

1998-01-01 D 68.4 AZ267
GRA1 18:20:30.6 e P Z mb5.1
BEAM 18:20:30.6 T2.4 A32
SZGRF: OT 18:09:32.1
WINDWARD ISLANDS

1998-01-01 D 77.4 AZ 11
GRA1 20:15:36.3 e P Z mb5.5
ALIGN 20:15:36.3 T1.5 A55
GRA1 20:15:44.5 e (pP) Z
NEIC: OT 20:03:44.2 53.9N 161.8E dep 33km mb4.7
OFF EAST COAST OF KAMCHATKA

1998-01-02 D127.0
GRA1 00:01:16.8 i PKPdf c Z
GRA1 00:01:31.0 e pPKPdf Z
GRA1 00:03:30.6 e PP Z
GRA1 01:03:07.9 e L Z T21.7 A1262 MS5.6
NEIC: OT 23:42:16.8 6.3S 154.8E dep 47km mb5.7
SOLOMON ISLANDS

1998-01-02
GRA1 00:06:56.0 e PKPdf Z
GRA1 00:07:08.2 e pPKPdf Z

1998-01-02 D129.8
GRA1 00:44:16.5 e PKPdf Z
GRA1 00:44:21.2 e (pPKPdf) Z
GRA1 00:46:26.8 e PP Z
NEIC: OT 00:25:30.2 17.6S 178.7W dep500km mb4.4
FIJI ISLANDS REGION

1998-01-02 524km
GRA1 07:33:41.3 e (PnI) Z
GRA1 07:34:36.9 e SnI Z M14.0
NEIC: OT 07:31:34.1 43.0N 12.7E dep 13km mb3.6
CENTRAL ITALY

1998-01-02
GRA1 08:13:50.4 e P Z

1998-01-02 D 52.4 AZ232
GRA1 11:57:02.2 e P Z mb4.5
BEAM 11:57:02.2 T1.1 A6
GRA1 11:57:06.3 e pP Z
SZGRF: OT 11:47:49.9 8.7N 28.2W dep 15km
NORTH ATLANTIC OCEAN

1998-01-02 D 57.7 AZ229
GRA1 12:10:39.7 e P Z mb4.8
BEAM 12:10:39.7 T1.6 A17
GRA1 12:10:47.3 e pP Z
SZGRF: OT 12:00:50.4 2.8N 28.7W dep 28km
CENTRAL MID-ATLANTIC RIDGE

1998-01-02
GRA1 12:46:17.8 e PnI Z
GRA1 12:47:19.9 e SnI Z

1998-01-02 D 79.4
GRA1 18:31:58.4 i P c Z mb5.6
ALIGN 18:31:58.4 T1.1 A66
GRA1 18:32:10.4 e pP Z
GRA1 18:32:15.0 e sP Z
GRA1 19:09:27.4 e L Z T21.3 A351 MS4.7

1998-01-02 D 82.5 AZ 76
GRA1 21:22:57.1 e P Z mb4.6
BEAM 21:22:57.1 T1.0 A4
NEIC: OT 21:11:56.4 23.4N 94.8E dep 33km mb4.6
MYANMAR-INDIA BORDER REGION

1998-01-03 D 85.1 AZ290
GRA1 00:32:13.2 e P Z mb5.0
ALIGN 00:32:13.2 T1.3 A12
GRA1 00:32:20.4 e pP Z
SZGRF: OT 00:19:39.5 16.4N 90.7W dep 25km
MEXICO-GUATEMALA BORDER REGION

1998-01-03 D 87.6 AZ202
GRA1 06:22:58.0 e P Z mb5.8
ALIGN 06:22:58.0 T1.6 A73
GRA1 06:23:16.7 e pP Z
GRA1 06:23:39.2 e Z
GRA1 06:23:49.1 e Z
GRA1 06:26:13.9 e PP Z
GRA1 07:00:50.2 e L Z T18.5 A1746 MS5.5
SZGRF: OT 06:10:15.9 35.0S 15.4W dep 68km
TRISTAN DA CUNHA REGION

1998-01-03
GRA1 14:43:12.0 e PKPdf Z

1998-01-03 D 85.4 AZ294
GRA1 15:24:07.5 i P c Z mb5.2
ALIGN 15:24:07.5 T1.1 A17
GRA1 15:24:53.8 e pP Z
SZGRF: OT 15:11:52.5 19.3N 94.7W dep188km
GULF OF CAMPECHE

1998-01-03 D 20.3 AZ282
GRA1 18:21:55.1 e (P) Z

1998-01-03 D 73.5 AZ 39
GRA1 18:54:19.2 e P c Z mb4.4
BEAM 18:54:19.2 T0.8 A2
SZGRF: OT 18:42:51.3
E. USSR-N.E. CHINA BORDER REGION

1998-01-03
GRA1 21:17:28.8 e PKPdf Z

1998-01-03
GRA1 22:25:59.2 e PnI Z
GRA1 22:26:43.8 e SnI Z
NEIC: OT 22:24:15.0 43.9N 10.6E dep 5km
CENTRAL ITALY

1998-01-03 D 76.6
GRA1 23:14:02.3 i P d Z mb5.2
ALIGN 23:14:02.3 T1.1 A24
GRA1 23:14:07.2 e pP Z
GRA1 23:14:10.7 e (sP) Z
GRA1 23:54:43.5 e L Z T21.5 A1462 MS5.3
NEIC: OT 23:02:14.8 54.4N 164.1W dep 33km mb5.5
UNIMAK ISLAND REGION

1998-01-04
GRA1 01:19:33.2 e PKPdf Z

1998-01-04 D 92.8 AZ 62
GRA1 04:37:20.3 e P Z mb4.8
BEAM 04:37:20.3 T1.1 A4
NEIC: OT 04:24:14.1 14.7N 122.0E dep 33km mb4.7
LUZON, PHILIPPINE ISLANDS

1998-01-04 D148.0
GRA1 06:31:31.3 i PKPdf c Z
GRA1 06:35:20.3 e PP Z
GRA1 07:24:34.4 e L Z T51.1 A170363 MS7.4

