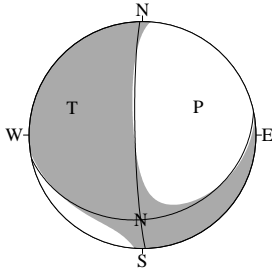


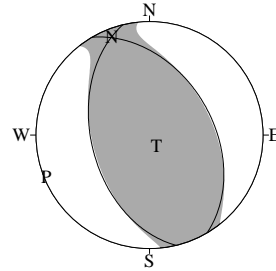
CMT SOLUTIONS FOR EARTHQUAKES IN JUNE, 2015

2015/06/03 06:04:27.5  
W OFF OGASAWARA  
Hypo.:27°49.9'N 140°46.0'E 695km



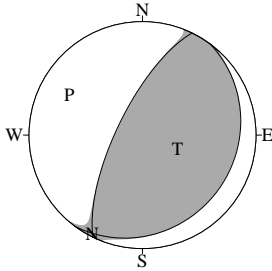
Cent.:27°48.4'N 140°39.4'E 695km  $\Delta t = 0.9$   
Mo:  $3.83 \times 10^{16}$  N·m Mw:5.0 Mj:5.6 (sec)  
mrr:-0.73 mtt: 0.23 mff: 0.50  
mrt:-0.50 mrf: 3.37 mtf: 1.66 ( $\times 10^{16}$  N·m)  
STR DIP SLIP MOM AZM PLG  
NP1: 78° 27° -12° P-axis:-4.05 63° 44°  
NP2:179° 85° -116° T-axis: 3.61 291° 34°  
N-axis: 0.44 181° 26°  
V.R.: 78%  $\epsilon$ :-0.11 N:32 COMP:39

2015/06/03 17:16: 2.9  
NEAR TORISHIMA IS  
Hypo.:31°12.8'N 142° 6.4'E 1km



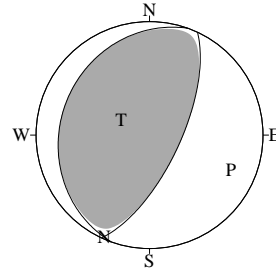
Cent.:31°12.1'N 142° 7.2'E 11km  $\Delta t = 2.7$   
Mo:  $2.60 \times 10^{16}$  N·m Mw:4.9 Mj:5.1 (sec)  
mrr: 2.45 mtt:-0.18 mff:-2.27  
mrt:-0.26 mrf:-0.27 mtf: 1.01 ( $\times 10^{16}$  N·m)  
STR DIP SLIP MOM AZM PLG  
NP1:330° 44° 78° P-axis:-2.68 248° 2°  
NP2:166° 47° 101° T-axis: 2.51 147° 81°  
N-axis: 0.17 339° 8°  
V.R.: 79%  $\epsilon$ :-0.06 N:25 COMP:28

2015/06/04 04:34:15.2  
TESHIKAGA REGION  
Hypo.:43°29.5'N 144° 3.6'E 0km



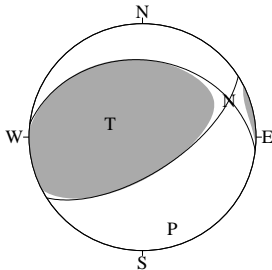
Cent.:43°29.5'N 144° 3.4'E 10km  $\Delta t = 0.6$   
Mo:  $1.68 \times 10^{16}$  N·m Mw:4.8 Mj:5.0 (sec)  
mrr: 0.99 mtt:-0.25 mff:-0.75  
mrt:-0.56 mrf:-1.22 mtf:-0.47 ( $\times 10^{16}$  N·m)  
STR DIP SLIP MOM AZM PLG  
NP1: 36° 19° 100° P-axis:-1.70 299° 27°  
NP2:206° 72° 87° T-axis: 1.67 111° 63°  
N-axis: 0.03 207° 3°  
V.R.: 77%  $\epsilon$ :-0.02 N:26 COMP:29

