24 March 2026

Why Weather

- Why are we interested?
- Why do we have weather?
- What does a skipper need to know?
- Where to get information?
- If in doubt what assumptions do you make?

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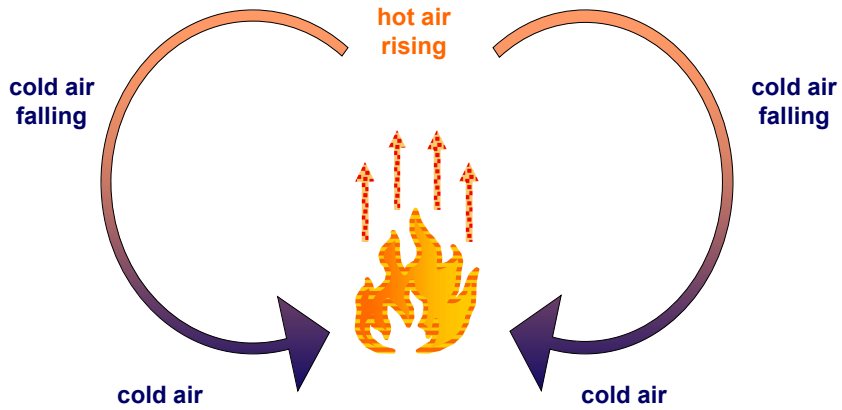
FUNDAMENTAL CAUSE OF WEATHER



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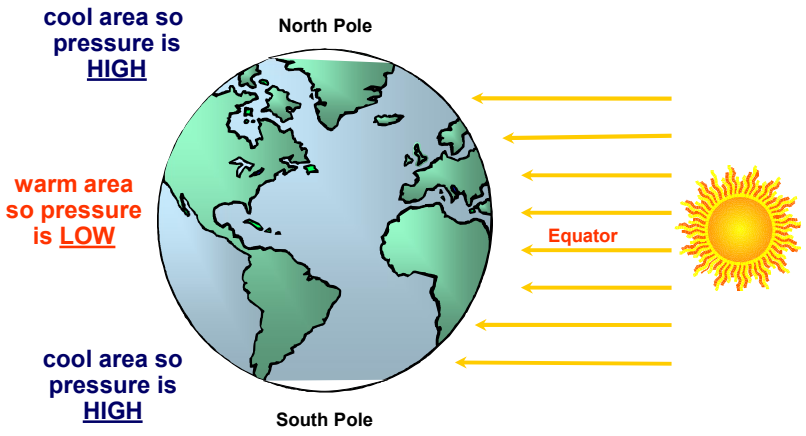
WORLD WIDE EFFECTS



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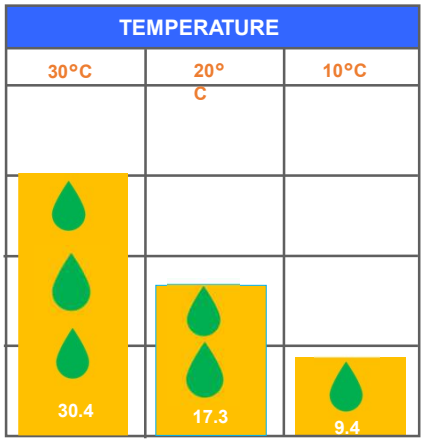
HOW MUCH LIQUID CAN AIR HOLD?

Grams H2O per metre cube



Air holds about three times as much water vapour at 30°C than it does at 10°C

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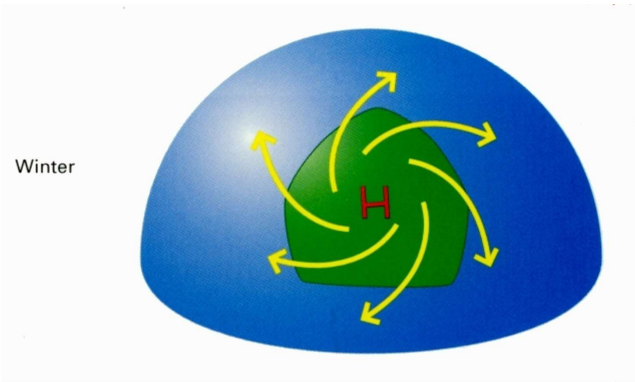
THERMAL HIGH



