

For use with sea horizon and software

Body			
Date			
IE 1			
IE 2			
IE 3			
IE			
Time 1			
SR 1			
Time 2			
SR 2			
Time 3			
SR 3			
SR			
Time			
TC			
GMT			
Dip [']			
Ha			
R [']			
SD			
Ho			
HP			
P(arralax)			
H <sub>4</sub>			

**1. Measurements and basic corrections**

Index error

Average IE (IE with – to Navigator)

Time (watches)

Sextant reading

Time (watches)

Sextant reading

Time (watches)

Sextant reading

Average SR

Average Time

Watch error

GMT = Time – TC + Time Zone

Dip ['] = 1.76' √ h[m]

Ha=SR – IE – Dip

R['] = 1/ tan ( Ha[°] + 7.31 / ( Ha[°] + 4.4) )

Only for Sun, Moon. Lower limb:+, upper limb:–

Ho = Ha – R (+ SD)

For Moon, Venus and Mars only

P = arcsin ( sin HP . cos Ho) ≈ HP . cos Ho

H<sub>4</sub> = Ho + P

**2. Intercept method**

E: + ; W: –

Lon <sub>AP</sub>			
Lat <sub>AP</sub>			
Hc			
Zn			
ΔH [']			

ΔH ['] = 60 . ( Ho[°] – Hc[°] )

or ΔH ['] = 60 . ( H<sub>4</sub>[°] – Hc[°] )