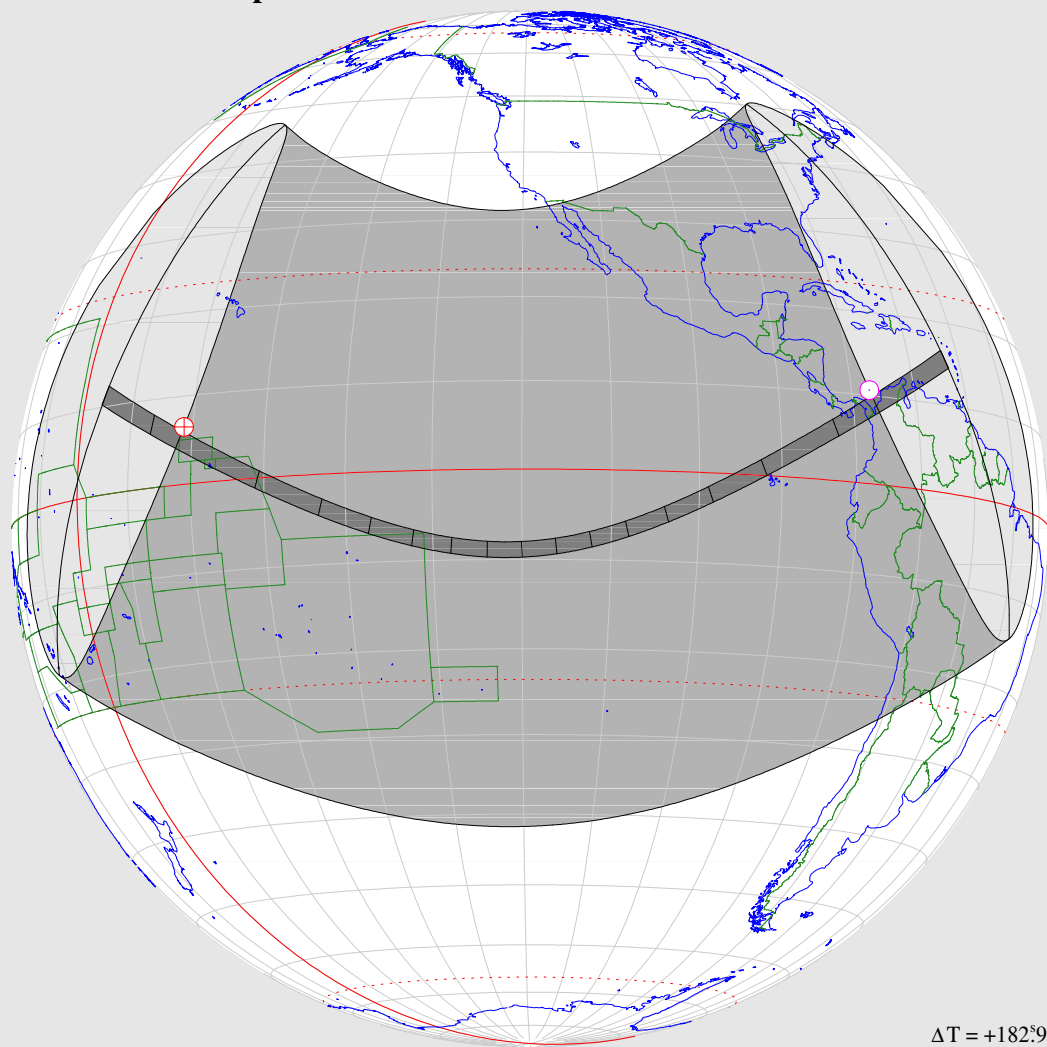


V. - Annular Eclipse of the Sun

1564 December 03



$\Delta T = +182^s.9$

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Globe centred on W 119°1 and S 6°6

| Circumstances | Time (UT) | | Longitude | | Latitude | |
|--|-----------|------|-----------|------|----------|------|
| | h | m | ° | ' | ° | ' |
| ⊕ Eclipse begins; first contact with Earth | 16 | 51.7 | W161 | 17.9 | N 6 | 27.2 |
| Beginning of southern limit of umbra | 17 | 57.8 | W176 | 09.0 | N10 | 17.5 |
| Beginning of centre line; central eclipse begins | 17 | 57.9 | W175 | 43.1 | N11 | 19.2 |
| Beginning of northern limit of umbra | 17 | 58.1 | W175 | 17.4 | N12 | 21.1 |
| Beginning of southern limit of penumbra | 18 | 11.1 | E 167 | 47.6 | S 18 | 30.9 |
| Beginning of northern limit of penumbra | 18 | 33.2 | W162 | 29.2 | N46 | 33.8 |
| Central eclipse at local apparent noon | 19 | 50.2 | W118 | 41.7 | S 8 | 48.1 |
| End of northern limit of penumbra | 21 | 04.8 | W 78 | 22.2 | N50 | 11.0 |
| End of southern limit of penumbra | 21 | 27.0 | W 46 | 34.6 | S 14 | 21.1 |
| End of northern limit of umbra | 21 | 39.9 | W 63 | 26.0 | N16 | 28.7 |
| End of centre line; central eclipse ends | 21 | 40.1 | W 62 | 59.9 | N15 | 28.3 |
| End of southern limit of umbra | 21 | 40.2 | W 62 | 33.6 | N14 | 28.1 |
| ⊙ Eclipse ends; last contact with Earth | 22 | 46.3 | W 77 | 20.2 | N10 | 37.3 |