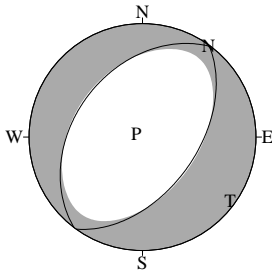


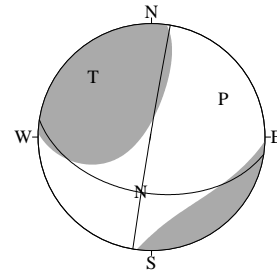
CMT SOLUTIONS FOR EARTHQUAKES IN JUNE, 2016

2016/06/03 17:00:24.5  
NEAR MINAMI-DAITTOJIMA IS  
Hypo.:26°52.9'N 130°14.6'E 55km



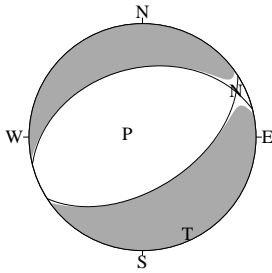
Cent.:26°42.4'N 130°14.8'E 19km  $\Delta t = 1.5$   
Mo:  $1.18 \times 10^{16}$  N·m Mw:4.6 Mj:4.4 (sec)  
mrr:-1.20 mtt: 0.45 mff:-0.75  
mrt:-0.12 mrf:-0.19 mtf: 0.49 ( $\times 10^{16}$  N·m)  
STR DIP SLIP MOM AZM PLG  
NP1: 36° 50° -91° P-axis:-1.22 298° 85°  
NP2:217° 40° -89° T-axis: 1.14 126° 5°  
N-axis: 0.09 36° 1°  
V.R.: 79%  $\epsilon$ :-0.07 N:11 COMP:18

2016/06/04 12:15:21.3  
SE OFF ERIMOMISAKI  
Hypo.:41°51.7'N 143°21.7'E 19km



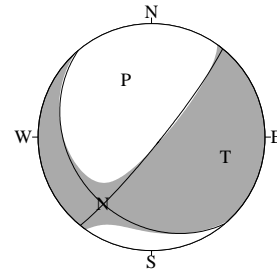
Cent.:41°51.7'N 143°22.0'E 19km  $\Delta t = 0.4$   
Mo:  $2.88 \times 10^{15}$  N·m Mw:4.2 Mj:4.3 (sec)  
mrr:-0.42 mtt: 0.58 mff:-0.15  
mrt: 1.04 mrf: 1.73 mtf: 2.18 ( $\times 10^{15}$  N·m)  
STR DIP SLIP MOM AZM PLG  
NP1:190° 89° -139° P-axis:-2.36 62° 29°  
NP2: 99° 49° -1° T-axis: 3.40 316° 27°  
N-axis:-1.04 191° 49°  
V.R.: 78%  $\epsilon$ : 0.31 N:14 COMP:16

2016/06/04 14:56:28.9  
SW OFF KYUSHU  
Hypo.:31°49.9'N 128°51.8'E 29km



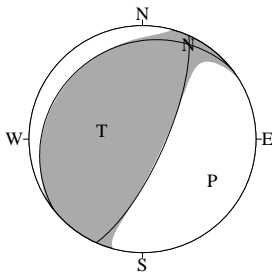
Cent.:31°49.9'N 128°51.4'E 20km  $\Delta t = 0.5$   
Mo:  $1.01 \times 10^{16}$  N·m Mw:4.6 Mj:4.5 (sec)  
mrr:-0.95 mtt: 0.83 mff: 0.12  
mrt:-0.15 mrf:-0.24 mtf: 0.38 ( $\times 10^{16}$  N·m)  
STR DIP SLIP MOM AZM PLG  
NP1: 57° 52° -102° P-axis:-1.00 281° 79°  
NP2:256° 39° -75° T-axis: 1.02 155° 7°  
N-axis:-0.02 64° 9°  
V.R.: 79%  $\epsilon$ : 0.02 N:12 COMP:19

