Correct Astronomical Position to WGS84

Latitude 30 to 40 °S — **Correction to Latitude**

Longitude 0 to 4 °E — **Correction to Longitude**

0° 0'	0° 30'	1° 0'	1° 30'	2° 0'	2° 30'	3° 0'	3° 30'	4° 0'	Longitude / Latitude	0° 0'	0° 30'	1° 0'	1° 30'	2° 0'	2° 30'	3° 0'	3° 30'	4° 0'
0	0	0	0	0.1	0	-0.1	0	0	30 ° 0 '	0.1	0.1	0	0	0	0.1	0	-0.2	0
0	0	0	0	0	0	0	0	0	30 ° 15 '	0.1	0.1	0	0	0	0.2	0	-0.2	0
0	0.1	0.1	0.1	0	0	0	0	0	30 ° 30 '	0.1	0	0	0	0.1	0.2	0	-0.2	0
0.1	0.1	0.1	0.1	0	0	0.1	0.1	0	30 ° 45 '	0	0	0	0	0.1	0.2	-0.1	-0.2	0
0.1	0.1	0.1	0.1	0	0	0.1	0.1	0	31 ° 0 '	0	0	0	0	0.1	0.1	-0.1	-0.1	0
0.1	0	0	0	-0.1	0	0.1	0	0	31 ° 15 '	0	0.1	0	0	0.2	0	-0.1	0	0.1
0	0	0	0	-0.1	0	0.1	0	0	31 ° 30 '	0	0.1	0	0.1	0.2	0	-0.1	0.1	0.1
0	0	0.1	0	0	0.1	0.1	0	0	31 ° 45 '	0.1	0.1	0	0.1	0.2	-0.1	-0.1	0.1	0
-0.1	0	0.1	0	0	0.1	0.1	0	0	32 ° 0 '	0.1	0	-0.1	0.1	0.1	-0.1	0	0.1	0
-0.1	0	0	0	0	0.1	0	0	0	32 ° 15 '	0	-0.1	0	0.2	0.1	-0.2	0.1	0.1	0
0	0.1	0	-0.1	0	0	0	0	0	32 ° 30 '	-0.1	-0.1	0	0.2	0	-0.2	0.1	0.1	0
0.1	0.1	0	0	0	0	0	0	0	32 ° 45 '	-0.1	-0.1	0.1	0.2	0	-0.2	0	0.1	0
0.1	0	0	0.1	0.1	0	0	0	0	33 ° 0 '	-0.1	0	0.1	0.2	0.1	-0.1	0	0	0
0.1	0	0	0.1	0.1	0.1	0	0	0	33 ° 15 '	-0.1	0	0	0.1	0.1	-0.1	0	0	0
0	0	0	0.1	0.1	0.1	0	0	0	33 ° 30 '	0	0.1	0	0.1	0.1	-0.1	0	0	0
0	0	0	0	0.1	0.1	0	0	0	33 ° 45 '	0.1	0.1	0	0	0.1	0	0	0	0
0	0	0	0	0.1	0.1	0	0	0	34 ° 0 '	0.1	0.1	0	0	0	0	0	0	0
0	0	0.1	0	0	0	0	0	0	34 ° 15 '	0.1	0.1	0	0	0	0	0	0	0
0	0	0.1	0	0	0	0	0	0	34 ° 30 '	0.1	0	0	0	0	0	0	0	0
0	0.1	0	0	0	0	0	0	0	34 ° 45 '	0.1	0	0	0	0	0	0	0	0
0.1	0.1	0	0	0	0	0	0	0	35 ° 0 '	0	0	0	0	0	0	0	0	0
0	0.1	0	0	0	0	0	0	0	35 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 45 '	0	0	0.1	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 0 '	0	0	0.1	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 30 '	0	0	0	0	0	0	0	0.1	0.1
0	0	0	0	0	0	0	0	0	36 ° 45 '	0	0	0	0	0	0	0	0.1	0.1
0	0	0	0	0	0	0	0	0	37 ° 0 '	0	0	0	0	0	0	0	0.1	0.1
0	0	0	0	0	0	0	0	0	37 ° 15 '	0	0	0	0	0	0	0	0.1	0.1
0	0	0	0	0	0	0	0	0	37 ° 30 '	0	0	0	0	0	0	0	0.1	0.1
0	0	0	0	0	0	0	0	0	37 ° 45 '	0	0	0	0	0	0.1	0	0.1	0.1
0	0	0	0	0	0	0	0	0	38 ° 0 '	0	0	0	0	0	0.1	0	0	0.1
0	0	0	0	0	0	0	0	0	38 ° 15 '	0	0	0	0	0	0.1	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 45 '	0	0	0.1	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 0 '	0	0	0	0	0	0.1	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 15 '	0	0	0	0	0.1	0.1	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 30 '	0	0	0	0	0	0.1	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	40 ° 0 '	0	0	0	0	0	0	0	0	0

Correct Astronomical Position to WGS84

Latitude 30 to 40 °S — **Correction to Latitude**

Longitude 4 to 8 °E — **Correction to Longitude**

4° 0'	4° 30'	5° 0'	5° 30'	6° 0'	6° 30'	7° 0'	7° 30'	8° 0'	Longitude / Latitude	4° 0'	4° 30'	5° 0'	5° 30'	6° 0'	6° 30'	7° 0'	7° 30'	8° 0'
0	0	0	0	0	0	0	0	0	30 ° 0 '	0	0.1	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	30 ° 15 '	0	0.1	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	30 ° 30 '	0	0.1	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	30 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 15 '	0.1	0	0	0	0	0	0	0	0.1
0	0	0	0	0	0	0	0	0	31 ° 30 '	0.1	0	0	0	0	0	0	0	0.1
0	0	0	0	0	0	0	0	0	31 ° 45 '	0	0	0	0	0	0	0	0	0.1
0	0	0	0	0	0	0	0	0	32 ° 0 '	0	0	0	0	0	0	0	0	0.1
0	0	0	0	0	0	0	0	0	32 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 0 '	0	0	0	0	0.1	0	0.1	0	0
0	0	0	0	0	0	0	0	0	36 ° 15 '	0	0	0	0	0.1	0	0.1	0.1	0
0	0	0	0	0	0	0	0	0	36 ° 30 '	0.1	0.1	0	0	0.1	0.1	0.1	0.1	0
0	0	0	0	0	0	0	0	0	36 ° 45 '	0.1	0.1	0.1	0	0.1	0.1	0.1	0	0
0	0	0	0	0	0	0	0	0	37 ° 0 '	0.1	0.1	0.1	0	0.1	0.1	0.1	0	0
0	0	0	0	0	0	0	0	0	37 ° 15 '	0.1	0.1	0.1	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 30 '	0.1	0	0	0.1	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 45 '	0.1	0	0	0.1	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 0 '	0.1	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 30 '	0	0	0	0	0	0.1	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 0 '	0	0	0	0	0	0	0	0.1	0
0	0	0	0	0	0	0	0	0	39 ° 15 '	0	0	0	0	0	0	0	0.1	0
0	0	0	0	0	0	0	0	0	39 ° 30 '	0	0	0	0	0	0	0	0.1	0.1
0	0	0	0	0	0	0	0	0	39 ° 45 '	0	0	0	0	0	0	0	0.1	0.1
0	0	0	0	0	0	0	0	0	40 ° 0 '	0	0	0	0	0	0	0	0.1	0.1

Correct Astronomical Position to WGS84

Latitude 30 to 40 °S — **Correction to Latitude**

Longitude 8 to 12 °E — **Correction to Longitude**

8° 0'	8° 30'	9° 0'	9° 30'	10° 0'	10° 30'	11° 0'	11° 30'	12° 0'	Latitude \ Longitude	8° 0'	8° 30'	9° 0'	9° 30'	10° 0'	10° 30'	11° 0'	11° 30'	12° 0'
0	0	0	0	0	0	0	0	0	30 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	30 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	30 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	30 ° 45 '	0	0	0	0	0	0	0	0	0.1
0	0	0	0	0	0	0	0	0	31 ° 0 '	0	0	0	0	0	0	0	0	0.1
0	0	0	0	0	0	0	0	0	31 ° 15 '	0.1	0	0	0	0	0	0	0.1	0.1
0	0	0	0	0	0	0	0	0	31 ° 30 '	0.1	0	0	0	0	0	0	0.1	0
0	0	0	0	0	0	0	0	0	31 ° 45 '	0.1	0	0	0	0	0	0	0.1	0
0	0.1	0	0	0	0	0	0	0	32 ° 0 '	0.1	0	0	0	0	0	0	0.1	0
0	0	0	0	0	0	0	0	0	32 ° 15 '	0	0	0	0	0	0	0	0.1	0
0	0	0	0	0	0	0	0	0	32 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 30 '	0	0.1	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 0 '	0	0	0	0	0	0	0	0.1	0
0	0	0	0	0	0	0	0	0	38 ° 15 '	0	0	0	0	0	0	0	0.1	0
0	0	0	0	0	0	0	0	0	38 ° 30 '	0	0	0	0	0.1	0.1	0	0.1	0
0	0	0	0	0	0	0	0	0	38 ° 45 '	0	0	0	0	0.1	0.1	0	0.1	0
0	0	0	0	0	0	0	0	0	39 ° 0 '	0	0	0.1	0	0.1	0.1	0	0.1	0
0	0	0	0	0	0	0	0	0	39 ° 15 '	0	0	0.1	0.1	0.1	0.1	0	0.1	0
0	0	0	0	0	0	0	0	0	39 ° 30 '	0.1	0.1	0.1	0.1	0.1	0.1	0	0.1	0
0	0	0	0	0	0	0	0	0	39 ° 45 '	0.1	0.1	0.1	0.1	0	0.1	0	0.1	0.1
0	0	0	0	0	0	0	0	0	40 ° 0 '	0.1	0.1	0.1	0.1	0.1	0	0	0	0.1

Correct Astronomical Position to WGS84

Latitude 30 to 40 °S — **Correction to Latitude**

Longitude 12 to 16 °E — **Correction to Longitude**

12° 0'	12° 30'	13° 0'	13° 30'	14° 0'	14° 30'	15° 0'	15° 30'	16° 0'	Longitude / Latitude	12° 0'	12° 30'	13° 0'	13° 30'	14° 0'	14° 30'	15° 0'	15° 30'	16° 0'
0	0	0	0	0	0.1	0	0	0	30 ° 0 '	0	0.1	0.1	0	0.1	0.1	0	-0.1	0
0	0	0	0	0	0.1	0.1	0	0	30 ° 15 '	0	0.1	0.1	0	0.1	0.1	0	0	0
0	0	0	0	0	0.1	0.1	0	0	30 ° 30 '	0	0.1	0.1	0	0	0.1	0.1	0	0
0	0	0	0	0	0.1	0.1	0	0	30 ° 45 '	0.1	0.1	0.1	0	0	0	0.1	0.1	0
0	0	0	0	0	0	0	0	0	31 ° 0 '	0.1	0	0	0	0	0	0.1	0.1	0
0	0	0	0	0	0	0	0	0	31 ° 15 '	0.1	0	0	0	0	0	0.1	0.1	0
0	0	0	0	0	0	0	0	0	31 ° 30 '	0	0	0	0	0	0	0.1	0.1	0
0	0	0	0	0	0	0	0	0	31 ° 45 '	0	0	0	0	0.1	0	0	0.1	0.1
0	0	0	0	0	0	0	0.1	0.1	32 ° 0 '	0	0	0	0	0.1	0	0	0.1	0.1
0	0	0	0	0	0.1	0.1	0.1	0.1	32 ° 15 '	0	0	0	0	0	0	0	0.1	0.1
0	0	0	0	0	0	0	0.1	0.1	32 ° 30 '	0	0	0	0	0	0	0	0	0.1
0	0	0	0	0	0	0	0	0.1	32 ° 45 '	0	0	0	0	0	0	0	0	0.1
0	0	0	0	0	0	0	0	0	33 ° 0 '	0	0	0	0	0	0	0	0	0.1
0	0	0	0	0	0	0	0	0	33 ° 15 '	0	0	0	0	0	0	0	0	0.1
0	0	0	0	0	0	0	0	0	33 ° 30 '	0	0	0	0	0	0	0	0	0.1
0	0	0	0	0	0	0	0	0	33 ° 45 '	0	0	0	0	0	0	0	0	0.1
0	0	0	0	0	0	0	0	0	34 ° 0 '	0	0	0	0	0	0	0	0	0.1
0	0	0	0	0	0	0	0	0	34 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 45 '	0	0	0	0	0	0	0	0	0.1
0	0	0	0	0	0	0	0	0	35 ° 0 '	0	0	0	0	0	0	0	0	0.1
0	0	0	0	0	0	0	0	0	35 ° 15 '	0	0	0	0	0	0	0	0	0.1
0	0	0	0	0	0	0	0	0	35 ° 30 '	0	0	0	0	0	0	0	0	0.1
0	0	0	0	0	0	0	0	0	35 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	-0.1	0	0	37 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	-0.1	0	0	38 ° 0 '	0	0	0	0	0.1	0.1	0	-0.1	0
0	0	0	-0.1	-0.1	0	0	0	0	38 ° 15 '	0	0	0	0	0.1	0.1	0	-0.1	0
0	0	0	-0.1	-0.1	0	0	0	0	38 ° 30 '	0	0	0.1	0.1	0	0	0	0	0
0	0	0	-0.1	-0.1	0	0	0	0	38 ° 45 '	0	0	0.2	0.1	-0.1	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 0 '	0	0	0.2	0.1	-0.1	-0.1	0.1	0	0
0	0	0	0.1	0.1	0	0	0	0	39 ° 15 '	0	0	0.1	0.1	-0.1	-0.1	0.1	0.1	0
0	-0.1	0	0.1	0.1	0	0	0	0	39 ° 30 '	0	0	0.1	0	-0.1	0	0.1	0	0
0	0	0	0.1	0	-0.1	-0.1	0	0	39 ° 45 '	0.1	0	0	0	0	0.1	0.1	0	0
0	0	0	0	-0.1	-0.1	-0.1	-0.1	-0.1	40 ° 0 '	0.1	0	-0.1	0	0.1	0.1	0	0	0

Correct Astronomical Position to WGS84

Latitude 30 to 40 °S — **Correction to Latitude**

Longitude 16 to 20 °E — **Correction to Longitude**

16° 0'	16° 30'	17° 0'	17° 30'	18° 0'	18° 30'	19° 0'	19° 30'	20° 0'	Longitude / Latitude	16° 0'	16° 30'	17° 0'	17° 30'	18° 0'	18° 30'	19° 0'	19° 30'	20° 0'
0	0	0	0	0	0	0	0	-0.1	30 ° 0 '	0	0	0.1	0.1	0.1	0	-0.1	0	0
0	0	0	0	0	0	0	0	0	30 ° 15 '	0	0	0	0.1	0.2	0.1	0	0	0
0	0	0	0	0.1	0.1	0.1	0	0	30 ° 30 '	0	0	0	0.1	0.1	0.1	0	0	0
0	0	0	0	0.1	0.1	0.1	0	0	30 ° 45 '	0	0	0	0.1	0.1	0.1	0	0	0
0	0	0	0	0	0.1	0.1	0	-0.1	31 ° 0 '	0	0	0.1	0.1	0	0	0.1	0.1	0
0	0	0	0	0	0	0	0	-0.1	31 ° 15 '	0	0	0	0.1	0	0	0.1	0.2	0.1
0	0	0	0	0	0	0	0	0	31 ° 30 '	0	-0.1	0	0.1	0	0	0.1	0.2	0.1
0	0	0	0	0	0	0	0	0.1	31 ° 45 '	0.1	0	0	0.1	0.1	0	0.1	0.1	0.1
0.1	0	0	0	0	0	0	0.1	0.1	32 ° 0 '	0.1	0	0	0.1	0.1	0	0	0.1	0.2
0.1	0	0	0	0	0	0	0	0.1	32 ° 15 '	0.1	0	-0.1	0.1	0.1	0.1	0	0	0.2
0.1	0.1	0	0	0	0	0	0	0	32 ° 30 '	0.1	0.1	0	0	0.1	0.1	0	0	0.1
0.1	0.1	0	0	0	0.1	0	0	0	32 ° 45 '	0.1	0.1	0	0	0.1	0.1	0.1	0	0.1
0	0.1	0	0	0	0.1	0.1	0	0	33 ° 0 '	0.1	0.2	0	0	0	0.1	0.1	0	0
0	0.1	0	0	0	0	0	0	0	33 ° 15 '	0.1	0.2	0.1	0	0	0	0.1	0	0
0	0.1	0.1	0	0	0	0	0	0	33 ° 30 '	0.1	0.2	0.1	0	0	0	0.1	0.1	0
0	0.1	0.1	0.1	0	0	0	0.1	0	33 ° 45 '	0.1	0.1	0.1	0.1	0	0	0.1	0.1	0
0	0.1	0.1	0.1	0	0	0	0.1	0	34 ° 0 '	0.1	0.1	0.1	0.1	0	0	0.1	0	0
0	0	0.1	0.1	0.1	0	0	0	0	34 ° 15 '	0	0.1	0.1	0.2	0	0	0.1	0	0
0	0	0	0.1	0.1	0	0	0	0	34 ° 30 '	0	0.1	0.1	0.1	0.1	0	0.1	0	0
0	0	0	0	0	0	0	0	0	34 ° 45 '	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 0 '	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0
0	0	0	0	0	0.1	0.1	0	0	35 ° 15 '	0.1	0.1	0.1	0	0.1	0.1	0	0	0
0	0	0	0	0	0.1	0.1	0	0	35 ° 30 '	0.1	0.1	0.1	0	0	0	0.1	0.1	0
0	0	0.1	0	0	0.1	0.1	0	0	35 ° 45 '	0	0.1	0.1	0.1	0	0	0.1	0.1	0
0	0	0.1	0.1	0.1	0.1	0.1	0.1	0	36 ° 0 '	0	0	0.1	0.1	0	0	0.1	0.1	0
0	0	0	0.1	0	0	0.1	0.1	0	36 ° 15 '	0	0	0	0.1	0	0	0.1	0.1	0.1
0	0	0	0	0	0	0.1	0.1	0.1	36 ° 30 '	0	0	0	0	0	0	0	0.1	0.1
0	0	0	0	0	0	0.1	0.1	0.1	36 ° 45 '	0	0	0	0	0	0	0	0.1	0.1
0	0	0	0	0	0	0	0	0.1	37 ° 0 '	0	0	0	0	0	0	0	0.1	0.1
0	0	0	0	0	0	0	0	0.1	37 ° 15 '	0	0	0	0	0	0	0	0.1	0
0	0	0	0	0	0	0	0	0	37 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	-0.1	38 ° 0 '	0	0	0	0	0	0	0	0	0.1
0	0	0	0	0	0	0	-0.1	-0.1	38 ° 15 '	0	0	0	0	0	0	0.1	0.1	0.1
0	0	0	0	0	0	-0.1	-0.1	0	38 ° 30 '	0	0	0	0	0	0	0.1	0.1	0.1
0	0	0	0	0	-0.1	-0.1	-0.1	0	38 ° 45 '	0	0	0	0	0	0.1	0.1	0	0
0	0	0	0	-0.1	-0.1	-0.1	0	0	39 ° 0 '	0	0	0	0	0	0.1	0.1	0	0
0	0	0	-0.1	-0.1	-0.1	0	0	0	39 ° 15 '	0	0	0	0.1	0.1	0	0	0	0
0	0	-0.1	-0.1	-0.1	0	0	0	0	39 ° 30 '	0	0	0	0.1	0.1	0	0	0	0
0	0	-0.1	-0.1	0	0	0	0	0	39 ° 45 '	0	0.1	0.1	0.1	0	0	0	0	0
-0.1	0	0	0	0	0	0	0	0	40 ° 0 '	0	0.1	0	0	0	0	0	0	0

Correct Astronomical Position to WGS84

Latitude 30 to 40 °S — **Correction to Latitude**

Longitude 20 to 24 °E — **Correction to Longitude**

20° 0'	20° 30'	21° 0'	21° 30'	22° 0'	22° 30'	23° 0'	23° 30'	24° 0'	Longitude / Latitude	20° 0'	20° 30'	21° 0'	21° 30'	22° 0'	22° 30'	23° 0'	23° 30'	24° 0'
-0.1	-0.1	-0.1	-0.1	0	0	0	0	0	30 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	-0.1	-0.1	-0.1	0	0	0	-0.1	30 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	30 ° 30 '	0	0	0	0	0	0	0	0	0
0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	30 ° 45 '	0	0	0	0	0	0	0	0	0
-0.1	-0.1	-0.1	0	-0.1	-0.1	-0.1	-0.1	-0.1	31 ° 0 '	0	0	0	0	0	0	0	0	0
-0.1	-0.1	-0.1	0	0	-0.1	0	0	0	31 ° 15 '	0.1	0	0	0	0	0	0	0	0
0	-0.1	-0.1	0	0	0	0	0	0	31 ° 30 '	0.1	0	0	0	0	0	-0.1	0	0
0.1	0	-0.1	0	0	0	0	0.1	0.1	31 ° 45 '	0.1	0	0	0	0	0	-0.1	0	0
0.1	0	0	0	0.1	0.1	0.1	0.1	0.1	32 ° 0 '	0.2	0.1	0	-0.1	0	-0.1	-0.1	0	0
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	32 ° 15 '	0.2	0.2	0	-0.1	0	-0.1	-0.1	0	0
0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	32 ° 30 '	0.1	0.2	0	-0.1	-0.1	0	-0.1	0	-0.1
0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	32 ° 45 '	0.1	0.1	-0.1	-0.1	0	0	-0.1	-0.1	-0.1
0	0.1	0.1	0.1	0	0	0	0.1	0.1	33 ° 0 '	0	0.1	-0.1	-0.1	0	0	-0.1	-0.1	-0.1
0	0.1	0.1	0	0	0	0	0	0	33 ° 15 '	0	0	-0.1	-0.1	0	-0.1	-0.1	-0.1	-0.1
0	0	0	0	0	0	0	0	0	33 ° 30 '	0	0	0	0	0	-0.1	-0.1	-0.1	-0.1
0	0	0	0	0	0.1	0	0	0	33 ° 45 '	0	0	0	0	0	-0.1	-0.1	-0.1	-0.1
0	0	0.1	0.1	0.1	0.1	0.1	0	0	34 ° 0 '	0	0	0	0	-0.1	-0.1	0	0	-0.1
0	0	0.1	0.1	0.1	0.1	0.1	0	0	34 ° 15 '	0	0	0	0	-0.1	-0.1	0	0	-0.1
0	0	0.1	0.1	0.1	0	0	0	0	34 ° 30 '	0	0	0	0	-0.1	0	0	0	0
0	0	0	0	0	0	0	0.1	0.1	34 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0.1	0.1	0.1	35 ° 0 '	0	0	0	0	0	0	-0.1	0	0
0	0	0	0	0	0.1	0.1	0.1	0.1	35 ° 15 '	0	0	0	0	0	-0.1	-0.1	0	0
0	0	0	0	0	0.1	0.1	0	0	35 ° 30 '	0	0	0	0	-0.1	-0.2	-0.1	0	0
0	0	0	0	0	0	0	-0.1	-0.1	35 ° 45 '	0	0	0	0	-0.1	-0.2	-0.1	0	0
0	0	0	0	0	0	-0.1	-0.1	-0.1	36 ° 0 '	0	0	0	0	-0.1	-0.2	0	0	0
0	0	0	0.1	0	0	-0.1	-0.1	-0.1	36 ° 15 '	0.1	0.1	0	-0.1	-0.1	-0.1	0	0	-0.1
0.1	0	0.1	0.1	0	0	0	0	0	36 ° 30 '	0.1	0.1	-0.1	-0.1	0	0	0	0	0
0.1	0.1	0.2	0.1	0	0	0	0	0	36 ° 45 '	0.1	0	-0.1	0	0	0	-0.1	0	0
0.1	0.2	0.1	0	0	0	0	0	0	37 ° 0 '	0.1	0	-0.1	0	0.1	0	-0.1	0	0
0.1	0.1	0	0	0	0	0	0	0	37 ° 15 '	0	0	0	0.1	0.1	-0.1	-0.1	0	0.1
0	0	-0.1	-0.1	0	0.1	0	0	0	37 ° 30 '	0	0	0.1	0.1	0	-0.1	-0.1	0	0.1
0	-0.1	-0.1	0	0	0	0	0	0	37 ° 45 '	0	0.1	0.1	0	0	-0.1	0	0	0.1
-0.1	-0.1	0	0	0	0	0	0	0	38 ° 0 '	0.1	0.1	0	0	0	0	0	0	0.1
-0.1	0	0	0	0	0	0	0	0	38 ° 15 '	0.1	0.1	0	0	0	0	0	0	0.1
0	0	0	0	0	0	0	0	0	38 ° 30 '	0.1	0	0	0	0	0	0	0	0.1
0	0	0	0	0	0	0	0	0	38 ° 45 '	0	0	0	0	0	0	0	0	0.1
0	0	0	0	0	0	0	0	0	39 ° 0 '	0	0	0	0	0	0	0	0	0.1
0	0	0	0	0	0	0	0	0	39 ° 15 '	0	0	0	0	0	0	0	0	0.1
0	0	0	0	0	0	0	0	0	39 ° 30 '	0	0	0	0	0	0	0	0	0.1
0	0	0	0	0	0	0	0	-0.1	39 ° 45 '	0	0	0	0	0	0	0	0.1	0.1
0	0	0	0	0	0	0	-0.1	-0.1	40 ° 0 '	0	0	0	0	0	0	0	0.1	0.1

Correct Astronomical Position to WGS84

Latitude 30 to 40 °S — **Correction to Latitude**

Longitude 24 to 28 °E — **Correction to Longitude**

24° 0'	24° 30'	25° 0'	25° 30'	26° 0'	26° 30'	27° 0'	27° 30'	28° 0'	Latitude \ Longitude	24° 0'	24° 30'	25° 0'	25° 30'	26° 0'	26° 30'	27° 0'	27° 30'	28° 0'
0	0	0	0	-0.1	-0.1	-0.1	0	0	30 ° 0 '	0	0	0.1	0.1	0	-0.1	0.1	0.1	0
-0.1	-0.1	0	0	0	-0.1	-0.1	0	0	30 ° 15 '	0	0	0.1	0.1	0	0	0	0.1	0
-0.1	-0.1	0	0	0	-0.1	-0.1	-0.1	0	30 ° 30 '	0	-0.1	0	0.1	0	0	0	0.1	0
-0.1	-0.1	-0.1	0	0	-0.1	-0.1	-0.1	0	30 ° 45 '	0	0	0	0.1	0	0	0.1	0	-0.1
-0.1	-0.1	-0.1	0	0	0	0	0	0.1	31 ° 0 '	0	0	0	0.1	0	0	0	0	-0.1
0	0	0	0	0	0	0.1	0.1	0.2	31 ° 15 '	0	0	0	0	0	0	0	0	-0.1
0	0	0	0	0.1	0.1	0.1	0.2	0.2	31 ° 30 '	0	0	-0.1	0	0.1	0	0	-0.1	-0.1
0.1	0.1	0	0	0.1	0.1	0.1	0.1	0.1	31 ° 45 '	0	0	-0.1	0	0.1	0	-0.1	-0.1	-0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	32 ° 0 '	0	0	0	0	0	0	-0.1	-0.1	-0.1
0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0	32 ° 15 '	0	0	0	0	0	0	-0.1	-0.1	0
0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0	32 ° 30 '	-0.1	0	0.1	0	0	0	0	-0.1	0
0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0	32 ° 45 '	-0.1	0	0.1	0	0	0	0	0	0
0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1	33 ° 0 '	-0.1	-0.1	0	0	0.1	0	0	0	0
0	0	0.1	0.1	0.1	0.1	0	0	0.1	33 ° 15 '	-0.1	-0.1	0	0	0.1	0.1	0	0	0
0	-0.1	0	0	0	0	0	0	0.1	33 ° 30 '	-0.1	-0.1	-0.1	0	0.1	0.1	0	0	0
0	-0.1	-0.1	-0.1	0	0	0	0	0.1	33 ° 45 '	-0.1	-0.1	-0.1	0	0.1	0.1	0	0	-0.1
0	0	0	0	-0.1	0	0	0	0.1	34 ° 0 '	-0.1	-0.1	-0.1	0	0.1	0.1	0	-0.1	-0.1
0	0	0	0	0	0	0	0.1	0	34 ° 15 '	-0.1	-0.1	-0.1	0	0.1	0.1	0	-0.1	-0.1
0	0	0.1	0.1	0	0	0.1	0.1	0	34 ° 30 '	0	-0.1	-0.1	0	0.1	0	-0.1	-0.1	-0.1
0.1	0.1	0.1	0	0	0.1	0.1	0	0	34 ° 45 '	0	-0.2	-0.1	0.1	0.1	0	-0.1	-0.1	0
0.1	0.1	0	0	0	0	0	0	0	35 ° 0 '	0	-0.1	-0.1	0.1	0.1	0	0	0	0
0.1	0.1	0	-0.1	0	0	0	0	0	35 ° 15 '	0	-0.1	0	0.1	0	0	0	0	0
0	0	-0.1	-0.1	0	0	0	0	0	35 ° 30 '	0	0	0.1	0.1	0	0	0	0	0
-0.1	-0.1	-0.1	0	0	0	0	0	0	35 ° 45 '	0	0	0.1	0	0	0	0	0	0
-0.1	-0.1	-0.1	0	0	-0.1	0	0	0	36 ° 0 '	0	0	0	0	0	0	0	0	0
-0.1	0	0	0	-0.1	-0.1	-0.1	0	0	36 ° 15 '	-0.1	0	0	0	0	0	0	0	0
0	0	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	36 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	36 ° 45 '	0	0	0.1	0	0	0	0	0	0
0	-0.1	-0.1	-0.1	0	0	-0.1	-0.1	-0.1	37 ° 0 '	0	0.1	0.1	0	0	0	0	0	0
0	0	0	0	0	0	-0.1	-0.1	-0.1	37 ° 15 '	0.1	0.1	0.1	0	0	0	0	0	0
0	0	0	0	0	0	0	-0.1	-0.1	37 ° 30 '	0.1	0.1	0.1	0	0	0	0	0	0
0	0	0	0	0	0	0	-0.1	-0.1	37 ° 45 '	0.1	0.1	0.1	0	0	0	0	0	0
0	0	0	0	-0.1	0	0	-0.1	0	38 ° 0 '	0.1	0.1	0.1	0	0	0	0	0	0
0	0	0	0	-0.1	-0.1	-0.1	0	0	38 ° 15 '	0.1	0.1	0.1	0	0	0	0	0	0
0	0	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	38 ° 30 '	0.1	0.1	0.1	0.1	0	0	0	0	0
0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	38 ° 45 '	0.1	0.1	0.1	0.1	0	0	0	0	0
0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	39 ° 0 '	0.1	0.1	0.1	0.1	0	0	0	0	0
0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	39 ° 15 '	0.1	0.1	0.1	0.1	0	0	0	0	0
0	-0.1	-0.1	0	0	0	0	0	-0.1	39 ° 30 '	0.1	0.1	0.1	0.1	0	0	0	0	0
-0.1	0	0	0	0	0	0	0	0	39 ° 45 '	0.1	0.1	0.1	0.1	0	0	0	0	0
-0.1	0	0	0	0	0	0	-0.1	-0.1	40 ° 0 '	0.1	0.1	0.1	0.1	0	0	0	0	0

Correct Astronomical Position to WGS84

Latitude 30 to 40 °S — **Correction to Latitude**

Longitude 28 to 32 °E — **Correction to Longitude**

28° 0'	28° 30'	29° 0'	29° 30'	30° 0'	30° 30'	31° 0'	31° 30'	32° 0'	Latitude	28° 0'	28° 30'	29° 0'	29° 30'	30° 0'	30° 30'	31° 0'	31° 30'	32° 0'
0	0.1	0.1	0.1	0	0	0	0.1	0.1	30 ° 0 '	0	-0.1	-0.1	-0.2	-0.1	-0.1	-0.1	-0.2	-0.2
0	0.1	0.1	0.1	0	0	0.1	0.1	0.1	30 ° 15 '	0	-0.1	-0.1	-0.2	-0.1	-0.1	-0.2	-0.2	-0.2
0	0	0.1	0	0	0.1	0.1	0.1	0.1	30 ° 30 '	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.2	-0.2	-0.2
0	0.1	0.1	0	0	0.1	0.1	0	0	30 ° 45 '	-0.1	-0.2	-0.1	-0.1	-0.1	-0.2	-0.2	-0.2	-0.1
0.1	0.1	0.1	0	0	0.1	0.1	0	0	31 ° 0 '	-0.1	-0.2	-0.1	-0.1	-0.2	-0.2	-0.2	-0.1	-0.1
0.2	0.1	0.1	0	0.1	0.1	0	0	0	31 ° 15 '	-0.1	-0.1	0	-0.1	-0.2	-0.2	-0.1	-0.1	-0.1
0.2	0.1	0	0.1	0.1	0.1	0	0	0	31 ° 30 '	-0.1	-0.1	0	-0.1	-0.2	-0.2	-0.1	-0.1	-0.1
0.1	0.1	0	0.1	0.1	0.1	0	0	0	31 ° 45 '	-0.1	0	0	-0.1	-0.2	-0.2	-0.1	-0.1	0
0.1	0	0	0.1	0.1	0	0	0	0	32 ° 0 '	-0.1	0	-0.1	-0.2	-0.2	-0.1	-0.1	-0.1	0
0	0	0.1	0.1	0.1	0	0	0	0	32 ° 15 '	0	0	-0.1	-0.2	-0.2	-0.1	-0.1	0	0
0	0	0.1	0.1	0.1	0	0	0	-0.1	32 ° 30 '	0	0	-0.1	-0.2	-0.1	-0.1	0	0	0
0	0	0.1	0.1	0	0	0	-0.1	-0.1	32 ° 45 '	0	0	-0.1	-0.2	-0.1	-0.1	0	0	0
0.1	0.1	0.1	0.1	0	0	0	-0.1	-0.1	33 ° 0 '	0	0	-0.2	-0.1	-0.1	0	0	0	0
0.1	0.1	0.1	0	0	0	-0.1	-0.1	-0.1	33 ° 15 '	0	-0.1	-0.1	-0.1	-0.1	0	0	0	0
0.1	0.1	0.1	0	0	0	0	0	-0.1	33 ° 30 '	0	-0.1	-0.1	-0.1	0	0	0	0	0
0.1	0.1	0.1	0	0	0	0	0	-0.1	33 ° 45 '	-0.1	-0.1	-0.1	0	0	0	0	0	0
0.1	0.1	0	0	0	0	0	0	-0.1	34 ° 0 '	-0.1	-0.1	0	0	0	0	0	0	0.1
0	0	0	0	0	0	0	0	-0.1	34 ° 15 '	-0.1	-0.1	0	0	0	0	0	0.1	0.1
0	0	0	0	0	0	0	0	0	34 ° 30 '	-0.1	0	0	0	0	0	0	0.1	0.1
0	0	0	0	0	0	0	0	0	34 ° 45 '	0	0	0	0	0	0	0	0.1	0.1
0	0	0	0	0	0	0	0	0	35 ° 0 '	0	0	0	0	0	0	0	0.1	0.1
0	0	-0.1	-0.1	0	0	0	0	0	35 ° 15 '	0	0	0	0	0	0	0	0.1	0.1
0	-0.1	-0.1	-0.1	0	0	0	0	0	35 ° 30 '	0	0	0	0	0	0	0	0.1	0.1
0	-0.1	-0.1	0	0	0	0	0	-0.1	35 ° 45 '	0	0	0	0	0	0	0	0.1	0
0	0	0	0	-0.1	-0.1	0	-0.1	0	36 ° 0 '	0	0	0	0	0	0	0	0.1	0.1
0	0	0	0	-0.1	-0.1	-0.1	-0.1	0	36 ° 15 '	0	0	0	0	0	0	0	0.1	0
0	0	0	0	0	-0.1	-0.1	-0.1	0	36 ° 30 '	0	0	0	0	0	0	0	0.1	0
0	0	-0.1	-0.1	0	0	-0.1	0	0	36 ° 45 '	0	0	0	0	0	0	0.1	0	0
-0.1	-0.1	-0.1	-0.1	0	0	0	0	0	37 ° 0 '	0	0	0	0	0	0	0.1	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	0	0	0	0	37 ° 15 '	0	0	0	0	0	0	0.1	0	0
-0.1	0	0	-0.1	-0.1	-0.1	0	0	0	37 ° 30 '	0	0	0	0	0	0	0	0	0
-0.1	0	0	-0.1	-0.1	-0.1	0	0	0	37 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	-0.1	-0.1	-0.1	0	0	0	38 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	-0.1	0	0	0	0	0	0	38 ° 15 '	0	0	0	0	0	0	0	0	0
0	-0.1	-0.1	0	0	0	0	0	0	38 ° 30 '	0	0	0	0	0	0	0	0	0
0	-0.1	0	0	0	0	0	0	0	38 ° 45 '	0	0	0	0	0	0	0	0	0
-0.1	0	0	0	0	0	0	0	0	39 ° 0 '	0	0	0	0	0	0	0	0	0
-0.1	0	0	0	0	0	0	-0.1	-0.1	39 ° 15 '	0	0	0	0	0	0	0	0.1	0
-0.1	0	0	0	0	0	0	-0.1	-0.1	39 ° 30 '	0	0	0	0	-0.1	0	0.1	0.1	0
0	0	0	0	0	0	-0.1	-0.1	0	39 ° 45 '	0	0	0	0	-0.1	0	0.1	0.1	0
-0.1	0	0	0	0	0	0	0	0	40 ° 0 '	0	0	0	0	0	0	0.1	0.1	0

Correct Astronomical Position to WGS84

Latitude 30 to 40 °S — **Correction to Latitude**

Longitude 32 to 36 °E — **Correction to Longitude**

32° 0'	32° 30'	33° 0'	33° 30'	34° 0'	34° 30'	35° 0'	35° 30'	36° 0'	Longitude / Latitude	32° 0'	32° 30'	33° 0'	33° 30'	34° 0'	34° 30'	35° 0'	35° 30'	36° 0'
0.1	0	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	30 ° 0 '	-0.2	-0.1	0	0	0	0	0	0	-0.1
0.1	0	0	-0.1	0	0	-0.1	-0.1	-0.1	30 ° 15 '	-0.2	-0.1	0	0	0	0	0	0	-0.1
0.1	0	0	0	0	-0.1	-0.1	-0.1	-0.1	30 ° 30 '	-0.2	0	0	0	0	0	0	0	-0.1
0	0	0	0	0	-0.1	-0.1	0	0	30 ° 45 '	-0.1	0	0.1	0	0	0	0	0	-0.1
0	-0.1	0	0	0	-0.1	0	0	0	31 ° 0 '	-0.1	0	0	0	0	0	0	0	-0.1
0	0	0	0	-0.1	-0.1	-0.1	-0.1	-0.1	31 ° 15 '	-0.1	0	0	0	0	0	0	0	-0.1
0	0	0	0	-0.1	-0.1	-0.1	-0.1	-0.1	31 ° 30 '	-0.1	0	0	0	0	0	0	0	-0.1
0	0	0	0	-0.1	-0.1	-0.1	-0.1	-0.1	31 ° 45 '	0	0	0	0	0	0	0	0	-0.1
0	0	0	0	-0.1	-0.1	-0.1	-0.1	-0.1	32 ° 0 '	0	0	0	0	0.1	0.1	0	0	-0.1
0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	32 ° 15 '	0	0	0	0.1	0.1	0.1	0	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	32 ° 30 '	0	0	0	0.1	0.1	0.1	0	-0.1	-0.2
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	32 ° 45 '	0	0	0	0.1	0.1	0.1	0	-0.1	-0.2
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	33 ° 0 '	0	0	0.1	0.1	0.1	0.1	0	-0.1	-0.2
-0.1	-0.1	-0.1	-0.1	-0.1	0	0	0	0	33 ° 15 '	0	0	0.1	0.1	0.1	0.1	0	-0.1	-0.2
-0.1	-0.1	-0.1	-0.1	-0.1	0	0	0	0	33 ° 30 '	0	0.1	0.1	0.1	0.1	0.1	0	-0.1	-0.2
-0.1	-0.1	-0.1	-0.1	-0.1	0	0	0	0	33 ° 45 '	0	0.1	0.1	0	0	0	0	-0.1	-0.2
-0.1	-0.1	-0.1	-0.1	0	0	0	0	0	34 ° 0 '	0.1	0.1	0.1	0	0	0	0	-0.1	-0.2
-0.1	-0.1	0	0	0	0	0	0	0	34 ° 15 '	0.1	0.1	0.1	0	-0.1	0	-0.1	-0.1	-0.2
0	0	0	0	0	0	0	0	0	34 ° 30 '	0.1	0.1	0.1	0	0	0	-0.1	-0.1	-0.1
0	0	0	0	0	0	0	0	0	34 ° 45 '	0.1	0.1	0	0	0	0	-0.1	-0.1	-0.1
0	0	0	0	0	0	0	0	0	35 ° 0 '	0.1	0.1	0	0	0	0	-0.1	-0.1	-0.1
0	0	0	0	0	0	0	0	0	35 ° 15 '	0.1	0	0	0	0	0	-0.1	-0.1	-0.1
0	0	0	0	0	0	0	0	0	35 ° 30 '	0.1	0	0	0	0	0	-0.1	-0.1	-0.1
-0.1	0	0	0	0	0	0	0	0	35 ° 45 '	0	0	0	0	0	0	-0.1	-0.1	-0.1
0	0	0	0	0	0	0	0	0	36 ° 0 '	0.1	0	0	0	0	0	-0.1	-0.1	-0.1
0	0	0	0	0	0	0	0	0	36 ° 15 '	0	0	0	0	0	-0.1	-0.1	-0.1	-0.1
0	0	0	0	0	0	0	0	0	36 ° 30 '	0	0	0	0	0	-0.1	-0.1	-0.1	-0.1
0	0	0	0	0	0	0	0	0	36 ° 45 '	0	0	0	0	0	-0.1	-0.1	-0.1	-0.1
0	0	0	0	0	0	0	0	0	37 ° 0 '	0	0	0	0	0	-0.1	-0.1	-0.1	-0.1
0	0	0	0	0	0	0	0	0	37 ° 15 '	0	0	0	0	0	-0.1	-0.1	-0.1	0
0	0	0	0	0	0	0	0	0	37 ° 30 '	0	0	0	0.1	0	-0.1	-0.1	-0.1	0
0	0	0	0	0	0	0	0	-0.1	37 ° 45 '	0	0	0	0.1	0	-0.1	-0.1	-0.1	0
0	0	0	0	0	0	0	0	-0.1	38 ° 0 '	0	0	0.1	0.1	0	-0.1	0	-0.1	0
0	0	0	0	0	0	0	0	-0.1	38 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	-0.1	38 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	-0.1	38 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	-0.1	39 ° 0 '	0	0	0	0	0	0	0	0	0
-0.1	-0.1	-0.1	0	0	0	0	0	-0.1	39 ° 15 '	0	0	0	0	0	0	0	0	0
-0.1	-0.1	-0.1	0	0	0	0	0	0	39 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	-0.1	40 ° 0 '	0	0	0	0	0	0	0	0	0.1

