

POLAR LATITUDE ULF BURSTS ASSOCIATED WITH ENERGETIC (300-600 KEV) ELECTRON PRECIPITATION AND VISUAL AURORAS

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The energetic (300-600 keV) electron precipitation at polar latitudes measured by low altitude (~500 km) CORONAS-F satellite on December 13, 2003 has been analyzed and compared with ground geomagnetic observation from the stations located near footprint of the satellite pass in each given moment. Sporadic precipitations of energetic ($E > 300$ keV) electrons have been found in the Northern polar cap. They have been accompanied by the simultaneous bursts of the 1-30 mHz geomagnetic pulsations as well as riometer absorption with similar wavelet structure, and North-South stretched polar cap auroras. We suggest that peaks of precipitating energetic electrons near polar cap border and impulsive ULF waves could be attributed to the common source.

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