2015/06/08 15:01:11.7  
E OFF AOMORI PREF  
Hypo.:41°27.3'N 142° 1.1'E 66km



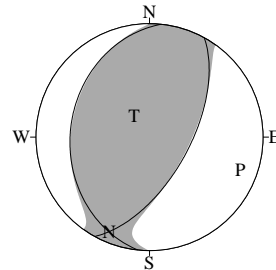
Cent.:41°28.8'N 142° 1.9'E 54km  $\Delta t = 3.6$   
Mo:  $1.53 \times 10^{18}$  N·m Mw:6.1 Mj:5.6 (sec)  
mrr: 1.07 mtt:-0.17 mff:-0.90  
mrt: 0.48 mrf: 0.98 mtf:-0.36 ( $\times 10^{18}$  N·m)  
STR DIP SLIP MOM AZM PLG  
NP1: 25° 68° 92° P-axis:-1.51 113° 23°  
NP2:200° 22° 85° T-axis: 1.54 298° 67°  
N-axis:-0.02 204° 2°  
V.R.: 83%  $\epsilon$ : 0.01 N:34 COMP:75

2015/06/09 05:44: 7.5  
SW IBARAKI PREF  
Hypo.:36°10.9'N 140° 0.8'E 51km



Cent.:36°10.9'N 140° 1.3'E 51km  $\Delta t = 0.4$   
Mo:  $3.76 \times 10^{15}$  N·m Mw:4.3 Mj:4.4 (sec)  
mrr: 2.89 mtt:-2.99 mff: 0.10  
mrt: 1.47 mrf: 1.71 mtf:-0.69 ( $\times 10^{15}$  N·m)  
STR DIP SLIP MOM AZM PLG  
NP1: 58° 64° 70° P-axis:-3.66 162° 16°  
NP2:277° 33° 124° T-axis: 3.86 292° 65°  
N-axis:-0.20 67° 18°  
V.R.: 66%  $\epsilon$ : 0.05 N:23 COMP:28

2015/06/10 03:44:51.3  
E OFF AOMORI PREF  
Hypo.:40°57.9'N 142°53.0'E 15km

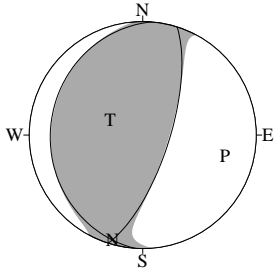


Cent.:40°57.9'N 142°53.9'E 40km  $\Delta t = 3.4$   
Mo:  $4.81 \times 10^{15}$  N·m Mw:4.4 Mj:4.4 (sec)  
mrr: 3.84 mtt:-0.01 mff:-3.83  
mrt: 1.56 mrf: 2.03 mtf:-1.38 ( $\times 10^{15}$  N·m)  
STR DIP SLIP MOM AZM PLG  
NP1: 29° 61° 102° P-axis:-4.95 110° 16°  
NP2:186° 31° 70° T-axis: 4.66 325° 71°  
N-axis: 0.29 203° 10°  
V.R.: 67%  $\epsilon$ :-0.06 N:17 COMP:28

EQUAL AREA PROJECTON, LOWER HEMISPHERE.

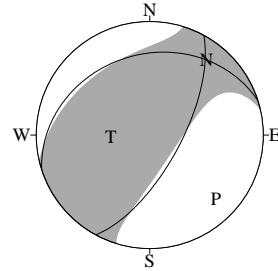
Hypo.:Location of hypocenter, Cent.:Location of centroid,  $\Delta t$ :Centroid time minus origin time  
Mo:Total scalar moment, Mw:Moment Magnitude, Mj:JMA Magnitude  
mrr,mtt,mff,mrt,mrf,mtf:Moment tensor components, STR,DIP,SLIP:Fault parameters of nodal plane  
MOM,AZM,PLG:Moment tensor component, 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

2015/06/10 17:32:59.1  
 FAR E OFF SANRIKU  
 Hypo.:39°39.7'N 143°37.1'E 36km



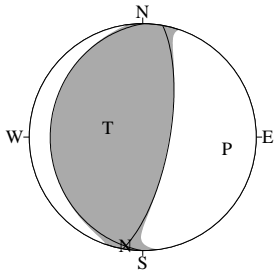
Cent.:39°39.7'N 143°36.7'E 15km  $\Delta t=17.8$   
 Mo:  $2.80 \times 10^{17}$ N·m Mw:5.6 Mj:5.8 (sec)  
 mrr: 1.67 mtt: 0.08 mff:-1.75  
 mrt: 0.72 mrf: 2.08 mtf:-0.39 ( $\times 10^{17}$ N·m)  
 STR DIP SLIP MOM AZM PLG  
 NP1: 18° 71° 95° P-axis:-2.90 104° 26°  
 NP2:184° 20° 77° T-axis: 2.70 295° 64°  
 N-axis: 0.10 196° 4°  
 V.R.: 77%  $\epsilon$ :-0.05 N:22 COMP:40

