

# Weather Forecasting

Good Sailing Technique



LYMINGTON TOWN  
SAILING CLUB

# Weather Forecasting

- Braincasting
- Case Study – Tuesday 2<sup>nd</sup> March 2021



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# Braincasting

Braincasting is understanding the big picture of the weather on any given day, in any location, and building up your own forecast before you reach for the Apps!



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# Braincasting

- Over breakfast, we need to:
  - Know the **General Situation** by looking at a Surface Pressure Chart and predict what we expect to happen (Braincast)
  - Take **Observations** by looking out the window, at a weather station and webcam (Nowcast)
  - **Check** our Braincast against our Nowcast (Validate)
  - Take a **Forecast** from a range of weather models and check against our Nowcast (re-validate)
  - Make notes of what to expect and any **signs of change**




# Braincasting Cont'd...

- Then:
  - GO SAILING! Keeping one eye on the clouds for the signs of change you expect
- And finally:
  - On returning home, review by logging what happened and scoring your accuracy.
  - Learn from what happened and try and work out why!

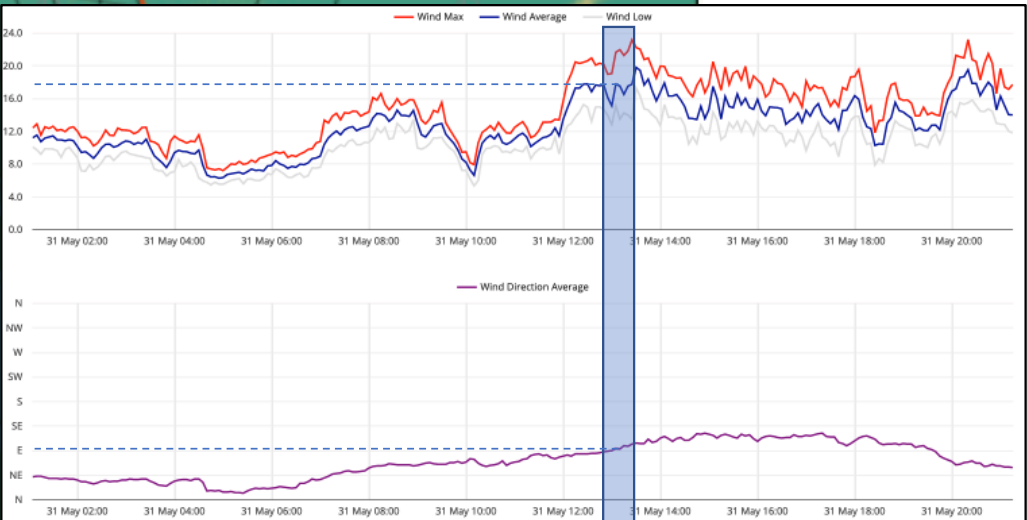
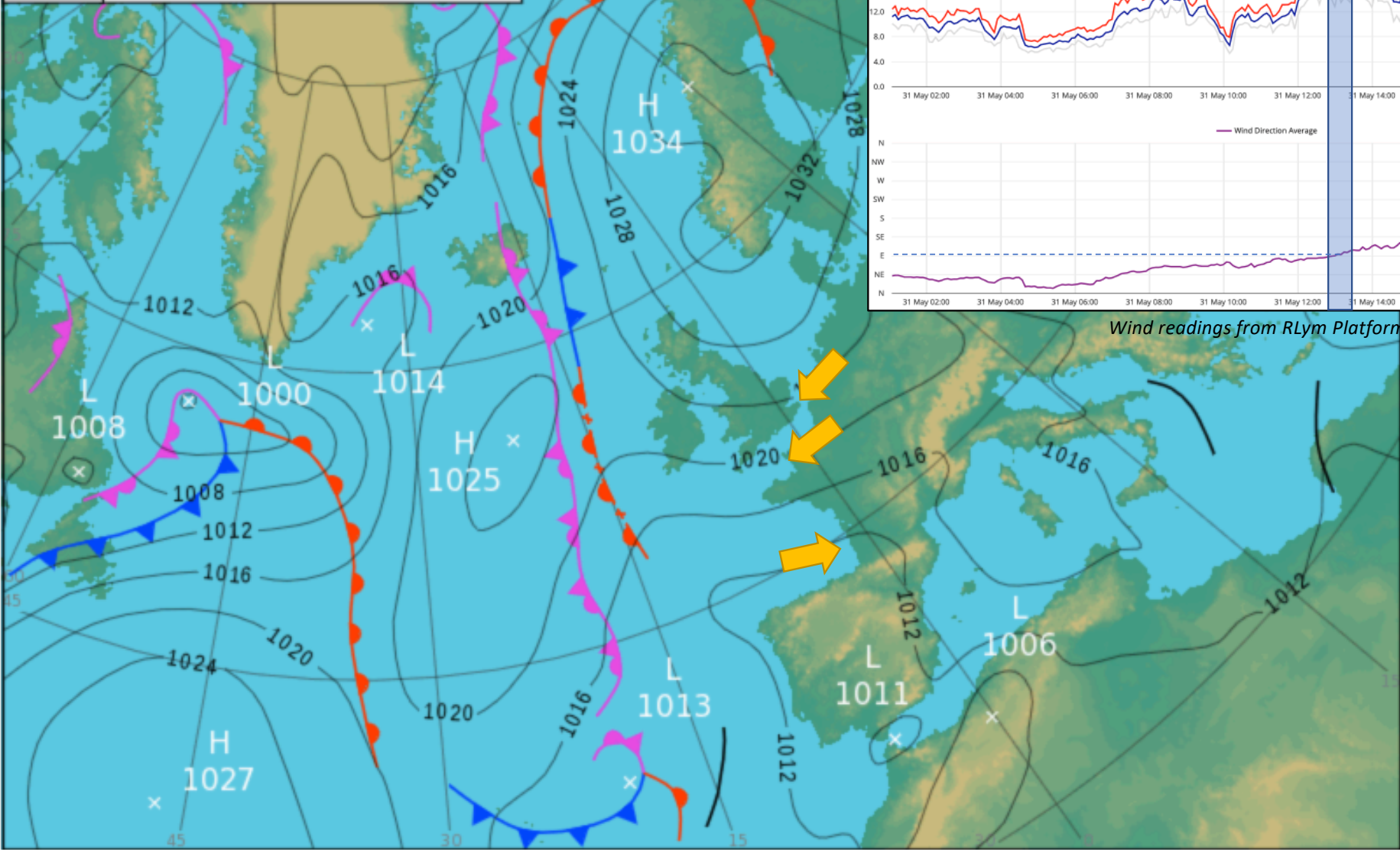
# Braincasting – General Situation

