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What is the flux of low energy electron precipitation in the lower thermosphere?

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Energetic particle precipitation (EPP) into the atmosphere, lead to chemical reactions producing NOx gases. Auroral electrons deposit their energy at altitudes throughout the upper mesosphere and lower thermosphere. During the winter the EPP-produced NOx gases can survive for months and be transported down to the stratosphere, where it can destroy ozone through catalytic reactions. Studies comparing the NO density estimated by chemistry climate models and observations suggest that the estimation of NO-production by auroral forcing is overestimated during quiet times and underestimated during active time. This study provides an intercomparison of different auroral forcing estimates. We compare fluxes from the Total energy detector (TED) onboard the NOAA Polar Orbiting Environmental Satellites (POES) and Meteorological Operational satellite (MetOp), sensor for precipitating particles (SSJ) from Defense Meteorological spacecraft Program (DMSP), alongside a Kp-driven auroral model. The data over a full year was sorted by the daily Kp and evaluated as function of geomagnetic latitude and magnetic local time. Discrepancies are evaluated in respect to geographical bias, as well as geometric factors of the satellites. Furthermore, the observations are compared to the Kp-driven auroral model.