2015/06/11 05:06:58.3  
 SE OFF TOKACHI  
 Hypo.:41°42.0'N 144°15.7'E 28km



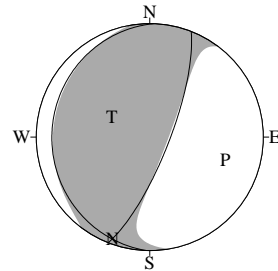
Cent.:41°36.7'N 144°15.9'E 18km  $\Delta t= 0.6$   
 Mo:  $0.92 \times 10^{16}$ N·m Mw:4.6 Mj:4.7 (sec)  
 mrr: 0.54 mtt:-0.31 mff:-0.23  
 mrt: 0.26 mrf: 0.55 mtf:-0.54 ( $\times 10^{16}$ N·m)  
 STR DIP SLIP MOM AZM PLG  
 NP1: 29° 68° 70° P-axis:-1.02 134° 20°  
 NP2:252° 29° 129° T-axis: 0.82 268° 62°  
 N-axis: 0.19 37° 18°  
 V.R.: 75%  $\epsilon$ :-0.19 N:23 COMP:33

2015/06/11 13:45:27.6  
 FAR E OFF SANRIKU  
 Hypo.:39°41.8'N 143°37.5'E 27km



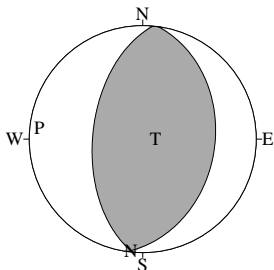
Cent.:39°34.4'N 143°36.8'E 20km  $\Delta t= 8.2$   
 Mo:  $3.40 \times 10^{17}$ N·m Mw:5.6 Mj:5.9 (sec)  
 mrr: 2.03 mtt: 0.10 mff:-2.14  
 mrt: 0.51 mrf: 2.57 mtf:-0.22 ( $\times 10^{17}$ N·m)  
 STR DIP SLIP MOM AZM PLG  
 NP1: 10° 71° 93° P-axis:-3.40 98° 26°  
 NP2:180° 20° 81° T-axis: 3.30 285° 64°  
 N-axis: 0.10 189° 3°  
 V.R.: 52%  $\epsilon$ :-0.03 N:21 COMP:36

2015/06/11 13:51:24.1  
 FAR E OFF SANRIKU  
 Hypo.:39°37.2'N 143°30.4'E 36km



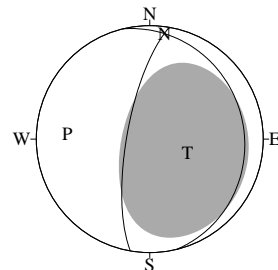
Cent.:39°36.4'N 143°29.8'E 19km  $\Delta t= 6.8$   
 Mo:  $2.80 \times 10^{17}$ N·m Mw:5.6 Mj:5.9 (sec)  
 mrr: 1.19 mtt: 0.19 mff:-1.38  
 mrt: 0.93 mrf: 2.30 mtf:-0.40 ( $\times 10^{17}$ N·m)  
 STR DIP SLIP MOM AZM PLG  
 NP1: 21° 76° 95° P-axis:-2.90 107° 31°  
 NP2:182° 15° 71° T-axis: 2.70 298° 59°  
 N-axis: 0.30 200° 5°  
 V.R.: 64%  $\epsilon$ :-0.09 N:23 COMP:46

2015/06/13 05:56: 0.4  
 E OFF MIYAGI PREF  
 Hypo.:38°59.6'N 142°15.8'E 50km



Cent.:38°59.6'N 142°16.1'E 50km  $\Delta t= 0.5$   
 Mo:  $1.01 \times 10^{16}$ N·m Mw:4.6 Mj:4.7 (sec)  
 mrr: 0.97 mtt:-0.01 mff:-0.96  
 mrt:-0.01 mrf:-0.30 mtf:-0.11 ( $\times 10^{16}$ N·m)  
 STR DIP SLIP MOM AZM PLG  
 NP1: 8° 37° 92° P-axis:-1.01 276° 9°  
 NP2:185° 54° 88° T-axis: 1.01 87° 81°  
 N-axis: 0.00 186° 1°  
 V.R.: 72%  $\epsilon$ : 0.00 N:43 COMP:73

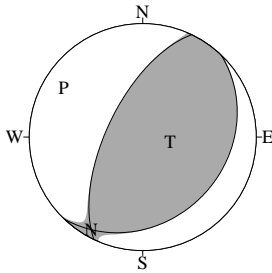
2015/06/13 11:33:19.7  
 ENSYUNADA  
 Hypo.:34°33.9'N 137°21.7'E 332km



