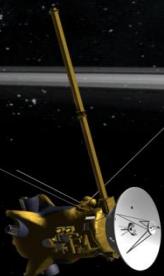


# The Cassini-Huygens mission: Tale of a 13-year journey in the Saturnian system

Benjamin Palmaerts

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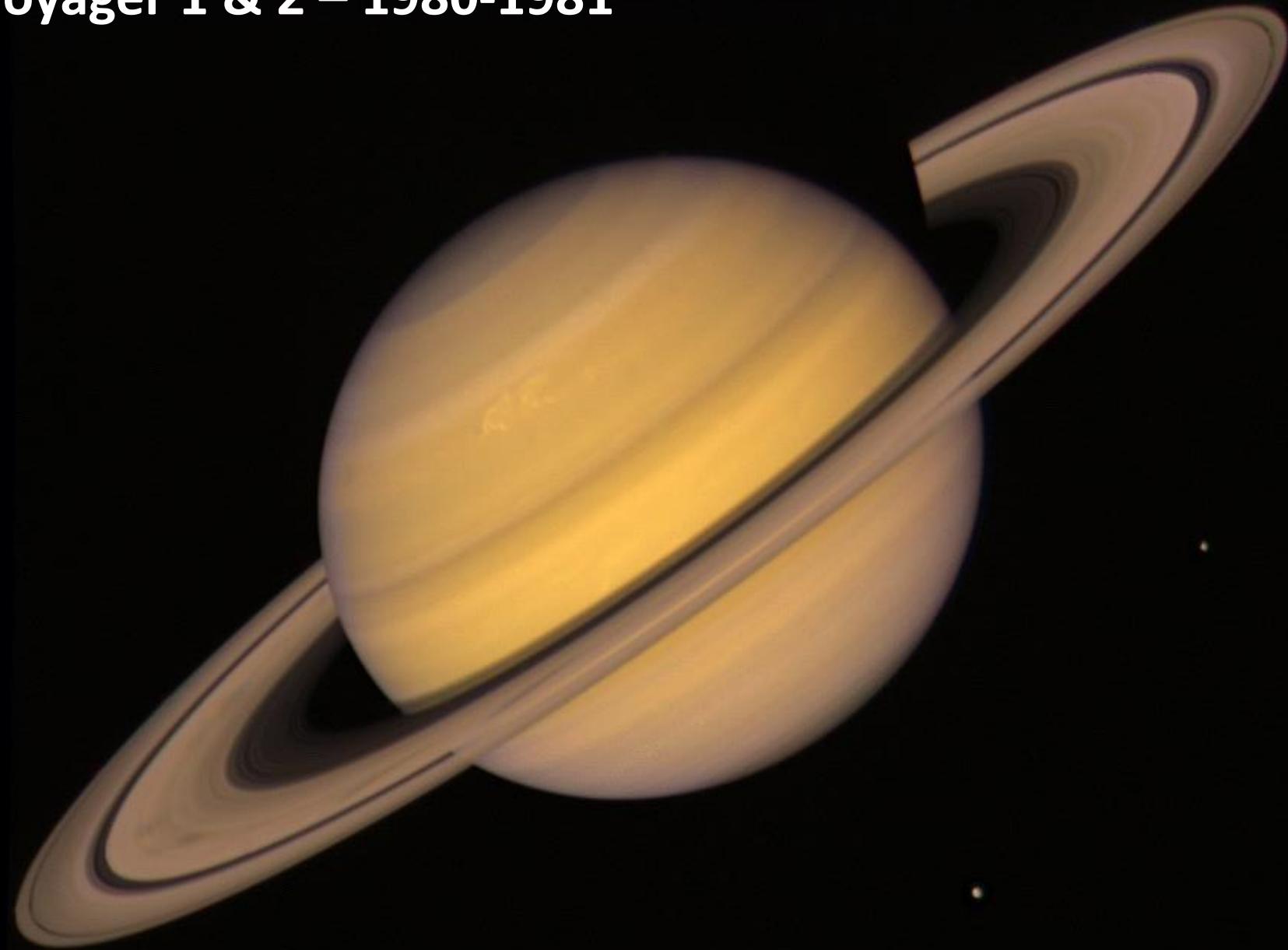
Meeting of the FNRS Contact Group *Astronomie & Astrophysique*  
Planetarium, Brussels – 19 September 2017



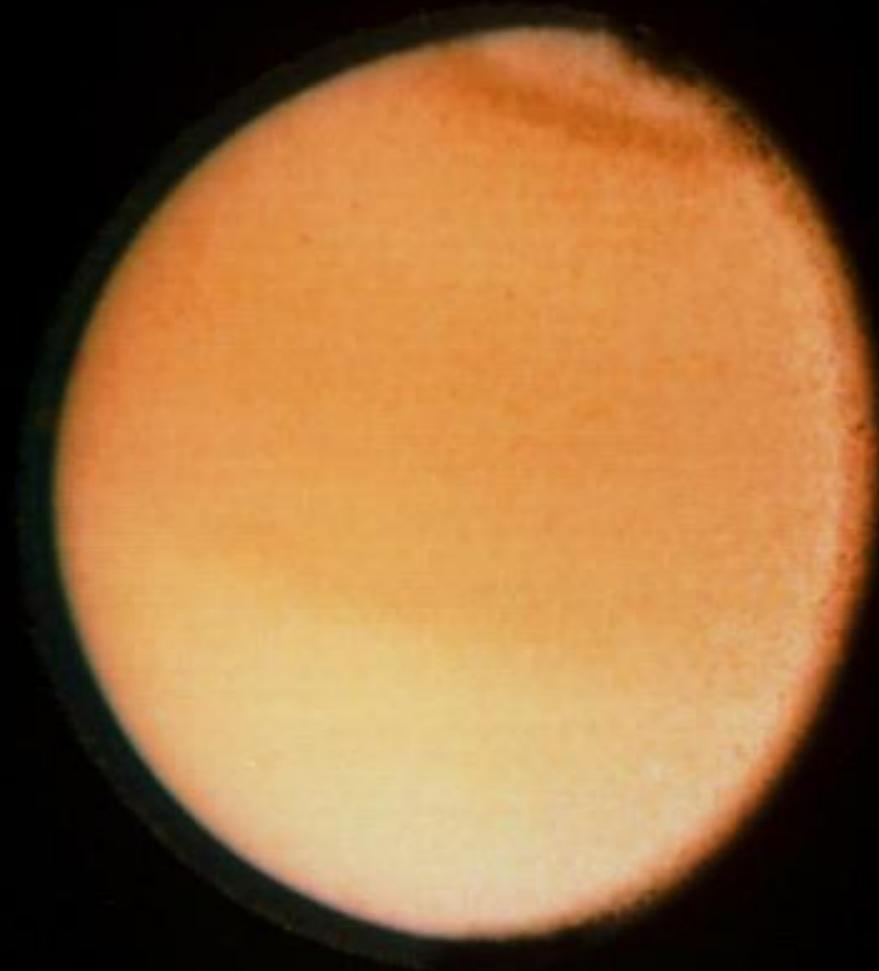


Pioneer 11 - 1979

Voyager 1 & 2 – 1980-1981



# Voyager 1 & 2 – 1980-1981



**Giovanni Domenico Cassini**



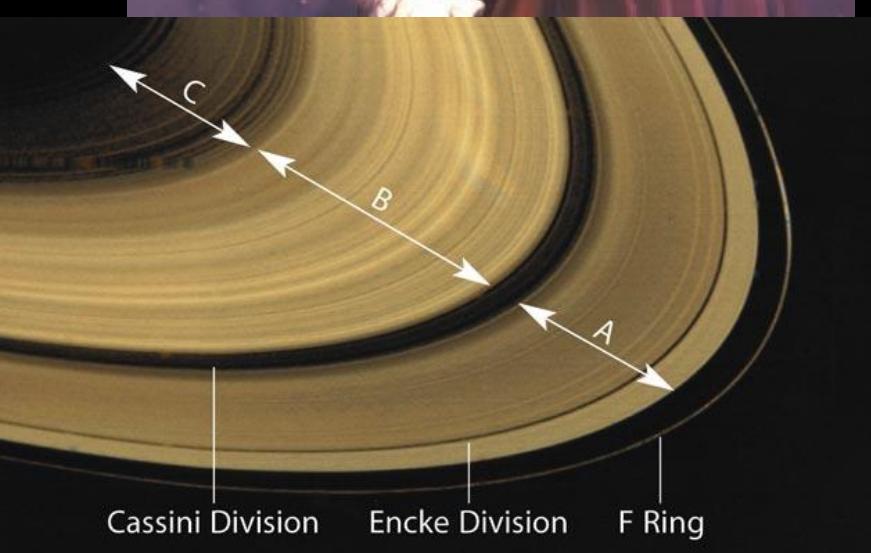
(1625 – 1712)

**Christiaan Huygens**



(1629 – 1695)

# Giovanni Domenico Cassini

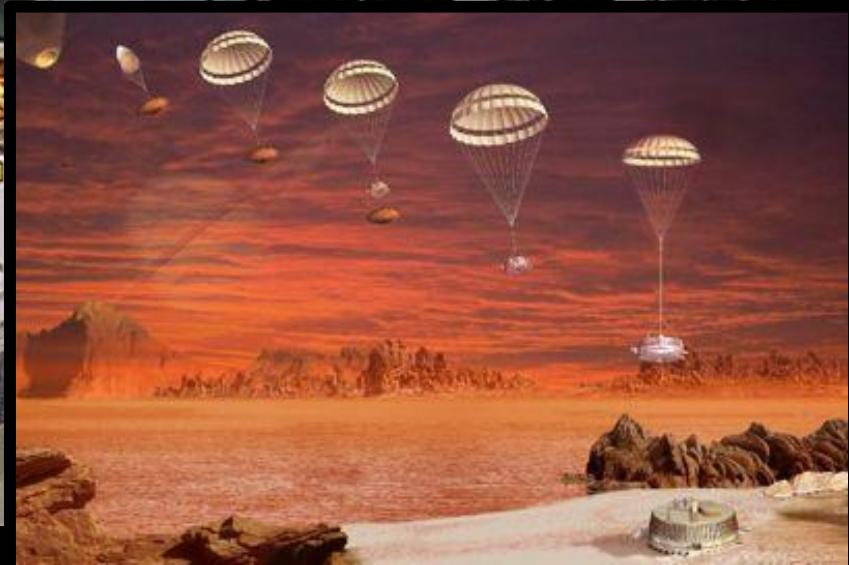
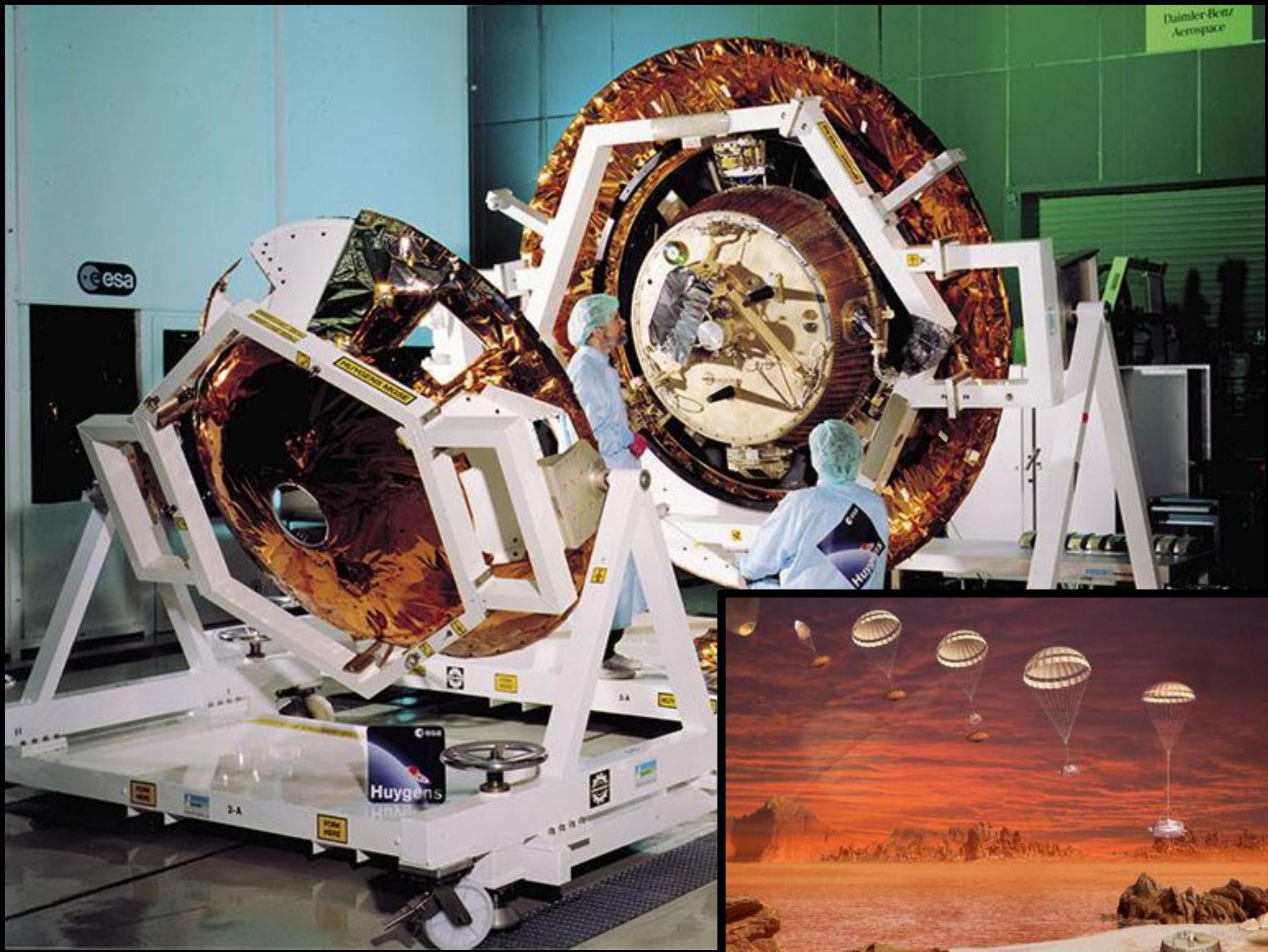


# Christiaan Huygens



(1629 – 1695)

