

Hydrogen emission H_α intensity variations measured in winter 2002-2003 at Apatity

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Measurements of the energetic proton precipitations by means of hydrogen optical emission H_α registration during the geomagnetic disturbances were performed with new spectral installation. H_α emission used to be obscured with molecular nitrogen bands 1PG(7,4) and(6,3) emissions. Possibility of the extraction of the H_α emission from the mixed H_α and 1PGN₂ signal with synthetic spectra usage is discussed. Spatial and temporal variations of the H_α intensity are compared with Lovozero all-sky camera data.