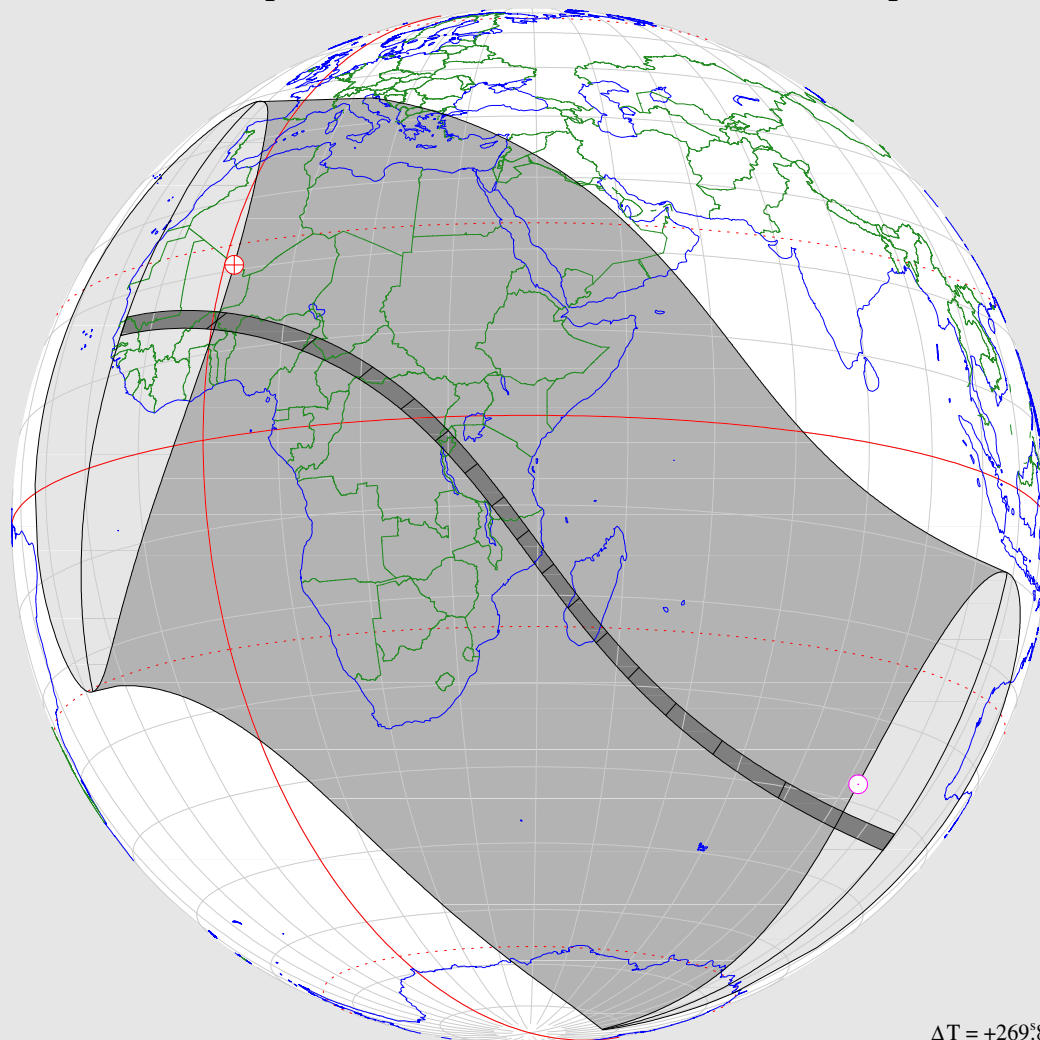


IV. - Annular Eclipse of the Sun

1503 September 20



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$\Delta T = +269^s.8$
Globe centred on E 39°1' and S 12°4'

| Circumstances | Time (UT) | Longitude | Latitude |
|--|---------------------------|----------------|----------------|
| | ^h ^m | [°] / | [°] / |
| ⊕ Eclipse begins; first contact with Earth | 5 47.9 | E 1 29.4 | N20 45.2 |
| Beginning of northern limit of umbra | 6 54.3 | W 15 16.8 | N16 56.9 |
| Beginning of centre line; central eclipse begins | 6 54.8 | W 15 27.7 | N15 50.8 |
| Beginning of southern limit of umbra | 6 55.4 | W 15 39.2 | N14 44.5 |
| Beginning of northern limit of penumbra | 6 57.2 | W 14 03.6 | N48 48.4 |
| Beginning of southern limit of penumbra | 7 38.5 | W 28 03.9 | S 23 49.9 |
| Central eclipse at local apparent noon | 9 03.1 | E 41 47.9 | S 17 50.0 |
| End of southern limit of penumbra | 9 57.0 | E 135 12.5 | S 81 55.9 |
| End of northern limit of penumbra | 10 39.3 | E 108 08.6 | S 9 41.8 |
| End of southern limit of umbra | 10 40.6 | E 109 41.8 | S 43 49.1 |
| End of centre line; central eclipse ends | 10 41.2 | E 109 27.6 | S 42 41.8 |
| End of northern limit of umbra | 10 41.8 | E 109 14.1 | S 41 34.8 |
| ⊙ Eclipse ends; last contact with Earth | 11 48.3 | E 92 21.1 | S 37 47.9 |