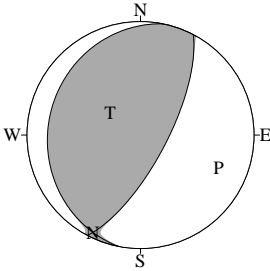


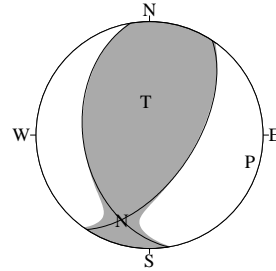
CMT SOLUTIONS FOR EARTHQUAKES IN NOVEMBER, 2015

2015/11/01 12:48:47.6  
E OFF AOMORI PREF  
Hypo.:41°34.0'N 142° 4.0'E 65km



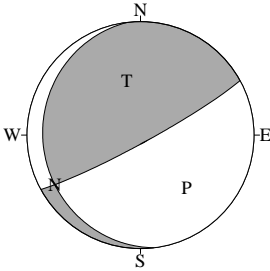
Cent.:41°38.2'N 142° 4.3'E 47km  $\Delta t = 3.7$   
Mo:  $1.50 \times 10^{17}$  N·m Mw:5.4 Mj:5.2 (sec)  
mrr: 0.89 mtt:-0.08 mff:-0.81  
mrt: 0.58 mrf: 1.01 mtf:-0.30 ( $\times 10^{17}$  N·m)  
STR DIP SLIP MOM AZM PLG  
NP1: 28° 71° 95° P-axis:-1.50 113° 26°  
NP2:191° 19° 75° T-axis: 1.50 306° 63°  
N-axis: 0.00 206° 5°  
V.R.: 79%  $\epsilon$ :-0.01 N:26 COMP:44

2015/11/02 06:09:39.1  
TAIWAN REGION  
Hypo.:22°39.3'N 121°42.9'E 3km



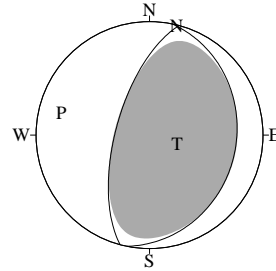
Cent.:22°36.7'N 121°42.0'E 17km  $\Delta t = 5.5$   
Mo:  $1.80 \times 10^{17}$  N·m Mw:5.4 Mj:5.4 (sec)  
mrr: 1.45 mtt: 0.23 mff:-1.69  
mrt: 0.71 mrf: 0.34 mtf:-0.44 ( $\times 10^{17}$  N·m)  
STR DIP SLIP MOM AZM PLG  
NP1: 33° 57° 117° P-axis:-1.90 105° 9°  
NP2:171° 41° 55° T-axis: 1.80 354° 66°  
N-axis: 0.10 198° 22°  
V.R.: 89%  $\epsilon$ :-0.04 N:9 COMP:12

2015/11/04 22:47:50.6  
OFF NEMURO PENINSULA  
Hypo.:43°20.2'N 146° 2.7'E 92km



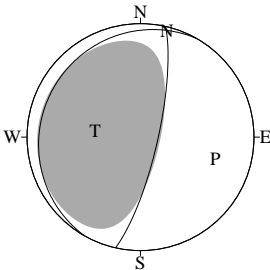
Cent.:43°20.2'N 146° 2.7'E 92km  $\Delta t = 0.6$   
Mo:  $1.15 \times 10^{16}$  N·m Mw:4.6 Mj:4.6 (sec)  
mrr: 0.22 mtt: 0.06 mff:-0.28  
mrt: 0.97 mrf: 0.50 mtf:-0.24 ( $\times 10^{16}$  N·m)  
STR DIP SLIP MOM AZM PLG  
NP1: 62° 84° 104° P-axis:-1.15 139° 38°  
NP2:173° 15° 22° T-axis: 1.15 346° 49°  
N-axis: 0.00 240° 14°  
V.R.: 81%  $\epsilon$ : 0.00 N:10 COMP:14

