	iP	19 40 16.4			Fox Islands, Aleutian Islands (h = N).		
		Ud	iP	19 40 38.2					
				South of Mariana Islands (h = 55 km).					
"	17	Um	iP	19 46 40.5	"	18	Ki	iSgl	22 08 56.0
		Ud	iP	19 46 59.5			Sk	iSgl	22 09 09.7
				Molucca Passage (h = 70 km).			Um	iSn	22 09 16.5
								iSgl	22 09 33.9
"	17	Up	iPKP1	20 03 11.4			Coast of Nordland, Norway, 66.8°N, 13.7°E.		
		Ud	iPKP1	20 03 12.7			Origin time = 22 07 28.		
"	18	Up	iP	00 32 15.9			M <sub>L</sub> = 2.5 (Ki,Um).		
			iPP	00 33 42.3					
				(cont.)					

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979				1979					
Jan.	18	Ud	iP	23 56 24.6	Jan.	19	Ki	iSgl	14 32 40.2
"	19	Up	iP	06 25 44.1			Sk	eSgl	14 32 55
		Sk	iP	06 24 53.3			Um	iSgl	14 33 17.8
		Um	iP	06 24 57.6			Coast of Nordland, Norway, 66.8°N, 13.7°E.		
			i	06 25 06.0			Origin time = 14 31 12.		
		Ud	iP	06 25 34.1			M <sub>L</sub> = 2.5 (Ki,Um).		
		Greenland Sea (h = 10 km).			"	19	Up	iPKPl	17 02 30.0
"	19	Um	iP	09 18 24.5			Ud	iPKPl	17 02 31.6
		Ud	iP	09 18 55.3	"	19	Up	iP	19 36 57.2
		Hokkaido, Japan region (h = 40 km).						iPP	19 38 18.1
"	19	Up	eP	10 14 04				i	19 38 23.2
		Ki	iP	10 14 30.1			Ki	iP	19 37 22.9
		Um	iP	10 14 15.6					micr sec
		Ud	iP	10 14 20.1				P	Z' 0.1 1.2
			i	10 14 23.0			Sk	iP	19 37 29.5
		De	eP	10 14 10				iPP	19 39 05.5
		Southern Iran (h = 20 km).					Um	iP	19 37 04.2
"	19	Up	iP	12 07 24.2				iPP	19 38 28.9
			ipP	12 07 31.3			Ud	iP	19 37 13.9
				micr sec				iPP	19 38 45.9
			P	Z' 0.2 1.5	"	19	De	iP	19 37 02.9
			pP	Z' 0.5 1.5			Iran (h = N).		
			Mx	E 3.0 22			Up	iP	19 57 44.9
			Mx	N 4.2 21			Um	iP	19 57 20.1
		Ki	iP	12 06 41.3				i	19 57 22.4
			ipP	12 06 48.8			Ud	iP	19 57 51.1
				micr sec			De	iP	19 58 08.9
			pP	Z' 0.2 1.5	"	19	Kuril Islands (h = 30 km).		
			Mx	E 4.2 16	"	19	Um	iP	20 12 38.7
			Mx	N 2.9 17	"	19	Up	eP	21 30 18
		Sk	iP	12 07 16.3			Um	iP	21 30 16.1
			ipP	12 07 23.0			Ud	iP	21 30 35.1
		Um	iP	12 07 00.3			Afghanistan-USSR border region (h = 40 km).		
			ipP	12 07 07.2	"	19	Um	i	23 03 33.6
		Ud	iP	12 07 31.1			Ud	iP	23 04 04.9
			ipP	12 07 38.2			Lake Baikal region (h = 20 km).		
			iPcP	12 07 52.0	"	19	Up	eP	23 42 15
		De	iP	12 07 48.2				i	23 42 26.6
		Hokkaido, Japan region. h = 25 km (Up,Ki,Sk,Um,Ud). m = 6.2, M = 5.8 (Up,Ki).						iS	23 46 41.8
"	19	Ud	iP	13 09 15.9					micr sec
"	19	Up	iSgl	13 44 41.4				i	Z' 0.2 1.3
		Ud	iPgl	13 43 18.1			Ki	iP	23 43 05.1
			iSgl	13 43 39.7				i	23 43 11.6
			iRg	13 43 52.3			Sk	i	23 43 02.6
		De	eSgl	13 44 42			Um	iP	23 42 35.2
		Southeastern Norway, 59.6°N, 10.4°E. Origin time = 13 42 49. Near-surface event.						i	23 47 38.0
							Ud	iP	23 42 31.2
								i	23 42 46.9
								i	23 47 16.0

(cont.)



Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979				1979					
Jan.	19	Ud	i	23 47 24.6	Jan.	20	De	iSKP1	18 16 34.1
		De	i	23 42 15.8			South of Fiji Islands		
				Turkey (h = 10 km).			(h = 580 km).		
"	20	Up	i1	03 51 29.9	"	20	Up	iP	19 19 19.9
			i2	03 51 37.0			Ki	iP	19 19 26.1
		Um	iP	03 51 39.3			Um	iP	19 19 17.0
		Ud	iP	03 51 36.5			Ud	iP	19 19 36.1
			i1	03 51 48.7			Tadzhik SSR (h = 200 km).		
			i2	03 51 55.3	"	21	Up	iPKP1	00 30 24.1
				Turkey (h = 10 km).				iPKP	00 30 31.8
"	20	Um	iP	05 29 32.8			Ki	iPKP	00 30 16.3
				Banda Sea (h = 160 km).			Um	iPKP	00 30 23.7
"	20	Up	iP	09 13 14.4			Ud	iPKP1	00 30 24.0
		Ki	iP	09 12 35.8			De	iPKP1	00 30 34.8
		Um	iP	09 12 52.6 C			Fiji Islands region		
		Ud	iP	09 13 21.5			(h = 520 km).		
				Near east coast of Honshu, Japan (h = 70 km).	"	21	Um	iP	01 04 41.7
"	20	Um	iP	10 03 55.2	"	21	Ud	iP	03 58 01.4
				South of Honshu, Japan (h = 130 km).	"	21	Ki	eP	04 40 53
"	20	Ud	iP	12 49 07.0			Um	iP	04 40 34.6
							Ud	iP	04 40 41.7
							Southern Iran (h = 10 km).		
"	20	Up	iP	13 54 47.6	"	21	Ud	ipP	12 47 38.1
			ipP	13 54 51.0			Peru-Brasil border region		
			iS	13 58 46			(h = 130 km).		
				micr sec	"	21	Ud	iP	19 07 21.1
			pP	Z' 0.1 1.3			Iran (h = N).		
			Mx	E 0.8 11	"	22	Um	iP	02 03 15.8
			Mx	N 0.9 13			Carlsberg Ridge (h = 10 km).		
			Mx	Z 2.6 14	"	22	Up	Mx	05 03
		Ki	iP	13 56 04.1					micr sec
			ipP	13 56 07.7				Mx	E 1.5 20
				micr sec				Mx	Z 2.3 19
			pP	Z' 0.2 1.2			Ki	iP	04 36 56.4
			Mx	E 0.9 11			Um	iP	04 36 59.3
		Sk	iP	13 55 24.0			Ud	eP	04 36 41
			ipP	13 55 27.4				i	04 37 18.6
		Um	iP	13 55 28.4			Virgin Islands (h = 45 km).		
			ipP	13 55 32.3	"	22	Ud	iP	05 52 49.8
		Ud	iP	13 54 49.1	"	22	Up	iP	07 46 03.2
			ipP	13 54 53.4			Ki	iP	07 45 54.1
				Sicily.			Southeast Asia (h = N).		
				h = 15 km (Up,Ki,Sk,Um,Ud).	"	22	Up	iP	16 50 53.4
				m = 5.5, M = 4.6 (Up,Ki).			Mariana Islands (h = 220 km).		
"	20	Um	iP	18 02 31.8	"	22	Up	iP	18 02 31.5 D
"	20	Up	iSKP1	18 16 23.2			(cont.)		
		Um	iSKP1	18 16 12.8			(cont.)		
		Ud	iPKP1	18 13 37.4			(cont.)		
			iSKP1	18 16 25.5			(cont.)		
		De	iPKP1	18 13 48.6			(cont.)		

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979					1979				
Jan.	22	(cont.)			Jan.	23	(cont.)		
		Up		micr sec			Ud	iRg	16 36 37.5
		P	Z'	0.1 0.9					Central Sweden.
		Ki	iP	18 01 39.0 D					Near-surface event.
				micr sec					
		P	Z'	0.1 1.0	"	23	Um	iP	21 06 07.2
		Sk	iP	18 02 12.3 D					
		Um	iP	18 02 04.5 D		23	Ki	ePKP	22 02 18
		Ud	iP	18 02 33.2 D			Um	iPKP	22 02 23.8
		De	iP	18 02 54.9				i	22 02 40.1
									New Hebrides Islands (h = N).
				Rat Islands, Aleutian					
				Islands (h = N).					
				m = 5.9 (Up,Ki).	"	24	Up	iPKP	01 49 26.5
"	22	Up	iPKP2	19 26 40.3			Ki	iPKP	01 49 15.1
		Um	ePKP1	19 26 24			Um	iPKP	01 49 20.0
		Ud	iPKP1	19 26 38.5			Ud	iPKP	01 49 29.2
				Kermadec Islands region			De	iPKP	01 49 34.8
				(h = 470 km).					Solomon Islands (h = 160 km).
"	22	Up	iP	19 30 50.2			Um	iP	01 59 02.4
		Um	iP	19 30 27.3			Ud	iP	01 58 36.3
		Ud	iP	19 30 56.5				ipP	01 58 43.5
				Off east coast of Honshu,					South Atlantic Ridge
				Japan (h = 70 km).					(h = 10 km).
				Comparing with the NEIS	"	24	Up	iSg1	03 14 38.6
				solution, these arrival			Ki	iPg1	03 11 57.8
				times are early by about				iSg1	03 12 35.8
				16 s.			Sk	iSg1	03 12 40.2
"	22	Ki	iSg1	19 39 01.3			Um	iPg1	03 12 13.8
		Sk	iSg1	19 39 14.5				iSn	03 12 47.9
		Um	iSn	19 39 23.2				iSg1	03 13 01.0
			iSg1	19 39 39.3			Ud	iSg1	03 14 28.3
				Coast of Nordland, Norway,					Nordland, Norway, 66.4°N,
				66.8°N, 13.7°E.					14.1°E.
				Origin time = 19 37 33.					Origin time = 03 11 09.
				M <sub>L</sub> = 2.5 (Um).					M <sub>L</sub> = 2.5 (Ki,Sk,Um,Ud).
"	23	Sk	iP	04 16 24.7					Explosion?
		Um	iP	04 16 22.4	"	24	Um	iP	07 46 36.0
		Ud	iP	04 15 47.3			Ud	iP	07 46 54.5
			i	04 15 53.5					Hindu Kush region (h = 260 km).
				Greece-Albania border	"	24	Ud	iP	08 54 38.6
				region (h = 15 km).					Tibet (h = N).
"	23	Um	i(P)	07 52 01.5	"	24	Sk	i(P)	12 04 09.8
"	23	Ud	i(P)	08 06 33.1	"	24	Ud	i(P)	12 09 21.6
"	23	Up	iP	09 13 41.7	"	24	Up	iP	16 01 41.2
		Um	iP	09 13 30.9			Sk	iP	16 02 36.2
		Ud	iP	09 13 49.9			Um	iP	16 02 20.8
				Leyte, Philippine Islands					Romania (h = 120 km).
				(h = 160 km).	"	24	Ud	iP	18 11 41.2
"	23	Up	i	16 36 55.9					Southern Nevada.
			iRg	16 37 00.7					Underground explosion.
				(cont.)					



Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979				1979			
Jan.	25	(cont.)		Jan.	26	(cont.)	
		Um	iPcP 21 13 07.3			Ki	micr sec
		Ud	iP 21 12 59.0 D			P	Z' 0.2 1.0
			i 21 13 07.9			Mx	E 13 18
			iPcP 21 13 27.3			Mx	N 18 19
		De	iP 21 13 17.6 D			Sk	iP 10 17 02.5
			iPcP 21 13 40.3			i	10 17 12.6
		Sea of Okhotsk (h = 580 km). m = 5.9 (Up,Ki).				iPP	10 20 16.7
						Um	iP 10 17 14.9
						iS	10 27 53
"	25	Sk	iP 23 57 44.7			Ud	iP 10 17 13.0
		Um	iP 23 57 51.4			De	iP 10 17 22.0
		Central Italy (h = 5 km).				i	10 17 27.9
						Guerrero, Mexico (h = 40 km). m = 6.2, M = 6.6 (Up,Ki).	
"	26	Um	iP 00 04 51.3				
		Flores Sea (h = 560 km).		"	26	Up	iP 17 23 34.7
"	26	Um	iP 00 42 58.6			Ki	iP 17 23 17.2
		Afghanistan-USSR border region (h = N).				Sk	iP 17 23 14.7
						Um	iP 17 23 26.8
						Ud	eP 17 23 29
"	26	Up	iPKP1 01 37 27.5			i	17 23 49.0
			iPKP2 01 37 31.1			Near coast of Guerrero, Mexico (h = 40 km).	
			i 01 37 35.0				
		Ki	iPKP 01 37 12.6	"	26	Ud	iP 20 16 33.6
		Sk	iPKP1 01 37 22.0			Greece (h = 10 km).	
		Um	iPKP1 01 37 15.6	"	26	Ki	iP 20 30 11.3
		Ud	iPKP1 01 37 29.1			Sk	iP 20 30 08.7
			iPKP2 01 37 34.7			Um	iP 20 30 21.3
			i 01 37 36.4			Near coast of Guerrero, Mexico (h = 45 km).	
		De	i 01 37 42.7				
			iPKP2 01 37 49.9	"	26	Um	iSKP1 20 46 22.3
		Kermadec Islands (h = N).				Ud	iPKP1 20 43 10.0
						De	iPKP1 20 43 20.7
"	26	Ki	iP 02 23 16.5			Fiji Islands region (h = 210 km).	
		Sk	iP 02 23 35.2	"	27	Ud	iP 03 05 49.0
		Um	iP 02 23 07.4	"	27	Ki	iP 03 11 56.5
		Ud	iP 02 23 26.6			Um	iP 03 12 22.0
		Tadzhik SSR (h = 160 km).				Ud	iP 03 12 53.8
"	26	Up	iP 08 30 19.1			Kamchatka (h = 150 km).	
		Ki	iP 08 29 41.7	"	27	Ud	eP 04 53 14
		Um	iP 08 29 59.3			Southern Sinkiang Prov., China (h = 60 km).	
		Ud	iP 08 30 26.8	"	27	Ki	iP 05 40 25.3
		South of Honshu, Japan (h = 55 km).				Sk	iP 05 40 32.4
						Um	iP 05 40 07.0
						Ud	iP 05 40 16.7
"	26	Up	iP 10 17 21.2			Iran (h = 10 km).	
			iPP 10 20 51	"	27	Up	iPKP1 07 23 32.5
			iSKS 10 27 53			(cont.)	
			iS 10 28 00				
			micr sec				
		P	Z' 0.1 0.8				
		Mx	E 19 19				
		Mx	N 19 20				
		Mx	Z 51 21				
		Ki	iP 10 17 04.1				
			iS 10 27 45				
		(cont.)					

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979				1979			
Jan.	27	(cont.)		Jan.	27		
		Up	iPKP2 07 23 37.0			Up	iPKP1 21 32 35.9
		Ki	ePKP1 07 23 11			Um	iPKP 21 32 36.2
			iPKP 07 23 17.9			Ud	iPKP1 21 32 37.2
		Sk	iPKP1 07 23 25.7			De	iPKP1 21 32 48.2
		Um	iPKP1 07 23 19.9			South of Fiji Islands	
		Ud	iPKP 07 23 29.4			(h = 70 km).	
			iPKP1 07 23 33.9	"	28	Up	iP 02 35 36.4
			i 07 23 51.5			Ki	iP 02 35 21.0
		De	iPKP1 07 23 42.3			Um	iP 02 35 32.4
		Kermadec Islands (h = N).				Near coast of Guerrero, Mexico (h = 55 km).	
"	27	Up	iPKP2 09 28 43.2	"	28	Um	iP 05 13 27.5
		Sk	iPKP1 09 28 31.6			North Atlantic Ridge	
		Um	iPKP1 09 28 28.4			(h = 10 km).	
		Ud	iPKP1 09 28 41.7	"	28	Up	iP 06 16 45.3
		Kermadec Islands region (h = N).					ipP 06 16 57.0
"	27	Up	iPKP 18 34 14.4			Ki	eP 06 16 41
			ipPKP 18 34 24.5			Sk	iP 06 17 02.5
		Ki	iPKP 18 34 00.5			Um	iP 06 16 38.7
			ipPKP 18 34 09.3				ipP 06 16 50.8
		Sk	iPKP 18 34 12.3			Ud	iP 06 16 58.8
			ipPKP 18 34 22.1				ipP 06 17 10.6
		Um	iPKP 18 34 07.3			De	i 06 17 11.3
			ipPKP 18 34 16.5			India-Bangladesh border region.	
			i 18 37 28.6			h = 45 km (Up,Um,Ud).	
			iSKP1 18 37 40.7	"	28	Um	iP 11 22 43.0
		Ud	iPKP 18 34 17.6	"	28	Up	iPKP1 12 46 54.4
			ipPKP 18 34 27.2			Ud	iPKP1 12 46 56.3
		De	iP 18 34 23.4			De	iPKP1 12 47 06.7
			iSKP1 18 38 08.4			South of Fiji Islands (h = 460 km).	
		New Hebrides Islands h = 35 km (Up,Ki,Sk,Um,Ud).					
"	27	Up	iP 19 08 38.9 C	"	28	Up	iPKP1 14 32 38.6
			i 19 08 51.5			Um	iPKP1 14 32 29.1
			micr sec			Ud	iPKP1 14 32 40.7
		P	Z' 0.4 0.9	"	28	Up	iP 19 30 14.6
		Ki	iP 19 07 44.5 C			Ki	iP 19 30 39.6
			i 19 07 47.4				micr sec
			i 19 07 58.4				P Z' 0.1 1.3
			micr sec			Um	iP 19 30 31.3
		P	Z' 0.3 1.0			Ud	iP 19 30 03.6 C
		i	Z' 0.5 1.1			North Atlantic Ridge (h = 10 km).	
		Sk	iP 19 08 13.6 C	"	28	Ud	iP 19 43 39.4
			i 19 08 27.8				i 19 43 45.5
			iP'P' 19 37 35.8	"	28	Up	iP 19 56 04.1
		Um	iP 19 08 12.2 C				ipP 19 56 11.3
			i 19 08 15.2				iS 20 04 53
			i 19 08 26.5			(cont.)	
			iP'P' 19 37 26.5				
		Ud	iP 19 08 37.0 C				
			i 19 08 51.6				
		De	iP 19 09 00.2 C				
			i 19 09 12.8				
		Alaska Peninsula (h = 15 km).					
		m = 6.7 (Up,Ki).					

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979				1979			
Jan.	28	(cont.)		Jan.	28	(cont.)	
		Up	micr sec			North Atlantic Ridge	
		P	Z' 0.5 1.8			(h = 10 km).	
		pP	Z' 0.3 1.4				
		Mx	E 1.2 20	"	28	Ud iP	22 37 48.3
		Mx	N 2.8 22			i	22 37 54.0
		Mx	Z 1.9 20			De iP	22 37 40.4
		Ki iP	19 56 28.7			North Atlantic Ridge	
		ipP	19 56 36.0			(h = 10 km).	
			micr sec				
		P	Z' 0.8 2.0	"	28	Ud iP	22 39 56.5
		pP	Z' 0.3 1.0				
		Mx	N 1.1 20	"	28	Ud iP	23 31 28.7
		Mx	Z 2.4 20				
		Sk iP	19 55 58.8	"	28	Ud iP	23 34 37.0
		ipP	19 56 06.2				
		Um iP	19 56 19.6	"	28	Up iP	23 41 42.3
		ipP	19 56 26.9			ipP	23 41 47.5
		iS	20 05 23			Ki iP	23 42 07.8
		Ud iP	19 55 52.1			Um iP	23 41 59.0
		ipP	19 55 59.8			Ud iP	23 41 30.4
		De iP	19 55 44.2			ipP	23 41 36.5
		ipP	19 55 52.6			De iP	23 41 23.8
		i	19 56 04.2			North Atlantic Ridge.	
		North Atlantic Ridge.				h = 20 km (Up,Ud).	
		h = 25 km (Up,Ki,Sk,Um,Ud,De).		"	28	Ud iP	23 53 17.4
		m = 6.4, M = 5.3 (Up,Ki).					
"	28	Ud iP	19 59 06.5	"	29	Ud iP	00 09 37.8
"	28	Ud iP	20 01 12.2	"	29	Ud iP	00 22 38.0
"	28	Um eP	20 05 41			i	00 22 46.5
		Ud iP	20 05 08.9	"	29	Ki iP	00 40 51.8
		i	20 05 16.3			Ud iP	00 40 12.4
		North Atlantic Ridge.				i	00 40 20.3
		Origin time = 19 54 38.				De iP	00 40 04.4
"	28	Ud iP	20 07 40.0			North Atlantic Ridge	
						(h = 10 km).	
"	28	Up iP	20 10 54.1	"	29	Um iP	00 40 54.7
		Ud iP	20 10 43.0			Ud iP	00 41 08.4
		i	20 10 48.6			Andaman Islands region	
		North Atlantic Ridge				(h = N).	
		(h = 10 km).		"	29	Ud eP	01 01 09
"	28	Um iP	20 43 21.9			North Atlantic Ridge	
						(h = 10 km).	
"	28	Ud iP	22 32 19.5	"	29	Ud iP	01 08 12.2
		i	22 32 25.2				
"	28	Up iP	22 36 38.7	"	29	Um iP	01 09 37.1
		Ud iP	22 36 47.1				
		Mindanao, Philippine		"	29	Ud iP	01 34 19.1
		Islands (h = 55 km).					
"	28	Ud iP	22 37 01.0	"	29	Up eP	02 37 04
		i	22 37 08.1			Ki iP	02 35 15.4
		(cont.)				i	02 35 22.6
						(cont.)	

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary							
1979				1979			
Jan.	29	(cont.)		Jan.	29	Up	iP 18 34 39.9
		Ki	micr sec			Ki	iP 18 34 24.0
		i	Z' 0.1 1.0			Sk	iP 18 34 20.8
		Sk	iP 02 36 03.0			Um	iP 18 34 32.2
		i	02 36 08.7			Near coast of Guerrero, Mexico (h = N).	
		Um	iP 02 36 06.7				
		Ud	iP 02 36 52.4		"	29	Up iP 18 42 23.5
		De	iP 02 37 33.0				Ki iP 18 42 06.5
		Svalbard region (h = 10 km).					Sk iP 18 42 02.7
"	29	Ud	iP 05 02 08.9				Um iP 18 42 15.6
		i	05 02 12.4			Near coast of Guerrero, Mexico (h = N).	
		i	05 02 18.1				
		North Atlantic Ridge (h = 10 km).			"	29	Ud iP 22 52 11.0
"	29	Up	iPKP1 06 01 33.0		"	30	Um iP 01 39 34.1
			micr sec		"	30	Sk iPKP1 09 58 53.7
		PKP1	Z' 0.2 0.8				Um iPKP1 09 58 46.3
		Ki	iPKP 06 01 21.5				Ud iPKP1 09 58 59.4
		iSKP1	06 04 05.9				De iPKP1 09 59 08.1
		Sk	iPKP1 06 01 28.3				iPKP2 09 59 19.3
		Um	iPKP1 06 01 20.8			Kermadec Islands region (h = 350 km).	
		iPKP	06 01 26.3		"	30	Up iPKP1 13 16 42.0
		i	06 01 30.7				Ud iPKP1 13 16 43.4
		iSKP1	06 04 16.2				De iPKP1 13 16 53.4
		Ud	iPKP1 06 01 35.0			Kermadec Islands region (h = 280 km).	
		i	06 01 38.9		"	30	Up iPKP1 13 56 45.5
		De	iPKP 06 01 43.3				iPKP2 13 56 51.3
		iPKP1	06 01 45.6				micr sec
		ipPKP1	06 03 47.1				PKP2 Z' 0.1 1.0
		South of Fiji Islands (h = 500 km).					Sk iPKP1 13 56 40.1
"	29	Up	iP 06 35 30.6				Um iPKP1 13 56 34.2
		Ki	iP 06 34 56.1				Ud iPKP1 13 56 46.6
		Um	iP 06 35 08.1				iPKP2 13 56 54.9
		Ud	iP 06 35 44.2				De ePKP1 13 56 52
		USSR-Mongolia border region (h = N).				Kermadec Islands region (h = 390 km).	
"	29	Ud	iP 09 20 13.8		"	30	Um iRg 14 10 38.6
		North Atlantic Ridge (h = 10 km).				Local near-surface event.	
"	29	Um	i(P) 10 28 12.4		"	31	Ki iP 01 31 30.1
"	29	Ud	iSgl 11 47 52.2				Um iP 01 31 56.7
		De	iSgl 11 46 52.8				Ud iP 01 32 22.0
"	29	Up	iP 14 48 03.1			Unimak Island region (h = 35 km).	
		Ki	iP 14 47 47.0		"	31	Ud iP 03 18 28.0
		Sk	iP 14 48 17.9			Andreanof Islands, Aleutian Is. (h = 60 km).	
		Um	iP 14 47 49.1		"	31	Up iPKP1 05 57 38.2
		Ud	iP 14 48 18.5			(cont.)	
		Northern Sinkiang Prov., China (h = N).					

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979				1979			
Jan.	31	(cont.)		Jan.	31	(cont.)	
		Sk	iPKP1 05 57 31.6			Up	micr sec
		Um	iPKP1 05 57 25.9			P	Z' 0.1 0.7
		Ud	iPKP1 05 57 40.1			Ki	iP 15 58 37.8 D
			iPKP2 05 57 45.8				micr sec
		De	iPKP1 05 57 48.7			P	Z' 0.1 1.0
		Kermadec Islands (h = N).				Sk	iP 15 58 46.1
"	31	Up	iP 12 46 05.3 D			Um	iP 15 58 21.6 D
			iPP 12 48 34.9			Ud	iP 15 58 32.2 D
			iS 12 53 56.9			De	iP 15 58 22.2 D
			iScS 12 54 58.2			Pakistan (h = 180 km).	
			micr sec			m = 5.5 (Up,Ki).	
		P	Z' 0.7 1.3	"	31	Up	iP 16 48 49.1
		Ki	iP 12 45 26.9 D			Ki	iP 16 47 55.8
			iPP 12 47 48.5			Um	iP 16 48 21.2
			iS 12 52 45.4			Ud	iP 16 48 50.3
			iScS 12 54 15.3			Rat Islands, Aleutian Islands (h = 40 km).	
			micr sec	"	31	Up	iP 20 06 15.6
		P	Z' 0.7 1.5			Ki	iP 20 04 48.1
		Sk	iP 12 46 01.4 D			Sk	iP 20 05 11.5
			ipP 12 47 53.9				iS 20 06 54.5
		Um	iP 12 45 43.3 D			Um	iP 20 05 32.3
			ipP 12 47 32.5			Ud	iP 20 06 06.9
			iS 12 53 16.5			Norwegian Sea (h = 10 km).	
		Ud	iP 12 46 13.9 D				
			ipP 12 48 14.8				
			iPP 12 48 42.8				
			iS 12 54 13.5				
		De	iP 12 46 28.8 D				
		E.-USSR-N.E. China border reg.					
		h = 590 km (Sk,Um,Ud).					
		m = 6.0 (Up,Ki).					
"	31	Ud	eP 14 07 43				
		Southern Iran (h = N).					
"	31	Up	iSgl 14 22 27.6				
		Sk	eSgl 14 22 27				
		Ud	iPgl 14 20 32.6				
			i 14 21 24.7				
			iSgl 14 21 28.8				
		Coast of southern Norway, near 58 1/4°N, 6°E.					
		Origin time = 14 19 17.					
		M <sub>L</sub> = 2.7 (Up,Ud).					
		By combination with Bergen and Kongsberg readings.					
"	31	Ud	iP 14 23 41.1				
		Tadzhik SSR (h = 45 km).					
"	31	Up	iP 15 50 01.5				
		Ud	iP 15 50 15.2				
"	31	Up	iP 15 58 16.0 D				
		(cont.)					

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SEISMOLOGICAL BULLETIN

U P P S A L A, K I R U N A, S K A L S T U G A N, U M E Å,

U D D E H O L M and D E L A R Y

Uppsala	(Up):	59°51.5'N,	17°37.6'E;	h = 14 m
Kiruna	(Ki):	67°50.4'N,	20°25.0'E;	h = 390 m
Skalstugan	(Sk):	63°34.8'N,	12°16.8'E;	h = 580 m
Umeå	(Um):	63°48.9'N,	20°14.2'E;	h = 16 m
Uddeholm	(Ud):	60°05.4'N,	13°36.4'E;	h = 240 m
Delary	(De):	56°28.2'N,	13°52.2'E;	h = 150 m

F E B R U A R Y 1 - 28, 1979

1979				1979			
Feb.	1	Up	iP	04 19 54.2 C	Feb.	2	(cont.)
				micr sec			South of Honshu, Japan
				P Z' 0.3 0.9			(h = N).
		Ki	iP	04 19 38.0 C	"	2	Up
				micr sec			iPKP1 08 43 12.1
				P Z' 0.2 0.6			ipPKP1 08 43 33.3
		Sk	iP	04 19 09.4 C			micr sec
		Um	iP	04 19 39.1 C			PKP1 Z' 0.3 1.5
		Ud	iP	04 20 10.9 C			Um iPKP1 08 43 01.7
		De	iP	04 20 18.2 C			Ud iPKP1 08 43 13.1
				Eastern Kazakh SSR.			De iPKP1 08 43 23.5
				Underground explosion.			Kermadec Islands region
				m = 6.2 (Up, Ki).			(h = 70 km).
"	1	Ki	iP	12 38 05.5	"	2	Ud
		Sk	iP	12 38 34.2			iP 12 08 12.1
		Um	iP	12 38 35.1			Mindanao, Philippine
		Ud	iP	12 38 58.6			Islands (h = 50 km).
		De	iP	12 39 21.5	"	2	Ud
				Southern Alaska			iP 20 46 08.3
				(h = 110 km).			Philippine Islands region
							(h = 100 km).
"	1	Um	iP	21 00 32.4	"	2	Up
							iPKP1 23 44 22.1
"	1	Up	iPKP2	21 27 31.9			Ud iPKP1 23 44 23.1
		Ki	iPKP1	21 26 55.8			De iPKP1 23 44 33.2
		Um	iPKP1	21 27 14.9	"	3	Up
		Ud	iPKP2	21 27 35.1			iP 00 41 31.1
							Um eP 00 41 56
"	2	Up	iP	01 17 21.8 C	"	3	Um
				micr sec			iPKP 06 44 22.6
				P Z' 0.1 0.6			Santa Cruz Islands
		Ki	iP	01 17 06.5			(h = 80 km).
		Sk	iP	01 17 35.4	"	3	Up
		Um	iP	01 17 08.3 C			iP 08 01 03.7
		Ud	iP	01 17 36.3 C			micr sec
		De	iP	01 17 41.8			Mx N 1.3 23
				Southern Sinkiang prov.,			Ki iP 08 00 49.1
				China (h = N).			Um iP 08 00 54.3 D
							Ud iP 08 01 12.8
							Molucca Passage (h = 55 km).
"	2	Up	eP	06 02 42	"	3	Up
		Um	iP	06 02 23.4			iPKP1 09 00 05.7 C
		Ud	iP	06 02 49.1			micr sec
				(cont.)			PKP1 Z' 0.1 0.8
							(cont.)

Up = Uppsala, Ki = Kiruna, Sk = Skalistugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979				1979				
Feb.	3	(cont.)		Feb.	4	Ud	iP	20 37 44.7
		Sk	iPKP1					Fox Islands, Aleutian
		Um	iPKP1					Islands (h = N).
		Ud	iPKP1					
		De	iPKP1	"	4	Up	iP	21 37 37.6
		Kermadec Islands						micr sec
		(h = 60 km).					P	Z' 0.1 1.0
"	3	Up	iP			Ki	iP	21 36 52.0
			ipP			Sk	iP	21 37 13.8
		Ki	iP			Um	iP	21 37 16.0
		Sk	iP			Ud	iP	21 37 34.7
		Um	iP				i	21 37 41.3
			ipP			De	i	21 38 00.2
		Ud	iP			North Pacific Ocean		
			ipP			(h = 10 km).		
		Near coast of northern California.		"	5	Up	ePKP1	02 22 51
		h = 40 km (Up,Um,Ud).				Sk	e	02 22 50
"	3	Ud	i(P)			Um	iPKP1	02 22 37.4
							i	02 22 42.3
"	3	Ud	i(P)			Ud	iPKP1	02 22 51.1
			i			De	iPKP1	02 22 59.8
"	3	Ud	iP	"	5	Up	iP	06 06 00.7
		Iran (h = N).					ipP	06 06 11.7
							i	06 06 25.8
"	4	Sk	iPKP					micr sec
		Um	iPKP				pP	Z' 0.1 1.0
		Ud	iPKP			Ki	eP	06 06 00
		Solomon Islands					ipP	06 06 13.4
		(h = 90 km).				Sk	ipP	06 06 27.1
"	4	Ud	iP	"		Um	iP	06 05 58.9
		Andreanof Islands,					ipP	06 06 09.2
		Aleutian Is. (h = N).				Ud	iP	06 06 11.6
"	4	Up	iP				i	06 06 14.6
			ipP				ipP	06 06 22.2
						De	i	06 06 12.6
							ipP	06 06 19.9
"	4	Up	iP			Off w. coast of North		
			ipP			Sumatera.		
						h = 35 km (Up,Um,Ud).		
			micr sec	"	5	Up	iP	10 07 08.3 C
			P					micr sec
			Z' 0.1 1.0				P	Z' 0.1 0.6
		Ki	iP			Ki	iP	10 06 43.0 C
		Sk	eP					micr sec
		Um	iP				P	Z' 0.1 0.8
		De	iP			Sk	iP	10 07 10.9 C
		Andreanof Islands,				Um	iP	10 06 52.3 C
		Aleutian Is. (h = N).				Ud	iP	10 07 17.6 C
"	4	Ud	iPKP1			De	iP	10 07 26.5 C
		De	ePKP1			Southwestern Ryukyu Islands		
		Tonga Islands (h = N).				(h = 40 km).		
"	4	Up	iP			m = 6.0 (Up,Ki).		
		Um	iP					
		Ud	iP					
		Kuril Islands (h = 60 km).		"	5	Up	iRg	14 04 02.6
"	4	Ud	iP			Ud	iRg	14 03 12.4
						Regional near-surface event.		



Up = Uppsala, Ki = Kiruna, Sk = Skalistugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979				1979			
Feb.				Feb.			
7	(cont.)			8	Up	iP	21 34 52.9
	Ki	iP	21 14 58.2 C		Ki	iP	21 35 59.8
			micr sec		Sk	iP	21 35 32.1
	P	Z'	0.3 1.0		Um	iP	21 35 24.4
	Mx	N	5.0 18		Ud	iP	21 35 00.8
	Mx	Z	5.7 18		De	iP	21 34 29.5
	Sk	iP	21 15 19.6				Crete (h = N).
	Um	iP	21 15 03.9	"	9	Up	iPKP 02 18 52.2
		iPP	21 18 53.3			Ki	iPKP 02 19 07.5
		i	21 19 38.6				ipPKP 02 19 29.6
		iPKKP	21 32 15.8			Um	iPKP 02 19 00.1
		iSKS	21 25 26.0				ipPKP 02 19 21.2
	Ud	iP	21 15 23.6 C			Ud	iPKP 02 18 50.6
		ipP	21 15 59.3				South Sandwich Islands
	De	iP	21 15 29.5 C				region.
		i	21 19 19.5				h = 80 km (Ki,Um).
		iPP	21 19 32.0				
			Philippine Islands region.	"	9	Up	iP 11 25 43.5
			h = 140 km (Up,Ud).			Ki	iP 11 26 07.3
			m = 6.4, M = 6.0 (Up,Ki).			Um	iP 11 25 57.0
			M not corrected for focal			Ud	iP 11 26 01.9
			depth.			De	iP 11 25 49.2
"	7	Ki	iP 21 32 36.0				Southwestern USSR (h = N).
		Um	iP 21 32 15.9	"	9	Up	ipP 14 47 54.0
		Ud	eP 21 32 34			Ki	iP 14 49 20.7
"	8	Ud	eP 12 22 58			Um	iP 14 48 39.1
			Crete (h = 10 km).			Ud	iP 14 47 43.5
"	8	Ud	iRg 13 59 22.5				ipP 14 47 49.4
			Local near-surface event.			De	iP 14 47 00.3
"	8	Up	iPKP1 14 48 37.1				Northern Italy (h = N).
		Um	iPKP1 14 48 24.4	"	9	Up	iPKP1 15 02 41.9
		Ud	iPKP1 14 48 39.3				ipPKP2 15 02 47.0
		De	iPKP1 14 48 49.2			Sk	iPKP1 15 02 36.6
			South of Fiji Islands			Um	iPKP1 15 02 31.0
			(h = 510 km).			Ud	iPKP1 15 02 44.2
"	8	Um	iP 15 44 08.9				ipPKP2 15 02 49.9
"	8	Um	iP 19 43 52.6			De	iPKP2 15 02 59.1
		i	19 44 02.5	"	9	Sk	eP 18 58 58
"	8	Up	iP 20 11 48.9 C			Um	ipP 18 59 21.0
			micr sec				Southern Alaska (h = 90 km).
		P	Z' 0.1 1.0	"	9	Ud	iPKP1 23 30 49.8
	Ki	iP	20 11 14.6				South of Fiji Islands
			micr sec				(h = 550 km).
		P	Z' 0.1 0.9	"	10	Ud	iP 08 09 42.2
	Sk	iP	20 11 22.7	"	10	Up	iPKP1 08 46 07.6
	Um	iP	20 11 34.1 C			Ud	iPKP1 08 46 08.3
	Ud	iP	20 11 40.8 C			De	iPKP1 08 46 19.4
	De	iP	20 11 58.8 C				Fiji Islands region
			Southern Nevada.				(h = 620 km).
			Underground explosion.	"	10	Up	iP 10 23 29.5
			m = 5.9 (Up,Ki).				(cont.)

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979				1979			
Feb.	10	(cont.) Ud iP Hokkaido, Japan region (h = 50 km).	10 23 36.0	Feb.	11	Up iP Sk iP Ud eP De iP Southern Greece (h = 90 km).	01 13 41.9 01 14 23.8 01 13 47 01 13 14.4
"	10	Ud eP	10 30 31	"	11	Ud iP	07 27 51.4
"	10	Up iP P Z' Ki iP Sk iP Ud iP De eP Northeast of Taiwan (h = 130 km).	12 24 21.7 micr sec 0.2 0.9 12 23 55.0 12 24 24.7 12 24 30.4 12 24 41	"	11	Up iP Um iP Ud iP ipP North Atlantic Ridge (h = 10 km).	07 28 45.6 07 29 12.5 07 28 44.9 07 28 49.9
"	10	Up iP iS iLg2 Ud iP iS iLg2 De iP iLg2 Poland (h = 10 km).	13 26 34.6 13 28 15.5 13 29 24.5 13 26 47.4 13 28 36.0 13 29 38.1 13 25 57.4 13 28 15.6	"	11	Up iP Mx E Mx N Mx Z Ki iP Mx E Sk ipP Um iP ipP Ud iP ipP De ipP North Atlantic Ridge h = 35 km (Um,Ud). M = 5.2 (Up,Ki).	08 11 43.7 micr sec 1.3 22 1.1 21 2.7 20 08 12 09.8 micr sec 1.0 19 08 11 47.9 08 11 58.7 08 12 08.9 08 11 30.2 08 11 39.6 08 11 30.9
"	10	Um iP Ud iP Off east coast of Honshu, Japan (h = 20 km).	17 36 33.2 17 37 03.9	"	11	Ud iPKP1 De iPKP1 Fiji Islands region (h = 560 km).	09 04 51.2 09 04 59.5
"	10	Um iP Ud iP Lake Baikal region (h = N).	18 51 53.2 18 52 29.1	"	11	Ki iP Um ipP Ud iP ipP North Atlantic Ridge (h = 10 km).	09 17 59.8 09 17 53.6 09 17 19.3 09 17 25.2
"	10	Um iP Tanimbar Islands region (h = N).	19 16 29.9	"	11	Ud iP i Up iP iS Mx E Mx N Mx Z Ki iP ipP Mx E Mx N	10 20 41.3 10 20 47.1 17 43 24.8 17 54 30 micr sec 2.9 19 2.2 18 5.0 17 17 43 09.2 17 43 20.4 micr sec 4.9 16 4.1 18
"	10	Um iPKP Solomon Islands (h = 410 km).	22 17 03.7	"	11	Up iP Ki iP ipP Mx E Mx N	00 04 36.0 00 04 39.8 00 04 23.8 00 04 41.1 00 04 26.4 00 04 27.4 Northern Columbia (h = 160 km).
"	11	Um iP Ud iP South of Honshu, Japan (h = N).	00 53 20.7 00 53 48.8				

(cont.)



Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979				1979				
Feb.	12	(cont.)		Feb.	13	Ki	iP	03 31 47.7
		Ki	micr sec			Ud	iP	03 31 33.2
		P	Z' 0.2 1.0			De	iP	03 31 24.1
		Sk	iP 15 54 42.3	"	13	Up	iP	05 45 03.3
		i	15 54 46.9			i		05 45 07.3
		Um	iP 15 54 40.8			iS		05 53 47.3
		i	15 54 45.8			iP'P'		06 14 13.5
		Ud	iP 15 55 05.0				micr sec	
		i	15 55 10.1			i	Z' 0.7 1.5	
		De	iP 15 55 28.6			Mx	E 9.6 20	
		i	15 55 33.9			Mx	N 45 20	
		Alaska Peninsula (h = N).				Mx	Z 64 21	
"	12	Ud	iP 16 09 42.1			Ki	iP	05 44 08.9
"	12	Up	iP 17 35 28.2			i		05 44 11.2
		Ud	iP 17 35 29.2			iS		05 52 04.1
						iP'P'		06 14 20.0
"	12	Up	iP 19 28 06.3				micr sec	
		Ki	eP 19 27 43			i	Z' 1.0 1.2	
		Sk	iP 19 28 22.0			Mx	E 28 19	
		Um	iP 19 27 49.7			Mx	N 42 19	
		ipP	19 27 54.0			Sk	iP	05 44 37.2
		Ud	iP 19 28 21.1			i		05 44 41.5
		ipP	19 28 25.3			iS		05 52 58.6
		De	iP 19 28 30.2			eP'P'		06 14 03
		ipP	19 28 33.2			Um	iP	05 44 36.8
		Northern Sinkiang Prov., China. h = 15 km (Um,Ud,De).				i		05 44 41.3
"	12	Um	iP 20 40 43.0			iS		05 52 58.2
		Ud	iP 20 40 38.3			iP'P'		06 14 00.9
"	12	Ud	i(P) 20 52 19.1			Ud	iP	05 45 01.0
"	12	Um	iP 21 40 08.3			i		05 45 04.4
		Ud	iP 21 40 10.5			iS		05 53 47.2
"	12	Um	iP 23 41 02.8			De	iP	05 45 24.0
		Ud	iP 23 41 29.7			i		05 45 28.3
		Rat Islands, Aleutian Islands (h = 70 km).				Alaska Peninsula (h = N). m = 6.7, M = 6.7 (Up,Ki). Double P, small and large, in average 4 s apart. The second onset if inter- preted as pP, gives a focal depth of 15 km.		
"	13	Up	iP 02 01 43.8	"	13	Ki	iP	06 33 45.3
		Ki	iP 02 02 08.1			Um	iP	06 34 10.9
		Sk	iP 02 01 38.6			South of Alaska (h = N).		
		Um	iP 02 01 59.9	"	13	Sk	iPKP1	09 41 33.6
		Ud	iP 02 01 32.2			Um	iPKP1	09 41 27.5
		i	02 01 35.1			Ud	iPKP1	09 41 41.3
		North Atlantic Ridge (h = 10 km).		"	13	Ki	iP	10 31 24.8
"	13	Ki	iP 02 49 24.5			Ud	iP	10 31 12.5
		Sk	iP 02 49 18.6	"	13	Up	iP	10 43 25.7 C
		Chiapas, Mexico (h = 100 km).				ipP		10 43 30.9
						iPP		10 44 46.0
							micr sec	
						P	Z' 0.2 1.2	

(cont.)

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979				1979			
Feb.	13	(cont.)		Feb.	13		
		Up	micr sec			Up	iSgl 14 50 57.0
		Mx	E 3.6 12				i 14 51 08.3
		Mx	N 6.7 11			Sk	eSgl 14 50 49
		Mx	Z 13 12			Ud	iPgl 14 49 42.6
		Ki	iP 10 43 54.5 C				iSgl 14 50 03.4
			ipP 10 43 58.5				i 14 50 05.6
			iPP 10 45 23.8			De	iSgl 14 51 45.9
			micr sec			Southeastern Norway, near	
		P	Z' 0.2 1.2			60 3/4°N, 12°E.	
		Mx	E 6.5 11			Origin time = 14 49 24.	
		Mx	N 3.2 10			M <sub>L</sub> = 2.0 (Ud).	
		Sk	iP 10 43 58.8	"	13	Sk	iPKP 16 33 35.7
			iPP 10 45 31.0			Southeast Indian Rise	
		Um	iP 10 43 34.3 C			(h = 10 km).	
			ipP 10 43 38.1	"	13	Ud	iP 17 39 48.2
		Ud	iP 10 43 42.1 C			Hokkaido, Japan region	
			ipP 10 43 46.0			(h = 70 km).	
			iPP 10 45 08.4	"	13	Up	iP 21 47 25.5
		De	iP 10 43 30.2 C			Ki	iP 21 47 08.7
			ipP 10 43 35.3			Sk	eP 21 47 33
			iPP 10 44 47.9			Um	iP 21 47 14.3
		Iran.					ipP 21 47 22.0
		h = 15 km (Up,Ki,Um,Ud,De).				Ud	iP 21 47 35.4
		m = 5.8, M = 5.6 (Up,Ki).					ipP 21 47 43.8
"	13	Up	iP 10 50 15.9			Luzon, Philippine Islands.	
		Ki	iP 10 49 21.3			h = 25 km (Um,Ud).	
			ipP 10 49 29.0	"	13	Ki	iP 22 12 34.5
			micr sec			Um	iP 22 13 01.3
		P	Z' 0.1 1.0			South of Alaska (h = N).	
		Sk	iP 10 49 49.3	"	14	Up	iP 01 14 19.8
		Um	iP 10 49 49.3			Ki	iP 01 13 25.7
		Ud	iP 10 50 12.9			Sk	iP 01 14 03.1
			ipP 10 50 21.2			Um	iP 01 13 51.4
		De	iP 10 50 36.3			Ud	iP 01 14 23.5
			ipP 10 50 43.1			De	iP 01 14 44.9
		South of Alaska.				Kamchatka (h = 280 km).	
		h = 30 km (Ki,Ud,De).		"	14	Up	iP 02 03 41.5
"	13	Um	iP 11 42 21.4			Ki	iP 02 02 53.4
		South of Alaska (h = N).				Sk	ipP 02 04 06.4
"	13	Up	iP 11 46 36.4			Um	iP 02 03 11.0
		Ki	iP 11 45 42.6 C				i 02 03 19.0
			micr sec				ipP 02 03 50.9
		P	Z' 0.1 0.7			Ud	iP 02 03 40.9
		Sk	iP 11 46 10.9			Honshu, Japan (h = 170 km).	
		Um	iP 11 46 10.3	"	14	Up	iP 03 48 18.6
		Ud	iP 11 46 34.2			Ki	iP 03 48 19.7
		Alaska Peninsula (h = N).				Sk	ePP 03 50 11
"	13	Ki	i(P) 12 36 01.9			Um	iP 03 48 10.4
"	13	Ki	i(P) 12 47 04.3				ipP 03 48 16.0
"	13	Ud	iP 13 40 43.3			Ud	iP 03 48 31.7
						Tadzhik SSR (h = 50 km).	



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1979				1979						
Feb.	14	Um	i(P)	04 27 34.5	Feb.	15	Up	iSgl	12 12 46.8	
"	14	Um	i(P)	05 58 23.6			Ud	iPgl	12 11 28.8	
"	14	Ki	iP	09 15 51.5				iSgl	12 11 47.4	
		Um	iP	09 16 05.1				Southeastern Norway.		
		Ud	iP	09 16 29.7				Origin time = 12 11 04.		
		Near west coast of Honshu, Japan (h = 50 km).			"	15	Up	iP	18 16 48.9	
"	14	Sk	iPgl	13 36 41.2			Ki	iP	18 16 14.7	
			iSgl	13 36 46.2			Um	iP	18 16 34.0	
			iRg	13 36 48.2			Ud	iP	18 16 40.7	
		Local near-surface event. Origin time = 13 36 34.					Southern Nevada. Underground explosion.			
"	14	Up	eSgl	14 20 21		"	15	Ki	iP	23 08 31.3
		Ud	iSgl	14 19 23.1			Um	iP	23 08 21.0	
"	14	Up	iPKP1	15 02 06.7			Ud	iP	23 08 39.3	
		Ud	iPKP1	15 02 08.0			Afghanistan-USSR border region (h = 240 km).			
		South of Fiji Islands (h = 35 km).			"	16	Up	iPKP	00 50 15.7	
"	14	Up	iPKP	17 13 59.7				iSKP1	00 53 39.1	
			iSKP1	17 17 13.3				iSKKP	01 02 51.2	
				micr sec					micr sec	
			PKP	Z' 0.3 1.4			PKP	Z'	0.1 1.0	
		Ki	iPKP	17 13 46.8			Mx	E	3.6 21	
				micr sec			Mx	N	6.7 23	
			PKP	Z' 0.3 0.9			Mx	Z	13 21	
		Sk	iPKP	17 13 57.6			Ki	iPKP	00 50 02.9	
			iSKP1	17 17 08.6					micr sec	
		Um	iPKP	17 13 52.8				PKP	Z' 0.1 0.6	
		Ud	i(PKP)	17 13 49.4				Mx	E 4.1 22	
			iPKP	17 14 02.1				Mx	N 3.9 21	
			iSKP1	17 17 17.1			Sk	iPKP	00 50 12.7	
		De	iPKP	17 14 08.2				i	00 50 16.2	
			iSKP1	17 17 27.8			Um	iPKP	00 50 07.7	
		New Hebrides Islands (h = 120 km).						i	00 50 10.8	
"	15	Sk	eP	08 22 44				iSKKP	01 03 02.5	
		Um	iP	08 22 09.9			Ud	iPKP	00 50 17.5	
		Ud	iP	08 22 34.6				iSKP1	00 53 38.7	
		Afghanistan-USSR border region (h = 30 km).					De	iPKP	00 50 25.4	
"	15	Ud	iP	10 16 48.8				iSKP1	00 53 49.0	
		Spain (h = 10 km).					New Hebrides Islands (h = 60 km). M = 6.3 (Up,Ki).			
"	15	Ud	iP	10 19 39.1		"	16	Up	iP	04 10 50.0 C
"	15	Ki	iP	11 20 59.8				iPn	04 11 54.1	
		Ud	iP	11 20 59.1			Ki	iP	04 10 35.0 C	
		Near east coast of Kamchatka (h = N).						iPP	04 11 48.4	
									micr sec	
							P	Z'	0.2 0.5	
							Sk	iP	04 11 06.1 C	
							Um	iP	04 10 35.3 C	
								i	04 11 19.9	
							Ud	iP	04 11 06.8 C	
							De	iP	04 11 13.6	
							Eastern Kazakh SSR. Underground explosion.			

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1979				1979			
Feb.	16	Up	eP	04 33 30	Feb.	16	(cont.)
		Ki	iP	04 34 39.8			De iPP 10 26 54.5
			ipP	04 34 50.1			iPKKP2 10 39 12.5
		Sk	eP	04 34 12			Near coast of Peru
		Um	iP	04 34 04.2			(h = 55 km).
			ipP	04 34 14.6			M = 7.2 (Up,Ki).
		Ud	iP	04 33 39.6	"	16	Ud i(P) 18 27 46.2
			i	04 34 16.9	"	16	Sk epP 22 32 29
		De	iP	04 33 07.8			Um iPKKP1 22 48 16.2
		Dodecanese Islands.					Ud iPKKP1 22 48 33.7
		h = 40 km (Ki,Um).					Near coast of Peru
"	16	Up	ePKP	05 14 27			(h = 50 km).
			iPKP1	05 14 31.8	"	16	Ud i(P) 22 46 16.7
			iPKP2	05 14 38.1	"	16	Ud iP 23 31 30.8
		Ki	iPKP1	05 14 10.1			Tadzhik SSR (h = 140 km).
		Sk	iPKP1	05 14 26.8	"	17	Ud iP 02 19 16.4
		Um	iPKP1	05 14 21.1	"	17	Up iP 02 27 41.7
			i	05 14 25.0			Sk iP 02 27 15.7
		Ud	iPKP1	05 14 33.8			Um eP 02 27 15
			iPKP2	05 14 41.2			Ud iP 02 27 38.3
		De	iPKP1	05 14 42.4			Alaska Peninsula (h = N).
			iPKP2	05 14 54.6	"	17	Um iP 06 59 09.6
		Kermadec Islands region					Ud iP 06 59 33.1
		(h = 480 km).					Volcano Islands region
"	16	Um	iPKP	09 06 52.3	"	17	(h = N).
		South Sandwich Islands					Up iP 09 13 49.6
		region (h = N).					Um iP 09 14 01.7
"	16	Up	iP	10 22 51.6	"	17	Ki iP 10 56 57.5
			iSKS	10 33 27			Sk e 10 57 48
			iS	10 34 41			Um iP 10 57 28.6
			iPKKP2	10 39 00.0			Central Alaska (h = 55 km).
				micr sec	"	17	Up iPgl 17 32 38.1
		Mx	E	65 23			i 17 32 43.2
		Mx	N	19 20			i 17 32 45.7
		Mx	Z	153 25			iSn 17 33 17.5
		Ki	iP	10 23 02.3			iSgl 17 33 34.2
			i	10 23 17.0			Ki iPn 17 32 35.2
			iPKKP1	10 38 35.2			iSn 17 33 30.2
				micr sec			iSgl 17 33 50.1
		Mx	E	49 19			Sk ePn 17 32 42
		Mx	N	52 25			iPgl 17 32 51.4
		Sk	iP	10 22 47.9			iSn 17 33 41.1
			iPP	10 27 09.7			iSgl 17 34 01.7
			iPKKP1	10 38 46.0			Um iPgl 17 31 51.2 D
		Um	iP	10 23 02.5			i 17 31 56.2
			iPP	10 27 26.2			iSgl 17 32 13.5
			iSKS	10 33 36			i 17 32 20.0
			iS	10 34 55			Ud iPn 17 32 47.8
			iPKKP1	10 38 33.5			iPgl 17 32 59.6
			iP'P'	10 47 07.3			(cont.)
		Ud	iP	10 22 42.8			
			iPP	10 27 03.7			
			iPKKP2	10 39 05.9			
			i	10 39 24.1			
		De	iP	10 22 41.3			
		(cont.)					

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979						1979							
Feb.	17	(cont.)				Feb.	18	Up	iP	11 24	52.7		
		Ud	iSn	17 33	50.7				ipP	11 25	07.0		
			iSgl	17 34	12.5			Ki	iP	11 23	58.4		
		De	iSn	17 34	48.4			Sk	iP	11 24	28.4		
			iSgl	17 35	37.4			Um	iP	11 24	26.1		
		South Österbotten, Finland, near 63 1/4°N, 23 1/2°E. Origin time = 17 31 22. M <sub>L</sub> = 3.7 (Up,Ki,Sk,Ud,De). Felt.							ipP	11 24	40.3		
								Ud	iP	11 24	50.5		
								De	iP	11 25	15.1		
								Alaska Peninsula (h = 55 km).					
"	17	Up	iSgl	17 43	11.5	"	18	Ud	iSKP	12 48	20.9		
		Ki	iSgl	17 43	26.7			Fiji Islands region (h = 380 km).					
		Sk	iSgl	17 43	38.3								
		Um	iPgl	17 41	27.4 D			"	18	Up	iP	16 05	29.3
			i	17 41	32.3					Ki	iP	16 05	14.3
			iSgl	17 41	49.8					Um	iP	16 02	18.9
			i	17 41	56.0					Ud	iP	16 05	37.9
		Ud	eSn	17 43	27			Talaud Islands (h = 70 km).					
			iSgl	17 43	48.9								
		Same location as the pre- ceding event. Origin time = 17 40 58. M <sub>L</sub> = 2.4 (Up,Um). Felt.						"	19	Up	iP	00 48	51.0
										Ki	iP	00 48	40.9
										Um	iP	00 48	44.3
										Ud	iP	00 49	04.8
								Mindanao, Philippine Islands (h = 60 km).					
"	17	Up	iP	20 02	46.4	"	19	Um	iP	04 18	49.6		
		Ki	iP	20 03	56.2			Ud	iP	04 19	14.6		
		Ud	iP	20 02	52.0								
		Mediterranean Sea (h = N).						"	19	Up	iP	10 52	49.4
"	17	Up	iP	23 37	30.5					Ki	iP	10 52	06.1
		Ki	iP	23 37	15.6					Sk	eP	10 52	42
		Um	iP	23 37	20.3					Um	iP	10 52	25.4
			ipP	23 37	46.5					Ud	iP	10 52	56.4
		Ud	iP	23 37	38.9			Hokkaido, Japan region (h = 120 km).					
		Molucca Passage (h = 100 km).						"	19	Up	iP	16 53	01.3
"	18	Up	Mx	06 28						Ki	iP	16 53	07.6
				micr	sec					Sk	eP	16 53	26
			Mx	E	1.6 21					Um	iP	16 52	58.1
			Mx	N	2.8 22					Ud	iP	16 53	17.6
			Mx	Z	4.2 22					De	iP	16 53	16.1
		Ki	Mx	06 39				Afghanistan-USSR border region (h = 45 km).					
				micr	sec								
			Mx	E	3.7 19			"	19	Um	iP	22 22	53.8
			Mx	N	3.2 20					Ud	iP	22 23	21.5
		Prince Edward Islands region (h = 10 km). M = 6.0 (Up,Ki).								Near s. coast of Honshu, Japan (h = 140 km).			
"	18	Up	ePKP1	11 11	03	"	19	Ud	iP	22 38	15.8		
		Um	iPKP	11 11	01.5								
		Ud	iPKP1	11 11	03.6	"	20	Up	iP	06 43	50.4		
		Tonga Islands (h = 60 km).								iPP	06 46	26.6	
										iS	06 53	02.3	
								(cont.)					

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979				1979				
Feb.	20	(cont.)		Feb.	20	Um	iP	15 34 19.0
		Up	micr sec			Ud	iP	15 34 49.4
		P	Z' 2.9 2.1	"	20	Ud	iP	16 07 00.1
		Mx	E 27 15	"	20	Up	iPKP1	19 58 35.8
		Mx	N 29 16			Ud	iPKP1	19 58 37.7
		Mx	Z 48 16	"	21	Ud	iP	01 19 20.5
		Ki	iP 06 43 08.1			Near east coast of Honshu, Japan (h = 90 km).		
			iPP 06 45 27.1	"	21	Ud	iPKP1	05 36 57.9
			iS 06 51 43			De	iPKP1	05 37 08.6
			micr sec				iPKP2	05 37 14.9
		P	Z' 0.6 1.5			South of Fiji Islands (h = 130 km).		
		Mx	E 133 18	"	21	Um	iP	06 38 40.8
		Mx	N 90 17	"	21	Up	iP	12 47 24.5
		Sk	iP 06 43 42.1			Um	iP	12 47 04.1
		Um	iP 06 43 26.6			Ud	iP	12 47 34.8
			iS 06 52 19			De	ipP	12 48 02.1
		Ud	iP 06 43 56.7			Off east coast of Honshu, Japan (h = N).		
			iPP 06 46 44.4	"	21	Up	iSgl	13 29 28.4
			i 06 48 18.4			i		13 29 38.6
		De	iP 06 44 13.2			Ud	iSgl	13 28 26.8
			iPP 06 47 02.9			iRg		13 28 33.9
			iS 06 53 48.1			De	i(Rg)	13 28 30.0
		Off east coast of Honshu, Japan (h = 10 km). m = 6.8, M = 7.0 (Up,Ki).				Regional near-surface event.		
"	20	Up	iP 07 17 07.4	"	21	Up	iP	13 50 21.8 C
		Ki	iP 07 16 25.5			ipP		13 50 31.4
		Sk	iP 07 17 01.3					micr sec
		Um	iP 07 16 44.1			P	Z' 0.2 1.1	
		Ud	iP 07 17 14.8			Ki	iP	13 49 39.7 C
		De	iP 07 17 33.4					micr sec
		Off east coast of Honshu, Japan (h = 10 km).				P	Z' 0.1 1.0	
"	20	Ud	iP 09 56 34.6	"	21	Um	iP	13 49 58.2 C
"	20	Up	iSn 10 02 18.4			ipP		13 50 07.6
			i 10 02 33.1			Ud	iP	13 50 28.7 C
			iSgl 10 02 54.9			ipP		13 50 38.4
		Sk	eSgl 10 03 27			De	iP	13 50 44.8 C
			i 10 03 36.1			Off east coast of Honshu, Japan. h = 35 km (Up,Um,Ud). m = 5.9 (Up,Ki).		
		Um	iSgl 10 04 37.1	"	21	Up	iSgl	14 20 57.8
		Ud	iPgl 10 01 09.6			Sk	eSgl	14 21 03
			iSn 10 01 53.9			Ud	iSn	14 19 36.4
			eSgl 10 02 13				iSgl	14 19 59.4
		De	iPgl 10 00 53.1			Southwestern Norway, near 58 3/4°N, 6 1/2°E. Origin time = 14 17 57. M <sub>L</sub> = 2.8 (Up,Ud). By combination with Bergen readings.		
		North Sea, near 57°N, 7 1/2°E. Origin time = 09 59 48. M <sub>L</sub> = 2.7 (Up,Ud). By combination with Bergen and Kongsberg readings.						
"	20	Ud	iP 13 20 43.6					
		Hokkaido, Japan region (h = 55 km).						



Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979									1979									
Feb.	23	Up	iP	16 49	40.0				Feb.	24	Up	iP	11 04	30.7	C			
		Ki	iP	16 49	22.8							i	11 04	35.6				
		Sk	iP	16 49	45.7						Sk	iP	11 05	10.3				
		Um	iP	16 49	29.1						Um	iP	11 05	08.8				
			i	16 49	33.9						Ud	iP	11 04	36.8				
		Ud	iP	16 49	49.0							i	11 04	42.4				
			i	16 49	54.0						De	iP	11 04	01.5				
		West Irian region										Ionian Sea (h = N).						
		(h = 45 km).																
"	23	Up	iSgl	18 05	00.0				"	24	Up	iP	14 03	28.9				
		Ud	iP	18 02	47.7						Um	i	14 03	34.2				
		De	iP	18 01	50.0						Ud	iP	14 03	46.8				
			iS	18 02	49.2						De	iP	14 03	38.4				
		Poland (h = 10 km).										Iran (h = 30 km).						
"	23	Up	iPKP1	19 50	19.1				"	24	Up	iP	17 41	32.1				
			iPKP2	19 50	28.5						Um	iP	17 41	13.6				
		Um	iPKP1	19 50	07.6						Ud	iP	17 41	39.0				
		Ud	iPKP2	19 50	33.5						De	iP	17 41	51.1				
		North Island, New Zealand										Bonin Islands region						
		(h = 210 km).										(h = 430 km).						
"	23	Ud	i(P)	21 12	06.0				"	24	Um	iP	18 01	17.5				
											De	iP	18 01	19.8				
											Chiapas, Mexico (h = 180 km).							
"	23	Up	iP	22 49	15.8				"	24	Ud	iP	21 25	12.8				
			ipP	22 49	24.8						Strait of Gibraltar							
			i	22 49	32.0						(h = 10 km).							
			pP	Z'	0.2 0.9				"	24	Up	iP	22 13	06.9				
			Mx	E	2.8 21						Ki	iP	22 12	25.6				
			Mx	N	3.7 16						Um	iP	22 12	43.1				
			Mx	Z	4.3 21						Ud	iP	22 13	14.2				
		Ki	iP	22 48	57.0						De	iP	22 13	30.7				
			ipP	22 49	05.8						Off east coast of Honshu,							
											Japan (h = N).							
			pP	Z'	0.3 1.2				"	25	Up	iP	00 57	51.9				
			Mx	E	3.3 17						Um	iP	00 57	26.6				
			Mx	N	4.5 19						Ud	iP	00 57	57.8				
		Sk	iP	22 49	17.4						Kuril Islands (h = N).							
		Um	iP	22 49	03.5													
			ipP	22 49	12.9													
			i	22 49	19.8													
			iPP	22 52	26.6													
		Ud	iP	22 49	25.7				"	25	Up	iP	05 53	08.4				
			ipP	22 49	34.2							ipP	05 53	19.7				
		De	iP	22 49	32.9						Ki	iP	05 53	06.6				
			ipP	22 49	40.0						Um	iP	05 53	05.5				
			iPP	22 53	13.3							ipP	05 53	16.8				
		Samar, Philippine Island.									Ud	iP	05 53	17.9				
		h = 30 km (Up,Ki,Um,Ud,De).									De	i	05 53	20.2				
		m = 6.3, M = 6.0 (Up,Ki).									Southern Sumatera.							
											h = 35 km (Up,Um).							
"	24	Up	iP	04 49	48.9				"	25	Up	iP	07 00	19.5				
		Ud	iP	04 49	58.4						Um	iP	06 59	55.0				
		Southwestern Ryukyu Islands									Ud	iP	07 00	26.7				
		(h = 70 km).									De	iP	07 00	43.4				
											Kuril Islands (h = 210 km).							

