

MONTHLY TELESEISMIC BULLETIN of SZGRF-ERLANGEN - February 1998

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date	station	time	distance	phase	backazimut	comp	per[s]	ampl[nm]	magn
	SZGRF or NEIC-QED		LOCATION						

1998-02-01 D 81.0 AZ 28
 GRA1 02:54:14.2 i P c Z mb5.0
 ALIGN 02:54:14.2 T1.2 A18
 GRA1 02:54:26.6 e (pP) Z
 SZGRF: OT 02:42:05.5 43.3N 151.4E dep 43km
 KURIL ISLANDS REGION

1998-02-01
 GRA1 04:50:06.6 e PKP Z

1998-02-01 D 36.4
 GRA1 05:19:35.9 i P d Z mb4.8
 ALIGN 05:19:35.9 T1.5 A24
 GRA1 05:19:45.7 e pP Z
 GRA1 05:32:58.4 e L Z T20.7 A288 MS4.0
 SZGRF: OT 05:12:35.9 85.1N 22.2W dep 37km
 LOMONOSOV RIDGE

1998-02-01
 GRA1 05:21:22.5 i PKP d Z

1998-02-01 D 82.9 AZ 33
 GRA1 06:58:53.3 i P d Z mb4.8
 ALIGN 06:58:53.3 T1.0 A7
 GRA1 06:59:04.3 e pP Z
 GRA1 07:38:36.7 e L Z T19.5 A146 MS4.4
 SZGRF: OT 06:46:34.1 39.5N 146.6E dep 38km
 OFF EAST COAST OF HONSHU, JAPAN

1998-02-01 D 89.6 AZ 44
 GRA1 09:18:41.9 i P c Z mb5.5

BEAM 09:18:41.9 T1.2 A35
GRA1 09:22:22.0 e (PP) Z
SZGRF: OT 09:05:48.4 28.1N 138.9E dep 33km
BONIN ISLANDS REGION

1998-02-01

GRA1 11:10:16.8 e PKPdf Z
GRA1 11:10:22.3 e pPKPdf Z
NEIC: OT 10:50:41.8 22.2S 171.3E dep108km mb5.4
LOYALTY ISLANDS REGION

1998-02-01

GRA1 13:48:18.2 i PKPdf d Z

1998-02-01

GRA1 17:28:24.3 e PKPdf Z
NEIC: OT 17:09:02.9 11.3S 165.4E dep 33km mb4.6
SANTA CRUZ ISLANDS

1998-02-01 D 78.9 AZ 28

GRA1 18:32:29.5 e P Z mb4.4
BEAM 18:32:29.5 T1.0 A4
SZGRF: OT 18:20:31.1 45.5N 150.8E dep 33km
KURIL ISLANDS

1998-02-03 D 54.8

GRA1 02:18:48.2 e P Z mb4.5
BEAM 02:18:48.2 T1.6 A8
GRA1 02:40:32.7 e L Z T21.1 A141 MS4.0
NEIC: OT 02:09:14.7 .0S 16.7W dep 10km mb4.6
NORTH OF ASCENSION ISLAND

1998-02-03 D 89.1 AZ295

GRA1 03:14:53.9 i P c Z mb5.9
ALIGN 03:14:53.9 T1.3 A98
GRA1 03:18:22.1 e PP Z
GRA1 03:32:33.8 e PKKP Z
GRA1 03:56:26.0 e L Z T19.4 A13630 MS6.4
SZGRF: OT 03:02:02.4 16.4N 97.3W dep 33km
OAXACA, MEXICO

1998-02-03

GRA1 08:12:12.9 e PKPdf Z
GRA1 08:13:16.0 e (pPKPdf) Z

1998-02-04

GRA1 03:18:17.2 e PKPdf Z

GRA1 03:18:24.2 e (pPKPdf) Z
GRA1 04:09:56.2 e L Z T21.3 A87
NEIC: OT 02:58:59.0 7.9S 158.3E dep111km mb4.8
SOLOMON ISLANDS

1998-02-04 D 80.7 AZ 33
GRA1 11:46:33.3 i P c Z mb5.0
BEAM 11:46:33.3 T0.9 A15
GRA1 11:46:54.4 e (pP) Z
GRA1 12:23:27.8 e L Z T22.0 A56 MS3.9
SZGRF: OT 11:34:30.4 41.5N 145.5E dep 79km
HOKKAIDO, JAPAN REGION

1998-02-04
GRA1 13:38:00.5 e PKPdf Z
NEIC: OT 13:18:46.8 15.4S 167.5E dep114km mb5.0
VANUATU ISLANDS

