

Atmospheric Anomalies prior to the Nepal Earthquake in April 2015

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ABSTRACT

The present paper deals with the appearance of atmospheric anomalies prior to the devastating Nepal (Gokhra) Earthquake that occurred recently in April 2015 (28.1 N and 84.6 E). In the present paper the observations of Atmospheric parameters such as Atmospheric Temperature, relative humidity and Atmospheric refractivity and their variation prior to the Earthquake are presented. In order to identify the anomalies in atmospheric parameters we analyzed the data for a period of seven years (2009-2015) around the Nepal Earthquake epicenter. The mean and standard deviation of the atmospheric parameters were obtained; it is observed that the increase in atmospheric temperature before 1 day of the Earthquake was found to be the highest in all the seven years. The temperature was higher than the $M+2\sigma$. The similar results were obtained for atmospheric refractivity and Atmospheric vapour pressure.

Key words: Earthquake, Atmospheric Refractivity, Atmospheric anomalies, precursors