

SOLAR WIND MEASUREMENTS UPSTREAM OF THE SATURNIAN AURORA

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For three weeks extending from January through early February, 2004, the Cassini spacecraft and Hubble Space Telescope were used to make simultaneous observations of the solar wind and Saturn's aurora. We report here on initial results from data taken with the Cassini Plasma Spectrometer's electron and high-resolution ion spectrometers in the solar wind upstream of Saturn. Earlier studies have shown grounds for solar wind control of at least certain aspects of the aurora of Jupiter and Saturn. This special study is designed to test that hypothesis using a relatively long period of solar wind data combined with UV observations of the aurora.