



The Visual and Infrared Mapping Spectrometer (VIMS) on Cassini

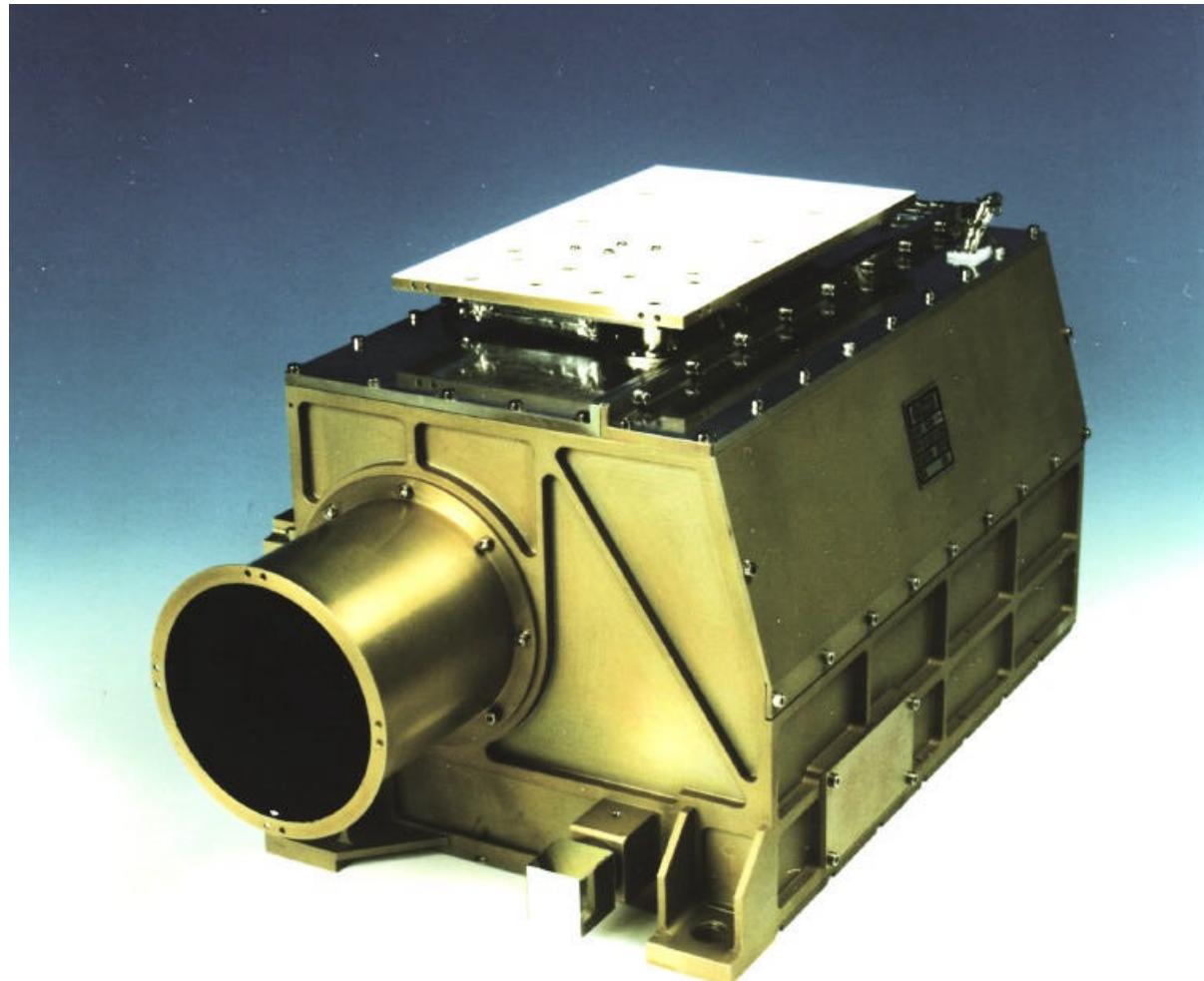
R. Brown, K. Baines, G. Bellucci, J-P. Bibring, B. Buratti, F. Capaccioni, P. Cerroni, R. Clark, A. Coradini, D. Cruikshank, P. Drossart, V. Formisano, R. Jaumann, Y. Langevin, D. Matson, T. McCord, V. Mennella, R. Nelson, P. Nicholson, B. Sicardy, C. Sotin



- Instrument description
- General goals and capabilities
- Near-term observation plans
- Newest data on Saturn

