

## SOME RECENT RESULTS FROM THE CLUSTER STAFF EXPERIMENT AT LOW FREQUENCY

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Different recent results from the STAFF waveform data and their implications will be presented. In the plasmasheet during a substorm event, the simultaneous occurrence of large-amplitude quasi-parallel whistler mode waves and ion-scale magnetic structures is presented. This study provides new insights on the possible multiscale coupling of plasma dynamics during the substorm expansion, on the basis of the whistler mode wave trapping by coherent ion-scale structures. Looking at ULF waves at the magnetopause, comparisons at low and high latitude and at different local time show the influence of the latitude, but contrary to some expectation, no local time dependence is evidenced. Newly observed ULF EMIC triggered chorus in the vicinity of the plasmopause will be presented and discussed, in particular the possible reasons of the few number of events observed despite a systematic search on 8 years of data. Finally some localized short time structures will be presented and discussed.