

| Date       | Origin Time | OT_err | Lat     | Long    | Smajor | Sminor | Az | Depth | D_err | Ndef | Nsta | Gap | Mag   | Ref | Source | Ev_type |
|------------|-------------|--------|---------|---------|--------|--------|----|-------|-------|------|------|-----|-------|-----|--------|---------|
| 1997/07/02 | 20:40:51.5  |        | 47.375N | 10.875E |        |        |    | 1     |       | 9    | 6    |     | 2.0ML |     | SED    |         |

Imst/A, Western Mieminger Mountains

| Date         | Origin Time | OT_err   | Lat     | Long    | Smajor | Sminor | Az  | Depth | D_err  | Ndef | Nsta | Gap | Mag   | Ref | Source | Ev_type |
|--------------|-------------|----------|---------|---------|--------|--------|-----|-------|--------|------|------|-----|-------|-----|--------|---------|
| 1997/07/03   | 00:50:36.5  |          | 47.223N | 10.885E |        |        |     | 10G   |        |      | 8    |     | 2.0ML | VIE | NEIC   |         |
| ML= 1.7(FUR) |             |          |         |         |        |        |     |       |        |      |      |     |       |     |        |         |
| 1997/07/03   | 00:50:37.1  |          | 47.139N | 10.756E | 8.9    | 8.9    | 0   | 10    | --54.3 | 11   | 9    |     | 2.0ML |     | SED    |         |
| 1997/07/03   | 00:50:34.3  | + - 1.15 | 47.110N | 10.760E | 12.2   | 4.4    | 170 | 0G    |        | 10   | 7    | 260 | 1.7ML | BFO | BGR    | L       |

Pitztal/A, E of Landeck

| Sta  | Phase  | Time       | TRes | Def | S/N | Dist  | EvAz  | Mag    |
|------|--------|------------|------|-----|-----|-------|-------|--------|
| OGA  | i Pg - | 00:50:43.6 | 3.6  |     |     | 33.6  | 143.1 |        |
| FUR  | e Pg Z | 00:50:55.8 | 0.7  | T   | 6.8 | 123.3 | 18.1  | ML 2.8 |
|      | e Sg N | 00:51:09.2 | -0.3 | T   | 9.0 |       |       |        |
| BFO  | e Pg Z | 00:51:12.5 | -0.2 | T   | 3.5 | 226.8 | 307.6 | ML 1.7 |
|      | e Sg E | 00:51:38.8 | -0.3 | T   | 2.2 |       |       |        |
| WET  | e Pn Z | 00:51:14.8 | -0.1 | T   | 1.6 | 275.4 | 34.0  | ML 2.0 |
|      | e Sn E | 00:51:43.8 | -0.2 | T   | 2.5 |       |       |        |
| GRFO | e Pg Z | 00:51:22.9 | -0.4 | T   | 2.0 | 289.0 | 6.6   |        |
| GEC2 | e Sg E | 00:51:57.0 | -0.6 | T   | 2.1 | 291.8 | 47.5  |        |
| TNS  | e Sn N | 00:52:07.4 | 0.0  | T   | 1.4 | 385.5 | 334.7 |        |
| MOX  | e Sn E | 00:52:10.1 | 0.1  | T   | 1.6 | 398.0 | 8.7   |        |

| Date       | Origin Time | OT_err   | Lat     | Long    | Smajor | Sminor | Az  | Depth | D_err | Ndef | Nsta | Gap | Mag   | Ref | Source | Ev_type |
|------------|-------------|----------|---------|---------|--------|--------|-----|-------|-------|------|------|-----|-------|-----|--------|---------|
| 1997/07/04 | 20:13:36.0  | + - 0.43 | 50.790N | 10.000E | 5.6    | 4.4    | 94  | 1G    |       | 7    | 4    | 131 | 2.4ML |     | SZGRF  | I       |
| 1997/07/04 | 20:13:35.5  | + - 0.39 | 50.790N | 10.030E | 5.6    | 4.4    | 151 | 0G    |       | 7    | 4    | 130 | 2.3ML | TNS | BGR    | I?      |

Mixed event, the largest of three events within 30 seconds.

Tann, E of Fulda

| Sta  | Phase  | Time       | TRes | Def | S/N  | Dist  | EvAz  | Mag    |
|------|--------|------------|------|-----|------|-------|-------|--------|
| MOX  | e Pg Z | 20:13:54.5 | -0.1 | T   | 13.2 | 112.8 | 97.6  | ML 2.1 |
|      | e Sg N | 20:14:07.5 | -0.3 | T   |      |       |       |        |
| CLZ  | e Pg Z | 20:13:54.9 | -0.8 | T   | 9.6  | 119.3 | 11.4  | ML 2.4 |
|      | e Sg E | 20:14:10.4 | 0.7  | T   |      |       |       |        |
| TNS  | e Pg Z | 20:13:57.6 | 0.3  | T   | 2.6  | 128.5 | 241.2 | ML 2.3 |
|      | e Sg E | 20:14:12.1 | -0.1 | T   |      |       |       |        |
| GRA1 | e Pg Z | 20:13:59.3 | -1.4 |     |      | 148.6 | 144.8 | ML 2.6 |
|      | e Sg N | 20:14:19.1 | 1.1  |     |      |       |       |        |
| GRFO | e Sg N | 20:14:18.8 | 0.8  | T   |      | 148.7 | 144.8 | ML 2.5 |

|     |   |    |            |      |  |  |  |  |       |      |  |  |  |  |  |  |  |
|-----|---|----|------------|------|--|--|--|--|-------|------|--|--|--|--|--|--|--|
| BRG | i | Pg | 20:14:20.3 | -1.8 |  |  |  |  | 274.9 | 86.6 |  |  |  |  |  |  |  |
|     | i | Sg | 20:14:53.8 | -0.3 |  |  |  |  |       |      |  |  |  |  |  |  |  |

| Date              | Origin Time       | OT_err          | Lat            | Long          | Smajor     | Sminor     | Az         | Depth     | D_err | Ndef      | Nsta      | Gap        | Mag          | Ref | Source       | Ev_type   |
|-------------------|-------------------|-----------------|----------------|---------------|------------|------------|------------|-----------|-------|-----------|-----------|------------|--------------|-----|--------------|-----------|
| 1997/07/05        | 10:29:19.9        |                 | 47.829N        | 7.984E        |            |            |            | 0G        |       | 14        | 12        |            | 2.0ML        |     | SED          | B?        |
| 1997/07/05        | 10:29:19.1        | + - 1.35        | 47.730N        | 8.010E        | 12.2       | 7.8        | 22         | 0G        |       | 8         | 4         | 301        | 1.5ML        | BFO | BGR          | L?        |
| <b>1997/07/05</b> | <b>10:29:20.4</b> | <b>+ - 0.20</b> | <b>47.820N</b> | <b>7.980E</b> | <b>3.0</b> | <b>2.0</b> | <b>117</b> | <b>0G</b> |       | <b>15</b> | <b>11</b> | <b>127</b> | <b>2.1ML</b> |     | <b>LEDBW</b> | <b>BG</b> |

Quarry Valentini, Auf der Wacht (Bernau)

## Freiburg i. Breisgau/Upper Rhine Graben

| Sta  | Phase  | Time       | TRes | Def | S/N  | Dist  | EvAz  | Mag    |
|------|--------|------------|------|-----|------|-------|-------|--------|
| FELD | i Pg + | 10:29:21.6 | 0.1  | T   |      | 6.5   | 15.9  |        |
|      | e Sg   | 10:29:22.6 | 0.4  | T   |      |       |       |        |
| KIZ  | i Pg + | 10:29:23.2 | 0.1  | T   |      | 15.8  | 343.1 | ML 1.8 |
|      | i Sg   | 10:29:25.7 | 0.8  | T   |      |       |       |        |
| BBS  | i Pg + | 10:29:29.6 | 0.3  | T   |      | 53.0  | 221.9 |        |
| BFO  | e Pg Z | 10:29:31.0 | 0.0  |     | 16.1 | 62.4  | 24.5  | ML 1.5 |
|      | e Sg E | 10:29:39.0 | 0.8  |     |      |       |       |        |
| SGW  | e Pg   | 10:29:37.5 | 0.6  | T   |      | 97.3  | 70.4  | ML 2.5 |
|      | e Sg   | 10:29:51.1 | 2.9  |     |      |       |       |        |
| LBG  | e Pn + | 10:29:39.2 | -1.8 | T   |      | 111.5 | 32.4  | ML 2.1 |
|      | e Sg   | 10:29:54.4 | 2.2  |     |      |       |       |        |
| BEU  | e Pn + | 10:29:42.2 | -1.8 | T   |      | 136.1 | 50.9  | ML 2.3 |
|      | i Pg - | 10:29:43.8 | 0.4  | T   |      |       |       |        |
| UBR  | e Pn + | 10:29:46.3 | -0.6 | T   |      | 159.8 | 94.8  | ML 2.0 |
|      | e Sg   | 10:30:07.6 | 1.5  | T   |      |       |       |        |
| HOL  | e Pg   | 10:29:56.9 | -0.5 | T   |      | 218.8 | 37.3  | ML 2.1 |
| TNS  | e Pn Z | 10:29:59.5 | -0.8 |     | 1.3  | 269.3 | 7.1   |        |
|      | e Sn N | 10:30:30.1 | 1.2  |     |      |       |       |        |
|      | e Sg N | 10:30:39.1 | 1.8  |     |      |       |       |        |
| GRFO | e Pg N | 10:30:13.8 | -0.1 |     | 1.7  | 315.7 | 47.6  |        |
|      | e Sg E | 10:30:50.4 | -0.2 |     |      |       |       |        |
| WET  | e Sg N | 10:31:11.7 | -0.0 |     |      | 389.8 | 66.0  |        |

