

## Guide to Weather and Sailing at Portishead

### General Weather

Use [BBC Weather](#) to give an idea of the general weather, if it's sunny this is great for sailing, if it's wet it is not ideal, however, you probably won't notice once sailing as you are dressed to get wet anyway. Just make sure you bring a waterproof kit when rigging the boat on shore.

Also take note of the temperature as this will affect what kit you need to wear while sailing. In general a wetsuit is (almost) always needed in the UK. A short or long wetsuit can be used depending on the temperature although it always feels colder on the water than on land so you may need more kit than you think - even on a hot sunny day. If you think you will only wear a wetsuit it is still a good idea to take a woolly hat and spray top on the water with you in case conditions change or it is colder than you expected.

### Wind Forecast

The wind forecast is perhaps the most important for sailors. Key things to look out for are;

- 1. Wind Speed (including wind gusts)**
- 2. Wind Direction**
- 3. Trends over time (increasing/ decreasing/ changing direction)**

Each of these are described in more detail later. A few examples of the most common websites are below. It is a good idea to compare a few to get a general consensus on the forecast. Note that local effects from the land/ buildings and particularly the tide will influence what the wind actually feels like on the water. If you look at the forecast a few days away it can change significantly so it's best to also look the day before and on the day for a more accurate prediction.

### Websites

Windguru is one of the most widely used websites and is embedded into the Portishead Sailing Club website on the [Weather Page](#).

There is also a webcam on [Weather Page](#) which can give you a good idea what the water/ waves look like.

## Windguru

GFS 27 km 20.07. 00 UTC																	Powered by Windguru				
	Sa 20.	Sa 20.	Sa 20.	Sa 20.	Sa 20.	Sa 20.	Sa 20.	Su 21.	Su 21.	Su 21.	Su 21.	Su 21.	Su 21.	Su 21.	Mo 22.	Mo 22.	Mo 22.	Mo 22.	Mo 22.	Mo 22.	
	04h	07h	10h	13h	16h	19h	22h	04h	07h	10h	13h	16h	19h	22h	04h	07h	10h	13h	16h	19h	22h
Wind speed (knots)	11	13	16	17	14	13	9	7	7	10	9	9	7	10	10	8	8	8	7	7	3
Wind gusts (knots)	21	20	22	23	18	18	16	13	13	12	13	12	10	18	19	15	12	11	9	9	4
Wind direction	↑	↗	↗	→	→	→	→	↗	↗	↗	↗	↗	↗	↑	↑	↑	↑	↑	↑	↑	↑
*Temperature (°C)	16	16	17	17	17	17	14	14	15	18	19	21	19	16	15	16	19	22	23	22	18
Cloud cover (%)	66	33	30	22		34	7	67	71	50	69	93	96	91	100	100	78	64	6		
high / mid / low	30	16	17	26																	
	78	67	69	82	90	70				25	22	34	46	12							
*Precip. (mm/3h)	0.6	0.7																			
*Pressure (hPa)	4	4	6	8	11	12	15	17	19	20	21	21	20	22	21	21	22	22	22	21	21
Humidity (%)	95	93	81	81	81	78	86	93	92	79	71	70	80	88	92	89	75	68	68	73	87
Lat: 51.4912, Lon: -2.7943, Alt: 0 m, Timezone: BST (UTC+1) ☀️ 05:22 - 21:12																					

[\[Detail / Map\]](#)

[Bristol Port Company](#) (also linked on the Portishead [Weather Page](#).) provide live weather including current average wind speed, gusts (in mph) and wind direction. This is also interesting to look at when you come off the water to know what the wind speed was while you were out.