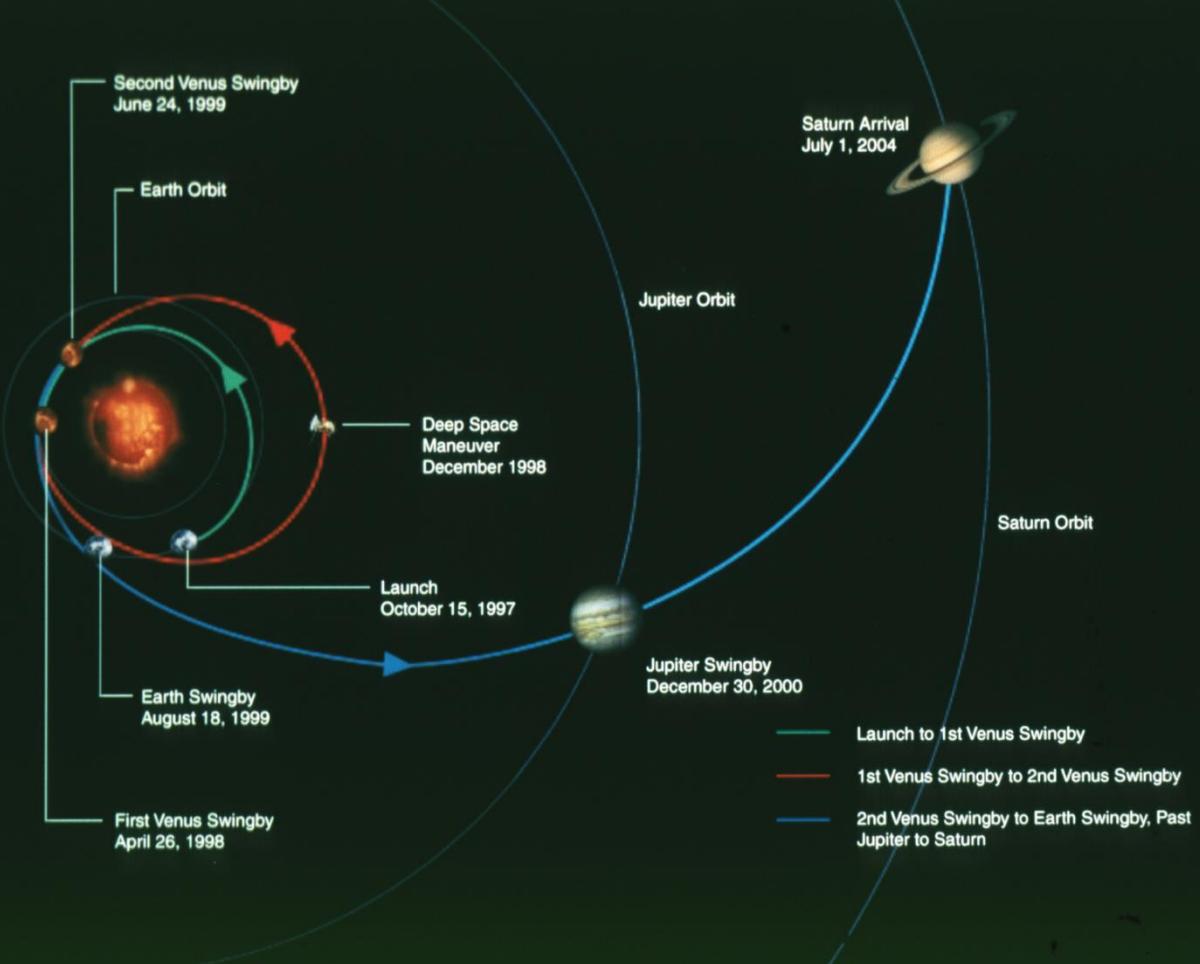




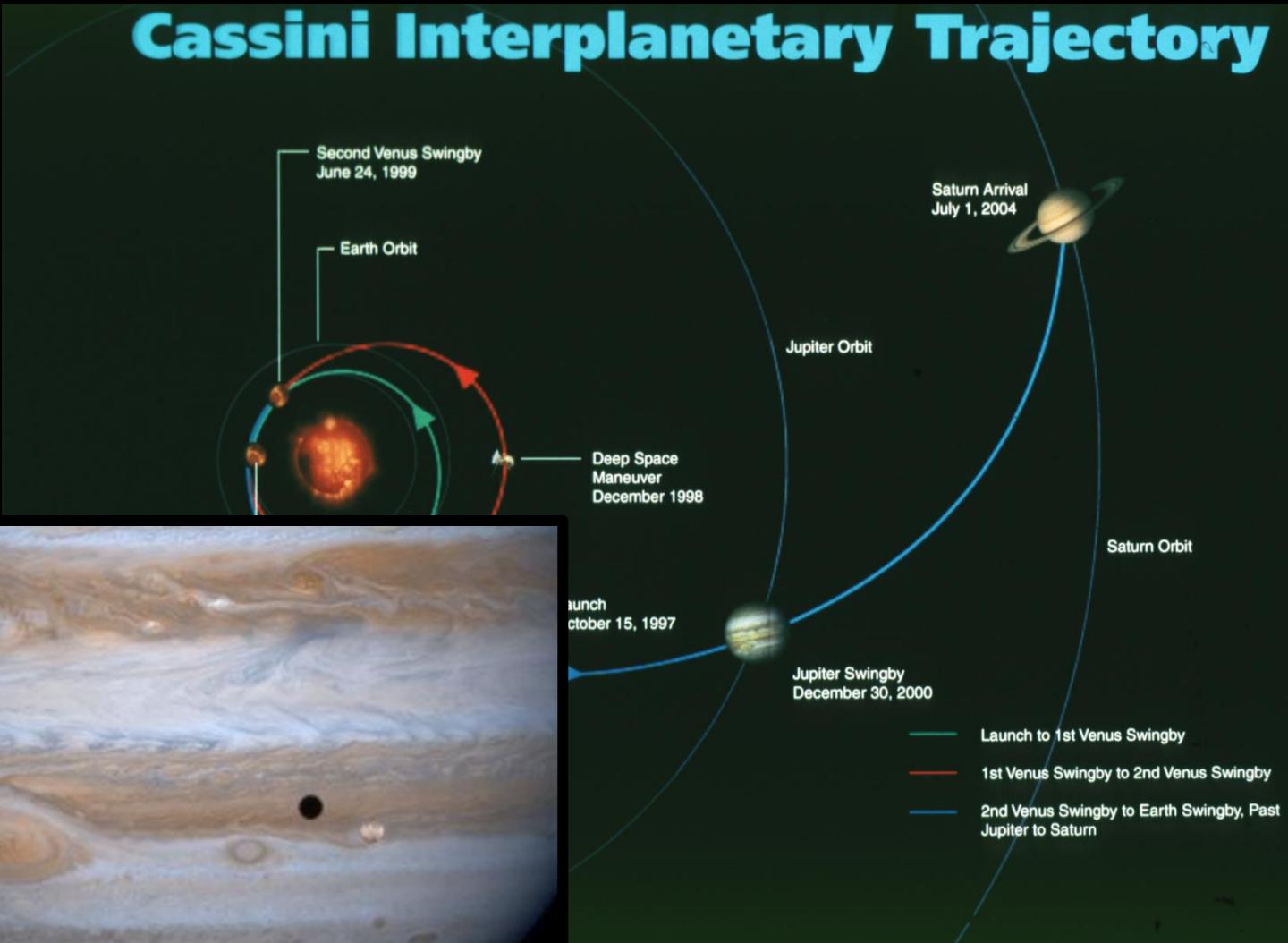
# Cassini Interplanetary Trajectory



1997

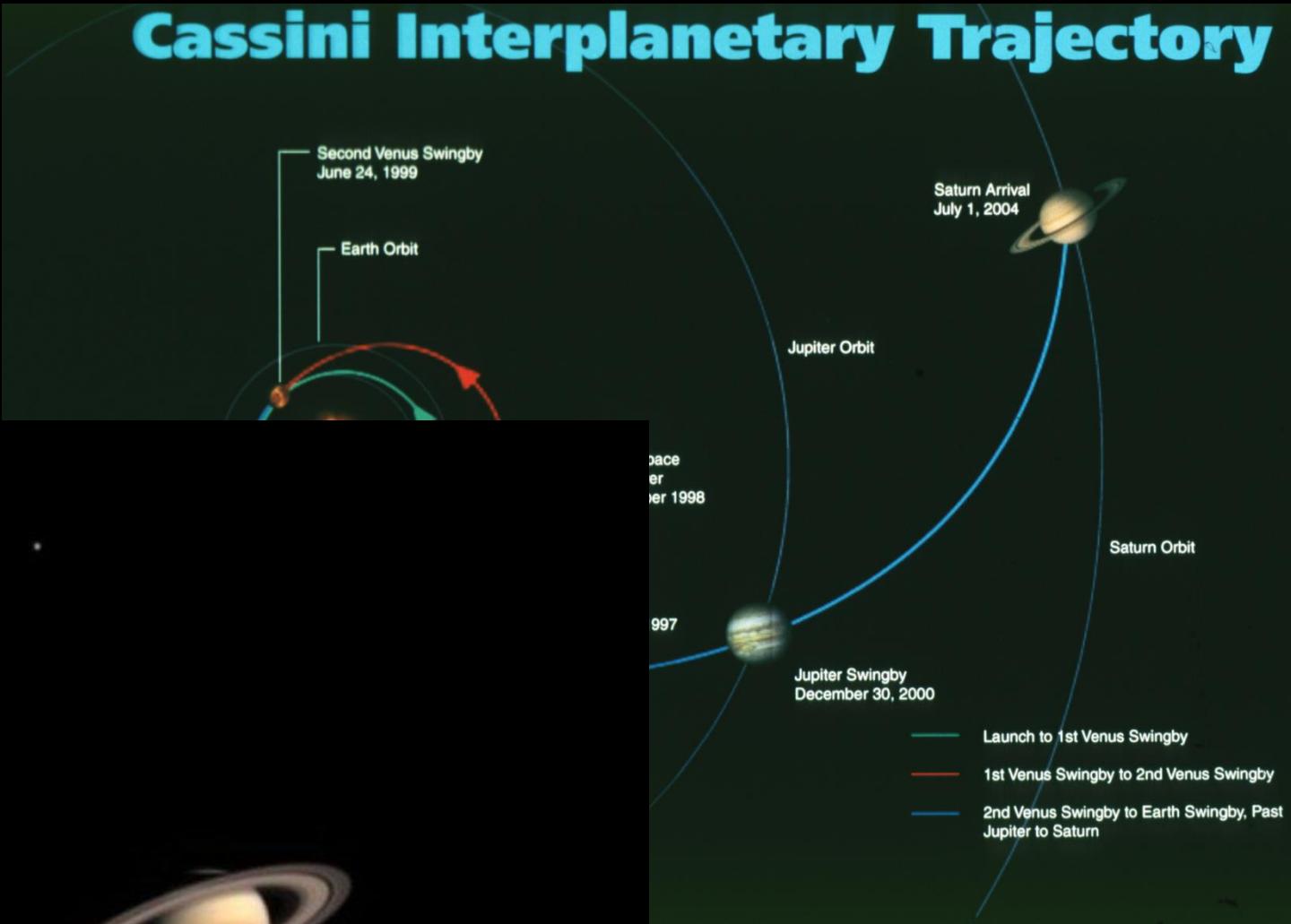


# Cassini Interplanetary Trajectory

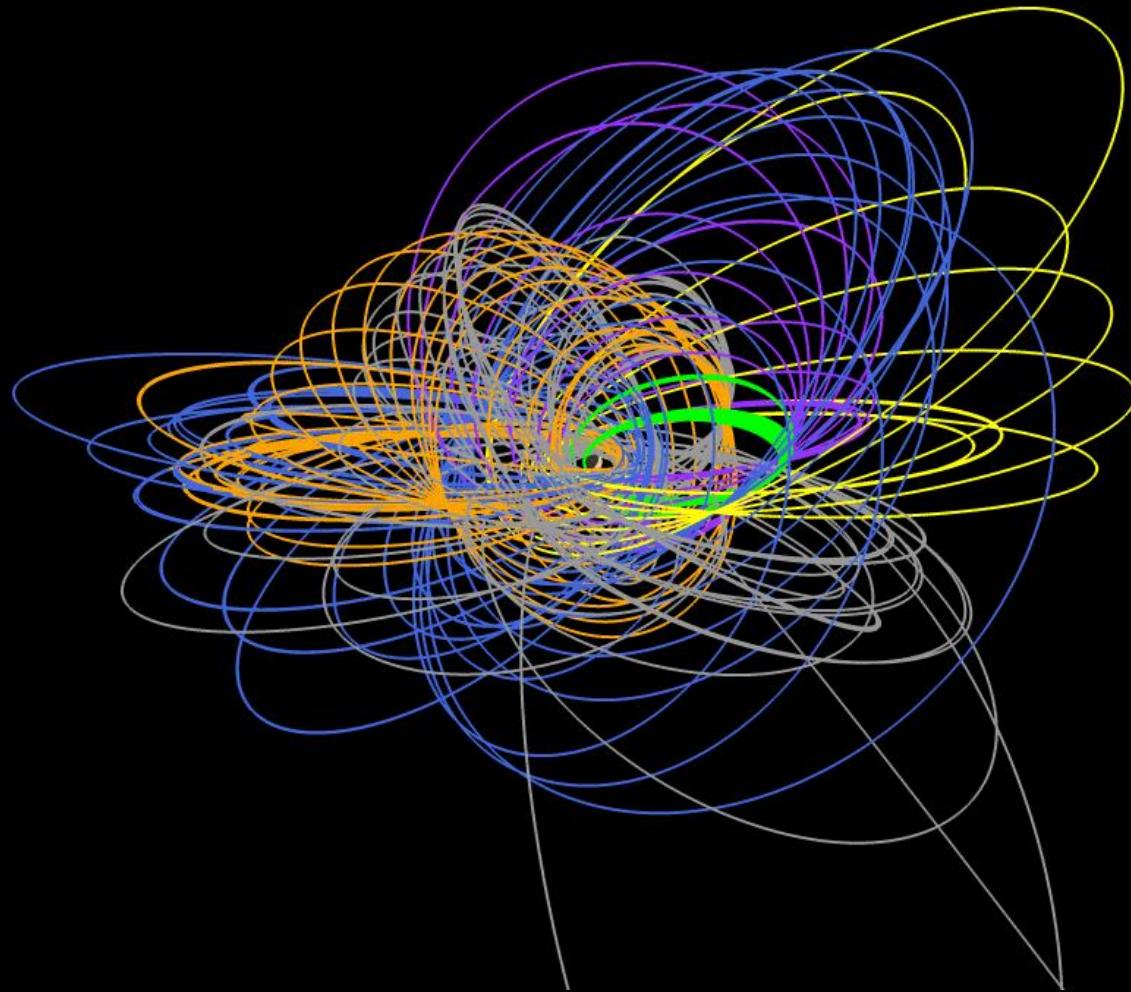


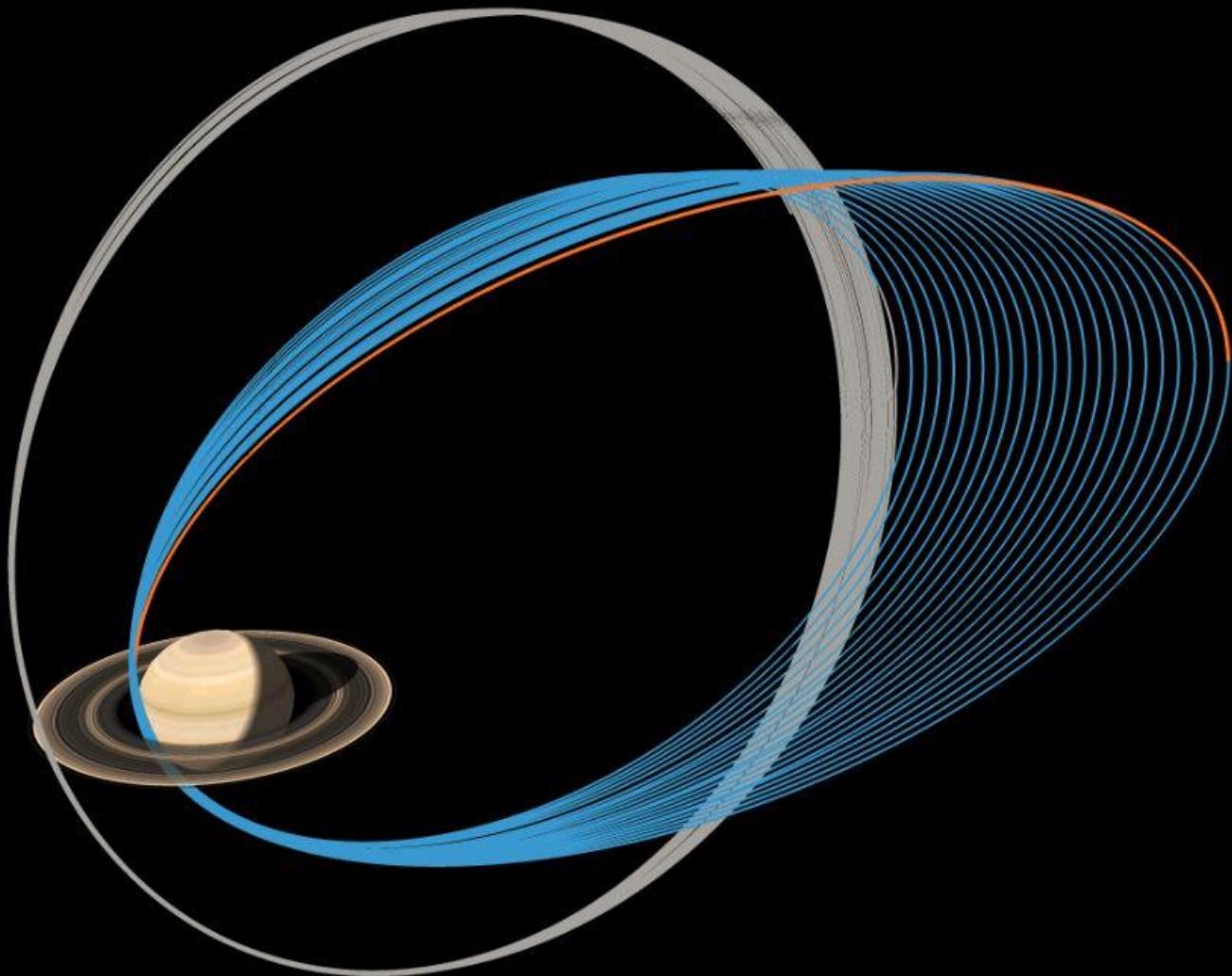
2000

# Cassini Interplanetary Trajectory



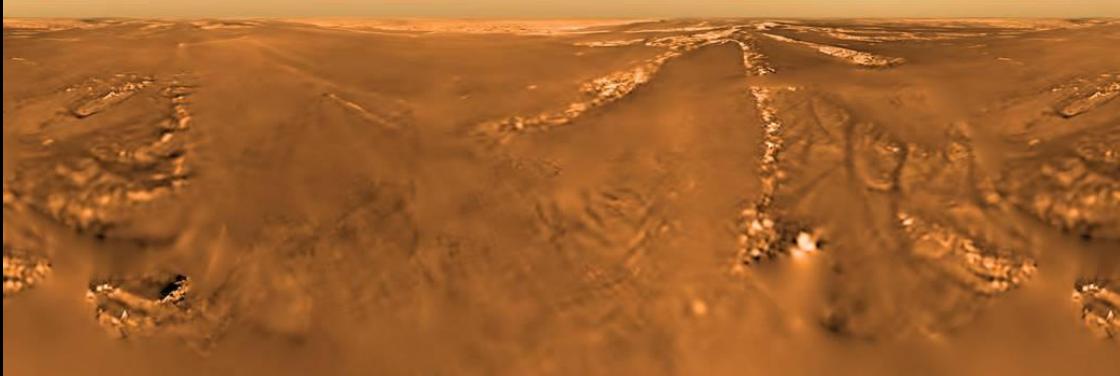
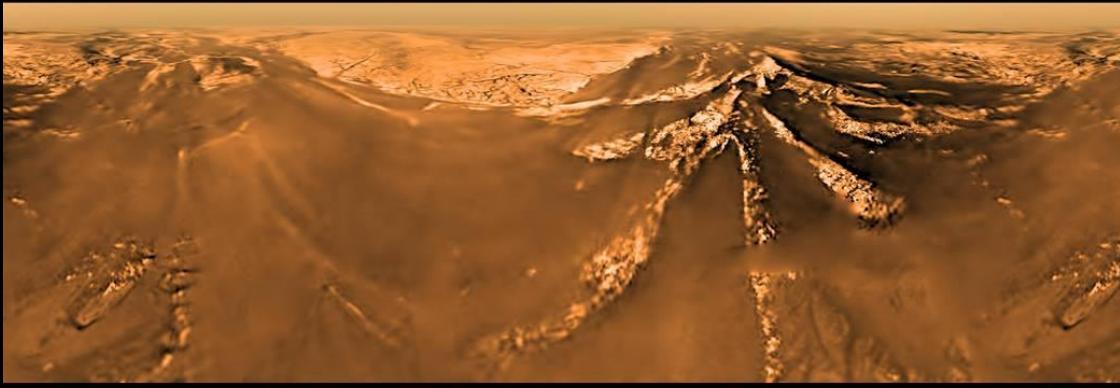
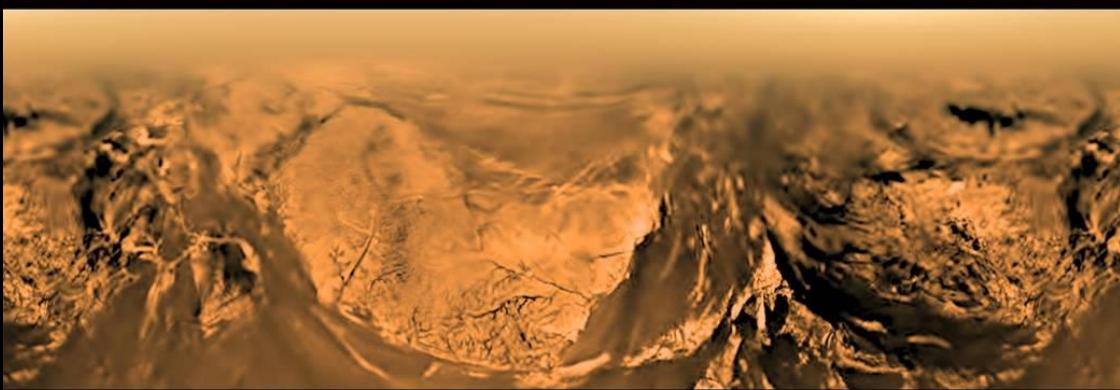
2004

