

Dynamics of high-energy proton fluxes in South Atlantic Anomaly region with ARINA experiment data

Friday, 9 October 2015 14:30 (30)

The South Atlantic Anomaly (SAA) dynamics in high-energy proton fluxes was investigated from 2006 to 2014 on the bases ARINA experiment data. This experiment on board the Resurs-DK1 satellite is carried out since 2006 and till now. The instrument detects protons in an energy range from 30 MeV to 100 MeV. The drift of positions (longitudes) of the proton flux maximum and the Earth's IGRF model magnetic field minimum in the SAA region at different L-shells ($L = 1.2 - 1.5$) were considered in this work. These drifts were compared. It was shown that the average velocities of the SAA's longitude drift are practically the same and this value about 0.4 ± 0.1 degrees in a year in the western direction.

Presentation type

Section talk (10+5 min)

Primary author(s) : RAMAKOTI, Ekaterina (NRNU MEPhI)

Co-author(s) : Dr. ALEKSANDRIN, Sergey (National Research Nuclear University MEPhI (Moscow Engineering Physics Institute)); Dr. KOLDASHOV, Sergey (MEPhI)

Presenter(s) : RAMAKOTI, Ekaterina (NRNU MEPhI)

Session Classification : Poster session IV

Track Classification : Cosmic rays