| Date              | Origin Time       | OT_err          | Lat            | Long          | Smajor     | Sminor     | Az         | Depth     | D_err          | Ndef      | Nsta     | Gap        | Mag          | Ref | Source       | Ev_type  |
|-------------------|-------------------|-----------------|----------------|---------------|------------|------------|------------|-----------|----------------|-----------|----------|------------|--------------|-----|--------------|----------|
| 1997/07/11        | 03:16:37.8        |                 | 48.735N        | 7.630E        |            |            |            | 5G        |                |           | 13       |            | 2.3ML        | LDG | NEIC         |          |
| 1997/07/11        | 03:16:38.6        | + - 1.26        | 48.730N        | 7.800E        | 16.7       | 5.6        | 85         | 0G        |                | 4         | 3        | 236        | 1.8ML        | TNS | BGR          | L        |
| <b>1997/07/11</b> | <b>03:16:38.0</b> | <b>+ - 0.29</b> | <b>48.732N</b> | <b>7.734E</b> | <b>3.6</b> | <b>2.0</b> | <b>323</b> | <b>11</b> | <b>+ - 2.2</b> | <b>21</b> | <b>9</b> | <b>152</b> | <b>1.9ML</b> |     | <b>LEDBW</b> | <b>L</b> |

## N of Strasbourg/F, Upper Rhine Graben

| Sta | Phase  | Time       | TRes | Def | S/N | Dist | EvAz  | Mag    |
|-----|--------|------------|------|-----|-----|------|-------|--------|
| BFO | e Pg Z | 03:16:48.5 | -0.3 |     | 2.7 | 62.6 | 135.3 | ML 1.3 |
|     | e Sg E | 03:16:55.5 | -0.7 |     |     |      |       |        |

|      |   |      |            |      |   |       |       |    |     |
|------|---|------|------------|------|---|-------|-------|----|-----|
| LBG  | i | Pg - | 03:16:51.3 | -0.2 | T | 78.2  | 95.2  | ML | 1.9 |
|      | i | PmP  | 03:16:51.8 | -1.8 | T |       |       |    |     |
|      | i | Sg   | 03:17:00.2 | -0.4 | T |       |       |    |     |
| HEX  | e | Pg - | 03:16:52.2 | -0.3 | T | 84.8  | 158.6 |    |     |
|      | e | PmP- | 03:16:52.8 | -1.9 | T |       |       |    |     |
|      | e | Sg   | 03:17:02.5 | 0.1  | T |       |       |    |     |
|      | e | SmS  | 03:17:04.0 | -2.1 | T |       |       |    |     |
| KIZ  | i | Pg + | 03:16:52.9 | -0.1 | T | 87.3  | 171.0 | ML | 1.7 |
|      | i | PmP  | 03:16:53.2 | -1.9 | T |       |       |    |     |
|      | e | Sg   | 03:17:03.2 | -0.0 | T |       |       |    |     |
| FELD | i | Pn + | 03:16:54.7 | -1.0 | T | 97.2  | 168.0 |    |     |
|      | i | Sn   | 03:17:06.3 | -1.7 | T |       |       |    |     |
| BHB  | e | Pn - | 03:16:56.7 | -0.3 |   | 108.0 | 119.5 |    |     |
|      | e | Sn   | 03:17:09.2 | -1.1 |   |       |       |    |     |
| END  | e | Pn + | 03:16:57.3 | -0.3 |   | 113.1 | 179.9 |    |     |
|      | e | Sn   | 03:17:10.6 | -0.8 |   |       |       |    |     |
| HSN  | e | Pn + | 03:16:58.2 | -0.0 |   | 117.6 | 113.3 |    |     |
|      | e | Sn   | 03:17:11.8 | -0.5 |   |       |       |    |     |
| RUP  | i | Pn + | 03:16:58.6 | 0.3  |   | 118.4 | 335.8 |    |     |
| BEU  | i | Pn + | 03:16:59.0 | 0.0  |   | 124.6 | 97.0  | ML | 2.2 |
|      | e | Sn   | 03:17:13.7 | -0.2 |   |       |       |    |     |
|      | e | Sg   | 03:17:14.1 | 0.4  |   |       |       |    |     |
| ABH  | i | Pn - | 03:17:00.2 | 0.7  |   | 128.5 | 354.0 |    |     |
| SGW  | i | Sg   | 03:17:15.2 | -0.0 |   | 129.5 | 121.9 | ML | 2.3 |
| HOL  | e | Pg   | 03:17:05.8 | -0.6 |   | 167.2 | 64.1  | ML | 1.9 |
|      | e | Sg   | 03:17:25.5 | -0.4 |   |       |       |    |     |
| TNS  | e | Sg E | 03:17:28.0 | 0.3  |   | 173.5 | 17.0  | ML | 1.8 |
| HDH  | i | Pg - | 03:17:09.0 | 0.0  |   | 182.4 | 94.2  | ML | 1.9 |
|      | e | Sg   | 03:17:30.5 | 0.2  |   |       |       |    |     |
| UBR  | e | Sg   | 03:17:38.8 | 0.3  |   | 211.2 | 122.7 | ML | 1.9 |
| GRFO | e | Sg N | 03:17:56.0 | -0.6 |   | 274.7 | 65.9  |    |     |

| Date              | Origin            | Time | OT_err | Lat            | Long          | Smajor | Sminor | Az  | Depth     | D_err | Ndef | Nsta | Gap | Mag          | Ref | Source     | Ev_type  |
|-------------------|-------------------|------|--------|----------------|---------------|--------|--------|-----|-----------|-------|------|------|-----|--------------|-----|------------|----------|
| 1997/07/11        | 16:16:50.9        | +-   | 0.29   | 51.640N        | 7.720E        | 3.3    | 2.2    | 153 | 1G        |       | 23   | 12   | 127 | 2.3ML        | TNS | BGR        | I        |
| 1997/07/11        | 16:16:49.9        | +-   | 0.33   | 51.620N        | 7.790E        | 5.6    | 4.4    | 130 | 1G        |       | 10   | 5    | 117 | 2.4ML        |     | SZGRF      | I        |
| <b>1997/07/11</b> | <b>16:16:48.6</b> |      |        | <b>51.653N</b> | <b>7.726E</b> |        |        |     | <b>1G</b> |       |      |      |     | <b>2.4ML</b> |     | <b>RUB</b> | <b>I</b> |

Hamm/Westfalen, Ruhr Coal Mining District

| Sta  | Phase    | Time       | TRes | Def | S/N | Dist  | EvAz  | Mag    |
|------|----------|------------|------|-----|-----|-------|-------|--------|
| BUG  | i Pg - Z | 16:16:56.5 | 1.2  | TA  |     | 39.4  | 233.4 | ML 2.4 |
|      | e Sg E   | 16:17:02.0 | 2.1  |     |     |       |       |        |
| IBBN | e Pg Z   | 16:17:03.2 | 2.2  |     |     | 72.8  | 1.7   | ML 2.4 |
|      | e Sg N   | 16:17:12.0 | 2.6  |     |     |       |       |        |
| GSH  | e Pn Z   | 16:17:13.1 | 0.7  |     |     | 138.5 | 223.2 | ML 2.4 |
|      | e Pg Z   | 16:17:13.6 | 1.5  |     | 9.8 |       |       |        |
|      | e Sg N   | 16:17:30.8 | 2.7  |     |     |       |       |        |