**skylinkpro**  
the weather site

Weather for Avonmouth VTS at 2019-07-20 10:06:00 ... Temp 14.9 C ... Humidity 91% ... Wind Speed 22 mph ... Wind Gust 25 mph

Current Weather for Avonmouth VTS: Issue Date Jul 20th 10:06 GMT

**Wind**

Wind Speed mph: 22  
Gust mph: 25  
Avg mph: 22  
Direction: WSW

**Temperature**

Out °C: 14.90  
Dew °C: 13.42

**Rainfall**

Day mm: 1  
Month mm: 1  
Year mm: 1

**Forecast**

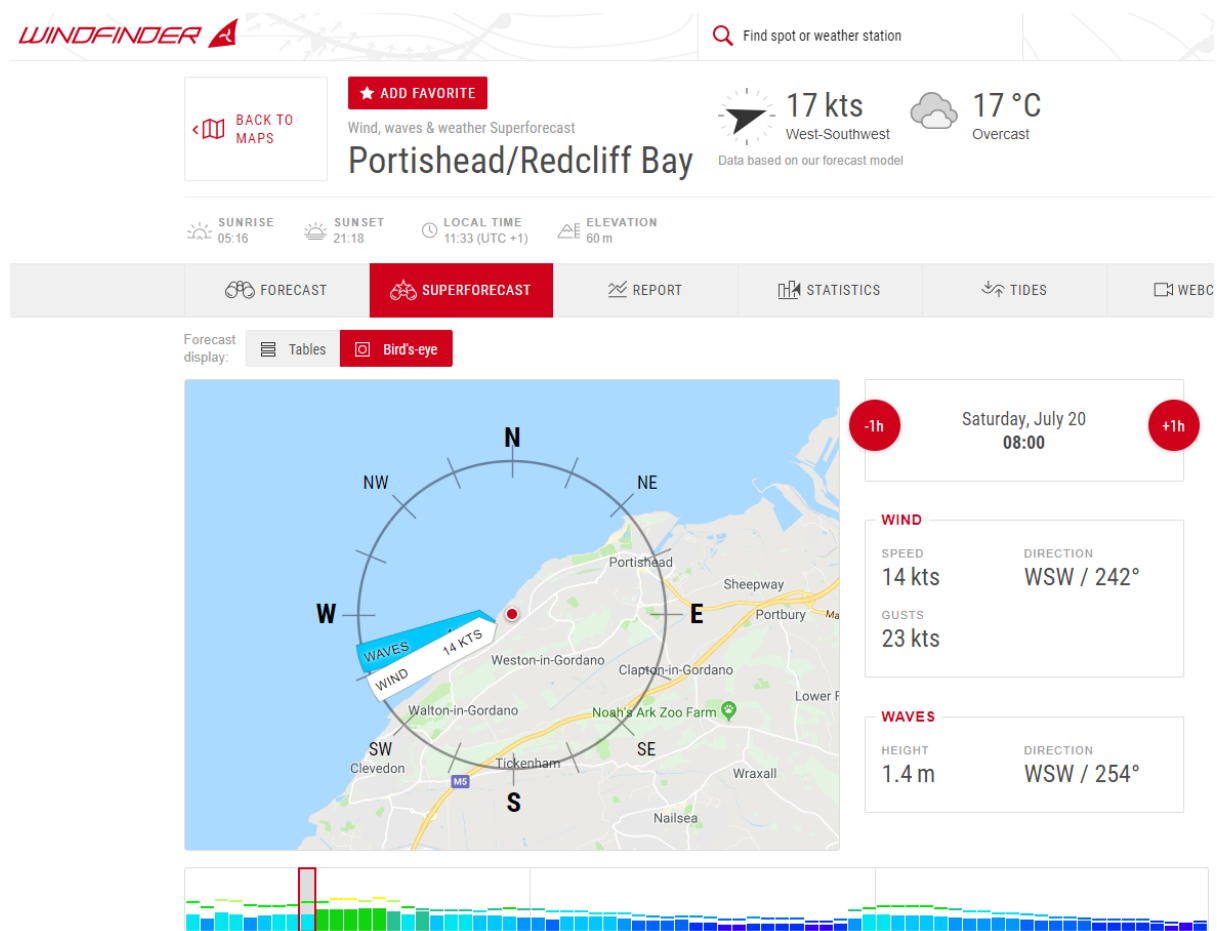
Today: [Sun with clouds]  
Tomorrow: [Sun with clouds]  
48 Hours: [Sun with clouds]

**Pressure**

Pressure mb: 1005.5  
Sea Level mb: 1005.5

**WHO WE ARE**  
Skyview are experts in providing effective weather monitoring solutions. Skylink-pro is our feature rich Gateway for Professional, Commercial & Industrial customers: providing clear, concise & accurate intelligence at the touch of a button.

