41st COSPAR Scientific Assembly 2016

Space Studies of the Upper Atmospheres of the Earth and Planets including Reference Atmospheres (C)

Recent Advances in Equatorial, Low- and Mid-Latitude Mesosphere, Thermosphere and Ionosphere Studies (C1.1)

NEPAL EARTHQUAKE: EXPLORING SOME OF THE CATASTROPHES

Pranab Hazra, pranabhazra2007@gmail.com

Narula Institute of Technology, Kolkata, India

Suman Paul, paul_suman30@yahoo.co.in

Centre of Advanced Study in Radio Physics and Electronics, University of Calcutta, Kolkata, India

Abhijit Ghosh, abhijit3034@gmail.com

University of Calcutta, Kolkata, India

Gautam Guha, goutamguha@gmail.com

University of Calcutta, Kolkata, India

Syam Sundar De, de_syam_sundar@yahoo.co.in

University of Calcutta, Kolkata, India

The characteristic variations of different meteorological parameters during the period of Nepal earthquakes having M=7.8 occurred on April 25, 2015 and M=7.3 on May 12, 2015 are presented. The results are interpreted in terms of Lithosphere-Atmosphere-Ionosphere coupling processes occurred due to thermal anomalies in the event of major earthquakes. These are reported in terms of thermodynamic properties within the lower ionosphere. The differences in the results are explained through the emission of α -particle from Rn²²².