



Contribution ID: 1041

Type: Poster contribution

Cosmic ray measurements in the atmosphere at several latitudes in October, 2014

Saturday 1 August 2015 15:30 (1 hour)

We summarize the results of analysis of cosmic ray (CR) measurements in the Earth's atmosphere at several latitudes on October 20 and 24, 2014. The cosmic ray fluxes in the atmosphere were recorded during balloon flight in Zaragoza (Spain; 41°39'N, 0°54'W) by two detectors constructed at the Reading University, UK and at the Lebedev Physical Institute, Russia. We compare these data with simultaneous cosmic ray measurements by standard radiosondes in northern Murmansk region, Apatity (Russia; 67°33'N, 33°24'E), in Antarctica (observatory Mirny; 66°33'S, 93°00'E) and in Moscow (Russia; 55°45'N, 37°37'E). The measurements in Reading (UK; 51° 27'N, 0° 58' W) and in Mitzpe-Ramon (Israel; 30°36'N, 34°48'E) are also used in the analysis. We focus on the estimation of the cosmic ray latitudinal effect in the atmosphere. The new results will be discussed and compared with the previous results obtained.

Collaboration

– not specified –

Registration number following "ICRC2015-I/"

243

Author: Dr MAKHMUTOV, Vladimir (Lebedev Physical Institute of the Russian Academy of Sciences, Moscow, Russia)

Co-authors: Prof. BAZILEVSKAYA, Galina (Lebedev Physical Institute of the Russian Academy of Sciences, Moscow, Russia); Prof. HARRISON, Giles (Department of Meteorology, University of Reading P.O. Box 243, Earley Gate, Reading, Berks, RG6 6BB UK); Dr APLIN, Karen (Head of Physics Teaching Laboratories, Oxford University, UK); Dr NICOLL, Keri (Department of Meteorology, University of Reading P.O. Box 243, Earley Gate, Reading, Berks, RG6 6BB UK); Dr PHILIPPOV, Maxim (Lebedev Physical Institute of the Russian Academy of Sciences, Moscow, Russia); Dr YANIV, Roy (Department of Geosciences, Tel-Aviv University, Israel); Prof. YAIR, Yoav (Interdisciplinary Center (IDC), Herzliya, Israel); Prof. STOZHKOY, Yuri (Lebedev Physical Institute of the Russian Academy of Sciences, Moscow, Russia)

Presenter: Dr MAKHMUTOV, Vladimir (Lebedev Physical Institute of the Russian Academy of Sciences, Moscow, Russia)

Session Classification: Poster 2 CR

Track Classification: CR-EX