[Windfinder](#) is useful for providing and hourly forecast using their 'Superforecast'. The 'Birds Eye' display is also useful for showing the wind and wave directions with a compass and map. This is particularly useful when considering the importance of wind direction discussed later.



## 1. Wind Speed

**Wind speed** gives the mean (average) wind speed. This is a good indication of the lightest wind which you will experience and will generally be maintained over a prolonged period of time.

**Wind gusts** gives a good indication of the strongest wind you will experience, however wind gusts will be short in duration (normally seconds rather than minutes). Depending on the direction wind gusts can be more or less frequent but you will normally be sailing in a gust 20-50% of the time. The rest of the time you are likely to experience a wind speed of roughly the mean wind speed.

The Beaufort scale is the most widely used measure of wind speed and based on observations rather than actual measurements. Sailors will often refer to the wind speed as 'Force 3' rather than a speed in Mph, Knots or Km/h. If quoting actual speeds sailors will tend to use knots. The table below shows the Beaufort scale and can be used to interpret the forecast online. There are also some comments on the left hand side which relate specifically to dinghy sailing.

We can go sailing as the tide will help push you around the bay. It may be difficult to tell where the wind is coming from, sit comfortably and steer the boat accurately.

Ideal conditions for sailing. Above 3 knots gives enough wind to sail sensibly. As the wind speed increases things get more exciting as the boat moves faster. Up to 14 Knots is still fun and manageable.

Above 14 Knots waves start to pick up and the boat will be more likely to capsize. Up to 21 Knots is great fun for experienced sailors. Also a good challenge less experienced sailors that are more confident.

A challenge for confident experienced sailors. Less experienced sailors should pair up with someone more experienced.

Not a day for dinghy sailing.

Beaufort Wind Scale in Miles per hour (Mph), knots and Kilometers per hour (Km/h)				
Beaufort Scale Force	Wind in MPH	Wind in Knots	Wind in Km/h	Description - Wave Heights—Visible Condition
Force 0	0-1	0-1	0-1	Calm; Ht 0.0m ~ At sea no waves - glassy like appearance of sea.
Force 1	1 - 4	1 - 3	2 – 6	Light Airs Ht 0m ~ At Sea wind makes glassy ripples on water.
Force 2	4 - 7	4 - 6	7 – 11	Light breeze Ht 0.1m ~ At Sea smooth wavelets
Force 3	8 - 12	7-10	13 - 19	Gentle breeze Ht 0.4m Slight ~ At sea slight waves no white horses.
Force 4	13 - 18	11-16	20 – 30	Moderate breeze Ht 1m - Slight to moderate ~ At Sea waves described as with occasional white horses. On land raises dust and loose paper; small branches are moved
Force 5	19 - 24	17 - 21	31- 39	Fresh breeze Ht 2m Moderate ~ At sea consistent white horses
Force 6	25 - 31	22 - 27	40 – 50	Strong breeze Ht 3m Rough At Sea large waves start to form, more extensive white foam crests, some blown spray.
Force 7	32 - 38	28 - 33	51 – 61	Moderate (near) gale Ht 4m Rough to very rough. At Sea waves begin to heap up and streaks begin to appear down the waves. On land whole trees in motion; inconvenience in walking against wind
Force 8	39 - 46	34 - 40	62 – 74	Fresh gale Ht 5.5m Very rough to high At Sea waves get longer - crests break into spindrift and the streaks become more pronounced.
Force 9	47 - 54	41 - 47	75 – 88	Strong or severe gale Ht 7m High At Sea high waves and dense streaks of foam may begin to affect visibility. On land slight structural damage occurs; chimney pots and slates removed
Force 10	55 - 63	48 - 55	89 - 102	Whole gale or Storm - Ht 9m Very High At Sea very high waves with overhanging crests, lots of spray makes the sea almost white, visibility seriously affected.
Force 11	64 - 72	56 - 63	103 – 117	Violent Storm Ht 11m Very High At Sea exceptionally high waves and a complete coverage of long white foam patches. All crests blown into froth.
12	73+	64 +	118 +	Hurricane Ht 14m plus Phenomenal At sea the air is completely filled with driving spray, visibility extremely difficult. On land devastation occurs.