In winter these form over large cold continental land masses i.e. Central Canada, Siberia and The Iberian Peninsula

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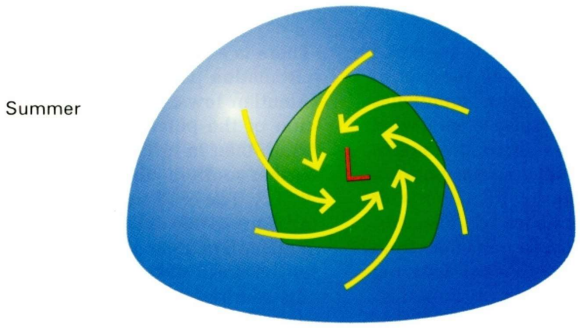
THERMAL LOW



In summer these form over large warm continental land masses i.e. Central Canada, Siberia and The Iberian Peninsula

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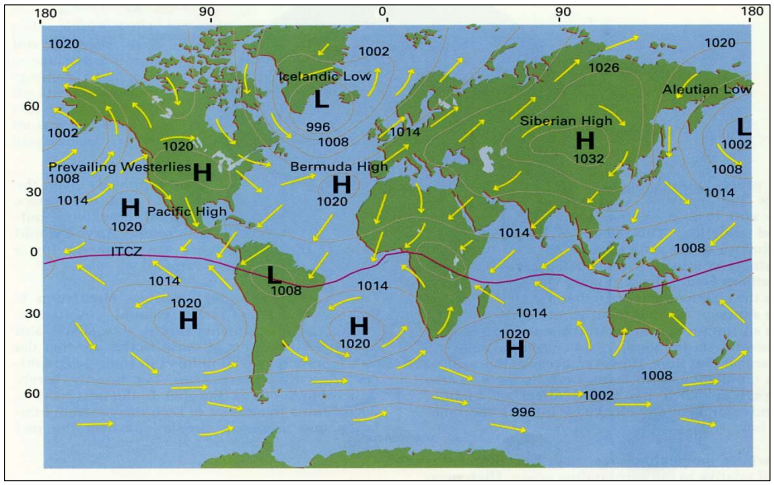
WORLD PRESSURE DISTRIBUTION - WINTER



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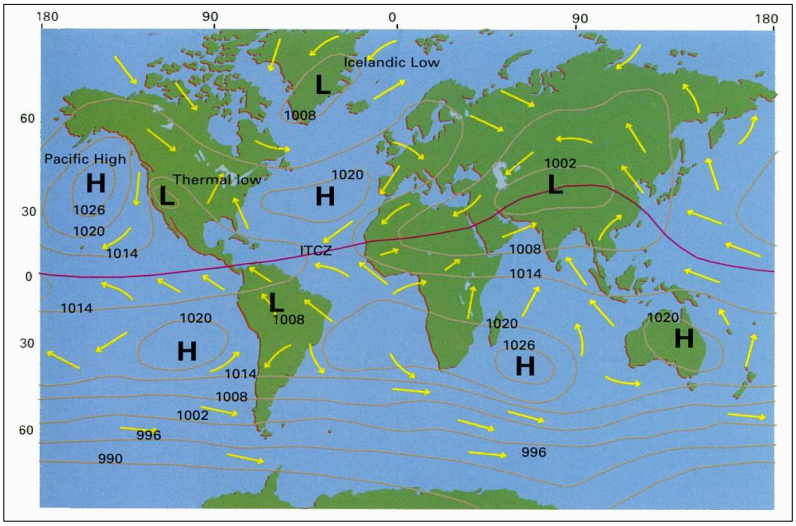
WORLD PRESSURE DISTRIBUTION - SUMMER



