

WEATHER

PAUL POOLE
— MOUNTAINEERING —



Mountain
Training
Cymru

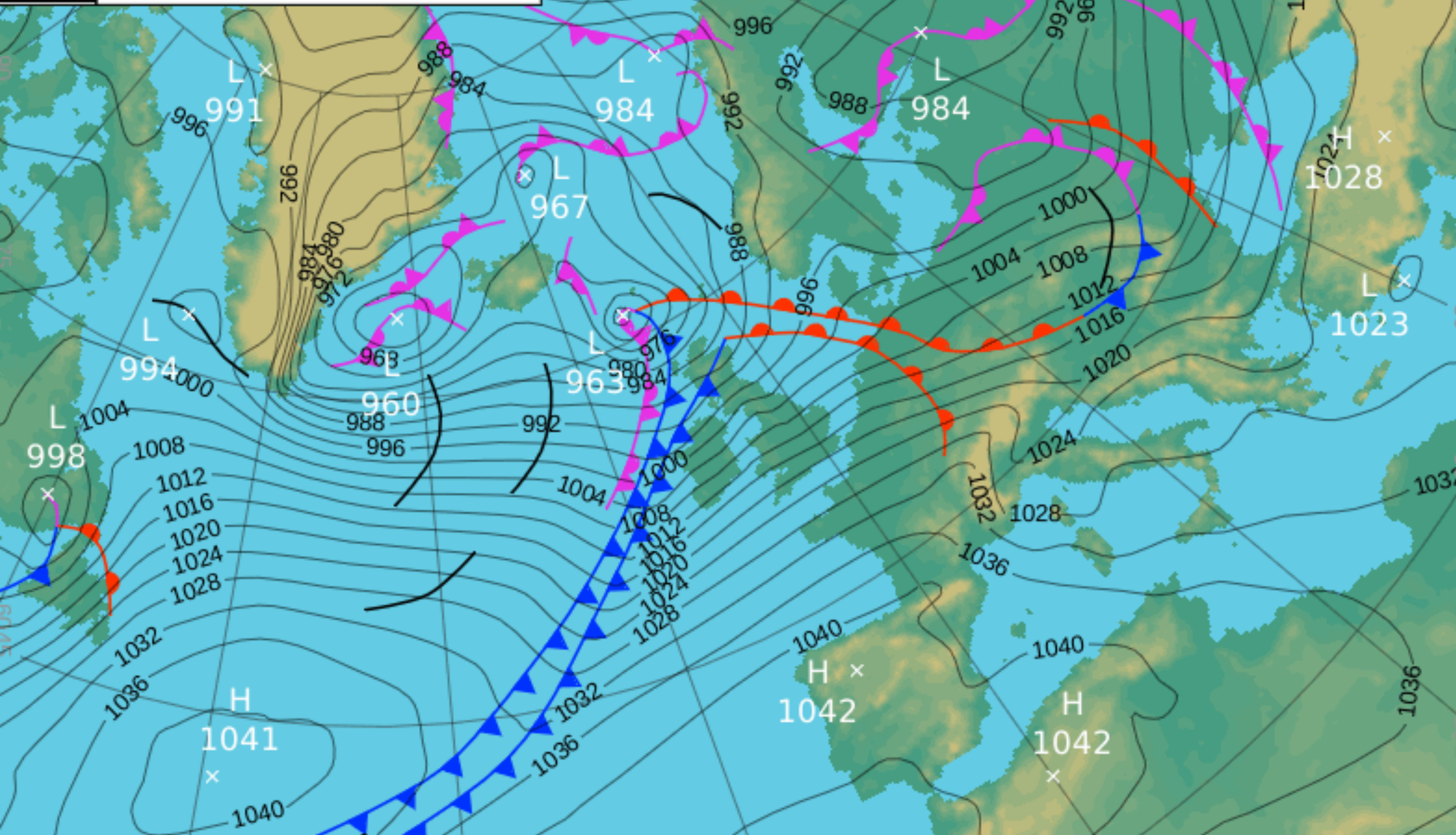
WEATHER SYLLABUS

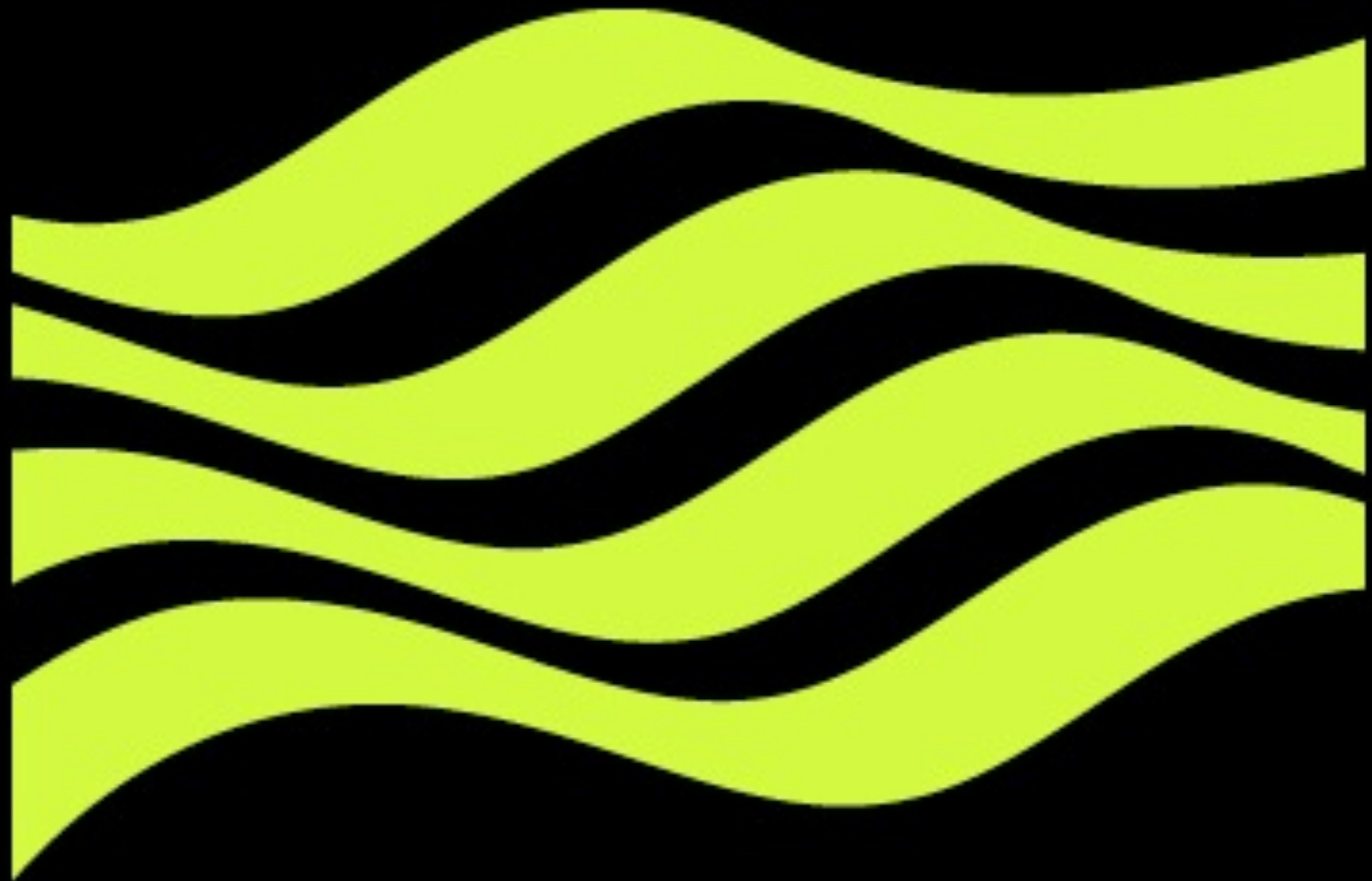
- Interpret & use reliable sources of weather information
- Elementary interpretation of weather maps
- Weather developments associated with different air masses, major cloud forms, changes in wind direction and in atmospheric pressure
- Recognise & continuously evaluate the effect of weather on route selection, kit choice & activity