## 2. Wind Direction

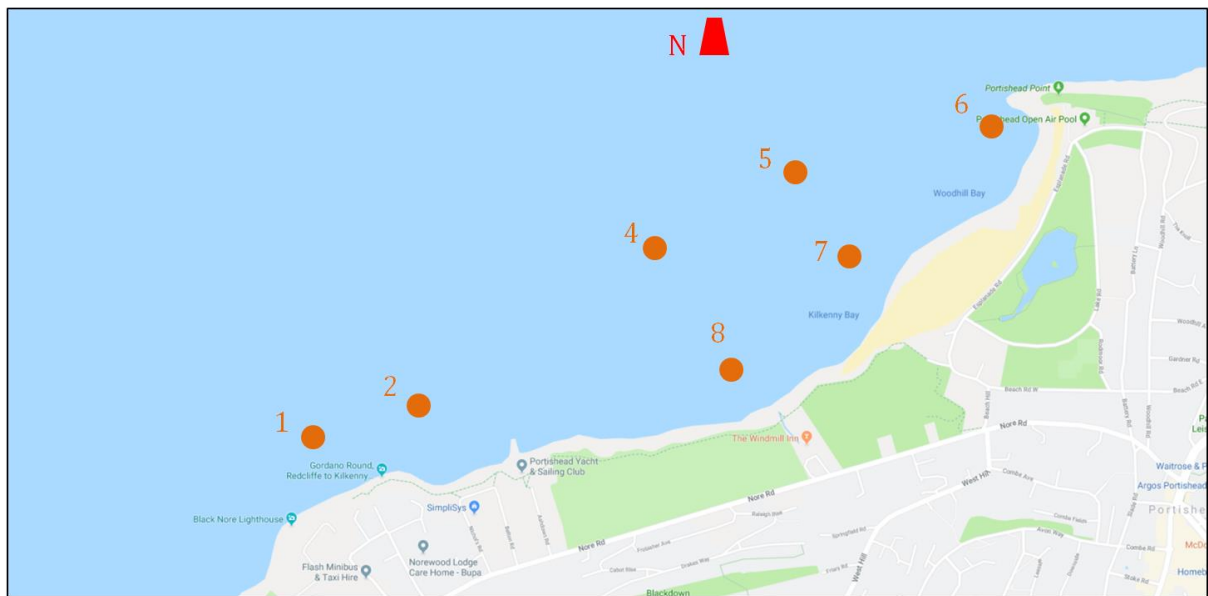
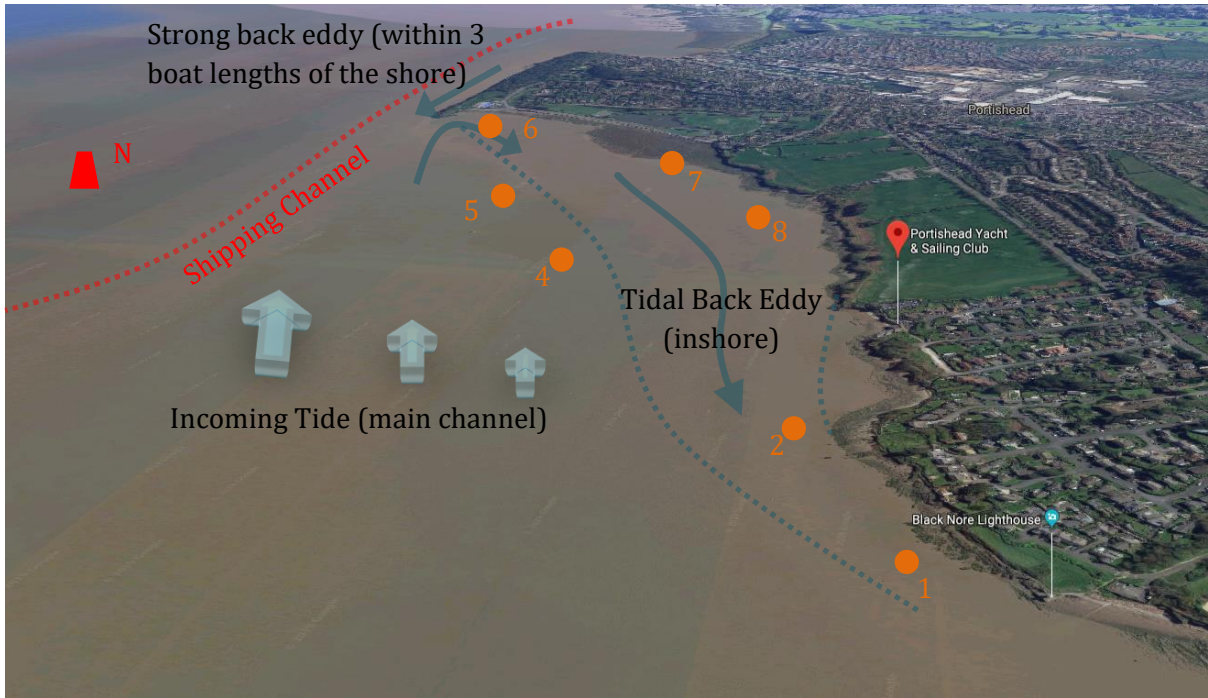
-Wind is stable. Gusts are generally a similar strength to the mean wind.  
-Wind direction is similar to the incoming tide making the wind and waves less in the main channel. The tidal back eddy it will be windier and more wavy inshore.  
-A wind direction SW to W is the prevailing wind direction for Portishead and is straight along the estuary therefore is the most stable.  
-Onshore it will feel more sheltered near the top of the slipway but windier at the end.