Cent.:34°33.3'N 137°21.1'E 335km  $\Delta t= 0.8$   
 Mo:  $7.14 \times 10^{15}$ N·m Mw:4.5 Mj:4.4 (sec)  
 mrr: 4.72 mtt:-1.53 mff:-3.20  
 mrt:-1.58 mrf:-5.76 mtf: 0.50 ( $\times 10^{15}$ N·m)  
 STR DIP SLIP MOM AZM PLG  
 NP1:346° 18° 67° P-axis:-6.25 274° 28°  
 NP2:190° 73° 97° T-axis: 8.03 110° 61°  
 N-axis:-1.79 8° 7°  
 V.R.: 77%  $\epsilon$ : 0.22 N:34 COMP:36

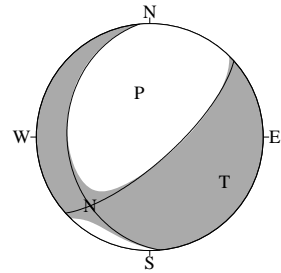
EQUAL AREA PROJECTON, LOWER HEMISPHERE.

2015/06/14 07:38:34.1  
 SOYA REGION  
 Hypo.:45°19.2'N 142° 2.0'E 300km



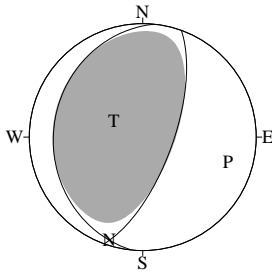
Cent.:45°21.0'N 142° 2.1'E 301km  $\Delta t = 0.6$   
 Mo:  $5.35 \times 10^{15}$  N·m Mw:4.4 Mj:4.3 (sec)  
 mrr: 4.12 mtt:-1.26 mff:-2.87  
 mrt:-1.13 mrf:-3.09 mtf:-2.09 ( $\times 10^{15}$  N·m)  
 STR DIP SLIP MOM AZM PLG  
 NP1: 44° 27° 106° P-axis:-5.39 302° 19°  
 NP2:206° 64° 82° T-axis: 5.31 99° 70°  
 N-axis: 0.08 209° 7°  
 V.R.: 65%  $\epsilon$ :-0.01 N:13 COMP:17

2015/06/15 07:22:20.0  
 W OFF OGASAWARA  
 Hypo.:27°25.5'N 140°39.4'E 404km



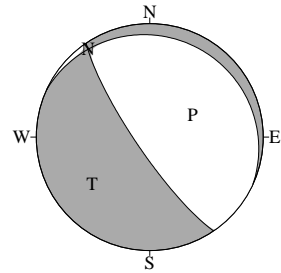
Cent.:27°23.1'N 140°36.7'E 390km  $\Delta t = -0.1$   
 Mo:  $2.78 \times 10^{16}$  N·m Mw:4.9 Mj:5.5 (sec)  
 mrr:-1.54 mtt:-0.13 mff: 1.67  
 mrt:-1.83 mrf:-1.13 mtf: 0.75 ( $\times 10^{16}$  N·m)  
 STR DIP SLIP MOM AZM PLG  
 NP1: 48° 72° -68° P-axis:-2.86 347° 57°  
 NP2:175° 28°-140° T-axis: 2.71 121° 24°  
 N-axis: 0.15 221° 21°  
 V.R.: 77%  $\epsilon$ :-0.05 N:21 COMP:27

2015/06/19 09:35:13.6  
 E OFF FUKUSHIMA PREF  
 Hypo.:37°30.7'N 141°32.3'E 46km



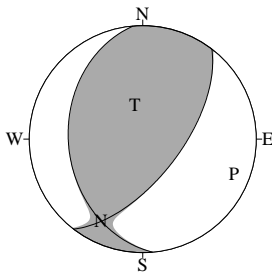
Cent.:37°32.1'N 141°32.5'E 45km  $\Delta t = 0.6$   
 Mo:  $1.39 \times 10^{16}$  N·m Mw:4.7 Mj:4.7 (sec)  
 mrr: 1.00 mtt:-0.12 mff:-0.89  
 mrt: 0.40 mrf: 0.93 mtf:-0.17 ( $\times 10^{16}$  N·m)  
 STR DIP SLIP MOM AZM PLG  
 NP1: 20° 68° 96° P-axis:-1.34 106° 23°  
 NP2:185° 22° 76° T-axis: 1.44 300° 66°  
 N-axis:-0.10 198° 5°  
 V.R.: 74%  $\epsilon$ : 0.07 N:47 COMP:65