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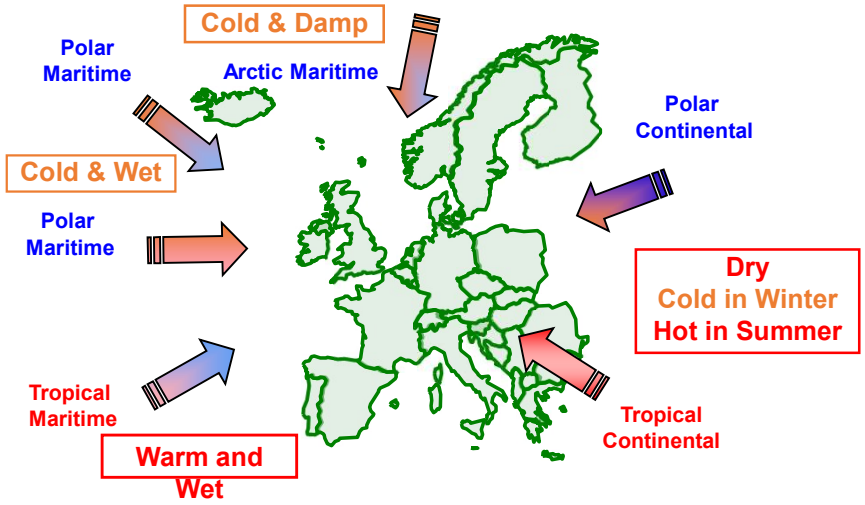
WIND EFFECTS ON WEATHER



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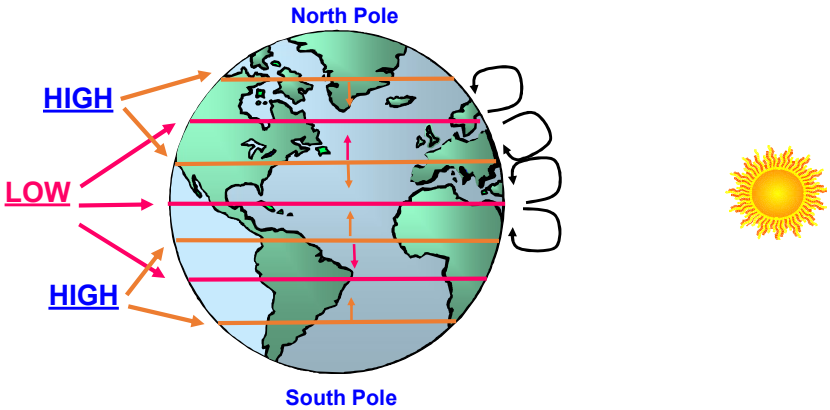
WORLD WIDE EFFECTS



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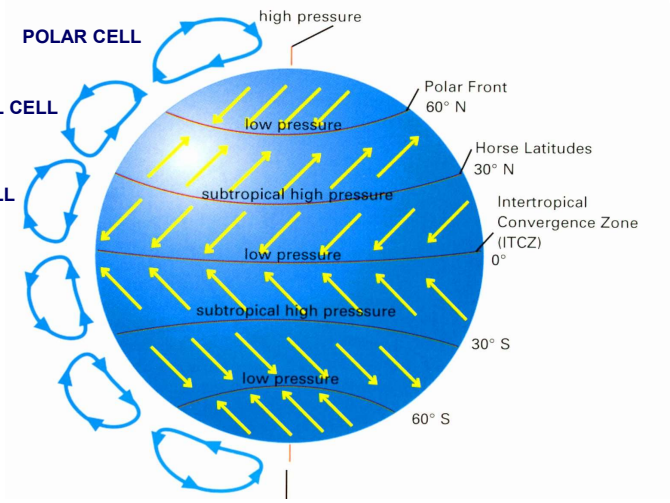
GLOBAL WIND CIRCULATION



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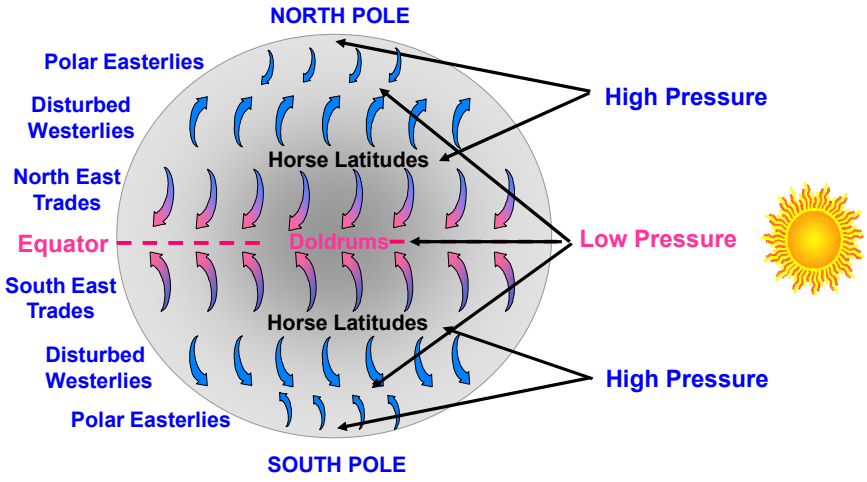
WIND ORIGINS