1998-01-04

GRA1 06:52:15.7 e PKPdf Z

1998-01-04

GRA1 08:23:49.4 e PKPdf Z

1998-01-04

GRA1 09:18:13.4 i PKPbc d Z

1998-01-04

GRA1 11:23:20.4 e PnI Z

GRA1 11:24:33.4 e (SnI) Z

NEIC: OT 11:21:35.6 42.9N 13.2E dep 10km mb3.8

CENTRAL ITALY

1998-01-04 D 1.8 195km

GRA1 13:46:10.6 e Sg N M12.5

SZGRF: OT 13:45:14.0 50.6N 13.6E dep 0km

Chomutov, Most/CR

1998-01-04

GRA1 14:26:48.5 i PKPbc c Z

GRA1 14:26:52.6 e PKPab Z

NEIC: OT 14:07:12.7 22.2S 171.6E dep117km mb4.7

LOYALTY ISLANDS REGION

1998-01-04

GRA1 15:40:59.5 e PKP Z

1998-01-04 D 73.4 AZ274

GRA1 18:57:54.7 e P c Z mb4.6

BEAM 18:57:54.7 T1.3 A7

SZGRF: OT 18:46:26.1

CARIBBEAN SEA

1998-01-05

AZ153

GRA1 05:32:29.8 e P Z

GRA1 05:32:40.2 e P1 Z

1998-01-05 D149.0

GRA1 12:44:52.9 e PKPdf Z

GRA1 12:44:55.3 e PKPbc Z

GRA1 12:44:59.9 e PKPab Z

1998-01-05 D 41.7 AZ106
GRA1 16:04:07.2 i P c Z mb4.7
ALIGN 16:04:07.2 T1.1 A17
SZGRF: OT 15:56:21.5
SOUTHERN IRAN

1998-01-05 D 42.4 AZ100
GRA1 17:06:51.4 e P Z mb4.3
ALIGN 17:06:51.4 T1.1 A7
GRA1 17:06:56.7 e (pP) Z
SZGRF: OT 16:58:58.7
SOUTHERN IRAN

1998-01-06 D 89.3 AZ312
GRA1 04:08:52.4 e (P) Z

1998-01-06 D 81.0 AZ 29
GRA1 04:24:52.7 e P Z mb4.6
BEAM 04:24:52.7 T0.9 A5
GRA1 04:25:07.0 e pP Z
SZGRF: OT 04:12:45.0 43.2N 150.9E dep 50km
KURIL ISLANDS REGION

1998-01-06
GRA1 20:45:10.7 e PnI Z
GRA1 20:46:12.1 e (SnI) Z
NEIC: OT 20:43:07.7 43.0N 12.8E dep 10km
CENTRAL ITALY

1998-01-06
GRA1 23:33:24.8 e (PKP) Z

1998-01-07 AZ286
GRA1 02:27:31.7 e (P) Z

1998-01-07 D 75.0 AZ 21
GRA1 03:17:53.2 e P Z mb4.8
ALIGN 03:17:53.2 T1.3 A14
SZGRF: OT 03:06:17.0 51.6N 156.9E dep 33km
KAMCHATKA

1998-01-07 D 3.7 406km
GRA1 06:36:26.1 e Pn Z M13.9

GRA1 06:37:24.7 e Sg E
SZGRF: OT 06:35:28.7 51.5N 16.2E dep 1km
POLAND

1998-01-07 AZ 80
GRA1 12:28:18.6 e (P) Z

1998-01-07 D 79.4 AZ 8
GRA1 19:21:48.9 e P c Z mb4.9
ALIGN 19:21:48.9 T1.2 A15
SZGRF: OT 19:09:47.7 50.6N 178.0E dep 33km
RAT ISLANDS, ALEUTIAN ISLANDS

1998-01-07 D 20.0 AZ153
GRA1 19:26:16.4 e PnI Z
BEAM 19:26:16.4 T1.1 A12
GRA1 19:26:21.2 e P Z mb4.0
BEAM 19:26:21.2 T1.1 A12
GRA1 19:26:29.6 e pP Z
SZGRF: OT 19:21:44.1
NEAR COAST OF LIBYA

1998-01-08 D 86.7 AZ 50
GRA1 02:24:23.0 e P Z T2.3 A90 mb5.5
GRA1 02:24:33.7 e pP Z
SZGRF: OT 02:11:43.9 27.4N 131.5E dep 36km
RYUKYU ISLANDS REGION

1998-01-08 D 79.4 AZ 7
GRA1 02:42:57.9 i P c Z mb5.2
ALIGN 02:42:57.9 T1.5 A36
GRA1 02:43:13.7 e pP Z
GRA1 02:43:19.1 e sP Z
GRA1 03:28:29.5 e L Z T21.5 A339 MS4.7

1998-01-08 D 84.4 AZ 52
GRA1 03:47:55.0 e P Z mb5.0
ALIGN 03:47:55.0 T1.2 A11
GRA1 03:48:04.7 e pP Z
SZGRF: OT 03:35:26.7 28.0N 127.9E dep 33km
RYUKYU ISLANDS

1998-01-08 D 83.7 AZ272
GRA1 04:37:26.5 e P Z mb4.4
BEAM 04:37:26.5 T0.9 A2
SZGRF: OT 04:25:00.8
COLOMBIA

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1998-01-09      D139.8
  GRA1 03:03:19.1 e PKPdf Z
  GRA1 03:03:23.7 e PKiKP Z
  GRA1 03:06:14.8 e PP     Z
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1998-01-09
  GRA1 03:06:57.2 e PKPdf Z
  GRA1 03:07:07.1 e pPKPdf Z
  GRA1 03:10:31.9 e PP     Z
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1998-01-09
  GRA1 09:58:22.0 e PKPdf Z
  GRA1 09:58:31.6 e pPKPdf Z
NEIC: OT 09:39:03.3 14.9S 167.5E dep 33km mb5.1
  VANUATU ISLANDS
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1998-01-09      D 86.1  AZ 36
  GRA1 12:20:52.7 e P      Z          mb4.5
  BEAM 12:20:52.7          T1.0    A5
SZGRF: OT 12:08:16.4
  OFF EAST COAST OF HONSHU, JAPAN
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1998-01-09      D 38.7  AZ100
  GRA1 19:12:44.2 e P      Z          mb4.3
  BEAM 19:12:44.2          T1.7    A13
  GRA1 19:27:59.4 e L      Z    T21.3  A434  MS4.2
SZGRF: OT 19:05:23.5
  IRAN
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1998-01-09      D 2.9  320km
  GRA1 23:27:22.4 e Pn     Z          M13.2
  GRA1 23:28:05.5 e Sg     E
SZGRF: OT 23:26:34.4 49.4N  6.8E dep 1km
  Saarbruecken-West
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1998-01-10      D 67.3
  GRA1 04:01:36.2 i P      c Z          mb6.3
  ALIGN 04:01:36.2          T1.1    A204
  GRA1 04:01:43.0 e (pP)   Z
  GRA1 04:04:08.6 e PP     Z
  GRA1 04:31:13.1 e L      Z    T19.8  A3759  MS5.6
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1998-01-10
  GRA1 04:37:41.3 e Pn     Z
  GRA1 04:37:51.0 e P1    Z

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GRA1 04:39:58.4 e (SnI) Z
NEIC: OT 04:34:16.9 37.2N 21.0E dep 10km mb4.9
IONIAN SEA

1998-01-10 D 79.3 AZ 1
GRA1 04:49:13.0 e P Z mb5.0
BEAM 04:49:13.0 T2.0 A34
GRA1 04:49:20.7 e pP Z
SZGRF: OT 04:37:11.4 51.4N 170.8W dep 27km
FOX ISLANDS, ALEUTIAN ISLANDS