2015/06/19 17:09:54.3  
 NEAR CHICHIJIMA ISLAND  
 Hypo.:27° 3.7'N 143°46.9'E 78km



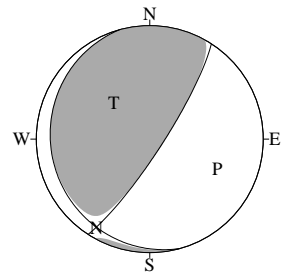
Cent.:27°11.1'N 143°47.5'E 10km  $\Delta t = 0.3$   
 Mo:  $3.61 \times 10^{16}$  N·m Mw:5.0 Mj:5.2 (sec)  
 mrr:-1.26 mtt: 0.75 mff: 0.50  
 mrt:-1.83 mrf: 2.82 mtf:-0.71 ( $\times 10^{16}$  N·m)  
 STR DIP SLIP MOM AZM PLG  
 NP1:146° 80° -84° P-axis:-3.62 63° 55°  
 NP2:295° 12°-121° T-axis: 3.60 231° 35°  
 N-axis: 0.02 325° 6°  
 V.R.: 78%  $\epsilon$ :-0.01 N:12 COMP:15

2015/06/19 21:30:16.0  
 NEAR AMAMI-OSHIMA ISLAND  
 Hypo.:29°13.4'N 130°28.4'E 66km



Cent.:29°13.3'N 130°31.2'E 20km  $\Delta t = 0.5$   
 Mo:  $7.67 \times 10^{15}$  N·m Mw:4.5 Mj:4.4 (sec)  
 mrr: 5.70 mtt: 0.47 mff:-6.18  
 mrt: 3.53 mrf: 2.49 mtf:-2.16 ( $\times 10^{15}$  N·m)  
 STR DIP SLIP MOM AZM PLG  
 NP1: 37° 63° 113° P-axis:-7.73 111° 15°  
 NP2:175° 35° 53° T-axis: 7.61 347° 65°  
 N-axis: 0.12 207° 20°  
 V.R.: 72%  $\epsilon$ :-0.02 N:15 COMP:16

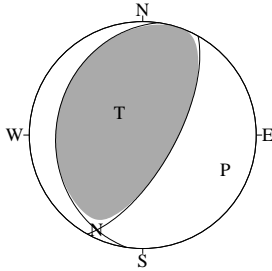
2015/06/22 11:17:53.9  
 E OFF MIYAGI PREF  
 Hypo.:38°44.1'N 142°20.0'E 38km



Cent.:38°46.9'N 142°20.7'E 38km  $\Delta t = 0.7$   
 Mo:  $3.08 \times 10^{16}$  N·m Mw:4.9 Mj:5.0 (sec)  
 mrr: 1.00 mtt: 0.17 mff:-1.16  
 mrt: 1.65 mrf: 2.35 mtf:-0.17 ( $\times 10^{16}$  N·m)  
 STR DIP SLIP MOM AZM PLG  
 NP1: 33° 81° 100° P-axis:-3.04 114° 35°  
 NP2:165° 14° 43° T-axis: 3.11 315° 53°  
 N-axis:-0.07 211° 10°  
 V.R.: 83%  $\epsilon$ : 0.02 N:13 COMP:19

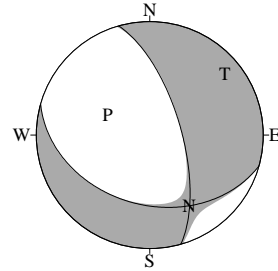
EQUAL AREA PROJECTON, LOWER HEMISPHERE.

2015/06/23 00:35:16.6  
 E OFF AOMORI PREF  
 Hypo.:41°29.0'N 142° 5.2'E 63km



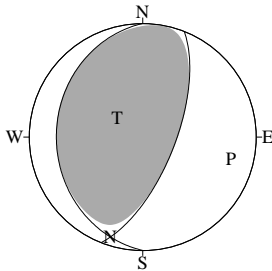
Cent.:41°29.0'N 142° 5.6'E 63km  $\Delta t = 0.6$   
 Mo:  $1.29 \times 10^{16}$  N·m Mw:4.7 Mj:4.6 (sec)  
 mrr: 0.93 mtt:-0.09 mff:-0.84  
 mrt: 0.50 mrf: 0.73 mtf:-0.28 ( $\times 10^{16}$  N·m)  
 STR DIP SLIP MOM AZM PLG  
 NP1: 29° 67° 98° P-axis:-1.27 113° 22°  
 NP2:188° 24° 71° T-axis: 1.30 314° 67°  
 N-axis:-0.03 206° 8°  
 V.R.: 79%  $\epsilon$ : 0.02 N:39 COMP:61