2015/11/05 17:23: 3.6  
E OFF HACHIJOJIMA ISLAND  
Hypo.:32°17.5'N 140°59.0'E 37km



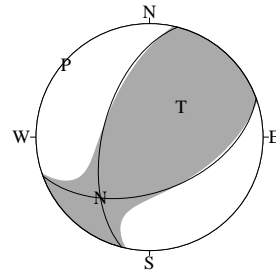
Cent.:32°12.4'N 140°59.7'E 41km  $\Delta t = 1.5$   
Mo:  $4.36 \times 10^{16}$  N·m Mw:5.0 Mj:5.1 (sec)  
mrr: 3.39 mtt:-0.38 mff:-3.02  
mrt:-0.80 mrf:-2.76 mtf:-0.65 ( $\times 10^{16}$  N·m)  
STR DIP SLIP MOM AZM PLG  
NP1: 11° 24° 87° P-axis:-4.25 284° 21°  
NP2:195° 66° 92° T-axis: 4.48 108° 69°  
N-axis:-0.23 14° 1°  
V.R.: 72%  $\epsilon$ : 0.05 N:30 COMP:50

2015/11/06 03:02:52.6  
FAR E OFF SANRIKU  
Hypo.:39°22.3'N 143°41.6'E 35km



Cent.:39°22.3'N 143°42.3'E 10km  $\Delta t = 0.6$   
Mo:  $1.14 \times 10^{16}$  N·m Mw:4.6 Mj:5.0 (sec)  
mrr: 0.55 mtt:-0.19 mff:-0.37  
mrt: 0.20 mrf: 1.02 mtf:-0.12 ( $\times 10^{16}$  N·m)  
STR DIP SLIP MOM AZM PLG  
NP1: 13° 78° 86° P-axis:-1.07 106° 32°  
NP2:210° 13° 106° T-axis: 1.22 278° 57°  
N-axis:-0.14 14° 4°  
V.R.: 69%  $\epsilon$ : 0.12 N:17 COMP:21

2015/11/06 08:30:13.5  
OFF NEMURO PENINSULA  
Hypo.:42°56.7'N 146°28.7'E 57km

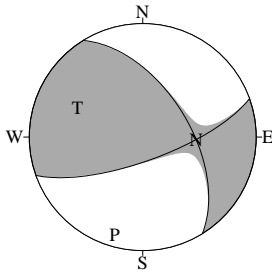


Cent.:42°56.7'N 146°28.8'E 57km  $\Delta t = 0.3$   
Mo:  $2.57 \times 10^{15}$  N·m Mw:4.2 Mj:4.1 (sec)  
mrr: 1.81 mtt:-0.71 mff:-1.11  
mrt: 0.53 mrf:-0.82 mtf:-1.79 ( $\times 10^{15}$  N·m)  
STR DIP SLIP MOM AZM PLG  
NP1: 70° 50° 133° P-axis:-2.72 311° 3°  
NP2:194° 56° 51° T-axis: 2.41 46° 58°  
N-axis: 0.31 219° 32°  
V.R.: 71%  $\epsilon$ :-0.11 N:9 COMP:11

EQUAL AREA PROJECTON, LOWER HEMISPHERE.

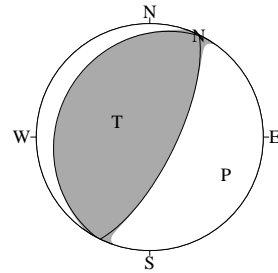
Hypo.:Location of hypocenter, Cent.:Location of centroid,  $\Delta t$ :Centroid time minus origin time  
Mo:Total scalar moment, Mw:Moment Magnitude, Mj:JMA Magnitude  
mrr,mtt,mff,mrt,mrf,mtf: Moment tensor components, STR,DIP,SLIP:Fault parameters of nodal plane  
MOM,AZM,PLG: Moment tensor component, azimuth and plunge of P-, T-, N-axis  
V.R.:Variance Reduction,  $\epsilon$ :Non-double couple component ratio, N:Number of stations, COMP:Number of components