- We obtain the General Situation from Surface Pressure Charts – which technically are forecasts. Met Office is great for where we live.
- Take a chart for 0000 UTC, 1200 UTC, and 0000 UTC (tonight)
- Observe the major systems, and how fast/where they are moving
- How do they affect where you are sailing? What do the isobars indicate about the wind and are there any fronts expected?



Forecast chart (T+12)

Valid 1200 UTC Sun 31 MAY 2020



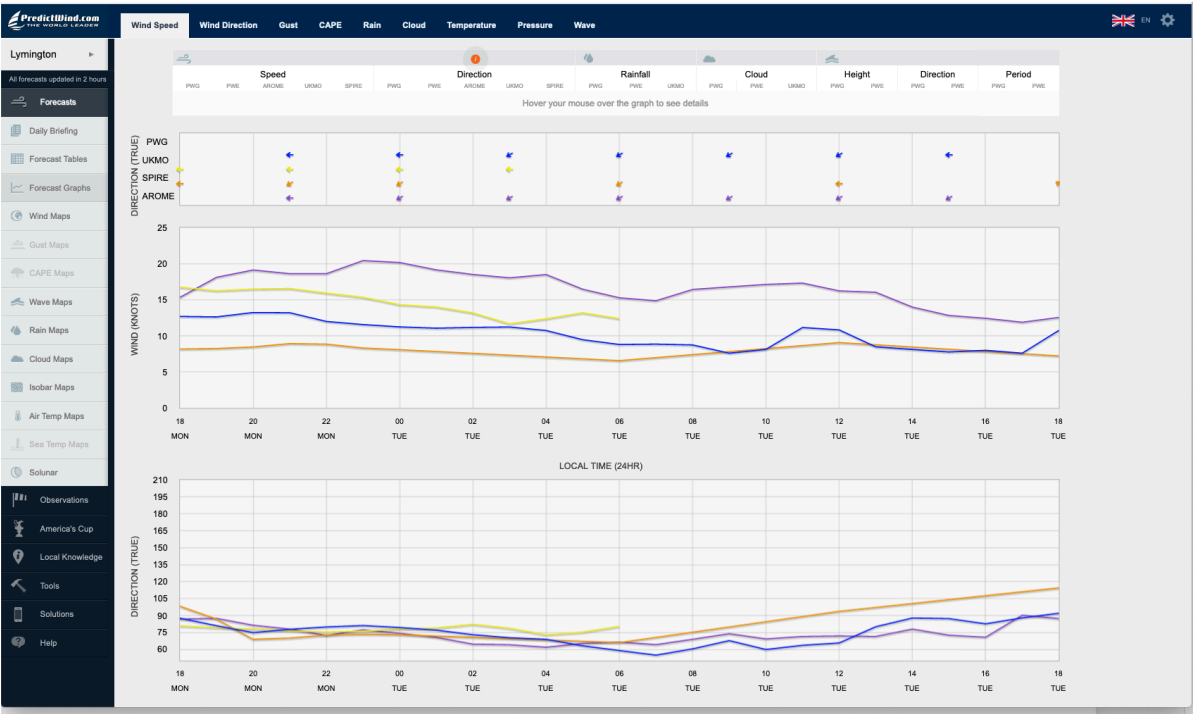
Wind readings from RLym Platform courtesy of RPR Weather File