2016/06/05 11:47:51.5  
NW OFF AMAMI-OSHIMA IS  
Hypo.:28°51.8'N 128°12.4'E 181km



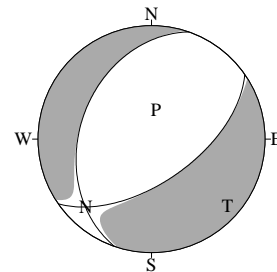
Cent.:28°53.2'N 128°12.3'E 181km  $\Delta t = 0.8$   
Mo:  $2.33 \times 10^{16}$  N·m Mw:4.8 Mj:4.6 (sec)  
mrr:-0.46 mtt:-0.85 mff: 1.31  
mrt:-1.45 mrf:-1.43 mtf:-0.13 ( $\times 10^{16}$  N·m)  
STR DIP SLIP MOM AZM PLG  
NP1: 39° 84° -62° P-axis:-2.43 336° 44°  
NP2:140° 29° -167° T-axis: 2.24 105° 33°  
N-axis: 0.19 216° 28°  
V.R.: 84%  $\epsilon$ :-0.08 N:16 COMP:22

2016/06/08 09:56:39.0  
NEAR AMAMI-OSHIMA ISLAND  
Hypo.:29°58.5'N 131°15.9'E 23km



Cent.:29°45.4'N 131°15.1'E 21km  $\Delta t = 1.5$   
Mo:  $2.18 \times 10^{16}$  N·m Mw:4.8 Mj:4.6 (sec)  
mrr: 1.08 mtt:-0.32 mff:-0.76  
mrt: 0.69 mrf: 1.69 mtf:-0.70 ( $\times 10^{16}$  N·m)  
STR DIP SLIP MOM AZM PLG  
NP1: 24° 74° 82° P-axis:-2.24 121° 29°  
NP2:232° 18° 116° T-axis: 2.11 282° 60°  
N-axis: 0.14 26° 8°  
V.R.: 72%  $\epsilon$ :-0.06 N:26 COMP:38

2016/06/08 10:54:27.4  
NEAR MINAMI-DAITTOJIMA IS  
Hypo.:27° 7.0'N 130°14.9'E 65km

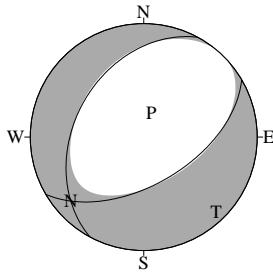


Cent.:26°55.4'N 130°15.0'E 10km  $\Delta t = 1.8$   
Mo:  $1.38 \times 10^{16}$  N·m Mw:4.7 Mj:4.5 (sec)  
mrr:-1.12 mtt: 0.37 mff: 0.75  
mrt:-0.62 mrf:-0.15 mtf: 0.71 ( $\times 10^{16}$  N·m)  
STR DIP SLIP MOM AZM PLG  
NP1: 56° 59° -69° P-axis:-1.35 9° 69°  
NP2:199° 37° -121° T-axis: 1.40 131° 12°  
N-axis:-0.05 224° 18°  
V.R.: 77%  $\epsilon$ : 0.03 N:19 COMP:35

EQUAL AREA PROJECTON, LOWER HEMISPHERE.

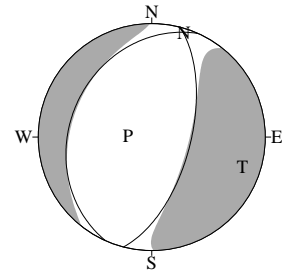
Hypo.:Location of hypocenter, Cent.:Location of centroid,  $\Delta t$ :Centroid time minus origin time  
Mo:Total scalar moment, Mw:Moment Magnitude, Mj:JMA Magnitude  
mrr,mtt,mff,mrt,mrf,mtf: Moment tensor components, STR,DIP,SLIP:Fault parameters of nodal plane  
MOM,AZM,PLG: Moment tensor component,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

2016/06/08 11:02:21.9  
NEAR MINAMI-DAITTOJIMA IS  
Hypo.: 26°57.6'N 130°18.1'E 63km



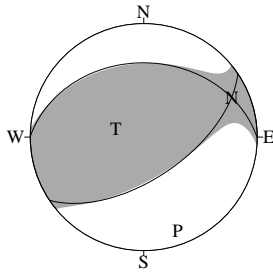
Cent.: 26°46.5'N 130°18.4'E 10km Δt= 1.6  
Mo: 1.41x10<sup>16</sup>N·m Mw:4.7 Mj:4.4 (sec)  
mrr:-1.29 mtt: 0.61 mff: 0.68  
mrt:-0.58 mrf: 0.01 mtf: 0.65 (x10<sup>16</sup>N·m)  
STR DIP SLIP MOM AZM PLG  
NP1: 60° 56° -71° P-axis: -1.48 18° 72°  
NP2: 208° 39° -115° T-axis: 1.35 136° 9°  
N-axis: 0.12 229° 16°  
V.R.: 82% ε: -0.08 N:19 COMP:35