1998-02-04 D 3.9 432km
GRC1 14:08:11.7 e Pn Z M14.0
GRA1 14:08:23.7 e Pn Z M14.1
GRA1 14:09:38.0 e Sg E
SZGRF: OT 14:07:11.7 45.7N 14.4E dep 10km
YUGOSLAVIA

1998-02-04 D 42.8 AZ 85
GRA1 14:41:24.6 i P d Z mb5.7
ALIGN 14:41:24.6 T1.5 A262
GRA1 14:43:05.5 e PP Z
GRA1 15:00:53.6 e L Z T19.5 A12330 MS5.8
SZGRF: OT 14:33:30.5 36.8N 68.7E dep 33km
HINDU KUSH REGION

1998-02-04 D151.0
GRA1 16:22:19.8 e PKPdf Z
GRA1 16:22:24.1 e PKPbc Z
GRA1 16:22:32.0 e PKPab Z
NEIC: OT 16:03:10.1 20.2S 177.5W dep300km mb4.6
FIJI ISLANDS REGION

1998-02-05 D151.7
GRA1 09:50:53.7 e (PKPdf) Z
GRA1 09:50:58.8 e PKPbc Z
GRA1 09:51:07.7 e PKPab Z
GRA1 09:51:18.6 e (pPKPbc) Z

1998-02-05 D 79.5
GRA1 11:00:49.1 i P c Z mb5.0

ALIGN 11:00:49.1 T1.0 A22
GRA1 11:01:02.2 e pP Z
GRA1 11:41:02.4 e L Z T19.1 A282 MS4.6

1998-02-05 D 20.9 AZ140
GRA1 16:12:40.7 e P Z mb3.6
BEAM 16:12:40.7 T1.2 A4

1998-02-05
GRA1 16:42:46.6 e PKPdf Z
GRA1 16:42:58.0 e pPKPdf Z

1998-02-05
GRA1 17:24:24.2 e (P) Z
NEIC: OT 17:05:36.4 18.2S 178.3W dep518km mb4.3
FIJI ISLANDS REGION

1998-02-06 D 79.4
GRA1 01:17:16.8 i P c Z mb5.4
ALIGN 01:17:16.8 T1.8 A67
GRA1 01:17:30.7 e pP Z
GRA1 01:57:03.4 e L Z T19.6 A537 MS4.9

1998-02-06
GRA1 02:36:24.8 e PKPdf Z

1998-02-06 D153.2
GRA1 09:14:59.9 e PKPdf Z
GRA1 09:15:07.0 e PKPbc Z
GRA1 09:15:17.4 e PKPab Z
GRA1 09:16:43.2 e (pPKPbc)Z
NEIC: OT 08:55:56.0 21.9S 178.1W dep374km mb4.8
FIJI ISLANDS REGION

1998-02-06 D 79.4
GRA1 19:48:32.3 i P c Z mb5.3
ALIGN 19:48:32.3 T0.9 A31

1998-02-06
GRA1 22:09:02.3 e PKPab Z
NEIC: OT 21:55:28.4 6.0S 105.5E dep 33km mb5.1
SUNDA STRAIT