Correct Astronomical Position to WGS84

Latitude 30 to 40 °S — **Correction to Latitude**

Longitude 36 to 40 °E — **Correction to Longitude**

36° 0'	36° 30'	37° 0'	37° 30'	38° 0'	38° 30'	39° 0'	39° 30'	40° 0'	Latitude	36° 0'	36° 30'	37° 0'	37° 30'	38° 0'	38° 30'	39° 0'	39° 30'	40° 0'
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	30 ° 0 '	-0.1	-0.2	-0.2	-0.1	0	0	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	30 ° 15 '	-0.1	-0.2	-0.2	-0.1	0	0	0	0	0
-0.1	0	0	-0.1	-0.1	-0.1	-0.1	-0.1	0	30 ° 30 '	-0.1	-0.2	-0.2	-0.1	0	0	0	0	0
0	0	0	-0.1	-0.1	-0.1	-0.1	-0.1	0	30 ° 45 '	-0.1	-0.2	-0.2	0	0	0	0	0	0
0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	31 ° 0 '	-0.1	-0.2	-0.1	0	0	0	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	31 ° 15 '	-0.1	-0.2	-0.1	-0.1	0	0	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	31 ° 30 '	-0.1	-0.2	-0.2	-0.1	0	0	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	31 ° 45 '	-0.1	-0.2	-0.2	-0.1	0	0	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	32 ° 0 '	-0.1	-0.2	-0.2	-0.1	0	0	0	0	0
-0.1	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	32 ° 15 '	-0.1	-0.2	-0.1	-0.1	0	0	0	0	0
-0.1	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	32 ° 30 '	-0.2	-0.2	-0.1	-0.1	0	0	0	0	0
-0.1	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	32 ° 45 '	-0.2	-0.2	-0.1	-0.1	0	0	0	0	0.1
0	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	33 ° 0 '	-0.2	-0.2	-0.1	0	0	0	0	0	0.1
0	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	33 ° 15 '	-0.2	-0.2	-0.1	0	0	0	0	0	0
0	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	33 ° 30 '	-0.2	-0.2	-0.1	0	0	0	0	0	0
0	0	0	-0.1	-0.1	-0.1	-0.1	-0.1	0	33 ° 45 '	-0.2	-0.2	-0.1	0	0	0	0	0	0
0	0	0	-0.1	-0.1	-0.1	-0.1	-0.1	0	34 ° 0 '	-0.2	-0.1	-0.1	0	0	0	0	0	0
0	0	0	-0.1	-0.1	-0.1	-0.1	-0.1	0	34 ° 15 '	-0.2	-0.1	-0.1	0	0	0	0	0	0
0	0	0	-0.1	-0.1	-0.1	-0.1	-0.1	0	34 ° 30 '	-0.1	-0.1	0	0	0	0	0	0	0
0	0	0	-0.1	-0.1	-0.1	-0.1	-0.1	0	34 ° 45 '	-0.1	-0.1	0	0	0	0	0	0	0
0	0	0	-0.1	-0.1	-0.1	-0.1	-0.1	0	35 ° 0 '	-0.1	-0.1	0	0	0	0	0	0	0
0	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	35 ° 15 '	-0.1	-0.1	0	0	0	0	0	0	0
0	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	35 ° 30 '	-0.1	0	0	0	0	0	0	0	0
0	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	35 ° 45 '	-0.1	0	0	0	0	0	0	0	0
0	0	0	-0.1	-0.1	-0.1	-0.1	-0.1	0	36 ° 0 '	-0.1	0	0	0	0	0	0	0	0
0	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	36 ° 15 '	-0.1	0	0	0	0	0	0	0	0
0	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	36 ° 30 '	-0.1	0	0	0	0	0	0	0	0
0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	36 ° 45 '	-0.1	0	0	0	0	0	0	0	0
0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	37 ° 0 '	-0.1	0	0	0	0	0	0.1	0	0
0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	37 ° 15 '	0	0	0	0	0	0	0.1	0.1	0
0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	37 ° 30 '	0	0	0	0	0	0	0.1	0.1	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	37 ° 45 '	0	0	0	0.1	0	0	0.1	0.1	0.1
-0.1	-0.1	-0.1	0	0	0	-0.1	-0.1	0	38 ° 0 '	0	0	0	0.1	0	0.1	0.1	0.1	0.1
-0.1	-0.1	-0.1	-0.1	0	0	-0.1	-0.1	0	38 ° 15 '	0	0	0	0	0	0.1	0.1	0.1	0.1
-0.1	-0.1	-0.1	-0.1	-0.1	0	-0.1	-0.1	0	38 ° 30 '	0	0	0	0	0	0.1	0.1	0.1	0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	38 ° 45 '	0	0	0	0	0	0.1	0.1	0.1	0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	39 ° 0 '	0	0	0	0	0	0.1	0.1	0.1	0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	39 ° 15 '	0	0	0	0	0	0.1	0.1	0.1	0.1
0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	39 ° 30 '	0	0	0	0	0	0.1	0.1	0.1	0.1
0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	39 ° 45 '	0	0	0	0	0	0.1	0.1	0.1	0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	40 ° 0 '	0.1	0	0	0	0	0.1	0.1	0.1	0.1

Correct Astronomical Position to WGS84

Latitude 30 to 40 °S — **Correction to Latitude**

Longitude 40 to 44 °E — **Correction to Longitude**

40° 0'	40° 30'	41° 0'	41° 30'	42° 0'	42° 30'	43° 0'	43° 30'	44° 0'	Latitude \ Longitude	40° 0'	40° 30'	41° 0'	41° 30'	42° 0'	42° 30'	43° 0'	43° 30'	44° 0'
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.2	-0.2	30 ° 0 '	0	0	0	0	0.1	0	0	0.1	0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.2	-0.2	30 ° 15 '	0	0	0	0	0.1	0	0.1	0.1	0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.2	-0.2	-0.1	30 ° 30 '	0	0	0	0.1	0.1	0	0.1	0.1	0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.2	-0.2	-0.1	30 ° 45 '	0	0	0	0.1	0.1	0.1	0.2	0.1	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.2	-0.1	-0.1	31 ° 0 '	0	0	0	0.1	0	0.1	0.2	0.1	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	31 ° 15 '	0	0	0	0.1	0.1	0.1	0.2	0.1	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	31 ° 30 '	0	0	0.1	0.1	0.1	0.1	0.2	0.1	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	31 ° 45 '	0	0.1	0.1	0	0.1	0.1	0.2	0.1	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.2	32 ° 0 '	0	0.1	0.1	0.1	0	0.1	0.2	0.1	0
-0.1	-0.1	-0.1	-0.1	-0.1	0	-0.1	-0.1	-0.2	32 ° 15 '	0	0.1	0.1	0.1	0	0.1	0.2	0.2	0
-0.1	-0.1	-0.1	-0.1	-0.1	0	-0.1	-0.1	-0.1	32 ° 30 '	0	0.1	0	0.1	0	0.1	0.3	0.2	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	32 ° 45 '	0.1	0.1	0	0.1	0	0.1	0.3	0.2	0
-0.1	-0.1	-0.1	-0.1	0	-0.1	-0.1	-0.1	-0.1	33 ° 0 '	0.1	0.1	0	0.1	0	0.1	0.3	0.2	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	33 ° 15 '	0	0.1	0	0.1	0	0.1	0.3	0.2	0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	0	33 ° 30 '	0	0.1	0	0.1	0	0.1	0.3	0.2	0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	33 ° 45 '	0	0.1	0	0.1	0	0.1	0.2	0.2	0.1
-0.1	-0.1	-0.1	-0.1	0	-0.1	-0.1	0	0	34 ° 0 '	0	0	0	0	0	0.1	0.2	0.1	0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	34 ° 15 '	0	0	0	0	0	0.2	0.2	0.1	0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	34 ° 30 '	0	0	0	0	0	0.2	0.2	0.1	0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	34 ° 45 '	0	0	0	0	0	0.2	0.2	0.1	0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	0	35 ° 0 '	0	0	0	0.1	0.1	0.2	0.2	0.1	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	0	35 ° 15 '	0	0	0	0.1	0.1	0.1	0.2	0.1	0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	35 ° 30 '	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	35 ° 45 '	0	0	0	0.1	0.1	0.1	0.1	0.1	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	36 ° 0 '	0	0	0	0.1	0.1	0.1	0.1	0.1	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	36 ° 15 '	0	0	0	0.1	0.1	0.1	0.1	0.1	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	36 ° 30 '	0	0	0	0	0.1	0.1	0.1	0.1	0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	36 ° 45 '	0	0	0	0	0.1	0.1	0.1	0.1	0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	37 ° 0 '	0	0	0	0	0.1	0.1	0.1	0.1	0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	37 ° 15 '	0	0	0	0	0.1	0.1	0.1	0.1	0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	37 ° 30 '	0	0	0	0	0.1	0.1	0.1	0.1	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	37 ° 45 '	0.1	0	0	0	0.1	0.1	0.1	0.1	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	38 ° 0 '	0.1	0.1	0	0	0.1	0.1	0.1	0.1	0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	38 ° 15 '	0.1	0.1	0	0.1	0.1	0.1	0.1	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	38 ° 30 '	0.1	0.1	0	0.1	0.1	0.1	0.1	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	38 ° 45 '	0.1	0.1	0	0.1	0	0.1	0.1	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	39 ° 0 '	0.1	0.1	0.1	0.1	0	0.1	0.1	0	0
-0.1	0	-0.1	-0.1	-0.1	-0.1	-0.1	0	-0.1	39 ° 15 '	0.1	0.1	0.1	0.1	0	0.1	0	0	0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	39 ° 30 '	0.1	0.1	0.1	0.1	0	0.1	0	0	0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	39 ° 45 '	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	40 ° 0 '	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0.1

Correct Astronomical Position to WGS84

Latitude 30 to 40 °S — **Correction to Latitude**

Longitude 44 to 48 °E — **Correction to Longitude**

44° 0'	44° 30'	45° 0'	45° 30'	46° 0'	46° 30'	47° 0'	47° 30'	48° 0'	Latitude \ Longitude	44° 0'	44° 30'	45° 0'	45° 30'	46° 0'	46° 30'	47° 0'	47° 30'	48° 0'
-0.2	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	30 ° 0 '	0.1	0	0	0	0	-0.1	0	-0.1	-0.1
-0.2	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	30 ° 15 '	0.1	0	0	0	-0.1	-0.1	0	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	30 ° 30 '	0.1	0	0	0	-0.1	0	0	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	30 ° 45 '	0	0	0	0	0	0	0	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	31 ° 0 '	0	0	0	0	0	0	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	31 ° 15 '	0	0	0	0	0	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	31 ° 30 '	0	0	0	0	-0.1	-0.1	-0.1	-0.1	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	31 ° 45 '	0	0	0	0	-0.1	-0.1	-0.1	0	0
-0.2	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	32 ° 0 '	0	0	0	0	-0.1	-0.1	0	0	0
-0.2	-0.2	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	32 ° 15 '	0	0	0	0	-0.1	-0.1	-0.1	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	32 ° 30 '	0	0	0	-0.1	-0.1	-0.1	-0.1	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	32 ° 45 '	0	0	-0.1	-0.1	-0.1	-0.1	-0.1	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	33 ° 0 '	0	0	-0.1	-0.1	-0.1	-0.1	-0.1	0	0
0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	33 ° 15 '	0.1	0	-0.1	-0.1	-0.1	-0.1	-0.1	0	0
0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	33 ° 30 '	0.1	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0
0	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	33 ° 45 '	0.1	0.1	0	-0.1	-0.1	-0.1	-0.1	-0.1	0
0	0	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	34 ° 0 '	0.1	0.1	0	-0.1	-0.1	-0.1	-0.1	-0.1	0
0	0	0	0	-0.1	-0.1	-0.1	-0.1	-0.1	34 ° 15 '	0.1	0.1	0	-0.1	-0.1	-0.1	-0.1	-0.1	0
0	0	0	0	0	-0.1	-0.1	-0.1	-0.1	34 ° 30 '	0.1	0.1	0	0	-0.1	-0.1	-0.1	-0.1	0
0	0	0	0	0	0	-0.1	-0.1	-0.1	34 ° 45 '	0.1	0	0	0	-0.1	-0.1	-0.1	0	0
0	0	0	0	0	0	-0.1	-0.1	-0.1	35 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	-0.1	-0.1	-0.1	-0.1	35 ° 15 '	0.1	0	0	0	0	0	0	0	0
0	0	0	0	-0.1	-0.1	-0.1	-0.1	-0.1	35 ° 30 '	0.1	0	0	0	0	0	0	0	0
0	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	35 ° 45 '	0	0	0	0	0	0	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	36 ° 0 '	0	0	0	0	0	0	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	36 ° 15 '	0	0	0	0	0	0	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	36 ° 30 '	0.1	0	0	0	0	0	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	36 ° 45 '	0.1	0	0	0	0	0	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	37 ° 0 '	0.1	0	0	0	0	0	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	37 ° 15 '	0.1	0	0	0	0	0	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	37 ° 30 '	0	0	0	0	0	0	0.1	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	37 ° 45 '	0	0	0	0	0	0.1	0.1	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	38 ° 0 '	0.1	0	0	0	0	0.1	0.1	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	38 ° 15 '	0	0	0	0	0	0.1	0.1	-0.1	0
-0.1	-0.1	-0.1	-0.1	-0.1	0	0	0	0	38 ° 30 '	0	0	0	0	0	0.1	0.1	-0.1	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	0	38 ° 45 '	0	0	0	0	0	0.1	0.1	-0.1	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	0	39 ° 0 '	0	0	0	0	0	0.1	0	-0.1	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	0	39 ° 15 '	0.1	0	0	0	0	0.1	0	-0.1	0
-0.1	-0.1	-0.1	-0.1	-0.1	0	0	0	0	39 ° 30 '	0.1	0	0	0	0	0	0	-0.1	0
-0.1	-0.1	-0.1	-0.1	0	0	0	0	0	39 ° 45 '	0.1	0	0	0	0	0	0	-0.1	0
-0.1	0	0	0	0	0	0	0	0	40 ° 0 '	0.1	0	0	0	-0.1	0	0	0	0

Correct Astronomical Position to WGS84

Latitude 30 to 40 °S — **Correction to Latitude**

Longitude 48 to 52 °E — **Correction to Longitude**

48° 0'	48° 30'	49° 0'	49° 30'	50° 0'	50° 30'	51° 0'	51° 30'	52° 0'	Latitude	48° 0'	48° 30'	49° 0'	49° 30'	50° 0'	50° 30'	51° 0'	51° 30'	52° 0'
0	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	30 ° 0 '	-0.1	-0.1	0	0	0	0	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	30 ° 15 '	-0.1	-0.1	0	0	0	0	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	30 ° 30 '	-0.1	-0.1	0	0	0	0	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	30 ° 45 '	-0.1	-0.1	0	0	0	0	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	31 ° 0 '	-0.1	-0.1	0	0	0	0	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	31 ° 15 '	-0.1	-0.1	0	0	0	0	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	31 ° 30 '	0	-0.1	0	0	0	0	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	31 ° 45 '	0	-0.1	0	0	0	0	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	32 ° 0 '	0	-0.1	0	0	0	0	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	32 ° 15 '	0	0	0	0	0	0	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	32 ° 30 '	0	0	0	0	0	0	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	32 ° 45 '	0	0	0	0	0	0	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	33 ° 0 '	0	0	0	0	0	0	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	33 ° 15 '	0	0	0	0	0	0	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	33 ° 30 '	0	0	0	0	0	0	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	33 ° 45 '	0	0	0	0	0	0	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	34 ° 0 '	0	0	0	0	0	0	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	34 ° 15 '	0	0	0	0	0	0	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	34 ° 30 '	0	0	0	0	0	0	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	34 ° 45 '	0	0	0	0	0	0	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	35 ° 0 '	0	0	0	0	0	0	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	35 ° 15 '	0	0	0	0	0	0	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	35 ° 30 '	0	0	0	0	0	0	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	35 ° 45 '	0	0	0	0	0	0	0	0	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	36 ° 0 '	0	0	0	0	0	0	0	0	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	36 ° 15 '	0	0	0	0	0	0	0	0	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	36 ° 30 '	0	0.1	0	0	0	-0.1	0	0	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	36 ° 45 '	0	0.1	0	0	0	-0.1	0	0	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	37 ° 0 '	0	0.1	0	0	0	-0.1	0	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	37 ° 15 '	0	0.1	0	0	0	-0.1	0	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	0	-0.1	-0.1	0	37 ° 30 '	0	0	0	0	0	-0.1	0	-0.1	-0.2
-0.1	-0.1	-0.1	-0.1	0	0	0	0	0	37 ° 45 '	0	0	0	0	0	-0.1	0	-0.1	-0.2
-0.1	0	0	0	0	0	0	0	0	38 ° 0 '	0	0	0	0	-0.1	-0.1	0	-0.1	-0.2
0	0	0	0	0	0	0	0	0	38 ° 15 '	0	0	0	0	-0.1	-0.1	0	-0.1	-0.2
0	0	0	0	0	0	0	0	0	38 ° 30 '	0	0	0	0	-0.1	0	0	-0.1	-0.2
0	0	0	0	0	0	0	0	0	38 ° 45 '	0	0	-0.1	0	-0.1	0	0	-0.2	-0.1
0	0	0	0	0	0	0	0	0	39 ° 0 '	0	0	-0.1	0	-0.1	0	0	-0.1	-0.1
0	0	0	0	0	0	0	0	0	39 ° 15 '	0	0	-0.1	0	-0.1	0	0	-0.1	-0.1
0	0	0	0	0	0	0	0	0	39 ° 30 '	0	-0.1	0	0	0	0	0	-0.1	-0.1
0	0	0	0	0	0	0	0	0	39 ° 45 '	0	0	0	0	0	0	0	-0.1	0
0	0	0	0	0	0	0	0	0	40 ° 0 '	0	0	0	0	0	0	-0.1	-0.1	0

Correct Astronomical Position to WGS84

Latitude 30 to 40 °S — **Correction to Latitude**

Longitude 52 to 56 °E — **Correction to Longitude**

52° 0'	52° 30'	53° 0'	53° 30'	54° 0'	54° 30'	55° 0'	55° 30'	56° 0'	Latitude	52° 0'	52° 30'	53° 0'	53° 30'	54° 0'	54° 30'	55° 0'	55° 30'	56° 0'
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	30 ° 0 '	0	0	0	0	0	0	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	30 ° 15 '	0	0	0	0	0	0	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	30 ° 30 '	0	0	0	0	0	0	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	30 ° 45 '	0	0	0	0	0	0	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	31 ° 0 '	0	0	0	0	0	0	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	31 ° 15 '	0	0	0	0	0	0	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	31 ° 30 '	0	0	0	0	0	0	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	31 ° 45 '	0	0	0	0	0	0	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	32 ° 0 '	0	0	0	0	0	0	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	32 ° 15 '	0	0	0	0	0	0	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	32 ° 30 '	0	0	0	0	0	0	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	32 ° 45 '	0	0	0	0	0	0.1	0	0	0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	33 ° 0 '	0	0	0	0	0	0.1	0	0	0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	33 ° 15 '	0	0	0	0	0	0.1	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	33 ° 30 '	0	0	0	0	0	0.1	0	-0.1	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	33 ° 45 '	0	0	0	0	0	0.1	0	-0.1	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	-0.1	-0.1	34 ° 0 '	0	0	0	0	0	0	0	-0.1	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	-0.1	-0.1	34 ° 15 '	0	0	0	0	0	0	0	-0.1	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	34 ° 30 '	0	0	0	0	0	0	0	-0.1	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	34 ° 45 '	0	0	0	0	0	0	0	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	35 ° 0 '	0	0	0	0	0	0	0	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	0	35 ° 15 '	0	0	0	0	0	0	0	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	0	35 ° 30 '	0	0	0	0	0	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	0	-0.1	-0.1	0	0	0	0	35 ° 45 '	-0.1	0	0	0	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	0	0	0	0	0	0	0	36 ° 0 '	-0.1	0	0	0	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	0	0	0	0	0	0	36 ° 15 '	-0.1	0	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	0	0	0	0	0	0	36 ° 30 '	-0.1	0	-0.1	-0.1	0	-0.1	-0.1	-0.1	-0.1
0	-0.1	-0.1	0	0	0	0	0	0	36 ° 45 '	-0.1	0	-0.1	-0.1	0	-0.1	-0.1	-0.1	-0.1
0	0	0	0	0	0	0	0	0	37 ° 0 '	-0.1	0	-0.1	-0.2	0	-0.1	-0.1	-0.1	-0.1
0	0	0	0	0	0	0	0	0	37 ° 15 '	-0.1	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
0	0	0	0	0	0	0	0	0	37 ° 30 '	-0.2	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
0	0	0	0	0	0	0	0	0	37 ° 45 '	-0.2	0	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
0	0	0	0	0	0	0	0	0	38 ° 0 '	-0.2	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
0	0	0	0	0	0	0	0	0	38 ° 15 '	-0.2	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
0	0	0	0	0	0	0	0	0	38 ° 30 '	-0.2	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
0	0	0	0	0	0	0	0	0	38 ° 45 '	-0.1	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
0	-0.1	0	0	0	0	0	0	0	39 ° 0 '	-0.1	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
0	-0.1	0	0	0	0	0	0	-0.1	39 ° 15 '	-0.1	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
0	-0.1	0	0	0	0	-0.1	-0.1	-0.1	39 ° 30 '	-0.1	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
0	0	0	0	0	0	-0.1	-0.1	-0.1	39 ° 45 '	0	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
0	0	0	0	0	-0.1	-0.1	-0.1	-0.1	40 ° 0 '	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1

Correct Astronomical Position to WGS84

Latitude 30 to 40 °S — **Correction to Latitude**

Longitude 56 to 60 °E — **Correction to Longitude**

56° 0'	56° 30'	57° 0'	57° 30'	58° 0'	58° 30'	59° 0'	59° 30'	60° 0'	Latitude	56° 0'	56° 30'	57° 0'	57° 30'	58° 0'	58° 30'	59° 0'	59° 30'	60° 0'
-0.1	-0.1	-0.1	-0.1	-0.1	-0.2	-0.1	-0.1	-0.1	30 ° 0 '	0	0	0	0	0	0.1	0	0	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	30 ° 15 '	0	0	0	0	0	0.1	0	0	-0.1
-0.1	-0.1	-0.1	-0.1	-0.2	-0.1	-0.1	-0.1	-0.1	30 ° 30 '	0	0	0	0	0	0	0	0	-0.1
-0.1	-0.1	-0.1	-0.2	-0.2	-0.1	-0.1	-0.1	-0.1	30 ° 45 '	0	0	0	0.1	0	0	0	0	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	31 ° 0 '	0	0	0	0.1	0	0	0	0	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	31 ° 15 '	0	0	0	0	0	0	0	0	-0.1
-0.1	-0.1	-0.1	-0.1	0	-0.1	-0.1	0	0	31 ° 30 '	0	0	0	0	0	0	-0.1	0	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	31 ° 45 '	0	-0.1	0	0	0	0	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	0	0	0	0	32 ° 0 '	0	-0.1	0	0	-0.1	0	-0.1	-0.1	0
-0.1	-0.1	-0.1	-0.1	-0.1	0	0	0	0	32 ° 15 '	0	-0.1	0	0	-0.1	0	-0.1	-0.1	0
-0.1	-0.1	-0.1	0	0	0	0	0	0	32 ° 30 '	0	-0.1	0	0	-0.1	0	-0.1	-0.1	0
-0.1	-0.1	-0.1	0	0	0	0	-0.1	0	32 ° 45 '	0.1	-0.1	0	0	-0.1	0	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	0	0	0	0	0	0	33 ° 0 '	0.1	-0.1	-0.1	0	-0.1	0	0	-0.1	-0.1
-0.1	0	0	0	-0.1	0	0	0	0	33 ° 15 '	0	-0.1	-0.1	0	-0.1	0	-0.1	-0.1	0
0	0	0	0	-0.1	0	0	0	-0.1	33 ° 30 '	0	-0.1	-0.1	0	-0.1	-0.1	-0.1	-0.1	0
0	0	0	0	0	0	0	0	-0.1	33 ° 45 '	0	-0.1	-0.1	0	-0.1	-0.1	-0.1	-0.1	0
-0.1	-0.1	-0.1	0	0	0	0	0	0	34 ° 0 '	0	-0.1	-0.1	0	-0.1	-0.1	-0.1	-0.1	0
-0.1	-0.1	-0.1	0	0	0	0	0	0	34 ° 15 '	0	-0.1	-0.1	0	-0.1	-0.1	-0.1	-0.1	0
-0.1	0	0	0	0	0	0	0	0	34 ° 30 '	0	-0.1	-0.2	-0.1	0	-0.1	-0.1	-0.1	0
0	0	0	0	0	0	0	0	-0.1	34 ° 45 '	-0.1	-0.1	-0.1	-0.1	0	-0.1	-0.1	-0.1	0
0	0	0	0	0	0	0	0	-0.1	35 ° 0 '	-0.1	-0.1	-0.1	-0.1	0	-0.1	-0.1	0	0
0	0	0	0	0	0	0	0	0	35 ° 15 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	0
0	0	0	0	0	0	0	0	0	35 ° 30 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 45 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 0 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 15 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 30 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 45 '	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 0 '	-0.1	-0.1	-0.1	-0.1	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 15 '	-0.1	-0.1	-0.1	-0.1	0	0	0	0	0
0	0	0	-0.1	0	0	0	0	0	37 ° 30 '	-0.1	-0.1	-0.1	-0.1	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 45 '	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	0	0
0	0	0	0	0	-0.1	0	0	0	38 ° 0 '	-0.1	-0.1	-0.1	-0.1	0	0	0	0	0
0	0	0	0	-0.1	-0.1	0	0	0	38 ° 15 '	-0.1	-0.1	-0.1	-0.1	0	0	-0.1	0	0
0	0	0	-0.1	-0.1	0	0	0	0	38 ° 30 '	-0.1	-0.1	-0.1	-0.1	0	0	-0.1	0	0
0	0	-0.1	-0.1	-0.1	0	0	-0.1	0	38 ° 45 '	-0.1	-0.1	-0.1	0	-0.1	-0.1	0	0	0
0	0	-0.1	-0.1	-0.1	0	-0.1	-0.1	0	39 ° 0 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	39 ° 15 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	39 ° 30 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	0	-0.1	-0.1	-0.1	39 ° 45 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	0	0	-0.1	0	0	40 ° 0 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	-0.1	-0.1

Correct Astronomical Position to WGS84

Latitude 30 to 40 °S — **Correction to Latitude**

Longitude 60 to 64 °E — **Correction to Longitude**

60° 0'	60° 30'	61° 0'	61° 30'	62° 0'	62° 30'	63° 0'	63° 30'	64° 0'	Latitude	60° 0'	60° 30'	61° 0'	61° 30'	62° 0'	62° 30'	63° 0'	63° 30'	64° 0'
-0.1	-0.1	-0.1	0	0	0	0	0	-0.1	30 ° 0 '	-0.1	-0.1	0	0	-0.1	0	-0.1	0	0
-0.1	-0.1	0	0	0	0	0	-0.1	-0.1	30 ° 15 '	-0.1	-0.1	0	-0.1	0	0	-0.1	0	0
-0.1	-0.1	-0.1	0	0	0	-0.1	-0.1	-0.1	30 ° 30 '	-0.1	-0.1	0	-0.1	0	0	-0.1	0	0
-0.1	-0.1	0	0	-0.1	0	-0.1	-0.1	-0.1	30 ° 45 '	-0.1	-0.1	0	-0.1	0	0	-0.1	0	0
-0.1	-0.1	0	0	-0.1	-0.1	-0.1	-0.1	-0.1	31 ° 0 '	-0.1	-0.1	0	-0.1	0	0	0	0	0
-0.1	0	0	0	-0.1	-0.1	-0.1	-0.1	-0.1	31 ° 15 '	-0.1	-0.2	0	0	0	0	0	0	0
0	0	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	31 ° 30 '	-0.1	-0.2	0	0	0	0	0	0	0
0	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	31 ° 45 '	-0.1	-0.2	0	0	-0.1	0	0	0	0
0	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	32 ° 0 '	0	-0.1	0	0	-0.1	0	0	0	0
0	0	-0.1	0	-0.1	-0.1	-0.1	-0.1	-0.1	32 ° 15 '	0	-0.1	0	0	0	0	0	0	0
0	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	32 ° 30 '	0	-0.1	0	0	0	0	0	0	0
0	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	32 ° 45 '	-0.1	-0.1	0	0	0	0	0	0	0
0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	33 ° 0 '	-0.1	0	0	0	0	0	0	0	0
0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	33 ° 15 '	0	0	0	0	0	0	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	33 ° 30 '	0	0	0	0	0	0	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	33 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	34 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	34 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	34 ° 30 '	0	0	0	0	0	0	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	34 ° 45 '	0	0	0	0	0	0	0	0	0
-0.1	-0.1	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	35 ° 0 '	0	0	0	0	0	0	0	0	0
0	-0.1	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	35 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	-0.1	-0.1	0	35 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 15 '	-0.1	0	0	0	0	0	0	0	0
-0.1	-0.1	0	0	0	0	0	0	0	39 ° 30 '	-0.1	0	0	0	0	0	0	0	0
-0.1	-0.1	-0.1	0	0	0	0	0	0	39 ° 45 '	-0.1	0	0	0	0	0	0	0	0
0	-0.1	-0.1	0	0	0	0	0	0	40 ° 0 '	-0.1	0	0	0	0	0	0	0	0

Correct Astronomical Position to WGS84

Latitude 30 to 40 °S — **Correction to Latitude**

Longitude 64 to 68 °E — **Correction to Longitude**

64° 0'	64° 30'	65° 0'	65° 30'	66° 0'	66° 30'	67° 0'	67° 30'	68° 0'	Latitude	64° 0'	64° 30'	65° 0'	65° 30'	66° 0'	66° 30'	67° 0'	67° 30'	68° 0'
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	30 ° 0 '	0	0	0	0	0	0	0	0	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	30 ° 15 '	0	0	0	0	0	0	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	30 ° 30 '	0	0	0	0	0	0	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	30 ° 45 '	0	0	0	0	0	0	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	31 ° 0 '	0	0	0	0	0	0	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	31 ° 15 '	0	0	0	0	0	0	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	31 ° 30 '	0	0	0	0	0	0	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	31 ° 45 '	0	0	0	0	0	0	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	32 ° 0 '	0	0	0	0	0	0	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	32 ° 15 '	0	0	0	0	0	0	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	32 ° 30 '	0	0	0	0	0	0	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	32 ° 45 '	0	0	0	0	0	0	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	33 ° 0 '	0	0	0	0	0	0	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	33 ° 15 '	0	0	0	0	0	0	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	33 ° 30 '	0	0	0	0	0	-0.1	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	33 ° 45 '	0	0	0	0	0	-0.1	0	0	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	34 ° 0 '	0	0	0	0	0	-0.1	0	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	34 ° 15 '	0	0	0	0	0	-0.1	0	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	34 ° 30 '	0	0	0	0	0	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	34 ° 45 '	0	0	0	0	0	-0.1	-0.1	-0.1	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	35 ° 0 '	0	0	0	0	-0.1	-0.1	-0.1	-0.1	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	35 ° 15 '	0	0	0	0	-0.1	-0.1	-0.1	-0.1	-0.1
0	0	0	-0.1	-0.1	-0.1	-0.1	-0.1	0	35 ° 30 '	0	0	0	0	-0.1	-0.1	-0.1	-0.1	-0.1
0	0	0	0	0	0	-0.1	0	0	35 ° 45 '	0	0	0	0	-0.1	-0.1	-0.1	-0.1	-0.1
0	0	0	0	0	0	0	0	0	36 ° 0 '	0	0	0	0	-0.1	-0.1	-0.1	-0.1	-0.1
0	0	0	0	0	0	0	0	0	36 ° 15 '	0	0	0	0	-0.1	0	-0.1	-0.1	-0.1
0	0	0	0	0	0	0	0	-0.1	36 ° 30 '	0	0	0	-0.1	-0.1	0	-0.1	-0.1	-0.1
0	0	0	0	0	0	0	-0.1	-0.1	36 ° 45 '	0	0	0	0	-0.1	0	0	-0.1	-0.1
0	0	0	0	0	0	0	-0.1	-0.1	37 ° 0 '	0	0	0	0	-0.1	0	0	-0.1	-0.1
0	0	0	0	0	0	0	0	-0.1	37 ° 15 '	0	0	0	0	-0.1	0	0	0	-0.1
0	0	0	0	0	0	0	0	0	37 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	-0.1	38 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	-0.1	39 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	40 ° 0 '	0	0	0	0	0	0	0	0	0

Correct Astronomical Position to WGS84

Latitude 30 to 40 °S — **Correction to Latitude**

Longitude 68 to 72 °E — **Correction to Longitude**

68° 0'	68° 30'	69° 0'	69° 30'	70° 0'	70° 30'	71° 0'	71° 30'	72° 0'	Latitude	68° 0'	68° 30'	69° 0'	69° 30'	70° 0'	70° 30'	71° 0'	71° 30'	72° 0'
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	30 ° 0 '	-0.1	0	0	0	0	-0.1	0	0	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	30 ° 15 '	0	0	0	0	0	0	-0.1	0	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	30 ° 30 '	0	0	0	0	0	0	-0.1	0	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	30 ° 45 '	0	0	0	0	-0.1	0	-0.1	-0.1	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	31 ° 0 '	0	0	0	0	-0.1	0	-0.1	-0.1	0
0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	31 ° 15 '	0	0	0	0	-0.1	0	-0.1	-0.1	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	31 ° 30 '	0	0	0	0	-0.1	0	-0.1	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	31 ° 45 '	0	0	-0.1	-0.1	0	0	-0.1	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	32 ° 0 '	0	0	-0.1	0	0	-0.1	-0.1	0	0
-0.1	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	32 ° 15 '	0	0	0	0	-0.1	-0.1	0	0	0
-0.1	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	32 ° 30 '	0	0	0	0	-0.1	0	0	0	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	32 ° 45 '	0	0	0	0	-0.1	0	0	-0.1	0
-0.1	-0.1	-0.1	0	-0.1	-0.1	0	0	0	33 ° 0 '	0	0	0	0	-0.1	0	-0.1	-0.1	0
-0.1	-0.1	0	-0.1	-0.1	-0.1	0	-0.1	-0.1	33 ° 15 '	0	0	0	0	-0.1	-0.1	-0.1	-0.1	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	33 ° 30 '	0	0	-0.1	0	-0.1	-0.1	-0.1	-0.1	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	33 ° 45 '	-0.1	0	0	0	-0.1	-0.1	0	-0.1	0
-0.1	-0.1	-0.1	-0.1	0	-0.1	-0.1	-0.1	0	34 ° 0 '	-0.1	0	0	0	-0.1	-0.1	0	-0.1	0
-0.1	-0.1	-0.1	0	0	-0.1	-0.1	-0.1	0	34 ° 15 '	-0.1	0	0	0	-0.1	-0.1	0	-0.1	0
-0.1	-0.1	-0.1	0	0	-0.1	-0.1	-0.1	-0.1	34 ° 30 '	-0.1	0	0	0	-0.1	0	-0.1	-0.1	0
-0.1	-0.1	-0.1	0	0	-0.1	-0.1	-0.1	-0.1	34 ° 45 '	0	0	0	-0.1	0	0	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	0	0	0	0	0	-0.1	35 ° 0 '	0	-0.1	-0.1	-0.1	0	0	-0.1	-0.1	-0.1
-0.1	0	0	0	0	0	0	0	0	35 ° 15 '	-0.1	-0.1	-0.1	-0.1	0	0	-0.1	-0.1	-0.1
0	0	0	0	0	0	0	0	0	35 ° 30 '	-0.1	-0.1	-0.1	-0.1	0	-0.1	-0.1	0	-0.1
0	0	0	0	0	0	0	0	0	35 ° 45 '	-0.1	-0.1	-0.1	-0.1	0	-0.1	-0.1	0	-0.1
0	0	0	0	0	0	0	0	0	36 ° 0 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	-0.1
0	0	0	0	0	0	0	0	0	36 ° 15 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	-0.1
-0.1	-0.1	0	0	-0.1	0	0	0	0	36 ° 30 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	0	-0.1	-0.1	0	0	36 ° 45 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0
-0.1	-0.1	-0.1	-0.1	0	-0.1	-0.1	0	0	37 ° 0 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	37 ° 15 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0
0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	37 ° 30 '	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
0	0	0	-0.1	-0.1	-0.1	-0.1	0	0	37 ° 45 '	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	0	0	-0.1	-0.1	-0.1	0	0	0	38 ° 0 '	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
0	0	0	0	-0.1	-0.1	0	0	-0.1	38 ° 15 '	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
0	0	0	0	0	0	0	-0.1	-0.1	38 ° 30 '	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
0	0	0	0	0	0	0	0	0	38 ° 45 '	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
0	0	0	0	0	0	0	0	0	39 ° 0 '	0	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
0	-0.1	0	0	0	0	-0.1	-0.1	0	39 ° 15 '	0	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	0	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	39 ° 30 '	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
0	0	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	39 ° 45 '	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
0	0	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	40 ° 0 '	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1

Correct Astronomical Position to WGS84

Latitude 30 to 40 °S — **Correction to Latitude**

Longitude 72 to 76 °E — **Correction to Longitude**

72° 0'	72° 30'	73° 0'	73° 30'	74° 0'	74° 30'	75° 0'	75° 30'	76° 0'	Longitude / Latitude	72° 0'	72° 30'	73° 0'	73° 30'	74° 0'	74° 30'	75° 0'	75° 30'	76° 0'
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	30 ° 0 '	-0.1	0	0	-0.1	0	0	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	30 ° 15 '	-0.1	-0.1	0	-0.1	0	0	0	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	30 ° 30 '	-0.1	-0.1	0	0	0	0	0	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	30 ° 45 '	0	-0.1	0	0	-0.1	0	0	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	31 ° 0 '	0	-0.1	0	0	0	0	0	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	31 ° 15 '	0	0	0	0	0	0	0	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	31 ° 30 '	0	0	0	-0.1	0	0	-0.1	0	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	31 ° 45 '	0	-0.1	-0.1	-0.1	0	0	-0.1	0	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	32 ° 0 '	0	-0.1	-0.1	-0.1	0	0	0	0	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	32 ° 15 '	0	-0.1	-0.1	-0.1	0	0	0	0	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	32 ° 30 '	-0.1	-0.1	-0.1	0	0	0	0	0	-0.1
0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	32 ° 45 '	0	-0.1	0	0	0	0	0	0	-0.1
0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	33 ° 0 '	0	-0.1	0	-0.1	0	0	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	0	-0.1	-0.1	-0.1	33 ° 15 '	0	-0.1	-0.1	-0.1	0	0	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	0	0	-0.1	-0.1	33 ° 30 '	0	0	-0.1	-0.1	-0.1	0	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	0	-0.1	-0.1	-0.1	33 ° 45 '	0	0	-0.1	-0.1	-0.1	0	0	0	0
0	-0.1	0	0	-0.1	-0.1	-0.1	-0.1	-0.1	34 ° 0 '	0	0	-0.1	-0.1	-0.1	0	0	0	-0.1
0	0	0	0	-0.1	-0.1	-0.1	-0.1	-0.1	34 ° 15 '	0	0	-0.1	-0.1	0	0	0	0	-0.1
-0.1	0	0	-0.1	-0.1	-0.1	-0.1	0	-0.1	34 ° 30 '	0	0	-0.1	-0.1	0	0	0	0	0
-0.1	0	0	-0.1	-0.1	-0.1	-0.1	0	-0.1	34 ° 45 '	-0.1	-0.1	-0.1	0	0	0	0	0	0
-0.1	0	-0.1	-0.1	0	0	-0.1	-0.1	-0.1	35 ° 0 '	-0.1	-0.1	-0.1	0	0	0	0	0	0
0	0	-0.1	0	0	0	0	-0.1	-0.1	35 ° 15 '	-0.1	-0.1	0	-0.1	0	0	0	0	0
0	-0.1	-0.1	0	0	0	0	-0.1	-0.1	35 ° 30 '	-0.1	-0.1	0	-0.1	0	0	0	0	0
0	0	0	0	0	0	-0.1	-0.1	-0.1	35 ° 45 '	-0.1	-0.1	-0.1	-0.1	0	0	0	0	0
0	0	0	0	-0.1	-0.1	-0.1	-0.1	0	36 ° 0 '	-0.1	0	-0.1	-0.1	0	0	0	0	0
0	0	0	0	-0.1	-0.1	-0.1	-0.1	0	36 ° 15 '	-0.1	0	-0.1	-0.1	0	0	0	0	0
0	0	0	0	-0.1	-0.1	-0.1	0	0	36 ° 30 '	-0.1	0	-0.1	-0.1	0	0	0	0	0
0	0	0	-0.1	-0.1	-0.1	0	0	-0.1	36 ° 45 '	0	0	-0.1	-0.1	0	0	0	0	0
0	0	0	-0.1	0	0	0	0	-0.1	37 ° 0 '	0	0	-0.1	0	0	0	0	0	0
0	0	0	0	0	0	0	0	-0.1	37 ° 15 '	0	-0.1	-0.1	0	0	0	0	0	0
0	0	0	0	0	0	0	0	-0.1	37 ° 30 '	-0.1	-0.1	-0.1	-0.1	0	0	0	0	0
0	0	0	0	0	0	0	0	-0.1	37 ° 45 '	-0.1	-0.1	-0.1	-0.1	0	0	0	0	0
0	0	0	0	0	-0.1	0	0	-0.1	38 ° 0 '	-0.1	-0.1	-0.1	-0.1	0	0	0	0	0
-0.1	0	0	0	0	-0.1	0	-0.1	-0.1	38 ° 15 '	-0.1	-0.1	-0.1	-0.1	0	0	0	0	0
-0.1	0	0	0	0	0	-0.1	-0.1	-0.1	38 ° 30 '	-0.1	-0.1	-0.1	-0.1	0	0	0	0	0
0	0	0	-0.1	-0.1	0	-0.1	-0.1	0	38 ° 45 '	-0.1	-0.1	-0.1	-0.1	0	0	0	0	0
0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	39 ° 0 '	-0.1	-0.1	-0.1	-0.1	0	0	0	0	0
0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	39 ° 15 '	-0.1	-0.1	-0.1	-0.1	0	0	0	0	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	39 ° 30 '	-0.1	-0.1	-0.1	-0.1	0	0	0	0	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	39 ° 45 '	-0.1	-0.1	-0.1	-0.1	0	0	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	-0.1	40 ° 0 '	-0.1	-0.1	-0.1	-0.1	0	0	0	0	0

