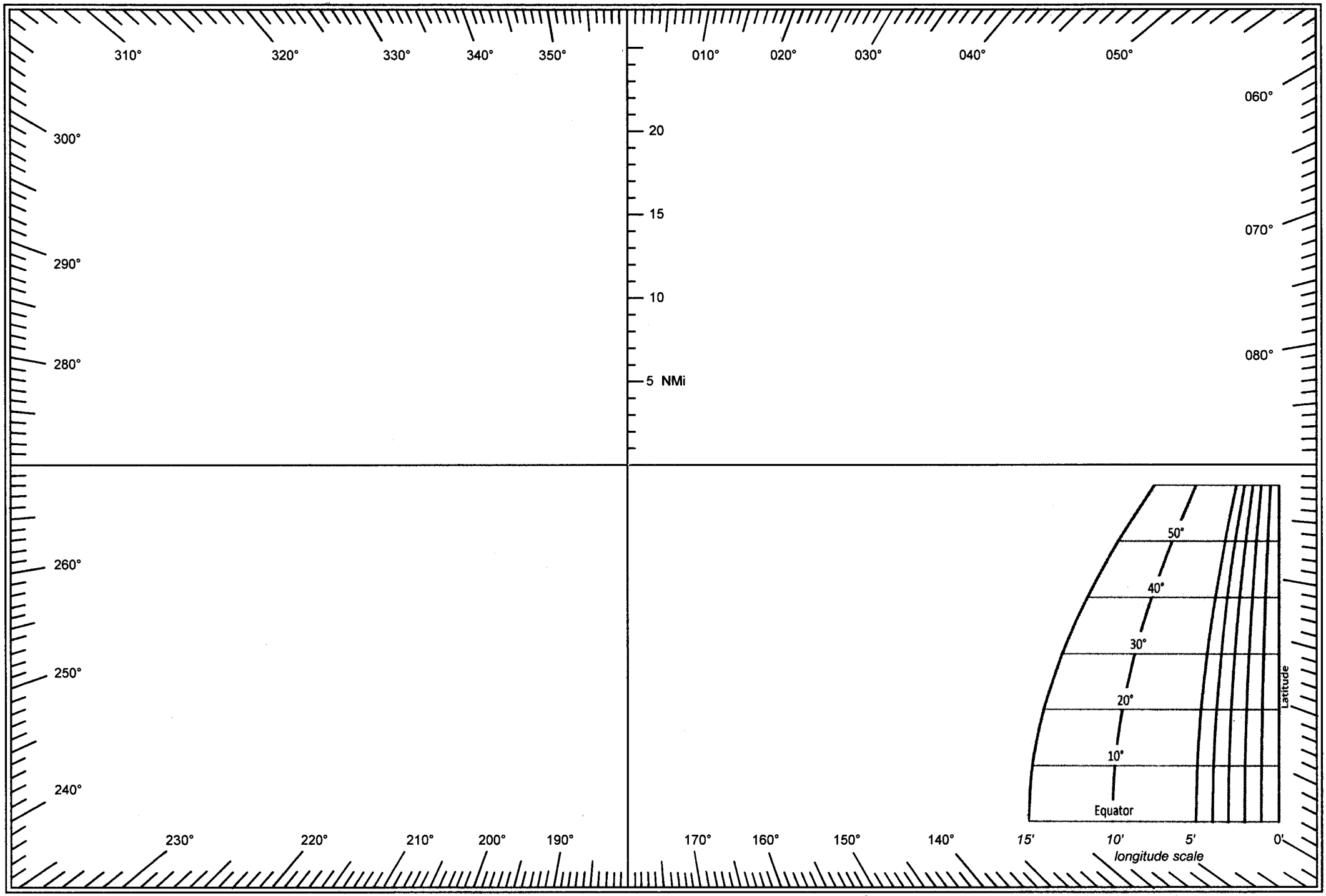
★ Sight Reduction Form ★

Sun sights only. To be used with Long-Term Sun Ephemerides Table from www.siranah.de

Body	SUN		Date to Nearest Integral Hour		Y/M/D H rounded
Date			Correction for OT		
Watch Time			Orbital Time (OT)		Y/M/D H
Watch Timezone		east - **subtract** west - **add**	E from Table GHA and Decl.		Diff:
Watch Correction		fast watch - **subtract** slow watch - **add**	Interpolation of E Diff		
Time (UTC)			Corrected E		
Sextant Altitude			Diurnal Arc (Hours & 10Mins)		**UTC time, not OT!**
Index Correction		on the arc - **subtract** off the arc - **add**			
Dip (Eye Height)		always **subtract**	Diurnal Arc (Mins & Secs)		**UTC time, not OT!**
Total Apparent Altitude (Ha)			**GHA**		
Semidiameter		upper limb - **subtract** lower limb - **add**	(a) Assumed Longitude		
Atmospheric Correction			(b) +/- 360°		if LHA < 0° or > 360°
Total Observed Altitude (Ho)			**LHA**		W Long = GHA-a+b E Long = GHA +a+b
Line of position calculation:			**Assumed Latitude (B)**		
Hc = arcsin (sin Dec sin B + cos Dec cos B cos LHA)			Dec from Table GHA and Decl.		Diff:
Z = arccos [(sin Dec – sin B sin Hc) / (cos Hc cos B)]			Interpolation of Dec Diff		
N Latitude (B): if LHA > 180° Zn=Z; if LHA < 180° Zn = 360°-Z **S Latitude (B)**: if LHA > 180° Zn=180°-Z; if LHA < 180° Zn = 180°+Z			**Total Declination (Dec)**		Same / Contrary to B


310°
320°
330°
340°
350°
010°
020°
030°
040°
050°
060°
070°
080°
300°
290°
280°
260°
250°
240°
230°
220°
210°
200°
190°
170°
160°
150°
140°
20
15
10
5 NMi
50°
40°
30°
20°
10°
Equator
Latitude
15'
10'
5'
0'
longitude scale