1998-02-07

GRA1 00:58:17.5 e PKPdf Z

1998-02-07 D 6.8

GRA1 01:01:29.7 e Pn Z

GRA1 01:02:41.2 e Sn Z

GRA1 01:03:15.1 e Sg Z

GRA1 01:04:46.2 e L Z T14.8 A3044 M15.1 MS4.0

1998-02-07 D 7.1

GRA1 01:12:49.2 e Pn Z

GRA1 01:13:57.8 e Sn Z

GRA1 01:14:25.8 e Sg Z M14.4

1998-02-07 D 94.1

GRA1 01:25:58.7 i P d Z T1.2 A62 mb5.8

GRA1 01:26:07.2 e Z

GRA1 01:28:02.4 e pP Z

GRA1 01:28:11.4 e pX Z

GRA1 01:29:54.9 i PP d Z

NEIC: OT 01:13:36.9 24.8N 141.8E dep526km mb5.4

VOLCANO ISLANDS REGION

1998-02-07 D 94.1

GRA1 01:31:21.5 i P d Z T1.2 A131 mb6.1

GRA1 01:33:21.8 e pP Z

GRA1 01:35:17.7 i PP d Z

NEIC: OT 01:18:59.6 24.8N 141.8E dep526km mb5.8

VOLCANO ISLANDS REGION

1998-02-07 D 84.5 AZ 36

GRA1 02:56:19.9 i P c Z mb5.2

ALIGN 02:56:19.9 T1.2 A17

GRA1 02:58:10.3 e (pP) Z

NEIC: OT 02:43:45.7 35.0N 141.0E dep 23km mb4.9

NEAR EAST COAST OF HONSHU, JAPAN

1998-02-07 D140.1

GRA1 03:39:28.0 e PKPdf Z

GRA1 03:39:36.4 e pPKPdf Z

GRA1 03:42:32.4 e PP Z

NEIC: OT 03:20:08.3 14.7S 167.5E dep 33km mb5.3

VANUATU ISLANDS

1998-02-07

GRA1 03:43:02.0 e PKPdf Z

GRA1 03:43:14.3 e sPKPdf Z

1998-02-07 D143.5

GRA1 05:45:06.0 e PKPdf Z

GRA1 05:45:11.2 e pPKPdf Z

GRA1 06:46:11.2 e L Z T19.9 A222 MS4.9

1998-02-07 D 83.0

GRA1 13:45:49.0 i P c Z mb5.0

BEAM 13:45:49.0 T1.2 A11

GRA1 13:45:59.0 e pP Z

NEIC: OT 13:33:29.8 4.1N 95.1E dep 71km mb4.9

NORTHERN SUMATERA, INDONESIA

1998-02-07 D 79.8 AZ 3

GRA1 16:00:32.9 e P Z mb4.8

ALIGN 16:00:32.9 T1.3 A18

GRA1 16:00:47.4 e (pP) Z

SZGRF: OT 15:48:31.8 50.8N 173.7W dep 50km

ANDREANOF ISLANDS, ALEUTIAN IS.

1998-02-07 D154.1

GRA1 23:36:31.0 e PKPdf Z

GRA1 00:38:20.1 e L Z T20.8 A265 MS5.0

NEIC: OT 23:16:22.4 55.1S 126.8W dep 10km mb5.2

SOUTHERN EAST PACIFIC RISE

1998-02-08

GRA1 01:22:28.6 e PKPab Z

NEIC: OT 01:03:25.3 23.5S 179.8E dep550km mb4.8

SOUTH OF FIJI ISLANDS

1998-02-08

GRA1 01:51:02.5 e Pn Z

GRA1 01:52:32.2 e Sn Z

NEIC: OT 01:49:05.6 43.0N 12.7E dep 5km

CENTRAL ITALY

1998-02-09 D 73.1

GRA1 03:12:39.7 i P d Z mb5.8

ALIGN 03:12:39.7 T0.9 A68

GRA1 03:14:56.5 e pP Z

1998-02-09 D152.7

GRA1 04:18:27.9 e PKPdf Z

GRA1 04:18:34.7 i PKPbc d Z

GRA1 04:18:44.2 e PKPab Z
GRA1 04:20:03.7 e pPKPbc Z
GRA1 04:20:12.1 e pPKPab Z
NEIC: OT 03:59:21.0 22.2S 178.2W dep354km mb4.8
SOUTH OF FIJI ISLANDS

1998-02-09
GRA1 08:52:59.4 e PKPdf Z
GRA1 08:53:42.3 e (pPKPdf)Z
NEIC: OT 08:33:12.8 18.2S 175.1W dep 33km mb5.2
TONGA ISLANDS

1998-02-09 D 44.7
GRA1 21:21:30.1 i P c Z mb4.8
ALIGN 21:21:30.1 T1.3 A19
GRA1 21:21:53.9 e pP Z
NEIC: OT 21:13:26.0 36.7N 70.7E dep 80km mb4.7
HINDU KUSH REGION, AFGHANISTAN

1998-02-10 D 99.2
GRA1 03:40:03.2 e Pdiff Z
GRA1 04:24:22.4 e L Z T19.2 A424 MS5.0
NEIC: OT 03:26:09.0 16.2S 74.0W dep 25km mb5.1
NEAR COAST OF PERU

1998-02-10
GRA1 07:07:07.1 e PKPdf Z
NEIC: OT 06:48:08.4 4.8S 152.6E dep 33km mb4.8
NEW BRITAIN REGION, P.N.G.

1998-02-10 D 3.7 411km
GRA1 09:20:19.4 e Pn Z M14.2
GRA1 09:21:19.1 e Sg E
SZGRF: OT 09:19:21.0 51.5N 16.2E dep 1km
POLAND

1998-02-10 AZ146
GRA1 23:56:33.3 e P Z
GRA1 23:56:37.2 e pP Z
NEIC: OT 23:52:35.6 36.7N 26.3E dep 33km mb3.8
DODECANESE ISLANDS

1998-02-11 D 79.5
GRA1 02:37:42.6 i P c Z mb5.3
ALIGN 02:37:42.6 T1.2 A52
GRA1 02:38:03.8 e pP Z
GRA1 03:12:21.6 e L Z T21.9 A261 MS4.5