Correct Astronomical Position to WGS84

Latitude 30 to 40 °S — **Correction to Latitude**

Longitude 76 to 80 °E — **Correction to Longitude**

76° 0'	76° 30'	77° 0'	77° 30'	78° 0'	78° 30'	79° 0'	79° 30'	80° 0'	Longitude Latitude	76° 0'	76° 30'	77° 0'	77° 30'	78° 0'	78° 30'	79° 0'	79° 30'	80° 0'
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	30 ° 0 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	30 ° 15 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	30 ° 30 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	30 ° 45 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	31 ° 0 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	31 ° 15 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	31 ° 30 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	31 ° 45 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	32 ° 0 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	32 ° 15 '	-0.1	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	32 ° 30 '	-0.1	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	32 ° 45 '	-0.1	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	33 ° 0 '	0	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	33 ° 15 '	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	33 ° 30 '	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	33 ° 45 '	0	-0.1	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	34 ° 0 '	-0.1	0	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	34 ° 15 '	-0.1	0	0	0	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	34 ° 30 '	0	0	0	0	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	34 ° 45 '	0	0	0	0	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	35 ° 0 '	0	0	0	0	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	35 ° 15 '	0	0	0	0	0	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	35 ° 30 '	0	0	0	0	0	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	35 ° 45 '	0	0	0	0	0	-0.1	-0.1	-0.1	-0.1
0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	36 ° 0 '	0	0	0	0	0	-0.1	-0.1	-0.1	-0.1
0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	36 ° 15 '	0	0	0	0	0	-0.1	-0.1	-0.1	-0.1
0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	36 ° 30 '	0	0	0	0	0	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	36 ° 45 '	0	0	0	0	0	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	0	-0.1	-0.1	-0.1	-0.1	-0.1	0	37 ° 0 '	0	0	0	0	0	-0.1	-0.1	-0.1	-0.2
-0.1	0	0	-0.1	-0.1	-0.1	-0.1	-0.1	0	37 ° 15 '	0	0	0	0	0	-0.1	-0.1	-0.1	-0.2
-0.1	0	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	37 ° 30 '	0	0	0	0	0	-0.1	-0.1	-0.2	-0.2
-0.1	0	-0.1	-0.1	-0.1	-0.1	0	0	0	37 ° 45 '	0	0	0	0	0	-0.1	-0.1	-0.2	-0.2
-0.1	-0.1	-0.1	-0.1	0	0	0	0	0	38 ° 0 '	0	0	0	0	0	-0.1	-0.1	-0.2	-0.1
-0.1	-0.1	-0.1	0	0	0	0	0	0	38 ° 15 '	0	0	0	0	-0.1	-0.1	-0.1	-0.2	-0.1
-0.1	0	0	0	0	0	0	0	0	38 ° 30 '	0	-0.1	0	0	-0.1	-0.1	-0.1	-0.1	-0.1
0	0	0	0	0	0	0	0	0	38 ° 45 '	0	-0.1	0	0	-0.1	-0.1	-0.1	-0.1	-0.1
0	0	-0.1	0	0	0	0	-0.1	0	39 ° 0 '	0	0	0	0	-0.1	-0.1	-0.1	-0.1	-0.1
0	0	-0.1	-0.1	0	0	-0.1	-0.1	0	39 ° 15 '	-0.1	0	0	0	-0.1	-0.1	-0.1	-0.1	-0.1
0	-0.1	-0.1	0	0	0	-0.1	-0.1	0	39 ° 30 '	-0.1	0	0	0	-0.1	-0.1	-0.1	-0.1	-0.1
0	-0.1	-0.1	0	0	0	-0.1	-0.1	0	39 ° 45 '	0	0	0	0	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	0	0	0	-0.1	-0.1	0	40 ° 0 '	0	0	0	0	-0.1	-0.1	-0.1	-0.1	-0.1

Correct Astronomical Position to WGS84

Latitude 30 to 40 °S — **Correction to Latitude**

Longitude 80 to 84 °E — **Correction to Longitude**

80° 0'	80° 30'	81° 0'	81° 30'	82° 0'	82° 30'	83° 0'	83° 30'	84° 0'	Latitude	80° 0'	80° 30'	81° 0'	81° 30'	82° 0'	82° 30'	83° 0'	83° 30'	84° 0'
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	30 ° 0 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	30 ° 15 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	30 ° 30 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	30 ° 45 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	31 ° 0 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	31 ° 15 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	31 ° 30 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	31 ° 45 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	32 ° 0 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	32 ° 15 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	32 ° 30 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	32 ° 45 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	33 ° 0 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	33 ° 15 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	33 ° 30 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	33 ° 45 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	34 ° 0 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	-0.1	-0.1	34 ° 15 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	0	-0.1	-0.1	-0.1	34 ° 30 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	0	-0.1	-0.1	-0.1	-0.1	34 ° 45 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	0	-0.1	-0.1	-0.1	-0.1	35 ° 0 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	35 ° 15 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	0	-0.1	-0.1	-0.1	-0.1	-0.1	35 ° 30 '	-0.1	-0.1	-0.1	-0.1	-0.1	0	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	0	-0.1	-0.1	-0.1	-0.1	-0.1	35 ° 45 '	-0.1	-0.1	-0.1	-0.1	-0.1	0	-0.1	-0.1	-0.1
-0.1	-0.1	0	0	-0.1	-0.1	0	-0.1	-0.1	36 ° 0 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	0	-0.1	-0.1	-0.1	0	-0.1	-0.1	36 ° 15 '	-0.1	-0.1	-0.2	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	0	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	36 ° 30 '	-0.1	-0.1	-0.2	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
0	0	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	36 ° 45 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
0	0	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	37 ° 0 '	-0.2	-0.2	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
0	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	37 ° 15 '	-0.2	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	37 ° 30 '	-0.2	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	37 ° 45 '	-0.2	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	38 ° 0 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	38 ° 15 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	38 ° 30 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	38 ° 45 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	39 ° 0 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	39 ° 15 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	39 ° 30 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	39 ° 45 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	40 ° 0 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1

Correct Astronomical Position to WGS84

Latitude 30 to 40 °S — **Correction to Latitude**

Longitude 84 to 88 °E — **Correction to Longitude**

84° 0'	84° 30'	85° 0'	85° 30'	86° 0'	86° 30'	87° 0'	87° 30'	88° 0'	Latitude	84° 0'	84° 30'	85° 0'	85° 30'	86° 0'	86° 30'	87° 0'	87° 30'	88° 0'
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	30 ° 0 '	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	0	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	30 ° 15 '	-0.1	-0.1	-0.1	0	-0.1	-0.1	0	0	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	30 ° 30 '	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	0	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	30 ° 45 '	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	0	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	31 ° 0 '	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	0	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	31 ° 15 '	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	0	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	31 ° 30 '	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	0	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	31 ° 45 '	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	0	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	32 ° 0 '	-0.1	-0.1	-0.1	-0.1	0	0	0	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	32 ° 15 '	-0.1	-0.1	-0.1	-0.1	0	0	0	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	32 ° 30 '	-0.1	-0.1	-0.1	0	0	0	0	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	32 ° 45 '	-0.1	-0.1	-0.1	0	0	0	-0.1	-0.1	-0.1
0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	33 ° 0 '	-0.1	-0.1	-0.1	0	0	-0.1	-0.1	-0.1	-0.1
0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	33 ° 15 '	0	-0.1	-0.1	0	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	33 ° 30 '	0	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	33 ° 45 '	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	-0.1	-0.1	34 ° 0 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	0	0	0	-0.1	34 ° 15 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	0	0	0	-0.1	34 ° 30 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	0	0	-0.1	-0.1	34 ° 45 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	0	-0.1	-0.1	-0.1	35 ° 0 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	0	-0.1	-0.1	-0.1	35 ° 15 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	0	0	-0.1	-0.1	-0.1	35 ° 30 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	0	-0.1	-0.1	-0.1	-0.1	35 ° 45 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	36 ° 0 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	36 ° 15 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	36 ° 30 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	36 ° 45 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	37 ° 0 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	37 ° 15 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	37 ° 30 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	37 ° 45 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	38 ° 0 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	38 ° 15 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	38 ° 30 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	38 ° 45 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	39 ° 0 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	39 ° 15 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	39 ° 30 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	39 ° 45 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	40 ° 0 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1

Correct Astronomical Position to WGS84

Latitude 30 to 40 °S — **Correction to Latitude**

Longitude 88 to 92 °E — **Correction to Longitude**

88° 0'	88° 30'	89° 0'	89° 30'	90° 0'	90° 30'	91° 0'	91° 30'	92° 0'	Latitude	88° 0'	88° 30'	89° 0'	89° 30'	90° 0'	90° 30'	91° 0'	91° 30'	92° 0'
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	30 ° 0 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.2	30 ° 15 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	30 ° 30 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0
-0.1	-0.1	0	0	0	0	0	0	0	30 ° 45 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0
-0.1	-0.1	0	0	0	0	0	0	0	31 ° 0 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0
-0.1	-0.1	0	0	0	0	0	0	0	31 ° 15 '	-0.1	-0.2	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
0	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	31 ° 30 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
0	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	31 ° 45 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
0	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	32 ° 0 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	32 ° 15 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	32 ° 30 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	32 ° 45 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	33 ° 0 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	33 ° 15 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	33 ° 30 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	33 ° 45 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	34 ° 0 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	34 ° 15 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	34 ° 30 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	34 ° 45 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	35 ° 0 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	35 ° 15 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	35 ° 30 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	35 ° 45 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	36 ° 0 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	36 ° 15 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	36 ° 30 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	36 ° 45 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	37 ° 0 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	37 ° 15 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	37 ° 30 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	37 ° 45 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	38 ° 0 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	38 ° 15 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	38 ° 30 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	38 ° 45 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	39 ° 0 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	39 ° 15 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	39 ° 30 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	39 ° 45 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	40 ° 0 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1

Correct Astronomical Position to WGS84

Latitude 30 to 40 °S — **Correction to Latitude**

Longitude 92 to 96 °E — **Correction to Longitude**

92° 0'	92° 30'	93° 0'	93° 30'	94° 0'	94° 30'	95° 0'	95° 30'	96° 0'	Longitude / Latitude	92° 0'	92° 30'	93° 0'	93° 30'	94° 0'	94° 30'	95° 0'	95° 30'	96° 0'
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	30 ° 0 '	0	0	0	0	0	0	-0.1	-0.1	-0.1
-0.2	-0.2	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	30 ° 15 '	0	0	-0.1	0	0	0	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	30 ° 30 '	0	0	-0.1	0	-0.1	-0.1	-0.1	-0.1	-0.1
0	0	0	0	-0.1	-0.1	-0.1	-0.1	0	30 ° 45 '	0	-0.1	0	0	-0.1	-0.1	-0.1	-0.1	-0.1
0	0.1	0.1	0	0	0	-0.1	-0.1	-0.1	31 ° 0 '	0	-0.1	0	0	0	-0.1	-0.1	-0.1	-0.1
0	0	0	0	0	0	0	-0.1	-0.1	31 ° 15 '	-0.1	-0.1	0	0	0	0	0	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	0	0	0	-0.1	-0.1	31 ° 30 '	-0.1	-0.1	0	0	0	0	0	0	-0.1
-0.1	-0.1	-0.1	-0.1	0	0	0	0	0	31 ° 45 '	-0.1	-0.1	0	-0.1	-0.1	0	0	0	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	0.1	0.1	32 ° 0 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	0
-0.1	0	0	0	0	-0.1	0	0	0.1	32 ° 15 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	0
-0.1	-0.1	0	0	0	-0.1	-0.1	0	0	32 ° 30 '	-0.1	-0.1	-0.1	-0.1	0	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	0	-0.1	-0.1	-0.1	32 ° 45 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	0	0	-0.1	-0.1	33 ° 0 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	-0.1	33 ° 15 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	33 ° 30 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	33 ° 45 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	34 ° 0 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	34 ° 15 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	34 ° 30 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	34 ° 45 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	35 ° 0 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	35 ° 15 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	35 ° 30 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	35 ° 45 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	36 ° 0 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	36 ° 15 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	36 ° 30 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	36 ° 45 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	37 ° 0 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	37 ° 15 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	37 ° 30 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	37 ° 45 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	38 ° 0 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	38 ° 15 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	38 ° 30 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	38 ° 45 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	39 ° 0 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	39 ° 15 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	39 ° 30 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	39 ° 45 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	40 ° 0 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1

Correct Astronomical Position to WGS84

Latitude 30 to 40 °S — **Correction to Latitude**

Longitude 96 to 100 °E — **Correction to Longitude**

96° 0'	96° 30'	97° 0'	97° 30'	98° 0'	98° 30'	99° 0'	99° 30'	100° 0'	Latitude	96° 0'	96° 30'	97° 0'	97° 30'	98° 0'	98° 30'	99° 0'	99° 30'	100° 0'
-0.1	0	0	0	0	0	0	0	0	30 ° 0 '	-0.1	-0.1	0	0	0	0	-0.1	0	0
0	0	0	0	0	0	0	0	0	30 ° 15 '	-0.1	-0.1	0	0	0	0	0	-0.1	-0.1
0	0	0	0	0	0	0	0	0	30 ° 30 '	-0.1	-0.1	0	0	0	0	0	-0.1	-0.1
0	0	0	0	0	0	0	0	0	30 ° 45 '	-0.1	0	0	0	0	-0.1	0	-0.1	-0.1
-0.1	-0.1	0	0	0	0	0	0	0	31 ° 0 '	-0.1	0	-0.1	0	0	-0.1	0	-0.1	-0.1
-0.1	-0.1	-0.1	0	0	0	0	0	0	31 ° 15 '	-0.1	-0.1	-0.1	0	0	-0.1	0	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	31 ° 30 '	-0.1	-0.1	-0.1	0	0	-0.1	-0.1	-0.1	-0.1
0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	31 ° 45 '	-0.1	-0.1	-0.1	-0.1	0	-0.1	-0.1	0	-0.1
0.1	0	-0.1	-0.1	0	0	0	-0.1	-0.1	32 ° 0 '	0	0	-0.1	-0.1	0	-0.1	0	0	-0.1
0.1	0.1	0	0.1	0.1	0.1	0	0	0	32 ° 15 '	0	0	-0.1	-0.1	0	-0.1	0	0	-0.1
0	0.1	0.1	0.1	0.1	0.1	0	0.1	0.1	32 ° 30 '	-0.1	0	-0.1	-0.1	0	0	0	0	-0.1
-0.1	0	0	0	0	0	0	0	0	32 ° 45 '	-0.1	-0.1	-0.1	-0.1	0	0	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	33 ° 0 '	-0.1	-0.1	-0.1	-0.1	0	0	0	-0.1	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	33 ° 15 '	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	-0.1	-0.1
0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	33 ° 30 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	-0.1
0	0	0	0	0	0	0	0	0	33 ° 45 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	0
-0.1	0	0	0	0	-0.1	0	0	0	34 ° 0 '	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	34 ° 15 '	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	-0.1	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	34 ° 30 '	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	-0.1	-0.1
-0.1	-0.1	-0.1	0	-0.1	-0.1	0	0	-0.1	34 ° 45 '	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	-0.1	35 ° 0 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	35 ° 15 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	35 ° 30 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	35 ° 45 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	36 ° 0 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	36 ° 15 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	36 ° 30 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	36 ° 45 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	37 ° 0 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	37 ° 15 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	37 ° 30 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	37 ° 45 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	38 ° 0 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	38 ° 15 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	38 ° 30 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	38 ° 45 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	39 ° 0 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	39 ° 15 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	39 ° 30 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	39 ° 45 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	40 ° 0 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1

Correct Astronomical Position to WGS84

Latitude 30 to 40 °S — **Correction to Latitude**

Longitude 100 to 104 °E — **Correction to Longitude**

100° 0'	100° 30'	101° 0'	101° 30'	102° 0'	102° 30'	103° 0'	103° 30'	104° 0'	Latitude	100° 0'	100° 30'	101° 0'	101° 30'	102° 0'	102° 30'	103° 0'	103° 30'	104° 0'
0	0	0	0	0	0	0	0	0	30 ° 0 '	0	0	0	0	0	0	-0.1	0	0
0	0	0	0	0	0	0	0	0	30 ° 15 '	-0.1	0	0	0	0	0	-0.1	0	0
0	0	0	0	0	0	0	0	0	30 ° 30 '	-0.1	0	0	0	0	0	-0.1	0	0
0	0	0	0	0	0	0	0	0	30 ° 45 '	-0.1	0	0	-0.1	0	0	-0.1	0	0
0	0	0	0	0	0	0	0	0	31 ° 0 '	-0.1	0	0	-0.1	0	0	-0.1	0	0
0	0	0	-0.1	0	0	0	0	0	31 ° 15 '	-0.1	0	0	-0.1	-0.1	0	-0.1	0	0
-0.1	-0.1	0	-0.1	-0.1	0	0	0	0	31 ° 30 '	-0.1	0	0	-0.1	-0.1	-0.1	0	0	0
-0.1	-0.1	0	-0.1	-0.1	0	0	0	0	31 ° 45 '	-0.1	0	0	-0.1	-0.2	-0.1	0	0	0
-0.1	-0.1	0	0	0	0	0	0	0	32 ° 0 '	-0.1	-0.1	0	0	-0.2	-0.1	-0.1	0	0
0	0	0	0.1	0	0	0	0	0	32 ° 15 '	-0.1	-0.1	0	-0.1	-0.2	-0.1	-0.1	0	0
0.1	0	0	0.1	0.1	0	0	0	0	32 ° 30 '	-0.1	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0
0	0	0	0.1	0.1	0	0	0	0	32 ° 45 '	0	0	-0.1	-0.1	-0.1	0	0	0	0
-0.1	0	0	0	0	0	0	0	0	33 ° 0 '	0	0	-0.2	-0.1	0	0	0	0	0
-0.1	-0.1	0	-0.1	-0.1	-0.1	0	0	0	33 ° 15 '	-0.1	-0.1	-0.2	-0.1	0	0	-0.1	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	33 ° 30 '	-0.1	-0.1	-0.2	0	0	-0.1	-0.1	-0.1	0
0	0	-0.1	-0.1	0	0	-0.1	-0.1	0	33 ° 45 '	0	-0.1	-0.1	0	0	-0.1	-0.1	-0.1	0
0	0	-0.1	-0.1	0	0	0	-0.1	-0.1	34 ° 0 '	0	-0.1	-0.1	-0.1	0	0	-0.1	-0.1	-0.1
0	0	-0.1	-0.1	0	0	0	-0.1	-0.1	34 ° 15 '	0	-0.1	-0.1	-0.1	-0.1	0	0	-0.1	-0.1
0	0	-0.1	-0.1	-0.1	0	0	0	-0.1	34 ° 30 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	-0.1	-0.1
-0.1	0	0	-0.1	-0.1	-0.1	0	0	0	34 ° 45 '	-0.1	-0.1	0	-0.1	-0.2	-0.1	0	0	-0.1
-0.1	-0.1	0	0	-0.1	-0.1	-0.1	0	-0.1	35 ° 0 '	-0.1	-0.1	0	-0.1	-0.1	-0.1	-0.1	0	0
-0.1	-0.1	0	0	-0.1	-0.1	-0.1	-0.1	-0.1	35 ° 15 '	-0.1	-0.1	-0.1	0	-0.1	-0.1	-0.1	-0.1	0
-0.1	-0.1	-0.1	0	0	-0.1	-0.1	-0.1	-0.1	35 ° 30 '	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0
0	0	0	0	0	-0.1	-0.1	-0.1	-0.1	35 ° 45 '	-0.1	-0.1	-0.1	-0.1	-0.1	0	-0.1	-0.1	-0.1
-0.1	-0.1	0	-0.1	0	0	-0.1	-0.1	-0.1	36 ° 0 '	-0.1	-0.1	-0.1	-0.1	-0.1	0	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	0	0	-0.1	-0.1	36 ° 15 '	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	-0.1	36 ° 30 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	36 ° 45 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	37 ° 0 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	37 ° 15 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	37 ° 30 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	37 ° 45 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	38 ° 0 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	38 ° 15 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	38 ° 30 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	38 ° 45 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	39 ° 0 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	39 ° 15 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	39 ° 30 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	39 ° 45 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	40 ° 0 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1

Correct Astronomical Position to WGS84

Latitude 30 to 40 °S — **Correction to Latitude**

Longitude 104 to 108 °E — **Correction to Longitude**

104° 0'	104° 30'	105° 0'	105° 30'	106° 0'	106° 30'	107° 0'	107° 30'	108° 0'	Latitude	104° 0'	104° 30'	105° 0'	105° 30'	106° 0'	106° 30'	107° 0'	107° 30'	108° 0'
0	0	0	0	0	0	0	0	0	30 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	30 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	30 ° 30 '	0	0	0.1	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	30 ° 45 '	0	0	0.1	-0.1	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 0 '	0	0	0.1	-0.1	0	0	0	0	0
0	0	0.1	0.1	0	0	0	0	0	31 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0.1	0	0	0	0	0	0	31 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 45 '	0	-0.1	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 15 '	0	0	0	0.1	0	0	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 30 '	0	0	0	0.1	0	0	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 45 '	0	0	0	0.1	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 45 '	0	0	0	0	0	0	0	0	0
-0.1	0	0	0	0	0	0	0	0	34 ° 0 '	-0.1	0	0	0	0	0	0	0	0
-0.1	0	0	0	0	0	0	0	0	34 ° 15 '	-0.1	-0.1	0	0	0	0	0	0	0
-0.1	0	0	0	0	0	0	0	0	34 ° 30 '	-0.1	-0.1	0	0	0	0	0	0	0
0	-0.1	-0.1	0	0	0	0	0	0	34 ° 45 '	-0.1	-0.1	-0.1	0	0	0	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	0	35 ° 0 '	0	-0.1	-0.1	0	0	0	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	0	35 ° 15 '	0	-0.1	-0.1	0	0	0	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	35 ° 30 '	0	-0.1	-0.1	0	0	-0.1	0	0	0
-0.1	-0.1	-0.1	-0.1	0	0	-0.1	-0.1	0	35 ° 45 '	-0.1	-0.1	-0.1	0	0	-0.1	0	0	0
-0.1	-0.1	-0.1	-0.1	0	0	-0.1	-0.1	-0.1	36 ° 0 '	-0.1	-0.1	-0.1	0	0	0	0	0	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	36 ° 15 '	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	0	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	36 ° 30 '	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	-0.1	-0.1
0	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	36 ° 45 '	-0.1	0	0	0	0	0	0	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	37 ° 0 '	-0.1	0	0	0	0	0	-0.1	-0.1	0
-0.1	-0.1	-0.1	0	0	0	0	-0.1	-0.1	37 ° 15 '	-0.1	0	0	0	0	0	-0.1	0	0
-0.1	-0.1	-0.1	0	0	0	-0.1	-0.1	-0.1	37 ° 30 '	0	0	-0.1	0	0	0	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	0	-0.1	-0.1	-0.1	37 ° 45 '	-0.1	0	-0.1	0	0	0	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	0	38 ° 0 '	-0.1	-0.1	-0.1	0	0	0	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	0	38 ° 15 '	-0.1	-0.1	-0.1	0	0	0	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	38 ° 30 '	-0.1	-0.1	-0.1	0	0	0	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	38 ° 45 '	-0.1	-0.1	-0.1	-0.1	0	0	-0.1	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	39 ° 0 '	-0.1	-0.1	-0.1	-0.1	0	0	-0.1	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	39 ° 15 '	-0.1	-0.1	-0.1	-0.1	0	0	-0.1	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	39 ° 30 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	39 ° 45 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	40 ° 0 '	-0.1	-0.1	-0.1	-0.1	-0.1	0	-0.1	0	0

Correct Astronomical Position to WGS84

Latitude 30 to 40 °S — **Correction to Latitude**

Longitude 108 to 112 °E — **Correction to Longitude**

108° 0'	108° 30'	109° 0'	109° 30'	110° 0'	110° 30'	111° 0'	111° 30'	112° 0'	Latitude	108° 0'	108° 30'	109° 0'	109° 30'	110° 0'	110° 30'	111° 0'	111° 30'	112° 0'
0	0	0	0	0	0	0	0	0	30 ° 0 '	0	0	0	0	0	0	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	30 ° 15 '	0	0	0	0	0	0	0.1	0	0.1
0	0	0	0	0	0	0	0	0	30 ° 30 '	0	0	0	0	0	0	0.1	0	0.1
0	0	0	0	0	0	0	0	0	30 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	-0.1	0	0	0	32 ° 30 '	0	0	0	0	0.1	0	0	0	0
0	0	0	0	-0.1	-0.1	-0.1	0	0	32 ° 45 '	0	0	0	0.1	0.1	0	-0.1	0	0
0	0	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	33 ° 0 '	0	0	0.1	0.1	0.1	0	-0.1	0	0
0	0	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	33 ° 15 '	0	0	0.1	0.1	0.1	0	-0.1	0	0
0	0	0	0	0	0	0	-0.1	-0.1	33 ° 30 '	0	0	0.1	0.1	0.1	0	-0.1	0	0
0	0	0	0	0	0	0	0	0	33 ° 45 '	0	0	0.1	0.1	0.1	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 0 '	0	0	0.1	0.1	0.1	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 15 '	0	0	0.1	0.1	0.1	0	0	0	0
0	0	0	0.1	0.1	0	0.1	0	0	34 ° 30 '	0	0	0	0.1	0.1	0	0	0	-0.1
0	0	0	0.1	0.1	0.1	0.1	0.1	0.1	34 ° 45 '	0	0	0	0.1	0.1	0	0	0	-0.1
0	0	0	0	0.1	0.1	0.1	0.1	0.1	35 ° 0 '	0	0	0	0.1	0.1	0	0	0	0
0	0	0	0	0.1	0.1	0.1	0.1	0.1	35 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0.1	0	0	0.1	35 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 45 '	0	0	0	0	0	0	0	0	0
-0.1	-0.1	0	-0.1	-0.1	-0.1	0	0	0	36 ° 0 '	-0.1	0	0	0	0	0	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	0	36 ° 15 '	-0.1	0	0	0	0	0	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	-0.1	36 ° 30 '	-0.1	-0.1	0	0.1	-0.1	-0.1	0	0	0
-0.1	-0.1	-0.1	-0.1	0	0	-0.1	-0.1	-0.1	36 ° 45 '	-0.1	-0.1	0	0	-0.1	-0.1	0	0	0
-0.1	-0.1	-0.1	-0.1	0	-0.1	-0.1	-0.1	-0.1	37 ° 0 '	0	0	0	0	-0.1	-0.1	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	37 ° 15 '	0	0	0	0	-0.1	0	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	37 ° 30 '	0	0	0	-0.1	0	0	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	37 ° 45 '	0	0	0	0	0	0	0	0	0
0	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	0	38 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 45 '	0	0	0	0	0	0	0	0	0
-0.1	0	0	0	0	0	0	0	0	39 ° 0 '	0	0	0	0	0	0	0	0	0
-0.1	-0.1	0	0	0	0	0	0	0	39 ° 15 '	0	0	0	0	0	0	0	0	0
-0.1	-0.1	0	0	0	0	0	0	0	39 ° 30 '	0	0	0	0	0	0	0	0	0
-0.1	0	0	0	0	0	0	0	0	39 ° 45 '	0	-0.1	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	40 ° 0 '	0	-0.1	0	0	0	0	0	0	0

Correct Astronomical Position to WGS84

Latitude 30 to 40 °S — **Correction to Latitude**

Longitude 112 to 116 °E — **Correction to Longitude**

112° 0'	112° 30'	113° 0'	113° 30'	114° 0'	114° 30'	115° 0'	115° 30'	116° 0'	Longitude / Latitude	112° 0'	112° 30'	113° 0'	113° 30'	114° 0'	114° 30'	115° 0'	115° 30'	116° 0'
0	0	0	0.1	0.2	0.1	0	0.1	0.1	30 ° 0 '	0.1	0	0	0.1	0.3	0.2	-0.1	0.1	0.2
0	0	0	0.1	0.2	0.1	0	0.1	0.1	30 ° 15 '	0.1	0	0	0.1	0.2	0.3	-0.1	0	0.3
0	0	0	0	0.1	0.1	0.1	0.1	0.1	30 ° 30 '	0.1	0	0	0	0.2	0.3	0	0	0.3
0	0	0	0	0	0.1	0.1	0.1	0.1	30 ° 45 '	0	0	0.1	0.1	0.1	0.3	0	0	0.3
0	0	0	0	0	0.1	0.1	0.1	0	31 ° 0 '	0	0	0.1	0.1	0.1	0.2	0	0	0.3
0	0	0	0	0	0.1	0.1	0.1	0.1	31 ° 15 '	0	0	0	0.1	0.1	0.2	0	0	0.3
0	0	0	0	0	0.1	0.1	0.1	0.1	31 ° 30 '	0	0	0	0.1	0.1	0.1	0	0.1	0.3
0	0	0	0	0	0	0.1	0	0	31 ° 45 '	0	0	0	0.1	0.1	0.1	0	0.1	0.3
0	0	0	0	0	0	0	0	0	32 ° 0 '	0	0	0	0.1	0.1	0.1	0	0.1	0.4
0	0	0	0	0	0	0	0	0	32 ° 15 '	0	0	0	0.1	0.1	0.1	0	0.1	0.4
0	0	0	0	0	-0.1	-0.1	0	0	32 ° 30 '	0	0	0	0.1	0.2	0.1	0	0.1	0.4
0	0	0	0	0	0	-0.1	0	0	32 ° 45 '	0	0	0	0.1	0.2	0.1	-0.1	0.1	0.3
-0.1	0	0	0	0	0	0	0	0	33 ° 0 '	0	0	0	0.1	0.2	0.2	-0.1	0.1	0.3
-0.1	0	0	0	0	0	0	0	0	33 ° 15 '	0	0	0	0.1	0.2	0.2	0	0.1	0.3
-0.1	0	0	0	0	0	0	0	0	33 ° 30 '	0	0	0	0.1	0.2	0.2	0	0.1	0.3
0	0	0	0	0	0	0	0	0	33 ° 45 '	0	-0.1	0	0.1	0.2	0.2	0	0.1	0.3
0	0	0	0	0	0	0	0	0	34 ° 0 '	0	-0.1	0	0.1	0.2	0.2	0	0.1	0.2
0	0	0	0	0	0	0	0	0.1	34 ° 15 '	0	-0.1	0	0.1	0.2	0.2	0	0.1	0.2
0	0	0.1	0.1	0.1	0.1	0.1	0	0.1	34 ° 30 '	-0.1	-0.1	0	0.1	0.2	0.2	0	0	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	34 ° 45 '	-0.1	-0.1	0	0.1	0.2	0.2	0.1	0.1	0.1
0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	35 ° 0 '	0	-0.1	0	0.1	0.2	0.2	0.1	0.1	0.1
0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	35 ° 15 '	0	-0.1	0	0.1	0.1	0.1	0.1	0.1	0.1
0.1	0	0	0	0.1	0.1	0.2	0.2	0.2	35 ° 30 '	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1
0	0	0	0	0	0.1	0.1	0.1	0.2	35 ° 45 '	0	0	0	0	0	0	0.1	0.1	0.1
0	0	0	0	0	0	0	0.1	0.1	36 ° 0 '	0	0	0	0	0	0	0	0	0.1
0	0	0	0	0	0	0	0	0	36 ° 15 '	0	0	0	0	0	0	0	0	0
-0.1	-0.1	-0.1	-0.1	0	0	0	0	0	36 ° 30 '	0	0	0	0	0	0	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	0	0	0	0	36 ° 45 '	0	0	0	0	0	0	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	0	0	0	0	37 ° 0 '	0	0	0	0	0	0	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	-0.1	-0.1	37 ° 15 '	0	0	0	0	0	0	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	37 ° 30 '	0	0	0	0	0	0	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	37 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	-0.1	-0.1	0	38 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	40 ° 0 '	0	0	0	0	0	0	0	0	0

Correct Astronomical Position to WGS84

Latitude 30 to 40 °S — **Correction to Latitude**

Longitude 116 to 120 °E — **Correction to Longitude**

116° 0'	116° 30'	117° 0'	117° 30'	118° 0'	118° 30'	119° 0'	119° 30'	120° 0'	Longitude / Latitude	116° 0'	116° 30'	117° 0'	117° 30'	118° 0'	118° 30'	119° 0'	119° 30'	120° 0'
0.1	0	0	0.1	0	0.1	0.1	0.1	0	30 ° 0 '	0.2	0.1	0.1	0	0	0.1	0	0	0
0.1	0	0.1	0.1	0	0.1	0.1	0.1	0	30 ° 15 '	0.3	0.1	0	0	0	0	0	0	0
0.1	0	0.1	0	0	0.1	0.1	0.1	0	30 ° 30 '	0.3	0.2	0	0	0	0	0	0	0
0.1	0	0.1	0	0	0	0.1	0.1	0	30 ° 45 '	0.3	0.2	0	0.1	0	0	0	0	0
0	0	0.1	0.1	0.1	0	0	0	0	31 ° 0 '	0.3	0.2	0	0.1	0	0	0	0	0
0.1	0.1	0.1	0.1	0.1	0	0	0	0	31 ° 15 '	0.3	0.2	0	0.1	0	0	0	0	0
0.1	0	0	0	0	0	0	0	0	31 ° 30 '	0.3	0.2	0	0.1	0	0.1	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 45 '	0.3	0.2	0	0	0	0	0	0	0
0	0	0	0	0	0	0.1	0.1	0	32 ° 0 '	0.4	0.2	0	0	0	0	0	0	0
0	0	0	0	0	0	0.1	0.1	0	32 ° 15 '	0.4	0.2	0	0	0	0	0	0	0
0	0	0	0	0	0	0.1	0.1	0	32 ° 30 '	0.4	0.1	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0.1	0	32 ° 45 '	0.3	0.1	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0.1	0	33 ° 0 '	0.3	0.1	0	0	0	0	0	0	0
0	0	0	0	0	0	0.1	0.1	0	33 ° 15 '	0.3	0.1	0	0	0	0	0	0	0
0	0	0	0	0	0	0.1	0.1	0	33 ° 30 '	0.3	0.1	0	0	0	-0.1	-0.1	0	0
0	0	0	0	0	0.1	0.1	0.1	0	33 ° 45 '	0.3	0.1	0	0	-0.1	-0.1	-0.1	0	0
0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	34 ° 0 '	0.2	0.1	0	0	-0.1	-0.1	-0.1	0	0
0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0	34 ° 15 '	0.2	0.1	0	0	-0.1	-0.1	-0.1	0	0
0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0	34 ° 30 '	0.1	0	0	0	0	-0.1	0	0	0
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0	34 ° 45 '	0.1	0	0	0	0	-0.1	-0.1	0	0
0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0	35 ° 0 '	0.1	0	0	0	0	-0.1	-0.1	0	0
0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0	35 ° 15 '	0.1	0.1	0	0	-0.1	-0.1	-0.1	0	0
0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0	35 ° 30 '	0.1	0.1	0	0	-0.1	-0.1	0	0	0
0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0	35 ° 45 '	0.1	0	0	0	-0.1	-0.1	0	0	0
0.1	0.1	0.1	0.1	0.1	0.1	0	0.1	0	36 ° 0 '	0.1	0	0	0	0	0	0	0	0
0	0	0.1	0.1	0	0	0	0	0	36 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	-0.1	0	36 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	-0.1	-0.1	-0.1	-0.1	-0.1	0	37 ° 0 '	0	0	0	0	0	0	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	37 ° 15 '	0	0	0	0	0	0	0	0.1	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	37 ° 30 '	0	0	0	0	0	0	0	0.1	0
-0.1	0	0	0	0	0	0	0	0	37 ° 45 '	0	0	0	0	0	0	0	0.1	0
0	0	0	0	0	0	0	0	0	38 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	-0.1	0	0	0	0	0	0	38 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	-0.1	0	0	38 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	40 ° 0 '	0	0	0	0	0	0	0	0	0

Correct Astronomical Position to WGS84

Latitude 30 to 40 °S — **Correction to Latitude**

Longitude 120 to 124 °E — **Correction to Longitude**

120° 0'	120° 30'	121° 0'	121° 30'	122° 0'	122° 30'	123° 0'	123° 30'	124° 0'	Longitude / Latitude	120° 0'	120° 30'	121° 0'	121° 30'	122° 0'	122° 30'	123° 0'	123° 30'	124° 0'
0.1	0.1	0	0	0.1	0.1	0.1	0.1	0.1	30 ° 0 '	0	0	0	0	0.1	0	0	0	0.1
0.1	0	0	0	0	0.1	0.1	0.1	0	30 ° 15 '	0	0	0	0	0	0	0	0	0.2
0.1	0	0	0	0	0.1	0.1	0.1	0	30 ° 30 '	0	0	0	0	0	0	0	0.1	0.2
0	0	0	0	0	0.1	0.1	0	0	30 ° 45 '	0	0	0	0	0	0	0	0.1	0.2
0	0	0.1	0.1	0.1	0.1	0.1	0	0.1	31 ° 0 '	0	0	0	0	0	-0.1	0	0.1	0.1
0	0	0.1	0.1	0.1	0.1	0	0	0.1	31 ° 15 '	0	0	0	0	0	0	0	0.1	0.1
0	0.1	0.1	0.1	0.1	0.1	0	0	0.1	31 ° 30 '	0	0	0	0	0	0	0.1	0.1	0
0	0.1	0.1	0.1	0.1	0	0	0	0.1	31 ° 45 '	0	0	0	0	-0.1	0.1	0.1	0	0
0.1	0.1	0.1	0.1	0.1	0	0	0	0.1	32 ° 0 '	0	0	0	0	0	0.1	0.2	0	0
0.1	0.1	0.1	0.1	0.1	0	0	0.1	0	32 ° 15 '	0	0	0	0	0	0.2	0.1	-0.1	0
0.1	0.1	0.1	0.1	0.1	0	0.1	0.1	0	32 ° 30 '	0	0	0	0	0	0.2	0.1	0	0
0.1	0.1	0.1	0.1	0	0.1	0.1	0.1	0	32 ° 45 '	0	0	0	0	0.1	0.1	0	0	0.1
0.1	0.1	0.1	0	0	0.1	0.1	0.1	0	33 ° 0 '	0	0	0	0	0.1	0.1	0	0	0.1
0.1	0.1	0	0	0	0.1	0.1	0.1	0.1	33 ° 15 '	0	0	0	0	0.1	0.1	0	0.1	0.1
0.1	0	0	0	0.1	0.1	0.1	0	0	33 ° 30 '	0	0	0	0	0	0	0	0.1	0.1
0	0	0	0.1	0.1	0.1	0.1	0	0	33 ° 45 '	0	0	0	0	0	0	0.1	0.1	0.1
0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	34 ° 0 '	0	0	0	0	0	0	0.1	0.1	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	34 ° 15 '	0	0	0	0	0	0	0.1	0.1	0
0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.2	34 ° 30 '	0	0	0	0	0.1	0	0	0	0
0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2	34 ° 45 '	0	0	0	0	0.1	0	0	0	0
0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	35 ° 0 '	0	0	0	0	0	0	0	0	0
0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	35 ° 15 '	0	0	0	0	0	0	0	0	0
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	35 ° 30 '	0	0	0	0	0	0	0	0	0
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	35 ° 45 '	0	0	0	0	0	0	0	0	0
0.1	0.1	0	0	0	0	0	0	0	36 ° 0 '	0	0	0	0.1	0.1	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 15 '	0	0	0	0.1	0.1	0	0	0	0
0	0	-0.1	0	0	0	0	0	0	36 ° 30 '	0	0.1	0.1	0	0	0	0	0	0
-0.1	-0.1	-0.1	-0.1	0	0	0	0	0	36 ° 45 '	0	0.1	0	0	0	0	0.1	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	0	37 ° 0 '	0	0	0	0	0	0	0.1	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	0	37 ° 15 '	0	0	0	0	0	0	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	0	0	0	0	37 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	40 ° 0 '	0	0	0	0	0	0	0	0	0

