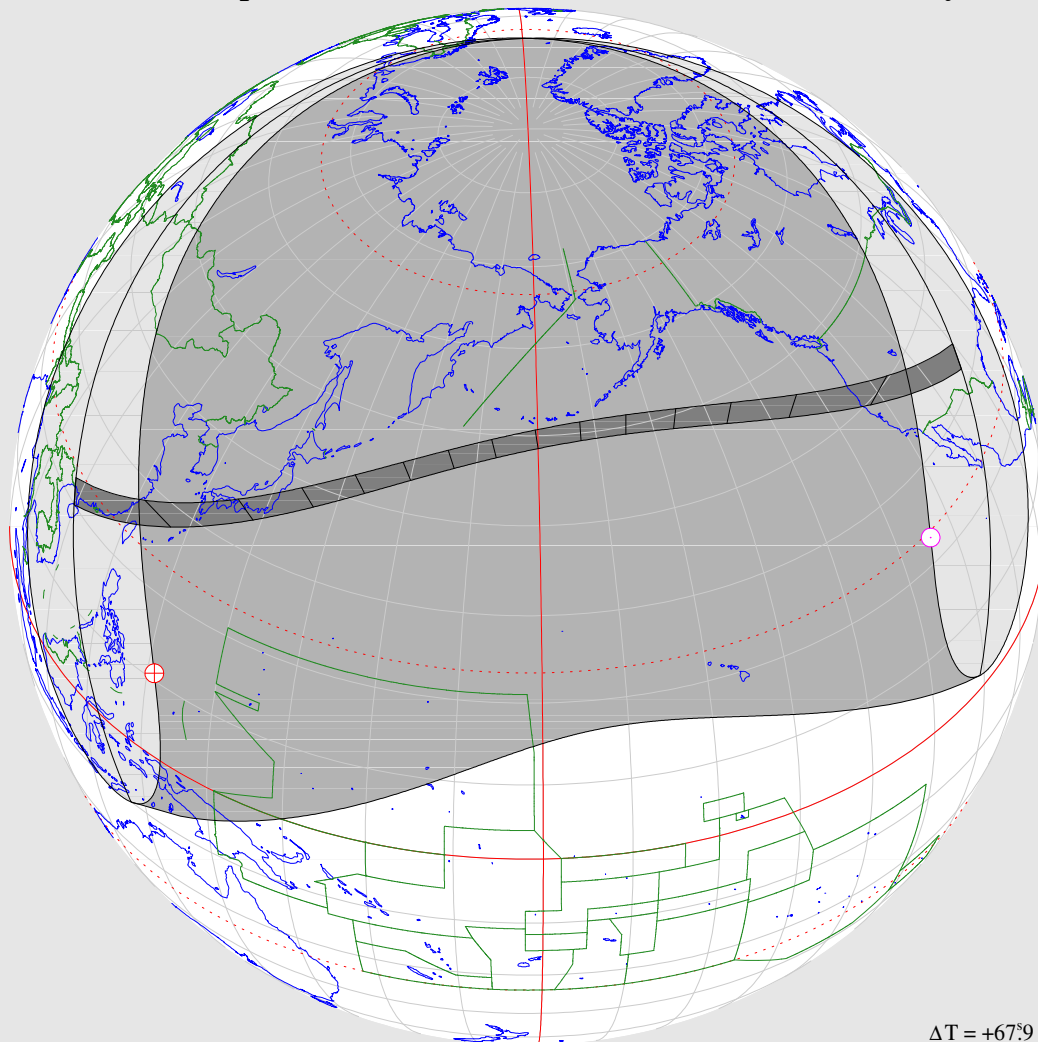


I. - Annular Eclipse of the Sun

2012 May 20-21



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$\Delta T = +67^s.9$
Globe centred on E 178°3 and N 39°9

| Circumstances | Time (UT) | | Longitude | | Latitude | |
|--|-----------|------|-----------|------|----------|------|
| | h | m | ° | ' | ° | ' |
| ⊕ Eclipse begins; first contact with Earth | 20 | 56.1 | E 131 | 04.2 | N 10 | 53.2 |
| Beginning of southern limit of penumbra | 21 | 42.4 | E 127 | 17.0 | S 10 | 03.8 |
| Beginning of southern limit of umbra | 22 | 07.4 | E 109 | 37.8 | N 19 | 56.6 |
| Beginning of centre line; central eclipse begins | 22 | 09.0 | E 108 | 42.9 | N 21 | 08.9 |
| Beginning of northern limit of umbra | 22 | 10.6 | E 107 | 46.2 | N 22 | 22.2 |
| Central eclipse at local apparent noon | 23 | 59.1 | E 179 | 21.9 | N 49 | 31.9 |
| End of northern limit of umbra | 1 | 34.8 | W 100 | 05.7 | N 34 | 06.1 |
| End of centre line; central eclipse ends | 1 | 36.4 | W 101 | 09.6 | N 32 | 54.7 |
| End of southern limit of umbra | 1 | 38.0 | W 102 | 11.3 | N 31 | 44.1 |
| End of southern limit of penumbra | 2 | 03.1 | W 120 | 54.6 | N 1 | 56.7 |
| ⊙ Eclipse ends; last contact with Earth | 2 | 49.3 | W 124 | 16.3 | N 22 | 48.0 |