1998-02-11

GRA1 04:28:28.6 e Pn Z
 GRA1 04:29:46.6 e (SnI) Z

1998-02-11 D 97.0

GRA1 13:28:16.5 e P Z
 GRA1 14:11:48.0 e L Z T20.9 A541 MS5.0

1998-02-11 D102.0

GRA1 20:53:54.5 e Pdiff Z
 GRA1 20:58:07.5 e PP Z
 NEIC: OT 20:40:18.6 17.4N 145.6E dep164km mb5.2
 MARIANA ISLANDS

1998-02-11 D 58.2

GRA1 21:26:33.5 e P Z mb5.3
 ALIGN 21:26:33.5 T1.2 A35
 GRA1 21:26:42.9 e pP Z
 GRA1 21:45:43.6 e L Z T20.4 A117 MS4.0
 NEIC: OT 21:16:37.6 10.7N 41.4W dep 10km mb5.0
 NORTHERN MID-ATLANTIC RIDGE

1998-02-11 D149.7

GRA1 23:25:07.9 e PKPdf Z
 GRA1 23:25:16.5 e PKPab Z
 NEIC: OT 23:06:15.0 20.4S 178.5W dep500km mb4.1
 FIJI ISLANDS REGION

1998-02-12 D 43.3 AZ 77

GRA1 00:50:19.0 i P c Z mb4.5
 ALIGN 00:50:19.0 T1.1 A11
 SZGRF: OT 00:42:21.3 40.9N 73.1E dep 33km
 KIRGHIZ SSR

1998-02-12

GRA1 02:30:04.9 e PKPdf Z
 NEIC: OT 02:11:06.9 5.5S 152.4E dep 33km mb5.4
 NEW BRITAIN REGION, P.N.G.

1998-02-12

GRA1 07:07:53.9 e PKPdf Z
 NEIC: OT 06:48:40.7 27.4S 109.9W dep 10km mb5.0
 EASTER ISLAND REGION

1998-02-12 D 35.1 AZ235

GRA1 12:47:50.1 e (P) Z

1998-02-12

GRA1 17:16:40.5 e PKPdf Z

1998-02-12

AZ132

GRA1 17:18:53.9 e P Z

GRA1 17:19:02.3 e (pP) Z

NEIC: OT 17:06:44.2 10.2N 127.0E dep 33km mb4.9

PHILIPPINE ISLANDS REGION

1998-02-12

GRA1 17:38:14.0 e PKPdf Z

1998-02-12

D144.9

GRA1 17:50:45.3 e PKPdf Z

GRA1 19:01:49.3 e L Z T19.7 A497 MS5.3

1998-02-12

D146.3

GRA1 19:10:55.6 e PKPdf Z

GRA1 20:21:57.2 e L Z T20.0 A347 MS5.1

1998-02-13

D 18.2

GRA1 07:23:01.5 e P Z

GRA1 07:32:41.0 e L Z T18.8 A138 MS3.3

1998-02-13

D146.5

GRA1 11:07:57.7 e PKPdf Z

GRA1 11:08:00.5 e PKPbc Z

GRA1 11:08:02.4 e PKPab Z

1998-02-13

D 78.8

GRA1 13:51:34.8 i P c Z T0.8 A8 mb4.8

1998-02-13

D 77.9

GRA1 17:21:11.3 i P c Z

GRA1 17:21:22.0 e (pP) Z

GRA1 17:56:22.0 e L Z T20.5 A142 MS4.3

NEIC: OT 17:09:18.8 52.3N 174.1E dep 42km mb4.8

NEAR ISLANDS, ALEUTIAN ISLANDS

1998-02-13

GRA1 23:25:18.8 e PKPdf Z

1998-02-14

GRA1 00:13:17.7 e P Z

1998-02-14 D 44.8 AZ 83

GRA1 00:16:01.3 i P c Z mb5.8

ALIGN 00:16:01.3 T1.0 A115

GRA1 00:16:48.9 e pP Z

GRA1 00:17:10.3 e sP Z

GRA1 00:18:49.2 e Z

GRA1 00:36:29.3 e L Z T19.9 A308 MS4.2

NEIC: OT 00:08:08.0 36.3N 71.0E dep221km mb5.3

AFGHANISTAN-TAJIKISTAN BORD REG.