1998-01-10 D 94.2 AZ256
GRA1 05:07:47.0 e P Z mb5.3
BEAM 05:07:47.0 T1.4 A23
GRA1 05:45:18.2 e L Z T21.6 A6718 MS6.1
NEIC: OT 04:54:25.3 12.0S 72.1W dep 33km mb5.7
CENTRAL PERU

1998-01-10 D101.4
GRA1 07:01:24.4 e Pdiff Z
BEAM 07:01:24.4 T1.1 A5
GRA1 07:05:40.6 e (PP) Z
NEIC: OT 06:48:30.5 5.2N 123.8E dep500km mb4.9
MINDANAO, PHILIPPINE ISLANDS

1998-01-10 D 85.7 AZ289
GRA1 08:32:50.7 i P d Z mb6.2
ALIGN 08:32:50.7 T1.2 A220
GRA1 08:33:12.1 e pP Z
GRA1 08:33:24.1 e sP Z
GRA1 08:36:18.4 e PP Z
GRA1 08:36:35.8 e pPP Z
GRA1 09:07:30.1 e L Z T21.8 A25941 MS6.6
SZGRF: OT 08:20:22.1 15.8N 90.8W dep 84km
GUATEMALA

1998-01-10 D 15.0 AZ161
GRA1 08:48:15.7 e P Z
GRA1 08:48:25.2 e (pP) Z
NEIC: OT 08:45:18.7 37.8N 15.0E dep 5km
SICILY

1998-01-10 D 85.1 AZ288
GRA1 08:50:10.4 e P Z mb4.8
BEAM 08:50:10.4 T1.1 A8
GRA1 08:50:36.7 e (pP) Z
SZGRF: OT 08:37:46.3 15.7N 89.8W dep101km
GUATEMALA

1998-01-10 D 68.3 AZ349
GRA1 09:05:15.0 i P d Z mb5.0
BEAM 09:05:15.0 T0.9 A9
SZGRF: OT 08:54:19.1 61.1N 148.1W dep 33km
SOUTHERN ALASKA

1998-01-10 D 87.2 AZ288
GRA1 10:19:28.2 i P c Z mb4.7
BEAM 10:19:28.2 T1.1 A6
GRA1 10:19:34.4 e pP Z
SZGRF: OT 10:06:43.7 13.9N 90.9W dep 22km
NEAR COAST OF GUATEMALA

1998-01-10 D 14.5
GRA1 19:25:14.1 e Pn Z
GRA1 19:25:23.9 e Z
GRA1 19:32:44.7 e L Z T18.2 A4129 MS4.6

1998-01-10
GRA1 21:07:56.2 e PKPab Z
GRA1 21:08:10.1 e pPKPab Z
GRA1 21:08:17.4 e sPKPab Z

1998-01-10
GRA1 21:23:49.6 e Pn Z
GRA1 21:25:01.3 e Sn Z
NEIC: OT 21:22:08.5 44.9N 7.5E dep 10km
NORTHERN ITALY

1998-01-11 D 61.0 AZ208
GRA1 00:49:53.0 e P Z mb3.9
BEAM 00:49:53.0 T0.9 A2
GRA1 00:49:59.6 e pP Z
GRA1 01:17:30.7 e L Z T18.2 A117 MS4.1
SZGRF: OT 00:39:39.5 7.7S 13.4W dep 24km
ASCENSION ISLAND REGION

1998-01-11 D 23.6 AZ342
GRA1 02:44:37.3 e P Z
GRA1 02:48:50.2 e (S) Z
GRA1 02:53:12.9 e L Z T21.0 A589 MS4.0

1998-01-11
GRA1 03:11:32.8 e PKPdf Z

1998-01-11 D 59.4 AZ158
GRA1 06:43:00.0 e P Z mb4.6
BEAM 06:43:00.0 T1.3 A8
GRA1 06:43:04.2 e (pP) Z
SZGRF: OT 06:32:56.9 7.6S 30.1E dep 12km
LAKE TANGANYIKA REGION

1998-01-11 D 41.7 AZ107
GRA1 08:14:59.6 i P c Z mb4.7
BEAM 08:14:59.6 T1.3 A20
GRA1 08:15:09.6 e pP Z
GRA1 08:15:14.2 e sP Z
SZGRF: OT 08:07:14.7 26.6N 56.6E dep 38km
SOUTHERN IRAN

1998-01-11 D 77.4 AZ 20
GRA1 09:21:38.7 e P Z mb5.6
ALIGN 09:21:38.7 T1.0 A47
GRA1 09:21:44.6 e (pP) Z
GRA1 09:56:27.9 e L Z T21.7 A195 MS4.4
SZGRF: OT 09:09:46.9 49.7N 159.9E dep 20km
KURIL ISLANDS REGION

1998-01-11 D 77.3
GRA1 15:37:01.1 i P d Z mb5.2
BEAM 15:37:01.1 T0.9 A18

1998-01-11 D 78.9
GRA1 19:09:11.5 e P Z mb4.6
BEAM 19:09:11.5 T1.4 A9
NEIC: OT 18:57:11.2 52.1N 172.0W dep 33km mb4.5
FOX ISLANDS, ALEUTIAN ISLANDS

1998-01-11
GRA1 19:31:28.7 e PKPab Z

1998-01-11
GRA1 23:58:23.7 e PKPdf Z
GRA1 00:53:16.8 e L Z T18.0 A321
NEIC: OT 23:39:05.6 33.5S 111.6W dep 10km mb5.3
SOUTHERN EAST PACIFIC RISE

1998-01-12 D136.3
GRA1 00:24:01.3 e PKPdf Z
GRA1 01:29:19.2 e L Z T20.1 A464 MS5.2
NEIC: OT 00:04:32.7 34.5S 112.1W dep 10km mb4.9
SOUTHERN EAST PACIFIC RISE

1998-01-12 D153.8
GRA1 04:30:29.2 e PKPdf Z
GRA1 04:30:34.7 i PKPbc d Z
GRA1 04:30:42.9 e pPKPbc Z
GRA1 04:30:54.8 e PKPab Z
GRA1 04:31:12.7 e pPKPab Z
GRA1 05:33:48.7 e L Z T21.4 A160 MS4.8
NEIC: OT 04:10:46.2 23.6S 176.1W dep 33km mb5.4
SOUTH OF FIJI ISLANDS

1998-01-12
GRA1 06:04:12.8 e PKPdf Z

1998-01-12
GRA1 09:15:06.5 e PKPdf Z
GRA1 09:16:08.3 e (pPKPdf)Z

1998-01-12 D108.3
GRA1 10:28:29.3 e Pdiff Z
GRA1 10:28:40.6 e pPdiff Z
GRA1 10:28:46.4 e (sPdiff)Z
GRA1 10:32:54.6 e PP Z
GRA1 10:43:43.5 e (PKKP) Z
GRA1 11:15:30.0 e L Z T22.0 A10996 MS6.4
NEIC: OT 10:14:07.6 30.9S 71.4W dep 33km mb5.8
NEAR COAST OF CENTRAL CHILE

