

is low at between 0.1 and 0.4 $\mu\text{g S m}^{-3}$ with the lowest values with winds in the sector W through NE (Joranges et al., 1980).

A study of rain chemistry over Ireland (Fisher, 1980) shows pH on the exposed west-coast stations between 5.1 and 5.6. It is estimated that about 50% of the measured sulfate in the rain is attributable to natural background.

Continental remote

Except for a few individual months, the pH is greater than 5.6 and occasionally alkaline (pH >7). The main cause of this is the wind blown dust in arid and semi-arid areas which is calcium rich. There is more than required to neutralize any background acidic components and thus the remainder produces rain more basic than pH 5.6.

Remote Polar regions

A joint study by Canada, the U.S. and Denmark has been monitoring air chemistry on sites in the Arctic. These show that the winter months sufficient acid particulate material reaches high latitudes to reduce visibility producing arctic haze. Concentrations of sulfates measured at Mould Bay and Igloolik range between 1 and 3 $\mu\text{g/m}^3$ in the winter months (Barrie, 1980) and in the absence of any significant alkaline content would be sufficient to produce snow with a pH of about 5.0.