1998-02-14 D 66.9 AZ352

GRA1 02:25:39.7 i P c Z mb5.0

BEAM 02:25:39.7 T1.2 A13

NEIC: OT 02:15:02.6 63.1N 150.9W dep129km mb4.6

CENTRAL ALASKA

1998-02-14 D148.1

GRA1 06:46:16.7 e PKPdf Z

GRA1 06:46:21.4 e PKPab Z

NEIC: OT 06:26:40.1 18.9S 175.1W dep108km mb4.7

TONGA ISLANDS

1998-02-14 D 28.0 AZ292

GRA1 07:00:06.2 i P c Z mb4.9

ALIGN 07:00:06.2 T1.0 A20

GRA1 07:09:58.2 e L Z T18.3 A803 MS4.3

1998-02-14 D 35.2 AZ292

GRA1 09:08:40.5 e P Z mb4.4

BEAM 09:08:40.5 T1.1 A6

SZGRF: OT 09:01:50.1 49.9N 44.5W dep 33km

NORTH ATLANTIC OCEAN

1998-02-14

GRA1 12:50:35.9 e PKPdf Z

1998-02-14 D 30.1 AZ293

GRA1 14:49:55.8 e P Z mb4.4

BEAM 14:49:55.8 T1.3 A9

GRA1 14:50:05.1 e pP Z

SZGRF: OT 14:43:50.7 51.9N 36.9W dep 36km

NORTH ATLANTIC OCEAN

1998-02-15

GRA1 06:14:45.5 e PKPdf Z

1998-02-16

D 28.1

GRA1 13:42:08.9 e P Z

BEAM 13:42:08.9 T1.5 A24

GRA1 13:55:33.3 e L Z T18.3 A863 MS4.4

1998-02-16

D 7.0

GRA1 13:47:03.0 e Pn Z

GRA1 13:48:13.2 e Sn Z

1998-02-16

D 72.7 AZ267

GRA1 15:13:33.8 e P Z mb4.6

BEAM 15:13:33.8 T0.8 A3

SZGRF: OT 15:02:09.2

CARIBBEAN SEA

1998-02-16

D 28.0

GRA1 23:59:12.0 i P c Z mb6.3

BEAM 23:59:12.0 T1.5 A758

GRA1 00:09:23.8 e L Z T18.1 A52869 MS6.2

1998-02-17

D 52.7

GRA1 14:05:16.1 i P d Z mb5.3

ALIGN 14:05:16.1 T1.5 A52

GRA1 14:25:23.6 e L Z T18.0 A292 MS4.4

NEIC: OT 13:56:00.3 21.5N 45.6W dep10km mb5.0

NORTHERN MID-ATLANTIC RIDGE

1998-02-18

GRA1 00:09:19.6 e PKPdf Z

NEIC: OT 23:49:40.0 22.2S 176.6W dep150km mb4.2

SOUTH OF FIJI ISLANDS

1998-02-18

D149.6

GRA1 07:44:18.9 e PKPdf Z

GRA1 07:44:27.3 e PKPab Z

GRA1 07:44:47.2 e pPKPdf Z

GRA1 07:44:59.1 e pPKPab Z

NEIC: OT 07:24:49.9 15.5S 173.8W dep100km mb5.0

TONGA ISLANDS

1998-02-18 D 77.2
GRA1 09:25:32.8 i P c Z mb5.4
BEAM 09:25:32.8 T1.0 A31
GRA1 09:25:54.6 e pP Z
GRA1 10:04:20.3 e L Z T19.0 A891 MS5.1

1998-02-19
GRA1 02:35:28.6 e PKPdf Z
NEIC: OT 02:15:45.3 20.7S 170.0E dep 33km mb4.2
VANUATU ISLANDS

1998-02-19 D 15.0 AZ151
GRA1 02:56:51.7 e P Z

1998-02-19 D 95.3
GRA1 04:34:54.1 i Pdiff c Z
GRA1 05:14:15.9 e L Z T21.8 A1794 MS5.5

1998-02-19
GRA1 10:12:17.3 e PKPdf Z
NEIC: OT 09:53:37.7 17.6S 178.8W dep600km mb4.1
FIJI ISLANDS REGION

1998-02-19 D111.1
GRA1 14:29:24.0 e Pdiff Z
GRA1 15:27:31.1 e L Z T22.0 A4956 MS6.0
NEIC: OT 14:14:51.0 4.5S 129.1E dep 33km mb6.1
BANDA SEA

1998-02-19 D147.7
GRA1 23:23:45.1 e PKPdf Z
GRA1 23:23:48.9 e PKPab Z
NEIC: OT 23:04:31.4 18.1S 175.5W dep300km mb4.3
TONGA ISLANDS

1998-02-20 D122.1
GRA1 02:35:18.4 e (PP) Z
GRA1 03:52:32.1 e L Z T21.7 A169 MS4.7
SZGRF: OT 02:14:50.7
OFF COAST OF SOUTHERN CHILE

1998-02-20
GRA1 07:22:37.8 e PKPab Z

1998-02-20 D 44.6 AZ 84

GRA1 12:25:56.7 i P c Z mb6.6
 ALIGN 12:25:56.7 T1.4 A1089
 GRA1 12:26:48.9 e pP Z
 GRA1 12:27:15.4 e sP Z
 GRA1 12:27:46.1 e PcP Z
 GRA1 12:28:28.1 e pPcP Z
 GRA1 12:36:40.7 e L Z T21.1 A9385 MS5.7
 NEIC: OT 12:18:06.1 36.5N 71.1E dep235km mb5.8
 AFGHANISTAN-TAJIKISTAN BORD REG.