2015/11/07 22:44:45.9  
SOUTHERN IBARAKI PREF  
Hypo.:35°59.3'N 139°57.6'E 101km



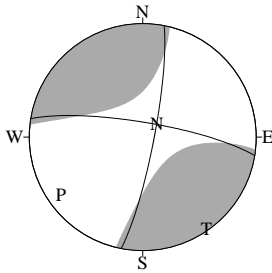
Cent.:36° 0.4'N 139°57.6'E 108km  $\Delta t = 1.4$   
Mo:  $3.36 \times 10^{16}$  N·m Mw:5.0 Mj:4.9 (sec)  
mrr: 1.15 mtt:-2.70 mff: 1.55  
mrt: 1.24 mrf: 1.22 mtf: 1.67 ( $\times 10^{16}$  N·m)  
STR DIP SLIP MOM AZM PLG  
NP1: 70° 73° 35° P-axis:-3.42 196° 11°  
NP2:328° 56° 159° T-axis: 3.30 294° 37°  
N-axis: 0.12 93° 51°  
V.R.: 76%  $\epsilon$ :-0.04 N:51 COMP:85

2015/11/10 23:12:42.4  
FAR E OFF SANRIKU  
Hypo.:39°38.4'N 143°19.8'E 21km



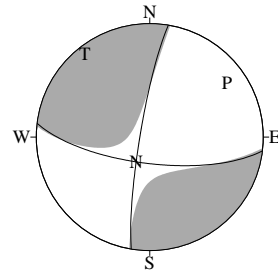
Cent.:39°38.4'N 143°20.2'E 21km  $\Delta t = 0.5$   
Mo:  $8.31 \times 10^{15}$  N·m Mw:4.5 Mj:4.7 (sec)  
mrr: 5.03 mtt:-0.96 mff:-4.06  
mrt: 2.84 mrf: 5.93 mtf:-2.12 ( $\times 10^{15}$  N·m)  
STR DIP SLIP MOM AZM PLG  
NP1: 26° 71° 89° P-axis:-8.37 116° 26°  
NP2:208° 19° 92° T-axis: 8.26 295° 64°  
N-axis: 0.11 26° 1°  
V.R.: 75%  $\epsilon$ :-0.01 N:28 COMP:35

2015/11/14 05:51:30.1  
SW OFF KYUSHU  
Hypo.:30°56.5'N 128°35.4'E 17km



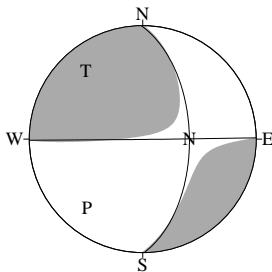
Cent.:31° 4.5'N 128°37.5'E 10km  $\Delta t = 17.9$   
Mo:  $1.38 \times 10^{19}$  N·m Mw:6.7 Mj:7.1 (sec)  
mrr:-0.36 mtt: 0.64 mff:-0.29  
mrt: 0.07 mrf:-0.20 mtf: 1.27 ( $\times 10^{19}$  N·m)  
STR DIP SLIP MOM AZM PLG  
NP1: 11° 82°-169° P-axis:-1.22 235° 13°  
NP2:279° 79° -8° T-axis: 1.53 145° 2°  
N-axis:-0.31 47° 76°  
V.R.: 73%  $\epsilon$ : 0.20 N:31 COMP:76

