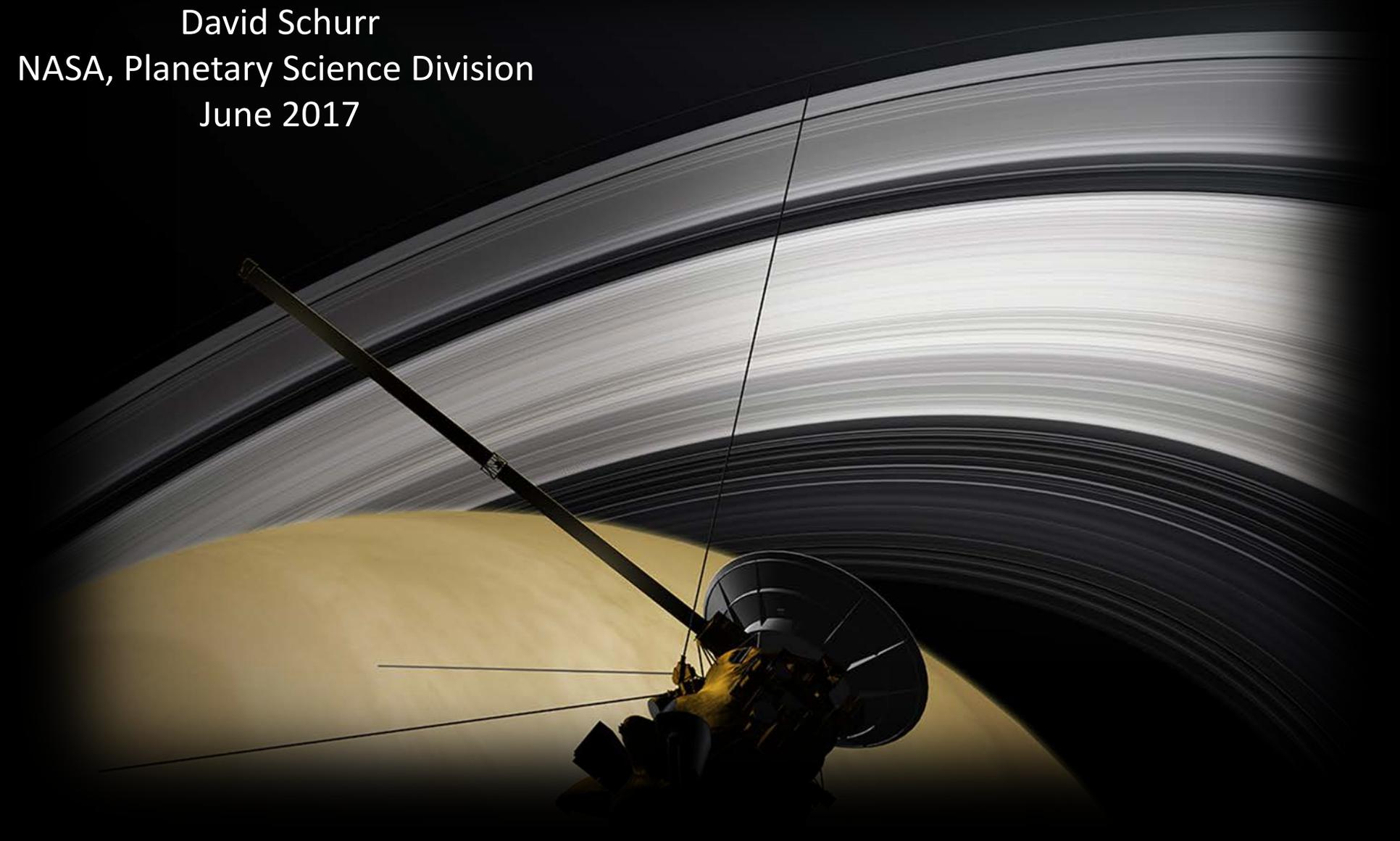


Saturn According to Cassini

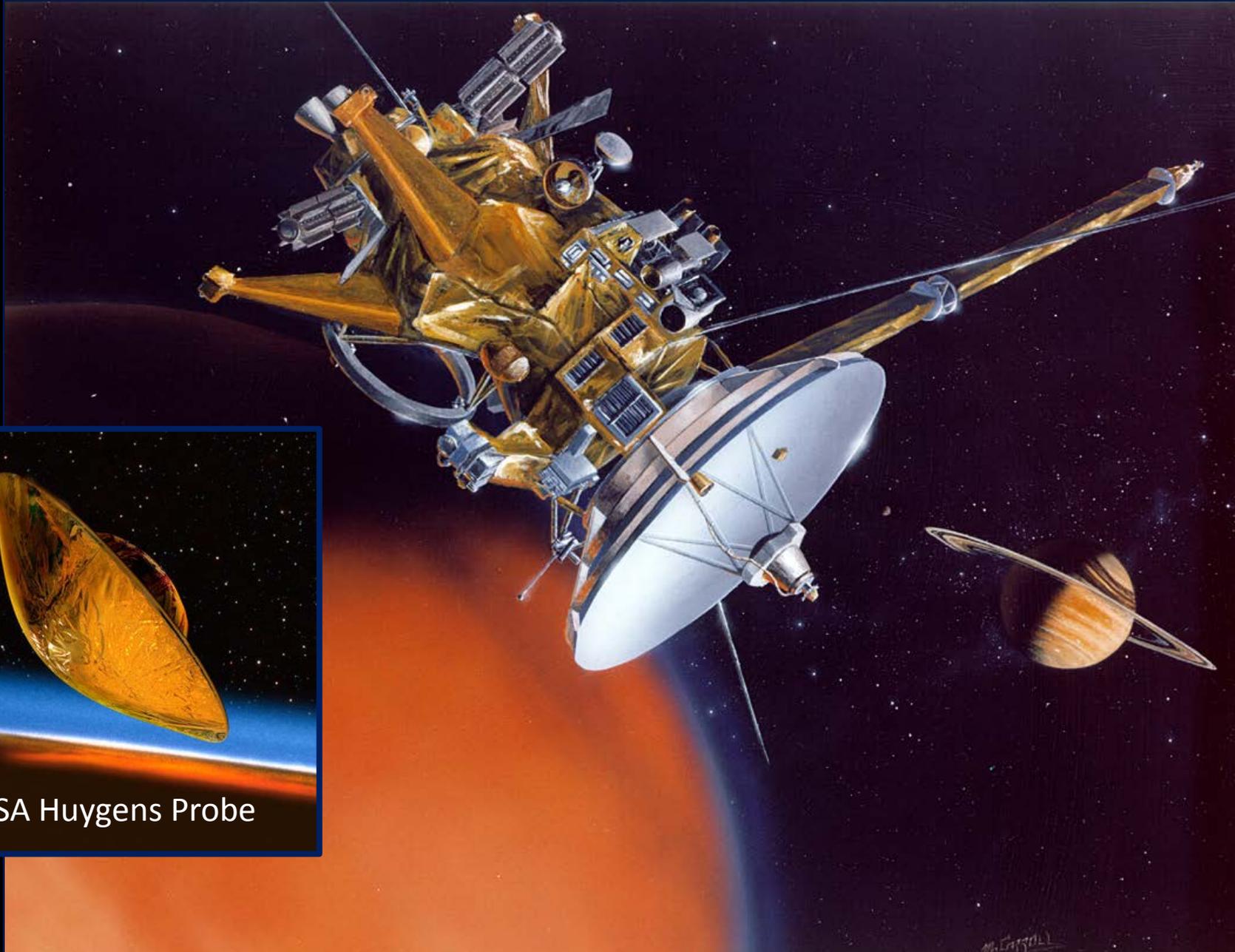
David Schurr

NASA, Planetary Science Division

June 2017



Cassini Mission To Saturn



