A SEARCH FOR ACCELERATED 7BE IN SOLAR ENERGETIC PARTICLE EVENTS

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The LDEF spacecraft measured an unexpectedly high level of ⁷Be, and from the fact that the ⁷Be was concentrated on the leading surfaces, it was presumed to have been swept up from the residual atmosphere. Later measurements from the Russian COSMOS and RESURS spacecraft showed a correlation of the ⁷Be with solar energetic particle events. However, it is unclear whether the atmospheric ⁷Be is due to primary particles accelerated at the Sun, or due to secondary spallation of heavier solar energetic particles in the Earth's atmosphere. The Solar Isotope Spectrometer (SIS) on ACE has been measuring solar energetic particles since launch in 1997. Here, we present the results of a search for primary accelerated ⁷Be above about 5 MeV/nucleon with the SIS instrument.