## XXV European Cosmic Ray Symposium



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## The SEP event of 775 AD: The worst case scenario over ten millennia

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A very unusual enhancement of production of cosmogenic isotopes in 775 AD was discovered recently. Although different hypotheses about its origin were proposed, it is a paradigm now that the event was caused by a (possibly a series of) extreme solar energetic particle (SEP) event with a very hard energy spectrum. It appears to be the strongest event over the Holocene thus serving as the upper bound for SEP events. Here we discuss the strength of the event, its spectrum, and atmospheric consequences to be considered as the worst case scenario on the time scale of tens of thousands years.

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