

VOLCANIC ERUPTION EYJAFJALLAJOKULL OF APRIL 2010 AND ITS EFFECTS ON PRESSURE, TEMPERATURE AND RAINFALL

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Abstract

For many years, climatologists have noticed a connection between large explosive volcanic eruptions and short term climatic change. At first, scientists thought that the dust emitted into the atmosphere from large volcanic eruptions was responsible for the cooling by partially blocking the transmission of solar radiation to the Earth's surface. Recent stratospheric data suggests that large explosive volcanic eruptions also eject large quantities of sulfur dioxide gas which remains in the atmosphere for as long as three years and affects the dynamics of the troposphere and stratosphere which in turn changes the weather/climate. Keeping the above in view using 38 stations, surface pressure, temperature and rainfall data study has been undertaken to examine the effects of 19th April volcanic eruption on the above parameters.

Keywords: Volcanic effects, Troposphere, Radiation, Dynamics, Climate.