# Forecast Apps

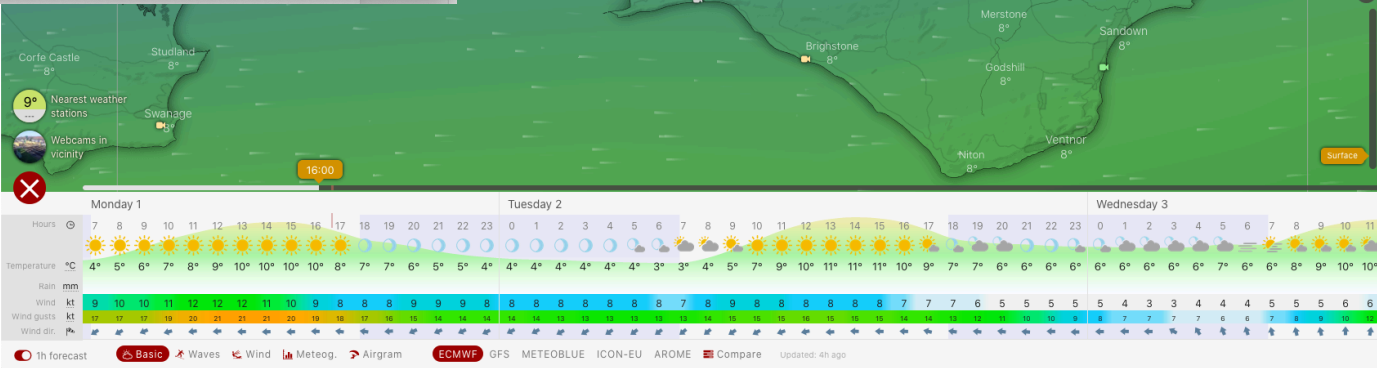


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Windy.com



Predict Wind

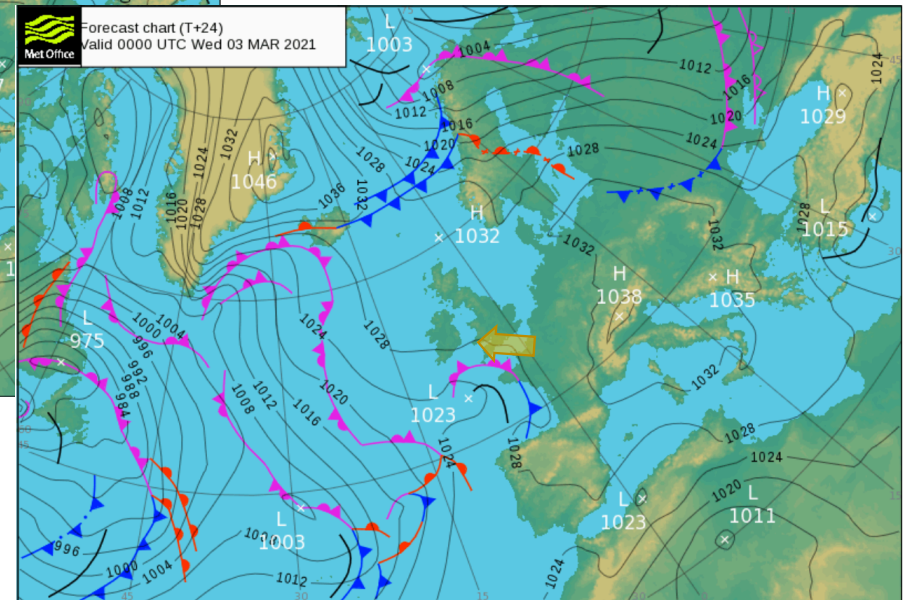
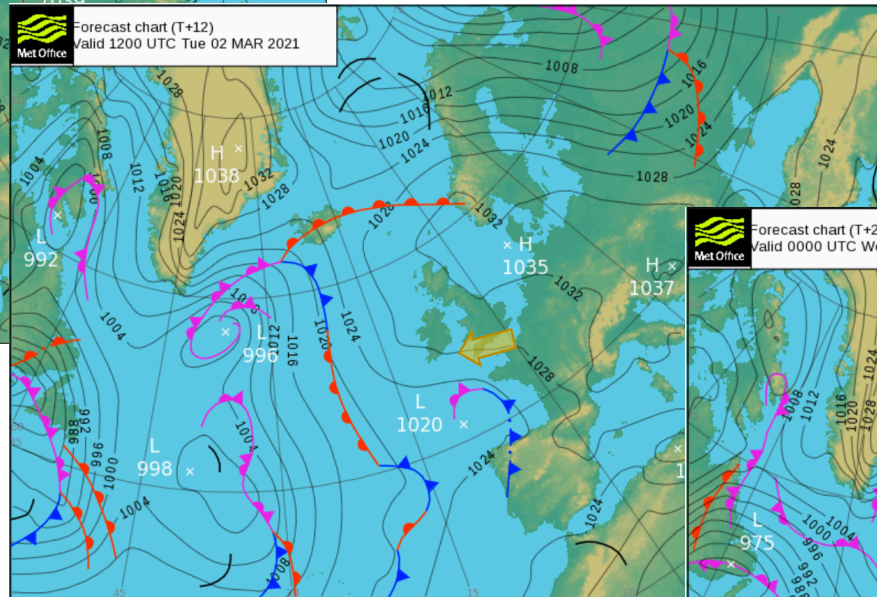
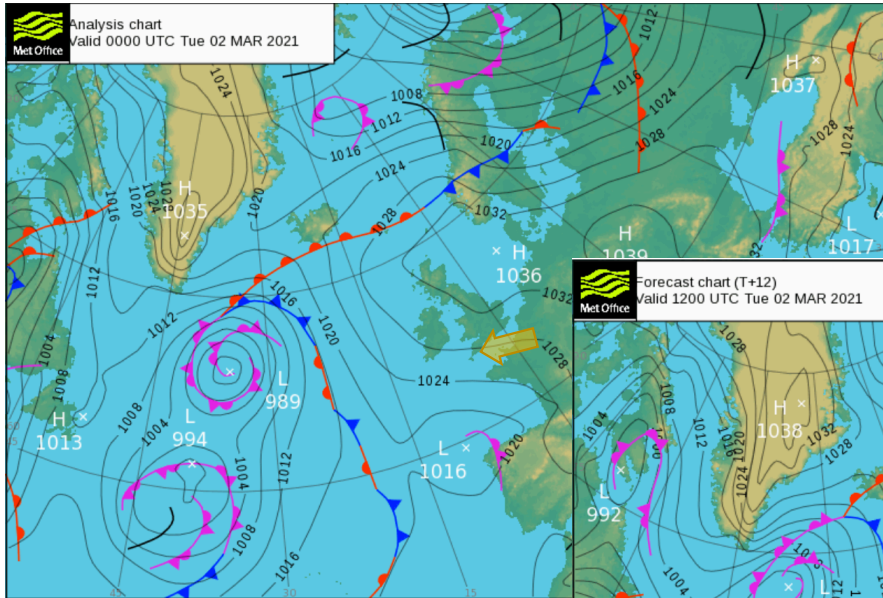