ESA Huygens Probe



NASA Cassini Orbiter



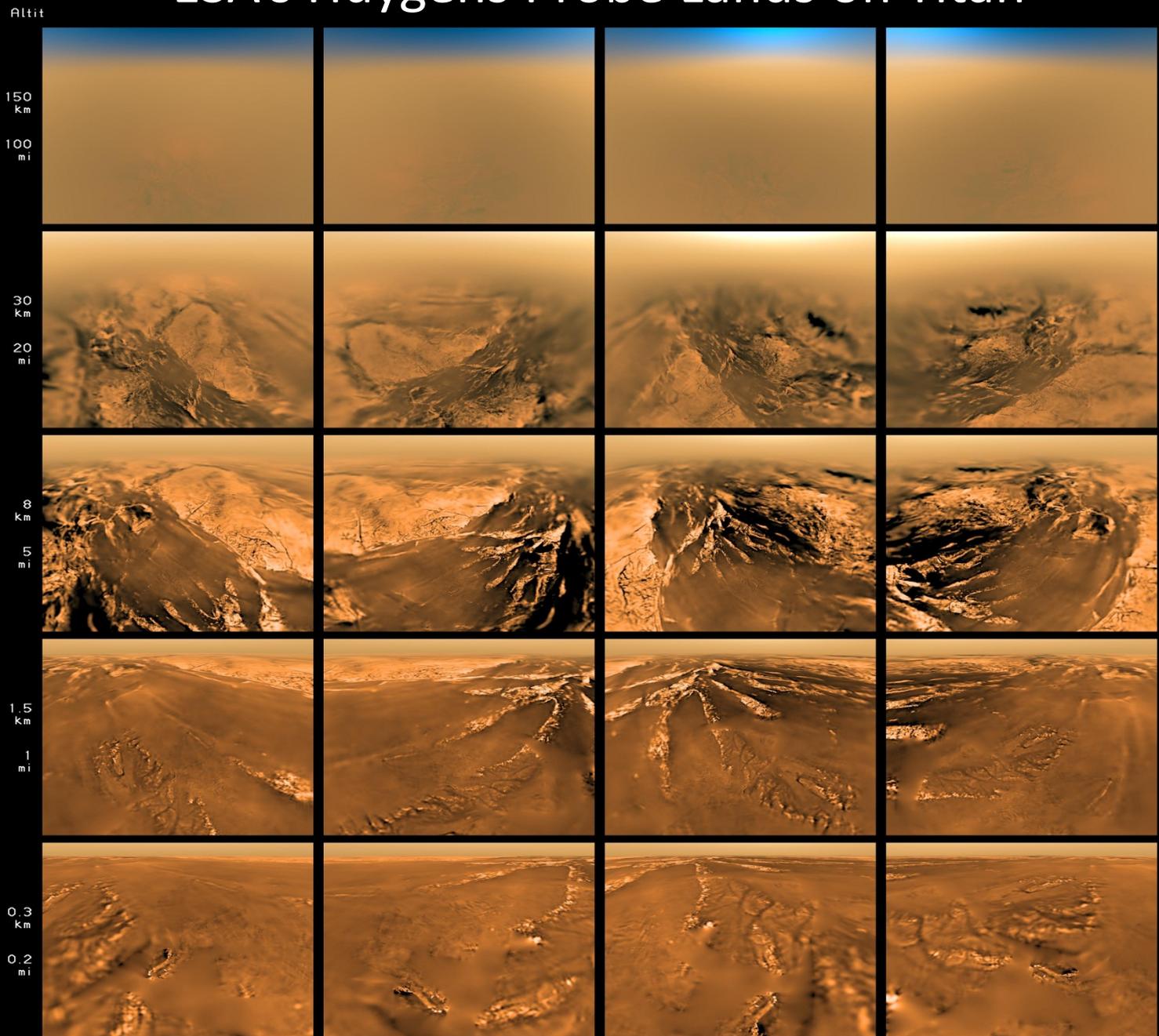
Launched Oct. 15,
1997



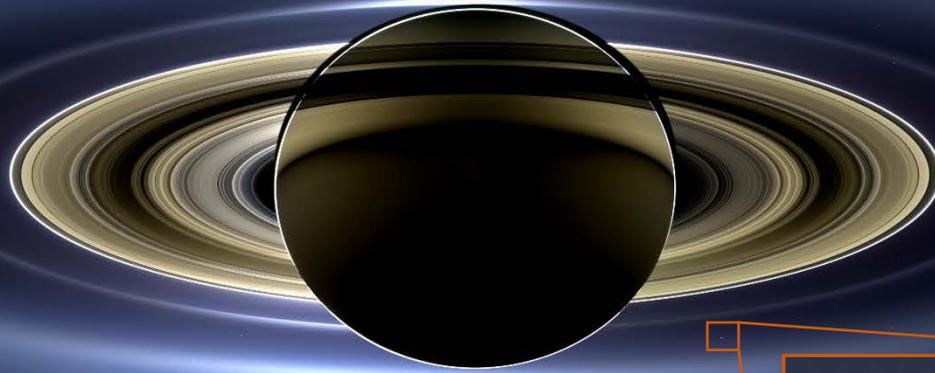
European Space Agency (ESA) Huygens Probe