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979				1979							
Feb.	25	Up	iPKP1	10 08	59.9	Feb.	26	Up	iP	22 14	04.1 C
		Ud	iPKP1	10 09	01.7				i	22 14	12.0
		De	iPKP1	10 09	10.3			Ki	iP	22 15	24.5
"	25	Um	iP	12 09	18.3			Sk	iP	22 14	46.6
"	25	Up	i	13 45	31.3			Um	iP	22 14	42.8
			i	13 46	22.8				i	22 14	48.9
			i	13 46	40.6			Ud	iP	22 14	06.4
			iSgl	13 46	55.6				i	22 14	13.9
		Um	iLgl	13 49	03.4			De	iP	22 13	28.1
		Ud	iP	13 44	18.2			Albania (h = 30 km).			
			i	13 44	27.3	"	27	Up	iSKP1	04 23	37.6
			iS	13 45	55.4				i	04 23	42.7
		De	iP	13 43	29.5 C			Ki	iPKP	04 20	12.0
			i	13 44	25.7			Um	iPKP	04 20	18.3
			iS	13 44	31.4			Ud	iPKP	04 20	28.9
			iSgl	13 45	00.5				iSKP1	04 23	41.0
		Poland (h = 10 km).							i	04 23	45.6
"	26	Ud	iP	01 26	57.1			De	iPKP	04 20	33.4
		Mindanao, Philippine Islands (h = N).							iSKP1	04 23	54.7
"	26	Up	iPKP	05 14	42.3			New Hebrides Islands (h = N).			
		Um	iPKP	05 14	36.8	"	27	Um	iPKP	04 55	58.8
		Ud	iPKP	05 14	46.4			Santa Cruz Islands (h = 70 km).			
		De	iPKP	05 14	50.7	"	27	Ud	iP	14 07	55.3
		Solomon Islands (h = N).						Greece-Albania border region (h = 10 km).			
"	26	Ud	iP	07 05	09.3	"	27	Up	iP	16 25	09.9
		Eastern India (h = N).						Um	iP	16 25	28.2
"	26	Ud	i(P)	09 08	59.0			Carlsberg Ridge (h = 10 km).			
"	26	Ud	iP	13 49	51.6	"	27	Um	iP	17 30	26.2
		De	iP	13 49	40.1			South of Honshu, Japan (h = 110 km).			
		Southern Iran (h = N).				"	27	Up	i(P)	19 35	34.5
"	26	Um	iP	14 38	43.4	"	27	Up	iPKP1	19 40	06.3
		Ud	iP	14 28	22.8				iPKP2	19 40	17.4
		North Atlantic Ocean (h = 10 km).							i	19 40	28.0
"	26	Up	iP	16 23	21.3					micr	sec
			ipP	16 23	33.6				PKP2	Z'	0.1 1.0
								Ki	iPKP1	19 39	46.7
			P	Z'	0.1 0.7				i	19 39	57.4
		Ki	iP	16 22	36.1					micr	sec
			ipP	16 22	48.3				PKP1	Z'	0.2 1.0
								Sk	iPKP1	19 40	01.2
			P	Z'	0.1 0.9			Um	iPKP1	19 39	56.5
		Sk	iP	16 23	11.4				iPKP2	19 40	01.7
		Um	iP	16 22	56.8				i	19 40	07.1
			ipP	16 23	08.5			Ud	iPKP1	19 40	07.3
		Ud	iP	16 23	27.4				iPKP2	19 40	20.7
			ipP	16 23	39.6			De	iPKP2	19 40	34.5
		De	iP	16 23	45.1			East of North Island, N.Z. (h = N).			
		Kuril Islands.									
		h = 40 km (Up,Ki,Um,Ud).									
		m = 5.8 (Up,Ki).									





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SEISMOLOGICAL BULLETIN

UPPSALA, KIRUNA, SKALSTUGAN, UMEÅ,

UDDEHOLM and DELARY

Uppsala	(Up):	59°51.5'N,	17°37.6'E;	h = 14 m
Kiruna	(Ki):	67°50.4'N,	20°25.0'E;	h = 390 m
Skalstugan	(Sk):	63°34.8'N,	12°16.8'E;	h = 580 m
Umeå	(Um):	63°48.9'N,	20°14.2'E;	h = 16 m
Uddeholm	(Ud):	60°05.4'N,	13°36.4'E;	h = 240 m
Delary	(De):	56°28.2'N,	13°52.2'E;	h = 150 m

MARCH 1 - 31, 1979

1979					1979				
Mar.	1	Up	iP	00 19 42.7	Mar.	1	(cont.)		
		Ki	iP	00 18 49.1			Sk	iP	02 58 13.4
		Sk	iP	00 19 13.5			Um	iP	02 58 17.8
		Um	iP	00 19 17.6			Ud	iP	02 58 39.3
		Ud	iP	00 19 38.8			De	iP	02 59 03.2
		De	iP	00 20 02.9			Southeastern Alaska		
		Southeastern Alaska					(h = 15 km).		
		(h = 5 km).							
"	1	Ki	iP	01 10 10.9	"	1	Um	iP	03 32 09.1
		Um	iP	01 10 40.0			De	iP	03 32 15.2
		Ud	iP	01 11 01.1			Michoacan, Mexico (h = N).		
		Southeastern Alaska							
		(h = 5 km).							
"	1	Up	iP	01 47 47.0	"	1	Up	iPKP2	03 55 36.5
		Ki	iP	01 46 52.4			Ki	iPKP1	03 55 04.6
		Sk	iP	01 47 17.1			Sk	iPKP1	03 55 17.2
		Um	iP	01 47 21.4			Um	iPKP1	03 55 12.0
		Ud	iP	01 47 42.7				iPKP2	03 55 21.4
		De	iP	01 48 06.6			Ud	iPKP2	03 55 42.1
		Southeastern Alaska					North Island, New Zealand		
		(h = 10 km).					(h = 240 km).		
"	1	Up	iP	02 47 27.9	"	1	Up	iP	07 18 50.0 C
		Ki	iP	02 46 40.0					micr sec
		Sk	eP	02 47 14				P	Z' 0.1 0.9
		Um	iP	02 47 02.1			Ki	iP	07 17 55.1 C
		Ud	iP	02 47 33.1				i	07 18 02.6
		De	iP	02 47 52.2					micr sec
		Kuril Islands (h = N).						P	Z' 0.3 0.9
"	1	Up	iP	02 54 01.2			Sk	iP	07 18 20.4 C
		Um	iP	02 54 03.3			Um	iP	07 18 24.4 C
		Ud	iP	02 53 50.6				i	07 18 35.8
		Panama (h = N).					Ud	iP	07 18 45.2 C
							De	iP	07 19 10.2 C
								i	07 19 21.4
							Southeastern Alaska		
							(h = 10 km).		
							m = 6.0 (Up,Ki).		
"	1	Up	iP	02 55 18.4	"	2	Up	iPKP1	12 53 11.3
		Ud	iP	02 55 25.4				iPKP2	12 53 15.6
		Aegean Sea (h = 10 km).					Sk	iPKP2	12 53 06.8
"	1	Up	iP	02 58 43.0			Um	iPKP1	12 53 00.7
		Ki	iP	02 57 49.5			Ud	iPKP1	12 53 11.1
		(cont.)					(cont.)		

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979				1979					
Mar.	1	(cont.)		Mar.	2	Up	iPKP1	20 17 37.2	
		Ud	iPKP2	12 53 18.7			iPKP2	20 17 44.0 C	
		De	iPKP2	12 53 28.6		Um	iPKP1	20 17 26.8	
		Kermadec Islands				Ud	iPKP1	20 17 39.2	
		(h = 160 km).					iPKP2	20 17 47.3	
"	1	Sk	iP	14 46 18.2		De	iPKP2	20 18 00.9	
		Um	iP	14 46 30.1		Kermadec Islands region			
		Near coast of Ecuador				(h = 360 km).			
		(h = N).		"	3	Up	iPKP1	00 05 48.6	
"	1	De	iP	15 37 05.1		Ki	iPKP	00 05 42.8	
"	2	Up	iP	01 44 14.5			iSKP1	00 08 08.9	
		Ki	iP	01 44 24.7		Um	i(PKP)	00 05 36.4	
		Sk	iP	01 44 40.3			i	00 05 43.2	
		Um	iP	01 44 13.4			iPKP	00 05 49.2	
		Ud	iP	01 44 31.1			iSKP1	00 08 26.5	
		De	iP	01 44 27.2		Ud	iPKP1	00 05 51.1	
		Hindu Kush region					iSKP1	00 08 39.0	
		(h = 100 km).				De	iPKP1	00 06 00.8	
"	2	Um	iP	07 30 46.9			iPKP	00 06 02.1	
		Ud	iP	07 31 12.9		Fiji Islands region			
		Eastern China (h = N).		"	3	Ki	iP	06 21 10.7	
"	2	Up	iP	09 44 46.1		Philippine Islands region			
						(h = 25 km).			
					"	3	Um	iP	11 29 49.0
					"	3	Up	iP	12 36 01.0
						Ki	iP	12 35 56.4	
						Um	i	12 36 02.7	
						Ud	iP	12 36 13.9	
						Burma-India border region			
						(h = 70 km).			
"	2	Up	iP	10 33 58.3	"	4	Up	iP	02 59 52.8
		Sk	iP	10 34 27.6		Ki	iP	03 00 01.0	
		Um	iP	10 34 02.4		Sk	iP	03 00 19.0	
		Ud	iP	10 34 14.6		Um	iP	02 59 51.3	
		De	iP	10 34 07.4		Ud	iP	03 00 09.5	
		Pakistan (h = N).				De	iP	03 00 05.9	
"	2	Ud	iP	15 41 07.8		Pakistan (h = 40 km).			
"	2	Up	iP	15 41 00.4	"	4	Up	iP	05 51 24.7
		Ki	iP	15 41 41.1			ipP	05 51 32.4	
		Sk	iP	15 41 37.0		Ki	iP	05 51 55.9	
		Um	iP	15 41 13.2		Um	iP	05 51 34.4	
		Ud	iP	15 41 17.9		Ud	iP	05 51 38.7	
		De	iP	15 41 04.1			ipP	05 51 47.1	
		Eastern Caucasus (h = N).				De	iP	05 51 24.9	
							ipP	05 51 33.0	
						Southern Iran.			
						h = 35 km (Up,Ud,De).			
"	4	Um	iP	17 14 54.1	"	4	Um	iP	17 14 54.1
"	4	Up	iP	17 50 28.5	"	4	Up	iP	17 50 28.5
							i	17 50 40.0	

(cont.)

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979				1979			
Mar.				Mar.			
4	(cont.)			6	(cont.)		
	Ud	iP	17 50 42.4		De	iP	17 05 19.7
		i	17 50 53.6				South of Honshu, Japan
			Burma-India border region				(h = N).
			(h = N).				
"	4	Up	iP 19 01 05.4	"	6	Up	iP 18 44 51.0
		Um	iP 19 01 06.8			Um	iP 18 44 31.5
			Kashmir-Sinkiang border region (h = N).				
"	4	Up	iP 21 34 23.7	"	7	Up	iPKP1 05 45 15.7
		Um	iP 21 34 05.1			Ud	iPKP1 05 45 17.5
		Ud	iP 21 34 37.9			De	iPKP2 05 45 31.1
		De	iP 21 34 47.8				South of Fiji Islands
			Mongolia (h = N).				(h = 60 km).
"	5	Up	iPKP1 06 16 19.6	"	7	Ud	i(P) 10 17 01.1
			iPKP2 06 16 29.8				
		Ki	iPKP1 06 15 59.7				
		Um	iPKP1 06 16 09.2				
							Szechwan Province, China
							(h = 50 km).
"	5	Um	iP 11 11 16.5	"	7	Up	iP 22 38 45.0
		Ud	iP 11 11 47.9			Um	iP 22 38 22.0
			Hokkaido, Japan region			Ud	iP 22 38 49.6
			(h = 170 km).				Near east coast of Honshu,
"	5	Up	iP 16 59 27.7				Japan (h = 60 km).
			micr sec	"	8	Up	iP 00 14 00.4
		P	Z' 0.1 1.1				micr sec
		Ki	i 17 00 11.1				P Z' 0.1 1.0
			ipP 17 00 13.9			Ki	iP 00 13 25.1
		Sk	iP 17 00 04.9			Sk	iP 00 13 55.9
		Um	iP 16 59 40.2			Um	iP 00 13 40.6
			ipP 16 59 49.7			Ud	iP 00 14 07.3
		Ud	iP 16 59 44.1			De	iP 00 14 21.8
		De	iP 16 59 32.7				South of Honshu, Japan
			Caspian Sea (h = 45 km).				(h = 30 km).
"	5	Ud	iSgl 21 36 30.9	"	8	Up	iP 01 23 11.8
		De	iSgl 21 36 36.5				micr sec
"	5	Um	iPKP 23 16 09.2				P Z' 0.1 1.0
			Fiji Islands region			Sk	iP 01 24 09.0
			(h = 440 km).			Um	iP 01 23 58.1
"	6	Up	iP 15 45 47.7			De	iP 01 22 46.2
			micr sec				Romania (h = 10 km).
		P	Z' 0.1 1.0	"	8	Up	iP 03 04 40.5
		Sk	eP 15 45 45			Um	eP 03 04 46
		Um	iP 15 45 28.4				i 03 04 51.9
		Ud	iP 15 45 55.1			Ud	i 03 04 27.1
		De	iP 15 45 09.2				North Atlantic Ocean
			South of Honshu, Japan				(h = 10 km).
			(h = 20 km).	"	8	Ki	ipP 11 18 58.1
"	6	Up	iP 17 04 55.8			Um	iP 11 18 32.4
		Um	iP 17 04 36.4				ipP 11 18 37.8
		Ud	iP 17 05 03.1			Ud	ipP 11 18 07.6
			(cont.)				(cont.)

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979					1979				
Mar.	8	(cont.)			Mar.	9	Up	iP	00 56 10.1
		De	ipP	11 17 46.5			Ki	iP	00 56 30.9
				Ascension Island region			Um	iP	00 56 18.6
				(h = 10 km).			Ud	iP	00 56 20.6
							De	iP	00 56 04.4
"	8	Ud	iSgl	11 31 10.0					Chagos Archipelago region
				Near Bergen, Norway.					(h = 10 km).
				By combination with Bergen	"	9	Ud	iP	00 57 40.7
				readings.					
"	8	Ud	iSgl	11 34 09.9	"	9	Up	iPKP	01 45 18.7
				Near Bergen, Norway.					micr sec
				By combination with Bergen			Mx	E	3.6 21
				readings.			Mx	N	4.2 23
							Mx	Z	7.3 23
"	8	Ud	iSgl	11 45 31.7			Ki	iPKP	01 44 08.5
				Near Bergen, Norway.					micr sec
				By combination with Bergen			Mx	E	3.3 19
				readings.			Mx	N	3.9 20
							Mx	Z	4.5 23
"	8	Up	iP	15 03 14.8			Um	i	01 45 29.5
			iPP	15 07 09.8			Ud	i	01 45 39.2
			iSKS	15 13 47			De	i	01 45 34.7
				micr sec					East Papua New Guinea
		Mx	E	3.6 19					region (h = N).
		Mx	N	4.5 17					M = 6.1 (Up,Ki).
		Mx	Z	7.2 19					
		Ki	iP	15 03 04.1	"	9	Up	iPKP1	02 17 54.1
			iSKS	15 13 32			Ki	iPKP	02 17 45.8
				micr sec			Um	i(PKP)	02 17 48.7
		Mx	E	6.9 21				iPKP	02 17 52.9
		Mx	N	5.3 17			Ud	iPKP1	02 17 55.1
		Mx	Z	4.3 18			De	iPKP1	02 18 06.6
		Sk	iP	15 03 21.0					Fiji Islands region
		Um	iP	15 03 05.4					(h = 570 km).
			i	15 06 52.0	"	9	Um	iP	08 15 43.4
			iSKS	15 13 35					Off east coast of Honshu,
			iS	15 14 10					Japan (h = N).
		Ud	iP	15 03 24.1	"	9	Ki	iP	10 12 07.4
		De	iP	15 03 27.4			Um	iP	10 11 42.5
				Minahassa Peninsula					Uganda (h = 35 km).
				(h = 30 km).	"	9	Up	iSgl	15 21 41.0
				M = 6.2 (Up,Ki).			Sk	iSgl	15 21 45.7
"	8	Up	iPKP1	17 06 25.7	"	9	Ud	iSgl	15 20 42.9
		Ud	iPKP1	17 06 28.3					Southwest coast of Norway,
				South of Fiji Islands					near 58 1/2°N, 6 1/2°E.
				(h = N).					Origin time = 15 18 38.
"	8	Up	iP	20 29 37.6					M <sub>L</sub> = 2.6 (Up,Ud).
		Ud	iP	20 29 41.3					Explosion?
									By combination with Bergen
"	8	Up	e	22 47 26					and Kongsberg readings.
		Um	iP	22 47 18.3					
		Ud	iP	22 47 30.9	"	9	Up	i	20 53 56.0
				Iran-USSR border region				iRg	20 53 58.8
				(h = N).					(cont.)

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979						1979						
Mar.	9	(cont.)				Mar.	11	(cont.)				
		Um	iSgl	20 55	39.7			De	i	05 15 49.6		
		Ud	iRg	20 53	47.5			Southern Greece				
		Central Sweden.						(h = 160 km).				
		Near-surface event.					"	11	Up	iP	05 47 42.0	
"	10	Up	iP	06 55	23.8			Um	iP	05 47 36.5		
		Ki	iP	06 55	55.0			Ud	iP	05 47 50.9		
		Sk	iP	06 54	56.3			Java Sea (h = 560 km).				
		Um	iP	06 55	36.0			"	11	Up	iPKP1	06 43 15.1
			i	06 55	45.7			Ki	iPKP	06 43 06.6		
		Ud	iP	06 55	35.3			Um	i(PKP)	06 43 04.0		
			i	06 55	43.6				iPKP	06 43 09.2		
		Carlsberg Ridge (h = 10 km).						Ud	iPKP1	06 43 16.7		
"	10	Up	iP	10 28	16.8			De	iPKP1	06 43 27.6		
		Ki	iP	10 27	23.6			South of Fiji Islands				
		Ud	iP	10 28	16.0			(h = 510 km).				
			i	10 28	30.1			"	11	Ud	iP	11 59 58.4
		De	i	10 28	52.5			Southeastern Alaska				
		Andreanof Islands, Aleutian Is. (h = N).						(h = 15 km).				
"	10	Up	eP	11 18	16			"	11	Up	iP	12 28 34.5
			i	11 18	29.7						iS	12 38 40
		Ki	iP	11 17	23.0			Ki	iP	12 28	37.7	
		Sk	iP	11 17	54.2						micr	sec
		Um	iP	11 17	49.5				P	Z'	0.1	0.6
		Ud	iP	11 18	16.0			Sk	iP	12 28	21.6	
			i	11 18	29.1			Um	iP	12 28	39.1	
		De	iP	11 18	38.7				iS	12 38	56	
		Andreanof Islands, Aleutian Is. (h = N).						Ud	iP	12 28	24.3	
"	10	Up	iP	20 33	18.1				ipP	12 29	09.4	
			ipP	20 33	30.4			De	iP	12 28	25.5	
		Ki	i	20 32	50.8				ipP	12 29	10.8	
		Sk	iP	20 33	10.9			Northern Columbia.				
			ipP	20 33	24.2			h = 190 km (Ud,De).				
		Um	iP	20 32	56.0			"	11	Up	i(P)	18 10 12.3
			ipP	20 33	08.8			Ud	i(P)	18 09	35.2	
		Ud	iP	20 33	24.6			"	11	Ud	i(P)	18 39 48.9
			ipP	20 33	37.8			"	12	Um	iPKP	01 30 07.7
		De	iP	20 33	40.3			Ud	iPKP1	01 30	09.2	
			ipP	20 33	53.5			De	iPKP1	01 30	20.0	
		Near east coast of Honshu, Japan.						Fiji Islands region				
		h = 45 km (Up,Sk,Um,Ud,De).						(h = 540 km).				
"	11	De	eP	02 16	58			"	13	Up	iP	02 30 42.8
		Southern Iran (h = N).							Ki	iP	02 30 27.2	
"	11	Up	iP	05 16	12.9				Sk	iP	02 30 57.1	
			i	05 16	22.7				Um	iP	02 30 28.7	
			i	05 16	40.0				Ud	iP	02 30 57.4	
		Sk	iP	05 16	52.7				De	iP	02 31 03.9	
		Um	iP	05 16	47.5			Northern Sinkiang Prov., China (h = N).				
		Ud	iP	05 16	20.9			"	13	Ki	iP	03 45 30.3
		De	iP	05 15	45.9			(cont.)				
		(cont.)										

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979					1979				
Mar.	13	(cont.)			Mar.	13	(cont.)		
		Um	iP	03 45 49.2			Ud	iP	12 11 07.4
		Ud	iP	03 46 20.0				i	12 11 13.4
			i	03 46 45.1				i	12 11 18.0
		De	iP	03 46 36.7			Vancouver Islands region		
			i	03 47 01.3			(h = 10 km).		
		Hokkaido, Japan region					m = 5.9, M = 5.4 (Up,Ki).		
		(h = 80 km).							
"	13	Up	iP	04 18 07.3	"	13	Ki	iP	13 39 56.7
		Ki	iP	04 18 17.5			Ud	iP	13 40 29.3
		Sk	iP	04 18 37.3			Taiwan region (h = 15 km).		
		Um	iP	04 18 06.1	"	13	Up	eP	13 53 51
			i	04 18 09.2			Sk	i	13 54 42.2
		Ud	iP	04 18 22.8			Um	iP	13 53 27.7
		De	iP	04 18 20.2			Ud	iP	13 53 59.0
		Pakistan (h = 70 km).						i	13 54 06.8
							De	iP	13 53 23.7
"	13	Up	iP	09 56 27.3			Aegean Sea (h = 10 km).		
		Ki	iP	09 55 38.3	"	13	Ki	iP	15 13 04.3
		Sk	iP	09 56 16.3				i	15 13 10.7
		Um	iP	09 56 01.4			Ud	iP	15 13 41.9
		Ud	iP	09 56 32.6				i	15 13 50.8
		De	iP	09 56 53.9			Vancouver Island region		
		Kuril Islands (h = N).					(h = 10 km).		
"	13	Ki	iP	09 59 03.4	"	13	Sk	iSgl	16 26 47.7
		Philippine Islands region						iRg	16 26 53.0
		(h = 45 km).					Um	iSgl	16 27 20.1
"	13	Ki	iP	10 01 44.3			Regional near-surface event.		
		Ud	iP	10 02 22.6	"	13	Up	iSgl	16 47 35.3
		Vancouver Island region					Ud	iPgl	16 46 12.5
		(h = 10 km).						iSgl	16 46 33.8
"	13	Up	iP	12 11 13.0			Southeastern Norway.		
			i	12 11 19.1			Origin time = 16 45 44.		
			i	12 11 25.8			M <sub>L</sub> = 1.7 (Ud).		
			iS	12 20 13	"	13	Ud	iP	17 20 03.9
				micr sec			Vancouver Island region		
			i	Z' 0.1 1.0			(h = 10 km).		
			Mx	N 1.4 19	"	13	Ki	iP	17 21 32.5
			Mx	Z 2.4 15			Ud	iP	17 22 15.7
		Ki	iP	12 10 26.9			Vancouver Island region		
			i	12 10 33.5			(h = 10 km).		
				micr sec	"	13	Ud	iP	18 48 40.4
			i	Z' 0.1 1.2	"	13	Up	iP	18 59 16.9
			Mx	E 2.6 20			Um	iP	18 58 59.7
			Mx	N 3.2 19			Ud	iP	18 59 25.3
			Mx	Z 1.0 20			Ryukyu Islands (h = N).		
		Sk	iP	12 10 46.3	"	13	Up	iP	19 25 06.9
			i	12 10 59.0			Ki	iP	19 23 25.0
		Um	iP	12 10 53.0				iS	19 24 46.9
			i	12 10 58.7			(cont.)		
			iS	12 19 35					
		(cont.)							

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979						1979				
Mar.	13	(cont.)				Mar.	14	(cont.)		
		Ki	TPgl	19 29 17.5				Ud	i	11 20 00.7
				micr sec				De	iP	11 20 04.1
			Mx	E 1.2 16					i	11 20 09.2
			Mx	N 1.0 16					i	11 20 16.4
			Mx	Z 0.9 16					iS	11 31 05.2
		Sk	iP	19 24 13.7				Near coast of Guerrero, Mexico (h = 50 km).		
			i	19 24 21.2				m = 7.3, M = 7.6 (Up,Ki).		
		Um	iP	19 24 17.8 C						
			iTPgl	19 31 46.4						
		Ud	iP	19 25 03.9		"	14	Up	iP	12 14 15.0
			i	19 25 08.0				Ki	iP	12 13 54.4
		De	iP	19 25 47.1				Sk	iP	12 13 51.8
		Greenland Sea (h = 10 km).							i	12 13 55.6
"	13	Up	i	21 01 07.8				Um	iP	12 14 04.5
		Ud	iP	21 00 54.6					i	12 14 09.0
		Vancouver Island region (h = 10 km).							iP	12 14 17.9
"	13	Ud	i(P)	22 30 24.9				Ud	iP	12 14 05.7
								De	iP	12 14 11.3
"	13	Up	iP	22 50 04.3					i	12 14 16.4
		Ki	eP	22 49 18		"	14	Guerrero, Mexico (h = 50 km).		
		Sk	eP	22 49 37				Ki	i	14 46 40.0
		Um	iP	22 49 42.3				Sk	eP	14 46 48
		Ud	iP	22 49 58.0				Um	iP	14 46 59.8
		Vancouver Island region (h = 10 km).						Ud	iP	14 47 12.3
"	14	Ud	iP	01 23 45.3				Vancouver Island region (h = 10 km).		
"	14	Up	iP	11 20 03.7			"	14	Up	iP
			i	11 20 10.4						15 24 28.3
			i	11 20 20.1						micr sec
			iPP	11 23 28.9					P	Z' 0.1 1.3
			iSKS	11 30 17				Ki	iP	15 23 42.1
			iS	11 30 45						micr sec
				micr sec					P	Z' 0.2 1.6
			i	Z' 0.3 1.2				Sk	iP	15 23 59.8
			PP	Z' 7.5 3.0				Um	iP	15 24 07.1
			Mx	E 152 21				Ud	iP	15 24 22.0
			Mx	N 158 18				Vancouver Island region (h = 10 km).		
			Mx	Z 250 17				m = 6.0 (Up,Ki).		
		Ki	iP	11 19 47.0		"	14	Ki	i	15 48 19.6
			i	11 19 52.5				Sk	i	15 48 15.1
				micr sec				Um	iP	15 48 23.3
			i	Z' 11.1 3.1					i	15 48 29.0
			Mx	E 211 17				De	i	15 48 35.0
			Mx	N 192 19				Near coast of Guerrero, Mexico (h = 70 km).		
			Mx	Z 205 17						
		Sk	iP	11 19 44.7		"	14	Up	iP	15 50 23.1
			i	11 19 50.4				Ki	iP	15 49 54.3
		Um	iP	11 19 57.7				Sk	eP	15 50 21
			i	11 20 03.0				Um	iP	15 50 06.8
			i	11 20 08.2				Ud	iP	15 50 30.2
			iPP	11 23 21.1				De	iP	15 50 41.1
			iS	11 30 49.2				Mariana Islands (h = N).		
		Ud	iP	11 19 53.0		"	14	Sk	i	15 57 10.7
		(cont.)						(cont.)		







Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979						1979						
Mar.	17	(cont.)				Mar.	18	(cont.)				
		Ki		micr	sec			Um	ipP	20 25 28.3		
		Mx	N	2.9	16			Ud	eP	20 25 16		
		Mx	Z	1.4	15			De	iP	20 25 21.6		
		Sk	iP	12 45	15.3				ipP	20 25 35.3		
		Um	iP	12 44	49.2					Near Coast of Guerrero,		
			i	12 44	54.3					Mexico.		
		Ud	iP	12 44	58.2					h = 50 km (Up,Ki,Um,De).		
		De	iP	12 44	47.4					M = 5.3 (Up,Ki).		
		Southern Iran (h = N).										
		M = 5.2 (Up,Ki).					"	18	Up	iP	21 07 54.9 C	
"	17	Ki	iP	13 06	20.6			Ki	iP	21 07 45.6		
		Um	iP	13 07	12.2				ipP	21 07 49.1		
		Ud	iP	13 07	58.3			Sk	iP	21 08 08.4		
		Greenland Sea (h = 10 km).						Um	iP	21 07 46.0 C		
"	17	Ki	iP	23 49	56.6				i	21 07 49.2		
		Um	iP	23 49	22.4			Ud	iP	21 08 08.2		
		Ud	i	23 49	24.2				i	21 08 11.2		
		Cyprus (h = 50 km).						De	iP	21 08 10.3		
									i	21 08 14.3		
										Burma (h = 55 km).		
"	18	Ud	iPKP1	01 30	40.3		"	18	Up	iP	22 48 32.3	
		Tonga Islands region							ipP	22 48 43.4		
		(h = N).						Ki	iP	22 48 37.1		
"	18	Up	iP	05 22	49.9				ipP	22 48 48.7		
		Ud	iP	05 22	49.5			Sk	iP	22 48 15.9		
		De	iP	05 23	11.9			Um	iP	22 48 38.0		
		Andreanof Islands,							ipP	22 48 49.3		
		Aleutian Is. (h = 55 km).						Ud	iP	22 48 19.7		
"	18	Ki	i	05 27	01.0				ipP	22 48 31.3		
		Sk	e	05 27	08			De	iP	22 48 21.5		
		Um	i	05 26	38.5 D				ipP	22 48 32.6		
		Ud	iP	05 26	35.7					Virgin Islands.		
		Iran (h = N).								h = 40 km (Up,Ki,Um,Ud,De).		
"	18	Up	iP	06 52	31.0		"	19	Um	iPKP	00 21 14.8	
		Um	iP	06 52	18.5			Ud	iPKP	00 21 19.0		
		Ud	iP	06 52	39.5			De	iPKP1	00 21 23.7		
		Southeast Asia (h = N).							Tonga Islands region			
"	18	Up	iP	15 46	56.4				(h = N).			
		Um	iP	15 46	59.9			"	19	Up	iP	03 26 55.2
		Ud	iP	15 47	12.5					ipP	03 27 07.3	
"	18	Up	iP	20 25	21.2			Ki	iP	03 26 21.0		
		ipP		20 25	35.0			Sk	iP	03 26 52.5		
				micr	sec			Um	iP	03 26 36.3		
		Mx	E	1.2	20			Ud	iP	03 27 03.1		
		Mx	Z	3.3	24				i	03 27 22.1		
		Ki	iP	20 25	02.6			De	iP	03 27 16.5		
		ipP		20 25	18.7					South of Honshu, Japan		
				micr	sec					(h = N).		
		Mx	E	1.1	20			"	19	Up	iP	06 45 34.5
		Mx	N	0.7	15			Ki	iP	06 45 16.5		
		Sk	eP	20 25	03			Sk	iP	06 45 39.2		
		Um	iP	20 25	13.9			Ud	iP	06 45 43.0		
		(cont.)							Mindanao, Philippine			
									Islands (h = 55 km).			

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979				1979			
Mar.	19	Ki	iP	07 34 38.8	Mar.	20	(cont.)
				Java (h = 70 km).			Norwegian Sea, near 67 3/4°N, 8°E.
"	19	Up	iPKP	08 39 20.8			Origin time = 06 03 51.
			i	08 39 31.4			M <sub>L</sub> = 3.0 (Ki,Sk,Um).
		Ki	i(PKP)	08 38 50.0	"	20	Up iP
			iPKP	08 39 01.0			Ki iP
		Um	i(PKP)	08 39 02.3			Um iP
			iPKP	08 39 10.4			09 06 43.2
"	19	De	iPKP1	09 13 05.6			09 06 25.8
				Fiji Islands region			09 06 31.6
				(h = 550 km).			Mindanao, Philippine
"	19	Um	iP	12 02 39.5			Islands (h = 150 km).
		Ud	iP	12 03 18.6	"	20	Up iP
				Svalbard region			11 05 07.8
				(h = 10 km).			Szechwan Province, China
"	19	Ud	iP	15 05 42.6			(h = 60 km).
"	20	Up	iP	02 15 17.0	"	20	Ud iP
		Ki	iP	02 14 23.4			15 25 31.4
		Ud	iP	02 15 17.1	"	20	Ud iP
		De	iP	02 15 38.3			19 37 22.9
				Andreanof Islands,	"	20	De iPKP1
				Aleutian Is. (h = N).			19 38 16.3
"	20	Up	iPKP1	04 31 31.1			Fiji Islands region
		Um	iPKP1	04 31 20.5			(h = 530 km).
		Ud	iPKP1	04 31 33.4	"	20	Up Mx
				Kermadec Islands region			21 05
				(h = N).			micr sec
"	20	Up	iP	04 45 42.2			Mx E 2.7 20
				micr sec			Mx N 2.6 21
		P	Z'	0.1 1.3			Mx Z 4.5 22
		Ki	iP	04 44 50.7			Ki Mx 21 03
		Um	iP	04 45 15.6			micr sec
			i	04 45 31.2			Mx E 3.0 17
		Ud	iP	04 45 46.7			Mx N 2.9 18
		De	iP	04 46 07.8			Mid-Indian Rise (h = 10 km).
				Kuril Islands region			M = 6.0 (Up,Ki).
				(h = 410 km).	"	20	Ki iP
"	20	Ki	iP	05 53 41.8			22 00 06.2
		Ud	iP	05 53 54.9			Um iP
				Tadzhik-Sinkiang border			22 00 04.6
				region (h = 50 km).			Central Chile (h = 90 km).
"	20	Ki	iPn	06 05 03.5	"	20	Ki iP
			iSn	06 05 58.9			22 53 29.3
			iSgl	06 06 15.4			iS 22 54 42.2
		Sk	iPn	06 04 59.4			eTSn 22 58 30
			iSn	06 05 49.5			i 22 59 08.3
			iSgl	06 06 08.2			Sk iP 22 54 09.7
		Um	i	06 06 27.7			Um iP 22 54 18.5
			iSn	06 06 41.9			eTSg2 23 00 53
			iSgl	06 07 06.7			Greenland Sea, approximate
				(cont.)			location 72 1/2°N, 8°E.
							Origin time = 22 51 56.
"	21	Up	iP	02 23 18.5	"	21	Up iP
		Ki	iP	02 22 25.7			02 23 18.5
		Sk	iP	02 23 02.7			Ki iP 02 22 25.7
		Um	iP	02 22 50.9			Sk iP 02 23 02.7
		Ud	eP	02 23 25			Um iP 02 22 50.9
		De	iP	02 23 43.8			Ud eP 02 23 25
				Near East coast of Kamchatka			De iP 02 23 43.8
				(h = 130 km).			

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979				1979					
Mar.	21	Up	iSn	11 35 30.3	Mar.	22	Up	iP	03 53 16.6 C
			iSgl	11 35 42.2			Ki	iP	03 52 31.1
		Sk	i	11 34 22.4			Sk	iP	03 53 07.6
			iSgl	11 34 33.5			Um	iP	03 52 52.0 C
		Um	iSgl	11 36 15.8			Ud	iP	03 53 22.9
		Ud	iSgl	11 34 40.9			De	iP	03 53 40.2
		De	iSgl	11 35 46.6			Hokkaido, Japan region (h = 35 km).		
		Off coast of western Norway, near 61 1/2°N, 3°E. Origin time = 11 31 55. M <sub>L</sub> = 3.0 (Up,Sk,Um,Ud,De). By combination with Bergen and Kongsberg readings.			"	22	Ud	i(P)	07 09 54.8
"	21	Up	i	14 19 49.5	"	22	Ki	iP	08 24 29.8
			iSgl	14 19 56.0			Um	iP	08 24 34.2
		Ud	iPn	14 17 51.1			Molucca Passage (h = 40 km).		
			i	14 18 46.5	"	22	Ud	iP	08 52 24.9
			iSgl	14 18 56.1	"	22	Ud	iP	09 06 51.5
		Southwestern coast of Norway, near 58 1/2°N, 6 1/2°E. Origin time = 14 16 49. M <sub>L</sub> = 2.6 (Ud). By combination with Bergen and Kongsberg readings. Explosion?			"	22	Up	iP	12 36 00.0
"	21	Ud	iP	16 36 12.7			Ki	iP	12 35 43.9
		Mindanao, Philippine Islands (h = 80 km).					Sk	iP	12 35 45.1
"	21	Up	iP	16 41 29.7			Um	iP	12 35 54.5
		Ki	iP	16 41 12.4			Guerrero, Mexico (h = 80 km).		
		Um	iP	16 41 17.8	"	22	Ud	iP	12 43 29.0
		Philippine Islands region (h = 55 km).			"	22	Ud	iRg	15 17 11.5
"	21	Up	iP	17 19 18.2			Local near-surface event.		
		Ki	iP	17 17 32.5	"	22	Um	iP	15 25 19.4
			i	17 17 36.5			Off coast of northern California (h = 15 km).		
			iTSgl	17 23 10.4	"	22	Um	iP	18 18 30.6
		Sk	iP	17 18 14.7			South of Alaska (h = N).		
			iS	17 20 00.6	"	22	Um	iP	18 33 03.5
		Um	iP	17 18 22.3	"	22	Ud	i(P)	18 37 34.6
			iTSgl	17 25 12.8	"	22	Ki	eP	19 38 36
		Ud	eP	17 19 03			Sk	iP	19 37 57.2
		De	iP	17 19 53.0				i	19 37 58.8
		Greenland Sea, near 72 3/4°N, 8 1/2°E. Origin time = 17 15 59.					Um	iP	19 38 00.7
"	21	Up	iP	19 18 36.4			Sicily (h = 110 km).		
		Ki	iP	19 17 49.6	"	22	Sk	eP	20 20 29
		Um	iP	19 18 10.7			Um	iP	20 20 33.6
		Ud	iP	19 18 42.4			Central Italy (h = N).		
		Kuril Islands (h = 75 km).			"	22	Ki	iP	21 19 35.7
"	21	Um	iP	21 57 21.4			Afghanistan-USSR border region (h = N).		
		Taiwan region (h = 20 km).			"	23	Ud	iP	02 23 22.4
"	21	Um	iP	21 57 21.4	"	23	Ud	iP	12 10 20.3
		Taiwan region (h = 20 km).					Dodecanese Islands (h = N).		

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979								1979						
Mar.	23	Ud	iP	13 03 17.4				Mar.	23	Sk	iP	19 43 37.0		
		De	iP	13 03 48.7							i	19 43 40.3		
				Eastern Mediterranean Sea (h = 55 km).								i	19 44 04.3	
											iP'P'	20 11 32.7		
"	23	Um	iPKP	15 21 25.4						Um	iP	19 43 57.9	C	
				Tonga Islands (h = 90 km).								i	19 44 01.3	
											i	19 44 26.4		
"	23	Up	iS	17 44 54							iS	19 53 22		
				micr sec							iP'P'	20 11 29.6		
		Mx	E	1.0 17						Ud	iP	19 43 40.9		
		Mx	N	1.5 17							i	19 43 45.1		
		Mx	Z	2.3 17							i	19 44 07.6		
		Ki	iP	17 34 00.5							iP'P'	20 11 31.1		
				micr sec						De	iP	19 43 44.0		
		Mx	E	3.0 16							i	19 43 46.7		
		Mx	N	2.4 16							i	19 44 09.4		
		Mx	Z	2.8 16						Dominican Republic region (h = 80 km).				
		Um	iP	17 34 15.4						m = 6.1, M = 6.2 (Up,Ki).				
			iS	17 44 31						Double shock, small and				
		Ud	e	17 34 20						large, in average 3.5 s				
			i	17 34 28.3						apart. The third phase				
		De	iP	17 34 30.6						could be interpreted as				
				Gulf of California (h = 15 km).							pP for a focal depth of			
				M = 5.7 (Up,Ki).							110 km.			
"	23	Um	iP	18 24 13.9				"	23	Ud	iP	20 07 04.5		
				Gulf of California (h = 15 km).						"	23	Ud	iP	21 20 57.2
"	23	Ud	iP	18 35 46.0				"	24	Up	iPKP1	02 07 16.4		
		De	iP	18 35 14.4						Ud	iPKP1	02 07 18.3		
				Dodecanese Islands (h = 70 km).							De	iPKP1	02 07 28.2	
											Kermadec Islands region (h = 120 km).			
"	23	Up	iP	19 43 53.2	C			"	24	Up	iPKP1	13 31 24.1		
			i	19 43 57.5						Sk	ePKP1	13 31 16		
			i	19 44 20.9						Um	iPKP1	13 31 11.9		
			iS	19 53 08.6						Ud	iPKP1	13 31 25.5		
			i	19 53 54.9							iPKP2	13 31 29.7		
				micr sec						De	iPKP1	13 31 34.3		
		P	Z'	0.2 1.4						Kermadec Islands (h = 220 km).				
		i	Z'	0.2 0.8						"	24	Sk	eP	20 12 39
		Mx	E	11.1 20							Ud	iP	20 12 06.9	
		Mx	N	3.3 17							De	iP	20 11 36.3	
		Mx	Z	24.1 20							Dodecanese Islands (h = 40 km).			
		Ki	iP	19 43 55.2						"	24	Up	iPKP1	21 26 49.7
			i	19 43 58.4								iPKP2	21 27 07.4	
			i	19 44 23.4							Ki	iPKP1	21 26 35.8	
			iS	19 53 17								iPKP2	21 26 42.2	
			iP'P'	20 11 32.5									micr sec	
				micr sec								PKP1	Z'	0.2 0.6
		P	Z'	0.2 1.1							Sk	iPKP1	21 26 48.8	
		i	Z'	0.5 0.9							Um	iPKP	21 26 35.5	
		Mx	E	13.5 22								iPKP1	21 26 42.5	
		Mx	N	7.7 19							(cont.)			
		Mx	Z	16.0 23							(cont.)			



Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979				1979					
Mar.	26	De	iPn	13 56	48.7	Mar.	28	(cont.)	
			i	13 57	44.0			Sk i 04 30 23.4	
			Poland (h = 10 km).					ipP 04 30 49.4	
"	27	Ki	iSgl	11 09	19.8			Um iP 04 30 35.9	
		Um	iSgl	11 10	31.0			ipP 04 31 04.3	
"	27	Up	iP	11 50	06.1 C			Ud iP 04 30 21.1	
				micr	sec			ipP 04 30 51.0	
			P	Z' 0.1	1.0			De iP 04 30 23.8	
		Ki	iP	11 49	12.7			i 04 30 26.9	
		Um	iP	11 49	39.2			ipP 04 30 52.7	
		Ud	iP	11 50	06.0			Northern Columbia.	
		De	iP	11 50	28.2			h = 120 km (Ki,Um,Ud,De).	
			Andreanof Islands,				"	28	Um iP 05 16 09.9
			Aleutian Is. (h = 45 km).						South of Panama (h = N).
"	27	Up	iPKP1	12 00	51.1		"	28	Up iP 11 37 14.3
		Ki	iPKP	12 00	41.0				Ki iP 11 36 52.9
			iSKP1	12 03	18.7				Um iP 11 37 00.8
		Sk	iP	12 00	51.2				ipP 11 37 12.5
		Um	iPKP	12 00	49.6				Ud iP 11 37 23.4
			iSKP1	12 03	29.7				De iP 11 37 41.7
		Ud	iPKP1	12 00	50.7				Philippine Islands region
			iSKP1	12 03	42.8				(h = 40 km).
		De	iPKP1	12 01	02.4		"	28	Ud ipP 11 42 45.9
			iSKP1	12 03	52.1				Southern Greece (h = 55 km).
			Fiji Islands region				"	28	Up i(P) 12 47 16.6
			(h = 560 km).						i 12 47 24.9
"	27	Ud	i(P)	15 15	59.5				Ud i(P) 12 47 17.6
"	27	Ki	iP	16 58	25.7				De i(P) 12 47 20.9
		Ud	iP	16 58	39.2		"	28	Up iP 13 05 42.8
"	27	Up	iPKP1	22 59	43.2				Um iLg2 13 11 18.5
		Um	iPKP	22 59	38.3				Ud iLg2 13 10 05.6
		Ud	iPKP1	22 59	45.2				De iP 13 05 15.7
		De	iPKP1	22 59	53.1				Southwestern USSR
			Tonga Islands (h = N).						(h = 10 km).
"	28	Up	iP	01 40	25.9		"	28	Up iP 13 27 00.9
		Ki	iP	01 41	05.6				Ud iP 13 27 14.2
				micr	sec				De iP 13 27 15.7
			Mx	E 0.7	15				Burma (h = N).
			Mx	N 0.7	15		"	28	Up iPKP1 17 04 31.2
		Sk	eP	01 41	00				iPKP2 17 04 40.7
		Um	iP	01 40	40.8				Sk iPKP1 17 04 27.7
		Ud	iP	01 40	41.4				Um iPKP1 17 04 21.4
		De	iP	01 40	24.0				Ud iPKP1 17 04 32.8
			Western Iran (h = N).				"	28	Ki iP 17 07 12.7
"	28	Um	iP	01 51	10.4				Um iP 17 07 22.9
"	28	Up	iP	04 30	31.9				Ud iP 17 07 39.3
		Ki	iP	04 30	34.5				Mindanao, Philippine
			ipP	04 31	03.0				Islands (h = 110 km).
			(cont.)				"	28	Sk iPgl 19 41 41.2
									iSgl 19 41 50.5
			(cont.)						(cont.)





Up = Uppsala, Ki = Kiruna, Sk = Skalistugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979				1979			
Mar.	29	(cont.) Ud i Arabian Sea. h = 15 km (Up,Um).	10 14 39.2	Mar.	30	Up iP iS P Z' Ki iP iS Sk iP iS Um iP iS Ud iP iS De iP iS Romania (h = N).	15 59 17.4 16 01 32.6 0.3 1.0 16 00 54.7 16 04 43.0 16 00 14.2 16 03 17.5 16 00 04.0 16 02 58.4 15 59 32.5 16 01 59.4 15 58 50.9 16 00 45.4
"	29	Um iP Fiji Islands region (h = 590 km).	11 36 45.5	"	30	De iP New Britain region (h = 70 km).	16 39 00.9
"	29	Sk eP Um iP Ud iP	11 39 33 11 39 23.1 11 39 35.9	"	30	Up iP Ki iP ipPKP PKP Z' Sk iP Um iP ipPKP Ud iP ipPKP South Sandwich Islands region. h = 120 km (Ki,Um,Ud).	17 29 01.9 17 29 16.7 17 29 49.3 0.1 1.0 17 29 09.1 17 29 09.8 17 29 42.5 17 29 00.5 17 29 32.4
"	29	Up iSgl Sk iSgl Ud iPgl i iSgl iRg Southeastern Norway, 60.7°N, 10.4°E. Origin time = 12 12 37. M <sub>L</sub> = 2.3 (Ud). Near-surface event.	12 14 32.6 12 14 08.3 12 13 06.9 12 13 27.0 12 13 29.3 12 13 38.0	"	30	Ki iP Sk iPcP Um iP iPcP Ud iP De iP Fox Islands, Aleutian Islands (h = 35 km).	19 05 51.2 19 06 59.3 19 06 20.0 19 06 57.6 19 06 45.0 19 07 08.5
"	29	Ud i(P)	15 16 15.9	"	30	Up iP Ki iP Um iP iPcP Ud iP De iP Leyte, Philippine Islands (h = 50 km).	22 12 46.4 22 12 28.2 22 12 34.5 22 12 55.2
"	29	Um iP	16 52 55.0	"	30	Ki eP Um iP Ud iP Banda Sea (h = N).	22 29 26 22 29 28.5 22 29 47.7
"	29	Um iP	23 57 03.5	"	31	Ud iP	00 22 17.1
"	30	Ki iP	00 15 43.4	"	31	Ki iP Um iP	00 31 21.3 00 31 28.3
"	30	Up iP Sk eP Um iP Ud iP i De iP Southern Greece (h = 65 km).	06 50 42.2 06 51 22 06 51 20.7 06 50 49.1 06 50 53.5 06 50 11.2	(cont.)			
"	30	Ud iP	10 28 47.7				
"	30	Um i(P)	14 06 47.1				
"	30	Sk i(P) Um i(P)	14 49 56.4 14 51 13.9				
"	30	Sk ePKP Um iP Santa Cruz Islands (h = 160 km).	15 08 57 15 08 51.7				



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SEISMOLOGICAL BULLETIN

UPPSALA, KIRUNA, SKALSTUGAN, UMEÅ,  
 UDDEHOLM and DELARY

Uppsala	(Up):	59°51.5'N,	17°37.6'E;	h = 14 m
Kiruna	(Ki):	67°50.4'N,	20°25.0'E;	h = 390 m
Skalstugan	(Sk):	63°34.8'N,	12°16.8'E;	h = 580 m
Umeå	(Um):	63°48.9'N,	20°14.2'E;	h = 16 m
Uddeholm	(Ud):	60°05.4'N,	13°36.4'E;	h = 240 m
Delary	(De):	56°28.2'N,	13°52.2'E;	h = 150 m

APRIL 1 - 30, 1979  
 .....

1979					1979				
Apr.	1	Um	iP	04 35 24.7	Apr.	1	Ki	eP	13 15 20
			i	04 35 31.2			Ud	iP	13 15 34.0
		Ud	iP	04 35 11.9			Southern Sinkiang Prov., China (h = N).		
		Iceland (h = 5 km).							
"	1	Ud	iP	06 02 21.8	"	1	Up	iP	13 26 28.1
		De	iP	06 02 32.2			Ki	iP	13 26 11.7
									micr sec
"	1	Ud	iP	06 45 36.8			P	Z'	0.1 1.0
							Sk	iP	13 26 33.0
"	1	Ki	i	07 30 17.1			Um	iP	13 26 15.7
		Um	iP	07 30 14.7				i	13 26 22.3
			i	07 30 23.7			Ud	iP	13 26 36.6
		Ud	iP	07 30 35.6			Mindanao, Philippine Islands (h = 40 km).		
			i	07 30 42.0					
		Banda Sea (h = 30 km).			"	1	Up	iP	15 09 13.2
"	1	Up		micr sec			Ki	iP	15 08 42.4
		Mx	E	1.2 20				i	15 08 53.7
		Mx	N	1.1 20			Um	iP	15 08 52.4
		Mx	Z	1.9 23					
		Ki	iP	07 37 57.6	"	1	Um	eP	16 03 19
				micr sec			Ud	eP	16 03 12
		Mx	E	0.8 17			Near coast of Guatemala (h = N).		
		Mx	N	0.6 18	"	1	Ud	eP	17 29 48
		Mx	Z	1.3 19	"	1	Um	iP	17 45 32.7
		Ud	iP	07 38 21.9	"	1	Ud	iP	21 40 23.5
		Mindanao, Philippine Islands (h = 70 km). M = 5.4 (Up,Ki).					Mariana Islands region (h = 300 km).		
"	1	Ki	eP	08 26 43	"	1	Up	iP	22 15 40.9
		Um	iP	08 26 48.4			ipP		22 15 53.2
		Mindanao, Philippine Islands (h = N).					i		22 16 04.5
"	1	Up	iPKP1	09 06 34.8					micr sec
		Ud	iPKP1	09 06 36.9			P	Z'	0.1 1.2
		South of Fiji Islands (h = 450 km).					pP	Z'	0.3 1.4

(cont.)

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979								1979							
Apr.	1	(cont.)						Apr.	2	(cont.)					
		Ki	eP	22 14 48						De	iP	17 38 11.8			
			ipP	22 14 59.1						Near east coast of Honshu, Japan.					
										h = 45 km (Ki,Um,Ud).					
			pP	Z' 0.1 1.0											
		Sk	eP	22 15 24					"	3	Ki	iPKP	02 43 18.6		
		Um	iP	22 15 12.7							Um	iPKP	02 43 11.6		
			ipP	22 15 25.7							South Sandwich Islands region (h = N).				
		Ud	iP	22 15 45.7						"	3	Um	iP	03 02 01.6	
			ipP	22 15 58.7								Ud	iP	03 02 27.9	
		De	ipP	22 16 17.9						"	3	Up	iP	10 35 30.1	
		Off coast of Kamchatka.										i	10 35 35.1		
		h = 45 km (Up,Ki,Um,Ud).										Ki	e	10 36 48	
		m = 6.1 (Up,Ki).										Sk	eP	10 36 10	
"	2	Ud	iP	01 02 43.1								i	10 36 16.1		
"	2	Up	eP	01 26 46								Um	eP	10 36 09	
		Sk	eP	01 27 03								i	10 36 13.9		
		Um	iP	01 26 38.8								Ud	iP	10 35 36.7	
		Ud	iP	01 26 59.3								i	10 35 41.7		
"	2	Up	iP	03 27 27.4								De	i	10 35 05.6	
		Um	iP	03 27 09.5								Southern Greece (h = 50 km).			
		Ud	iP	03 27 34.3						"	3	Up	iPKP1	13 25 50.1 C	
		Bonin Islands region (h = 430 km).										Ki	iPKP	13 25 40.7	
"	2	Um	ipP	03 59 04.3								Sk	ePKP1	13 25 43	
		Oaxaca, Mexico (h = N).										Um	i(PKP)	13 25 39.0	
"	2	Um	iSgl	12 41 37.0								iPKP	13 25 44.0		
		Approximate location 62 1/4°N, 17 1/2°E.										iSKP1	13 28 37.4		
		Approximate Origin time = 12 40 34.										Ud	iPKP1	13 25 52.2 C	
		M <sub>L</sub> = 2.5 (Um).										De	iPKP1	13 26 03.2 C	
		Felt in Njurunda, Medelpad, Sweden.										South of Fiji Islands (h = 480 km).			
"	2	Um	iP	17 08 33.3						"	3	Up	iP	15 06 03.1	
		Ud	iP	17 09 05.6										micr sec	
		Kuril Islands region (h = 40 km).											P	Z' 0.1 1.0	
"	2	Up	iP	17 37 49.2 C								Mx	E 1.0 17		
				micr sec								Mx	N 0.6 17		
			P	Z' 0.1 1.2								Mx	Z 1.4 17		
		Ki	iP	17 37 08.4								Ki	eP	15 05 35	
			ipP	17 37 21.6										micr sec	
		Sk	eP	17 37 45									Mx	E 0.4 14	
		Um	iP	17 37 26.8 C									Mx	N 0.4 14	
			i	17 37 39.1									Sk	eP	15 06 05
		Ud	iP	17 37 56.3 C									Um	iP	15 05 47.3
			i	17 38 09.2									Ud	iP	15 06 13.7
		(cont.)											De	e	15 06 29
													East China Sea (h = N).		
													M = 5.1 (Up,Ki).		
										"	3	Up	iPKP1	15 50 38.6	
													(cont.)		



Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979				1979						
Apr.	5	(cont.)		Apr.	6	Ud	iP	00 26 00.3		
		Up	micr sec			"	6	Ki	iPKP	00 36 11.2
		Mx	N 1.2 14					Um	iPKP	00 36 04.0
		Mx	Z 0.6 16					Ud	iPKP	00 35 54.2
		Ki	eP 04 13 53					South Sandwich Islands		
		i	04 13 54.3					region (h = 70 km).		
			micr sec			"	6	Up	iP	06 26 17.6
		Mx	E 2.2 16					Ki	iP	06 26 16.9 C
		Mx	N 3.1 21							micr sec
		Mx	Z 1.5 16						P	Z' 0.1 0.8
		Sk	e 04 14 02					Sk	iP	06 26 31.1 C
		Um	iP 04 13 35.5					Um	iP	06 26 14.8 C
			iS 04 20 15						i	06 26 30.1
		Ud	iP 04 13 42.4					Ud	iP	06 26 26.8
		De	iP 04 13 31.4					Southern Sumatera (h = 60 km).		
		Southern Iran (h = N).								
		M = 5.2 (Up,Ki).								
"	5	Ki	iP 04 51 59.0	"	6	Up	iP	08 55 26.7		
		Um	iP 04 52 05.0				ipP	08 55 40.5		
		Ud	iP 04 52 14.6			Ki	iP	08 55 04.5		
							ipP	08 55 17.8		
"	5	Ud	iP 04 56 46.9			Sk	eP	08 55 30		
		Southern Iran (h = N).				Um	iP	08 55 12.0		
							ipP	08 55 26.0		
"	5	Ki	iP 05 52 16.4			Ud	iP	08 55 35.4		
		Um	iP 05 52 19.0				ipP	08 55 49.3		
		Near west coast of Colombia				Philippine Islands region.				
		(h = N).				h = 45 km (Up,Ki,Um,Ud).				
"	5	Up	iP 08 16 32.7	"	6	Ki	i	18 25 12.2		
		Ud	iP 08 16 50.8			Ud	iP	18 24 51.4		
						Southern Iran (h = N).				
"	5	Um	iP 11 06 24.8	"	6	Up	iP	18 37 43.1 C		
		Ud	iP 11 06 36.8				ipP	18 37 47.2		
"	5	Ud	iP 15 01 06.5				iS	18 43 47		
		Mariana Islands (h = 100 km).						micr sec		
							pP	Z' 0.1 0.8		
"	5	Up	iP 20 37 05.5				Mx	E 2.0 10		
		Ki	iP 20 37 06.1				Mx	Z 4.6 10		
		Um	iP 20 37 02.6			Ki	iP	18 37 38.4 C		
		Ud	iP 20 37 15.6				ipP	18 37 42.4		
		Northern Sumatera (h = 70 km).					iLg1	18 50 38.3		
								micr sec		
"	5	Ki	eSg1 21 10 54				pP	Z' 0.2 0.9		
		Sk	eSg1 21 11 17				Mx	E 5.7 11		
		Um	eSg1 21 11 47				Mx	N 2.3 10		
		Off coast of Nordland,					Mx	Z 4.6 11		
		Norway, approximate				Sk	iP	18 38 03.5		
		location 67 1/2° N, 13° E.					ipP	18 38 08.1		
		Approximate origin time =					iLg1	18 52 12.2		
		21 09 20.				Um	iP	18 37 34.3		
		M <sub>L</sub> = 2.5 (Um).				(cont.)				

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979						1979						
Apr.	6	(cont.)				Apr.	7	Um	iP		04 36 55.1	
		Um	ipP	18 37 39.0		"	7	Um	iP		05 50 49.6	
			iS	18 43 31				Ud	iP		05 51 21.1	
			iLgl	18 50 24.0								
		Ud	iP	18 37 58.5		"	7	Up	iP		06 30 09.5	
			i	18 38 00.0							micr sec	
			ipP	18 38 04.0					P	Z'	0.1 1.4	
			iLgl	18 52 09.6				Ki	iP		06 29 30.5	
		De	iP	18 38 01.5							micr sec	
			ipP	18 38 06.3					P	Z'	0.2 1.6	
			iLgl	18 52 10.7				Sk	iP		06 29 44.3 C	
		Kirgiz-Sinkiang border region.						Um	iP		06 29 53.1 C	
		h = 15 km (Up,Ki,Sk,Um,Ud,De).							iS		06 39 11	
		m = 5.7, M = 5.5 (Up,Ki).						Ud	iP		06 30 04.1 C	
								De	eP		06 30 18	
"	6	Up	iP	20 40 21.0				Off coast of Oregon (h = 15 km). m = 5.9 (Up,Ki).				
		Ki	iP	20 40 03.7 C								
			P	Z' 0.1 1.0								
		Sk	iP	20 40 25.4		"	7	Up	iPKP1		06 50 19.4	
		Um	iP	20 40 09.6 C				Ud	iPKP1		06 50 21.8	
		Ud	iP	20 40 29.3 C				De	iPKP1		06 50 32.5	
		Mindanao, Philippine Islands (h = 120 km).						South of Fiji Islands (h = 520 km).				
"	6	Um	iP	22 42 04.0		"	7	Um	iPKP		08 36 09.5	
		Ud	eP	22 41 26				South Shetland Islands (h = 10 km).				
"	6	Ud	iP	23 51 26.6		"	7	Up	iP		12 04 02.9	
		Luzon, Philippine Islands (h = N).						Ki	iP		12 03 14.5	
"	6	Um	iP	23 57 37.7				Um	iP		12 03 37.0	
		Ud	iP	23 58 09.1				Ud	iP		12 04 07.5	
								Kuril Islands (h = 55 km).				
"	6	Up	iP	23 58 09.7		"	7	Sk	ipP		13 47 08.7	
				micr sec				Um	iP		13 47 04.5	
			P	Z' 0.1 1.0					ipP		13 47 21.5	
		Ki	iP	23 57 23.6				Guatemala (h = 90 km).				
		Sk	eP	23 57 59		"	7	Ud	iP		13 50 22.7	
		Um	iP	23 57 44.5 C								
		Ud	iP	23 58 15.6 C		"	7	Ki	eP		13 55 49	
		De	eP	23 58 33				Um	iP		13 56 06.0	
		Kuril Islands (h = N). Possibly a double shock. See the preceding event.					"	7	Up	i(P)		16 21 55.0
"	7	Up	eP	01 39 13		"	8	Ud	iP		02 46 30.6	
		Ki	iP	01 39 07.3								
		Um	iP	01 39 07.0		"	8	Ud	iP		12 28 25.8	
			i	01 39 18.6				Near east coast of Kamchatka (h = N).				
		Ud	iP	01 39 19.2								
		Sunda Strait (h = 80 km).										