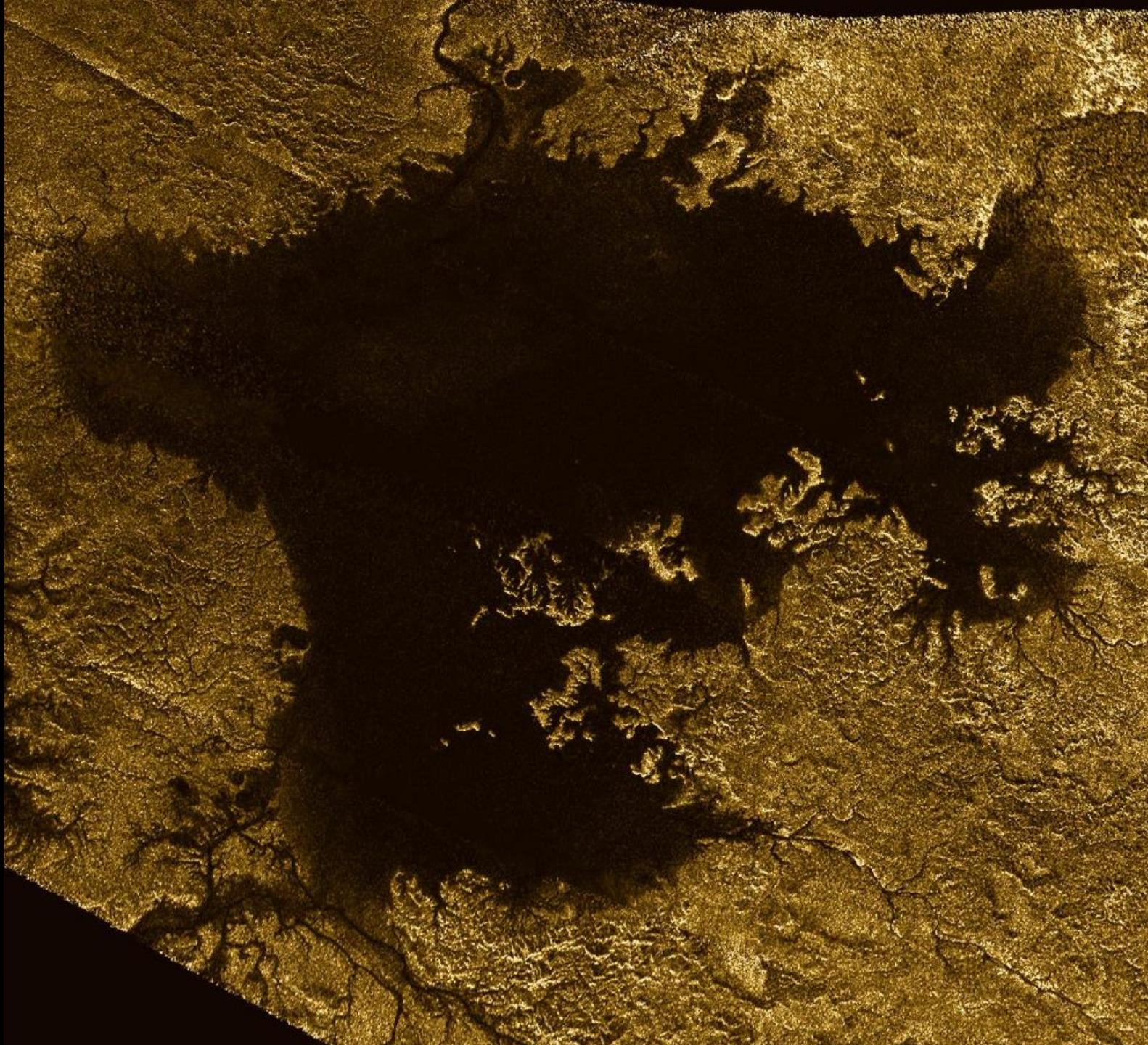




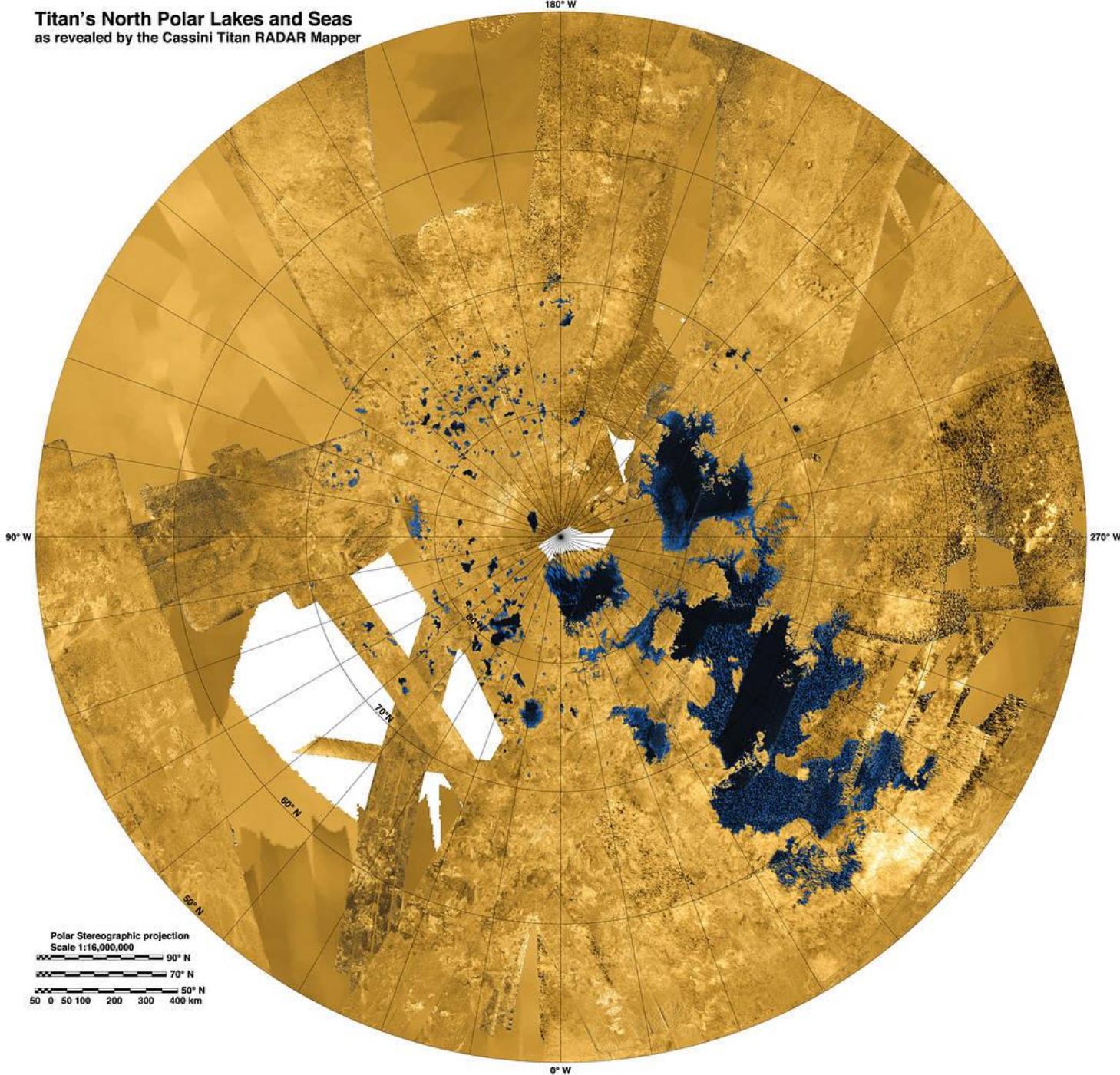
# Titan

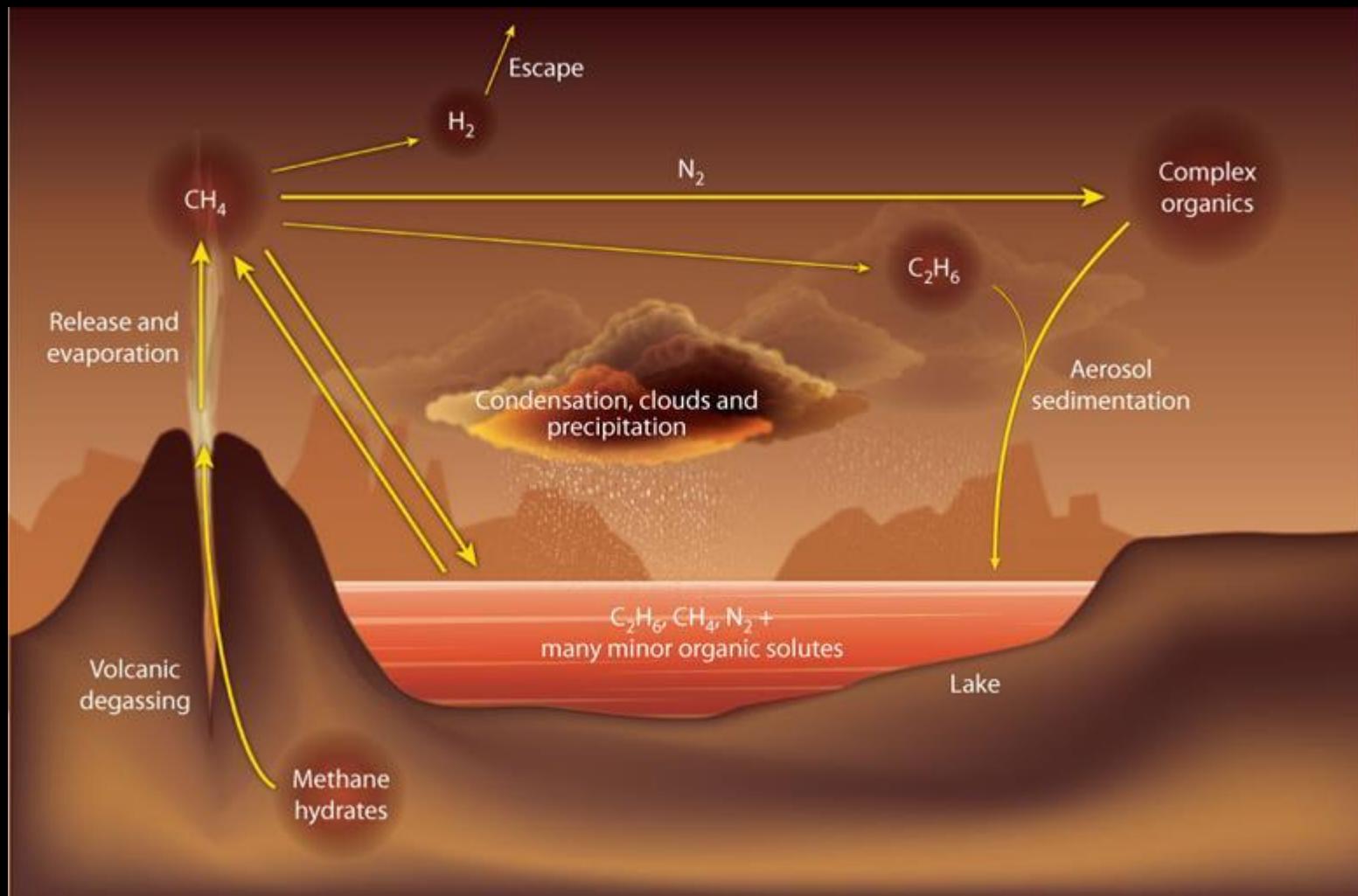






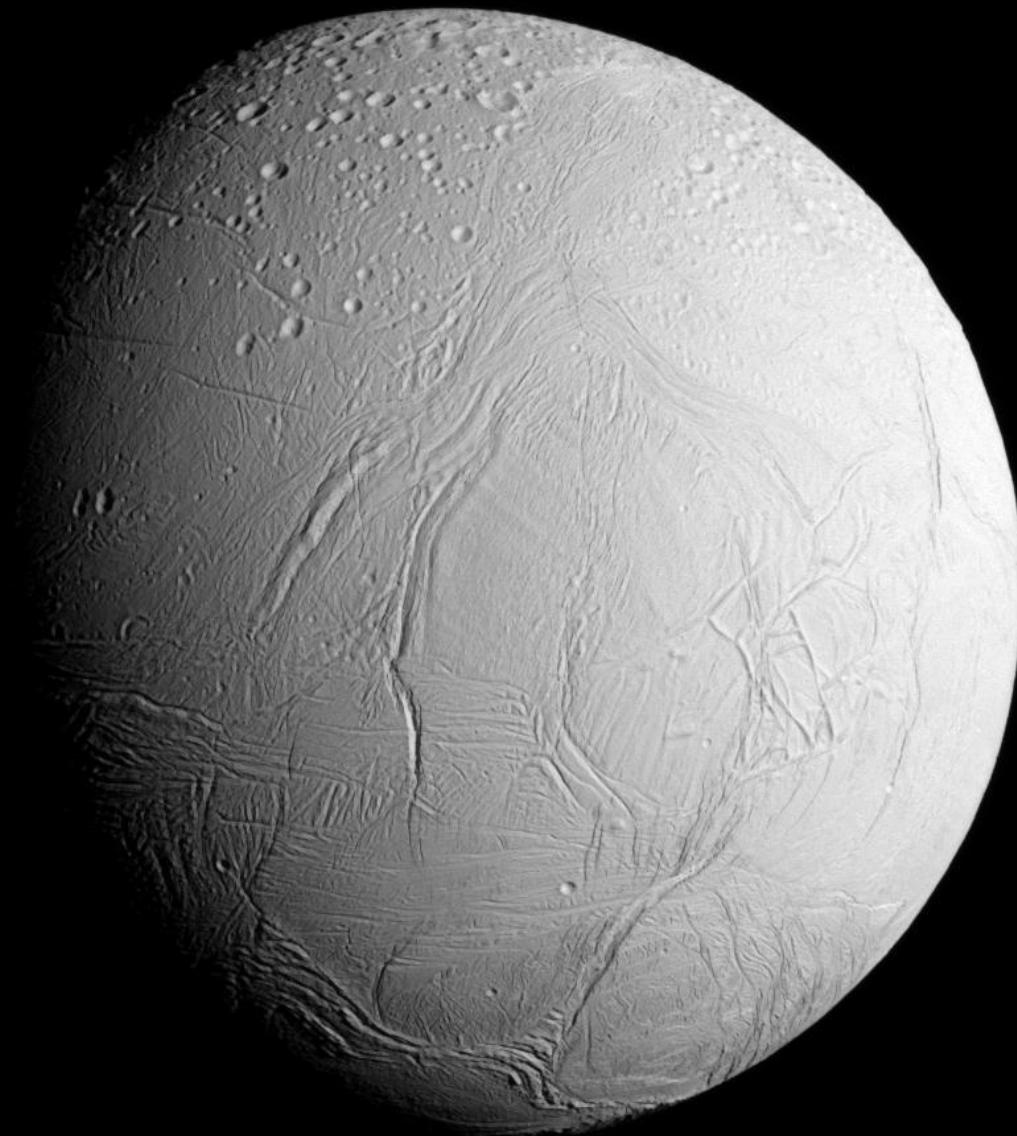
**Titan's North Polar Lakes and Seas**  
as revealed by the Cassini Titan RADAR Mapper

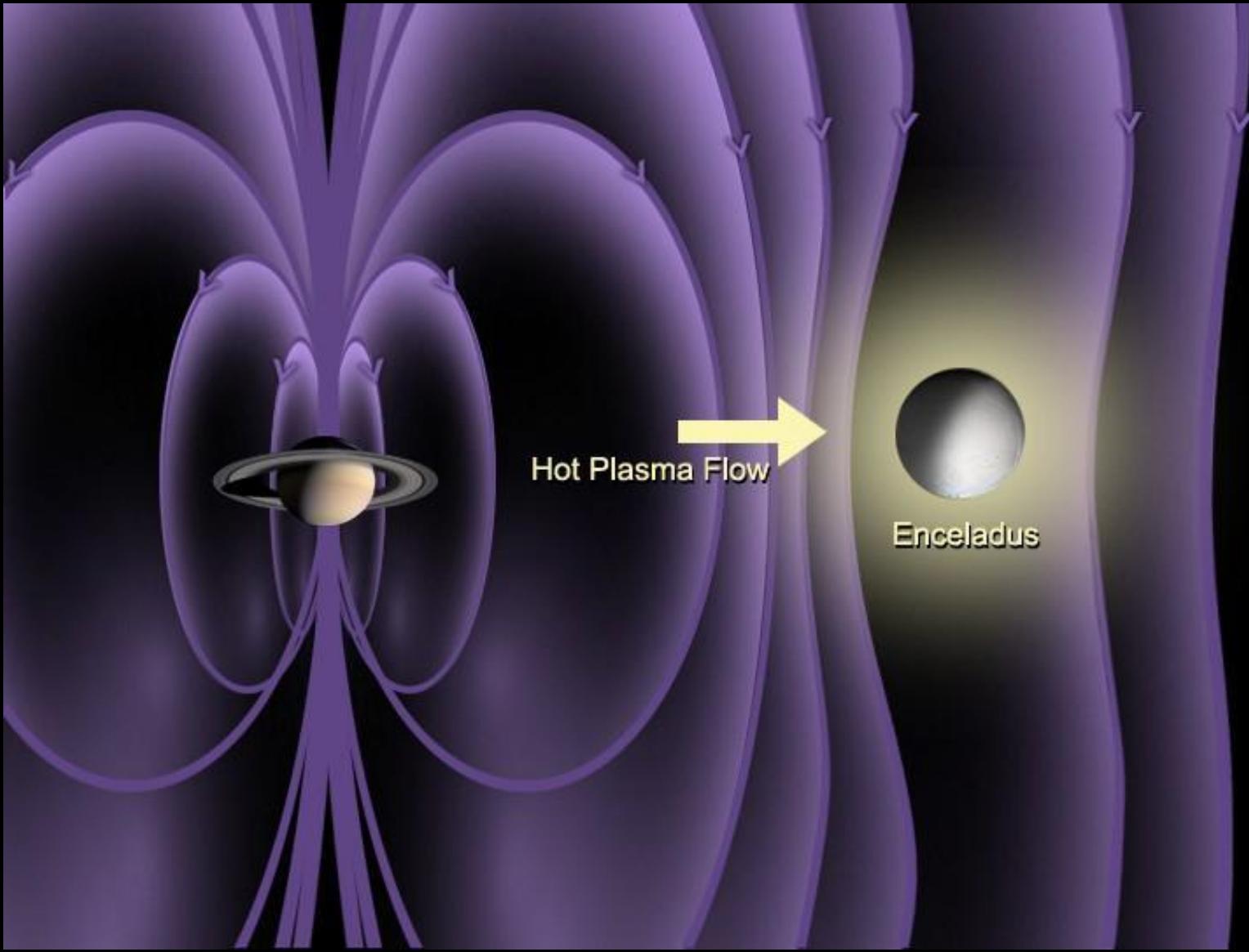


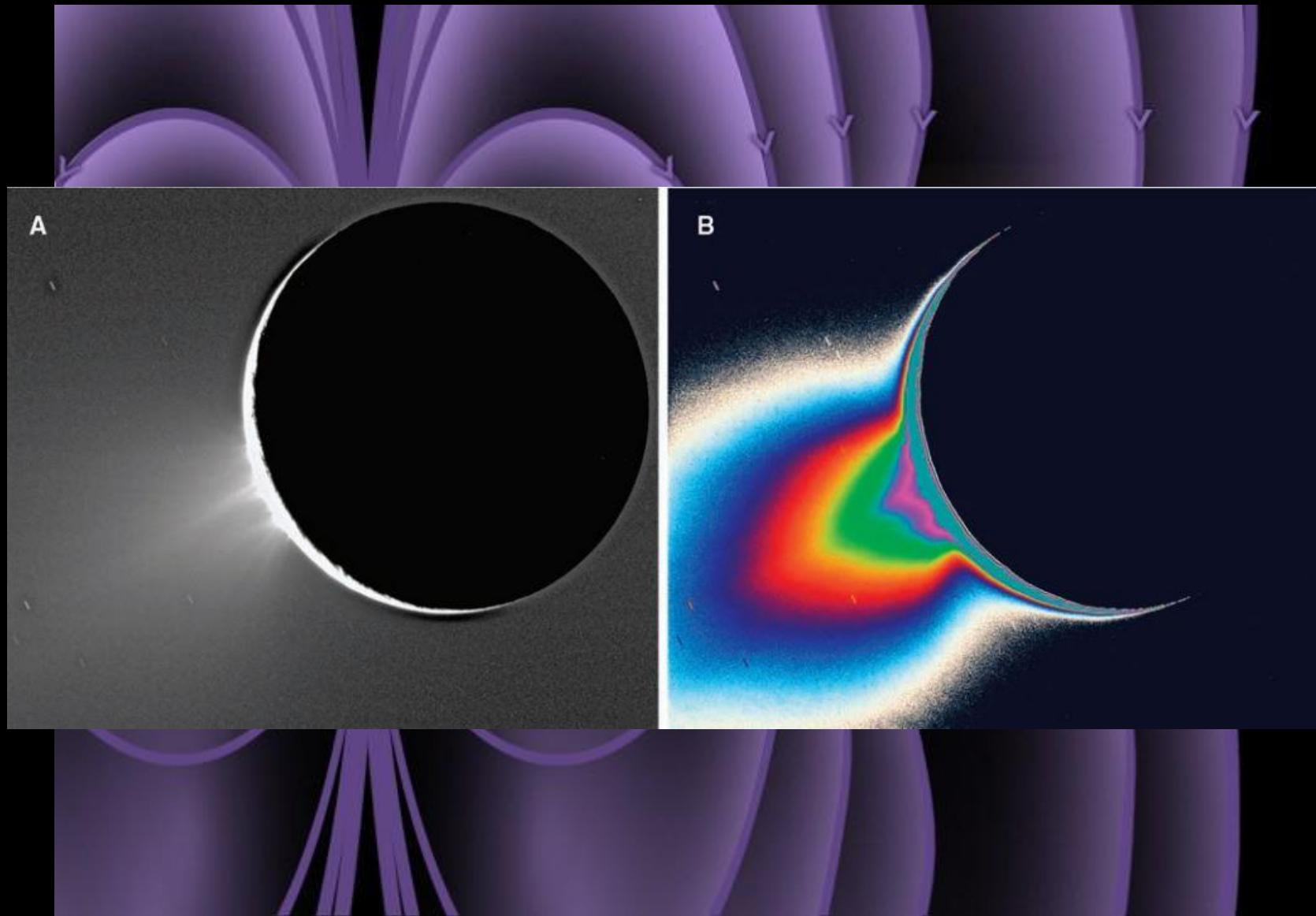


(Raulin, 2008)