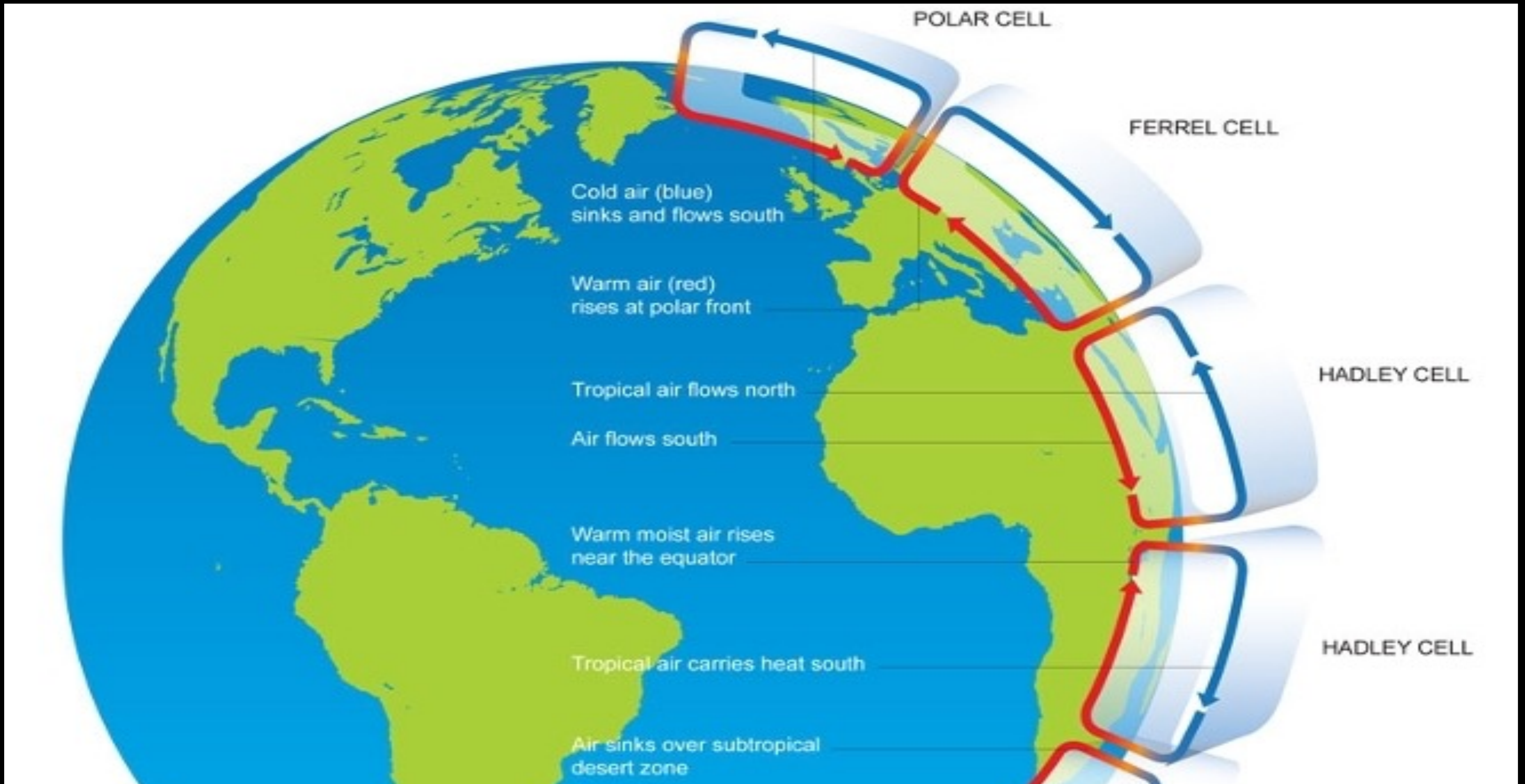
Forecast chart (T+24)
Valid 0000 UTC Sat 10 JAN 2015





Met Office





AREAS OF DIFFERENT TEMPERATURE

Polar Maritime Air Mass

From: Greenland / Arctic Sea
Wet, cold air brings cold
showery weather.

Returning Polar Maritime

From: Greenland / Arctic
via North Atlantic
Moist, mild and unstable air bringing
cloud and rain showers.

Arctic Maritime Air Mass

From: Arctic
Wet, cold air brings
snow in winter.

Polar Continental Air Mass

From: Central Europe
Hot air brings dry summers.
Cold air brings snow in winter.

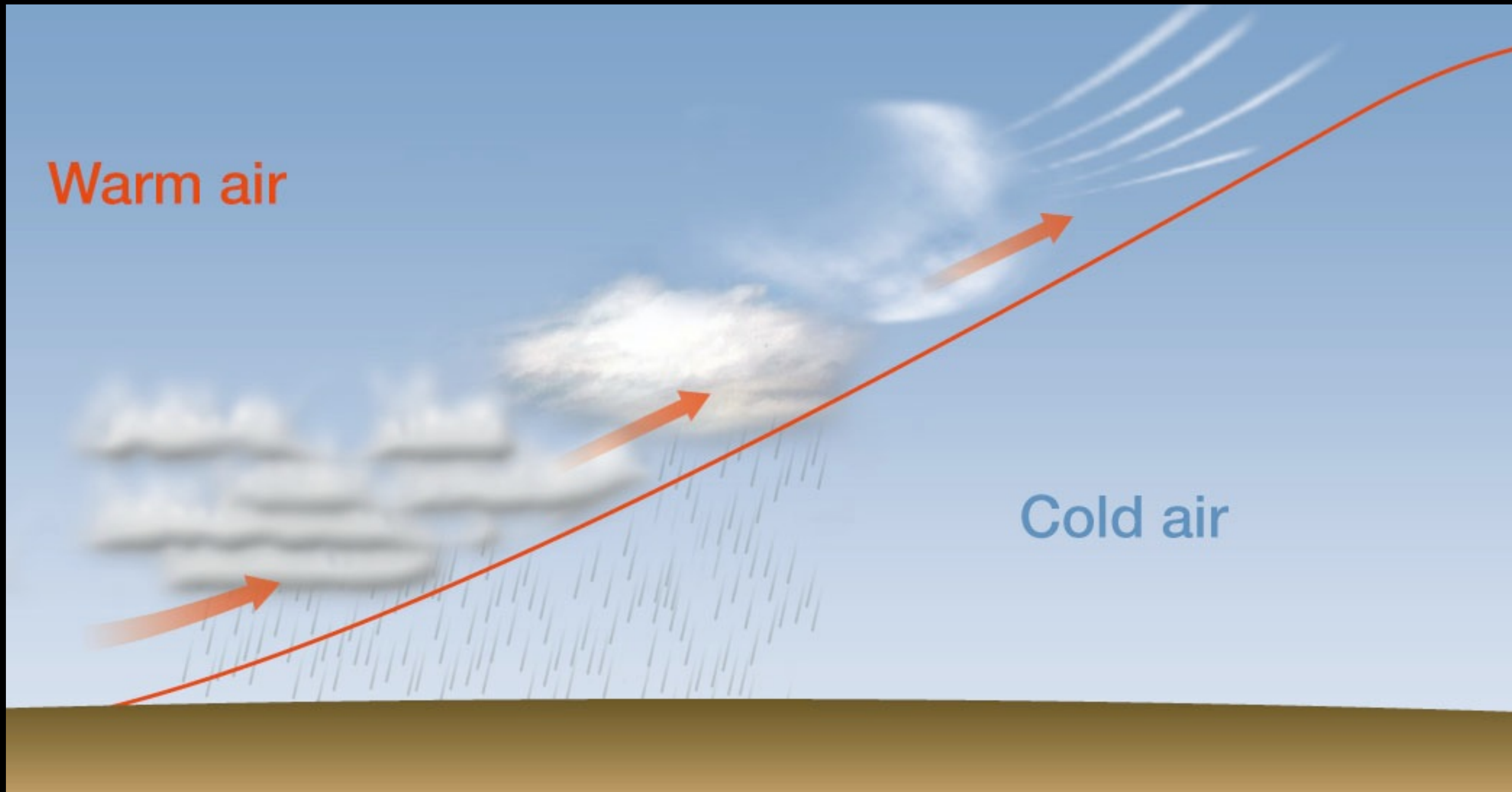
Tropical Maritime Air Mass

From: Atlantic
Warm, moist air brings cloud, rain and mild weather.

