

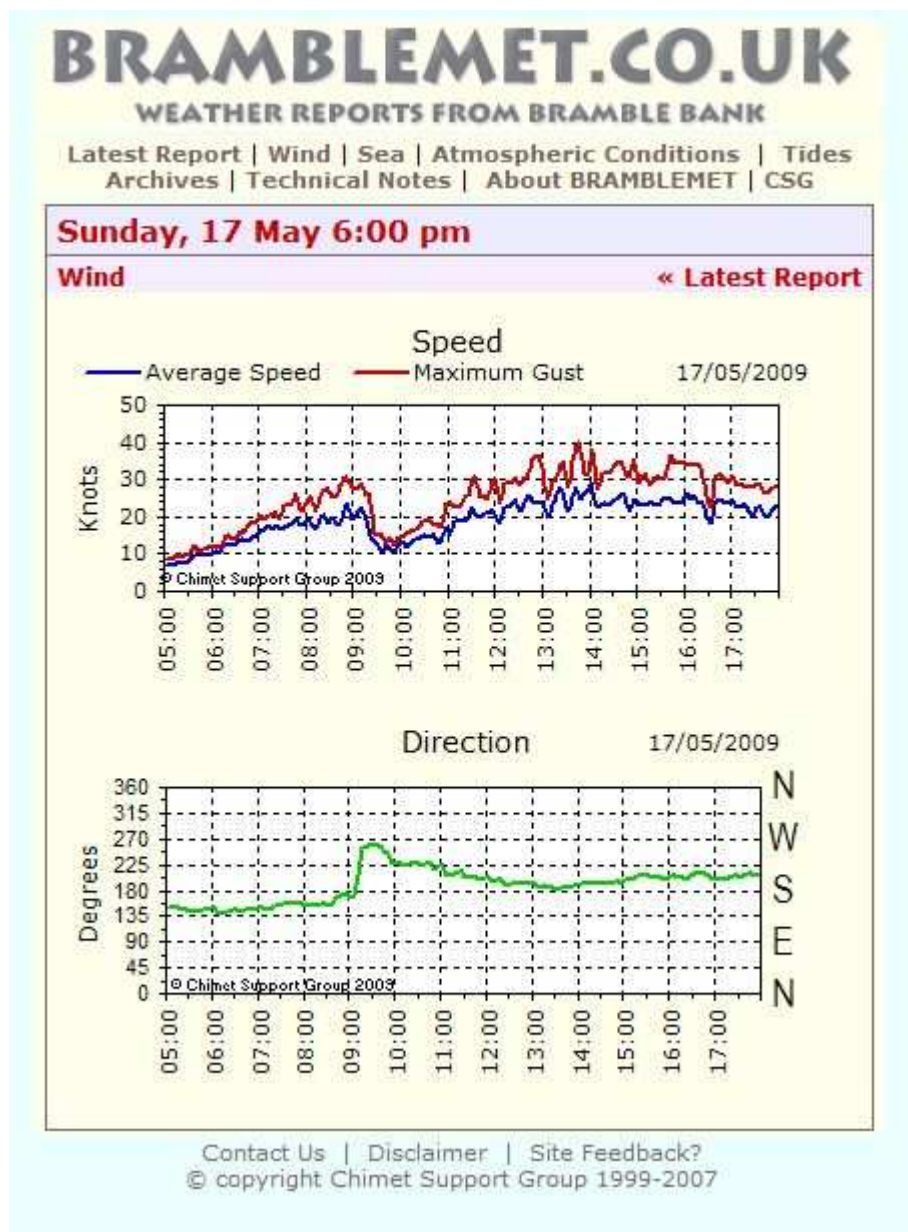
# Weather Tales

By Vortex Wind

## A front approaching the Solent

As a front approaches and then passes overhead, it is well known that the wind will increase in velocity and then veer in the northern hemisphere. The question for those racing or passage making is by how much will it increase in speed and by how many degrees will it shift?

Below is an example of a warm front passing over the Solent on a Sunday in May.



Source: *Bramblemet.co.uk*

The wind increases steadily as the front approaches, along with the associated rain, and then just after 09:00 veers violently west. With the wind shifting over 90 degrees

in this case, however, with the violent shift and the ending of the rain the wind speed drops by over 50%.

With a typical yacht racing, on a windward leg any shift greater than 40 degrees will allow the yacht to lay the windward mark(which might include a tack) or on a downwind leg any shift of greater than 20 degrees, depending on your ships gybing angle, will again allow the mark to be laid. So, knowing whether the shift from the approaching front is greater than 40 degrees whilst heading upwind or greater than 20 whilst heading downwind, will alter your strategy from that of a *persistent* shift to that of a *violent* shift.

To be able to get a relatively accurate timing for the arrival of the front it is best to make use of one of the excellent rain radar internet sites, such as *raintoday.co.uk*, an example is below.



Source: *raintoday.co.uk*

The rain radar with some simple extrapolation will give you an accurate timing for the arrival of the front, but how do you know what the wind is going to do? With the numerous weather stations now uploading live data to the internet, and a typical English Channel front moving west to east. It is possible to look up the wind history from the weather stations to the west of your location, be it the Sevenstones lightship for those further west, Portland Bill for those in the Solent or Bramblemet for those further east. This will allow you to see the size of the shift and the fall in the wind strength as the rain stops and the front passes overhead.

If you have made good use of passing front, then still keep your eyes open as often the wind will start to shift again, backing this time, but in a more gradual manner, and you may have to use the tactics of a persistent shift rather than of a violent one!