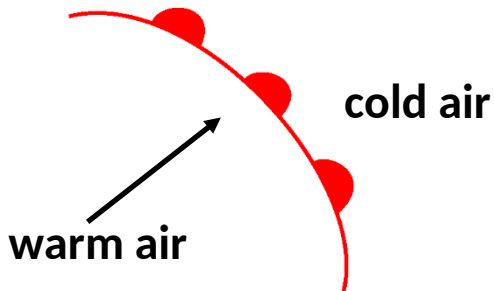


Reading synoptic (weather) charts

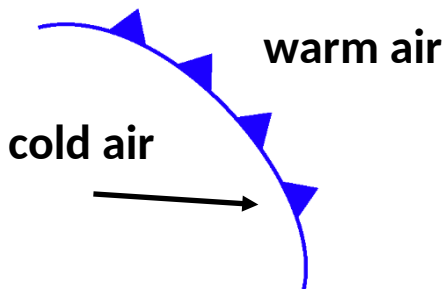
warm front



A warmer air mass begins to catch up with a cold air mass. Because the warmer air is less dense, it rises upwards over the cold air.

Clouds you would expect along a warm front are: nimbostratus (rain clouds), altostratus (mid-level blanket of cloud), cirrostratus (high level thin clouds), cirrus (wispy high-level clouds).

cold front



The reverse of a warm front. A cold air mass moves toward a warmer one, undercutting it due to the higher density of cold air. This pushes the warm air upward on a shallower gradient.

Clouds you would expect along a cold front include: cirrus (high level wispy clouds), altostratus (mid-level blanket of cloud), nimbostratus (rain clouds), cumulonimbus (towering rain clouds)

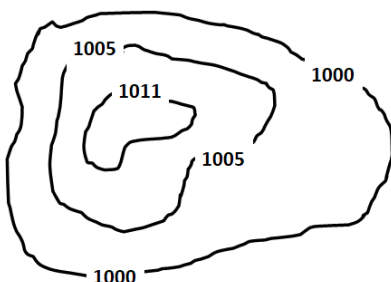
occluded front



The reverse of a warm front. A cold air mass moves toward a warmer one, undercutting it due to the higher air densities of cold air. This pushes the warm air upward on a shallower gradient.

Occluded fronts can include a whole range of cloud types. Typically you might see rain clouds such as cumulonimbus and nimbostratus.

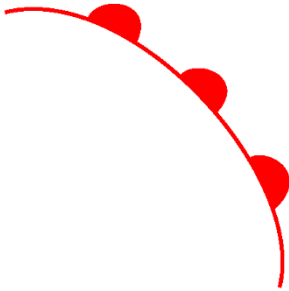
isobars



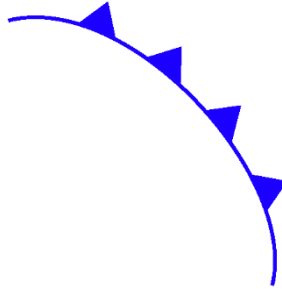
Isobars are lines of constant pressure. One isobar will have the same pressure all around. Pressure is noted in hectopascals (hPa, also known as millibars or mb). Standard sea-level pressure is 1013 hPa. Low pressure areas are associated with unstable conditions such as rain and storms, whereas relatively high pressure areas have low wind and rain. When the isobars are close together, this means the wind speeds are a higher because the wind flows along the isobars.