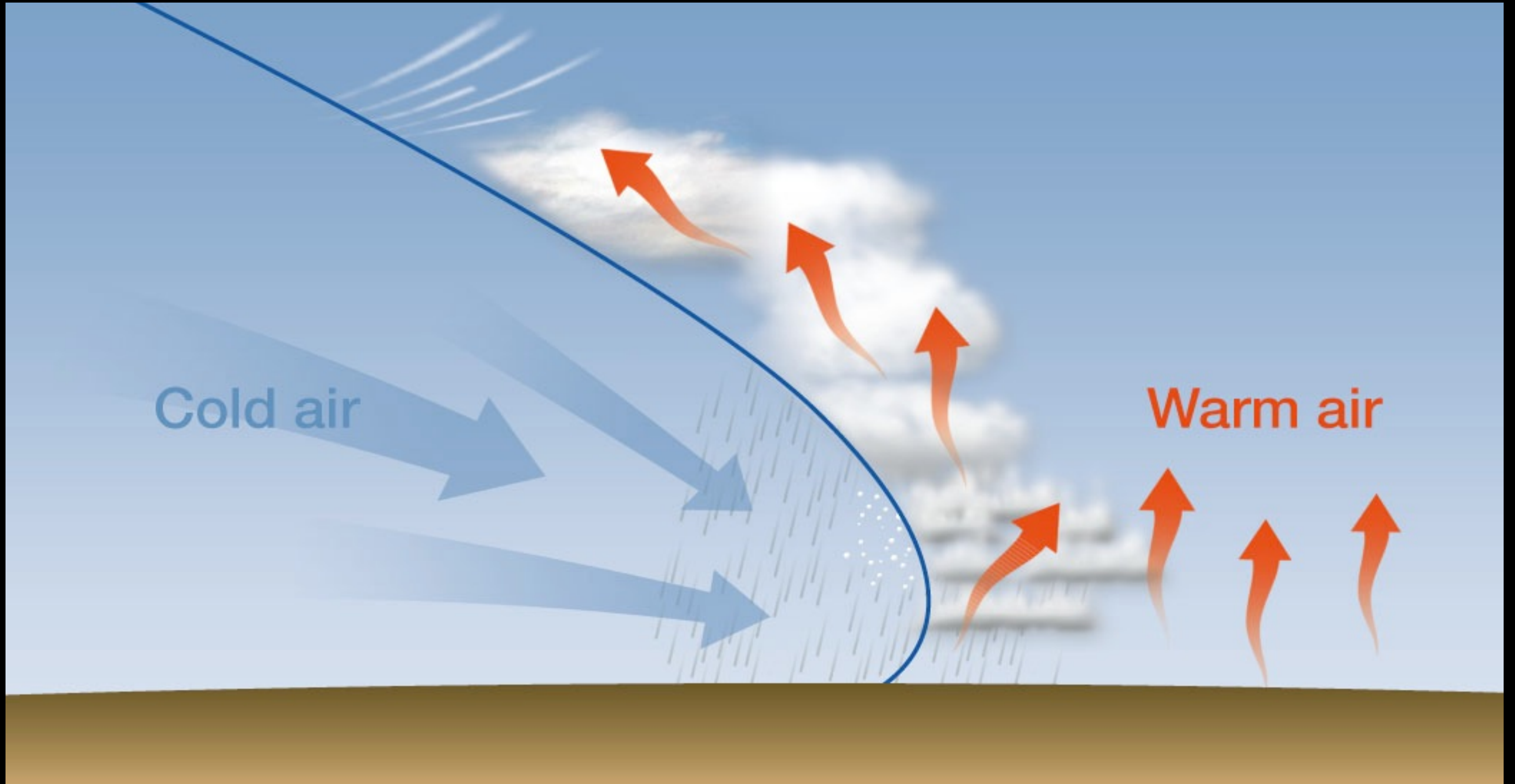
Tropical Continental Air Mass

From: North Africa
Hot, dry air brings hot weather in summer.