2016/06/10 21:07: 3.7  
FAR E OFF NORTH HONSHU  
Hypo.: 38°26.1'N 144°24.2'E 46km



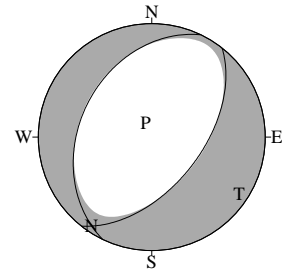
Cent.: 38°29.5'N 144°26.4'E 28km Δt= 2.4  
Mo: 3.93x10<sup>16</sup>N·m Mw:5.0 Mj:5.1 (sec)  
mrr:-3.04 mtt:-0.04 mff: 3.08  
mrt:-0.44 mrf:-2.13 mtf: 1.20 (x10<sup>16</sup>N·m)  
STR DIP SLIP MOM AZM PLG  
NP1: 14° 62° -95° P-axis: -3.71 273° 73°  
NP2: 204° 28° -82° T-axis: 4.14 108° 17°  
N-axis: -0.43 17° 4°  
V.R.: 80% ε: 0.10 N:21 COMP:40

2016/06/12 07:54:23.5  
SOUTHERN IBARAKI PREF  
Hypo.: 35°59.8'N 139°55.9'E 40km



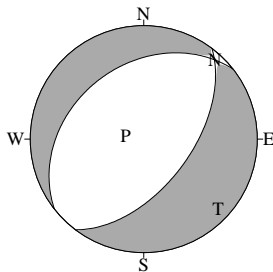
Cent.: 35°54.1'N 139°55.9'E 47km Δt= 2.5  
Mo: 2.08x10<sup>16</sup>N·m Mw:4.8 Mj:4.8 (sec)  
mrr: 1.64 mtt:-1.75 mff: 0.11  
mrt: 0.66 mrf: 0.77 mtf:-0.65 (x10<sup>16</sup>N·m)  
STR DIP SLIP MOM AZM PLG  
NP1: 56° 60° 71° P-axis: -2.16 160° 13°  
NP2: 270° 35° 119° T-axis: 2.00 287° 69°  
N-axis: 0.16 66° 16°  
V.R.: 83% ε: -0.07 N:29 COMP:56

2016/06/13 13:21:42.6  
NEAR MINAMI-DAITTOJIMA IS  
Hypo.: 26°57.3'N 130°18.6'E 66km



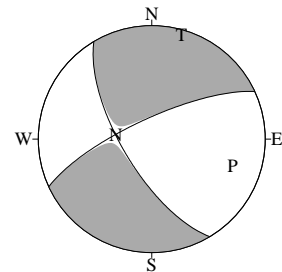
Cent.: 26°49.6'N 130°18.7'E 10km Δt= 4.3  
Mo: 2.80x10<sup>17</sup>N·m Mw:5.6 Mj:5.5 (sec)  
mrr:-2.68 mtt: 0.79 mff: 1.89  
mrt:-0.73 mrf:-0.55 mtf: 1.11 (x10<sup>17</sup>N·m)  
STR DIP SLIP MOM AZM PLG  
NP1: 38° 54° -83° P-axis: -2.90 337° 79°  
NP2: 206° 36° -100° T-axis: 2.70 123° 9°  
N-axis: 0.10 214° 6°  
V.R.: 83% ε: -0.05 N:17 COMP:37

2016/06/13 13:27: 4.1  
NEAR MINAMI-DAITTOJIMA IS  
Hypo.: 26°56.2'N 130°15.5'E 56km



Cent.: 26°56.1'N 130°15.6'E 11km Δt= 4.7  
Mo: 1.00x10<sup>17</sup>N·m Mw:5.3 Mj:5.2 (sec)  
mrr:-0.92 mtt: 0.45 mff: 0.47  
mrt:-0.16 mrf:-0.35 mtf: 0.48 (x10<sup>17</sup>N·m)  
STR DIP SLIP MOM AZM PLG  
NP1: 37° 56° -99° P-axis: -1.00 279° 77°  
NP2: 232° 35° -77° T-axis: 1.00 133° 11°  
N-axis: 0.00 42° 7°  
V.R.: 79% ε: 0.00 N:11 COMP:27