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979				1979					
Apr.	8	Um	iP	17 22	18.1	Apr.	9	(cont.)	
		Ud	iP	17 21	40.0			Sk eP 02 15 15	
"	8	Up	iP	18 34	28.0			Um iP 02 15 13.6	
		Ud	iP	18 34	43.2			iS 02 19 11	
		De	eP	18 34	26			Ud iP 02 14 35.4	
		Southern Iran (h = N).						i 02 14 49.3	
"	8	Up	iP	18 37	29.0			De i 02 13 57.0	
		Ud	iP	18 37	44.3 C			i 02 14 30.0	
		South Burma (h = N).						Yugoslavia (h = 10 km).	
"	8	Ud	iP	21 49	21.7	"	9	Ki eP 02 28 24	
		South Burma (h = N).						Sk eP 02 28 49	
"	9	Up	iPKP1	00 40	45.8			Um iP 02 28 47.3	
			i	00 40	56.9			Ud iP 02 28 10.1	
		Sk	iPKP1	00 40	38.9			De eP 02 27 32	
		Um	iPKP1	00 40	35.5			Yugoslavia (h = 10 km).	
		Ud	iPKP1	00 40	47.9	"	9	Up iPKP1 03 47 27.7	
"	9	Ki	iP	01 10	02.6			i 03 47 32.7	
"	9	Up	iPKP	01 19	15.2			Sk ePKP1 03 47 21	
			iPKP2	01 19	31.7			Um iPKP 03 47 15.6	
		Sk	iPKP	01 19	10.8			Ud e(PKP) 03 47 12	
		Um	ePKP	01 19	05			iPKP1 03 47 29.2	
			i	01 19	21.1			i 03 47 36.3	
		Ud	iPKP	01 19	17.1			South of Kermadec Islands	
			iPKP2	01 19	33.2			(h = N).	
		South of Kermadec Islands					"	9	Ud iP 05 11 03.8
		(h = 130 km).							Southern Greece (h = N).
"	9	Ki	iP	01 24	37.4	"	9	Up iP 06 44 05.5	
"	9	Up	ipP	02 09	54.7			Ki iP 06 43 52.1	
		Um	iP	02 09	48.4			Sk iP 06 44 12.5	
			ipP	02 09	59.1			Um iP 06 43 56.2	
			i	02 10	19.4			Ud iP 06 44 14.0	
		Ud	eP	02 09	34			De iP 06 44 19.6	
		North of Panama (h = 40 km).					"	9	Up iP 08 18 16.0
"	9	Up	iP	02 14	29.9			Ki iP 08 19 30.1	
			iS	02 17	47			Sk eP 08 18 49	
				micr	sec			Ud iP 08 18 14.5	
		P	Z'	0.3	1.5			De iP 08 17 36.4	
		Mx	E	5.1	11			Tunisia (h = 25 km).	
		Mx	N	5.8	9	"	9	Up iP 10 32 24.5	
		Mx	Z	8.9	9			Ud iP 10 32 23.3	
		Ki	eP	02 15	52			Tunisia (h = 35 km).	
			eS	02 20	23	"	9	Ki iPKP 11 47 19.0	
				micr	sec			Sk iPKP 11 47 30.4	
		P	Z'	0.2	1.4			Um iPKP 11 47 25.4	
		Mx	E	8.4	11			Ud iPKP 11 47 35.3	
		Mx	N	6.1	10			Santa Cruz Islands	
		(cont.)						(h = 250 km).	



Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979				1979			
Apr.	9	Up	iP	13	12	59.8	
		Ki	iP	13	12	08.1	
		Sk	iP	13	12	45.0	
		Um	iP	13	12	32.6	
		Ud	iP	13	13	04.9	
		De	iP	13	13	25.3	
		Sea of Okhotsk (h = 520 km).					
"	9	Up	iP	13	24	12.5	
		Sk	iP	13	24	10.5	
		Um	iP	13	23	52.4	
		Ud	iP	13	24	20.4	
		Southern Honshu, Japan (h = 55 km).					
"	9	Up	iP	14	18	10.5	
		Ki	iP	14	17	30.6	
		Um	iP	14	17	48.5 C	
		Ud	iP	14	18	17.6	
		Off east coast of Honshu, Japan (h = 40 km).					
"	9	Sk	iSgl	14	23	42.6	
		Ud	iSgl	14	22	34.8	
		Probably southwestern Norway.					
"	9	Up	eP	15	27	12	
		Ud	iP	15	27	03.7	
"	10	Up	iP	01	55	49.2 C	
			i(PP)	01	59	33	
			iSKS	02	06	23	
			iS	02	06	51	
						micr sec	
		P	Z'	0.2	1.1		
		Mx	E	29	23		
		Mx	N	47	23		
		Mx	Z	65	23		
		Ki	iP	01	55	32.8 C	
			iPP	01	59	19.4	
			iSKS	02	06	02	
			iS	02	06	32	
						micr sec	
		P	Z'	0.7	1.1		
		Mx	E	43	21		
		Mx	N	48	21		
		Mx	Z	49	23		
		Sk	iP	01	55	54.2	
			i	01	56	04.4	
		Um	iP	01	55	38.8 C	
			i	01	55	48.8	
			iSKS	02	06	11	
			iS	02	06	43	
		(cont.)					
Apr.	10	(cont.)					
		Ud	iP	01	55	57.5 C	
		De	eP	01	56	03	
			iPP	02	00	11.8	
		Talaud Islands (h = 35 km). m = 6.8, M = 7.0 (Up,Ki).					
"	10	Up	epP	03	26	15	
		Um	iP	03	25	51.8	
		South of Honshu, Japan (h = N).					
"	10	Ud	iP	05	26	32.3	
		De	eP	05	26	07	
		Crete (h = 70 km).					
"	10	Ki	eP	05	30	29	
			i	05	30	30.9	
		Um	iP	05	30	38.3	
"	10	Up	iP	10	38	47.1	
		Ki	eP	10	38	57	
		Sk	eP	10	38	24	
		Um	eP	10	38	55	
		Ud	iP	10	38	28.1	
		North Atlantic Ridge (h = 10 km).					
"	10	Up	iPKP1	16	01	25.2 D	
						micr sec	
			PKP1	Z'	0.1	1.0	
		Sk	i(PKP)	16	01	08.6	
		Ud	iPKP1	16	01	26.7 C	
		De	iPKP1	16	01	36.9	
		South of Fiji Islands (h = 110 km).					
"	10	Up	iP	15	57	09.7	
		Ud	iP	15	57	08.4	
"	10	Up	iP	17	39	46.6	
		Um	iP	17	39	39.0	
		Ud	iP	17	40	00.0	
"	10	Up	i(P)	19	11	54.8	
"	10	Ki	iP	21	51	01.8	
		Um	iP	21	51	29.8	
			i	21	51	37.9	
		Unimak Islands region (h = 15 km).					
"	11	Up	iP	08	36	43.7	
		Ud	iP	08	36	39.4	

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979				1979									
Apr.	11	Ud	iP	10 44	11.6	Apr.	11	Um	iP	22 40	07.9		
"	11	Ud	i(P)	11 06	05.0			De	iP	22 39	44.3		
"	11	Up	iP	12 20	01.5			Turkey (h = 70 km).					
			i	12 20	17.9	"	12	Up	i(PKP)	00 32	24.6		
				micr sec				Ki	iPKP	00 32	19.1		
		Mx	E	0.6	15			Sk	iPKP	00 32	28.5		
		Mx	N	1.7	19			Um	i(PKP)	00 32	16.4		
		Ki	iP	12 20	45.8				iPKP	00 32	25.7		
			i	12 20	51.9			Ud	i(PKP)	00 32	25.3		
				micr sec				De	iPKP1	00 32	35.0		
			i	Z'	0.1 1.0			Fiji Island region (h = 620 km).					
		Mx	E	1.2	16			"	12	Um	iP	01 07	43.5
		Mx	N	1.5	18			Aegean Sea (h = 10 km).					
		Mx	Z	1.0	12			"	12	Um	iP	02 10	16.4
		Sk	i	12 20	51.5			Ud	iP	02 03	00.5		
		Um	iP	12 20	17.9 C			South Atlantic Ridge (h = 10 km).					
			i	12 20	23.7			"	12	Up	iP	02 33	20.6
			i	12 20	59.8			Ki	iP	02 33	25.8		
		Ud	iP	12 20	16.9			Um	iP	02 33	17.4		
			i	12 20	42.3			Ud	iP	02 33	37.3		
		De	iP	12 19	59.6			Tadzhik SSR (h = 130 km).					
		Turkey (h = 35 km).											
"	11	Up	iRg	14 17	21.5	"	12	Up	iP	02 50	47.8		
		Ud	iRg	14 17	05.5			Um	iP	02 51	09.4		
		Central Sweden. Near-surface event.											
"	11	Up	iP	14 37	04.6	"	12	Ud	iP	02 50	44.3		
		Ki	eP	14 37	42			De	eP	02 50	27		
		South Atlantic Ridge (h = 10 km).											
"	11	Up	iP	15 43	45.9	"	12	Up	iPKP1	03 08	56.9 C		
		Ki	iP	15 42	51.9			Ki	iPKP	03 08	48.8		
		Sk	iP	15 43	21.5			Um	iPKP	03 08	56.9		
		Um	iP	15 43	19.4			Ud	iPKP1	03 08	57.9		
		Ud	iP	15 43	43.9			De	iPKP1	03 09	08.8		
		De	iP	15 44	07.3			Fiji Islands region (h = 580 km).					
		Alaska peninsula (h = N).											
"	11	Up	iP	16 18	07.2	"	12	Ud	iP	08 35	55.4		
			i	16 18	20.4			"	12	Up	iP	15 50	47.3
		Ki	iP	16 18	04.2					iS	16 01	27	
		Sk	iP	16 18	25.3			micr sec					
		Um	iP	16 18	00.9			Mx	E	1.2	20		
		Ud	iP	16 18	21.2 C			Mx	N	1.1	20		
			i	16 18	33.4			Mx	Z	3.1	19		
		De	eP	16 18	22			Ki		micr sec			
		India-Bangladesh border region (h = N).											
"	11	Up	e(P)	21 01	03			Mx	E	2.6	20		
		Ud	i(P)	21 00	50.5			(cont.)					



Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979					1979				
Apr.	14	(cont.)			Apr.	15	(cont.)		
		De	i	10 19 51.5			Ki	micr	sec
		Southern Pacific Ocean						Z'	2.0 0.9
		(h = 10 km).					Sk	iP	06 24 34.5
		M = 6.5 (Up,Ki).						i	06 24 38.1
"	14	Um	iP	12 55 02.6			Um	iP	06 24 33.3 C
		Ud	iP	12 55 15.2				i	06 24 37.5
"	14	Um	iP	13 15 11.1			Ud	iP	06 23 55.2
		Ud	iP	13 15 35.6				i	06 23 59.1
		Unimak Island region					De	i	06 23 14.0
		(h = 55 km).					Yugoslavia (h = 10 km).		
"	14	Up	iPKP1	15 43 33.9			m = 6.7 (Up,Ki).		
		Um	iPKP	15 43 28.5			Double P, small and large,		
		Ud	iPKP1	15 43 35.4			in average 3.6 s apart.		
		De	iPKP1	15 43 47.1			The second onset, when		
		Fiji Islands region					interpreted as pP, provides		
		(h = 630 km).					a focal depth of 15 km.		
"	14	Up	iP	15 50 50.5	"	15	Um	eP	06 51 41
			ipP	15 51 17.1	"	15	Sk	eP	07 06 29
		Um	iP	15 50 48.5			Um	iP	07 06 25.6
		Ud	iP	15 51 07.1			Ud	iP	07 05 48.2
			ipP	15 51 33.9			Yugoslavia (h = 10 km).		
		De	iP	15 51 05.6	"	15	Sk	e	07 16 27
			ipP	15 51 30.7			Um	iP	07 16 20.1
		Afghanistan-USSR border					Ud	eP	07 15 39
		region.					Yugoslavia (h = 10 km).		
		h = 120 km (Up,Ud,De).			"	15	Um	iP	07 24 10.0
"	15	Ud	iP	00 37 29.3	"	15	Sk	eP	07 30 26
		Kuril Islands (h = N).					Um	iP	07 30 23.5
"	15	De	iPKP1	01 50 12.6 C			Ud	iP	07 29 47.9
		Tonga Islands (h = N).					Yugoslavia (h = 10 km).		
"	15	Um	i(PKP)	04 54 54.5	"	15	Um	iP	07 33 17.7
		Ud	iPKP1	04 55 01.3	"	15	Um	iP	07 34 55.0
		De	iPKP1	04 55 12.6			Albania (h = 10 km).		
		Fiji Islands region			"	15	Um	iP	07 53 37.8
		(h = 650 km).					Albania (h = 10 km).		
"	15	Um	iP	06 03 33.6	"	15	Sk	eP	08 00 15
		Albania (h = 10 km).					Um	iP	08 00 04.0
"	15	Up	iP	06 23 50.2	"	15	Up	eP	08 12 50
			i	06 23 53.4			Sk	iP	08 13 32.1
			iS	06 27 10			Um	iP	08 13 31.6 C
				micr sec			Ud	iP	08 12 53.3
			i	Z' 8.4 1.5			Yugoslavia (h = 10 km).		
		Ki	iP	06 25 12.7	"	15	Up	eP	08 17 23
			i	06 25 15.8			(cont.)		
			iS	06 29 30					
		(cont.)							

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979				1979			
Apr.	15	(cont.)		Apr.	15	Um iP	11 35 15.6
		Sk iP	08 18 08.6			Yugoslavia (h = 10 km).	
		Um iP	08 18 07.1 C				
		Ud iP	08 17 29.3	"	15	Sk iP	11 47 11.1
		Yugoslavia (h = 10 km).				Um iP	11 47 09.5
"	15	Sk eP	09 15 48			Ud iP	11 46 32.3
		e	09 15 53			Albania (h = 10 km).	
		Um iP	09 15 47.2	"	15	Um iP	12 13 45.5
		Ud i	09 15 11.8			Yugoslavia (h = 10 km).	
		Yugoslavia (h = 10 km).		"	15	Um iP	12 37 43.2 C
"	15	Ki eP	09 32 43	"	15	Um iP	12 40 06.8
		Um eP	09 32 56				
		i	09 33 28.9	"	15	Sk iP	12 48 41.1
		Ud iP	09 33 21.4			Um iP	12 48 39.4
		Bonin Islands region				Ud iP	12 48 01.6
		(h = 120 km).				Yugoslavia (h = 10 km).	
"	15	Um iP	09 51 23.2	"	15	Up eP	13 28 37
"	15	Um iP	10 08 19.6			Sk iP	13 29 22.1
		Ud eP	10 07 44			Um iP	13 29 21.4
		Yugoslavia (h = 10 km).				Ud iP	13 28 43.0
"	15	Up iP	10 29 34.6			Yugoslavia (h = 10 km).	
			micr sec	"	15	Sk iP	14 07 39.2
		P	Z' 0.1 0.7			Um iP	14 07 38.7
		Ki iP	10 30 56.7 C			Ud iP	14 07 02.2
			micr sec			Yugoslavia (h = 10 km).	
		P	Z' 0.1 1.0	"	15	Sk eP	14 15 57
		Sk iP	10 30 19.9 C			Um iP	14 15 55.7
		Um iP	10 30 18.5 C			i	14 16 04.5
		Ud iP	10 29 41.2			Ud eP	14 15 18
		De iP	10 28 59.8			Yugoslavia (h = 10 km).	
		i	10 29 08.4	"	15	Up iP	14 47 11.3
		Albania (h = 10 km).				iS	14 50 29
		m = 5.2 (Up,Ki).					micr sec
"	15	Sk iP	11 12 23.2			P	Z' 1.3 1.6
		Um iP	11 12 22.1 C			Mx	E 16 9
		Ud iP	11 11 44.5			Mx	N 49 11
		Yugoslavia (h = 10 km).				Mx	Z 64 11
"	15	Sk eP	11 22 07			Ki iP	14 48 36.1
		Um iP	11 22 06.0			iS	14 53 12
		Ud eP	11 21 28				micr sec
		Yugoslavia (h = 10 km).				P	Z' 0.7 1.8
"	15	Um iP	11 26 49.2			Mx	E 22 9
		Ud iP	11 26 10.6			Mx	N 27 11
		Yugoslavia (h = 10 km).				Mx	Z 23 11
"	15	Um iP	11 30 20.7			Sk iP	14 47 56.5
						Um iP	14 47 56.3 C
						iS	14 51 54
						(cont.)	



Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979					1979					
Apr.	16	Sk	eP	01 45 06	Apr.	16	Up	eP	09 47 53	
"	16	Ud	iP	02 14 50.7			Sk	eP	09 48 39 C	
				Dodecanese Islands			Um	iP	09 48 37.0	
				(h = 10 km).			Ud	iP	09 47 59.4	
									Albania (h = 10 km).	
"	16	Up	iP	03 00 28.0	"	16	Ud	iP	10 05 46.1	
		Sk	iP	03 00 40.1					Halmahera (h = 130 km).	
		Um	eP	03 00 14						
				Tsinghai Province, China	"	16	Up	iP	10 08 47.7	
				(h = N).				iS	10 12 09	
"	16	Um	iP	03 09 44.1					micr sec	
							P	Z'	0.1 0.9	
"	16	Um	iP	04 29 32.6			Mx	E	0.9 10	
				Albania (h = 10 km).			Mx	N	1.9 12	
							Mx	Z	3.2 12	
"	16	Up	iP	04 42 42.5			Ki	iP	10 10 10.3	
		Sk	iP	04 43 27.3				i	10 10 35.8	
		Um	iP	04 43 25.1					micr sec	
		Ud	iP	04 42 47.6				P	Z'	0.1 1.1
				Albania (h = 10 km).				Mx	E	2.3 11
"	16	Um	i	05 03 45.6				Mx	N	4.2 10
		Ud	iP	05 04 01.5				Mx	Z	3.6 9
				Afghanistan-USSR border			Sk	iP	10 09 33.1 C	
				region (h = 20 km).			Um	iP	10 09 32.1 C	
"	16	Um	iP	06 19 43.8				iS	10 13 30	
							Ud	iP	10 08 54.6	
"	16	Um	iP	07 03 36.2			De	iP	10 08 10.6	
				Albania (h = 10 km).				i	10 08 16.9	
									Yugoslavia (h = 10 km).	
"	16	Ki	iP	07 13 51.9	"	16	Um	iP	10 46 03.9	
		Um	iP	07 13 45.6 C			Ud	iP	10 45 26.8	
		Ud	iP	07 14 06.0					Albania (h = 10 km).	
				Tadzhik-Sinkiang border	"	16	Ud	iP	12 45 28.0	
				region (h = 110 km).					Iran (h = 10 km).	
"	16	Um	iP	07 43 35.4	"	16	Up	iP	14 35 00.6	
				North of Svalbard			Sk	eP	14 35 45	
				(h = 10 km).			Um	iP	14 35 44.6	
"	16	Up	iP	08 00 12.7			Ud	iP	14 35 06.3	
		Sk	iP	08 00 57.3					Yugoslavia (h = 10 km).	
		Um	iP	08 00 55.1	"	16	Um	iP	14 57 14.9	
		Ud	iP	08 00 18.2					Yugoslavia (h = 10 km).	
		De	i	07 59 41.9	"	16	Um	iP	15 31 32.0	
				Albania (h = 10 km).					Yugoslavia (h = 10 km).	
"	16	Ki	iP	08 43 49.0 C	"	16	Ud	iP	15 40 13.8	
		Um	iP	08 44 15.7 C					Kuril Islands (h = 200 km).	
		Ud	iP	08 44 41.5	"	16	Up	iP	15 55 18.9	
				Fox Islands, Aleutian					(cont.)	
				Islands (h = 40 km).						

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979					1979				
Apr.	16	(cont.)			Apr.	17	Sk	eP	03 58 30
		Sk	eP	15 56 03			Um	iP	03 58 28.2
		Um	iP	15 56 01.5			Ud	iP	03 57 50.0
		Ud	iP	15 55 23.7			Albania (h = 10 km).		
"	16	Um	iP	16 46 18.5	"	17	Sk	iP	03 59 16.2
		Ud	iP	16 46 52.6			Um	iP	03 59 14.1
							Ud	iP	03 58 35.9
							From the same focal region as the preceding event.		
"	16	Up	iP	21 07 18.0	"	17	Um	iP	04 35 48.0
		Sk	e	21 07 04			Banda Sea (h = 130 km).		
		Um	iP	21 06 52.2					
		Ud	iP	21 07 19.1					
		Andreanof Islands, Aleutian Is. (h = 50 km).					Up	iP	05 44 00.2 C
"	16	Up	iPKP1	21 38 25.0			i		05 44 04.0
		Sk	iPKP1	21 38 19.8					micr sec
		Um	iPKP1	21 38 16.9			i	Z'	0.2 1.3
		Ud	iPKP1	21 38 26.4			Mx	E	0.9 8
"	16	Ud	eP	22 39 21			Mx	N	4.4 10
		Greece (h = 10 km).					Mx	Z	5.9 10
							Ki	iP	05 45 25.0
"	16	Up	iP	23 04 37.6					micr sec
		Sk	iP	23 05 21.6 C			P	Z'	0.1 1.2
		Um	iP	23 05 20.6 C			Mx	E	1.6 11
		Ud	iP	23 04 42.5 C			Mx	N	3.0 11
		De	i	23 04 05.7			Mx	Z	2.4 10
		Yugoslavia (h = 10 km).					Sk	iP	05 44 46.3 C
"	17	Um	iP	01 20 38.2			Um	iP	05 44 46.1 C
		Yugoslavia (h = 10 km).					iS		05 48 39
"	17	Um	iP	01 28 39.4			Ud	iP	05 44 07.6 C
							De	i	05 43 26.7
							i		05 43 31.1
							Yugoslavia (h = 10 km). m = 5.3 (Up,Ki).		
"	17	Up	eP	01 36 35	"	17	Um	iP	06 53 54.0
		Sk	iP	01 37 20.8			Albania (h = 10 km).		
		Um	iP	01 37 19.5	"	17	Um	iP	09 11 30.0
		Ud	iP	01 36 41.1			i		09 11 39.7
		Yugoslavia (h = 10 km).							
"	17	Um	iP	01 43 44.0	"	17	Up	iPKP1	13 28 55.3
		Albania (h = 10 km).					i		13 29 06.5
"	17	Up	iP	02 59 53.4					micr sec
		Ki	iP	03 00 20.6			PKP1	Z'	0.1 0.8
				micr sec			Ud	iPKP1	13 28 57.5
		P	Z'	0.1 1.2			i		13 29 07.8
		Sk	eP	02 59 42			De	iPKP1	13 29 07.5
		Um	iP	03 00 11.0			South of Tonga Islands (h = N).		
		Ud	iP	02 59 36.8					
		Azores Islands region (h = 10 km).							



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1979						1979				
Apr.	17	Sk	iPgl	13 29 43.0		Apr.	17	Sk	eP	18 15 31
			iSgl	13 29 47.7				Um	iP	18 15 29.0
			iRg	13 29 49.5				Ud	iP	18 14 48.7
				Origin time = 13 29 37.						From the same focal region
				Local near-surface event.						as the preceding event.
"	17	Up	iP	13 49 16.2		"	17	Sk	eP	18 36 17
		Ki	iP	13 50 39.1				Um	iP	18 36 15.2 D
		Sk	iP	13 50 02.4				Ud	iP	18 35 38.4
		Um	iP	13 49 58.4						Yugoslavia (h = 10 km).
		Ud	iP	13 49 19.8						
				Yugoslavia (h = 10 km).		"	17	Um	iP	18 40 43.6
									i	18 40 52.7
"	17	Ki	iP	13 51 25.5 C				Ud	eP	18 40 06
		Ud	iP	13 51 41.0						Yugoslavia (h = 10 km).
			i	13 51 46.0						
				Southern Sinkiang Prov.,		"	17	Up	iP	19 07 42.9
				China (h = N).				Um	iP	19 07 23.3
								Ud	iP	19 07 48.4
"	17	Um	iP	16 14 48.0		"	17	Um	iP	19 27 49.2
		Ud	iP	16 15 14.2				Ud	iP	19 27 12.2
				Near s. coast of Honshu,						Albania (h = 10 km).
				Japan (h = 380 km).						
"	17	Up	iP	17 09 28.9 C		"	18	Sk	ePKP1	00 16 28
			ipP	17 09 55.7				Um	ipKP1	00 16 22.0 C
		Ki	iP	17 09 32.3 C				De	ipKP2	00 16 54.7
			ipP	17 09 58.5						
				micr sec		"	18	Um	iP	00 42 15.0
				P Z' 0.1 0.8						
		Sk	iP	17 09 52.8 C		"	18	Um	iP	00 46 30.0
			ipP	17 10 19.8				Ud	iP	00 46 54.7
		Um	iP	17 09 24.4 C						Volcano Islands region
			ipP	17 09 49.9						(h = N).
		Ud	iP	17 09 45.6 C		"	18	Ud	iP	01 52 13.2
			ipP	17 10 12.2				De	iP	01 52 24.9
		De	iP	17 09 43.7 C						
			ipP	17 10 10.5		"	18	Sk	eP	02 50 08
				Tadzhik-Sinkiang border				Um	iP	02 50 05.6 D
				region.				Ud	iP	02 49 26.7
				h = 120 km (Up,Ki,Sk,Um,Ud,De).						Yugoslavia (h = 10 km).
"	17	Sk	eP	17 21 22		"	18	Ud	iP	03 51 44.5
		Um	iP	17 21 22.1						
		Ud	iP	17 20 44.1		"	18	Up	e	03 54 18
				Yugoslavia (h = 10 km).					i	03 54 27.1
"	17	Up	eP	18 10 24				Sk	iP	03 54 59.4 D
		Sk	iP	18 11 09.8 D				Um	iP	03 54 58.2 D
		Um	iP	18 11 08.9 D				Ud	iP	03 54 20.4
			i	18 11 12.3						Yugoslavia (h = 20 km).
		Ud	iP	18 10 31.0 D		"	18	Ki	iP	05 24 08.2
				Yugoslavia (h = 10 km).						(cont.)

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979				1979			
Apr.	18	(cont.)		Apr.	18	(cont.)	
		Um	iP 05 24 19.7 Mariana Islands (h = 60 km).			Up	i 15 22 45.0 micr sec
"	18	Up	iP 05 31 01.9 D ipP 05 31 16.4 Ki iP 05 30 08.6 D Um iP 05 30 35.1 D ipP 05 30 49.6 Ud iP 05 31 02.1 D De iP 05 31 22.3 Andreanof Islands, Aleutian Islands. h = 55 km (Up,Um).				i Z' 0.1 1.4 Mx E 0.9 10 Mx N 1.2 10 Mx Z 1.7 11 Ki micr sec Mx E 1.6 11 Mx N 0.7 13 Mx Z 0.7 11 Sk iP 15 23 22.7 iLg2 15 28 40.5 Um iP 15 23 27.6 i 15 27 18.4 iLg1 15 28 53.0 Ud iP 15 22 37.5 i 15 22 47.5 iS 15 25 15.3 i 15 25 54.6 iLg1 15 26 26.3 De iP 15 21 45.8 iS 15 23 36.1 iLg1 15 24 44.8 Austria (h = 10 km).
"	18	Um	iP 06 25 02.6 Albania (h = 10 km).				
"	18	Um	iP 07 44 14.5 Ud iP 07 43 38.9 Albania (h = 10 km).				
"	18	Up	iP 08 14 40.9 Ud iP 08 14 54.0 Burma-India border region (h = 90 km).				
"	18	Up	iP 12 20 11.8 i 12 20 23.2 Ud iP 12 20 18.3 De iP 12 19 45.0 Crete (h = N).	"	18	Ud	iPP 18 17 22.8 Chile-Argentina border region (h = 150 km).
"	18	Up	iP 13 32 08.6 Sk iP 13 31 45.9 Um iP 13 31 40.4 Ud iP 13 32 07.0 i 13 32 07.9 i 13 32 20.8 De iP 13 32 29.7 Fox Islands, Aleutian Islands (h = N).	"	18	Um	iP 18 28 30.4 Ud iP 18 28 48.5 Minahassa Peninsula (h = N).
"	18	Up	iP 14 49 14.8 Sk eP 14 49 52 Um iP 14 49 31.7 C Ud iP 14 49 30.0 C De iP 14 49 11.5 Iran-Iraq border region (h = N).	"	18	Ud	iP 19 49 36.9 Peru-Brazil border region (h = 160 km).
"	18	Sk	iP 14 52 14.6 Um iP 14 52 07.5	"	18	Up	iP 19 55 21.5 micr sec Mx E 0.7 10 Mx N 0.9 10 Mx Z 1.8 9 Ki micr sec Mx E 1.3 12 Mx N 0.9 10 Mx Z 0.7 9 Sk iP 19 56 07.0 Um iP 19 56 05.6 C i 19 56 09.5 Ud iP 19 55 27.8 Yugoslavia (h = 10 km).
"	18	Up	iP 15 22 36.8 (cont.)	"	18	Um	iP 20 13 46.1 C i 20 13 49.5 Ud iP 20 13 09.7 Yugoslavia (h = 10 km).

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979									1979											
Apr.	18	Um	iP	20 14	41.5				Apr.	19	(cont.)									
			i	20 14	46.6						Um	i	07 33	39.4						
		Ud	iP	20 14	05.8						Ud	iP	07 33	39.1						
		From the same focal region as the preceding event.										De	iP	07 33	38.8					
												Southern Sumatera (h = 35 km).								
"	18	Up	iP	22 15	47.1	C			"	19	Up	iP	12 30	38.3						
		Sk	iP	22 15	35.5	C					Um	iP	12 30	21.8						
			i	22 15	38.1						Ud	iP	12 30	47.9						
		Um	iP	22 16	01.9						Southwestern Ryukyu Islands (h = 70 km).									
		Ud	iP	22 15	32.8															
			i	22 15	37.4						"	19	Ud	iPgl	15 11	35.5				
		De	iP	22 15	28.5								iSgl	15 11	54.6					
		North Atlantic Ridge (h = 10 km).											iRg	15 12	07.0					
													De	iSgl	15 12	49.5				
"	19	Up	iP	00 21	46.6								Coast of Southeastern Norway, near 59 1/4°N, 11°E. Origin time = 15 11 10. Near-surface event.							
					micr	sec					"	19	Ud	eP	15 28	55				
		Mx	E	0.5	9								Greece-Bulgaria border region (h = 10 km).							
		Mx	N	0.8	11							"	19	De	iP	16 18	00.6	D		
		Mx	Z	0.7	10							"	19	Um	iPKP	18 20	56.3	D		
		Ki			micr	sec							North Island, New Zealand (h = N).							
		Mx	E	0.5	12															
		Mx	N	0.5	13															
		Mx	Z	0.7	13															
		Sk	iP	00 22	29.8															
			i	00 22	37.9															
		Um	iP	00 22	28.6	C														
		Ud	iP	00 21	51.2															
		Yugoslavia (h = 10 km).																		
"	19	Up	iP	05 46	59.9					"	19	Up	iP	22 09	32.4					
					micr	sec						Ki	eP	22 09	35					
		Mx	E	0.4	8							Um	iP	22 09	27.1					
		Mx	N	1.9	11							Ud	iP	22 09	49.1					
		Mx	Z	2.4	10							Tibet (h = N).								
		Ki			micr	sec					"	19	Ud	iP	22 13	55.6				
		Mx	E	1.0	9							"	19	Up	iP	22 59	51.6	C		
		Mx	N	1.1	10									iSKS	23 10	07				
		Mx	Z	1.1	10									iS	23 10	27				
		Sk	iP	05 47	44.0										micr	sec				
		Um	iP	05 47	43.1	C								P	Z'	0.1	1.4			
		Ud	iP	05 47	05.1									Mx	E	1.4	15			
		Yugoslavia (h = 10 km).											Mx	N	1.3	15				
"	19	Up	iP	07 11	15.2									Mx	Z	2.8	14			
		Sk	iP	07 11	59.8									Ki	iP	22 59	52.7	C		
		Um	iP	07 11	58.9	C								iSKS	23 10	23				
			i	07 12	02.3									iS	23 10	29				
		Ud	iP	07 11	20.7	C									micr	sec				
		Yugoslavia (h = 10 km).											P	Z'	0.1	1.3				
														Mx	E	4.7	19			
		Up	iP	07 33	31.2									Mx	N	3.0	15			
		Um	iP	07 33	28.7									(cont.)						
		(cont.)											(cont.)							

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979					1979				
Apr.	19	(cont.)			Apr.	20	(cont.)		
		Ki		micr sec			Ud ipP	10 39 48.7	
		Mx	Z	3.1 16			Philippine Islands region		
		Um ip		22 59 49.2 C			(h = 25 km).		
		iS		23 10 20		"	20	Up ip	12 12 46.6
		Ud ip		23 00 01.3 C				Ki ip	12 13 09.6
		De ip		22 59 59.5 C				Sk ip	12 13 11.1
		Southern Sumatera (h = N).						Um ip	12 12 55.2
		M = 5.8 (Up,Ki).						Ud ip	12 12 57.3
"	19	Up ipKP1		23 31 34.5 C				De ip	12 12 45.0
		i		23 31 53.2				Carlsberg Ridge (h = 10 km).	
		Ki ipKP		23 31 20.4		"	20	Up ip	12 59 06.1
		Sk ipKP1		23 31 26.6				ipP	12 59 14.3
		Um ipKP1		23 31 23.0					micr sec
		Ud ipKP1		23 31 35.5 C				P	Z' 0.1 1.0
		i		23 31 46.0				pP	Z' 0.2 1.5
		i		23 31 53.2				Ki ip	12 58 11.7 C
		De ipKP1		23 31 45.5				ipP	12 59 19.7
		Kermadec Islands region							micr sec
		(h = 70 km).						P	Z' 0.4 1.6
"	19	Um ip		23 42 51.9				Sk ip	12 58 36.7 C
"	20	Ki ip		01 29 09.2				ipP	12 58 44.7
		South of Sumbawa Island						Um ip	12 58 40.4 C
		(h = N).						ipP	12 58 48.6
"	20	Um ip		02 33 48.5				Ud ip	12 59 01.1 C
		Ud eP		02 33 10				ipP	12 59 09.3
		Adriatic Sea (h = 10 km).						i	12 59 26.7
"	20	Sk eP		03 22 33				De ip	12 59 26.2 C
		Um ip		03 22 29.7				ipP	12 59 34.0
		Ud ip		03 21 56.2				Southeastern Alaska.	
		Albania (h = 10 km).						h = 30 km (Up,Ki,Sk,Um,Ud,De).	
"	20	Um ip		06 02 09.5				m = 6.0 (Up,Ki).	
"	20	Ud ip		08 52 33.4		"	20	Up i(P)	14 13 38.1
		De ip		08 52 57.3				Um i(P)	14 25 07.5
		Southern Alaska (h = 90 km).						Um ip	16 29 46.2
"	20	Up ipKP1		09 08 09.5		"	20	Ud eP	16 41 29
		Ud ipKP1		09 08 11.8				Sk eP	17 07 32
"	20	Up ip		10 39 31.7				Um ip	17 07 27.9
		i		10 39 36.4				Ud i	17 06 55.5
		ipP		10 39 42.1				Yugoslavia (h = 10 km).	
		Ki eP		10 39 09		"	20	Um ip	17 29 22.7
		ipP		10 39 16.1				i	17 29 35.2
		Sk epP		10 39 42		"	20	Ki ip	19 35 50.4
		Um ipP		10 39 23.8				Sk ip	19 35 31.5
		Ud ip		10 39 39.0				Um ip	19 35 45.3
		(cont.)						(cont.)	

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979				1979			
Apr.	20	(cont.)		Apr.	21	(cont.)	
		Um	i 19 36 01.6			Um	iP 04 59 31.4
		Ud	iP 19 35 53.1			Ud	iP 04 58 55.6
"	20	Sk	iP 19 37 50.7			Albania (h = 10 km).	
		Um	iP 19 37 47.2	"	21	Ud	iP 10 58 12.2
		Ud	iP 19 37 12.7			Near east coast of Kamchatka (h = 35 km).	
		Albania (h = 10 km).		"	21	Sk	iP 11 06 34.1
"	20	Ud	iPKP1 21 21 16.6 C			Um	iP 11 06 31.7
		De	ePKP1 21 21 27			Ud	iP 11 05 53.6
"	20	Ki	iP 22 07 43.2			i	11 05 57.4
		Sk	iP 22 08 08.0			Albania (h = 10 km).	
		Um	iP 22 08 11.7	"	21	Up	iP 12 46 54.2
		Ud	iP 22 08 32.4			Ki	iP 12 45 58.9
		Southeastern Alaska (h = 15 km).				Sk	iP 12 46 24.1
"	20	Sk	iP 23 46 45.5			Um	iP 12 46 27.8
		Um	iP 23 46 39.6			i	12 46 34.7
		Ud	eP 23 46 02			Ud	eP 12 46 49
		Albania (h = 10 km).				De	iP 12 47 12.9
"	21	Up	eP 02 42 15			Southeastern Alaska (h = 15 km).	
		i	02 42 19.8	"	21	Up	iP 13 34 09.9
		Ki	eP 02 43 40			Ki	iP 13 33 14.6
		Sk	eP 02 43 00			i	13 33 36.1
		i	02 43 03.2			Sk	eP 13 33 46
		Um	iP 02 42 57.8			Um	iP 13 33 41.8
		i	02 43 04.3			i	13 33 47.5
		Ud	iP 02 42 20.4			i	13 33 52.7
		i	02 42 24.3			Ud	iP 13 34 07.1
		Yugoslavia (h = 10 km).				De	iP 13 34 30.4
"	21	Sk	iP 04 09 50.3			Fox Islands, Aleutian Islands (h = 35 km).	
		i	04 09 51.9	"	21	Up	i 15 31 37.2
		Um	iP 04 09 47.7			Ki	eP 15 31 52
		i	04 09 53.1			Sk	iP 15 32 00.9
		Ud	iP 04 09 12.5			Um	iP 15 31 36.8
		i	04 09 17.2			Ud	iP 15 31 47.0
		Albania (h = 10 km).				i	15 31 56.6
"	21	Up	iP 04 37 16.2			Pakistan (h = N).	
		Ki	iP 04 38 38.3	"	21	Sk	iP 16 04 44.0
		Sk	eP 04 38 01			Um	iP 16 04 42.5
		Um	iP 04 37 55.8			i	16 04 46.0
		i	04 37 59.6			Ud	eP 16 04 09
		Ud	iP 04 37 20.4			Albania (h = 10 km).	
		i	04 37 23.1	"	21	Um	ePKP1 16 26 40
		Albania (h = 10 km).				Ud	ePKP1 16 26 53
"	21	Up	iP 04 58 51.6			(cont.)	
		Sk	iP 04 59 35.9				

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979				1979			
Apr.	21	Um	iP	21 41 30.3	Apr.	22	(cont.)
				Yugoslavia (h = 10 km).			De i 06 35 54.7
							Yugoslavia (h = 10 km).
"	21	Ki	iP	22 32 35.4	"	22	Up iP 07 36 18.6
		Ud	iP	22 32 47.9			Ki eP 07 37 42
				Tadzhik-Sinkiang border			Sk iP 07 37 02.1
				region (h = 50 km).			i 07 37 07.4
"	21	Ud	iP	22 42 53.3			Um iP 07 37 01.0
							i 07 37 04.0
"	21	Up	iP	23 03 06.0			Ud iP 07 36 23.4
		Um	iP	23 02 42.4			i 07 36 29.9
		Ud	iP	23 03 13.2			Albania (h = 10 km).
			i	23 03 24.3			
				Off east coast of Honshu,	"	22	Up iPKP 08 28 44.5
				Japan (h = N).			Ki iPKP 08 29 07.0
"	22	Um	iP	01 29 57.9			Um iPKP 08 28 53.4
		Ud	iP	01 29 20.6			Ud iPKP 08 28 43.9
				Albania (h = 10 km).			South Sandwich Islands
							region (h = 80 km).
"	22	Ki	iP	01 37 37.0	"	22	Um iPKP 08 41 30.9
		Ud	iP	01 37 48.8			Santa Cruz Islands
							(h = 45 km).
"	22	Up	iP	02 51 04.4	"	22	Ki iP 09 31 54.8
		Ki	eP	02 50 21	"	22	Up iP 09 58 35.6 D
		Um	iP	02 50 40.7			i 09 58 37.8
			i	02 50 49.2			iS 10 05 19
		Ud	iP	02 51 11.2			micr sec
				Off east coast of Honshu,			i Z' 0.2 1.4
				Japan (h = 30 km).			Mx E 2.6 17
"	22	Um	iP	04 39 25.8			Mx N 2.3 16
							Mx Z 6.6 17
"	22	Sk	eP	04 49 51			Ki iP 09 58 58.1 D
		Um	iP	04 49 48.4			iS 10 06 05
		Ud	iP	04 49 14.7			micr sec
				Yugoslavia (h = 10 km).			P Z' 0.3 1.5
"	22	Ki	iP	05 54 21.8			Mx E 1.8 15
		Sk	eP	05 53 54			Mx N 1.7 16
		Um	iP	05 53 46.5			Mx Z 1.5 16
		Ud	iP	05 53 22.2			Sk iP 09 58 24.0 D
		De	iP	05 52 48.9			Um iP 09 58 51.0 D
				Crete (h = N).			i 09 58 53.5
"	22	Up	iP	06 36 24.2			iS 10 05 46
			i	06 36 33.0			Ud iP 09 58 22.3 D
		Ki	iP	06 37 45.9			De iP 09 58 16.3 D
		Sk	iP	06 37 09.3			i 09 58 18.5
		Um	iP	06 37 05.4 D			North Atlantic Ridge
			i	06 37 07.6			(h = 10 km).
		Ud	iP	06 36 27.3 D			m = 6.1, M = 5.3 (Up,Ki).
			i	06 36 30.0	"	22	Ki iP 10 10 08.2
				(cont.)			

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979				1979			
Apr.	22	Up	iP	10 32	45.6	D	
		Ki	iP	10 32	00.0		
		Um	iP	10 32	20.3		
		Ud	iP	10 32	51.3		
		De	iP	10 33	08.8		
		Kuril Islands (h = N).					
"	22	Up	iP	11 29	13.1		
		Ki	iP	11 29	35.7		
					micr sec		
		P	Z'	0.2	1.9		
		Um	iP	11 29	27.9		
		North Atlantic Ridge (h = 10 km).					
"	22	Ki	iP	14 13	43.4		
		Southeastern Alaska (h = 15 km).					
"	22	Ud	iPKP1	14 31	24.5		
		Fiji Islands region (h = 410 km).					
"	22	Um	iP	15 38	09.7		
		Off east coast of Honshu, Japan (h = N).					
"	22	Up	iP	18 29	55.9		
			iPP	18 33	56.0		
					micr sec		
		PP	Z'	0.1	1.1		
		Mx	E	1.3	23		
		Mx	N	1.9	21		
		Mx	Z	1.6	23		
		Ki	iP	18 29	42.4		
			iPP	18 33	37.2		
			i(PKKP)	18 46	20.1		
			iPKKP	18 46	43.2		
					micr sec		
		Mx	E	2.3	22		
		Mx	N	1.6	24		
		Mx	Z	2.1	21		
		Sk	iP	18 30	03.6		
			ePP	18 34	10		
			ePKKP	18 46	32		
		Um	iP	18 29	48.1		
			ipP	18 30	09.4		
			iPP	18 33	43.2		
			iPKKP	18 46	41.5		
		Ud	iP	18 30	05.6		
			iPP	18 34	16.7		
		De	eP	18 30	09		
			iPP	18 34	16.3		
		Minahassa Peninsula. h = 80 km (Um). m = 6.2, M = 5.6 (Up,Ki).					
Apr.	22	Up	iPKP2	20 04	38.2		
		Ki	iPKP1	20 04	05.8		
			i	20 04	14.7		
		Um	iPKP1	20 04	14.0	C	
		Ud	ePKP2	20 04	43		
		Off e. coast of N. Island, N. Z. (h = 30 km).					
"	22	Um	iP	23 11	03.9		
		Ud	iP	23 11	34.9		
"	22	Up	iPKP1	23 43	19.0		
		Ud	iPKP1	23 43	21.4		
"	22	Um	iP	01 12	40.0		
		Banda Sea (h = 100 km).					
"	23	Um	iPKP	01 13	31.9		
		Ud	iPKP	01 13	42.2		
		De	iPKP	01 13	45.8		
		Solomon Islands (h = 110 km).					
"	23	Ud	iP	05 46	52.1		
"	23	Up	iPP	06 04	30.1		
					micr sec		
		PP	Z'	0.1	1.3		
		Mx	E	1.5	20		
		Mx	N	3.3	23		
		Mx	Z	3.5	25		
		Ki	iP	05 59	33.1		
			i(PP)	06 03	49.0		
					micr sec		
		Mx	E	1.3	19		
		Mx	N	3.3	23		
		Mx	Z	1.6	21		
		Sk	i(PP)	06 03	58.5		
		Um	i(PP)	06 03	36.0		
			iPP	06 04	29.8		
			iSKS	06 10	10		
			iS	06 11	38		
		Ud	i(PP)	06 04	33.9		
			iPP	06 04	43.9		
		De	iPP	06 04	40.7		
		Northwest of Australia (h = N). M = 5.9 (Up,Ki).					
"	23	Up	iPKP1	10 17	03.5	C	
			i	10 17	07.7		
					micr sec		
			i	Z'	0.1	0.8	
		Ki	iPKP	10 16	46.3		
		Sk	iPKP1	10 16	56.5	C	
		Um	iPKP1	10 16	51.5	C	
			i	10 16	59.0		

(cont.)

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979					1979				
Apr.	23	(cont.)			Apr.	23	(cont.)		
		Ud	iPKP1	10 17 05.0 C			Ki	iPKP1	22 14 40.4
		De	iPKP1	10 17 13.5 C				iPKP2	22 14 56.9
			i	10 17 18.5					micr sec
			i	10 18 12.1				PKP1	Z' 0.1 1.4
		Kermadec Islands (h = 100 km).						PKP2	Z' 0.2 1.3
"	23	Up	iPKP2	10 29 33.5			Mx	E	2.5 21
			i	10 29 40.1			Mx	N	1.8 20
		Sk	ePKP1	10 29 25			Mx	Z	2.4 20
		Um	iPKP1	10 29 18.9			Sk	ePKP	22 14 36
		Ud	iPKP2	10 29 34.8				iPKP2	22 15 18.5
			i	10 29 39.7			Um	iPKP1	22 14 43.4
		De	iPKP2	10 29 50.0				iPKP2	22 15 01.3
		Kermadec Islands (h = 150 km).					Ud	iPKP2	22 15 14.7
								i	22 15 17.1
"	23	Up	iP	11 38 25.5			De	iPKP2	22 15 13.9
		Ki	iP	11 38 11.0				i	22 15 25.9
			ipP	11 38 24.2			Macquarie Islands region		
		Sk	iP	11 38 40.3			(h = 10 km).		
		Um	iP	11 38 11.9			M = 6.2 (Up,Ki).		
			ipP	11 38 25.1	"	24	Sk	eP	00 28 00
		Ud	iP	11 38 39.9			Um	iP	00 27 58.1
		De	iP	11 38 46.7			Ud	iP	00 27 21.4
		Northern Sinkiang Prov., China.					Albania (h = 10 km).		
		h = 50 km (Ki,Um).			"	24	Up	iPKP1	02 03 21.1 C
"	23	Up	iP	13 08 12.8				iSKP1	02 06 10.3
			iPP	13 09 10.4				iSKKP	02 14 48.0
			iS	13-13 19					micr sec
		Ki	iP	13 09 11.2 C				PKP1	Z' 0.2 0.9
			iPP	13 10 36.9				SKP1	Z' 0.3 0.9
				micr sec			Ki	i(PKP)	02 03 01.6
			P	Z' 0.1 0.9				iPKP	02 03 14.2
		Sk	iP	13 08 52.4				iSKP1	02 05 46.9
		Ud	iP	13 08 24.9					micr sec
		De	iP	13 07 59.1				PKP	Z' 0.3 1.0
		Dead Sea region (h = N).						SKP1	Z' 2.3 2.2
"	23	Ki	iP	17 31 58.6			Sk	i(PKP)	02 03 13.7 C
		Um	iP	17 31 40.5 C				iPKP	02 03 24.4
		Ud	iP	17 31 50.0				iSKP1	02 06 03.2
		Iran (h = 15 km).						iSKKP	02 15 01.5
"	23	Up	iP	18 28 04.9			Um	i(PKP)	02 03 06.7
		Ud	iP	18 27 52.0				i(PKP)	02 03 09.5
								i(PKP)	02 03 14.0
								iPKP	02 03 20.6
								iSKP1	02 05 58.0
								iSKKP	02 15 07.6
"	23	Up	iPKP2	22 15 08.3			Ud	i	02 03 21.4
				micr sec				iPKP1	02 03 22.9
			PKP2	Z' 0.1 1.5				iSKP1	02 06 11.6
			Mx	E 2.7 20				iSKKP	02 14 45.2
			Mx	N 2.9 20			De	iPKP1	02 03 33.2 C
			Mx	Z 3.8 23				iSKP1	02 06 20.6
		(cont.)					(cont.)		



Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979				1979				
Apr.	24	(cont.)		Apr.	25	Ud	iP	00 37 24.1
		De	iSKKP					Central Alaska (h = 120 km).
			02 14					
			31.9					
		Fiji Islands region						
		(h = 600 km).		"	25	Um	iP	00 44 16.0 C
"	24	Up	iP	"	25	Um	iP	01 45 21.1 C
			08 17					
			00.0 D					
			micr sec					
		Mx	N	"	25	Up	iP	02 32 04.8
			1.1			Sk	iP	02 32 18.6
			20			Um	iP	02 31 54.7 C
		Mx	Z			Ud	iP	02 32 17.8
			1.1				ipP	02 32 31.5
			20			De	iP	02 32 22.1
		Ki	iP			Burma-India border region.		
			08 16			h = 50 km (Ud).		
			17.3 D					
			micr sec					
		P	Z'	"	25	Up	iP	02 34 24.9
			0.1			Sk	eP	02 34 36
			0.8			Um	iP	02 34 13.0
		Mx	E				i	02 34 16.9
			0.7			Ud	iP	02 34 36.7
			16			Szechwan Province, China		
		Mx	N			(h = N).		
			0.7					
			15					
		Mx	Z					
			1.0					
			17					
		Sk	eP					
			08 16					
			52					
		Um	iP					
			08 16					
			36.4 D					
		Ud	iP					
			08 17					
			06.9 D					
			ipP					
			08 17					
			23.3					
		De	iP					
			08 17					
			24.1					
		Hokkaido, Japan region.						
		h = 60 km (Ud).						
		M = 5.1 (Up,Ki).						
"	24	Um	iP	"	25	Up	iP	06 40 56.4
			16 49			Sk	iP	06 41 42.9
			54.3			Um	iP	06 41 39.8
		Ud	iP			Ud	iP	06 41 02.5
			16 49			Yugoslavia (h = 10 km).		
			18.1					
		Albania (h = 10 km).		"	25	Up	iP	07 40 01.0
"	24	Up	iP			Sk	iP	07 40 34.3
			17 58			Um	iP	07 40 12.3
			43.7			Ud	iP	07 40 16.2 D
		Ki	iP				i	07 40 19.1
			17 58			De	iP	07 40 02.2 D
			47.1 D			Southern Iran (h = N).		
		Sk	iP					
			17 59					
			07.1 D					
		Um	iP					
			17 58					
			39.1 D					
		Ud	iP					
			17 59					
			00.1 D					
		De	iP					
			17 58					
			58.3 D					
		Tadzhik-Sinkiang border						
		region (h = 150 km).						
"	24	Ki	eP	"	25	Ud	iP	07 45 23.9
			21 27			Western Caucasus (h = 10 km).		
			36					
		Um	ePP					
			21 32					
			07					
		Papua New Guinea (h = 50 km).						
"	24	Ki	iP	"	25	Sk	iP	15 19 33.9
			22 16			Um	iP	15 19 29.8
			33.0			Ud	iP	15 18 52.8
"	24	Sk	iP			Albania (h = 10 km).		
			22 31					
			19.3					
		Um	iP					
			22 31					
			17.4 D					
			i					
			22 31					
			21.5					
		Ud	iP					
			22 30					
			39.0					
		Yugoslavia (h = 10 km).		"	25	Sk	iP	19 17 18.2
"	24	Up	iP			Um	iP	19 17 11.6
			23 43			Ud	iP	19 16 35.9
			25.9			Albania (h = 10 km).		
		Um	iP					
			23 42					
			59.0					
		Ud	iP					
			23 43					
			26.8					
		Rat Islands, Aleutian		"	25	Um	iP	23 08 29.6
		Islands (h = N).				Ud	iP	23 09 00.8
						Kuril Islands (h = 140 km).		

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979					1979						
Apr.	26	Up		micr sec	Apr.	26	(cont.)				
		Mx	E	1.2 20			Up	iPKP2	23 27 24.0		
		Mx	N	1.1 20				i	23 42 33.6		
		Mx	Z	2.6 19			Sk	iPKP1	23 27 13.5		
		Ki	ePKP	02 19 00				i	23 27 25.6		
				micr sec			Um	iPKP1	23 27 08.7		
		Mx	E	1.2 16				i	23 27 19.9		
		Mx	Z	1.3 19			Ud	iPKP1	23 27 22.1		
		Um	iPKP	02 18 57.3			Kermadec Islands (h = 55 km).				
		Ud	iPKP	02 18 49.0							
		Near coast of central Chile (h = 40 km). M = 5.6 (Up,Ki).				"	26	Up	iPKP1	23 42 06.8	
								iPKP2	23 42 09.5		
								i	23 42 18.9		
"	26	Up	iP	09 33 23.9			Sk	iPKP1	23 41 59.3		
		Ki	iP	09 34 20.4				i	23 42 12.1		
				micr sec			Um	iPKP1	23 41 54.3		
		Mx	E	0.8 17				i	23 41 07.1		
		Um	iP	09 33 47.5			Ud	iPKP1	23 42 08.2		
		Ud	i	09 33 53.7			Kermadec Islands (h = 50 km).				
		Turkey (h = 50 km).				"	27	Um	iP	01 40 10.7	
							Albania (h = 10 km).				
"	26	Up	ipP	10 44 42.1			"	27	Ud	iP	04 56 41.5
		Ki	ipP	10 44 41.6			"	27	Ud	i(P)	05 03 00.8
		Sk	ipP	10 44 56.2			"	27	Up	iPKP2	05 23 11.6
		Um	iP	10 44 08.7				Sk	ePKP1	05 22 58	
			ipP	10 44 38.8				Ud	iPKP2	05 23 13.2	
		Ud	iP	10 44 22.4					i	05 23 18.9	
			ipP	10 44 52.4			Kermadec Islands (h = 60 km).				
		Northern Sumatera. h = 120 km (Um,Ud).				"	27	Sk	eP	05 45 52	
"	26	Ki	iP	12 35 05.0				Um	iP	05 46 50.4	
		Sk	eP	12 34 22				Ud	iP	05 46 13.2	
		Ud	iP	12 33 52.8			Albania (h = 10 km).				
		Tunisia (h = 10 km).				"	27	Up	iP	06 28 12.0	
"	26	Up	iP	12 59 31.3				Ud	iP	06 28 13.2	
		Ud	eP	12 59 36							
"	26	Um	iP	16 10 36.9			"	27	Ud	iPg1	15 30 20.7
		Yugoslavia (h = 10 km).							iSg1	15 30 46.1	
"	26	Sk	eP	18 17 19				iRg	15 31 00.1		
		Um	iP	18 17 17.5				De	eSg1	15 31 33	
		Albania (h = 10 km).					Southeastern Norway. Origin time = 15 29 46. Near-surface event.				
"	26	Up	i(P)	19 33 15.1			"	27	Um	eP	17 01 38
"	26	Up	eP	20 23 13			Turkey (h = 10 km).				
		Ki	eP	20 23 38							
			i	20 23 49.2							
		Um	iP	20 23 29.2							
		North Atlantic Ridge (h = 10 km).									
"	26	Up	iPKP1	23 27 21.4							
		(cont.)									



Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979								1979							
Apr.	28	Up	iP	11 01	25.3			Apr.	28	Up	iPKP1	18 14	13.2		
		Ki	iP	11 00	35.0					Um	iPKP	18 14	08.0		
		Sk	iP	11 01	11.7					Ud	iPKP1	18 14	14.5		
		Um	iP	11 00	58.1						ipPKP1	18 15	38.7		
		Ud	iP	11 01	29.8					De	iPKP1	18 14	24.6		
		De	iP	11 01	49.5						iPKP2	18 14	31.0		
		Kuril Islands (h = N).								Kermadec Islands region. h = 300 km (Ud).					
"	28	Up	iP	11 53	00.5			"	28	Ki	iP	20 34	58.2		
		Ki	iP	11 52	44.4	C					i	20 35	12.0		
			P	Z'	0.1	1.0									
		Um	iP	11 52	49.9						P	Z'	0.1	1.5	
			iS	12 03	42					Um	iP	20 35	33.0		
		Ud	iP	11 53	09.0					Ud	iP	20 36	12.7		
		Halmahera (h = 130 km).								De	iP	20 36	40.1		
"	28	Um	iP	11 54	13.7					North of Severnaya Zemlya (h = 10 km).					
"	28	Up	i(PKP)	11 56	39.0			"	28	Sk	iP	20 35	50.2		
										Um	iP	20 35	45.5		
			Mx	E	2.1	22					i	20 35	56.5		
			Mx	N	1.4	19				Ud	eP	20 35	07		
			Mx	Z	5.7	27				Albania (h = 10 km).					
		Ki						"	28	Up	iP	20 39	51.1		
			Mx	E	4.5	22					isP	20 40	39.0		
			Mx	N	2.6	24				Ki	iP	20 39	53.1		
			Mx	Z	4.1	22					isP	20 40	41.2		
		Um	i(PKP)	11 56	44.8										
			iS	12 05	38						sP	Z'	0.1	0.8	
		Ud	iPKP	11 56	51.7					Sk	iP	20 40	15.1		
			i	11 56	58.6						isP	20 41	01.3		
		Near coast of northern Chile (h = 25 km). M = 5.9 (Up,Ki).								Um	iP	20 39	46.5		
"	28	Um	iPKP1	13 53	36.6						isP	20 40	32.3		
		Ud	iPKP1	13 53	49.0					Ud	iP	20 40	07.1		
		South of Kermadec Islands (h = N).									ipP	20 40	38.7		
"	28	Ki	iP	14 21	30.4						isP	20 40	55.2		
		Um	iP	14 22	20.9					De	iP	20 40	06.4		
		Ud	eP	14 23	01						isP	20 40	54.1		
"	28	Ki	iP	14 35	31.6					Tadzhik-Sinkiang border region. h = 140 km (Up,Ki,Sk,Um,Ud,De).					
"	28	Um	iP	14 36	17.1			"	29	Ki	iP	03 32	05.3		
"	28	Ud	iP	15 08	14.1						i	03 32	13.5		
"	28	Ud	iP	17 48	44.1						iS	03 33	23.8		
		De	iP	17 48	28.4						i	03 33	37.1		
		Western Iran (h = N).									iTSg1	03 37	09.4		
											i	03 37	46.8		
										Sk	iP	03 32	47.7		
											i	03 32	52.1		
											iS	03 34	33.2		
										Um	iP	03 32	54.5		
										(cont.)					



Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979

Apr. 30 (cont.)  
 Ki micr sec  
 P Z' 0.1 1.4

" 30 Up iP 17 04 13.9  
 micr sec  
 P Z' 0.1 1.0  
 Ki eP 17 05 38 D  
 i 17 05 48.4  
 Sk iP 17 04 57.5 D  
 i 17 05 01.3  
 Um iP 17 04 57.0 D  
 i 17 05 00.7  
 Ud iP 17 04 18.5 D  
 Yugoslavia (h = 10 km).

" 30 Ud iRg 20 43 39.3  
 Local near-surface event.

" 30 Ki iP 21 53 15.9 C  
 Um iP 21 53 34.6  
 Iceland region (h = 10 km).  
 The onsets are about 12 s  
 late when related to the  
 NEIS solution.

" 30 Up iP 23 01 46.5  
 Ki iP 23 01 56.1  
 Sk iP 23 02 12.4  
 Um iP 23 01 44.8  
 i 23 02 15.6  
 iPP 23 03 17.0  
 Ud iP 23 02 02.7  
 i 23 02 39.8  
 iPP 23 03 43.7  
 De iP 23 01 58.7  
 Hindu Kush region  
 (h = 130 km).

" 30 Ki eP 23 31 35  
 micr sec  
 P Z' 0.1 1.2  
 Sk e 23 31 32  
 Um iP 23 31 48.1  
 i 23 31 51.3  
 Ud iP 23 31 44.5  
 Iceland region (h = 10 km).

January 23 , 1981

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SEISMOLOGICAL SECTION  
 BOX 12019  
 S-750 12 UPPSALA  
 SWEDEN

SEISMOLOGISKA AVDELNINGEN  
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SEISMOLOGICAL BULLETIN

UPPSALA, KIRUNA, SKALSTUGAN, UMEÅ

UDDEHOLM and DELARY

Uppsala	(Up):	59°51.5'N,	17°37.6'E;	h = 14 m
Kiruna	(Ki):	67°50.4'N,	20°25.0'E;	h = 390 m
Skalstugan	(Sk):	63°34.8'N,	12°16.8'E;	h = 580 m
Umeå	(Um):	63°48.9'N,	20°14.2'E;	h = 16 m
Uddeholm	(Ud):	60°05.4'N,	13°36.4'E;	h = 240 m
Delary	(De):	56°28.2'N,	13°52.2'E;	h = 150 m

MAY 1 - 31, 1979  
 .....

1979

May	1	Up	iP	00 52 34.9
			ipP	00 52 38.6
			i	00 52 51.8
				micr sec
			pP	Z' 0.2 1.2
			Mx	E 5.4 20
			Mx	N 18.8 23
			Mx	Z 9.0 22
		Ki	iP	00 52 15.8
			ipP	00 52 20.7
			i	00 52 30.9
				micr sec
			pP	Z' 0.1 1.0
			Mx	E 9.2 20
			Mx	N 20.7 21
			Mx	Z 7.7 19
		Sk	iP	00 52 38.1
			ipP	00 52 43.3
			i	00 52 55.6
		Um	iP	00 52 22.1
			ipP	00 52 27.5
		Ud	iP	00 52 40.7
			ipP	00 52 45.7
			i	00 53 02.4
		Mindanao, Philippine Islands.		
		h = 15 km (Up,Ki,Sk,Um,Ud).		
		m = 6.2, M = 6.5 (Up,Ki).		
"	1	Ud	iP	05 00 31.6
		Mindanao, Philippine Islands (h = 50 km).		
"	1	Um	iP	09 53 11.1
"	1	Ki	iP	10 59 43.6
		Um	iP	10 59 48.6
		Ud	iP	11 00 08.8
		Mindanao, Philippine Islands (h = 40 km).		

1979

May	1	Up	i(PKP)	13 22 41.4
			iPKP	13 22 51.6
			i	13 22 55.9
			i	13 23 03.6
			iSKP1	13 26 23.5
				micr sec
			PKP	Z' 0.1 1.0
			i	Z' 0.3 1.1
			i	Z' 0.5 1.1
			Mx	E 10.3 26
			Mx	N 45.0 23
			Mx	Z 69.5 28
		Ki	iPKP	13 22 37.2
			i	13 22 41.1
			i	13 22 47.9
			iSKP1	13 25 55.2
				micr sec
			PKP	Z' 0.1 1.0
			i	Z' 0.7 1.5
			i	Z' 1.9 1.4
			Mx	E 38.2 24
			Mx	N 19.5 20
			Mx	Z 26.4 25
		Sk	iPKP	13 22 47.7
			i	13 22 57.1
			iSKP1	13 26 14.2
		Um	i(PKP)	13 22 37.1
			iPKP	13 22 43.0
			i	13 22 48.4
			i	13 22 56.6
			iSKP1	13 26 05.6
		Ud	i(PKP)	13 22 43.8
			i(PKP)	13 22 48.9
			iPKP	13 22 52.9
			i	13 22 57.9
			i	13 23 06.3

Loyalty Islands region  
 (h = 80 km).

M = 7.1 (Up,Ki).

Multiple event with successively increasing amplitudes.

