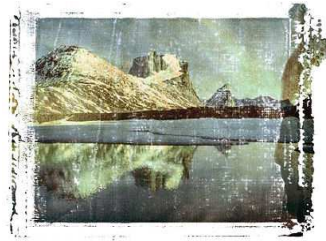


The “Global Warming” of the United Kingdom might result in a colder climate

We often call Climate Change “Global Warming”, yet although the overall trend in global temperatures is upward, the scientific community has been telling us from the start that there will also be greater extremes in climate, and these variations will be experienced both upward in some areas, and downward in other parts of the world.

Climate change prediction is still far from an exact science and substantial uncertainties exist when trying to predict how large areas will react to changing climatic conditions. However, we do know already that when it comes to global climate the warm temperatures currently experienced in the UK are already an anomaly.



The UK climate is noticeably warmer than other countries located at the same latitude such as Newfoundland to the west, and also its Balkan neighbours in Europe, to the east. It is easy to forget that Glasgow and Edinburgh are situated at latitudes similar to the much colder city of Moscow, and surrounding regions.

The Scottish lowlands have in the past 10 years, seldom witnessed anything more than a covering of snow for periods numbering no more than a few days each winter. This is in comparison with the continued prolonged snow covered winters of Moscow, and the hard frozen countryside of the eastern European states, at similar latitudes..

The reason for this warmth is the Gulf Stream, a sea current which draws heat from the tropics and releases the warmth in the north-east Atlantic. However, if global warming causes the acceleration of the hydrological cycle and melting of ice, surface water salinity will be diluted and water currents will slow. This is not just a general theory either, as climate change models do also show a net effect of slowed down warming in the north Atlantic because of this effect (Grub, 2004).

Most of us in the UK have been resolutely assuming, as a result, that although many other currently cold climates will at least become more temperate, and some may even become new summer tourist resorts of the future, the UK will miss out!

However, work by the scientist Seager et al (2002) disputes that climate change will have a cooling effect on the UK climate. This is surprising and such ideas go against the established scientific view which has been held for very many years.

Using weather data from the past 50 years, their research shows that as little as 10% of the UK’s warmth comes from the Gulf Stream. Instead, the paper claims that the majority of the UK’s climate arrives in the form of warm winds from continental North America,

and that this combined with the ocean's ability to hold heat for longer than the land, is the key to the mild climate.

Therefore, dilution of the Gulf Stream by ice melt water, could have a less disastrous effect on the UK's climate than was first thought, and climate change may cause the UK to warm instead of cool.

While there is uncertainty regarding how climate change will affect areas locally, changes already experienced in the global climate and as shown to be occurring by UKCIP (2002) include:-

- Increased night-time temperatures, occurring at twice the rate of warming of daytime temperatures;
- Higher rainfall over many Northern Hemisphere mid-to-high latitude areas of land;
- The Northern Hemisphere is also experiencing an extension in the length of the freeze-free season.

These combined with a practically globe-wide reduction in ice mass, accompanied by substantial Arctic sea ice thinning which is most pronounced in late summer, all point to significant changes. So we will probably not have to wait very long before we will know whether, "Global Warming" in the United Kingdom might result in a colder climate, or indeed just the opposite.

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Please visit "Climate Change for Better or Worse", an independent web site about Climate Change www.climate-change.me.uk to find out more, and for the references given.