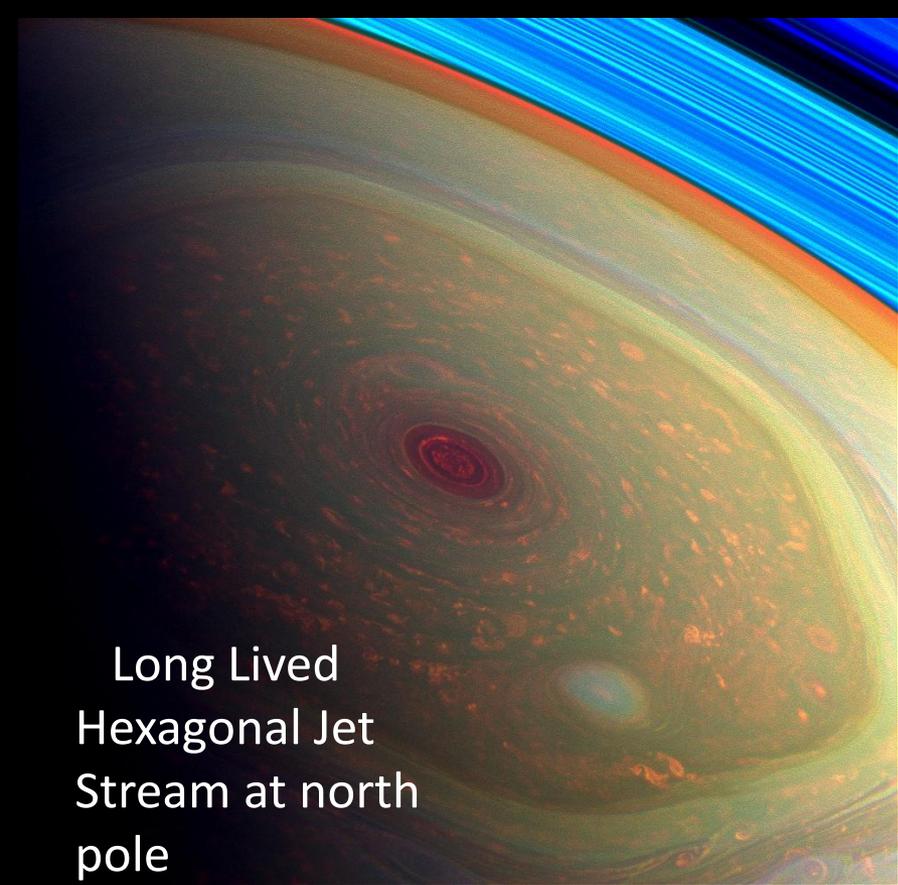
ESA's Huygens Probe Lands on Titan

Haze clears
at an altitude
of 60 km

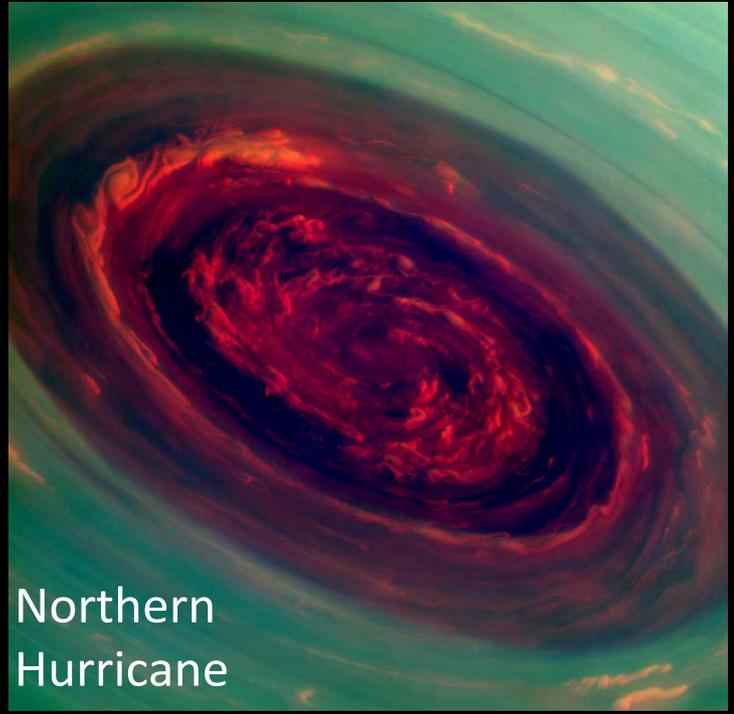


A New View of Saturn and Earth

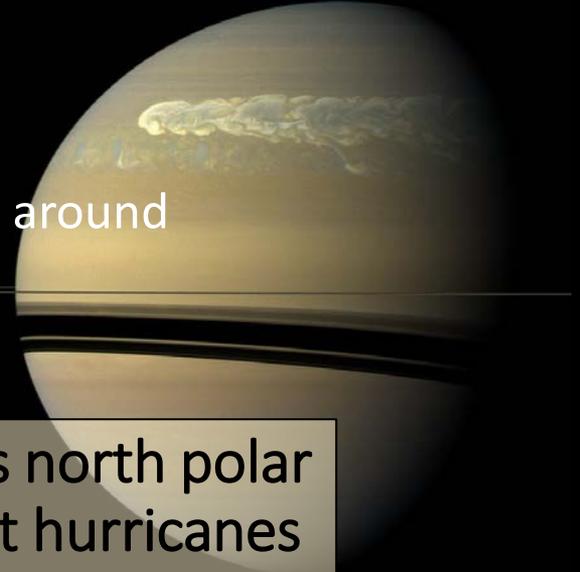


A close-up view of Saturn's north polar region, showing a prominent hexagonal jet stream. The hexagon is a large, six-sided cloud feature with a reddish-brown center and a yellowish-green outer ring. The surrounding atmosphere is dark with some smaller, fainter features.