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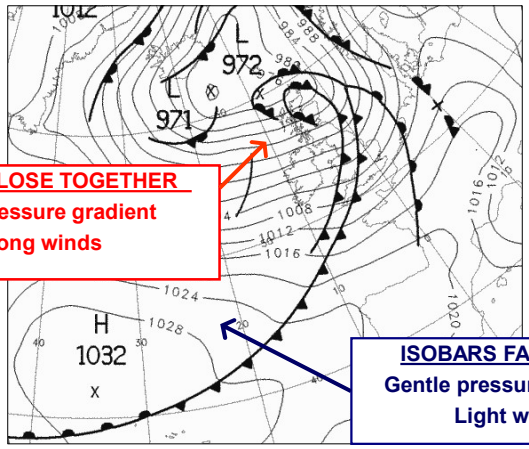
ISOBARS

ISOBARS ARE LINES JOINING POINTS OF EQUAL PRESSURE



ISOBARS CLOSE TOGETHER
Steep pressure gradient
Strong winds

ISOBARS FAR APART
Gentle pressure gradient
Light winds

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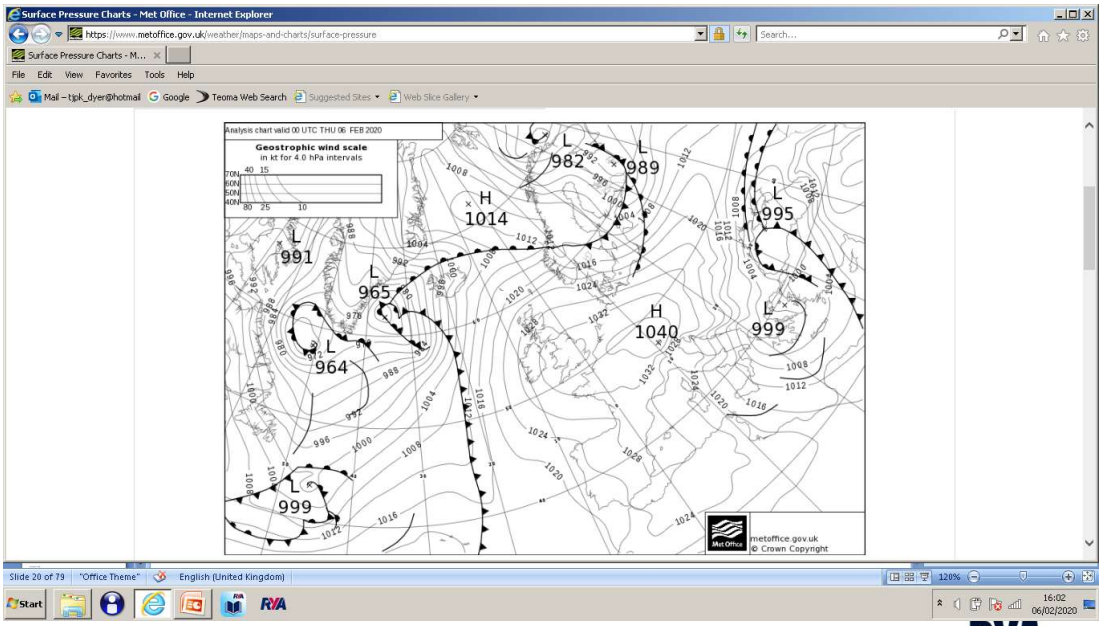