2015/11/14 12:51:50.9  
SW OFF KYUSHU  
Hypo.:31°11.6'N 128°40.9'E 13km



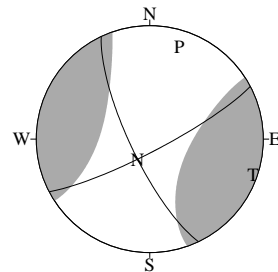
Cent.:31° 7.2'N 128°40.8'E 15km  $\Delta t = 0.9$   
Mo:  $1.00 \times 10^{16}$  N·m Mw:4.6 Mj:4.6 (sec)  
mrr:-0.16 mtt: 0.34 mff:-0.18  
mrt:-0.02 mrf: 0.31 mtf: 0.91 ( $\times 10^{16}$  N·m)  
STR DIP SLIP MOM AZM PLG  
NP1:189° 83°-161° P-axis:-0.96 55° 18°  
NP2: 97° 71° -7° T-axis: 1.05 322° 8°  
N-axis:-0.10 209° 70°  
V.R.: 75%  $\epsilon$ : 0.09 N:26 COMP:31

2015/11/14 17:40:52.8  
SW OFF KYUSHU  
Hypo.:31°20.1'N 128°42.6'E 5km



Cent.:31° 5.7'N 128°42.7'E 11km  $\Delta t = 1.8$   
Mo:  $1.45 \times 10^{16}$  N·m Mw:4.7 Mj:4.7 (sec)  
mrr:-0.06 mtt: 0.03 mff: 0.03  
mrt: 0.81 mrf: 0.10 mtf: 1.21 ( $\times 10^{16}$  N·m)  
STR DIP SLIP MOM AZM PLG  
NP1:359° 56° 180° P-axis:-1.39 219° 23°  
NP2: 89° 90° 47° T-axis: 1.52 320° 23°  
N-axis:-0.13 89° 56°  
V.R.: 86%  $\epsilon$ : 0.08 N:27 COMP:47

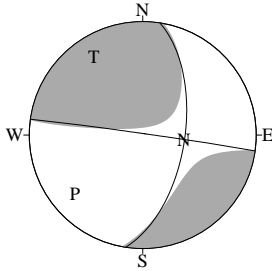
2015/11/14 19:21:41.6  
FAR E OFF MIYAGI PREF  
Hypo.:38° 1.1'N 143°48.6'E 44km



Cent.:38° 9.4'N 143°48.3'E 14km  $\Delta t = 8.6$   
Mo:  $4.40 \times 10^{16}$  N·m Mw:5.0 Mj:5.1 (sec)  
mrr:-2.05 mtt:-2.40 mff: 4.45  
mrt:-0.53 mrf:-0.32 mtf: 2.65 ( $\times 10^{16}$  N·m)  
STR DIP SLIP MOM AZM PLG  
NP1: 62° 81° -14° P-axis:-3.42 18° 16°  
NP2:155° 76°-171° T-axis: 5.39 109° 4°  
N-axis:-1.97 211° 73°  
V.R.: 77%  $\epsilon$ : 0.37 N:23 COMP:41

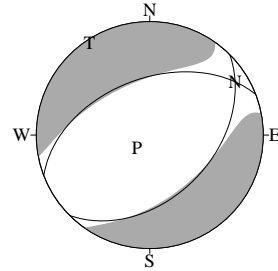
EQUAL AREA PROJECTON, LOWER HEMISPHERE.

2015/11/15 04:20:18.2  
 SW OFF KYUSHU  
 Hypo.: 31°19.8'N 128°43.0'E 9km



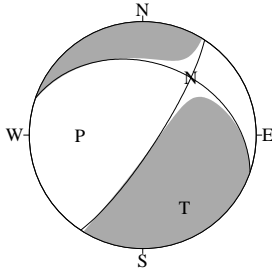
Cent.: 31°23.8'N 128°44.2'E 10km  $\Delta t = 10.4$   
 Mo:  $4.80 \times 10^{17}$  N·m Mw: 5.7 Mj: 5.9 (sec)  
 mrr: -0.45 mtt: 1.51 mff: -1.07  
 mrt: 2.41 mrf: -0.04 mtf: 3.91 ( $\times 10^{17}$  N·m)  
 STR DIP SLIP MOM AZM PLG  
 NP1: 9° 60° -179° P-axis: -4.50 229° 22°  
 NP2: 278° 89° -30° T-axis: 5.10 328° 20°  
 N-axis: -0.60 96° 60°  
 V.R.: 76%  $\epsilon$ : 0.11 N:36 COMP:77

