



Saturnian magnetopause boundary layer waves: Cassini

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Low frequency (LF) and VLF wave properties of the Saturnian magnetopause boundary layer are studied. The boundary layer regions will be identified using magnetic field and plasma data. The results of studies of numerous crossings will be summarized. Wavelet, minimum variance and FFT techniques will be applied. From the results of the analyses, the mechanism for various wave-generating instabilities will be inferred. Wave-particle interactions and resultant contributions to the dayside aurora will be estimated.