# Case Study

- Tuesday 2<sup>nd</sup> March 2021 (18)
- Case Study will run through:
  - Braincast
  - Observation
  - Forecast
  - Review

# General Situation – Tuesday 2<sup>nd</sup> March 2021

What's your Braincast from this information?



High 1036 West of Denmark dominates UK weather, Low 1016 of NW Spain tracking slowly N up through Biscay with frontal activity ahead of it

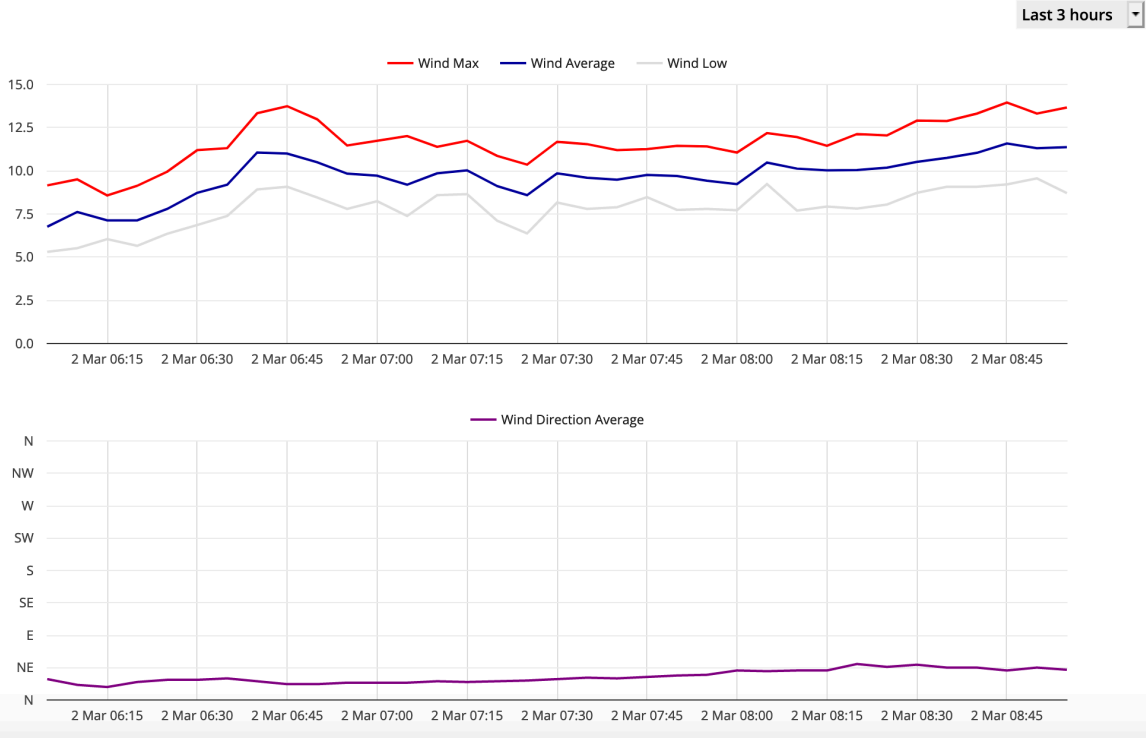


# Braincast

- Dominated by high pressure – stable and steady conditions
- Light NE winds veering E then SE later and weakening
- No frontal activity expected

# Observations

How did we do? Do the observations match what we expect at 0900?