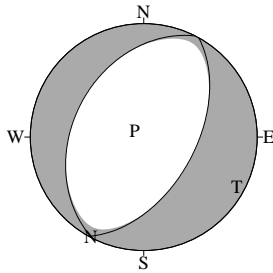
2016/06/14 15:20: 1.2  
NEAR AMAMI-OSHIMA ISLAND  
Hypo.: 29°22.3'N 130°37.3'E 21km



Cent.: 29°22.3'N 130°37.6'E 21km Δt= 0.5  
Mo: 6.07x10<sup>15</sup>N·m Mw:4.5 Mj:4.5 (sec)  
mrr:-1.18 mtt: 5.11 mff:-3.93  
mrt: 1.21 mrf: 2.09 mtf:-3.10 (x10<sup>15</sup>N·m)  
STR DIP SLIP MOM AZM PLG  
NP1: 245° 75° -158° P-axis: -6.03 108° 26°  
NP2: 149° 69° -16° T-axis: 6.11 16° 5°  
N-axis: -0.08 277° 64°  
V.R.: 74% ε: 0.01 N:31 COMP:44

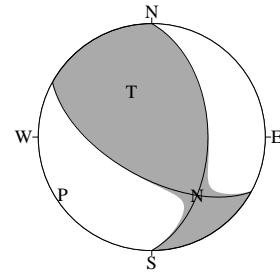
EQUAL AREA PROJECTON, LOWER HEMISPHERE.

2016/06/15 00:01:57.0  
 NEAR MINAMI-DAITTOJIMA IS  
 Hypo.: 26°54.6'N 130°16.1'E 72km



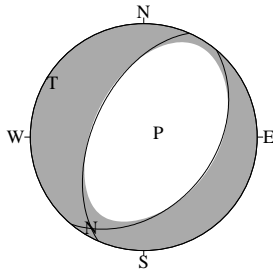
Cent.: 26°48.4'N 130°16.7'E 10km  $\Delta t = 5.3$   
 Mo:  $2.90 \times 10^{17}$  N·m Mw: 5.6 Mj: 5.2 (sec)  
 mrr: -2.79 mtt: 0.65 mff: 2.14  
 mrt: -0.40 mrf: -0.64 mtf: 1.10 ( $\times 10^{17}$  N·m)  
 STR DIP SLIP MOM AZM PLG  
 NP1: 29° 53° -89° P-axis: -2.90 305° 82°  
 NP2: 207° 37° -91° T-axis: 2.80 118° 8°  
 N-axis: 0.10 208° 1°  
 V.R.: 86%  $\epsilon$ : -0.02 N: 26 COMP: 58

2016/06/16 14:21:28.2  
 UCHIURA BAY REGION  
 Hypo.: 41°56.9'N 140°59.2'E 11km



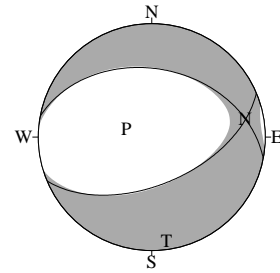
Cent.: 41°54.1'N 141° 0.5'E 10km  $\Delta t = 5.8$   
 Mo:  $7.14 \times 10^{16}$  N·m Mw: 5.2 Mj: 5.3 (sec)  
 mrr: 4.56 mtt: 0.03 mff: -4.59  
 mrt: 3.45 mrf: 0.55 mtf: 4.23 ( $\times 10^{16}$  N·m)  
 STR DIP SLIP MOM AZM PLG  
 NP1: 0° 49° 140° P-axis: -7.26 237° 7°  
 NP2: 119° 61° 49° T-axis: 7.03 336° 54°  
 N-axis: 0.23 142° 35°  
 V.R.: 84%  $\epsilon$ : -0.03 N: 14 COMP: 25

