



Irish National Sailing & Powerboat School

West Pier, Dun Laoghaire, Co. Dublin

Tel: +353 (0) 1 2844195

Email: sailing@inss.ie

Web: www.inss.ie

Tides

Getting the Information – Tide Tables

While a lot of weather apps now include tide information, there's no substitute for checking the information yourself. A tide table example is displayed below.

Dublin (North Wall) - April 2020

01 Wed ☾	05:23 3.3m 11:27 1.4m 18:07 3.2m 23:59 1.6m	02 Thu	06:35 3.3m 12:48 1.4m 19:33 3.2m	03 Fri	01:22 1.6m 07:57 3.4m 14:08 1.2m 20:53 3.4m	04 Sat	02:34 1.4m 09:11 3.6m 15:13 1.0m 22:01 3.6m
05 Sun	03:35 1.1m 10:15 3.9m 16:07 0.6m 22:57 3.9m	06 Mon	04:24 0.8m 11:10 4.2m 16:54 0.3m 23:46 4.2m	07 Tue	05:10 0.5m 12:00 4.5m 17:38 0.1m	08 Wed ☉	00:33 4.3m 05:55 0.3m 12:48 4.6m 18:22 0.0m
09 Thu	01:17 4.4m 06:39 0.2m 13:33 4.6m 19:06 0.1m	10 Fri	01:59 4.4m 07:24 0.2m 14:17 4.5m 19:50 0.3m	11 Sat	02:41 4.3m 08:11 0.4m 15:01 4.2m 20:36 0.5m	12 Sun	03:22 4.1m 09:00 0.6m 15:46 3.9m 21:25 0.9m
13 Mon	04:06 3.8m 09:55 1.0m 16:37 3.6m 22:21 1.2m	14 Tue ☾	04:57 3.6m 10:57 1.2m 17:39 3.3m 23:26 1.5m	15 Wed	06:00 3.4m 12:13 1.4m 18:56 3.2m	16 Thu	00:43 1.7m 07:15 3.3m 13:33 1.5m 20:16 3.2m
17 Fri	02:02 1.7m 08:29 3.3m 14:42 1.4m 21:23 3.3m	18 Sat	03:03 1.6m 09:30 3.4m 15:34 1.2m 22:15 3.4m	19 Sun	03:51 1.4m 10:19 3.6m 16:16 1.0m 22:57 3.6m	20 Mon	04:29 1.2m 11:01 3.7m 16:51 0.9m 23:32 3.7m
21 Tue	05:03 1.1m 11:38 3.9m 17:24 0.7m	22 Wed	00:06 3.8m 05:36 0.9m 12:13 4.0m 17:56 0.7m	23 Thu ☉	00:39 3.9m 06:09 0.8m 12:48 4.0m 18:28 0.6m	24 Fri	01:10 3.9m 06:41 0.8m 13:21 4.0m 18:59 0.7m
25 Sat	01:41 3.9m 07:14 0.8m 13:53 3.9m 19:32 0.8m	26 Sun	02:11 3.9m 07:49 0.9m 14:28 3.8m 20:08 0.9m	27 Mon	02:46 3.8m 08:28 1.0m 15:06 3.7m 20:45 1.1m	28 Tue	03:22 3.7m 09:12 1.1m 15:50 3.5m 21:31 1.3m
29 Wed	04:06 3.6m 10:06 1.2m 16:45 3.4m 22:27 1.5m	30 Thu ☾	05:03 3.5m 11:12 1.3m 17:55 3.3m 23:36 1.6m				

In Ireland, the National Governing Body for Sailing and Powerboating, Irish Sailing, publish tide tables for the main areas of recreational activity around our coasts.

- [Irish Sailing Tide Tables](#)

Tides are mainly affected by the alignment of earth, moon and sun.

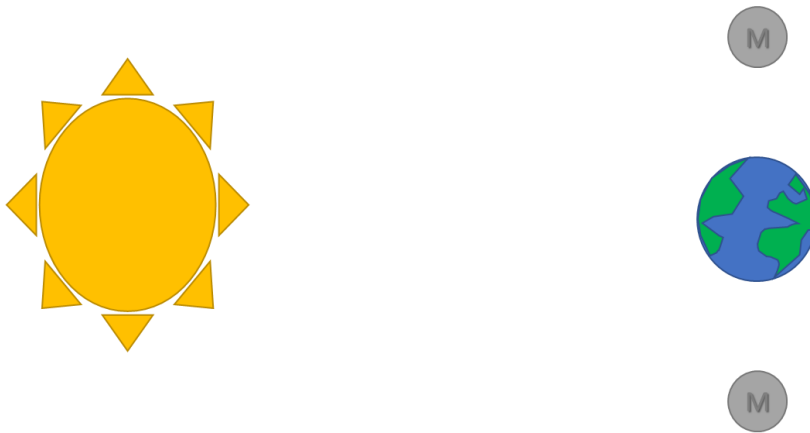
Terminology

- **Tidal Range** – This is difference between high and low water.
- **Spring Tides** – These occur on full and new moons. Higher High Waters and Lower Low Waters are the characteristic of spring tides (or in other words, a larger tidal range)
- **Neap Tides** – These occur on half moons. Lower High Waters and Higher Low Waters are the characteristics of neap tides (or in other words, a smaller tidal range)