| Sta  | Phase  | Time       | TRes | Def | S/N  | Dist  | EvAz  | Mag    |
|------|--------|------------|------|-----|------|-------|-------|--------|
| SCE  | i Pg - | 15:18:27.7 | -7.0 |     |      | 44.1  | 139.2 |        |
| OGA  | i Pg + | 15:18:29.9 | -7.0 |     |      | 57.3  | 203.8 |        |
| FUR  | e Pn Z | 15:18:43.6 | -0.5 |     | 53.1 | 91.6  | 357.5 | ML 3.7 |
|      | e Pg Z | 15:18:43.5 | 0.9  | T   |      |       |       |        |
|      | e Sn E | 15:18:58.1 | 2.1  |     |      |       |       |        |
|      | e Sg E | 15:18:55.5 | 2.2  |     |      |       |       |        |
| UBR  | e Pg + | 15:18:41.5 | -2.4 |     |      | 99.3  | 292.9 | ML 3.3 |
|      | e PmP  | 15:18:44.0 | -1.9 |     |      |       |       |        |
|      | e Sg   | 15:18:55.6 | 0.1  |     |      |       |       |        |
|      | i SmS  | 15:18:59.5 | 0.7  |     |      |       |       |        |
| BHG  | i Pg - | 15:18:44.3 | -3.7 |     |      | 123.8 | 69.4  |        |
| HDH  | i Pn + | 15:18:50.8 | -1.8 |     |      | 161.6 | 329.3 | ML 3.6 |
|      | i Pg + | 15:18:52.7 | -1.8 |     |      |       |       |        |
|      | i Sn   | 15:19:11.8 | 1.0  |     |      |       |       |        |
|      | e Sg   | 15:19:14.8 | 1.6  |     |      |       |       |        |
| SGW  | i Pg + | 15:18:55.1 | -2.4 |     |      | 179.7 | 299.1 | ML 3.5 |
|      | i Sg   | 15:19:18.2 | -0.2 |     |      |       |       |        |
| HSN  | i Sg   | 15:19:21.5 | -0.5 |     |      | 192.2 | 304.7 |        |
| BEU  | e Sn   | 15:19:18.9 | 0.3  |     |      | 198.6 | 314.8 | ML 3.2 |
|      | i Sg   | 15:19:23.8 | -0.0 |     |      |       |       |        |
| WET  | e Pn Z | 15:18:59.1 | -1.9 | T   |      | 231.0 | 29.2  | ML 3.1 |
|      | e Pg Z | 15:19:03.8 | -2.4 | T   |      |       |       |        |
|      | e Sn Z | 15:19:25.3 | -0.2 | T   |      |       |       |        |
|      | e Sg Z | 15:19:31.8 | -1.3 | T   |      |       |       |        |
| LBG  | i Pn + | 15:19:00.7 | -1.4 |     |      | 239.3 | 308.9 | ML 3.2 |
|      | i Sg   | 15:19:34.1 | -1.3 |     |      |       |       |        |
| BFO  | e Pn Z | 15:19:05.8 | 2.5  | T   |      | 249.5 | 297.3 | ML 3.0 |
|      | e Pg Z | 15:19:05.9 | -3.4 |     | 8.8  |       |       |        |
|      | e Sn Z | 15:19:28.7 | -0.6 | T   |      |       |       |        |
|      | e Sg Z | 15:19:36.6 | -1.8 | T   |      |       |       |        |
| HOL  | e Pn   | 15:19:02.8 | -0.8 |     |      | 252.2 | 334.1 | ML 3.2 |
|      | i Pg + | 15:19:08.5 | -1.3 |     |      |       |       |        |
|      | e Sg   | 15:19:40.4 | 1.3  |     |      |       |       |        |
| FELD | i Pn - | 15:19:02.8 | -1.3 |     |      | 256.3 | 284.7 |        |
|      | i Sg   | 15:19:38.0 | -2.3 |     |      |       |       |        |
| GRFO | e Pn Z | 15:19:04.1 | -0.7 |     | 8.4  | 261.5 | 358.3 | ML 3.2 |
|      | e Pg Z | 15:19:09.5 | -1.9 |     | 8.5  |       |       |        |
|      | e Sn E | 15:19:33.9 | 2.0  |     |      |       |       |        |
|      | e Sg E | 15:19:41.6 | -0.2 |     |      |       |       |        |
| GRA1 | e Pg Z | 15:19:09.5 | -1.9 | T   |      | 261.6 | 358.3 | ML 3.3 |
|      | e Sn Z | 15:19:33.2 | 1.3  | T   |      |       |       |        |
|      | e Sg Z | 15:19:42.1 | 0.3  | T   |      |       |       |        |
| KIZ  | e Pn   | 15:19:04.8 | -0.4 |     |      | 264.6 | 286.3 | ML 3.0 |
|      | i Pg + | 15:19:08.4 | -3.5 |     |      |       |       |        |
|      | e Sg   | 15:19:40.6 | -2.1 |     |      |       |       |        |
| BAW  | e Pn + | 15:19:06.2 | -0.7 |     |      | 278.7 | 281.9 |        |
|      | e Pg + | 15:19:10.6 | -3.7 |     |      |       |       |        |
|      | e Sg   | 15:19:44.3 | -2.4 |     |      |       |       |        |

|     |   |    |   |            |      |   |  |     |       |       |    |     |  |  |  |  |  |  |
|-----|---|----|---|------------|------|---|--|-----|-------|-------|----|-----|--|--|--|--|--|--|
| BBS | i | Pn |   | 15:19:07.1 | -0.9 |   |  |     | 287.9 | 274.2 |    |     |  |  |  |  |  |  |
|     | i | Sg |   | 15:19:46.9 | -2.4 |   |  |     |       |       |    |     |  |  |  |  |  |  |
| TOD | i | Pg |   | 15:19:22.7 | 2.6  |   |  |     | 313.2 | 324.5 |    |     |  |  |  |  |  |  |
|     | e | Sg |   | 15:19:57.9 | 1.4  |   |  |     |       |       |    |     |  |  |  |  |  |  |
| MOX | e | Pn | Z | 15:19:18.2 | 0.5  | T |  |     | 368.0 | 3.1   | ML | 3.1 |  |  |  |  |  |  |
|     | e | Pg | Z | 15:19:28.8 | -0.6 | T |  |     |       |       |    |     |  |  |  |  |  |  |
|     | e | Sn | N | 15:19:56.7 | 2.2  | T |  |     |       |       |    |     |  |  |  |  |  |  |
|     | e | Sg | E | 15:20:13.2 | 1.1  |   |  |     |       |       |    |     |  |  |  |  |  |  |
| TNS | e | Pn | Z | 15:19:19.4 | -0.3 | T |  |     | 383.8 | 327.7 |    |     |  |  |  |  |  |  |
|     | e | Sn | Z | 15:20:01.0 | 3.3  | T |  |     |       |       |    |     |  |  |  |  |  |  |
|     | e | Sg | N | 15:20:18.7 | 2.0  |   |  |     |       |       |    |     |  |  |  |  |  |  |
| ABH | i | Pn | + | 15:19:21.0 | -0.3 |   |  |     | 396.4 | 316.9 |    |     |  |  |  |  |  |  |
| BRG | e | Pn | Z | 15:19:23.5 | -2.6 |   |  | 1.8 | 436.4 | 24.9  | ML | 3.4 |  |  |  |  |  |  |
|     | e | Pg | Z | 15:19:38.0 | -3.0 |   |  | 2.5 |       |       |    |     |  |  |  |  |  |  |
|     | e | Sn | Z | 15:20:11.2 | 2.4  | T |  |     |       |       |    |     |  |  |  |  |  |  |
|     | e | Sg | Z | 15:20:32.2 | 0.5  | T |  |     |       |       |    |     |  |  |  |  |  |  |
| CLL | e | Pn | Z | 15:19:26.8 | -1.9 |   |  | 1.5 | 457.5 | 14.7  | ML | 3.6 |  |  |  |  |  |  |
|     | e | Pg | Z | 15:19:42.9 | -1.6 |   |  | 1.6 |       |       |    |     |  |  |  |  |  |  |
|     | e | Sn | Z | 15:20:16.9 | 3.6  | T |  |     |       |       |    |     |  |  |  |  |  |  |
|     | e | Sg | Z | 15:20:35.9 | -1.9 | T |  |     |       |       |    |     |  |  |  |  |  |  |
| CLZ | e | Pn | Z | 15:19:34.9 | 0.4  | T |  |     | 505.3 | 352.5 | ML | 3.4 |  |  |  |  |  |  |
|     | e | Pg | Z | 15:19:53.5 | 0.9  |   |  | 2.5 |       |       |    |     |  |  |  |  |  |  |
|     | e | Sn | E | 15:20:23.4 | 0.0  |   |  |     |       |       |    |     |  |  |  |  |  |  |
|     | e | Sg | Z | 15:20:52.3 | 1.0  | T |  |     |       |       |    |     |  |  |  |  |  |  |
| GSH | e | Pn | Z | 15:19:32.4 | -4.2 |   |  | 1.3 | 522.3 | 318.1 | ML | 3.2 |  |  |  |  |  |  |
|     | e | Sn | E | 15:20:28.2 | 1.2  |   |  |     |       |       |    |     |  |  |  |  |  |  |
|     | e | Sg | E | 15:20:58.8 | 2.5  |   |  |     |       |       |    |     |  |  |  |  |  |  |

| Date       | Origin Time | OT_err   | Lat     | Long    | Smajor | Sminor | Az  | Depth | D_err | Ndef | Nsta | Gap | Mag   | Ref | Source | Ev_type |
|------------|-------------|----------|---------|---------|--------|--------|-----|-------|-------|------|------|-----|-------|-----|--------|---------|
| 1997/07/15 | 04:56:31.7  |          | 47.481N | 12.592E |        |        |     | 5G    |       |      | 8    |     | 2.5ML | VIE | NEIC   |         |
| 1997/07/15 | 04:56:33.4  | + - 0.84 | 47.630N | 12.620E | 10.0   | 4.4    | 151 | 0G    |       | 12   | 6    | 255 | 2.4ML | BFO | BGR    | L       |

Reit i. Winkl, SW of Salzburg/A, Austrian-German border reg.