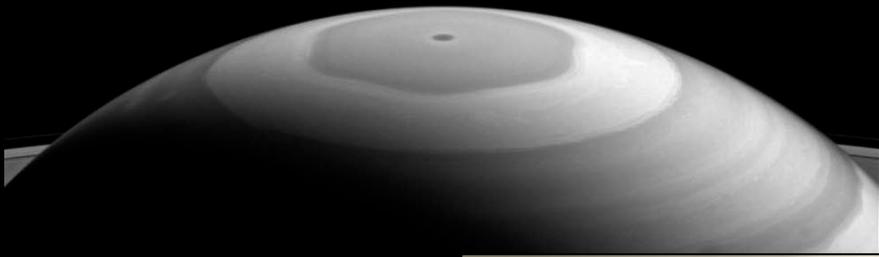
Long Lived
Hexagonal Jet
Stream at north
pole

A close-up view of a large, swirling storm on Saturn, known as a northern hurricane. The storm is a deep red color with a dark center, surrounded by concentric rings of lighter red and orange. The background is a mix of green and blue, representing the surrounding atmosphere.

Northern
Hurricane

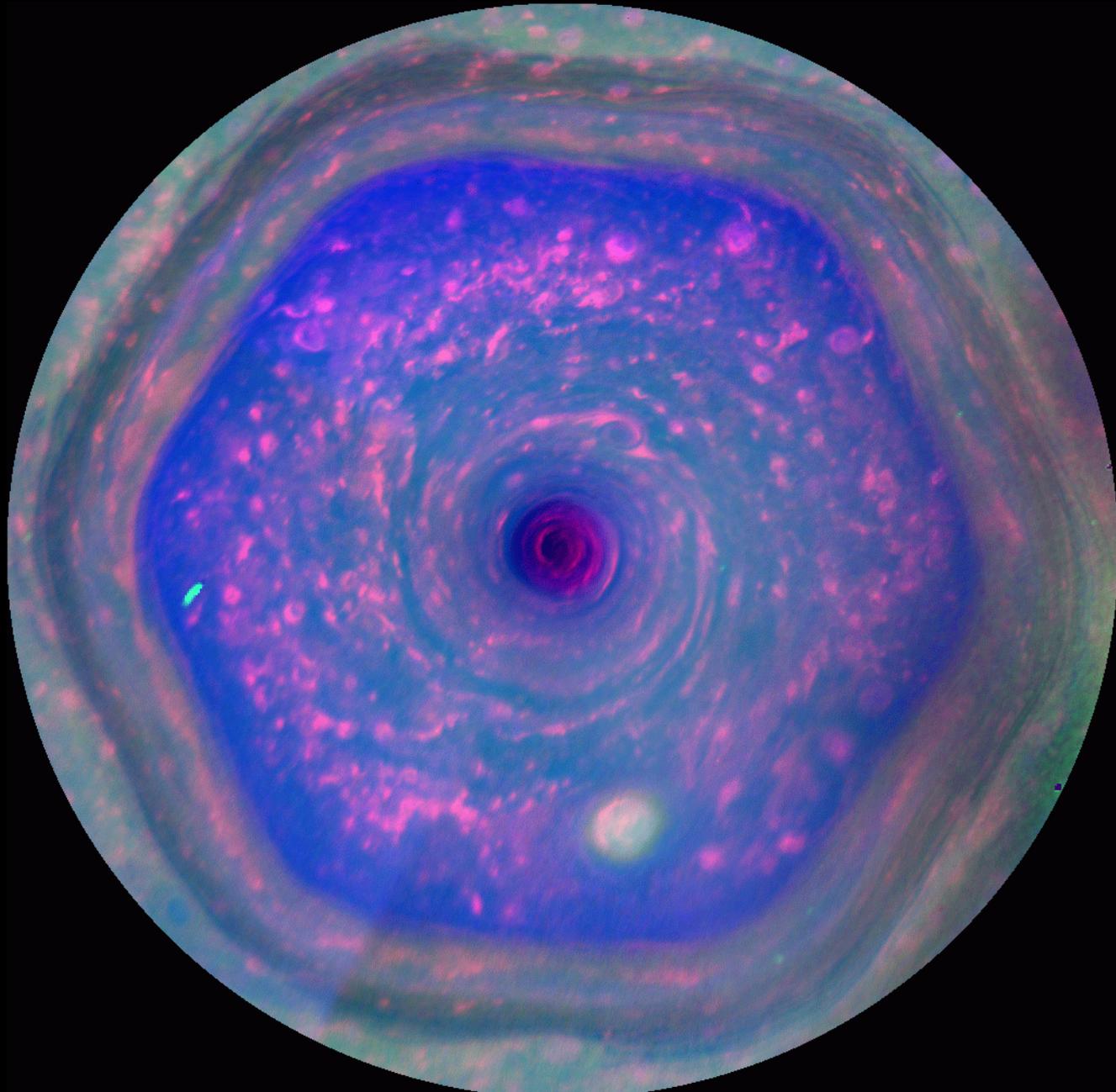
A view of Saturn showing a large storm system wrapping around the planet. The storm is a bright, white, cloud-like feature that follows the curvature of the planet's surface. The planet's rings are visible at the bottom.