2015/11/15 05:34:25.5  
 SW OFF KYUSHU  
 Hypo.: 31°13.4'N 128°39.2'E 9km



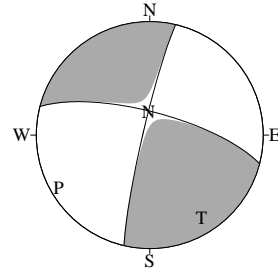
Cent.: 31°14.9'N 128°40.5'E 10km  $\Delta t = 8.2$   
 Mo:  $5.04 \times 10^{16}$  N·m Mw: 5.1 Mj: 5.1 (sec)  
 mrr: -4.49 mtt: 3.52 mff: 0.97  
 mrt: 0.84 mrf: -0.46 mtf: 2.84 ( $\times 10^{16}$  N·m)  
 STR DIP SLIP MOM AZM PLG  
 NP1: 45° 44° -108° P-axis: -4.70 225° 77°  
 NP2: 249° 49° -74° T-axis: 5.38 327° 3°  
 N-axis: -0.68 58° 12°  
 V.R.: 83%  $\epsilon$ : 0.13 N:11 COMP:24

2015/11/15 07:34:58.7  
 SW OFF KYUSHU  
 Hypo.: 30°54.6'N 128°35.0'E 17km



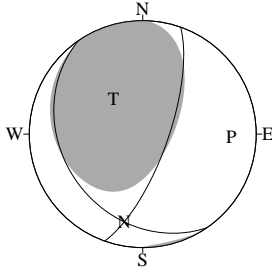
Cent.: 30°54.6'N 128°35.3'E 10km  $\Delta t = 5.5$   
 Mo:  $7.35 \times 10^{15}$  N·m Mw: 4.5 Mj: 4.3 (sec)  
 mrr: -2.07 mtt: 4.37 mff: -2.30  
 mrt: -2.70 mrf: -4.94 mtf: 2.85 ( $\times 10^{15}$  N·m)  
 STR DIP SLIP MOM AZM PLG  
 NP1: 33° 80° -125° P-axis: -7.13 269° 44°  
 NP2: 289° 36° -17° T-axis: 7.57 150° 27°  
 N-axis: -0.44 40° 34°  
 V.R.: 81%  $\epsilon$ : 0.06 N:18 COMP:23

2015/11/15 10:12:22.2  
 SW OFF KYUSHU  
 Hypo.: 31°19.5'N 128°38.1'E 6km



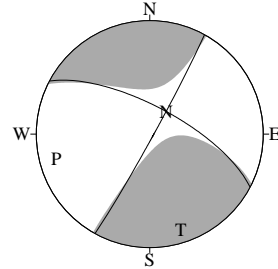
Cent.: 31°19.5'N 128°38.7'E 10km  $\Delta t = 5.4$   
 Mo:  $5.04 \times 10^{15}$  N·m Mw: 4.4 Mj: 4.3 (sec)  
 mrr: 0.15 mtt: 2.16 mff: -2.31  
 mrt: -0.78 mrf: -1.30 mtf: 4.26 ( $\times 10^{15}$  N·m)  
 STR DIP SLIP MOM AZM PLG  
 NP1: 193° 85° 163° P-axis: -4.99 240° 8°  
 NP2: 285° 73° 5° T-axis: 5.10 148° 15°  
 N-axis: -0.12 357° 73°  
 V.R.: 87%  $\epsilon$ : 0.02 N:27 COMP:37

2015/11/16 02:11:43.7  
 HIDAKA MOUNTAINS REGION  
 Hypo.: 42°32.4'N 143° 8.3'E 93km



Cent.: 42°32.4'N 143° 8.2'E 93km  $\Delta t = 0.5$   
 Mo:  $6.29 \times 10^{15}$  N·m Mw: 4.5 Mj: 4.4 (sec)  
 mrr: 3.83 mtt: 0.08 mff: -3.90  
 mrt: 2.99 mrf: 3.98 mtf: 1.11 ( $\times 10^{15}$  N·m)  
 STR DIP SLIP MOM AZM PLG  
 NP1: 19° 72° 113° P-axis: -5.59 92° 23°  
 NP2: 146° 29° 40° T-axis: 6.98 320° 57°  
 N-axis: -1.39 192° 22°  
 V.R.: 80%  $\epsilon$ : 0.20 N:15 COMP:19