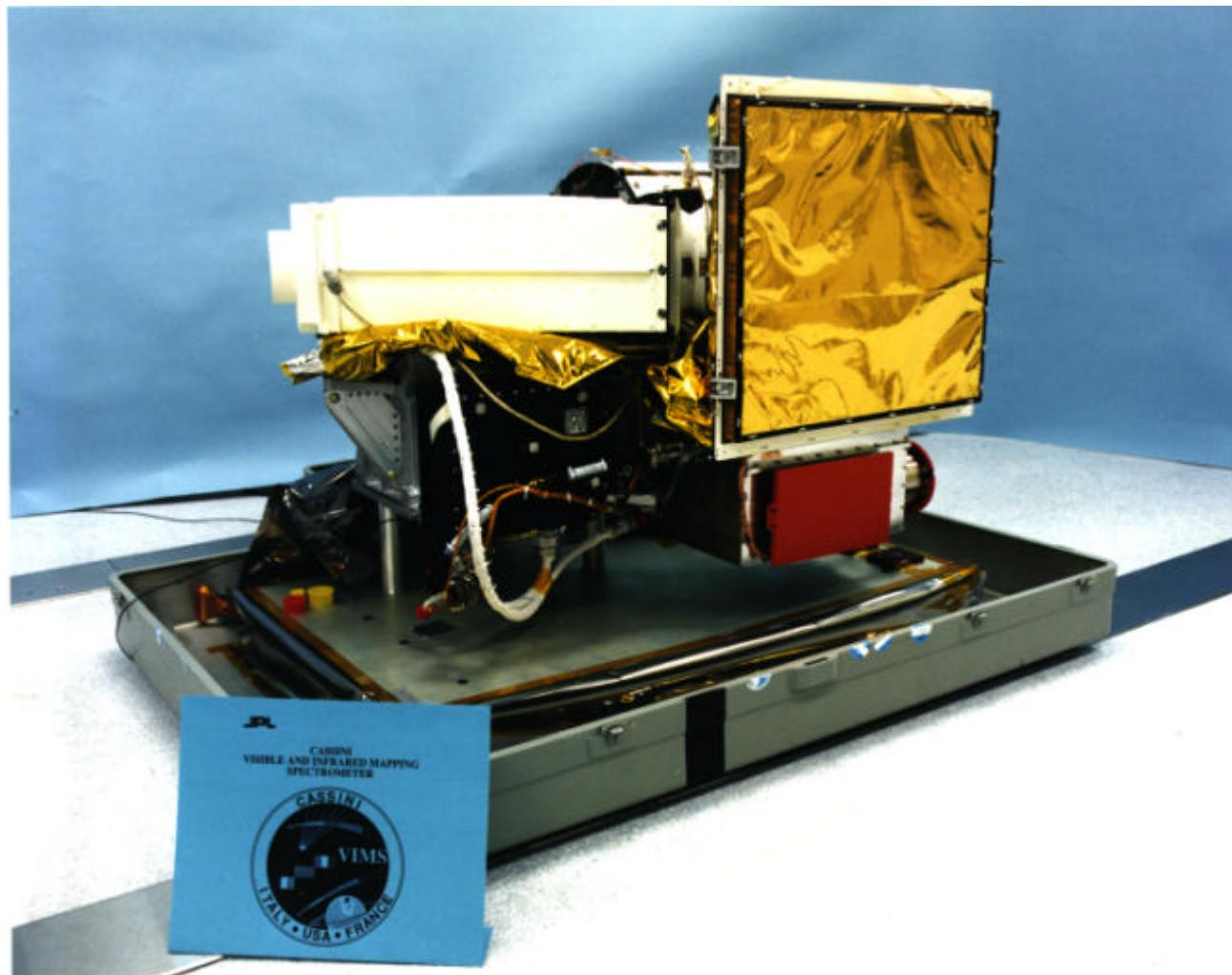
VIMS Visual Channel (Built by ASI)

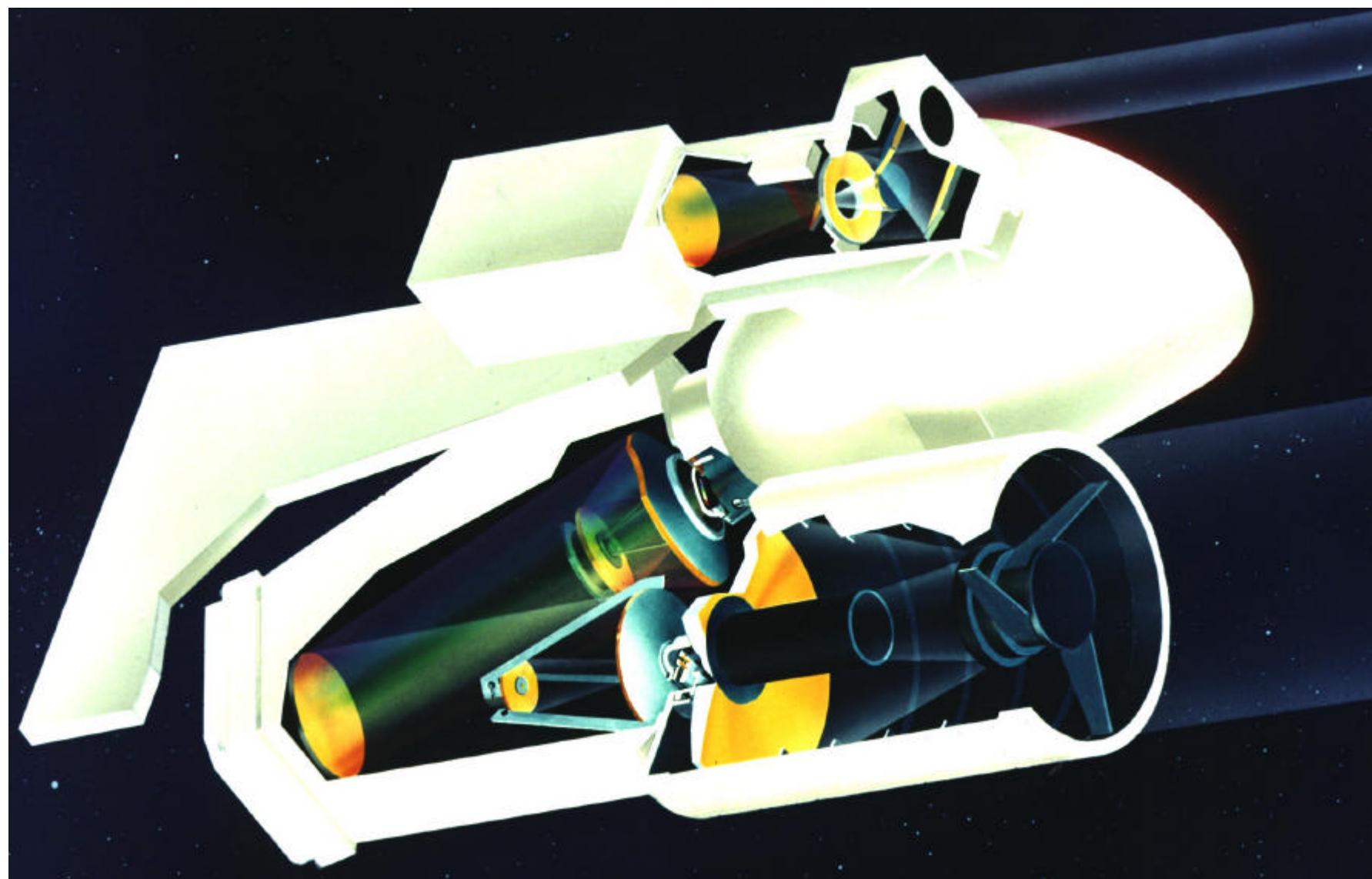
**0.3-1.08 mm; 7.3 nm res.; 0.5x0.5 mrad pixel (3x3x5 sum)
(rocks and gases)**