Storm wrapping around
the planet

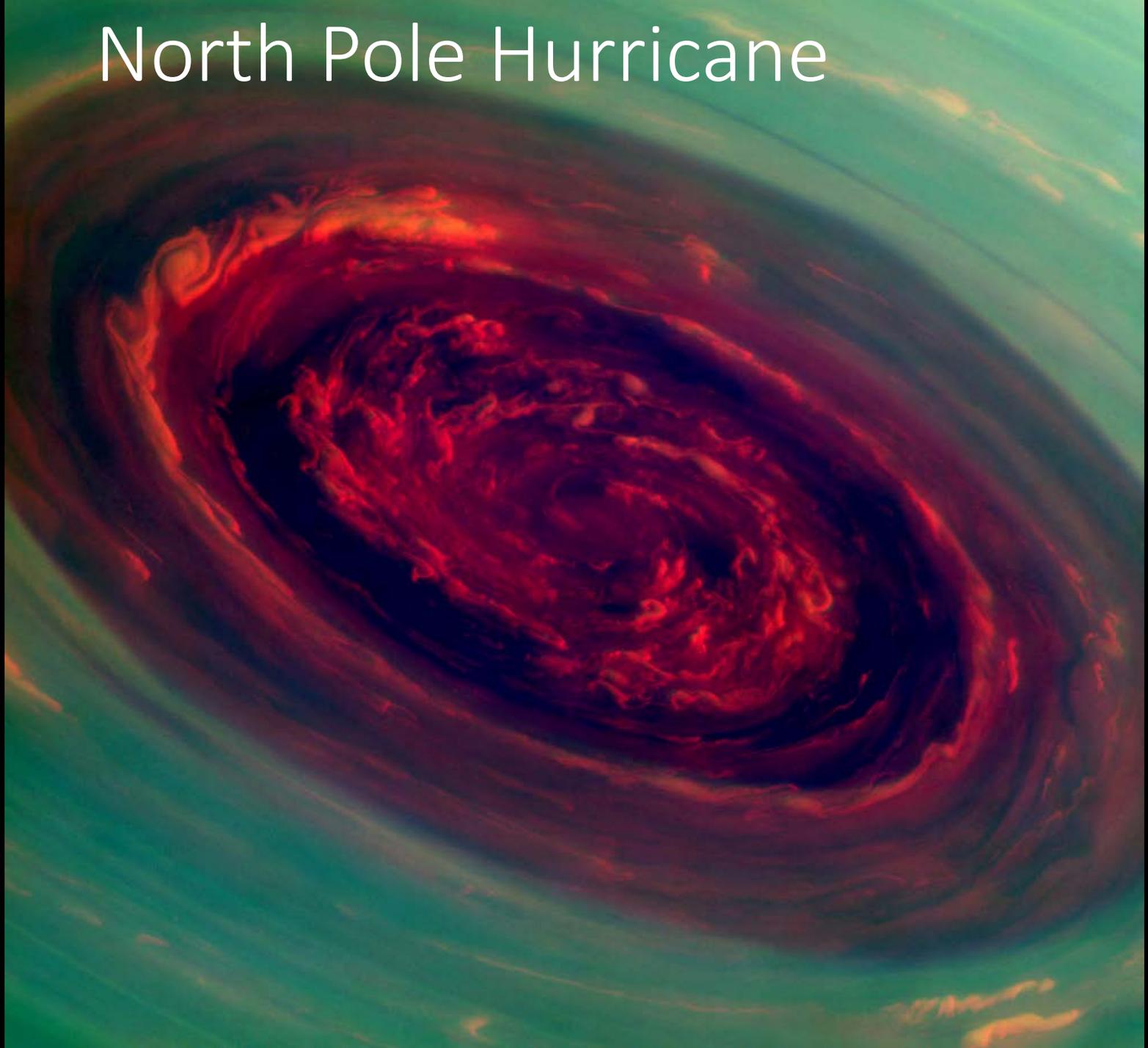
A view of Saturn showing the first complete view of the north polar hexagon. The hexagon is a large, six-sided cloud feature with a reddish-brown center and a yellowish-green outer ring. The surrounding atmosphere is dark with some smaller, fainter features.

First complete view of Saturn's north polar
hexagon and discovery of giant hurricanes
at both poles