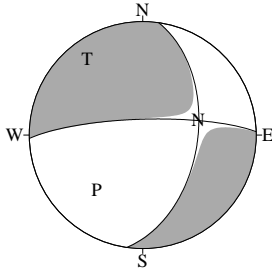
2015/11/16 14:11:34.0  
 SW OFF KYUSHU  
 Hypo.: 30°49.4'N 128°30.8'E 14km



Cent.: 30°49.5'N 128°31.2'E 14km  $\Delta t = 8.5$   
 Mo:  $6.22 \times 10^{15}$  N·m Mw: 4.5 Mj: 4.5 (sec)  
 mrr: -0.78 mtt: 5.26 mff: -4.47  
 mrt: -1.07 mrf: -1.77 mtf: 3.27 ( $\times 10^{15}$  N·m)  
 STR DIP SLIP MOM AZM PLG  
 NP1: 29° 87° -160° P-axis: -5.86 255° 16°  
 NP2: 298° 70° -3° T-axis: 6.58 162° 12°  
 N-axis: -0.72 36° 70°  
 V.R.: 80%  $\epsilon$ : 0.11 N:25 COMP:34

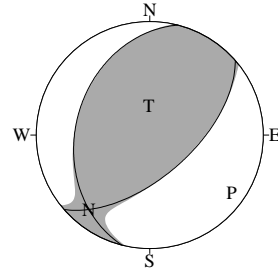
EQUAL AREA PROJECTON, LOWER HEMISPHERE.

2015/11/16 16:31:10.0  
 SW OFF KYUSHU  
 Hypo.:31° 8.1'N 128°47.7'E 1km



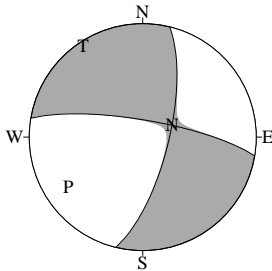
Cent.:31° 8.1'N 128°48.5'E 10km  $\Delta t = 7.6$   
 Mo:  $1.03 \times 10^{16}$  N·m Mw:4.6 Mj:4.6 (sec)  
 mrr:-0.27 mtt: 0.23 mff: 0.04  
 mrt: 0.62 mrf:-0.11 mtf: 0.77 ( $\times 10^{16}$  N·m)  
 STR DIP SLIP MOM AZM PLG  
 NP1: 8° 50°-165° P-axis:-1.01 220° 37°  
 NP2:268° 79° -41° T-axis: 1.04 324° 18°  
 N-axis:-0.03 75° 48°  
 V.R.: 85%  $\epsilon$ : 0.03 N:27 COMP:46

2015/11/17 01:49:10.3  
 FAR FIELD  
 Hypo.:48°13.1'N 155° 1.0'E 30km



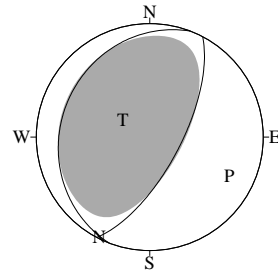
Cent.:47°47.2'N 154°58.5'E 46km  $\Delta t = 9.9$   
 Mo:  $0.99 \times 10^{18}$  N·m Mw:5.9 Mj:6.1 (sec)  
 mrr: 0.79 mtt:-0.17 mff:-0.62  
 mrt: 0.45 mrf: 0.20 mtf:-0.46 ( $\times 10^{18}$  N·m)  
 STR DIP SLIP MOM AZM PLG  
 NP1: 49° 60° 109° P-axis:-1.01 125° 13°  
 NP2:195° 35° 61° T-axis: 0.97 358° 69°  
 N-axis: 0.04 219° 16°  
 V.R.: 79%  $\epsilon$ :-0.04 N:9 COMP:26