2016/06/17 06:41:59.2  
 NEAR AMAMI-OSHIMA ISLAND  
 Hypo.: 28°16.0'N 130°33.5'E 53km



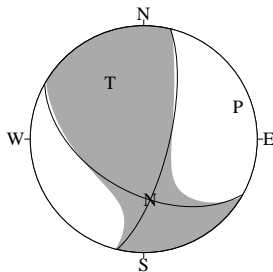
Cent.: 28°12.5'N 130°32.9'E 21km  $\Delta t = 0.9$   
 Mo:  $1.95 \times 10^{16}$  N·m Mw: 4.8 Mj: 4.7 (sec)  
 mrr: -1.91 mtt: 0.58 mff: 1.33  
 mrt: 0.00 mrf: 0.57 mtf: 0.77 ( $\times 10^{16}$  N·m)  
 STR DIP SLIP MOM AZM PLG  
 NP1: 40° 38° -77° P-axis: -2.02 73° 79°  
 NP2: 204° 53° -100° T-axis: 1.88 301° 7°  
 N-axis: 0.14 210° 8°  
 V.R.: 74%  $\epsilon$ : -0.07 N: 26 COMP: 45

2016/06/18 20:46:55.2  
 NW KUMAMOTO PREF  
 Hypo.: 32°41.4'N 130°42.4'E 10km



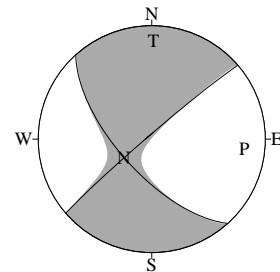
Cent.: 32°41.4'N 130°42.4'E 10km  $\Delta t = 0.5$   
 Mo:  $7.26 \times 10^{15}$  N·m Mw: 4.5 Mj: 4.6 (sec)  
 mrr: -6.51 mtt: 6.71 mff: -0.20  
 mrt: -1.63 mrf: -2.45 mtf: 0.69 ( $\times 10^{15}$  N·m)  
 STR DIP SLIP MOM AZM PLG  
 NP1: 67° 55° -111° P-axis: -7.47 287° 71°  
 NP2: 281° 40° -63° T-axis: 7.05 172° 8°  
 N-axis: 0.42 79° 17°  
 V.R.: 81%  $\epsilon$ : -0.06 N: 32 COMP: 55

2016/06/22 15:09:50.1  
 IOTO ISLANDS REGION  
 Hypo.: 24°32.6'N 141°15.6'E 186km



Cent.: 24°30.9'N 141°23.1'E 186km  $\Delta t = 0.8$   
 Mo:  $1.70 \times 10^{16}$  N·m Mw: 4.8 Mj: 4.9 (sec)  
 mrr: 0.74 mtt: 0.57 mff: -1.31  
 mrt: 0.42 mrf: 0.77 mtf: 0.94 ( $\times 10^{16}$  N·m)  
 STR DIP SLIP MOM AZM PLG  
 NP1: 14° 72° 138° P-axis: -1.83 71° 13°  
 NP2: 119° 51° 24° T-axis: 1.58 329° 42°  
 N-axis: 0.24 174° 45°  
 V.R.: 78%  $\epsilon$ : -0.13 N: 19 COMP: 25

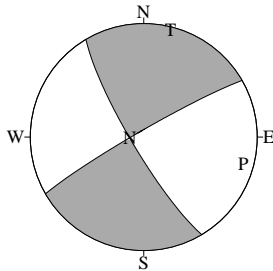
2016/06/24 06:05:30.6  
 NEAR ISHIGAKIJIMA ISLAND  
 Hypo.: 23°29.8'N 123°19.9'E 54km



Cent.: 23°35.7'N 123°20.1'E 20km  $\Delta t = 8.8$   
 Mo:  $7.30 \times 10^{17}$  N·m Mw: 5.8 Mj: 6.2 (sec)  
 mrr: -0.04 mtt: 6.65 mff: -6.61  
 mrt: 1.89 mrf: 2.34 mtf: -0.89 ( $\times 10^{17}$  N·m)  
 STR DIP SLIP MOM AZM PLG  
 NP1: 229° 87° -156° P-axis: -7.50 96° 19°  
 NP2: 138° 66° -3° T-axis: 7.20 1° 14°  
 N-axis: 0.30 236° 66°  
 V.R.: 71%  $\epsilon$ : -0.05 N: 13 COMP: 21

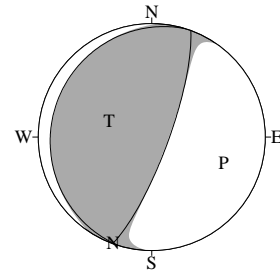
EQUAL AREA PROJECTON, LOWER HEMISPHERE.