Correct Astronomical Position to WGS84

Latitude 30 to 40 °S — **Correction to Latitude**

Longitude 124 to 128 °E — **Correction to Longitude**

124° 0'	124° 30'	125° 0'	125° 30'	126° 0'	126° 30'	127° 0'	127° 30'	128° 0'	Longitude / Latitude	124° 0'	124° 30'	125° 0'	125° 30'	126° 0'	126° 30'	127° 0'	127° 30'	128° 0'
0.1	0	0.1	0.1	0	0.1	0.1	0.1	0.1	30 ° 0 '	0.1	0.1	0	0	0	0	0	-0.1	0
0	0	0.1	0.1	0	0.1	0.1	0.1	0.1	30 ° 15 '	0.2	0.1	-0.1	0	0	0	0	-0.1	0
0	0.1	0.1	0.1	0.1	0.1	0	0.1	0.1	30 ° 30 '	0.2	0.1	-0.1	0	0.1	0	0	-0.1	0
0	0.1	0.1	0	0.1	0.1	0	0	0	30 ° 45 '	0.2	0	-0.1	0	0	0	0	-0.1	0
0.1	0.1	0.1	0	0.1	0	0	0	0	31 ° 0 '	0.1	0	0	0	0	0.1	0	-0.1	0
0.1	0.1	0.1	0	0	0	0	0	0	31 ° 15 '	0.1	0	0	0	0	0.1	0	-0.1	0
0.1	0.1	0	0	0	0	0	0	0	31 ° 30 '	0	0.1	0.1	0	0.1	0.1	0	-0.1	0
0.1	0.1	0	0	0	0	0	0	0	31 ° 45 '	0	0.1	0.1	0	0.1	0.1	0	-0.1	0
0.1	0	0	0	0	0	0	0	0	32 ° 0 '	0	0.1	0.1	0	0.1	0.1	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 15 '	0	0.1	0.1	0	0.1	0	0	0	0
0	0	0.1	0	0.1	0.1	0.1	0	0	32 ° 30 '	0	0.1	0.1	0	0	0.1	0	0	0
0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	32 ° 45 '	0.1	0.1	0.1	0	0	0.1	0	0	0
0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	33 ° 0 '	0.1	0.1	0.1	0	0	0	0	0	0
0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	33 ° 15 '	0.1	0.1	0.1	0	0	0	0	0	0
0	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	33 ° 30 '	0.1	0.1	0.1	0	0	0	0	0	0
0	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	33 ° 45 '	0.1	0.1	0.1	0	0	0	0	0	0
0.1	0.1	0.2	0.2	0.2	0.3	0.2	0.2	0.2	34 ° 0 '	0.1	0	0	0	0	0	0	0	0
0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	34 ° 15 '	0	0	0	0	0	0	0	0	0
0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	34 ° 30 '	0	0	0	0	0	0	0	0	0
0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	34 ° 45 '	0	0	0	0	0	0	0	0	0
0.2	0.1	0.1	0.1	0.1	0.1	0.1	0	0	35 ° 0 '	0	0	0	0	0	0	0	0	0.1
0.1	0.1	0.1	0.1	0.1	0	0	0	0	35 ° 15 '	0	0	0	0	0	0	0.1	0.1	0.1
0.1	0.1	0.1	0	0	0	0	0	0	35 ° 30 '	0	0	0	0	0	0	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	35 ° 45 '	0	0	0	0.1	0.1	0	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	36 ° 0 '	0	0	0	0.1	0.1	0	0	0.1	0.1
0	0	0	0	0	0	0	0	0	36 ° 15 '	0	0	0.1	0.1	0.1	0	0	0.1	0.1
0	0	0	0	0	0	0	0	0	36 ° 30 '	0	0	0.1	0.1	0.1	0	0	0.1	0.1
0	0	0	0	0	0	0	0	0	36 ° 45 '	0	0	0	0.1	0.1	0	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	37 ° 0 '	0	0	0	0.1	0	0	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	37 ° 15 '	0	0	0	0	0	0	0.1	0.1	0
0	0	0	0	0	0	0	0	0	37 ° 30 '	0	0.1	0	0	0	0	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	37 ° 45 '	0	0	0.1	0	0	0.1	0	0.1	0.1
0	0	0	0	0	0	0	0	0	38 ° 0 '	0	0	0.1	0	0	0	0	0.1	0.1
0	0	0	0	0	0	0	0	0	38 ° 15 '	0	0	0.1	0	0	0	0	0.1	0.1
0	0	0	0	0	0	0	0	0	38 ° 30 '	0	0	0.1	0	0	0	0	0.1	0.1
0	0	0	0	0	0	0	0	0	38 ° 45 '	0	0	0	0	0	0	0	0.1	0.1
0	0	0	0	0	0	0	0	0	39 ° 0 '	0	0	0	0	0	0	0	0	0.1
0	0	0	0	0	0	0	0	0	39 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	40 ° 0 '	0	0	0	0	0	0	0	0	0

Correct Astronomical Position to WGS84

Latitude 30 to 40 °S — **Correction to Latitude**

Longitude 128 to 132 °E — **Correction to Longitude**

128° 0'	128° 30'	129° 0'	129° 30'	130° 0'	130° 30'	131° 0'	131° 30'	132° 0'	Longitude / Latitude	128° 0'	128° 30'	129° 0'	129° 30'	130° 0'	130° 30'	131° 0'	131° 30'	132° 0'
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	30 ° 0 '	0	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	30 ° 15 '	0	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1
0.1	0.1	0	0.1	0.1	0.1	0.1	0.1	0.1	30 ° 30 '	0	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1
0	0	0	0	0.1	0.1	0.1	0.1	0.1	30 ° 45 '	0	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1
0	0	0	0	0.1	0.1	0.1	0.1	0.1	31 ° 0 '	0	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1
0	0	0	0	0	0.1	0.1	0.1	0.1	31 ° 15 '	0	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1
0	0	0	0.1	0	0.1	0.1	0.1	0.1	31 ° 30 '	0	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0
0	0	0.1	0.1	0	0	0.1	0.1	0.1	31 ° 45 '	0	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0
0	0	0	0	0	0	0	0.1	0.1	32 ° 0 '	0	0	0.1	0.1	0.1	0.1	0.2	0.1	0
0	0	0	0	0	0	0	0.1	0.1	32 ° 15 '	0	0	0	0.1	0.1	0.1	0.2	0.1	-0.1
0	0	0	0	0	0	0	0.1	0.1	32 ° 30 '	0	0	0	0.1	0.1	0.1	0.2	0.1	-0.1
0.1	0.1	0.1	0	0.1	0.1	0.1	0.1	0.1	32 ° 45 '	0	0	0	0.1	0.1	0.1	0.2	0.1	-0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	33 ° 0 '	0	0	0	0.1	0.1	0.1	0.2	0.1	-0.1
0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.1	0.1	33 ° 15 '	0	0	0.1	0.1	0	0.1	0.2	0.1	0
0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	33 ° 30 '	0	0	0.1	0.1	0	0.1	0.2	0.2	0.1
0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	33 ° 45 '	0	0	0.2	0.1	0.1	0.1	0.1	0.2	0.2
0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.2	34 ° 0 '	0	0	0.2	0.1	0.1	0.1	0.1	0.2	0.2
0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.2	34 ° 15 '	0	0	0.1	0.2	0.1	0.1	0.1	0.1	0.2
0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	34 ° 30 '	0	0	0.1	0.2	0.2	0.1	0.1	0.1	0.2
0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	34 ° 45 '	0	0	0.1	0.1	0.2	0.1	0.1	0.1	0.1
0	0	0	0.1	0.1	0.2	0.1	0.1	0.1	35 ° 0 '	0.1	0	0	0.1	0.2	0.2	0.1	0.1	0.1
0	0	0	0	0.1	0.1	0.1	0.1	0.1	35 ° 15 '	0.1	0.1	0	0.1	0.1	0.1	0.2	0.2	0.1
0	0	0	0	0	0.1	0.1	0.1	0.1	35 ° 30 '	0.1	0.1	0	0	0.1	0.1	0.1	0.2	0.1
0	0	0	0	0	0	0.1	0.1	0.1	35 ° 45 '	0.1	0	0.1	0	0.1	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0.1	0.1	36 ° 0 '	0.1	0	0.1	0	0	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	36 ° 15 '	0.1	0	0	0	0.1	0.1	0	0.1	0.1
0	0	0	0	0	0	0	0	0	36 ° 30 '	0.1	0.1	0	0	0.1	0.1	0	0.1	0.1
0	0	0	0	0	0	0	0	0	36 ° 45 '	0.1	0	0.1	0	0.1	0.1	0	0	0.1
0	0	0	0	0	0	0	0	0	37 ° 0 '	0.1	0	0.1	0.1	0	0.1	0	0.1	0.1
0	0	0	0	0	0	0	0	0	37 ° 15 '	0	0	0.1	0.1	0	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	37 ° 30 '	0.1	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	37 ° 45 '	0.1	0	0	0.1	0.1	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	38 ° 0 '	0.1	0	0	0.1	0.1	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	38 ° 15 '	0.1	0	0.1	0.1	0	0	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	38 ° 30 '	0.1	0	0.1	0.1	0	0	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	38 ° 45 '	0.1	0	0.1	0.1	0	0	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	39 ° 0 '	0.1	0	0.1	0	0	0	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	39 ° 15 '	0	0	0	0	0	0	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	39 ° 30 '	0	0	0	0	0	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	39 ° 45 '	0	0	0	0	0	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	40 ° 0 '	0	0	0	0	0	0.1	0.1	0	0

Correct Astronomical Position to WGS84

Latitude 30 to 40 °S — **Correction to Latitude**

Longitude 132 to 136 °E — **Correction to Longitude**

132° 0'	132° 30'	133° 0'	133° 30'	134° 0'	134° 30'	135° 0'	135° 30'	136° 0'	Longitude / Latitude	132° 0'	132° 30'	133° 0'	133° 30'	134° 0'	134° 30'	135° 0'	135° 30'	136° 0'
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	30 ° 0 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	30 ° 15 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	30 ° 30 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	30 ° 45 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0	31 ° 0 '	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1
0.1	0.2	0.2	0.1	0.1	0.1	0	0	0	31 ° 15 '	0.1	0	0.1	0.1	0.1	0.2	0.2	0.1	0.1
0.1	0.2	0.2	0.1	0.1	0.1	0	0	0	31 ° 30 '	0	0	0.1	0.1	0.1	0.2	0.2	0.2	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	31 ° 45 '	0	0	0.1	0.1	0.2	0.2	0.2	0.2	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	32 ° 0 '	0	0	0.1	0.1	0.2	0.2	0.2	0.2	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	32 ° 15 '	-0.1	0	0.1	0.1	0.2	0.2	0.2	0.2	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	32 ° 30 '	-0.1	0	0.1	0.1	0.2	0.2	0.2	0.2	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	32 ° 45 '	-0.1	0	0.1	0.2	0.2	0.2	0.2	0.2	0.2
0	0	0	0	0.1	0.1	0.1	0.1	0.1	33 ° 0 '	-0.1	0	0.1	0.1	0.2	0.2	0.2	0.2	0.2
0.1	0	0	0	0	0.1	0.1	0.1	0.1	33 ° 15 '	0	0	0.1	0.1	0.2	0.2	0.2	0.2	0.2
0.1	0	0	0	0	0	0	0	0.1	33 ° 30 '	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2
0.2	0.1	0	0	0	0	0	0	0	33 ° 45 '	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2
0.2	0.1	0.1	0	0	0	0	0	0	34 ° 0 '	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.1
0.2	0.2	0.1	0.1	0	0	0.1	0.1	0.1	34 ° 15 '	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.1
0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	34 ° 30 '	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.1
0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1	34 ° 45 '	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1
0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.1	35 ° 0 '	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.1
0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.1	35 ° 15 '	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.1
0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.2	0.1	35 ° 30 '	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.3	0.2
0.1	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.1	35 ° 45 '	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.3	0.3
0.1	0.1	0.2	0.1	0.1	0.2	0.2	0.3	0.2	36 ° 0 '	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.4	0.3
0	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	36 ° 15 '	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.4	0.4
0	0	0	0	0	0	0.1	0.2	0.3	36 ° 30 '	0.1	0	0.1	0.1	0.1	0.1	0.1	0.3	0.3
0	0	-0.1	0	0	0	0	0.1	0.2	36 ° 45 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3
0	0	0	0	0	0	0	0	0.1	37 ° 0 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
0	0	0	0	0	0	0	0	0	37 ° 15 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	37 ° 30 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	37 ° 45 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0.1	38 ° 0 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	38 ° 15 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	38 ° 30 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	38 ° 45 '	0.1	0.1	0.1	0	0.1	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	39 ° 0 '	0.1	0.1	0.1	0	0	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	39 ° 15 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	39 ° 30 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	39 ° 45 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	40 ° 0 '	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

Correct Astronomical Position to WGS84

Latitude 30 to 40 °S — **Correction to Latitude**

Longitude 136 to 140 °E — **Correction to Longitude**

136° 0'	136° 30'	137° 0'	137° 30'	138° 0'	138° 30'	139° 0'	139° 30'	140° 0'	Latitude	136° 0'	136° 30'	137° 0'	137° 30'	138° 0'	138° 30'	139° 0'	139° 30'	140° 0'
0.1	0.1	0	0	0	0	0	0	0	30 ° 0 '	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0	0.1
0.1	0.1	0.1	0	0	0	0	0	0.1	30 ° 15 '	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0	0
0.1	0.1	0.1	0.1	0	0	0	0.1	0.1	30 ° 30 '	0.1	0.1	0.1	0.1	0.1	0.2	0.1	-0.1	0
0	0	0.1	0.1	0.1	0	0.1	0.1	0.1	30 ° 45 '	0.1	0.1	0.1	0.1	0.2	0.2	0	-0.1	0.1
0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	31 ° 0 '	0.1	0.1	0.1	0.1	0.2	0.2	0	-0.1	0.1
0	0	0.1	0.1	0.1	0.1	0.1	0.1	0	31 ° 15 '	0.1	0.1	0.1	0.1	0.2	0.2	0	-0.1	0.1
0	0	0	0.1	0.1	0.1	0.1	0	0	31 ° 30 '	0.1	0.1	0.1	0.1	0.2	0.2	0	0	0.1
0	0	0	0.1	0	0.1	0.1	0	0	31 ° 45 '	0.1	0.1	0.1	0.1	0.2	0.2	0	0	0.1
0.1	0	0	0.1	0	0	0.1	0	0	32 ° 0 '	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0	0.1
0.1	0	0	0	0	0	0	0	0	32 ° 15 '	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0	0.1
0.1	0.1	0	0	0.1	0.1	0	0	0.1	32 ° 30 '	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0	0.1
0.1	0.1	0	0.1	0.1	0.1	0.1	0.1	0.1	32 ° 45 '	0.2	0.1	0.1	0.1	0.2	0.2	0.1	0	0
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	33 ° 0 '	0.2	0.2	0.1	0.1	0.2	0.2	0.1	0	0
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	33 ° 15 '	0.2	0.2	0.1	0	0.2	0.2	0.1	0	0
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	33 ° 30 '	0.2	0.2	0.1	0	0.2	0.2	0.1	0	0
0	0.1	0.1	0	0	0.1	0.2	0.1	0.1	33 ° 45 '	0.2	0.1	0.1	0.1	0.1	0.2	0.1	0	0
0	0.1	0.1	0	0	0.1	0.2	0.1	0.1	34 ° 0 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0
0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	34 ° 15 '	0.1	0.1	0.1	0.1	0.1	0	0.1	0.1	0
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	34 ° 30 '	0.1	0.1	0.1	0.2	0	0	0.1	0.1	0
0.1	0.1	0	0.1	0.1	0.1	0.1	0.1	0.1	34 ° 45 '	0.1	0.1	0.1	0.1	0	0	0.1	0.1	0
0.1	0.1	0	0.1	0.1	0	0.1	0.1	0.1	35 ° 0 '	0.1	0.1	0.1	0.1	0	0.1	0.1	0.1	0
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	35 ° 15 '	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	35 ° 30 '	0.2	0.2	0.1	0.1	0.1	0.1	0	0.1	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	35 ° 45 '	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	36 ° 0 '	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	36 ° 15 '	0.4	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0.3	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	36 ° 30 '	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1
0.2	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1	36 ° 45 '	0.3	0.3	0.3	0.2	0.1	0.1	0.1	0.1	0.1
0.1	0.2	0.2	0.3	0.2	0.2	0.1	0.1	0.1	37 ° 0 '	0.2	0.2	0.3	0.2	0.2	0.1	0.1	0.1	0.1
0	0.1	0.2	0.2	0.3	0.2	0.2	0.1	0.1	37 ° 15 '	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.1
0	0	0.1	0.2	0.2	0.2	0.2	0.1	0.1	37 ° 30 '	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2
0	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	37 ° 45 '	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2
0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	38 ° 0 '	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2
0	0	0.1	0	0	0.1	0.1	0.2	0.2	38 ° 15 '	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.2
0	0	0	0	0	0	0.1	0.1	0.2	38 ° 30 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
0	0	0	0	0	0	0.1	0.1	0.1	38 ° 45 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0.1	0.1	39 ° 0 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0.1	39 ° 15 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0.1	39 ° 30 '	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0.1
0	0	0	0	0	0	0	0	0.1	39 ° 45 '	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0.1
0	0	0	0	0	0	0	0	0	40 ° 0 '	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0.1

Correct Astronomical Position to WGS84

Latitude 30 to 40 °S — **Correction to Latitude**

Longitude 140 to 144 °E — **Correction to Longitude**

140° 0'	140° 30'	141° 0'	141° 30'	142° 0'	142° 30'	143° 0'	143° 30'	144° 0'	Latitude	140° 0'	140° 30'	141° 0'	141° 30'	142° 0'	142° 30'	143° 0'	143° 30'	144° 0'
0	0.1	0.1	0.1	0.1	0	0.1	0.1	0.1	30 ° 0 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0.1	0.1	0.1	0.1	0.1	0	0.1	0.1	0.1	30 ° 15 '	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0.1	0.1	0.1	0.1	0.1	0	0.1	0.1	0.1	30 ° 30 '	0	0.1	0.1	0.1	0.1	0	0	0	0
0.1	0	0	0.1	0.1	0.1	0.1	0.1	0.1	30 ° 45 '	0.1	0.1	0.1	0.1	0.1	0	0	0	0
0.1	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	31 ° 0 '	0.1	0.2	0.1	0.1	0.1	0	0	0	0
0	0	0.1	0	0.1	0.1	0.1	0.1	0.1	31 ° 15 '	0.1	0.1	0.1	0.1	0	0	0	0	0.1
0	0	0.1	0	0.1	0.1	0.1	0.1	0.1	31 ° 30 '	0.1	0.1	0.1	0.1	0	0	0	0	0.1
0	0	0	0.1	0.1	0.1	0.1	0.1	0.1	31 ° 45 '	0.1	0.1	0.1	0.1	0	0	0	0	0.1
0	0	0	0.1	0.1	0.1	0.1	0.1	0.1	32 ° 0 '	0.1	0.1	0.1	0	0	0	0	0	0.1
0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	32 ° 15 '	0.1	0.1	0.1	0	0	0	0	0.1	0.1
0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0	32 ° 30 '	0.1	0.1	0.1	0	0	0	0	0.1	0.1
0.1	0.1	0.2	0.2	0.1	0.1	0.1	0	0	32 ° 45 '	0	0.1	0	0	0	0	0	0.1	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0.1	33 ° 0 '	0	0	0	0	0	0	0.1	0.1	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0	0	0.1	33 ° 15 '	0	0	0	0	0	0	0.1	0.1	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0	0	0.1	33 ° 30 '	0	0	0	0	0	0.1	0.1	0.1	0.1
0.1	0.1	0.1	0.1	0.1	0	0	0	0	33 ° 45 '	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1
0.1	0.1	0.1	0.1	0.1	0	0	0	0	34 ° 0 '	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	34 ° 15 '	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0.1	0.1	0.1	0	0	0.1	0.1	0.1	0.1	34 ° 30 '	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0.1	0.1	0	0	0	0.1	0.1	0	0	34 ° 45 '	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0.1	0	0	0	0	0	0	0	0	35 ° 0 '	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0.1	0	0	0	0	0	0	0	0.1	35 ° 15 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0.1	0	0	0	0	0	0	0.1	0.1	35 ° 30 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0.1	0.1	0	0	0	0	0.1	0.1	0.1	35 ° 45 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0.1	0.1	0.1	0	0	0	0	0	0	36 ° 0 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0.1	0.1	0	0	0	0	0	0	0	36 ° 15 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0.1	0.1	0	0	0	0	0	0	0	36 ° 30 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0.1	0.1	0.1	0	0	0	0	0	0	36 ° 45 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0.1	0.1	0.1	0	0	0	0	0	0	37 ° 0 '	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1
0.1	0.1	0.1	0.1	0	0	0	0	0	37 ° 15 '	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	37 ° 30 '	0.2	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1
0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	37 ° 45 '	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1
0.2	0.2	0.1	0.1	0.2	0.2	0.1	0.1	0.1	38 ° 0 '	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0
0.2	0.2	0.2	0.1	0.2	0.2	0.1	0.1	0.1	38 ° 15 '	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0
0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	38 ° 30 '	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0
0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	38 ° 45 '	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0
0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.1	39 ° 0 '	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.1
0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0	39 ° 15 '	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.1
0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0	39 ° 30 '	0.1	0.1	0.1	0.1	0.2	0.3	0.2	0.2	0.1
0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0	39 ° 45 '	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.2	0.1
0	0	0.1	0.1	0.1	0.2	0.1	0.1	0.1	40 ° 0 '	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.3	0.1

Correct Astronomical Position to WGS84

Latitude 30 to 40 °S — **Correction to Latitude**

Longitude 144 to 148 °E — **Correction to Longitude**

144° 0'	144° 30'	145° 0'	145° 30'	146° 0'	146° 30'	147° 0'	147° 30'	148° 0'	Longitude / Latitude	144° 0'	144° 30'	145° 0'	145° 30'	146° 0'	146° 30'	147° 0'	147° 30'	148° 0'
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	30 ° 0 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0
0.1	0.1	0.1	0.1	0.1	0.1	0	0.1	0.1	30 ° 15 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0
0.1	0.2	0.1	0.1	0.1	0	0	0.1	0.1	30 ° 30 '	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0
0.1	0.1	0.1	0.1	0.1	0.1	0	0.1	0.1	30 ° 45 '	0	0.1	0.1	0.1	0.1	0.1	0	0	0
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	31 ° 0 '	0	0.1	0.1	0.1	0.1	0.1	0	0	0.1
0.1	0.1	0.1	0.1	0	0.1	0.1	0.1	0.1	31 ° 15 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0.1
0.1	0.1	0	0	0	0.1	0.1	0.1	0.1	31 ° 30 '	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0	0.1
0.1	0.1	0	0	0.1	0.1	0.1	0.1	0	31 ° 45 '	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	32 ° 0 '	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	32 ° 15 '	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1
0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	32 ° 30 '	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1
0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	32 ° 45 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	33 ° 0 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	33 ° 15 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	33 ° 30 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	33 ° 45 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	34 ° 0 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	34 ° 15 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	34 ° 30 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	34 ° 45 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1
0	0	0	0.1	0.1	0.1	0.1	0.1	0.1	35 ° 0 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	35 ° 15 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	35 ° 30 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	35 ° 45 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3
0	0	0.1	0	0.1	0.1	0	0	0	36 ° 0 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3
0	0	0.1	0	0	0	0	0	0	36 ° 15 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2
0	0	0	0	0	0	0	0	0.1	36 ° 30 '	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.2
0	0	0	0	0	0	0	0	0.1	36 ° 45 '	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1
0	0	0	0	0	0	0	0.1	0.1	37 ° 0 '	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0	0
0	0	0	0	0	0	0.1	0.2	0.2	37 ° 15 '	0.1	0	0	0.1	0.2	0.2	0.1	0	0
0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	37 ° 30 '	0.1	0	0	0.1	0.2	0.1	0	0	0
0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.3	0.2	37 ° 45 '	0.1	0	0.1	0.2	0.2	0	0	0	0
0.1	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	38 ° 0 '	0	0	0.1	0.2	0.1	0	-0.1	0	0
0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	38 ° 15 '	0	0	0.1	0.1	0.1	0	-0.1	0	0
0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	38 ° 30 '	0	0.1	0.1	0.1	0	0	0	0	0
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	38 ° 45 '	0	0.1	0.1	0.1	0	0	0	0.1	0
0.1	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	39 ° 0 '	0.1	0.1	0.1	0.1	0	0	0	0.1	0
0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	39 ° 15 '	0.1	0.1	0	0	0	0	0	0.1	0.1
0	0	0.1	0.1	0.1	0.1	0	0	0.1	39 ° 30 '	0.1	0	0	0	0	0	0	0	0.1
0	0.1	0.1	0.1	0.1	0.1	0	0	0	39 ° 45 '	0.1	0	0	0	0	0	0	0	0.1
0.1	0.1	0.1	0	0	0	0	0	0	40 ° 0 '	0.1	0	0	0	0	0.1	0.1	0	0.1

Correct Astronomical Position to WGS84

Latitude 30 to 40 °S — **Correction to Latitude**

Longitude 148 to 152 °E — **Correction to Longitude**

148° 0'	148° 30'	149° 0'	149° 30'	150° 0'	150° 30'	151° 0'	151° 30'	152° 0'	Latitude	148° 0'	148° 30'	149° 0'	149° 30'	150° 0'	150° 30'	151° 0'	151° 30'	152° 0'
0.1	0.1	0.1	0.1	0	0	0	0	0.1	30 ° 0 '	0	0	0.1	0.2	0.1	0.1	0.1	0.1	0
0.1	0.1	0.1	0	0.1	0	0	0.1	0.1	30 ° 15 '	0	0	0.1	0.2	0.2	0.1	0.1	0	0
0.1	0	0	0	0.1	0.1	0.1	0.1	0.1	30 ° 30 '	0	0	0.1	0.2	0.1	0.1	0.1	0	-0.1
0.1	0	0	0	0.1	0.1	0.1	0	0.1	30 ° 45 '	0	0	0.1	0.1	0.1	0.1	0.1	0	-0.1
0.1	0	0	0	0	0.1	0	0	0	31 ° 0 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	-0.1
0.1	0	0	0	0	0	0	0	0.1	31 ° 15 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	-0.1
0.1	0	0	0	0	0	0.1	0.1	0.1	31 ° 30 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	-0.1
0	0	0	0.1	0.1	0.1	0.1	0.2	0.2	31 ° 45 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	-0.1
0	0	0	0.1	0.1	0.1	0.2	0.2	0.2	32 ° 0 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0
0	0	0	0	0.1	0.1	0.1	0.2	0.1	32 ° 15 '	0.1	0.1	0.1	0.1	0.1	0	0	0	0
0.1	0	0	0	0	0	0.1	0.1	0.1	32 ° 30 '	0.1	0.1	0.1	0.1	0	0	0	0	0
0.1	0.1	0	0	0	0	0.1	0.1	0.1	32 ° 45 '	0.1	0.1	0.1	0.1	0.1	0	-0.1	0	0
0.1	0.1	0	0	0.1	0.1	0.1	0.1	0.1	33 ° 0 '	0.1	0.1	0.1	0.1	0	0	-0.1	0	-0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	33 ° 15 '	0.1	0.1	0.1	0.1	0	-0.1	-0.1	0	-0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	33 ° 30 '	0.1	0.2	0.1	0.1	0	-0.1	0	-0.1	-0.2
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	33 ° 45 '	0.1	0.2	0.2	0.1	-0.1	-0.1	0	-0.1	-0.3
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	34 ° 0 '	0.1	0.1	0.2	0.1	0	-0.1	-0.1	-0.2	-0.3
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	34 ° 15 '	0.1	0.1	0.1	0.1	0	-0.1	-0.1	-0.3	-0.2
0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	34 ° 30 '	0.1	0.1	0.1	0.1	0	-0.1	-0.2	-0.3	-0.2
0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	34 ° 45 '	0.1	0.1	0.1	0.1	0	-0.1	-0.3	-0.4	-0.1
0.1	0	0	0.1	0.1	0.2	0.2	0.2	0.1	35 ° 0 '	0.1	0.1	0.1	0	-0.1	-0.1	-0.3	-0.3	0
0	0	0	0.1	0.1	0.2	0.2	0.2	0.1	35 ° 15 '	0.2	0.1	0.1	0	-0.1	-0.2	-0.3	-0.2	0
0	0	0	0.1	0.1	0.2	0.2	0.1	0.1	35 ° 30 '	0.2	0.1	0	0	-0.1	-0.3	-0.3	-0.2	0.1
0	0	0	0.1	0.1	0.2	0.2	0.1	0.1	35 ° 45 '	0.3	0.1	0	-0.1	-0.2	-0.3	-0.3	-0.1	0.1
0	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	36 ° 0 '	0.3	0.1	0	-0.1	-0.2	-0.4	-0.3	0	0.1
0	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	36 ° 15 '	0.2	0.1	-0.1	-0.1	-0.2	-0.4	-0.2	0	0.1
0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	36 ° 30 '	0.2	0.1	-0.1	-0.1	-0.3	-0.4	-0.1	0.1	0.1
0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	36 ° 45 '	0.1	0	0	-0.1	-0.3	-0.4	-0.1	0.1	0.1
0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	37 ° 0 '	0	0	0	-0.1	-0.3	-0.4	-0.1	0.1	0
0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	37 ° 15 '	0	0	0	-0.1	-0.3	-0.3	-0.1	0.1	0
0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	37 ° 30 '	0	0	0	0	-0.2	-0.3	-0.1	0.1	0.1
0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	37 ° 45 '	0	0	0	0	-0.2	-0.3	-0.1	0.1	0.1
0.2	0.2	0.3	0.2	0.2	0.2	0.1	0.1	0.1	38 ° 0 '	0	0	0	0	-0.2	-0.2	0	0.1	0.1
0.2	0.2	0.3	0.3	0.3	0.2	0.1	0.1	0.1	38 ° 15 '	0	0	0	0	-0.2	-0.2	0.1	0.1	0.1
0.1	0.1	0.2	0.3	0.2	0.1	0.1	0.1	0.1	38 ° 30 '	0	-0.1	0	0	-0.1	-0.1	0.1	0.1	0
0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	38 ° 45 '	0	-0.1	-0.1	0	0	0	0.1	0.1	0.1
0.1	0	0	0.1	0.1	0.1	0.1	0.1	0.1	39 ° 0 '	0	-0.1	-0.2	-0.1	0	0.1	0.1	0.1	0.1
0.1	0	0	0	0.1	0.1	0.1	0.1	0.1	39 ° 15 '	0.1	0	-0.2	-0.1	0	0.1	0.1	0.1	0.1
0.1	0	0	0	0	0	0.1	0.1	0.1	39 ° 30 '	0.1	0	-0.2	-0.2	0	0	0.1	0.1	0.1
0	0	0.1	0.1	0	0	0.1	0.1	0.1	39 ° 45 '	0.1	0	-0.2	-0.2	0	0	0	0.1	0.1
0	0	0.1	0.1	0	0	0	0	0.1	40 ° 0 '	0.1	0	-0.2	-0.1	0	0	0	0.1	0

Correct Astronomical Position to WGS84

Latitude 30 to 40 °S — **Correction to Latitude**

Longitude 152 to 156 °E — **Correction to Longitude**

152° 0'	152° 30'	153° 0'	153° 30'	154° 0'	154° 30'	155° 0'	155° 30'	156° 0'	Longitude / Latitude	152° 0'	152° 30'	153° 0'	153° 30'	154° 0'	154° 30'	155° 0'	155° 30'	156° 0'
0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0	30 ° 0 '	0	0	-0.1	-0.2	-0.2	0	0	0	0
0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0	30 ° 15 '	0	0	-0.1	-0.3	-0.1	0.1	0	0	0.1
0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0	30 ° 30 '	-0.1	0	-0.1	-0.3	-0.1	0.1	-0.1	0.1	0.2
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	30 ° 45 '	-0.1	-0.1	-0.2	-0.3	0	0.1	-0.1	0.2	0.2
0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	31 ° 0 '	-0.1	-0.1	-0.2	-0.3	0	0.1	-0.1	0.1	0.1
0.1	0	0.1	0.1	0.1	0.1	0.1	0.1	0.2	31 ° 15 '	-0.1	-0.1	-0.2	-0.3	0	0.1	-0.1	0.1	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	31 ° 30 '	-0.1	-0.1	-0.2	-0.3	0	0.1	0	0	0
0.2	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	31 ° 45 '	-0.1	0	-0.2	-0.3	0	0.1	0	0	0
0.2	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0	32 ° 0 '	0	-0.1	-0.3	-0.2	0	0.1	0	0	0
0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0	32 ° 15 '	0	-0.1	-0.3	-0.2	0.1	0.1	0	0	0.1
0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0	32 ° 30 '	0	-0.1	-0.3	-0.1	0.1	0.1	0	0.1	0.1
0.1	0.2	0.2	0.1	0.1	0.1	0.1	0	-0.1	32 ° 45 '	0	-0.2	-0.3	-0.1	0.1	0.1	0	0.1	0.2
0.1	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0	33 ° 0 '	-0.1	-0.2	-0.2	0	0.1	0.1	0	0.2	0.2
0.2	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	33 ° 15 '	-0.1	-0.3	-0.1	0.1	0.1	0	0	0.2	0.2
0.2	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.2	33 ° 30 '	-0.2	-0.3	-0.1	0.1	0.1	0	0	0.2	0.1
0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	33 ° 45 '	-0.3	-0.2	0	0.1	0	0	0	0.1	0.1
0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	34 ° 0 '	-0.3	-0.1	0.1	0.1	0	0	0	0	0.1
0.3	0.1	0	0.1	0.1	0.1	0.1	0.1	0.1	34 ° 15 '	-0.2	0	0.1	0.1	0	0	0	0	0.1
0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	34 ° 30 '	-0.2	0.1	0.1	0.1	0	0	0	0.1	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	34 ° 45 '	-0.1	0.1	0.1	0.1	0	0	0	0.1	0
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	35 ° 0 '	0	0.1	0	0.1	0.1	0	0	0.1	0
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	35 ° 15 '	0	0.1	0	0.1	0	0	0.1	0	0
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	35 ° 30 '	0.1	0.1	0.1	0.1	0	0.1	0.1	0	0
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	35 ° 45 '	0.1	0.1	0.1	0.1	0	0.1	0	0	0
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	36 ° 0 '	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	36 ° 15 '	0.1	0.1	0.1	0.1	0.1	0.1	0	0.1	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	36 ° 30 '	0.1	0.1	0.1	0.1	0.1	0.1	0	0.1	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	36 ° 45 '	0.1	0.1	0.1	0	0.1	0.1	0	0.1	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	37 ° 0 '	0	0.1	0.1	0	0.1	0.1	0	0.1	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	37 ° 15 '	0	0.1	0.1	0	0.1	0.1	0	0.1	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	37 ° 30 '	0.1	0.1	0.1	0	0.1	0.1	0	0	0
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	37 ° 45 '	0.1	0.1	0.1	0	0.1	0.1	0	0	0
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	38 ° 0 '	0.1	0.1	0.1	0	0.1	0	0	0	0
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	38 ° 15 '	0.1	0.1	0.1	0.1	0.1	0	0	0	0
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	38 ° 30 '	0	0.1	0.1	0.1	0.1	0	0	0	0
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	38 ° 45 '	0.1	0.1	0	0.1	0.1	0	0	0	0
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	39 ° 0 '	0.1	0.1	0	0.1	0.1	0	0	0	0
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	39 ° 15 '	0.1	0	0.1	0.1	0	0	0	0	0
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	39 ° 30 '	0.1	0	0.1	0.1	0	0	0	0	0
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	39 ° 45 '	0.1	0.1	0.1	0.1	0	0	0	0	0
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	40 ° 0 '	0	0.1	0.1	0	0	0	0	0	0

Correct Astronomical Position to WGS84

Latitude 30 to 40 °S — **Correction to Latitude**

Longitude 156 to 160 °E — **Correction to Longitude**

156° 0'	156° 30'	157° 0'	157° 30'	158° 0'	158° 30'	159° 0'	159° 30'	160° 0'	Longitude Latitude	156° 0'	156° 30'	157° 0'	157° 30'	158° 0'	158° 30'	159° 0'	159° 30'	160° 0'
0	0	0.1	0.1	0.1	0.1	0.1	0.1	0	30 ° 0 '	0	0	0.1	0.1	0	0	0.1	0	0
0	0	0	0.1	0.1	0.1	0.1	0.1	0	30 ° 15 '	0.1	0	0.1	0.1	0	0	0.1	0	0.1
0	0	0.1	0.1	0.1	0.1	0.1	0.1	0	30 ° 30 '	0.2	-0.1	0	0.1	0	0	0.1	0.1	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	30 ° 45 '	0.2	-0.1	0	0.1	0	0.1	0.1	0.1	0.1
0.2	0.2	0.1	0.1	0.1	0.1	0	0	0	31 ° 0 '	0.1	-0.1	0	0.1	0	0.1	0.1	0	0
0.2	0.2	0.1	0.1	0.1	0.1	0	0	0	31 ° 15 '	0.1	0	0.1	0.1	0	0.1	0.1	0	0
0.2	0.2	0.1	0.1	0.1	0.1	0	0.1	0	31 ° 30 '	0	0	0.1	0	0	0.2	0.2	0	0
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	31 ° 45 '	0	0	0.1	0	0	0.2	0.1	0	0
0	0	0.1	0.1	0.1	0.1	0.2	0.2	0	32 ° 0 '	0	0	0.1	0	0	0.1	0.1	0	0.1
0	0	0.1	0.1	0.1	0.1	0.2	0.2	0	32 ° 15 '	0.1	0	0.1	0.1	0	0.1	0.1	0.1	0.1
0	0	0.1	0.1	0.1	0.1	0.1	0.1	0	32 ° 30 '	0.1	-0.1	0	0.1	0	0	0.1	0.1	0.1
-0.1	0	0.1	0.1	0.1	0.1	0.1	0.1	0	32 ° 45 '	0.2	-0.1	0	0.1	0	0	0.1	0.1	0.1
0	0	0.1	0.1	0.1	0.1	0.1	0.1	0	33 ° 0 '	0.2	-0.2	-0.1	0.1	0	0	0.1	0.1	0.1
0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0	33 ° 15 '	0.2	-0.2	-0.1	0.1	0	0	0	0.1	0.1
0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0	33 ° 30 '	0.1	-0.1	0	0.1	0	0	0	0.2	0.1
0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0	33 ° 45 '	0.1	-0.1	0	0.1	0	0	0	0.2	0.1
0.1	0.1	0	0.1	0.1	0.1	0.1	0.1	0	34 ° 0 '	0.1	0	0.1	0	0	0	0	0.2	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	34 ° 15 '	0.1	0	0	0	0	0	0	0.2	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	34 ° 30 '	0.1	0	0	0	0	0	0	0.2	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	34 ° 45 '	0	0	0	0	0	0	0	0.1	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	35 ° 0 '	0	0	0	0	0	0	0	0.1	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	35 ° 15 '	0	0	0	0	0	0	0	0.1	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	35 ° 30 '	0	0	0	0	0	0	0	0	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	35 ° 45 '	0	0	0	0	0	0	0	0	0.1
0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	36 ° 0 '	0	0	0	0	0	0	0	0	0.1
0	0	0.1	0.1	0.1	0.1	0.1	0.1	0	36 ° 15 '	0.1	0	0	0	0	0	0	0	0.1
0	0	0.1	0.1	0.1	0.1	0.1	0.1	0	36 ° 30 '	0.1	-0.1	0	0	0	0	0	0	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	36 ° 45 '	0.1	-0.1	-0.1	0	0	0	0	0	0.1
0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	37 ° 0 '	0.1	-0.1	0	0	0	0	0	0	0.1
0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	37 ° 15 '	0.1	0	0	0	0	0	0	0	0
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	37 ° 30 '	0	0	0	0	0	0	0	0.1	0
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	37 ° 45 '	0	0	0	0	0	0	0	0.1	0
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	38 ° 0 '	0	0	0	0	0	0	0	0.1	0
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	38 ° 15 '	0	0	0	0	0	0	0	0.1	0
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	38 ° 30 '	0	0	0	0	0	0	0	0	0
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	38 ° 45 '	0	0	0	0	0	0	0	0	0
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	39 ° 0 '	0	0	0	0	0	0	0	0	0
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	39 ° 15 '	0	0	0	0	0	0	0	0	0
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	39 ° 30 '	0	0	0	0	0	0	0	0	0
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	39 ° 45 '	0	0	0	0	0	0	0	0	0
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	40 ° 0 '	0	0	0	0	0	0	0	0	0

