

# What factors affect britains climate?

[Environment](#), [Climate](#)



Weather is different in every country even city. Climate is the general weather conditions usually found in a particular place. Through climate we can judge the type of fruit or vegetables that grow in a certain area. The Mediterranean climate is good for growing citrus fruits and grapes. Whereas the American climate is good for growing bananas and Indian and Pakistani climate is perfect for mangoes.

Britain is an island country and is surrounded by sea which gives it a varied climate. We never actually know what the weather will be like, one day it might be sunny the next there might be rain. As we have such a variable climate it's hard to predict in general we have warm summers and cool winters our summers are cooler than other countries because we are surrounded by sea but our winters are milder. The main influences on Britain's climate which are important are latitude, altitude, distance from the sea, ocean currents and the prevailing winds.

Latitude:

Latitude is the position north or south of the equator measured from 0° to 90°. If you are on the equator then your latitude would be zero. If you are near the north pole your latitude would be nearly ninety degrees north and if you are more to the south pole your latitude would be almost 90 degrees south. The further away from the equator you are the colder it is. Therefore when we compare the UK with a country such as

Egypt, Egypt is always hotter because it's more nearer to the equator than UK. As you can see on the diagram Egypt is more nearer to the equator than Britain and is therefore more warmer. (The diagram is not accurate just a

<https://assignbuster.com/what-factors-affect-britains-climate/>

rough estimation of where the two countries may be) as one gets above tropic of cancer or Capricorn, the climate becomes milder, with warm summers and cold winters. This is known as temperate climate and this is what the UK climate is referred as. At points furthest away from the equator, the climate is colder and is called polar.

Altitude:

Altitude is the height above sea level, the higher we go the colder it gets altitude may be measured in units such as metres or miles but is usually measured in feet. When I say the higher you go the colder it gets a mere example is on top of mountain peaks, the peaks are way high up and it is much much much colder there and therefore the air there freezes into ice or snow. In Britain there are a few mountains but we are surrounded more by the sea and therefore the mountains don't have a lot of effect in Britain. Other countries such as Nepal that have a lot of mountain ranges are very cold and I personally think its because of the mountains. The temperature falls by about 1 degrees for ever 100 metres above sea level.

Distance form the sea:

The sea is cooler than land during summer and warmer in winter because it conducts heat slower than land and cools down slower than land in winter. Land heats up faster than sea because its denser and has a bit of metal in it which is a very good conductor heat. The centre of continents are subject to a large range of temperatures. In the summer, temperatures can be very hot and dry as moisture from the sea evaporates before it reaches the centre of

the continent. Distance from the sea has a great effect on Britain as you can see on the map that Britain is surrounded by water and therefore makes our summer cooler and our winters are much milder.

Prevailing wind direction:

prevailing wind direction means the direction wind comes from. Winds that blow from the sea often bring rain to the coast and dry weather to inland areas. Winds that blow to Britain from warm inland areas such as Africa (a warm hot area) will be warm and dry. Winds that blow to Britain from inland areas such as the Netherlands (cold region) will be cold and dry in winter. Britain's prevailing winds come from a south westerly direction over the Atlantic. The winds are cool in the summer and mild in the winter.

Because Britain's wind comes from the south west this means it brings fairly warm air because it comes from near the equator. It also brings water vapour from the ocean (as it comes over the Atlantic ocean) - and that means more rain!

Ocean currents:

The North Atlantic Current (North Atlantic Drift and the North Atlantic Sea Movement) is a powerful warm ocean current that continues the Gulf Stream northeast. Ocean currents can have a great effect on temperatures either reduce it or increase it. The main ocean current that affects UK is the Gulf Stream. The Gulf Stream is a warm ocean current in the North Atlantic flowing from the Gulf of Mexico. The Gulf of Mexico has a higher temperature than UK

because its more closer to the equator where as uk is more futher away near the north pole.

This means that the air coming from the Gulf of Mexico to Britain is also warm. However, the air is also quite moist as it travels over the Atlantic ocean. This is one reason why Britain often has wet weather.

Some local factors affecting climate:

There are some local factors which don't have a major affect but do in a way affect all climate such as the two following; One place may be warm and dry because it is sheletered by hills whereas another place may unmasked to wind and rain. Also electronic things, cars leting of gas and central heating also give out heat. So therefore the city is made to be more warmer than the countryside.

Air mass

Some part of the world is hot some is cold. The result is that the air moves around- like the air in a cold building when you turn on the heater or even the cooker in the kitchen. The air moves around the world in huge blocks known as air masses. An air mass can be thousands of km across. It can be warm or cold or any temperature but depending on where it came from. If for example an air mass comes from the north pole and moves over to the UK there will be cold and dry weather if an air mass coming from the equator (a warm dry place) there will be warm weather.

Often two different air masses will meet and clash over the UK which causes sudden changes in weather. Many different air masses cross Britain. That's why our weather changes so fast but if an air mass stays very slow or stays in one place the weather stays the same for days. The weather does not change from day to day at the tropics and poles because they have the same type of air mass all year round.

Conclusion:

In conclusion, although many factors affect Britain some are more important than others. Like the direction in which the sun's rays hit the earth (equator). How far away a place is from the equator (latitude) the height above sea level (altitude), the distance from the sea, the direction the winds come from and the ocean currents. But all of these are based on one major factor which I didn't mention the SUN. How the sun affects us is affected by the rotation of the earth, latitude and cloud cover. Cloud cover is affected by the wind, another important factor, and the wind is affected by what it has passed over and altitude. Mountains redirect wind or force it up to form clouds if the wind has passed over a warm sea it will be warm and wet, and if it has passed over a cold land mass it will be cold and dry. The sea has a huge impact on the land masses.

Minor factors such as how built up a place is can have a big impact but in small areas, and lastly the ocean currents also is related to which sea it came from then where about the sea is (maybe near the equator). So the sun to me is main factor which affects all climate including Britain's but Britain's climate is more or less linked with the factor; the distance from the sea

which is as I mentioned before is related to the sun in all ways. Where we live in Britain (England) the temperature in winter is not much less than  $0\frac{1}{2}^{\circ}\text{C}$  and in summer not much higher than  $32\frac{1}{2}^{\circ}\text{C}$  in the summer.

Also the weather here is damp and there may be lots of sudden changes. Rain is fairly well distributed throughout the year, with February to March being the driest period and October to January the wettest. The Lake District is England's wettest region, receiving an average of 130 inches (330 centimetres) of precipitation (different forms of water falling from the sky) each year.