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PEM029-12

Room:203

Time:May 24 17:15-17:30

## Probability forecast of the SEP event occurrence in a long-term range

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The SEP events are one of the space weather effects most hazardous to the space environment of mankind. Due to the rareness of its occurrence, the long-term, a monthly-to-yearly range, probability assessment can also provide useful information to operations, as well as the accurate prediction of its arrival. We have already developed the forecast scheme of one-month occurrence probability for the geomagnetic storm [Tsubouchi and Kubo, 2010], in which the probability is derived as a function of the elapsed time after the latest event from the cumulative distribution function for the time interval between successive events. In the present study, we apply this scheme to the SEP case and compare with the corresponding observations to verify the forecast validity. The most appropriate parameters, such as the event criterion and lead time, will be explored.