Correct Astronomical Position to WGS84

Latitude 20 to 40 °S — **Correction to Latitude**

Longitude 160 to 164 °E — **Correction to Longitude**

160° 0'	160° 30'	161° 0'	161° 30'	162° 0'	162° 30'	163° 0'	163° 30'	164° 0'	Longitude / Latitude	160° 0'	160° 30'	161° 0'	161° 30'	162° 0'	162° 30'	163° 0'	163° 30'	164° 0'
0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	30 ° 0 '	0	0.1	0.1	0	0	0	0	0	0
0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	30 ° 15 '	0.1	0	0	0	0	0	0	0	0
0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	30 ° 30 '	0.1	0	0	0	0	0	0	0	0
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	30 ° 45 '	0.1	0	0	0	0	0	0	0	0
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	31 ° 0 '	0	0	0	0	0.1	0	0	0	0
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	31 ° 15 '	0	0	0	0	0	0	0	0	0
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	31 ° 30 '	0	0	0	0	0	0	0	0	0
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	31 ° 45 '	0	0	0	0	0	0	0	0	0
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	32 ° 0 '	0.1	0.1	0	0	0	0	0	0	0
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	32 ° 15 '	0.1	0.1	0	0	0	0	0	0	0
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	32 ° 30 '	0.1	0	0	0	0	0	0	0	0
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	32 ° 45 '	0.1	0	0	0	0	0.1	0	0	0
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	33 ° 0 '	0.1	0	0	0	0	0.1	0	0	0
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	33 ° 15 '	0.1	0	0	0	0.1	0.1	0	0	0
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	33 ° 30 '	0.1	0	0	0	0.1	0.1	0	0	0
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	33 ° 45 '	0.1	0	0	0	0.1	0.1	0	0	0
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	34 ° 0 '	0.1	0	0	0	0.1	0.1	0	0	0
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	34 ° 15 '	0.1	0	0.1	0	0.1	0.1	0	0	0
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	34 ° 30 '	0.1	0.1	0	0	0.1	0.1	0	0	0
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	34 ° 45 '	0.1	0.1	0	0.1	0.1	0.1	0	0	0
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	35 ° 0 '	0.1	0.1	0	0.1	0.1	0.1	0	0	0
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	35 ° 15 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	35 ° 30 '	0.1	0.1	0.1	0	0.1	0.1	0.1	0.1	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	35 ° 45 '	0.1	0.1	0	0	0.1	0.1	0.1	0.1	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	36 ° 0 '	0.1	0.1	0	0	0.1	0.1	0.1	0.1	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	36 ° 15 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	36 ° 30 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	36 ° 45 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	37 ° 0 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	37 ° 15 '	0	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	37 ° 30 '	0	0	0.1	0.1	0.1	0	0.1	0.2	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	37 ° 45 '	0	0	0.1	0.1	0.1	0	0.1	0.2	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	38 ° 0 '	0	0	0.1	0.1	0	0	0.1	0.2	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	38 ° 15 '	0	0	0.1	0.1	0	0.1	0.1	0.1	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	38 ° 30 '	0	0	0.1	0.1	0	0.1	0.1	0.1	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	38 ° 45 '	0	0	0.1	0.1	0	0.1	0.1	0.1	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	39 ° 0 '	0	0	0.1	0.1	0	0.1	0.1	0.1	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	39 ° 15 '	0	0.1	0.1	0.1	0	0.1	0.2	0.1	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	39 ° 30 '	0	0.1	0.1	0.1	0	0.1	0.2	0.1	0.1
0.1	0.1	0.1	0.1	0	0.1	0.1	0.1	0.1	39 ° 45 '	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	40 ° 0 '	0	0.1	0.1	0.1	0.1	0	0.1	0.1	0.1

Correct Astronomical Position to WGS84

Latitude 20 to 40 °S — **Correction to Latitude**

Longitude 164 to 168 °E — **Correction to Longitude**

164° 0'	164° 30'	165° 0'	165° 30'	166° 0'	166° 30'	167° 0'	167° 30'	168° 0'	Latitude	164° 0'	164° 30'	165° 0'	165° 30'	166° 0'	166° 30'	167° 0'	167° 30'	168° 0'
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	30 ° 0 '	0	0	0	0.1	0.1	0.1	0.1	0.2	0
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	30 ° 15 '	0	0	0	0.1	0.1	0.1	0.1	0.2	0
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	30 ° 30 '	0	0	0	0.1	0.1	0.1	0.1	0.2	0
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	30 ° 45 '	0	0	0	0.1	0.1	0.1	0.1	0.2	0
0.1	0.1	0.1	0.1	0.1	0	0	0.1	0.1	31 ° 0 '	0	0	0	0	0.1	0.1	0.1	0.1	0.1
0.1	0.1	0.1	0.1	0.1	0	0	0.1	0.1	31 ° 15 '	0	0	0	0	0.1	0.1	0	0.1	0.1
0.1	0.1	0.1	0.1	0.1	0	0	0.1	0.1	31 ° 30 '	0	0	0	0	0.2	0.2	0	0.1	0.1
0.1	0.1	0	0	0	0	0	0.1	0.1	31 ° 45 '	0	0	0	0	0.2	0.2	0	0	0.1
0.1	0.1	0	0	0	0	0	0.1	0.1	32 ° 0 '	0	0	0	0	0.2	0.2	0	0	0.1
0.1	0.1	0	0	0.1	0.1	0	0.1	0.1	32 ° 15 '	0	0	0	0	0.2	0.2	0	0	0.1
0.1	0	0	0	0.1	0.1	0.1	0.1	0.1	32 ° 30 '	0	0	0.1	0	0.1	0.2	0	0	0.1
0	0	0	0	0.1	0.1	0.1	0.1	0.1	32 ° 45 '	0	0	0.1	0	0.1	0.2	0	0	0.1
0	0.1	0.1	0	0.1	0.1	0.1	0.1	0.1	33 ° 0 '	0	0	0.1	-0.1	0	0.2	0.1	0	0
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	33 ° 15 '	0	0	0.1	0	0	0.2	0.2	0	0
0.1	0.1	0.1	0.1	0	0.1	0.1	0.1	0.1	33 ° 30 '	0	0	0.1	0	0	0.2	0.2	0	0
0.1	0.1	0.1	0.1	0	0.1	0.1	0.1	0.1	33 ° 45 '	0	0	0.1	0	0	0.1	0.2	0	0
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	34 ° 0 '	0	0	0	0.1	0	0.1	0.2	0.1	0
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	34 ° 15 '	0	0	0	0.1	0	0	0.1	0.1	0.1
0.1	0.1	0	0.1	0.1	0.1	0.1	0.1	0.1	34 ° 30 '	0	0	0	0	0.1	0	0.1	0.1	0.1
0.1	0.1	0	0	0.1	0.1	0.1	0.1	0.1	34 ° 45 '	0	0	0	0	0.1	0	0.1	0.1	0.1
0.1	0.1	0	0	0	0.1	0.1	0.1	0.1	35 ° 0 '	0	0.1	0	0	0	0.1	0.1	0	0.1
0.1	0.1	0	0	0	0.1	0.1	0	0	35 ° 15 '	0	0.1	0.1	0	0	0	0.1	0	0
0.1	0.1	0.1	0	0	0	0.1	0	0	35 ° 30 '	0.1	0.1	0.1	0	0	0	0.1	0.1	0
0.1	0.1	0.1	0.1	0	0	0.1	0.1	0	35 ° 45 '	0.1	0.1	0.1	0	0	0	0.1	0.1	0.1
0.1	0.1	0.1	0.1	0.1	0	0.1	0.1	0.1	36 ° 0 '	0.1	0.1	0.1	0	0	0	0	0.1	0.1
0.1	0.1	0.1	0.1	0.1	0	0	0.1	0.1	36 ° 15 '	0.1	0.1	0.1	0	0	0	0	0	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	36 ° 30 '	0.1	0.1	0.1	0	0	0	0	0	0
0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	36 ° 45 '	0.1	0.1	0.1	0	0.1	0.1	0.1	0	0
0	0.1	0.1	0.1	0.1	0.1	0.1	0	0	37 ° 0 '	0.1	0.1	0.1	0	0.1	0.1	0.1	0	0
0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	37 ° 15 '	0.1	0.1	0.1	0	0.1	0.1	0.1	0.1	0
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	37 ° 30 '	0.1	0.1	0	0	0.1	0.1	0.1	0.1	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	37 ° 45 '	0.1	0.1	0	0	0.1	0.1	0.1	0.1	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	38 ° 0 '	0.1	0.1	0	0	0	0.1	0.2	0.1	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	38 ° 15 '	0.1	0.1	0	0	0	0.1	0.2	0.1	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	38 ° 30 '	0.1	0.1	0.1	0	0.1	0.1	0.2	0.1	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	38 ° 45 '	0.1	0.1	0	0	0.1	0.1	0.2	0.1	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	39 ° 0 '	0.1	0.2	0.1	0	0	0.1	0.2	0.1	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	39 ° 15 '	0.1	0.2	0.1	0	0	0.1	0.2	0.1	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	39 ° 30 '	0.1	0.1	0.1	0	0	0.1	0.2	0.1	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	39 ° 45 '	0.1	0.1	0.1	0	0.1	0.2	0.2	0.1	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	40 ° 0 '	0.1	0.1	0	0	0.1	0.2	0.2	0.1	0.1

Correct Astronomical Position to WGS84

Latitude 20 to 40 °S — **Correction to Latitude**

Longitude 168 to 172 °E — **Correction to Longitude**

168° 0'	168° 30'	169° 0'	169° 30'	170° 0'	170° 30'	171° 0'	171° 30'	172° 0'	Latitude	168° 0'	168° 30'	169° 0'	169° 30'	170° 0'	170° 30'	171° 0'	171° 30'	172° 0'
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	30 ° 0 '	0	0	0.1	0	0	0	0	0	0
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	30 ° 15 '	0	0	0.1	0	0	0	0	0	0
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	30 ° 30 '	0	0	0.1	0	0	0	0	0	0
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	30 ° 45 '	0	0	0.1	0	0	0	0.1	0	0
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	31 ° 0 '	0.1	0	0.1	0	0	0	0.1	0	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	31 ° 15 '	0.1	0	0.1	0.1	0	0	0.1	0	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	31 ° 30 '	0.1	0	0.1	0.1	0	0	0.1	0	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	31 ° 45 '	0.1	0	0.1	0.1	0	0	0.1	0	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	32 ° 0 '	0.1	0	0	0.1	0	0	0	0	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	32 ° 15 '	0.1	0	0	0.1	0.1	0.1	0.1	0	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	32 ° 30 '	0.1	0	0	0.1	0.1	0.1	0.1	0.1	0.1
0.1	0.1	0	0	0	0.1	0.1	0.1	0.1	32 ° 45 '	0.1	0	0	0.1	0	0.1	0.1	0.1	0.1
0.1	0.1	0	0	0	0	0	0.1	0.1	33 ° 0 '	0	0	0	0.1	0	0	0.1	0	0
0.1	0.1	0.1	0.1	0	0	0	0	0	33 ° 15 '	0	0.1	0.1	0.1	0	0	0.1	0	0
0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	33 ° 30 '	0	0.1	0.1	0.1	0.1	0	0.1	0	0
0.1	0	0.1	0.1	0.1	0.1	0.1	0	-0.1	33 ° 45 '	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1
0.1	0	0	0.1	0.1	0.1	0.1	0	0	34 ° 0 '	0	0	0	0.1	0.1	0.1	0.2	0.1	0.1
0.1	0	0	0	0.1	0.1	0.1	0.1	0.1	34 ° 15 '	0.1	0.1	0	0	0.1	0.1	0.2	0.2	0.1
0.1	0.1	0	0	0	0.1	0.1	0.2	0.2	34 ° 30 '	0.1	0.1	0	0	0	0.1	0.2	0.2	0.2
0.1	0.1	0.1	0	0	0.1	0.1	0.2	0.2	34 ° 45 '	0.1	0.1	0.1	0	0	0	0.1	0.2	0.2
0.1	0.1	0.1	0	0	0	0.1	0.1	0.2	35 ° 0 '	0.1	0.1	0.1	0	0	0	0.1	0.1	0.2
0	0.1	0.1	0.1	0.1	0	0.1	0.1	0.1	35 ° 15 '	0	0.1	0.2	0.1	0	0	0	0.1	0.2
0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	35 ° 30 '	0	0.1	0.1	0.1	0	0	0	0.1	0.1
0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	35 ° 45 '	0.1	0	0.1	0.1	0	0	0	0.1	0.1
0.1	0.1	0	0.1	0.1	0.1	0.1	0.1	0.1	36 ° 0 '	0.1	0.1	0	0.1	0	0	0	0.1	0.1
0.1	0.1	0.1	0	0	0	0.1	0.1	0.1	36 ° 15 '	0.1	0.1	0	0.1	0	0	0	0.1	0.1
0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	36 ° 30 '	0	0.1	0.1	0.1	0	0	0	0	0.1
0	0.1	0.1	0.1	0.1	0.1	0	0.1	0.1	36 ° 45 '	0	0.1	0.1	0.1	0.1	0	0	0	0
0	0	0	0.1	0.1	0.1	0.1	0.1	0.1	37 ° 0 '	0	0	0	0	0.1	0	0	0	0
0	0	0	0	0.1	0.1	0.1	0.1	0.1	37 ° 15 '	0	0	0	0	0	0.1	0	0	0
0	0	0	0	0	0.1	0.1	0.1	0.1	37 ° 30 '	0.1	0	0	0	0	0	0	0	0
0.1	0	0	0	0	0.1	0.1	0.1	0.1	37 ° 45 '	0.1	0.1	0	0	0	0	0	0	0
0.1	0.1	0.1	0	0	0	0.1	0.1	0.1	38 ° 0 '	0.1	0.1	0	0	0	0	0	0	0
0.1	0.1	0.1	0.1	0.1	0	0.1	0.1	0.1	38 ° 15 '	0.1	0.1	0	0	0	-0.1	0	0	0
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	38 ° 30 '	0.1	0.1	0	0	0	0	0	0	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	38 ° 45 '	0.1	0.1	0	0	0	0	0	0	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	39 ° 0 '	0.1	0.1	0	0	0	0	0	0	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	39 ° 15 '	0.1	0.1	0	0	0	0	0	0	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	39 ° 30 '	0.1	0.1	0	0	0	0	0	0	0
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	39 ° 45 '	0.1	0.1	0	0	0	0	0	0	0
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	40 ° 0 '	0.1	0	0	0	0	0	0	0	0

Correct Astronomical Position to WGS84

Latitude 20 to 40 °S — **Correction to Latitude**

Longitude 172 to 176 °E — **Correction to Longitude**

172° 0'	172° 30'	173° 0'	173° 30'	174° 0'	174° 30'	175° 0'	175° 30'	176° 0'	Longitude / Latitude	172° 0'	172° 30'	173° 0'	173° 30'	174° 0'	174° 30'	175° 0'	175° 30'	176° 0'
0.1	0	0	0	0.1	0.1	0.1	0.1	0	30 ° 0 '	0	0	0	0	0	0	0	0	0
0.1	0	0	0	0	0	0.1	0.1	0.1	30 ° 15 '	0	0.1	0	-0.1	0	0	0	0	0
0.1	0	0	0.1	0	0	0	0.1	0.1	30 ° 30 '	0	0.1	0	-0.1	0	0	0	0	0
0.1	0.1	0.1	0.1	0.1	0	0	0	0.1	30 ° 45 '	0	0.1	0	-0.1	0	0	0	0	0
0.1	0.1	0.1	0.1	0.1	0	0	0	0	31 ° 0 '	0.1	0.1	0	-0.1	0	0	0	0	0
0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	31 ° 15 '	0.1	0.1	0	-0.1	0	0	0	0	0
0.1	0.1	0.1	0	0	0.1	0.1	0	0	31 ° 30 '	0.1	0.1	0	0	0	0	0	0	0
0.1	0.1	0.1	0.1	0	0.1	0.1	0.1	0	31 ° 45 '	0.1	0.1	0	0	0	0	0	0	0
0.1	0.1	0.1	0.1	0.1	0	0	0	0	32 ° 0 '	0.1	0.1	0	0	0	0	0	0	0
0.1	0.1	0.1	0.1	0.1	0	0	0	0	32 ° 15 '	0.1	0.1	0	0	0	0	0	0	0
0.1	0.1	0.1	0	0	0.1	0	0	0	32 ° 30 '	0.1	0.1	0	0	0	0	0	0	0
0.1	0.1	0.1	0	0	0.1	0.1	0.1	0.1	32 ° 45 '	0.1	0.1	0	0	0	0	0	0	0
0.1	0.1	0.1	0.1	0	0.1	0.1	0.1	0.1	33 ° 0 '	0	0.1	0	0	0	0	0	0	0
0	0.1	0.1	0.1	0	0	0	0	0	33 ° 15 '	0	0.1	0	0	0	0	0	0	0
0	0	0.1	0.1	0	0	0	0	0	33 ° 30 '	0	0	0	0	0	0	0	0	0
-0.1	-0.1	0	0	0	0	0	0	0	33 ° 45 '	0.1	0	0	0	0.1	0	0	0	0
0	-0.1	-0.1	0	0	0	0	0	0.1	34 ° 0 '	0.1	0	-0.1	0	0	0	0	0	0
0.1	0	0	-0.1	0	0	0.1	0.1	0.1	34 ° 15 '	0.1	0	-0.1	0	0	0	0	0	0
0.2	0.1	0	0	0	0	0	0.1	0.1	34 ° 30 '	0.2	0.1	0	0	0	0	0	0	0
0.2	0.2	0.1	0	0	0	0	0	0.1	34 ° 45 '	0.2	0.1	0.1	0	0	0	0	0	0
0.2	0.2	0.1	0.1	0	0	0	0	0.1	35 ° 0 '	0.2	0.2	0.1	0.1	0	0	0	0	0
0.1	0.1	0.1	0.1	0.1	0	0	0	0	35 ° 15 '	0.2	0.2	0.1	0.1	0	0	0	0	0
0.1	0.1	0.2	0.2	0.1	0.1	0	0	0	35 ° 30 '	0.1	0.2	0.1	0.1	0.1	0	0	0	0
0.1	0.1	0.2	0.1	0.1	0.1	0.1	0	0	35 ° 45 '	0.1	0.1	0.1	0.1	0.1	0	0	0	-0.1
0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	36 ° 0 '	0.1	0.1	0.1	0.1	0.1	0.1	0	0	-0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	36 ° 15 '	0.1	0.1	0.1	0.1	0.1	0.1	0	0	-0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	36 ° 30 '	0.1	0.1	0.1	0.1	0.1	0.1	0	0	-0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	36 ° 45 '	0	0.1	0.1	0.1	0.1	0.1	0	0	-0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	37 ° 0 '	0	0.1	0.1	0.1	0.1	0.1	0	0	-0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	37 ° 15 '	0	0.1	0.1	0.1	0.2	0.1	0	0	-0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	37 ° 30 '	0	0	0.1	0.1	0.1	0.1	0	0	-0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	37 ° 45 '	0	0	0.1	0.1	0.1	0.1	0	0	-0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	38 ° 0 '	0	0.1	0.1	0.1	0.1	0.1	0	0	-0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	38 ° 15 '	0	0.1	0.1	0.1	0.1	0.1	0.1	-0.1	-0.1
0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1	38 ° 30 '	0.1	0.1	0.1	0	0.1	0.1	0.1	-0.1	-0.1
0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.2	38 ° 45 '	0.1	0.1	0.1	0	0	0.1	0.1	0	-0.2
0	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	39 ° 0 '	0.1	0.1	0	0	0	0.1	0.1	0	-0.2
0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.3	39 ° 15 '	0.1	0	0	0	0	0.1	0.1	0	-0.2
0.1	0.1	0.2	0.2	0.3	0.3	0.4	0.4	0.3	39 ° 30 '	0	0	-0.1	-0.1	0	0	0.1	0	-0.1
0.1	0.1	0.1	0.2	0.2	0.3	0.4	0.4	0.2	39 ° 45 '	0	0	-0.1	-0.1	-0.1	-0.1	0	0.1	0
0.1	0.1	0.1	0.1	0.2	0.3	0.3	0.3	0.1	40 ° 0 '	0	0	-0.2	-0.2	-0.2	-0.2	0	0.2	0.2

Correct Astronomical Position to WGS84

Latitude 20 to 40 °S — **Correction to Latitude**

Longitude 176 to 180 °E — **Correction to Longitude**

176° 0'	176° 30'	177° 0'	177° 30'	178° 0'	178° 30'	179° 0'	179° 30'	180° 0'	Latitude	176° 0'	176° 30'	177° 0'	177° 30'	178° 0'	178° 30'	179° 0'	179° 30'	180° 0'
0	0	0	0	0	0	0	0	0	30 ° 0 '	0	0	0	0	0	0	0	0.1	0
0.1	0.1	0	0	0	0	0	0	0	30 ° 15 '	0	0	0	0	0	0	0	0.1	0
0.1	0.1	0	0	0	0	0	0	0	30 ° 30 '	0	0	0	0	0	0	0.1	0.1	0
0.1	0	0	0	0	0	0	0	0.1	30 ° 45 '	0	0	0	0	0	0	0.1	0.1	0
0	0	0	0	0	0	0	0	0.1	31 ° 0 '	0	0	0	0	0	0	0.1	0.1	-0.1
0	0	0	0	0	0	0	0	0.1	31 ° 15 '	0	0	0	0	0	0	0.1	0.1	-0.1
0	0	0	0	0	0	0	0	0.1	31 ° 30 '	0	0	0	0	0	0	0.1	0	-0.1
0	0	0	0	0	0	0	0	0.1	31 ° 45 '	0	0	0	0	0	0	0.1	0	-0.1
0	0	0	0	0	0	0	0	0.1	32 ° 0 '	0	0	0	0	0	0	0.1	0	0
0	0	0	0	0	0	0	0.1	0.1	32 ° 15 '	0	0	0	0	0	0.1	0	0	0
0	0.1	0	0	0	0	0	0.1	0	32 ° 30 '	0	0	0	0	0	0.1	0	0	0
0.1	0.1	0	0	0	0	0	0.1	0.1	32 ° 45 '	0	0	0	0	0	0.1	0	0	0
0.1	0	0	0	0	0	0.1	0.1	0.1	33 ° 0 '	0	0	0	0	0.1	0.1	0	0	0
0	0	0	0.1	0	0	0.1	0.1	0.1	33 ° 15 '	0	0	0	0	0.1	0.1	0	0	-0.1
0	0	0	0.1	0	0.1	0.1	0.1	0.2	33 ° 30 '	0	0	0	0	0.1	0	0	0	-0.2
0	0	0.1	0	0	0.1	0.1	0.1	0.2	33 ° 45 '	0	0	0	0	0.1	0	0	-0.1	-0.3
0.1	0.1	0.1	0	0.1	0.1	0.1	0.1	0.3	34 ° 0 '	0	0	0	0	0.1	0	0	-0.1	-0.4
0.1	0.1	0.1	0	0.1	0.1	0.1	0.2	0.3	34 ° 15 '	0	0	0	0	0	0	0	-0.2	-0.5
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	34 ° 30 '	0	0	0	0	0	0	-0.1	-0.3	-0.5
0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	34 ° 45 '	0	0	0.1	0	0	0	-0.1	-0.4	-0.5
0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.2	35 ° 0 '	0	0	0.1	0	0	0	-0.2	-0.4	-0.5
0	0.1	0.1	0.1	0.1	0.2	0.3	0.2	0.2	35 ° 15 '	0	0	0	0	-0.1	-0.1	-0.2	-0.4	-0.4
0	0	0.1	0.1	0.2	0.2	0.3	0.2	0.2	35 ° 30 '	0	0	0	0	-0.1	-0.1	-0.3	-0.3	-0.4
0	0.1	0.1	0.2	0.2	0.3	0.3	0.2	0.2	35 ° 45 '	-0.1	-0.1	0	0	-0.1	-0.2	-0.2	-0.3	-0.4
0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.2	0.1	36 ° 0 '	-0.1	-0.1	-0.1	-0.1	-0.2	-0.2	-0.2	-0.2	-0.4
0.1	0.1	0.1	0.2	0.3	0.3	0.2	0.2	0.1	36 ° 15 '	-0.1	-0.1	-0.1	-0.1	-0.2	-0.2	-0.1	-0.2	-0.4
0.1	0.1	0.1	0.2	0.3	0.3	0.2	0.2	0.1	36 ° 30 '	-0.1	-0.1	-0.1	-0.2	-0.3	-0.2	0	-0.2	-0.3
0.1	0.1	0.1	0.2	0.3	0.3	0.2	0.2	0.1	36 ° 45 '	-0.1	-0.1	-0.2	-0.3	-0.3	-0.1	0	-0.1	-0.2
0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0	37 ° 0 '	-0.1	-0.1	-0.2	-0.4	-0.3	-0.1	0.1	-0.1	-0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	37 ° 15 '	-0.1	-0.1	-0.3	-0.4	-0.3	0	0.1	-0.1	-0.1
0.1	0.1	0.1	0.1	0	0	0	0	0	37 ° 30 '	-0.1	-0.1	-0.2	-0.3	-0.3	-0.1	0.1	0	0
0.1	0.1	0.1	0.1	0	-0.1	0	0	-0.1	37 ° 45 '	-0.1	-0.2	-0.2	-0.3	-0.2	-0.1	0	0	0.1
0.1	0.1	0.1	0.1	0	-0.1	0	0	-0.1	38 ° 0 '	-0.1	-0.2	-0.2	-0.2	-0.2	-0.1	0	0	0.1
0.1	0.1	0.2	0.1	0	0	0	0	0	38 ° 15 '	-0.1	-0.2	-0.2	-0.2	-0.1	0	-0.1	0	0.1
0.1	0.2	0.2	0.1	0	0	0	0	0	38 ° 30 '	-0.1	-0.2	-0.2	-0.1	0	0	-0.1	0	0.1
0.2	0.2	0.2	0.1	0	0	0	0	0	38 ° 45 '	-0.2	-0.2	-0.2	0	0.1	0	-0.1	0.1	0.1
0.2	0.3	0.2	0.1	0	0	0	0	0	39 ° 0 '	-0.2	-0.3	-0.1	0.1	0.1	-0.1	-0.1	0.1	0.1
0.3	0.2	0.1	0	0	0.1	0	0	0	39 ° 15 '	-0.2	-0.3	0	0.2	0.1	-0.1	-0.1	0.1	0.1
0.3	0.1	0	0	0.1	0.1	0	0	0	39 ° 30 '	-0.1	-0.2	0.1	0.2	0	-0.1	0	0.1	0.1
0.2	0	0	0	0.1	0.1	0	0	0	39 ° 45 '	0	0	0.1	0.2	0	-0.1	0	0.1	0
0.1	0	0	0.1	0.2	0.1	0.1	0	0	40 ° 0 '	0.2	0.1	0.1	0	0	0	0.1	0.1	0

Correct Astronomical Position to WGS84

Latitude 20 to 40 °S — **Correction to Latitude**

Longitude 180 to 176 °W — **Correction to Longitude**

180° 0'	179° 30'	179° 0'	178° 30'	178° 0'	177° 30'	177° 0'	176° 30'	176° 0'	Longitude / Latitude	180° 0'	179° 30'	179° 0'	178° 30'	178° 0'	177° 30'	177° 0'	176° 30'	176° 0'
0	0	0	0.1	0.2	0.2	0.3	0.1	-0.1	30 ° 0 '	0	-0.1	0	-0.3	-0.5	-0.6	-0.5	-0.1	0.4
0	0	0	0.1	0.2	0.2	0.3	0	-0.1	30 ° 15 '	0	-0.1	0	-0.3	-0.6	-0.6	-0.5	0.1	0.4
0	0	0	0.1	0.2	0.3	0.2	0	-0.1	30 ° 30 '	0	-0.1	-0.1	-0.4	-0.6	-0.7	-0.4	0.3	0.4
0.1	0	0	0.1	0.3	0.3	0.2	-0.1	-0.1	30 ° 45 '	0	0	-0.1	-0.4	-0.7	-0.7	-0.2	0.4	0.4
0.1	0	0.1	0.2	0.3	0.3	0.1	-0.1	-0.1	31 ° 0 '	-0.1	0	-0.1	-0.6	-0.7	-0.6	-0.1	0.5	0.3
0.1	0.1	0.1	0.2	0.3	0.2	0	-0.1	0	31 ° 15 '	-0.1	0	-0.2	-0.7	-0.8	-0.5	0.1	0.5	0.3
0.1	0.1	0.1	0.2	0.3	0.2	-0.1	-0.1	0	31 ° 30 '	-0.1	0	-0.3	-0.7	-0.8	-0.4	0.3	0.4	0.2
0.1	0	0.1	0.2	0.3	0.1	-0.1	-0.1	0	31 ° 45 '	-0.1	0	-0.3	-0.8	-0.8	-0.2	0.4	0.4	0.1
0.1	0	0.1	0.2	0.2	0.1	-0.1	0	0	32 ° 0 '	0	-0.1	-0.4	-0.8	-0.7	-0.1	0.4	0.4	0.1
0.1	0.1	0.2	0.2	0.2	0	-0.1	0	0	32 ° 15 '	0	-0.1	-0.5	-0.9	-0.7	0	0.4	0.3	0.1
0	0.1	0.2	0.3	0.2	0	-0.1	0	0	32 ° 30 '	0	-0.1	-0.6	-0.9	-0.6	0.1	0.4	0.3	0.1
0.1	0.1	0.3	0.3	0.1	-0.1	-0.1	0	0	32 ° 45 '	0	-0.2	-0.7	-0.9	-0.4	0.2	0.4	0.2	0.1
0.1	0.2	0.3	0.3	0.1	-0.1	-0.1	0	0	33 ° 0 '	0	-0.3	-0.7	-0.8	-0.3	0.3	0.4	0.2	0.1
0.1	0.2	0.3	0.3	0.1	-0.1	0	0	0	33 ° 15 '	-0.1	-0.4	-0.8	-0.7	-0.1	0.4	0.3	0.1	0.1
0.2	0.3	0.3	0.2	0	-0.1	0	0	0	33 ° 30 '	-0.2	-0.5	-0.8	-0.6	0	0.4	0.3	0.1	0.1
0.2	0.3	0.3	0.2	0	-0.1	0	0	0	33 ° 45 '	-0.3	-0.6	-0.8	-0.5	0.2	0.4	0.2	0.1	0.1
0.3	0.4	0.3	0.1	-0.1	-0.1	0	0	0	34 ° 0 '	-0.4	-0.6	-0.7	-0.3	0.2	0.3	0.2	0.1	0
0.3	0.3	0.2	0.1	-0.1	-0.1	0	0	0	34 ° 15 '	-0.5	-0.6	-0.6	-0.2	0.3	0.3	0.2	0.1	0
0.3	0.3	0.2	0	-0.1	0	0	0	0	34 ° 30 '	-0.5	-0.5	-0.5	-0.1	0.3	0.3	0.2	0.1	0
0.2	0.2	0.1	0	-0.1	0	0	0	0.1	34 ° 45 '	-0.5	-0.5	-0.4	0	0.3	0.2	0.1	0.1	0
0.2	0.2	0.1	0	-0.1	0	0	0	0.1	35 ° 0 '	-0.5	-0.5	-0.3	0.1	0.3	0.2	0.1	0.1	0
0.2	0.2	0.1	0	-0.1	0	0	0	0.1	35 ° 15 '	-0.4	-0.5	-0.2	0.2	0.3	0.2	0.1	0	0
0.2	0.1	0.1	-0.1	-0.1	0	0	0	0.1	35 ° 30 '	-0.4	-0.5	-0.2	0.2	0.3	0.2	0.1	0	0
0.2	0.1	0	-0.1	0	0	0	0	0.1	35 ° 45 '	-0.4	-0.4	0	0.3	0.2	0.1	0.1	0	0
0.1	0.1	-0.1	-0.1	0	0	0	0	0.1	36 ° 0 '	-0.4	-0.3	0.1	0.3	0.2	0.1	0.1	0	0
0.1	0	-0.1	-0.1	0	0	0	0	0.1	36 ° 15 '	-0.4	-0.2	0.1	0.2	0.1	0.1	0	0	0
0.1	0	-0.1	-0.1	-0.1	0	0	0	0	36 ° 30 '	-0.3	-0.1	0.2	0.2	0.1	0.1	0	0	-0.1
0.1	-0.1	-0.1	-0.1	0	0	0	0	0.1	36 ° 45 '	-0.2	0	0.2	0.1	0.1	0	0	0	-0.1
0	-0.1	-0.1	-0.1	0	0	0	0.1	0.1	37 ° 0 '	-0.1	0.1	0.2	0.1	0	0	0	0	-0.1
0	-0.1	-0.1	0	0	0	0	0	0.1	37 ° 15 '	-0.1	0.2	0.2	0	0	0	0	0	-0.1
0	-0.1	0	0	0	0	0	0.1	0.1	37 ° 30 '	0	0.2	0.1	0	0	0	0	0	-0.1
-0.1	-0.1	0	0	0	0	0	0.1	0.1	37 ° 45 '	0.1	0.1	0.1	0	0	-0.1	-0.1	-0.1	-0.1
-0.1	-0.1	0	0	0	0	0.1	0.1	0.1	38 ° 0 '	0.1	0.1	0	0	0	-0.1	-0.1	-0.1	-0.1
0	0	0	0	0.1	0.1	0.1	0.1	0.1	38 ° 15 '	0.1	0.1	0	0	0	-0.1	-0.1	-0.1	-0.1
0	0	0	0	0.1	0.1	0.1	0.1	0.1	38 ° 30 '	0.1	0.1	0	0	-0.1	-0.1	-0.1	-0.1	-0.1
0	0	0	0	0.1	0.1	0.1	0.1	0.1	38 ° 45 '	0.1	0	0	0	-0.1	-0.1	-0.1	-0.1	-0.1
0	0	0	0	0.1	0.1	0.1	0.1	0.1	39 ° 0 '	0.1	0	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	39 ° 15 '	0.1	0	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	39 ° 30 '	0.1	0	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	39 ° 45 '	0	0	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
0	0	0	0.1	0.1	0.1	0.1	0.1	0.1	40 ° 0 '	0	0	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1

Correct Astronomical Position to WGS84

Latitude 20 to 40 °S — **Correction to Latitude**

Longitude 176 to 172 °W — **Correction to Longitude**

176° 0'	175° 30'	175° 0'	174° 30'	174° 0'	173° 30'	173° 0'	172° 30'	172° 0'	Longitude / Latitude	176° 0'	175° 30'	175° 0'	174° 30'	174° 0'	173° 30'	173° 0'	172° 30'	172° 0'
-0.1	0	0	0	0	0	0	0	0.1	30 ° 0 '	0.4	0.2	0.1	0	0	0	-0.2	-0.2	0
-0.1	0	0	0	0	0.1	0	0	0.1	30 ° 15 '	0.4	0.2	0.1	0	0	0.1	-0.2	-0.2	0
-0.1	0	0	0	0	0.1	0.1	0	0	30 ° 30 '	0.4	0.1	0.1	-0.1	0	0	-0.2	-0.2	-0.1
-0.1	0	0	0	0	0.1	0.1	-0.1	0	30 ° 45 '	0.4	0.1	0.1	-0.1	-0.1	0	-0.1	-0.1	-0.2
-0.1	0	0	0	0	0.1	0.1	0	0	31 ° 0 '	0.3	0.1	0	-0.1	-0.1	-0.1	0	0	-0.2
0	0	0	0	0	0.1	0.1	0.1	0	31 ° 15 '	0.3	0.1	0	-0.1	-0.1	-0.1	0	0	-0.2
0	0	0	0	0	0	0.1	0.1	0.1	31 ° 30 '	0.2	0.1	0	-0.1	-0.1	-0.2	0	0	-0.2
0	0	0	0	0	0	0.1	0.1	0.1	31 ° 45 '	0.1	0.1	0	-0.1	-0.1	-0.2	-0.1	0	-0.2
0	0	0	0	0	0	0	0.1	0	32 ° 0 '	0.1	0.1	0	-0.1	-0.1	-0.1	-0.1	0	-0.1
0	0	0.1	0	0	0.1	0	0.1	0	32 ° 15 '	0.1	0.1	0	-0.1	-0.1	-0.1	-0.1	0	0
0	0	0.1	0	0	0.1	0	0.1	0	32 ° 30 '	0.1	0.1	0	-0.1	-0.1	-0.1	-0.1	0	0
0	0	0.1	0	0	0	0	0.1	0.1	32 ° 45 '	0.1	0	0	0	-0.1	-0.1	-0.1	0	0.1
0	0	0	0	0	0	0	0.1	0.1	33 ° 0 '	0.1	0	0	0	-0.1	-0.1	-0.2	-0.1	0.1
0	0	0	0	0.1	0	0	0	0.1	33 ° 15 '	0.1	0	0	0	-0.1	-0.1	-0.1	-0.1	0.1
0	0	0	0	0.1	0	0	0	0	33 ° 30 '	0.1	0	0	-0.1	-0.1	-0.1	-0.1	-0.1	0.1
0	0	0	0.1	0	0	0	0	0.1	33 ° 45 '	0.1	0	0	-0.1	-0.1	-0.1	-0.1	-0.1	0
0	0	0.1	0.1	0	0	0.1	0	0.1	34 ° 0 '	0	0	0	-0.1	-0.1	-0.1	-0.1	-0.1	0
0	0	0.1	0.1	0.1	0.1	0.1	0	0.1	34 ° 15 '	0	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
0	0	0.1	0.1	0.1	0.1	0.1	0	0	34 ° 30 '	0	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	34 ° 45 '	0	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	35 ° 0 '	0	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	35 ° 15 '	0	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	35 ° 30 '	0	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	35 ° 45 '	0	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	36 ° 0 '	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	36 ° 15 '	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	36 ° 30 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	36 ° 45 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	37 ° 0 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	37 ° 15 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
0.1	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	37 ° 30 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	-0.1
0.1	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	37 ° 45 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	-0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	38 ° 0 '	-0.1	-0.1	-0.2	-0.1	-0.1	-0.1	-0.1	0	0
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	38 ° 15 '	-0.1	-0.1	-0.2	-0.1	-0.1	-0.1	-0.1	0	0
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	38 ° 30 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	0
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	38 ° 45 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	0
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	39 ° 0 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	0
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	39 ° 15 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	0
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	39 ° 30 '	-0.1	-0.1	-0.1	-0.1	-0.1	0	-0.1	0	0
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	39 ° 45 '	-0.1	-0.1	-0.2	-0.1	-0.1	-0.1	-0.1	0	0
0.1	0.1	0.1	0.1	0	0	0.1	0.1	0.1	40 ° 0 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1

Correct Astronomical Position to WGS84

Latitude 20 to 40 °S — **Correction to Latitude**

Longitude 172 to 168 °W — **Correction to Longitude**

172° 0'	171° 30'	171° 0'	170° 30'	170° 0'	169° 30'	169° 0'	168° 30'	168° 0'	Latitude	172° 0'	171° 30'	171° 0'	170° 30'	170° 0'	169° 30'	169° 0'	168° 30'	168° 0'
0.1	0.1	0.1	0	0	0	0	0	0	30 ° 0 '	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
0.1	0.1	0.1	0	0	0	0	0	0	30 ° 15 '	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
0	0.1	0.1	0	0	0	0	0	0	30 ° 30 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
0	0.1	0.1	0	0	0	0	0	0	30 ° 45 '	-0.2	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
0	0	0.1	0	0	0	0	0	0	31 ° 0 '	-0.2	-0.2	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
0	0	0.1	0	0	0	0	0	0	31 ° 15 '	-0.2	-0.2	-0.1	-0.1	0	-0.1	-0.1	-0.1	-0.1
0.1	0	0.1	0	0	0	0	0	0	31 ° 30 '	-0.2	-0.2	-0.1	-0.1	0	-0.1	-0.1	-0.1	-0.1
0.1	0	0	0	0	0	0	0	0	31 ° 45 '	-0.2	-0.2	-0.1	0	-0.1	-0.1	-0.1	-0.1	-0.1
0	0	0	0	0	0	0	0	0	32 ° 0 '	-0.1	-0.2	-0.1	0	-0.1	0	-0.1	-0.1	-0.1
0	0	0	0	0	0	0	0	0	32 ° 15 '	0	-0.2	-0.1	0	-0.1	0	-0.1	-0.1	-0.1
0	0	0	0	0	0	0	0	0	32 ° 30 '	0	-0.2	-0.2	0	-0.1	0	-0.1	-0.1	-0.1
0.1	0	0	0	0	0	0	0	0	32 ° 45 '	0.1	-0.2	-0.2	0	-0.1	0	-0.1	-0.1	-0.1
0.1	0	0	0	0	0	0	0	0	33 ° 0 '	0.1	-0.1	-0.2	0	0	-0.1	-0.1	-0.1	-0.1
0.1	0	0	0	0.1	0	0	0	0	33 ° 15 '	0.1	-0.1	-0.2	-0.1	0	-0.1	-0.1	-0.1	-0.1
0	0	0	0	0.1	0	0	0	0	33 ° 30 '	0.1	0	-0.2	-0.1	0	-0.1	-0.1	0	-0.1
0.1	0.1	0.1	0	0	0	0	0	0	33 ° 45 '	0	0	-0.2	-0.1	0	-0.1	-0.1	0	-0.1
0.1	0.1	0.1	0	0	0	0	0	0	34 ° 0 '	0	0	-0.1	-0.1	0	0	-0.1	0	-0.1
0.1	0.1	0.1	0	0	0	0	0	0	34 ° 15 '	-0.1	0	-0.1	-0.1	-0.1	0	-0.1	0	-0.1
0	0.1	0	0	0	0	0	0	0	34 ° 30 '	-0.1	0	0	-0.1	-0.1	0	0	0	-0.1
0	0	0	0	0	0	0	0	0	34 ° 45 '	-0.1	-0.1	0	-0.1	-0.1	0	0	-0.1	-0.1
0	0	0	0	0	0	0	0	0	35 ° 0 '	-0.1	-0.1	0	-0.1	-0.2	-0.1	0	-0.1	-0.1
0	0	0.1	0	0	0	0.1	0	0	35 ° 15 '	-0.1	-0.1	0	0	-0.2	-0.1	0	-0.1	-0.1
0.1	0.1	0.1	0.1	0	0	0	0	0	35 ° 30 '	-0.1	-0.1	0	0	-0.2	-0.1	0	0	0
0.1	0.1	0.1	0.1	0.1	0	0	0	0	35 ° 45 '	-0.1	-0.1	0	0	-0.1	-0.1	-0.1	0	0
0.1	0.1	0.1	0.1	0.1	0	0	0.1	0	36 ° 0 '	-0.1	-0.1	0	0	0	-0.1	-0.1	0	0
0.1	0	0	0.1	0.1	0	0.1	0.1	0	36 ° 15 '	-0.1	-0.1	-0.1	0	0	-0.1	-0.1	0	0
0.1	0	0	0	0	0	0.1	0.1	0.1	36 ° 30 '	-0.1	0	-0.1	0	0.1	-0.1	-0.1	0	0
0.1	0.1	0.1	0	0	0	0	0.1	0.1	36 ° 45 '	-0.1	0	-0.1	0	0.1	-0.1	-0.1	0	0
0.1	0.1	0.1	0.1	0.1	0	0	0.1	0.1	37 ° 0 '	-0.1	0	-0.1	0	0.1	-0.1	-0.2	0	0
0.1	0.1	0.1	0.1	0.1	0	0	0	0.1	37 ° 15 '	-0.1	0	-0.1	-0.1	0.1	0	-0.2	-0.1	0
0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	37 ° 30 '	-0.1	0	-0.1	-0.1	0.1	0	-0.1	-0.2	-0.1
0.1	0.1	0	0	0.1	0.1	0.1	-0.1	-0.1	37 ° 45 '	-0.1	0	-0.1	-0.1	0.1	0.1	-0.1	-0.1	-0.1
0.1	0.1	0.1	0	0.1	0.2	0.2	0	-0.1	38 ° 0 '	0	0	-0.1	-0.1	0	0	0	0	-0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0	38 ° 15 '	0	0	-0.1	-0.1	-0.1	0	0.1	0.2	-0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	38 ° 30 '	0	0	-0.1	-0.1	-0.1	-0.1	0.1	0.2	0
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	38 ° 45 '	0	0	-0.1	-0.1	-0.1	-0.1	0	0.2	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	39 ° 0 '	0	-0.1	-0.1	-0.1	0	-0.1	0	0.1	0.2
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	39 ° 15 '	0	-0.1	-0.1	-0.1	0	0	-0.1	0.1	0.2
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	39 ° 30 '	0	-0.1	-0.1	-0.1	0	0	0	0	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0	0	0.1	39 ° 45 '	0	-0.1	-0.1	0	0	0	0	0	0
0.1	0.1	0.1	0.1	0.1	0.1	0	0	0.1	40 ° 0 '	-0.1	-0.1	0	0	0	0	0	0	-0.1

