

Tides & Current Approximations

Rule of 12's

This 'rule' is used to estimate the heights of tide over the duration of a tidal cycle from Low-High or vice versa. In order to make use of this rule, you need to know the tidal heights of the Low and High in order to get the tidal range for that period. The range is then divided by 12, and the allocated twelfth amounts are present below in the table for each period of the tidal cycle. This rule assumes that the tidal cycle is relatively symmetrical with the mid-way point having an increased height change. It is more applicable for semi-diurnal tides, but it can be used for diurnal tides where the time block of an hour would be doubled.

SLACK TIDE	1st Hour	2nd Hour	3rd Hour	4th Hour	5th Hour	6th Hour
EST. HEIGHT	1/12	2/12	3/12	3/12	2/12	1/12
Example of 12' L-H difference	06-07:00 / 1'	07-08:00 / 2'	08-09:00 / 3'	09-10:00 / 3'	10-11:00 / 2'	11-12:00 / 1'

50-90 Rule

This 'rule' is used to estimate the speed of the tidal current following each hour from the turn-time (i.e. slack water). In order to make use of this rule, you need to know the maximum current (i.e. flood or ebb) and turn times. This rule assumes that the tidal current is relatively symmetrical with the mid-way point having the maximum flows.

TIME FRAME	SLACK	1st Hour	2nd Hour	3rd Hour	4th Hour	5th Hour	6th Hour
EST. SPEED	0%	50%	90%	100%	90%	50%	0%
Example of 5kt max	06:00 / 0 kts	07:00 / 2.5 kts	08:00 / 4.5 kts	09:00 / 5 kts	10:00 / 4.5 kts	11:00 / 2.5 kts	12:00 / 0 kts

Rule of Thirds

This 'rule' is used to account for estimated drift over specific hourly periods of the tidal current. In order to make use of the rule, you need to know the maximum current (i.e. flood or ebb) and turn times. This rule assumes that the tidal current is relatively symmetrical with the middle hours having the maximum flows.

SLACK TIDE	1st Hour	2nd Hour	3rd Hour	4th Hour	5th Hour	6th Hour
EST. DRIFT	1/3	2/3	3/3	3/3	2/3	1/3
Example of 3 kt max	06-07:00 / 1M	07-08:00 / 2M	08-09:00 / 3M	09-10:00 / 3M	10-11:00 / 2M	11-12:00 / 1M