Spring Tide – Alignment of Moon, Earth and Sun



Neap Tide – Alignment of Moon, Earth and Sun



Reading a Tide Table

Dublin (North Wall) - April 2020			
01 Wed ☾	02 Thu	03 Fri	04 Sat
05:23 3.3m 11:27 1.4m 18:07 3.2m 23:59 1.6m	06:35 3.3m 12:48 1.4m 19:33 3.2m	01:22 1.6m 07:57 3.4m 14:08 1.2m 20:53 3.4m	02:34 1.4m 09:11 3.6m 15:13 1.0m 22:01 3.0m
05 Sun	06 Mon	07 Tue	08 Wed ☉
03:35 1.1m 10:15 3.9m 16:07 0.6m 22:57 3.9m	04:24 0.8m 11:10 4.2m 16:54 0.3m 23:46 4.2m	05:10 0.5m 12:00 4.5m 17:38 0.1m	00:33 4.3m 05:55 0.3m 12:48 4.6m 18:22 0.0m
09 Thu	10 Fri	11 Sat	12 Sun
01:17 4.4m 06:39 0.2m 13:33 4.6m 19:06 0.1m	01:59 4.4m 07:24 0.2m 14:17 4.5m 19:50 0.3m	02:41 4.3m 08:11 0.4m 15:01 4.2m 20:36 0.5m	03:22 4.1m 09:00 0.6m 15:46 3.9m 21:25 0.9m
13 Mon	14 Tue ☾	15 Wed	16 Thu
04:06 3.8m 09:55 1.0m 16:37 3.6m 22:21 1.2m	04:57 3.6m 10:57 1.2m 17:39 3.3m 23:26 1.5m	06:00 3.4m 12:13 1.4m 18:56 3.2m	00:43 1.7m 07:15 3.3m 13:33 1.5m 20:16 3.2m
17 Fri	18 Sat	19 Sun	20 Mon
02:02 1.7m 08:29 3.3m 14:42 1.4m 21:23 3.3m	03:03 1.6m 09:36 3.4m 15:34 1.3m 22:15 3.4m	03:51 1.4m 10:19 3.6m 16:16 1.0m 22:57 3.6m	04:29 1.2m 11:01 3.7m 16:51 0.9m 23:32 3.7m
21 Tue	22 Wed	23 Thu ☉	24 Fri
05:03 1.1m 11:36 3.9m 17:24 0.7m	00:06 3.8m 05:36 0.9m 12:13 4.0m 17:56 0.7m	00:39 3.9m 06:09 0.8m 12:48 4.0m 18:28 0.6m	01:10 3.9m 06:41 0.8m 13:21 4.0m 18:59 0.7m
25 Sat	26 Sun	27 Mon	28 Tue
01:41 3.9m 07:14 0.8m 13:53 3.9m 19:32 0.8m	02:11 3.9m 07:49 0.9m 14:28 3.8m 20:08 0.9m	02:46 3.8m 08:28 1.0m 15:06 3.7m 20:45 1.1m	03:22 3.7m 09:12 1.1m 15:50 3.5m 21:31 1.3m
29 Wed	30 Thu ☾		
04:06 3.6m 10:06 1.2m 16:45 3.4m 22:27 1.5m	05:03 3.5m 11:12 1.3m 17:55 3.3m 23:36 1.6m		

DATE	Time of HW or LW	Height of Tide	
08 Wed ☉	00:33	4.3m	← HW
	05:55	0.3m	← LW
	12:48	4.6m	← HW
	18:22	0.0m	← LW

Large Tidal Ranges
Spring Tide

DATE	Time of HW or LW	Height of Tide	
14 Tue ☾	04:57	3.6m	← HW
	10:57	1.2m	← LW
	17:39	3.3m	← HW
	23:26	1.5m	← LW

Smaller Tidal Ranges
Neap Tide

Rule of Twelfths

In Ireland, our tidal cycle is roughly two high tides and two low tides approximately every 25 hours. For the purpose of determining tidal flow, it is acceptable to say that the time difference between high and low water is approximately every 6 hours. This tidal cycle is called **semi-diurnal**.

The movement of the water is not uniform. It speeds up then slows down over the 6 hours. The rule of twelfths is a good way to see how much water is moving in any one-hour period.

Hour	Amount of Water Moving in that Hour
1 st Hour	1/12 of total
2 nd Hour	2/12 of total
3 rd Hour	3/12 of total
4 th Hour	3/12 of total
5 th Hour	2/12 of total
6 th Hour	1/12 of total

As you can see, half of the total tidal range moves between the 3rd and 4th hour of the tide. This may be a useful thing to know if anchoring or tying your boat up to a set of steps.

Want to know more....

This is a basic overview of tides. Our Day Skipper or Yachtmaster Theory Courses go into much more detail for sailors. Skippers need to understand the effect the direction of the tidal flow will have on sailing boats and navigation.

- [Day Skipper Theory](#)
- [Yachtmaster Theory](#)

Powerboaters may like our short classroom course that helps planning passages, including what effects tides will have on fast powerboats. This course is designed to teach you the navigation skills for the Irish Sailing Intermediate Powerboat Course and Irish Sailing Advanced Powerboat Course.

- [Coastal Navigation for Small Boats](#)