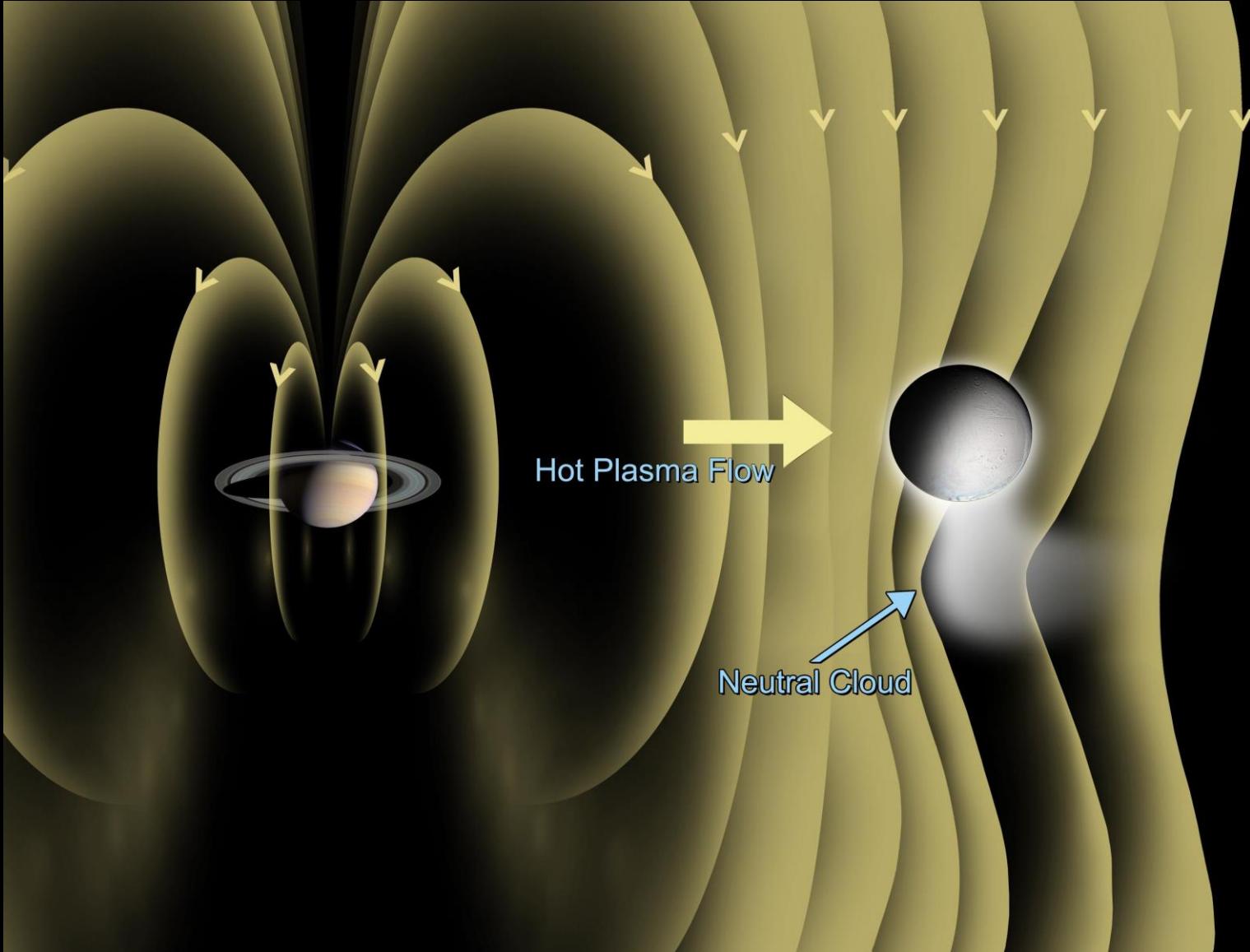
# Enceladus



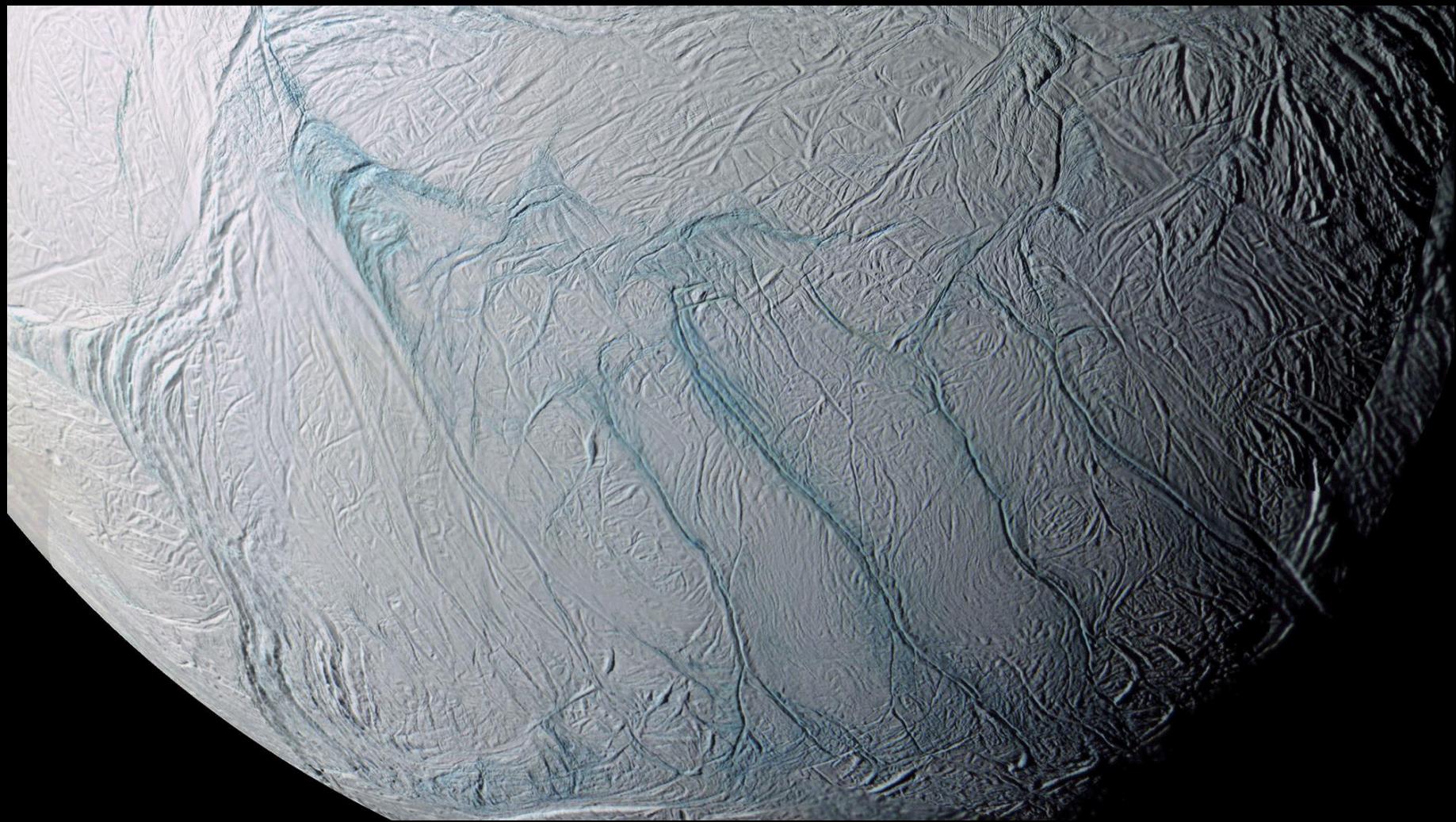




(Porco et al., 2006)



