Simplified Harmonic Method

NauticTools2 – report of 06.11.2026, 08:05

Input

Port	**Example (ATT Instructions)**
Time Zone	**Zone +0400 (UTC-4)**
Date / Time	**10.09.05 08:00**
Seasonal Corr. (Part III)	**0**

Result

	0.46 m at 08:00 UTC-4

Hourly heights

05:00	06:00	07:00	**08:00**	09:00	10:00	11:00
0.36 m	0.32 m	0.35 m	**0.46 m**	0.62 m	0.79 m	0.94 m

A

1.	Zo (Part III) or (Tab VI)				0.67
2.	Seasonal Corr. (Part III)				0.0
3.	Sum = ML				0.67
		M2	S2	K1	O1
4.	A1 (Tab VII)	140	005	117	038
5.	A2 (Tab VII)	164	004	115	063
6.	A1 − A2	-024	+001	+002	-025
7.	360.n	720	720	360	360
8.	(A1 − A2) + 360.n = p	696	721	362	335
9.	p/24	29.00	30.04	15.08	13.96
10.	A1 (Line 4)	140	005	117	038
11.	g (Part III)	243	267	127	137
12.	A1 + g	023	272	244	175
13.	F2 (Tab VII)	0.97	1.31	0.89	1.25
14.	F1 (Tab VII)	0.94	1.30	0.88	1.20
15.	F2 − F1 = P	+0.03	+0.01	+0.01	+0.05
16.	P/24	+0.0013	+0.0004	+0.0004	+0.0021

B

17.	Time = T	0800			
	H.C.	M2	S2	K1	O1
18.	p/24 (Line 9)	29.00	30.04	15.08	13.96
19.	p/24 × T	232	240	121	112
20.	(A1 + g) (Line 12)	023	272	244	175
21.	(A1 + g) − p.T/24 = θ	151	032	123	063
22.	Sin θ	+0.485	+0.530	×	×
23.	Cos θ	-0.875	+0.848	-0.545	+0.454
24.	P/24 (Line 16)	+0.0013	+0.0004	+0.0004	+0.0021
25.	P/24 × T	+0.0104	+0.0032	+0.0032	+0.0168
26.	F1 (Line 14)	0.94	1.30	0.88	1.20
27.	F1 + P.T/24 = Ft	0.95	1.30	0.88	1.22
28.	H (Part III)	0.35	0.08	0.07	0.05
29.	H × Ft	0.332	0.104	0.062	0.061
30.	(H × Ft) Sin θ	+0.161	+0.055	‡ K1	-0.034
31.	(H × Ft) Cos θ	-0.291	+0.088	§ O1	+0.028
32.	R Sin r : R Cos r	+0.216	-0.203	→	-0.203
33.	r : R	133	0.296	ML	0.67
34.	2r : R²	266	0.088		
35.	f4 (Part III) : F4 (Part III)	238	0.013		
36.	2r + f4 = d4 : R².F4 = D4	144	0.001	D4 cos d4	-0.001
37.	3r : R³	039	0.026		
38.	f6 (Part III) : F6 (Part III)	133	0.022		
39.	3r + f6 = d6 : R³.F6 = D6	172	0.001	D6 cos d6	-0.001
40.	**Sum lines 30 − 39 = Height**				0.46

Approximate calculation for training and planning – not for navigation. The official tide tables are authoritative.