R Lym YC Platform – courtesy of RPR Weatherfile

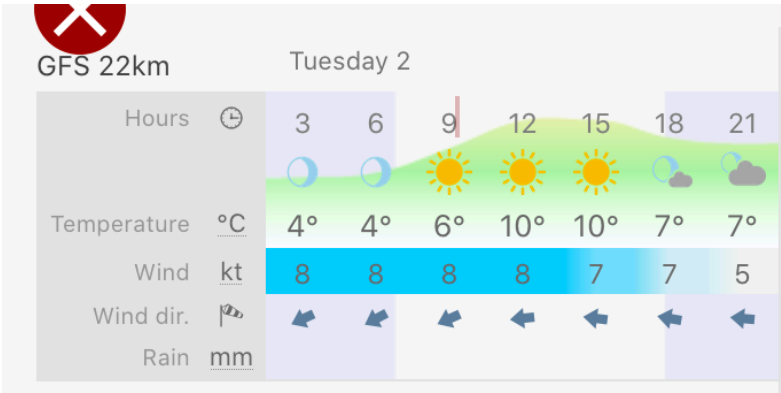
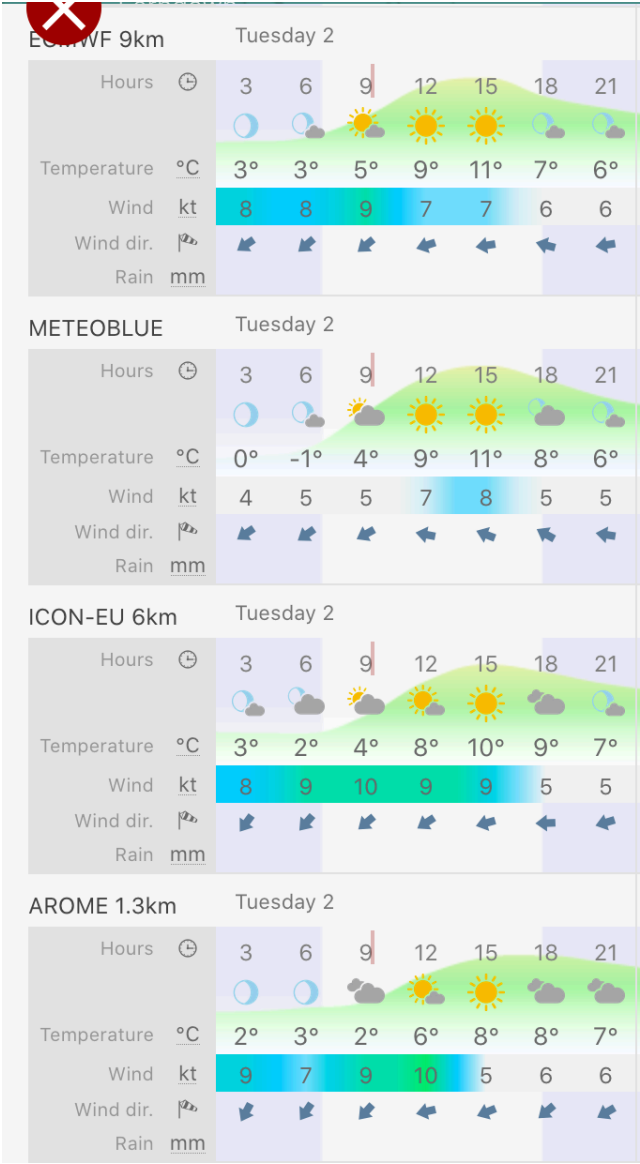