1998-01-12 D145.0
GRA1 16:55:56.6 e PKPdf Z
GRA1 18:06:28.1 e L Z T22.0 A14854 MS6.7

1998-01-12 D149.3
GRA1 21:39:18.6 e PKPdf Z
GRA1 21:39:22.0 i PKPbc c Z
GRA1 21:39:26.4 e PKPab Z
GRA1 21:41:19.8 e pPKPbc Z
NEIC: OT 21:20:29.9 18.5S 178.1W dep484km mb4.8
FIJI ISLANDS REGION

1998-01-12
GRA1 22:38:56.3 e PKPdf Z
GRA1 22:39:00.0 e pP Z

1998-01-12 D 77.5 AZ 89

GRA1 22:51:45.2 e P Z mb5.6
 BEAM 22:51:45.2 T1.1 A50
 GRA1 22:52:16.9 e pP Z
 SZGRF: OT 22:40:03.7 10.0N 93.6E dep126km
 ANDAMAN ISLANDS REGION

1998-01-13

GRA1 01:51:15.5 e Pn Z
 GRA1 01:52:21.1 e Sn Z
 NEIC: OT 01:49:15.6 42.9N 12.8E dep 10km
 CENTRAL ITALY

1998-01-13 D110.8

GRA1 10:08:16.0 e PKPdf Z
 GRA1 10:08:40.8 e pPKPdf Z
 GRA1 11:09:02.5 e L Z T18.9 A779 MS5.3

1998-01-13 D 47.8 AZ 81

GRA1 12:13:56.5 i P d Z mb5.7
 BEAM 12:13:56.5 T3.6 A251
 GRA1 12:14:01.8 e pP Z
 NEIC: OT 12:05:00.6 35.3N 78.6E dep 33km mb4.7
 EASTERN KASHMIR

1998-01-13 D 55.1 AZ 80

GRA1 12:27:29.4 e P Z mb4.4
 BEAM 12:27:29.4 T0.7 A2
 GRA1 12:27:33.0 e (pP) Z
 NEIC: OT 12:18:03.8 35.3N 78.2E dep 33km mb3.8
 EASTERN KASHMIR

1998-01-13 D 95.9 AZ256

GRA1 17:15:00.5 i P d Z mb5.2
 ALIGN 17:15:00.5 T1.2 A10
 GRA1 17:15:24.4 e pP Z
 SZGRF: OT 17:01:43.4 13.8S 71.7W dep 89km
 PERU

1998-01-13 D 72.9 AZ 46

GRA1 17:29:34.4 e P Z
 NEIC: OT 17:17:07.6 35.5N 140.2E dep 62km mb5.0
 NEAR EAST COAST OF HONSHU, JAPAN

1998-01-13 D 60.5 AZ 72

GRA1 19:54:08.7 e P Z mb4.9
 BEAM 19:54:08.7 T1.5 A29
 GRA1 19:54:25.5 e (pP) Z
 GRA1 20:19:11.3 e L Z T21.1 A1167 MS5.0

SZGRF: OT 19:44:06.3 33.1N 92.9E dep 64km
TSINGHAI PROVINCE, CHINA

1998-01-14 D 85.0
GRA1 02:50:38.2 e (P) Z
GRA1 02:54:20.5 e PP Z
GRA1 03:01:13.1 e S Z
GRA1 03:08:03.7 e SS Z
GRA1 03:36:53.2 e L Z T19.7 A677 MS5.0

1998-01-14 D 66.4 AZ 74
GRA1 17:05:19.6 e P Z mb4.8
BEAM 17:05:19.6 T1.8 A12
GRA1 17:05:27.8 e (pP) Z
GRA1 17:30:29.9 e L Z T21.0 A418 MS4.6
SZGRF: OT 16:54:34.1
INDIA-CHINA BORDER REGION

1998-01-14 D145.1
GRA1 17:43:47.2 e PKPdf Z
GRA1 18:54:10.0 e L Z T20.2 A11736

1998-01-14 D 70.7
GRA1 19:04:33.5 i P d Z mb5.5
ALIGN 19:04:33.5 T1.7 A70
GRA1 19:04:40.1 e pP Z
GRA1 19:07:10.8 e PP Z
GRA1 19:17:59.7 e L Z T19.9 A4861 MS5.8

1998-01-14 D144.6
GRA1 20:15:47.8 e PKPdf Z
GRA1 20:15:54.2 e PKPbc Z
GRA1 20:16:01.6 e PKPab Z
GRA1 21:26:07.2 e L Z T20.4 A896 MS5.5

1998-01-14
GRA1 20:23:59.7 e PKPdf Z
NEIC: OT 20:05:38.4 6.9S 129.6E dep150km mb5.4
BANDA SEA

1998-01-14 D148.7
GRA1 20:28:50.7 e PKPdf Z
GRA1 20:28:55.0 e PKPbc Z
GRA1 20:28:56.8 e PKPab Z

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1998-01-14          AZ146
  GRA1 20:48:59.3 e P      Z
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1998-01-14
  GRA1 21:47:18.2 e PKPab  Z
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1998-01-15          D 67.5  AZ277
  GRA1 02:01:53.9 e P      Z      mb4.8
  BEAM 02:01:53.9          T1.4  A8
  GRA1 02:02:12.3 e pP     Z
  GRA1 02:33:39.1 e L      Z T20.7 A74  MS3.9
SZGRF: OT 01:51:06.0 21.2N 68.4W dep 70km
  NORTH ATLANTIC OCEAN
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1998-01-15          D 59.7  AZ 13
  GRA1 03:42:54.2 e P      Z      mb4.9
  ALIGN 03:42:54.2          T1.1  A14
  GRA1 03:43:00.4 e        Z
  GRA1 03:43:12.0 e pP     Z
  GRA1 03:43:17.6 e sP     Z
  GRA1 04:11:07.0 e L      Z T21.2 A70  MS3.8
SZGRF: OT 03:32:58.6 68.6N 159.5E dep 65km
  NEAR N. COAST OF EASTERN SIBERIA
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1998-01-15          D144.6
  GRA1 05:37:21.2 e PKPdf  Z
  GRA1 05:37:26.9 e pPKPdf Z
  GRA1 06:40:04.6 e L      Z T21.0 A140  MS4.7
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1998-01-15
  GRA1 09:03:35.4 e Pn     Z
  GRA1 09:04:27.1 e (SnI) Z
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1998-01-15          D 84.9  AZ100
  GRA1 09:33:43.7 e P      Z
  GRA1 10:37:14.2 e L      Z T20.3 A153  MS4.4
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1998-01-15          D 80.1
  GRA1 14:23:28.3 i P      c Z      mb5.1
  BEAM 14:23:28.3          T1.0  A25
  GRA1 14:23:52.5 e pP     Z
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1998-01-15 D118.9
GRA1 18:47:00.3 e PKPdf Z
GRA1 19:43:48.0 e L Z T18.3 A223 MS4.8