| Sta  | Phase  | Time       | TRes | Def | S/N  | Dist  | EvAz  | Mag    |
|------|--------|------------|------|-----|------|-------|-------|--------|
| BHG  | e Pg   | 04:56:37.1 | -0.0 |     |      | 21.9  | 62.2  |        |
| SCE  | i Pg + | 04:56:46.9 | -2.6 |     |      | 95.0  | 226.5 |        |
| FUR  | e Pg Z | 04:56:53.6 | 0.5  | T   | 1.6  | 116.5 | 301.1 | ML 2.3 |
|      | e Sg N | 04:57:04.8 | -1.8 | T   |      |       |       |        |
| OGA  | e Pg   | 04:56:58.6 | 0.3  |     |      | 147.2 | 235.4 |        |
| GEC2 | e Pn Z | 04:56:58.6 | -1.0 | T   | 12.2 | 157.1 | 30.3  |        |
|      | e Sg N | 04:57:18.0 | -0.3 | T   |      |       |       |        |
| GRFO | e Pg Z | 04:57:16.8 | 0.9  | T   | 1.1  | 251.1 | 336.4 | ML 2.2 |
|      | e Sg E | 04:57:44.6 | -0.5 | T   |      |       |       |        |
| BFO  | e Pn Z | 04:57:20.1 | -0.4 | T   | 1.8  | 328.6 | 285.3 | ML 2.4 |
|      | e Sn E | 04:57:54.6 | 0.2  | T   |      |       |       |        |
|      | e Sg E | 04:58:08.6 | 1.3  | T   |      |       |       |        |

|     |   |    |   |            |     |   |       |       |    |     |
|-----|---|----|---|------------|-----|---|-------|-------|----|-----|
| MOX | e | Sn | N | 04:57:57.9 | 0.5 | T | 343.1 | 348.1 | ML | 2.4 |
|     | e | Sg | N | 04:58:11.8 | 0.4 | T |       |       |    |     |
| BRG | e | Sg | E | 04:58:20.2 | 0.2 | T | 373.2 | 14.4  | ML | 2.4 |

| Date              | Origin            | Time      | OT_err      | Lat            | Long           | Smajor     | Sminor     | Az        | Depth     | D_err | Ndef      | Nsta     | Gap       | Mag          | Ref        | Source     | Ev_type  |
|-------------------|-------------------|-----------|-------------|----------------|----------------|------------|------------|-----------|-----------|-------|-----------|----------|-----------|--------------|------------|------------|----------|
| 1997/07/17        | 14:31:24.2        | +-        | 0.29        | 51.520N        | 10.420E        | 5.6        | 4.4        | 54        | 1G        |       | 13        | 7        | 101       | 2.4ML        |            | SZGRF      | I        |
| <b>1997/07/17</b> | <b>14:31:24.2</b> | <b>+-</b> | <b>0.29</b> | <b>51.490N</b> | <b>10.390E</b> | <b>2.2</b> | <b>2.2</b> | <b>10</b> | <b>0G</b> |       | <b>16</b> | <b>9</b> | <b>97</b> | <b>2.4ML</b> | <b>MOX</b> | <b>BGR</b> | <b>I</b> |

## Bleicherode, S Harz Mining District

| Sta  | Phase  | Time       | TRes | Def | S/N  | Dist  | EvAz  | Mag    |
|------|--------|------------|------|-----|------|-------|-------|--------|
| CLZ  | e Pg Z | 14:31:30.8 | -0.0 | T   | 39.7 | 39.1  | 358.2 | ML 2.1 |
|      | e Sg E | 14:31:35.7 | 0.3  | T   |      |       |       |        |
| MOX  | e Pg Z | 14:31:46.0 | 0.3  | T   | 6.2  | 127.1 | 137.2 | ML 2.4 |
|      | e Sg E | 14:32:01.5 | 1.0  | T   |      |       |       |        |
| CLL  | e Pn Z | 14:31:53.8 | 0.3  | T   | 6.2  | 182.4 | 95.4  | ML 2.3 |
|      | e Sg E | 14:32:15.8 | -0.5 | T   |      |       |       |        |
| TNS  | e Pn Z | 14:31:54.7 | -0.5 | T   | 2.3  | 196.1 | 224.8 | ML 2.4 |
|      | e Pg Z | 14:31:57.5 | 0.1  | T   | 6.5  |       |       |        |
|      | e Sg N | 14:32:19.7 | -0.5 | T   |      |       |       |        |
| GRA1 | e Pg Z | 14:31:59.1 | -0.4 |     |      | 208.4 | 163.3 | ML 2.6 |
|      | e Sg N | 14:32:25.1 | 1.3  |     |      |       |       |        |
| GRFO | e Pg Z | 14:31:59.5 | -0.0 | T   | 1.9  | 208.5 | 163.3 | ML 2.5 |
|      | e Sg E | 14:32:24.1 | 0.4  | T   |      |       |       |        |
| BUG  | e Sg E | 14:32:26.2 | 0.3  | T   |      | 216.2 | 269.8 | ML 2.5 |
| BRG  | e Pg Z | 14:32:08.0 | 0.2  | T   | 2.0  | 256.9 | 104.1 | ML 2.2 |
|      | e Sg E | 14:32:37.5 | -0.1 | T   |      |       |       |        |
| GSH  | e Sg E | 14:32:49.3 | 1.6  |     |      | 292.3 | 254.9 | ML 2.5 |
| WET  | e Sg E | 14:32:54.5 | 0.3  | T   |      | 315.0 | 144.9 | ML 2.4 |
| GEC2 | e Sg E | 14:33:13.6 | 1.7  |     |      | 376.9 | 140.0 |        |
| BFO  | e Sg E | 14:33:13.3 | 0.3  | T   |      | 381.0 | 203.6 | ML 2.7 |

| Date              | Origin            | Time      | OT_err      | Lat            | Long           | Smajor     | Sminor     | Az         | Depth     | D_err | Ndef      | Nsta     | Gap        | Mag          | Ref        | Source     | Ev_type  |
|-------------------|-------------------|-----------|-------------|----------------|----------------|------------|------------|------------|-----------|-------|-----------|----------|------------|--------------|------------|------------|----------|
| 1997/07/19        | 11:37:07.9        |           |             | 47.313N        | 11.214E        |            |            |            | 10G       |       |           | 11       |            | 2.3ML        | FUR        | NEIC       |          |
|                   |                   |           |             |                |                |            |            |            |           |       |           |          |            |              |            |            |          |
|                   |                   |           |             |                |                |            |            |            |           |       |           |          |            |              |            |            |          |
| 1997/07/19        | 11:37:07.8        |           |             | 47.163N        | 11.270E        | 9.9        | 9.9        | 0          | 10        | +-    | 4.9       | 11       | 8          | 2.5ML        |            | SED        |          |
| 1997/07/19        | 11:37:11.0        | +-        | 0.30        | 47.350N        | 10.990E        | 6.0        | 2.0        | 27         | 10G       |       | 6         | 4        | 327        | 2.3ML        |            | LEDBW      | L        |
| 1997/07/19        | 11:37:12.4        | +-        | 0.91        | 47.510N        | 11.080E        | 15.6       | 5.6        | 160        | 10        | +-    | 3.8       | 13       | 5          | 259          | 2.3ML      | SZGRF      | L        |
| <b>1997/07/19</b> | <b>11:37:09.7</b> | <b>+-</b> | <b>0.59</b> | <b>47.370N</b> | <b>11.120E</b> | <b>7.8</b> | <b>4.4</b> | <b>165</b> | <b>5G</b> |       | <b>20</b> | <b>6</b> | <b>249</b> | <b>2.3ML</b> | <b>WET</b> | <b>BGR</b> | <b>L</b> |

## Inn Valley/A, W of Innsbruck

| Sta | Phase  | Time       | TRes | Def | S/N | Dist | EvAz  | Mag |
|-----|--------|------------|------|-----|-----|------|-------|-----|
| OGA | i Pg - | 11:37:16.8 | -2.4 |     |     | 56.3 | 187.3 |     |