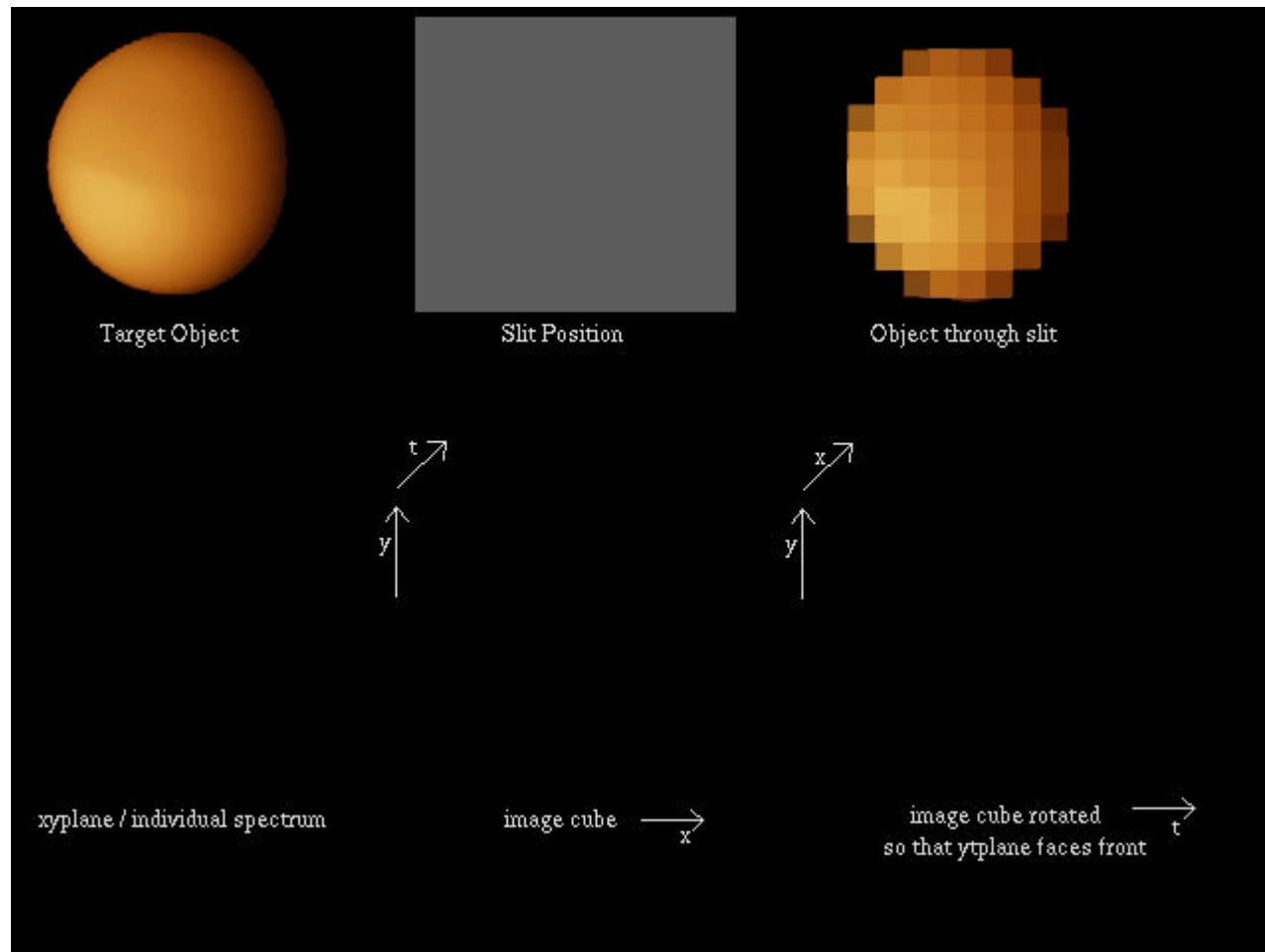
VIMS IR Channel (Built by JPL)