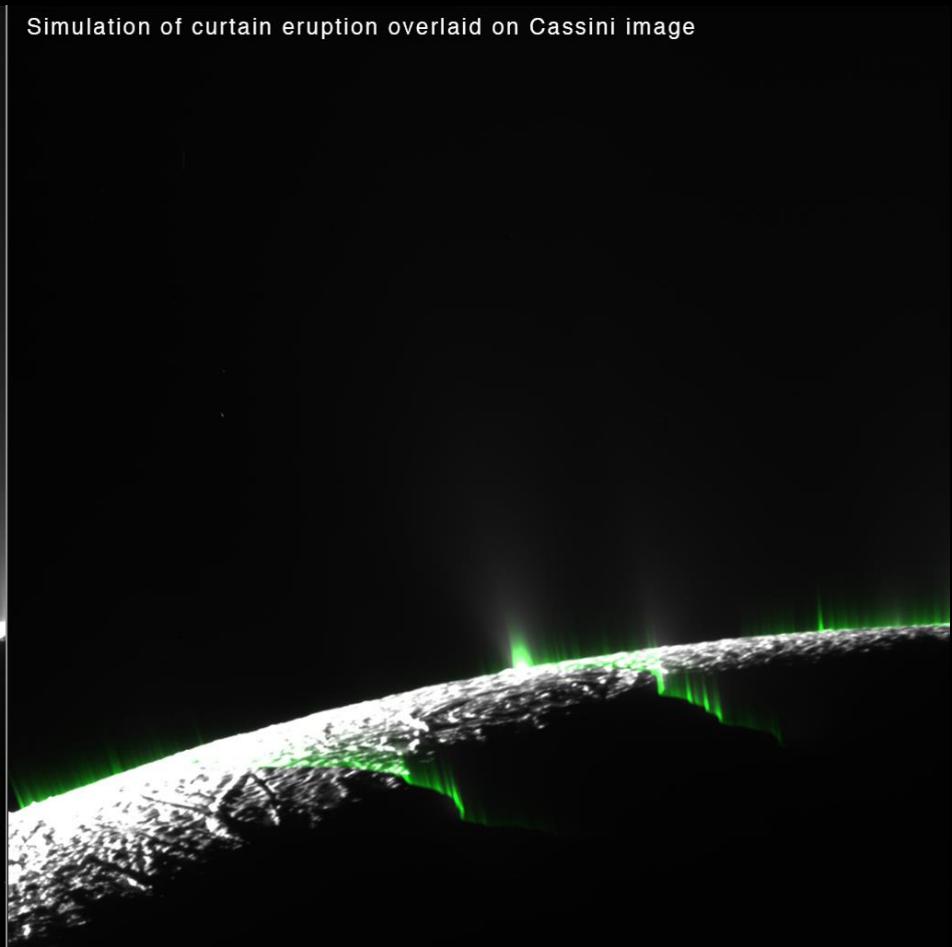


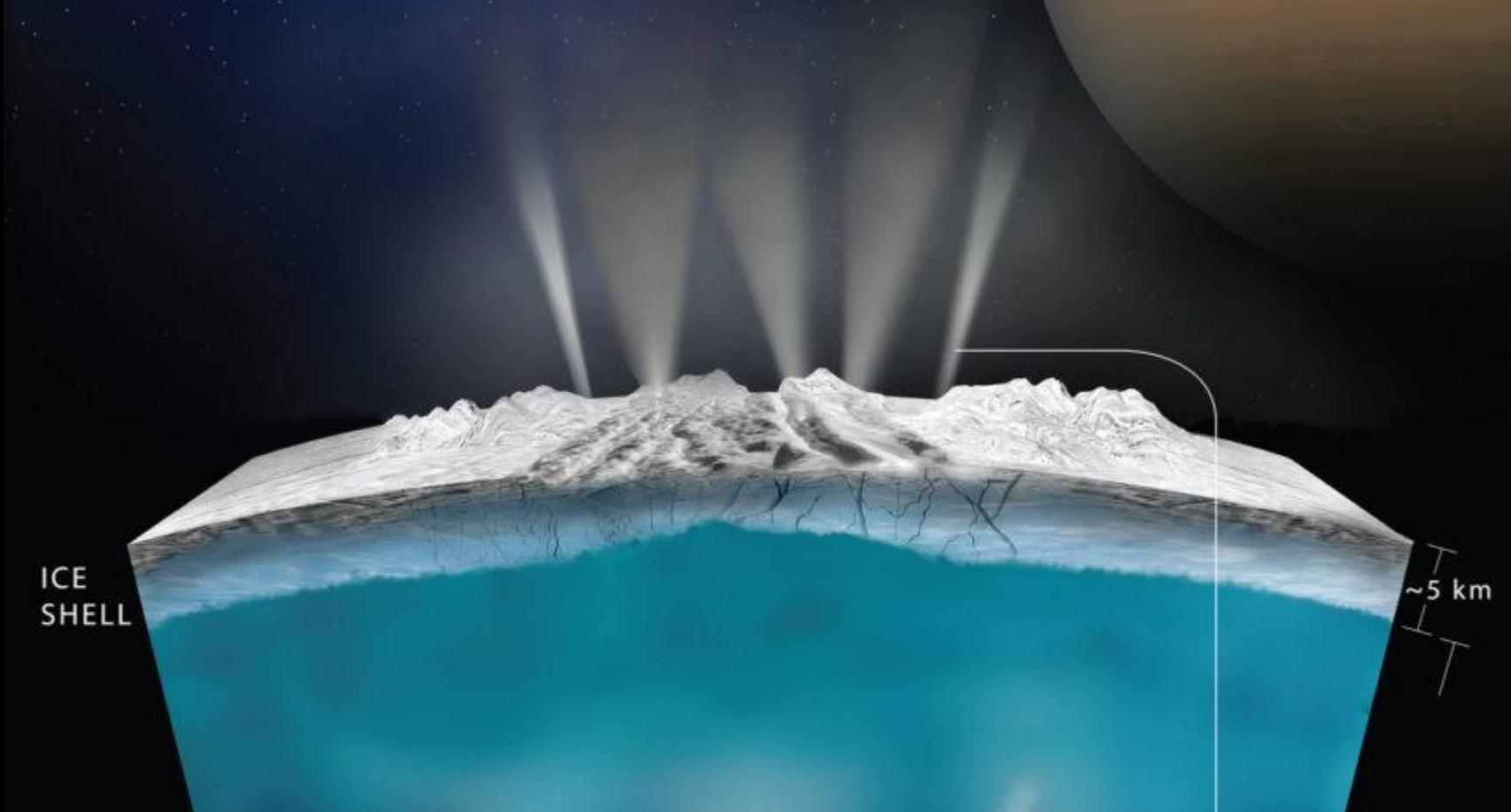


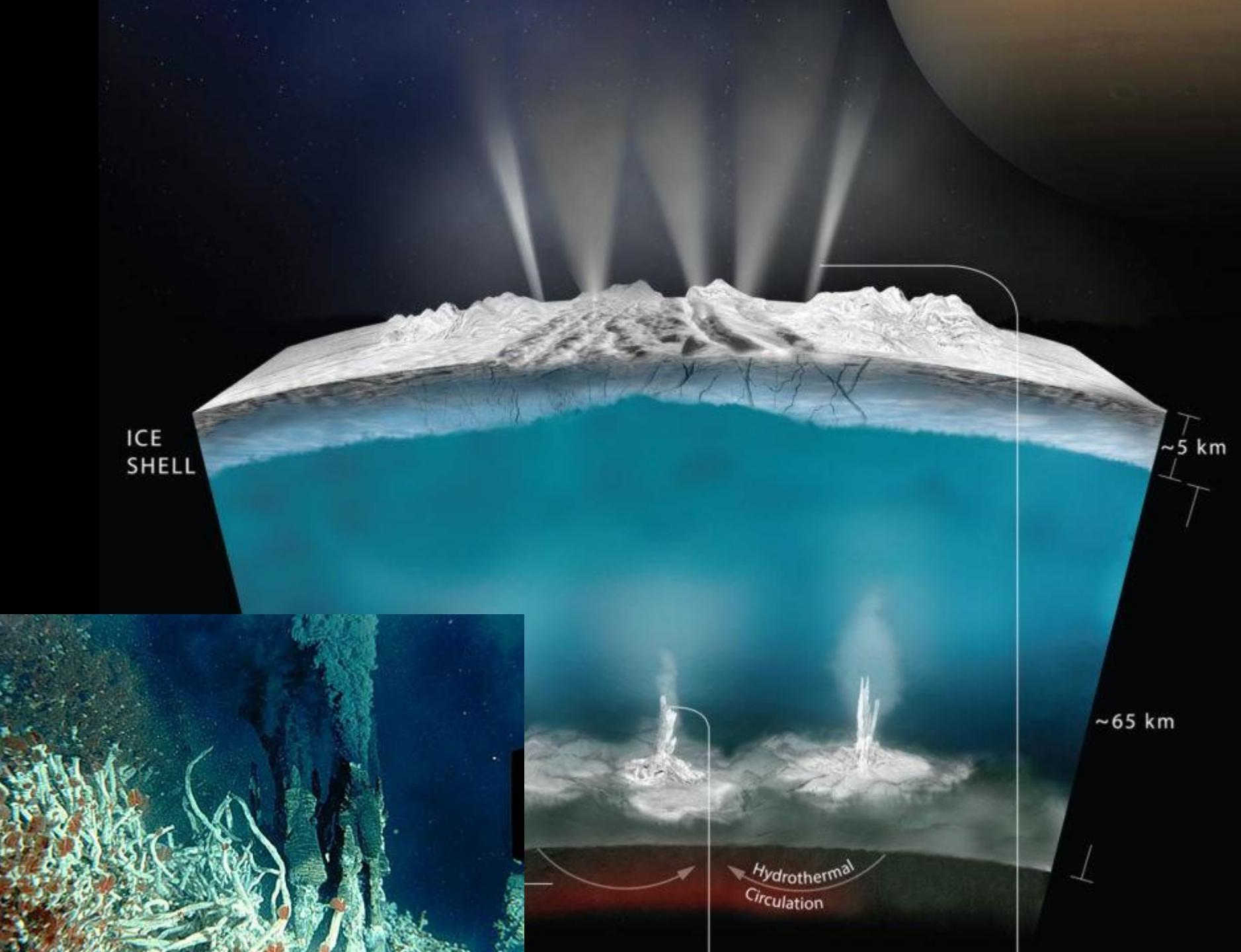
Cassini image (brightness enhanced)