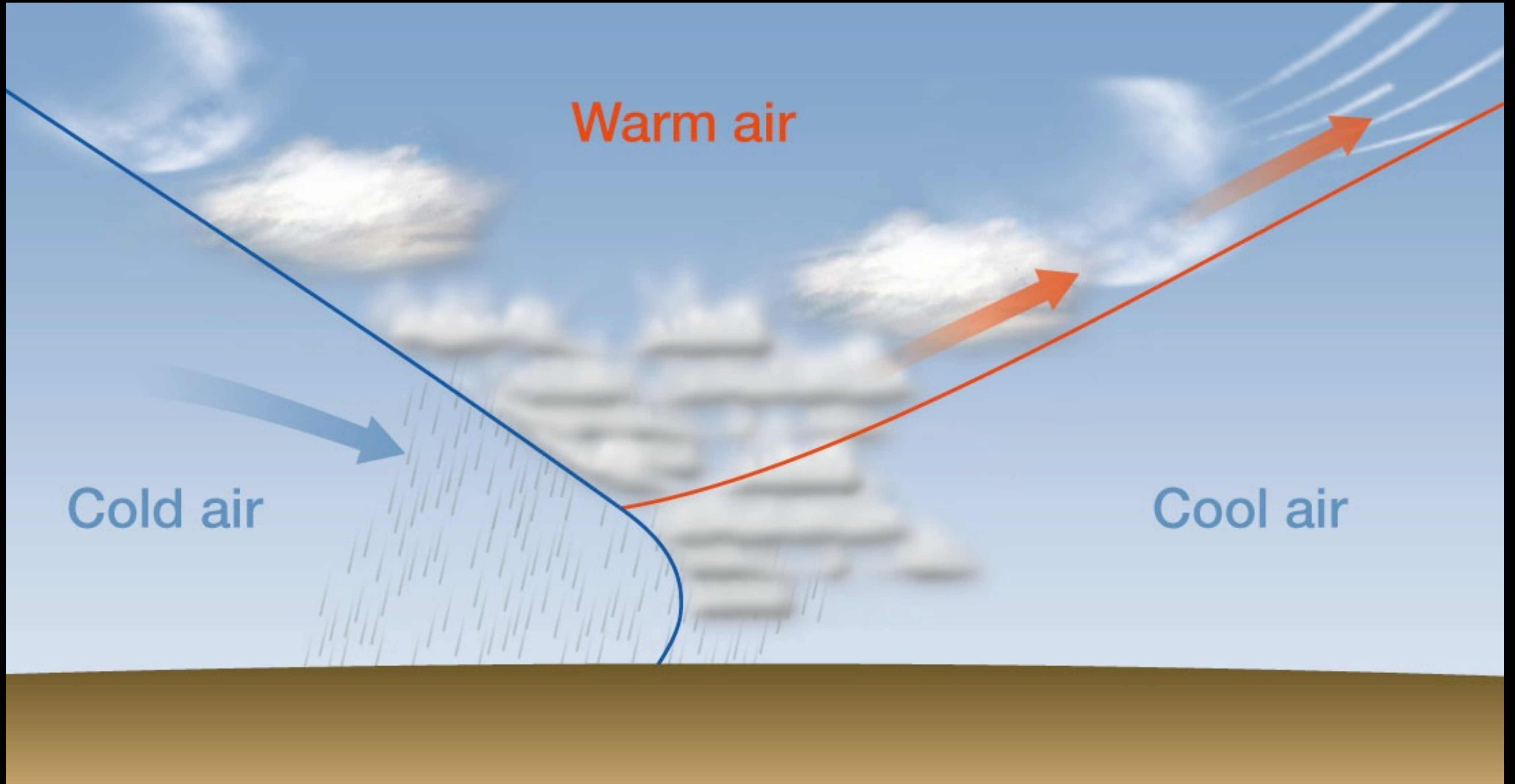
AIR MASSES AFFECTING THE UK



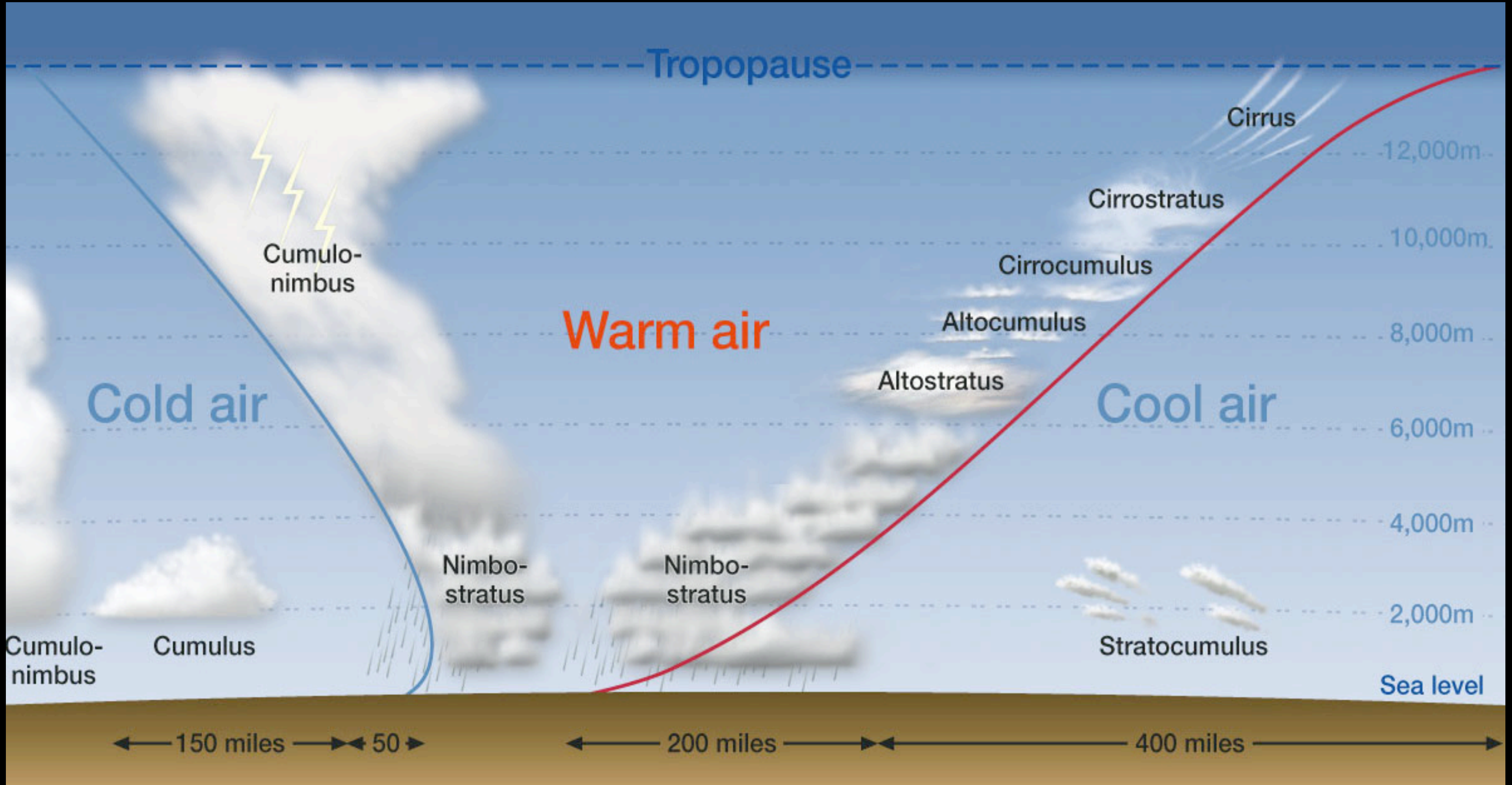
WARM FRONT



COLD FRONT

