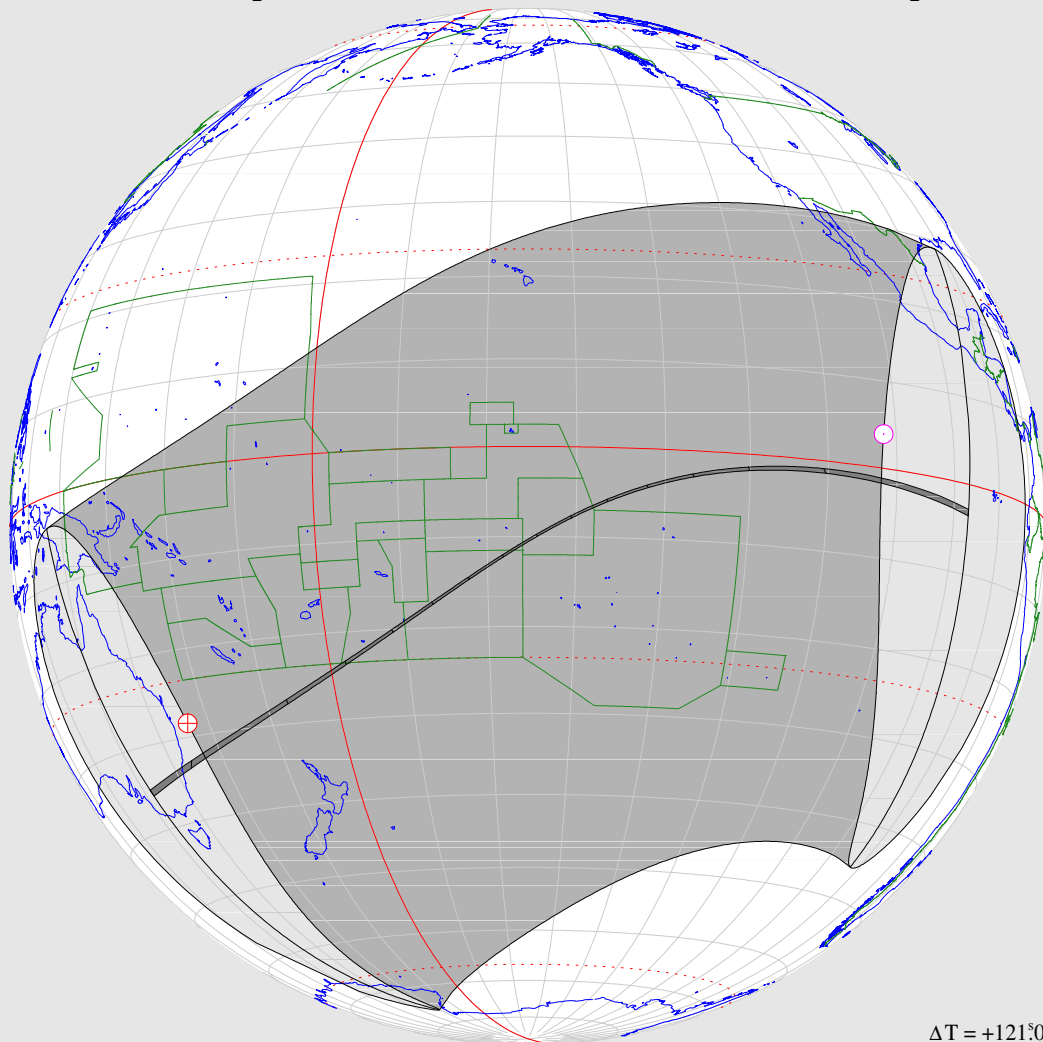


II. - Annular Eclipse of the Sun

2089 April 10-11



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$\Delta T = +121^{\text{s}}.0$
Globe centred on W 155°4 and S 8°9

| Circumstances | Time (UT) | Longitude | Latitude |
|--|---------------------------|----------------|----------------|
| | ^h ^m | ^o / | ^o / |
| ⊕ Eclipse begins; first contact with Earth | 19 54.2 | E 156 18.7 | S 28 24.7 |
| Beginning of northern limit of umbra | 20 57.8 | E 141 46.8 | S 34 59.3 |
| Beginning of centre line; central eclipse begins | 20 58.0 | E 141 48.9 | S 35 22.8 |
| Beginning of southern limit of umbra | 20 58.2 | E 141 51.1 | S 35 46.4 |
| Beginning of northern limit of penumbra | 20 58.4 | E 136 11.1 | S 3 31.6 |
| Beginning of southern limit of penumbra | 21 49.4 | E 159 40.8 | S 76 01.2 |
| Central eclipse at local apparent noon | 22 31.9 | W 157 43.9 | S 11 49.0 |
| End of southern limit of penumbra | 23 36.4 | W 92 38.8 | S 45 38.5 |
| End of northern limit of penumbra | 0 26.8 | W 91 45.0 | N 28 43.3 |
| End of southern limit of umbra | 0 27.2 | W 97 05.4 | S 3 30.7 |
| End of centre line; central eclipse ends | 0 27.4 | W 97 04.9 | S 3 08.5 |
| End of northern limit of umbra | 0 27.6 | W 97 04.5 | S 2 46.3 |
| ⊙ Eclipse ends; last contact with Earth | 1 31.1 | W 111 56.9 | N 3 51.8 |