Supplement 1: Coordinates of the faults

Table S1: Geographic coordinates of the fault lines

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Source Zone Name** | **Longitude** | **Latitude** | **Source Zone Name** | **Longitude** | **Latitude** |
| Izmit Rupture System | 30.9367 | 40.7646 | Düzce Rupture System | 31.5297 | 40.7376 |
| 30.8742 | 40.7437 | 31.5031 | 40.7403 |
| 30.8467 | 40.7343 | 31.4779 | 40.7459 |
| 30.7409 | 40.7093 | 31.453 | 40.7479 |
| 30.7134 | 40.7033 | 31.4238 | 40.753 |
| 30.6624 | 40.6887 | 31.4137 | 40.7619 |
| 30.5887 | 40.7012 | 31.4006 | 40.7622 |
| 30.5675 | 40.6984 | 31.3839 | 40.7653 |
| 30.4719 | 40.702 | 31.3412 | 40.7763 |
| 30.4142 | 40.7087 | 31.2976 | 40.7782 |
| 30.3579 | 40.7109 | 31.2817 | 40.7761 |
| 30.324 | 40.7151 | 31.235 | 40.7761 |
| 30.3083 | 40.7205 | 31.1767 | 40.7726 |
| 30.2756 | 40.7236 | 31.1445 | 40.7682 |
| 30.2047 | 40.7207 | 31.1287 | 40.7682 |
| 30.0279 | 40.7237 | 31.108 | 40.766 |
| 29.9845 | 40.7242 | 31.0812 | 40.7605 |
| 29.9226 | 40.7217 | 31.0588 | 40.7547 |
| 29.8478 | 40.7279 | 31.0221 | 40.7632 |
| 29.7943 | 40.7283 | 30.9947 | 40.7632 |
| 29.7329 | 40.7346 | 30.97 | 40.7598 |
| 29.6374 | 40.7337 | 30.9367 | 40.7646 |
| 29.5069 | 40.7236 |  |  |
| 29.3472 | 40.7266 |  |  |
| 29.3012 | 40.7247 |  |  |
| 29.2381 | 40.7282 |  |  |
| 29.1878 | 40.7383 |  |  |
| 29.0254 | 40.7567 |  |  |
| 29.0105 | 40.7836 |  |  |
| 28.9456 | 40.8393 |  |  |
| **Source Zone Name** | **Longitude** | **Latitude** | **Source Zone Name** | **Longitude** | **Latitude** |
| Ganos/Saros Rupture System | 27.3729 | 40.7573 | Central Marmara Rupture System | 28.8779 | 40.8738 |
| 27.3366 | 40.751 | 28.8102 | 40.8785 |
| 27.211 | 40.7142 | 28.7458 | 40.8795 |
| 27.192 | 40.7148 | 28.681 | 40.8772 |
| 27.1548 | 40.704 | 28.5902 | 40.8701 |
| 27.0875 | 40.6832 | 28.5252 | 40.8667 |
| 26.9193 | 40.6295 | 28.4228 | 40.865 |
| 26.89 | 40.6177 | 28.197 | 40.8345 |
| 26.814 | 40.5966 | 28.1393 | 40.8276 |
| 26.7553 | 40.5784 | 27.9341 | 40.8209 |
| 26.7198 | 40.5676 | **Source Zone Name** | **Longitude** | **Latitude** |
| 26.5893 | 40.5294 | South Çınarcık Fault | 28.6916 | 40.7590 |
| 26.5806 | 40.5271 | 28.7551 | 40.7355 |
| 26.5042 | 40.5001 | 28.8386 | 40.7192 |
| 26.4451 | 40.4859 | 28.9286 | 40.7074 |
|  |  | 28.9915 | 40.6887 |
|  |  | 29.0218 | 40.6855 |
|  |  | 29.0637 | 40.6839 |
|  |  | 29.1584 | 40.6886 |