



Continuous cosmic ray records for space weather studies

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Several algorithms were used to test cosmic ray data for nowcast and forecast issues of Space Weather and the main results are discussed. In particular, we present a detailed investigation for two solar activity epochs: January 7-15, 1997 (near the minimum phase) and August 8-16, 2000 (near the maximum phase), showing that interplanetary coronal mass ejections can be identified from indices derived from neutron monitor records. Also the relationship between the cosmic ray variability and the geomagnetic activity level is analyzed. Work performed for COST 724 Action in the frame of Science for Solar-Terrestrial Relations (Antarctic Research Program of Italy) and Slovak VEGA agency project 4064.