Cross-Comparison of GOES EPEAD and Van Allen Probes REPT Using Solar Energetic Proton Fluxes: Initial Results

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Relativistic Electron Proton Telescope (REPT) on Van Allen Probes

REPT protons			
Bin	Center energy	Low bound	High bound
0	21.25 MeV	18.5 MeV	24.0 MeV
1	27.6 MeV	24.0 MeV	31.2 MeV
2	35.9 MeV	31.2 MeV	40.6 MeV
3	46.7 MeV	40.6 MeV	52.8 MeV
4	60.7 MeV	52.8 MeV	68.6 MeV
5	78.9 MeV	68.6 MeV	89.2 MeV
6	102.6 MeV	89.2 MeV	116.0 MeV
7	208.0 MeV _(integral)	116.0 MeV	*** MeV





REPT fluxes used here are derived from ground analysis of pulse heights

09 Jan 2014 03-15 UT

SEP Events, 06-10 Jan 2014

Cross-comparison



Cross-comparison opportunity: Van Allen Probes at apogee while GOES-13 fluxes are nearly isotropic



Initial results: EPEAD-REPT crosscomparison on 09 Jan 2014



REPT spectra constructed from 20-min- and spin-averaged PHA fluxes