



Cassini/CIRS observations of Saturn at 7.18 microns

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We analyze the thermal infrared spectra of Saturn obtained by the Cassini-CIRS instrument to infer thermal and cloud information for Saturn's stratosphere and upper troposphere. A narrow spectral window centered at 1392 cm^{-1} (7.18 microns) allows us to probe the structure of Saturn's atmosphere in the vicinity of the 1 bar pressure level. Variations in the planet's emission at 1392 cm^{-1} indicate the presence of an atmospheric absorber that is not uniformly distributed over the planet. The observed variations correspond to a zonal mean brightness temperature contrast of about 5 K. A numerical inversion is used to constrain the absorption coefficient, the optical thickness and the pressure level of the present cloud/haze layer. We present the results from our analysis at selected latitudes in Saturn's southern hemisphere.