



Predicting The Shifts
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Team GBR Meteorologist
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First shift from Shipping Forecast?

- America's Cup
 - Olympics
 - Portland Harbour
 - Weymouth Bay
1. The basics
 2. Venue knowledge
 3. Keep it simple!

3 important things to remember;

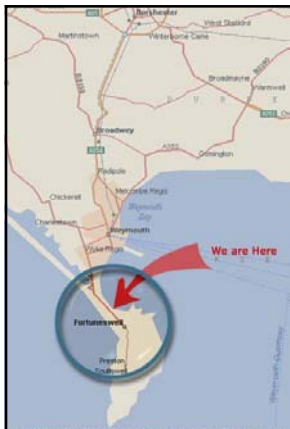
TODAY

1. The basics
2. Venue knowledge
3. Keep it simple!

- Venue profile
- Large weather effects on the local wind
- Local effects on your racing wind
- Compiling a forecast
- Using the knowledge & forecast on the water

Venue Profile – Weymouth

- Location – lat & long
- Synoptic Weather: fronts, low's, high's (where are they?)
- Prevailing gradient wind direction
- Prevailing surface wind direction
- Estimated wind speeds
- Sea breeze? Direction, speed, direction changes
- Air temperature
- Sea temperature
- Stability – stable / unstable venue?
- Weather (mainly sunny, wet, bit of everything)
- Currents
- Wave height
- Map – local effects, headlands – which direction?
- Pictures – what does it look like?



Venue Profile – Weymouth

Location – lat & long
 (important when going abroad or up north)

Google Earth

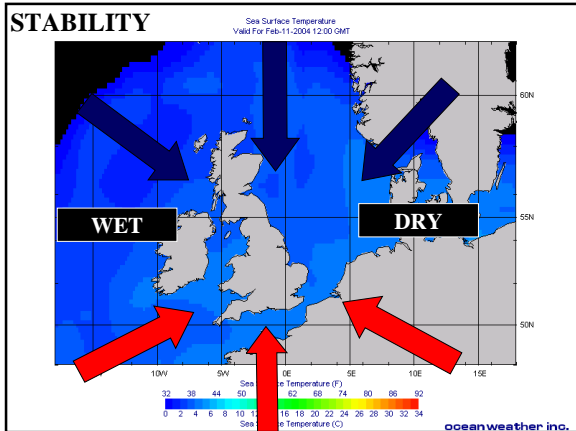
<http://earth.google.com/>

1. The basics
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Large scale weather & how it affects your sailing wind

Prevailing Wind Direction?

Stability
 Large Scale Changes
 Fronts



- The basics
- Venue knowledge
- Keep it simple!

Obstacles & Friction

Prevailing Wind Direction?
PORTLAND CLIFFS

What is the most common / obvious obstacle?



FRICION GRADIENT ALONG SHORE

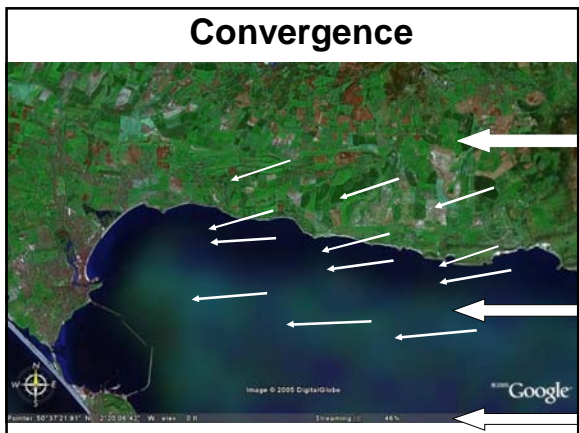
DIVERGENCE

FRICION CAUSES WIND TO;
SLOW DOWN
BACK OVER LAND
MORE THAN THE SEA
THIS EFFECT IS FELT JUST OFFSHORE

FRICION GRADIENT ALONG SHORE

CONVERGENCE

FRICION CAUSES WIND TO;
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**Complicated surroundings!
Keep it simple – venue knowledge**

What's it like to sail here?
Timing shifts
(Random/Oscillations)

Note books
What's the main effect?

Clouds high, medium or low?

Cloud

Gust Lull Gust

Raining clouds & thunderstorms

Which wind direction brings big nasty showers?

Raining clouds & thunderstorms

Which way would you sail?

Raining clouds & thunderstorms

Which way would you sail?

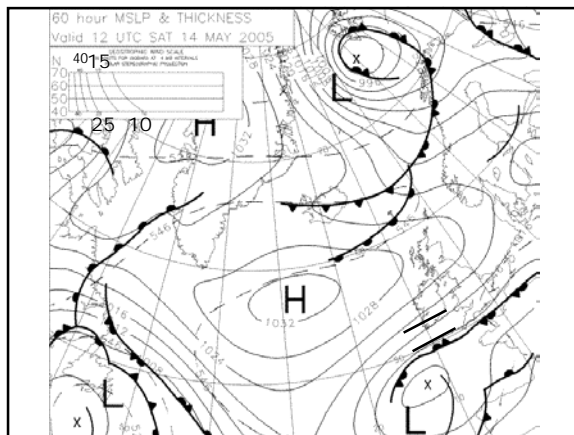
Patterns can be hard to spot but clouds can give clues to wind behaviour



Predicting the Shifts The Essentials of Weather

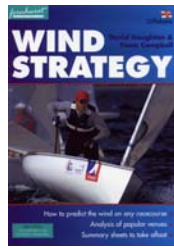
How to create a forecast
How to read a forecast
How to disseminate a forecast
How to use the forecast

Call books / note books



Books

Wind Strategy
& Weather at Sea



RYA Weather Handbook, Chris Tibbs
North U Weather for Sailors

High Performance Sailing, Frank
Bethwaite