Up = Uppsala, Ki = Kiruna, Sk = Skalistugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979				1979					
May	1	Um	iP	13 53 08.1	May	3	Up	iPKP1	02 50 16.9
"	2	Ud	iP	05 15 59.3			Ki	iPKP1	02 49 59.0
				Kuril Islands (h = N).			Sk	iPKP1	02 50 13.8
"	2	Ud	iSgl	14 18 57.4			Um	iPKP1	02 50 08.8
				Southwestern coast of			Ud	iPKP1	02 50 20.5
				Norway, near 58 1/2°N,	"	3	Ki	iP	20 00 46.6
				6 1/2°E.					Mariana Islands (h = 370 km).
				Origin time = 14 16 53.	"	3	Up	iPKP1	21 37 51.3
				M <sub>L</sub> = 2.4 (Ud).			Ki	iPKP1	21 37 28.9
				Explosion?			Sk	iPKP1	21 37 45.2
				By combination with Bergen			Um	iPKP1	21 37 39.5 C
				and Kongsberg readings.			i		21 37 45.7
"	2	Ki	iPn	14 52 29.7			i		21 38 00.1
			i	14 52 50.1			Ud	iPKP1	21 37 52.9 C
			iSgl	14 53 37.5					South of Kermadec Islands
		Sk	iPn	14 52 25.5					(h = 55 km).
			iSn	14 53 15.4	"	4	Up	iP	01 47 29.9
		Um	iSn	14 53 55.0			Ud	iP	01 47 31.1
			iSgl	14 54 24.4			i		01 47 42.5
				Norwegian Sea, near 67 1/2°N,	"	4	Ki	iPKP	05 39 08.0
				8°E.					New Hebrides Islands
				Origin time = 14 51 20.					(h = 120 km).
				M <sub>L</sub> = 2.9 (Ki,Um).	"	4	Ki	iP	06 27 13.2
"	2	Up	iPKP1	18 35 56.4	"	4	Ud	iRg	06 49 52.9
			iPKP2	18 36 01.3					Local near-surface event.
			i	18 36 13.4	"	4	Ud	iP	07 13 01.6
				micr sec	"	4	Up	iSgl	10 47 38.2
				PKP1 Z' 0.1 1.0			Ud	iPgl	10 47 09.3
				PKP2 Z' 0.3 1.0				iSgl	10 47 32.6
		Ki	ePKP	18 35 36				iRg	10 47 42.0
			iPKP1	18 35 42.6			De	eSgl	10 47 48
		Sk	iPKP1	18 35 50.3					Central Sweden.
			i	18 35 56.5					Origin time = 10 46 38.
		Um	iPKP1	18 35 44.3 C					Near-surface event.
		Ud	iPKP	18 35 53.8	"	4	Ud	i	12 05 38.1
			iPKP1	18 35 58.4				iRg	12 05 42.0
			iPKP2	18 36 02.4					Local near-surface event.
			i	18 36 13.9	"	4	Up	iP	13 47 09.2
		De	iPKP1	18 36 06.5					micr sec
			iPKP2	18 36 18.3					P Z' 0.1 1.0
				Kermadec Islands (h = 40 km).			Ki	iP	13 46 15.6
"	2	Um	iP	23 26 36.5			Um	iP	13 46 41.7
"	3	Up	eP	01 20 08			Ud	iP	13 47 09.3
				micr sec			De	iP	13 47 31.3
				Mx E 0.9 16					Andreanof Islands,
				Mx N 0.9 16					Aleutian Is. (h = 55 km).
				Mx Z 1.0 18	"	4	Ki	iP	14 45 50.7
		Ki	iP	01 20 06.9					Java (h = 90 km).
		Sk	iP	01 19 39.6					
		Um	iP	01 20 08.0					
		Ud	iP	01 19 45.3					
			i	01 19 48.8					
				North Atlantic Ocean					
				(h = 10 km).					



Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979						1979					
May	4	De	iPgl	15 12 41.8		May	5	Up	iP	20 17 17.8	
			iSgl	15 13 00.3				Ki	iP	20 17 21.7	
			iRg	15 13 03.4					ipP	20 17 28.3	
			Local near-surface event.								
"	5	Ki	iPKP	01 35 37.1				Sk	pP	Z' 0.2 1.2	
		Um	iPKP	01 35 29.8					iP	20 17 05.0	
		Ud	iPKP	01 35 20.9				Um	ipP	20 17 10.6	
		South Sandwich Islands						Um	iP	20 17 22.9 C	
		region (h = N).							ipP	20 17 29.5	
"	5	Ki	iP	02 44 41.4				Ud	iP	20 17 06.9	
		Sk	eP	02 44 57				De	iP	20 17 07.6	
		Um	iP	02 44 49.4					ipP	20 17 14.4	
		Venezuela.						h = 25 km (Ki,Sk,Um,De).			
"	5	Ki	iP	06 59 19.8		"	5	Up	iP	20 20 57.8	
		Central Alaska (h = 80 km).						Ki	iP	20 21 02.4	
"	5	Up	iP	07 35 59.0							
		Ki	iP	07 35 18.1					P	Z' 0.1 1.0	
		Sk	iP	07 35 55.4				Sk	iP	20 20 45.2	
		Um	iP	07 35 34.6				Um	iP	20 21 03.4 C	
		Ud	iP	07 36 06.4				Ud	iP	20 20 47.5	
		Near s. coast of Honshu,						De	iP	20 20 48.5	
		Japan (h = 30 km).						Venezuela (h = 25 km).			
"	5	Up	iP	08 56 43.5		"	5	Ki	ipPKP	20 35 16.1	
		Um	iP	08 56 24.1				Sk	ipPKP	20 35 19.8	
		Ud	iP	08 56 50.4					ipPKP	20 35 28.5	
		South of Honshu, Japan						Um	ipPKP	20 35 13.9	
		(h = 410 km).							ipPKP	20 35 23.4	
"	5	Um	iP	11 32 18.5				Ud	ePKP	20 35 25	
		Ud	iP	11 32 38.6				De	ePKP	20 35 30	
		Nepal (h = N).							ipPKP	20 35 39.6	
		Santa Cruz Islands.						h = 30 km (Sk,Um,De).			
"	5	Up		micr sec		"	5	Ud	iP	21 07 18.6	
		Mx	E	0.8 15		"	5	Up	iP	21 35 49.2	
		Mx	N	1.1 16				Ki	eP	21 35 04	
		Mx	Z	1.4 21				Ud	iP	21 35 55.2	
		Ki	ipPKP	16 35 50.4				Hokkaido, Japan region			
				micr sec				(h = 100 km).			
		Mx	E	2.3 22		"	5	Ud	eP	21 44 54	
		Mx	N	1.2 16				Crete (h = 35 km).			
		Mx	Z	0.9 16		"	6	Um	ipPKP	00 54 02.9	
		Um	ipPKP	16 35 56.4				Ud	ipPKP	00 54 11.4	
		Ud	ipPKP	16 36 08.0				De	ipPKP	00 54 17.1 C	
		Santa Cruz Islands						Solomon Islands			
		(h = 35 km).						(h = 140 km).			
		M = 5.8 (Up,Ki).				"	6	Um	ipPKP	02 37 19.9	
"	5	Ud	iP	17 11 44.4				De	ipPKP	02 37 36.0	
		Andreanof Islands, Aleu-						Santa Cruz Islands			
		tian Is. (h = N).						(h = 35 km).			
"	5	Um	i(P)	17 16 10.9		"	6	Um	ipPKP	02 53 41.0	
"	5	Um	eP	20 10 12				Ud	ipPKP	02 53 49.0	
								De	ipPKP	02 54 00.3	

Up = Uppsala, Ki = Kiruna, Sk = Skalistugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979

May 6 Up iP 03 23 52.7  
 iPn 03 25 00.2  
 iPP 03 25 11.8  
 micr sec  
 P Z' 0.1 0.9  
 Ki iP 03 23 37.3 C  
 iPn 03 24 31.8  
 micr sec  
 P Z' 0.2 0.5  
 Sk iP 03 24 08.5  
 iPP 03 25 31.0  
 Um iP 03 23 37.7 C  
 iPn 03 24 29.0  
 Ud iP 03 24 09.1 C  
 De iP 03 24 15.7  
 Eastern Kazakh SSR.  
 m = 6.0 (Up,Ki).  
 Underground explosion.

" 6 Ki iPKP 07 26 03.1  
 Sk iPKP 07 26 17.7  
 i 07 26 26.3  
 Um iPKP 07 26 12.6  
 i 07 26 20.3  
 Ud iPKP 07 26 23.2  
 i 07 26 30.9  
 Santa Cruz Islands (h = N).

" 6 Um ePKP 07 43 10  
 Santa Cruz Islands  
 (h = 60 km).

" 6 Ud eP 08 16 55

" 6 Ud iP 11 24 11.4  
 Mindanao, Philippine  
 Islands (h = 90 km).

" 6 Ki eP 17 27 03  
 Ud iP 17 28 01.1  
 Near east coast of  
 Kamchatka (h = 35 km).

" 6 Up iPKP1 21 06 35.6  
 Ud iPKP1 21 06 38.0

" 6 Um iP 21 20 16.5  
 Ud iP 21 19 39.7  
 Yugoslavia (h = 10 km).

" 6 Um iP 22 57 52.3  
 Ud iP 22 57 15.2  
 Albania (h = 10 km).

" 7 Ki iP 01 05 39.4  
 Ud eP 01 06 35

" 7 Ud iP 01 28 51.9

" 7 Um iP 05 48 56.9  
 Yugoslavia (h = 10 km).

1979

May 7 Ki iSgl 06 21 18.9  
 Finnish Lapland, 68.1°N,  
 26.1°E.  
 Origin time = 06 20 22.  
 Solution from Helsinki  
 regional bulletin.

" 7 Ud i(P) 06 30 33.6

" 7 Up iP 08 16 01.6  
 Ki iP 08 16 10.5 C  
 micr sec  
 P Z' 0.1 0.8  
 Sk iP 08 16 26.9 C  
 Um iP 08 15 59.9 C  
 Ud iP 08 16 17.9 C  
 i 08 17 32.9  
 De iP 08 16 14.2  
 Hindu Kush region  
 (h = 230 km).

" 7 Ud eP 08 43 52  
 Southwestern Ryukyu  
 Islands (h = N).

" 7 Up iP 13 05 14.9  
 isP 13 06 00.4  
 micr sec  
 P Z' 0.1 1.0  
 Ki iP 13 05 12.5 C  
 isP 13 05 56.0  
 Sk iP 13 05 27.7 C  
 Um iP 13 05 10.9  
 ipP 13 05 40.9  
 Ud iP 13 05 24.5  
 ipP 13 05 57.1  
 i(PP) 13 10 00.4  
 De iP 13 05 22.5  
 Java.

h = 120 km (Up,Ki,Um,Ud).  
 m = 6.5 (Up,Ki).

" 8 Up iP 01 32 20.1  
 ipP 01 32 27.7  
 Ki iP 01 32 21.1 C  
 ipP 01 32 28.5  
 micr sec  
 P Z' 0.1 1.0  
 Sk ipP 01 32 42.4  
 Um iP 01 32 17.4 C  
 ipP 01 32 24.9  
 Ud iP 01 32 30.2 C  
 ipP 01 32 37.6

Southern Sumatera.  
 h = 30 km (Up,Ki,Um,Ud,De).

" 8 Um iP 03 09 37.5

" 8 Ud iP 03 43 47.5

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979				1979					
May	8	Up	eP	13 07 08	May	10	Up	iSgl	14 17 11.7
		Ki	iP	13 06 14.5			Sk	iSgl	14 17 09.6
			iPcP	13 07 02.9			Ud	iSgl	14 16 13.1
		Sk	eP	13 06 44			Southwestern coast of Norway, near 58 1/2°N, 6 1/2°E.		
		Um	iP	13 06 40.5			Origin time = 14 14 08.		
			i	13 06 57.4			M <sub>L</sub> = 2.7 (Up,Sk,Ud).		
		Ud	iP	13 07 06.3 C			Explosion?		
		De	iP	13 07 28.1			By combination with Bergen, Kongsberg and Finnish station readings.		
		Fox Islands, Aleutian Islands (h = 40 km).							
"	9	Um	iP	07 41 38.2	"	10	Up	iP	17 45 29.4
			i	07 41 45.2			Um	iP	17 46 02.7
		Ud	iP	07 41 17.9			Ud	iP	17 45 33.6
			i	07 41 23.0			De	iP	17 45 54
		Angola (h = N).					Kuril Islands (h = N).		
"	9	Um	iP	10 07 38.3	"	10	Up	iP	21 13 29.1
		South of Honshu, Japan (h = 25 km).					Ki	iP	21 12 46.1
"	9	Up	iPKP1	17 11 38.7			Ud	iP	21 13 34.9
		Ud	iPKP1	17 11 40.1				i	21 13 52.5
		Kermadec Islands region (h = 130 km).					Kuril Islands (h = N).		
"	9	Ki	iP	18 46 32.0	"	10	Ki	iP	22 06 44.4
		Um	iP	18 46 32.4			Southeastern Alaska (h = 15 km).		
		Ud	iP	18 46 12.8	"	10	Ud	iP	23 21 23.4
		North Atlantic Ocean (h = N).					Taiwan region (h = N).		
"	9	Up	ipP	18 48 47.7	"	11	Up	ePKP	00 55 47
			iPP	18 50 25.2			Ki	iPKP	00 55 32.5
				micr sec			Sk	iPKP	00 55 44.4
		Mx	E	0.5 13			Um	iPKP	00 55 39.2
		Mx	N	1.8 15				iSKP1	00 58 53.0
		Mx	Z	0.5 12			Ud	e(PKP)	00 55 43
		Ki	iP	18 48 37.2				iPKP	00 55 47.7
			ipP	18 48 41.2			New Hebrides Islands (h = 140 km).		
			i	18 48 57.0	"	11	Up	eP	01 50 56
			iLgl	19 02 04.4					micr sec
				micr sec			Mx	E	0.6 10
		Mx	E	0.5 12			Mx	N	0.5 10
		Mx	N	4.1 16			Mx	Z	0.8 10
		Mx	Z	0.6 12			Ki	eP	01 52 14
		Sk	ipP	18 49 07.4					micr sec
			iLgl	19 03 42.6			Mx	E	0.4 10
		Um	ipP	18 48 37.8			Mx	N	0.6 10
			iLgl	19 01 35.5			Mx	Z	0.6 10
		Ud	iP	18 48 59.8			Sk	iP	01 51 39.8
			ipP	18 49 03.9			Um	iP	01 51 34.9
			iLgl	19 03 27.0			Ud	iP	01 51 06.8
		De	epP	18 49 07.0			Greece (h = 15 km).		
		Alma-Ata.					M = 4.4 (Up,Ki).		
		h = 15 km (Ki,Ud).							
		M = 5.3 (Up,Ki).							

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1979							
May	11	Ki	iP	07 38	07.6	C	
				micr	sec		
			P	Z'	0.1	0.8	
		Um	iP	07 38	20.6		
		Volcano Islands region (h = N).					
"	11	Ki	iP	09 13	37.4		
		Um	iP	09 13	46.1		
		Ud	iP	09 14	10.9		
		Taiwan region (h = 20 km).					
"	11	Um	iP	11 35	40.6		
		Yugoslavia (h = 10 km).					
"	11	Um	iP	15 15	41.2		
		Ud	i	15 15	09.4		
		Yugoslavia (h = 10 km).					
"	11	Up	iP	22 05	20.8		
		Ki	iP	22 05	23.8		
		Sk	eP	22 05	45		
		Um	iP	22 05	14.7		
		Ud	iP	22 05	35.1		
			i	22 05	38.6		
		Kashmir - Tibet border region (h = N).					
"	11	Ud	iP	22 52	44.6		
		Ryukyu Islands (h = N).					
"	11	Um	iP	23 31	28.1		
		Ud	iP	23 31	59.8		
		De	iP	23 32	21.1		
		Near east coast of Kamchatka (h = 70 km).					
"	12	Ud	iP	00 16	35.1		
		Mindanao, Philippine Islands (h = 70 km).					
"	12	Up	iP	01 09	45.9		
				micr	sec		
			P	Z'	0.1	1.0	
		Ki	iP	01 09	26.7		
			i	01 09	39.3		
				micr	sec		
			P	Z'	0.1	1.0	
		Um	iP	01 09	33.2		
			i	01 09	45.2		
		Ud	iP	01 09	53.8		
		De	iP	01 10	00.2		
		Samar, Philippine Islands (h = 45 km). m = 6.0 (Up,Ki).					
"	12	Up	iP	03 34	41.5	C	
			iS	03 37	55		
				micr	sec		
			P	Z'	0.2	1.1	
		(cont.)					

1979							
May	12	(cont.)					
		Up	Mx	E	1.1	10	
			Mx	N	1.7	10	
			Mx	Z	2.1	10	
		Ki	eP		03 36	04	
			i		03 36	18.5	
					micr	sec	
			Mx	E	3.2	10	
			Mx	N	1.4	10	
			Mx	Z	1.3	10	
		Sk	iP		03 35	25.7	C
		Um	iP		03 35	24.8	C
			i		03 36	49.9	
			iS		03 39	23.7	
		Ud	iP		03 34	46.2	
			i		03 34	47.2	
			i		03 34	50.5	
		De	iP		03 34	03.7	
			i		03 34	09.3	
		Yugoslavia (h = 10 km). M = 4.9 (Up,Ki).					
"	12	Up	iP		06 20	27.3	
		Ki	iP		06 20	22.6	
		Sk	eP		06 20	44	
		Um	iP		06 20	19.8	C
		Ud	iP		06 20	40.4	C
		De	iP		06 20	41.5	
		India - Bangladesh border region (h = N).					
"	12	Up	i(P)		06 34	18.6	
"	12	Up	iPn		07 15	47.8	
			i		07 15	55.5	
			iSn		07 17	07.9	
			i		07 17	20.3	
			i		07 17	33.5	
			i		07 17	51.4	
			iSgl		07 17	59.2	
		Ki	iPn		07 16	22.7	
			iSn		07 18	06.6	
		Sk	iPn		07 15	16.5	
			i		07 15	33.8	
			i		07 15	46.5	
			i		07 16	27.2	
			iSgl		07 16	34.9	
		Um	iPn		07 16	01.3	
			iSn		07 17	30.0	
			i		07 17	59.9	
			iSgl		07 18	18.8	
		Ud	iPn		07 15	20.1	
			i		07 15	27.3	
			iSn		07 16	16.0	
			i		07 16	30.1	
			i		07 16	56.0	
		De	iPn		07 15	48.2	
			iSn		07 17	08.6	
			i		07 17	20.3	
			iSgl		07 17	56.6	
		(cont.)					

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979				1979			
May	12	(cont.)		May	13	(cont.)	
		Off west coast of Norway, near 61 1/2°N, 3°E. Origin time = 07 14 00. M <sub>L</sub> = 3.7 (Up,Sk,Um,De).				Um iP 06 38 24.9 C ipP 06 39 20.9 iS 06 48 24.5 Ud iP 06 38 47.3 C ipP 06 39 43.4 De iP 06 38 58.3 C ipP 06 39 54.4 i 06 43 21.4 i 06 42 36.6	
"	12	Ki iP 17 58 49.3 C Um iP 17 58 13.3 Ud iP 17 57 47.9 De eP 17 57 16 Aegean Sea (h = 20 km).				Mariana Islands. h = 240 km (Up,Ki,Sk,Um,Ud,De). m = 6.6, M = 6.4 (Up,Ki).	
"	12	Sk iP 18 06 10.6 Um iP 18 05 55.4 Ud iP 18 06 23.5 Off east coast of Honshu, Japan (h = 35 km).		"	13	Up iP 06 50 49.6 Ki iP 06 50 47.3 C P Z' 0.1 0.7 Sk iP 06 51 10.6 Um iP 06 50 42.0 C Ud iP 06 51 04.9 C De iP 06 51 05.2 Southern Sinkiang Prov., China (h = N).	
	12	Um iP 19 23 41.9 Ud iP 19 24 02.9 Fox Islands, Aleutian Islands (h = 110 km).					
"	12	Ud iP 21 59 21.0 Dodecanese Islands (h = 10 km).		"	13	Up iP 06 56 06.7 Ki iP 06 56 22.5 Sk iP 06 56 09.7 Um iP 06 56 15.9 Ud iP 06 56 03.6	
"	13	Ki iPKP 00 16 52.1 Um iPKP 00 16 58.7 Ud iPKP 00 17 08.3 De iPKP 00 17 14.7 New Hebrides Islands (h = 110 km).		"	13	Um iP 07 49 55.3 Yugoslavia (h = 10 km).	
"	13	Up eP 06 20 40 Ki eP 06 20 09 Ud eP 06 20 47 Ryukyu Islands region (h = N).		"	13	Up iP 08 03 56.2 Iceland region (h = 10 km).	
"	13	Up iP 06 38 41.3 C ipP 06 39 36.8 iS 06 48 43.5 P Z' 0.6 1.0 Mx E 6.7 23 Mx N 10.1 24 Mx Z 8.0 26 Ki iP 06 38 13.2 C ipP 06 39 07.2 iS 06 48 09 P Z' 0.9 1.0 Mx E 17.4 23 Mx N 16.6 23 Mx Z 3.1 18 Sk iP 06 38 38.5 C ipP 06 39 34.6 i 06 42 59.8		"	13	Up iPP 17 47 50.8 Ki iP 17 43 30.2 P Z' 0.1 1.0 Um iP 17 43 32.8 Ud iP 17 43 50.9 iPP 17 48 02.0 De iP 17 43 55.0 Banda Sea (h = 620 km).	
		(cont.)		"	13	Ki iP 20 21 37.1 Ud iP 20 21 25.1 De iP 20 21 15.8 Southern Iran (h = 10 km).	
				"	13	Up iP 22 55 37.8 ipP 22 56 23.5 Ki iP 22 55 29.5 i 22 55 50.5 ipP 22 56 15.8 P Z' 0.1 1.5	

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979				1979			
May	13	(cont.)		May	15	(cont.)	
		Sk	iP			Up	Mx N 15.5 16
			i				Mx Z 28.0 21
			ipP			Ki	iP 07 05 57.1
		Um	iP				i 07 06 07.0
			i				micr sec
			ipP				P Z' 0.3 1.3
		Ud	iP				i Z' 0.3 1.3
			ipP			Sk	iP 07 05 27.3
		De	iP				i 07 05 37.9
			i			Um	iP 07 05 21.0 C
			ipP				i 07 06 23.6
		Nicaragua.					i 07 11 42.0
		h = 200 km (Up,Ki,Sk,Um,Ud,De).				Ud	iP 07 04 55.7 C
						De	iP 07 04 23.2 C
"	14	Up	iP			Crete (h = N).	
		Ki	iP			m = 6.1 (Up,Ki).	
		Ud	iP				
		De	iP	"	15	Ud	iP 07 15 01.4
		Southern Iran (h = N).				De	iP 07 14 28.9
"	14	Ud	iP			Crete, from the same focal area as the preceding event. Origin time = 07 09 27.	
"	14	Up	iP				
		Ki	iP			"	15
		Sk	iP			Ud	iP 14 10 53.4
		Um	iP			De	iP 14 10 21.1
		Ud	iP			"	15
		De	eP			Up	iRg 14 21 21.4
			i			Ud	iRg 14 21 36.4
		Yugoslavia (h = 10 km).				De	iSgl 14 22 08.4
"	14	Up	iP			Central Sweden.	
			ipP			Near-surface event.	
						"	15
			P			Up	i(P) 14 57 03.1
			Z'			"	16
		Ki	iP			Up	iPP 02 44 41.7
							iS 02 52 16
							micr sec
			P				Mx E 3.2 21
			Z'				Mx N 3.0 21
		Sk	iP				Mx Z 7.9 23
		Um	iP			Ki	micr sec
		Ud	iP				Mx E 5.4 25
		De	iP				Mx N 5.7 23
		Kuril Islands (h = 110 km).				Um	iS 02 53 00
		m = 5.8 (Up,Ki).				De	iP 02 40 30.0
"	14	Up	iPP				iPP 02 44 15.1
		Um	i(PP)			South Atlantic Ridge (h = 10 km).	
			iPP			M = 6.1 (Up,Ki).	
		Ud	iPP			"	16
			iPKKP			Ud	iP 14 29 14.5
		De	iPP			Southeastern Alaska (h = 15 km).	
		Northern Chile (h = 90 km).				"	16
"	15	Up	iP			Ud	iPgl 14 59 17.4
			i				iSgl 14 59 40.4
			iS				iRg 14 59 50.7
						De	iSgl 14 59 55.9
						Regional near-surface event.	
			P				Z' 0.8 1.6
			Mx				E 18.1 18

(cont.)

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979				1979			
May	16	Ud iP	18 13 28.8	May	18	Up iP	20 29 35.8 D
		Talaud Islands (h = 50 km).				ipP	20 31 40.7
"	16	Um iP	19 27 14.8			iS	20 39 01.0
		Ud iP	19 27 32.4				micr sec
		Molucca Passage (h = 90 km).				P	Z' 1.1 1.2
"	16	Ud iP	22 09 33.0			Mx	E 0.7 12
		South of Honshu, Japan				Mx	N 1.4 16
		(h = 390 km).				Mx	Z 2.3 16
"	16	Ud iP	22 27 19.4	Ki	iP		20 29 05.9
		Iran-Iraq border region			ipP		20 31 10.3
		(h = N).			iS		20 38 15.2
"	17	Ud iP	03 57 23.0				micr sec
		North Atlantic Ridge				P	Z' 1.2 1.0
		(h = N).				Mx	E 4.2 18
"	17	Up iP	10 07 19.9 C			Mx	N 2.6 15
			micr sec			Mx	Z 2.1 19
			P Z' 0.1 0.9	Sk	iP		20 29 32.6
		Ki iP	10 06 35.8		i		20 31 43.3
		Sk iP	10 07 10.9	Um	iP		20 29 18.7 D
		Um iP	10 06 55.6		ipP		20 31 23.8
		ipP	10 07 10.2		iS		20 38 39.2
		Ud iP	10 07 26.3 C	Ud	iP		20 29 42.3 D
		ipP	10 07 43.0		i		20 31 47.9
		De iP	10 07 43.5		iS		20 39 11.0
		Hokkaido, Japan region.		De	iP		20 29 53.2 D
		h = 60 km (Um,Ud).			ipP		20 32 04.0
"	17	Ud iSgl	10 23 54.5				Volcano Islands region.
"	17	Up iP	13 07 45.1				h = 600 km (Up,Ki,Sk,Um,Ud,De).
		Sk eP	13 07 40	"	18	Up iPgl	20 53 57.3
		Um iP	13 07 22.9			i	20 54 15.9
		ipP	13 07 34.7			iRg	20 54 19.7
		Ud iP	13 07 52.0			Ud iRg	20 54 07.4
		ipP	13 08 03.9				Central Sweden.
		Near east coast of Honshu,					Near-surface event.
		Japan.		"	18	Up iP	23 36 02.5
		h = 45 km (Um,Ud).					micr sec
"	17	Um iP	17 13 27.2			Mx	E 3.8 22
"	18	Up iP	15 14 25.9 C			Mx	N 2.1 23
		i	15 14 52.3			Mx	Z 7.5 22
		Ki iP	15 15 35.9	Ki	iP		23 35 46.8
		Sk iP	15 15 04.6				micr sec
		Um iP	15 14 59.7			Mx	E 1.1 15
		Ud iP	15 14 32.4 C			Mx	N 5.5 21
		De iP	15 13 59.4	Sk	eP		23 36 08
		i	15 14 14.0	Um	iP		23 35 50.8
		Crete (h = 40 km).		Ud	iP		23 36 10.0
"	18	De iPKP1	18 43 35.5		i		23 36 15.3
		South of Fiji Islands		De	iP		23 36 15.3
		(h = 540 km).					Molucca Passage (h = N).
							M = 5.9 (Up,Ki).
"	19	Up iP	09 51 00.5	"	19	Up iP	09 51 00.5
		Um iP	09 51 37.4			Um iP	09 51 37.4
		Ud eP	09 51 08			Ud eP	09 51 08
		Aegean Sea (h = 10 km).					Aegean Sea (h = 10 km).
"	19	Ki eP	18 14 30	"	19	Ki eP	18 14 30
		Southeastern Alaska					Southeastern Alaska
		(h = 15 km).					(h = 15 km).





Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979				1979			
May	21	(cont.)		May	21	(cont.)	
		Ki	micr sec			Sk	iP 21 42 22.8
		P	Z' 0.2 1.0			Um	iP 21 41 58.4
		Sk	iP 14 48 48.2 C			Ud	iP 21 42 25.1
		Um	iP 14 48 31.9 C			Szechwan Province, China (h = 50 km).	
		Ud	iP 14 49 00.6 C				
		De	iP 14 49 15.0 C				
		Near east coast of Honshu, Japan (h = 70 km). m = 5.9 (Up,Ki).		"	21	Up	iP 22 35 53.7
"	21	De	i(P) 15 10 11.1				ipP 22 36 53.6
		i	15 10 17.7				iPP 22 40 05
							iSKS 22 46 09
"	21	Up	iP 15 12 12.7				micr sec
		ipP	15 12 23.4			P	Z' 0.1 1.1
			micr sec			Mx	E 3.3 24
		P	Z' 0.1 1.0			Mx	N 6.3 23
		Ki	iP 15 11 31.2			Mx	Z 9.1 26
		ipP	15 11 42.5			Ki	ipP 22 37 03.9
		Sk	i 15 12 25.3				iPP 22 40 22.7
		Um	iP 15 11 49.5 C				eSKS 22 46 21
		ipP	15 12 00.9				iPKKP 22 51 49.9
		Ud	iP 15 12 19.6 C				micr sec
		ipP	15 12 30.3			Mx	E 3.7 19
		Near east coast of Honshu, Japan. h = 40 km (Up,Ki,Um,Ud).				Mx	N 3.6 20
"	21	Ud	iRg 15 47 35.3			Mx	Z 2.6 23
		Local near-surface event.				Sk	iP 22 35 48.6
"	21	Up	iP 17 20 29.3				ipP 22 36 44.4
		Ki	iP 17 20 38.3			Um	iP 22 36 04.4
		Um	iP 17 20 27.6			i	22 36 46.4
		Ud	iP 17 20 45.8			i(PP)	22 39 19.3
		Hindu Kush region (h = 200 km).				iPP	22 40 19.3
"	21	Up	eP 20 34 11			iSKS	22 46 20
		Ki	iP 20 34 14.5			Ud	iP 22 35 46.0
		i	20 34 25.7			ipP	22 36 44.9
		Sk	iP 20 33 58.9			De	iP 22 35 42.3
		Um	iP 20 34 16.6			ipP	22 36 39.8
		Ud	iP 20 34 02.0			i(PP)	22 39 35.8
		De	iP 20 34 03.9			iPP	22 39 48.4
		i	20 34 14.6			Southern Peru. h = 240 km (Up,Sk,Ud,De). M = 6.1 (Up,Ki).	
"	21	Up	eP 20 34 11	"	21	Up	iP 22 57 38.9 C
		Ki	iP 20 34 14.5				micr sec
		i	20 34 25.7			P	Z' 0.1 1.0
		Sk	iP 20 33 58.9			Ki	iP 22 57 16.5
		Um	iP 20 34 16.6				micr sec
		Ud	iP 20 34 02.0			P	Z' 0.1 1.0
		De	iP 20 34 03.9			Sk	eP 22 57 45
		i	20 34 14.6			Um	iP 22 57 23.4
		Northern Colombia (h = 45 km).				Ud	iP 22 57 50.4 C
"	21	Um	iP 21 29 07.9			De	iP 22 57 59.5
		Ud	iP 21 29 33.0			Eastern China (h = N). m = 5.9 (Up,Ki).	
		Volcano Islands region (h = N).		"	22	Up	iP 11 55 33.5
"	21	Up	iP 21 42 12.9			Ki	eP 11 56 43
		Ki	iP 21 41 53.1			Ud	iP 11 55 39.3
		(cont.)				De	iP 11 55 08.0
						Mediterranean Sea (h = 10 km).	



		Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary			
1979					1979
May	24	Um	iP	16 26 12.9	May 24 Um iP 19 42 40.7
		Ud	iP	16 26 35.8	Yugoslavia (h = 10 km).
				Volcano Islands region	
				(h = 130 km).	
"	24	Up	iP	17 27 24.1	" 24 Sk eP 19 47 33
			i	17 27 25.3	Um iP 19 47 31.0
			iS	17 30 40	Ud iP 19 46 52.3
				micr sec	Yugoslavia (h = 10 km).
			i	Z' 0.7 0.8	" 24 Um iP 20 19 57.7
		Mx	E	104.0 11	Yugoslavia (h = 10 km).
		Mx	N	76.4 11	" 24 Um iP 20 30 59.0
		Mx	Z	110.2 11	Ud eP 20 30 21
		Ki	iP	17 28 48.4	Yugoslavia (h = 10 km).
			i	17 29 02.4	" 24 Um iP 20 40 20.1
			iS	17 33 28	Ud iP 20 39 42.1
				micr sec	Yugoslavia (h = 10 km).
			P	Z' 0.4 1.3	" 24 Um eP 20 51 27
			i	Z' 1.3 1.6	Yugoslavia (h = 10 km).
		Mx	E	163.7 19	" 24 Up iP 21 08 49.7
		Mx	N	117.5 19	Sk iP 21 09 35.6
		Mx	Z	43.9 9	Um iP 21 09 33.0
		Sk	iP	17 28 10.3	i 21 09 34.4
			i	17 28 11.5	i 21 09 38.0
		Um	iP	17 28 09.0 C	Ud iP 21 08 54.9
			i	17 28 10.5	i 21 08 57.8
			iS	17 32 08	Yugoslavia (h = 10 km).
		Ud	iP	17 27 30.8	" 24 Um iP 22 32 47.0
			i	17 27 32.0	" 24 Up iP 22 32 22.8
				Yugoslavia (h = 10 km).	Sk iP 22 33 05.8
				m = 6.1, M = 6.6 (Up,Ki).	Um i 22 33 04.5
"	24	Um	iP	17 59 10.5	Ud iP 22 32 26.0
		Ud	iP	17 58 32.8	i 22 32 47.2
				Yugoslavia (h = 10 km).	Yugoslavia (h = 10 km).
"	24	Um	iP	18 03 37.4	" 24 Ud iP 23 35 58.6
"	24	Um	iP	18 08 08.0	" 24 Up eP 23 47 34
"	24	Um	iP	18 08 59.8	Ki iP 23 47 32.9
		Ud	iP	18 08 23.0	i 23 47 48.1
				Yugoslavia.	Sk i 23 48 01.8
				Origin time = 18 03 59.	Um iP 23 47 26.7
"	24	Up	iP	19 04 52.3	i 23 47 43.0
		Um	iP	19 05 33.8	Ud iP 23 47 48.9
		Ud	iP	19 04 56.5	De iP 23 47 49.9
				Yugoslavia (h = 10 km).	Kashmir-Sinkiang border
"	24	Um	iP	19 09 35.1	region (h = 90 km).
"	24	Um	iP	19 22 50.5	" 24 Um iP 23 53 21.1
		Ud	iP	19 22 13.3	
				Yugoslavia (h = 10 km).	

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979				1979			
May	25	Um iP	00 08 44.5	May	25	Up iP	16 56 23.5 C
		Yugoslavia (h = 10 km).				iPcP	16 56 51.6
"	25	Sk eP	02 50 38			iS	17 05 19
		Um iP	02 50 37.9			iP'P'	17 24 43.6
		Ud iP	02 49 59.4				micr sec
		Yugoslavia (h = 10 km).				P	Z' 0.7 1.0
"	25	Um iP	02 55 02.8			Mx	E 3.9 17
		Yugoslavia (h = 10 km).				Mx	N 9.2 15
"	25	Ki i(P)	03 16 12.0			Mx	Z 11.5 15
"	25	Um iP	03 28 01.1	Ki	iP		16 55 30.1 C
		Yugoslavia (h = 10 km).			i		16 55 48.1
"	25	Um iP	03 37 12.6				micr sec
		Ud iP	03 36 36.9			P	Z' 1.1 1.1
		Yugoslavia (h = 10 km).				Mx	E 5.6 15
"	25	Ud eP	05 59 43			Mx	N 5.9 14
"	25	Sk iP	07 26 57.2			Mx	Z 4.1 15
		Um iP	07 26 54.6	Sk	iP		16 55 59.6 C
		Ud iP	07 26 17.1		iPcP		16 56 37.6
		i	07 26 20.0	Um	iP		16 55 56.6 C
		Yugoslavia (h = 10 km).			iPcP		16 56 34.5
"	25	Sk iP	08 50 51.1		iS		17 04 32
		Um iP	08 50 44.7		iP'P'		17 24 54.6
		Ud iP	08 50 06.5	Ud	iP		16 56 21.9 C
		Yugoslavia (h = 10 km).			i		16 56 23.1
"	25	Um iP	09 06 19.6	De	iP		16 56 45.4 C
		Yugoslavia (h = 10 km).			iPcP		16 57 03.1
"	25	Um iP	09 29 56.6				Fox Islands, Aleutian
		Ud iP	09 29 18.9				Islands (h = 25 km).
		Yugoslavia (h = 10 km).					m = 6.8, M = 6.1 (Up,Ki).
"	25	Um iP	11 11 18.6	"	25	Up iP	17 01 55.4
		Ud eP	11 10 40			Ki iP	17 01 01.9
		Yugoslavia (h = 10 km).				Um iP	17 01 29.0 C
"	25	Sk eP	11 50 09			Ud iP	17 01 54.3
		Um iP	11 50 08.0			De iP	17 02 17.2
		Ud iP	11 49 30.1				Fox Islands, Aleutian
		Yugoslavia (h = 10 km).					Islands.
"	25	Um iP	12 35 57.1				Origin time = 16 51 00.
		Yugoslavia (h = 10 km).		"	25	Um iP	17 09 48.2
"	25	Up iP	14 25 12.2			Ud iP	17 10 13.9
		Ki eP	14 24 19				Fox Islands, Aleutian
		Um iP	14 24 45.6				Islands.
		Ud iP	14 25 13.8				Origin time = 16 59 19.
		Rat Islands, Aleutian		"	25	Ki iP	17 09 47.1
		Islands (h = N).				Um iP	17 10 14.1
"	25	Um iP	16 51 00.0			Ud iP	17 10 39.2
		Yugoslavia (h = 10 km).					Fox Islands, Aleutian
"	25	Um iP	17 09 45.0				Islands.
		Yugoslavia (h = 10 km).					Origin time = 16 59 45.
"	25	Up iP	17 18 37.5	"	25	Um iP	17 18 37.5
		Ki eP	17 18 37.5				Western Arabian Peninsula
		Um iP	17 18 37.5				(h = 10 km).
		Ud iP	17 18 37.5	"	25	Um iP	17 57 29.3
		Rat Islands, Aleutian					(cont.)
		Islands (h = N).					

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979						1979						
May	25	(cont.)				May	25	Um	iP	21 48 25.4		
		Ud	iP	17 57 53.8				Ud	iP	21 47 48.2		
		Fox Islands, Aleutian Islands (h = N)						Yugoslavia (h = 10 km).				
"	25	Ki	iP	18 20 43.7		"	25	Sk	iP	23 49 02.8		
		Um	iP	18 21 10.4				Um	iP	23 49 00.2		
		Ud	iP	18 21 35.6				Ud	iP	23 48 24.0		
		Fox Islands, Aleutian Islands (h = N).						i		23 48 32.0		
		Yugoslavia (h = 10 km).						Yugoslavia (h = 10 km).				
"	25	Up	iP	18 27 13.3		"	26	Up	eP	00 29 10		
			ipP	18 29 17.4				Ki	iP	00 28 59.2		
				micr sec					i	00 29 09.5		
										micr sec		
			P	Z' 0.2 1.0					P	Z' 0.2 1.7		
		Ki	iP	18 26 44.4 D				Sk	iP	00 28 53.0		
			iS	18 35 52.4				Um	iP	00 29 07.1		
				micr sec					i	00 29 17.6		
			P	Z' 0.4 1.0				Ud	iP	00 29 00.1		
		Sk	iP	18 27 10.5 D					i	00 29 12.3		
			epP	18 29 16				De	iP	00 29 07.9		
		Um	iP	18 26 56.1 D				Off coast of Chiapas, Mexico (h = 10 km).				
			ipP	18 29 00.4								
			iS	18 36 17.4			"	26	Ud	iP	01 02 55.3	
		Ud	iP	18 27 20.0 D				"	26	Up	iP	07 11 04.9
			ipP	18 29 27.1					Ud	iP	07 11 20.0	
			iS	18 36 47.7				Southern Iran (h = N).				
		De	iP	18 27 31.1 D				"	26	Um	iP	11 12 29.6
			ipP	18 29 38.2					Ud	iP	11 11 52.5	
		Volcano Islands region.						Yugoslavia (h = 10 km).				
		h = 590 km (Up,Sk,Um,Ud,De).										
		m = 5.8 (Up,Ki).										
"	25	Up	iP	20 26 34.4		"	26	Um	iP	13 53 34.4		
		Ki	iP	20 26 15.8				Ud	iP	13 53 59.8		
		Um	eP	20 26 24				Fox Islands, Aleutian Islands (h = 25 km).				
		Ud	eP	20 26 47								
			i	20 27 00.9				"	26	Up	iP	14 44 40.5 D
		Luzon, Philippine Islands (h = 40 km).									micr sec	
"	25	Up	iP	21 22 04.6 C					P	Z' 0.2 0.8		
				micr sec				Um	iPKP1	14 44 29.7		
			P	Z' 0.1 1.0					i	14 44 34.7		
		Ki	iP	21 21 21.3 C				Ud	iPKP1	14 44 42.2 D		
				micr sec					i	14 44 50.3		
			P	Z' 0.1 1.0				De	iP	14 44 52.2 D		
		Sk	iP	21 21 56.7				South of Tonga Islands (h = N).				
		Um	iP	21 21 40.3 C								
		Ud	iP	21 22 11.6 C				"	26	Ki	iP	14 45 38.8
			i	21 22 33.6					Ud	iP	14 46 31.4	
		De	iP	21 22 28.5				Fox Islands, Aleutian Islands (h = N).				
		Hokkaido, Japan region (h = 60 km).										
		m = 5.8 (Up,Ki).										

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979				1979			
May	26	Um iP	15 59 56.7	May	27	Um iP	05 13 43.1
		Albania (h = 10 km).				Yugoslavia (h = 10 km).	
"	26	Up iP	16 03 41.3	"	27	Up iP	06 19 49.7
		Turkey (h = 10 km).				Ki iP	06 19 54.3
"	26	Up iPKP1	18 05 18.3			Sk iP	06 20 12.9
		iPKP2	18 05 24.1			Um iP	06 19 46.4
		Sk iPKP1	18 05 12.4			Kashmir-India border region (h = 20 km).	
		Um iPKP1	18 05 06.6	"	27	Ud iP	06 50 44.0
		Ud iPKP1	18 05 20.0			i	06 50 48.1
		iPKP2	18 05 27.5			Iran (h = 10 km).	
		Kermadec Islands region (h = 360 km).		"	27	Um iP	10 40 47.6
"	26	Ki iSgl	19 32 33.4			Ud iP	10 41 12.8
		Um iSgl	19 33 06.3			Fox Islands, Aleutian Islands (h = N).	
		Norrbotten-Swedish Lapland, Sweden, 66.4°N, 22.2°E. Origin time = 19 31 46. By combination with Finnish station readings.		"	27	Ud iPKP	12 15 33.2
"	26	Up iP	19 44 57.8			De iPKP	12 15 37.8
		Um iP	19 44 40.6			Dentrecasteaux Islands region (h = 10 km).	
		Ud iP	19 45 04.6	"	27	Um iP	14 30 21.1
		Volcano Islands region (h = N).				Ud iP	14 29 45.3
"	27	Up iP	01 12 49.6			Yugoslavia (h = 10 km).	
		Um iP	01 12 47.6	"	27	Sk iP	14 52 26.7
		Ud iP	01 12 40.0			Um iP	14 52 25.1
		Near coast of Guatemala (h = 80 km).				Ud iP	14 51 47.2
"	27	Up iP	02 12 21.1			Yugoslavia (h = 10 km).	
		Um iP	02 12 17.6	"	27	Ud iP	15 30 37.1
		Ud iP	02 12 10.8	"	27	Up iP	17 29 08.2
		Near coast of Guatemala (h = 90 km).				i	17 29 20.5
"	27	Up iP	03 25 53.9				micr sec
			micr sec			P	Z' 0.1 1.0
		P	Z' 0.1 0.9			Ki iP	17 28 23.3
		Sk iP	03 26 32.8			i	17 28 36.7
		Um iP	03 26 30.5			Um iP	17 28 42.7
		Ud iP	03 25 59.8			Ud iP	17 29 14.2
		i	03 26 08.0			i	17 29 25.9
		De iP	03 25 25.0			De iP	17 29 31.7
		Southern Greece (h = 35 km).				Kuril Islands (h = N).	
"	27	Up ipP	04 16 43.3	"	27	De iPgl	18 16 08.9
		Um ipP	04 16 25.1			iSgl	18 16 25.4
		Ud iP	04 16 04.1			Origin time = 18 15 47.	
		ipP	04 16 49.6	"	28	Um iSKP1	00 24 20.2
		Minahassa Peninsula. h = 180 km (Ud).				Tonga Islands (h = 280 km).	
				"	28	Up iPKP1	00 25 35.9
						Sk iPKP1	00 25 29.1
						(cont.)	

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979				1979										
May	28	(cont.)		May	28	(cont.)								
		Sk	i	00 25	36.7	Ki	iP	14 49 45.3 D						
		Um	iPKP1	00 25	23.9		iPP	14 52 07.5						
			i	00 25	30.2			micr sec						
		Ud	iPKP1	00 25	37.5		P	Z' 0.1 1.0						
			i	00 25	51.7	Sk	iP	14 50 17.8						
		De	iPKP1	00 25	46.1	Um	iP	14 50 01.3 D						
			i	00 25	53.5	Ud	iP	14 50 30.1 D						
						De	iP	14 50 44.6						
"	28	Ud	iRg	01 02	00.6			Near west coast of Honshu, Japan (h = 270 km).						
		Local near-surface event.												
"	28	Ud	iPKP1	04 30	51.3	"	28	Um	iP	15 28 40.7				
		De	iPKP1	04 31	02.0			Ud	iP	15 29 06.7				
		South of Fiji Islands (h = 530 km).												
"	28	Up	iP	09 32	49.3 C	"	28	Up	eP	19 15 09				
			iS	09 37	17.1			Ki	iP	19 15 09.1				
			iScP	09 39	49.9				i	19 15 23.7				
								Southern Sumatera (h = 50 km).						
			P	Z'	0.5 0.7	"	28	Um	iP	23 22 29.1				
			Mx	E	3.6 19			Albania (h = 10 km).						
			Mx	N	6.0 22	"	29	Up	iP	00 50 09.7 C				
			Mx	Z	9.5 20					micr sec				
		Ki	iP	09 33	50.8 C			Ki	iP	00 50 02.9 C				
			iScP	09 40	12.0				ipP	00 50 24.2				
									iScP	00 54 37.3				
			P	Z'	0.9 0.8			Sk	iP	00 50 24.9 C				
			Mx	E	4.9 16				ipP	00 50 46.8				
			Mx	N	15.5 26			Um	iP	00 50 02.0 C				
			Mx	Z	2.1 16				ipP	00 50 22.8				
		Sk	iP	09 33	28.6 C			Ud	iP	00 50 22.8 C				
			i	09 33	35.1				iScP	00 54 50.8				
		Um	iP	09 33	16.6 C			De	iP	00 50 24.2				
			iS	09 37	53			Burma-India border region. h = 80 km (Ki,Sk,Um).						
			iScP	09 39	59.2			"	29	Ud	i(P)	00 58 55.2		
		Ud	iP	09 32	59.7 C			"	29	Ud	iP	02 28 58.1		
			ipP	09 33	18.8			"	29	Um	iP	11 29 13.6		
		De	iP	09 32	31.4 C			Yugoslavia (h = 10 km).						
			iS	09 36	40.8			"	29	Up	iP	13 11 36.0		
			iScP	09 39	45.4					Ki	iP	13 11 37.9		
		Turkey. h = 90 km (Ud). m = 6.4 (Up,Ki).								Sk	iP	13 11 23.5		
"	28	Um	iSgl	10 11	39.3			Um	iP	13 11 39.3				
"	28	Sk	eP	13 32	49			Ud	iP	13 11 26.2				
		Um	iP	13 32	43.7			De	iP	13 11 27.8				
		Ud	eP	13 32	09			Colombia (h = 120 km).						
		Yugoslavia (h = 10 km).								"	29	Ud	iP	15 32 24.1
"	28	Up	iP	14 50	22.9 D			Near Islands, Aleutian Islands (h = N).						
			P	Z'	0.1 1.0									
		(cont.)												

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979				1979							
May	29	Up	iP	20 53	27.4	May	30	(cont.)			
		Ki	iP	20 52	56.2			Up	ipP	11 17	13.7
		Um	iP	20 53	09.8			Ki	eP	11 16	46
		Ud	iP	20 53	33.9			Sk	iP	11 17	07.2
		Bonin Islands region						Um	iP	11 16	42.8
		(h = 450 km).						Ud	iP	11 17	05.2
"	29	Up	iP	22 04	28.9			De	eP	11 17	06
		Ki	iP	22 03	35.6			Burma (h = 120 km).			
							"	30	Up	ePKP1	11 56 23
			P	Z'	0.1 0.8				i	11 56	41.6
		Sk	iP	22 04	06.1			Sk	iPKP1	11 56	16.1
		Um	iP	22 04	02.6			Um	iPKP1	11 56	11.0
		Ud	iP	22 04	28.0				i	11 56	28.0
		De	iP	22 04	50.9			Ud	iPKP1	11 56	24.2
		Fox Islands, Aleutian Islands (h = 100 km).						De	iPKP1	11 56	31.0
								Kermadec Islands (h = 150 km).			
"	29	Ki	i(P)	22 25	14.4		"	30	Sk	ePKP1	12 35 19
		Sk	e(P)	22 25	48				Um	iPKP1	12 35 15.0
		Um	e(S)	22 27	52				Ud	iPKP1	12 35 28.3
			i	22 28	10.5					iPKP2	12 35 37.3
			i	22 28	24.1				De	ePKP2	12 35 46
"	30	Ud	iP	00 20	41.4		"	30	Up	iPKP1	14 59 04.6
		Ascension Island region (h = 10 km).							Ud	iPKP1	14 59 07.1
"	30	Up	iP	03 12	11.2				De	iPKP1	14 59 17.2
		Um	iP	03 11	51.4				South of Fiji Islands (h = 530 km).		
		Ud	iP	03 12	18.7		"	30	Ud	iP	15 47 22.7
		South of Honshu, Japan (h = 50 km).								i	15 47 28.0
"	30	Sk	iP	05 42	58.4		"	30	Up	iP	16 19 21.1
		Um	iP	05 42	54.4						micr sec
		Ud	iP	05 42	16.9				P	Z'	0.1 1.3
			i	05 42	24.1			Ki	iP	16 19	43.5
		Albania (h = 10 km).									micr sec
"	30	Up	ePP	09 56	48				P	Z'	0.3 1.4
								Sk	iP	16 19	13.3
			Mx	E	1.4 18			Um	iP	16 19	34.8
			Mx	N	2.9 23			Ud	iP	16 19	08.1
			Mx	Z	4.5 22			De	iP	16 19	01.1
		Sk	ePP	09 57	01			North Atlantic Ridge (h = 10 km). m = 6.0 (Up,Ki).			
		Um	iSKS	10 03	09		"	30	Ud	iP	16 29 28.7
		Ud	iP	09 52	50.3		"	30	Up	iSKP1	18 11 28.7
			e(PP)	09 56	38				Ud	iPKP1	18 08 24.8
			iPP	09 56	53.3				De	iPKP1	18 08 34.1 C
		De	i	09 57	22.4			Tonga Islands region (h = 80 km).			
		Bali Island region (h = 25 km).									
"	30	Up	iP	11 16	52.3						
		(cont.)									



Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979				1979									
May	30	Up	iP	19 30	39.7	May	31	Up	iP	07 23	33.2 C		
			ipP	19 31	28.7				iS	07 26	14.4		
					micr sec								
			P	Z'	0.1 0.9				P	Z'	0.5 1.2		
		Ki	iP	19 29	45.5			Ki	iP	07 24	57.4		
			i	19 30	03.9				i	07 25	03.4		
			ipP	19 30	31.9						micr sec		
		Sk	iP	19 30	15.2				i	Z'	0.5 1.5		
			ipP	19 31	02.4			Sk	iP	07 24	26.4		
		Um	iP	19 30	13.4				i	07 24	30.9		
			ipP	19 31	00.3			Um	iP	07 24	15.5		
		Ud	iP	19 30	37.9				iS	07 27	31.9		
			ipP	19 31	26.3			Ud	iP	07 23	47.8		
		De	iP	19 31	01.2				i	07 23	50.9		
			ipP	19 31	49.2			De	iP	07 23	07.6		
									i	07 23	10.6		
									i	07 23	17.4		
		Alaska Peninsula.							Romania (h = 120 km).				
		h = 210 km (Up,Ki,Sk,Um,Ud,De).							m = 5.7 (Up,Ki).				
"	30	Um	iP	22 30	16.0	"	31	Up	iPKP1	16 45	48.1		
		Yugoslavia (h = 10 km).								i	16 45	53.4	
"	30	Um	iP	23 32	46.5			Ud	iPKP1	16 45	48.3		
		Ud	iP	23 32	07.6				i	16 45	54.9		
			i	23 32	12.0			De	iPKP1	16 45	59.4		
		Yugoslavia (h = 10 km).								i	16 46	02.7	
"	30	Sk	iP	23 52	06.0				i	16 46	08.3		
		Um	iP	23 52	05.7 C			South of Fiji Islands					
		Ud	eP	23 51	28			(h = N).					
		Yugoslavia (h = 10 km).					"	31	Up	iP	17 06	14.9	
"	31	Up	iP	00 50	22.1			Ki	eP	17 05	27		
		Ki	eP	00 50	05			Um	iP	17 05	49.1		
		Ud	iP	00 50	30.5			Ud	iP	17 06	20.8		
		Luzon, Philippine Islands							Kuril Islands (h = N).				
		(h = 60 km).					"	31	Up	iP	17 55	29.3	
"	31	Up	iP	06 01	52.6 C			Ki	iP	17 55	28.6		
			iPn	06 02	59.3				i	17 55	38.4		
		Ki	iP	06 01	37.0 C						micr sec		
									P	Z'	0.1 1.0		
								Sk	iP	17 55	42.1		
		Sk	iP	06 02	08.2 C			Um	iP	17 55	26.0		
		Um	iP	06 01	37.8			Ud	iP	17 55	38.2		
			i	06 01	50.2			De	iP	17 55	36.8		
		Ud	iP	06 02	09.0 C			Southern Sumatera (h = N).					
			iPn	06 03	23.4			"	31	Ud	iP	18 52	17.9
		De	iP	06 02	15.8			"	31	Ki	iSg1	18 53	51.2
			iPP	06 03	43.3				Um	iSg1	18 55	47.8	
		Eastern Kazakh SSR.							Off coast of northern				
		Underground explosion.							Norway, near 70 1/2°N, 17°E.				
"	31	De	iPKP1	06 05	21.4 C			Origin time = 18 52 19.					
			i	06 05	37.2			M <sub>L</sub> = 2.9 (Ki).					
		Tonga Islands region							By combination with Tromsøe				
		(h = 100 km).							and Finnish station readings.				

Up = Uppsala, Ki = Kiruna, Sk = Skanstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979

May 31 Ud iP 19 50 53.9  
i 19 51 00.0  
Burma-India border region  
(h = 110 km).

" 31 Up iPKP1 20 33 46.1  
Sk iPKP1 20 33 38.6  
i 20 33 49.6  
Ud iPKP1 20 33 47.6  
i 20 33 59.3  
De iPKP1 20 33 56.8  
i 20 34 07.4

" 31 Up iP 22 21 12.7  
Um iP 22 20 50.1  
Ud iP 22 21 19.8  
Near east coast of Honshu,  
Japan (h = 50 km).

" 31 Um iP 23 05 03.6

June 11, 1981

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SEISMOLOGISKA AVDELNINGEN  
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SEISMOLOGICAL BULLETIN

UPPSALA, KIRUNA, SKALSTUGAN, UMEÅ

UDDEHOLM and DELARY

Uppsala	(Up):	59°51.5'N,	17°37.6'E;	h = 14 m
Kiruna	(Ki):	67°50.4'N,	20°25.0'E;	h = 390 m
Skalstugan	(Sk):	63°34.8'N,	12°16.8'E;	h = 580 m
Umeå	(Um):	63°48.9'N,	20°14.2'E;	h = 16 m
Uddeholm	(Ud):	60°05.4'N,	13°36.4'E;	h = 240 m
Delary	(De):	56°28.2'N,	13°52.2'E;	h = 150 m

J U N I 1 - 30, 1979  
 .....

1979					1979				
Jun.	1	Up	ePKP1	01 36 57	Jun.	1	Up	iP	19 09 03.6
		Sk	iPKP1	01 36 49.2			i		19 09 26.4
		Um	iPKP1	01 36 44.6 C			Ki	iP	19 10 18.1
		Ud	iPKP1	01 36 57.4			Um	eP	19 09 46
		De	iPKP2	01 37 14.3			Ud	eP	19 09 08
				Kermadec Islands (h = 80 km).			i		19 09 25.2
									Aegean Sea (h = 10 km).
"	1	Up	eP	09 33 09	"	1	Up	iP	19 34 20.6
		Sk	eP	09 33 51			Um	iP	19 34 08.9
		Um	iP	09 33 50.7			Ud	iP	19 34 22.9
		Ud	ipP	09 33 12.7					
				Yugoslavia (h = 10 km).	"	1	Up	iP	21 08 11.6 C
"	1	Up	iP	11 05 42.3			i		21 08 14.4
			ipP	11 05 53.9			Ki	eP	21 09 30
		Ki	iP	11 04 54.0			Um	iP	21 08 54.1
		Sk	eP	11 05 30			Ud	iP	21 08 17.9
		Um	iP	11 05 15.9 C			De	iP	21 07 40.3
			ipP	11 05 27.6					Greece-Albania border region
		Ud	iP	11 05 47.4					(h = 50 km).
			ipP	11 05 59.1	"	1	Ud	iPKP1	21 16 38.3
				Kuril Islands region.			De	iPKP1	21 16 45.3
				h = 40 km (Up,Um,Ud).					Tonga Islands (h = N).
"	1	Up	iP	17 16 22.7	"	1	Ki	iP	22 01 42.7
		Ki	iP	17 15 58.3 C			Um	iP	22 01 44.1
		Um	iP	17 16 07.1			Ud	iP	22 02 07.4
		Ud	iP	17 16 32.2	"	1	Um	iPKP	22 12 51.8
		De	eP	17 16 40			Ud	iPKP	22 12 54.7
				Taiwan region (h = N).					Western Australia
"	1	Up	eP	17 19 25					(h = 10 km).
		Ki	iP	17 19 16.9	"	1	Up	iP	23 46 21.0
		Um	iP	17 19 24.6			Ki	iP	23 46 54.6
			ipP	17 19 43.7			Ud	iP	23 46 36.0
		Ud	iP	17 19 18.2			De	iP	23 46 20.8
		De	iP	17 19 25.3					Southern Iran (h = N).
				Guatemala (h = 70 km).	"	2	Up	iP	00 20 52.0
"	1	Up	iP	18 15 43.8					(cont.)
		Um	eP	18 15 18					
		Ud	iP	18 15 49.2					

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979					
Jun.	2	(cont.)			
		Up	i	00 20 54.5	
				micr sec	
			i	Z' 0.1 1.0	
			Mx	N 1.3 24	
			Mx	Z 1.0 18	
		Ki	iP	00 20 29.2	
				micr sec	
			P	Z' 0.1 1.3	
			Mx	E 0.4 14	
		Um	iP	00 20 37.1	
			i	00 20 40.0	
		Ud	iP	00 21 01.4	
			i	00 21 04.0	
		De	i	00 21 12.1	
		Taiwan region (h = 20 km).			
		m = 5.7, M = 5.0 (Up,Ki).			
		Double P, small and large in average 2.6 s apart.			
"		Up	iP	02 57 00.3	
		Um	iP	02 57 43.3	
		Ud	iP	02 57 06.1	
		Albania (h = 10 km).			
"	2	Up	eP	03 16 32	
				micr sec	
			Mx	E 0.8 11	
			Mx	N 0.4 8	
			Mx	Z 0.6 15	
		Ki	eP	03 17 47	
				micr sec	
			Mx	E 1.0 12	
			Mx	N 0.4 10	
			Mx	Z 0.3 10	
		Um	iP	03 17 08.2	
		Ud	iP	03 16 40.0	
		De	iP	03 16 05.8	
		Aegean Sea (h = 10 km).			
"	2	Up	iP	05 58 41.3	
		Ki	iP	05 59 53.5	
		Um	i	05 59 21.4	
		Ud	iP	05 58 50.4	
		De	iP	05 58 18.7	
		Crete (h = N).			
"	2	Up	iP	07 16 16.1	
		Ki	iP	07 16 03.9 C	
		Ud	iP	07 16 28.8	
		Northern Sinkiang prov., China (h = N).			
"	2	Up	ePKP	10 06 53	
			i	10 08 22.9	
				micr sec	
			Mx	E 2.4 24	
			Mx	N 4.2 21	
			Mx	Z 3.8 25	
		Ki	iPKP	10 06 51.3	

(cont.)

1979					
Jun.	2	(cont.)			
		Ki		micr sec	
			PKP	Z' 0.1 1.1	
			Mx	E 4.8 20	
			Mx	N 3.9 19	
		Um	iPKP	10 06 49.9	
		Ud	iPKP	10 06 54.7	
		De	iPKP	10 06 54.2	
		Western Australia (h = 5 km).			
		M = 6.2 (Up,Ki).			
"	2	Up	iPKP1	13 38 59.7	
			iPKP2	13 39 04.6	
		Ki	iPKP	13 38 44.9	
		Um	iPKP1	13 38 47.9 C	
			i	13 39 04.6	
		Ud	iPKP1	13 39 01.2 C	
		De	iPKP1	13 39 09.8	
		Kermadec Islands (h = 50 km).			
"	2	Up	iPKP1	15 46 15.8 C	
		Ud	iPKP1	15 46 16.6 C	
		De	iPKP1	15 46 27.9	
		South of Fiji Islands (h = 230 km).			
"	2	Up	iP	16 07 29.2	
		Um	iP	16 07 18.7	
		Ud	iP	16 07 43.4 C	
		De	eP	16 07 48	
		Tibet (h = 35 km).			
"	2	Ud	iP	17 58 41.9	
"	2	Up	ePKP1	22 36 13	
			i	22 36 16.6	
		Um	iPKP1	22 36 01.0 C	
		Ud	iPKP1	22 36 14.4 C	
			i	22 36 18.5	
		De	iPKP1	22 36 22.7	
"	3	Um	iP	04 24 34.7	
		Ud	iP	04 24 16.3	
		Puerto Rico region (h = N).			
"	3	Um	iPKP	08 04 23.8	
		Western Australia (h = 10 km).			
"	3	Ud	iP	10 13 40.1	
"	3	Um	iP	11 08 13.7	
		Ud	iP	11 07 34.0	
		Yugoslavia (h = 10 km).			
"	3	Ud	iP	12 26 26.7	
		Iran (h = 30 km).			

Up = Uppsala, Ki = Kiruna, Sk = Skanstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979				1979			
Jun.	3	Ud iP	15 02 42.9	Jun.	4	Up iP	13 41 39.9
		Sicily (h = 10 km).				Um iP	13 41 20.1
						Ud iP	13 41 47.0
"	3	Um i	15 11 48.3			South of Honshu, Japan	
		Ud iP	15 11 55.3			(h = 430 km).	
		Southeastern Alaska		"	4	De iPKP	14 04 56.5
		(h = 15 km).				Fiji Islands region	
"	3	Up iP	17 45 55.8			(h = 620 km).	
		Ki iP	17 46 25.1	"	4	Ud iP	15 16 12.2
		Ud iP	17 46 13.0			Kuril Islands (h = N).	
		Iran (h = 15 km).		"	4	Up iP	20 49 53.6
"	3	Up iP	23 32 12.6			Ki iP	20 49 00.7
		Ud iP	23 32 22.2			Um iP	20 49 27.2
		Taiwan (h = 55 km).				Ud iP	20 49 52.5
"	4	Up iP	02 55 50.3			De iP	20 50 15.5
		Ki i	02 57 26.4			Fox Islands, Aleutian	
		Um iP	02 56 34.5			Islands (h = N).	
		Ud iP	02 55 56.1	"	5	Ki iP	01 13 35.5
		Yugoslavia (h = 10 km).		"	5	Up iP	07 52 36.8
"	4	Um iP	03 29 04.8			Um iP	07 52 11.4
		Ud iP	03 28 25.3			Ud iP	07 52 42.1
		Yugoslavia (h = 10 km).				Kuril Islands (h = N).	
"	4	Up iP	06 39 20.1	"	5	Um iP	12 54 45.9
		iSKS	06 49 38			Ud iP	12 54 07.2
		iS	06 49 55			Yugoslavia (h = 10 km).	
			micr sec	"	5	Um iP	13 05 51.0
		P	Z' 0.2 1.2			Ud iP	13 05 13.3
		Ki iP	06 39 07.9 C			Yugoslavia (h = 10 km).	
		i	06 39 27.8	"	5	Up iP	22 56 17.4
		iSKS	06 49 31			Ud iP	22 56 23.0 C
			micr sec	"	5	Up iP	22 56 17.4
		P	Z' 0.8 1.4			Ud iP	22 56 23.0 C
		Mx	E 3.1 28	"	6	Um iSKP1	00 30 34.6
		Mx	N 2.0 27			Ud iPKP1	00 27 55.2
		Um iP	06 39 16.3 C			De iPKP1	00 28 05.8
		iSKS	06 49 36			South of Fiji Islands	
		iS	06 49 49			(h = 480 km).	
		Ud iP	06 39 10.5 C	"	6	Up eP	08 41 56
		De iP	06 39 18.3			Ud iP	08 41 46.2
		Near coast of Chiapas,				ipP	08 41 50.4
		Mexico (h = 80 km).				De i	08 41 39.7
		m = 6.3 (Up,Ki).				Central Mid-Atlantic	
"	4	Ud iP	09 44 36.7			ridge (h = 10 km).	
"	4	Up iP	10 18 46.7	"	6	Up iPKP	11 13 41.4
		Um iP	10 18 04.9			Ki iPKP	11 13 50.1
		Ud iP	10 18 36.5			Um iPKP	11 13 46.8
"	4	Up iP	11 50 24.2			Ud iPKP	11 13 37.2
		Ki iP	11 49 37.3			De iPKP	11 13 35.3
		Um iP	11 49 58.9			Near coast of southern	
		Ud iP	11 50 30.1			Chile (h = N).	
		Kuril Islands (h = 110 km).					