 1998-02-20 D 15.0 AZ128

GRA1 13:49:47.0 e P Z

 1998-02-20

GRA1 16:57:26.1 e PKPab Z
 NEIC: OT 16:37:20.0 22.2S 175.4W dep 33km mb4.4
 TONGA ISLANDS REGION

 1998-02-21 D 82.6 AZ 39

GRA1 01:07:59.9 i P c Z mb5.7
 ALIGN 01:07:59.9 T1.2 A62
 GRA1 01:08:06.1 e pP Z
 GRA1 01:51:30.2 e L Z T18.0 A246 MS4.6
 SZGRF: OT 00:55:39.4 36.7N 139.7E dep 21km
 HONSHU, JAPAN

 1998-02-21 D 4.4 494km

GRA1 02:22:24.9 e Pn Z
 GRA1 02:23:21.2 e Sn Z
 GRA1 02:23:46.8 e Sg Z M14.3
 NEIC: OT 02:21:11.5 44.8N 10.7E dep 10km
 NORTHERN ITALY

 1998-02-21

GRA1 06:51:50.1 e PKPdf Z

 1998-02-21 D 1.6 173km

GRA1 16:49:36.0 e Pn Z M12.3
 GRA1 16:49:56.4 e Sg N
 SZGRF: OT 16:49:08.2 51.1N 12.4E dep 11km
 Regis-Breitingen, N of Altenburg

 1998-02-22 D 59.2

GRA1 02:50:36.6 e P Z mb4.7
 BEAM 02:50:36.6 T1.2 A9
 GRA1 02:50:57.0 e pP Z
 GRA1 03:16:09.1 e L Z T19.9 A110 MS4.0

1998-02-22 D 80.1
GRA1 04:33:34.0 i P c Z T0.8 A23 mb5.1
GRA1 04:33:50.3 e (pP) Z

1998-02-22 D111.1
GRA1 05:11:58.1 e PKPdf Z
GRA1 06:08:26.6 e L Z T18.7 A137 MS4.6
NEIC: OT 04:53:26.0 4.4S 129.0E dep 40km mb5.4
BANDA SEA

1998-02-22
GRA1 05:23:05.5 e (PKP) Z

1998-02-22 D147.8
GRA1 06:49:46.1 e PKPdf Z
GRA1 06:49:50.3 e PKPab Z

1998-02-22 D 78.9 AZ360
GRA1 11:00:57.1 i P c Z mb5.2
ALIGN 11:00:57.1 T0.9 A21
GRA1 11:01:14.7 e pP Z
GRA1 11:01:23.0 e (sP) Z
GRA1 11:31:57.5 e L Z T21.2 A230 MS4.5
SZGRF: OT 10:49:03.0 51.8N 168.5W dep 66km
FOX ISLANDS, ALEUTIAN ISLANDS

1998-02-22 D 85.0 AZ 40
GRA1 16:15:34.0 i P c Z mb5.0
BEAM 16:15:34.0 T1.4 A14
SZGRF: OT 16:03:03.0 34.5N 140.8E dep 33km
NEAR EAST COAST OF HONSHU, JAPAN

1998-02-22 D 76.6 AZ201
GRA1 16:19:26.8 i P d Z T1.4 A41 mb5.4
GRA1 16:19:36.6 e pP Z
GRA1 16:19:42.5 e sP Z
GRA1 16:50:54.4 e L Z T18.5 A220 MS4.5
SZGRF: OT 16:07:37.9 24.5S 11.6W dep 36km
SOUTH ATLANTIC RIDGE