Pennington Weather Bureau





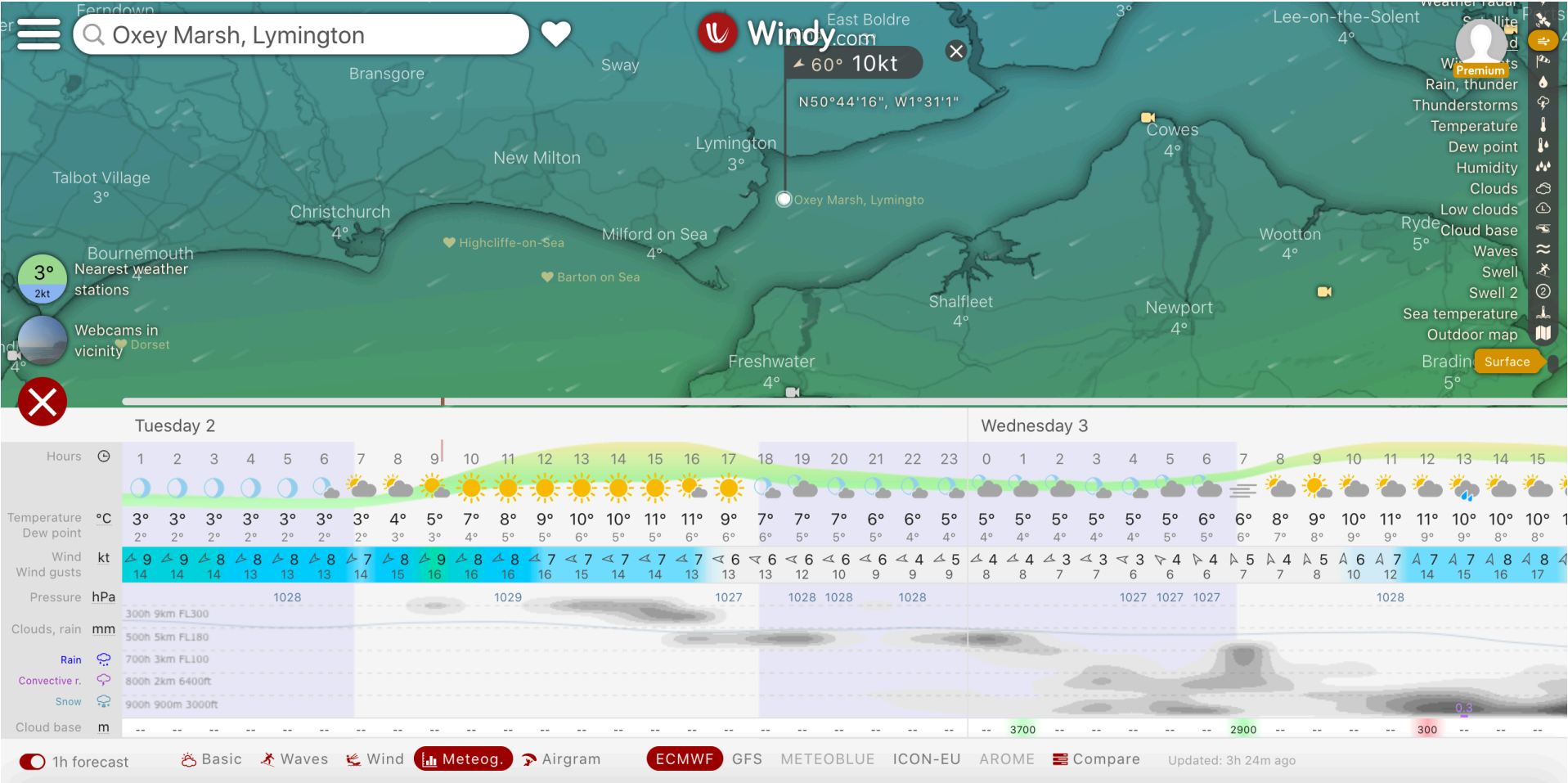
# Forecast



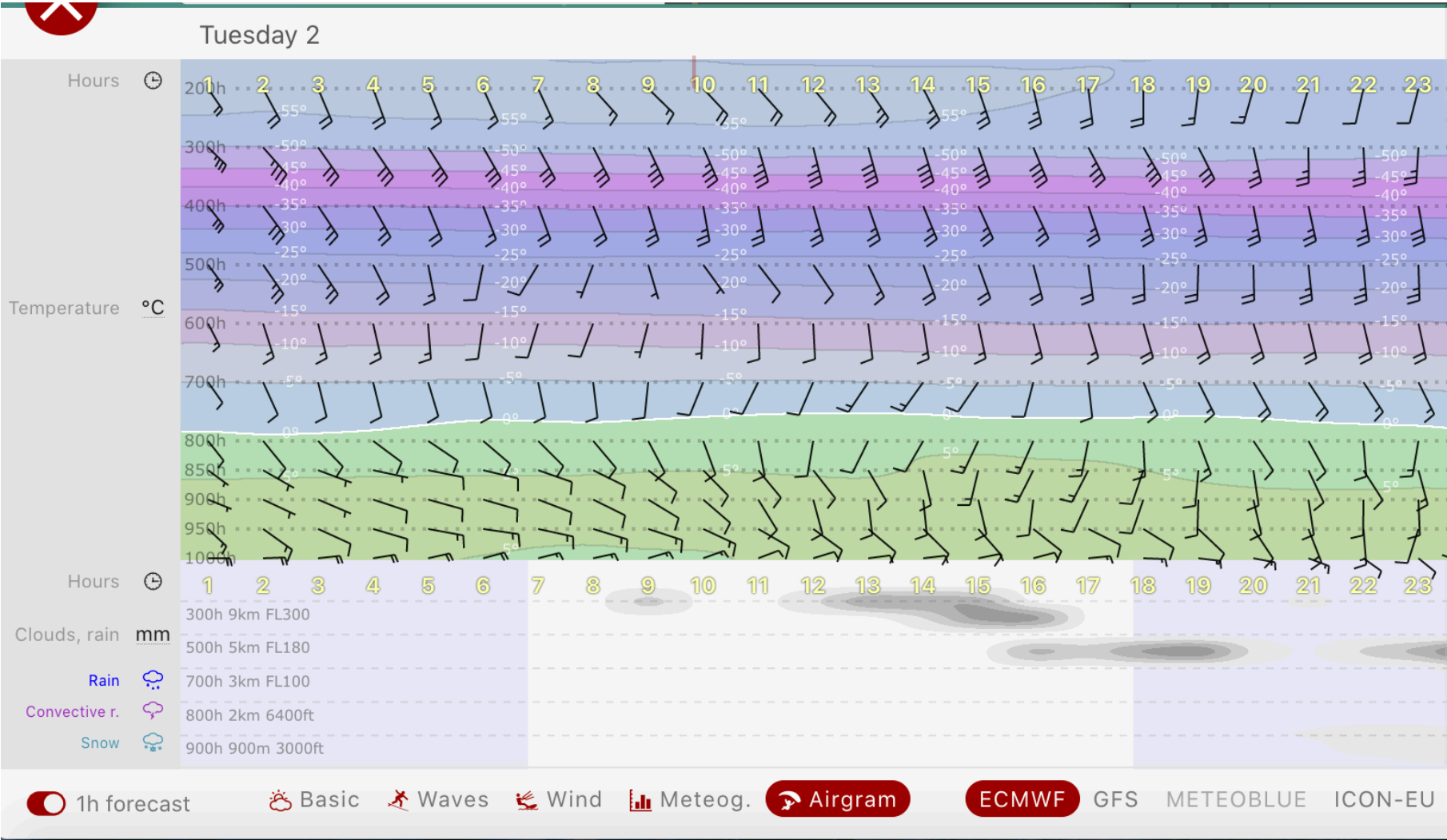
You will notice a very slight discrepancy between the models, but we can be reasonably confident