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979				1979											
Jun.	6	Up	iP	11 47	10.5	Jun.	6	(cont.)							
				micr	sec			Um	iPKP	22 10	39.4				
			P	Z'	0.1	1.2			i	22 10	50.2				
		Ki	iP	11 47	35.7			Ud	iPKP	22 10	51.9				
				micr	sec										
			P	Z'	0.2	1.1	"	6	Um	eP	23 01	55			
		Um	iP	11 47	26.5			Ud	iP	23 02	07.6				
		Ud	iP	11 46	58.7										
		De	iP	11 46	51.0			"	7	Ud	eP	01 37	40		
		North Atlantic Ridge								Mindanao, Philippine					
		(h = 10 km).								Islands (h = 70 km).					
		m = 6.1 (Up,Ki).													
"	6	Up	iP	12 02	46.6			"	7	Up	iP	06 02	43.5		
		Ki	eP	12 04	13					Ki	eP	06 02	00		
		Um	iP	12 03	28.8					Um	iP	06 02	20.6		
		Ud	iP	12 03	02.3					Ud	iP	06 02	50.2		
			i	12 06	17.9					Off east coast of Honshu,					
		De	iP	12 02	24.3					Japan (h = N).					
		Romania (h = 55 km).						"	7	Up	iPKP1	06 13	25.0		
										Ud	iPKP1	06 13	27.1		
										De	iPKP1	06 13	37.5		
		South of Fiji Islands								South of Fiji Islands					
		(h = 520 km).								(h = 540 km).					
"	6	Up	iPKP1	13 06	46.7			"	7	Ud	iP	06 26	25.3		
		Um	iSKP1	13 09	29.6					i	06 26	31.9			
		Ud	iPKP1	13 06	48.0										
		De	iPKP1	13 06	59.0										
		South of Fiji Islands													
		(h = 520 km).													
"	6	Ud	i(Pg1)	15 04	52.5			"	7	Ud	iP	06 51	49.1		
			iRg	15 05	24.9					Southeastern Uzbek SSR					
		De	i(Pg1)	15 04	56.5					(h = N).					
		Regional near-surface													
		event.													
"	6	Ud	iP	16 24	31.5			"	7	Up	iP	07 36	43.5		
		Albania (h = 10 km).								Um	iP	07 36	50.9		
										Ud	iP	07 36	31.1		
										De	iP	07 36	31.0		
										Leeward Islands (h = 20 km).					
"	6	Up	eP	17 36	12			"	7	Um	i(P)	08 01	45.9		
		Ki	eP	17 36	49					i	08 01	47.1			
		Um	eP	17 36	24										
		Ud	eP	17 36	25										
			i	17 36	34.9					"	7	Ki	iP	08 30	28.3
		De	eP	17 36	14					Ud	iP	08 29	50.5		
		Eastern Caucasus								North Atlantic Ridge					
		(h = 70 km).								(h = 10 km).					
"	6	Ud	iP	18 14	10.4			"	7	Up	eP	10 01	59		
"	6	Ud	i(P)	19 17	32.3					Ki	e	10 01	21		
"	6	Ki	iPKP	20 18	54.1					Um	i	10 01	48.1		
		South Sandwich Islands								Ud	iP	10 01	53.1		
		region (h = N).								i	10 02	07.7			
										Off coast of Oregon					
										(h = 15 km).					
"	6	Ud	eP	20 40	24			"	7	Ud	ipP	13 54	42.3		
"	6	Ud	i(P)	19 17	32.3					Hindu Kush region (h = 35 km).					
"	6	Up	ePKP	22 10	51			"	7	Ud	i(P)	13 56	23.8		
		(cont.)													

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979				1979			
Jun.	7	Ud	i(P)	15 26 01.2	Jun.	8	(cont.)
"	7	Ud	iP	18 28 43.5		Up	micr sec
"	7	Ud	i(P)	19 19 21.1		P	Z' 0.1 0.7
"	7	Up	iP	21 24 06.9		Ki	iP 20 48 21.4 D
			iS	21 26 44.1			micr sec
			iLgl	21 28 31.8		P	Z' 0.1 0.9
		Um	iS	21 28 11.5		Um	iP 20 48 17.2 D
		Ud	iP	21 24 25.5		Ud	iP 20 48 31.6 D
		De	iP	21 23 46.2		De	iP 20 48 29.4 D
		Romania (h = 30 km).				Nicobar Islands region (h = 130 km). m = 5.6 (Up,Ki).	
"	7	Up	eS	21 32 47	"	8	Up iP 21 06 48.8
			iLgl	21 34 28.1			Ud iP 21 06 55.3 C
		De	iP	21 29 48.1			Bonin Islands region (h = N).
		Romania (h = 25 km).			"	8	Ud iP 21 34 36.2
"	8	Up	iP	05 33 28.9			Northern Sumatera (h = 170 km).
		Um	iP	05 33 03.5	"	9	Ki iP 06 40 57.5
		Ud	iP	05 33 33.3			i 06 41 12.8
		Sea of Okhotsk (h = 340 km).					Um iP 06 41 32.5
"	8	Ki	iP	05 53 27.1			North of Severnaya Zemlya (h = 10 km).
		Mindanao, Philippine Islands (h = 170 km).		"	9	Up	iP 06 42 09.0
"	8	Ud	i(P)	06 00 52.5			micr sec
"	8	Up	iP	07 08 44.6		Mx	N 1.2 22
		Ki	iP	07 08 37.2		Ki	iP 06 42 57.3
		Ud	iP	07 08 58.4			i 06 43 04.2
		Burma (h = N).					micr sec
"	8	Up	iRg	10 52 36.6		P	Z' 0.1 1.3
		Ud	iRg	10 52 49.3		Um	iP 06 42 47.4
		East-central Sweden. Near-surface event.				Ud	iP 06 42 21.0 D
"	8	Ki	iP	11 15 56.6			i 06 42 27.4
			i	11 16 04.9		De	iP 06 42 13.2
		Um	iP	11 16 38.4			North Atlantic Ridge (h = 10 km).
		Ud	iP	11 17 04.1	"	9	Up ePKP2 20 24 30
		Norwegian Sea (h = 10 km).					Um iPKP1 20 24 14.3
"	8	De	iP	13 40 42.0 C			Ud iPKP1 20 24 24.8
"	8	Ki	Mx	18 09			i 20 24 28.2
				micr sec			Kermadec Islands (h = N).
		Mx	E	0.5 15	"	9	Ud iP 21 08 53.0
		Mx	N	0.4 14	"	10	Ki iPKP 02 59 29.5
		Ud	iP	17 53 09.1			Um iPKP 02 59 35.6
		Iran (h = N).					Ud ePKP 02 59 42
"	8	Ud	iP	20 16 49.9			New Hebrides Islands (h = 200 km).
"	8	Up	iP	20 48 20.1 D	"	10	Ud iP 03 36 16.0 C
		(cont.)					South Atlantic Ridge (h = 10 km).

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979				1979			
Jun.				Jun.			
10	Ud	iP	04 45 58.2	10	Up	Mx	23 20
			Taiwan region (h = N).				micr sec
"	10	Up	iP 07 00 41.6			Mx	E 1.2 20
			i 07 00 43.3			Mx	N 0.8 21
			i 07 00 50.3		Ki	Mx	Z 1.4 21
			iS 07 09 27				23 16
			micr sec			Mx	E 0.6 18
		i	Z' 0.8 1.6			Mx	N 1.0 19
		i	Z' 0.7 1.2			Mx	Z 0.9 19
		Mx	E 6.2 26		Um	iPKP2	22 08 11.7
		Mx	N 6.0 22		Ud	i	22 08 06.5
		Mx	Z 15 21				South Pacific Cordillera
	Ki	iP	07 01 11.0				(h = 10 km).
		eS	07 10 28				M = 5.8 (Up,Ki).
			micr sec	"	11	Ud	iP 02 48 09.5
		P	Z' 0.5 1.3				West Irian region (h = N).
		Mx	E 7.4 20	"	11	Ki	iP 02 52 15.7
		Mx	N 3.6 20			Um	iP 02 52 27.0
	Um	iP	07 00 59.7				Mariana Islands (h = 600 km).
		e	07 01 02	"	11	Up	iP 08 03 09.2
		iS	07 10 07			Ki	iP 08 02 30.6
	Ud	iP	07 00 30.3			Um	iP 08 02 47.4
		i	07 00 32.6			Ud	iP 08 03 16.6
	De	iP	07 00 19.4				Honshu, Japan (h = 160 km).
			Central Mid-Atlantic Ridge	"	11	Up	iP 14 11 48.2 C
			(h = 10 km).			i	14 12 09.3
			m = 6.6, M = 5.9 (Up,Ki).				micr sec
			Multiple shock. The second			P	Z' 0.1 1.2
			and third arrival delayed		Ki	iP	14 11 14.0 C
			by 1.9 and 8.7 s, respec-				micr sec
			tively.			P	Z' 0.1 1.1
"	10	Up	iP 15 17 24.2		Um	iP	14 11 33.6
		Ud	iP 15 17 30.9		i		14 12 02.0
			Hokkaido, Japan region		Ud	iP	14 11 40.2 C
			(h = 140 km).		De	iP	14 11 56.9 C
"	10	Up	iP 17 06 17.5 C				Southern Nevada.
			micr sec				m = 5.8 (Up,Ki).
		P	Z' 0.1 0.9				Underground explosion.
	Ki	iP	17 05 31.0 C	"	11	Up	iP 15 55 23.0
			micr sec			Ki	iP 15 55 22.4
		P	Z' 0.1 1.0			Um	iP 15 55 17.0
	Um	iP	17 05 52.4 C			Ud	iP 15 55 38.6 C
	Ud	iP	17 06 23.5 C			De	iP 15 55 37.9
	De	iP	17 06 41.4				Tibet (h = N).
			Northwest of Kuril Islands	"	11	Up	ePKP 19 32 51
			(h = 300 km).				micr sec
			m = 5.4 (Up,Ki).			Mx	E 0.4 20
"	10	Up	iPKP1 20 46 25.6			Mx	Z 1.2 22
		i	20 46 31.9				(cont.)
	Um	iPKP1	20 46 15.0				
	Ud	iPKP1	20 46 27.2				
	De	i	20 46 48.3				





Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979

Jun. 13 Up iP 09 21 13.4  
 Sk iP 09 21 28.1  
 Um iP 09 21 02.7  
 Ud iP 09 21 27.3  
 Tibet (h = N).

" 13 Um iP 11 03 42.0

" 13 Up iP 11 08 38.4  
 Ki iP 11 08 14.6  
 micr sec  
 P Z' 0.1 0.9  
 Um iP 11 08 23.5  
 Ud iP 11 08 44.7

" 13 Up iPKP 11 12 28.7 C  
 Ki iPKP 11 12 18.8 C  
 Sk iPKP 11 12 29.0 C  
 Um iPKP 11 12 23.0 C  
 Ud iPKP 11 12 31.3 C  
 De iPKP 11 12 36.3  
 East Papua New Guinea  
 region (h = 80 km).

" 13 Ud i(P) 11 48 35.7

" 13 Sk iPgl 13 47 52.5  
 iSgl 13 48 00.1  
 iRg 13 48 04.2  
 Origin time = 13 47 42.  
 Local near-surface event.

" 13 Up iP 15 27 06.6  
 iP 15 27 11.7  
 Ud iP 15 27 22.3  
 Northern Sinkiang Prov.,  
 China (h = 20 km).

" 13 Up iPKP1 19 01 59.4  
 Ud iPKP1 19 02 01.7  
 De iPKP1 19 02 12.1  
 South of Fiji Islands  
 (h = 550 km).

" 13 Um iP 23 41 21.9  
 Java Sea (h = 550 km).

" 14 Sk i(P) 09 31 56.9  
 i 09 32 34.3

" 14 Up iPKP1 10 00 36.8  
 iSKP1 10 03 26.4  
 Ki iPKP 10 00 28.4  
 iSKP1 10 03 03.2  
 Sk ePKP 10 00 36  
 Um i(PKP) 10 00 30.2  
 iPKP 10 00 35.3  
 i 10 00 37.3  
 iSKP1 10 03 14.5

(cont.)

1979

Jun. 14 (cont.)  
 Ud iPKP1 10 00 37.2  
 iSKP1 10 03 28.0  
 De iPKP1 10 00 49.5  
 Fiji Islands region (h = 580 km).

" 14 Up i(P) 11 48 50.1

" 14 Up iP 11 49 37.2  
 iP 11 49 40.0  
 iP 11 50 14.3  
 iS 11 53 35  
 micr sec  
 P Z' 0.1 1.0  
 pP Z' 1.7 1.8  
 Mx E 17 9  
 Mx N 25 15  
 Mx Z 46 15

Ki iP 11 50 47.9  
 iP 11 50 51.0  
 iS 11 55 46  
 micr sec  
 P Z' 0.2 1.0  
 pP Z' 0.8 1.7  
 Mx E 29 13  
 Mx N 17 11  
 Mx Z 12 11

Sk iP 11 50 20.0  
 iP 11 50 24.0  
 Um iP 11 50 11.6  
 iP 11 50 15.8  
 iS 11 54 38

Ud iP 11 49 46.9  
 iP 11 49 50.2  
 iS 11 53 57.6  
 De iP 11 49 13.4  
 iP 11 49 17.8  
 Aegean Sea.  
 h = 15 km (Up,Ki,Sk,Um,Ud,De).  
 m = 6.2, M = 6.1 (Up,Ki).

" 14 Sk iP 12 40 33.5

" 14 Up iSgl 13 00 49.5  
 Ud iSgl 13 00 40.3  
 De iSgl 12 58 49.5

" 14 Ki eP 13 06 59  
 Sk eP 13 06 38  
 Um iP 13 06 25.1  
 Ud iP 13 05 59.2  
 De iP 13 05 26.2  
 Aegean Sea (h = 35 km).

" 14 De iPgl 15 05 10.2  
 i 15 05 28.9  
 iRg 15 05 32.1  
 Local near-surface event.

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary			
1979			1979
Jun.	14	Ud iP	15 20 23.4
"	14	Ud iP	15 39 11.9
"	14	Ud iP	20 57 38.5
"	14	Up iPgl	21 25 10.8
		i	21 25 51.3
		iSgl	21 25 52.4
		Ki eSgl	21 28 36
		Sk iPn	21 25 03.2
		iPgl	21 25 10.7
		iSgl	21 25 52.6
		Um iSgl	21 27 00.1
		Ud iPgl	21 24 34.5 D
		iSgl	21 24 50.5
		De ePgl	21 25 31
		iSgl	21 26 20.4
		Southeastern Norway, 60.4°N, 11.2°E. Origin time = 21 24 14. M <sub>L</sub> = 3.1 (Up,Ki,Sk,Um,Ud,De). Felt. By combination with Bergen and Kongsberg readings.	
"	14	Sk iPKP	22 16 26.3
		Um iPKP	22 16 22.2
		Ud iPKP	22 16 32.0
		New Hebrides Islands (h = 25 km).	
"	15	Ud iP	01 22 54.4
		Southeastern Alaska (h = 15 km).	
"	15	Ki iP	01 54 24.4
		Um i	01 55 09.6
		North of Frank Josef Land (h = 10 km).	
"	15	Up ipP	09 45 32.7
		Ki epP	09 44 59
		Sk iP	09 46 14.4
		Um iP	09 46 13.8 C
		Ud ipP	09 45 35.8
		Yugoslavia (h = 10 km).	
"	15	Sk e	10 07 29
		Um iPKP1	10 07 13.4
		South of Kermadec Islands (h = 35 km).	
"	15	Up iP	10 44 03.1 C
		Sk eP	10 44 04
		Um iP	10 43 46.2
		Ud iP	10 44 10.3
		Ryukyu Islands region (h = N).	
Jun.	15	Up iPKP1	11 35 23.7 D
			micr sec
		PKP1 Z'	0.2 1.2
		Ud iPKP1	11 35 25.4 D
		i	11 35 33.8
		De iPKP1	11 35 35.0
		iPKP2	11 35 40.8
		South of Fiji Islands (h = 220 km).	
"	15	Up iP	11 39 39.0 C
		iS	11 44 05
		i	11 50 35.1
			micr sec
		P Z'	0.1 0.9
		Mx E	0.8 11
		Mx N	3.1 12
		Mx Z	1.1 12
		Ki iP	11 40 48.0 C
		i	11 41 12.6
			micr sec
		P Z'	0.3 1.0
		Mx E	0.9 8
		Mx N	3.6 13
		Mx Z	3.3 13
		Sk iP	11 40 18.3 C
		Um iP	11 40 12.1 C
		i	11 40 15.5
		Ud iP	11 39 46.4 C
		iS	11 44 14.9
		De iP	11 39 13.4 C
		Crete (h = N). m = 5.8, M = 5.2 (Up,Ki).	
"	15	Ud iP	14 01 11.2
		Kuril Islands (h = N).	
"	15	Up iP	16 02 40.4
		Ud iP	16 02 46.1
"	15	Ud iP	18 29 39.4
"	15	Up iSgl	19 55 29.1
		i	19 55 35.1
		Ud iSgl	19 56 28.2
"	15	Ki eP	22 47 43
		Ud eP	22 47 58
"	15	Up ipP	23 25 28.2
		i	23 25 53.9
		iS	23 30 19
		Ki iP	23 24 04.6 C
		eS	23 27 38
			micr sec
		P Z'	0.1 1.2
		Mx E	0.6 14
		Mx N	0.2 16

(cont.)

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979				1979					
Jun.		(cont.)		Jun.		(cont.)			
	15	Ki	micr sec		16	Ud	iPKP1 22 08 21.1 C		
		Mx	Z 0.3 17				iPKP2 22 08 26.4 C		
		Sk	ipP 23 24 54.1			De	iPKP1 22 08 29.7 C		
		Um	iP 23 24 48.4				Kermadec Islands (h = 120 km).		
			iS 23 28 58		"	17	Ki	eP 02 51 38	
		Ud	iP 23 25 22					Samar, Philippine Islands	
			e 23 25 26					(h = 70 km).	
		De	epP 23 25 59			17	Up	iP 03 39 04.2	
			North of Franz Josef Land				Ki	iP 03 38 59.3	
			(h = 10 km).				Um	iP 03 38 57.9	
"	16	Ud	iP 02 37 25.5				Ud	iP 03 39 16.9	
			i 02 37 30.2			"	17	Ud	iP 06 46 36.4
"	16	Ki	iP 05 59 17.0 C					Crete (h = N).	
		Ud	iP 05 59 42.8 C		"	17	Up	iP 08 03 42.4	
			Mindanao, Philippine				Ud	iP 08 03 55.6	
			Islands (h = 230 km).					Hindu Kush region (h = 80 km).	
"	16	Up	iPKP1 10 58 10.1		"	17	Ud	iPKP 08 07 24.2	
		Ud	iPKP1 10 58 12.0					South Sandwich Islands	
		De	iPKP1 10 58 23.4					region (h = N).	
			South of Fiji Islands			"	17	Um	iPKP1 14 35 16.3
			(h = 590 km).					Ud	iPKP2 14 35 48.8
"	16	Up	iP 12 52 30.9						North Island, New Zealand
		Ki	iP 12 52 41.2						(h = 120 km).
		Sk	eP 12 52 17		"	17	Up	iP 15 09 54.7	
		Ud	iP 12 52 20.1				Um	iP 15 09 53.2	
		De	iP 12 52 18.9 C						Southwest of Sumatera
			Windward Islands (h = 170 km).						(h = N).
"	16	Up	iP 18 46 53.4		"	17	Ud	iP 18 08 16.7 C	
			iS 18 50 51						Southeastern Alaska
			micr sec						(h = 15 km).
		P	Z' 0.1 1.4		"	17	Ud	i 19 47 27.8	
		Mx	E 4.5 12					iPP 19 51 32.7	
		Mx	N 13 11					De	iPP 19 51 22.1
		Mx	Z 13 12						Chile-Bolivia border region
		Ki	iP 18 48 04.0						(h = 120 km).
			micr sec		"	17	Ud	iP 20 03 35.8	
		P	Z' 0.1 1.0						
		Mx	E 6.8 10		"	17	Up	iP 23 13 26.6	
		Mx	N 2.4 10					e 23 13 32	
		Sk	eP 18 47 35						micr sec
		Um	iP 18 47 28.4					Mx	E 0.8 14
			iS 18 51 54					Ud	iP 23 13 38.4
		Ud	iP 18 47 01.7						i 23 13 42.4
		De	iP 18 46 29.9						Aegean Sea (h = 25 km).
			i 18 46 32.1						
			Aegean Sea (h = 20 km).						
			m = 5.3, M = 5.6 (Up,Ki).						
"	16	Up	iPKP1 22 08 19.4 C						
		Sk	iPKP1 22 08 12.7						
		Um	iPKP1 22 08 07.5 C						
			(cont.)						

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979				1979					
Jun.	18	Ud	iP	07 21 17.2	Jun.	19	(cont.)		
				Near s. coast of Honshu, Japan (h = 140 km).			Ud	iP	14 03 00.7
							De	iP	14 03 13.4
"	18	Sk	iP	10 01 39.6	"	19	Ud	i(P)	14 13 15.4
		Um	iP	10 01 37.7					
		Ud	i	10 01 08.4	"	19	Ud	i	15 51 40.9
				Yugoslavia (h = 10 km).				iRg	15 51 44.8
									Local near-surface event.
"	18	De	i(P)	14 27 01.7	"	19	De	iP	16 33 25.8
"	18	Ud	iP	19 21 56.0	"	19	Up	iP	16 38 58.4 D
"	18	Up	eP	21 30 10				i	16 39 04.3
		Ki	iP	21 29 51.9					micr sec
		Um	iP	21 29 58.9				P	Z' 0.1 0.9
		Ud	iP	21 30 18.1				i	Z' 0.2 1.0
			i	21 30 24.9			Ki	iP	16 38 56.0 D
				Samar, Philippine Islands (h = 40 km).				i	16 39 02.3
									micr sec
"	19	Up	eP	04 25 25				i	Z' 0.1 1.0
				micr sec			Sk	iP	16 39 16.7 D
		Mx	E	0.7 13				i	16 39 23.3
		Mx	Z	1.7 13			Um	iP	16 38 52.4 D
		Ki	iP	04 24 58.4				i	16 38 57.2
			i	04 25 06.3			Ud	iP	16 39 12.4 D
				micr sec				i	16 39 18.9
			i	Z' 0.1 1.5			De	iP	16 39 11.9
		Mx	E	0.8 9				i	16 39 18.5
		Sk	iP	04 25 29.9					Nepal-India border region.
		Um	iP	04 25 07.3					h = 20 km (Up,Ki,Sk,Um,Ud,De).
		Ud	iP	04 25 36.6					m = 6.0 (Up,Ki).
				Northeastern China (h = N).	"	19	Up	iPKP	17 49 15.3
"	19	Ud	iP	10 01 23.1				iSKP1	17 52 29.4
"	19	Um	ePKP	12 08 01				i	17 53 27.0
			i	12 10 01.9			Ki	iPKP	17 49 02.0 C
		Ud	iPKP1	12 08 01.8			Sk	iPKP	17 49 12.7
		De	iPKP1	12 08 13.0			Um	iPKP	17 49 08.1
				Fiji Islands region (h = 590 km).			Ud	iPKP	17 49 17.1
								iSKP1	17 52 32.8
"	19	Ud	iP	12 20 37.2				i	17 53 30.8
"	19	De	iP	12 30 39.7			De	iPKP	17 49 24.2
"	19	Ud	iPgl	12 43 51.6				iSKP1	17 52 43.8
			iSgl	12 44 11.0				i	17 53 37.1
		De	eSgl	12 45 18					New-Hebrides Islands (h = 120 km).
"	19	Ki	iP	12 57 47.7	"	19	Up	iP	21 21 40.7
		Ud	iP	12 58 20.9			Ki	iP	21 20 46.5 C
				Taiwan region (h = N).			Um	iP	21 21 12.5
"	19	Up	iP	14 02 55.9			Ud	iP	21 21 42.0 C
			(cont.)						Near Islands, Aleutian Islands (h = N).
"	19	Ud	iP	10 01 23.1	"	19	Ki	i(P)	22 10 37.5
"	19	Up	iP	14 02 55.9	"	19	Up	iP	23 14 50.3
			(cont.)					(cont.)	



Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979					1979					
Jun.	21	Ud	iP	03 29 23.7	Jun.	21	(cont.)			
"	21	Ki	eP	05 11 20			Sk	eP	17 13 38	
		Sk	eP	05 11 50			Um	iP	17 13 46.4	
		Ud	iP	05 11 18.5				iS	17 22 16	
		Aegean Sea (h = N).					Ud	eP	17 14 02	
"	21	Up	i(P)	07 51 43.8			Queen Charlotte Islands region (h = 10 km). M = 5.3 (Up,Ki).			
"	21	De	eP	07 28 49	"	22	Up	iP	06 43 24.5	
"	21	Up	iP	08 34 37.0				i	06 43 28.2	
		Ud	iP	08 34 42.9				i	06 53 40.6	
								iS	06 53 51.2	
"	21	Up	i(P)	11 03 12.0					micr sec	
		Ud	i(P)	11 03 07.3				P	Z' 0.2 0.9	
"	21	Up	eRg	12 40 09				i	Z' 2.5 1.4	
		Ud	iSgl	12 39 54.8			Ki	iP	06 43 11.2	
			iRg	12 40 01.4				i	06 43 16.3	
		De	eSgl	12 40 37				iS	06 53 20	
		Regional near-surface event.							micr sec	
"	21	De	e	13 43 24				P	Z' 0.5 1.0	
			eRg	13 43 42				i	Z' 3.0 1.5	
		Local near-surface event.						Mx	E 32 23	
"	21	Up	iP	14 16 11.3 D				Mx	N 36 22	
			i	14 16 14.5				Mx	Z 11 17	
				micr sec			Sk	iP	06 43 06.0	
			P	Z' 0.2 0.8				i	06 43 08.7	
		Ki	iP	14 15 27.9 D				i	06 43 58.8	
			i	14 15 29.0			Um	iP	06 43 20.5	
				micr sec				i	06 43 26.0	
			P	Z' 0.4 0.7				iS	06 53 34	
		Sk	iP	14 16 03.6 D			Ud	iP	06 43 15.5	
			i	14 16 09.3			De	iP	06 43 23.3	
		Um	iP	14 15 47.2 D	"	22	Up	eP	07 27 23	
			i	14 16 08.9			Ki	iP	07 27 23.7	
		Ud	iP	14 16 18.6 D			Sk	eP	07 27 36	
			i	14 16 21.2			Ud	iP	07 27 32.0	
		De	iP	14 16 35.3 D			De	iP	07 27 31.8	
		Eastern Sea of Japan (h = 230 km). m = 6.1 (Up,Ki).					Northern Sumatera (h = N).			
"	21	Ud	iP	15 39 07.6	"	22	Up	iP	09 10 03.2	
"	21	Up	iP	17 14 07.7	"	22	Up	eP	10 40 05	
				micr sec			Ud	iP	10 40 20.2	
			Mx	E 0.3 18			Dodecanese Islands (h = 10 km).			
			Mx	N 2.0 22						
			Mx	Z 2.2 23	"	22	Up	iP	23 21 57.1	
		Ki	iP	17 13 19.4				iS	23 25 12	
				micr sec					micr sec	
			Mx	E 1.2 16				P	Z' 0.6 1.7	
			Mx	N 1.8 20				Mx	E 0.8 11	
			Mx	Z 1.1 15				Mx	N 2.5 12	
		(cont.)					(cont.)			

Up = Uppsala, Ki = Kiruna, Sk = Skalistugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979				1979			
Jun.	22	(cont.)		Jun.	23	Ud	iP 05 15 07.8
		Up	micr sec	"	23	Ki	eP 05 21 08
		Mx	Z 2.5 12			Ud	iP 05 21 35.7
		Ki	iP 23 21 38.4			Minahassa peninsula	
		eS	23 24 47			(h = 140 km).	
			micr sec	"	23	Ud	eP 07 01 13
		P	Z' 1.1 2.3			Southern Greece (h = N).	
		Mx	E 2.8 13	"	23	Up	iP 10 15 49.8
		Mx	N 2.4 11			i	10 16 14.4
		Mx	Z 2.2 13	"	23	Ki	eP 10 15 04
		Sk	iP 23 21 07.0			Um	iP 10 15 23.1
		Um	iP 23 21 48.4			Ud	iP 10 15 55.4
		i	23 22 04.7			Kuril Islands (h = 55 km).	
		eS	23 24 52	"	23	Ki	iPKP 15 28 07.7
		Ud	iP 23 21 32.0			iPKP1	15 28 11.4
		i	23 21 40.1			Ud	iPKP2 15 28 45.8
		De	iP 23 22 01.0			i	15 28 54.4
		Iceland (h = 10 km).				Off w. coast of S. Island,	
		m = 5.5 (Up,Ki).				N.Z. (h = N).	
"	22	Up	iP 23 49 26.5	"	23	Up	eP 20 12 27
		Ud	iP 23 49 28.8			Ud	iP 20 12 37.6
		Unimak Island region				Greece (h = N).	
		(h = N).		"	23	Up	iP 20 24 57.6
"	23	Up	iP 00 01 46.9			Ki	eP 20 26 18
		i	00 02 18.4	"	23	Sk	eP 20 25 47
		ipP	00 02 38.0			Ud	iP 20 25 12.0
		Ki	iP 00 00 56.4			De	iP 20 24 35.4
		ipP	00 01 47			Romania (h = 170 km).	
		Sk	eP 00 01 33	"	23	Ud	iP 21 13 45.5
		Um	iP 00 01 20.7			Greece (h = N).	
		ipP	00 02 10.5	"	23	Ud	iP 23 23 08.2
		Ud	iP 00 01 51.6	"	24	Ud	iP 00 20 27.6
		ipP	00 02 42.9	"	24	Up	iP 02 25 49.8 C
		De	iP 00 02 11.1			iPP	02 29 28.8
		Kuril Islands.				Ki	iP 02 25 22.0 C
		h = 230 km (Up,Ki, Um,Ud).					micr sec
"	23	Up	iP 03 03 55.5 C			P	Z' 0.1 0.9
			micr sec			Sk	iP 02 25 47.0
		P	Z' 1.2 06			Um	iP 02 25 33.4 C
		Mx	E 0.5 5			Ud	iP 02 25 55.7 C
		Mx	Z 1.1 5			De	iP 02 26 06.6
		Ki	iP 03 03 38.8 C			Mariana Islands (h = 70 km).	
			micr sec	"	24	Ud	iP 03 04 24.7
		P	Z' 3.1 0.7	"	24	Up	ePdiff 04 37 59
		Mx	E 0.9 7			i	04 42 07.5
		Mx	Z 0.6 7			(cont.)	
		Sk	iP 03 04 10.7 C				
		iPP	03 05 33.7				
		Um	iP 03 03 40.1 C				
		Ud	iP 03 04 11.9 C				
		De	iP 03 04 19.0 C				
		iPn	03 05 42.9				
		Eastern Kazakh SSR.					
		m = 7.2 (Up,Ki).					
		Underground explosion.					



Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Déлары

1979					1979					
Jun.	24	(cont.)			Jun.	25				
		Up		micr sec			Up	eP	04 18 29	
		Mx	E	0.8 21			Ki	iP	04 17 33.5	
		Mx	N	0.4 22			Ud	iP	04 18 31.9	
		Mx	Z	1.1 21			Near east coast of Kamchatka (h = 45 km).			
		Ki	eP	04 37 31		"	25	Up	i	05 18 04.8
				micr sec				Ki	iP	05 17 04.3
		Mx	E	1.4 22					i	05 17 23.0
		Mx	Z	1.3 23				Sk	i	05 17 36.3
		Um	iP	04 37 38.5				Um	iP	05 17 32.9
		Ud	iPdiff	04 37 58.3				Ud	iP	05 17 53.7
		West Irian (h = N). M = 5.4 (Up,Ki).					Southeastern Alaska (h = 20 km).			
"	24	Ud	iP	06 51 36.0		"	25	Up	iPdiff	05 43 24
"	24	Up	iPKP1	07 30 43.1					i	05 47 05
			iPKP2	07 30 49.9					iPP	05 48 10
		Sk	iPKP1	07 30 37.9					i	05 57 13
		Um	iPKP1	07 30 32.5 D						micr sec
		Ud	iPKP1	07 30 46.0 D					PP	Z' 0.5 2.0
			iPKP2	07 30 52.8				Ki	iPdiff	05 43 01.9
		De	iPKP1	07 30 53.2					iPP	05 47 36.0
		Kermadec Islands region (h = 450 km).							i	05 58 26.4
"	24	Um	iP	07 45 51.7						micr sec
									Pdiff	Z' 0.1 1.0
"	24	Up	iP	09 04 37.4					PP	Z' 0.2 1.5
		Ki	iP	09 04 35.6				Sk	ePdiff	05 43 28
			i	09 04 45.5					i	05 58 09.7
		Um	iP	09 04 33.8				Um	iPdiff	05 43 13.2
			i	09 04 42.0					i	05 47 38.2
		Ud	iP	09 04 45.6					iPP	05 47 48.5
			i	09 04 54.5					iSKS	05 53 32
		Southern Sumatera. h = 30 km (Ki,Um,Ud).							iS	05 55 01
"	24	Ud	iP	09 19 42.2					i	05 58 22.0
								Ud	iPdiff	05 43 36.6
"	24	Up	iP	10 41 31.7					iPP	05 48 20.1
		Ud	iP	10 41 33.6					i	05 58 13.9
			i	10 42 21.9				De	i	05 47 26.6
									i(PP)	05 48 20.7
									iPP	05 48 38.4
								East Papua New Guinea region (h = 190 km). m = 6.4 (Up,Ki).		
"	24	Ud	iP	13 27 25.4 C		"	25	Up	iPKP	11 20 34.8
		South Atlantic Ridge (h = 10 km).								micr sec
"	24	Up	iP	13 57 06.8					Mx	N 0.9 24
		Ki	iP	13 57 27.2					Mx	Z 1.3 24
		Sk	iP	13 57 37.0				Ki	iPKP	11 20 20.0
		Um	iP	13 57 11.2						micr sec
		Ud	iP	13 57 22.9					Mx	N 1.0 24
		Pakistan (h = 40 km).						Um	iPKP	11 20 27.0
"	24	Um	iP	16 37 26.0				Ud	iPKP1	11 20 26.0
		Ud	iP	16 37 35.3				De	iPKP1	11 20 38.7 D
								Tonga Islands (h = 40 km). M = 5.4 (Up,Ki).		
"	25	Ud	iP	02 10 31.9						

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979						1979				
Jun.	25	Up	iP	12 31 34.6		Jun.	26	(cont.)		
		Ki	iP	12 31 33.9				Ki	iP	03 12 23.6 C
			iPP	12 35 15.8					i	03 12 32.1
		Sk	iP	12 31 47.7					i	03 13 27.1
		Um	iP	12 31 31.5 C						micr sec
		Ud	iP	12 31 43.9 C					P	Z' 1.2 0.9
			i	12 31 55.8				Sk	iP	03 12 40.5 C
		De	iP	12 13 42.4					i	03 13 03.3
		Southwest of Sumatera						Um	iP	03 12 13.0 C
		(h = 70 km).							i	03 12 30.2
"	25	Sk	iP	14 17 17.0					iS	03 18 04
		Um	iP	14 17 15.0				Ud	iP	03 12 31.7 C
		Ud	iP	14 16 40.0				De	iP	03 12 27.8 C
		Yugoslavia (h = 10 km).							i	03 12 38.1
"	25	Sk	iPgl	14 26 51.5					iPP	03 14 13.8
			iSgl	14 26 56.1				Afghanistan-USSR border		
			iRg	14 26 58.3				region (h = 230 km).		
		Local near-surface event.				"	26	Sk	eP	03 40 05
"	25	Up	iP	16 39 43.4				Ud	iP	03 39 28.9
		Ki	iP	16 39 17.7 C				Aegean Sea (h = N).		
			ipP	16 39 23.1		"	26	Ki	iP	04 06 28.3
			i	16 39 25.4				Um	iP	04 06 47.4
				micr sec				Ud	iP	04 07 18.8
			P	Z' 0.1 0.8				Hokkaido, Japan region		
		Sk	iP	16 39 51.6 C				(h = 70 km).		
			ipP	16 39 57.6		"	26	Ud	iPKP1	04 08 42.6
		Um	iP	16 39 24.7				De	iPKP1	04 08 54.5 C
			ipP	16 39 29.7				Tonga Islands region		
		Ud	iP	16 39 57.0 C				(h = N).		
		De	iP	16 40 06.9 C		"	26	Up	iP	06 21 31.1 D
		Mongolia.						Ki	iP	06 21 20.3
		h = 20 km (Ki,Sk,Um).							i	06 22 01.2
"	25	Up	iP	18 56 19.0				Ud	iP	06 21 44.8 D
				micr sec				Tibet (h = N).		
			P	Z' 0.1 1.0		"	26	Up	iP	12 12 40.3
		Ki	iP	18 55 25.4				Ud	iP	12 12 45.7
		Sk	iP	18 56 02.6				De	iP	12 13 04.1
		Um	iP	18 55 50.3 C				Kuril Islands (h = N).		
		Ud	iP	18 56 22.8		"	26	Up	iP	15 39 19.2
		De	iP	18 56 44.1 C				Sk	iP	15 40 02.6
		Near east coast of						Ud	iP	15 39 28.5
		Kamchatka (h = 60 km).						Greece (h = N).		
"	25	Up	iP	19 50 55.0		"	26	Ki	iP	16 01 52.9
		Ki	eP	19 52 00				Ud	iP	16 01 28.0
		Ud	iP	19 51 04.4					i	16 01 33.1
		Turkey (h = 45 km).						Western Iran (h = N).		
"	26	Up	iP	03 12 15.4 C		"	26	Ud	iP	16 21 42.8
			iPP	03 13 56.3						
			i	03 14 57		"	27	Up	iP	08 58 28.1
			iS	03 18 11					i	08 58 39.9
			iSS	03 21 12				(cont.)		
				micr sec				(cont.)		
			P	Z' 0.8 0.7				(cont.)		
		(cont.)						(cont.)		

Up = Uppsala, Ki = Kiruna, Sk = Skalistugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979				1979						
Jun.	27	(cont.)		Jun.	27	(cont.)				
		Ki	eP	08 57 35		Ud	i	18 35 45.3		
		Sk	eP	08 57 51		Northern Sumatera				
		Um	iP	08 58 03.2 C		(h = 60 km).				
			i	08 58 15.5		"	27	Ud	iP	21 39 10.0
		Ud	iP	08 58 18.4		South of Honshu, Japan				
			i	08 58 30.7		(h = 510 km).				
		De	iP	09 58 44.9 C		"	28	Up	iPgl	04 19 14.4
			i	09 58 56.9					iSn	04 19 55.2
		Northwest Territories, Canada (h = 20 km).							i	04 20 03.1
"	27	Up	iP	10 02 55.0					iSgl	04 20 09.4
			iS	10 13 45		Ki	e	04 20 27		
				micr sec			eSg2	04 22 52		
		Mx	E	4.5 23		Sk	i	04 20 08.3		
		Mx	N	6.9 25			iSgl	04 21 58.7		
		Mx	Z	9.3 24		Um	iSgl	04 20 49.3		
		Ki	eP	10 02 56		Ud	iPn	04 19 42.5		
			i	10 02 57.4			iSgl	04 21 14.2		
			iS	10 13 40		De	e	04 19 53		
				micr sec			eSgl	04 21 31		
			i	Z' 0.4 1.8		Esthonia, near 59°N, 25 1/2°E.				
		Mx	E	7.2 25		Origin time = 04 18 00.				
		Mx	N	6.3 25		M <sub>L</sub> = 3.1 (Up,Um,Ud,De).				
		Sk	eP	10 02 43		Explosion?				
			i	10 03 12.8		"	28	Up	iP	04 25 42.1
		Um	iP	10 02 59.3						micr sec
			i	10 03 30.4				P	Z' 0.2 1.4	
			iS	10 13 48				Mx	E 0.4 21	
		Ud	iP	10 02 48.1				Mx	N 0.3 18	
		De	i	10 02 52.7				Mx	Z 0.7 18	
		South of Panama (h = 10 km).				Ki	iP	04 26 22.5		
		M = 6.1 (Up,Ki).						micr sec		
"	27	Up	iP	12 10 18.5				P	Z' 0.5 2.0	
		Um	iP	12 10 02.3				Mx	E 0.8 14	
"	27	Ki	iPgl	12 48 20.4				Mx	N 0.9 18	
			iSgl	12 48 48.0				Mx	Z 0.9 16	
		Sk	iSgl	12 50 07.9		Sk	iP	04 25 49.6		
		Um	iSgl	12 48 44.5		Um	iP	04 26 05.9		
		Norrbotten, Sweden, 65.7°N, 21.7°E.					iS	04 35 29		
		Origin time = 12 47 43.				Ud	iP	04 25 35.9 C		
		M <sub>L</sub> = 2.1 (Ki).				De	iP	04 25 19.8		
		Checked with Finnish station readings.				Central Mid-Atlantic Ridge (h = 10 km).				
		m = 6.2, M = 5.0 (Up,Ki).				"	28	Up	iPN	04 28 19.0
"	27	Ud	iP	12 59 44.7					iSn	04 30 11.8
		Off coast of Oregon (h = 15 km).				Ki	iPn	04 26 35.7		
"	27	Ud	iP	13 22 38.0					iSgl	04 27 21.7
"	27	Ud	iP	15 33 53.1		Sk	iPn	04 27 32.5		
"	27	Ud	iP	18 35 18.8			i	04 27 40.0		
				(cont.)			iSn	04 28 50.9		
		Up	iP	18 35 18.8		Um	iPn	04 27 28.8 D		
				(cont.)				(cont.)		

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979				1979			
Jun.	28	(cont.)		Jun.	28	(cont.)	
		Um	iSn 04 28 41.1			Ud	iP 14 55 40.7 C
		Ud	iPn 04 28 18.4				Southern Nevada.
			iSn 04 30 11.9				Underground explosion.
			iLg2 04 31 29.5	"	28	Ud	iP 15 04 15.3
		De	iPn 04 29 04.5	"	28	Ud	iPgl 15 15 49.1
			i 04 31 58.8				iSgl 15 16 11.7
			iLg2 04 33 25.2				Origin time = 15 15 18.
			Off coast of northern Norway				M <sub>L</sub> = 2.2 (Ud).
			near 70 1/2°N, 16 1/2°E.	"	28	Ud	iP 16 20 02.8
			Origin time = 04 25 48.	"	28	Ki	iP 20 12 46.8
			M <sub>L</sub> = 4.3 (Ki).				Mariana Islands (h = 35 km).
			Felt.	"	28	Up	iP 20 52 18.0
			By combination with Finnish			Ki	eP 20 52 58
			and Norwegian station rea-			Um	iP 20 52 42.0
			dings.				Central Mid-Atlantic
"	28	Ki	ePKP 05 37 15	"	28		Ridge (h = 10 km).
			iSKP1 05 39 49.3	"	28	Up	iP 21 26 59.4
		Um	i(PKP) 05 37 14.5				iS 21 30 45.2
			iPKP 05 37 21.0			Ki	iP 21 28 01.7
			iSKP1 05 40 00.8				micr sec
		Ud	iPKP1 05 37 23.6				Mx N 0.2 15
			iSKP1 05 40 14.8			Sk	eP 21 27 42
		De	iPKP1 05 37 33.8 C			Um	iP 21 27 27.3 C
			Fiji Islands region				iS 21 31 50
			(h = 560 km).			Ud	iP 21 27 10.0
"	28	Ki	iP 07 31 25.1				iS 21 31 18.4
"	28	Up	iP 07 41 26.5			De	iP 21 26 36.1 C
		Ki	eP 07 42 06				Turkey (h = 10 km).
		Ud	iP 07 41 18.6	"	29	Ud	iP 00 27 16.9
			Central Mid-Atlantic	"	29	Ki	iP 01 08 54.0
			Ridge (h = 10 km).			Um	iP 01 09 08.6
"	28	Ki	eP 11 45 41				ipP 01 09 18.6
			Central Mid-Atlantic				South of Honshu, Japan
			Ridge (h = 10 km).				(h = N).
"	28	Ki	iP 13 12 23.5	"	29	Ki	iP 02 05 03.6
			Central Mid-Atlantic			Um	iP 02 04 47.1
			Ridge (h = 10 km).			Ud	iP 02 04 16.1
"	28	De	i(P) 14 23 46.3				Central Mid-Atlantic Ridge
"	28	Up	iP 14 34 30.6				(h = 10 km).
		Ud	iP 14 34 23.8	"	29	Up	iPKP2 02 20 34.3
			Central Mid-Atlantic			Sk	iPKP1 02 20 24.4
			Ridge (h = 10 km).			Um	iPKP1 02 20 18.9
			Early arrivals when				i 02 20 23.3
			compared with NEIS			Ud	iPKP1 02 20 32.7
			solutions.			De	iPKP1 02 20 40.9
"	28	Up	iP 14 55 48.9				Kermadec Islands (h = 90 km).
		Ki	iP 14 55 15.1	"	29	Um	iP 06 16 33.4
		Sk	iP 14 55 23.0				
		Um	iP 14 55 34.1				
			(cont.)				

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Déлары

1979

Jun.	29	Ud	iP	09 04	27.2
"	29	Ud	iP	09 40	11.9
"	29	Ud	iP	15 21	32.0
"	29	Um	iP	16 09	12.7 C
		Adriatic Sea (h = 10 km).			
"	30	De	iPKP	06 31	03.0
		New Hebrides Islands (h = N).			
"	30	Ud	iP	08 09	22.1
		Yugoslavia (h = 10 km).			
"	30	Um	iP	08 45	56.2
		Ud	iP	08 45	45.4
		South of Panama (h = 10 km).			
"	30	Up	iP	09 27	52.1
		Ud	iP	09 28	07.9
		Tibet (h = N).			
"	30	Up	iP	09 32	41.6
		Ud	iP	09 32	47.7 C
		Northwest of Kuril Islands (h = 430 km).			
"	30	Ud	iP	22 54	01.3
"	30	Um	iP	23 10	01.9
		Ud	iP	23 10	12.9
		Santa Cruz Islands region (h = 650 km).			

April 29, 1981

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SEISMOLOGICAL SECTION  
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SEISMOLOGICAL BULLETIN

UPPSALA, KIRUNA, SKALSTUGAN, UMEÅ,

UDDEHOLM and DELARY

Uppsala	(Up):	59°51.5'N,	17°37.6'E;	h = 14 m
Kiruna	(Ki):	67°50.4'N,	20°25.0'E;	h = 390 m
Skalstugan	(Sk):	63°34.8'N,	12°16.8'E;	h = 580 m
Umeå	(Um):	63°48.9'N,	20°14.2'E;	h = 16 m
Uddeholm	(Ud):	60°05.4'N,	13°36.4'E;	h = 240 m
Delary	(De):	56°28.2'N,	13°52.2'E;	h = 150 m

JULY 1 - 31, 1979

1979					1979				
July	1	Up	eP	09 44 33	July	2	(cont.)		
		Sk	iP	09 44 24.3			Sk	iP	06 30 40.8
		Ud	iP	09 44 01.0			Um	iP	06 30 58.3
		De	iP	09 43 42.4			Ud	iP	06 30 47.2
		Western Iran (h = N).					De	iP	06 30 52.1
"	1	Up	iPKP1	14 02 26.1			Costa Rica (h = N).		
		Sk	iPKP1	14 02 17.7			m = 6.2 (Up,Ki).		
		Ud	iPKP1	14 02 27.6	"	2	Um	iP	15 38 43.6
		De	iPKP1	14 02 36.4			Panama-Costa Rica border region (h = N).		
"	1	Up	iP	14 45 53.9	"	2	Up	eP	15 48 11
"	1	Up	iP	20 50 50.3			Um	iP	15 48 57.9
			iS	21 01 17			Ud	iP	15 48 20.1
			micr sec				De	iP	15 47 44.6
		P	Z'	0.1 1.0			Greece (h = 45 km).		
		Mx	E	8.0 19	"	2	Ki	iP	16 35 13.7
		Mx	N	5.1 19			Ud	iP	16 35 21.7
		Mx	Z	14 9			Eastern Kashmir (h = 90 km).		
		Ki	micr sec		"	2	Up	iP	16 38 48.4
			E	7.9 16			Ki	iP	16 38 55.9
			N	7.9 17			Um	iP	16 38 45.7
			Z	9.6 17			Ud	iP	16 39 05.4
		Sk	iP	20 50 38.8			Southwestern Kashmir (h = 110 km).		
			iS	21 01 06	"	2	Um	iP	20 48 29.4
		Um	iP	20 50 53.2			Ud	iP	20 48 10.5
		Ud	iP	20 50 42.4			Lake Tanganyika region (h = N).		
		De	iP	20 50 46.0	"	3	Up	iPKP1	03 08 52.7
		Panama-Costa Rica border region (h = 30 km).					Ki	iPKP	03 08 43.0
		m = 6.2, M = 6.3 (Up,Ki).					Um	i(PKP)	03 08 44.9
"	2	Um	iP	00 44 17.2				iPKP	03 08 50.9
		Ud	iP	00 44 06.8			Ud	iPKP1	03 08 54.4
		Panama-Costa Rica border region (h = N).						i	03 09 17.1
"	2	Up	iP	06 30 59.0			De	iPKP1	03 09 05.4
			micr sec				South of Fiji Islands (h = 480 km).		
		P	Z'	0.2 1.6					
		(cont.)							

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979				1979			
July	3	Um iP	07 42 53.9	July	4	Ud iP	06 49 12.3
		North Pacific Ocean (h = 10 km).		"	4	Up ipP	06 56 30.8
"	3	Ud iPgl	11 42 58.4				micr sec
		iSgl	11 43 21.5			Mx E	0.4 8
"	3	Up iRg	13 03 07.7			Mx N	3.6 9
		Ud iRg	13 03 21.0			Mx Z	2.9 10
		Central Sweden. Near-surface event.				Ki iP	06 57 58.2
"	3	Up iSgl	15 44 27.3			Sk eP	06 57 13
		Ud iPgl	15 43 02.5			Um iP	06 57 16.5
		iSgl	15 43 27.9			i	06 57 20.5
		De eSgl	15 44 13			Ud ipP	06 56 35.3
		Southeastern Norway, near 59 1/4°N, 10°E. Origin time = 15 42 28. M <sub>L</sub> = 2.3 (Up,Ud,De). Explosion ?				De ipP	06 55 50.0
"	3	Ud iP	17 06 36.2	"	4	Yugoslavia (h = 30 km).	
		Nepal (h = N).		"	4	Ki iP	08 24 35.8
"	3	Ud iP	17 34 13.5			Southern Alaska (h = 150 km).	
		South Atlantic Ridge (h = 10 km).		"	4	Sk iP	08 27 07.5
"	3	Ud iP	23 00 21.0			Um iP	08 27 01.3
"	3	Ud iP	23 34 30.7			Ud iP	08 26 23.1
"	4	Up iPKP2	01 40 18.3			Yugoslavia (h = 10 km).	
		Um iPKP1	01 40 01.5	"	4	Ud iP	12 57 01.7
		Ud iPKP1	01 40 14.3	"	4	Ud i(P)	13 45 59.6
		Kermadec Islands region (h = 270 km).		"	4	Up i	14 06 39.9
"	4	Up iP	06 18 38.7 C			iRg	14 06 44.5
		iS	06 27 29			Ud iSgl	14 07 24.9
			micr sec			East-central Sweden. Near-surface event.	
		P Z'	0.3 0.9	"	4	Up iP	19 08 29.5
		Mx E	1.3 23			Ki iP	19 07 34.0
		Mx N	1.9 21			i	19 07 36.1
		Mx Z	2.7 20			Sk eP	19 08 05
		Ki iP	06 18 52.4			Um iP	19 08 01.6
			micr sec			i	19 08 03.7
		P Z'	0.2 1.2			Ud iP	19 08 26.8
		Sk iP	06 18 28.9			i	19 08 28.8
		i	06 19 05.0			De iP	19 08 49.5
		Um iP	06 18 13.5			i	19 08 51.4
		ipP	06 18 29.7			Fox Islands, Aleutian Islands (h = N). Double P, in average 2 s apart.	
		iS	06 26 44	"	4	Ud iP	19 39 40.1
		De iP	06 19 03.3	"	4	Up iS	20 54 25
		Kuril Islands (h = 80 km). m = 6.3 (Up,Ki).				Ki iP	20 43 39.1
							micr sec
						P Z'	0.3 20
						Sk iP	20 43 29.3
						Um iP	20 43 43.8
						(cont.)	

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979		1979	
July	4	July	5
	(cont.)		(cont.)
	Um iSKS 20 54 12		Up iRg 13 28 07.8
	iS 20 54 30		Ud iSgl 13 28 48.5
	Ud iP 20 43 33.1		East-central Sweden.
	De iP 20 43 37.3		Near-surface event.
	Costa Rica (h = 25 km).		
"	4 Ud iP 22 51 45.9	"	5 Up iPKP1 14 31 23.9
	Costa Rica (h = N).		Ud iPKP1 14 31 26.1
			De iPKP1 14 31 36.5
"	4 Sk eP 23 49 08	"	5 Up iP 15 51 04.4
	Um iP 23 49 07.4		micr sec
	Ud iP 23 48 30.1		P Z' 0.1 1.0
	Yugoslavia (h = 10 km).		Ki iP 15 51 05.6
"	5 Up iP 04 53 18.1		Sk iP 15 51 21.9
	i 04 54 34.4		Um iP 15 51 00.8
	Ki iP 04 53 47.1		i 15 51 18.5
	i 04 55 14.6		Ud iP 15 51 16.8
	Sk eP 04 53 52		De iP 15 51 15.4
	Um eP 04 53 27		Andaman Islands region
	i 04 54 39.6		(h = 35 km).
	Ud iP 04 53 34.2	"	5 Up iP 16 33 34.9
	De iP 04 53 21.2		Ud iP 16 33 36.6
	Iran (h = N).	"	5 Up iP 23 12 38.2
"	5 Up iP 06 22 24.1		Ud iP 23 12 35.3
	Ki iP 06 21 38.6	"	5 Up iP 23 19 54.9
	Sk iP 06 22 14.2		Ud iP 23 19 57.9
	Um iP 06 21 59.2	"	6 De iP 01 36 49.7
	De iP 06 22 47.8		Romania (h = 130 km).
	Kuril Islands (h = 70 km).	"	6 Up micr sec
"	5 Up iP 07 59 45.9		Mx Z 1.9 23
	Ki iP 07 58 52.1		Ki iPKP 02 20 01.1
	Sk eP 07 59 23		micr sec
	Um iP 07 59 18.5		Mx E 1.1 20
	Ud iP 07 59 44.5		Mx Z 1.6 21
	De iP 08 00 06.8		Um i(PKP) 02 19 55.9
	Fox Islands, Aleutian		iPKP 02 19 59.7
	Islands (h = 20 km).		Ud ePKP 02 19 50
"	5 Up iSgl 11 03 25.7		i 02 20 04.8
	Sk eSgl 11 03 03		Near coast of central
	Ud iPgl 11 02 01.2		Chile (h = 45 km).
	iSgl 11 02 23.5	"	6 Ki iP 10 20 37.8
	iRg 11 02 32.4		Ud iP 10 21 03.2
	Southeastern Norway,		Talau Islands (h = 70 km).
	near 60 3/4° N, 10° E.	"	6 Up iP 10 25 01.4
	Origin time = 11 01 29.		Ki iP 10 24 41.7
	Near-surface event.		Ud iP 10 25 08.8
"	5 Ki iP 13 01 33.1	"	6 Up iP 10 25 01.4
	Ud iP 13 02 34.2		Ki iP 10 24 41.7
"	5 Up i 13 28 03.9		Ud iP 10 25 08.8
	(cont.)		Philippine Islands region
			(h = N).



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1979				1979					
July	6	Up	iRg	12 59 03.4	July	7	(cont.)		
		Sk	eSgl	13 00 27			Ki	iP	08 57 13.2
		Um	iSgl	13 00 43.4			Sk	iP	08 57 41.1
		Ud	iRg	12 58 51.0			Um	iP	08 57 22.5
		De	iSgl	13 00 07.1			Ud	iP	08 57 47.5
		Bergslagen area, central Sweden.					De	iP	08 57 56.5
		Near-surface event.					Taiwan region (h = 300 km).		
"	6	Ud	iP	13 00 57.8	"	7	Up	eP	09 45 39
								iS	09 56 13
									micr sec
"	6	Up	iP	13 35 52.8				Mx	Z 1.7 21
		Ud	iP	13 35 50.3			Ki	eP	09 45 29
									micr sec
"	6	Up	iSgl	15 26 44.7				Mx	E 1.8 22
		Ud	iSgl	15 25 44.2				Mx	N 1.2 21
		De	iSgl	15 26 34.4			Sk	iP	09 45 20.8
		Southeastern Norway.					Um	iP	09 45 36.6
							Ud	iP	09 45 28.4
"	7	Ki	iPgl	03 20 24.1			Guatemala (h = 90 km).		
			iSgl	03 20 52.4					
		Sk	eSgl	03 21 59	"	7	Ud	eP	11 05 18
		Um	iSgl	03 22 04.0	"	7	Ud	iP	11 09 13.9
		Coast of Nordland, Norway, near 67 3/4°N, 15°E.							
		Origin time = 03 19 46.							
		M <sub>L</sub> = 2.3 (Ki).							
"	7	Up	iP	03 53 55.1 C			Up	iP	12 53 00.5
			iPP	03 55 12.8			Ki	iP	12 53 02.1
				micr sec			Um	iP	12 52 58.5
							Ud	eP	12 53 12
							Northern Sumatera (h = 60 km).		
			P	Z' 1.4 1.0	"	7	Up	iP	13 44 29.2
		Ki	iP	03 53 38.4 C			Sk	eP	13 45 12
				micr sec				i	13 45 14.6
							Um	iP	13 45 13.0
			P	Z' 1.1 0.8			Ud	iP	13 44 32.2
		Sk	iP	03 54 10.1 C			Southern Italy (h = 10 km).		
			iPP	03 55 32.8					
			iPcP	03 56 30.9	"	7	Ud	iP	23 25 59.1
		Um	iP	03 53 39.6 C			Kuril Islands (h = N).		
		Ud	iP	03 54 11.2 C					
		De	iP	03 54 18.6 C	"	8	Up	Mx	02 11
			iPP	03 55 40.8					micr sec
		Eastern Kazakh SSR.						Mx	Z 1.5 22
		m = 6.9 (Up,Ki).					Ki	Mx	02 11
		Underground explosion.							micr sec
"	7	Up	eP	04 14 43				Mx	E 2.2 20
		Ki	iP	04 14 23.9				Mx	N 2.2 22
		Sk	eP	04 14 47			Northern Easter Island Cordillera (h = 10 km).		
		Um	iP	04 14 29.1					
		Ud	iP	04 14 47.7	"	8	Ki	eP	02 36 59
		De	iP	04 14 55.5			Ud	iP	02 37 23.5
		Molucca Passage (h = 60 km).					Mindanao, Philippine Islands (h = 90 km).		
"	7	Up	iP	08 57 37.9					
		(cont.)							









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1979				1979			
July	14	(cont.)		July	15	Ki iP	22 04 59.0
		Ki iPKP	17 08 06.8			Ud iP	22 04 39.0
		Sk iPKP1	17 08 18.9			Leeward Islands (h = N).	
		Um iPKP1	17 08 13.4		"	16	Up iP
		Ud iPKP1	17 08 25.9				Ki iP
			iPKP2				05 51 05.6
		De iPKP1	17 08 34.2				Ud iP
		Kermadec Islands region					05 51 57.8
		(h = 380 km).					Kuril Islands (h = 45 km).
"	14	Um i	20 02 11.9	"	16	Up iP	06 09 11.6
		iSgl	20 02 15.1			Ki iP	06 09 05.7
		Tibet (h = N).			"	16	Up iP
"	14	Ud iP	21 11 07.2				20 39 09.6 C
		De iP	21 11 17.9			Ki iP	20 38 20.8
"	15	Up iP	06 01 18.7			Sk iP	20 38 56.6
			micr sec			Um iP	20 39 43.7 C
		P	Z' 0.2 1.1			Ud iP	20 39 15.1 C
		Ki iP	06 00 25.3			De iP	20 39 34.1
			micr sec			Kuril Islands (h = 130 km).	
		P	Z' 0.3 1.0	"	16	Um iP	21 15 22.7
		Sk iP	06 00 55.9			Ud iP	21 15 54.4
		Um iP	06 00 52.4	"	16	Up iP	23 55 45.9
		Ud iP	06 01 18.0			Ki iP	23 55 50.2
		De iP	06 01 40.7			Sk iP	23 55 18.5
		Fox Islands, Aleutian				Um iP	23 55 19.4
		Islands (h = 40 km).				Ud iP	23 55 43.5
		m = 6.1 (Up,Ki).				De iP	23 56 08.2
"	15	Ud iP	10 12 51.4			Southern Alaska (h = 140 km).	
		Leeward Islands (h = N).		"	17	Ki iP	06 33 17.0
"	15	Up iP	11 35 25.5			Sk iP	06 33 05.8
		Ki iP	11 35 20.5			Um iP	06 33 21.9
		Ud iP	11 35 15.6			Ud iP	06 33 10.6
		Costa Rica (h = 36 km).				Costa Rica (h = 45 km).	
"	15	Ki iP	15 18 15.7	"	17	Ki iP	09 01 24.0
		Sk eP	15 17 45			Sk iP	09 01 00.9
		Um iP	15 17 58.4			Ud iP	09 01 04.7
			i			Near Coast of Venezuela	
		Ud iP	15 17 27.6			(h = 25 km).	
		North of Ascension Island		"	17	Ki iP	14 55 47.0
		(h = 10 km).				Sk iP	14 55 34.0
"	15	Up iP	18 29 31.0			Um iP	14 55 50.5
		Sk iPKP1	18 29 22.8			Ud iP	14 55 39.9
		Um iPKP1	18 29 18.0			Costa Rica (h = 40 km).	
		Ud iPKP1	18 29 30.5	"	17	Up iP	16 14 09.5 C
		Kermadec Islands (h = N).				iSKS	16 24 35
"	15	Up i(P)	19 59 22.5			(cont.)	