1998-01-16 D 82.4 AZ 38
GRA1 02:10:37.8 e P Z mb4.6
BEAM 02:10:37.8 T1.2 A6
GRA1 02:11:00.0 e (pP) Z
SZGRF: OT 01:58:26.9
HONSHU, JAPAN

1998-01-16
GRA1 02:58:23.1 e PKPab Z

1998-01-16 D 46.4
GRA1 03:47:00.8 e (PP) Z
GRA1 04:15:44.7 e L Z T18.7 A118

1998-01-16 D 94.4 AZ 92
GRA1 03:53:42.9 e P Z mb4.6
BEAM 03:53:42.9 T1.0 A3
SZGRF: OT 03:40:25.8
SOUTHERN SUMATERA

1998-01-16 D122.2
GRA1 10:42:26.6 e PKPdf Z
GRA1 11:37:10.4 e L Z T21.9 A1191 MS5.5

1998-01-16
GRA1 10:52:27.0 e (PKPab) Z

1998-01-16 D 76.8
GRA1 13:58:47.7 i P c Z mb5.7
ALIGN 13:58:47.7 T1.1 A76
GRA1 13:59:20.4 e pP Z
GRA1 13:59:30.7 e sP Z
NEIC: OT 13:47:09.9 54.3N 166.0W dep123km mb5.1
FOX ISLANDS, ALEUTIAN ISLANDS

1998-01-16
GRA1 20:35:58.3 e P Z

1998-01-16 D 74.1
GRA1 21:10:37.3 i P c Z mb5.0

ALIGN 21:10:37.3 T1.2 A20
 GRA1 21:11:00.0 e pP Z
 GRA1 21:11:08.8 e sP Z
 NEIC: OT 20:59:07.5 56.5N 156.6W dep 63km mb5.0
 ALASKA PENINSULA

 1998-01-16

GRA1 21:52:36.9 i (PKPabc Z

 1998-01-17 D115.2

GRA1 00:48:30.6 e PKPdf Z
 GRA1 00:48:38.1 e pPKPdf Z
 GRA1 01:49:39.7 e L Z T18.6 A321 MS5.0
 NEIC: OT 00:29:50.3 6.2S 133.7E dep 33km mb5.3
 ARU ISLANDS REGION, INDONESIA

 1998-01-17

GRA1 10:16:12.5 e PKPdf Z

 1998-01-17 D 79.4 AZ 26

GRA1 10:51:04.1 i P c Z T1.2 A289 mb6.2
 GRA1 10:51:23.7 e pP Z
 GRA1 10:51:33.4 e sP Z
 GRA1 10:54:01.7 e PP Z
 GRA1 11:31:51.0 e L Z T19.6 A1843 MS5.4
 SZGRF: OT 10:39:08.2 45.6N 152.7E dep 75km
 KURIL ISLANDS REGION

 1998-01-17 D 15.0 AZ173

GRA1 12:35:30.7 i P d Z
 GRA1 12:39:55.4 e L Z T21.7 A963
 NEIC: OT 12:32:47.2 38.4N 12.7E dep 10km mb5.1
 SICILY

 1998-01-17 D 23.5 AZ355

GRA1 22:47:06.4 e P Z mb4.5
 BEAM 22:47:06.4 T1.2 A17
 GRA1 22:47:12.6 e (pP) Z
 GRA1 22:54:59.9 e L Z T21.9 A129 MS3.3
 SZGRF: OT 22:41:59.3 72.9N 4.3E dep 26km
 NORWEGIAN SEA

 1998-01-17 D 23.6 AZ356

GRA1 23:17:00.7 e P Z mb4.2
 BEAM 23:17:00.7 T1.6 A12
 GRA1 23:17:05.8 e pP Z
 GRA1 23:17:08.3 e sP Z

SZGRF: OT 23:11:51.9

GREENLAND SEA

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1998-01-17      D 23.3  AZ355
  GRA1  23:58:12.4  i P      d Z      mb4.9
  ALIGN 23:58:12.4          T1.4   A60
  GRA1  23:58:19.2  e pP     Z
  GRA1  23:58:22.7  e sP     Z
  GRA1  00:06:29.7  e L      Z  T21.5  A290  MS3.7
SZGRF: OT 23:53:06.7  72.8N   5.0E  dep 28km
  NORWEGIAN SEA
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1998-01-18      D 23.5  AZ354
  GRA1  00:07:58.9  e P      Z      mb4.1
  BEAM  00:07:58.9          T1.9   A13
NEIC:  OT 00:02:43.4  73.3N   6.4E  dep 10km  mb4.1
  GREENLAND SEA
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1998-01-18      D 23.4  AZ356
  GRA1  02:40:49.1  i P      d Z
  ALIGN 02:40:49.1          T2.0   A106
  GRA1  02:40:55.2  e (pP)   Z
  GRA1  02:50:40.9  e L      Z  T19.1  A270  MS3.7
SZGRF: OT 02:35:42.7  72.8N   5.2E  dep 25km
  NORWEGIAN SEA
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1998-01-18      D 23.6  AZ359
  GRA1  02:43:47.5  e P      Z      mb4.6
  BEAM  02:43:47.5          T2.6   A54
  GRA1  02:43:54.3  e pP     Z
SZGRF: OT 02:38:39.5
  NORWEGIAN SEA
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1998-01-18      D 23.3  AZ355
  GRA1  02:58:47.0  i P      d Z      mb4.8
  ALIGN 02:58:47.0          T2.0   A65
  GRA1  02:58:56.3  e pP     Z
  GRA1  03:06:39.3  e L      Z  T21.5  A204  MS3.5
SZGRF: OT 02:53:43.5  72.7N   4.5E  dep 39km
  NORWEGIAN SEA
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1998-01-18      D 35.1
  GRA1  03:19:53.3  i P      c Z      mb5.0
  ALIGN 03:19:53.3          T0.8   A14
  GRA1  03:19:57.3  e pP     Z
NEIC:  OT 03:12:59.9  30.5N   50.5E  dep 33km  mb4.8
  NORTHERN IRAN
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1998-01-18      D 23.2  AZ354
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GRA1 05:06:07.6 e P Z mb4.8
BEAM 05:06:07.6 T2.0 A57
GRA1 05:06:16.1 e pP Z
GRA1 05:14:13.3 e L Z T21.5 A182 MS3.5
NEIC: OT 05:00:53.2 73.2N 5.8E dep 10km mb4.7
GREENLAND SEA