Hexagonal Jet Stream at North Pole

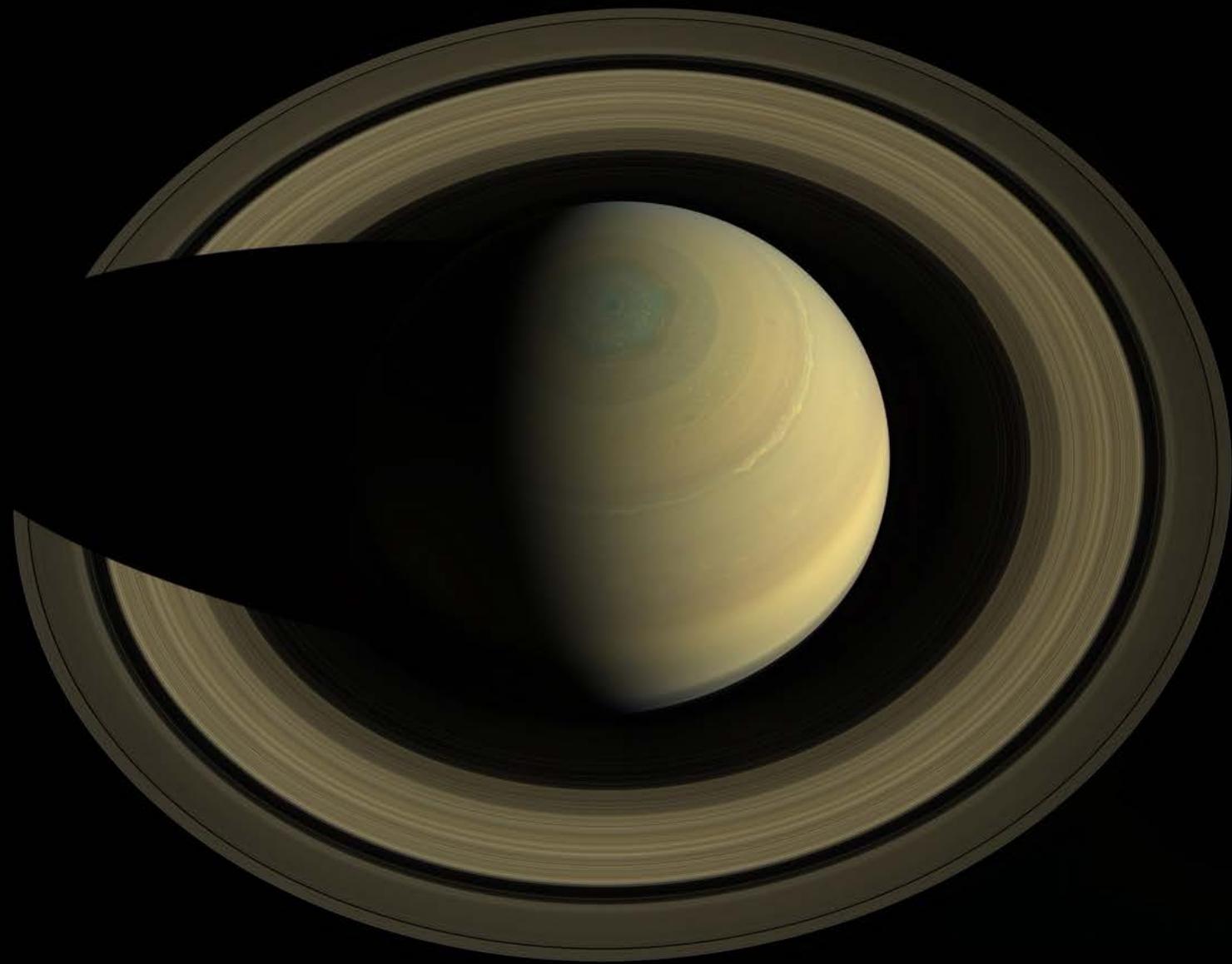


North Pole Hurricane

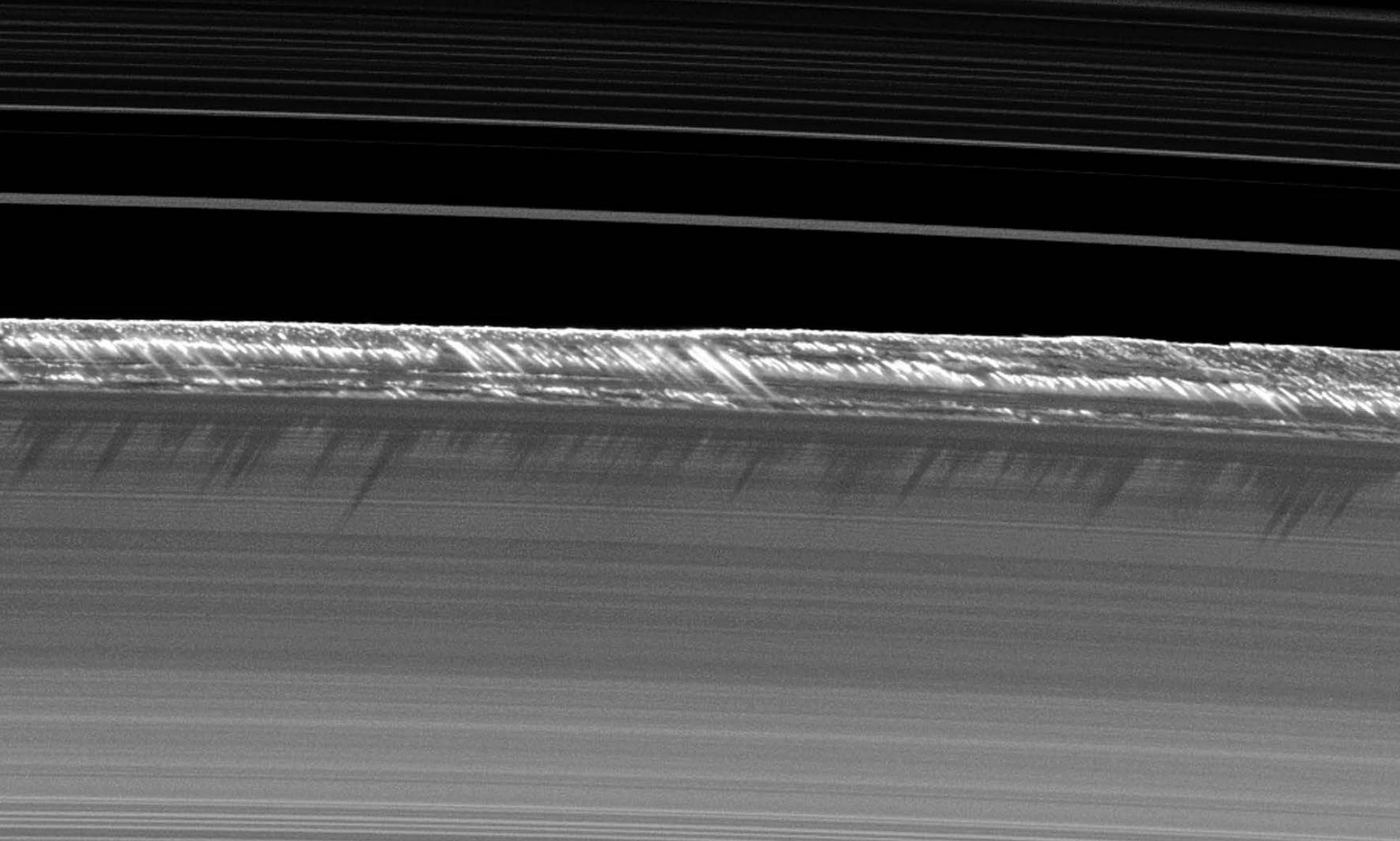


Rings