**0.89-5.22 mm; 11-22 nm res; 0.5x0.5 mrad pixel (1x2 sum)
(molecular ices and gases)**

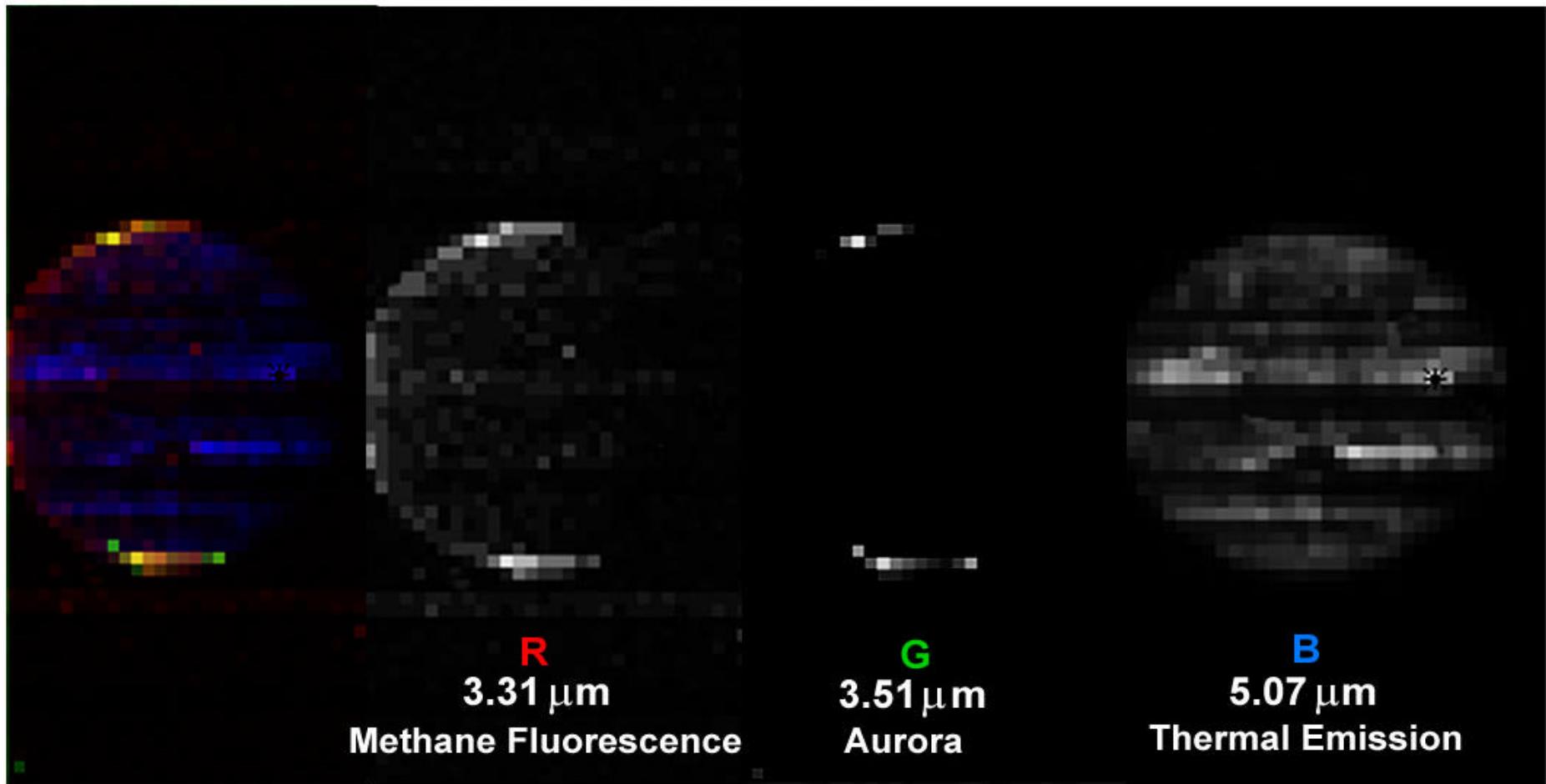


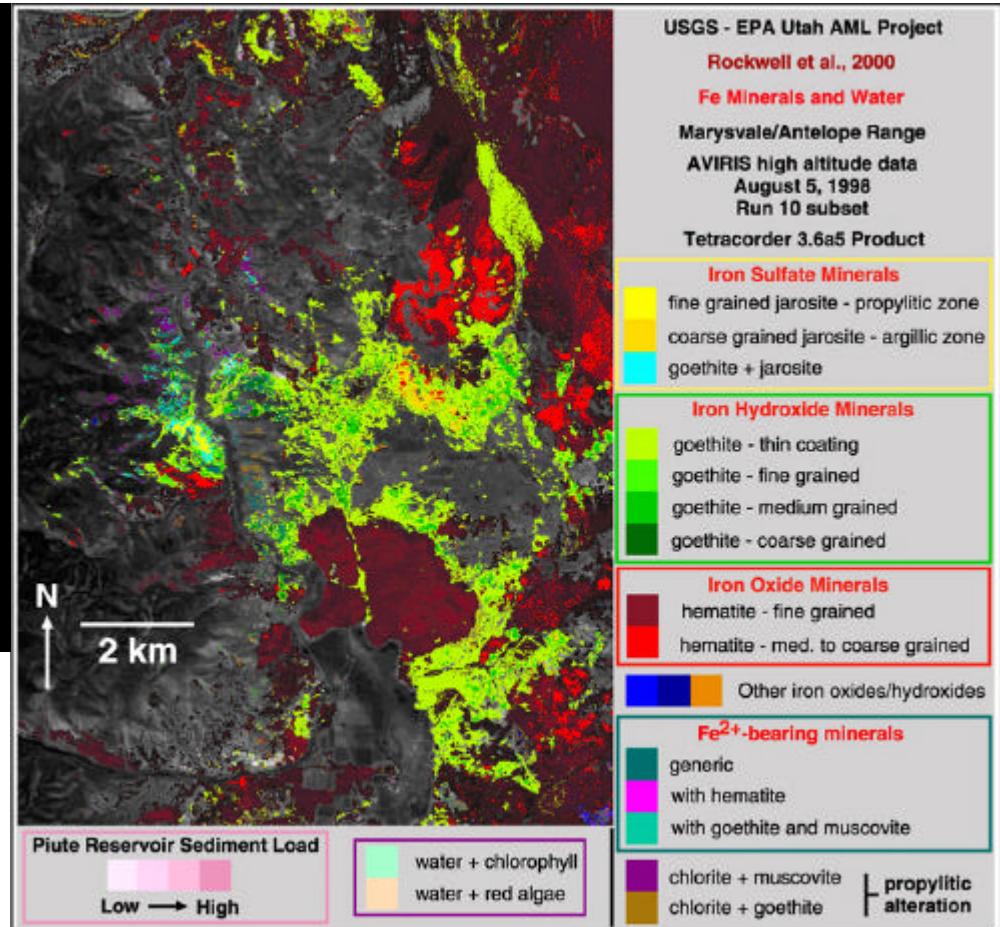


