

How to read a Weather Chart

Isobars

Isobars are the lines on a weather chart.

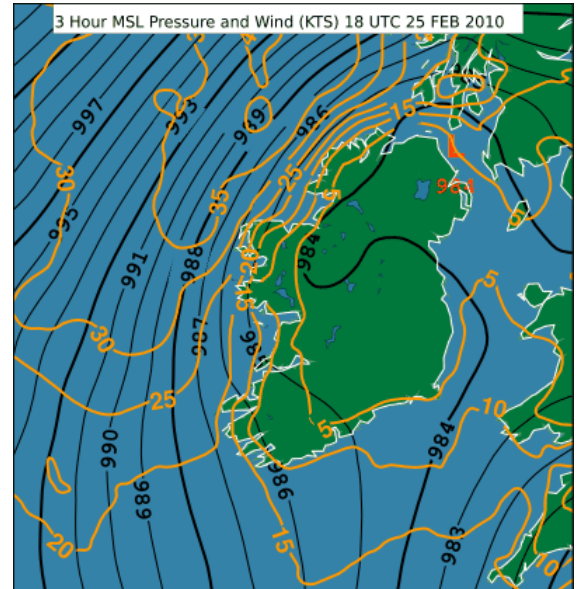
Isobars join points of equal pressure.

When the lines are close together, the wind is strong.

When the lines are far apart, the wind is light.

The wind blows almost parallel to the isobars.

Charts showing isobars are useful because they identify features such as **anticyclones** and **depressions**, which are associated with particular kinds of weather.



Weather chart with isobars, 25 Feb 2010

L = centre of a low pressure area/depression

This is usually associated with unsettled weather.

It brings strong winds, rain belts and perhaps snow in winter.

In the northern hemisphere, wind around a low pressure system blows anticlockwise.



H = centre of a high pressure area/anticyclone

This is usually associated with settled weather.

It brings cloudless skies.

In winter clear skies and light winds can mean frost and fog.

Wind around a high pressure system blows clockwise.



What are fronts?

A **warm front** is the edge of a warm air mass.

On a weather chart, it looks like this:



Ahead of a warm front there is usually a wide belt of rain.

Behind the warm front the temperatures increase and the rain gradually eases.

A **cold front** is the edge of a cold air mass. It can move twice as fast as a warm front.

On a weather chart, it looks like this:



Ahead of a cold front there is a narrow rain belt.

Behind a cold front the weather is brighter but the temperature is cooler.

An **occlusion** brings weather similar to a warm front.

On a weather chart, it looks like this:



It usually forms when a warm front catches up with a cold front.

Can you read this weather chart?