2015/11/18 13:38:44.3  
 SW OFF KYUSHU  
 Hypo.:31°20.6'N 128°40.1'E 8km



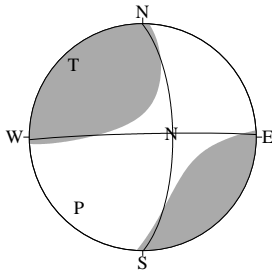
Cent.:31°19.6'N 128°42.7'E 13km  $\Delta t = 10.9$   
 Mo:  $2.84 \times 10^{16}$  N·m Mw:4.9 Mj:5.0 (sec)  
 mrr:-0.36 mtt: 1.21 mff:-0.86  
 mrt: 0.75 mrf:-0.72 mtf: 2.41 ( $\times 10^{16}$  N·m)  
 STR DIP SLIP MOM AZM PLG  
 NP1: 14° 71°-167° P-axis:-2.86 236° 22°  
 NP2:280° 78° -19° T-axis: 2.82 327° 4°  
 N-axis: 0.04 68° 67°  
 V.R.: 79%  $\epsilon$ :-0.01 N:25 COMP:36

2015/11/19 18:33: 1.9  
 E OFF FUKUSHIMA PREF  
 Hypo.:37°32.0'N 141°24.5'E 51km



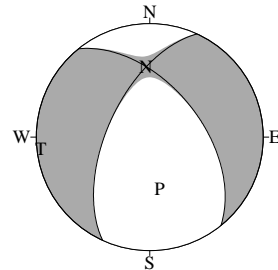
Cent.:37°32.8'N 141°24.9'E 51km  $\Delta t = 0.7$   
 Mo:  $2.57 \times 10^{16}$  N·m Mw:4.9 Mj:4.9 (sec)  
 mrr: 1.91 mtt:-0.47 mff:-1.44  
 mrt: 0.91 mrf: 1.60 mtf:-0.53 ( $\times 10^{16}$  N·m)  
 STR DIP SLIP MOM AZM PLG  
 NP1: 28° 68° 93° P-axis:-2.45 116° 23°  
 NP2:201° 22° 84° T-axis: 2.69 302° 67°  
 N-axis:-0.25 207° 2°  
 V.R.: 74%  $\epsilon$ : 0.09 N:39 COMP:73

2015/11/19 23:41:45.7  
 SW OFF KYUSHU  
 Hypo.:31°15.4'N 128°42.2'E 12km



Cent.:31°12.7'N 128°42.7'E 12km  $\Delta t = 5.7$   
 Mo:  $1.25 \times 10^{16}$  N·m Mw:4.7 Mj:4.6 (sec)  
 mrr:-0.27 mtt: 0.13 mff: 0.14  
 mrt: 0.44 mrf: 0.11 mtf: 1.17 ( $\times 10^{16}$  N·m)  
 STR DIP SLIP MOM AZM PLG  
 NP1:360° 69°-178° P-axis:-1.10 222° 17°  
 NP2:269° 88° -21° T-axis: 1.40 316° 13°  
 N-axis:-0.29 83° 69°  
 V.R.: 85%  $\epsilon$ : 0.21 N:29 COMP:54

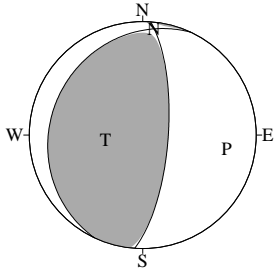
2015/11/20 08:15:53.1  
 NORTHERN IBARAKI PREF  
 Hypo.:36°40.2'N 140°39.1'E 10km