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WEATHER FORECAST SOURCES

Internet
- BBC/Met Office
- Magic Seaweed
- XC Weather
- Others

National Radio

Local Radio

TV

Coastguard

Press

Look, ask - harbourmaster

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Weather related websites

AccuWeather: https://www.accuweather.com/
MCA MSI leaflet:https://www.gov.uk/government/publications/maritime-safety information-leaflet
Met Office: https://www.metoffice.gov.uk/weather/specialist-forecasts/coast-a sea
Met Office surface pressure charts: https://www.metoffice.gov.uk/weather/map and-charts/surface-pressure/
Frank Singleton: http://weather.mailasail.com/Franks-Weather/Home
Theyr.com: https://www.theyr.com/
WaveNet: https://www.cefas.co.uk/data-and-publications/wavenet/
Weather Online: https://www.weatheronline.co.uk/
Windfinder: https://www.windfinder.com/
Windguru: https://www.windguru.cz/
XCWeather: https://www.xcweather.co.uk/

Maritime Safety Information NAVEX to 270 miles, MF to 150 miles, VHF to 30 miles

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Tides & Tidal Predictions

Sites such as the UKHO's Easytide (after you have completed a simple registra
procedure) offer access to free worldwide tidal predictions for up to 7 days ahea

Tides related websites

Tides.INFO: https://www.tides.info/
UKHO EasyTide: http://www.ukho.gov.uk/EasyTide/EasyTide/index.aspx

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Weather related websites

AccuWeather: https://www.accuweather.com/
MCA MSI leaflet:https://www.gov.uk/government/publications/maritime-safety
information-leaflet
Met Office: https://www.metoffice.gov.uk/weather/specialist-forecasts/coast-a
sea
Met Office surface pressure charts: https://www.metoffice.gov.uk/weather/map
and-charts/surface-pressure/
Frank Singleton: http://weather.mailasail.com/Franks-Weather/Home
Theyr.com: https://www.theyr.com/
WaveNet: https://www.cefas.co.uk/data-and-publications/wavenet/
Weather Online: https://www.weatheronline.co.uk/
Windfinder: https://www.windfinder.com/
Windguru: https://www.windguru.cz/
XCWeather: https://www.xcweather.co.uk/

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UKHO EasyTide: http://www.ukho.gov.uk/EasyTide/EasyTide/index.aspx

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SHIPPING FORECAST CONTENTS

Radio 4 2300 0500
1100 1700 UTC

Ch16 to Ch-
10,23,73,84,86 and 67

- Gale Warnings
- General Synopsis
- Sea Area Forecasts
  - Wind
  - Weather
  - Visibility
- Coastal Station Reports
  - Wind
  - Significant Weather
  - Visibility in miles or metres
  - Pressure
  - Tendency

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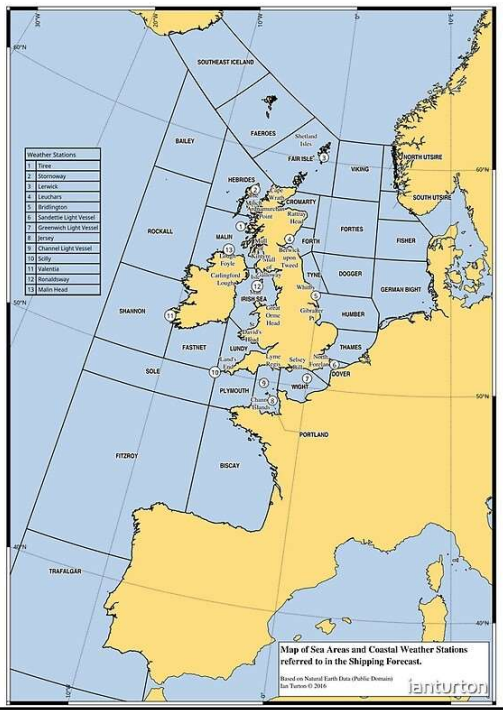

SHIPPING FORECAST AREAS

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USE OF WEATHER FORECASTS

Determine weather for the day

Determine where the best shelter is:
- **Imminently**
- **Soon**
- **Later**

Decide when to sail

Decide whether it is prudent to:
- **Sail**
- **Stay at anchor**
- **Run for shelter**

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