How VIMS Works

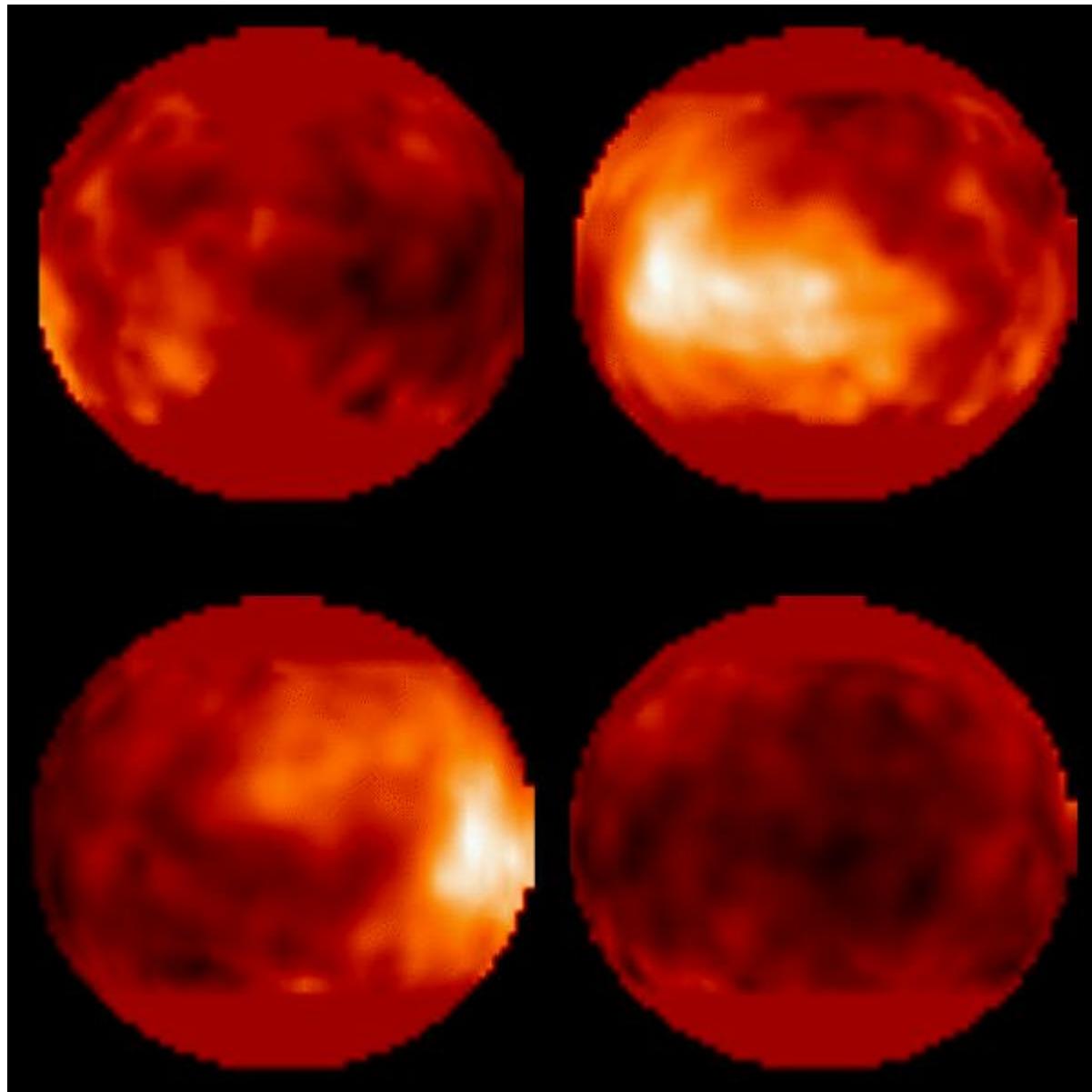


Cassini/VIMS at Jupiter, Dec. 30, 2000 IR Emissions





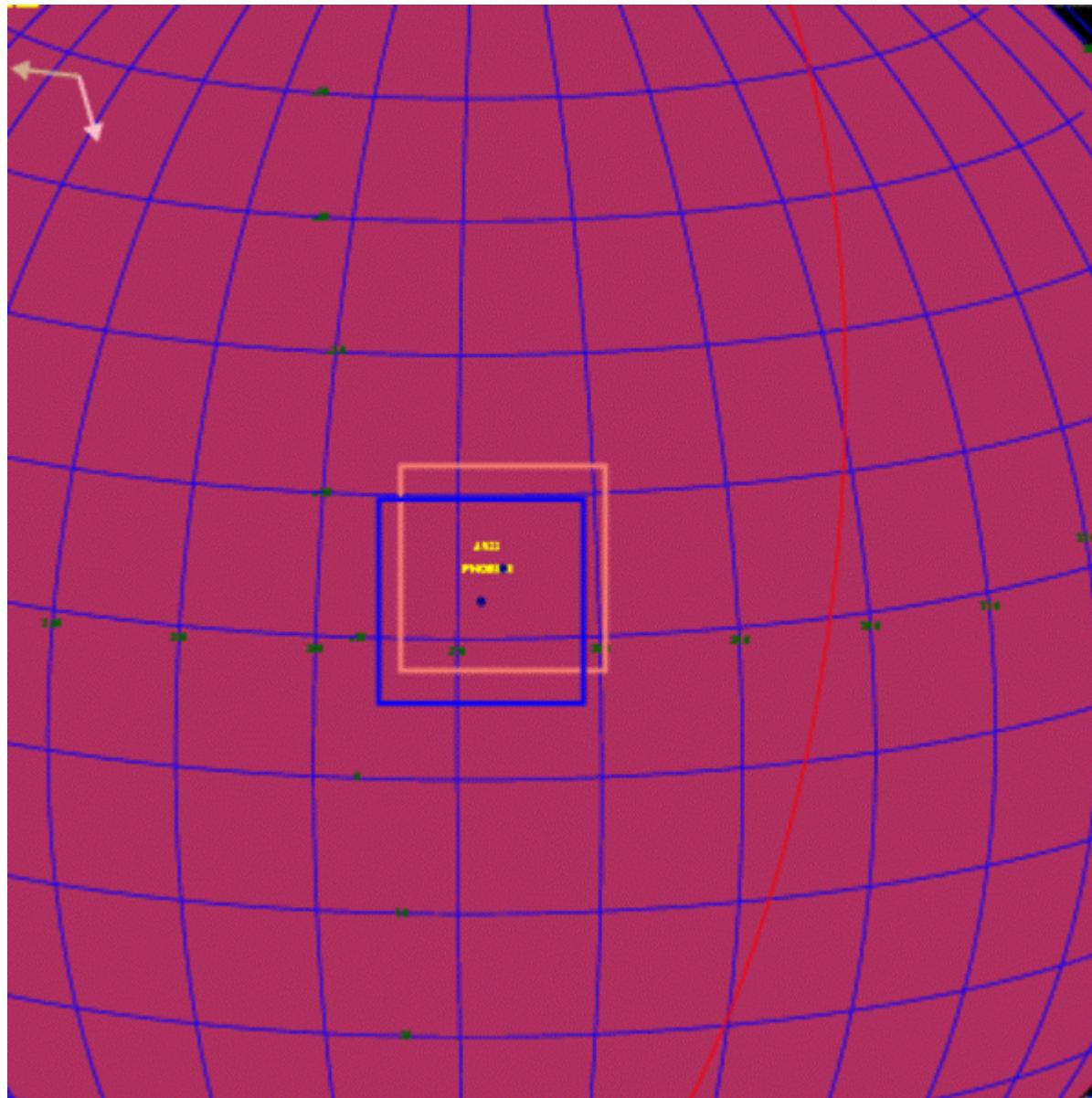