2015/06/23 21:18:29.0  
 W OFF OGASAWARA  
 Hypo.:27°42.0'N 140°10.7'E 484km



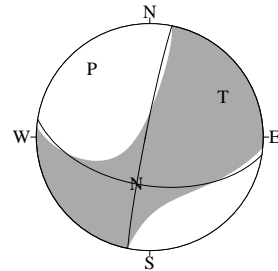
Cent.:27°43.5'N 140° 9.5'E 472km  $\Delta t = 3.8$   
 Mo:  $8.14 \times 10^{18}$  N·m Mw:6.5 Mj:6.5 (sec)  
 mrr:-4.95 mtt: 2.56 mff: 2.39  
 mrt:-0.42 mrf:-5.20 mtf:-4.54 ( $\times 10^{18}$  N·m)  
 STR DIP SLIP MOM AZM PLG  
 NP1:344° 67° -58° P-axis:-8.27 296° 56°  
 NP2:106° 39°-142° T-axis: 8.00 51° 16°  
 N-axis: 0.27 151° 29°  
 V.R.: 86%  $\epsilon$ :-0.03 N:29 COMP:73

2015/06/26 19:38: 1.3  
 E OFF AOMORI PREF  
 Hypo.:41°29.1'N 142° 0.4'E 65km



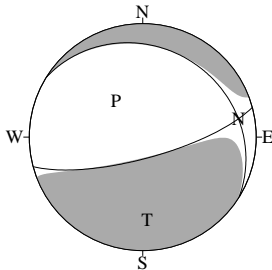
Cent.:41°29.1'N 142° 0.9'E 65km  $\Delta t = 0.6$   
 Mo:  $1.12 \times 10^{16}$  N·m Mw:4.6 Mj:4.4 (sec)  
 mrr: 0.82 mtt:-0.03 mff:-0.79  
 mrt: 0.35 mrf: 0.68 mtf:-0.14 ( $\times 10^{16}$  N·m)  
 STR DIP SLIP MOM AZM PLG  
 NP1: 21° 67° 99° P-axis:-1.10 104° 21°  
 NP2:180° 25° 71° T-axis: 1.14 307° 67°  
 N-axis:-0.04 198° 8°  
 V.R.: 78%  $\epsilon$ : 0.04 N:32 COMP:46

2015/06/27 01:16:40.3  
 NW OFF ISHIGAKIJIMA IS  
 Hypo.:24°52.5'N 123°19.8'E 116km



Cent.:24°52.3'N 123°19.9'E 120km  $\Delta t = 1.3$   
 Mo:  $1.71 \times 10^{16}$  N·m Mw:4.8 Mj:4.7 (sec)  
 mrr: 0.29 mtt:-0.55 mff: 0.26  
 mrt:-0.37 mrf:-0.91 mtf:-1.36 ( $\times 10^{16}$  N·m)  
 STR DIP SLIP MOM AZM PLG  
 NP1: 99° 55° 176° P-axis:-1.89 320° 22°  
 NP2:191° 87° 35° T-axis: 1.52 61° 27°  
 N-axis: 0.37 196° 55°  
 V.R.: 85%  $\epsilon$ :-0.20 N:7 COMP:10

2015/06/27 03:30: 9.4  
 NEAR KUNASHIRI ISLAND  
 Hypo.:43°56.2'N 146°58.2'E 73km



Cent.:43°56.2'N 146°58.2'E 73km  $\Delta t = 0.6$   
 Mo:  $1.37 \times 10^{16}$  N·m Mw:4.7 Mj:4.7 (sec)  
 mrr:-0.64 mtt: 0.85 mff:-0.21  
 mrt:-1.08 mrf:-0.36 mtf:-0.12 ( $\times 10^{16}$  N·m)  
 STR DIP SLIP MOM AZM PLG  
 NP1: 75° 75°-106° P-axis:-1.33 324° 57°  
 NP2:302° 22° -45° T-axis: 1.42 177° 28°  
 N-axis:-0.09 79° 15°  
 V.R.: 81%  $\epsilon$ : 0.06 N:18 COMP:23

EQUAL AREA PROJECTON, LOWER HEMISPHERE.