1998-01-18

GRA1 08:07:34.7 e PKPdf Z
NEIC: OT 07:47:58.3 16.2S 173.9W dep 72km mb4.5
TONGA ISLANDS

1998-01-18 D 73.1

GRA1 08:32:39.3 i P c Z mb5.3
ALIGN 08:32:39.3 T1.0 A26
GRA1 08:32:41.3 e pP Z
GRA1 09:10:46.7 e L Z T19.7 A180 MS4.4
NEIC: OT 08:21:12.0 55.0N 162.0E dep 33km mb5.0
NEAR EAST COAST OF KAMCHATKA

1998-01-18 D 85.3 AZ 60

GRA1 20:09:25.7 e P Z mb5.3
BEAM 20:09:25.7 T2.1 A40
GRA1 20:09:44.1 e (pP) Z
GRA1 20:51:32.3 e L Z T21.3 A726 MS5.0
NEIC: OT 19:56:54.6 22.8N 121.3E dep 33km mb4.8
TAIWAN REGION

1998-01-18

GRA1 22:53:00.0 e PKPab Z

1998-01-19 D 94.1

GRA1 07:25:27.8 e PP Z
GRA1 08:08:06.6 e L Z T20.2 A606 MS5.1

1998-01-19 D 3.6 404km

GRA1 09:42:12.8 e Pn Z M13.9
GRA1 09:43:10.7 e Sg N
SZGRF: OT 09:41:15.3 51.5N 16.2E dep 1km
POLAND

1998-01-19 D110.7

GRA1 12:39:52.9 e PP Z
GRA1 13:02:22.3 e L Z T21.1 A407 MS5.0
SZGRF: OT 12:20:43.9
SOUTH ATLANTIC OCEAN

1998-01-19 D121.9
GRA1 14:08:19.6 e PP Z
GRA1 14:58:58.1 e L Z T21.7 A111 MS4.5
NEIC: OT 13:48:07.7 5.2S 146.3E dep159km mb5.4
EASTERN NEW GUINEA REG., P.N.G.

1998-01-19 D122.6
GRA1 18:43:08.8 e PKPdf Z
GRA1 19:37:58.8 e L Z T19.7 A1413 MS5.6

1998-01-19 D 23.1 AZ231
GRA1 19:14:04.9 e (P) Z

1998-01-19 D 75.0 AZ 17
GRA1 22:06:15.5 e P d Z mb4.9
BEAM 22:06:15.5 T1.8 A22
GRA1 22:06:28.2 e pP Z
GRA1 22:44:36.2 e L Z T20.1 A92 MS4.1
SZGRF: OT 21:54:40.4 52.8N 162.9E dep 45km
OFF EAST COAST OF KAMCHATKA

1998-01-20 D135.9
GRA1 04:32:38.7 e (SKP) Z
GRA1 05:29:43.5 e L Z T20.2 A609 MS5.3
NEIC: OT 04:09:41.4 35.0S 110.9W dep 10km mb5.0
SOUTHERN EAST PACIFIC RISE

1998-01-20 D 46.6 AZ263
GRA1 07:46:50.3 e P Z mb5.2
BEAM 07:46:50.3 T2.0 A42
NEIC: OT 07:38:05.3 26.4N 44.6W dep 10km mb4.6
NORTHERN MID-ATLANTIC RIDGE

1998-01-20 AZ255
GRA1 14:18:09.5 e P Z

1998-01-20 D 79.5
GRA1 15:33:15.8 e P Z mb6.0
ALIGN 15:33:15.8 T0.9 A164
GRA1 16:14:28.6 e L Z T19.1 A1590 MS5.4
NEIC: OT 15:21:15.0 43.8N 146.9E dep 54km mb5.8
KURIL ISLANDS

1998-01-20 D 43.9 AZ 83
GRA1 18:12:02.6 i P d Z mb4.9
ALIGN 18:12:02.6 T1.2 A31

NEIC: OT 18:04:04.9 36.4N 71.4E dep200km mb4.5
AFGHANISTAN-TAJIKISTAN BORD REG.

1998-01-20 D 15.0 AZ344
GRA1 23:42:16.5 e (P) Z

1998-01-21 D 3.7 407km
GRA1 05:52:32.9 e Pn Z M14.0
GRA1 05:53:30.9 e Sg E
SZGRF: OT 05:51:35.2 51.5N 16.2E dep 1km
POLAND

1998-01-21
GRA1 09:55:28.6 e PKPdf Z
NEIC: OT 09:36:52.5 17.8S 179.5W dep614km mb4.7
FIJI ISLANDS REGION

1998-01-22 D150.3
GRA1 00:05:39.5 e PKPdf Z
GRA1 00:05:50.2 e PKPab Z
GRA1 01:22:57.8 e L Z T21.4 A663 MS5.4
NEIC: OT 23:45:35.7 59.0S 149.1E dep 10km mb5.1
WEST OF MACQUARIE ISLAND

1998-01-22 D149.3
GRA1 06:06:26.5 e PKPdf Z
GRA1 06:06:28.6 e PKPbc Z
GRA1 06:06:34.6 e PKPab Z
NEIC: OT 05:47:39.1 19.7S 178.3W dep550km mb4.6
FIJI ISLANDS REGION

1998-01-22
GRA1 15:33:10.9 e PKPab Z
GRA1 15:33:34.1 e (pPKPab)Z
NEIC: OT 15:12:45.9 28.0S 178.0W dep100km mb4.8
KERMADEC ISLANDS REGION

1998-01-22 D 46.3
GRA1 16:14:18.1 i P c Z mb5.0
ALIGN 16:14:18.1 T1.2 A20
GRA1 16:14:21.8 e pP Z
GRA1 16:14:24.8 e (sP) Z
GRA1 16:15:02.3 e Z
GRA1 16:16:05.6 e PP Z
GRA1 16:34:17.8 e L Z T18.1 A621 MS4.6
NEIC: OT 16:05:52.6 48.5N 84.8E dep 33km mb5.0
EASTERN KAZAKHSTAN

1998-01-23 D 79.5
GRA1 02:05:16.8 i P c Z mb4.6
BEAM 02:05:16.8 T1.1 A8

1998-01-23
GRA1 09:09:35.4 i PKPab d Z
GRA1 09:09:42.4 e pPKPab Z

1998-01-23 D 78.4
GRA1 09:32:06.0 i P c Z mb6.2
BEAM 09:32:06.0 T1.5 A310

1998-01-23 D 78.4
GRA1 09:37:21.8 i P c Z mb5.6
BEAM 09:37:21.8 T1.4 A68
GRA1 09:37:33.0 e pP Z
GRA1 09:37:36.5 e sP Z