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979					1979				
July	17	(cont.)			July	17	(cont.)		
		Up		micr sec			Ki ipP	20 53 32.6	
		P	Z'	0.2 1.4				micr sec	
		Mx	E	1.0 17			P	Z' 0.1 1.0	
		Mx	N	0.9 17			pP	Z' 0.2 1.1	
		Mx	Z	1.4 20			Sk ipP	20 53 45.8	
		Ki ipP		16 14 11.5 C			ipP	20 54 00.3	
		ipP		16 14 19.5			Um ipP	20 53 47.4	
		iS		16 25 02			ipP	20 54 02.1	
				micr sec			Ud ipP	20 54 11.1	
		P	Z'	0.3 1.5			ipP	20 54 25.6	
		Mx	E	1.4 22			De ipP	20 54 35.9	
		Mx	N	1.4 20			ipP	20 54 50.4	
		Mx	Z	1.4 20			Central Alaska.		
		Sk ipP		16 14 23.8			h = 55 km (Up,Ki,Sk,Um,Ud,De).		
		ipP		16 14 31.4			m = 5.9 (Up,Ki).		
		Um ipP		16 14 07.5 C					
		ipP		16 14 15.6		"	17	Up ipP	22 32 43.9
		iS		16 24 55				ipP	22 32 52.6
		Ud ipP		16 14 19.1 C				Ki ipP	22 32 10.3
		ipP		16 14 27.1				ipP	22 32 18.6
		De ipP		16 14 16.7 C				Sk ipP	22 32 50.7
		ipP		16 14 24.7				Um ipP	22 32 24.6
				Southwest of Sumatera.				ipP	22 32 33.0
				h = 25 km (Ki,Sk,Um,Ud,De).				Ud ipP	22 32 52.5
				m = 6.3, M = 5.5 (Up,Ki).				ipP	22 33 01.1
								Shikoku, Japan.	
"	17	Up ipP		17 15 16.6				h = 30 km (Up,Ki,Um,Ud).	
		Ki ipP		17 16 08.0					
		Sk ipP		17 15 52.6		"	17	Um iPgl	23 34 07.7 C
		Um ipP		17 15 40.8				iSgl	23 34 15.1
		Ud ipP		17 15 28.1				Västerbotten, Sweden,	
		De ipP		17 15 03.7				64.3°N, 20.8°E.	
		Red Sea (h = 10 km).						Origin time = 23 33 58.	
								By combination with Finnish	
"	17	Up ipP		17 59 31.2				station readings.	
		Ki ipP		17 59 33.2			"	18	Up iPKP1
		Sk ipP		17 59 45.7					00 49 01.5
		Um ipP		17 59 29.7				iSKP1	00 51 53.8
		Ud ipP		17 59 41.7				Ki iPKP	00 48 54.4
		De ipP		17 59 38.7				iSKP1	00 51 30.8
		Southwest of Sumatera						Sk i(PKP)	00 48 55.1
		(h = 30 km).						Um i(PKP)	00 48 50.6
								i	00 48 55.4
"	17	Ki ipP		18 11 42.1				iPKP	00 49 02.6
		Ud ipP		18 12 36.8				iSKP1	00 50 42.5
		Rat Islands, Aleutian						Ud iPKP1	00 49 03.9
		Islands (h = 90 km).						iSKP1	00 51 54.5
"	17	Up ipP		20 54 13.9				De iPKP1	00 49 15.6 D
		ipP		20 54 28.5				iSKP1	00 52 03.3
				micr sec				Fiji Islands region	
		P	Z'	0.1 1.1				(h = 560 km).	
		pP	Z'	0.1 1.2			"	18	Up ipP
		Ki ipP		20 53 17.8					04 44 16.8
		(cont.)						Sk ipP	04 44 42.1
								(cont.)	





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1979				1979								
July	19	(cont.)		July	20	Sk	iP	03 00 59.8				
		Sk	iP			Um	iP	03 00 58.7				
		Um	iP			Albania (h = 10 km).						
		Ud	iP			"	20	Up	i	04 00 08.6		
		Near east coast of Honshu, Japan (h = 60 km).						Ki	iP	04 00 57.5		
"	19	Ki	iP					Sk	eP	04 00 31		
		Um	iP					Ud	iP	03 59 59.5		
		Ud	iP					De	i	03 59 35.7		
		Kuril Islands (h = N).						Dodecanese Islands (h = N).				
"	19	Up	iP			"	20	Um	iP	05 53 27.7		
		Ki	iP			"	20	Up	iP	07 20 38.9		
		Sk	iP					Ud	iP	07 20 40.3		
		Um	iP			"	20	Up	iPKP	13 08 28.7		
		Ud	iP					Um	i	13 08 28.7		
		De	iP					Ud	iPKP	13 08 29.2		
		Afghanistan-USSR border region (h = 100 km).						New Hebrides Islands (h = 590 km).				
"	19	Up	iPKP2			"	20	Up	i	14 08 47.6		
		Ki	ePKP						i	14 08 51.7		
		Sk	iPKP1						iRg	14 08 53.9		
		Um	iPKP1					Ud	iRg	14 08 38.3		
		Ud	iPKP1					Central Sweden. Near-surface event.				
			iPKP2					"	20	Up	iPKP1	15 06 46.6
		Kermadec Islands region (h = 430 km).								Ud	iPKP1	15 06 47.3
"	19	Ki	iP					Kermadec Islands region (h = N).				
		Ud	iP			"	20	Up	iP	15 24 18.9		
"	19	Sk	iP					Ki	iP	15 23 55.7		
		Um	iP					Sk	iP	15 24 23.3		
		Afghanistan-USSR border region (h = 100 km).						Um	iP	15 24 04.0		
"	19	Up	iPKP2					Ud	iP	15 24 28.6 C		
		Sk	iPKP1					De	iP	15 24 37.0		
		Um	iPKP1					Taiwan (h = 25 km).				
		Ud	iPKP2			"	20	Up	iP	15 27 22.5		
"	20	Up	iPKP1					Ud	iP	15 27 24.0		
			iSKP1			"	20	Ud	iP	15 52 45.4		
		Ki	iPKP					"	20	Ud	iP	17 27 07.5
			iSKP1			"	20	Ki	iP	20 19 06.1		
		Sk	iSKP1					Sk	iP	20 18 50.1		
		Um	i(PKP)					Um	iP	20 19 08.1		
			iPKP					Ud	iP	20 18 53.5		
		Ud	iPKP1					De	iP	20 18 54.4		
			iSKP1					Northern Columbia (h = 170 km).				
		De	iPKP1									
		Fiji Islands region (h = 560 km).										

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1979				1979							
July	20	Up	iP	21 30	40.3	July	21	(cont.)			
								Ud iP	05 07	23.6 C	
			P	Z'	0.1 1.0			De iP	05 07	20.6	
		Ki	iP	21 29	51.4			Hindu Kush region			
								(h = 230 km).			
			P	Z'	0.1 0.9						
		Sk	iP	21 30	28.3	"	21	Up iP	05 32	58.0	
		Um	iP	21 30	14.1					micr sec	
		Ud	iP	21 30	45.1			Mx N	1.1	20	
		De	iP	21 31	05.2			Mx Z	1.4	20	
		Kuril Islands (h = 130 km).						Ki iP	05 31	26.5	
		m = 5.6 (Up,Ki).								micr sec	
"	20	Up	iPKP1	21 55	31.0			P Z'	0.1 0.9		
			iPKP2	21 55	39.0			Mx E	0.7 12		
		Ki	iPKP1	21 55	11.1			Mx N	1.1 17		
		Sk	iPKP1	21 55	26.2			Sk iP	05 32	00.4	
		Um	iPKP1	21 55	20.9			i	05 33	44.1	
		Ud	iPKP	21 55	27.1			Um iP	05 32	14.5	
			iPKP1	21 55	33.2			i	05 34	36.6	
		De	iPKP1	21 55	41.6			Ud iP	05 32	48.4	
			iPKP2	21 55	56.1			i	05 35	41.8	
		South of Kermadec Islands						De iP	05 33	40.6	
		(h = 100 km).						Greenland Sea (h = 10 km).			
"	20	Up	iPKP1	23 03	25.0	"	21	Um iP	05 53	55.7	
			i	23 05	46.1			Ud iP	05 54	19.5	
		Ki	iPKP	23 03	15.4			South of Honshu, Japan			
			iSKP1	23 05	54.2			(h = N).			
		Sk	e(PKP)	23 03	19	"	21	Up iPKP2	08 00	18.7	
			iSKP1	23 06	09.7			Sk iPKP1	08 00	09.2	
		Um	i(PKP)	23 03	18.7			Um iPKP1	08 00	04.2	
			iPKP	23 03	23.9			Ud iPKP1	08 00	15.7	
			iSKP1	23 06	05.5			iPKP2	08 00	18.0	
		Ud	iPKP1	23 03	27.1			Kermadec Islands (h = N).			
			iPKP	23 03	30.9						
			iSKP1	23 06	17.0	"	21	Um iP	10 59	06.9	
		De	iPKP1	23 03	38.3			Ud iP	10 58	59.8	
			i	23 05	47.9			Near coast of Chiapas,			
			iSKP1	23 06	26.7			Mexico (h = 70 km).			
		South of Fiji Islands					"	21	Up iP	12 25	04.2
		(h = 530 km).							i	12 25	15.8
"	21	Up	ipP	02 00	11.4			iSKS	12 35	31	
		Ki	iP	01 59	45.8			iS	12 35	46	
		Um	ipP	01 59	55.4					micr sec	
		Ud	iP	01 59	42.0			P Z'	0.1 1.0		
			ipP	02 00	14.1			Mx E	1.2 21		
		Near east coast of Kamchatka						Mx N	1.1 20		
		(h = 120 km).						Mx Z	1.7 21		
"	21	Up	iP	05 07	06.9 C			Ki iP	12 24	53.5	
		Ki	iP	05 07	15.9 C			iS	12 35	28	
		Sk	iP	05 07	32.9					micr sec	
		Um	iP	05 07	05.8 C			P Z'	0.4 1.9		
		(cont.)						Mx E	1.7 19		
								(cont.)			

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979					1979						
July	21	(cont.)			July	22	Up	iP	13 29 29.0		
		Ki		micr sec			Ki	iP	13 29 12.8		
		Mx	N	1.0 19			Um	iP	13 29 18.2		
		Mx	Z	1.9 20			Ud	iP	13 29 37.3		
		Sk	iP	12 24 47.4			Molucca Passage (h = 80 km).				
		Um	iP	12 25 01.3		"	22	Up	iP	13 47 50.2	
			iSKS	12 35 27				Ki	iP	13 47 01.0	
		Ud	iP	12 24 55.6				Um	iP	13 47 24.8	
		De	iP	12 25 03.0				Ud	iP	13 47 55.1	
		Near coast of Chiapas, Mexico (h = 30 km).						Kuril Islands (h = 140 km).			
		m = 6.1, M = 5.5 (Up,Ki).					"	22	Up	iP	15 59 12.7
"	21	Um	iP	20 28 04.1				Ki	iP	15 58 55.9	
		Ud	iP	20 28 23.1				Ud	iP	15 59 23.7	
		Talaud Islands (h = 190 km).						Luzon Philippine Islands (h = 50 km).			
"	21	Ud	iSgl	21 13 13.0		"	22	Up	iSgl	18 14 05.8	
"	22	Up	iP	04 10 30.0				Ki	eSgl	18 15 19	
		Ud	iP	04 10 32.3				Sk	i	18 12 21.3	
		De	iP	04 10 41.7					iSgl	18 12 40.7	
"	22	Up	iPKP	04 31 11.9				Um	iSgl	18 14 27.2	
		Ki	iPKP	04 31 26.7				Ud	iPn	18 11 55.1	
		Sk	ePKP	04 31 17					iPgl	18 12 05.7	
		Um	iPKP	04 31 19.5					iSgl	18 13 03.9	
		Ud	iPKP	04 31 10.0			De	i	18 14 00.1		
		South Sandwich Islands region (h = 90 km).							iSgl	18 14 26.0	
"	22	Up	iP	05 44 11.1				West coast of Norway, near near 62°N, 5°E. Origin time = 18 10 47. M <sub>L</sub> = 2.9 (Up,Sk,Um,Ud,De). Felt.			
			i	05 44 21.3			"	22	Um	iP	18 30 43.4
			iS	05 54 41				Ud	iP	18 31 02.5	
				micr sec			"	22	Up	iP	20 32 24.4
		P	Z'	0.1 1.0				Ud	iP	20 32 26.2	
		Mx	E	0.8 15				De	iP	20 32 35.4	
		Mx	N	1.1 16			"	22	Up	iPKP1	23 39 12.8
		Mx	Z	3.8 16					iPKP2	23 39 16.6	
		Ki	iP	05 44 51.8					i	23 39 52.3	
			iS	05 54 05				Ki	ePKP	23 38 53.3	
				micr sec				Sk	iPKP1	23 39 05.9	
		P	Z'	0.1 1.1				Um	iPKP1	23 39 01.0	
		Mx	E	3.0 16				Ud	iPKP1	23 39 14.2	
		Mx	N	1.0 14					iPKP2	23 39 19.2	
		Mx	Z	2.5 14				De	iPKP1	23 39 23.0	
		Sk	eP	05 44 19				Kermadec Islands region (h = 45 km).			
		Um	iP	05 43 59.2			"	23	Ud	iP	00 49 36.8
			iS	05 54 19				Hokkaido, Japan region (h = 35 km).			
		Ud	iP	05 44 19.1							
		De	iP	04 45 26.7							
		Luzon, Philippine Islands (h = 50 km).									
		m = 5.7, M = 5.6 (Up,Ki).									



Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979					1979					
July	24	(cont.)			July	24	(cont.)			
		Ud	iSn	16 05 21.2			Ud	iSgl	21 05 58.7	
			iSgl	16 05 42.5			De	eSgl	21 06 24	
		De	iPn	16 03 40.6			Southwestern Norway.			
			iPgl	16 03 48.6						
			iSgl	16 04 36.6		"	24	Up	eP	22 18 04
		Southeastern Baltic Sea, near 55 1/4°N, 20°E.						Ki	eP	22 18 04
		Origin time = 16 02 44							i	22 18 15.3
		M <sub>L</sub> = 2.7 (Ud).						Sk	iP	22 17 47.7
								Um	iP	22 18 04.5
								Ud	iP	22 17 53.2
"	24	Up	iP	19 45 02.4			South of Panama (h = N).			
			i	19 45 34.4						
			iPP	19 48 58.2		"	24	Up	iP	22 34 11.3
			iSKS	19 56 10					ipP	22 34 22.4
			iS	19 56 29				Ki	iP	22 33 17.8
				micr sec					ipP	22 33 29.0
		PP	Z'	0.3 1.2				Sk	iP	22 33 46.5
		Mx	E	29 20					ipP	22 33 57.9
		Mx	N	74 26				Um	iP	22 33 45.5
		Mx	Z	40 19					ipP	22 33 56.1
		Ki	iP	19 44 59.5				Ud	iP	22 34 09.5
				micr sec					ipP	22 34 20.6
		P	Z'	0.2 1.0				De	iP	22 34 32.8
		Mx	E	57 18					ipP	22 34 44.2
		Mx	N	62 20				Alaska Peninsula.		
		Mx	Z	26 17				h = 40 km (Up,Ki,Sk,Um,Ud,De).		
		Sk	iP	19 45 13.5						
			iPP	19 49 22.4		"	24	Ud	iP	23 04 57.6
		Um	iP	19 44 57.5			Kuril Islands (h = 60 km).			
			iPP	19 48 53.8						
			iSKS	19 56 09		"	24	Up	iP	23 34 27.7
			iS	19 56 22				Ud	iP	23 35 37.1
		Ud	iP	19 45 09.5				De	iP	23 35 05.1
			i	19 45 36.3			Crete (h = N).			
			iPP	19 49 19.8						
		De	iP	19 45 10.3		"	25	Up	iP	00 22 27.7
			iPP	19 49 12.9				Um	iP	00 23 05.8
		South of Java (h = 30 km).						Ud	iP	00 22 29.3
		M = 7.2 (Up,Ki).						De	iP	00 21 52.9
							Southern Italy (h = 300 km).			
"	24	Up	iPKP	20 10 46.3		"	25	Up	iPKP	01 36 23.0
			iSKP1	20 13 57.3				Ud	i(PKP)	01 36 12.0
		Ki	iPKP	20 10 31.2				De	i(PKP)	01 36 22.5
		Sk	iPKP	20 10 41.8			South of Fiji Islands			
		Um	iPKP	20 10 38.4			(h = 510 km).			
			iSKP1	20 13 40.1						
		Ud	iPKP	20 10 47.6						
		New Hebrides Islands (h = 240 km).				"	25	Ud	iP	02 56 33.4
						"	25	Um	iSKP1	09 44 17.2
"	24	Up	iSgl	21 06 57.4				Ud	iPKP	09 41 42.4
		Sk	eSgl	21 06 40					iSKP1	09 44 31.7
		Ud	i	21 05 53.3			Fiji Islands region			
		(cont.)					(h = 480 km).			

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979				1979							
July	25	Up	e(PKP)	18 16 19	July	26	Ki	iP	15 16 16.4		
			iPKP	18 16 26.5			Sk	iP	15 16 10.1		
			iSKP1	18 20 00.7			"	26	Up	iP	15 22 23.8 C
		Ki	iPKP	18 16 15.4			Ki	iP	15 21 46.4		
			e	18 19 35			Sk	iP	15 22 18.7		
		Sk	iPKP	18 16 18.6			Um	iP	15 22 02.6		
		Um	iPKP	18 16 22.2			Ud	iP	15 22 30.9 C		
		Ud	i(PKP)	18 16 16.7			De	iP	15 22 45.3		
			iPKP	18 16 24.7			Off east coast of Honshu, Japan (h = N).				
			i	18 18 47.3			"	26	Up	iP	16 24 16.5
		De	iPKP	18 16 29.5					Ud	iP	16 24 18.7
		Tuamoto Archipelago region (h = 0 km).					"	26	Up	iP	18 00 17.0
"	25	Up	i	19 34 54.5			Ki	iP	17 59 24.9		
				micr sec			Sk	iP	17 59 55.5		
		Mx	Z	0.6 14			Um	iP	17 59 51.0 D		
		Ki	iP	19 35 52.6			Ud	iP	18 00 17.1 D		
				micr sec			De	iP	18 00 39.6 D		
		Mx	E	0.6 14			Aleutian Islands region (h = N).				
		Ud	iP	19 34 53.6			"	26	Up	i(P)	18 37 09.2
		De	iP	19 34 20.5			"	26	Ki		micr sec
		Crete (h = N).							Mx	E	19 20
"	25	Up	i	23 23 12.0			Sk	iP	19 10 24.1		
		Ud	i	23 23 14.5			Um	iP	19 10 23.8		
		Off east coast of Honshu, Japan (h = 60 km).					Ud	iP	19 09 45.8		
"	26	Um	iP	00 51 02.2			Yugoslavia (h = 10 km).				
		Ud	iP	00 51 15.0			"	26	Up	i(PKP)	20 16 43.8
"	26	Up	eP	08 43 56					iPKP1	20 16 51.0	
		Ki	iP	08 43 43.7			Ki	ePKP	20 16 33		
		Ud	iP	08 44 02.7			Sk	iPKP1	20 16 44.4		
		Mindoro, Philippine Islands (h = 30 km).					Um	iPKP1	20 16 39.4		
"	26	Ud	iP	12 05 42.2			Ud	iPKP1	20 16 52.8		
"	26	Ud	iP	12 16 35.2			De	iPKP1	20 17 01.1		
		De	iP	12 16 02.4			Kermadec Islands (h = 70 km).				
		Crete (h = N).					"	27	Ud	iP	02 06 05.3
"	26	Up	iSg1	14 20 23.4			"	27	Ki	iP	04 37 26.3
		Sk	iSg1	14 20 27.6					Sk	iP	04 38 03.9
		Ud	iPg1	14 18 32.1					Um	eP	04 37 56
			i	14 19 10.4					i		04 38 05.0
			i	14 19 22.1					Ud	iP	04 38 27.8
			iSg1	14 19 26.8					Eastern Siberia (h = N).		
		De	iSn	14 19 20.6			"	27	Up	iP	05 04 21.4
		Southwestern coast of Norway, near 58 1/2°N, 6 1/2°E.							ipP		05 04 39.7
		Origin time = 14 17 18.							Ki	iP	05 03 27.9
		M <sub>L</sub> = 2.7 (Ud).							Sk	iP	05 04 05.4
		Explosion?							Um	iP	05 03 53.9
									(cont.)		

Up = Uppsala, Ki = Kiruna, Sk = Skalistugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979				1979						
July	27	(cont.)		July	27	Sk	eP	22 27 55		
		Um	iPcP			Um	iP	22 27 49.7		
		Ud	iP				i	22 27 59.6		
		De	iP			Ud	iP	22 28 03.9		
		Near east coast of Kamchatka (h = 80 km).		"	28	Up	iPKP	05 14 23.8		
"	27	Up	eP			Ki	i	05 14 15.6		
			i			Um	i	05 14 22.5		
			i			Ud	iPKP	05 14 21.9		
		Ki	iP			De	iPKP1	05 14 32.4		
			i			Fiji Islands region (h = 590 km).				
		Sk	iP	"	28	Up	iPKP	05 53 51.1		
			i			Sk	iPKP	05 53 44.1		
		Um	iP				i	05 53 55.1		
		Ud	iP			Um	iPKP	05 53 39.5		
			i				i	05 53 50.9		
		De	iP			Ud	iPKP	05 53 52.6		
			i			De	iPKP1	05 54 07.0		
		Near north coast of Greenland (h = 10 km).		"	28	Up	iP	15 15 50.9		
"	27	Up	iSgl			Ki	eP	15 15 32		
		Sk	iSgl			Um	iP	15 15 39.5		
		Um	iSgl			Ud	iP	15 16 00.0		
		Ud	iPgl			Luzon, Philippine Islands (h = N).				
			iSgl			"	28	Up	iP	15 33 11.4
		De	eSgl				ipP	15 33 16.6		
		Southern Norway, near 60 1/2° N, 7° E. Origin time = 12 05 50. M <sub>L</sub> = 2.6 (Um,Ud).					iS	15 41 32		
		Explosion?						micr sec		
"	27	Up	iP			P	Z'	0.2 1.6		
		Ud	iP			Mx	E	1.5 16		
		Ionian Sea (h = N).				Mx	N	1.2 14		
"	27	Um	iPKP			Mx	Z	1.6 17		
		Ud	iPKP			Ki	iP	15 32 24.0		
		De	iPKP				ipP	15 32 28.9		
		Solomon Islands (h = 50 km).						micr sec		
"	27	Sk	iP			P	Z'	0.4 1.8		
		Um	iP			Mx	E	2.7 17		
		Near coast of Chiapas, Mexico (h = 80 km).				Mx	N	1.2 14		
"	27	Ki	iP			Mx	Z	1.4 17		
		Sk	iP			Sk	iP	15 33 02.1		
		Um	iP				ipP	15 33 07.5		
		Ud	iP			Um	iP	15 32 46.1		
		De	iP				ipP	15 32 50.4		
"	27						iS	15 40 43		
						Ud	iP	15 33 19.1		
							ipP	15 33 23.4		
						De	iP	15 33 37.7		
							ipP	15 33 43.7		
		Minahassa Peninsula (h = 100 km).				Sakhalin Island. h = 20 km (Up,Ki,Sk,Um,Ud,De). m = 6.1, M = 5.4 (Up,Ki).				

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979									1979								
July	28	Up	ePn	15 43 21					July	29	(cont.)						
			iSn	15 44 43.9							De	iP	01 49 07.8				
			i	15 45 02.1							Southern Sinkiang Prov., China (h = N).						
			iSgl	15 45 28.0							"	29	Up	iP	02 41 02.9		
		Ki	iSn	15 45 47.3									Ki	iP	02 42 16.9		
		Sk	e	15 42 51									Sk	iP	02 41 43.6		
			iSn	15 43 35.4									Um	iP	02 41 41.8		
		Um	eSn	15 44 56										i	02 41 48.7		
		Ud	iPn	15 42 54.8									Ud	iP	02 41 09.5		
			iSn	15 43 57.2										i	02 41 14.9		
			iSgl	15 44 27.7										i	02 41 19.5		
		De	iSn	15 44 52.0									De	i	02 40 35.7		
		Norwegian Sea 62 1/4°N, 2°E.												Greece (h = 40 km).			
		Origin time = 15 41 29.															
		M <sub>L</sub> = 3.1 (Up,Ud).															
"	28	Up	iP	17 06 37.6					"	29	Up	eP	05 38 52				
		Ki	iP	17 06 11.7										micr	sec		
		Ud	iP	17 06 47.2								Mx	E	0.8	14		
		Ryukyu Islands (h = N).											Mx	N	0.7	14	
													Mx	Z	0.9	16	
"	28	Um	iP	18 53 06.8							Ki	eP	05 38 47				
		Ud	iP	18 53 34.6										micr	sec		
		Near south coast of Honshu, Japan (h = 320 km).												Mx	E	0.9	15
														Mx	N	0.6	14
														Mx	Z	0.7	14
"	28	Up		micr	sec						Um	eP	05 38 48				
			Mx	E	1.2	21								iS	05 49 47		
			Mx	N	1.1	21					Ud	i	05 39 15.9				
			Mx	Z	2.3	21							iPP	05 42 50.2			
		Ki		micr	sec								Southwest of Sumatera (h = 25 km).				
			Mx	E	0.8	17							M = 5.4 (Up,Ki).				
			Mx	N	0.9	18											
			Mx	Z	1.2	18											
		Um	eP	20 19 12							"	29	Ki	i	05 45 04.0		
		Off coast of Mexico (h = 10 km).												Southwest of Sumatera (h = N).			
		M = 5.5 (Up,Ki).															
"	28	Ki	iP	23 12 36.2					"	29	Up	iP	07 25 39.7				
			i	23 14 39.4							Um	iP	07 25 38.1				
		Sk	iP	23 12 41.4							Ud	iP	07 25 56.4				
			iS	23 14 33.9							Afghanistan-USSR border region (h = 90 km).						
		Um	iP	23 13 11.2													
			iS	23 15 16.7							"	29	Up	iP	08 01 07.6		
		Ud	iP	23 13 28.2									Ki	iP	08 00 56.4		
			iS	23 16 03.7									Sk	iP	08 00 49.3		
		Jan Mayen Island region, approximate location 71°N, 6°W.											Um	iP	08 01 04.5		
		Origin time = 23 10 16.											Ud	iP	08 00 58.6		
													De	iP	08 01 06.0		
													Near coast of Chiapas, Mexico (h = N).				
"	29	Up	iP	01 48 49.9					"	29	Up	iP	10 03 28.2				
		Ki	iP	01 48 46.1									Ud	iP	10 03 27.6		
		Ud	iP	01 49 06.7									(cont.)				
		(cont.)											(cont.)				





Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979

July 31 (cont.)  
Um i 11 58 55.0  
Northern China (h = N).

" 31 Up i 17 34 48.7  
i 17 34 52.5  
iRg 17 34 56.4  
Ud iRg 17 34 47.1  
Central Sweden.  
Near-surface event.

May 15, 1981

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SEISMOLOGICAL BULLETIN

U P P S A L A, K I R U N A, S K A L S T U G A N, U M E Å,

U D D E H O L M and D E L A R Y

Uppsala	(Up):	59°51.5'N,	17°37.6'E;	h = 14 m
Kiruna	(Ki):	67°50.4'N,	20°25.0'E;	h = 390 m
Skalstugan	(Sk):	63°34.8'N,	12°16.8'E;	h = 580 m
Umeå	(Um):	63°48.9'N,	20°14.2'E;	h = 16 m
Uddeholm	(Ud):	60°05.4'N,	13°36.4'E;	h = 240 m
Delary	(De):	56°28.2'N,	13°52.2'E;	h = 150 m

AUGUST 1 - 31, 1979

1979					1979						
Aug.	<u>Note:</u> Readings from the Fennolora project shooting are omitted in this bulletin. These will be accounted for in a separate paper.				Aug.	1	(cont.)				
"	1	Ki	iP	02 22 02.6			Sk	iPKP2	11 28 17.1		
"	1	Ki	iP	04 06 10.8			Um	iPKP1	11 27 51.1		
"	1	Up	iPKP1	04 07 31.7			Ud	iPKP2	11 28 11.7		
"	1	Ud	iPKP1	04 07 36.4				i	11 28 19.6		
"	1	Up	iP	11 02 09.4			De	iPKP1	11 27 56.5		
			i	11 02 12.6			West of Macquarie Island (h = 10 km).				
				micr sec		"	1	Ud	iP	11 34 08.2	
		P	Z'	0.1 1.0				Up	iPKP1	12 03 42.4	
		Mx	E	0.4 20				Ud	iPKP1	12 03 43.6	
		Mx	N	0.7 20				De	iPKP1	12 03 53.7	
		Mx	Z	0.8 20				i	12 03 59.3		
		Ki	iP	11 01 29.5			"	1	Up	Mx	15 03
				micr sec						micr sec	
		Mx	E	0.4 13				Mx	Z	0.8 20	
		Mx	N	0.4 13				Ki	Mx	15 09	
		Sk	eP	11 01 43						micr sec	
		Um	iP	11 01 51.7				Mx	E	0.3 18	
			i	11 01 54.2				Mx	N	0.2 15	
			iS	11 11 20			Easter Island region (h = 10 km).				
		Ud	iP	11 02 03.1			"	2	Ki	Mx	08 46
			i	11 02 05.7						micr sec	
		De	iP	11 02 21.1				Mx	E	0.4 20	
		Off coast of northern California.						Mx	N	0.3 18	
		h = 10 km (Up,Um,Ud).					Near coast of northern Chile (h = 35 km).				
		M = 5.0 (Up,Ki).					"	2	Ud	iRg	11 19 28.3
"	1	Up	iPKP1	11 27 52.7			Local near-surface event.				
			iPKP2	11 28 03.2			"	2	Ki		micr sec
		Ki	iPKP1	11 27 52.5				Mx	N	0.3 10	
			iPKP2	11 27 58.6				Um	iP	14 46 40.7	
		(cont.)						Ud	iP	14 46 00.9	
							Yugoslavia (h = 10 km).				

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979				1979			
Aug.	2	Ud iP	18 11 01.1	Aug.	4	(cont.)	
			Near east coast of Kamchatka (h = 80 km).			Ki	micr sec
						P	Z' 2.1 1.0
"	2	Ud eP	19 57 38			Mx	E 1.2 8
			Bonin Islands region (h = N).			Mx	N 0.8 8
"	3	Ud iP	04 02 11.1			Mx	Z 0.7 8
			Hokkaido, Japan region (h = 60 km).			Um iP	04 03 40.0 C
"	3	Up iP	06 57 58.0			i	04 04 17.3
		Ki iP	06 58 05.9			Ud iP	04 04 11.5 C
		Ud iP	06 58 14.7			i	04 05 34.3
		De iP	06 58 11.3			De iP	04 04 18.8 C
						i	04 04 46.4
						i	04 05 40.3
"	3	Sk iP	11 56 03.9				Eastern Kazakh SSR.
		Um eP	11 56 22				m = 7.1 (Up,Ki).
		Ud iP	11 56 06.0				Underground explosion.
			Venezuela (h = 20 km).	"	4	Ud iP	05 22 55.8
"	3	Ki iP	15 18 44.7				Kirgiz SSR (h = 25 km).
		Um iP	15 19 04.7	"	4	Ki	micr sec
		Ud iP	15 19 11.4			Mx	E 0.7 19
			Southern Nevada.			Mx	N 0.4 15
			Underground explosion.			Mx	Z 0.3 15
"	3	Ud iP	16 10 14.5			Ud iP	05 52 28.3
"	3	Ud iP	22 39 13.1				Kuril Islands (h = N).
"	4	Up Mx	02 15	"	4	Ud iP	09 33 32.5
			micr sec	"	4	Ud iP	21 43 55.7
		Mx	E 1.0 25	"	4	Up iP	23 15 06.7
		Mx	N 0.9 24				micr sec
		Mx	Z 2.2 23			P	Z' 0.1 1.2
		Ki Mx	02 13			Ki iP	23 14 56.5
			micr sec			Um iP	23 14 56.4
		Mx	E 1.1 20			Ud iP	23 15 20.5
		Mx	N 1.4 23			De iP	23 15 24.4
		Mx	Z 1.1 21				Tibet (h = 35 km).
			South Pacific Cordillera (h = 10 km).	"	5	Up iP	00 15 29.4
			M = 5.9 (Up,Ki).			i	00 15 30.3
"	4	Up iP	04 03 55.1 C			Ki iP	00 14 42.8
			micr sec			i	00 14 44.4
		P	Z' 1.4 0.6			Um iP	00 15 03.8
		Mx	N 0.7 10			i	00 15 05.3
		Mx	Z 2.1 10			Ud iP	00 15 35.2
		Ki iP	04 03 38.8 C			i	00 15 36.3
		i	04 04 42.7			De iP	00 15 53.9
		(cont.)					Kuril Islands (h = N).
				"	5	Up iP	01 12 48.4
						i	01 12 51.6
						(cont.)	



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1979				1979			
Aug.	6	(cont.)		Aug.	6		
		Ud	iP 07 52 23.1			Um	iP 18 35 24.1
		Yugoslavia (h = 10 km).					i 18 35 33.9
"	6	Up	iPKP1 13 55 53.6	"	6	De	iPKP1 19 36 30.3
		Ud	iPKP1 13 55 54.4			Fiji Islands region	
		De	iPKP1 13 56 04.3			(h = 550 km).	
		South of Fiji Islands		"	6	Up	iP 22 05 26.8
		(h = 120 km).				Ki	eP 22 04 38
"	6	Ki	iPgl 16 38 04.1			Um	iP 22 05 00.6
			iSgl 16 38 34.8			Ud	iP 22 05 32.0
		Off coast of northern Norway, near 70°N, 17°E.				De	iP 22 05 53.7
		Origin time = 16 37 24.		"	7	Up	iP 04 55 22.6
		M <sub>L</sub> = 2.4 (Ki).					ipP 04 55 40.2
		By combination with Tromsø and Finnish station readings.					iPP 04 59 23.2
"	6	Ki	iPgl 16 44 02.5				micr sec
			iSgl 16 44 32.1			Mx	N 0.3 19
		Off coast of northern Norway, near 70°N, 17°E.				Mx	Z 0.5 19
		Origin time = 16 43 22.				Ki	iP 04 55 19.9
		M <sub>L</sub> = 2.3 (Ki).					ipP 04 55 35.9
		By combination with Tromsø and Finnish station readings.					micr sec
"	6	Up	iP 17 17 19.7			Mx	E 0.6 18
			i 17 17 34.2			Mx	N 0.6 19
			eS 17 27 16			Mx	Z 0.7 17
			micr sec			Um	ipP 04 55 35.1
		i	Z' 0.1 1.0			Ud	iP 04 55 32.9
		Mx	E 1.4 15				i(PP) 04 58 49.9
		Mx	N 2.5 14				iPP 04 59 39.0
		Mx	Z 3.8 15			Java.	
		Ki	iP 17 16 43.8			h = 60 km (Up,Ki).	
			i 17 16 50.5			M = 5.1 (Up,Ki).	
			i 17 16 57.6	"	7	Up	iP 11 52 30.0
			micr sec	"	7	Up	Mx 14 41
		i	Z' 0.1 1.5				micr sec
		i	Z' 0.2 1.3			Mx	N 0.3 15
		Mx	E 2.9 15			Mx	Z 0.5 18
		Mx	N 3.4 16			Ki	Mx 14 47
		Mx	Z 2.5 14				micr sec
		Um	iP 17 17 04.0			Mx	N 0.6 18
			i 17 17 16.2			Mx	Z 0.4 19
			iS 17 26 42			Southwest of Africa	
		Ud	iP 17 17 12.4			(h = 10 km).	
			i 17 17 20.1			M = 5.1 (Up,Ki).	
			i 17 17 26.9	"	7	Ud	eP 14 42 42
		De	iP 17 17 29.2	"	7	Up	iPKP1 17 20 39.6
			i 17 17 37.0			Ud	iPKP1 17 20 42.1
		Central California (h = 5 km).		"	7	Ud	iP 18 29 42.2
		M = 5.8 (Up,Ki).		"	7	Ud	i(P) 18 36 48.9

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979						1979					
Aug.	7	Up	ePn	21 36 23		Aug.	8	(cont.)			
		Um	iSn	21 38 13.3					Ud	i	09 38 35.3
			iSg2	21 39 27.7					De	iP	09 38 35.0
		Ud	iPn	21 35 57.1						i	09 38 42.3
			iSn	21 36 53.9					Luzon, Philippine Islands		
			iSgl	21 37 25.0					(h = 55 km).		
		De	ePn	21 36 18					M = 5.2 (Up,Ki).		
			iSn	21 37 32.5							
		Norwegian Sea, near 60 3/4°N, 1 1/2°E.					"	8	Up	Mx	11 11
		Origin time = 21 34 25.									micr sec
		M <sub>L</sub> = 3.3 (Ud).								Mx	N 0.6 16
		By combination with Bergen and Kongsberg readings.								Mx	Z 0.8 19
								Ki	Mx	11 18	
										micr sec	
"	8	Up	iP	00 28 03.7						Mx	N 0.4 15
			iLgl	00 32 22.5						Mx	Z 0.5 14
		Um	iP	00 28 43.5					South Atlantic Ridge		
		Ud	iLgl	00 33 06.2					(h = 10 km).		
		De	iP	00 27 36.2					M = 5.2 (Up,Ki).		
		Romania (h = 40 km).					"	8	Ud	iP	11 25 31.3
"	8	Up	iP	03 29 31.7				De	iP	11 25 41.1	
		Ki	iP	03 29 41.4				Mongolia (h = N).			
		Um	iP	03 29 30.5			"	8	Ud	i(P)	15 01 29.7
		Ud	iP	03 29 48.4			"	8	Ki	iP	15 11 15.3
		Hindu Kush region (h = 200 km).							Sk	eP	15 11 24
"	8	Up	iP	08 55 23.5				Um	iP	15 11 35.4	
			iSKS	09 05 40				Ud	iP	15 11 41.4	
		Ki	iP	08 55 19.7				Southern Nevada.			
		Um	iSKS	09 05 33				Underground explosion.			
		Ud	iP	08 55 32.4			"	8	Up		micr sec
		De	iP	08 55 31.9					Mx	E 0.2 10	
		Java (h = 210 km).							Mx	N 0.2 13	
"	8	Up	iP	09 38 19.4				Ki		micr sec	
			i	09 38 25.5					Mx	E 0.6 13	
			iSKS	09 48 30				De	eP	15 55 06	
				micr sec				Crete (h = N).			
								M = 4.2 (Up,Ki).			
		Mx	E	0.6 15			"	8	Up	iP	17 11 26.6
		Mx	N	0.6 18						micr sec	
		Mx	Z	1.0 15					Mx	N 0.4 20	
		Ki	iP	09 38 00.8				Ki	iP	17 11 15.9	
			i	09 38 07.7						micr sec	
				micr sec					Mx	N 0.2 16	
								Sk	iP	17 11 39.9	
		Mx	E	0.5 12				Ud	iP	17 11 39.4	
		Mx	N	0.7 15				Burma-China border region			
		Mx	Z	0.6 12				(h = 10 km).			
		Sk	eP	09 38 25				M = 4.5 (Up,Ki).			
		Um	iP	09 38 05.8							
			i	09 38 13.3							
			iSKS	09 48 12							
		Ud	iP	09 38 28.8							
		(cont.)									

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1979				1979					
Aug.	8	Up	ePKP1	17 35 26	Aug.	9	Ki	iPKP	09 57 14.1
		Ki	iPKP	17 35 19.8			Sk	iPKP	09 57 24.8
		Ud	iPKP1	17 35 27.1			Um	iPKP	09 57 19.4
		De	iPKP1	17 35 39.0			Ud	iPKP	09 57 28.4
		Fiji Islands region					De	iPKP	09 57 34.1
		(h = 580 km).					Solomon Islands region		
							(h = 70 km).		
"	8	Up	iSgl	18 48 34.8	"	9	Up	iPKP1	12 40 58.8
		Sk	iSgl	18 48 49.4				iPKP2	12 41 03.6
		Um	iSgl	18 50 27.6			Ki	iPKP1	12 40 37.7
		Ud	iPgl	18 47 45.5			Um	iPKP1	12 40 46.7
			iSgl	18 48 27.9			Ud	iPKP1	12 41 00.0
		De	eSgl	18 49 32				iPKP2	12 41 06.1
		Southern Norway, near					De	iPKP1	12 41 08.8
		60 1/2°N, 7°E.						iPKP2	12 41 20.3
		Origin time = 18 46 48.					Kermadec Islands region		
		M <sub>L</sub> = 2.6 (Up,Ud).					(h = 350 km).		
		Explosion?				"	9	Ud	iP
								20 11 27.3	
"	8	Ki	iP	21 44 30.4			Pakistan (h = N).		
		Ud	iP	21 44 52.1	"	9	Ki	iPKP	20 29 49.2
		De	iP	21 44 56.9			Sk	iPKP	20 30 00.7
		Molucca Sea (h = 80 km).					Um	iPKP	20 29 55.9
"	8	Ki	iPKP	21 52 00.6			Ud	iPKP	20 30 05.7
			iSKP1	21 54 50.2			De	iPKP	20 30 12.2
		Sk	ePKP	21 52 12			New Hebrides Islands		
		Ud	iPKP1	21 52 08.1			(h = 150 km).		
		De	iPKP1	21 52 18.6	"	9	Sk	eP	23 25 08
		Fiji Islands region					i	23 25 13.4	
		(h = 370 km).					Um	iP	23 25 07.4
"	8	Up	iP	23 12 07.6			Ud	iP	23 24 28.5
				micr sec			Yugoslavia (h = 10 km).		
		P	Z'	0.1 1.0	"	10	Ud	iP	00 58 27.8
		Mx	N	0.3 14			Kuril Islands (h = 45 km).		
		Mx	Z	0.2 13	"	10	Ki	iP	03 42 20.2
		Ki	iP	23 11 22.1			Um	iP	03 42 47.3
				micr sec			Ud	iP	03 43 13.0
		Mx	E	0.5 17			De	iP	03 43 36.3
		Mx	N	0.2 16			Fox Islands, Aleutian		
		Mx	Z	0.3 15			Islands (h = N).		
		Sk	iP	23 11 57.2	"	10	Up	iP	07 36 08.6
		Um	iP	23 11 43.9					micr sec
		Ud	iP	23 12 13.7			Mx	Z	0.5 18
		De	iP	23 12 31.4			Ki	iP	07 35 14.9
		Kuril Islands region (h = N).					Sk	iP	07 35 45.8
		M = 4.7 (Up,Ki).					Um	iP	07 35 42.1
"	9	De	iPKP1	03 44 16.8			Ud	iP	07 36 07.6
		Loyalty Islands region					De	iP	07 36 30.1
		(h = N).					i	07 36 36.3	
"	9	Ud	iPgl	07 15 10.8			Fox Islands, Aleutian		
			iSgl	07 15 33.6			Islands (h = N).		





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1979					1979				
Aug.	11	(cont.)			Aug.	12	(cont.)		
		Sk	eP	22 36 29			Um	iS	07 33 46
		Um	iP	22 36 23.8			Ud	iP	07 25 01.6 C
		Ud	iP	22 36 00.6				ipP	07 25 18.8
		De	iP	22 35 27.1			De	iP	07 25 14.8
		Crete (h = N).					Near east coast of Honshu,		
		M = 5.0 (Up,Ki).					Japan.		
"	12	Ki	iP	00 43 27.1			h = 60 km (Up,Ki,Um,Ud).		
		Ud	iP	00 43 53.0			m = 6.1, M = 5.3 (Up,Ki).		
		Tibet (h = N).			"	12	Up	iP	08 35 56.9 C
"	12	Up	iP	01 19 16.9			Ki	iP	08 35 31.0
		Ki	iP	01 19 25.0			Sk	iP	08 35 59.2
		Sk	iP	01 19 42.5			Um	iP	08 35 40.6
		Um	iP	01 19 15.2			Ud	iP	08 36 06.0 C
		Ud	iP	01 19 33.6			Southwestern Ryukyu Islands		
		De	iP	01 19 30.5			(h = 70 km).		
		Afghanistan-USSR Border			"	12	Ud	iP	11 06 51.8
		region (h = 220 km).			"	12	Ud	iP	17 05 56.8
"	12	Ki	iP	01 34 25.3	"	12	Ud	iP	17 54 13.3
		Sk	iP	01 34 31.7	"	12	Ud	iP	17 54 13.3
			ipP	01 34 41.1	"	12	Up	iP	18 08 20.1
		Um	ipP	01 34 18.5			Ki	iP	18 07 26.3
		Ud	iP	01 34 17.3			Sk	iP	18 08 10.1
			ipP	01 34 26.5			Um	iP	18 07 49.9
		Near coast of Pakistan.					Ud	iP	18 08 29.0
		h = 35 km (Sk,Ud).						i	18 08 33.5
"	12	Ud	iP	02 28 48.5			De	iP	18 08 49.9
		Kamchatka (h = N).					Central Siberia (h = 0 km).		
"	12	Up	iP	07 24 54.2 C	"	12	Up	eP	19 06 21
			ipP	07 25 10.3					micr sec
			iPP	07 27 45.1			Mx	E	0.3 16
			iS	07 34 25			Mx	N	0.5 15
				micr sec			Mx	Z	1.1 16
		P	Z'	0.3 1.0			Ki	iP	19 05 25.9 C
		Mx	E	0.7 18					micr sec
		Mx	N	1.1 20			Mx	E	0.9 15
		Mx	Z	1.9 20			Mx	N	0.7 15
		Ki	iP	07 24 16.5 C			Mx	Z	1.2 14
			ipP	07 24 29.8			Sk	iP	19 06 03.2
				micr sec			Um	iP	19 05 52.1
		P	Z'	0.2 1.1			Ud	iP	19 06 24.3 C
		Mx	E	1.3 19			De	iP	19 06 46.1
		Mx	N	1.1 17			Near east coast of Kamchatka		
		Mx	Z	1.0 17			(h = N).		
		Sk	iP	07 24 49.2			M = 5.0 (Up,Ki).		
			iPP	07 27 33.4	"	12	Ud	iP	19 37 19.9
		Um	iP	07 24 33.2 C	"	12	Up	iP	20 34 03.7
			ipP	07 24 51.0			(cont.)		
			iPP	07 27 11.1			(cont.)		
		(cont.)					(cont.)		

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979									1979										
Aug.	12	(cont.)							Aug.	13	(cont.)								
		Um	iP	20	34	23.2	C				De	eP	21	13	05				
		Ud	iP	20	33	58.7					Albania (h = 10 km).								
		De	iP	20	33	42.6					"	14	Up	iP	00	12	02.8		
		South Atlantic Ridge												Sk	eP	00	12	46	
		(h = 10 km).												Ud	eP	00	12	10	
"	12	Ud	iP	21	11	42.8							Greece (h = N).						
"	12	Ud	iPKP1	23	39	48.3			"	14	Um	iP	02	25	40.0				
		Kermadec Islands region										Ud	iP	02	26	11.7			
		(h = N).										Kuril Islands (h = N).							
"	13	Um	iP	00	31	19.8			"	14	Ki	iP	00	12	30.2				
"	13	Ud	iP	01	20	38.2					Um	iP	00	12	35.5				
		Near east coast of Kamchatka										De	iPKP	00	17	04.7			
		(h = N).										Banda Sea (h = 50 km).							
"	13	Up	ePKP	03	22	23.1			"	14	Up	iP	04	59	00.6				
						micr	sec				Ki	iP	04	59	07.0				
		Mx	Z	0.8	20						Sk	iP	04	59	25.4				
		Ki	e	03	22	32					Um	iP	04	58	57.5				
						micr	sec				Ud	iP	04	59	16.8				
		Mx	E	0.6	18						De	iP	04	59	14.0				
		Mx	N	0.6	19						Afghanistan-USSR border								
		Mx	Z	0.9	19						region (h = 120 km).								
		Um	ePKP	03	22	15			"	14	Ud	iP	08	21	51.1				
											De	iP	08	21	20.1				
		i		03	22	25.5			"	14	Ki	eP	08	41	20				
		De	iPKP	03	22	28.9					Sk	eP	08	41	37				
		New Ireland region										Ud	iP	08	42	20.9			
		(h = 90 km).										Jan Mayen Island region							
"	13	Ki	iP	03	37	42.4					(h = 10 km).								
		New Hebrides Islands (h = N).								"	14	Up	iSKP1	11	19	43.1			
"	13	Ki	iP	15	48	49.6					Ki	iPKP	11	16	02.9				
						micr	sec								micr	sec			
		Mx	E	0.4	14								Mx	N	0.6	18			
		Mx	N	0.7	20								Mx	Z	0.3	17			
		Mx	Z	0.6	15								Sk	iSKP1	11	19	38.0		
		Ud	iP	15	48	37.4							Um	iSKP1	11	19	29.5		
		De	iP	15	48	25.8							Ud	iSKP1	11	19	46.6		
		Southern Iran (h = N).										De	iSKP1	11	19	56.0			
"	13	Up	iP	16	26	29.8					New Hebrides Islands								
		Ki	iP	16	27	17.7					(h = 40 km).								
		Western Arabian Peninsula								"	14	Ki	iP	11	53	39.7			
		(h = 10 km).										Hindu Kush region							
"	13	Up	eP	21	13	39					(h = 260 km).								
		Sk	eP	21	14	22			"	14	Ki	ePg1	12	49	56				
		Um	iP	21	14	19.1						iSg1	12	50	25.5				
		Ud	iP	21	13	44.5					(cont.)								
		(cont.)										(cont.)							

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979					1979				
Aug.	14	(cont.)			Aug.	15	Up	iPgl	18 09 01.8
		Ki	iRg	12 50 39.5				iSgl	18 09 27.1
		Sk	iSgl	12 51 44.3			Sk	eSgl	18 09 50
		Um	iSgl	12 50 20.9			Um	iSgl	18 09 50.2
		Coast of Norrbotten, Sweden, 65.7°N, 22.3°E.					Ud	iPgl	18 09 04.5
		Origin time = 12 49 17.						iSgl	18 09 31.3
		M <sub>L</sub> = 1.9 (Um).					Hälsingland, Sweden, 61.7°N, 16.4°E.		
		Near-surface event.					Origin time = 18 08 28.		
							M <sub>L</sub> = 2.3 (Um,Ud).		
"	14	Up	iP	14 31 56.5 C	"	15	Um	iP	20 02 40.1
			ipP	14 32 39.0			Ud	iP	20 03 09.6
			isP	14 32 59.6			Kuril Islands (h = N).		
				micr sec					
			P	Z' 0.2 0.7					
		Ki	iP	14 32 05.5 C	"	15	De	iPKP1	22 19 52.0
				micr sec			Fiji Islands region (h = 460 km).		
			P	Z' 0.2 0.6					
		Sk	iP	14 32 22.2 C	"	16	Up	iPKP1	09 10 24.9
			ipP	14 33 04.9				iPKP2	09 10 30.5
			i	14 35 03.8			Sk	ePKP	09 10 20
		Um	iP	14 31 55.0 C				iPKP1	09 10 21.3
			ipP	14 32 36.0			Um	iPKP1	09 10 14.3 C
			isP	14 32 59.4			Ud	iPKP1	09 10 27.0
			iS	14 37 50				iPKP2	09 10 33.5
		Ud	iP	14 32 12.9 C			De	iPKP1	09 10 35.0
			ipP	14 32 55.6				iPKP2	09 10 46.9
			isP	14 33 16.8			Kermadec Islands region (h = 450 km).		
			i	14 34 51.7	"	16	Up	iSgl	10 54 24.8
		De	iP	14 32 09.2 C			Ud	iSgl	10 53 52.6
			i	14 32 34.5			De	iSn	10 54 26.3
			ipP	14 32 51.3				iSgl	10 54 29.9
			isP	14 33 13.6			Lake Vänern region, 58.9°N, 13.7°E.		
		Hindu Kush region.					Origin time = 10 53 16.		
		h = 200 km (Up,Sk,Um,Ud,De).					M <sub>L</sub> = 2.4 (Ud,De).		
		m = 5.8 (Up,Ki).							
"	14	De	iP	17 38 27.4	"	16	Up	iP	12 06 27.4
		Eastern Mediterranean Sea (h = N).						i	12 06 40.7
"	14	Sk	iP	23 32 36.4				iS	12 15 46
		Um	eP	23 32 14					micr sec
			i	23 32 17.8				P	Z' 0.2 1.5
		Ud	iP	23 32 17.4			Mx	E	2.0 25
		De	iP	23 32 03.2 D			Mx	N	2.7 19
		Southern Iran (h = 70 km).					Mx	Z	3.0 15
"	15	Ud	iP	07 28 09.8			Ki	iP	12 05 46.2 C
		Unimak Island region (h = N).							micr sec
							Mx	E	4.2 18
							Mx	N	2.9 16
							Mx	Z	1.7 14
"	15	Um	iP	08 02 20.5			Sk	iP	12 06 20.1
		Ud	iP	08 02 35.6			Um	iP	12 06 04.2 C
		Andaman Islands region (h = N).					(cont.)		



Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979				1979				
Aug.	17	(cont.)		Aug.	17	Up	iSKP1	15 41 08.4
		Ud	iP					micr sec
			i			Mx	N	1.0 19
			i			Mx	Z	1.0 19
		Albania (h = 10 km).				Ki	iPKP	15 37 24.3 D
"	17	Up	iP					micr sec
		Ki	iP			Mx	E	0.9 18
		Sk	iP			Mx	N	0.6 19
		Um	iP			Mx	Z	0.8 18
			i			Um	iPKP	15 37 30.9
		Near west coast of Honshu, Japan (h = 15 km).				Ud	iSKP1	15 41 11.6
"	17	Ki	iP			New Hebrides Islands (h = 40 km). M = 5.6 (Up,Ki).		
		Um	iP	"	17	Um	iPKP	18 36 24.8
		Ud	iP			New Hebrides Islands (h = 15 km).		
		De	iP	"	17	Ud	iP	18 53 02.4
		Gulf of California (h = 15 km).				Iran (h = N).		
"	17	Um	iP			Ki	eP	20 06 02
"	17	Up	iPKP			Um	iP	20 06 23.9
			iSKP1			Ud	iP	20 06 55.7
								micr sec
		Mx	E	"	17	Up	iP	20 33 07.4
		Mx	N				iPP	20 37 31.5
		Mx	Z			Ki	iP	20 32 53.1
		Ki	iPKP					micr sec
			ipPKP				P	Z' 0.1 1.0
						Um	iP	20 32 57.9
						Ud	iP	20 33 16.0
						De	iP	20 33 21.5
						Banda Sea (h = 270 km).		
"	17	Um	eP	"	17	Um	eP	20 43 12
			i				i	20 43 19.6
"	17	Up	eP	"	17	Up	eP	23 05 48
		Ud	iP			Ud	iP	23 05 48.4
"	18	Up	iP	"	18	Up	iP	02 58 55.4 C
			iPP				iPP	03 00 14.0
			iS				iS	03 04 30
								micr sec
						P	Z'	1.2 0.5
						Mx	E	0.6 5
						Mx	N	1.1 3
						Mx	Z	1.1 5
"	17	Ki	ePKP			Ki	iP	02 58 38.8 C
		De	iPKP				i	02 59 38.5
"	17	Um	iPKP					micr sec
		New Hebrides Islands (h = 25 km).				P	Z'	2.3 0.7

(cont.)









Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979				1979				
Aug.	22	(cont.)		Aug.	24	Ki	iPKP	02 20 41.2
		Um	iSgl 19 34 25.4			Um	iPKP	02 20 50.3
		Ud	iRg 19 32 42.1			Ud	iPKP	02 21 00.7
		Central Sweden.						
		Near-surface event.		"	24	Ud	eP	02 27 21
"	22	Up	iP 20 18 01.2 C				ipP	02 27 33.0
			ipP 20 18 19.5			Minahassa Peninsula		
			iS 20 22 15.5			(h = 45 km).		
			iScS 20 28 53.3	"	24	Ud	iP	02 44 14.3
			micr sec			Kuril Islands (h = N).		
		P	Z' 0.3 0.9	"	24	Up	iP	04 39 39.6 C
		Mx	N 1.1 16				ipP	04 43 12
		Mx	Z 1.5 14				iSKS	04 50 03
Ki		iP	20 19 07.9 C					micr sec
			micr sec			P	Z' 0.5 1.3	
		P	Z' 0.3 0.9			Mx	E 5.1 22	
		Mx	E 0.4 13			Mx	N 8.3 23	
		Mx	Z 0.3 10			Mx	Z 14 22	
Um		iP	20 18 32.4 C			Ki	iP	04 39 36.1 C
			iS 20 23 11				i	04 40 22.9
Ud		iP	20 18 10.2 C				iS	04 50 11
			ipP 20 18 28.4					micr sec
De		iP	20 17 39.1 C			P	Z' 1.3 2.0	
			iS 20 21 37.9			Mx	E 17 18	
		Dodecanese Islands.				Mx	N 14 18	
		h = 80 km (Up,Ud).				Mx	Z 14 18	
		m = 5.9, M = 4.4 (Up,Ki).				Um	iP	04 39 40.9 C
"	23	Ki	iPKP 00 43 45.8				iS	04 50 13
		Um	iPKP 00 43 52.1			Ud	iP	04 39 30.5 C
		De	iPKPl 00 44 01.2			De	iP	04 39 34.4 C
		Fiji Islands region					ipP	04 42 56.3
		(h = 570 km).				Costa Rica (h = 40 km).		
"	23	Ud	iP 11 34 20.2			m = 6.7, M = 6.4 (Up,Ki).		
		De	iP 11 33 48.1	"	24	Up	iP	09 32 10.1
		Crete (h = N).						micr sec
"	23	Ud	iPKPl 14 41 17.3			Mx	E 2.4 10	
		De	iPKPl 14 41 29.3			Mx	N 4.8 12	
		Fiji Islands region				Mx	Z 4.8 11	
		(h = 620 km).				Ki	iP	09 32 15.4
"	23	Ud	iP 17 40 27.1					micr sec
		Turkey (h = 10 km).				Mx	E 9.9 14	
"	23	Ud	iPKP 18 08 23.9			Mx	N 5.0 11	
						Mx	Z 8.6 14	
"	23	Up	iP 22 04 55.0			Ud	iP	09 32 26.5
			i 22 07 05.5			Afghanistan-USSR border		
		Um	iP 22 05 33.1			region (h = 150 km).		
		Ud	iP 22 05 14.2			M = 6.0 (Up,Ki).		
			i 22 05 21.0	"	24	Um	iP	10 21 39.1
		De	iP 22 04 29.1			Ud	iP	10 21 01.3
						Yugoslavia (h = 10 km).		

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979				1979			
Aug.	24	Um	iP	11 06 09.5	Aug.	25	(cont.)
		Ud	iP	11 06 39.9			Ki
		Honshu, Japan (h = 140 km).					micr sec
"	24	Up	iP	17 09 05.3			P
			ipP	17 09 12.5			Z' 0.2 0.7
			iS	17 16 52			Mx E 24 16
				micr sec			Mx N 25 18
			P	Z' 0.4 1.3			Mx Z 24 17
			pP	Z' 0.6 1.4			Um iP 08 55 05.6 C
			Mx	E 2.4 10			i 08 55 17.7
			Mx	N 4.8 12			iS 09 04 08
			Mx	Z 4.8 11			Ud iP 08 54 38.0 C
		Ki	iP	17 08 37.5 D			i 08 54 49.9
			ipP	17 08 44.2			De iP 08 54 28.9 C
				micr sec			i 08 54 41.0
			P	Z' 0.6 1.6			i 08 56 27.8
			Mx	E 9.9 14			North Atlantic Ridge
			Mx	N 5.0 11			(h = 10 km).
			Mx	Z 8.6 14			m = 6.6, M = 6.7 (Up,Ki).
		Um	iP	17 08 46.4 D			UPP, surface wave amplitudes
			ipP	17 08 53.6			and corresponding magnitude
			iS	17 16 18			are calculated from Wiechert
		Ud	iP	17 09 17.5 D			readings.
			ipP	17 09 24.8	"	25	Ud iP 13 53 57.1
			i	17 10 10.3			Iran (h = 15 km).
		De	iP	17 09 28.3 D	"	25	Ud iP 19 33 29.0
			ipP	17 09 35.5	"	25	Ud iP 20 47 07.4
			i	17 10 06.5			South of Alaska (h = N).
		Northern China.			"	25	Up iP 21 24 12.9
		h = 25 km (Up,Ki,Um,Ud,De).					Ki iP 21 23 58.4
		m = 6.3, M = 6.0 (Up,Ki).					micr sec
"	25	Up	Mx	01 53			Mx E 0.9 22
				micr sec			Mx N 0.7 20
			Mx	Z 0.3 20			Mx Z 0.9 19
		Ki	Mx	01 45			Um iP 21 24 05.3
				micr sec			Ud iP 21 24 15.0
			Mx	N 0.3 19			De iP 21 24 18.1
		Mindanao, Philippine Islands					New Hebrides Islands
		(h = N).					(h = N).
"	25	Ud	iP	08 54 34.9	"	26	Ki
"	25	Up	iP	08 54 49.2 C			micr sec
			i	08 55 00.4			Mx E 0.5 15
			iS	09 03 34.5			Mx N 0.9 18
				micr sec			Mx Z 0.6 15
			P	Z' 1.0 1.5			Ud iP 05 08 06.5
			Mx	E 35 22			Tibet (h = N).
			Mx	N 32 22	"	26	Ud iP 08 56 42.5
		Ki	iP	08 55 15.7 C	"	26	Up
			i	08 55 27.6			micr sec
			iS	09 04 31			Mx E 1.2 20
		(cont.)					(cont.)



Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979				1979			
Aug.	27	(cont.)		Aug.	29	Ud iP	15 39 03.7
		Um iP	23 44 43.1			Hindu Kush region	
		Ud iP	23 45 06.1			(h = 240 km).	
		Philippine Islands region			"	29	Ki iP 17 31 50.1
		(h = 30 km).					Um iP 17 31 43.6 C
"	28	Ud i(P)	13 30 14.9				Ud iP 17 32 05.2
		i	13 30 21.3				Eastern Kashmir (h = N).
		De i(P)	13 31 36.4		"	29	Ki Mx 19 16
"	28	Up iP	15 31 53.8				micr sec
		Ki iP	15 31 36.6				Mx N 0.2 12
		Sk eP	15 31 59				Northeastern China (h = N).
		Um iP	15 31 41.8		"	29	Um iPKP1 19 34 55.5
		Ud iP	15 32 02.8				Ud iPKP1 19 35 04.5
		Mindoro, Philippine Islands					South of Kermadec Islands
		(h = 150 km).					(h = 170 km).
"	28	Sk i(P)	15 39 17.7		"	29	Um iPKP 21 47 54.3
"	28	Sk ePKP	17 19 44				iSKP1 21 50 33.0
		New Hebrides Islands					Ud iPKP 21 48 04.1
		(h = N).					iSKP1 21 50 47.8
"	28	Sk e(P)	17 25 25				De iPKP1 21 48 01.6
"	28	Ud iP	23 21 38.9				i 21 48 03.6
							Fiji Islands region
"	29	Up iP	05 22 39.0		"	30	Up iP 02 07 47.2
		ipP	05 22 51.6				Ki iP 02 07 58.6
		Sk iP	05 22 22.2				Sk eP 02 08 15
		Um iP	05 22 10.9				Um iP 02 07 46.6
		Ud iP	05 22 42.7				Ud iP 02 08 03.9
		De iP	05 23 03.1				iPP 02 09 42.1
		Off east coast of Kamchatka					De iP 02 08 00.1
		(h = 50 km).					iPP 02 09 38.6
"	29	Up iP	05 33 28.3				Hindu Kush region
		Um iP	05 33 26.5				(h = 35 km).
		Ud iP	05 33 45.6		"	30	Um iP 02 57 46.0
		ipP	05 34 11.0				Mindoro, Philippine Islands
		De iP	05 33 43.1				(h = 250 km).
		Afghanistan-USSR border			"	30	Up iP 10 20 32.5
		region (h = 100 km).					Ki iP 10 20 43.8
"	29	Up iRg	14 26 01.6				Sk iP 10 20 58.6
		Ud iRg	14 26 12.9				Um iP 10 20 31.5
		East-central Sweden.					Ud iP 10 20 49.0
		Near-surface event.					De iP 10 20 43.4
"	29	Um iP	15 19 35.3				Hindu Kush region (h = 35 km).
		Ud iP	15 19 41.3		"	30	Ki eP 21 27 16
		Southern Nevada.					Kodiak Islands region
		Underground explosion.					(h = 70 km).