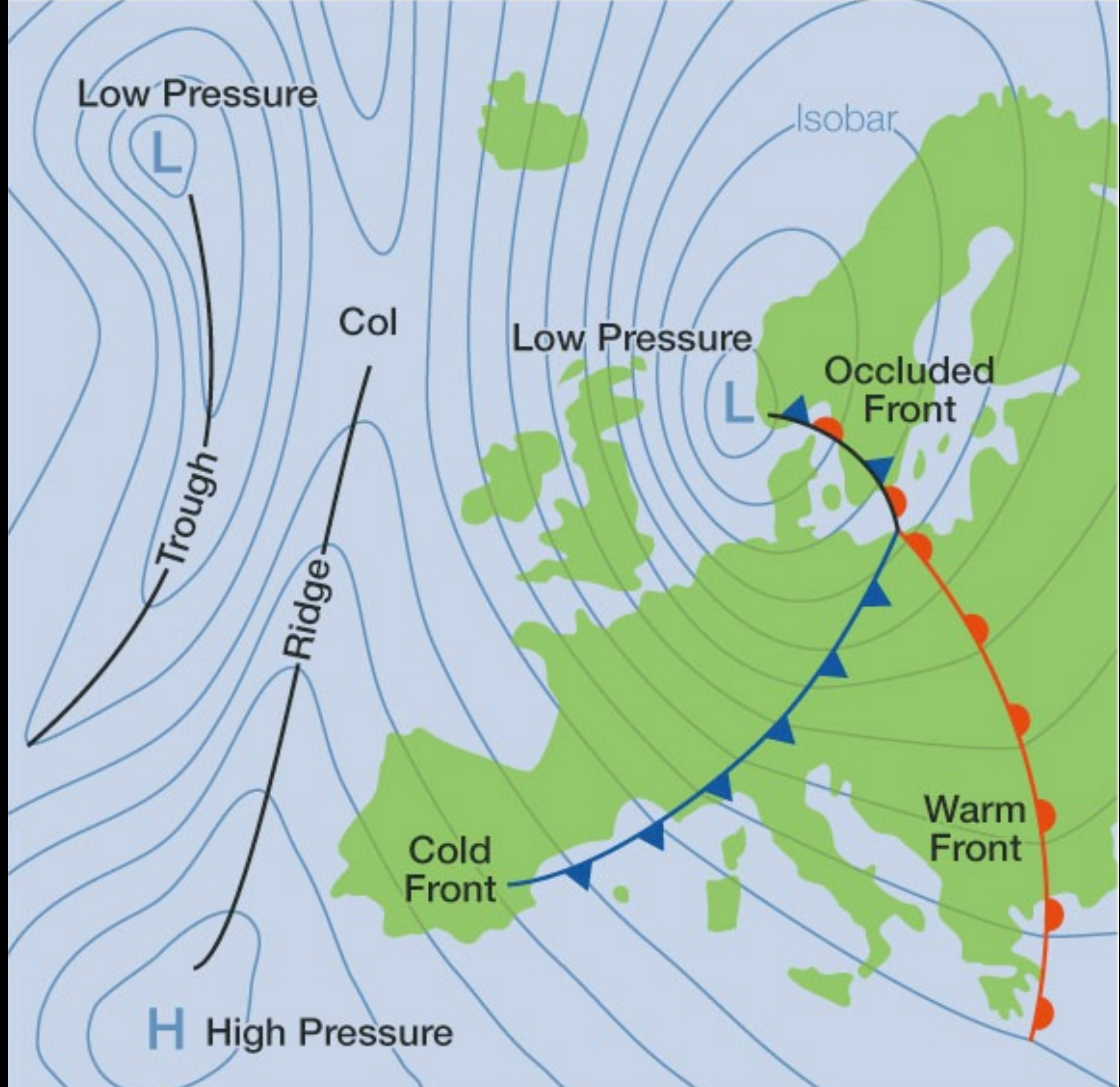


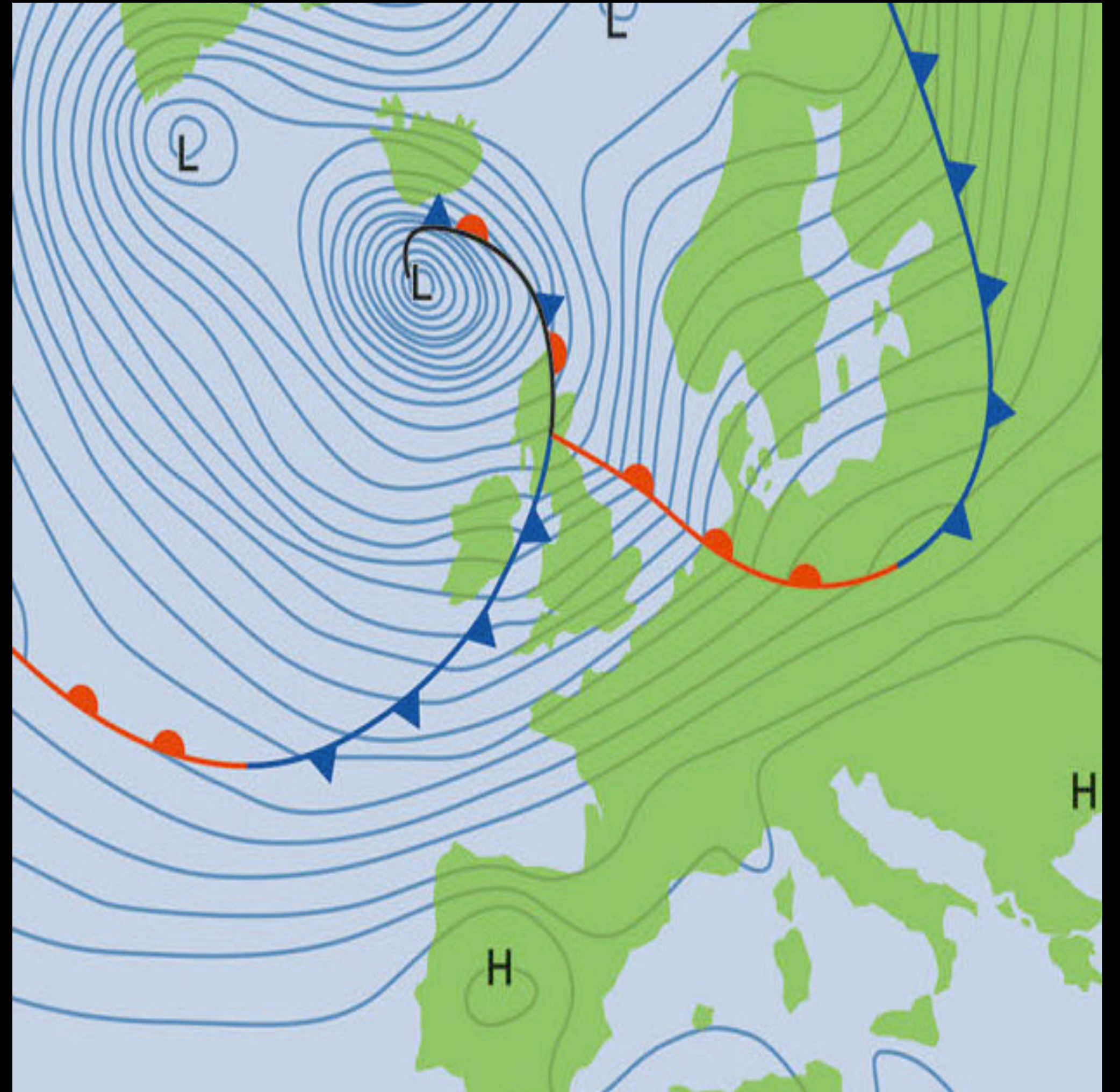
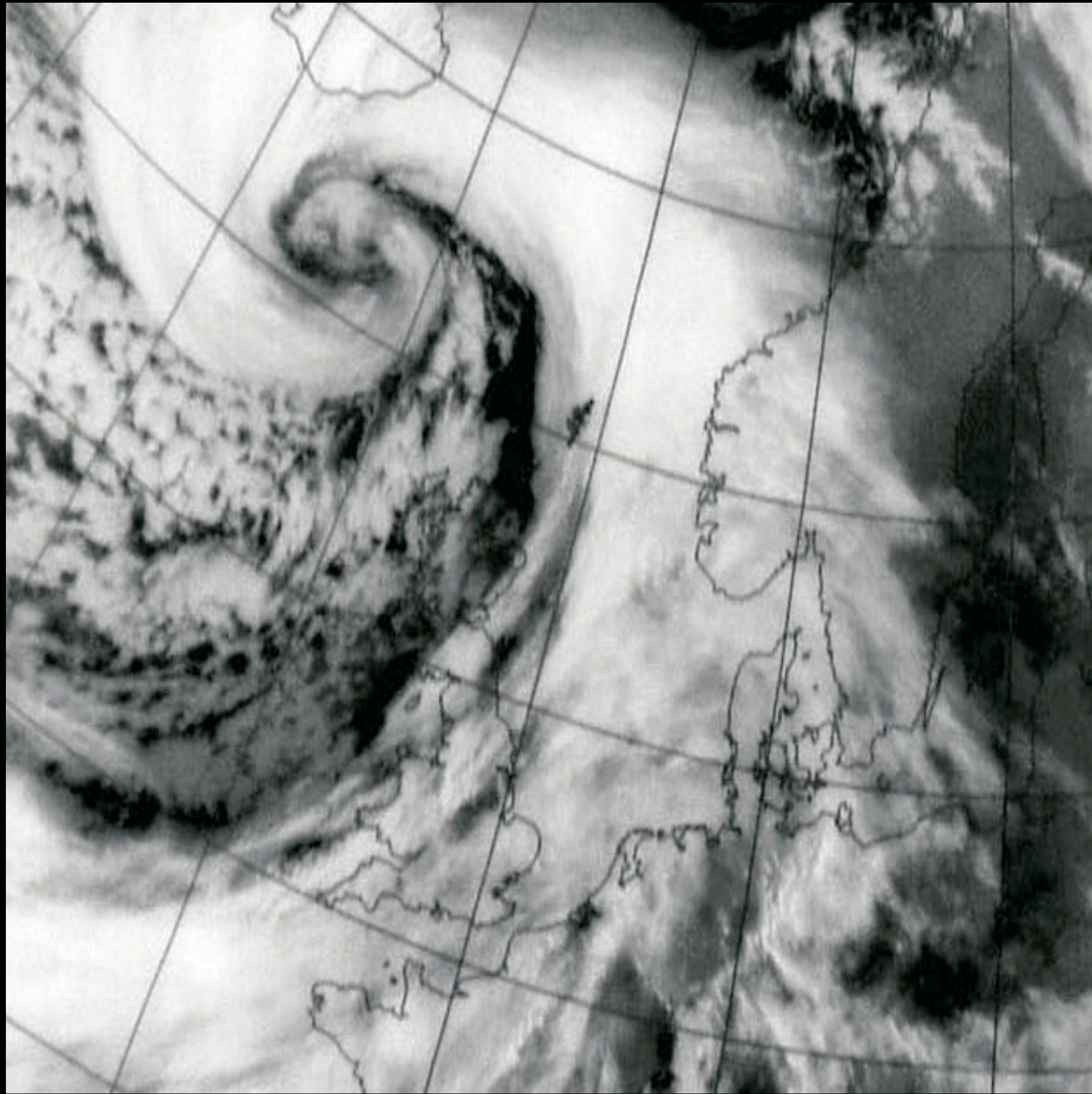
OCCLUDED FRONT