|      |   |    |   |            |      |   |     |       |       |  |  |    |     |  |  |  |  |
|------|---|----|---|------------|------|---|-----|-------|-------|--|--|----|-----|--|--|--|--|
| SCE  | i | Pg | - | 11:37:17.2 | -2.3 |   |     | 57.8  | 129.4 |  |  |    |     |  |  |  |  |
| UBR  | i | Pg |   | 11:37:23.2 | -0.7 |   |     | 83.5  | 294.8 |  |  | ML | 2.0 |  |  |  |  |
|      | e | Sg |   | 11:37:34.3 | 0.7  |   |     |       |       |  |  |    |     |  |  |  |  |
| FUR  | e | Pg | Z | 11:37:25.6 | 0.8  | T | 3.1 | 88.9  | 7.4   |  |  | ML | 2.3 |  |  |  |  |
|      | e | Sg | N | 11:37:36.5 | 1.4  | T |     |       |       |  |  |    |     |  |  |  |  |
| SGW  | i | Pn | + | 11:37:36.0 | -0.2 |   |     | 164.3 | 300.6 |  |  | ML | 2.5 |  |  |  |  |
|      | i | Sg |   | 11:37:56.5 | -0.1 |   |     |       |       |  |  |    |     |  |  |  |  |
| BEU  | e | Pn |   | 11:37:39.5 | 0.7  |   |     | 185.2 | 317.4 |  |  | ML | 2.2 |  |  |  |  |
|      | e | Sn |   | 11:37:58.5 | -0.9 |   |     |       |       |  |  |    |     |  |  |  |  |
|      | e | Sg |   | 11:38:02.8 | 0.2  |   |     |       |       |  |  |    |     |  |  |  |  |
| LBG  | e | Sg |   | 11:38:12.5 | -1.4 |   |     | 225.0 | 310.6 |  |  | ML | 2.2 |  |  |  |  |
| BFO  | e | Pn | Z | 11:37:45.9 | 1.2  | T | 2.6 | 234.0 | 298.2 |  |  | ML | 2.1 |  |  |  |  |
|      | e | Pg | Z | 11:37:50.2 | 0.9  | T |     |       |       |  |  |    |     |  |  |  |  |
|      | e | Sn | N | 11:38:09.3 | -0.4 | T |     |       |       |  |  |    |     |  |  |  |  |
|      | e | Sg | N | 11:38:15.5 | -1.1 | T |     |       |       |  |  |    |     |  |  |  |  |
| WET  | e | Pn | Z | 11:37:44.1 | -0.9 | T | 1.8 | 236.3 | 32.8  |  |  | ML | 2.3 |  |  |  |  |
|      | e | Pg | Z | 11:37:49.4 | -0.3 | T |     |       |       |  |  |    |     |  |  |  |  |
|      | e | Sn | N | 11:38:11.5 | 1.3  | T |     |       |       |  |  |    |     |  |  |  |  |
|      | e | Sg | N | 11:38:16.3 | -0.9 | T |     |       |       |  |  |    |     |  |  |  |  |
| KIZ  | e | Sg |   | 11:38:19.6 | -1.1 |   |     | 248.4 | 286.4 |  |  | ML | 2.3 |  |  |  |  |
| GEC2 | e | Pn | Z | 11:37:46.3 | -0.6 | T | 1.5 | 252.2 | 48.5  |  |  |    |     |  |  |  |  |
|      | e | Pg | Z | 11:37:52.0 | -0.4 | T |     |       |       |  |  |    |     |  |  |  |  |
|      | e | Sn | N | 11:38:15.3 | 1.7  | T |     |       |       |  |  |    |     |  |  |  |  |
|      | e | Sg | N | 11:38:20.7 | -1.0 | T |     |       |       |  |  |    |     |  |  |  |  |
| GRFO | e | Pg | Z | 11:37:53.2 | -0.2 | T | 2.7 | 258.2 | 1.6   |  |  | ML | 2.3 |  |  |  |  |
|      | e | Sg | N | 11:38:23.4 | -0.1 | T |     |       |       |  |  |    |     |  |  |  |  |
| GRA1 | e | Pg | Z | 11:37:52.3 | -1.1 |   |     | 258.3 | 1.6   |  |  | ML | 2.4 |  |  |  |  |
|      | e | Sg | Z | 11:38:23.1 | -0.4 |   |     |       |       |  |  |    |     |  |  |  |  |
| MOX  | e | Pn | Z | 11:38:00.1 | -0.6 | T | 1.2 | 365.9 | 5.5   |  |  | ML | 2.5 |  |  |  |  |
|      | e | Pg | Z | 11:38:11.0 | -0.7 | T |     |       |       |  |  |    |     |  |  |  |  |
|      | e | Sn | E | 11:38:37.7 | 0.2  | T |     |       |       |  |  |    |     |  |  |  |  |
|      | e | Sg | E | 11:38:54.3 | 0.0  | T |     |       |       |  |  |    |     |  |  |  |  |

| Date              | Origin Time       | OT_err   | Lat            | Long          | Smajor | Sminor | Az  | Depth     | D_err | Ndef | Nsta | Gap | Mag          | Ref | Source     | Ev_type  |
|-------------------|-------------------|----------|----------------|---------------|--------|--------|-----|-----------|-------|------|------|-----|--------------|-----|------------|----------|
| 1997/07/22        | 14:11:54.7        | +/- 0.42 | 51.710N        | 7.870E        | 6.7    | 4.4    | 145 | 0G        |       | 8    | 5    | 118 | 2.0ML        | GSH | BGR        | I?       |
| <b>1997/07/22</b> | <b>14:11:53.3</b> |          | <b>51.694N</b> | <b>7.867E</b> |        |        |     | <b>1G</b> |       |      |      |     | <b>1.9ML</b> |     | <b>RUB</b> | <b>I</b> |

Hamm/Westfalen, Ruhr Coal Mining District

| Sta  | Phase    | Time       | TRes | Def | S/N | Dist  | EvAz  | Mag    |
|------|----------|------------|------|-----|-----|-------|-------|--------|
| BUG  | i Pg - Z | 14:12:03.3 | 1.5  | TA  |     | 50.0  | 236.0 | ML 1.9 |
| IBBN | e Pg Z   | 14:12:06.0 | 1.0  |     | 2.0 | 68.6  | 353.7 |        |
| GSH  | e Pg Z   | 14:12:19.4 | 0.9  |     | 4.4 | 148.6 | 224.9 | ML 2.0 |
|      | e Sg E   | 14:12:38.7 | 2.9  |     |     |       |       |        |
| TNS  | e Pg Z   | 14:12:23.7 | 1.8  |     | 2.3 | 168.6 | 165.8 | ML 2.0 |
|      | e Sg N   | 14:12:42.7 | 1.2  |     |     |       |       |        |



|     |   |    |   |            |     |  |  |  |     |       |      |    |     |
|-----|---|----|---|------------|-----|--|--|--|-----|-------|------|----|-----|
| CLZ | e | Pg | Z | 14:12:23.5 | 0.8 |  |  |  | 2.5 | 173.2 | 83.6 | ML | 2.1 |
|     | e | Sg | E | 14:12:45.2 | 2.4 |  |  |  |     |       |      |    |     |

| Date              | Origin Time       | OT_err         | Lat            | Long          | Smajor     | Sminor     | Az         | Depth    | D_err         | Ndef      | Nsta      | Gap | Mag          | Ref | Source     | Ev_type  |
|-------------------|-------------------|----------------|----------------|---------------|------------|------------|------------|----------|---------------|-----------|-----------|-----|--------------|-----|------------|----------|
| 1997/07/25        | 11:36:42.3        |                | 47.127N        | 5.572E        |            |            |            | 5G       |               |           | 9         |     |              |     | NEIC       |          |
| <b>1997/07/25</b> | <b>11:36:43.1</b> | <b>+- 0.20</b> | <b>47.125N</b> | <b>5.562E</b> | <b>4.3</b> | <b>2.8</b> | <b>161</b> | <b>2</b> | <b>+- 0.0</b> | <b>24</b> | <b>12</b> |     | <b>2.6ML</b> |     | <b>LDG</b> | <b>L</b> |

near Dole/F

| Date              | Origin Time   | OT_err         | Lat            | Long          | Smajor     | Sminor     | Az        | Depth     | D_err | Ndef      | Nsta     | Gap        | Mag          | Ref | Source       | Ev_type  |
|-------------------|---|----------------|----------------|---------------|------------|------------|-----------|-----------|-------|-----------|----------|------------|--------------|-----|--------------|----------|
| 1997/07/25        | 15:24:48.2  |                | 49.383N        | 6.919E        |            |            |           | 5G        |       |           | 5        |            | 2.3ML        | UCC | NEIC         | I        |
|                   | Mining induced event in the Lorraine region, France, Less reliable solution |                |                |               |            |            |           |           |       |           |          |            |              |     |              |          |
| 1997/07/25        | 15:24:47.9  | +- 0.66        | 49.360N        | 6.890E        | 8.9        | 4.4        | 60        | 0G        |       | 7         | 4        | 209        | 2.0ML        | BFO | BGR          | I?       |
| <b>1997/07/25</b> | <b>15:24:48.1</b>   | <b>+- 0.40</b> | <b>49.380N</b> | <b>6.910E</b> | <b>5.0</b> | <b>2.0</b> | <b>98</b> | <b>1G</b> |       | <b>12</b> | <b>9</b> | <b>202</b> | <b>2.1ML</b> |     | <b>LEDBW</b> | <b>I</b> |

Saarbruecken-West

| Sta  | Phase  | Time       | TRes | Def | S/N | Dist  | EvAz  | Mag    |
|------|--------|------------|------|-----|-----|-------|-------|--------|
| RUP  | e Pg   | 15:24:55.1 | 0.6  | T   |     | 37.4  | 16.7  |        |
| ABH  | e Pg + | 15:25:00.5 | 0.1  | T   |     | 72.2  | 39.2  |        |
|      | e Sg   | 15:25:09.3 | 0.5  | T   |     |       |       |        |
| TNS  | e Pg Z | 15:25:13.0 | 0.3  |     | 7.0 | 144.7 | 49.1  | ML 2.3 |
|      | e Sn + | 15:25:28.7 | -1.3 |     |     |       |       |        |
|      | e Sg N | 15:25:31.0 | 1.5  |     | 4.0 |       |       |        |
| GSH  | e Pg Z | 15:25:14.7 | 0.3  |     | 3.6 | 155.6 | 346.1 | ML 2.1 |
|      | e Sg N | 15:25:32.6 | -0.0 |     | 3.6 |       |       |        |
| BFO  | e Pg Z | 15:25:14.4 | -0.1 |     | 5.2 | 156.2 | 137.8 | ML 2.0 |
|      | e Sg   | 15:25:33.2 | 0.5  | T   |     |       |       |        |
| LBG  | e Pg + | 15:25:14.9 | -0.1 | T   |     | 158.8 | 119.4 | ML 2.1 |
| KIZ  | i Pg + | 15:25:17.3 | -0.5 | T   |     | 174.8 | 154.6 | ML 2.3 |
|      | e Sg   | 15:25:37.4 | -0.7 |     |     |       |       |        |
| FELD | e Pg   | 15:25:18.8 | -0.7 | T   |     | 185.5 | 153.9 |        |
| SGW  | i Pg + | 15:25:25.4 | -0.1 | T   |     | 220.5 | 129.1 | ML 2.1 |
| GRFO | e Sg E | 15:26:17.2 | -0.3 |     | 1.6 | 312.9 | 82.0  |        |

