

Ionization profiles created by energetic solar protons from the incoherent radar data

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Electron density profiles and their variations obtained by the incoherent radars EISCAT during a number of powerful solar proton events have been investigated. It is found that an ionization maximum was situated at heights 65-105 km. The changes in the electron density connected with corresponding variations of solar proton flux and energetic spectrum as well as with daily variations of solar luminosity are demonstrated. The recombination coefficient estimations by different methods are discussed.