



## **Long-term variation of energetic electron precipitation**

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The long-term evolution of energetic electron precipitation (EEP) is of considerable interest, e.g., because of its atmospheric and climatic effects. However, the long-term evolution of EEP over several solar cycles has been problematic due to the lack of reliable long-term data. The NOAA/POES satellites have measured energetic particles for more than 35 years. This dataset has been used widely but it has been plagued by several instrumental problems, which have restricted its use for long-term studies. However, we have recently corrected and recalibrated the entire NOAA/POES energetic particle dataset. Using this unique dataset we present here an overview of the long-term evolution of EEP paying particular attention to the role of different types of solar wind disturbances in driving the EEP.