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979				1979							
Aug.	31	Up	iPKP1	00 41	21.3	Aug.	31	Up	iP	20 47	24.7
		Ud	iPKP1	00 41	23.6			Sk	iP	20 48	01.2
		De	iPKP1	00 41	34.5			Ud	iP	20 47	40.1
		South of Fiji Islands						De	iP	20 47	23.0
		(h = 560 km).						Western Iran (h = N).			
"	31	Ki	iP	01 31	26.3	"	31	Up	iP	20 53	12.9
		Um	iP	01 31	53.6			Sk	iP	20 52	48.8
		Fox Islands, Aleutian						Um	iP	20 52	46.5
		Islands (h = N).							ipP	20 52	53.1
"	31	Up	iPKP1	02 16	58.4			Ud	iP	20 53	11.7
		Ki	iPKP	02 16	48.1			De	iP	20 53	34.8
		Ud	iPKP1	02 17	00.2				ipP	20 53	40.8
		De	iPKP1	02 17	11.1			Alaska Peninsula.			
		South of Fiji Islands						h = 20 km (Um,De).			
		(h = 480 km).				"	31	Up	iPKP1	23 51	21.3
"	31	Um	eP	07 36	10			Ud	iPKP1	23 51	22.1
		Ud	iP	07 36	53.4			De	iPKP1	23 51	33.2
								Fiji Islands region			
"	31	Up	iP	08 32	26.2			(h = 580 km).			
		Sk	iP	08 32	53.4						
		Um	eP	08 32	26						
		Ud	iP	08 32	44.0						
		De	iP	08 32	39.7						
		Hindu Kush region									
		(h = 35 km).									
"	31	Up	iP	13 55	40.8						
		Ki	iP	13 54	57.5						
		Sk	iP	13 55	32.7						
		Um	iP	13 55	16.8						
		Ud	iP	13 55	48.0						
		De	eP	13 56	04						
		Hokkaido Japan region									
		(h = 115 km).									
"	31	Up	iP	15 20	26.9						
		Um	iP	15 20	55.3						
		Ud	iP	15 20	42.8						
		De	iP	15 20	12.6						
		Turkey (h = 10 km).									
"	31	Up	eP	17 28	37						
				micr	sec						
		Mx	N	0.5	10						
		Sk	eP	17 29	22						
		Ud	iP	17 28	45.7						
		Greece (h = 35 km).									
"	31	Um	iP	18 11	25.6						
		Ud	iP	18 11	46.7						
		Yugoslavia (h = 10 km).									

June 4, 1981

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SEISMOLOGICAL BULLETIN

UPPSALA, KIRUNA, SKALSTUGAN, UMEÅ,

UDDEHOLM and DELARY

Uppsala	(Up):	59°51.5'N,	17°37.6'E;	h = 14 m
Kiruna	(Ki):	67°50.4'N,	20°25.0'E;	h = 390 m
Skalstugan	(Sk):	63°34.8'N,	12°16.8'E;	h = 580 m
Umeå	(Um):	63°48.9'N,	20°14.2'E;	h = 16 m
Uddeholm	(Ud):	60°05.4'N,	13°36.4'E;	h = 240 m
Delary	(De):	56°28.2'N,	13°52.2'E;	h = 150 m

SEPTEMBER 1 - 30, 1979  
 .....

1979					1979						
Sep.	1	Up	eP	01 06 44	Sep.	1	Up		micr	sec	
		Um	iP	01 06 23.4			Mx	E	0.8	14	
			i	01 06 26.7			Mx	N	1.0	14	
		Ud	iP	01 06 49.9			Mx	Z	1.1	16	
			i	01 06 54.4			Ki	iP	13 34	30.1	
		De	iP	01 07 05.5				ipP	13 34	35.1	
		South of Honshu, Japan					Um	iP	13 34	19.8	
		(h = 35 km).					Ud	ipP	13 33	51.0	
"	1	Up	iP	01 24 20.6			North Atlantic Ridge				
		Ud	iP	01 24 28.1			(h = 10 km).				
			i	01 24 34.8	"	1	Up	iP	17 32	09.9 D	
		South of Honshu, Japan					Ki	iP	17 31	47.0	
		(h = 35 km).					Um	iP	17 31	54.9	
"	1	Ud	eP	04 46 25			Ud	iP	17 32	19.5	
		Mindanao, Philippine					Taiwan (h = N).				
		Islands (h = 35 km).			"	1	Up	iP	18 05	28.5 D	
"	1	Up	iP	05 37 59.9 D				ipP	18 05	36.9	
			i	05 38 05.7				iS	18 14	03	
			ipP	05 38 16.1				i	18 28	03	
			iP'P'	06 06 30.3							
		Sk	iP	05 37 35.9 D							
			i	05 37 45.7							
		Um	iP	05 37 33.5 D							
			iP'P'	06 06 38.2							
		Ud	iP	05 37 58.6 D							
			i	05 38 51.3							
		De	iP	05 38 21.6 D							
			ipP	05 38 36.3							
			iP'P'	06 06 21.0							
		Fox Islands, Aleutian									
		Islands.									
		h = 60 km (Up,De).									
"	1	Sk	iP	06 14 41.2			Sk	iP	18 05	12.3	
"	1	Ud	iP	10 08 02.3				ipP	18 05	20.2	
							Um	iP	18 04	59.6	
								ipP	18 05	08.7	

(cont.)

AUGUST 1979

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979

Aug.	1	(cont.)			
		Ud	iP	18 05 32.1	
			ipP	18 05 40.6	
		De	iP	18 05 53.8	
			ipP	18 06 02.6	
		Off east coast of Kamchatka. h = 30 km (Up,Ki,Sk,Um,Ud,De). m = 6.2, M = 5.8 (Up,Ki).			
"	1	Ki	iP	18 15 04.0	
		Ud	iP	18 16 02.7	
		Off east coast of Kamchatka (h = N).			
"	1	Up	iPKP2	22 03 39.6	
		Ki	iPKP1	22 03 08.6	
		Sk	iPKP1	22 03 22.5	
		Um	iPKP1	22 03 16.7	
		Ud	iPKP2	22 03 44.8	
		De	iPKP2	22 03 57.0	
		North Island, New Zealand (h = 175 km).			
"	1	Up	iP	23 17 52.8	
			ipP	23 18 03.4	
			i	23 18 15.6	
				micr sec	
			pP	Z' 0.1 1.2	
		Ki	iP	23 16 58.4	
			ipP	23 17 10.1	
				micr sec	
			P	Z' 0.2 1.5	
		Sk	iP	23 17 35.4	
			ipP	23 17 46.5	
		Um	iP	23 17 24.8	
			ipP	23 17 34.0	
		Ud	iP	23 17 56.2	
			ipP	23 18 06.8	
		De	iP	23 18 17.7	
			ipP	23 18 28.8	
		Off east coast of Kamchatka. h = 40 km (Up,Ki,Sk,Um,Ud,De). m = 5.9 (Up,Ki).			
"	1	Sk	eP	23 27 50	
		Ud	iP	23 28 08.6	
		De	iP	23 28 29.9	
		Off east coast of Kamchatka (h = N).			
"	2	Ud	iP	00 06 17.8	
"	2	Sk	iP	01 23 17.5	
			ipP	01 23 34.9	
		Um	iP	01 23 34.2	
		Ud	iP	01 23 25.1	
		(cont.)			

1979

Sep.	2	(cont.)			
		De	iP	01 23 31.0	
		El Salvador (h = 80 km).			
"	2	Ud	iP	02 12 44.3	
		De	iP	02 12 46.1	
		Colombia (h = 100 km).			
"	2	Um	iP	03 32 31.6	
		Ud	iP	03 33 03.9	
		De	iP	03 33 15.4	
		Northeastern China (h = N).			
"	2	Ud	iP	05 54 59.8	
"	2	Up	iP	08 10 29.4	
			ipP	08 10 37.1	
			i	08 10 43.7	
			iS	08 19 05	
				micr sec	
			P	Z' 0.1 1.3	
			i	Z' 0.2 1.2	
			Mx	E 1.1 19	
			Mx	N 1.1 20	
			Mx	Z 1.9 20	
		Ki	iP	08 09 35.6	
			ipP	08 09 43.2	
				micr sec	
			pP	Z' 0.2 1.5	
			Mx	E 0.9 18	
			Mx	N 1.5 18	
			Mx	Z 0.9 16	
		Sk	iP	08 10 13.0	
			ipP	08 10 20.4	
			i	08 10 26.9	
		Um	iP	08 10 01.7	
			ipP	08 10 08.7	
		Ud	iP	08 10 32.6	
			ipP	08 10 39.9	
		De	iP	08 10 54.2	
			ipP	08 11 02.0	
		Off east coast of Kamchatka. h = 30 km (Up,Ki,Sk,Um,Ud,De). m = 5.9, M = 5.2 (Up,Ki).			
"	2	De	iP	08 15 18.6	
"	2	Up	iP	10 23 29.1	
			ipP	10 23 35.1	
				micr sec	
			pP	Z' 0.1 1.2	
		Sk	iP	10 23 11.8	
			ipP	10 23 17.8	
		Um	ipP	10 23 06.5	
		Ud	iP	10 23 31.6	
		cont.)			



Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979				1979			
Sep.	2	(cont.) Ud ipP 10 23 37.3 De iP 10 23 54.6 Off east coast of Kamchatka. h = 20 km (Up,Sk,Ud).		Sep.	3	Ud iP 02 42 22.0 Near east coast of Honshu, Japan (h = 60 km).	
"	2	Ud iP 12 32 38.7 Off east coast of Kamchatka (h = N).		"	3	Sk iP 03 04 50.0 Ud iP 03 04 18.5 De iP 03 03 43.1 Dodecanese Islands (h = 70 km).	
"	2	Up iP 13 58 57.4 i 13 59 05.1 Sk iP 13 59 42.6 Um iP 13 59 41.3 Ud iP 13 59 07.2 i 13 59 15.3 De i 13 58 31.9 Greece-Albania border region (h = 10 km).		"	3	Ud iRg 08 29 11.7 Local near-surface event.	
"	2	Ud iP 15 23 21.8		"	3	Ud iP 10 48 48.4 i 10 48 51.1 i 10 48 59.0 De iP 10 49 20.7	
"	2	Ud iP 15 23 21.8		"	3	De i(P) 14 46 10.8	
"	2	Up iP 16 23 03.3 Ki iP 16 23 23.1 Sk iP 16 23 33.0 Um iP 16 23 08.3 i 16 23 14.6 Ud iP 16 23 18.8 De iP 16 23 09.7 Pakistan (h = N).		"	4	Ud iP 00 36 29.6 De eP 00 36 25	
"	2	Up iP 17 04 49.1 Um iP 17 04 36.0 Ud iP 17 04 50.5		"	4	Ud eP 04 30 04	
"	2	Up iP 18 57 02.7 Um iP 18 57 12.2 Ud iP 18 57 28.3 De eP 18 57 06 New Hebrides Islands (h = N).		"	4	Ud iP 09 13 41.8	
"	2	Up iP 19 56 34.0 Sk iP 19 57 13.7 Um iP 19 57 12.2 i 19 57 28.3 Ud iP 19 56 41.7 De eP 19 56 06 Southern Greece (h = 40 km).		"	4	Ud iP 12 05 41.8 De iP 12 05 33.9	
"	2	Up eP 21 19 55 Sk iP 21 20 35.0 Um i 21 20 45.2 Ud iP 21 20 01.3 Ionian Sea (h = 10 km).		"	4	Ki iP 13 50 02.4 Um i 13 50 20.6 Ud iP 13 50 28.4 Molucca Passage (h = 60 km).	
"	2	Up iP 21 19 55 Sk iP 21 20 35.0 Um i 21 20 45.2 Ud iP 21 20 01.3 Iran (h = 25 km).		"	4	Ud iP 20 51 44.2	
"	3	Ud iP 02 14 08.2 Iran (h = 25 km).		"	4	Up micr sec Mx N 1.5 21 Mx Z 2.0 21 Ki micr sec Mx E 1.1 20 Mx N 1.1 20 Mx Z 1.2 18 Sk ePKP 21 22 31 Um ePKP 21 22 25 De iP 21 22 36.1 Loyalty Islands region (h = 45 km). M = 5.7 (Up,Ki).	
"	3	Ud iP 02 14 08.2 Iran (h = 25 km).		"	5	Ud iP 02 00 34.1	
"	3	Ud iP 02 14 08.2 Iran (h = 25 km).		"	5	Sk eP 03 13 27	

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979				1979			
Sep.	5	De iPKP1	03 50 27.4	Sep.	6	(cont.)	
		Loyalty Islands region				Up	micr sec
		(h = 45 km).				Mx N	1.4 20
"	5	Up iP	05 07 23.7			Mx Z	1.8 19
		Ki iP	05 06 37.0			Ki	micr sec
		Um iP	05 06 56.9			Mx E	1.4 17
		Ud iP	05 07 29.5			Mx N	0.9 18
		Kuril Islands (h = N).				De iPKP	08 28 22.5
"	5	Ki iP	09 34 27.0			New Britain region	
		i	09 35 46.0			(h = 40 km).	
		Ud iP	09 34 14.5	"	6	Ud iRg	11 47 55.1
		De iP	09 34 02.4			Local near-surface event.	
		Iran (h = N).		"	6	Up iP	12 13 17.6
"	5	Ud iP	14 12 46.9			Ki eP	12 12 30
"	5	Ki iPKP	14 13 52.1			i	12 12 41.6
		Um iPKP	14 13 49.3			Sk i	12 12 30.7
		Ud i(PKP)	14 13 29.9			Um iP	12 12 56.1
		iPKP	14 13 40.6			Ud iP	12 12 58.0
		Santiago del Estero Prov.,				De iP	12 13 33.1
		Argentina (h = 560 km).				Iceland region (h = 10 km).	
"	5	Um iP	16 07 58.0	"	6	Um iP	13 53 33.0
		Ud iP	16 08 11.5			Ud iP	13 53 46.3
"	5	Ud iP	17 13 21.9			De iP	13 53 44.8
"	6	Ud iP	01 59 21.4			Nicobar Islands region	
"	6	Up iP	03 02 09.2 C	"	6	Up iP	15 11 49.0 C
			micr sec			P	Z' 0.6 1.4
		Mx E	0.9 16			Ki iP	15 11 14.8 C
		Mx N	1.7 16				micr sec
		Mx Z	0.6 16			P	Z' 0.3 1.4
		Ki iP	03 02 04.3			Sk iP	15 11 22.8 C
			micr sec			Um iP	15 11 34.4 C
		Mx E	1.2 14			i	15 11 44.0
		Mx N	2.0 13			Ud iP	15 11 41.2 C
		Mx Z	1.1 15			De iP	15 11 57.5 C
		Sk iP	03 02 28.0			Southern Nevada.	
		Um iP	03 02 01.3			m = 6.5 (Up,Ki).	
		Ud iP	03 02 24.3			Underground explosion.	
		De iP	03 02 25.4	"	6	Ki iP	15 26 34.0
		Tibet (h = N).				Near east coast of Kamchatka	
		M = 5.3 (Up,Ki).				(h = 60 km).	
"	6	De iP	04 10 18.9	"	6	Up iP	16 14 47.5
		Colombia (h = 165 km).				Ki iP	16 14 44.5
"	6	Up	micr sec			Sk iP	16 14 59.2
		Mx E	1.0 17			Um eP	16 14 44
		(cont.)				De iP	16 14 55.6
						Java (h = 100 km).	



Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979		1979			
Sep.	9	(cont.)	Sep. 10	Ud e(P)	12 03 58
		Sk iP			
		10 52 42.7			
		Um iP	" 10	Ud iPKP1	15 23 02.1
		10 52 15.1		De iPKP1	15 23 12.7
		Ud iP		South of Fiji Islands	
		10 52 35.9		(h = 550 km).	
		i			
		10 54 13.6			
		De iP			
		10 52 34.0			
		Tadzhik-Sinkiang border region (h = 120 km).			
"	9	Ud iP	" 11	Up iP	01 59 03.9
		11 09 54.4		Um iP	01 59 21.9
		Kuril Islands (h = 230 km).			
				Ud iP	01 58 46.3
				Azores Islands region	
				(h = 10 km).	
"	9	Ud iP	" 11	Up iP	03 39 13.0
		13 04 18.1		Sk iP	03 39 40.2
		Luzon, Philippine Islands			
		(h = 50 km).			
"	9	Up iP		Um iP	03 39 12.0
		16 59 09.7		Ud iP	03 39 29.7
		Ud iP		i	03 39 34.8
		16 59 15.1		De iP	03 39 24.7
		Kuril Islands (h = 40 km).			
"	10	Up iP	" 11	Hindu Kush region	
		03 23 06.1		(h = 45 km).	
		Um iP		Up iPKP2	08 05 39.6
		03 23 22.1		Sk ePKP1	08 05 28
		Ud iP		Um iPKP1	08 05 23.2
"	10	Ki iP		Ud iPKP1	08 05 35.7
		05 51 51.5		Kermadec Islands region	
		Um iP		(h = 200 km).	
		05 51 41.6			
		Azores Islands region			
		(h = 10 km).			
"	10	Ki iP	" 11	Um iP	12 05 42.3
		06 39 08.8		Ud iP	12 06 03.0
		Um iP		Mindanao, Philippine	
		06 38 59.1		Islands (h = 15 km).	
		Azores Islands region			
		(h = 10 km).			
"	10	Up iPKP1	" 11	Up iP	15 40 18.8 C
		07 57 19.3		i	15 40 33.2
		Ud iPKP1		i	15 43 10
		07 57 21.3		micr sec	
		South of Fiji Islands			
		(h = 460 km).			
"	10	Ki iP		P	Z' 0.2 1.1
		08 09 59.1		i	Z' 0.2 0.7
		Um iP		Ki iP	15 41 41.7
		08 09 49.6		i	15 41 48.4
		Azores Islands region			
		(h = 10 km).			
"	10	Up iP		i	15 42 12.0
		09 17 41.4		micr sec	
		Um iP		P	Z' 0.2 1.2
		09 17 57.3		i	Z' 0.1 0.7
		i		Sk iP	15 41 11.2
		09 18 01.0		Um iP	15 41 00.1
		Ud iP		i	15 41 20.5
		09 17 37.7		Ud iP	15 40 33.7
		i		i	15 40 50.6
		09 17 45.8		De iP	15 39 53.7
		South Atlantic Ridge			
		(h = 10 km).			
"	10	Ki iP		i	15 39 55.5
		11 07 08.8		i	15 40 02.9
		Um iP		i	15 40 13.0
		11 06 57.2		Romania (h = 150 km).	
		Azores Islands region			
		(h = 10 km).			

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979				1979				
Sep.	11	Ki	iP	22 06	29.4	Sep.	13	(cont.)
		Sk	iP	22 07	03.9			De iP KP1 03 58 33.3
		Um	iP	22 06	48.6			South of Fiji Islands
		Ud	iP	22 07	19.6			(h = 570 km).
		Hokkaido, Japan region				"	13	Up iP 06 47 09.2
		(h = 70 km).						micr sec
"	12	Up	iPdiff	05 32	02.0			Mx E 2.9 19
			i	05 32	11.7			Mx N 7.9 22
			i(PP)	05 35	23.8			Mx Z 6.8 20
			iPP	05 36	25	Ki	iP	06 46 49.4
			iSKS	05 42	48			micr sec
								P Z' 0.1 0.8
								Mx E 4.4 17
								Mx N 4.0 17
								Mx Z 3.1 16
						Sk	iP	06 47 11.7
						Um	iP	06 46 56.9
							i	06 47 17.2
						Ud	iP	06 47 17.2
						West Irian region (h = N).		
						M = 6.2 (Up,Ki).		
						"	13	Ki iP 06 55 06.5
						West Irian region (h = N).		
						"	13	Ki iP 07 43 35.3
								Ud iP 07 44 30.6
						Northwest of Kuril Islands		
						(h = 470 km).		
						"	13	Sk iP 12 11 44.2
								Um iP 12 11 34.1
								Ud iP 12 11 08.4
						Bulgaria (h = 45 km).		
"	12	Ud	i	16 20	39.8	"	13	Ud iP 14 44 34.7 D
		De	i	16 20	36.3			De iP 14 44 44.6 D
		Turkey (h = 10 km).				"	13	Up iP 21 06 39.9
"	12	Um	iP	22 30	46.9			micr sec
		Ud	iP	22 31	01.7			P Z' 0.1 0.9
"	13	Ki	ePgl	00 28	42	Ki	iP	21 06 17.5
			iSgl	00 29	37.0		ipP	21 06 28.3
		Sk	iSgl	00 29	35.3	Um	iP	21 06 25.3
		Um	iSgl	00 30	32.0		ipP	21 06 35.3
		Norwegian Sea, near				Ud	iP	21 06 49.4
		67 1/2° N, 9 1/2° E.					ipP	21 06 57.3
		Origin time = 00 27 28.				Taiwan (h = 40 km).		
		M <sub>L</sub> = 2.8 (Ki,Um).				"	14	Ud iP KP1 02 08 35.3
"	13	Ud	iPKP1	03 58	21.9			De iP KP1 02 08 46.2
		(cont.)				South of Fiji Islands		
						(h = 600 km).		

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979				1979			
Sep. 14	Up	iP	07 39 07.5 C	Sep. 14	(cont.)		
		ipP	07 39 16.3		Ki	micr	sec
		iS	07 47 43		Mx	N	2.0 18
			micr sec		Mx	Z	7.2 17
		P	Z' 0.5 1.1		Sk	iP	15 02 34.6
		pP	Z' 0.5 1.2		Um	iP	15 02 16.4
		Mx	E 1.5 16		Ud	iP	15 02 44.5
		Mx	N 2.0 19		De	iP	15 02 56.3
		Mx	Z 3.4 17				Kyushu, Japan (h = N).
	Ki	iP	07 38 13.5 C	" 14	Ki	iP	22 20 19.2
		ipP	07 38 20.5		Ud	iP	22 19 08.4
			micr sec				Southern Greece (h = 50 km).
		P	Z' 0.7 13	" 14	Ud	iPKP1	23 22 10.9
		ipP	Z' 0.6 1.5		De	iPKP1	23 22 21.3
		Mx	E 2.5 16				South of Fiji Islands
		Mx	N 1.7 15				(h = 530 km).
		Mx	Z 6.6 14	" 15	Ud	iP	00 43 15.1
	Sk	iP	07 38 48.7 C	" 15	Ki	iP	04 18 52.1
		ipP	07 38 56.4	" 15	Ud	iP	08 51 42.5
	Um	iP	07 38 39.7 C	" 15	Up	iP	10 15 42.0
		ipP	07 38 47.2		Sk	iP	10 15 36.4
		iS	07 46 52.3		Ud	iP	10 15 34.8
	Ud	iP	07 39 09.9 C		De	iP	10 15 31.8
		ipP	07 39 17.8				Peru-Bolivia border region
	De	iP	07 39 31.7 C				(h = 210 km).
		ipP	07 39 40.1	" 15	Ud	i	12 27 20.3
			Komandorsky Islands region.				Tibet (h = N).
			h = 25 km (Up,Ki,Sk,Um,Ud,De).	" 15	Ud	iP	12 52 04.3
			m = 6.6, M = 5.5 (Up,Ki).	" 15	Up	iPKP2	16 22 07.0
" 14	Up	iP	08 38 12.3		Um	iPKP1	16 21 55.4
	Sk	iP	08 38 52.1		Ud	iPKP2	16 22 09.2
	Ud	iP	08 38 18.4		De	ePKP2	16 22 23
		i	08 38 23.6				Kermadec Islands (h = N).
	De	iP	08 37 43.8	" 15	Up	iP	23 38 51.1
			Ionian Sea (h = N).		Ki	iP	23 38 20.5
" 14	Up	iP	09 51 53.0	" 15	Sk	iP	23 38 49.3
	Ki	iP	09 51 05.5		Um	ipP	23 38 43.0
	Sk	iP	09 51 40.7		Ud	iP	23 38 56.3
	Um	iP	09 51 27.6			ipP	23 39 06.7
	Ud	iP	09 51 58.9		De	iP	23 39 06.0
			Kuril Islands (h = 40 km).			ipP	23 39 16.8
" 14	Up	iP	15 02 35.7	" 15			Philippine Sea.
			micr sec				h = 35 km (Ud,De).
		P	Z' 0.1 0.7				
		Mx	E 8.0 19				
		Mx	N 6.3 17				
		Mx	Z 4.7 16				
	Ki	iP	15 02 03.5				
			micr sec				
		Mx	E 1.4 17				
			(cont.)				

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979				1979							
Sep.	16	Up	iPKP	00 39 15.9	Sep.	17	Ki	iP	11 20 51.8		
			i	00 39 38.6			Ud	iP	11 21 36.4		
				micr sec			Near east coast of Honshu, Japan (h = 80 km).				
			PKP	Z' 0.1 0.9	"	17	Up	iSgl	15 24 24.8		
		Ki	iPKP	00 39 31.4			Sk	iSgl	15 24 06.3		
				micr sec			Ud	iSgl	15 23 21.0		
			PKP	Z' 0.1 1.3			De	eSgl	15 23 54		
		Sk	ePKP	00 39 24			Southern Norway, near 59 1/2°N, 7°E.				
		Um	iPKP	00 39 24.4			Origin time = 15 21 34.				
		Ud	iPKP	00 39 14.7			M <sub>L</sub> = 2.5 (Ud)				
		South Sandwich Islands region (h = 90 km).					Explosion?				
"	16	De	iP	08 59 26.7			By combination with NAO readings.				
		Honshu, Japan (h = 180 km).				"	17	Up	iP	15 30 32.9	
"	16	Ki	iP	11 18 30.3			Ki	iP	15 30 51.6		
		Um	iP	11 18 37.5			Southern Sumatera (h = 40 km).				
		Ud	iP	11 19 12.4			"	17	Up	iP	16 08 41.6
		De	iP	11 19 24.6			Ud	iP	16 08 53.6		
		USSR-Mongolia border region (h = N).					De	iP	16 08 51.3		
"	16	Up	iP	16 43 38.0 D			Nicobar Islands region (h = 160 km).				
		Ki	iP	16 43 37.5			"	17	Ki	iP	17 27 31.9
			i	16 43 54.4			Ud	iP	17 27 06.8		
		Sk	iP	16 43 51.4			Southern Iran (h = N).				
		Um	iP	16 43 35.2			"	18	Up	iP	00 47 09.3
		Ud	iP	16 43 47.5			Ud	iP	00 47 11.4		
		Southern Sumatera (h = 35 km).				"	19	Ki	iP	18 57 56.7	
"	16	Up	iP	18 09 14.2			Ethiopia (h = N).				
				micr sec			"	19	Up	iP	21 39 39.3
			Mx	E 1.0 17				i	21 39 43.4		
		Ki	iP	18 08 57.2				iS	21 42 51		
				micr sec					micr sec		
			Mx	E 1.8 20				i	Z' 2.0 2.0		
		Sk	e	18 09 28				Mx	E 22.5 15		
		Um	iP	18 09 03.1				Mx	N 17.6 14		
		Ud	iP	18 09 22.6 D				Mx	Z 18.1 14		
		North of Halmahera (h = 45 km).					Ki	iP	21 41 05.2		
		M = 5.4 (Up,Ki).					i	21 41 07.6			
"	16	Ud	iP	22 10 45.1			iS	21 45 30.1			
								micr sec			
"	17	Ki	iP	03 48 58.8				i	Z' 1.0 1.6		
		Sk	iP	03 48 31.5				Mx	E 23.2 12		
		Um	iP	03 48 57.5				Mx	N 12.6 11		
			i	03 49 02.4				Mx	Z 9.8 12		
"	17	Ki	iP	09 06 14.8			(cont.)				
		Near east coast of Kamchatka (h = 100 km).									

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979	(cont.)				1979	(cont.)				
Sep. 19	Um	iP	21 40 26.5		Sep. 21	Ud	iPKP1	12 14 35.9		
		i	21 40 28.7				iPKP2	12 14 47.0		
		iS	21 44 05.0				South of Kermadec Islands			
		iLg2	21 47 22.1				(h = N).			
	Ud	iP	21 39 39.6		"	21	Up	iP	18 15 23.2	
		i	21 39 43.0				Ki	iP	18 14 29.3	
		i	21 43 02.3				Um	iP	18 14 56.9	
	De	iP	21 38 50.3				Ud	iP	18 15 21.6	
		i	21 38 57.9				De	iP	18 15 45.1	
		i	21 42 31.4				Alaska Peninsula (h = 40 km).			
	Central Italy (h = 15 km).				"	21	Up	iP	23 51 54.6	
	m = 6.1, M = 5.8 (Up,Ki).						Ki	iP	23 53 08.3	
"	19	Ki	iP	21 58 17.9			Sk	iP	23 52 28.9	
		Um	iP	21 57 41.6			Um	iP	23 52 33.1	
		Ud	iP	21 56 49.9			Ud	iP	23 51 56.1 C	
	Central Italy (h = 10 km).						De	iP	23 51 18.9	
"	20	Up	iP	10 42 09.4			Tyrrhenian Sea (h = 320 km).			
		Ki	iP	10 43 09.6		"	22	Ki	iP	04 15 01.6
		Ud	iP	10 42 20.3				Ud	iP	04 15 51.8
		De	iP	10 41 49.9			Hokkaido, Japan region			
	Eastern Mediterranean Sea						(h = N).			
	(h = 50 km).				"	22	Ki	iP	08 12 50.7	
"	20	Ud	i(P)	15 26 25.5			Hawaii (h = 10 km).			
"	20	Up	iP	20 19 49.0		"	22	Ki	iP	08 19 13.4
		Ki	iP	20 19 03.0			Panay, Philippine Islands			
		Um	iP	20 19 24.6			(h = N).			
		Ud	iP	20 19 55.0		"	22	Up	iP	09 59 26.0
		i	20 20 07.4				Ki	iP	09 58 55.5	
	Kuril Islands region						Um	iP	09 59 07.8	
	(h = N).						Ud	iP	09 59 36.2	
"	20	Ud	iP	21 50 27.4			De	iP	09 59 47.3	
	Southern Greece (h = N).						Ryukyu Islands (h = N).			
"	21	Ki	eP	00 58 13		"	22	Ud	iP	15 36 38.8
	Central Italy (h = 10 km).						Kuril Islands (h = 130 km).			
"	21	Ud	iP	02 04 58.0		"	22	Ki	iP	15 45 22.6
		De	iP	02 04 19.4				Ud	iP	15 45 30.6
"	21	Ki	iP	09 07 43.8				De	iP	15 45 27.0
		Ud	iP	09 07 20.9			Tadzhik SSR (h = 20 km).			
	Southern Iran (h = N).				"	22	Up	iP	18 09 02.1 D	
"	21	Up	iP	12 07 53.9				i	18 11 13.9	
		Ud	iP	12 06 59.4					micr sec	
	Yugoslavia (h = 10 km).						P	Z'	0.1 0.5	
"	21	Up	iPKP2	12 14 44.1			Ki	iP	18 10 39.6	
		Ki	iPKP1	12 14 14.0				iLg1	18 16 33.3	
	(cont.)						Sk	iP	18 09 59.4	
							(cont.)			



Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979				1979			
Sep.	22	(cont.)		Sep.	23	(cont.)	
		Sk eLgl	18 14 58			Ud i	10 28 10.7
		Um iP	18 09 48.7			De iP	10 28 30.4 C
		iLgl	18 14 30.8			i	10 28 32.3
		Ud iP	18 09 16.6			Near Islands, Aleutian Islands (h = 45 km).	
		i	18 09 17.7			m = 6.4, M = 5.4 (Up,Ki).	
		i	18 11 41.8			Double shock, small and large, in average 2.5 s apart.	
		eLgl	18 13 15				
		De iP	18 09 35.5				
		i	18 09 36.9				
		Southwestern USSR (h = N).					
"	22	Ud iP	18 21 18.4	"	23	Up i	13 56 35.2
		De iP	18 21 29.9			iSgl	13 56 38.3
		Fiji Islands region (h = 660 km).				Ki iP	13 53 47.0
						iSgl	13 54 23.6
"	22	Up iP	23 33 44.9 C			Um iP	13 54 01.6
		Ki iP	23 32 59.8			iPgl	13 54 09.3
		Um iP	23 33 20.6			i	13 54 42.9
		Ud iP	23 33 51.3			iSn	13 54 45.8
		De iP	23 34 08.5			i	13 54 59.9
		Kuril Islands (h = 40 km).				iSgl	13 55 03.0
						Ud i	13 55 53.7
"	23	Sk iP	01 31 36.2			iSgl	13 56 25.8
		Ud iP	01 32 15.5			De iLgl	13 58 22.4
		De iP	01 32 55.5			Coast of Nordland, Norway, 66.8°N, 13.5°E.	
"	23	Ud iP	02 44 58.8			Origin time = 13 52 58.	
		i	02 45 34.0			M <sub>L</sub> = 3.0 (Up,Ki,Ud,De).	
		De iP	02 45 09.8			Felt.	
"	23	Ud iP	04 35 53.5	"	23	De iP	14 49 38.9
		Taiwan region (h = 100 km).				Bismarck Sea (h = 580 km).	
"	23	Up iP	10 28 06.8 C	"	23	Ki iP	20 50 38.2
		i	10 28 09.7			Um iP	20 50 59.1
		i	10 28 16.6			Ud iP	20 51 31.1
			micr sec	"	23	Up iP	21 38 45.8
		P	Z' 0.1 0.9			Ki iP	21 28 22.5
		i	Z' 0.4 0.9			Um i(PKP)	21 28 23.7
		Mx	E 0.8 15			iPKP1	21 28 28.8
		Mx	N 2.2 20			i	21 28 57.9
		Mx	Z 3.4 21			Ud ePKP	21 28 37
		Ki iP	10 27 14.1 C			iPKP2	21 28 49.9
		i	10 27 16.1			South of Kermadec Islands (h = N).	
			micr sec	"	23	Up iP	23 02 52.0
		P	Z' 0.1 1.0			Ki i(PKP)	23 02 53.5
		i	Z' 0.3 0.9			iPKP	23 03 03.6
		Mx	E 1.7 19			Um iP	23 03 02.4
		Mx	N 1.9 17			i	23 03 32.3
		Mx	Z 2.1 19			Ud i(PKP)	23 02 48.3
		Sk iP	10 27 47.4			iPKP	23 02 50.8
		i	10 27 50.0			i	23 04 50.0
		Um iP	10 27 39.4 C			Scotia Sea (h = 10 km).	
		i	10 27 42.4				
		Ud iP	10 28 08.3 C				
		(cont.)					



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1979						1979								
Sep.	24	Up	iP	23 50	48.1	Sep.	26	Up	iP	04 18 25.4				
		Ki	iP	23 51	31.4			Ki	iP	04 17 40.6				
		Sk	iP	23 51	21.5			Ud	iP	04 18 30.9				
		Um	iP	23 51	05.1			Kuril Islands (h = 15 km).						
		Ud	iP	23 50	59.1									
		Eastern Gulf of Aden (h = 10 km).					"	26	Ud	iP	04 51 10.6			
"	25	De	iPKP1	01 43	38.8	"	26	Ud	Pgl	11 50 48.2				
		Loyalty Islands region (h = N).							Sgl	11 51 09.9				
									Rg	11 51 17.3				
								Local near-surface event.						
"	25	Up	iP	01 45	57.7	"	26	Ud	i(Sgl)	13 14 32.8				
		Ki	iP	01 47	13.1				i	13 14 43.1				
		Sk	iP	01 46	41.0			De	iPgl	13 14 04.1				
		Um	iP	01 46	36.7				iSgl	13 14 33.8				
		Ud	iP	01 46	03.7			Skagerrak, near 58 1/4° N, 11° E.						
		De	iP	01 45	26.1			Origin time = 13 13 24.						
		Greece (h = 15 km).						Explosion?						
"	25	Ud	iP	02 08	39.7	"	26	Ud	iPgl	13 26 04.1				
"	25	Up	iP	13 13	06.0 C				iSgl	13 26 36.7				
			ipP	13 13	17.2				i	13 26 45.7				
			iS	13 18	51			De	iPgl	13 26 05.6				
			iSS	13 21	33				iSgl	13 26 34.7				
								Skagerrak, near 58 1/4° N, 11° E.						
		P	Z'	0.1	1.0			Origin time = 13 25 25.						
		pP	Z'	0.2	1.0			Explosion?						
		Mx	E	4.5	12									
		Mx	N	8.4	12			"	26	Up	iP	15 11 48.8 C		
		Mx	Z	16.2	16					Ki	iP	15 11 14.3 C		
		Ki	iP	13 12	58.1 C							micr sec		
			ipP	13 13	10.2							P	Z'	0.1 0.7
			iSS	13 21	14.5					Sk	iP	15 11 22.3 C		
										Um	iP	15 11 33.9		
										Ud	iP	15 11 40.7 C		
										De	iP	15 11 57.2 C		
										Southern Nevada.				
										Underground explosion.				
		P	Z'	0.3	0.7			"	27	Up	iP	04 19 51.7		
		pP	Z'	0.4	0.7					Ki	iP	04 19 37.4		
		Mx	E	16.7	15					Sk	iP	04 20 08.8		
		Mx	N	8.4	11					Ud	iP	04 20 09.4		
		Mx	Z	12.3	15					Eastern Kazakh SSR.				
		Sk	iP	13 13	25.1 C					Underground explosion.				
			ipP	13 13	36.7									
		Um	iP	13 13	55.0 C									
			ipP	13 14	05.8									
		Ud	iP	13 13	22.8 C									
			ipP	13 13	34.3									
			eLgl	13 26	44									
		De	iP	13 13	26.0 C									
			ipP	13 13	37.8									
			iLgl	13 26	53.0									
		Eastern Kazakh SSR.						"	27	Up	iPKP	14 19 03.0		
		h = 45 km (Up,Ki,Sk,Um,Ud,De).										micr sec		
		m = 6.1, M = 5.9 (Up,Ki).								Mx	N	3.0 27		
										Mx	Z	2.9 26		
										(cont.)				

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979				1979			
Sep. 27 (cont.)				Sep. 29 (cont.)			
	Ki	iPKP	14 18 48.5		Up		micr sec
			micr sec		Mx	N	49.6 22
		PKP	Z' 0.1 0.9		Mx	Z	42.0 20
		Mx	N 2.8 25		Ki	iP	18 49 34.8
	Sk	iPKP	14 18 59.1			i	18 49 35.8
	Um	iPKP	14 18 54.8			i	18 49 46.0
	Ud	iPKP	14 19 05.2			iS	18 59 46.0
	De	i(PKP)	14 19 00.6				micr sec
	New Hebrides Islands					i	Z' 0.8 1.4
	(h = 70 km).					Mx	E 41.8 19
	M = 5.9 (Up,Ki).					Mx	N 52.8 21
						Mx	Z 38.2 18
"	28	Up	iP 07 55 38.2 C		Sk	iP	18 49 46.6
			ipP 07 55 44.8			i	18 49 49.1
			micr sec			i	18 49 59.4
		P	Z' 0.1 0.5		Um	iP	18 49 30.3
	Sk	iP	07 55 52.5 C			i	18 49 41.3
	Um	iP	07 55 25.7 C			iS	18 59 35.2
	Ud	iP	07 55 52.9 C		Ud	iP	18 49 42.3
		ipP	07 55 59.8			i	18 49 43.3
	De	iP	07 55 57.5 C			i	18 49 50.7
	Southern Sinkiang Prov.,				De	iP	18 49 39.7
	China.					i	18 49 40.7
	h = 25 km (Up,Ud).					i	18 49 51.2
					Off w. coast of North		
"	29	Um	iP 03 29 50.9		Sumatera (h = 25 km).		
	Panama (h = N).				m = 6.7, M = 6.9 (Up,Ki).		
"	29	Ud	iP 08 22 07.2	"	29	Up	iP 19 46 05.5
"	29	Up	iP 11 42 45.6			Ki	iP 19 45 45.8
		Ki	iP 11 42 34.8			Ud	iP 19 46 11.8
		Sk	iP 11 42 59.7		Philippine Islands region		
		Um	iP 11 42 35.1		(h = N).		
		Ud	iP 11 42 59.1	"	30	Ud	iP 00 08 19.4
	India-China border region			"	30	Ud	iP 06 47 17.4
	(h = N).				Hindu Kush region		
"	29	Ud	iP 14 09 56.0		(h = 140 km).		
	Dodecanese Islands			"	30	Up	iP 08 49 54.5
	(h = 70 km).					i	08 50 16.8
"	29	Ki	iP 18 14 18.9		Ki	iP	08 49 09.4
		Ud	iP 18 14 00.3		Sk	iP	08 49 44.6
	Southern Iran (h = N).				Um	iP	08 49 26.9
"	29	Up	iP 18 49 31.4			i	08 49 45.5
		i	18 49 33.1		Ud	iP	08 49 59.3
		i	18 49 43.4		De	iP	08 50 15.4
		iS	18 59 41		Hokkaido, Japan region		
			micr sec		(h = 70 km).		
		i	Z' 0.9 1.5	"	30	Ud	iP 18 35 54.3
		Mx	E 15.4 20		Southern Iran (h = N).		
	(cont.)						

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979

Sep.	30	Up	iP	20	50	15.3
		Ki	iP	20	50	49.9
		Sk	iP	20	50	50.2
		Ud	iP	20	50	30.5
		De	i	20	50	21.5
		Southern Iran (h = N).				
"	30	Ud	iP	21	21	48.3

November 24, 1981

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SEISMOLOGICAL BULLETIN

UPPSALA, KIRUNA, SKALSTUGAN, UMEÅ,

UDDEHOLM and DELARY

Uppsala	(Up):	59°51.5'N,	17°37.6'E;	h = 14 m
Kiruna	(Ki):	67°50.4'N,	20°25.0'E;	h = 390 m
Skalstugan	(Sk):	63°34.8'N,	12°16.8'E;	h = 580 m
Umeå	(Um):	63°48.9'N,	20°14.2'E;	h = 16 m
Uddeholm	(Ud):	60°05.4'N,	13°36.4'E;	h = 240 m
Delary	(De):	56°28.2'N,	13°52.2'E;	h = 150 m

OCTOBER 1 - 31, 1979

1979				1979			
Oct.				Oct.			
1	De	iP	03 46 08.9	1	(cont.)		
"	1	Up	iP 07 42 58.5		Um	iP	14 26 31.8
		Ki	iP 07 43 28.5			ipP	14 27 11.4
			i 07 43 44.4			i	14 27 27.5
		Sk	iP 07 43 33.0		Ud	iP	14 26 24.3
		Um	iP 07 43 07.3			ipP	14 27 04.6
			ipP 07 43 19.5			i	14 27 20.0
		Ud	iP 07 43 15.1		De	eP	14 26 29
			ipP 07 43 26.9			i	14 26 32.8
		De	eP 07 43 04			ipP	14 27 12.0
			i 07 43 12.6			i	14 27 27.6
		Caspian Sea. h = 45 km (Um,Ud).			Mexico-Guatemala border region. h = 160 km (Up,Ki,Sk,Um,Ud,De). M = 5.2 (Up,Ki).		
"	1	Ud	iP 09 55 52.9	"	1	Ki	iP 18 48 11.8
"	1	De	iPKPl 12 43 20.1			Sk	eP 18 48 47
		Tonga Islands (h = N).				Um	iP 18 48 31.0
"	1	Up	iP 14 26 34.2			Ud	iP 18 49 02.6
			ipP 14 27 15.3				i 18 49 25.4
			iSKS 14 36 42			Kuril Islands (h = 40 km).	
			iS 14 36 53	"	1	Ud	iP 19 50 58.0
			micr sec	"	1	Ki	iP 23 49 09.7
		Mx	N 0.2 21			Sk	eP 23 49 48
		Mx	Z 0.5 21			Um	iP 23 49 29.6
		Ki	eP 14 26 21				i 23 49 31.6
			i 14 26 23.6			Ud	iP 23 50 00.3
			ipP 14 27 01.6				i 23 50 02.2
			i 14 27 17.9			De	iP 23 50 17.6
			iS 14 36 29			Near east coast of Honshu, Japan (h = 50 km).	
			micr sec	"	2	Ki	iP 04 34 21.9
		Mx	E 0.3 18			Sk	eP 04 44 54
		Mx	N 0.2 18			Um	iP 04 33 46.8
		Mx	Z 0.3 18			Ud	iP 04 33 22.9
		Sk	iP 14 26 15.2			De	iP 04 32 51.9
			ipP 14 26 55.8			Crete (h = N).	
			i 14 27 10.6				
		(cont.)					



Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979				1979				
Oct.	4	(cont.)		Oct.	5	Ki	iP	16 56 29.4
		Up	micr sec				ipP	16 56 59.3
		Mx	N 0.3 10			Sk	iP	16 56 14.9
		Mx	Z 1.5 11				ipP	16 56 45.5
		Ki	iP 15 07 16.6			Um	iP	16 56 31.0
		Sk	iP 15 06 34.2				ipP	16 57 00.8
		Um	iP 15 06 34.1			Ud	iP	16 56 17.2
		Ud	iP 15 05 53.3				ipP	16 56 47.0
			i 15 05 56.1			De	iP	16 56 17.3
		De	iP 15 05 06.1				ipP	16 56 48.8
		Yugoslavia (h = 10 km).				Northern Peru. h = 120 km (Ki,Sk,Um,Ud,De).		
"	4	Up	iP 16 05 33.8	"	5	Ud	iP	20 10 41.2
			micr sec					
		P	Z' 0.1 0.6	"	5	Um	iP	20 51 52.1
		Ki	iP 16 05 00.5				i	20 53 46.6
			micr sec	"	5	Ud	iP	21 19 18.4
		P	Z' 0.5 0.8	"	5	Ki	iP	21 36 48.6
		Sk	iP 16 05 41.7			Um	iP	21 37 07.2
		Um	iP 16 05 09.5			Ud	iP	21 37 37.5
		Ud	iP 16 05 49.0			De	iP	21 37 55.6
		De	iP 16 06 03.6			Off east coast of Honshu, Japan (h = N).		
			i 16 06 29.1					
		Western Siberia. m = 6.1 (Up,Ki). Underground explosion.						
"	4	Ki	iP 19 55 02.5	"	5	Sk	iP	22 57 27.8
		Um	iP 19 55 06.1			Um	iP	22 57 11.7
		Ud	iP 19 55 24.6			Ud	iP	22 57 11.4
		Banda Sea (h = 140 km).				Carlsberg Ridge (h = 10 km).		
"	5	Ki	iP 01 15 37.9	"	6	Ud	iP	12 02 36.8
		Sk	eP 01 15 57			Iran-USSR border region (h = 15 km).		
		Um	iP 01 15 45.5	"	6	Ki	iSgl	12 28 08.5
		Ud	iP 01 16 02.1			Sk	iPgl	12 26 23.7
		Mindanao, Philippine Islands (h = 55 km).					iSgl	12 26 43.9
"	5	Up	iP 02 25 53.1			Um	iSgl	12 27 49.9
		Ki	iP 02 25 35.6			Ud	iSgl	12 28 38.9
			micr sec			West coast of Norway, 65.1°N, 12.3°E. Origin time = 12 25 57. M <sub>L</sub> = 2.6 (Ki,Sk,Um,Ud).		
		P	Z' 0.1 1.0	"	6	Ud	iPKP1	16 16 06.4
		Sk	iP 02 25 58.1			De	iPKP1	16 16 16.3
		Um	iP 02 25 41.7			South of Fiji Islands (h = 550 km).		
		Ud	iP 02 26 02.4	"	6	Ud	iP	17 33 14.0
		Mindanao, Philippine Islands (h = 40 km).				De	iP	17 33 11.7
"	5	Ki	eP 04 55 11	"	6	Ud	iP	17 33 14.0
		Halmahera (h = 130 km).		"	7	Up	iP	01 38 14.5
"	5	Ki	ePKP 13 05 51			Ki	iP	01 37 14.8
		Um	iPKP 13 05 58.9			Sk	iP	01 37 57.9
		Ud	iPKP1 13 06 00.8			Um	iP	01 37 43.0
		De	iPKP1 13 06 11.8			(cont.)		
		Fiji Islands region (h = 560 km).						



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1979				1979			
Oct.	7	(cont.)		Oct.	8	(cont.)	
		Ud	eP 01 38 17			Ud	iP 05 15 06.6
			i 01 38 31.9			Taiwan (h = 30 km).	
		Eastern Siberia (h = N).			"	8	Ki iP 06 12 38.5
"	7	Ud	iP 01 45 57.4			Um	iP 06 12 52.8
"	7	Ki	eP 02 07 26			Gulf of California	
		Sk	eP 02 07 51			(h = 15 km).	
			i 02 07 54.3	"	8	Up	iSgl 16 57 17.9
		Um	eP 02 07 56			Ud	iPgl 16 56 11.7
			i 02 07 58.8				iSgl 16 56 38.5
			i 02 08 16.5				iRg 16 56 51.5
		Ud	eP 02 08 17			De	iSgl 16 56 43.9
			i 02 08 19.7				iRg 16 56 56.2
		Northern Yukon Territory, Canada (h = 10 km).				Coast of Bohuslän, Sweden, 58.3°N, 11.7°E.	
"	7	Up	iP 02 40 26.4			Origin time = 16 55 35.	
		Ki	iP 02 40 07.1			Near-surface event.	
		Um	iP 02 40 13.3			Explosion?	
		Ud	iP 02 40 35.8	"	8	Sk	iP 17 11 30.7
		De	iP 02 40 41.7			Ud	iP 17 10 57.3
		Luzon, Philippine Islands (h = 170 km).				Greece (h = 80 km).	
"	7	Sk	ePKP 09 21 21	"	8	Ud	iP 17 14 31.9
		Um	iPKP 09 21 15.4	"	8	Up	iP 21 19 29.2
		Ud	iPKP 09 21 28.9			Um	iP 21 19 18.3
			i 09 21 33.2			Ud	iP 21 18 26.8
"	7	Um	iPKP 14 25 42.8	"	8	Sk	iPKP1 21 58 22.3
		Ud	iPKP 14 25 51.7			Um	iPKP1 21 58 20.7
		Santa Cruz Islands (h = 35 km).				Ud	iPKP1 21 58 30.8
"	7	Ud	iP 19 30 08.4				iPKP2 21 58 35.4
"	7	Ud	iP 19 41 12.9			De	iPKP1 21 58 39.9
		Java (h = 180 km).					i 21 58 43.9
"	7	Up	iP 21 07 55.3				iPKP2 21 58 51.7
		Ki	iP 21 07 03.4			Kermadec Islands (h = N).	
		Sk	iP 21 07 48.2	"	9	Ki	iP 02 00 03.7
		Um	iP 21 07 25.5			Um	iP 02 00 07.8
			i 21 08 58.8			Ud	iP 02 00 26.0
		Ud	iP 21 08 04.5			De	eP 02 00 31
		De	iP 21 08 26.0			Minihassa Peninsula (h = 130 km).	
		Central Siberia. Underground explosion.		"	9	Ki	ePgl 02 56 14
"	8	Up	iP 05 14 56.7				iSgl 02 56 50.6
		Ki	iP 05 14 32.8			Sk	eSgl 02 57 04
		Sk	eP 05 15 02			Um	iSn 02 57 11.0
		Um	iP 05 14 43.3				iSgl 02 57 27.2
		(cont.)				Coast of Nordland, Norway, 66.8°N, 13.6°E.	
						Origin time = 02 55 24.	
						M <sub>L</sub> = 2.4 (Ki,Um).	

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979				1979			
Oct.	9	Ki iP	05 19 02.6	Oct.	9	(cont.)	
		Um iP	05 19 19.8			Sk i	22 34 57.5
		De iP	05 20 03.7			Um iP	22 35 09.6
		Near east coast of Honshu, Japan (h = 55 km).				i	22 35 18.1
"	9	Up iP	08 02 12.3			i	22 35 34.3
			micr sec			Ud iP	22 34 49.6
		P	Z' 0.1 1.0			i	22 35 15.6
		Ki iP	08 02 03.4			De iP	22 34 49.2
			micr sec			i	22 34 57.9
		P	Z' 0.1 1.2			Leeward Islands (h = 60 km).	
		Sk iP	08 01 55.1	"	10	Ud iP	00 05 25.6
		Um iP	08 02 11.7			Pakistan (h = N).	
		Ud iP	08 02 02.5	"	10	Um iP	03 58 25.9
		De iP	08 02 09.5			Ud iP	03 58 18.7
		Guatemala (h = N). m = 6.0 (Up,Ki).				Near coast of Guatemala (h = 60 km).	
"	9	Ud iPKP1	10 00 39.5	"	10	Ki iPgl	07 44 41.3
		De ePKP1	10 00 49			i	07 44 43.2
		South of Fiji Islands (h = 520 km).				iSgl	07 44 58.3
"	9	Up iRg	11 03 29.7			Sk iSgl	07 47 44.8
		Ud iRg	11 03 14.1			Um iSgl	07 46 44.8
		Central Sweden. Near-surface event.				i	07 46 48.9
"	9	Up iSgl	15 27 20.7			Northern Finland, 68.4°N, 23.6°E. Origin time = 07 44 18. M <sub>L</sub> = 2.7 (Ki,Um). Felt.	
		Ud iRg	15 27 20.3	"	10	Up iRg	09 56 56.5
		De eSgl	15 27 56			Ud iSgl	09 57 37.0
		South-central Sweden. Near-surface event.				East-central Sweden. Near-surface event.	
"	9	Up i(P)	15 40 25.6	"	10	Sk eP	10 08 04
"	9	Ud iP	17 38 24.7			Um iP	10 07 39.3
		Burma (h = 125 km).				Ud iP	10 08 15.1
"	9	Ud ePKP1	18 09 27			De iP	10 08 31.2
		De iPKP1	18 09 39.5			Lake Baikal region (h = N).	
		South of Fiji Islands (h = 340 km).		"	10	Up iP	13 52 37.6
"	9	Um iP	21 11 25.4			iPP	13 56 28.8
		Ud iP	21 11 56.4			micr sec	
"	9	Up iP	22 35 01.2			Mx E	0.2 20
		i	22 35 24.7			Mx N	0.2 20
		Ki iP	22 35 09.9			Ki iP	13 52 34.3
		i	22 35 19.0			ipP	13 52 41.1
		micr sec				i	13 52 49.8
		P	Z' 0.1 0.7			iPP	13 56 24.7
		Sk iP	22 34 48.1			i	13 59 36.1
		(cont.)				micr sec	
						P	Z' 0.3 1.2
						(cont.)	

1979				1979			
Oct.	10	(cont.)		Oct.	12	(cont.)	
		Ki	micr sec			Ud iP	07 06 36.8
		Mx E	0.8 23			Southeast of Shikoku, Japan (h = 450 km).	
		Mx N	0.5 20				
		Mx Z	0.5 18				
		Sk iP	13 52 48.7	"	12	Up iPKP	10 45 15.4
		iPP	13 56 52.3			iPKP2	10 45 44.8
		Um iP	13 52 32.9			i	10 45 59.0
		ipP	13 52 39.4				micr sec
		i	13 52 49.7			Mx E	6.7 23
		Ud iP	13 52 45.1			Mx N	10.8 22
		iPP	13 56 42.7			Mx Z	24.0 21
		i	13 58 29.0			Ki iPKP	10 45 08.7
		De iP	13 52 44.7			iPKP1	10 45 14.0
		iPP	13 56 38.4				micr sec
		Java.				Mx N	18.1 21
		h = 30 km (Ki,Um).				Mx Z	15.0 21
		M = 5.6 (Up,Ki).				Sk iPKP	10 45 15.7
"	10	Ud iRg	14 21 52.3			i	10 45 30.4
		Local near-surface event.				iPP	10 49 23.6
"	10	Ud iP	14 25 11.2			Um iPKP	10 45 11.0
"	11	De iPKP1	04 06 24.0			i	10 45 14.9
		Fiji Islands region (h = 360 km).				iPKP1	10 45 18.9
"	11	Up iP	09 57 05.9			Ud iPKP	10 45 17.1
			micr sec			iPKP2	10 45 52.1
		P Z'	0.1 1.0			iPP	10 49 39.7
		Ud iP	09 57 18.0			De iPKP	10 45 18.9
						i	10 45 45.1
						iPP	10 49 49.4
						Off w. coast of S. Island, New Zealand (h = N).	
						M = 7.4 (Up,Ki).	
"	11	Um iP	11 08 27.0	"	12	Ki iPKP1	11 16 10.2
		Ud iP	11 09 04.0			iPKP2	11 16 17.4
"	11	Up iP	12 54 13.5			Um iPKP2	11 16 22.4
		Ki iP	12 53 57.5			Ud iPKP2	11 16 48.5
		Sk eP	12 54 19			i	11 16 54.6
		Um iP	12 54 03.9			Off w. coast of S. Island, New Zealand (h = N).	
		Ud iP	12 54 21.5				
		De iP	12 54 27.3	"	12	Up iPKP2	11 33 25.7
		Talau Islands (h = 130 km).				Ki iPKP1	11 32 55.2
"	11	Ud iP	21 17 16.4			iPKP2	11 33 02.5
		Luzon, Philippine Islands. (h = N).				Um iPKP1	11 32 59.4
"	12	Up iPKP	06 03 09.5			i	11 33 06.9
		Sk iPKP	06 03 04.0			Ud iPKP2	11 33 33.0
		Um iPKP	06 02 59.4			i	11 33 40.2
		Ud iPKP	06 03 11.2			Off w. coast of S. Island, New Zealand (h = N).	
"	12	Up iP	07 06 29.2	"	12	Ud iP	12 33 04.9
		Ki iP	07 05 55.0	"	12	Up iPKP2	13 55 44.2
		Sk iP	07 06 26.0			Ki iPKP1	13 55 13.9
		Um iP	07 06 09.4			(cont.)	
		(cont.)					

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979				1979				
Oct.	12	(cont.)		Oct.	13	Ud	iP	14 05 54.2
		Ki	iPKP2			"	Ki	eP
			i				Ud	iP
		Um	iPKP1				De	iP
		Ud	iPKP2				Central Alaska (h = 90 km).	
		Off w. coast of S. Island, New Zealand (h = 15 km).				"	Ud	iP
"	12	Ud	iPKP		13		Mindanao, Philippine Islands (h = 70 km).	
		De	iPKP					
"	12	Ud	i(P)		"	13	Up	iP
"	12	Ki	iPKP				Ki	iP
		Ud	iPKP2				Um	iP
		Off w. coast of S. Island, New Zealand (h = N).					Ud	iP
							De	iP
"	12	Ud	iP		"	14	Tadzhik SSR (h = 30 km).	
		Northern Sumatera (h = 80 km).					Up	ePKP1
"	12	Up	iP				Sk	ePKP
		Ki	eP				Um	iPKP
		Sk	iP					i
			i				Ud	iPKP1
		Um	iP					i
		Ud	iP				De	iPKP1
		De	iP					i
			i				Tonga Islands (h = 210 km).	
		Southern Greece (h = 50 km).		"	14	Ki	iPKP	06 27 55.6
"	12	Ud	i(P)			Sk	iPKP	06 28 05.7
"	13	Up	eP			Um	iPKP	06 28 01.9
		Ud	iP				New Hebrides Islands (h = 25 km).	
		Andreanof Islands, Aleutian Is. (h = 100 km).		"	14	Up	ePKP	11 43 49
"	13	Ud	iP			Ud	iPKP	11 43 50.2
"	13	Up	iP		"	14	Ki	iPKP
		Ki	eP				iSKP1	11 53 43.5
			i				Um	iPKP
		Sk	iP					iSKP1
		Um	iP				Ud	iPKP1
			i				De	iPKP1
		Ud	eP					i
			i				South of Fiji Islands (h = 620 km).	
		De	eP		"	14	Um	iP
			i				Ud	iP
		Near east coast of Honshu, Japan (h = 30 km).		"	14	Up	eP	13 29 50.0
"	13	Ki	iP			Sk	eP	13 30 10.1
						Um	iP	15 04 44
						Ud	iP	15 05 27
						De	iP	15 05 24.2
							Ud	iP
							De	iP
							Greece (h = 55 km).	



Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979										1979										
Oct.	15	(cont.)								Oct.	16	(cont.)								
		Um	iP			23	28	56.2				Ud	iP			16	51	16.4		
			ipP			23	29	02.3					i			16	51	20.6		
			i			23	29	09.2				De	iP			16	51	25.2		
			iS			23	38	46				Taiwan region (h = 40 km).								
		Ud	iP			23	29	01.1			"	16	Ki	eP		18	21	24		
			ipP			23	29	07.1					Sk	iP		18	21	14.0		
			i			23	29	14.7					Ud	eP		18	20	50		
		De	iP			23	29	17.0				Ethiopia (h = 10 km).								
			ipP			23	29	23.2			"	16	Up	iP		18	22	56.5		
			i			23	29	29.6					Ki	iP		18	23	42.1		
		California-Mexico border region.											Sk	iP		18	23	31.2		
		h = 20 km (Um,Ud,De).											Ud	iP		18	23	04.8		
		M = 6.9 (Up,Ki).										"	16	Ki	iPKP		19	03	34.3	
"	16	Up				micr		sec		"	16	Ud	iPKP1		19	03	41.7			
		Mx	E			0.6		17				De	iPKP1		19	03	53.5	D		
		Mx	N			1.3		16				Fiji Islands region								
		Mx	Z			2.4		18				(h = 570 km).								
		Ki	eP			07	10	21		"	16	Ki	iP		20	55	50.1			
			i			07	10	25.5				Sk	iP		20	55	36.5			
						micr		sec				Um	iP		20	55	22.8			
		Mx	E			1.3		15					i		20	55	25.1			
		Mx	N			1.3		16				Ethiopia (h = 10 km).								
		Sk	eP			07	10	30		"	16	Up	iP		21	03	55.9			
		Um	eP			07	10	42					Mx	E		0.3	16			
			i			07	10	46.6					Mx	N		0.4	19			
		Ud	eP			07	10	44					Mx	Z		0.8	18			
			i			07	10	49.2				Ki	iP		21	04	45.5			
		De	iP			07	11	00.4							micr		sec			
		Southern California (h = 5 km).													Mx	N		1.0	14	
		M = 5.9 (Up,Ki).													Mx	Z		0.5	14	
"	16	Up	iP			12	13	20.7				Sk	eP		21	04	32			
		Ki	eP			12	13	28				Um	iP		21	04	14.1			
		Um	iP			12	13	17.7					i		21	04	18.1			
		Ud	iP			12	13	37.5				Ud	iP		21	04	07.9			
		De	iP			12	13	34.8					i		21	04	12.3			
		Afghanistan-USSR border region (h = 250 km).											De	iP		21	03	47.1		
"	16	Up	iP			16	06	58.3				Ethiopia (h = 5 km).								
						micr		sec				M = 5.3 (Up,Ki).								
			P			Z'		0.1	1.1	"	16	Up	iP		21	26	56.1	C		
		Ki	eP			16	07	44					ipP		21	27	06.1			
			i			16	07	44.8							micr		sec			
		Sk	eP			16	07	31					P		Z'		0.1	0.9		
			i			16	07	32.4				Ki	iP		21	26	02.5			
		Um	iP			16	07	17.6					ipP		21	26	12.1			
		Ud	iP			16	07	09.6							micr		sec			
			i			16	07	10.7					P		Z'		0.1	1.0		
		De	iP			16	06	47.4				Sk	iP		21	26	36.7			
		Ethiopia (h = 10 km).											ipP		21	26	46.3			
"	16	Um	iP			16	50	51.1				Um	iP		21	26	29.1			
		(cont.)											(cont.)							

