

**AE INDEX FORECAST AT DIFFERENT TIME SCALES THROUGH AN ANN ALGORITHM
BASED ON L1 IMF AND PLASMA MEASUREMENTS**

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Numerous attempts to forecast the AE index have failed due to the inherent nature of AE, which appears to be a combination of a part driven by the solar wind and a part driven by internal magnetospheric processes. In this paper we present a study of the AE forecast on different time scales, from 5 min to 1 hour, based on a new ANN algorithm with L1 IMF and plasma inputs.