| Date              | Origin Time       | OT_err  | Lat            | Long          | Smajor | Sminor | Az  | Depth     | D_err  | Ndef | Nsta | Gap | Mag          | Ref | Source     | Ev_type |
|-------------------|-------------------|---------|----------------|---------------|--------|--------|-----|-----------|--------|------|------|-----|--------------|-----|------------|---------|
| 1997/07/26        | 01:17:48.6        | +- 0.20 | 51.654N        | 7.755E        | 6.0    | 5.3    | 53  | 2         | +- 0.0 | 28   | 11   |     | 2.7ML        |     | LDG        | L       |
| 1997/07/26        | 01:17:48.0        |         | 51.536N        | 7.623E        |        |        |     | 10G       |        |      | 12   |     | 2.5ML        | UCC | NEIC       |         |
| 1997/07/26        | 01:17:49.6        | +- 1.47 | 51.610N        | 7.760E        | 17.8   | 7.8    | 17  | 1G        |        | 6    | 3    | 281 | 2.3ML        |     | SZGRF      | I       |
| 1997/07/26        | 01:17:48.6        | +- 0.37 | 51.630N        | 7.790E        | 5.6    | 3.3    | 151 | 0G        |        | 11   | 5    | 118 | 2.3ML        | GSH | BGR        | I       |
| <b>1997/07/26</b> | <b>01:17:47.2</b> |         | <b>51.654N</b> | <b>7.728E</b> |        |        |     | <b>1G</b> |        |      |      |     | <b>2.2ML</b> |     | <b>RUB</b> |         |

Hamm/Westfalen, Ruhr Coal Mining District

| Sta  | Phase    | Time       | TRes | Def | S/N  | Dist  | EvAz  | Mag    |
|------|----------|------------|------|-----|------|-------|-------|--------|
| BUG  | i Pg - Z | 01:17:55.1 | 1.2  | TA  | 9.3  | 39.6  | 233.4 | ML 2.2 |
|      | e Sg E   | 01:18:00.8 | 2.2  |     |      |       |       |        |
| IBBN | e Pg Z   | 01:18:02.0 | 2.4  |     | 2.2  | 72.6  | 1.5   |        |
| GSH  | e Pg Z   | 01:18:12.3 | 1.6  |     | 9.4  | 138.8 | 223.2 | ML 2.3 |
|      | e Sg E   | 01:18:28.7 | 1.9  |     | 5.0  |       |       |        |
| TNS  | e Pn Z   | 01:18:14.9 | 0.4  |     |      | 167.0 | 162.2 | ML 2.1 |
|      | e Pg Z   | 01:18:16.1 | 0.6  |     | 7.4  |       |       |        |
|      | e Sg N   | 01:18:35.5 | 0.6  |     | 4.0  |       |       |        |
| CLZ  | e Pn Z   | 01:18:17.1 | 0.6  |     |      | 183.2 | 82.4  | ML 2.2 |
|      | e Pg Z   | 01:18:18.7 | 0.4  |     | 12.6 |       |       |        |
|      | e Sg E   | 01:18:40.6 | 1.1  |     | 2.7  |       |       |        |
| MOX  | i (Pn)   | 01:18:32.0 | 2.1  |     |      | 293.4 | 111.0 |        |
|      | i Pg     | 01:18:38.7 | 1.8  |     |      |       |       |        |
|      | i Sg     | 01:19:15.4 | 4.4  |     |      |       |       |        |
| CLL  | i Pg     | 01:18:50.5 | 1.1  |     |      | 367.2 | 94.0  |        |
|      | e Sg     | 01:19:36.0 | 3.9  |     |      |       |       |        |

| Date              | Origin Time       | OT_err         | Lat            | Long           | Smajor      | Sminor      | Az        | Depth     | D_err | Ndef     | Nsta     | Gap        | Mag          | Ref         | Source     | Ev_type   |
|-------------------|-------------------|----------------|----------------|----------------|-------------|-------------|-----------|-----------|-------|----------|----------|------------|--------------|-------------|------------|-----------|
| 1997/07/29        | 21:22:57.9        |                | 47.288N        | 11.332E        |             |             |           | 5G        |       |          | 6        |            | 2.2ML        | VIE         | NEIC       |           |
| <b>1997/07/29</b> | <b>21:22:59.6</b> | <b>+- 1.37</b> | <b>47.320N</b> | <b>11.390E</b> | <b>15.6</b> | <b>14.5</b> | <b>96</b> | <b>0G</b> |       | <b>9</b> | <b>5</b> | <b>329</b> | <b>2.3ML</b> | <b>GRFO</b> | <b>BGR</b> | <b>L?</b> |

Innsbruck, Hall/A

| Sta  | Phase  | Time       | TRes | Def | S/N | Dist  | EvAz  | Mag    |
|------|--------|------------|------|-----|-----|-------|-------|--------|
| SCE  | e Pg   | 21:23:05.0 | -1.3 |     |     | 39.6  | 142.2 |        |
| OGA  | e Pg   | 21:23:07.4 | -1.9 |     |     | 57.4  | 208.9 |        |
|      | i Sg   | 21:23:13.5 | -2.5 |     |     |       |       |        |
| WET  | e Pn Z | 21:23:34.0 | -0.8 | T   | 2.3 | 230.8 | 28.0  | ML 2.3 |
|      | e Sn N | 21:24:01.2 | 1.2  | T   |     |       |       |        |
|      | e Sg N | 21:24:05.9 | 0.3  | T   |     |       |       |        |
| GRFO | e Pg Z | 21:23:43.5 | -0.8 | T   | 2.0 | 263.9 | 357.3 | ML 2.3 |
|      | e Sg E | 21:24:14.5 | -0.5 | T   |     |       |       |        |
| MOX  | e Sn E | 21:24:30.2 | 0.8  | T   |     | 370.0 | 2.5   |        |
|      | e Sg E | 21:24:46.2 | 0.9  | T   |     |       |       |        |
| BRG  | e Sg E | 21:25:03.5 | -0.9 | T   |     | 436.5 | 24.2  |        |
| CLL  | e Sg E | 21:25:09.5 | -1.2 | T   |     | 458.5 | 14.2  |        |

| Date              | Origin Time       | OT_err  | Lat            | Long          | Smajor | Sminor | Az  | Depth     | D_err | Ndef | Nsta | Gap | Mag          | Ref | Source     | Ev_type  |
|-------------------|-------------------|---------|----------------|---------------|--------|--------|-----|-----------|-------|------|------|-----|--------------|-----|------------|----------|
| 1997/07/29        | 22:54:02.6        | +- 0.60 | 51.700N        | 7.870E        | 10.0   | 4.4    | 158 | 1G        |       | 8    | 4    | 208 | 2.0ML        |     | SZGRF      | I        |
| 1997/07/29        | 22:54:01.9        | +- 0.41 | 51.680N        | 7.890E        | 6.7    | 4.4    | 151 | 0G        |       | 9    | 5    | 114 | 2.1ML        | GSH | BGR        | I        |
| <b>1997/07/29</b> | <b>22:54:00.1</b> |         | <b>51.694N</b> | <b>7.867E</b> |        |        |     | <b>1G</b> |       |      |      |     | <b>1.8ML</b> |     | <b>RUB</b> | <b>I</b> |

Hamm/Westfalen, Ruhr Coal Mining District

| Sta  | Phase    | Time       | TRes | Def | S/N | Dist  | EvAz  | Mag    |
|------|----------|------------|------|-----|-----|-------|-------|--------|
| BUG  | i Pg - Z | 22:54:10.0 | 1.4  | TA  | 1.8 | 50.0  | 236.0 | ML 1.8 |
|      | e Sg E   | 22:54:17.1 | 2.7  |     |     |       |       |        |
| IBBN | e Pg Z   | 22:54:13.6 | 1.9  |     | 0.9 | 68.6  | 353.7 | ML 2.2 |
|      | e Sg E   | 22:54:21.4 | 1.6  |     |     |       |       |        |
| GSH  | e Pg Z   | 22:54:26.5 | 1.2  |     | 4.4 | 148.6 | 224.9 | ML 2.1 |
|      | e Sg E   | 22:54:45.3 | 2.8  |     |     |       |       |        |
| TNS  | e Pg Z   | 22:54:30.8 | 2.1  |     | 3.5 | 168.6 | 165.8 | ML 2.0 |
|      | e Sg N   | 22:54:49.2 | 0.9  |     |     |       |       |        |
| CLZ  | e Pg N   | 22:54:30.9 | 1.5  |     | 4.2 | 173.2 | 83.6  | ML 2.1 |
|      | e Sg E   | 22:54:51.8 | 2.3  |     |     |       |       |        |

| Date              | Origin Time       | OT_err          | Lat            | Long          | Smajor     | Sminor     | Az         | Depth     | D_err   | Ndef     | Nsta     | Gap        | Mag          | Ref | Source       | Ev_type  |
|-------------------|-------------------|-----------------|----------------|---------------|------------|------------|------------|-----------|---------|----------|----------|------------|--------------|-----|--------------|----------|
| 1997/07/30        | 00:40:20.4        |                 | 49.770N        | 6.702E        |            |            |            | 10G       |         |          | 12       |            | 2.2ML        | DBN | NEIC         |          |
|                   | ML= 2.1(UCC)      |                 |                |               |            |            |            |           |         |          |          |            |              |     |              |          |
| 1997/07/30        | 00:40:24.5        | + - 0.20        | 49.669N        | 6.576E        | 4.9        | 2.6        | 56         | 11        | + - 0.0 | 35       | 13       |            | 2.6ML        |     | LDG          | L        |
| 1997/07/30        | 00:40:20.9        | + - 0.57        | 49.820N        | 6.780E        | 6.7        | 4.4        | 67         | 0G        |         | 8        | 5        | 199        | 2.0ML        | TNS | BGR          | L        |
| 1997/07/30        | 00:40:21.5        | + - 0.58        | 49.820N        | 6.810E        | 11.1       | 5.6        | 67         | 10G       |         | 7        | 4        | 197        | 1.9ML        |     | SZGRF        | L        |
| <b>1997/07/30</b> | <b>00:40:22.2</b> | <b>+ - 0.40</b> | <b>49.850N</b> | <b>6.840E</b> | <b>3.0</b> | <b>3.0</b> | <b>115</b> | <b>2G</b> |         | <b>7</b> | <b>4</b> | <b>279</b> | <b>2.1ML</b> |     | <b>LEDBW</b> | <b>L</b> |

