Cosmic ray radiation effects on space environment associated to intense solar and geomagnetic activity

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Abstract: Intense cosmic ray fluxes during Forbush decreases can be responsible for a number of radiation effects in electronics and sensor systems of spacecrafts and aircrafts. Monitoring, modeling and possible prediction, from the real-time database of the Athens Neutron Monitor Data Processing (ANMODAP) Center are being considered. A different kind of cosmic ray events that evolves during a Forbush decrease, as an additional intermediate enhancement and its impact on electronic systems, is also identified. © 2007 IEEE.

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