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979				1979					
Oct.	16	(cont.)		Oct.	17	Up	iP	05 55 03.6	
		Um	ipP				i	05 55 09.4	
		Ud	iP				i	05 57 25.8	
			ipP				i	05 57 51.9	
		De	iP				iPP	05 58 55.2	
			ipP				iS	06 04 36	
		Rat Islands, Aleutian Islands.						micr sec	
		h = 20 km (Up,Ki,Sk,Um,Ud,De).					P	Z' 0.4 0.9	
		m = 5.9 (Up,Ki).					i	Z' 1.7 0.9	
							Mx	E 1.0 15	
							Mx	N 2.0 14	
"	16	Up	iP				Mx	Z 3.5 15	
		Ki	iP		Ki	iP		05 54 35.9	
		Ud	iP			i		05 54 43.7	
		De	iP			i		05 57 23.7	
						iPP		05 58 08.1	
"	16	Up	iP			iS		06 04 12	
			i					micr sec	
		Ki	iP			P	Z'	0.6 1.0	
		Sk	iP			i	Z'	4.2 1.0	
		Um	iP			Mx	N	2.0 17	
		Ud	iP			Mx	Z	1.0 16	
		De	iP		Sk	iP		05 55 00.5	
		Nicobar Islands region (h = 35 km).				i		05 55 01.4	
						i		05 55 09.0	
						i		05 57 49.4	
"	16	Up	iP			iPP		05 58 49.8	
			ipP		Um	iP		05 54 47.6	
		Ki	iP			i		05 54 55.6	
			ipP			i		05 57 35.5	
		Sk	iP			iPP		05 58 31.2	
		Um	iP			iS		06 04 26.0	
			ipP		Ud	iP		05 55 09.2	
		Ud	iP			i		05 55 10.0	
			ipP			i		05 55 15.8	
		De	iP			iPP		05 58 06.7	
			ipP		De	iP		05 55 21.0	
		Southern California.				i		05 55 28.9	
		h = 10 km (Up,Ki,Um,Ud,De).				i		05 58 09.2	
						iPP		05 59 25.4	
"	16	Ki	iP			Mariana Islands (h = 600 km).			
		Sk	iP			m = 7.0, M = 6.1 (Up,Ki).			
		Ud	eP			M uncorrected for focal depth.			
		Ethiopia (h = 10 km).							
"	17	Ud	iP		"	17	Up	iP	06 09 51.6
"	17	Sk	iP				Ki	iP	06 09 23.9
		Um	iP				Um	iP	06 09 35.2
		Ud	iP				Mariana Islands (h = 600 km).		
"	17	Up	iP		"	17	Up	iP	06 12 33.0
		Ki	iP				Ki	iP	06 12 46.7
		Sk	eP				Sk	iP	06 12 35.0
		Um	iP				Ud	iP	06 12 29.0
		Ud	iP						
		De	iP		"	17	Sk	iP	06 15 16.7
		Kuril Islands (h = 40 km).					Ud	iP	06 15 10.7
"	17	Ki	iP						
		Ud	iP						





Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979				1979			
Oct.	18	Up	iP	07 14 25.2	Oct.	20	(cont.)
			i	07 14 27.4			Up iSKP 02 03 20
				micr sec			iSKS 02 05 31
			P	Z' 1.0 0.5			iS 02 06 27
		Ki	iP	07 12 55.2 C			iSP 02 08 04
			i	07 15 08			micr sec
				micr sec			Mx E 1.2 18
			P	Z' 1.2 1.0			Mx N 2.4 19
		Sk	iP	07 14 04.6			Mx Z 4.1 20
			i	07 14 06.3		Ki	iP 01 54 49.7
			i	07 17 18.5			micr sec
		Um	iP	07 13 33.1			Mx N 3.2 16
			i	07 13 35.1			Mx Z 2.3 16
			i	07 16 16.1		Sk	iPP 01 59 25.5
		Ud	iP	07 14 35.9		Um	iSKS 02 05 24.0
		De	iP	07 15 08.6		Ud	iP 01 55 06.3
							iPP 01 59 24.9
						De	iPP 01 59 34.2
							Bali Island region
							(h = 40 km).
							M = 6.3 (Up,Ki).
"	18	Ud	iPKP1	11 17 31.4	"	20	Ki iP 19 11 59.8
		De	iPKP1	11 17 40.6			Um iP 19 11 49.3
			i	11 17 42.7			Ud iP 19 12 07.6
							Hindu Kush region
							(h = 200 km).
"	19	Ki	iP	02 51 43.6	"	20	Up iP 19 48 05.6
			i	02 51 51.4			Ki iP 19 48 11.9
							Um iP 19 48 02.3
							Ud iP 19 48 22.3
							De iP 19 48 19.6
							Tadzhik SSR (h = 25 km).
"	19	Um	iP	02 51 59.2	"	20	Ud iP 21 57 31.5
			i	02 52 04.9			Costa Rica (h = N).
		Ud	iP	02 52 14.8			
"	19	Um	iP	09 55 03.3	"	20	Ki iP 23 49 45.4
		Ud	iP	09 55 21.0			Um iP 23 49 49.9
							Banda Sea (h = 140 km).
"	19	Up	iP	15 23 47.1	"	21	Ud iP 00 53 03.2
		Sk	iP	15 24 02.2			De iP 00 52 28.1
		Um	iP	15 23 39.8			Greece (h = 130 km).
		Ud	iP	15 24 00.2			
"	19	Up	iP	20 25 14.4	"	21	Up iP 11 35 31.0
		Ud	iP	20 25 18.8			Um iP 11 36 13.4
							Ud iP 11 35 37.8
							i 11 35 45.2
							De eP 11 34 58
							Albania (h = 10 km).
"	20	Up	iPP	01 59 20	"	21	Ud iP 17 33 05.5
							Pakistan (h = N).

(cont.)



Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979				1979			
Oct.	24	(cont.)		Oct.	24	Up eP	15 35 36
		Ki iPKP1	01 22 57.7			Ud iP	15 35 25.4
		Sk iPKP1	01 23 06.4			i	15 35 33.6
		iPKP2	01 23 11.3			Near coast of northern California (h = 20 km).	
		i	01 23 23.1				
		Um iPKP1	01 22 56.4	"	24	Ud iP	20 53 51.2
		i	01 23 01.6				
		Ud iPKP1	01 23 01.6	"	25	Up iP	06 55 11.1
		iPKP2	01 23 10.2			Ud iP	06 55 14.2
		De iPKP1	01 23 00.3				
		iPKP2	01 23 07.1	"	25	Ud i(PKP)	07 12 15.2
		West of Macquarie Island (h = 10 km).				Solomon Islands (h = N).	
"	24	Up iP	06 04 45.6 C	"	25	Ki iP	17 09 37.6
		i	06 04 47.2			Central Alaska (h = 140 km).	
			micr sec				
		i	Z' 2.2 0.9	"	25	Ki iP	17 45 50.2
		Ki iP	06 05 18.3 C			Sk iP	17 45 55.9
		i	06 05 25.2			Um iP	17 45 32.5
			micr sec			Ud iP	17 45 39.0 C
		P	Z' 0.8 0.9			De iP	17 45 27.3 C
		i	Z' 1.5 0.9			Pakistan (h = N).	
		Sk iP	06 05 24.2 C	"	25	Um iP	18 09 25.0
		i	06 05 25.5			De iP	18 08 42.6
		Um iP	06 04 53.7 C			Lake Tanganyika region (h = N).	
		Ud iP	06 05 07.9 C	"	25	Up iP	18 42 00.1
		De iP	06 04 58.2 C			Ki iPn	18 40 13.3 C
		Western Kazakh SSR. m = 6.6 (Up,Ki). Underground explosion.				Sk eP	18 41 06
"	24	Ki iP	09 48 56.4			Um iP	18 41 07.8
		Um iP	09 49 14.9			Ud iP	18 41 52.8
		Ud iP	09 49 45.7			i	18 42 02.1
		De eP	09 50 02			Norwegian Sea (h = 10 km).	
		Hokkaido, Japan region (h = 60 km).		"	26	Ki iP	00 00 10.8
"	24	Ki iP	10 46 54.7			Sk iP	00 00 45.1
		Um iP	10 47 10.1			Um iP	00 00 59.0
		i	10 47 20.0			Ud iP	00 01 33.0
		Ud iP	10 47 37.1	"	26	Um i(P)	01 26 22.5 C
		South of Honshu, Japan (h = N).		"	26	Up iP	07 24 35.4
"	24	Ki iPKP1	12 17 53.6			Um iP	07 24 25.3
		Off w. coast of S. Island New Zealand (h = N).				Ud iP	07 24 37.5
"	24	Ud iRg	15 20 13.2	"	26	Up iP	07 26 24.1
						Ki iP	07 26 33.3 C
"	24	Up iRg	15 23 55.0			Sk iP	07 26 49.8
		Ud iRg	15 23 44.9			Um iP	07 26 22.5
		Central Sweden. Near-surface event.				Ud iP	07 26 40.2 C
						De iP	07 26 36.2
						Hindu Kush region (h = 200 km).	





Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979

Oct. 30 Up iP 01 49 07.7 C  
micr sec  
P Z' 0.2 1.0  
Ki iP 01 48 39.7  
micr sec  
P Z' 0.5 0.9  
Sk iP 01 49 04.8  
Um iP 01 48 52.1  
Ud iP 01 49 13.8  
De iP 01 49 25.0  
Mariana Islands (h = 580 km).  
m = 6.1 (Up,Ki).

" 30 Ki iPKP 06 55 21.3  
Sk iPKP 06 55 32.8  
Um iPKP 06 55 28.2  
Ud iPKP 06 55 37.8  
De iPKP 06 55 44.7  
Santa Cruz Islands  
(h = 300 km).

" 31 Up i 02 18 27.4  
Ki iP 02 19 19.1  
Sk e 02 18 57  
Ud iP 02 18 18.9  
De iP 02 17 45.8  
Crete (h = 45 km).

October 5, 1981

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SEISMOLOGICAL BULLETIN

UPPSALA, KIRUNA, SKALSTUGAN, UMEÅ,

UDDEHOLM and DELARY

Uppsala (Up): 59°51.5'N, 17°37.6'E; h = 14 m  
 Kiruna (Ki): 67°50.4'N, 20°25.0'E; h = 390 m  
 Skalstugan (Sk): 63°34.8'N, 12°16.8'E; h = 580 m  
 Umeå (Um): 63°48.9'N, 20°14.2'E; h = 16 m  
 Uddeholm (Ud): 60°05.4'N, 13°36.4'E; h = 240 m  
 Delary (De): 56°28.2'N, 13°52.2'E; h = 150 m

NOVEMBER 1 - 30, 1979

1979				1979			
Nov.	1	Ki iP	04 26 36.9	Nov.	2	Up iP	05 35 09.2
		i	04 26 41.9			i	05 35 27.0
		West Irian region (h = 25 km).				P	Z' 0.1 1.0
"	1	Ud i(PKP)	06 04 22.3			Ki iP	05 36 27.4
		New Britain region (h = N).				Sk iP	05 35 52.6
"	1	Um iPKP	19 27 20.3			Um iP	05 35 51.9
		Ud iPKP1	19 27 33.5 C			Ud iP	05 35 15.4
		South of Kermadec Islands (h = N).				Greece-Albania border region (h = 35 km).	
"	1	Up iP	22 00 37.2	"	2	Up iP	16 06 28.6 C
		i	22 00 48.5			i	16 06 31.1
		Ki iP	22 01 31.4			iPP	16 10 25.4
		Um iP	22 01 04.8 C			iSKS	16 16 57.1
		Ud iP	22 00 42.1			iPKKP	16 23 10.0
		Zaire Republic (h = 10 km).					micr sec
"	2	Up iPKP	01 51 23.4			P	Z' 0.1 0.6
			micr sec			i	Z' 0.3 1.2
		Mx E	2.1 22			Mx E	6.1 21
		Mx N	1.2 22			Mx N	11 25
		Mx Z	6.0 22			Mx Z	14 20
		Ki iPKP	01 51 08.5			Ki iP	16 06 25.2 C
			micr sec			i	16 06 27.8
		Mx N	1.7 22			iPKKP	16 23 14.6
		Sk iPKP	01 51 18.7				micr sec
		Um iPKP	01 51 13.8			P	Z' 0.2 0.7
		Ud iPKP	01 51 24.9			i	Z' 0.8 1.2
		iSKP1	01 54 44.2			Mx N	9.5 22
		De iPKP	01 51 29.9			Mx Z	10 18
		iSKP1	01 51 51.9			Sk iP	16 06 40.8 C
		New Hebrides Islands (h = N).				iPKKP	16 23 05.2
"	2	Ki iP	03 31 09.3			Um iP	16 06 24.3 C
		i	03 31 47.2			i	16 06 27.2
		Ud iP	03 32 04.9			iSKS	16 16 51
		Andreanof Islands, Aleutian Is. (h = N).				iPKKP	16 23 15.0
						Ud iP	16 06 38.2 C
						iPKKP	16 23 03.3
						De iP	16 06 37.5 C

(cont.)





Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979				1979			
Nov.	5	(cont.)		Nov.	6	Ud iP	06 47 43.3
		Um iPKP1	20 26 26.1			Tibet (h = N).	
		Ud iPKP1	20 26 38.6				
		i	20 26 45.3	"	6	Um iP	08 10 23.4
		De iPKP1	20 26 47.8			Albania (h = 10 km).	
"	6	Ki iP	00 01 50.1	"	6	Ud iP	08 36 59.5
		Um iP	00 01 41.9				
		Ud iP	00 02 01.5	"	6	Up iPKP	11 57 23.6
		Tadzhik SSR (h = 130 km).				micr sec	
"	6	Up iPKP1	01 43 13.8			Mx E	1.3 23
		i	01 44 12.9			Mx N	5.3 21
		iSKP1	01 46 03.5			Mx Z	5.4 19
			micr sec			Ki iPKP	11 57 11.6
		PKP1 Z'	0.1 1.0			Sk iPKP	11 57 22.3
		Ki i(PKP)	01 42 56.2			Um iPKP	11 57 16.4
		iPKP	01 43 07.0			Ud iPKP	11 57 26.2
		iSKP1	01 45 40.6			Solomon Islands (h = 30 km).	
			micr sec	"	6	Up iP	12 07 21.3
		PKP Z'	0.1 1.0			Ki iP	12 07 44.5
		Sk i(PKP)	01 43 06.7			Um iP	12 07 34.9
		iPKP	01 43 17.3			Ud iP	12 07 16.3
		iSKP1	01 45 57.2	"	6	Up i(P)	13 14 08.2
		Um i(PKP)	01 43 01.1	"	6	Up i(P)	13 21 30.1
		ePKP	01 43 13	"	6	Up iP	15 24 17.0
		iSKP1	01 45 52.3			Sk iP	15 24 59.4 C
		Ud iPKP1	01 43 15.3 D			Um iP	15 24 57.7
		iSKP1	01 46 05.6			Ud iP	15 24 22.9 C
		De iPKP1	01 43 27.4 D			Greece-Albania border region	
		iSKP1	01 46 14.7			(h = 60 km).	
		Fiji Islands region		"	6	Up iRg	23 26 49.8
		(h = 590 km).		"	7	Up iP	06 53 20.7
"	6	Up iP	05 30 51.4 C			Sk iP	06 53 36.2
		iS	05 34 45.6			Ud iP	06 53 33.3
			micr sec			Burma-India border region	
		P Z'	0.9 1.1			(h = 70 km).	
		Mx E	1.4 7	"	7	Ki iPKP1	11 51 29.2
		Mx N	3.4 7			micr sec	
		Mx Z	4.9 11			PKP1 Z'	0.4 1.9
		Ki iP	05 32 08.2			Um iPKP1	11 51 21.4
			micr sec			Southern Pacific Ocean	
		P Z'	0.3 1.6			(h = 10 km).	
		Mx N	4.9 13	"	7	Up iRg	18 46 40.7
		Sk iP	05 31 33.9			Ud eSgl	18 46 59
		Um iP	05 31 32.4 C			East-central Sweden.	
		iS	05 35 59			Near-surface event.	
		Ud iP	05 30 57.8 C				
		De iP	05 30 20.4				
		Greece-Albania border region					
		(h = 40 km).					
		m = 5.9 (Up,Ki).					



Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979				1979									
Nov.	9	Ud	iP	04 40	45.9	Nov.	9	(cont.)					
"	9	Ki	iP	05 48	54.0 C			Ud	iRg	14 29	20.8		
		Sk	eP	05 48	29			East-central Sweden.					
		Um	i	05 48	29.8			Near-surface event.					
		Ud	iP	05 47	57.7 C	"	9	De	iPKP1	14 56	40.5		
		De	iP	05 47	25.5 C			Fiji Islands region					
			i	05 47	28.8			(h = 560 km).					
		Dodecanese Islands (h = 35 km).					"	9	Up	iPKP	16 58	27.2	
"	9	Up	iP	07 06	20.3					micr	sec		
		Ki	iP	07 05	49.5 C			PKP	Z'	0.1	1.5		
		Sk	iP	07 06	19.5			Mx	E	2.6	22		
		Um	iP	07 06	01.5			Mx	N	4.5	21		
		Ud	iP	07 06	28.2			Mx	Z	8.7	22		
		Kyushu, Japan (h = 280 km).					Ki	iPKP		16 58	12.7		
"	9	Up	iP	12 11	22.4			i		16 58	26.5		
			i	12 11	24.5					micr	sec		
		Sk	iP	12 12	01.0			PKP	Z'	0.1	1.4		
		Um	iP	12 11	55.4			Mx	E	1.1	20		
			iS	12 16	14.2			Mx	N	2.8	20		
		Ud	iP	12 11	25.6 C			Mx	Z	3.0	19		
		De	iP	12 10	45.2			Sk	iPKP	16 58	23.7		
		Southern Greece (h = N).					Um	iPKP		16 58	18.8 C		
"	9	Um	i(P)	13 18	34.1			i		16 58	33.2		
"	9	Up	iP	13 56	03.7 C			Ud	iPKP	16 58	29.1 C		
			ipP	13 56	18.0			i		16 58	38.2		
			iS	14 04	22			iSKP1		17 01	53.1		
					micr	sec		De	iPKP	16 58	31.8		
		P	Z'	0.6	1.5			i		16 58	38.2		
		Mx	E	1.0	18			i		16 58	48.2		
		Mx	N	1.6	18			iSKP1		17 02	00.6		
		Mx	Z	4.3	21			New Hebrides Islands (h = 45 km).					
		Ki	iP	13 55	08.4			M = 6.1 (Up,Ki).					
					micr	sec	"	9	Up	iP	20 02	31.3 C	
		P	Z'	0.3	1.4			Ud	iP	20 02	24.3 C		
		Mx	N	2.3	19			"	9	Ud	iP	20 11	36.7
		Mx	Z	1.4	20			Albania (h = N).					
		Sk	iP	13 55	45.2 C			"	9	Up	iPKP	21 13	55.5
		Um	iP	13 55	35.2			Sk	iPKP	21 13	46.1		
			ipP	13 55	47.7			Um	iPKP	21 13	39.4		
			iS	14 03	27			Ud	iPKP	21 13	52.4		
		Ud	iP	13 56	06.4 C			"	9	De	i(Sn)	23 23	14.3
			ipP	13 56	20.6			Poland (h = 10 km).					
		De	iP	13 56	29.1 C			"	10	Ud	iP	02 13	49.1
		Komandorsky Islands region.							Afghanistan (h = 240 km).				
		h = 50 km (Up,Um,Ud).					"	10	Um	iP	02 52	36.0	
		m = 6.3, M = 5.3 (Up,Ki).							Zaire Republic (h = 10 km).				
"	9	Up	i	14 29	25.9								
			iRg	14 29	29.9								
		(cont.)											

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979							
Nov.	10	Sk	iP	04 24	31.5	C	
		Um	iP	04 24	29.2	C	
		Ud	iP	04 23	51.0		
		Albania (h = 10 km).					
"	10	Up	iP	06 21	09.9		
		Greece (h = N).					
"	10	Up	iP	10 46	17.6		
		Ki	iP	10 45	41.8		
		Sk	iP	10 46	14.3		
		Um	iP	10 45	56.9		
		Ud	iP	10 46	25.1		
		Near s. coast of Honshu, Japan (h = 320 km).					
"	10	Up	iP	11 25	55.0		
		Ki	iP	11 25	00.3	C	
		Sk	iP	11 25	25.7		
		Um	iP	11 25	29.2		
		Ud	iP	11 25	49.1		
			i	11 25	51.5		
		De	iP	11 26	14.4		
		Southeastern Alaska (h = 15 km).					
"	10	Ud	iP	13 08	06.0		
"	10	Ud	iP	15 32	21.1		
"	10	Up	iP	15 38	01.2		
		Ki	iP	15 37	27.5	D	
		Sk	iP	15 37	57.3		
		Um	iP	15 37	42.1	D	
		Ud	iP	15 38	08.5	D	
		De	iP	15 38	21.0		
		South of Honshu, Japan (h = 400 km).					
"	10	Ki	iP	15 42	45.6		
		Um	iP	15 42	58.6		
		Ud	iP	15 43	21.6		
		Volcano Islands region (h = 110 km).					
"	10	Ud	iP	18 02	24.6		
"	10	Ud	iP	18 23	49.8		
"	10	Up	iP	18 26	08.1		
		Ud	iP	18 26	13.2		
"	10	Ud	iP	19 25	19.6		
"	10	Up	iP	20 51	06.3		
		(cont.)					

1979							
Nov.	10	(cont.)					
		Ki	iP	20 50	50.0		
		Um	iP	20 50	54.8	C	
		Ud	iP	20 51	12.6	C	
		De	iP	20 51	18.0		
		Minahassa Peninsula (h = 260 km).					
"	11	Up	iP	01 22	42.1		
				micr	sec		
			P	Z'	0.4	0.8	
		Ki	iP	01 23	58.6		
		Sk	iP	01 23	24.1	C	
		Um	iP	01 23	22.1	C	
			ipP	01 23	30.9		
		Ud	iP	01 22	48.7		
			ipP	01 22	58.3		
		Greece-Albania border region. h = 35 km (Um,Ud).					
"	11	Ud	iP	02 21	34.0		
		Romania (h = 120 km).					
"	11	Ud	iP	03 14	19.0		
		Southern Greece (h = N).					
"	11	Up	iPKP1	16 50	23.2		
		Ki	iPKP	16 50	14.2		
		Sk	iPKP	16 50	25.0		
		Um	iPKP	16 50	18.9	C	
		Ud	i(PKP)	16 50	17.3		
			iPKP1	16 50	24.1		
		Fiji Islands region (h = 170 km).					
"	11	Up	i	23 58	40.5		
			iSn	23 58	53.5		
			iSgl	23 58	56.9		
			i	23 58	59.3		
		Sk	eSgl	23 59	53		
			i	24 00	01.0		
		Um	i	23 59	45.4		
			iSgl	23 59	48.0		
		Ud	iPgl	23 58	48.7		
			i	23 58	51.1		
			iSgl	23 59	14.8		
			i	23 59	16.5		
		De	e	24 00	53		
		Hälsingland, Sweden, 61.1°N, 16.9°E. Origin time = 23 58 14. M <sub>L</sub> = 2.3 (Up,Um,Ud). Felt.					
"	12	Um	i(P)	13 01	41.5		
			i	13 01	43.0		

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979				1979			
Nov.	12	Sk eP	15 53 07	Nov.	13	(cont.)	
		Um iP	15 52 50.3			De iPP	19 21 50.9
		Near s. coast of southern Honshu (h = 80 km).				Southern Sumatra (h = 45 km). m = 6.6, M = 6.4 (Up,Ki).	
"	12	De iPKP1	20 29 15.9	"	13	Up iPKP1	21 03 05.3 C
		Loyalty Islands region (h = 35 km).				i	21 03 11.7
"	12	Ud iP	23 41 15.9			i	21 06 13.5
"	13	Up iP	03 43 31.9			iSKP1	21 06 47.3
		i	03 43 55.9				micr sec
		Ki iP	03 42 45.5			PKP1 Z'	0.1 1.0
		Ud iP	03 43 37.9			Mx E	5.8 19
		Kuril Islands (h = 80 km).				Mx N	4.5 18
"	13	Ud i(P)	13 42 21.0			Mx Z	13 18
"	13	Ud i(P)	14 25 48.3			Ki i(PKP)	21 03 46.6
"	13	Ud iP	15 10 46.0			iPKP	21 03 55.1
"	13	Up iP	19 18 02.8 C			i(PP)	21 05 24.0
		i	19 18 17.8			iPP	21 05 35.1
		iPP	19 21 38				micr sec
		iSKS	19 28 32			PKP Z'	0.2 1.4
		iS	19 28 55			Mx E	2.7 17
			micr sec			Mx N	4.1 18
		P Z'	0.2 1.1			Mx Z	4.7 20
		Mx E	7.5 18			Sk i(PKP)	21 03 00.5
		Mx N	10 19			iPKP	21 03 04.7
		Mx Z	8.1 20			iPP	21 05 56.1
		Ki iP	19 18 02.9 C			Um i(PKP)	21 02 53.7
		i	19 18 13.7			iPKP	21 03 01.7
		i	19 18 29.2			iPP	21 05 56.1
		iPP	19 21 43.1			Ud iPKP1	21 03 05.8
			micr sec			iPKP	21 03 08.5
		P Z'	0.5 1.0			iPP	21 06 25.3
		Mx E	7.3 18			De iPKP1	21 03 16.0
		Mx N	9.9 18			Tonga Islands region (h = 30 km). M = 6.4 (Up,Ki).	
		Mx Z	10 18			"	14
		Sk iP	19 18 16.3 C			Up iP	02 28 35.2
		iPP	19 22 02.4			i	02 28 36.3
		Um iP	19 18 00.1 C			i	02 28 38.4
		i	19 18 12.2			i	02 28 44.2
		iSKS	19 28 26			iPP	02 30 02
		iS	19 28 52			iS	02 34 24
		Ud iP	19 18 12.2 C			iSS	02 36 32
		i	19 18 26.6				micr sec
		i(PP)	19 21 42.8			i Z'	0.1 0.8
		iPP	19 21 54.0			i Z'	1.1 1.5
		De iP	19 18 10.3 C			i Z'	0.7 1.1
		i	19 18 25.4			Ki iP	02 28 59.9
		(cont.)				i	02 29 03.4
							micr sec
						P Z'	1.0 1.2
						Mx E	160 14
						Mx N	568 20
						Mx Z	176 16
						(cont.)	

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979

Nov.	14	(cont.)			
		Sk	iP	02 29	07.4
			i	02 29	10.8
		Um	iP	02 28	41.2
			i	02 28	44.9
			iS	02 34	38
		Ud	iP	02 28	51.7 D
			i	02 28	53.3
		De	iP	02 28	42.1
			i	02 28	43.9
			i	02 28	46.3
		Iran (h = N).			
		m = 6.4, M = 7.2 (Up,Ki).			
		Multiple shock with successively increasing amplitudes.			
"	14	Up	iP	02 57	31.5
		Ki	iP	02 57	55.9
		Sk	iP	02 58	02.9
		Um	iP	02 57	38.7
		Ud	iP	02 57	53.7
		Iran (h = N).			
"	14	Ud	iP	03 01	51.6
"	14	Sk	iP	04 26	12.3
		Ud	iP	04 25	56.8
		Iran (h = N).			
"	14	Ki	iP	05 55	00.3
		Um	iP	05 54	51.8
		Ud	iP	05 55	07.9
		Hindu Kush region (h = 260 km).			
"	14	Ki	iP	07 51	21.3 C
		Sk	iP	07 51	28.1 C
		Um	iP	07 51	02.2
		Ud	iP	07 51	12.7
		Iran (h = N).			
"	14	Up	i(P)	09 36	31.9
		Ud	i(P)	09 37	14.7
"	14	Ud	iRg	09 52	37.7
"	14	Ud	iP	17 31	11.4
"	14	Up	iP	22 15	54.6
			iS	22 24	56
				micr	sec
		Mx	E	1.7	18
		Mx	N	2.7	19
		Mx	Z	5.3	18
		(cont.)			

1979

Nov.	14	(cont.)			
		Ki	eP	22 16	31
				micr	sec
			Mx	E	1.4 17
			Mx	N	2.3 19
		Sk	eP	22 16	00
		Um	iS	22 25	40
		Ud	iP	22 15	46.3
		De	i	22 15	35.7
		Central Mid-Atlantic Ridge (h = 10 km).			
		M = 5.6 (Up,Ki).			
"	14	Ki	iP	22 27	38.9
			i	22 27	43.5
"	14	Sk	iPKP	22 57	02.8
		Um	iPKP	22 56	56.7
		Ud	iPKP	22 57	06.9
		De	iPKP	22 57	11.8
		New Hebrides Islands (h = 130 km).			
"	14	Up	iP	23 10	34.0
			i	23 10	35.2
			ipP	23 10	51.4
				micr	sec
			i	Z'	0.1 1.0
		Ki	iP	23 09	38.7
			ipP	23 09	54.2
				micr	sec
			P	Z'	0.1 1.3
		Sk	iP	23 10	06.1
		Um	iP	23 10	07.9
		Ud	iP	23 10	31.2
		De	iP	23 10	56.3
		Southern Alaska.			
		h = 60 km (Up,Ki).			
		m = 5.7 (Up,Ki).			
"	15	Ki	iP	01 40	51.0
		Sk	iP	01 41	12.8
		Ud	iP	01 41	05.0
			i	01 41	06.7
		De	iP	01 41	07.1
		Kirgiz SSR (h = N).			
"	15	Sk	ipP	02 23	46.6
		Ud	iP	02 23	04.6
			ipP	02 23	10.8
		Greece (h = 10 km).			
"	15	Up	iP	03 27	26.5
		Um	iP	03 27	00.5
		Ud	iP	03 27	30.6
		Kuril Islands (h = 45 km).			



Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979						1979					
Nov.	16	(cont.)				Nov.	18	(cont.)			
		Ud	iP	18 24	59.5			Ud	iP	18 22 47.0	
			ipP	18 34	03.5			Near east coast of Honshu,			
		De	iP	18 25	09.9			Japan (h = 60 km).			
		West Irian region.					"	18	Ki	iP	20 20 00.4
		h = 10 km (Up,Ki,Um,Ud).					"	18	Up	iP	21 13 24.4
		m = 6.8 (Up,Ki).							Ki	iP	21 12 56.9
"	16	Ud	iP	19 27	26.5			Ud	iP	21 13 33.5 C	
		Sikkim (h = N).						Ryukyu Islands (h = N).			
"	16	Ud	iP	20 16	12.5		"	18	Ud	iP	23 17 33.1
"	17	Up	iP	14 28	47.7		"	19	Up	iP	00 36 30.4
		Ki	iP	14 28	49.5 C			Ki	iPn	00 35 13.0	
					micr sec			Sk	iPn	00 35 25.6	
			P	Z'	0.1 0.9				iSn	00 37 11.6	
		Sk	iP	14 28	31.5 C			Um	iP	00 35 50.3	
		Um	iP	14 28	52.2 C			Ud	iP	00 36 12.2	
		Ud	iP	14 28	35.6 C			De	iP	00 36 54.6	
		De	iP	14 28	38.5			Jan Mayen Island region			
		Dominican Republic region						(h = 10 km).			
		(h = 100 km).					"	19	Ud	iP	10 45 13.5
"	17	Ud	iP	15 24	10.2		"	19	Um	i(P)	12 52 03.6
"	17	Sk	eP	15 26	48		"	19	Up	iRg	13 47 43.5
		Ud	iP	15 26	09.1		"	19	Up	iP	16 40 00.2
		Albania (h = 10 km).								micr sec	
"	17	Ud	iP	16 32	26.5				P	Z'	0.1 1.0
		Yugoslavia (h = 10 km).						Ki	iP	16 40 08.8 D	
"	17	Ud	iP	18 42	21.8			Sk	iP	16 40 25.6	
"	17	Sk	iP	20 57	27.7			Um	iP	16 39 58.5	
		Ud	iP	20 56	43.1			Ud	iP	16 40 16.7 C	
			i	20 56	49.3				i	16 40 19.7	
		Northern Italy (h = 10 km).						De	iP	16 40 13.8	
"	17	Ki	iPKP	22 15	24.7			Hindu Kush region			
		Sk	iPKP	22 15	35.6			(h = 200 km).			
		Ud	iPKP	22 15	41.1		"	19	Ki	i(P)	17 15 00.7
		De	iPKP	22 15	47.1		"	19	Um	iP	17 24 07.1
		Santa Cruz Islands (h = 170 km).						Ud	iP	17 24 39.3 D	
"	18	Ud	iP	02 42	17.2			Kuril Islands (h = 55 km).			
			i	02 42	25.3		"	19	Up	iP	22 30 26.5
		De	iP	02 41	54.2				ipP	22 30 49.6	
		Crete (h = N).							i(PP)	22 33 24.5	
"	18	Up	iP	11 24	54.3				iPP	22 34 21.8	
"	18	Um	iP	18 22	17.7 C				iSKS	22 41 26	
		(cont.)							iS	22 41 58	
		(cont.)						(cont.)			







Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979				1979			
Nov.	23	(cont.)		Nov.	23	(cont.)	
		De	iPKP1 03 48 51.2 ePKP2 03 48 59 Kermadec Islands region (h = 60 km).			Sk	iP 23 52 54.3 i 23 52 59.3 i 23 53 06.7 Um iP 23 53 10.8 i 23 53 15.9 i 23 53 22.4 iS 24 03 47 Ud iP 23 52 57.0 C De iP 23 52 54.9 C Colombia (h = 110 km). m = 7.0, M = 6.6 (Up,Ki). M not corrected for focal depth. Multiple P, average separation 5.3 s and 6.5 s, with gradually increasing amplitudes.
"	23	Ud	iP 04 17 37.8	"	24	Ud	iP 01 54 10.6 Iran (h = N).
"	23	Um	iP 07 45 33.6	"	24	Up	iPKP1 06 29 02.9 D Ki iPKP 06 28 50.1 iSKP1 06 31 30.5 Um i(PKP) 06 28 51.6 iPKP 06 28 01.0 i 06 31 11.1 iSKP1 06 31 41.2 De iPKP1 06 29 16.1 i 06 29 18.6 South of Fiji Islands (h = 580 km).
"	23	Um	i(PKP) 08 15 23.8 iPKP1 08 15 27.7 Kermadec Islands region (h = 90 km).				
"	23	Up	iP 18 30 01.6 iPP 18 31 27.2 micr sec PP Z' 0.2 1.0 Ki iP 18 30 26.7 iPP 18 32 02.1 micr sec PP Z' 0.3 1.8 Um iP 18 30 06.6 Ud iP 18 30 18.3 C iPP 18 31 49.0 De iP 18 30 07.7 Iran (h = N). m = 5.7 (Up,Ki). m determined from PP.	"	24	Up	iP 07 50 26.9 Um iP 07 50 23.4 C Ud iP 07 50 37.5 C De iP 07 50 36.1 Northern Sumatera (h = 180 km).
"	23	Ud	iP 19 49 44.1	"	24	Um	iP 09 53 52.2 i 09 53 56.2 Ud iP 09 53 13.2 i 09 53 16.7 Albania (h = 10 km).
"	23	Up	iP 23 53 07.1 C i 23 53 12.8 i 23 53 18.8 iS 24 03 38 micr sec P Z' 0.3 1.2 i Z' 0.3 0.9 i Z' 1.0 0.9 Mx E 15 22 Mx N 11 20 Mx Z 30 22 Ki iP 23 53 09.1 i 23 53 14.7 i 23 53 20.8 iS 24 03 43 micr sec P Z' 0.7 1.9 i Z' 0.6 1.3 i Z' 4.4 1.4 Mx E 23 22 Mx N 14 21 Mx Z 20 22 (cont.)	"	24	Ud	iP 10 01 54.3
				"	24	Ud	iP 11 30 41.6 Andreanof Islands, Aleutian Is. (h = 45 km).
				"	24	Up	iPKP1 14 57 18.3 Um i 14 57 13.0 Ud iPKP1 14 57 20.2 C De iPKP1 14 57 29.3 Kermadec Islands region (h = 60 km).

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979						1979				
Nov.	24	Up	Mx	20 35		Nov.	25	(cont.)		
				micr sec				Ud	iP	10 26 50.4
			Mx	E 2.4 21					ipP	10 27 13.3
			Mx	N 5.0 20				De	iP	10 27 05.2
			Mx	Z 7.6 20				Near east coast of Honshu, Japan.		
		Ki	iPKP	19 38 10.4 C				h = 90 km (Um,Ud).		
				micr sec						
			Mx	E 4.0 19			"	25	Ud	iPKP1 11 56 19.9
			Mx	N 4.7 21				De	iPKP	11 56 30.8
		Um	iPKP	19 38 19.2					iPKP1	11 56 31.8
		Ud	iPKP	19 38 25.8				South of Fiji Islands (h = 580 km).		
		De	iPKP	19 38 29.0						
		Fiji Islands region (h = N).					"	25	Um	iP 12 06 50.6
		M = 6.3 (Up,Ki).							Ud	iP 12 07 03.3
"	24	Ki	iP	22 35 10.6			"	26	Ki	iP 09 44 28.2
		Um	iP	22 35 37.0					Ud	iP 09 45 07.0
		Ud	iP	22 36 02.9				Ryukyu Islands (h = 80 km).		
		De	iP	22 36 25.8						
		Fox Islands, Aleutian Islands (h = N).					"	26	Sk	iSgl 11 39 36.4
"	24	Up	iP	23 44 51.3			"	26	Up	iPKP1 11 45 30.7
		Ki	iP	23 44 07.0				Sk	iPKP	11 45 21.9 C
		Sk	iP	23 44 41.6				Um	i(PKP)	11 45 14.7
		Um	iP	23 44 26.0				Ud	iPKP1	11 45 34.2
		Ud	iP	23 44 57.4				Kermadec Islands region (h = 230 km).		
		De	iP	23 45 11.7						
		Hokkaido, Japan region (h = 50 km).					"	26	Um	iPKP 11 55 43.0
"	25	De	iPKP1	00 53 44.8				South of Kermadec Islands (h = 220 km).		
		Fiji Islands region (h = 590 km).					"	26	Sk	iP 15 02 59.6
"	25	Ud	iP	01 15 11.4			"	26	Sk	iPKP 16 02 37.3
		Southern Iran (h = N).							Um	iPKP 16 02 31.9
"	25	Up	iP	02 51 11.8 C				Off e. coast of N. Island, N.Z. (h = 210 km).		
		Ki	iP	02 51 01.1			"	26	Ki	iP 23 15 58.6
			i	02 51 08.2				Bonin Islands region (h = N).		
		Sk	iP	02 51 25.8			"	27	Up	iP 07 19 51.4
		Um	iP	02 51 03.6				Ki	iP	07 20 16.0 C
		Ud	iP	02 51 25.0 C				Sk	iP	07 20 25.0
		De	iP	02 51 28.4				Ud	iP	07 20 07.9 C
		Burma (h = 50 km).						Iran (h = 15 km).		
"	25	Up	iP	10 26 43.1			"	27	Ki	iP 09 31 52.7
		Ki	iP	10 26 03.5				Mindanao, Philippine Islands (h = N).		
		Sk	iP	10 26 37.4						
			iPP	10 29 16.7						
		Um	iP	10 26 20.7						
			ipP	10 26 42.8						
		(cont.)								



Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979					1979						
Nov.	29	Up	iPKP1	00 35 56.2	Nov.	29	Up	iP	23 39 14.1		
			i	00 36 07.1			Ud	iP	23 39 25.1		
		Ud	iPKP1	00 35 57.3			De	iP	23 39 23.1		
		De	iPKP1	00 36 06.8			Nicobar Islands region				
		Kermadec Islands region					(h = 130 km).				
		(h = N).					"	30	Ki	iP	04 59 37.9
"	29	Ud	iP	01 06 26.3				Ud	iP	05 00 10.4	
		Eastern Kazakh SSR (h = 0).					"	30	Um	i(P)	10 48 10.8
"	29	Up	iP	03 36 34.2			"	30	Ki	iP	17 25 28.9
			i	03 36 38.6				Um	iP	17 25 25.0	
		Sk	eP	03 36 28				Ud	iP	17 25 37.0	
		Um	iP	03 36 22.4				Northern Sumatera (h = 45 km).			
		Ud	iP	03 36 36.0			"	30	Ud	iP	20 56 36.6
"	29	Ud	iP	04 50 26.2				Iran (h = 35 km).			
		South of Honshu, Japan					"	30	Ud	iPKP1	23 06 31.9
		(h = N).							De	iPKP1	23 06 42.1
"	29	Ud	iP	09 57 14.7					i	23 06 55.4	
		De	iP	09 56 41.8				Tonga Islands region (h = 45 km).			
"	29	Up	iPKP1	10 39 24.0							
			i	10 39 32.7							
			ipPKP1	10 39 38.4							
			i	10 39 49.1							
				micr sec							
			pPKP1	Z' 0.1 1.0							
		Sk	iPKP1	10 39 16.1							
			ipPKP1	10 39 30.7							
		Ud	iPKP1	10 39 25.6							
			i	10 39 33.1							
		De	iPKP1	10 39 34.8							
			i	10 39 41.2							
			ipPKP1	10 39 48.8							
		Kermadec Islands region.									
		h = 50 km (Up,Sk,De).									
"	29	Up	iP	17 20 52.8							
			i	17 21 14.3							
				micr sec							
			P	Z' 0.1 0.7							
		Ki	iP	17 20 23.1							
				micr sec							
			P	Z' 0.2 0.8							
		Sk	iP	17 20 49.8							
		Um	iP	17 20 36.3							
		Ud	iP	17 20 59.3							
		De	iP	17 21 10.6							
		Volcano Islands region									
		(h = 130 km).									
		m = 5.9 (Up,Ki).									
"	29	Ud	iP	18 32 34.2							

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July 7, 1981

SEISMOLOGICAL DEPARTMENT  
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SEISMOLOGICAL BULLETIN

UPPSALA, KIRUNA, SKALSTUGAN, UMEÅ,

UDDEHOLM and DELARY

Uppsala (Up): 59°51.5'N, 17°37.6'E; h = 14 m  
 Kiruna (Ki): 67°50.4'N, 20°25.0'E; h = 390 m  
 Skalstugan (Sk): 63°34.8'N, 12°16.8'E; h = 580 m  
 Umeå (Um): 63°48.9'N, 20°14.2'E; h = 16 m  
 Uddeholm (Ud): 60°05.4'N, 13°36.4'E; h = 240 m  
 Delary (De): 56°28.2'N, 13°52.2'E; h = 150 m

DECEMBER 1 - 31, 1979

1979				1979			
Dec.	1	Um iP	02 30 48.8	Dec.	2	(cont.)	
		Volcano Islands region (h = 240 km).				Ki	micr sec
						i	Z' 0.1 1.0
"	1	Up iP	03 00 29.6			Mx	E 4.0 14
		Ud iP	03 00 35.7			Mx	N 2.3 11
		Off coast of Hokkaido, Japan (h = N).				Mx	Z 3.3 13
						Sk	iP 01 46 11.7
"	1	Up iP	05 42 24.4			i	01 46 20.8
		Um eP	05 42 23			Um	iP 01 45 42.8
		Ud iP	05 42 41.3 C			i	01 45 49.5
		Hindu Kush region (h = 70 km).				Ud	iP 01 46 11.6
						De	iP 01 46 16.6
"	1	Up iP	13 39 28.3			Southern Sinkiang Prov., China (h = N). m = 5.8 (Up,Ki).	
		iS	13 43 35.0	"	2	Up	iP 04 43 55.0 C
		micr sec				iPn	04 44 56.6
		P	Z' 0.1 0.8			iPP	04 45 10.8
		Mx	E 2.1 14			Ki	iP 04 43 38.9 C
		Ki	iP 13 40 42.8			micr sec	
		Sk	iP 13 40 08.0			P	Z' 2.1 0.9
		Um	iP 13 40 05.6			Sk	iP 04 44 10.1 C
		i	13 40 16.4			iPn	04 45 26.4
		Ud	iP 13 39 35.4			Um	iP 04 43 40.0 C
		i	13 39 43.7			Ud	iP 04 44 10.9 C
		iS	13 43 48.6			De	iP 04 44 18.8 C
		De	iP 13 38 58.9			Eastern Kazakh SSR. m = 7.0 (Up,Ki).	
		i	13 39 14.6			Underground explosion.	
		Southern Greece (h = 20 km).		"	2	Up	iP 05 37 07.2
"	2	Up	iP 01 45 56.4			ipP	05 37 18.2
		i	01 46 01.9			micr sec	
		micr sec				P	Z' 0.1 1.0
		i	Z' 0.1 1.0			Mx	E 5.1 15
		Mx	E 1.1 5			Mx	N 7.2 20
		Mx	N 1.3 6			Mx	Z 11 15
		Mx	Z 1.4 4			Ki	iP 05 36 44.1
		Ki	iP 01 45 42.7			(cont.)	
		i	01 45 47.9				
		(cont.)					

Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979				1979					
Dec.	2	(cont.)		Dec.	4	Ki	iP	07 45 32.1	
		Ki	micr sec			Sk	eP	07 45 12	
		P	Z' 0.1 1.0			Um	iP	07 45 05.8	
		Mx	E 7.6 12			Uganda (h = N).			
		Mx	N 4.5 14	"	4	Up	eP	12 12 10	
		Mx	Z 4.2 11			Ki	iP	12 11 14.3	
		Sk	iP	05 37 11.6		Um	iP	12 11 42.1	
		Um	iP	05 36 52.2		Ud	iP	12 12 07.8	
			ipP	05 37 03.2		Unimak Island region			
		Ud	iP	05 37 16.6		(h = 40 km).			
			ipP	05 37 27.9	"	4	Up	iPKP1	18 57 04.0 C
		De	iP	05 37 24.8			i	18 57 09.7	
		Taiwan region.					PKP1	Z' 0.1 1.0	
		h = 40 km (Up,Um,Ud).				Ki	iPKP1	18 56 42.6	
		m = 5.8, M = 6.2 (Up,Ki).				Sk	iPKP1	18 56 58.4 C	
"	2	Um	iP	06 18 03.3		Um	iPKP1	18 56 53.7 C	
		Ud	iP	06 18 10.9			i	18 57 08.0	
		Iran (h = N).				Ud	iPKP1	18 57 05.4 C	
"	2	Up	eP	06 28 46			i	18 57 09.7	
		Ki	iP	06 27 22.7		De	iPKP2	18 57 28.6	
		Ud	iP	06 27 55.7		South of Kermadec Islands			
		Taiwan (h = N).				(h = N).			
"	2	Up	iP	06 59 46.1	"	5	Ud	iP	01 03 18.5
			i	06 59 51.7		Lake Baikal region (h = N).			
		Ki	iP	06 59 11.1	"	5	Ki	iP	08 50 01.3
			i	06 59 16.2			Ud	iP	08 50 11.9
		Um	iP	06 59 25.2		Tadzhik SSR (h = 140 km).			
			i	06 59 30.6	"	6	Ki	iP	07 19 41.0
		Ud	eP	06 59 51			Ud	iP	07 20 04.0
			i	06 59 56.7		Molucca Passage (h = 70 km).			
		South of Honshu, Japan		"	6	Up	iP	09 58 51.6	
		(h = N).				Ki	eP	09 58 40	
"	2	Ud	iP	08 58 22.3		Ud	iP	09 59 04.8	
		Taiwan region (h = 25 km).				Tibet (h = N).			
"	2	Um	iP	09 56 08.3	"	6	Ki	iP	16 07 35.0
		Ud	iP	09 56 38.1			Um	iP	16 08 11.1
			i	09 56 48.1			Ud	iP	16 08 36.9
		Near east coast of Honshu,		"	6	Up	iRg	21 13 02.4	
		Japan (h = N).				Ud	iSgl	21 13 56.5	
"	2	Up	iP	19 21 34.4		Dannemora, Sweden,			
		Ki	eP	19 21 10		60.1°N, 17.5°E.			
		Um	iP	19 21 20.5		Origin time = 21 12 45.			
		Ud	iP	19 21 44.6		Rockburst.			
		Taiwan region (h = 25 km).				Felt.			
"	2	Um	iP	22 50 10.5	"	7	Up	iP	09 31 13.0
		Albania (h = 10 km).					iPP	09 32 37.9	
"	3	De	iPKP1	02 42 51.8		(cont.)			
		Fiji Islands region							
		(h = 590 km).							



Up = Uppsala, Ki = Kiruna, Sk = Skalstugan, Um = Umeå, Ud = Uddeholm, De = Delary

1979				1979			
Dec.	7	(cont.)		Dec.	8	Ki ePKP	08 50 29
		Up iS	09 37 03			Sk ePKP	08 50 40
			micr sec			Um iPKP	08 50 34.8
		P Z'	0.4 1.2			Ud ePKP	08 50 45
		Mx E	13 16			New Hebrides Islands	
		Mx N	24 16			(h = 35 km).	
		Mx Z	13 10				
		Ki iP	09 31 37.8 D	"	8	Up iP	13 12 08.8
		iPP	09 33 03.6			Ki iP	13 11 40.8
			micr sec			Sk eP	13 12 06
		P Z'	0.6 1.7			Um iP	13 11 52.5
		Mx E	22 17			i	13 12 14.7
		Mx N	38 15			De eP	13 12 25
		Mx Z	27 15			Mariana Islands region	
		Sk iP	09 31 46.2			(h = 45 km).	
		Um iP	09 31 19.5 D				
		iS	09 37 12	"	8	De iPKP1	20 23 18.8
		Ud iP	09 31 29.7 D			Fiji Islands region	
		De iP	09 31 18.8			(h = 590 km).	
		Iran (h = 30 km).					
		m = 6.1, M = 6.3 (Up,Ki).		"	8	Up iP	20 45 48.4
"	7	Ki iP	15 24 52.2			iS	20 48 26.6
		Philippine Islands region				Mx E	0.9 16
		(h = 55 km).				Ki iP	20 44 40.7 D
"	7	Ki iP	16 26 44.6			i	20 44 49.9
		Banda Sea (h = N).				iS	20 46 29.8
"	8	Up iP	04 11 25.6 C				micr sec
		i	04 11 27.8			P Z'	0.2 1.0
		iS	04 15 28			Mx E	0.4 7
			micr sec			Mx N	1.9 17
		i Z'	0.3 1.2			Sk eP	20 44 49
		Mx E	3.2 13			i	20 44 53.9
		Mx N	2.1 8			iS	20 46 41.0
		Mx Z	2.5 8			Um iP	20 45 14.5
		Ki iP	04 12 40.4 C			i	20 45 38.8
			micr sec			iS	20 47 31.1
		P Z'	0.3 1.3			Ud iP	20 45 30.6
		Mx E	3.3 10			i	20 45 38.9
		Mx N	1.9 8			Jan Mayen Island region	
		Mx Z	1.8 11			(h = 10 km).	
		Sk iP	04 12 00.7 C	"	8	Up iPKP	23 01 46.0
		i	04 12 05.2			Um iPKP	23 01 54.0
		Um iP	04 12 05.7 C			Ud iPKP	23 01 44.6
		i	04 12 15.1			South Sandwich Islands	
		iS	04 16 37			region (h = 100 km).	
		Ud iP	04 11 24.8 C	"	8	Up iP	23 35 57.5
		De iP	04 10 48.2			i	23 36 05.7
		Sicily (h = N).				Ki eP	23 36 21
		m = 5.7 (Up,Ki).				Sk e	23 36 27
"	8	Ud iP	07 38 43.4			Ud iP	23 36 07.2
		Iran (h = N).				i	23 36 12.5
						Mid-Indian Rise (h = 10 km).	



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1979						1979				
Dec.	12	Um	i(Rg)	06 59 08.9		Dec.	12	(cont.)		
"	12	Up	iP	08 12 10.2				Um	iPKP1	16 52 04.1
			i	08 12 17.4				De	iPKP1	16 52 26.5
			i	08 12 57.0					iPKP2	16 52 37.5
			iSKS	08 23 03					Kermadec Islands region	
			iS	08 23 55					(h = 380 km).	
				micr sec		"	13	Up	iPKP	01 29 36.1
		P	Z'	0.2 1.6				Ki	iPKP	01 29 22.4 C
		i	Z'	0.5 1.7				Sk	iPKP	01 29 33.3
		Ki	iP	08 12 10.2				Um	iPKP	01 29 28.8
			i	08 12 16.7					ipPKP	01 30 17.5
				micr sec				De	iPKP	01 29 45.0
		P	Z'	0.3 2.0					New Hebrides Islands	
		i	Z'	0.9 1.6					(h = 190 km).	
		Mx	E	577 22		"	13	Up	iP	02 56 33.2
		Mx	N	512 22				Ki	iP	02 56 32.8
		Mx	Z	557 22				Sk	iP	02 56 18.1
		Sk	iP	08 11 56.8				Um	iP	02 56 33.3
		Um	iP	08 12 14.1				De	iP	02 56 25.1
		De	iP	08 12 05.0					South of Panama (h = N).	
				Near coast of Ecuador		"	13	Um	iP	04 59 53.2
				(h = 25 km).					South of Panama (h = N).	
				m = 6.8, M = 8.0 (Up,Ki).		"	13	Up	iS	06 02 03
"	12	Ki	iP	08 45 09.2						micr sec
		Sk	iP	08 44 56.3					Mx	E 1.7 22
		Um	iP	08 45 11.0					Mx	N 1.1 20
				Near west coast of Colombia				Ki	iSKS	06 01 39
				(h = N).						micr sec
"	12	Ki	iP	08 46 55.1					Mx	E 2.0 21
		Sk	iP	08 46 41.4					Mx	N 2.5 20
		Um	iP	08 46 56.7					Mx	Z 1.9 18
				Near west coast of Colombia				Um	iS	06 02 08
				(h = N).					South of Panama (h = N).	
"	12	Up	iP	10 11 13.5 D					M = 5.6 (Up,Ki).	
				micr sec		"	13	Up	iP	18 24 00.2
		P	Z'	0.1 0.6				Ki	iP	18 23 46.2
		Ki	iP	10 11 20.7 D				Um	iP	18 23 56.5
				micr sec					Near coast of Oaxaca,	
		P	Z'	0.1 1.0					Mexico (h = N).	
		Sk	iP	10 11 38.9		"	14	Ki	iP	03 05 29.5
		Um	iP	10 11 11.0 D					South of Alaska (h = N).	
		De	iP	10 11 27.6		"	14	Up	i(Pn)	03 15 32.6
				Afghanistan-USSR border					iPn	03 15 35.1
				region (h = 70 km).					i	03 16 01.5
				m = 5.7 (Up,Ki).					iSn	03 16 54.9
"	12	Up	iPKP1	16 52 16.5 C					i	03 17 27.7
			iPKP2	16 52 20.1				Ki	iPn	03 15 20.4
		Ki	iPKP1	16 51 54.2					(cont.)	
		Sk	iPKP1	16 52 09.4					(cont.)	
				(cont.)					(cont.)	

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1979				1979			
Dec.	Day	(cont.)		Dec.	Day	(cont.)	
	14	(cont.)			15	(cont.)	
		Ki	iSn 03 16 31.4			Up	micr sec
			i 03 16 51.4			Mx	N 27 19
		Sk	iPn 03 14 35.5			Mx	Z 24 17
			i 03 15 04.9			Ki	iP 00 15 38.7 D
			iSn 03 15 14.6				i 00 15 44.0
		Um	iPn 03 15 18.2				iPP 00 19 09.7
			i 03 15 27.7				iSKS 00 26 14
			iSn 03 16 29.2				i 00 26 42
			i 03 16 33.4				micr sec
		De	iSn 03 17 39.3				i Z' 0.9 1.5
			iSgl 03 18 33.5				Mx E 31 21
		Norwegian Sea, near 65°N, 5 1/2°E.					Mx N 70 21
		Origin time = 03 13 43.					Mx Z 27 21
		M <sub>L</sub> = 3.6 (De).				Sk	iP 00 15 52.6
"	14	Up	iP 03 20 33.0				i 00 15 58.0
		Kuril Islands region (h = 90 km).				Um	iP 00 15 36.0
"	14	Up	iP 07 30 10.4 D				i 00 15 40.3
			micr sec				i 00 16 08.3
			P Z' 0.2 1.1				iPP 00 19 12.6
		Ki	iP 07 29 26.7 D				iS 00 26 26
			micr sec			De	i 00 15 54.5
			P Z' 0.2 1.2	"	15	Ki	iP 07 54 54.7
		Sk	eP 07 30 02			Tadzhik-Sinkiang border region (h = 40 km).	
		Um	iP 07 29 46.1 D	"	15	Up	iP 17 55 48.5 C
		De	iP 07 30 34.2			Ki	iP 17 55 22.0 C
		Hokkaido, Japan region (h = 70 km).				Sk	eP 17 55 50
		m = 6.0 (Up,Ki).				Um	iP 17 55 32.2
"	14	Up	iP 09 01 17.8			Southwestern Ryukyu Islands (h = 110 km).	
			ipP 09 01 37.7 D	"	15	Ki	eP 22 49 56
			micr sec			Off coast of Hokkaido, Japan (h = N).	
			pP Z' 0.1 0.7	"	16	Up	i 07 30 20.1
		Ki	ipP 09 01 20.5			Ki	iP 07 30 56.1
		Sk	epP 09 01 45				i 07 31 03.3
		Um	ipP 09 01 25.6			Sk	eP 07 30 24
		Mindoro, Philippine Islands (h = 100 km).					i 07 30 33.5
"	14	Up	iP 11 21 53.7			Um	iP 07 30 36.8
		Ki	iP 11 21 35.2				i 07 30 44.6
		Um	iP 11 21 44.1			Ascension Island region (h = 10 km).	
		Talaud Islands (h = 55 km).		"	16	Ki	eP 13 02 18
"	15	Up	iP 00 15 40.1			Mexico-Guatemala border region (h = 130 km).	
			i 00 15 46.3	"	16	De	iPKP1 13 23 18.2
			iS 00 26 33			Fiji Islands region (h = 510 km).	
			micr sec				
			i Z' 0.2 1.0				
			Mx E 21 20				
		(cont.)					



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1979		1979		
Dec.	21	(cont.) Sweden, 67.5°N, 22.0°E. Origin time = 08 48 54. M <sub>L</sub> = 2.5 (Um). Checked with Finnish station readings.	Dec. 22	Up iP 22 14 15.6 Ki iP 22 14 14.3 C Sk eP 22 14 28 Um iP 22 14 12.5 Sunda Strait (h = 60 km).
"	21	Um iP 11 58 20.5 Ud iP 11 58 19.5 Western Caucasus (h = N).	" 22	Up iP 22 37 09.6 Ki iP 22 37 15.6 Sk eP 22 37 33 Eastern Kashmir (h = N).
"	21	Up i(P) 15 34 45.1	" 23	Up iP 05 03 54.9 C P Z' 1.5 0.7 Ki iP 05 03 38.5 C P Z' 2.9 0.8 Sk iP 05 04 10.1 C Um iP 05 03 39.7 C Ud iP 05 04 11.2 C De iP 05 04 18.4 C Eastern Kazakh SSR. m = 7.1 (Up,Ki). Underground explosion.
"	21	Up iP 18 19 45.6 i 18 19 55.6 P Z' 0.1 1.0 Ki iP 18 19 28.6 i 18 19 38.0 Um iP 18 19 34.6 i 18 19 44.0 De i 18 20 10.6 Philippine Islands region (h = 55 km).	" 23	Up iP 08 47 26.2 iS 08 58 49 Mx E 1.1 19 Mx N 1.6 22 Ki iP 08 47 08.2 C Mx N 1.9 19 Um iP 08 47 14.1 iS 08 58 18 Ud iP 08 47 32.7 C Talaud Islands (h = N). M = 5.6 (Up,Ki).
"	21	Up iP 18 22 06.5 i 18 22 19.5 Ki iP 18 21 48.9 i 18 21 52.3 Sk iP 18 22 10.7 Philippine Islands region (h = 70 km).	" 23	Up iP 09 58 21.5 Ki eP 09 57 58 Um iP 09 58 09.0 Ud iP 09 58 30.6 Taiwan (h = N).
"	21	Up iP 21 13 47.8 i 21 13 56.2 Ki iP 21 13 49.6 Um iP 21 13 46.6 i 21 13 53.1 Northern Sumatera (h = 55 km).	" 23	Up iPgl 14 09 23.3 iSgl 14 09 31.1 iRg 14 09 34.2 Ki i(Sn) 14 12 40.4 iSn 14 12 43.6 iSgl 14 13 33.7 Sk iSgl 14 11 45.8 Um iPgl 14 10 28.9 iSn 14 11 09.0 iSgl 14 11 24.2 Ud i 14 09 56.0 (cont.)
"	22	Up iP 02 41 58.9 Mindanao, Philippine Islands (h = 45 km).		
"	22	Up iP 15 52 44.3 C i 15 52 53.4 iS 16 00 21 Ki iP 15 53 22.9 C i 15 53 31.6 Sk iP 15 53 16.1 i 15 53 23.6 Um iP 15 53 00.4 C i 15 53 10.4 De iP 15 52 37.4 Eastern Gulf of Aden (h = N).		



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1979				1979			
Dec.	25	(cont.)		Dec.	25	(cont.)	
		Ud	ipP 03 48 29.7			Ki	micr sec
		De	iP 03 46 55.8			Mx	Z 1.3 19
		E. USSR-N.E. China border region.				Sk	eP 23 58 29
		h = 540 km (Up,Ki,Sk,Um,Ud).				Um	iP 23 58 16.4
"	25	Ki	iP 04 53 55.3			Ud	iP 23 58 16.6
		Um	iP 04 53 59.9 C			De	iP 23 58 06.3
		Ud	eP 04 54 17			Carlsberg Ridge (h = 10 km).	
		Banda Sea (h = 130 km).		"	26	Up	iP 03 59 55.5
"	25	Sk	iSgl 05 33 44.4			i	04 00 02.6
		Ud	iSgl 05 34 06.5			iS	04 02 05.1
		De	e 05 35 09			i	04 02 35.3
		Off coast of western Norway, near 62 1/4° N, 4 1/2° E.				iLg2	04 03 45
		Origin time = 05 31 40.				Ki	eP 04 01 01
		By combination with Bergen and Kongsberg readings.				i	04 01 09.6
							micr sec
						Mx	E 0.6 14
						Mx	N 0.4 14
"	25	Up	iP 06 20 21.9			Sk	eP 03 59 52
		Sk	eP 06 20 34			Um	eP 04 00 36
		Um	eP 06 20 10			i	04 00 42.3
		Ud	iP 06 20 35.2			Ud	iP 03 59 29.7
"	25	Up	i(P) 13 42 36.0			iS	04 01 26.2
"	25	Up	iP 16 51 19.4			De	iP 03 59 22.8
		iPP	16 52 41.5			i	03 59 29.3
		Ki	iP 16 51 44.4	"	26	United Kingdom (h = 10 km).	
		Sk	iP 16 51 51.6			Ud	iP 08 29 39.2
		Um	iP 16 51 23.9			Rat Islands, Aleutian Islands (h = 55 km).	
		Ud	iP 16 51 35.7	"	26	Up	ePKP 20 02 16
		De	eP 16 51 26			iPKKP	20 12 27.9
		Iran (h = 10 km).				Ki	ePKP 20 02 24
"	25	Up	iPKP1 18 38 43.4			Um	ePKP 20 02 22
		De	iPKP1 18 38 53.4			i	20 02 47.0
		i	18 39 12.0			iPKKP	20 12 17.4
"	25	Up	iP 23 58 07.6			Ud	iPKP 20 02 12.8
		iS	24 07 33			iPKKP	20 12 35.9
			micr sec			De	iPKKP 20 12 33.2
		P	Z' 0.1 1.5			Central Chile (h = 90 km).	
		Mx	E 1.5 20	"	27	Ki	iP 11 08 54.5
		Mx	N 1.6 22	"	27	Up	iP 13 57 13.3
		Mx	Z 1.8 22				micr sec
		Ki	iP 23 58 31.7			P	Z' 0.1 1.0
			micr sec			Ki	iP 13 56 34.5
		P	Z' 0.2 1.6			i	13 56 49.3
		Mx	E 1.7 19			Um	iP 13 56 52.0
		Mx	N 1.9 23			i	13 57 05.1
		(cont.)				Ud	iP 13 57 20.0
						Near east coast of Honshu, Japan (h = 45 km).	





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1979

Dec. 31 (cont.)  
 Sk iP 02 58 57.2  
 Um iP 02 58 42.0  
 i 02 58 54.1  
 Ud iP 02 59 11.8  
 De iP 02 59 28.6  
 i 02 59 40.5  
 Off east coast of Honshu,  
 Japan (h = N).  
 m = 5.9 (Up,Ki).

" 31 Up iP 06 26 56.0 C  
 i 06 27 11.2  
 iS 06 31 13.4  
 micr sec  
 P Z' 0.2 1.0  
 Mx E 1.5 20  
 Mx N 3.9 20  
 Mx Z 6.0 21  
 Ki iP 06 27 55.9 C  
 micr sec  
 P Z' 0.2 1.0  
 Mx N 2.6 17  
 Mx Z 1.9 18  
 Sk iP 06 27 35.0  
 Um iP 06 27 23.4  
 i 06 27 37.5  
 iS 06 32 05  
 Ud iP 06 27 05.1  
 i 06 27 22.9  
 De iP 06 26 36.4  
 i 06 26 42.3  
 Turkey (h = 80 km).  
 m = 5.7, M = 5.0 (Up,Ki).

" 31 Up ip 20 59 07.2  
 Ki eP 20 59 41  
 Sk eP 20 59 09  
 Um iP 20 59 31.4  
 Ud iP 20 58 57.9  
 Central Mid-Atlantic  
 Ridge (h = 10 km).

" 31 Up iS 23 31 33  
 micr sec  
 Mx E 0.8 20  
 Ki eS 23 31 33  
 micr sec  
 Mx N 0.8 17  
 Um iP 23 20 30.7  
 iS 23 31 39  
 Ud iP 23 20 18.1  
 South of Panama (h = N).  
 M = 5.2 (Up,Ki).

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