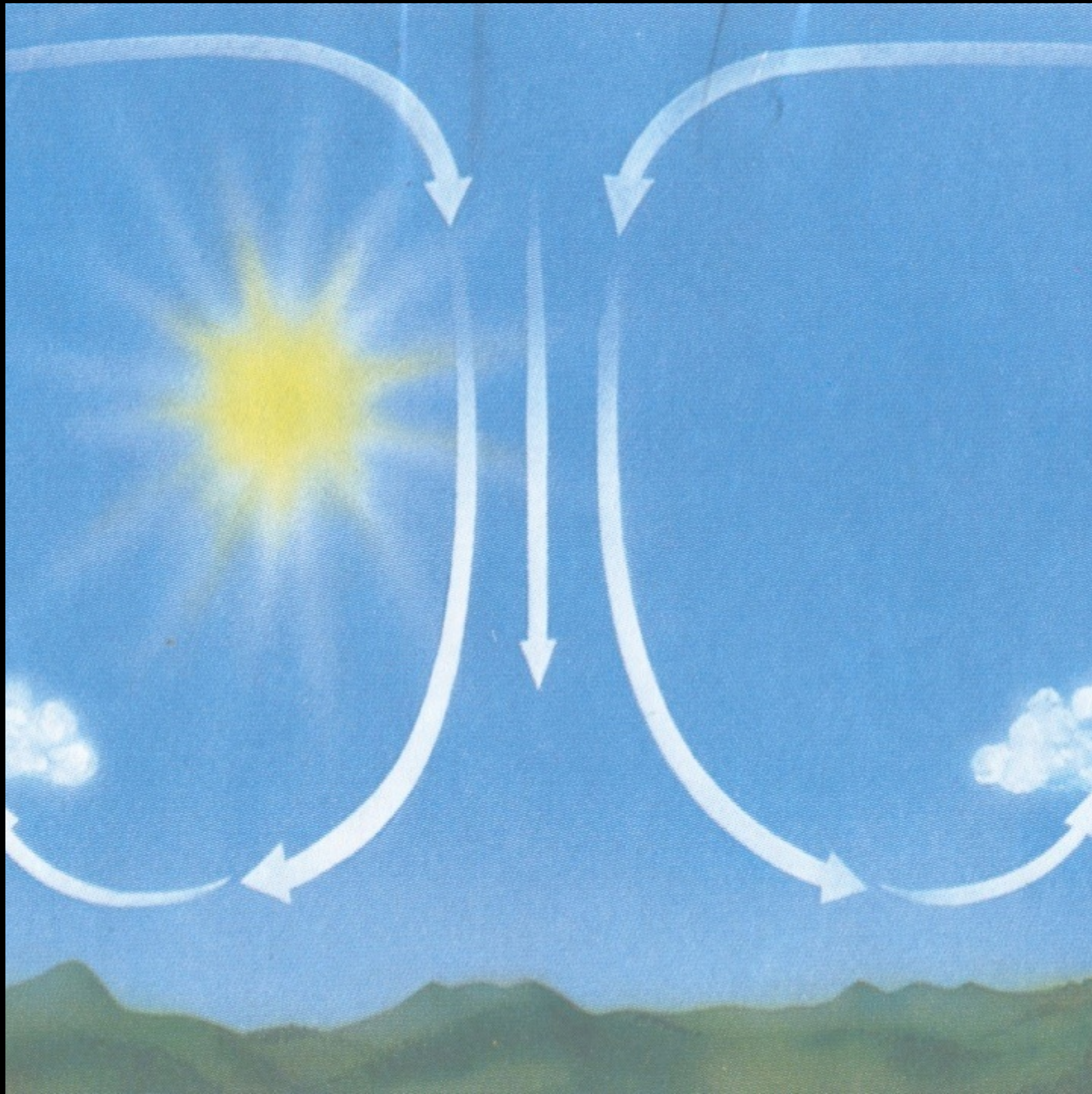
FRONTAL CLOUDS

SYNOPTIC MAPS / WEATHER CHARTS





**SATELLITE IMAGE OF A
LOW PRESSURE SYSTEM**

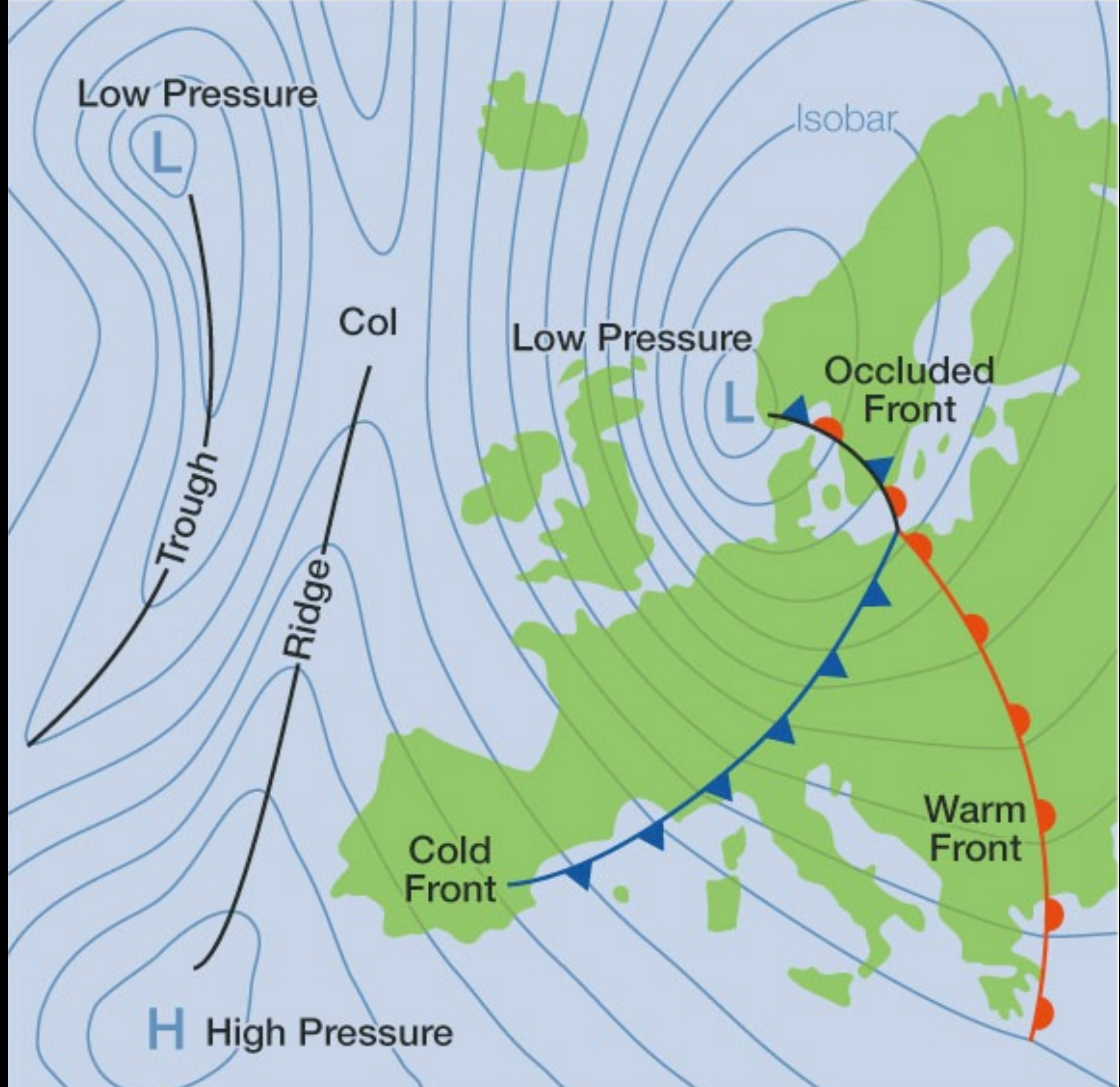


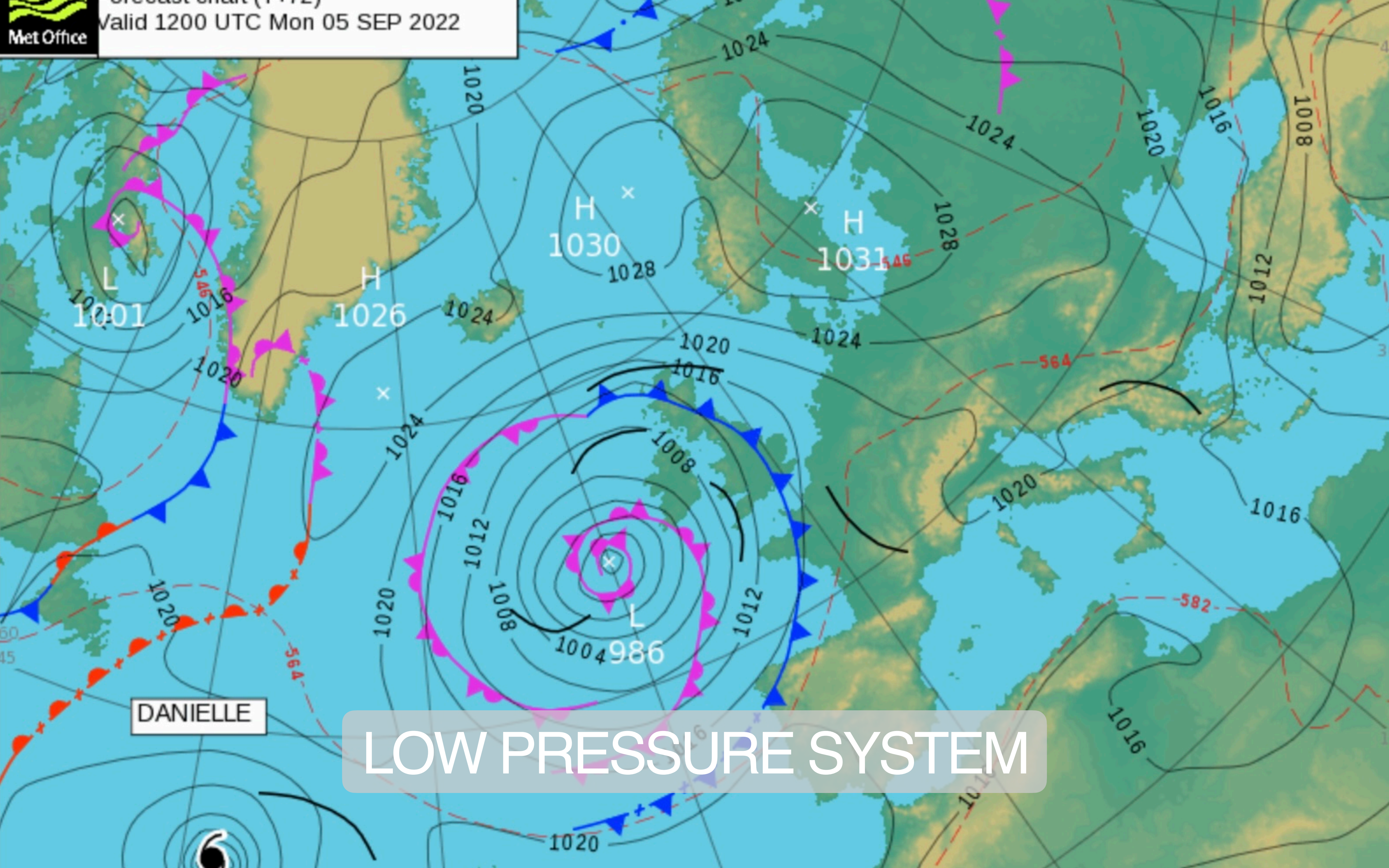
**COOLED AIR
HIGH PRESSURE**