We tend to use AROME and ECMWF....

# Forecast - Windy.com (Meteogram / ECMWF)



# Forecast - Windy.com (Airgram / ECMWF)



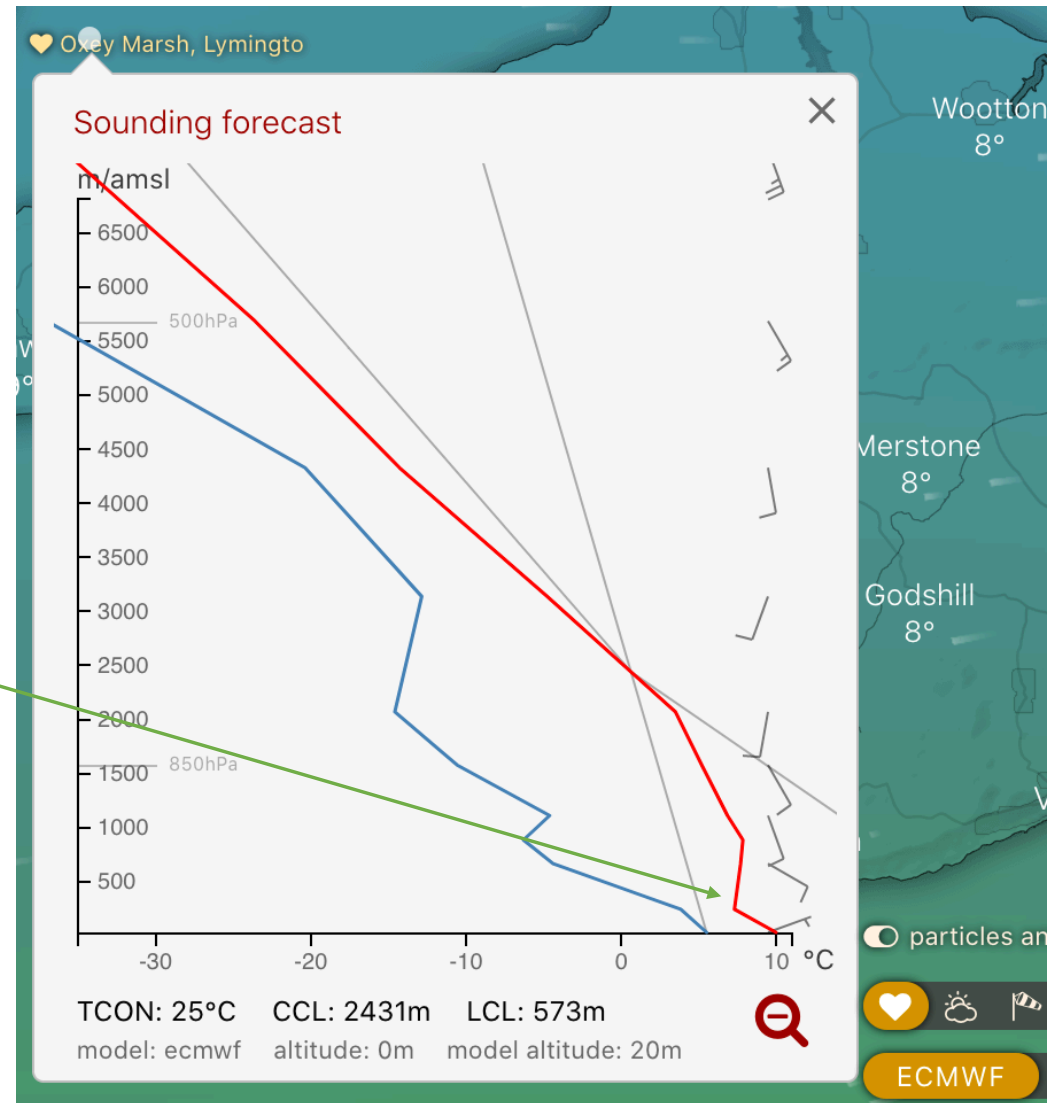
## Forecast - Windy.com (Sounding / ECMWF)