Titan



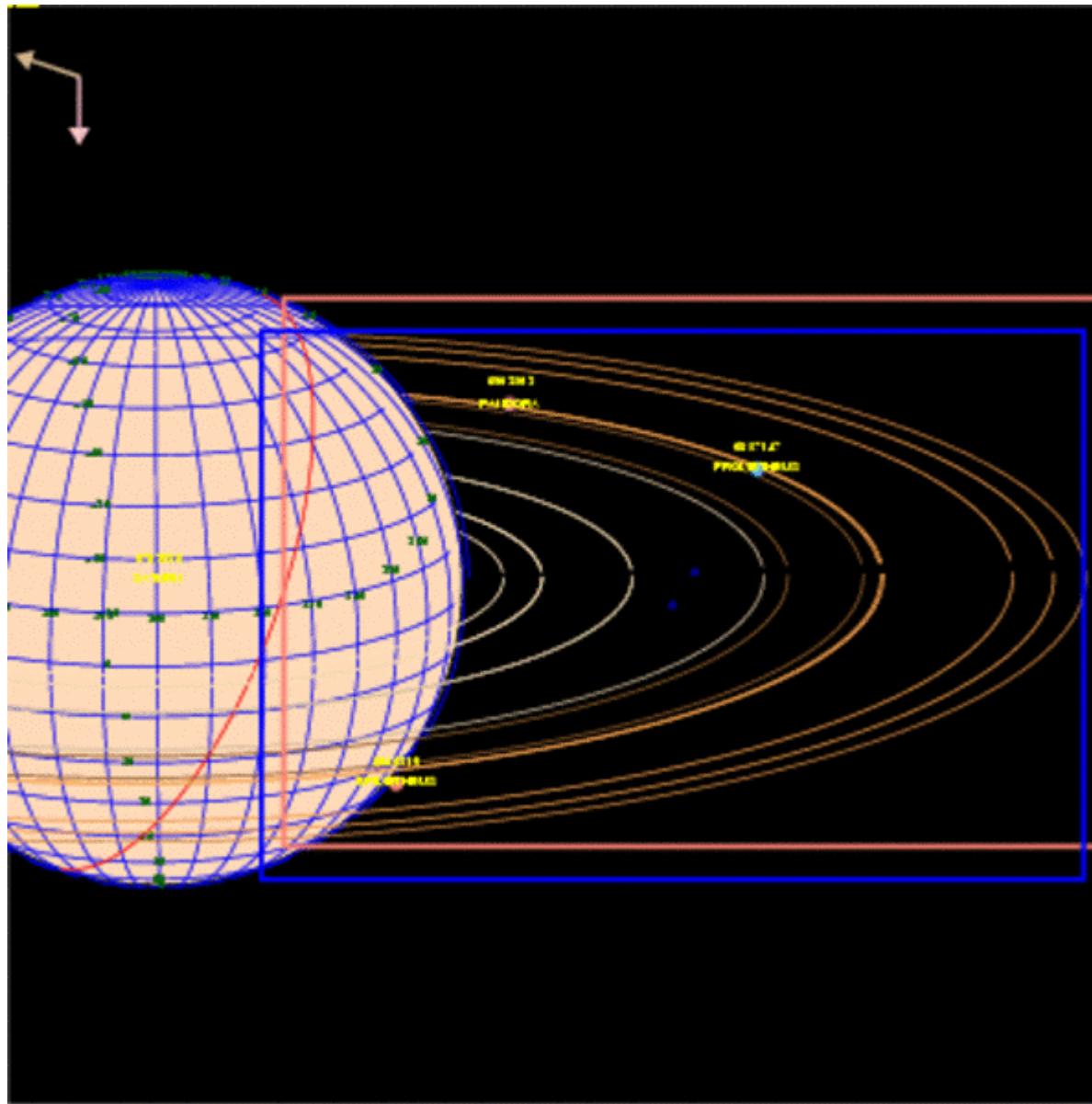
Things VIMS Can Measure and Map

- chemical and isotopic composition
- chemical and isotopic abundance
- distribution (mapping)
- correlation of composition with
geomorphology
- crystalline versus amorphous
- solid-state phase
- temperature
- stuff with strange spectral characteristics