**WARMED AIR
LOW PRESSURE**

SYNOPTIC MAPS / WEATHER CHARTS



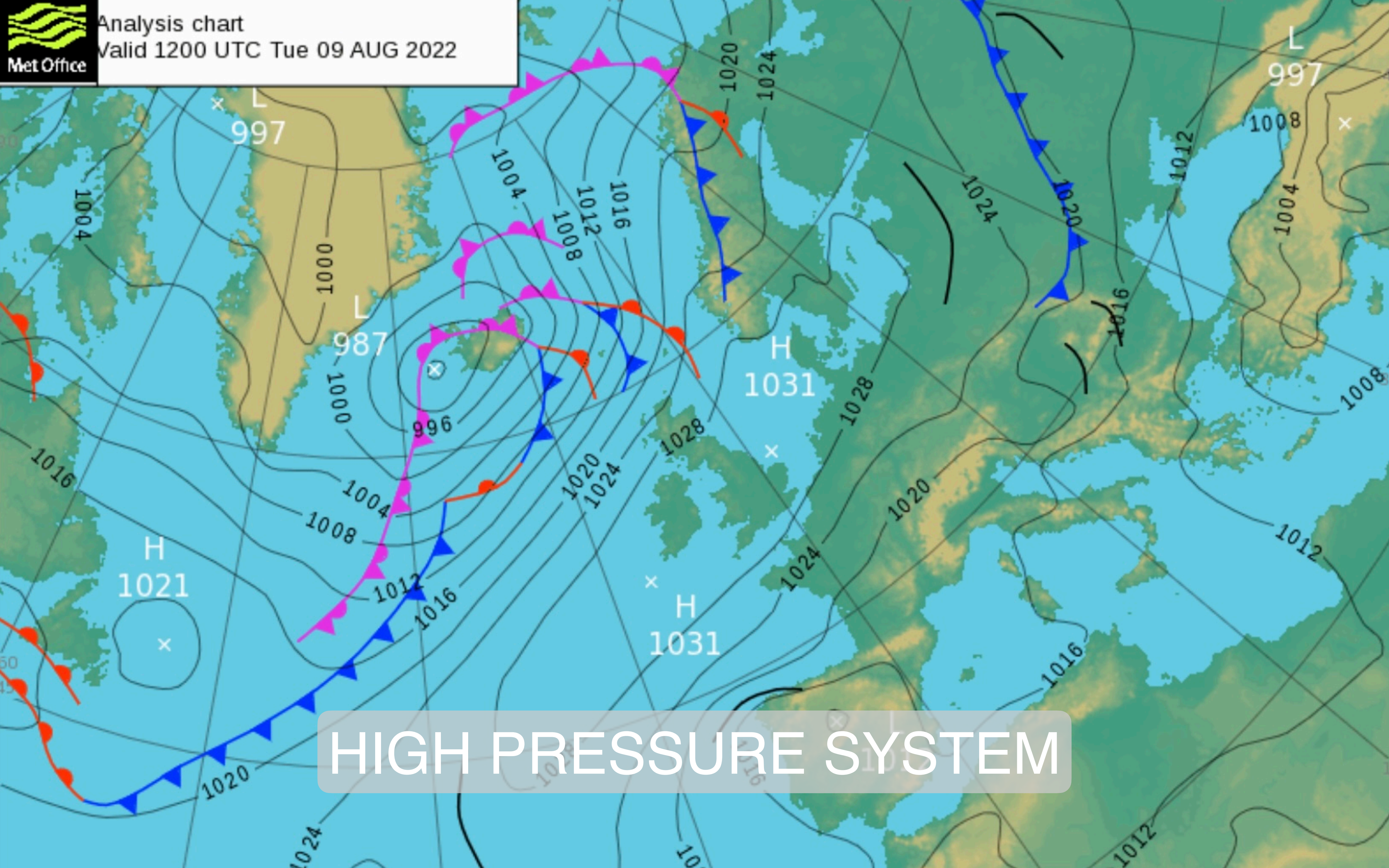


DANIELLE

LOW PRESSURE SYSTEM



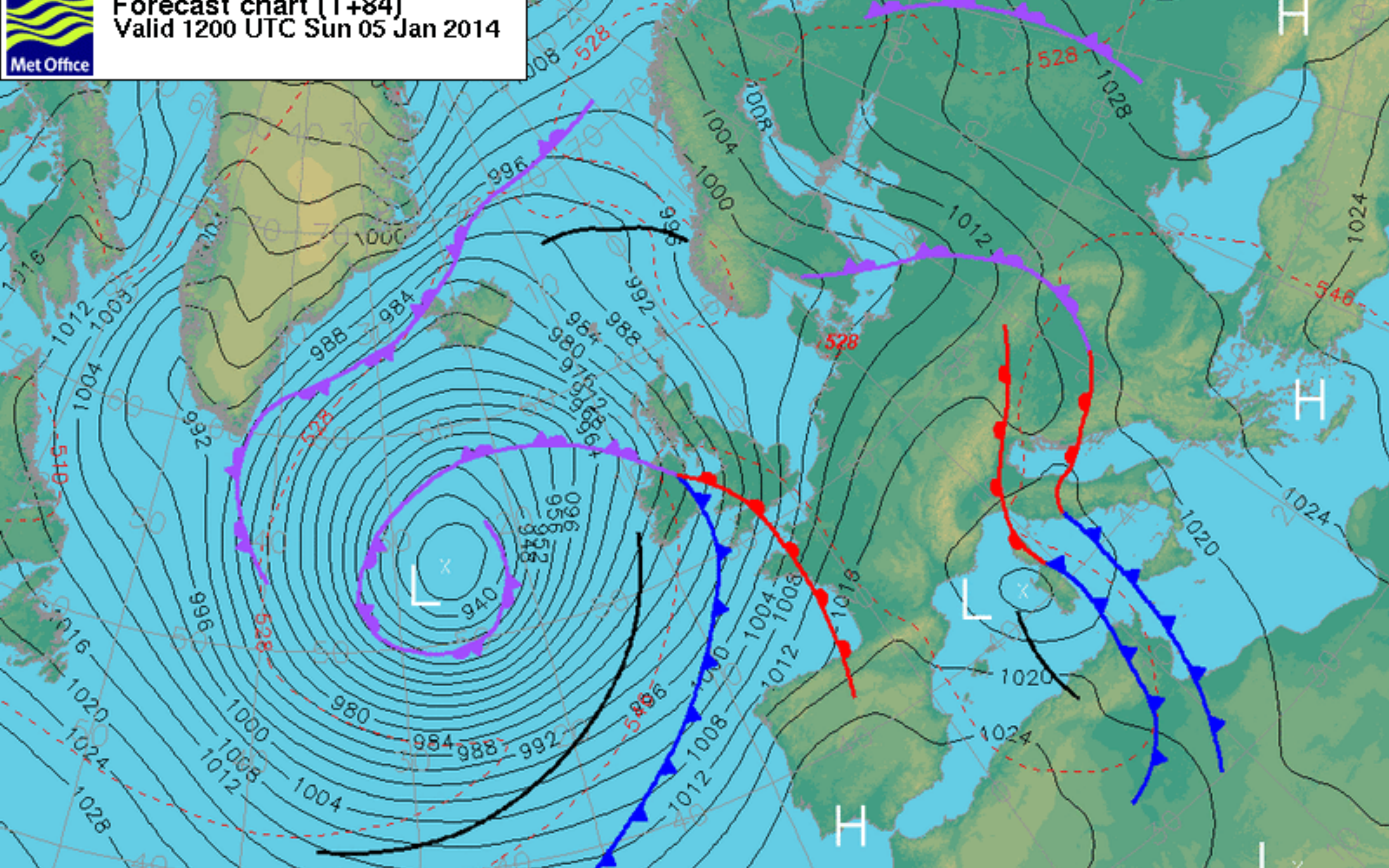
Analysis chart
Valid 1200 UTC Tue 09 AUG 2022

