

**ERRORS ARISING FROM SO CALLED "SIDE ERROR" (OFFSET CAUSED BY HORIZON MIRROR NOT BEING PERPENDICULAR TO THE PLANE OF THE SEXTANT)**

Offset 1'		Offset 2'		Offset 5'		Offset 10'		Offset 15'		Offset 20'		Offset 30'		Offset 40'	
Sextant reading	Error	Sextant reading	Error	Sextant reading	Error	Sextant reading	Error	Sextant reading	Error	Sextant reading	Error	Sextant reading	Error	Sextant reading	Error
1°	0.0072'	1°	0.028'	1°	0.18'	1°	0.72'	1°	1.62'	1°	2.88'	1°	6.48'	1°	11.5'
2°	0.0035'	2°	0.014'	2°	0.09'	2°	0.36'	2°	0.81'	2°	1.43'	2°	3.23'	2°	5.8'
5°	0.0014'	5°	0.006'	5°	0.04'	5°	0.14'	5°	0.32'	5°	0.57'	5°	1.29'	5°	2.3'
10°	0.0007'	10°	0.003'	10°	0.02'	10°	0.07'	10°	0.16'	10°	0.28'	10°	0.64'	10°	1.1'
15°	0.0005'	15°	0.002'	15°	0.012'	15°	0.05'	15°	0.10'	15°	0.19'	15°	0.42'	15°	0.8'
20°	0.0004'	20°	0.001'	20°	0.009'	20°	0.03'	20°	0.08'	20°	0.14'	20°	0.31'	20°	0.6'

NOTE: All values are calculated for sextant design with angle between sight line and perpendicular to the horizon mirror equal  $\beta=18^\circ$