1998-02-22 D 57.7 AZ162
GRA1 17:29:03.4 e P Z
BEAM 17:29:03.4 T0.8 A3
SZGRF: OT 17:19:14.0

ZAIRE REPUBLIC

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1998-02-22      D 70.3  AZ 77
  GRA1 22:57:46.2 e P      Z      mb4.7
  BEAM 22:57:46.2          T1.6  A10
  GRA1 23:25:25.6 e L      Z  T18.5 A160  MS4.3
SZGRF: OT 22:46:36.4
  BURMA-CHINA BORDER REGION
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1998-02-23      D151.7
  GRA1 00:47:13.7 e (PKPdf) Z
  GRA1 00:47:19.7 e PKPbc  Z
  GRA1 00:47:27.6 e PKPab  Z
  GRA1 02:00:00.5 e L      Z  T21.9 A528  MS5.3
NEIC:  OT 00:27:20.9 56.9S 147.3E dep 10km mb5.0
  WEST OF MACQUARIE ISLAND
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1998-02-23
  GRA1 00:58:13.5 e PKPdf  Z
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1998-02-23
  GRA1 01:56:07.0 e PKPdf  Z
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1998-02-23      D149.2
  GRA1 03:34:18.7 e (PKPdf) Z
  GRA1 03:34:21.7 i PKPbc d Z
  GRA1 03:34:26.4 e PKPab  Z
  GRA1 03:34:32.5 e pPKPbc Z
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1998-02-23
  GRA1 21:19:15.3 e PKPdf  Z
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1998-02-23      D 1.1  120km
  GRA1 09:29:55.3 e Pg      Z      M12.0
  GRA1 09:30:11.1 e Sg      N
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1998-02-24      D 71.3  AZ211
  GRA1 05:41:30.6 e P      Z      mb4.6
  BEAM 05:41:30.6          T1.3  A7
  GRA1 05:41:36.6 e (pP)   Z
  GRA1 06:00:16.4 e L      Z  T20.4 A108  MS4.1
SZGRF: OT 05:30:10.7
  SOUTH ATLANTIC OCEAN
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1998-02-24

GRA1 06:31:11.3 e PKPdf Z
 NEIC: OT 06:11:59.8 14.2S 167.3E dep150km mb3.9
 VANUATU ISLANDS

1998-02-24 D 7.2

GRA1 12:34:18.6 e (PnI) Z
 GRA1 12:35:18.7 e Sn Z

1998-02-24 D 5.7

GRA1 12:43:00.1 e Pn Z
 GRA1 12:44:18.8 e Sn Z

1998-02-24 D 4.3 481km

GRA1 15:15:56.8 e P Z T0.9 A23

1998-02-24 D 78.7

GRA1 21:20:37.6 e P Z mb5.0
 BEAM 21:20:37.6 T1.6 A25
 GRA1 22:00:14.1 e L Z T21.2 A500 MS4.8

1998-02-25

GRA1 05:50:02.9 e PKPab Z
 NEIC: OT 05:30:05.9 21.8S 175.6W dep 65km mb4.4
 TONGA ISLANDS

1998-02-25 D 79.8 AZ 27

GRA1 06:54:10.6 e P Z mb4.7
 ALIGN 06:54:10.6 T0.9 A9
 SZGRF: OT 06:42:07.2 44.8N 151.8E dep 33km
 KURIL ISLANDS REGION

1998-02-25 D 21.4

GRA1 07:02:11.7 e P Z mb4.2
 BEAM 07:02:11.7 T1.6 A21
 GRA1 07:08:57.7 e L Z T20.3 A228 MS3.6
 NEIC: OT 06:58:05.3 37.7N 29.7E dep 52km mb4.2
 TURKEY

1998-02-25 D 80.4

GRA1 09:24:38.2 i P d Z mb5.1
 ALIGN 09:24:38.2 T0.9 A21
 GRA1 10:00:26.4 e L Z T18.5 A83 MS4.1

1998-02-25 D 3.6 401km
 GRA1 10:33:13.3 e Pn Z
 GRA1 10:34:09.5 e Sg Z M13.6

 1998-02-25 D 28.8
 GRA1 10:35:56.6 e P Z mb4.4
 BEAM 10:35:56.6 T1.8 A12
 GRA1 10:46:36.1 e L Z T19.1 A393 MS4.0

 1998-02-25 D 84.2
 GRA1 17:44:50.2 i P c Z mb5.3
 ALIGN 17:44:50.2 T1.2 A25
 GRA1 17:44:59.8 e pP Z
 NEIC: OT 17:32:21.2 35.4N 140.9E dep 50km mb4.8
 NEAR EAST COAST OF HONSHU, JAPAN

 1998-02-25 D 28.5
 GRA1 19:11:50.0 i P d Z mb5.6
 ALIGN 19:11:50.0 T2.1 A186
 GRA1 19:22:30.7 e L Z T18.1 A9571 MS5.4

 1998-02-25 D 28.6
 GRA1 19:58:55.3 e P Z mb4.6
 BEAM 19:58:55.3 T1.8 A16
 NEIC: OT 19:52:52.0 53.8N 35.4W dep 10km mb4.5
 NORTH ATLANTIC OCEAN

 1998-02-25 D 28.6
 GRA1 19:59:16.1 e P Z mb5.3
 BEAM 19:59:16.1 T1.9 A94
 GRA1 20:08:44.4 e L Z T21.8 A2518 MS4.8

 1998-02-25 AZ144
 GRA1 23:02:07.0 e P Z

 1998-02-26 D 25.0 AZ279
 GRA1 00:26:30.4 e P Z mb4.0
 BEAM 00:26:30.4 T0.9 A3
 SZGRF: OT 00:21:10.4
 NORTH ATLANTIC RIDGE