Wittlich/Mosel

| Sta  | Phase  | Time       | TRes | Def | S/N | Dist  | EvAz  | Mag    |
|------|--------|------------|------|-----|-----|-------|-------|--------|
| RUP  | i Pg - | 00:40:26.3 | 0.2  | T   |     | 22.8  | 136.2 |        |
|      | i Sg   | 00:40:29.4 | 0.7  |     |     |       |       |        |
| ABH  | i Pg + | 00:40:31.2 | 0.3  | T   |     | 50.8  | 85.8  |        |
|      | i Sg   | 00:40:38.6 | 1.9  |     |     |       |       |        |
| GSH  | e Pg Z | 00:40:38.8 | -1.1 |     |     | 104.0 | 341.7 | ML 1.7 |
|      | e Sg N | 00:40:52.2 | 0.3  |     |     |       |       |        |
| KTD  | i Pg   | 00:40:40.8 | 0.4  | T   |     | 107.3 | 122.8 |        |
|      | i Sg   | 00:40:54.1 | 1.3  |     |     |       |       |        |
| TNS  | e Pn - | 00:40:41.9 | -2.0 |     |     | 122.0 | 69.5  | ML 2.0 |
|      | e Pg Z | 00:40:42.7 | -0.2 |     |     |       |       |        |
|      | e Sg N | 00:40:57.7 | 0.6  |     |     |       |       |        |
| BUG  | e Sn E | 00:41:10.9 | -0.4 |     |     | 179.4 | 9.5   | ML 2.1 |
|      | e Sg N | 00:41:12.4 | -1.1 |     |     |       |       |        |
| LBG  | e Sg   | 00:41:16.7 | -0.9 |     |     | 193.7 | 132.2 | ML 1.9 |
| BFO  | e Pg Z | 00:40:55.1 | -1.1 |     |     | 200.8 | 146.7 | ML 1.6 |
|      | e Sg N | 00:41:17.0 | -2.6 |     |     |       |       |        |
| HOL  | e Pn   | 00:40:54.1 | -1.8 |     |     | 220.6 | 102.8 | ML 2.2 |
|      | e Sn   | 00:41:17.5 | -2.5 |     |     |       |       |        |
| KIZ  | e Sg   | 00:41:24.5 | -1.9 |     |     | 224.8 | 159.1 | ML 2.1 |
| BEU  | e Sg   | 00:41:29.2 | 0.1  |     |     | 234.1 | 126.0 | ML 2.1 |
| FELD | i Pg - | 00:41:02.4 | 0.3  |     |     | 235.4 | 158.4 |        |
|      | i Sg   | 00:41:28.5 | -1.0 |     |     |       |       |        |

|     |   |    |   |            |      |     |       |       |    |     |
|-----|---|----|---|------------|------|-----|-------|-------|----|-----|
| SGW | e | Sg |   | 00:41:35.5 | -1.0 |     | 260.0 | 137.3 | ML | 2.1 |
| CLZ | e | Sg | N | 00:41:57.4 | 0.2  | 2.0 | 332.4 | 46.9  |    |     |

| Date   | Origin Time       | OT_err   | Lat            | Long          | Smajor | Sminor | Az  | Depth    | D_err   | Ndef | Nsta | Gap | Mag          | Ref | Source     | Ev_type |
|--|-------------------|----------|----------------|---------------|--------|--------|-----|----------|---------|------|------|-----|--------------|-----|------------|---------|
| 1997/07/30   | 21:24:15.9        |          | 50.234N        | 7.852E        |        |        |     | 10G      |         |      | 57   |     | 3.6ML        | STR | NEIC       |         |
| ML= 3.1(DBN), ML= 3.0(VIE)                                     |                   |          |                |               |        |        |     |          |         |      |      |     |              |     |            |         |
| 1997/07/30   | 21:24:17.6        | + - 0.20 | 50.178N        | 7.958E        | 3.7    | 2.7    | 51  | 2        | + - 0.0 | 78   | 28   |     | 3.6ML        |     | LDG        | L       |
| 1997/07/30   | 21:24:17.4        | + - 0.34 | 50.240N        | 7.940E        | 4.4    | 3.3    | 49  | 0        | + - 0.0 | 14   | 9    | 124 | 2.8ML        | BFO | BGR        | L       |
| 1997/07/30   | 21:24:17.4        | + - 0.47 | 50.240N        | 8.010E        | 7.8    | 4.4    | 28  | 10       | + - 3.3 | 22   | 13   | 122 | 3.1ML        |     | SZGRF      | L       |
| 1997/07/30   | 21:24:18.2        | + - 0.90 | 50.210N        | 7.920E        | 10.0   | 3.0    | 357 | 2        | + - 4.0 | 27   | 18   | 255 | 2.8ML        |     | LEDBW      | L       |
| followed by aftershock (Ml=2.0) approximately 60 seconds later |                   |          |                |               |        |        |     |          |         |      |      |     |              |     |            |         |
| <b>1997/07/30</b>  | <b>21:24:17.4</b> |          | <b>50.260N</b> | <b>7.970E</b> |        |        |     | <b>7</b> |         |      |      |     | <b>2.8ML</b> |     | <b>IGF</b> |         |

Bad Ems, E of Koblenz

| Sta  | Phase  | Time       | TRes | Def | S/N | Dist  | EvAz  | Mag    |
|------|--------|------------|------|-----|-----|-------|-------|--------|
| TNS  | e Pg - | 21:24:23.7 | 0.4  |     |     | 34.2  | 96.8  | ML 2.9 |
|      | e Sg + | 21:24:27.3 | -0.1 |     |     |       |       |        |
| ABH  | i Pg + | 21:24:26.5 | 0.2  |     |     | 51.8  | 215.8 |        |
|      | e PmP  | 21:24:29.2 | -0.7 |     |     |       |       |        |
|      | e Sg   | 21:24:32.7 | 0.4  |     |     |       |       |        |
| RUP  | e Pg + | 21:24:32.4 | -0.3 |     |     | 90.0  | 226.7 |        |
| TOD  | e Pg - | 21:24:33.2 | -0.2 |     |     | 94.1  | 140.3 |        |
|      | e Sg   | 21:24:44.2 | -0.2 |     |     |       |       |        |
| KTD  | i Pg - | 21:24:35.3 | 0.1  |     |     | 104.8 | 175.5 |        |
| HEI  | i Pg - | 21:24:36.4 | 0.3  |     |     | 110.1 | 150.1 |        |
|      | PmP    | 21:24:37.3 | -0.8 |     |     |       |       |        |
|      | e Sg   | 21:24:50.1 | 1.2  |     |     |       |       |        |
| GSH  | e Pg Z | 21:24:38.7 | 0.1  |     |     | 124.5 | 295.8 | ML 2.9 |
|      | e Sg N | 21:24:53.9 | 0.9  |     |     |       |       |        |
| BUG  | e Pg Z | 21:24:41.5 | 0.3  |     |     | 140.2 | 339.7 | ML 3.1 |
|      | e Sg N | 21:24:58.1 | 0.6  |     |     |       |       |        |
| HOL  | e Pn   | 21:24:43.5 | -0.3 |     |     | 165.0 | 126.1 | ML 3.2 |
|      | i Pg - | 21:24:46.2 | 0.8  |     |     |       |       |        |
|      | e Sn   | 21:25:02.4 | -0.0 |     |     |       |       |        |
| LBG  | e Pn   | 21:24:46.3 | -0.2 |     |     | 187.2 | 161.1 | ML 2.8 |
|      | e Sg   | 21:25:10.3 | -0.7 |     |     |       |       |        |
| BEU  | i Pn + | 21:24:49.5 | -0.2 |     |     | 213.7 | 150.2 | ML 2.8 |
| BFO  | e Pn   | 21:24:49.7 | -0.3 |     |     | 216.2 | 172.9 | ML 2.8 |
|      | e Pg Z | 21:24:53.2 | -0.9 |     |     |       |       |        |
|      | e Sg   | 21:25:18.9 | -0.3 |     |     |       |       |        |
| IBBN | e Pg Z | 21:24:54.7 | -1.3 |     |     | 228.1 | 356.4 | ML 3.5 |
|      | e Sn N | 21:25:18.0 | 2.1  |     |     |       |       |        |
|      | e Sg N | 21:25:22.4 | -0.2 |     |     |       |       |        |
| GRFO | e Pn Z | 21:24:54.4 | 1.4  |     |     | 240.9 | 104.0 | ML 3.0 |
|      | e Pg Z | 21:24:58.9 | 0.6  |     |     |       |       |        |
|      | e Sn N | 21:25:20.1 | 1.6  |     |     |       |       |        |
|      | e Sg N | 21:25:25.1 | -1.1 |     |     |       |       |        |