Simulation of curtain eruption overlaid on Cassini image



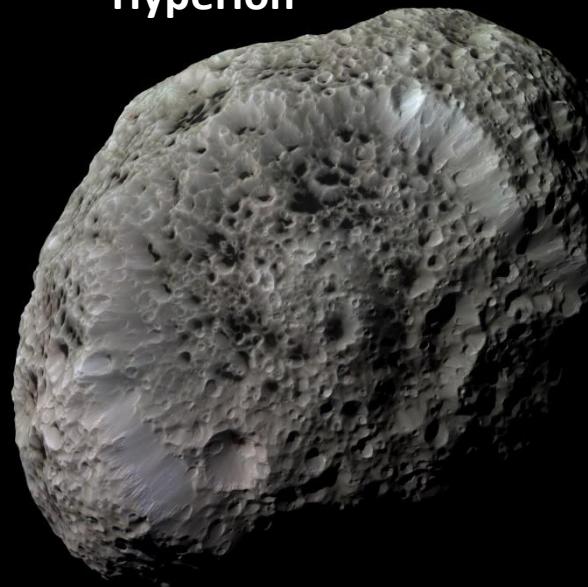




Mimas



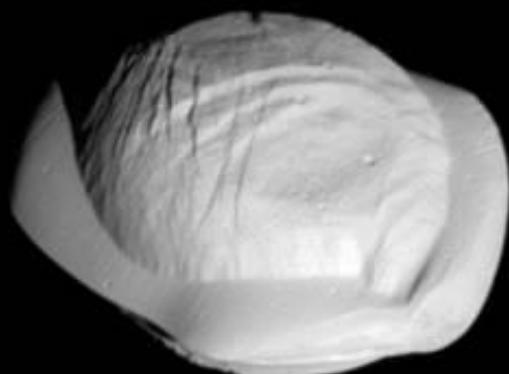
Hyperion



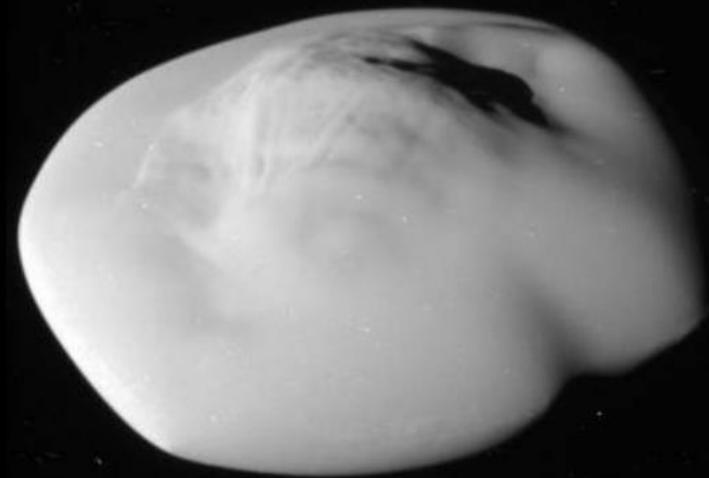
Iapetus



**Janus & Epimetheus**

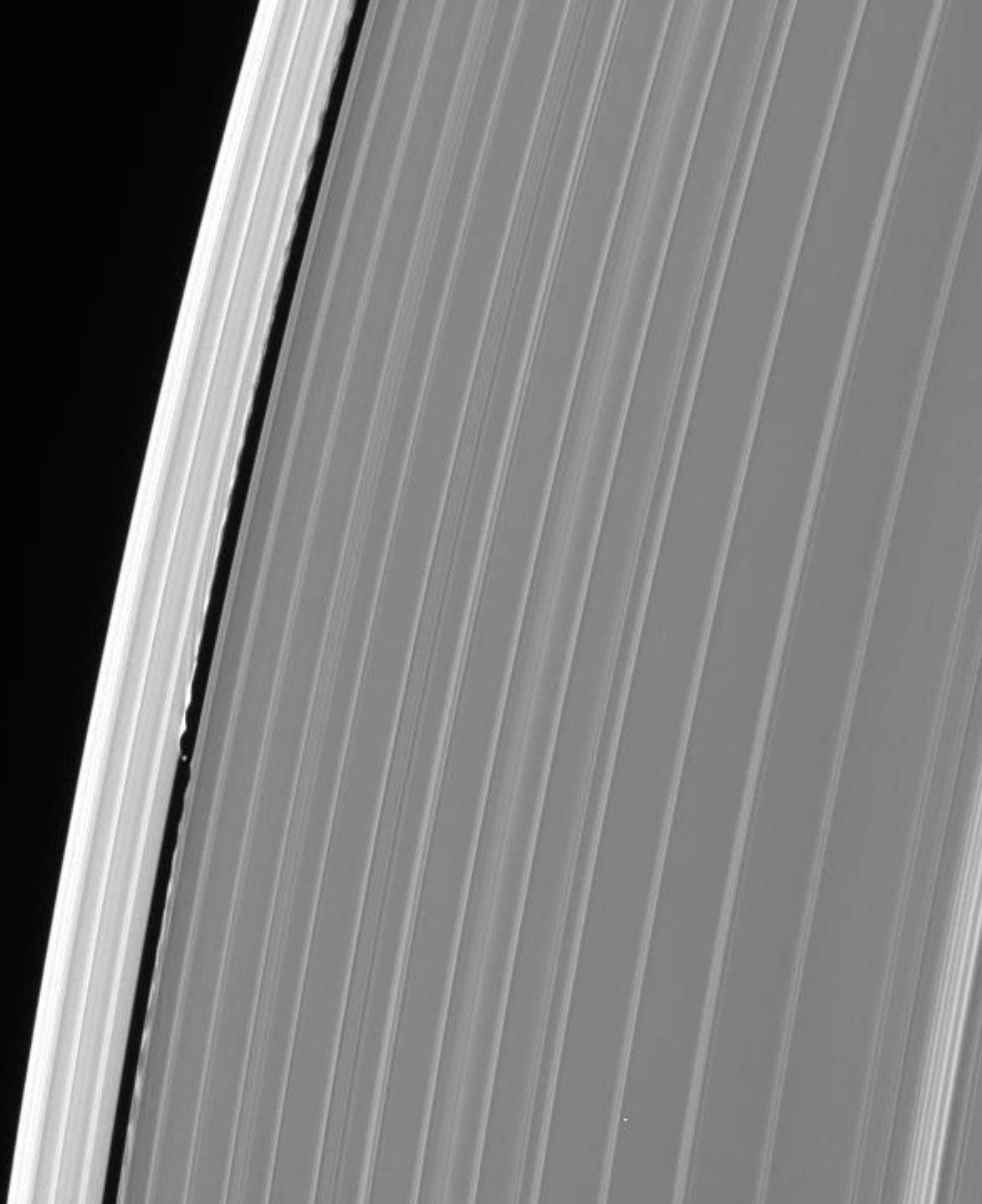


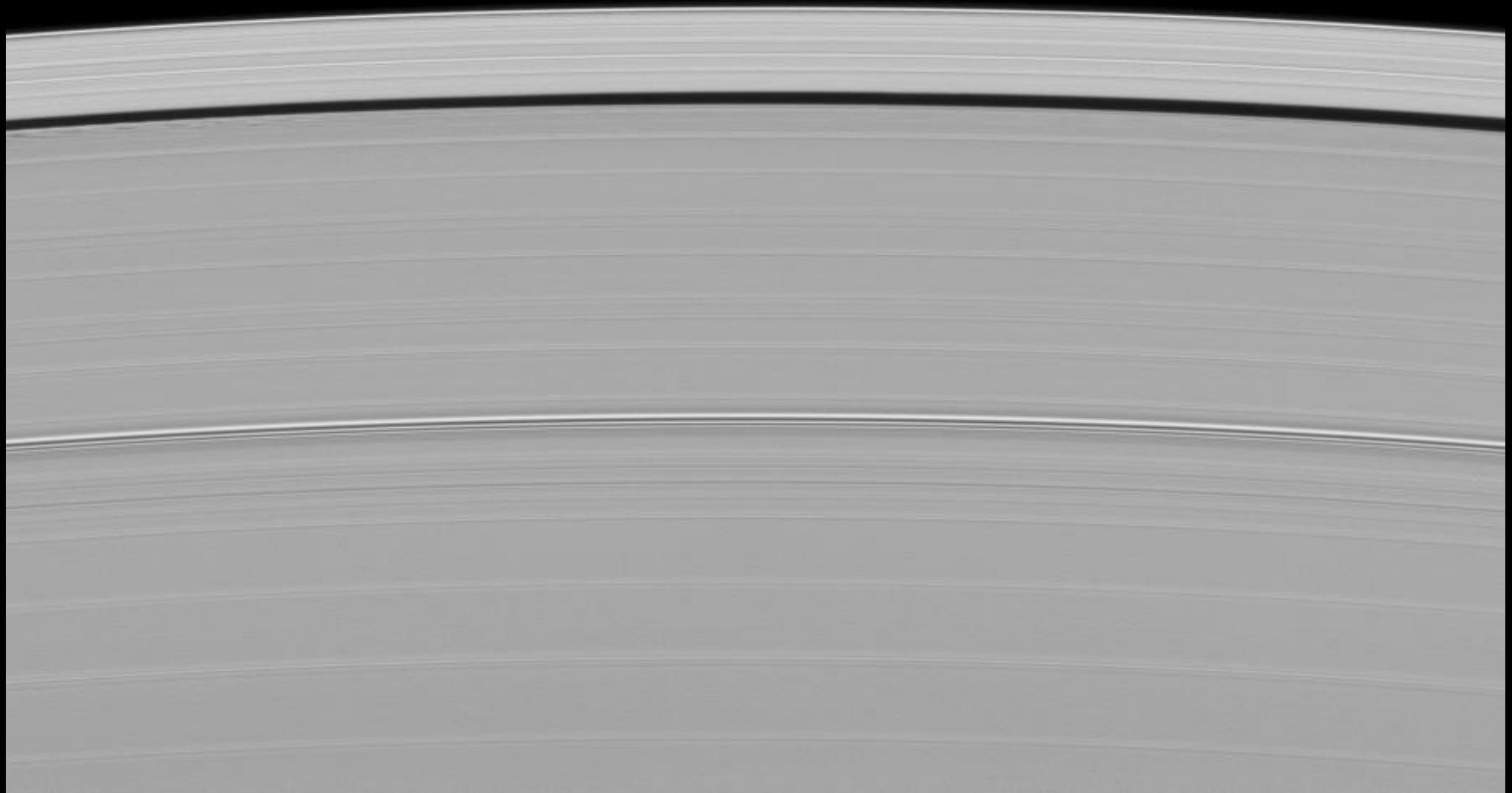
**Pan**

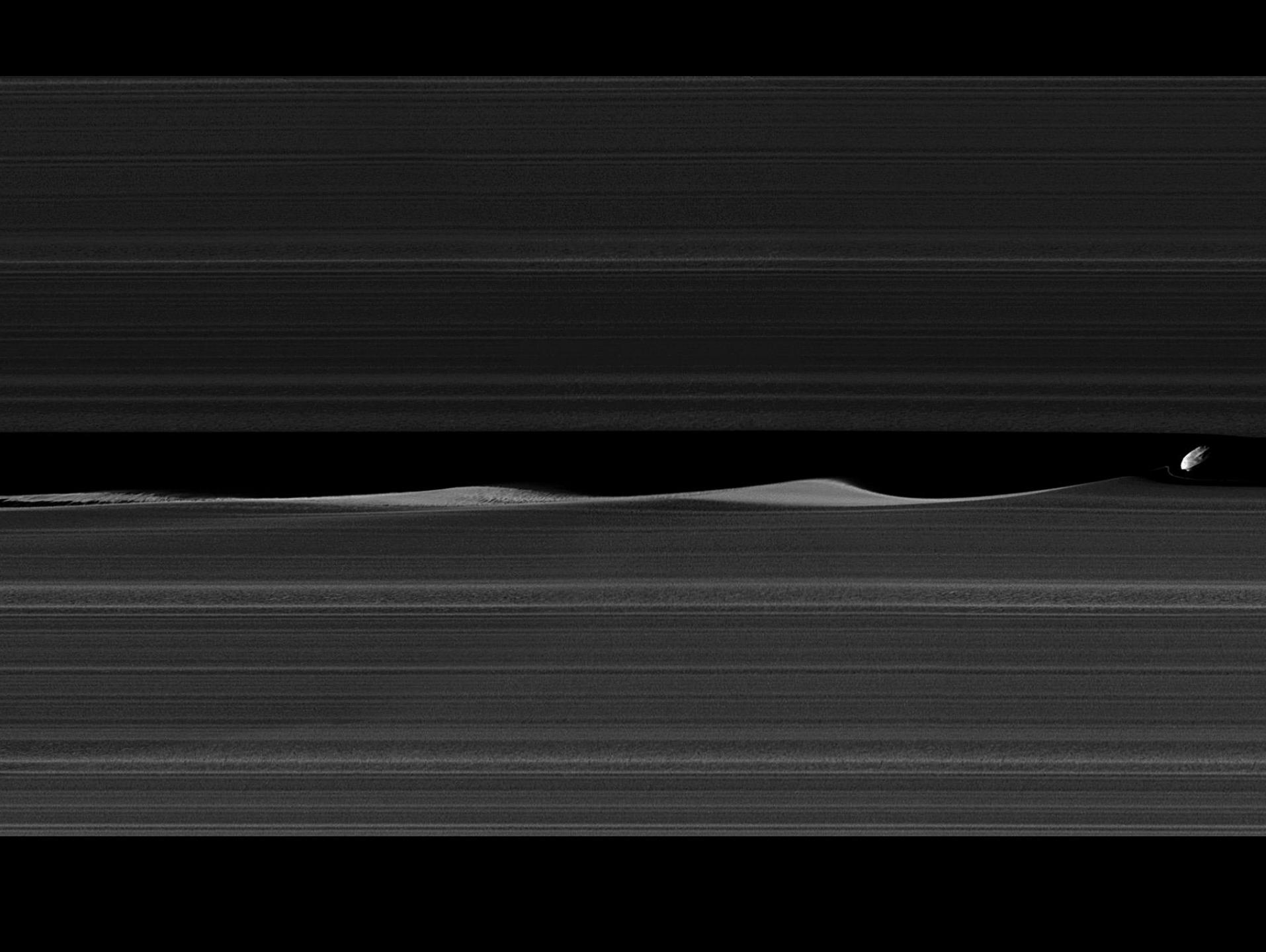