2016/06/25 13:51:57.3  
 SW NIIGATA PREF  
 Hypo.:36°49.0'N 137°49.9'E 0km



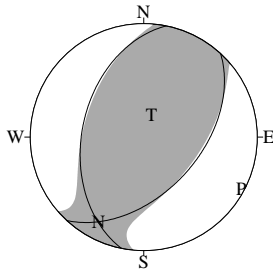
Cent.:36°52.8'N 137°49.8'E 10km  $\Delta t = 0.9$   
 Mo:  $1.16 \times 10^{16}$  N·m Mw:4.6 Mj:4.8 (sec)  
 mrr:-0.03 mtt: 1.01 mff:-0.98  
 mrt: 0.11 mrf: 0.17 mtf:-0.56 ( $\times 10^{16}$  N·m)  
 STR DIP SLIP MOM AZM PLG  
 NP1:240° 85° -171° P-axis:-1.16 105° 10°  
 NP2:149° 81° -5° T-axis: 1.16 14° 3°  
 N-axis: 0.00 267° 80°  
 V.R.: 80%  $\epsilon$ : 0.00 N:28 COMP:44

2016/06/27 07:57: 4.3  
 E OFF FUKUSHIMA PREF  
 Hypo.:36°59.3'N 142°24.1'E 19km



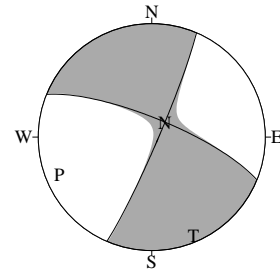
Cent.:37° 3.8'N 142°23.4'E 20km  $\Delta t = 7.2$   
 Mo:  $4.10 \times 10^{17}$  N·m Mw:5.7 Mj:5.9 (sec)  
 mrr: 1.60 mtt:-0.05 mff:-1.55  
 mrt: 1.30 mrf: 3.53 mtf:-0.58 ( $\times 10^{17}$  N·m)  
 STR DIP SLIP MOM AZM PLG  
 NP1: 20° 78° 91° P-axis:-4.20 110° 33°  
 NP2:197° 12° 87° T-axis: 4.10 291° 57°  
 N-axis: 0.10 200° 1°  
 V.R.: 78%  $\epsilon$ :-0.04 N:22 COMP:46

2016/06/27 13:36:20.6  
 OFF S NIIGATA PREF  
 Hypo.:37°34.0'N 138° 6.3'E 26km



Cent.:37°39.1'N 138° 6.3'E 22km  $\Delta t = 0.8$   
 Mo:  $1.21 \times 10^{16}$  N·m Mw:4.7 Mj:4.6 (sec)  
 mrr: 1.06 mtt:-0.10 mff:-0.96  
 mrt: 0.29 mrf:-0.03 mtf:-0.60 ( $\times 10^{16}$  N·m)  
 STR DIP SLIP MOM AZM PLG  
 NP1: 43° 50° 112° P-axis:-1.27 118° 3°  
 NP2:191° 45° 67° T-axis: 1.14 19° 73°  
 N-axis: 0.13 208° 16°  
 V.R.: 76%  $\epsilon$ :-0.10 N:30 COMP:46

2016/06/30 03:12:43.2  
 FAR E OFF NORTH HONSHU  
 Hypo.:39°52.0'N 144°36.3'E 43km



Cent.:39°47.4'N 144°37.7'E 47km  $\Delta t = 1.0$   
 Mo:  $3.43 \times 10^{16}$  N·m Mw:5.0 Mj:5.2 (sec)  
 mrr:-0.03 mtt: 2.38 mff:-2.35  
 mrt:-0.04 mrf:-0.86 mtf: 2.33 ( $\times 10^{16}$  N·m)  
 STR DIP SLIP MOM AZM PLG  
 NP1: 23° 85° -167° P-axis:-3.48 248° 13°  
 NP2:292° 77° -5° T-axis: 3.38 157° 6°  
 N-axis: 0.10 42° 76°  
 V.R.: 75%  $\epsilon$ :-0.03 N:16 COMP:31

EQUAL AREA PROJECTON, LOWER HEMISPHERE.