-Wind is reasonably unobstructed so direction is generally stable and gusts are similar to the mean wind.  
-Wind direction opposes the incoming tide making the wind and waves bigger in the main channel. The tidal back eddy means there will not be waves inshore and it will be sheltered in the bay.  
-Onshore you will feel the same wind as on the water, although the tide in the main channel will increase this by 3-4 knots. The sailing club may feel sheltered with a wind coming from the E.

-The wind coming directly off the land so will be very variable in both direction and strength. Between E and SE is better than SE to SW. Gusts will be sudden and can be double the mean wind. Changes in direction can be 45°. The wind feels most harsh at higher wind speeds; light to medium winds can be a little awkward but not too bad to sail in.  
-Tidal effects have little influence on the wind. The sea state is always flat even in strong winds.  
-Onshore it will feel and look calm. Look at the forecast as the forecast speed will be present further away from the shore.





These images show the arrangement of the buoys and the tidal direction on an incoming tide. It is not often we sail on an outgoing tide, however, the tidal flow in the main channel is reversed and there are no real back eddies.

### **3. Trends over time (increasing/ decreasing/ changing direction)**

Look at how long you expect to be on the water and look at how the wind speed and wind direction are expected to change over this time. If there is a weather front about to come through or one that has just passed the wind strength and direction can change significantly which can dramatically change the sailing conditions.

It is also worth looking at the general trend and if any significant changes are expected. Often the weather may arrive earlier or later than expected and would otherwise be a surprise.