Correct Astronomical Position to WGS84

Latitude 20 to 40 °S — **Correction to Latitude**

Longitude 168 to 164 °W — **Correction to Longitude**

168° 0'	167° 30'	167° 0'	166° 30'	166° 0'	165° 30'	165° 0'	164° 30'	164° 0'	Longitude / Latitude	168° 0'	167° 30'	167° 0'	166° 30'	166° 0'	165° 30'	165° 0'	164° 30'	164° 0'
0	0	0	0	0	0	0	0	0	30 ° 0 '	-0.1	-0.1	-0.1	0	-0.1	-0.1	0	-0.1	-0.1
0	0	0	0	0	0.1	0	0	0	30 ° 15 '	-0.1	-0.1	-0.1	0	-0.1	-0.1	0	-0.1	-0.1
0	0	0	0	0	0.1	0	0	0	30 ° 30 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	-0.1	-0.1
0	0	0	0	0	0	0	0	0	30 ° 45 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	-0.1
0	0	0	0	0	0	0	0	0	31 ° 0 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	-0.1
0	0	0	0	0	0	0	0	0	31 ° 15 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	-0.1
0	0	0	0	0	0	0	0	0	31 ° 30 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	-0.1
0	0	0	0	0	0	0	0	0	31 ° 45 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	-0.1
0	0	0	0	0	0	0	0	0	32 ° 0 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	-0.1
0	0	0	0	0	0	0	0	0	32 ° 15 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	-0.1
0	0	0	0	0	0	0	0	0	32 ° 30 '	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	0	-0.1
0	0	0	0	0	0	0	0	0	32 ° 45 '	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	0	-0.1
0	0	0	0	0	0	0	0	0	33 ° 0 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	-0.1
0	0	0	0	0	0	0	0	0	33 ° 15 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	-0.1
0	0	0	0	0	0	0	0	0	33 ° 30 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	-0.1
0	0	0	0	0	0	0	0	0	33 ° 45 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	-0.1
0	0	0	0	0	0	0	0	0	34 ° 0 '	-0.1	-0.1	-0.1	-0.1	0	-0.1	-0.1	-0.1	-0.1
0	0	0	0	0	0	0	0	0	34 ° 15 '	-0.1	-0.1	-0.1	-0.1	0	-0.1	-0.1	-0.1	-0.1
0	0	0	0	0	0	0	0	0	34 ° 30 '	-0.1	-0.1	-0.1	-0.1	0	-0.1	-0.1	-0.1	-0.1
0	0	0	0	0	0	0	0	0	34 ° 45 '	-0.1	-0.1	-0.1	-0.1	0	-0.1	-0.1	-0.1	-0.1
0	0	0	0	0	0	0	0	0	35 ° 0 '	-0.1	-0.1	-0.1	-0.1	0	-0.1	-0.1	-0.1	-0.1
0	0	0	0	0	0	0	0	0	35 ° 15 '	-0.1	-0.1	-0.1	-0.1	0	-0.1	-0.1	-0.1	-0.1
0	0	0	0	0	0	0	0	0	35 ° 30 '	0	-0.1	-0.1	-0.1	0	-0.1	-0.1	0	-0.1
0	0	0	0	0	0	0	0	0	35 ° 45 '	0	-0.1	-0.1	-0.1	0	-0.1	-0.1	0	-0.1
0	0	0	0	0	0	0	0	0	36 ° 0 '	0	-0.1	-0.1	-0.1	0	-0.1	-0.1	0	-0.1
0	0.1	0	0	0	0	0	0	0	36 ° 15 '	0	-0.1	-0.1	-0.1	0	-0.1	-0.1	0	-0.1
0.1	0.1	0	0	0	0	0	0	0	36 ° 30 '	0	-0.1	0	-0.1	0	-0.1	-0.1	0	0
0.1	0.1	0	0	0	0	0	0	0	36 ° 45 '	0	-0.1	0	-0.1	-0.1	-0.1	-0.1	0	0
0.1	0.1	0	0	0	0	0	0	0	37 ° 0 '	0	0	0	-0.1	-0.1	-0.1	-0.1	0	0
0.1	0.1	0.1	0.1	0.1	0	0	0	0	37 ° 15 '	0	0	0	-0.1	-0.1	-0.1	-0.1	0	0
0	0	0.1	0.1	0.1	0.1	0	0	0	37 ° 30 '	-0.1	0	0	-0.1	-0.1	-0.1	-0.1	0	0
-0.1	0	0.1	0.1	0.1	0.1	0	0	0	37 ° 45 '	-0.1	-0.1	0	-0.1	-0.1	0	-0.1	0	0
-0.1	0	0.1	0.1	0	0	0	0	0	38 ° 0 '	-0.1	-0.2	-0.1	0	0	0	0	0	0
0	0	0.1	0.1	0	0	0	0	0	38 ° 15 '	-0.1	-0.3	-0.1	0	0	0	0	0	0
0.1	0	0	0.1	0.1	0.1	0	0	0	38 ° 30 '	0	-0.3	-0.2	0	0	0	0	0	0
0.2	0	0	0.1	0.1	0.1	0.1	0.1	0	38 ° 45 '	0.1	-0.2	-0.2	-0.1	0	0	0	-0.1	0
0.2	0	0	0	0	0.1	0.1	0.1	0.1	39 ° 0 '	0.2	-0.1	-0.2	-0.1	0	0	0	-0.1	0
0.1	0.1	0	0	0	0.1	0.1	0.1	0	39 ° 15 '	0.2	0	-0.2	-0.1	-0.1	0	0	0	0
0.1	0.2	0.1	0	0	0.1	0.1	0.1	0	39 ° 30 '	0.1	0	-0.1	-0.1	-0.1	-0.1	0	0	0
0.1	0.2	0.2	0.1	0	0.1	0.1	0.1	0.1	39 ° 45 '	0	0	0	0	-0.1	-0.2	0	0	0
0.1	0.1	0.2	0.1	0.1	0	0	0.1	0.1	40 ° 0 '	-0.1	-0.1	0.1	0.1	-0.1	-0.2	-0.1	0	0

Correct Astronomical Position to WGS84

Latitude 20 to 40 °S — **Correction to Latitude**

Longitude 164 to 160 °W — **Correction to Longitude**

164° 0'	163° 30'	163° 0'	162° 30'	162° 0'	161° 30'	161° 0'	160° 30'	160° 0'	Longitude / Latitude	164° 0'	163° 30'	163° 0'	162° 30'	162° 0'	161° 30'	161° 0'	160° 30'	160° 0'
0	0	0	0	0	0	0	0	0	30 ° 0 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
0	0	0	0	0	0	0	0	0	30 ° 15 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
0	0	0	0	0	0	0	0	0	30 ° 30 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
0	0	0	0	0	0	0	0	0	30 ° 45 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	-0.1	-0.1
0	0	0	0	0	0	0	0	0	31 ° 0 '	-0.1	0	-0.1	-0.1	-0.1	-0.1	0	-0.1	-0.1
0	0	0	0	0	0	0	0	0	31 ° 15 '	-0.1	-0.1	-0.1	-0.1	0	-0.1	0	0	-0.1
0	0	0	0	0	0	0	0	0	31 ° 30 '	-0.1	-0.1	-0.1	-0.1	0	-0.1	-0.1	0	-0.1
0	0	0	0	0	0	0	0	0	31 ° 45 '	-0.1	-0.1	-0.1	-0.1	0	-0.1	-0.1	0	0
0	0	0	0	0	0	0	0	0	32 ° 0 '	-0.1	0	-0.1	-0.1	0	-0.1	-0.1	0	0
0	0	0	0	0	0	0	0	0	32 ° 15 '	-0.1	0	-0.1	-0.1	0	0	-0.1	-0.1	0
0	0	0	0	0	0	0	0	0	32 ° 30 '	-0.1	0	0	-0.1	0	0	-0.1	-0.1	0
0	0	0	0	0	0	0	0	0	32 ° 45 '	-0.1	0	0	-0.1	-0.1	0	-0.1	-0.1	0
0	0	0	0	0	0	0	0	0	33 ° 0 '	-0.1	0	0	-0.1	-0.1	0	0	-0.1	0
0	0	0	0	0	0	0	0	0	33 ° 15 '	-0.1	-0.1	0	-0.1	0	0	0	-0.1	-0.1
0	0	0	0	0	0	0	0	0	33 ° 30 '	-0.1	-0.1	0	0	0	0	0	0	-0.1
0	0	0	0	0	0	0	0	0	33 ° 45 '	-0.1	-0.1	0	0	0	0	0	0	-0.1
0	0	0	0	0	0	0	0	0	34 ° 0 '	-0.1	-0.1	0	0	0	0	0	0	-0.1
0	0	0	0	0	0	0	0	0	34 ° 15 '	-0.1	-0.1	-0.1	0	0	0	0	0	-0.1
0	0	0	0	0	0	0	0	0	34 ° 30 '	-0.1	-0.1	-0.1	-0.1	0	0	0	0	-0.1
0	0	0	0	0	0	0	0	0	34 ° 45 '	-0.1	-0.1	-0.1	-0.1	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 0 '	-0.1	-0.1	-0.1	-0.1	0	0	-0.1	0	0
0	0	0	0	0	0	0	0	0	35 ° 15 '	-0.1	-0.1	0	-0.1	-0.1	0	-0.1	0	0
0	0	0	0	0	0	0	0	0	35 ° 30 '	-0.1	-0.1	0	-0.1	-0.1	0	-0.1	0	0
0	0	0	0	0	0	0	0	0	35 ° 45 '	-0.1	-0.1	0	-0.1	-0.1	0	0	-0.1	0
0	0	0	0	0	0	0	0	0	36 ° 0 '	-0.1	-0.1	0	0	0	0	0	-0.1	0
0	0	0	0	0	0	0	0	0	36 ° 15 '	-0.1	-0.1	0	0	0	0	0	-0.1	-0.1
0	0	0	0	0	0	0	0	0	36 ° 30 '	0	-0.1	0	0	0	0	0	-0.1	-0.1
0	0	0	0	0	0	0	0	0	36 ° 45 '	0	-0.1	0	0	0	0	0	-0.1	-0.1
0	0	0	0	0	0	0	0	0	37 ° 0 '	0	-0.1	0	0	0	0	0	0	-0.1
0	0	0	0	0	0	0	0	0	37 ° 15 '	0	-0.1	0	0	0	0	0	0	-0.1
0	0	0	0	0	0	0	0	0	37 ° 30 '	0	-0.1	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 45 '	0	-0.1	-0.1	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 0 '	0	-0.1	-0.1	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 15 '	0	-0.1	-0.1	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 30 '	0	-0.1	-0.1	0	0	0	0	0	0
0	0	0	0	0	0	0	0.1	0	38 ° 45 '	0	-0.1	-0.1	0	0	0	0	0	0
0.1	0	0	0	0	0	0	0	0	39 ° 0 '	0	0	-0.1	0	0	0	0	0	0
0	0.1	0	0	0	0	0	0	0	39 ° 15 '	0	0	0	0	0	0	0	0	0
0	0.1	0.1	0	0	0.1	0.1	0.1	0	39 ° 30 '	0	0	0	0	0	0	0	0	0
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	39 ° 45 '	0	0	0	0	0	0	0	0	0
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	40 ° 0 '	0	0	0	0	0	0	0	0	0

Correct Astronomical Position to WGS84

Latitude 30 to 40 °S — **Correction to Latitude**

Longitude 160 to 156 °W — **Correction to Longitude**

160° 0'	159° 30'	159° 0'	158° 30'	158° 0'	157° 30'	157° 0'	156° 30'	156° 0'	Latitude	160° 0'	159° 30'	159° 0'	158° 30'	158° 0'	157° 30'	157° 0'	156° 30'	156° 0'
0	0	0	0	0	0	0	0	0	30 ° 0 '	-0.1	-0.1	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	30 ° 15 '	-0.1	-0.1	0	0	-0.1	-0.1	0	0	0
0	0	0	0	0	0	0	0	0	30 ° 30 '	-0.1	-0.1	-0.1	0	-0.1	-0.1	0	0	0
0	0	0	0	0	0	0	0	0	30 ° 45 '	-0.1	-0.1	-0.1	0	0	-0.1	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 0 '	-0.1	-0.1	-0.1	0	0	-0.1	-0.1	0	0
0	0	0	0	0	0	0	0	0	31 ° 15 '	-0.1	-0.1	-0.1	0	0	0	-0.1	0	0
0	0	0	0	0	0	0	0	0	31 ° 30 '	-0.1	-0.1	-0.1	-0.1	0	0	-0.1	0	0
0	0	0	0	0	0	0	0	0	31 ° 45 '	0	-0.1	-0.1	-0.1	0	0	-0.1	0	0
0	0	0	0	0	0	0	0	0	32 ° 0 '	0	-0.1	-0.1	-0.1	0	0	-0.1	-0.1	0
0	0	0	0	0	0	0	0	0	32 ° 15 '	0	-0.1	-0.1	-0.1	-0.1	0	-0.1	-0.1	0
0	0	0	0	0	0	0	0	0	32 ° 30 '	0	0	-0.1	-0.1	-0.1	0	0	-0.1	0
0	0	0	0	0	0	0	0	0	32 ° 45 '	0	0	-0.1	-0.1	-0.1	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 0 '	0	0	-0.1	-0.1	-0.1	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 15 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 30 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 45 '	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 0 '	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 15 '	-0.1	-0.1	0	-0.1	-0.1	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 30 '	-0.1	-0.1	0	-0.1	-0.1	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 45 '	0	-0.1	-0.1	-0.1	-0.1	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 0 '	0	-0.1	-0.1	-0.1	0	0	0	-0.1	0
0	0	0	0	0	0	0	0	0	35 ° 15 '	0	-0.1	-0.1	-0.1	0	0	0	-0.1	0
0	0	0	0	0	0	0	0	0	35 ° 30 '	0	-0.1	-0.1	-0.1	0	0	0	-0.1	-0.1
0	0	0	0	0	0	0	0	0	35 ° 45 '	0	0	-0.1	-0.1	0	0	0	-0.1	-0.1
0	0	0	0	0	0	0	0	0	36 ° 0 '	0	0	-0.1	-0.1	0	0	0	-0.1	-0.1
0	0	0	0	0	0	0	0	0	36 ° 15 '	-0.1	0	-0.1	-0.1	0	0	-0.1	-0.1	-0.1
0	0	0	0	0	0	0	0	0	36 ° 30 '	-0.1	0	0	-0.1	0	0	-0.1	-0.1	0
0	0	0	0	0	0	0	0	0	36 ° 45 '	-0.1	0	0	-0.1	-0.1	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 0 '	-0.1	0	0	-0.1	-0.1	-0.1	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 15 '	-0.1	-0.1	0	-0.1	-0.1	-0.1	0	-0.1	0
0	0	0	0	0	0	0	0	0	37 ° 30 '	0	-0.1	-0.1	-0.1	-0.1	-0.1	0	-0.1	0
0	0	0	0	0	0	0	0	0	37 ° 45 '	0	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0
0	0	0	0	0	0	0	0	0	38 ° 0 '	0	0	-0.1	-0.1	-0.1	-0.1	-0.1	0	0
0	0	0	0	0	0	0	0	0	38 ° 15 '	0	0	-0.1	-0.1	0	-0.1	-0.1	0	0
0	0	0	0	0	0	0	0	0	38 ° 30 '	0	0	-0.1	-0.1	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 45 '	0	0	-0.1	-0.1	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 0 '	0	0	0	-0.1	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 15 '	0	0	0	-0.1	0	0	0	0	0
0	0.1	0.1	0	0	0	0	0	0	39 ° 30 '	0	0	0	0	0	0	0	0	0
0.1	0.1	0.1	0.1	0	0	0	0	0	39 ° 45 '	0	0	0	0	0	0	0	0	0
0.1	0.1	0.1	0.1	0.1	0	0	0	0	40 ° 0 '	0	0	0	0	0	0	0	0	0

Correct Astronomical Position to WGS84

Latitude 30 to 40 °S — **Correction to Latitude**

Longitude 156 to 152 °W — **Correction to Longitude**

156° 0'	155° 30'	155° 0'	154° 30'	154° 0'	153° 30'	153° 0'	152° 30'	152° 0'	Longitude / Latitude	156° 0'	155° 30'	155° 0'	154° 30'	154° 0'	153° 30'	153° 0'	152° 30'	152° 0'
0	0	0	0	0	0	0	0	0	30 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	30 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	30 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	30 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 15 '	0	0	0	0	0	0	-0.1	0	0
0	0	0	0	0	0	0	0	0	31 ° 30 '	0	0	0	0	0	0	-0.1	0	0
0	0	0	0	0	0	0	0	0	31 ° 45 '	0	0	0	0	0	0	-0.1	0	0
0	0	0	0	0	0	0	0	0	32 ° 0 '	0	0	0	0	0	0	-0.1	0	0
0	0	0	0	0	0	0	0	0	32 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 15 '	0	0	0	0	-0.1	-0.1	-0.1	0	0
0	0	0	0	0	0	0	0	0	34 ° 30 '	0	0	0	0	0	-0.1	-0.1	0	0
0	0	0	0	0	0	0	0	0	34 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 30 '	-0.1	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 45 '	-0.1	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 0 '	-0.1	0	0	0	0	-0.1	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 15 '	-0.1	0	0	0	0	-0.1	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 30 '	0	0	0	0	0	0	0	-0.1	0
0	0	0	0	0	0	0	0	0	36 ° 45 '	0	0	0	0	-0.1	0	0	-0.1	-0.1
0	0	0	0	0	0	0	0	0	37 ° 0 '	0	-0.1	0	0	-0.1	0	0	0	-0.1
0	0	0	0	0	0	0	0	0	37 ° 15 '	0	-0.1	0	0	-0.1	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 30 '	0	-0.1	-0.1	0	-0.1	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 45 '	0	-0.1	-0.1	0	-0.1	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 0 '	0	-0.1	-0.1	0	-0.1	0	0	-0.1	0
0	0	0	0	0	0	0	0	0	38 ° 15 '	0	-0.1	-0.1	0	-0.1	0	0	-0.1	0
0	0	0	0	0	0	0	0	0	38 ° 30 '	0	-0.1	-0.1	0	-0.1	-0.1	-0.1	-0.1	-0.1
0	0	0	0	0	0	0	0	0	38 ° 45 '	0	-0.1	-0.1	0	0	-0.1	-0.1	-0.1	-0.1
0	0	0	0	0	0	0	0	0	39 ° 0 '	0	-0.1	-0.1	0	0	-0.1	-0.1	-0.1	-0.1
0	0	0	0	0	0	0	0	0	39 ° 15 '	0	0	0	0	0	-0.1	-0.1	-0.1	-0.1
0	0	0	0	0	0	0	0	0	39 ° 30 '	0	0	0	0	0	-0.1	-0.1	-0.1	-0.1
0	0	0	0	0	0	0	0	0	39 ° 45 '	0	0	0	0	0	-0.1	-0.1	-0.1	-0.1
0	0	0	0	0	0	0	0	0	40 ° 0 '	0	-0.1	0	0	0	0	-0.1	-0.1	-0.1

Correct Astronomical Position to WGS84

Latitude 30 to 40 °S — **Correction to Latitude**

Longitude 152 to 148 °W — **Correction to Longitude**

152° 0'	151° 30'	151° 0'	150° 30'	150° 0'	149° 30'	149° 0'	148° 30'	148° 0'	Latitude	152° 0'	151° 30'	151° 0'	150° 30'	150° 0'	149° 30'	149° 0'	148° 30'	148° 0'
0	0	0	0	0	0	0	0	0	30 ° 0 '	0	0	0	0	0	0	0	-0.1	-0.1
0	0	0	0	0	0	0	0	0	30 ° 15 '	0	0	0	0	0	0	0	-0.1	-0.1
0	0	0	0	0	0	0	0	0	30 ° 30 '	0	0	0	0	0	0	0	0	-0.1
0	0	0	0	0	0	0	0	0	30 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 0 '	0	0	0	0	0	0	0	-0.1	0
0	0	0	0	0	0	0	0	0	35 ° 15 '	0	0	0	0	0	0	0	-0.1	0
0	0	0	0	0	0	0	0	0	35 ° 30 '	0	0	0	0	0	0	0	-0.1	0
0	0	0	0	0	0	0	0	0	35 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 0 '	0	0	0	0	0	0	0	-0.1	0
0	0	0	0	0	0	0	0	0	36 ° 15 '	0	0	0	0	0	0	0	-0.1	0
0	0	0	0	0	0	0	0	0	36 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 45 '	-0.1	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 0 '	-0.1	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 15 '	0	-0.1	-0.1	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 30 '	0	-0.1	-0.1	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 45 '	0	-0.1	-0.1	-0.1	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 0 '	0	-0.1	-0.1	-0.1	-0.1	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 15 '	0	-0.1	-0.1	0	-0.1	-0.1	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 30 '	-0.1	-0.1	-0.1	0	-0.1	-0.1	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 45 '	-0.1	-0.1	-0.1	0	-0.1	-0.1	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 0 '	-0.1	-0.1	-0.1	0	-0.1	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 15 '	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 30 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 45 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	0
0	0	0	0	0	0	0	0	0	40 ° 0 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	0

Correct Astronomical Position to WGS84

Latitude 30 to 40 °S — **Correction to Latitude**

Longitude 148 to 144 °W — **Correction to Longitude**

148° 0'	147° 30'	147° 0'	146° 30'	146° 0'	145° 30'	145° 0'	144° 30'	144° 0'	Longitude / Latitude	148° 0'	147° 30'	147° 0'	146° 30'	146° 0'	145° 30'	145° 0'	144° 30'	144° 0'
0	0	0	0	0	0	0	0	0	30 ° 0 '	-0.1	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	30 ° 15 '	-0.1	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	30 ° 30 '	-0.1	-0.1	-0.1	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	30 ° 45 '	0	-0.1	-0.1	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 0 '	0	-0.1	-0.1	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 15 '	0	-0.1	-0.1	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 30 '	0	-0.1	-0.1	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 45 '	0	-0.1	-0.1	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 0 '	0	-0.1	-0.1	0	0	0	-0.1	0	0
0	0	0	0	0	0	0	0	0	32 ° 15 '	0	-0.1	-0.1	0	0	0	-0.1	-0.1	0
0	0	0	0	0	0	0	0	0	32 ° 30 '	0	0	-0.1	-0.1	-0.1	0	-0.1	-0.1	0
0	0	0	0	0	0	0	0	0	32 ° 45 '	0	0	-0.1	-0.1	-0.1	-0.1	-0.1	0	0
0	0	0	0	0	0	0	0	0	33 ° 0 '	0	0	-0.1	-0.1	-0.1	-0.1	-0.1	0	0
0	0	0	0	0	0	0	0	0	33 ° 15 '	0	0	0	-0.1	-0.1	-0.1	-0.1	0	0
0	0	0	0	0	0	0	0	0	33 ° 30 '	0	0	0	-0.1	-0.1	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 45 '	0	0	0	0	-0.1	-0.1	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 0 '	0	0	0	0	-0.1	-0.1	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 15 '	0	0	0	0	-0.1	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 45 '	0	0	0	0	-0.1	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 0 '	0	0	0	0	-0.1	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 15 '	0	0	0	0	0	-0.1	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	40 ° 0 '	0	0	0	0	0	0	0	0	0

Correct Astronomical Position to WGS84

Latitude 30 to 40 °S — **Correction to Latitude**

Longitude 144 to 140 °W — **Correction to Longitude**

144° 0'	143° 30'	143° 0'	142° 30'	142° 0'	141° 30'	141° 0'	140° 30'	140° 0'	Latitude	144° 0'	143° 30'	143° 0'	142° 30'	142° 0'	141° 30'	141° 0'	140° 30'	140° 0'
0	0	0	0	0	0	0	0	0	30 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	30 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	30 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	30 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	40 ° 0 '	0	0	0	0	0	0	0	0	0

Correct Astronomical Position to WGS84

Latitude 30 to 40 °S — **Correction to Latitude**

Longitude 140 to 136 °W — **Correction to Longitude**

140° 0'	139° 30'	139° 0'	138° 30'	138° 0'	137° 30'	137° 0'	136° 30'	136° 0'	Longitude / Latitude	140° 0'	139° 30'	139° 0'	138° 30'	138° 0'	137° 30'	137° 0'	136° 30'	136° 0'
0	0	0	0	0	0	0	0	0	30 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	30 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	30 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	30 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	40 ° 0 '	0	0	0	0	0	0	0	0	0

Correct Astronomical Position to WGS84

Latitude 30 to 40 °S — **Correction to Latitude**

Longitude 136 to 132 °W — **Correction to Longitude**

136° 0'	135° 30'	135° 0'	134° 30'	134° 0'	133° 30'	133° 0'	132° 30'	132° 0'	Longitude / Latitude	136° 0'	135° 30'	135° 0'	134° 30'	134° 0'	133° 30'	133° 0'	132° 30'	132° 0'
0	0	0	0	0	0	0	0	0	30 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	30 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	30 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	30 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	-0.1	0	0	34 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	40 ° 0 '	0	0	0	0	0	0	0	0	0

Correct Astronomical Position to WGS84

Latitude 30 to 40 °S — **Correction to Latitude**

Longitude 132 to 128 °W — **Correction to Longitude**

132° 0'	131° 30'	131° 0'	130° 30'	130° 0'	129° 30'	129° 0'	128° 30'	128° 0'	Longitude / Latitude	132° 0'	131° 30'	131° 0'	130° 30'	130° 0'	129° 30'	129° 0'	128° 30'	128° 0'
0	0	0	0	0	0	0	0	0	30 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	30 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	30 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	30 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	40 ° 0 '	0	0	0	0	0	0	0	0	0

Correct Astronomical Position to WGS84

Latitude 30 to 40 °S — **Correction to Latitude**

Longitude 128 to 124 °W — **Correction to Longitude**

128° 0'	127° 30'	127° 0'	126° 30'	126° 0'	125° 30'	125° 0'	124° 30'	124° 0'	Longitude / Latitude	128° 0'	127° 30'	127° 0'	126° 30'	126° 0'	125° 30'	125° 0'	124° 30'	124° 0'
0	0	0	0	0	0	0	0	0	30 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	30 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	30 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	30 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 0 '	0	0	0	0	0	0	-0.1	0	0
0	0	0	0	0	0	0	0	0	36 ° 15 '	0	0	0	0	0	0	-0.1	0	0
0	0	0	0	0	0	0	0	0	36 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 15 '	0	0	0	0	0	0	0	0	-0.1
0	0	0	0	0	0	0	0	0	37 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	40 ° 0 '	0	0	0	0	0	0	0	0	0

Correct Astronomical Position to WGS84

Latitude 30 to 40 °S — **Correction to Latitude**

Longitude 124 to 120 °W — **Correction to Longitude**

124° 0'	123° 30'	123° 0'	122° 30'	122° 0'	121° 30'	121° 0'	120° 30'	120° 0'	Longitude / Latitude	124° 0'	123° 30'	123° 0'	122° 30'	122° 0'	121° 30'	121° 0'	120° 30'	120° 0'
0	0	0	0	0	0	0	0	0	30 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	30 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	30 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	30 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 15 '	0	0	0	-0.1	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 15 '	-0.1	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	40 ° 0 '	0	0	0	0	0	0	0	0	0

Correct Astronomical Position to WGS84

Latitude 30 to 40 °S — **Correction to Latitude**

Longitude 120 to 116 °W — **Correction to Longitude**

120° 0'	119° 30'	119° 0'	118° 30'	118° 0'	117° 30'	117° 0'	116° 30'	116° 0'	Longitude / Latitude	120° 0'	119° 30'	119° 0'	118° 30'	118° 0'	117° 30'	117° 0'	116° 30'	116° 0'
0	0	0	0	0	0	0	0	0	30 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	30 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	30 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	30 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 0 '	0	0	0	0	0	0	0	0	0.1
0	0	0	0	0	0	0	0	0	36 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	40 ° 0 '	0	0	0	0	0	0	0	0	0

Correct Astronomical Position to WGS84

Latitude 30 to 40 °S — **Correction to Latitude**

Longitude 116 to 112 °W — **Correction to Longitude**

116° 0'	115° 30'	115° 0'	114° 30'	114° 0'	113° 30'	113° 0'	112° 30'	112° 0'	Longitude / Latitude	116° 0'	115° 30'	115° 0'	114° 30'	114° 0'	113° 30'	113° 0'	112° 30'	112° 0'
0	0	0	0	0	0	0	0	0	30 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	30 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	30 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	30 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 0 '	0.1	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	40 ° 0 '	0	0	0	0	0	0	0	0	0

Correct Astronomical Position to WGS84

Latitude 30 to 40 °S — **Correction to Latitude**

Longitude 112 to 108 °W — **Correction to Longitude**

112° 0'	111° 30'	111° 0'	110° 30'	110° 0'	109° 30'	109° 0'	108° 30'	108° 0'	Latitude	112° 0'	111° 30'	111° 0'	110° 30'	110° 0'	109° 30'	109° 0'	108° 30'	108° 0'
0	0	0	0	0	0	0	0	0	30 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	30 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	30 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	30 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	40 ° 0 '	0	0	0	0	0	0	0	0	0

Correct Astronomical Position to WGS84

Latitude 30 to 40 °S — **Correction to Latitude**

Longitude 108 to 104 °W — **Correction to Longitude**

108° 0'	107° 30'	107° 0'	106° 30'	106° 0'	105° 30'	105° 0'	104° 30'	104° 0'	Longitude / Latitude	108° 0'	107° 30'	107° 0'	106° 30'	106° 0'	105° 30'	105° 0'	104° 30'	104° 0'
0	0	0	0	0	0	0	0	0	30 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	30 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	30 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	30 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	40 ° 0 '	0	0	0	0	0	0	0	0	0

Correct Astronomical Position to WGS84

Latitude 30 to 40 °S — **Correction to Latitude**

Longitude 104 to 100 °W — **Correction to Longitude**

104° 0'	103° 30'	103° 0'	102° 30'	102° 0'	101° 30'	101° 0'	100° 30'	100° 0'	Latitude	104° 0'	103° 30'	103° 0'	102° 30'	102° 0'	101° 30'	101° 0'	100° 30'	100° 0'
0	0	0	0	0	0	0	0	0	30 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	30 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	30 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	30 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	40 ° 0 '	0	0	0	0	0	0	0	0	0

Correct Astronomical Position to WGS84

Latitude 30 to 40 °S — **Correction to Latitude**

Longitude 100 to 96 °W — **Correction to Longitude**

100° 0'	99° 30'	99° 0'	98° 30'	98° 0'	97° 30'	97° 0'	96° 30'	96° 0'	Latitude	100° 0'	99° 30'	99° 0'	98° 30'	98° 0'	97° 30'	97° 0'	96° 30'	96° 0'
0	0	0	0	0	0	0	0	0	30 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	30 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	30 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	30 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 45 '	0	0	0	0	0.1	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 30 '	0	0.1	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 45 '	0	0.1	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 45 '	0	0	0	0	0.1	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 0 '	0	0	0	0	0.1	0.1	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 15 '	0	0	0	0	0.1	0.1	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 30 '	0	0	0	0	0.1	0.1	0.1	0	0
0	0	0	0	0	0	0	0	0	39 ° 45 '	0	0	0	0	0	0.1	0.1	0	0
0	0	0	0	0	0	0	0	0	40 ° 0 '	0	0	0	0	0	0.1	0.1	0	0

Correct Astronomical Position to WGS84

Latitude 30 to 40 °S — **Correction to Latitude**

Longitude 96 to 92 °W — **Correction to Longitude**

96° 0'	95° 30'	95° 0'	94° 30'	94° 0'	93° 30'	93° 0'	92° 30'	92° 0'	Longitude / Latitude	96° 0'	95° 30'	95° 0'	94° 30'	94° 0'	93° 30'	93° 0'	92° 30'	92° 0'
0	0	0	0	0	0	0	0	0	30 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	30 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	30 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	30 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	40 ° 0 '	0	0	0	0	0	0	0	0	0

Correct Astronomical Position to WGS84

Latitude 30 to 40 °S — **Correction to Latitude**

Longitude 92 to 88 °W — **Correction to Longitude**

92° 0'	91° 30'	91° 0'	90° 30'	90° 0'	89° 30'	89° 0'	88° 30'	88° 0'	Longitude / Latitude	92° 0'	91° 30'	91° 0'	90° 30'	90° 0'	89° 30'	89° 0'	88° 30'	88° 0'
0	0	0	0	0	0	0	0	0	30 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	30 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	30 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	30 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	40 ° 0 '	0	0	0	0	0	0	0	0	0

Correct Astronomical Position to WGS84

Latitude 30 to 40 °S — **Correction to Latitude**

Longitude 88 to 84 °W — **Correction to Longitude**

88° 0'	87° 30'	87° 0'	86° 30'	86° 0'	85° 30'	85° 0'	84° 30'	84° 0'	Longitude / Latitude	88° 0'	87° 30'	87° 0'	86° 30'	86° 0'	85° 30'	85° 0'	84° 30'	84° 0'
0	0	0	0	0	0	0	0	0	30 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	30 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	30 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	30 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 15 '	0	0	0	0	0	0	0.1	0	0
0	0	0	0	0	0	0	0	0	31 ° 30 '	0	0	0	0	0	0	0.1	0	0
0	0	0	0	0	0	0	0	0	31 ° 45 '	0	0	0	0	0	0	0.1	0	0
0	0	0	0	0	0	0	0	0	32 ° 0 '	0	0	0	0	0	0	0	0	0.1
0	0	0	0	0	0	0	0	0	32 ° 15 '	0	0	0	0	0	0	0.1	0	0.1
0	0	0	0	0	0	0	0	0	32 ° 30 '	0	0	0	0	0	0	0.1	0	0.1
0	0	0	0	0	0	0	0	0	32 ° 45 '	0	0	0	0	0	0	0.1	0	0
0	0	0	0	0	0	0	0	0	33 ° 0 '	0	0	0	0	0	0	0.1	0	0
0	0	0	0	0	0	0	0	0	33 ° 15 '	0	0	0	0	0	0	0	0	0.1
0	0	0	0	0	0	0	0	0	33 ° 30 '	0	0	0	0	0	0	0	0	0.1
0	0	0	0	0	0	0	0	0	33 ° 45 '	0	0	0	0	0	0	0.1	0	0.1
0	0	0	0	0	0	0	0	0	34 ° 0 '	0	0	0	0	0	0	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	34 ° 15 '	0	0	0	0	0	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	34 ° 30 '	0	0	0	0	0	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	34 ° 45 '	0	0	0	0	0	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	35 ° 0 '	0	0	0	0	0	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	35 ° 15 '	0	0	0	0	0	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	35 ° 30 '	0	0	0	0	0	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	35 ° 45 '	0	0	0	0	0	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	36 ° 0 '	0	0	0	0	0	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	36 ° 15 '	0	0	0	0	0	0	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	36 ° 30 '	0	0	0	0	0	0	0	0.1	0.1
0	0	0	0	0	0	0	0	0	36 ° 45 '	0	0	0	0	0	0	0	0.1	0.1
0	0	0	0	0	0	0	0	0	37 ° 0 '	0	0.1	0	0	0.1	0	0	0.1	0.1
0	0	0	0	0	0	0	0	0	37 ° 15 '	0	0	0	0	0	0	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	37 ° 30 '	0	0	0	0	0	0	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	37 ° 45 '	0	0	0	0	0	0	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	38 ° 0 '	0	0	0	0	0	0	0.1	0	0.1
0	0	0	0	0	0	0	0	0	38 ° 15 '	0	0	0	0	0	0	0	0.1	0.1
0	0	0	0	0	0	0	0	0	38 ° 30 '	0	0	0	0	0	0	0	0.1	0.1
0	0	0	0	0	0	0	0	0	38 ° 45 '	0	0	0	0	0	0	0	0.1	0.1
0	0	0	0	0	0	0	0	0	39 ° 0 '	0	0	0	0	0	0	0	0.1	0.1
0	0	0	0	0	0	0	0	0	39 ° 15 '	0	0	0	0	0	0	0	0.1	0.1
0	0	0	0	0	0	0	0	0	39 ° 30 '	0	0	0	0	0	0	0	0.1	0.1
0	0	0	0	0	0	0	0	0	39 ° 45 '	0	0	0	0	0	0	0	0.1	0.1
0	0	0	0	0	0	0	0	0	40 ° 0 '	0	0	0	0	0	0	0.1	0.1	0.1

Correct Astronomical Position to WGS84

Latitude 30 to 40 °S — **Correction to Latitude**

Longitude 84 to 80 °W — **Correction to Longitude**

84° 0'	83° 30'	83° 0'	82° 30'	82° 0'	81° 30'	81° 0'	80° 30'	80° 0'	Latitude	84° 0'	83° 30'	83° 0'	82° 30'	82° 0'	81° 30'	81° 0'	80° 30'	80° 0'
0	0	0	0	0	0	0	0	0	30 ° 0 '	0	0	0	0	0	0	0.1	0.1	0
0	0	0	0	0	0	0	0	0	30 ° 15 '	0	0	0	0	0	0.1	0.1	0.1	0
0	0	0	0	0	0	0	0	0	30 ° 30 '	0	0	0	0	0	0.1	0.1	0.1	0
0	0	0	0	0	0	0	0	0	30 ° 45 '	0	0	0	0	0	0.1	0.1	0	0
0	0	0	0	0	0	0	0	0	31 ° 0 '	0	0	0	0	0	0.1	0.1	0	0
0	0	0	0	0	0	0	0	0	31 ° 15 '	0	0	0	0	0	0.1	0.1	0	0
0	0	0	0	0	0	0	0	0	31 ° 30 '	0	0	0	0	0.1	0.1	0.1	0	0
0	0	0	0	0	0	0	0	0	31 ° 45 '	0	0	0	0.1	0.1	0.1	0.1	0	0
0	0	0	0	0	0	0	0	0	32 ° 0 '	0.1	0	0	0.1	0.1	0.1	0	0	0.1
0	0	0	0	0	0	0	0	0	32 ° 15 '	0.1	0	0	0.1	0	0.1	0	0	0.1
0	0	0	0	0	0	0	0	0	32 ° 30 '	0.1	0	0.1	0	0	0.1	0	0	0.1
0	0	0	0	0	0	0	0	0	32 ° 45 '	0	0	0	0	0.1	0.1	0	0	0.1
0	0	0	0	0	0	0	0	0	33 ° 0 '	0	0	0	0	0.1	0	0	0	0
0	0	0	0	0	0	-0.1	-0.1	0	33 ° 15 '	0.1	0.1	0	0	0.1	0	0	0	0
0	0	0	0	0	0	-0.1	-0.1	0	33 ° 30 '	0.1	0.1	0	0.1	0.1	0.1	0.1	0	0
0	0	0	0	0	0	0	0	0	33 ° 45 '	0.1	0	0.1	0.1	0.1	0.1	0.1	0	0
0	0	0	0	0	0	0	0.1	0	34 ° 0 '	0.1	0	0.1	0.1	0.1	0.1	0.1	0	0
0	0	0	0	0	0	0.1	0.1	0	34 ° 15 '	0.1	0	0.1	0.1	0	0	0.1	0	0
0	0	0	0	0	0	0	0	0	34 ° 30 '	0.1	0	0.1	0.1	0	0	0.1	0.1	0
0	0	0	0	0	0	0	0	0	34 ° 45 '	0.1	0.1	0.1	0.1	0.1	0	0.1	0.1	0
0	0	0	0	0	0	0	0	0	35 ° 0 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	35 ° 15 '	0.1	0.1	0.1	0	0.1	0.1	0.1	0.1	0
0	0	0	0	0	0	0	0	0	35 ° 30 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0
0	0	0	0	0	0	0	0	0	35 ° 45 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0
0	0	0	0	0	0	0	0	0	36 ° 0 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	36 ° 15 '	0.1	0.1	0.1	0.1	0.1	0	0	0.1	0.1
0	0	0	0	0	0	0	0	0	36 ° 30 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	36 ° 45 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0.1
0	0	0	0	0	0	0	0	0	37 ° 0 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0.1
0	0	0	0	0	0	0	0	0	37 ° 15 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0.1
0	0	0	0	0	0	0	0	0	37 ° 30 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0.1
0	0	0	0	0	0	0	0	0	37 ° 45 '	0.1	0.1	0	0.1	0.1	0.1	0.1	0	0.1
0	0	0	0	0	0	0	0	0	38 ° 0 '	0.1	0.1	0	0.1	0.1	0.1	0.1	0	0.1
0	0	0	0	0	0	0	0	0	38 ° 15 '	0.1	0	0	0.1	0.1	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	38 ° 30 '	0.1	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	38 ° 45 '	0.1	0	0.1	0.1	0.1	0.1	0.1	0	0.1
0	0	0	0	0	0	0	0	0	39 ° 0 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	39 ° 15 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	39 ° 30 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	39 ° 45 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	40 ° 0 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