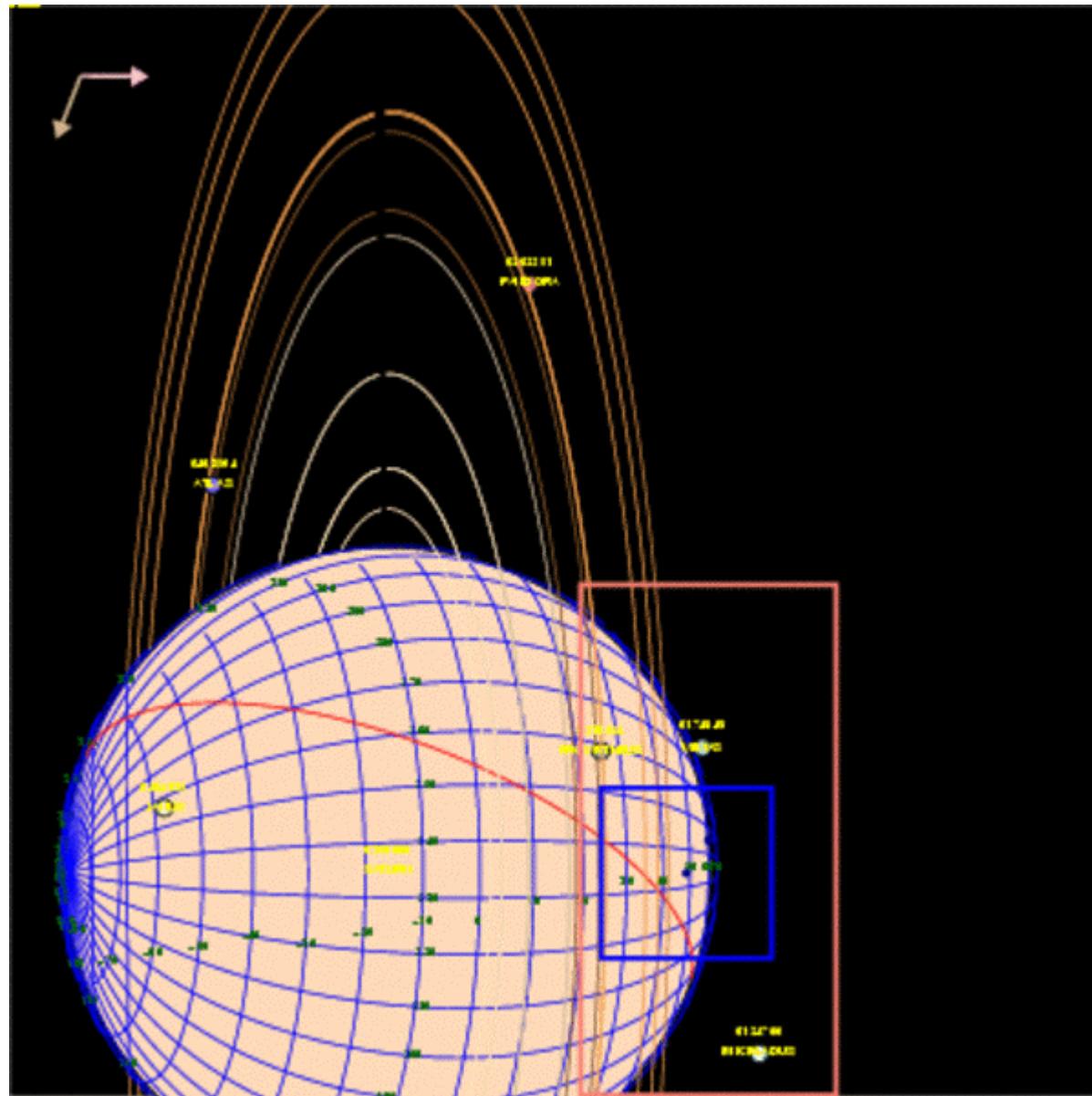
Phoebe flyby, 11 June 2004, UT



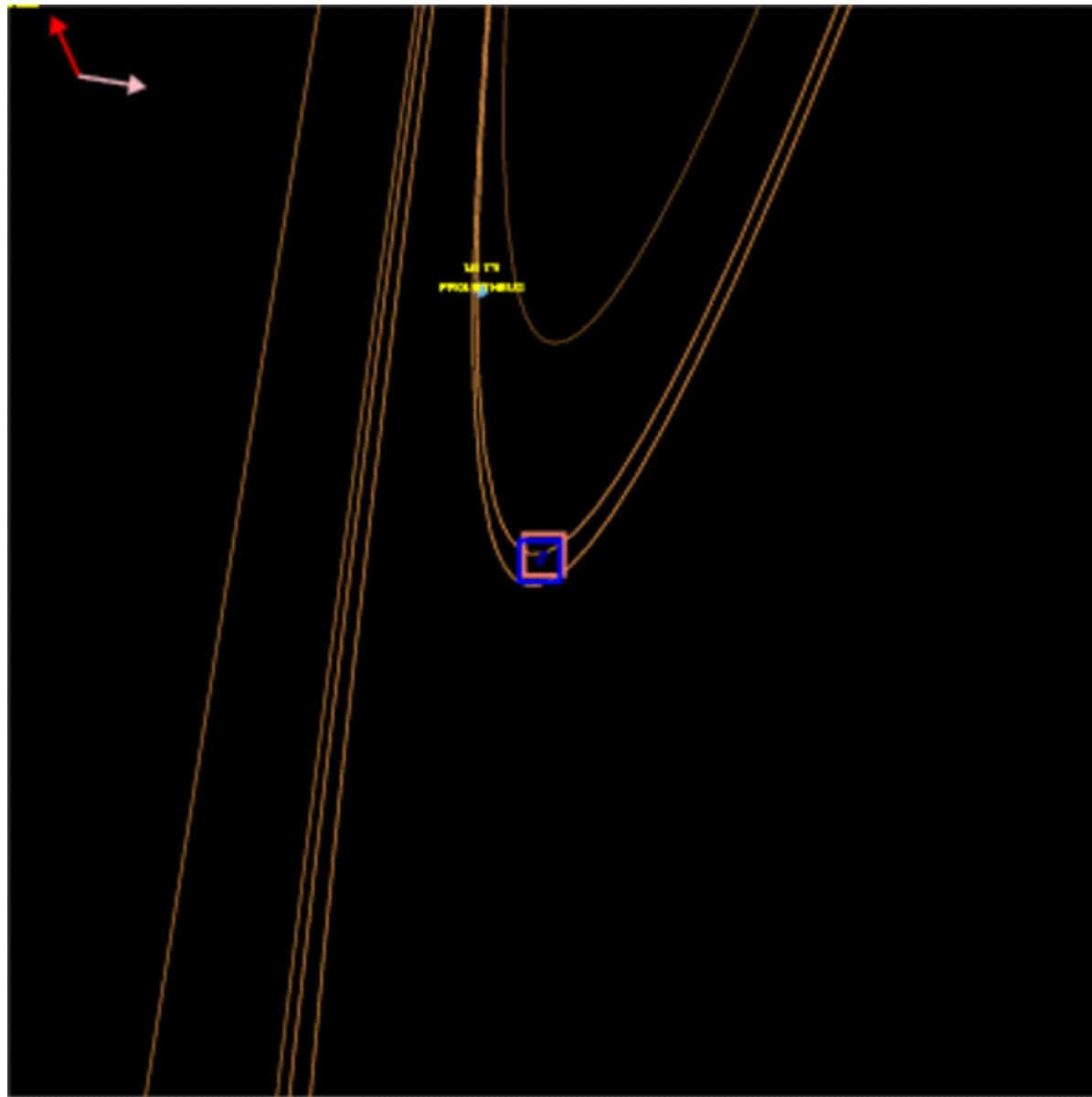
Ring Observations, Pre-SOI, 20 June 2004, UT



Saturn Mosaic, 20 June 2004, UT



A-Ring Scan, 01 July 2004, UT



Titan Flyby, 02 July 2004, UT

