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Cluster survey of narrow band electrostatic emissions in the plasmasphere region.

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Several kinds of natural electrostatic emissions are observed in the outer plasmasphere (Christiansen et al 1978, Olsen et al 1987), in particular emissions related to the electron gyrofrequency (Hubbard and Birmingham 1978), classified as low 3/2 in the class 1a.
The low 3/2 emissions have been routinely observed by WHISPER instrument in the plasmasphere region. These emissions are present as bandwidth electrostatic emissions. They are referred to as n(1.1) fce in this work.
The Whisper instrument provides a good resolution on time and frequency and allow a fine spectral characterization of the frequency and intensity of these waves.
Compared to the (n+1/2) fce emissions, the n(1.1) fce emissions are less intense, and present a high latitudinal extension.
A statistical study of these emission using five years of data (2002-2007) is presented. The MLT dependence and the latitudinal extension of these emissions is investigated.
The relative occurrence of the n(1.1) fce emissions is calculated, exploring the effect of the distance to the plasmapause in their observation.
Finally, a test of the geomagnetic activity influence is presented via the variations of the DST index associated to the observations.