Electric field and electric current variations in Kola and Antarctica during solar proton events

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Trial measurements of atmospheric electricity at Apatitian atmospheric station started in April 2001, and 13 SPE occurred in this year. The device was a long wire line with high input resistance, so its measured parameter realized linear combination of electric field and current. In 6 from 13 cases the proton precipitations were accompanied by electric current increase, in 6 cases no effect was observed, and one case was indeterminate. Similar situation is observed for these 13 events in results of electric field measurements at Vostok in Antarctica, but the dates of field increase contemporize not always.
At the turn of October - beginning of November 2004 five SPEs occurred. In this time there were two long wire lines in Apatity and Lovozero and a rotating electric field mill in Apatity for the atmospheric electricity measurements. No one in the three devices detect the increase effect on no one account. However the possibility of effect, when the current decreases and the field increases during SPE, is conceded.