Cent.:36°40.3'N 140°39.2'E 10km  $\Delta t = 0.3$   
 Mo:  $1.67 \times 10^{15}$  N·m Mw:4.1 Mj:4.3 (sec)  
 mrr:-1.02 mtt:-0.58 mff: 1.60  
 mrt: 0.81 mrf: 0.26 mtf:-0.28 ( $\times 10^{15}$  N·m)  
 STR DIP SLIP MOM AZM PLG  
 NP1:321° 53°-140° P-axis:-1.68 169° 52°  
 NP2:205° 59° -45° T-axis: 1.65 264° 4°  
 N-axis: 0.04 357° 38°  
 V.R.: 76%  $\epsilon$ :-0.02 N:11 COMP:13

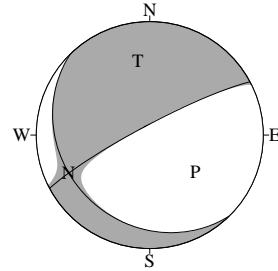
EQUAL AREA PROJECTON, LOWER HEMISPHERE.

2015/11/20 14:31:47.6  
 NEAR CHICHIJIMA ISLAND  
 Hypo.: 26°23.0'N 143° 6.3'E 0km



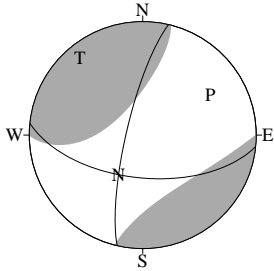
Cent.: 26°26.6'N 143° 6.3'E 14km  $\Delta t = 6.5$   
 Mo:  $6.90 \times 10^{17}$  N·m Mw: 5.8 Mj: 6.3 (sec)  
 mrr: 4.10 mtt: -0.19 mff: -3.92  
 mrt: 0.12 mrf: 5.49 mtf: -1.05 ( $\times 10^{17}$  N·m)  
 STR DIP SLIP MOM AZM PLG  
 NP1: 4° 72° 83° P-axis: -6.90 99° 26°  
 NP2: 205° 20° 110° T-axis: 6.90 263° 63°  
 N-axis: -0.10 6° 7°  
 V.R.: 76%  $\epsilon$ : 0.01 N: 28 COMP: 63

2015/11/28 11:51: 8.1  
 OFF NEMURO PENINSULA  
 Hypo.: 43°13.4'N 146°30.1'E 71km



Cent.: 43° 6.9'N 146°30.1'E 62km  $\Delta t = 1.3$   
 Mo:  $2.20 \times 10^{17}$  N·m Mw: 5.5 Mj: 5.6 (sec)  
 mrr: -0.52 mtt: 1.08 mff: -0.56  
 mrt: 1.72 mrf: 1.07 mtf: -0.30 ( $\times 10^{17}$  N·m)  
 STR DIP SLIP MOM AZM PLG  
 NP1: 135° 23° -18° P-axis: -2.30 129° 47°  
 NP2: 242° 83° -112° T-axis: 2.20 351° 34°  
 N-axis: 0.10 245° 22°  
 V.R.: 79%  $\epsilon$ : -0.03 N: 22 COMP: 40

2015/11/29 18:48:14.1  
 SW OFF KYUSHU  
 Hypo.: 31° 9.6'N 129° 7.4'E 5km



Cent.: 31° 9.6'N 129° 7.7'E 10km  $\Delta t = 4.4$   
 Mo:  $5.08 \times 10^{15}$  N·m Mw: 4.4 Mj: 4.4 (sec)  
 mrr: -2.37 mtt: 2.32 mff: 0.05  
 mrt: 1.11 mrf: 1.72 mtf: 4.53 ( $\times 10^{15}$  N·m)  
 STR DIP SLIP MOM AZM PLG  
 NP1: 193° 78° -148° P-axis: -3.88 59° 31°  
 NP2: 96° 59° -14° T-axis: 6.29 321° 13°  
 N-axis: -2.41 211° 56°  
 V.R.: 85%  $\epsilon$ : 0.38 N: 22 COMP: 30

EQUAL AREA PROJECTON, LOWER HEMISPHERE.