

Disturbances of magnetic field with work of stand “Sura” at distances more then 500 km from source

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Presented of monitoring results from magnetic observatories, working on “INTERMAGNET” program with “Sura” stand during 2011 (16-19.06) and 2012 (8-18.06). On X and Y (H) component records with step 1 min it was detected features with periods of any hours or minutes, that is not usual variation of magnetic field. Nature of these signals from local source is confirmed by observations along power line at sector from -40 to 70°N and from -15 to 90°E. We propose that these features are related with artificial processes in the region, onside that zone they are weaker or disappear. Earlier influence on magnetic field by “Sura” was observed on short distances by Kotik at al., an distance more 500 km by Ruzhin at al.

In our paper there was noticed a similarity of the observed effect with effect, registered on satellite APEX, where was investigated the local affecting on magnetic field by flow of plasma. In that cosmic experiment than phenomenon has been explained as trigger effect at change of source phase. Qwick change of phase led to change of deriviti of wave vector and it meanse the change of amplitude of wave, other words the change of oscillogram. It is possible, that such trigger was observed at work of "SURA".