Reading synoptic (weather) charts

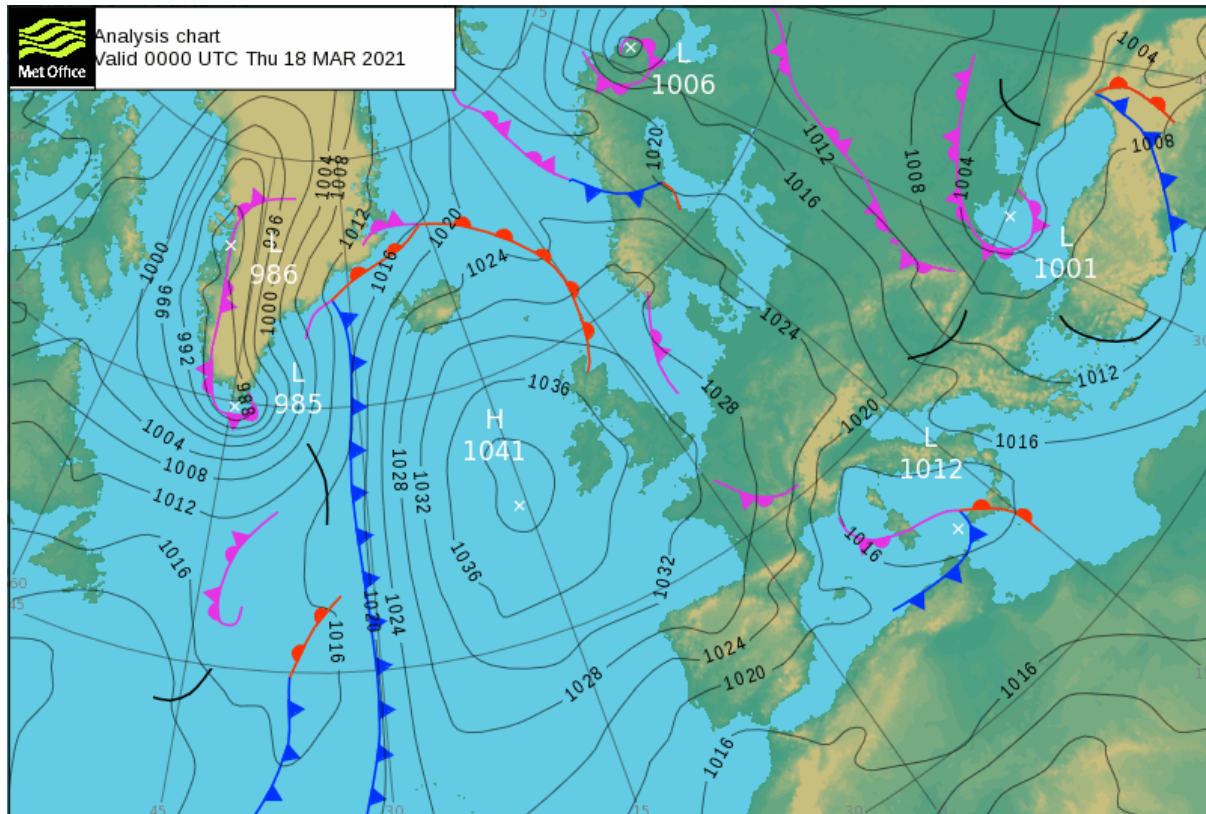
warm front



cold front

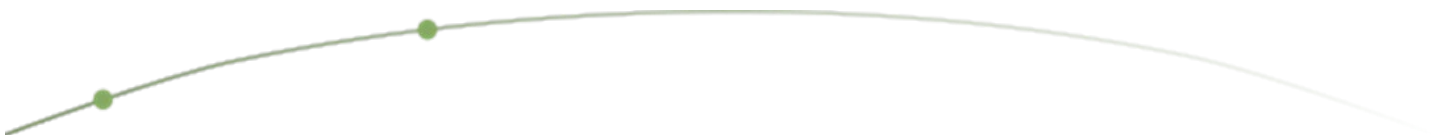


occluded front



The synoptic chart above shows a range of meteorological features. There is a high pressure system moving toward the UK. **What conditions are associated with high pressure systems?**

From the chart, **what conditions would you expect to follow the high pressure system**, assuming all of the fronts continue to move in the direction they're facing?