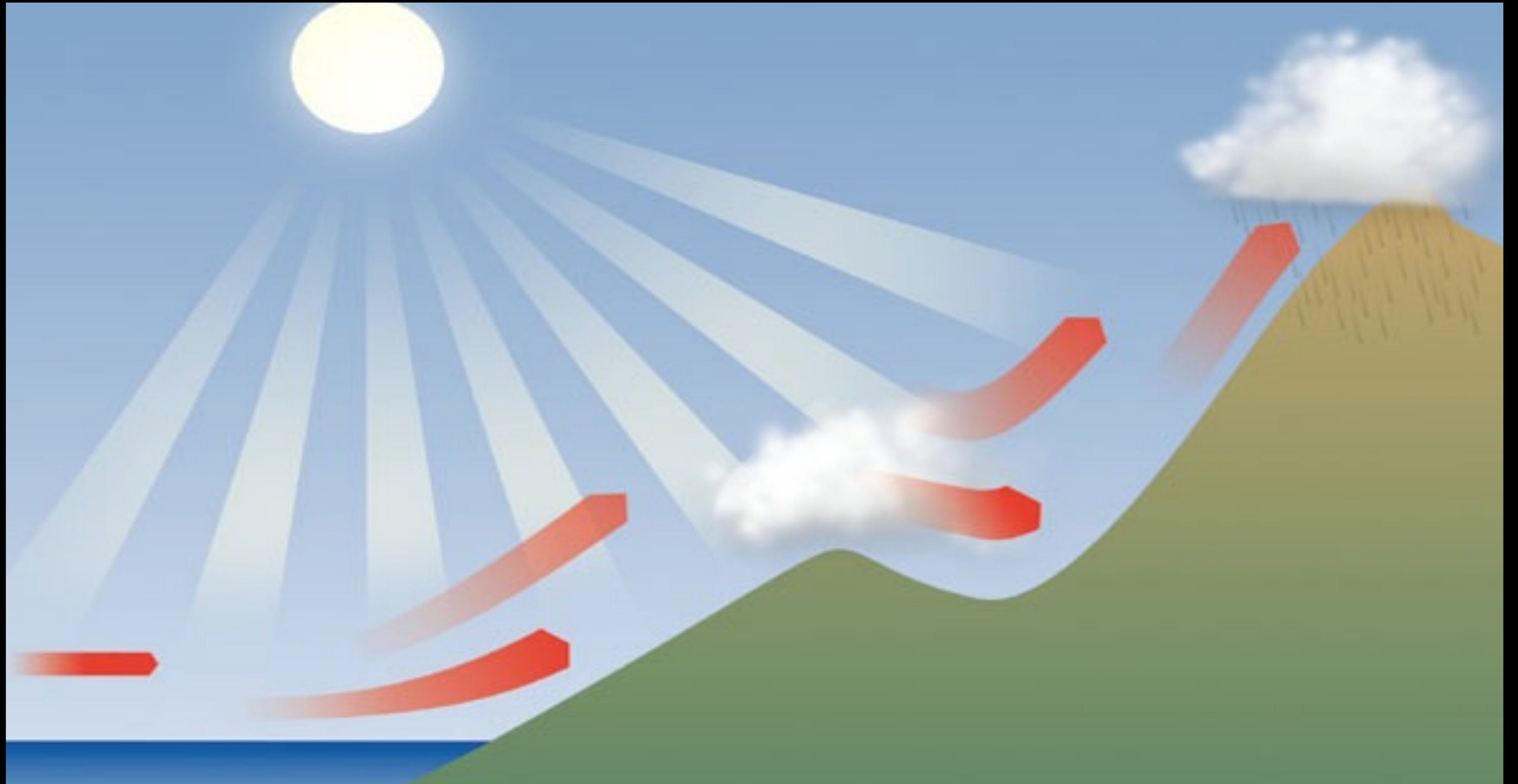


HIGH PRESSURE SYSTEM

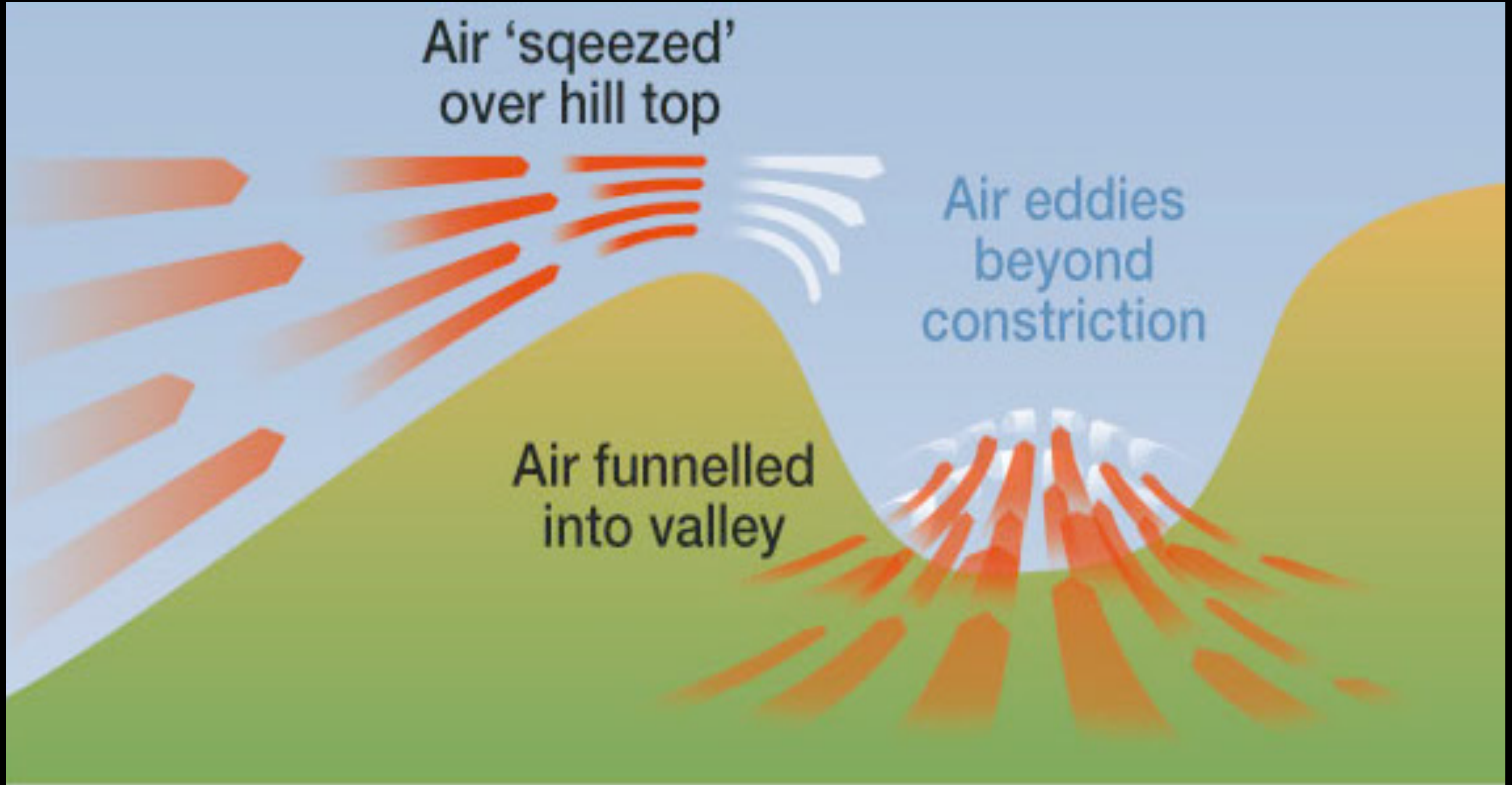


Forecast chart (1+84)
Valid 1200 UTC Sun 05 Jan 2014





OROGRAPHIC LIFTING

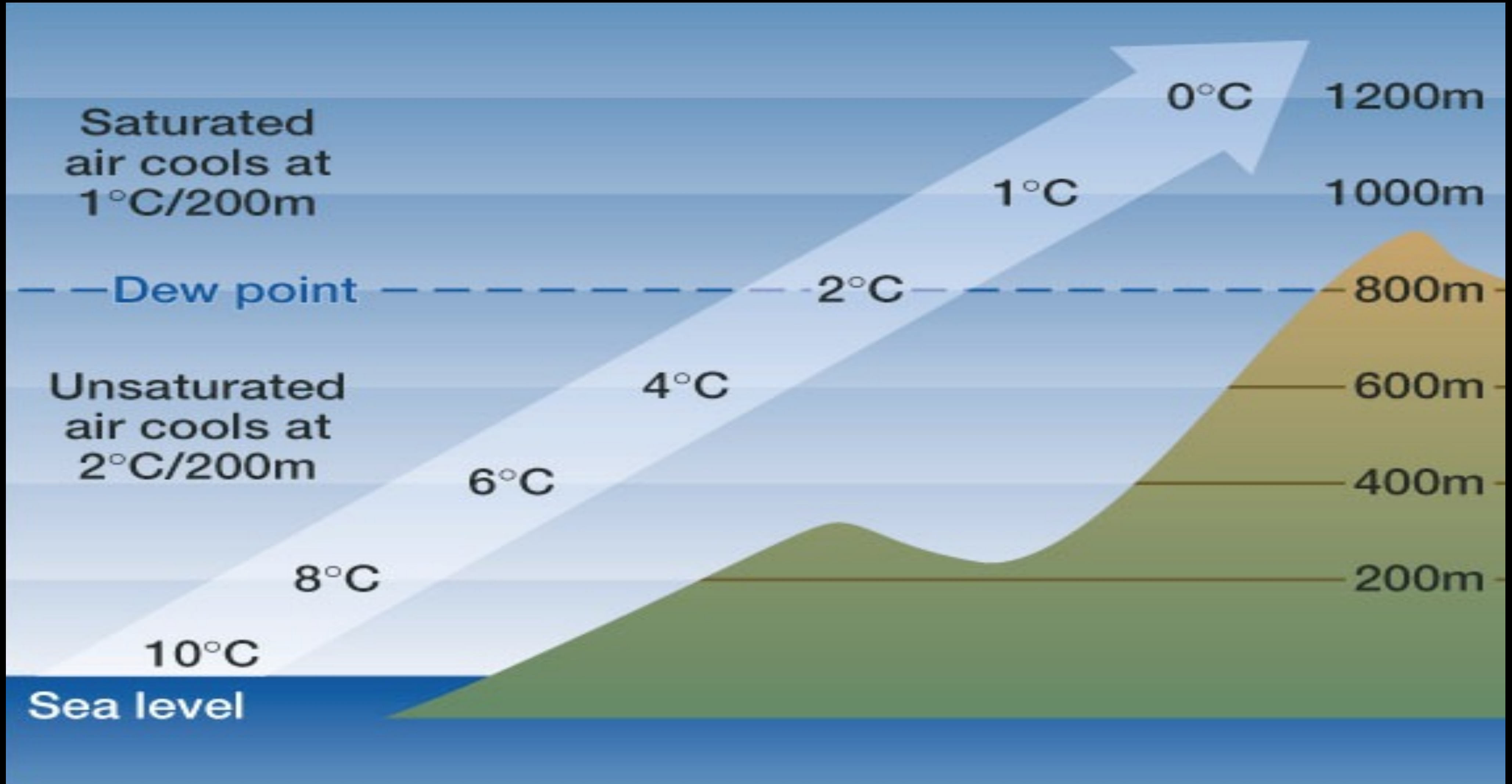


Air 'squeezed'
over hill top

Air eddies
beyond
constriction

Air funnelled
into valley

AIR MOVEMENT



PRESSURE & TEMPERATURE

WHAT'S ESSENTIAL AS A MOUNTAIN LEADER

- Wind Direction and Speed
- Temperature
- Rain
- Where's the weather coming from?
- What's coming?
- Plan well



