



## **Observations of chorus at Saturn using the Cassini Radio and Plasma Wave Science Instrument**

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Whistler mode chorus has been detected at Saturn by the Radio and Plasma Wave Science (RPWS) Instrument during most of Cassini's first nineteen periapse passes. The occurrence of the emission shows no obvious correlation with Saturn latitude or local time, and the emission is detected primarily between L shells of 5 to 8. Wave normal and Poynting vector analysis using the simultaneous waveforms of the two-axis electric antenna and the three-axis magnetic search coil obtained by the RPWS Five-Channel Waveform Receiver (WFR) has been performed on the chorus emission. This analysis shows that the chorus propagates away from the Saturnian magnetic equator, similar to chorus propagation at the Earth, suggesting a source region near the equator. High resolution wideband measurements from the Wideband Receiver (WBR) shows fine structure in the chorus similar to fine structure of chorus observed at the Earth, but with longer time scales.