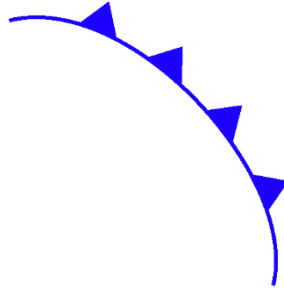


Reading synoptic (weather) charts

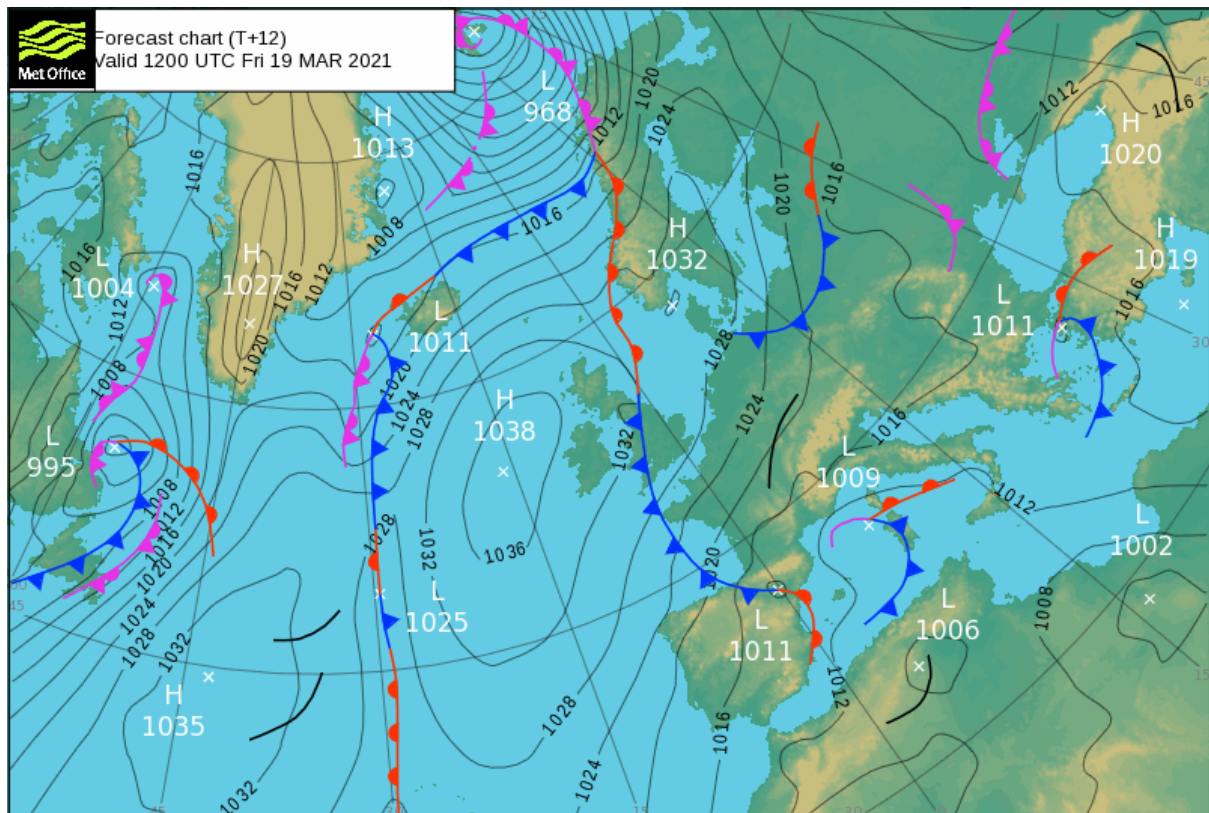
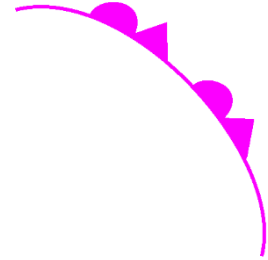
warm front



cold front



occluded front



Circle the part of the chart above that likely has the strongest windspeeds. From the chart, what can you assume about the weather conditions in this area?

What clouds might you expect to see over Wales on this chart?