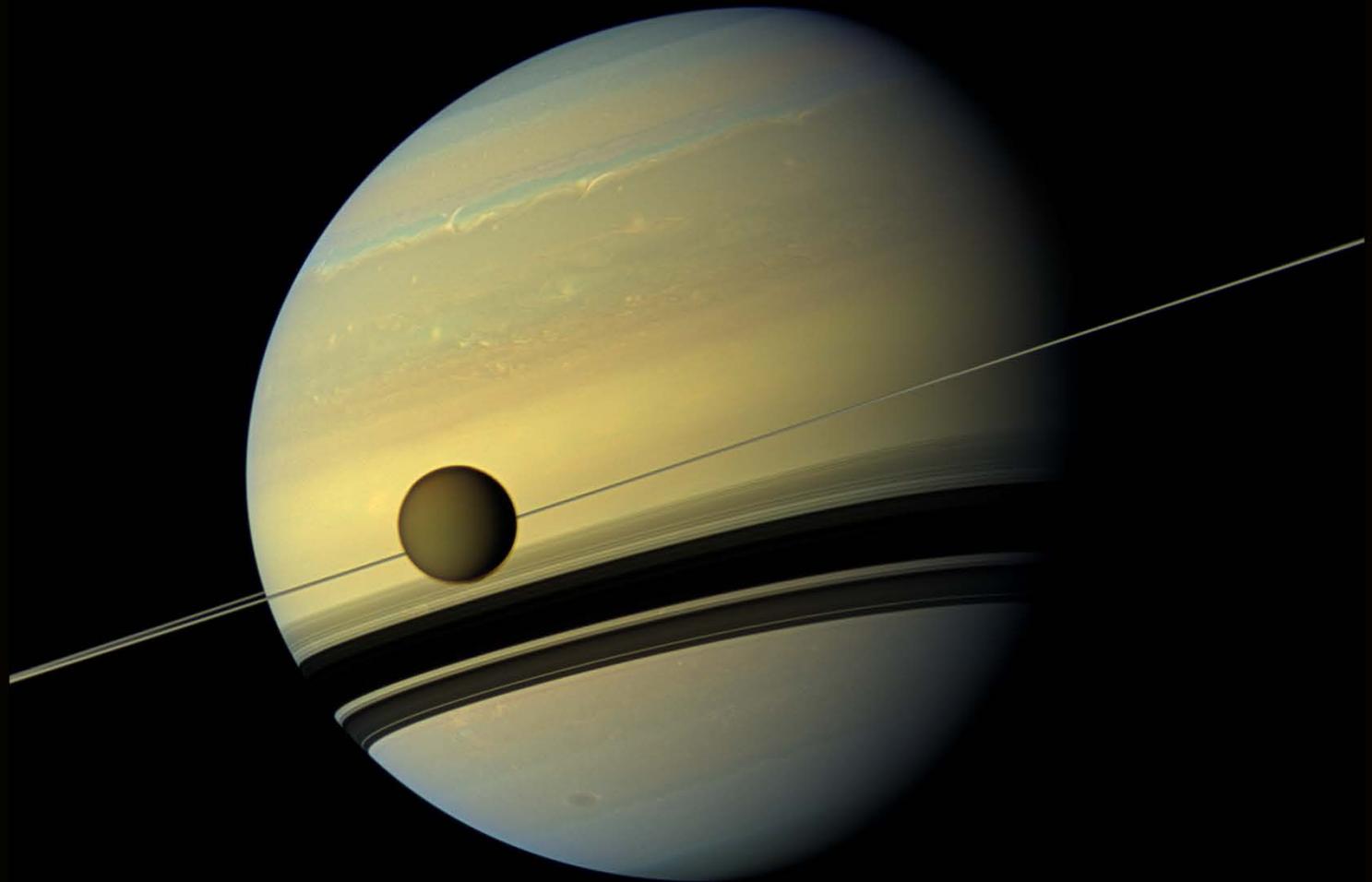


Saturn's B Ring



Moons

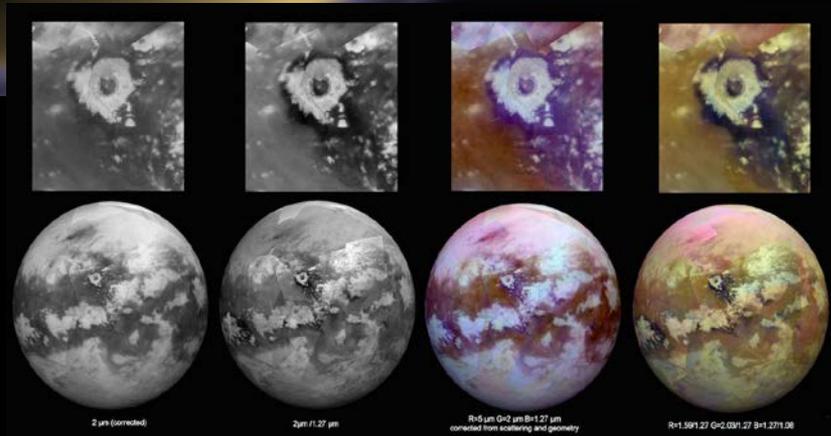
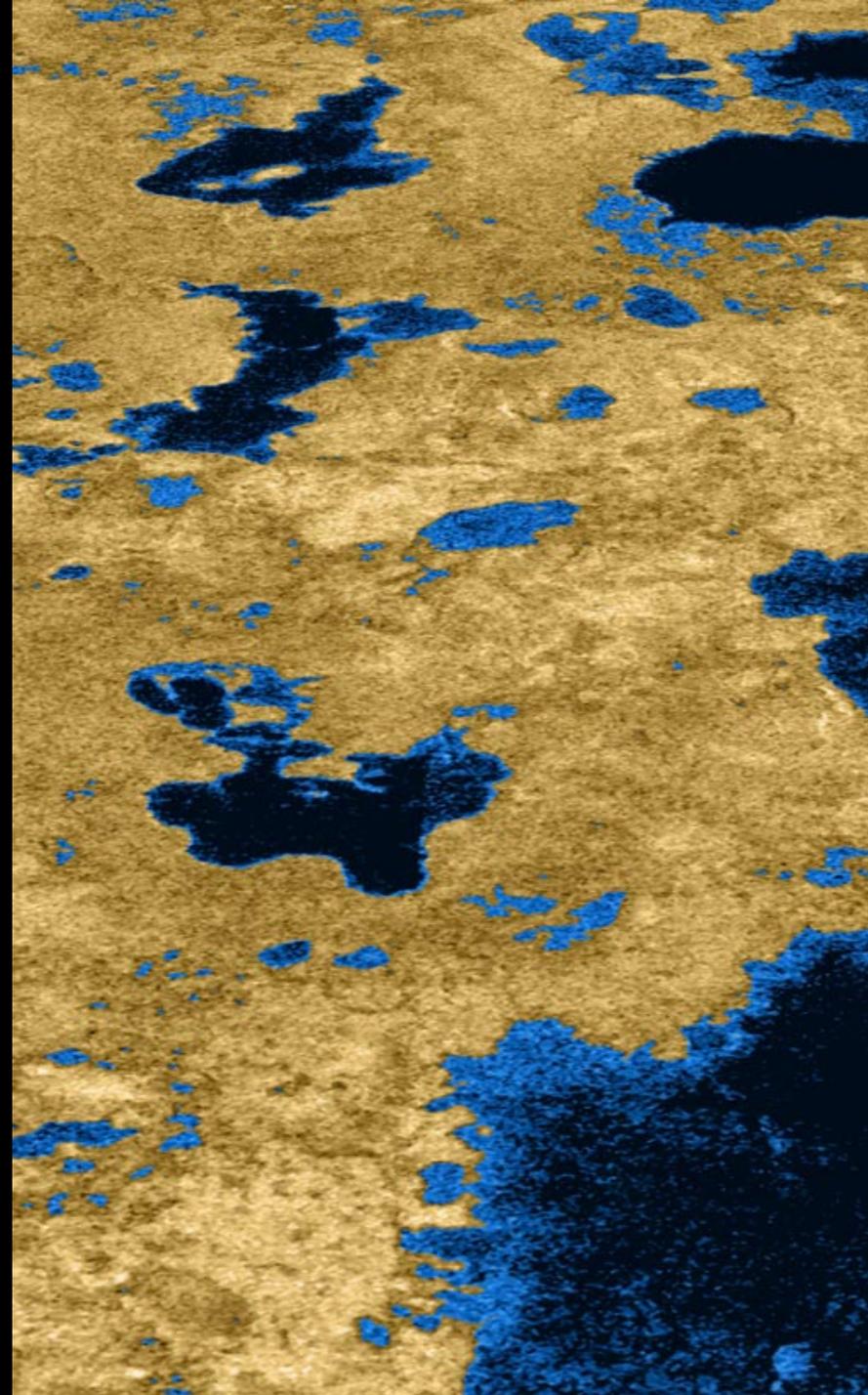




