

MAJOR GEOMAGNETIC STORMS AND COSMIC RAYS, 1. SEARCH OF FEATURES IN CR WHAT CAN BE USED FOR FORECASTING.

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According to NOAA Space Weather Scales, geomagnetic storms of scales G5 (3-hour index of geomagnetic activity $K_p=9$), G4 ($K_p=8$) and G3 ($K_p=7$) are dangerous for people technology and health (influence on power systems, on spacecraft operations, on HF radio-communications and others. To prevent these serious damages will be very important to forecast dangerous geomagnetic storms. In many papers it was shown that in principle for this forecasting can be used data on CR intensity and CR anisotropy changing before SC of major geomagnetic storms accompanied by sufficient Forbush-decreases (e.g., Dorman et al., 1995, 1999). In this paper we consider over 100 major geomagnetic storms and for each case we analyze hourly data of many NM for 8 days with SC in the 4-st day of 8-days period (that before SC we have at least 3 full days). We determine what part of major geomagnetic storms is accompanied CR intensity and CR anisotropy changing before SC, and what part of major geomagnetic storms does not show any features what can be used for forecasting. We estimate also how these parts depend from the index of geomagnetic activity K_p .

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