1998-01-23 D 78.5
GRA1 09:49:47.0 i P c Z mb5.1
BEAM 09:49:47.0 T1.3 A20

1998-01-23 D 78.4
GRA1 10:59:60.0 e P c Z mb4.9
BEAM 10:59:60.0 T1.2 A13

1998-01-23 D 23.9 AZ103
GRA1 12:38:18.0 e P Z T1.7 A80 mb5.0
GRA1 12:38:37.2 e Z
SZGRF: OT 12:33:06.8
TURKEY

1998-01-23 D 78.7
GRA1 12:39:52.9 i P c Z mb5.7
BEAM 12:39:52.9 T1.3 A102

1998-01-23 D 78.6
GRA1 13:55:31.2 i P c Z mb5.5
BEAM 13:55:31.2 T1.2 A67

1998-01-24 D 78.9 AZ357
GRA1 01:04:51.3 e P Z mb4.6
BEAM 01:04:51.3 T1.1 A7
NEIC: OT 00:52:53.8 52.3N 168.5W dep 47km mb4.6
FOX ISLANDS, ALEUTIAN ISLANDS

1998-01-24 D 24.5 AZ354
GRA1 01:17:28.5 e P Z

1998-01-24
GRA1 02:19:58.2 e PKPdf Z
NEIC: OT 02:01:39.5 6.7S 129.6E dep172km mb4.8
BANDA SEA

1998-01-24 D151.3
GRA1 05:58:14.0 e PKPdf Z
GRA1 05:58:17.3 e PKPbc Z
GRA1 05:58:27.8 e PKPab Z

1998-01-24 D 80.6 AZ 23
GRA1 13:58:28.5 e P d Z mb4.6
BEAM 13:58:28.5 T1.2 A7
SZGRF: OT 13:46:20.6
KURIL ISLANDS REGION

1998-01-24 D151.5
GRA1 18:16:38.3 e PKPdf Z
GRA1 18:16:41.8 e PKPbc Z
GRA1 18:16:53.1 e PKPab Z

1998-01-24 D 20.2 AZ148
GRA1 20:39:22.2 e P Z mb3.7
BEAM 20:39:22.2 T1.0 A5
SZGRF: OT 20:34:49.4
NEAR COAST OF LIBYA

1998-01-24
GRA1 23:01:32.9 e PKPab Z

1998-01-24 D 81.3 AZ 27
GRA1 23:51:13.1 e P Z mb4.8
BEAM 23:51:13.1 T0.9 A9
SZGRF: OT 23:39:01.3 43.5N 153.0E dep 33km
NORTH PACIFIC OCEAN

1998-01-25

GRA1 00:23:46.2 e PKPdf Z
NEIC: OT 00:04:58.7 17.8S 178.6W dep500km mb4.4
FIJI ISLANDS REGION

1998-01-25 D 26.2 AZ103

GRA1 01:00:14.9 e P Z

1998-01-25

GRA1 05:02:29.3 i PKPdf d Z
GRA1 05:02:53.2 e pPKPdf Z
NEIC: OT 04:42:55.7 15.3S 173.8W dep 57km mb4.7
TONGA ISLANDS

1998-01-25

GRA1 05:32:10.8 e PKPab Z
GRA1 05:32:21.0 e (pPKPab)Z

1998-01-25 D 53.2 AZ221

GRA1 05:37:46.9 e P Z mb4.4
BEAM 05:37:46.9 T1.8 A9
SZGRF: OT 05:28:30.5
NORTH ATLANTIC OCEAN

1998-01-25 D144.9

GRA1 08:31:48.2 e PKPdf Z
GRA1 09:41:29.8 e L Z T20.3 A832 MS5.5
NEIC: OT 08:12:07.0 16.0S 177.2W dep 33km mb5.0
FIJI ISLANDS REGION

1998-01-25

GRA1 09:14:08.1 e PKPdf Z
GRA1 09:14:19.5 e (pPKPdf)Z

1998-01-25

GRA1 09:16:26.9 e PKPdf Z
GRA1 09:16:32.8 e pPKPdf Z
GRA1 09:16:37.5 e sPKPdf Z

1998-01-26 D 78.7 AZ***

GRA1 07:52:25.5 i P c Z mb5.4
ALIGN 07:52:25.5 T1.5 A63
GRA1 07:52:36.1 e Z
GRA1 07:52:43.2 e pP Z
GRA1 08:25:54.7 e L Z T22.0 A145 MS4.3

SZGRF: OT 07:40:32.1 52.0N 169.2W dep 65km
FOX ISLANDS, ALEUTIAN ISLANDS

1998-01-26 D 66.5 AZ203
GRA1 14:43:04.2 e P Z mb4.8
BEAM 14:43:04.2 T1.3 A8
GRA1 15:08:26.8 e L Z T21.8 A167 MS4.2
NEIC: OT 14:32:31.1 10.5S 13.0W dep 10km mb4.8
ASCENSION ISLAND REGION

1998-01-26 D 52.3 AZ213
GRA1 15:56:40.2 e P Z mb4.4
BEAM 15:56:40.2 T1.1 A6
GRA1 15:56:46.2 e pP Z
GRA1 16:23:21.0 e L Z T18.9 A279 MS4.3
NEIC: OT 15:46:08.0 10.5S 13.2W dep 10km mb4.7
ASCENSION ISLAND REGION

1998-01-26 D152.3
GRA1 18:50:02.1 e PKPdf Z
GRA1 18:50:08.5 e PKPbc Z
GRA1 18:50:17.2 e PKPab Z
GRA1 18:50:44.4 e pPKPdf Z
GRA1 18:50:51.8 e pPKPbc Z
GRA1 18:51:01.1 e pPKPab Z
NEIC: OT 18:30:31.2 22.0S 176.7W dep160km mb4.8
SOUTH OF FIJI ISLANDS

1998-01-26 D 8.2
GRA1 23:19:10.5 e Pn Z
GRA1 23:20:38.1 e (SnI) Z M14.6
GRA1 23:21:08.9 e Sg Z

1998-01-26 D162.2
GRA1 23:26:50.3 e PKPab Z
GRA1 23:26:57.4 e pPKPab Z
GRA1 00:47:44.9 e L Z T20.8 A1451 MS5.8
NEIC: OT 23:06:02.2 47.5S 165.1E dep 33km mb5.3
OFF W. COAST OF S. ISLAND, N.Z.