 1998-02-26 D 23.7 AZ 61
 GRA1 02:05:27.0 e (P) Z

 1998-02-26 D 79.6 AZ 26
 GRA1 03:28:38.8 i P c Z mb5.3
 ALIGN 03:28:38.8 T0.9 A41
 SZGRF: OT 03:16:36.1 45.5N 153.6E dep 33km
 KURIL ISLANDS REGION

1998-02-26 D 6.6
 GRA1 12:10:59.9 e Pn Z
 GRA1 12:12:10.3 e Sn Z
 GRA1 12:12:39.1 e Sg Z M15.0

1998-02-26 D124.0
 GRA1 16:42:31.1 e PKPdf Z
 NEIC: OT 16:23:33.7 3.9S 152.7E dep 27km mb5.1
 NEW IRELAND REGION, P.N.G.

1998-02-26 D133.4
 GRA1 20:03:56.1 e PKPdf Z
 NEIC: OT 19:44:34.3 35.3S 106.7W dep 10km mb4.8
 SOUTHERN EAST PACIFIC RISE

1998-02-26 D 3.6 403km
 GRA1 22:21:05.2 e Pn Z M13.7
 GRA1 22:22:02.9 e Sg E
 SZGRF: OT 22:20:08.0 51.4N 16.2E dep 1km
 POLAND

1998-02-26 D 3.6 403km
 GRA1 23:04:04.3 e Pn Z M13.5
 GRA1 23:05:03.3 e Sg N
 SZGRF: OT 23:03:07.1 51.5N 16.1E dep 1km
 POLAND

1998-02-26 D 28.7
 GRA1 23:20:37.4 e P Z T2.3 A167 mb5.5
 GRA1 23:31:24.2 e L Z T18.5 A1689 MS4.7

1998-02-26 D 26.2 AZ294
 GRA1 23:48:42.5 e P Z
 GRA1 23:59:08.0 e L Z T19.6 A533 MS4.1
 NEIC: OT 23:42:40.7 54.0N 35.0W dep 10km mb4.5
 NORTH ATLANTIC OCEAN

1998-02-27 D 80.2
 GRA1 02:17:27.6 e P Z mb4.4
 BEAM 02:17:27.6 T1.3 A6

1998-02-27

GRA1 03:01:45.9 e PKPdf Z

GRA1 03:01:53.8 e (pPKPdf)Z

NEIC: OT 02:43:01.9 18.8S 177.8W dep500km mb3.8

FIJI ISLANDS REGION

1998-02-27 D 80.3 AZ 31

GRA1 19:08:57.3 i P c Z mb4.9

ALIGN 19:08:57.3 T0.9 A14

SZGRF: OT 18:56:51.2 42.7N 147.2E dep 33km

OFF COAST OF HOKKAIDO, JAPAN

1998-02-27 D 80.8 AZ 29

GRA1 22:30:23.6 e P c Z mb4.7

BEAM 22:30:23.6 T1.5 A12

GRA1 22:30:26.5 e Z

GRA1 22:30:38.6 e pP Z

GRA1 22:30:43.1 e pX Z

NEIC: OT 22:18:15.8 43.2N 147.5E dep 33km mb4.8

KURIL ISLANDS

1998-02-28 D 54.2 AZ101

GRA1 00:45:22.8 e P Z

NEIC: OT 00:39:10.7 37.0N 48.8E dep 33km mb4.6

NORTHWESTERN IRAN

1998-02-28 D139.9

GRA1 11:05:52.8 e PKPdf Z

GRA1 11:06:00.7 e pPKPdf Z

GRA1 11:08:55.6 e PP Z

GRA1 11:09:19.6 e pPP Z

NEIC: OT 10:46:52.3 14.4S 167.3E dep185km mb5.1

VANUATU ISLANDS

1998-02-28 D 79.3

GRA1 14:58:22.0 e P Z mb4.7

BEAM 14:58:22.0 T1.0 A8

NEIC: OT 14:46:20.9 51.7N 173.5W dep 42km mb4.9

ANDREANOF ISLANDS, ALEUTIAN IS.

1998-02-28 D 85.8 AZ 42

GRA1 17:50:52.2 i P d Z mb6.0

ALIGN 17:50:52.2 T1.7 A199

GRA1 17:50:59.9 e pP Z

GRA1 17:54:13.1 i PP Z

SZGRF: OT 17:38:16.1 32.8N 139.4E dep 27km

SOUTH OF HONSHU, JAPAN

1998-02-28 D130.1
 GRA1 22:34:20.4 e PKPdf Z
 GRA1 22:37:40.8 e (PP) Z
