**table S2. Source parameters of 18 earthquakes obtained from earthquake relocation and waveform modeling.** The date and origin time are GMT time. The fault plane (strike, dip, rake) is either from the gCMT (shown in the parentheses) or from this study. MW is moment magnitude, λE is longitude, *ψ*N is latitude, and H is focal depth beneath the sea level.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ID | Data  yyyy/mm/dd | | Time (GMT)  hh:mm:ss.ss | Mw | | λE  /° | *ψ*N  /° | | H  /km | Fault plane  Strike/dip/Rake | | |
| 1  2  3  4  5  6  7  8  9  10  11  12  13  14  15  16  17  18 | | 2015/04/25  2015/04/25  2015/04/25  2015/04/26  2015/04/26  2015/05/12  2015/05/12  2015/05/16  2015/07/02  2015/08/23  2015/08/30  2015/10/07  2015/11/19  2015/11/24  2016/02/05  2016/02/24  2016/03/13  2016/03/30 | 06:11:25.57  06:45:21.21  23:16:15.60  07:09:09.77  16:26:07.32  07:05:19.40  07:36:53.65  11:34:09.26  01:56:12.72  09:02:03.95  13:17:38.74  04:58:19.27  04:15:52.00  12:24:16.78  16:20:09.61  09:22:16.16  05:15:35.77  12:26:42.24 | 7.8  6.6  5.5  6.7  5.6  7.3  6.3  5.5  4.2  4.8  4.5  4.2  5.0  4.6  5.2  4.7  4.4  4.1 | 28.2387  28.2990  27.8935  27.7666  27.7660  27.8032  27.6428  27.6059  27.9170  27.8915  27.7278  28.0575  27.8924  28.2527  27.8769  27.8404  27.8816  27.9175 | | | 84.7657  84.8592  84.9369  86.0136  85.8174  86.1299  86.2068  86.2006  85.5960  86.1230  85.7502  84.9151  85.7270  84.7806  85.4948  85.7204  84.8879  85.7205 | 16.5  15.0  10.5  19.0  14.2  19.0  10.0  7.4  14.4  6.8  12.4  19.6  15.4  8.1  22.6  3.9  11.3  13.2 | | (287/6/96)  (308/23/131)  (201/40/-20)  (289/14/98)  (305/26/115)  (307/11/127)  (299/28/116)  (324/34/138)  88/23/90  48/23/22  291/70/64  227/72/3  250/80/35  97/84/70  69/75/66  302/79/71  239/72/13  123/49/62 |