1998-01-27 D150.0
GRA1 02:32:47.2 e PKPdf Z
GRA1 02:32:53.7 i PKPbc d Z
GRA1 02:33:02.7 e PKPab Z
GRA1 02:35:20.3 e pPKPbc Z
GRA1 02:36:24.8 e PP Z
GRA1 03:21:06.4 e L Z T21.0 A222 MS4.9

1998-01-27 D 73.0 AZ 16
GRA1 19:19:26.6 i P d Z mb5.8
ALIGN 19:19:26.6 T1.2 A101
GRA1 19:19:40.9 e pP Z
GRA1 19:19:47.9 e sP Z
GRA1 19:22:09.8 e Z
GRA1 19:22:23.6 e PP Z
GRA1 19:22:36.1 e pPP Z
GRA1 19:53:11.1 e L Z T20.1 A664 MS4.9
SZGRF: OT 19:08:04.8 55.3N 164.1E dep 52km
KOMANDORSKY ISLANDS REGION

1998-01-27 D 3.6 405km
GRA1 20:03:16.1 e Pn Z M14.4
GRA1 20:04:15.1 e Sg N
SZGRF: OT 20:02:19.2 51.4N 16.2E dep 1km
POLAND

1998-01-27 D151.1
GRA1 20:13:41.5 e PKPdf Z
GRA1 20:13:47.9 i PKPbc d Z
GRA1 20:13:59.1 i PKPab d Z
GRA1 20:16:04.8 e pPKPbc Z
GRA1 20:17:29.9 e PP Z
NEIC: OT 19:55:01.2 22.5S 179.0E dep612km mb5.5
SOUTH OF FIJI ISLANDS

1998-01-27 D151.0
GRA1 21:24:24.0 i PKPdf d Z
GRA1 21:24:30.9 i PKPbc d Z
GRA1 21:24:42.2 e PKPab Z
GRA1 21:26:42.8 e pPKPbc Z
GRA1 21:26:48.5 e pPKPab Z
GRA1 21:28:23.1 e PKP Z
NEIC: OT 21:05:44.8 22.3S 179.0E dep610km mb5.5
SOUTH OF FIJI ISLANDS

1998-01-28
GRA1 17:28:33.0 e PKP Z

1998-01-28
GRA1 22:43:43.0 e P Z
NEIC: OT 22:38:52.4 34.4N 32.1E dep 10km mb4.5
CYPRUS REGION

1998-01-29
GRA1 00:12:26.9 e PKPab Z

GRA1 00:13:17.7 e (pPKPab)Z
GRA1 01:31:41.5 e L Z T18.5 A747

1998-01-29 D127.7
GRA1 02:33:54.5 e PKPdf Z

1998-01-29 D 97.4
GRA1 03:27:00.6 e Pdiff Z
BEAM 03:27:00.6 T1.8 A14
GRA1 03:27:36.5 e pPdiff Z
NEIC: OT 03:13:39.4 15.6S 72.2W dep133km mb5.1
SOUTHERN PERU

1998-01-29 AZ151
GRA1 15:27:21.2 e P Z
GRA1 15:27:25.8 e Z
GRA1 15:27:33.6 e Z

1998-01-29 D 31.5 AZ 7
GRA1 17:30:53.0 e P Z mb4.6
ALIGN 17:30:53.0 T1.3 A11
GRA1 17:30:57.7 e pP Z
GRA1 17:45:35.0 e L Z T20.2 A111 MS3.5
SZGRF: OT 17:24:32.7 80.3N 32.1E dep 18km
SVALBARD REGION

1998-01-29
GRA1 20:33:33.3 i PKPdf d Z
NEIC: OT 20:14:55.2 17.8S 178.4W dep600km mb4.7
FIJI ISLANDS REGION

1998-01-30
GRA1 07:54:41.1 e (PKPdf) Z

1998-01-30 D 98.4
GRA1 09:03:32.5 e Pdiff Z
GRA1 09:07:27.8 e PP Z
GRA1 09:51:32.7 e L Z T19.7 A596 MS5.1

1998-01-30 D101.9
GRA1 12:30:02.7 i Pdiff c Z
BEAM 12:30:02.7 T1.4 A64
GRA1 12:30:15.8 e pPdiff Z
GRA1 12:32:52.9 e Z

GRA1 12:33:38.1 e Z
GRA1 12:34:08.2 e PP Z
GRA1 12:46:16.6 e PKKP Z
GRA1 13:14:38.7 e L Z T21.6 A19310 MS6.6
NEIC: OT 12:16:07.8 24.1S 70.5W dep 44km mb6.3
NEAR COAST OF NORTHERN CHILE

1998-01-30

GRA1 12:49:49.7 e Pn Z
GRA1 12:50:02.4 e Pg Z
GRA1 12:50:38.8 e Sg Z

1998-01-30 D 79.9 AZ 34

GRA1 16:02:19.5 i P c Z mb5.8
ALIGN 16:02:19.5 T1.2 A145
GRA1 16:05:17.7 e PP Z
GRA1 16:40:15.5 e L Z T20.8 A1540 MS5.3
SZGRF: OT 15:50:15.6 41.8N 143.9E dep 33km
HOKKAIDO, JAPAN REGION

1998-01-30 D 80.7 AZ 28

GRA1 17:13:05.7 i P d Z mb4.8
ALIGN 17:13:05.7 T0.7 A7
GRA1 17:13:33.9 e pP Z
SZGRF: OT 17:01:06.9 43.9N 151.9E dep110km
KURIL ISLANDS REGION

1998-01-30

GRA1 22:04:48.2 e PKPdf Z
NEIC: OT 21:45:17.6 19.5S 168.4E dep 33km mb4.1
VANUATU ISLANDS

1998-01-30

GRA1 23:20:26.1 e PKPdf Z
GRA1 23:20:33.8 e pPKPdf Z

1998-01-31 D 84.0 AZ 57

GRA1 01:20:47.9 i P d Z mb5.0
ALIGN 01:20:47.9 T1.1 A10
GRA1 01:21:01.7 e pP Z
GRA1 02:03:07.2 e L Z T20.2 A212 MS4.5
SZGRF: OT 01:08:23.9 25.9N 123.9E dep 47km
NORTHEAST OF TAIWAN

1998-01-31 D 3.6 401km

GRA1 03:14:36.0 e Pn Z M13.8
GRA1 03:15:33.9 e Sg E

SZGRF: OT 03:13:38.9 51.5N 16.1E dep 1km
POLAND

1998-01-31 D154.7

GRA1 03:34:25.6 e PKPdf Z
GRA1 03:34:35.6 e PKPbc Z
GRA1 03:34:39.9 e pPKPbc Z
GRA1 03:34:47.9 e PKPab Z
GRA1 03:34:55.0 e pPKPab Z

NEIC: OT 03:15:02.7 23.3S 177.9W dep200km mb4.7
SOUTH OF FIJI ISLANDS

1998-01-31

GRA1 18:41:13.2 e PKPdf Z
GRA1 19:45:58.6 e L Z T19.2 A111

NEIC: OT 18:21:50.4 11.4S 165.4E dep 33km mb5.0
SANTA CRUZ ISLANDS

1998-01-31

GRA1 19:58:36.4 e PKPdf Z

NEIC: OT 19:39:15.3 11.5S 165.3E dep 33km mb4.7
SANTA CRUZ ISLANDS

1998-01-31

GRA1 23:49:50.6 e PKPdf Z
GRA1 23:49:57.7 e Z
GRA1 23:50:04.5 e Z

NEIC: OT 23:30:37.7 36.6S 97.3W dep 10km mb5.0
WEST CHILE RISE