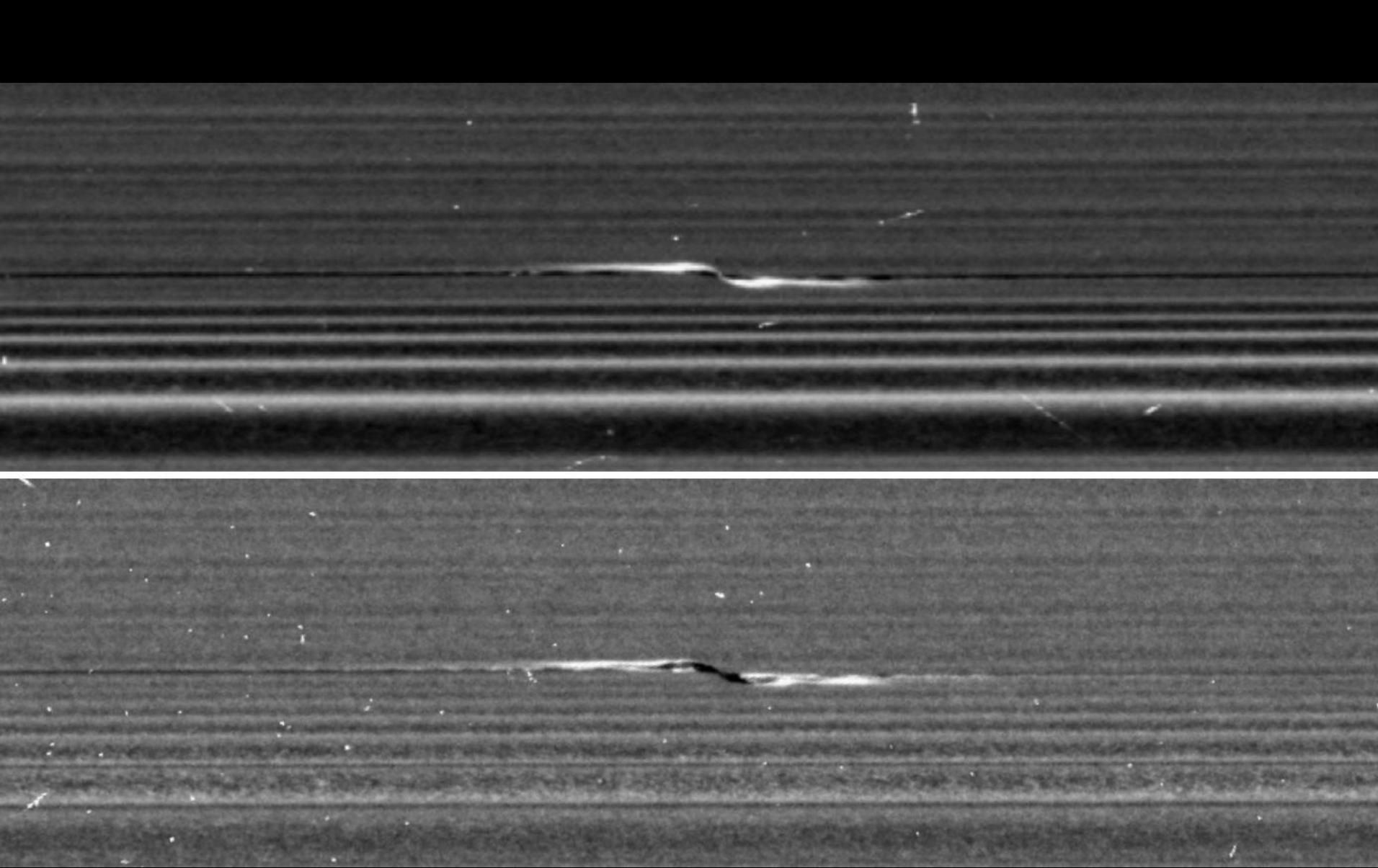
**Atlas**

# Rings

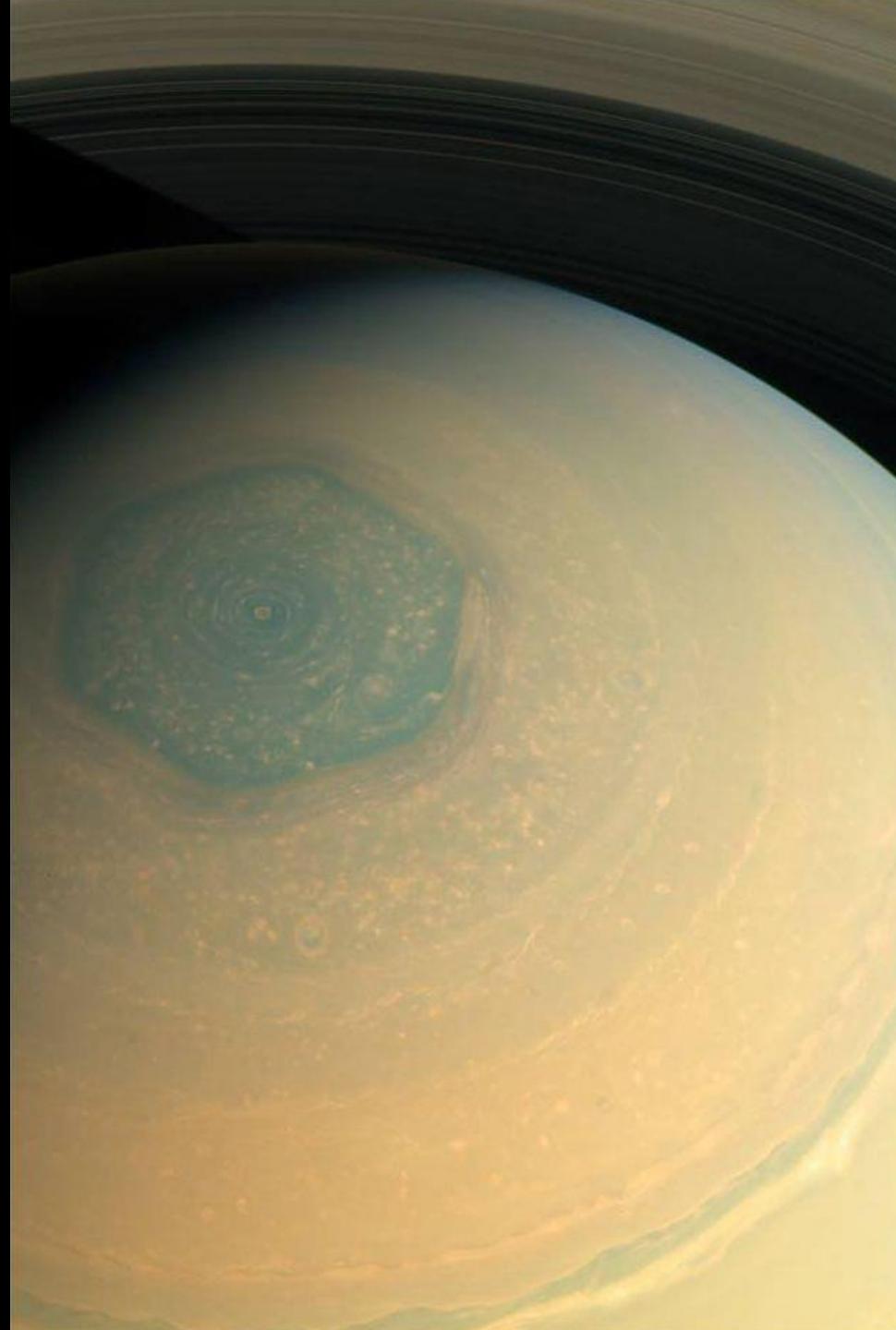


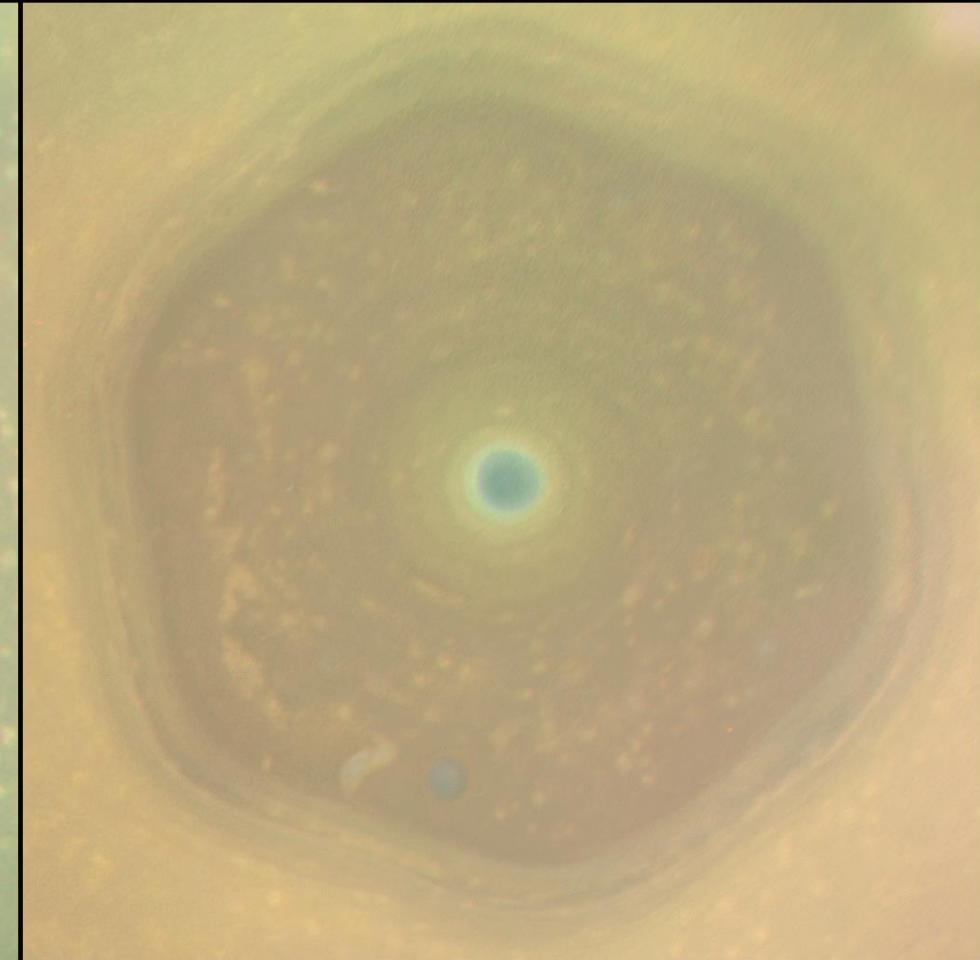
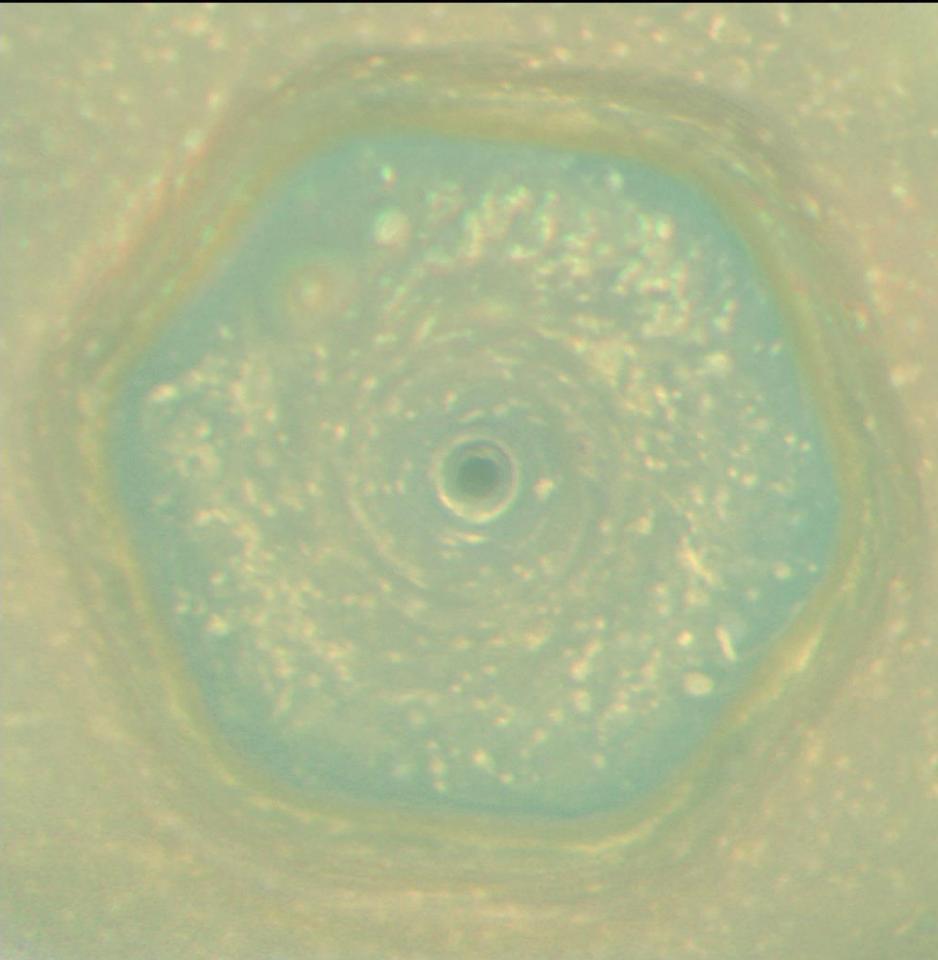






# Atmosphere







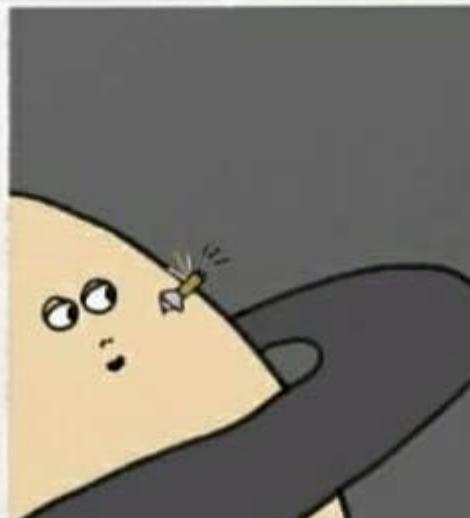
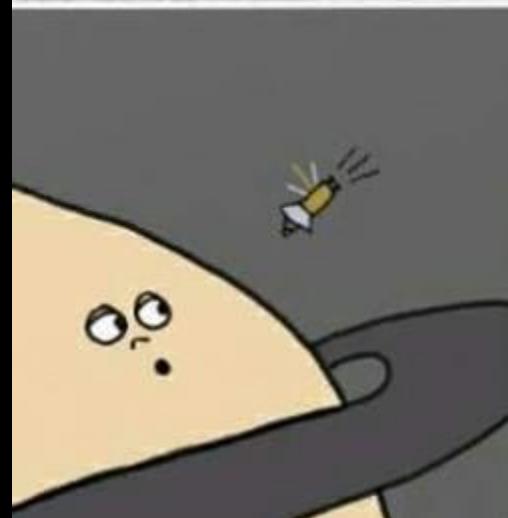
[saturn.jpl.nasa.gov](http://saturn.jpl.nasa.gov)

Well, that's it!  
My mission is  
COMPLETE!

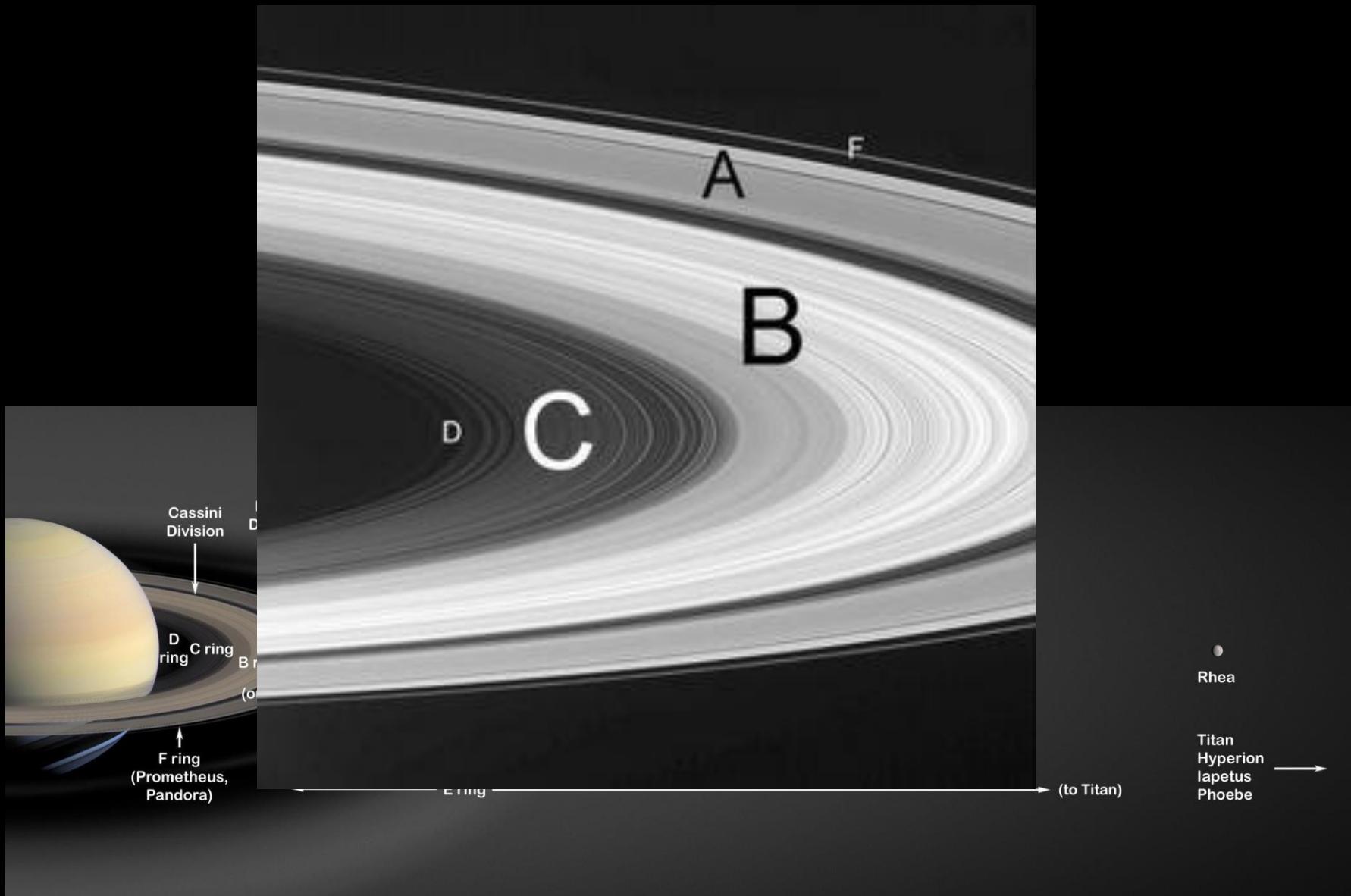