Sounding forecast 1300 –

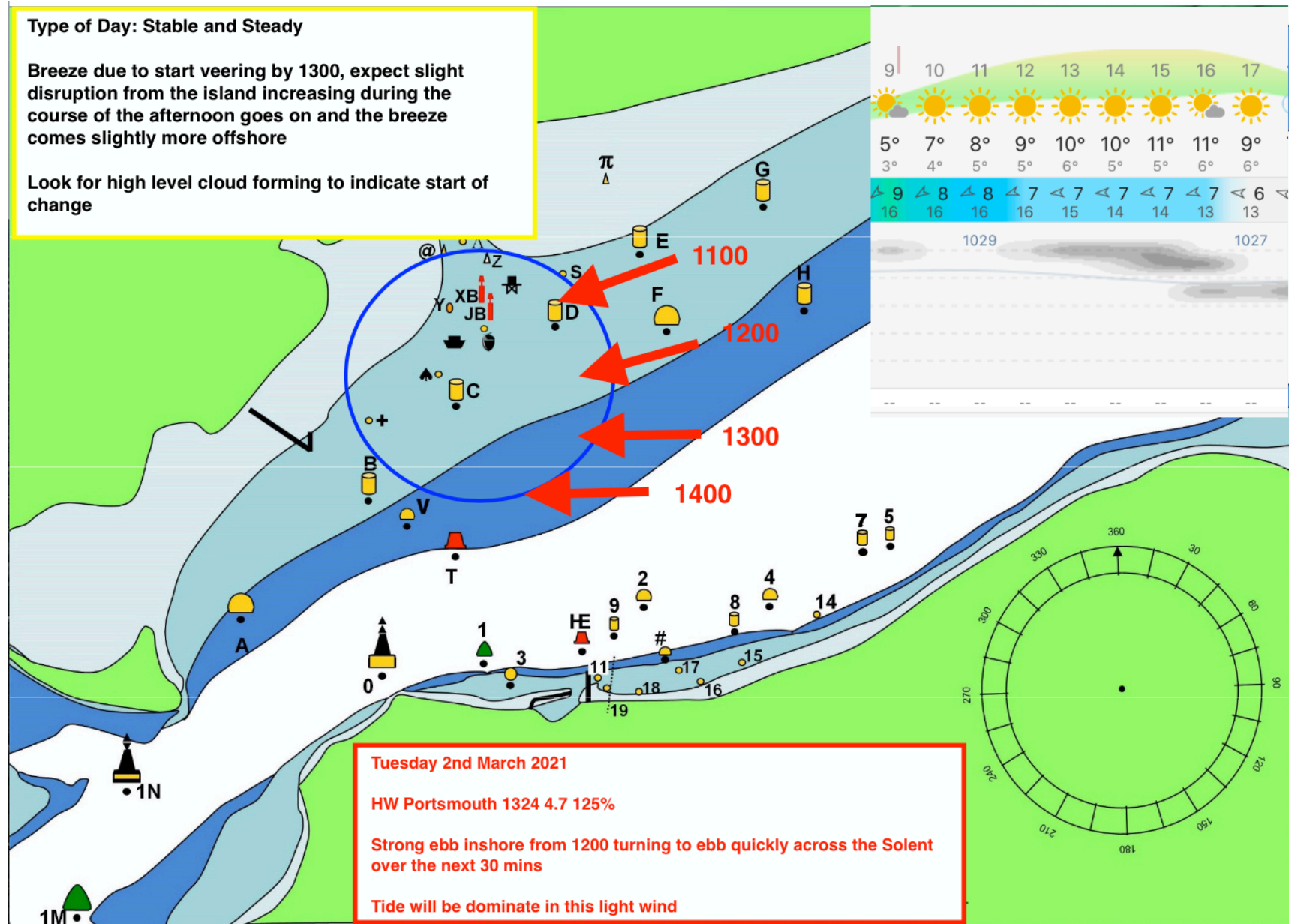
Red line is temp and blue is dew point, forecast at different altitudes

This forecast shows a temperature inversion at 1000m (red line turns right) and light winds aloft.

The wind forecast on the right hand side indicates a light and stable day, no strong winds being brought down to sea level



Forecast Summary  
Check chart to take afloat



# Review – How did we do?