Correct Astronomical Position to WGS84

Latitude 30 to 40 °S — **Correction to Latitude**

Longitude 80 to 76 °W — **Correction to Longitude**

80° 0'	79° 30'	79° 0'	78° 30'	78° 0'	77° 30'	77° 0'	76° 30'	76° 0'	Longitude / Latitude	80° 0'	79° 30'	79° 0'	78° 30'	78° 0'	77° 30'	77° 0'	76° 30'	76° 0'
0	0	0	0	0	0	0	0	0	30 ° 0 '	0	0	0.1	0	0	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	30 ° 15 '	0	0	0.1	0	0	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	30 ° 30 '	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	30 ° 45 '	0	0	0.1	0.1	0.1	0.1	0.1	0	0.1
0	0	0	0	0	0	0	0	0	31 ° 0 '	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	31 ° 15 '	0	0.1	0.1	0.1	0	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	31 ° 30 '	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	31 ° 45 '	0	0.1	0.1	0.1	0.1	0.1	0.1	0	0.1
0	0	0	0	0	0	0	0	0	32 ° 0 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0.1	0	0	32 ° 15 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0	0	0	0.1	0.1	0	0	0	0.1	32 ° 30 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0
0	0	0	0.1	0.1	0	0	0	0.1	32 ° 45 '	0.1	0	0	0.1	0.1	0.1	0.1	0.1	0
0	0	0	0	0	0	0	0	0	33 ° 0 '	0	0.1	0	0	0.1	0.1	0.1	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	0	0	0	0	33 ° 15 '	0	0.1	0.1	0	0.1	0.1	0	0	0.1
-0.1	-0.1	-0.1	-0.1	-0.1	0	0	0	0	33 ° 30 '	0	0.1	0.1	0	0	0.1	0	0	0.1
0	0	0	0	0	0	0	0	-0.1	33 ° 45 '	0	0.2	0.1	-0.1	0	0	0	0	0.1
0.1	0.1	0.1	0.1	0.1	0	0	0	0	34 ° 0 '	0	0.1	0.1	-0.1	0	0.1	0.1	0.1	0.1
0	0.1	0.1	0.1	0	0	0	0	0	34 ° 15 '	0	0.1	0.1	0	0	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	34 ° 30 '	0	0.1	0.1	0	0.1	0.1	0.1	0.1	0.1
0	0	0	0	-0.1	0	0	0	0	34 ° 45 '	0	0	0	0.1	0.1	0.1	0.1	0.1	0
0	0	0	0	0	0	0	0	0	35 ° 0 '	0.1	0	0.1	0.1	0.1	0.1	0.1	0.1	0
0	0	0	0	0	0	0	0	0	35 ° 15 '	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0
0	0	0	0	0	0	0	0	0	35 ° 30 '	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0
0	0	0	0	0	0	0	0	0	35 ° 45 '	0	0.1	0.1	0.1	0.1	0.1	0.1	0	0
0	0	0	0	0	0	0	0	0	36 ° 0 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0
0	0	0	0	0	0	0	0	0	36 ° 15 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0
0	0	0	0	0	0	0	0	0	36 ° 30 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0
0	0	0	0	0	0	0	0	0	36 ° 45 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0
0	0	0	0	0	0	0	0	0	37 ° 0 '	0.1	0.1	0	0.1	0.1	0.1	0.1	0	0
0	0	0	0	0	0	0	0	0	37 ° 15 '	0.1	0.1	0	0.1	0.1	0.1	0.1	0	0
0	0	0	0	0	0	0	0	0	37 ° 30 '	0.1	0.1	0	0.1	0.1	0.1	0.1	0	0
0	0	0	0	0	0	0	0	0	37 ° 45 '	0.1	0	0.1	0.1	0.1	0.1	0.1	0	0
0	0	0	0	0	0	0	0	0	38 ° 0 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0
0	0	0	0	0	0	0	0	0	38 ° 15 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0
0	0	0	0	0	0	0	0	0	38 ° 30 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0
0	0	0	0	0	0	0	0	0	38 ° 45 '	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 0 '	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 15 '	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 30 '	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 45 '	0.1	0.1	0.1	0.1	0.1	0.1	0	0	-0.1
0	0	0	0	0	0	0	0	0	40 ° 0 '	0.1	0.1	0.1	0.1	0.1	0.1	0	0	-0.1

Correct Astronomical Position to WGS84

Latitude 30 to 40 °S — **Correction to Latitude**

Longitude 76 to 72 °W — **Correction to Longitude**

76° 0'	75° 30'	75° 0'	74° 30'	74° 0'	73° 30'	73° 0'	72° 30'	72° 0'	Latitude	76° 0'	75° 30'	75° 0'	74° 30'	74° 0'	73° 30'	73° 0'	72° 30'	72° 0'
0	0	0	0	0	0	0	0	-0.1	30 ° 0 '	0.1	0	0.1	0.1	0	-0.1	-0.2	0	0.6
0	0	0	0	0	0	0	0	-0.1	30 ° 15 '	0.1	0	0.1	0.1	0	-0.1	-0.2	0	0.7
0	0	0	0	0	0	0	0	-0.1	30 ° 30 '	0.1	0.1	0.1	0.1	0	-0.1	-0.2	0.1	0.7
0	0	0	0	0	0	0	0	0	30 ° 45 '	0.1	0.1	0.1	0.1	0	-0.1	-0.2	0.1	0.7
0	0	0	0	0	0	0	0	0	31 ° 0 '	0.1	0.1	0.1	0.1	0	-0.1	-0.3	0.1	0.7
0	0	0	0	0	0	0	0	0.1	31 ° 15 '	0.1	0.1	0.1	0.1	0	-0.1	-0.3	0.1	0.7
0	0	0	0	0	0	0	0	0.1	31 ° 30 '	0.1	0.1	0.1	0.1	0	-0.1	-0.3	0.1	0.7
0	0	0	0	0	0	0	0	0.1	31 ° 45 '	0.1	0.1	0.1	0.1	0	-0.1	-0.3	0.1	0.7
0	0	0	0	0	0	0.1	0	0.1	32 ° 0 '	0.1	0.1	0.1	0	0	-0.1	-0.3	0.1	0.6
0	0	0	0	0	0	0.1	0	0	32 ° 15 '	0.1	0	0.1	0	0	-0.1	-0.3	0.1	0.6
0.1	0.1	0	0	0	0	0.1	0	0	32 ° 30 '	0	0.1	0.1	0.1	0	-0.2	-0.3	0.1	0.6
0.1	0	0	0	0	0	0.1	0	0	32 ° 45 '	0	0.1	0.1	0.1	0	-0.2	-0.3	0.1	0.7
0	0	0	0	0	0.1	0.1	0	-0.1	33 ° 0 '	0	0.1	0.1	0.1	0	-0.2	-0.3	0.2	0.7
0	0	0	0	0	0.1	0.1	0	-0.1	33 ° 15 '	0.1	0.1	0.1	0.1	0	-0.3	-0.3	0.3	0.7
0	0	0	0	0.1	0.1	0.1	-0.1	-0.1	33 ° 30 '	0.1	0.1	0.1	0	-0.1	-0.3	-0.2	0.4	0.7
-0.1	0	0	0	0.1	0.1	0	-0.1	-0.1	33 ° 45 '	0.1	0.1	0	0	-0.1	-0.3	-0.1	0.5	0.7
0	0	0	0	0.1	0.1	0	-0.1	-0.1	34 ° 0 '	0.1	0.1	0	0	-0.2	-0.3	0	0.5	0.7
0	0	0	0.1	0.1	0.1	-0.1	-0.2	-0.1	34 ° 15 '	0.1	0	0	0	-0.2	-0.2	0.1	0.6	0.6
0	0	0	0.1	0.1	0.1	-0.1	-0.2	0	34 ° 30 '	0.1	0	0	-0.1	-0.2	-0.1	0.2	0.5	0.4
0	0	0	0.1	0.1	0	-0.1	-0.2	0	34 ° 45 '	0	0	0	-0.1	-0.2	0	0.3	0.5	0.3
0	0	0	0.1	0.1	0	-0.2	-0.2	0	35 ° 0 '	0	0	0	-0.2	-0.2	0.1	0.4	0.4	0.2
0	0	0	0.1	0.1	-0.1	-0.2	-0.2	0	35 ° 15 '	0	0	-0.1	-0.2	-0.1	0.2	0.5	0.4	0.1
0	0	0.1	0.1	0	-0.1	-0.2	-0.1	0	35 ° 30 '	0	0	-0.1	-0.2	0	0.4	0.5	0.3	0.1
0	0	0.1	0.1	0	-0.2	-0.2	-0.1	0	35 ° 45 '	0	0	-0.1	-0.2	0.1	0.5	0.5	0.1	0
0	0	0.1	0	-0.1	-0.2	-0.2	0	0	36 ° 0 '	0	0	-0.2	-0.1	0.2	0.5	0.4	0.1	0
0	0	0.1	0	-0.1	-0.2	-0.1	0	0	36 ° 15 '	0	0	-0.2	-0.1	0.3	0.5	0.3	0	0
0	0	0.1	0	-0.1	-0.1	0	0	0	36 ° 30 '	0	-0.1	-0.2	0	0.4	0.5	0.2	0	0.1
0	0	0	0	-0.1	-0.1	-0.1	0	0	36 ° 45 '	0	-0.1	-0.2	0.1	0.4	0.5	0.2	0	0.1
0	0	0	0	-0.1	-0.1	-0.1	0	0	37 ° 0 '	0	-0.1	-0.1	0.1	0.5	0.4	0.1	0	0.1
0	0	0	0	-0.1	-0.1	0	0	0	37 ° 15 '	0	-0.1	-0.1	0.2	0.5	0.4	0.1	-0.1	0.2
0	0	0	0	-0.1	0	0	0	0	37 ° 30 '	0	-0.1	-0.1	0.2	0.5	0.4	0	-0.1	0.2
0	0	0	0	0	0	0.1	0	0	37 ° 45 '	0	-0.1	-0.1	0.3	0.6	0.3	0	0	0.2
0	0	0	0	0	0.1	0.1	0	0	38 ° 0 '	0	-0.1	-0.1	0.3	0.5	0.3	0	0	0.3
0	0	0	0	0	0.1	0.1	0	0	38 ° 15 '	0	-0.1	-0.1	0.3	0.5	0.2	0	0.1	0.3
0	0	0	0	0	0.1	0.1	0	0	38 ° 30 '	0	-0.1	0	0.3	0.4	0.2	0	0.1	0.3
0	0	0	0	0.1	0.1	0.1	0	0	38 ° 45 '	0	-0.1	0	0.2	0.3	0.2	0.1	0.2	0.3
0	0	0	0	0.1	0.1	0	0	0	39 ° 0 '	0	-0.1	0	0.2	0.2	0.2	0.2	0.2	0.3
0	0	0	0	0	0.1	0	0	0	39 ° 15 '	0	-0.1	0	0.2	0.2	0.2	0.2	0.2	0.2
0	0	0	0	0	0	0	0	0	39 ° 30 '	0	-0.1	0	0.2	0.2	0.2	0.2	0.2	0.2
0	0	0	0	-0.1	-0.1	0	0	0	39 ° 45 '	-0.1	-0.1	0	0.2	0.2	0.2	0.2	0.2	0.2
0	0	0	0	-0.1	-0.1	-0.1	0	0	40 ° 0 '	-0.1	-0.1	0	0.2	0.3	0.2	0.2	0.2	0.2

Correct Astronomical Position to WGS84

Latitude 30 to 40 °S — **Correction to Latitude**

Longitude 72 to 68 °W — **Correction to Longitude**

72° 0'	71° 30'	71° 0'	70° 30'	70° 0'	69° 30'	69° 0'	68° 30'	68° 0'	Longitude / Latitude	72° 0'	71° 30'	71° 0'	70° 30'	70° 0'	69° 30'	69° 0'	68° 30'	68° 0'
-0.1	-0.1	0	0	0.1	0.1	0.2	0.2	0.2	30 ° 0 '	0.6	0.8	0.5	0.2	-0.1	-0.2	-0.4	-0.2	0.2
-0.1	0	0	0.1	0.1	0.2	0.2	0.2	0.2	30 ° 15 '	0.7	0.7	0.5	0.1	-0.2	-0.2	-0.4	-0.2	0.2
-0.1	0	0.1	0.1	0.1	0.2	0.2	0.1	0.1	30 ° 30 '	0.7	0.7	0.4	0.1	-0.2	-0.2	-0.4	-0.2	0.1
0	0	0	0	0.1	0.1	0.1	0	0	30 ° 45 '	0.7	0.6	0.4	0.1	-0.2	-0.2	-0.4	-0.2	0.1
0	0	0	0	0	0.1	0	-0.1	-0.1	31 ° 0 '	0.7	0.6	0.4	0.1	-0.3	-0.2	-0.3	-0.2	0.1
0.1	0.1	0	0	0	0	0	0	0	31 ° 15 '	0.7	0.6	0.4	0.1	-0.3	-0.2	-0.3	-0.1	0.1
0.1	0.1	0.1	0.1	0	0	0	0.1	0.1	31 ° 30 '	0.7	0.6	0.5	0.1	-0.3	-0.2	-0.3	-0.1	0.1
0.1	0.1	0.1	0.1	0	0	0.1	0.1	0.2	31 ° 45 '	0.7	0.7	0.5	0.1	-0.3	-0.2	-0.3	-0.2	0.1
0.1	0.1	0.1	0.1	0	0	0.1	0.2	0.2	32 ° 0 '	0.6	0.7	0.5	0.1	-0.2	-0.3	-0.4	-0.2	0.1
0	0	0.1	0.1	0	0	0.1	0.1	0.1	32 ° 15 '	0.6	0.6	0.4	0.2	-0.1	-0.3	-0.5	-0.2	0.1
0	0	0.1	0.1	0	0	0.1	0.1	0	32 ° 30 '	0.6	0.6	0.4	0.2	0	-0.4	-0.5	-0.1	0.1
0	0	0.1	0.1	0	0	0.1	0	-0.1	32 ° 45 '	0.7	0.6	0.3	0.3	0	-0.5	-0.5	-0.1	0.1
-0.1	-0.1	0.1	0.1	0.1	0.1	0	-0.1	-0.1	33 ° 0 '	0.7	0.5	0.2	0.3	0	-0.5	-0.5	0	0.1
-0.1	-0.1	0.1	0.1	0.1	0.1	0	-0.1	-0.1	33 ° 15 '	0.7	0.4	0.2	0.3	0	-0.5	-0.4	0	0
-0.1	-0.1	0	0	0	0.1	0	-0.1	0	33 ° 30 '	0.7	0.3	0.1	0.3	0	-0.4	-0.3	0	0
-0.1	0	0	-0.1	-0.1	0	-0.1	-0.1	0	33 ° 45 '	0.7	0.2	0.1	0.4	-0.1	-0.4	-0.2	-0.1	0
-0.1	0	0	-0.2	-0.2	-0.1	-0.1	-0.1	0	34 ° 0 '	0.7	0.2	0.2	0.4	-0.1	-0.4	-0.2	-0.1	-0.1
-0.1	0.1	0	-0.1	-0.1	-0.1	-0.1	-0.1	0	34 ° 15 '	0.6	0.1	0.4	0.5	-0.2	-0.4	-0.2	-0.2	-0.1
0	0.1	0	0	0.1	0	0	0	0	34 ° 30 '	0.4	0.1	0.4	0.5	-0.2	-0.4	-0.2	-0.2	-0.1
0	0.1	0	0.1	0.2	0.1	0	0	0	34 ° 45 '	0.3	0.1	0.4	0.4	-0.3	-0.3	-0.1	-0.2	-0.1
0	0	0	0.1	0.2	0.1	0	-0.1	-0.1	35 ° 0 '	0.2	0.1	0.4	0.3	-0.3	-0.2	0	-0.2	-0.2
0	0	0	0.1	0.1	0.1	0	-0.1	-0.1	35 ° 15 '	0.1	0.2	0.4	0.2	-0.2	-0.1	0	-0.2	-0.2
0	0	0	0.1	0.1	0	0	0	0	35 ° 30 '	0.1	0.2	0.4	0.2	-0.2	-0.1	0.1	-0.1	-0.3
0	0	0	0.1	0	0	0	0	0	35 ° 45 '	0	0.2	0.4	0.1	-0.1	0	0	-0.1	-0.3
0	0	0	0.1	0	0	0	0.1	0.1	36 ° 0 '	0	0.2	0.3	0.1	-0.1	0	0	-0.2	-0.2
0	-0.1	0	0	0	0	0.1	0.1	0.1	36 ° 15 '	0	0.2	0.2	0.1	0	0	-0.1	-0.2	-0.2
0	0	0	0	0	0.1	0.1	0.1	0.1	36 ° 30 '	0.1	0.2	0.2	0.1	0	-0.1	-0.1	-0.2	-0.2
0	0	0	0	0.1	0.1	0.1	0.1	0.1	36 ° 45 '	0.1	0.2	0.2	0	-0.1	-0.1	-0.1	-0.2	-0.2
0	0	0	0	0.1	0.1	0.1	0.1	0.1	37 ° 0 '	0.1	0.2	0.1	0	-0.1	-0.1	-0.1	-0.1	-0.1
0	0	0	0	0.1	0.1	0	0.1	0.1	37 ° 15 '	0.2	0.2	0.1	0	-0.1	-0.1	-0.1	-0.2	-0.1
0	0	0	0	0	0	0	0.1	0.1	37 ° 30 '	0.2	0.2	0.1	0	-0.1	-0.1	-0.1	-0.2	-0.1
0	0	0	0	0	0	0.1	0	0	37 ° 45 '	0.2	0.2	0	0	-0.1	-0.1	-0.1	-0.2	-0.1
0	0	0	0	0	0.1	0.1	0	0	38 ° 0 '	0.3	0.2	0	0	-0.1	-0.1	-0.1	-0.1	-0.1
0	0	0	0	0	0.1	0.1	0	0	38 ° 15 '	0.3	0.2	0	0	-0.1	-0.2	-0.1	-0.1	0
0	0	0	0	0	0	0	0	0	38 ° 30 '	0.3	0.2	0	0	-0.2	-0.2	-0.1	-0.1	0
0	0	0	0	0	0	0	0	0	38 ° 45 '	0.3	0.2	0.1	-0.1	-0.2	-0.1	-0.1	-0.1	0
0	0	0	0	0	0	0	0	0	39 ° 0 '	0.3	0.2	0	-0.1	-0.2	-0.1	-0.1	-0.1	-0.1
0	0	0	0	0	0	0	-0.1	-0.1	39 ° 15 '	0.2	0.2	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
0	0	0	0	0	0	-0.1	-0.1	-0.1	39 ° 30 '	0.2	0.2	0	-0.1	-0.1	-0.1	0	-0.1	-0.1
0	0	0	0	0	-0.1	-0.1	-0.1	-0.1	39 ° 45 '	0.2	0.1	0	-0.1	-0.1	0	0	-0.1	-0.1
0	0	0.1	0	0	-0.1	-0.1	-0.1	-0.1	40 ° 0 '	0.2	0.1	0	0	0	0	0	-0.1	-0.2

Correct Astronomical Position to WGS84

Latitude 30 to 40 °S — **Correction to Latitude**

Longitude 68 to 64 °W — **Correction to Longitude**

68° 0'	67° 30'	67° 0'	66° 30'	66° 0'	65° 30'	65° 0'	64° 30'	64° 0'	Longitude / Latitude	68° 0'	67° 30'	67° 0'	66° 30'	66° 0'	65° 30'	65° 0'	64° 30'	64° 0'
0.2	0.2	0.1	-0.1	0	0.1	0	-0.1	0	30 ° 0 '	0.2	-0.1	-0.2	0	0	0	0.1	0.1	-0.1
0.2	0.2	0	-0.1	0	0	0	-0.1	0	30 ° 15 '	0.2	-0.1	-0.1	0	-0.1	0	0.2	0.1	-0.1
0.1	0.1	0	-0.1	0	-0.1	-0.1	-0.1	0	30 ° 30 '	0.1	0	0	0	-0.1	0	0.2	0.1	-0.2
0	0	-0.1	-0.1	0	-0.1	-0.1	0	0	30 ° 45 '	0.1	0	0.1	0	-0.1	0	0.2	0	-0.2
-0.1	-0.1	-0.1	0	0	-0.1	-0.1	0	0	31 ° 0 '	0.1	0	0.1	0	-0.1	0.1	0.1	0	-0.2
0	0	0	0	0	0	-0.1	0	0	31 ° 15 '	0.1	0.1	0	0	-0.1	0.1	0.1	-0.1	-0.2
0.1	0.1	0	0	0	0	0	0	0	31 ° 30 '	0.1	0.1	0.1	0	-0.1	0.1	0.1	-0.2	-0.2
0.2	0.2	0.1	0	0	0	0.1	0	0	31 ° 45 '	0.1	0.1	0.1	0	-0.1	0.1	0.1	-0.2	-0.2
0.2	0.2	0.1	0.1	0	0	0.1	0	0	32 ° 0 '	0.1	0.1	0.2	0.1	-0.1	0.1	0.1	-0.1	-0.2
0.1	0.1	0.1	0	0	0	0	0	0	32 ° 15 '	0.1	0.1	0.2	0.1	-0.1	0.1	0.1	-0.1	-0.2
0	0	0	0	0	0	0	0.1	0	32 ° 30 '	0.1	0.1	0.2	0.2	0	0	0.1	-0.1	-0.2
-0.1	0	0	0	0	0	0.1	0.1	0.1	32 ° 45 '	0.1	0.1	0.2	0.2	0	0	0	-0.1	-0.1
-0.1	-0.1	-0.1	0	0	0	0.1	0.1	0.1	33 ° 0 '	0.1	0.1	0.2	0.1	-0.1	0	0	-0.1	-0.1
-0.1	-0.1	0	0	0.1	0.1	0.1	0.1	0.1	33 ° 15 '	0	0.1	0.2	0.1	-0.1	0	0	-0.1	-0.1
0	0	0	0.1	0.1	0.1	0.1	0.1	0.1	33 ° 30 '	0	0.1	0.2	0	-0.1	0	-0.1	-0.1	0
0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	33 ° 45 '	0	0.1	0.1	0	-0.1	0	0	0	0
0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	34 ° 0 '	-0.1	0	0.1	0	-0.1	0	0	0	0
0	0	0.1	0.1	0.1	0.1	0.1	0	0.1	34 ° 15 '	-0.1	0	0	0	-0.1	0	0	0	-0.1
0	0	0	0.1	0.1	0.1	0.1	0.1	0.1	34 ° 30 '	-0.1	0	0	0	-0.1	0	0	0	-0.1
0	0	0	0.1	0.1	0.1	0.1	0.1	0.1	34 ° 45 '	-0.1	0	0	0	-0.1	0	0	0	-0.1
-0.1	0	0	0.1	0.1	0.1	0.1	0.1	0.1	35 ° 0 '	-0.2	0	0	0	-0.1	0	0	0	-0.1
-0.1	0	0.1	0.1	0.1	0.1	0.1	0.1	0	35 ° 15 '	-0.2	-0.1	0	0	-0.1	0	0	0	0
0	0	0	0	0	0	0.1	0	0	35 ° 30 '	-0.3	-0.2	0	0	-0.1	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 45 '	-0.3	-0.2	0	0	-0.1	0	0	0	0
0.1	0	0	0	0	0	0	0	0	36 ° 0 '	-0.2	-0.1	0	-0.1	-0.1	0	0	0	0
0.1	0.1	0	0	0	0	0	0	0	36 ° 15 '	-0.2	-0.1	0	0	-0.1	0	0	0	0
0.1	0.1	0.1	0.1	0	0	0	0	0	36 ° 30 '	-0.2	-0.1	0	0	0	0	0	0	0
0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	36 ° 45 '	-0.2	-0.1	0	0	0	0	0	0	0
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	37 ° 0 '	-0.1	-0.1	0	0	0	0	0	0	0
0.1	0	0	0	0.1	0.1	0.1	0	0	37 ° 15 '	-0.1	-0.1	0	0	0	0	0	0	0
0.1	0	0	0	0	0	0	0.1	0.1	37 ° 30 '	-0.1	-0.1	0	0	-0.1	0	0	0	0
0	0	0	0	0	0	0	0.1	0.1	37 ° 45 '	-0.1	0	-0.1	-0.1	-0.1	0	0	0	0
0	0	0	0	0	0	0.1	0.1	0.1	38 ° 0 '	-0.1	0	-0.1	-0.1	-0.1	0	0	0	0
0	0	0	0	0	0	0.1	0	0	38 ° 15 '	0	-0.1	-0.1	-0.1	-0.1	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 30 '	0	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 45 '	0	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 0 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	0
-0.1	0	-0.1	0	0	0	0	0	0	39 ° 15 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	0
-0.1	-0.1	-0.1	0	0	0	0	0	0	39 ° 30 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	0
-0.1	-0.1	0	0	0	0	0	0	0	39 ° 45 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	0
-0.1	0	0	0	0	0	0	0	0	40 ° 0 '	-0.2	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	0

Correct Astronomical Position to WGS84

Latitude 30 to 40 °S — **Correction to Latitude**

Longitude 64 to 60 °W — **Correction to Longitude**

64° 0'	63° 30'	63° 0'	62° 30'	62° 0'	61° 30'	61° 0'	60° 30'	60° 0'	Longitude / Latitude	64° 0'	63° 30'	63° 0'	62° 30'	62° 0'	61° 30'	61° 0'	60° 30'	60° 0'
0	0.1	0.1	0.1	0.1	0.1	0	0	0	30 ° 0 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0
0	0	0	0.1	0.1	0.1	0.1	0	0	30 ° 15 '	-0.1	-0.2	-0.1	-0.1	-0.1	-0.1	-0.1	0	0
0	0	0	0	0.1	0.1	0	0	0	30 ° 30 '	-0.2	-0.2	-0.1	-0.1	-0.1	-0.1	-0.1	0	0
0	0	0	0	0	0	0	0	0	30 ° 45 '	-0.2	-0.2	-0.1	-0.1	-0.1	-0.1	-0.1	0	0
0	0	0	0	0	0	0	0	0	31 ° 0 '	-0.2	-0.2	-0.1	-0.1	-0.1	-0.1	-0.1	0	0
0	0	0	0	0	0	0	0	0	31 ° 15 '	-0.2	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	0
0	0	0	0	0	0	0	0	0	31 ° 30 '	-0.2	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0
0	0	0	0	0	0	0	0	0	31 ° 45 '	-0.2	-0.1	-0.2	-0.1	-0.1	-0.1	-0.1	-0.1	0
0	0	0	0	0	0	0	0	0	32 ° 0 '	-0.2	-0.1	-0.2	-0.1	-0.1	-0.1	-0.1	0	0
0	0	0	0	0	0	0	0	0	32 ° 15 '	-0.2	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 30 '	-0.2	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	0
0.1	0	0	0	0	0	0	0	0	32 ° 45 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	0
0.1	0	0	0	0	0	0	0	0	33 ° 0 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	0
0.1	0	0	0	0	0	0	0	0	33 ° 15 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	0
0.1	0	0	0	0	0	0	0	0	33 ° 30 '	0	-0.1	-0.1	0	-0.1	-0.1	-0.1	0	0
0.1	0.1	0	0	0	0	0	0	0	33 ° 45 '	0	-0.1	-0.1	0	-0.1	-0.1	0	0	0
0.1	0.1	0	0	0	0	0	0	0	34 ° 0 '	0	-0.1	-0.1	-0.1	-0.1	0	0	0	0
0.1	0.1	0	0	0	0	0	0	0	34 ° 15 '	-0.1	-0.1	-0.1	-0.1	0	0	0	0	0
0.1	0.1	0	0	0	0	0	0	0	34 ° 30 '	-0.1	-0.1	0	0	0	0	0	0	0
0.1	0.1	0	0	0	0	0	0	0	34 ° 45 '	-0.1	-0.1	0	0	0	0	0	0	0
0.1	0	0	0	0	0	0	0	0	35 ° 0 '	-0.1	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0.1	0	0	0	0	0	36 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0.1	0.1	0	37 ° 15 '	0	0	0	0	0	0	0	0	0
0.1	0	0	0	0	0	0.1	0.1	0.1	37 ° 30 '	0	0	0	0	0	0	0	0	0
0.1	0.1	0	0	0	0.1	0.1	0.1	0.1	37 ° 45 '	0	0	0	0	0	0	0	0	0
0.1	0.1	0	0	0	0.1	0.1	0.1	0.1	38 ° 0 '	0	0	0	0	0	0	0	0	0
0	0.1	0.1	0	0	0.1	0.1	0.1	0.1	38 ° 15 '	0	0	0	0	0	-0.1	-0.1	0	0
0	0.1	0.1	0.1	0	0	0	0	0.1	38 ° 30 '	0	0	0	0	0	-0.1	-0.1	0	0
0	0	0.1	0	0	0	0	0	0	38 ° 45 '	0	0	0	0	0	-0.1	-0.1	0	0
0	0	0	0	0	0	0	0	0	39 ° 0 '	0	0	0	0	0	0	0	-0.1	0
0	0	0	0	0	0	0	-0.1	-0.1	39 ° 15 '	0	0	0	0	0	0	0	-0.1	-0.1
0	0	0	0	0	0	0	0	-0.1	39 ° 30 '	0	0	0	0	0	0	0	0	-0.1
0	0	0	0	0	0	0	0	0	39 ° 45 '	0	0	-0.1	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	40 ° 0 '	0	0	-0.1	0	0.1	0	0	0	0

Correct Astronomical Position to WGS84

Latitude 30 to 40 °S — **Correction to Latitude**

Longitude 60 to 56 °W — **Correction to Longitude**

60° 0'	59° 30'	59° 0'	58° 30'	58° 0'	57° 30'	57° 0'	56° 30'	56° 0'	Latitude	60° 0'	59° 30'	59° 0'	58° 30'	58° 0'	57° 30'	57° 0'	56° 30'	56° 0'
0	0	0	0	0	0	0	0	-0.1	30 ° 0 '	0	0	0	-0.1	-0.1	0	-0.1	-0.1	0
0	0	0	0	0	0	0	-0.1	-0.1	30 ° 15 '	0	0	0	-0.1	-0.1	0	0	0	0
0	0	0	0	0	0	0	0	-0.1	30 ° 30 '	0	0	0	-0.1	-0.1	0	0	0	0
0	0	0	0	0	0	0	0	0	30 ° 45 '	0	0	0	0	-0.1	-0.1	0	0	0
0	0	0	0	0	-0.1	-0.1	0	0	31 ° 0 '	0	0	0	0	-0.1	-0.1	0	0	0
0	0	0	0	0	-0.1	-0.1	0	0	31 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 0 '	0	0	0	0	0	0	0	0	-0.1
0	0	0	0	0	0	0	0	0	32 ° 15 '	0	0	0	0	0	0	0	0	-0.1
0	0	0	0	0	0	0	0	0	32 ° 30 '	0	0	0	0	0	0	0	0	-0.1
0	0	0	0	0	0	0	0	0	32 ° 45 '	0	0	0	0	0	0	0	-0.1	-0.1
0	0	0	0	0	0	0	0	0	33 ° 0 '	0	0	0	0	0	0	0	-0.1	-0.1
0	0	0	0	0	0	0	0	0	33 ° 15 '	0	0	0	0	0	0	0	0	-0.1
0	0	0	0	0	0	0	0	0	33 ° 30 '	0	0	0	0	0	0	0	0	-0.1
0	0	0	0	0	0	0	0	0	33 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 15 '	0	0	0	0	0	0	0	0	-0.1
0	0	0	0	0	0	0	0	0.1	34 ° 30 '	0	0	0	0	0	0	0	-0.1	-0.1
0	0	0	0	0	0	0	0.1	0.1	34 ° 45 '	0	0	0	0	0	0	0	-0.1	-0.1
0	0	0	0	0	0	0	0.1	0.1	35 ° 0 '	0	0	0	0	0	0	0	-0.1	-0.1
0	0	-0.1	0	0	0	0	0.1	0	35 ° 15 '	0	0	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
0	0	0	0	-0.1	0	0	0	0	35 ° 30 '	0	0	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
0	0	0	0	0	0	0	0	0	35 ° 45 '	0	0	0	0	-0.1	-0.1	-0.1	-0.1	-0.1
0	0	0.1	0	0	0	0	0	0	36 ° 0 '	0	0	0	0	0	-0.1	-0.1	-0.1	-0.1
0	0	0.1	0.1	0.1	0	0	0	0	36 ° 15 '	0	0	0	0	0	0	-0.1	-0.1	-0.1
0	0	0	0.1	0.1	0.1	0	0	0	36 ° 30 '	0	0	0	0	0	0	0	-0.1	-0.2
0	0	0	0	0	0.1	0.1	0.1	0	36 ° 45 '	0	0	-0.1	-0.1	0	0	0	-0.1	-0.2
0	0	0	0	0	0	0.1	0.1	0	37 ° 0 '	0	0	0	-0.1	-0.1	0	-0.1	-0.1	-0.1
0	0	0	0	0	0	0.1	0.1	0	37 ° 15 '	0	0	0	0	-0.1	-0.1	-0.1	-0.1	-0.1
0.1	0.1	0	0	0	0	0	0.1	0	37 ° 30 '	0	0	0	0	-0.1	-0.1	-0.1	-0.1	-0.1
0.1	0.1	0.1	0	0	0	0	0	0	37 ° 45 '	0	0	0	0	-0.1	-0.1	-0.1	-0.1	0
0.1	0.1	0.1	0.1	0	0	0	0	0	38 ° 0 '	0	0	0	0	-0.1	-0.1	-0.1	-0.1	0
0.1	0.1	0.1	0.1	0.1	0	0	0	0	38 ° 15 '	0	0	0.1	0	0	-0.1	-0.1	-0.1	-0.1
0.1	0.1	0.1	0.1	0.1	0	0	0	0	38 ° 30 '	0	0	0.1	0	0	0	-0.1	-0.1	-0.1
0	0	0.1	0.1	0.1	0	0	0	0	38 ° 45 '	0	0	0.1	0	0	0	-0.1	-0.1	-0.1
0	0	0	0	0	0	0	0	0	39 ° 0 '	0	0	0.1	0	0	0	-0.1	-0.1	-0.1
-0.1	0	0	0	0	0	0	0	0	39 ° 15 '	-0.1	0	0	0	0	0	-0.1	-0.1	-0.1
-0.1	-0.1	0	0	0	0	0	0	0	39 ° 30 '	-0.1	0	0	0	0	0	-0.1	-0.1	-0.1
0	0	0	0	0	0	0	0	0.1	39 ° 45 '	0	0	0	0	0	0	-0.1	-0.1	-0.2
0	0	0	0	0	0	0	0.1	0.1	40 ° 0 '	0	0	0	0	0	0	-0.1	-0.1	-0.2

Correct Astronomical Position to WGS84

Latitude 30 to 40 °S — **Correction to Latitude**

Longitude 56 to 52 °W — **Correction to Longitude**

56° 0'	55° 30'	55° 0'	54° 30'	54° 0'	53° 30'	53° 0'	52° 30'	52° 0'	Latitude	56° 0'	55° 30'	55° 0'	54° 30'	54° 0'	53° 30'	53° 0'	52° 30'	52° 0'
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	30 ° 0 '	0	-0.1	-0.1	-0.1	0	0	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	30 ° 15 '	0	-0.1	-0.1	-0.1	0	0	-0.1	-0.1	-0.1
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	30 ° 30 '	0	0	-0.1	-0.1	0	-0.1	-0.1	-0.1	-0.1
0	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	30 ° 45 '	0	0	0	0	0	-0.1	-0.1	-0.1	-0.1
0	0	0	0	0	0	0	0	0	31 ° 0 '	0	0	0	0	0	-0.1	-0.1	-0.1	-0.1
0	0	0	0	0	0	0	0	0	31 ° 15 '	0	0	0	0	0	-0.1	-0.1	-0.1	-0.1
0	0	0	0	0	0	0	0	0	31 ° 30 '	0	0	0	-0.1	0	-0.1	-0.1	-0.1	-0.1
0	0	0	0	0	0	0	0	0	31 ° 45 '	0	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
0	0	0	0	0	0	0	0	0	32 ° 0 '	-0.1	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
0	0	0	0	0	0	0	0	0	32 ° 15 '	-0.1	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
0	0	0	0	0	0	0	0	0	32 ° 30 '	-0.1	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
0	0	0	0	0	0	0	0	0	32 ° 45 '	-0.1	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
0	0	0	0	0	0	0	0	0	33 ° 0 '	-0.1	0	-0.1	-0.1	-0.1	-0.1	-0.2	-0.1	-0.1
0	0	0	0	0	0	0	0	0	33 ° 15 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.2	-0.2	0
0	0	0	0	0	0	0	0	0	33 ° 30 '	-0.1	-0.1	-0.1	0	-0.1	-0.1	-0.2	-0.1	0
0	0	0	0	0	0.1	0.1	0	0	33 ° 45 '	0	0	-0.1	-0.1	-0.1	-0.1	-0.2	-0.1	0
0	0	0	0	0.1	0.1	0.1	0	0	34 ° 0 '	0	0	-0.1	-0.1	-0.1	-0.1	-0.1	0	0
0	0	0	0.1	0.1	0.1	0	0	0	34 ° 15 '	-0.1	0	-0.1	-0.1	-0.1	-0.1	-0.1	0	0
0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	34 ° 30 '	-0.1	0	-0.1	-0.1	-0.1	-0.1	-0.1	0	-0.1
0.1	0.1	0.1	0.1	0.1	0	0	0	0.1	34 ° 45 '	-0.1	0	-0.1	-0.1	-0.1	-0.1	0	0	-0.1
0.1	0.1	0.1	0.1	0.1	0	0	0	0.1	35 ° 0 '	-0.1	0	-0.1	-0.1	-0.1	-0.1	0	0	-0.2
0	0	0.1	0.1	0	0	0	0.1	0.1	35 ° 15 '	-0.1	0	-0.1	-0.1	-0.1	-0.1	0	-0.1	-0.2
0	0	0	0	0	0	0.1	0.1	0.1	35 ° 30 '	-0.1	0	-0.1	-0.1	-0.1	-0.1	0	-0.1	-0.2
0	0	0	0	0	0	0.1	0.1	0.1	35 ° 45 '	-0.1	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.2
0	0	0	0	0	0	0.1	0.1	0.1	36 ° 0 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.2	-0.1
0	0.1	0.1	0	0	0	0.1	0.1	0.1	36 ° 15 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.2	-0.1
0	0	0.1	0	0	0.1	0.1	0.1	0	36 ° 30 '	-0.2	-0.1	-0.1	-0.1	-0.1	-0.2	-0.2	-0.1	-0.1
0	0	0	0	0.1	0.1	0.1	0.1	0.1	36 ° 45 '	-0.2	-0.1	0	-0.1	-0.1	-0.2	-0.2	-0.1	-0.1
0	0	0	0.1	0.1	0.1	0.1	0.1	0.1	37 ° 0 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.2	-0.2	-0.1	-0.1
0	0	0	0.1	0.1	0.1	0.1	0.1	0.1	37 ° 15 '	-0.1	-0.1	-0.1	-0.1	-0.2	-0.2	-0.1	0	-0.1
0	0	0	0.1	0.1	0.1	0.1	0	0	37 ° 30 '	-0.1	-0.1	-0.2	-0.2	-0.2	-0.2	-0.1	0	-0.1
0	0	0	0.1	0.1	0.1	0	0	0	37 ° 45 '	0	-0.1	-0.2	-0.2	-0.1	-0.1	-0.1	0	-0.1
0	0	0	0	0	0	0	0	0	38 ° 0 '	0	-0.1	-0.2	-0.2	-0.1	-0.1	-0.1	-0.1	-0.1
0	0	0	0	0	0	0	0	0	38 ° 15 '	-0.1	-0.1	-0.2	-0.2	-0.2	-0.1	-0.1	-0.1	-0.1
0	0	0	0	0	0	0	0	0	38 ° 30 '	-0.1	-0.1	-0.2	-0.2	-0.2	-0.1	-0.1	-0.1	-0.1
0	0	0	0	0	0	0	0	0	38 ° 45 '	-0.1	-0.2	-0.2	-0.2	-0.2	-0.1	-0.1	-0.1	-0.1
0	0	0	0.1	0.1	0	0	0	0	39 ° 0 '	-0.1	-0.2	-0.2	-0.2	-0.2	-0.1	-0.1	-0.1	-0.1
0	0	0.1	0.1	0.1	0	0	0	0	39 ° 15 '	-0.1	-0.2	-0.2	-0.2	-0.2	-0.1	-0.1	-0.1	-0.1
0	0.1	0.1	0.1	0	0	0	0	0	39 ° 30 '	-0.1	-0.2	-0.2	-0.2	-0.2	-0.1	-0.1	-0.1	-0.1
0.1	0.1	0.1	0.1	0	0	0	0	0	39 ° 45 '	-0.2	-0.2	-0.2	-0.2	-0.1	-0.1	-0.1	0	-0.1
0.1	0.1	0.1	0.1	0	0	0	0	0	40 ° 0 '	-0.2	-0.2	-0.2	-0.2	-0.1	-0.1	-0.1	0	-0.1