I guess you'll be  
going home now.  
Cassini...

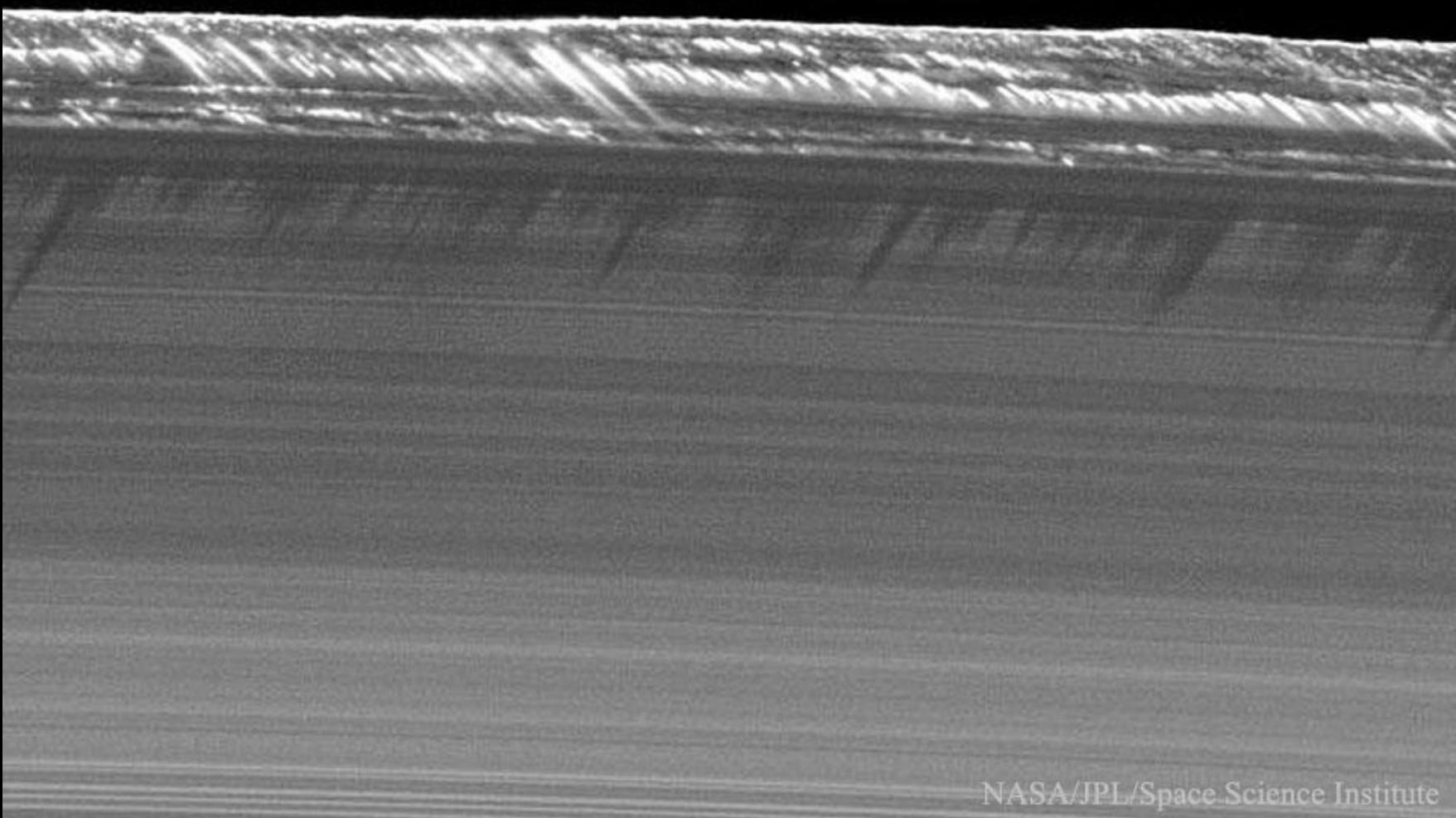


Saturn...  
You ARE  
my home.



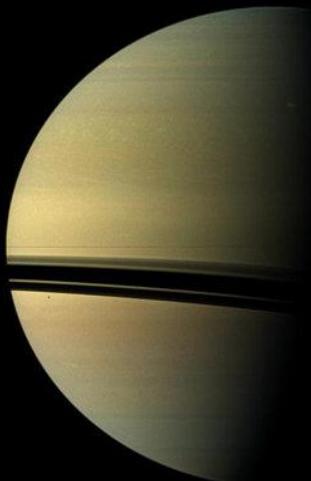






NASA/JPL/Space Science Institute

Dec 5, 2010



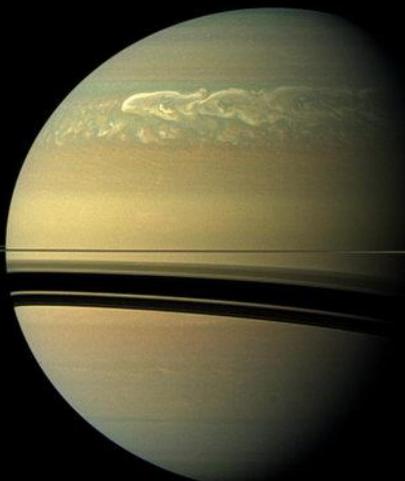
Jan 2, 2011



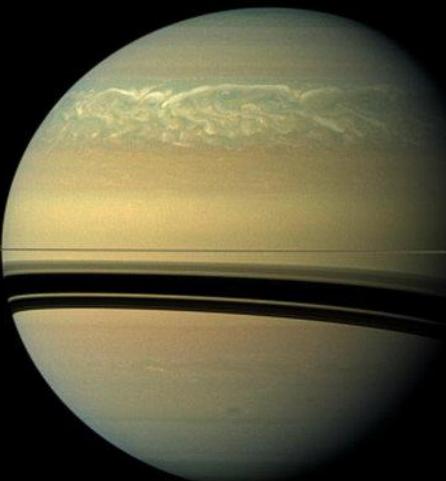
Feb 25, 2011



Apr 22, 2011



May 18, 2011



Aug 12, 2011