| Sta  | Phase  | Time       | TRes | Def | S/N  | Dist  | EvAz  | Mag    |
|------|--------|------------|------|-----|------|-------|-------|--------|
| TNS  | i Pg - | 21:28:29.8 | 0.3  |     |      | 34.2  | 96.8  | ML 2.1 |
|      | e Sg E | 21:28:33.4 | -0.2 |     | 23.4 |       |       |        |
| GSH  | e Pg Z | 21:28:44.9 | 0.1  |     | 3.4  | 124.5 | 295.8 | ML 2.0 |
|      | e Sg N | 21:29:00.0 | 0.8  |     | 4.2  |       |       |        |
| BUG  | e Sg E | 21:29:03.7 | -0.0 |     | 4.3  | 140.2 | 339.7 | ML 2.1 |
| BFO  | e Sg E | 21:29:24.9 | -0.5 |     | 2.9  | 216.2 | 172.9 | ML 2.1 |
| GRFO | e Sg N | 21:29:32.2 | -0.2 |     | 2.6  | 240.9 | 104.0 |        |
| CLZ  | e Pg Z | 21:29:04.9 | 0.0  |     | 4.1  | 243.1 | 42.7  |        |
| MOX  | e Pn   | 21:29:02.2 | 0.5  |     |      | 261.6 | 79.2  | ML 2.3 |
|      | e Sn N | 21:29:31.1 | 2.0  |     | 1.5  |       |       |        |
| WET  | e Pn E | 21:29:17.3 | 1.8  |     | 5.6  | 374.1 | 107.5 |        |
| GEC2 | e Pn Z | 21:29:25.4 | 1.6  |     | 3.9  | 442.2 | 108.6 |        |
|      | e Sn N | 21:30:09.3 | 2.0  |     | 3.2  |       |       |        |

| Date              | Origin Time       | OT_err  | Lat            | Long          | Smajor | Sminor | Az  | Depth     | D_err | Ndef | Nsta | Gap | Mag          | Ref | Source     | Ev_type  |
|-------------------|-------------------|---------|----------------|---------------|--------|--------|-----|-----------|-------|------|------|-----|--------------|-----|------------|----------|
| 1997/07/30        | 22:39:09.1        | +- 0.91 | 51.720N        | 7.720E        | 15.6   | 4.4    | 154 | 0G        |       | 7    | 4    | 219 | 2.1ML        | GSH | BGR        | I?       |
| <b>1997/07/30</b> | <b>22:39:08.4</b> |         | <b>51.653N</b> | <b>7.726E</b> |        |        |     | <b>1G</b> |       |      |      |     | <b>1.9ML</b> |     | <b>RUB</b> | <b>I</b> |

Hamm/Westfalen, Ruhr Coal Mining District

| Sta | Phase    | Time       | TRes | Def | S/N | Dist  | EvAz  | Mag    |
|-----|----------|------------|------|-----|-----|-------|-------|--------|
| BUG | i Pg - Z | 22:39:16.2 | 1.1  | TA  |     | 39.4  | 233.4 | ML 1.9 |
|     | e Sg E   | 22:39:21.7 | 2.1  |     | 7.2 |       |       |        |
| GSH | e Sg N   | 22:39:50.5 | 2.6  |     | 4.2 | 138.5 | 223.2 | ML 2.1 |
| TNS | e Pn Z   | 22:39:36.8 | 1.1  |     | 3.4 | 166.9 | 162.1 | ML 2.2 |
|     | e Sn N   | 22:39:57.0 | 2.0  |     |     |       |       |        |
| CLZ | e Pg Z   | 22:39:40.0 | 0.5  |     | 5.6 | 183.4 | 82.4  | ML 2.2 |
|     | e Sg Z   | 22:40:02.0 | 1.2  |     | 2.1 |       |       |        |
| MOX | e (Pg)   | 22:39:59.7 | 1.6  |     |     | 293.5 | 110.9 |        |
|     | e Sg     | 22:40:35.2 | 2.9  |     |     |       |       |        |
| CLL | e Sg     | 22:40:59.0 | 5.6  |     |     | 367.4 | 93.9  |        |
| BRG | i Sg     | 22:41:15.9 | 1.5  |     |     | 441.0 | 98.9  |        |

## Unassociated arrivals

| Sta  | Phase  | Date       | Time       | TRes | Def | S/N | Dist | EvAz | Mag    |
|------|--------|------------|------------|------|-----|-----|------|------|--------|
| CLL  | e Sg   | 1997/07/01 | 10:30:29.0 |      |     |     |      |      |        |
| MOX  | e (Pg) | 1997/07/02 | 02:24:19.2 |      |     |     |      |      |        |
| MOX  | e Sg   | 1997/07/02 | 02:24:59.7 |      |     |     |      |      |        |
| CLL  | e Sg   | 1997/07/02 | 12:26:25.0 |      |     |     |      |      |        |
| CLL  | e Sg   | 1997/07/02 | 15:06:34.0 |      |     |     |      |      |        |
| BRG  | e Sg   | 1997/07/02 | 15:06:36.9 |      |     |     |      |      |        |
| MOX  | e Sg   | 1997/07/02 | 19:27:20.7 |      |     |     |      |      |        |
| BRG  | i Sg   | 1997/07/03 | 09:17:50.0 |      |     |     |      |      |        |
| CLL  | i Sg   | 1997/07/03 | 09:18:18.3 |      |     |     |      |      |        |
| CLL  | e Sg   | 1997/07/03 | 10:56:42.0 |      |     |     |      |      |        |
| MOX  | e (Pg) | 1997/07/03 | 19:04:45.8 |      |     |     |      |      | ML 3.2 |
| MOX  | e Sg   | 1997/07/03 | 19:05:25.5 |      |     |     |      |      |        |
| BRG  | i Sg   | 1997/07/04 | 06:02:23.6 |      |     |     |      |      |        |
| GRA1 | e Pg   | 1997/07/04 | 20:05:18.0 |      |     |     |      |      |        |
| GRA1 | e Sg   | 1997/07/04 | 20:05:36.6 |      |     |     |      |      |        |
| MOX  | i Pg   | 1997/07/04 | 20:05:13.1 |      |     |     |      |      |        |
| MOX  | i Sg   | 1997/07/04 | 20:05:27.6 |      |     |     |      |      |        |
| CLL  | i Pg   | 1997/07/04 | 20:13:58.3 |      |     |     |      |      |        |
| CLL  | i Sg   | 1997/07/04 | 20:14:24.7 |      |     |     |      |      |        |
| MOX  | i (Sg) | 1997/07/04 | 20:13:54.5 |      |     |     |      |      |        |
| BRG  | i Pg   | 1997/07/04 | 20:14:08.6 |      |     |     |      |      |        |

|      |   |      |            |            |
|------|---|------|------------|------------|
| BRG  | i | Sg   | 1997/07/04 | 20:14:40.6 |
| CLL  | i | Pg   | 1997/07/04 | 20:13:58.3 |
| CLL  | i | Sg   | 1997/07/04 | 20:14:24.7 |
| BRG  | i | Sg   | 1997/07/04 | 22:46:47.8 |
| GRA1 | e | Sg   | 1997/07/06 | 10:48:12.5 |
| CLL  | e | Sg   | 1997/07/07 | 17:42:08.0 |
| BRG  | i | Sg   | 1997/07/07 | 23:11:52.0 |
| BRG  | i | Sg   | 1997/07/08 | 00:02:45.0 |
| CLL  | e | (Sg) | 1997/07/08 | 00:03:21.0 |
| BRG  | i | Sg   | 1997/07/08 | 07:28:20.9 |
| BRG  | i | Sg   | 1997/07/08 | 10:37:12.4 |
| BRG  | e | Sg   | 1997/07/09 | 00:58:34.4 |
| CLL  | e | (Sg) | 1997/07/11 | 02:22:58.0 |
| BRG  | i | Sg   | 1997/07/11 | 02:22:55.4 |
| OGA  | e | Pn   | 1997/07/15 | 08:52:18.8 |
| BRG  | i | Sg   | 1997/07/15 | 19:53:14.4 |
| CLL  | e | Sg   | 1997/07/16 | 20:12:02.0 |
| OGA  | i | Pg + | 1997/07/18 | 13:00:01.6 |
| BRG  | i | Sg   | 1997/07/18 | 16:12:09.8 |
| BRG  | i | Pg   | 1997/07/19 | 03:18:54.3 |
| BRG  | i | Pg   | 1997/07/19 | 05:22:07.2 |
| CLL  | e | (Sg) | 1997/07/26 | 20:19:19.0 |
| MOX  | e | Pg   | 1997/07/28 | 02:29:35.5 |
| MOX  | i | Sg   | 1997/07/28 | 02:30:13.2 |



CLL e (Sg) 1997/07/31 10:46:07.0