Correct Astronomical Position to WGS84

Latitude 30 to 40 °S — **Correction to Latitude**

Longitude 52 to 48 °W — **Correction to Longitude**

52° 0'	51° 30'	51° 0'	50° 30'	50° 0'	49° 30'	49° 0'	48° 30'	48° 0'	Longitude / Latitude	52° 0'	51° 30'	51° 0'	50° 30'	50° 0'	49° 30'	49° 0'	48° 30'	48° 0'
-0.1	-0.1	0	0	0	0	0	0	0	30 ° 0 '	-0.1	-0.1	-0.1	-0.1	0	0	0	-0.1	-0.2
-0.1	-0.1	-0.1	0	0	0	0	0.1	0.1	30 ° 15 '	-0.1	-0.1	-0.1	-0.1	0	0	0	-0.1	-0.2
-0.1	-0.1	-0.1	-0.1	-0.1	0	0.1	0.1	0.1	30 ° 30 '	-0.1	-0.1	-0.1	-0.1	0	0	-0.1	-0.2	-0.2
0	0	0	-0.1	-0.1	0	0.1	0.2	0.1	30 ° 45 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.2	-0.2
0	0	0	-0.1	-0.1	0	0.1	0.1	0.1	31 ° 0 '	-0.1	-0.1	-0.1	0	-0.1	-0.1	-0.2	-0.2	-0.1
0	0	0	0	0	0.1	0.1	0.1	0	31 ° 15 '	-0.1	-0.1	-0.1	0	-0.1	-0.2	-0.2	-0.1	-0.1
0	0	0	0	0	0.1	0.1	0	0	31 ° 30 '	-0.1	-0.1	0	0	-0.2	-0.3	-0.2	-0.1	-0.1
0	0	0	0	0	0.1	0	0	0	31 ° 45 '	-0.1	-0.1	0	0	-0.2	-0.3	-0.2	-0.1	-0.1
0	0	0	0	0	0	0	0	0	32 ° 0 '	-0.1	-0.1	0	0	-0.2	-0.3	-0.1	-0.1	-0.1
0	0	-0.1	0	0	0	0	0	0	32 ° 15 '	-0.1	-0.1	0	-0.1	-0.3	-0.2	-0.1	-0.1	-0.1
0	0	-0.1	0	0	0	0	0	0	32 ° 30 '	-0.1	-0.1	0	-0.1	-0.3	-0.2	-0.1	-0.1	-0.1
0	0	0	0	0	0	0	0	0	32 ° 45 '	-0.1	0	0	-0.1	-0.3	-0.2	-0.1	-0.1	-0.1
0	0	0	0	0	0	0	0	0	33 ° 0 '	-0.1	0	0	-0.1	-0.2	-0.2	-0.2	-0.1	-0.1
0	0	0	0.1	0	0	0	0	0	33 ° 15 '	0	0	0	-0.1	-0.2	-0.2	-0.2	-0.1	-0.1
0	0	0	0.1	0.1	0.1	0	0	0	33 ° 30 '	0	0	-0.1	-0.2	-0.2	-0.2	-0.1	-0.1	-0.1
0	0	0.1	0.1	0.1	0.1	0	0	0	33 ° 45 '	0	-0.1	-0.2	-0.2	-0.2	-0.2	-0.1	-0.1	-0.1
0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	34 ° 0 '	0	-0.1	-0.2	-0.2	-0.2	-0.2	-0.1	-0.1	-0.1
0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	34 ° 15 '	0	-0.2	-0.2	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	34 ° 30 '	-0.1	-0.2	-0.2	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
0.1	0.1	0.1	0	0.1	0.1	0.1	0.1	0	34 ° 45 '	-0.1	-0.2	-0.2	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
0.1	0.1	0	0	0.1	0	0	0	0	35 ° 0 '	-0.2	-0.2	-0.2	-0.2	-0.1	-0.1	-0.1	-0.1	-0.1
0.1	0.1	0	0.1	0	0	0	0	0	35 ° 15 '	-0.2	-0.2	-0.2	-0.2	-0.1	-0.1	-0.1	-0.1	0
0.1	0.1	0.1	0.1	0	0	0	0	0	35 ° 30 '	-0.2	-0.2	-0.2	-0.2	-0.1	-0.1	-0.1	-0.1	0
0.1	0.1	0.1	0.1	0	0	0	0	0	35 ° 45 '	-0.2	-0.1	-0.2	-0.2	-0.1	-0.1	-0.1	-0.1	0
0.1	0.1	0.1	0	0	0	0	0	0	36 ° 0 '	-0.1	-0.1	-0.2	-0.1	-0.1	-0.1	-0.1	-0.1	0
0.1	0.1	0.1	0	0	0	0	0	0	36 ° 15 '	-0.1	-0.1	-0.2	-0.1	-0.1	-0.1	-0.1	0	-0.1
0	0.1	0.1	0	0	0	0	0	0	36 ° 30 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	-0.1
0.1	0.1	0	0	0	0	0	0	0	36 ° 45 '	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	0
0.1	0.1	0	0	0	0	0	0	0	37 ° 0 '	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	0	0
0.1	0	0	0	0	0	0	0	0	37 ° 15 '	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 30 '	-0.1	-0.1	-0.1	-0.1	-0.1	0	-0.1	0	0
0	0	0	0	0	0	0	0	0	37 ° 45 '	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 0 '	-0.1	-0.1	-0.1	-0.1	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 15 '	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 30 '	-0.1	-0.1	-0.1	-0.1	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 45 '	-0.1	-0.1	-0.1	-0.1	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 0 '	-0.1	-0.1	-0.1	-0.1	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 15 '	-0.1	-0.1	-0.1	-0.1	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 30 '	-0.1	-0.1	-0.1	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 45 '	-0.1	-0.1	-0.1	0	-0.1	0	0	0	0
0	0	0	0	0	0	0	0	0	40 ° 0 '	-0.1	-0.1	0	-0.1	-0.1	0	-0.1	0	0

Correct Astronomical Position to WGS84

Latitude 30 to 40 °S — **Correction to Latitude**

Longitude 48 to 44 °W — **Correction to Longitude**

48° 0'	47° 30'	47° 0'	46° 30'	46° 0'	45° 30'	45° 0'	44° 30'	44° 0'	Longitude / Latitude	48° 0'	47° 30'	47° 0'	46° 30'	46° 0'	45° 30'	45° 0'	44° 30'	44° 0'
0	0	0	0	0	0	0	0	0	30 ° 0 '	-0.2	-0.2	-0.1	-0.1	-0.1	0	0	0	0
0.1	0.1	0	0	0	0	0	0	0	30 ° 15 '	-0.2	-0.2	-0.1	-0.1	-0.1	0	0	0	0
0.1	0.1	0.1	0	0	0	0	0	0	30 ° 30 '	-0.2	-0.2	-0.1	-0.1	-0.1	0	0	0	0
0.1	0.1	0	0	0	0	0	0	0	30 ° 45 '	-0.2	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	0
0.1	0	0	0	-0.1	0	0	0	0	31 ° 0 '	-0.1	-0.1	0	0	-0.1	-0.1	0	0	0
0	0	0	-0.1	-0.1	-0.1	-0.1	0	0	31 ° 15 '	-0.1	-0.1	0	0	-0.1	-0.1	-0.1	0	0
0	-0.1	-0.1	0	0	-0.1	-0.1	0	0	31 ° 30 '	-0.1	-0.1	0	0	-0.1	-0.1	-0.1	0	0
0	0	0	0	0	0	-0.1	0	0	31 ° 45 '	-0.1	0	0	0	-0.1	-0.1	-0.1	-0.1	0
0	0	0	0	0	0	0	0	0	32 ° 0 '	-0.1	0	0	-0.1	0	-0.1	-0.1	-0.1	0
0	0	0	0	0	0	0	0	0	32 ° 15 '	-0.1	-0.1	0	-0.1	0	0	-0.1	-0.1	0
0	0	0	0	0	0	0	0	0	32 ° 30 '	-0.1	-0.1	-0.1	-0.1	0	0	-0.1	0	0
0	0	0	0	0	0	0	0	0	32 ° 45 '	-0.1	-0.1	-0.1	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 0 '	-0.1	-0.1	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 15 '	-0.1	-0.1	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 30 '	-0.1	-0.1	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 45 '	-0.1	-0.1	0	0	0	0	0	0	0
0.1	0.1	0.1	0.1	0	0	0	0	0	34 ° 0 '	-0.1	-0.1	0	0	0	0	0	0	0
0.1	0.1	0	0	0	0	0	0	0	34 ° 15 '	-0.1	-0.1	0	0	0	0	0	0	0
0.1	0	0	0	0	0	0	0	0	34 ° 30 '	-0.1	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 45 '	-0.1	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 0 '	-0.1	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 15 '	-0.1	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 30 '	-0.1	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	40 ° 0 '	0	0	0	0	0	0	0	0	0

Correct Astronomical Position to WGS84

Latitude 30 to 40 °S — **Correction to Latitude**

Longitude 44 to 40 °W — **Correction to Longitude**

44° 0'	43° 30'	43° 0'	42° 30'	42° 0'	41° 30'	41° 0'	40° 30'	40° 0'	Latitude	44° 0'	43° 30'	43° 0'	42° 30'	42° 0'	41° 30'	41° 0'	40° 30'	40° 0'
0	0	0	0	0	0	0	0	0	30 ° 0 '	0	0	0	0	-0.1	0	0	0	0
0	0	0	0	0	0	0	0	0	30 ° 15 '	0	0	0	0	-0.1	0	0	0	0
0	0	0	0	0	0	0	0	0	30 ° 30 '	0	0	0	0	-0.1	0	0	0	0
0	0	0	0	0	0	0	0	0	30 ° 45 '	0	0	0	0	-0.1	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 0 '	0	0	0	0	-0.1	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 15 '	0	0	0	0	-0.1	0	0	0.1	0
0	0	0	0	0	0	0	0	0	31 ° 30 '	0	0	0	0	-0.1	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	40 ° 0 '	0	0	0	0	0	0	0	0	0

Correct Astronomical Position to WGS84

Latitude 30 to 40 °S — **Correction to Latitude**

Longitude 40 to 36 °W — **Correction to Longitude**

40° 0'	39° 30'	39° 0'	38° 30'	38° 0'	37° 30'	37° 0'	36° 30'	36° 0'	Latitude	40° 0'	39° 30'	39° 0'	38° 30'	38° 0'	37° 30'	37° 0'	36° 30'	36° 0'
									Longitude									
0	0	0	0	0	-0.1	-0.1	-0.1	-0.1	30 ° 0 '	0	0.1	0.1	0	0	0.1	0.1	0.1	0
0	0	0	0	0	0	0	0	-0.1	30 ° 15 '	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0
0	0	0	0	0	0	0	0	0	30 ° 30 '	0	0.1	0.1	0.1	0	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	30 ° 45 '	0	0.1	0.1	0.1	0	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0.1	0.1	0	31 ° 0 '	0	0	0.1	0.1	0	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0.1	0.1	0.1	31 ° 15 '	0	0	0.1	0.1	0	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	31 ° 30 '	0	0	0.1	0.1	0	0	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	31 ° 45 '	0	0	0	0	0.1	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	32 ° 0 '	0	0	0	0	0.1	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	32 ° 15 '	0	0	0	0	0	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	32 ° 30 '	0	0	0	0	0	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0.1	32 ° 45 '	0	0	0	0	0	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0.1	33 ° 0 '	0	0	0	0	0	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	33 ° 15 '	0	0	0	0	0	0	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	33 ° 30 '	0	0	0	0	0	0	0	0.1	0.1
0	0	0	0	0	0	0	0	0	33 ° 45 '	0	0	0	0	0	0	0	0.1	0.1
0	0	0	0	0	0	0	0	0	34 ° 0 '	0	0	0	0.1	0	0	0	0.1	0.1
0	0	0	0	0	0	0	0	0	34 ° 15 '	0	0	0	0	0	0	0	0.1	0.1
0	0	0	0	0	0	0	0	0	34 ° 30 '	0	0	0	0	0	0.1	0	0.1	0.1
0	0	0	0	0	0	0	0	0	34 ° 45 '	0	0	0	0	0	0.1	0.1	0	0.1
0	0	0	0	0	0	0	0	0	35 ° 0 '	0	0	0	0	0	0.1	0.1	0	0.1
0	0	0	0	0	0	0	0	0	35 ° 15 '	0	0	0	0	0	0.1	0.1	0	0
0	0	0	0	0	0	0	0	0	35 ° 30 '	0	0	0	0	0	0.1	0.1	0.1	0
0	0	0	0	0	0	0	0	0	35 ° 45 '	0	0	0	0	0	0	0.1	0.1	0
0	0	0	0	0	0	0	0	0	36 ° 0 '	0	0	0	0	0	0	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	36 ° 15 '	0	0	0	0	0	0	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	36 ° 30 '	0	0	0	0	0	0	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	36 ° 45 '	0	0	0	0	0	0	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	37 ° 0 '	0	0	0	0	0	0	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	37 ° 15 '	0	0	0	0	0	0	0.1	0	0.1
0	0	0	0	0	0	0	0	0	37 ° 30 '	0	0	0	0	0	0	0.1	0	0
0	0	0	0	0	0	0	0	0	37 ° 45 '	0	0	0	0	0	0	0.1	0	0
0	0	0	0	0	0	0	0	0	38 ° 0 '	0	0	0	0	0	0	0.1	0	0
0	0	0	0	0	0	0	0	0	38 ° 15 '	0	0	0	0	0	0	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	38 ° 30 '	0	0	0	0	0	0	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	38 ° 45 '	0	0	0	0	0	0.1	0.1	0.1	0
0	0	0	0	0	0	0	0	0	39 ° 0 '	0	0	0	0	0	0	0.1	0.1	0
0	0	0	0	0	0	0	0	0	39 ° 15 '	0	0	0	0	0	0	0.1	0.1	0
0	0	0	0	0	0	0	0	0	39 ° 30 '	0	0	0	0	0	0	0.1	0.1	0
0	0	0	0	0	0	0	0	0	39 ° 45 '	0	0	0	0	0	0	0.1	0.1	0
0	0	0	0	0	0	0	0	0	40 ° 0 '	0	0	0	0	0	0	0.1	0.1	0.1

Correct Astronomical Position to WGS84

Latitude 30 to 40 °S — **Correction to Latitude**

Longitude 36 to 32 °W — **Correction to Longitude**

36° 0'	35° 30'	35° 0'	34° 30'	34° 0'	33° 30'	33° 0'	32° 30'	32° 0'	Latitude	36° 0'	35° 30'	35° 0'	34° 30'	34° 0'	33° 30'	33° 0'	32° 30'	32° 0'
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	0	30 ° 0 '	0	0	0.1	0	0	0	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	30 ° 15 '	0	0	0.1	0	0	0	0	0	0
0	-0.1	0	0	-0.1	-0.1	-0.1	0	0	30 ° 30 '	0.1	0.1	0.1	0.1	0	-0.1	0	0	0
0	0	0	0	0	-0.1	-0.1	-0.1	0	30 ° 45 '	0.1	0.1	0	0.1	0	0	0	0	0
0	0	0	0	0	0	-0.1	-0.1	0	31 ° 0 '	0.1	0.1	0	0.1	0.1	0	0	0	0
0.1	0.1	0	0	0.1	0.1	0	0	0	31 ° 15 '	0.1	0.1	0	0	0.1	0	0	0	0
0	0.1	0.1	0.1	0.1	0.1	0.1	0	0	31 ° 30 '	0.1	0.1	0.1	0	0	0.1	0	0	0
0	0.1	0.1	0.1	0.1	0.1	0.1	0	0	31 ° 45 '	0.1	0.1	0.1	0	0	0	0.1	0	0
0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	32 ° 0 '	0.1	0	0.1	0.1	0	0	0.1	0	0
0	0	0.1	0.1	0	0	0	0	0	32 ° 15 '	0.1	0	0	0.1	0	0	0.1	0	0
0	0	0	0	0	0	0	0	0	32 ° 30 '	0.1	0	0	0.1	0.1	0	0	0	0
0.1	0	0	0	0	0	0	0	0	32 ° 45 '	0.1	0	0	0.1	0.1	0.1	0	0	0
0.1	0.1	0	0	0	0	0	0	0	33 ° 0 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0
0	0	0	0	0	0	0	0	0	33 ° 15 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0
0	0	0	0	0	0	0	0	0	33 ° 30 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0
0	0	0	0	0	0	0	0	0	33 ° 45 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0
0	0	0	0	0	0	0	0	0	34 ° 0 '	0.1	0	0.1	0.1	0.1	0.1	0.1	0.1	0
0	0	0	0	0	0	0	0	0	34 ° 15 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	34 ° 30 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	34 ° 45 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	35 ° 0 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0.1
0	0	0	0	0	0	0	0	0	35 ° 15 '	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	35 ° 30 '	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	35 ° 45 '	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	36 ° 0 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	36 ° 15 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	36 ° 30 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	36 ° 45 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	37 ° 0 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	37 ° 15 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	37 ° 30 '	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	37 ° 45 '	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	38 ° 0 '	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	38 ° 15 '	0.1	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	38 ° 30 '	0.1	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	38 ° 45 '	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	39 ° 0 '	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	39 ° 15 '	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	39 ° 30 '	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	39 ° 45 '	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	40 ° 0 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

Correct Astronomical Position to WGS84

Latitude 30 to 40 °S — **Correction to Latitude**

Longitude 32 to 28 °W — **Correction to Longitude**

32° 0'	31° 30'	31° 0'	30° 30'	30° 0'	29° 30'	29° 0'	28° 30'	28° 0'	Longitude / Latitude	32° 0'	31° 30'	31° 0'	30° 30'	30° 0'	29° 30'	29° 0'	28° 30'	28° 0'
0	0	0	0	0	-0.1	-0.1	0	0	30 ° 0 '	0	0.1	0	0	0.1	0	0	0	0
0	0	0	0	0	-0.1	-0.1	0	0	30 ° 15 '	0	0.1	0	0	0.1	0	0	0	0
0	0	0	0	0	0	0	0	0	30 ° 30 '	0	0.1	0	0	0.1	0.1	0	0	0
0	0	0	0	0	0	0	0	0	30 ° 45 '	0	0	0	0	0.1	0.1	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 0 '	0	0	0	0	0.1	0.1	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 15 '	0	0	0	0.1	0.1	0.1	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 30 '	0	0	0	0	0.1	0.1	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 45 '	0	0	0	0	0.1	0.1	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 0 '	0	0	0	0	0.1	0.1	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 15 '	0	0	0.1	0.1	0.1	0.1	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 30 '	0	0.1	0.1	0.1	0.1	0.1	0.1	0	0
0	0	0	0	0	0	0	0	0	32 ° 45 '	0	0.1	0	0	0.1	0.1	0.1	0	0
0	0	0	-0.1	-0.1	0	0	0	0	33 ° 0 '	0	0.1	0	0	0.1	0.1	0.1	0	0
0	0	0	-0.1	-0.1	-0.1	0	0	0	33 ° 15 '	0	0.1	0.1	0.1	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 30 '	0	0	0.1	0.1	0.1	0	0	0	0
0	0	0	0.1	0.1	0	0	0	0	33 ° 45 '	0	0	0.1	0.1	0.1	0	0	0	0
0	-0.1	-0.1	0	0.1	0.1	0	0	0	34 ° 0 '	0	0	0	0.1	0.1	0.1	0	0	0.1
0	-0.1	-0.1	-0.1	0	0	0	0	0	34 ° 15 '	0.1	0	0	0	0.1	0.1	0	0.1	0.1
0	0	-0.1	-0.1	-0.1	-0.1	0	0	0	34 ° 30 '	0.1	0.1	0	0	0	0	0	0.1	0.1
0	0	0	-0.1	-0.1	-0.1	0	0	0	34 ° 45 '	0.1	0.2	0.1	0	0	0	0	0.1	0.1
0	0.1	0.1	0	0	0	-0.1	-0.1	-0.1	35 ° 0 '	0.1	0.2	0.1	0.1	0	0	0	0.1	0.1
0	0	0.1	0.1	0.1	0	-0.1	-0.1	0	35 ° 15 '	0.1	0.1	0.1	0.1	0.1	0	0	0.1	0
0	0	0	0	0	0	0	0	0	35 ° 30 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0
0	0	0	0	0	0	0	0	0	35 ° 45 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	36 ° 0 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	36 ° 15 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	36 ° 30 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	36 ° 45 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	37 ° 0 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	37 ° 15 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	37 ° 30 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	37 ° 45 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	38 ° 0 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	38 ° 15 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	38 ° 30 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	38 ° 45 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	39 ° 0 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	39 ° 15 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	39 ° 30 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	39 ° 45 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	40 ° 0 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

Correct Astronomical Position to WGS84

Latitude 30 to 40 °S — **Correction to Latitude**

Longitude 28 to 24 °W — **Correction to Longitude**

28° 0'	27° 30'	27° 0'	26° 30'	26° 0'	25° 30'	25° 0'	24° 30'	24° 0'	Longitude / Latitude	28° 0'	27° 30'	27° 0'	26° 30'	26° 0'	25° 30'	25° 0'	24° 30'	24° 0'
0	-0.1	-0.1	0	-0.1	-0.1	-0.1	-0.1	0	30 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	-0.1	-0.1	-0.1	-0.1	-0.1	30 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	-0.1	-0.1	-0.1	0	30 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	30 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	-0.1	0	0	0	31 ° 15 '	0	0	0	0	0.1	0.1	0	0	0
0	0	0	0	0	-0.1	0	0	0	31 ° 30 '	0	0	0	0	0.1	0.1	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 45 '	0	0	0	0	0.1	0	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 0 '	0	0	0	0	0.1	0	0	0.1	0.1
0	0	0	0	0	0	0	0	0	32 ° 15 '	0	0	0	0	0.1	0	0	0.1	0.1
0	0	0	0	0	0	0	0	0	32 ° 30 '	0	0	0	0	0	0	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	32 ° 45 '	0	0	0	0	0	0	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	33 ° 0 '	0	0	0	0	0	0	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	33 ° 15 '	0	0	0	0.1	0	0	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	33 ° 30 '	0	0	0	0.1	0	0	0	0.1	0
0	0	-0.1	0	0	0	-0.1	0	0	33 ° 45 '	0	0.1	0	0.1	0.1	0	0	0	0
0	0	0	-0.1	0	0	-0.1	-0.1	-0.1	34 ° 0 '	0.1	0.1	0.1	0	0	0.1	0	0	0
0	0	0	-0.1	0	0	-0.1	-0.1	-0.1	34 ° 15 '	0.1	0.1	0.1	0	0	0.1	0.1	0	0.1
0	0	0	0	-0.1	0	0	-0.1	-0.1	34 ° 30 '	0.1	0.1	0.1	0.1	0	0.1	0.1	0.1	0.1
0	0	0	0	-0.1	0	0	0	0	34 ° 45 '	0.1	0.1	0.1	0.1	0	0.1	0.1	0.1	0.1
-0.1	0	0	0	0	0	0	0	0	35 ° 0 '	0.1	0	0.1	0.1	0	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	35 ° 15 '	0	0	0.1	0.1	0	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	35 ° 30 '	0	0	0.1	0.1	0.1	0.1	0	0	0.1
0	0	0	0	0	0	0	0	0	35 ° 45 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0.1
0	0	0	0	0	0	0	0	0	36 ° 0 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0.1
0	0	0	0	0	0	0	0	0	36 ° 15 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	36 ° 30 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	36 ° 45 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	37 ° 0 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	37 ° 15 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	37 ° 30 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	37 ° 45 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	38 ° 0 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	38 ° 15 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	38 ° 30 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	38 ° 45 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	39 ° 0 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	39 ° 15 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	39 ° 30 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	39 ° 45 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	40 ° 0 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

Correct Astronomical Position to WGS84

Latitude 30 to 40 °S — **Correction to Latitude**

Longitude 24 to 20 °W — **Correction to Longitude**

24° 0'	23° 30'	23° 0'	22° 30'	22° 0'	21° 30'	21° 0'	20° 30'	20° 0'	Longitude / Latitude	24° 0'	23° 30'	23° 0'	22° 30'	22° 0'	21° 30'	21° 0'	20° 30'	20° 0'
0	0	0	0	0	0	0	0	0	30 ° 0 '	0	0	0	0	0	0	0	0	0
-0.1	0	0	0	0	0	0	0	0	30 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	-0.1	-0.1	-0.1	0	0	30 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	-0.1	-0.1	-0.1	-0.1	0	0	0	30 ° 45 '	0	0	0	0	0	0	0	0	0
0	-0.1	-0.1	-0.1	-0.1	0	0	0	0	31 ° 0 '	0	0	0	0	0	0	0	0	0
0	-0.1	-0.1	-0.1	0	0	0	0	-0.1	31 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	-0.1	-0.1	0	0	0	0	0	31 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	-0.1	0	0	0	0	0	0	31 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	32 ° 0 '	0.1	0.1	0	0	0	0	0	0	0
0	0	0	-0.1	-0.1	0	-0.1	-0.1	-0.1	32 ° 15 '	0.1	0.1	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 30 '	0.1	0.1	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 45 '	0.1	0.1	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 0 '	0.1	0.1	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 15 '	0.1	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 45 '	0	0.1	0	0	0	0	0	0.1	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	34 ° 0 '	0	0.1	0	0	0	0	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	34 ° 15 '	0.1	0.1	0	0	0	0	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	34 ° 30 '	0.1	0	0	0	0	0	0	0	0
0	0	0	0	-0.1	-0.1	-0.1	-0.1	0	34 ° 45 '	0.1	0	0	0.1	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 0 '	0.1	0	0	0.1	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 15 '	0.1	0	0	0.1	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 30 '	0.1	0.1	0	0.1	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 45 '	0.1	0.1	0	0	0.1	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 0 '	0.1	0.1	0	0.1	0.1	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 15 '	0.1	0.1	0.1	0.1	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 30 '	0.1	0.1	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 45 '	0.1	0.1	0	0	0	0	0.1	0	0.1
0	0	0	0	0	0	0	0	0	37 ° 0 '	0.1	0.1	0	0	0	0.1	0.1	0	0
0	0	0	0	0	0	0	0	0	37 ° 15 '	0.1	0	0	0	0.1	0.1	0.1	0	0
0	0	0	0	0	0	0	0	0	37 ° 30 '	0.1	0	0.1	0.1	0.1	0.1	0.1	0	0
0	0	0	0	0	0	0	0	0	37 ° 45 '	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 0 '	0.1	0.1	0.1	0.1	0.1	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 15 '	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0
0	0	0	0	0	0	0	0	0	38 ° 30 '	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 45 '	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 0 '	0.1	0.1	0.1	0.1	0.1	0	0	0	0.1
0	0	0	0	0	0	0	0	0	39 ° 15 '	0.1	0.1	0.1	0.1	0.1	0	0	0.1	0.1
0	0	0	0	0	0	0	0	0	39 ° 30 '	0.1	0.1	0.1	0.1	0.1	0	0	0.1	0.1
0	0	0	0	0	0	0	0	0	39 ° 45 '	0.1	0.1	0.1	0.1	0.1	0	0.1	0.1	0.1
0	0	0	0	0	0	0	0	0	40 ° 0 '	0.1	0.1	0.1	0.1	0.1	0	0.1	0.1	0.1

Correct Astronomical Position to WGS84

Latitude 30 to 40 °S — **Correction to Latitude**

Longitude 20 to 16 °W — **Correction to Longitude**

20° 0'	19° 30'	19° 0'	18° 30'	18° 0'	17° 30'	17° 0'	16° 30'	16° 0'	Latitude	20° 0'	19° 30'	19° 0'	18° 30'	18° 0'	17° 30'	17° 0'	16° 30'	16° 0'
0	0	0	0	0	0	0	0	0	30 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	30 ° 15 '	0	0	0	0	0	0	0	0	0
0	-0.1	0	0	0	0	0	0	0	30 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	30 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 0 '	0	0	0	0	0	0	0	0	0
-0.1	0	0	0	0	0	0	0	0	31 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 45 '	0	0	0	0	0	0	0	0	0
-0.1	-0.1	0	0	-0.1	0	0	0	0	32 ° 0 '	0	0	0	0	0	0	0	0	0
-0.1	-0.1	-0.1	0	0	0	0	0	0	32 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 30 '	0	0	0	0	0	0	0	0	0
0	-0.1	-0.1	0	0	0	0	0	0	34 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	-0.1	0	0	0	0	0	0	35 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	-0.1	-0.1	-0.1	-0.1	0	35 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	-0.1	-0.1	-0.1	-0.1	0	36 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 30 '	0	0.1	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 45 '	0.1	0.1	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 30 '	0	0	0	0.1	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 45 '	0	0	0	0.1	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 0 '	0	0	0	0.1	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 15 '	0	0	0	0.1	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 30 '	0	0	0	0.1	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 45 '	0	0	0	0.1	0	0	0.1	0	0
0	0	0	0	0	0	0	0	0	39 ° 0 '	0.1	0	0	0.1	0	0	0.1	0	0
0	0	0	0	0	0	0	0	0	39 ° 15 '	0.1	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 30 '	0.1	0	0.1	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 45 '	0.1	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	40 ° 0 '	0.1	0.1	0	0	0	0	0	0	0

Correct Astronomical Position to WGS84

Latitude 30 to 40 °S — **Correction to Latitude**

Longitude 16 to 12 °W — **Correction to Longitude**

16° 0'	15° 30'	15° 0'	14° 30'	14° 0'	13° 30'	13° 0'	12° 30'	12° 0'	Latitude	16° 0'	15° 30'	15° 0'	14° 30'	14° 0'	13° 30'	13° 0'	12° 30'	12° 0'
0	0	0	0	0	0	0	0	0	30 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	30 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	30 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	30 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	-0.1	-0.1	36 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	-0.1	-0.1	-0.1	36 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	-0.1	-0.1	-0.1	37 ° 0 '	0	0	0	0	0	0	0.1	0	-0.1
0	0	0	0	0	0	0	0	0	37 ° 15 '	0	0	0	0	0	0	0.1	0	-0.1
0	0	0	0	0	0	0	0	0	37 ° 30 '	0	0	0	0	0	0	0.1	0	-0.1
0	0	0	0	0	-0.1	0	0	0	37 ° 45 '	0	0	0	0	0	0	0	0	-0.1
0	0	0	0	0	-0.1	0	0	0	38 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	-0.1	38 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	40 ° 0 '	0	0	0	0	0	0	0	0	0

Correct Astronomical Position to WGS84

Latitude 30 to 40 °S — **Correction to Latitude**

Longitude 12 to 8 °W — **Correction to Longitude**

12° 0'	11° 30'	11° 0'	10° 30'	10° 0'	9° 30'	9° 0'	8° 30'	8° 0'	Longitude / Latitude	12° 0'	11° 30'	11° 0'	10° 30'	10° 0'	9° 30'	9° 0'	8° 30'	8° 0'
0	0	0	0	0	0	0	0	0	30 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	30 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	30 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	30 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	32 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	33 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	-0.1	35 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 0 '	0	0	0	0	0	0	0	0	0
0	-0.1	-0.1	0	0	0	0	0	0	36 ° 15 '	0	0	0	0	0	0	0	0	0
-0.1	0	0	0	0	0	0	0	0	36 ° 30 '	0	0	0	0	0	0	0	0	0
-0.1	0	0	0	0	-0.1	0	-0.1	-0.1	36 ° 45 '	0	0	0	0	0	0	0	0	0
-0.1	0	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	37 ° 0 '	-0.1	0	0	0	0	0	0	0	0
0	0	-0.1	-0.1	-0.1	-0.1	0	-0.1	-0.1	37 ° 15 '	-0.1	0	0	0	0	0	0	0	0
0	-0.1	-0.1	-0.1	0	-0.1	0	0	0	37 ° 30 '	-0.1	0	0	0	0	0	0	0	0
0	-0.1	0	0	0	0	0	0	0	37 ° 45 '	-0.1	0	0	0	0	0	0	0	0
0	-0.1	0	0	0	0	0	0	0	38 ° 0 '	0	0	0	0	0	0	0	0	0
-0.1	0	0	0	0	0	0	0	0	38 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	-0.1	38 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	-0.1	38 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	40 ° 0 '	0	0	0	0	0	-0.1	0	0	-0.1

Correct Astronomical Position to WGS84

Latitude 30 to 40 °S — **Correction to Latitude**

Longitude 8 to 4 °W — **Correction to Longitude**

8° 0'	7° 30'	7° 0'	6° 30'	6° 0'	5° 30'	5° 0'	4° 30'	4° 0'	Longitude / Latitude	8° 0'	7° 30'	7° 0'	6° 30'	6° 0'	5° 30'	5° 0'	4° 30'	4° 0'
0	0	0	0	0	0	0	0	0	30 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	30 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	30 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	30 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	31 ° 15 '	0	0	0	0	0	0	0	0	0.1
0	0	0	0	0	0	0	0	0	31 ° 30 '	0	0	0	0	0	0	0	0	0.1
0	0	0	0	0	0	0	0	0	31 ° 45 '	0	0	0	0	0	0	0	0	0.1
0	0	0	0	0	0	0	0	0	32 ° 0 '	0	0	0	0	0	0.1	0	0.1	0.1
0	0	0	0	0	0	0	0	0	32 ° 15 '	0	0	0	0	0	0	0	0.1	0.1
0	0	0	0	0	0	0	0	0	32 ° 30 '	0	0	0	0	0	0	0	0.1	0
0	0	0	0	0	0	0	0	0.1	32 ° 45 '	0	0	0	0	0	0	0	0.1	0
0	0	0	0	0	0	0	0	0	33 ° 0 '	0	0	0	0	0	0	0.1	0	-0.1
0	0	0	0	0	0	0	0	0	33 ° 15 '	0	0	0	0	0	0.1	0.1	0	-0.1
0	0	0	0	0	0	0	0.1	0	33 ° 30 '	0	0	0	0	0	0.1	0	0	0
0	0	0	0	0	0	0.1	0.1	0	33 ° 45 '	0	0	0	0	0	0.1	0	0	0.1
0	0	0	0	0	0	0	0	0	34 ° 0 '	0	0	0	0	0	0	0	0	0.2
0	0	0	0	0	0	-0.1	-0.1	0	34 ° 15 '	0	0	0	0	0	0	0	0	0.1
0	0	0	0	0	0	-0.1	-0.1	0	34 ° 30 '	0	0	0	0	0	0.1	0	0	0
0	0	0	0	0	0	0	0	0	34 ° 45 '	0	0	0	0	0	0.1	0	0	-0.1
0	0	0	0	0	0	0	0.1	0.1	35 ° 0 '	0	0	0	0	0	0.1	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 30 '	0	0	0	0	0	0	0	0	0
-0.1	-0.1	0	0	0	0	0	0	0	35 ° 45 '	0	0	0	0	0	0	0	0	0
0	-0.1	-0.1	0	0	0	0	0	0	36 ° 0 '	0	0	0	0	0	0	0	0	0
0	0	-0.1	0	0	0	0	0	0	36 ° 15 '	0	0	-0.1	0	0	0	0	0	0
0	0	0	0	0	-0.1	0	0	0	36 ° 30 '	0	0	-0.1	0	0	0	0	0	0
-0.1	0	0	-0.1	0	0	0	0	0	36 ° 45 '	0	0	0	0	0	0	0	0	0
-0.1	0	-0.1	-0.1	-0.1	0	0	0	0	37 ° 0 '	0	0	0	0	0	0	0	0	0
-0.1	-0.1	-0.1	-0.1	-0.1	0	0	0	0	37 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 30 '	0	0	0	0	0	-0.1	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 45 '	0	0	0	0	0	0	-0.1	0	-0.1
0	0	0	0	0	0	0	0	0	38 ° 0 '	0	0	0	0	0	0	-0.1	-0.1	-0.1
0	0	0	0	0	0	0	0	-0.1	38 ° 15 '	0	0	0	0	0	0	-0.1	-0.1	0
-0.1	0	0	0	0	0	0	0	0	38 ° 30 '	0	0	-0.1	0	0	0	-0.1	0	0
-0.1	0	0	0	0	0	0	0	0	38 ° 45 '	0	-0.1	-0.1	0	0	0	0	0	0
0	0	0	-0.1	-0.1	0	0	0	0	39 ° 0 '	0	-0.1	0	0	-0.1	0	0	0	0
0	0	-0.1	-0.1	-0.1	-0.1	0	0	0	39 ° 15 '	0	-0.1	0	0	-0.1	-0.1	0	0	0
0	0	-0.1	-0.1	-0.1	-0.1	0	0	0	39 ° 30 '	0	0	0.1	0	-0.1	-0.1	-0.1	0	0
0	0	0	0	0	-0.1	0	0	0	39 ° 45 '	0	0	0.1	0	-0.1	-0.1	-0.1	0	0
0	0	0	0.1	0	0	0	0	0	40 ° 0 '	-0.1	0	0	0	-0.1	-0.1	-0.1	0	0

Correct Astronomical Position to WGS84

Latitude 30 to 40 °S — **Correction to Latitude**

Longitude 4 to 0 °W — **Correction to Longitude**

4° 0'	3° 30'	3° 0'	2° 30'	2° 0'	1° 30'	1° 0'	0° 30'	0° 0'	Latitude	4° 0'	3° 30'	3° 0'	2° 30'	2° 0'	1° 30'	1° 0'	0° 30'	0° 0'
									Longitude									
0	0	0	0	0	0	0	0	0	30 ° 0 '	0	0	0	0	0	0.1	0	0	0.1
0	0	0	0	0	0	0	0	0	30 ° 15 '	0	0	0	0	0.1	0.1	0	0	0.1
0	0	0	0	0	0	0	0	0	30 ° 30 '	0	0	0	0	0.1	0	0	0.1	0.1
0	0	0	0	0	0	0	0	0	30 ° 45 '	0	0	0	0	0	0	0.1	0.1	0
0	0	0	0	0	0	0	0	0	31 ° 0 '	0	0	0	0	0	0	0.1	0	0
0	0	0	0	0	0	0	0.1	0	31 ° 15 '	0.1	0	0	0	0	0.1	0.1	0	0
0	0	0	0	0	0	0	0.1	0	31 ° 30 '	0.1	0	0	0	0	0.1	0	-0.1	0
0	0	0	0	0	0	0.1	0	0	31 ° 45 '	0.1	0	0	0	0.1	0	0	0	0.1
0	0	0	0	0	0	0	0	0	32 ° 0 '	0.1	0	0	0	0.1	0	0	0	0.1
0	0	0	0	0.1	0.1	0	-0.1	0	32 ° 15 '	0.1	0	-0.1	0	0.1	0	0	0.1	0
0	0.1	0	-0.1	0	0.1	0	-0.1	0	32 ° 30 '	0	0	0	0	0	0	0.1	0.1	-0.1
0.1	0.1	0	-0.1	0	0	0	0	0	32 ° 45 '	0	0	0.1	0	-0.1	0	0.2	0.1	-0.1
0	0	0	0	0	0	0	0.1	0	33 ° 0 '	-0.1	0.1	0.2	0	-0.1	0	0.2	0	-0.1
0	-0.1	0	0.1	0	-0.1	0	0.1	0	33 ° 15 '	-0.1	0.1	0.1	0	-0.1	0	0.1	0	-0.1
0	-0.1	0.1	0.2	0	-0.1	0	0.1	0	33 ° 30 '	0	0	0	0	0.1	0	0	0	0
0	0	0.1	0.1	0.1	0	0	0.1	0	33 ° 45 '	0.1	0	-0.1	0	0.2	0	-0.1	0	0.1
0	0	0.1	0	0	0	0	0	0	34 ° 0 '	0.2	0	-0.2	0.1	0.2	0	-0.1	0	0.1
0	0.1	0	0	0	0.1	0	0	0	34 ° 15 '	0.1	-0.1	-0.1	0.1	0.1	0	-0.1	0	0.1
0	0.1	0	-0.1	0	0.1	0	0	0	34 ° 30 '	0	-0.1	0	0.1	0.1	0	0	0	0.1
0	0	0	0	0	0.1	0	0	0	34 ° 45 '	-0.1	-0.1	0	0	0	0.1	0	0	0.1
0.1	0	0	0	0	0	0	0	0	35 ° 0 '	0	0	0.1	0	0	0.1	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	35 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 0 '	0	0	0	0	0	0	0	0	0
0	0.1	0.1	0	0	0	0	0	0	36 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	36 ° 30 '	0	-0.1	0	0	0	0	0	0	0
0	0	0	-0.1	0	0	0	0	0	36 ° 45 '	0	-0.1	0	0	0	0	0	0	0
0	0	-0.1	-0.1	0	0	0	0	0	37 ° 0 '	0	-0.1	0	0	-0.1	0	0	0	0
0	0	0	0	0	0	0	0	0	37 ° 15 '	0	0	0.1	0	-0.1	0	0	0	0
0	0	0	0.1	0	0	0	0	0	37 ° 30 '	0	0	0.1	0	-0.1	0	0	0	0
0	0	0.1	0.1	0	0	0	0	0	37 ° 45 '	-0.1	0	0	0	-0.1	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 0 '	-0.1	-0.1	0	0	0	0	0	0	0
-0.1	-0.1	-0.1	0	0	0	0	0	0	38 ° 15 '	0	-0.1	-0.1	0	0	0	0	0	0
0	-0.1	0	0	0	0	0	0	0	38 ° 30 '	0	-0.1	-0.1	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	38 ° 45 '	0	-0.1	-0.1	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 0 '	0	-0.1	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 15 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 30 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	39 ° 45 '	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	40 ° 0 '	0	0	0	0	0	0	0	0	0