HYPERION



Saturn's Moon Titan

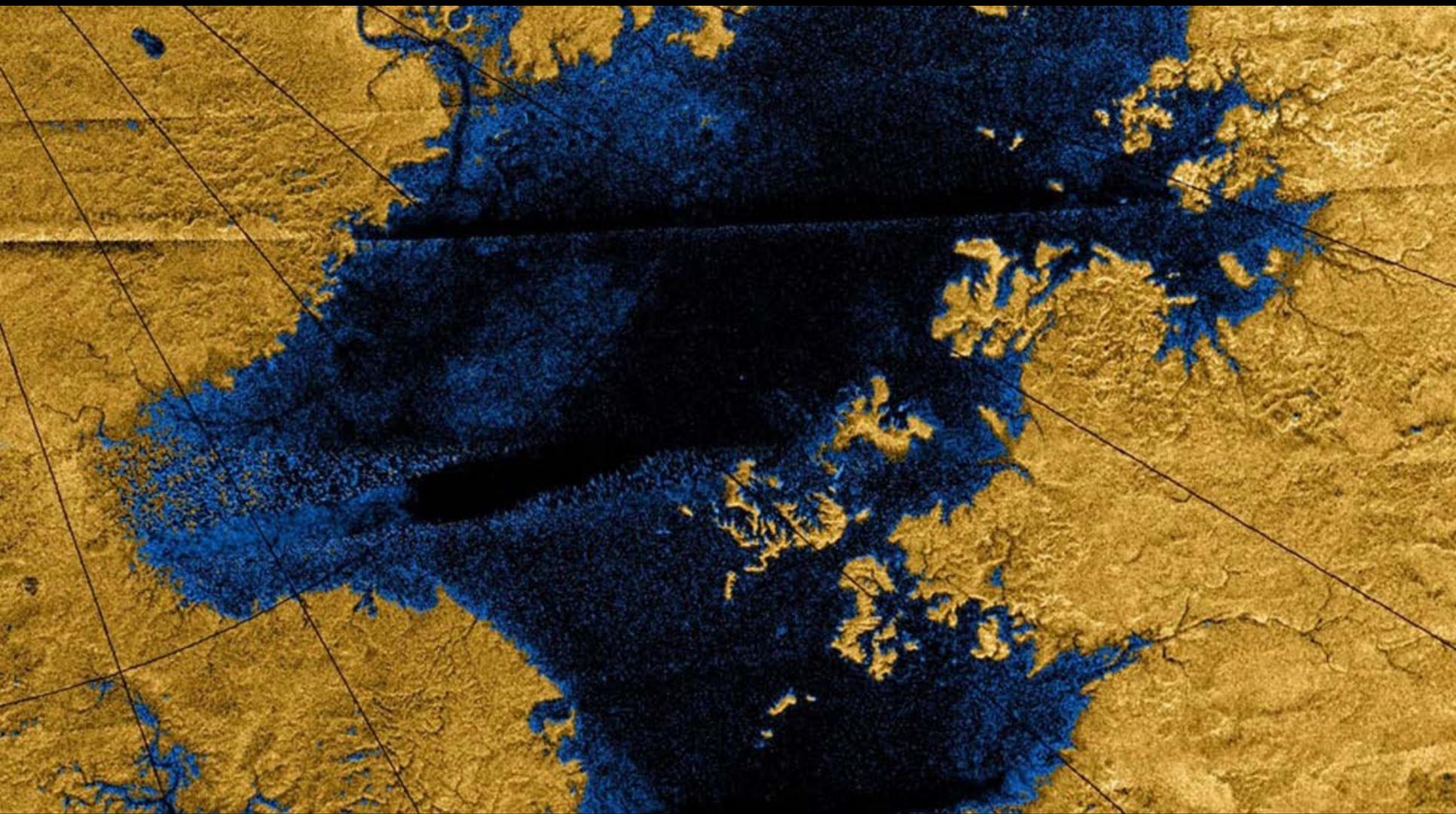


2 μm (corrected)

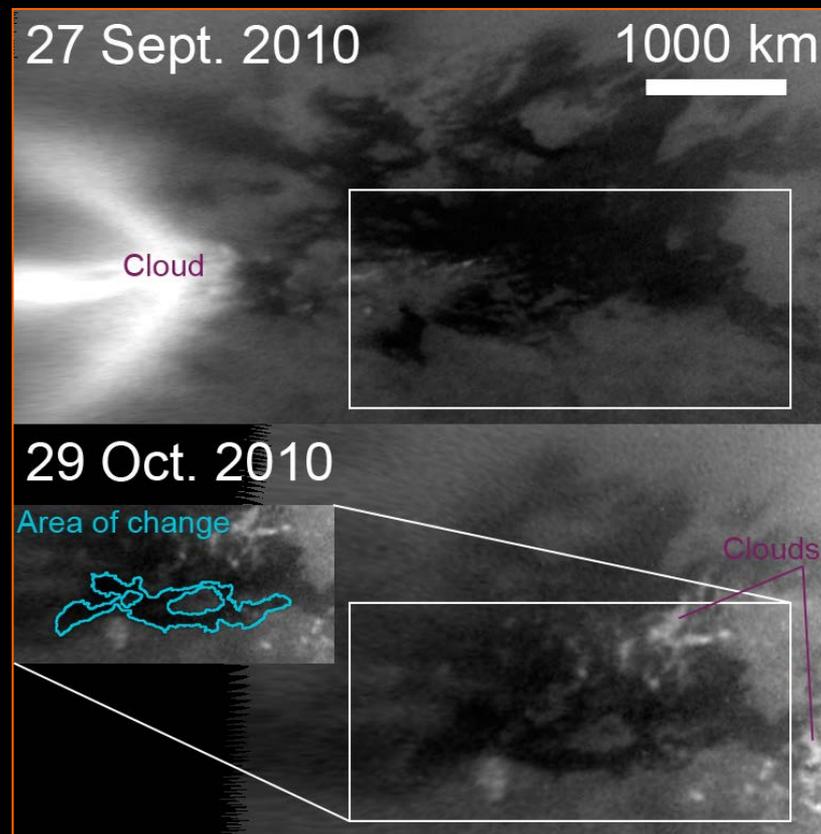
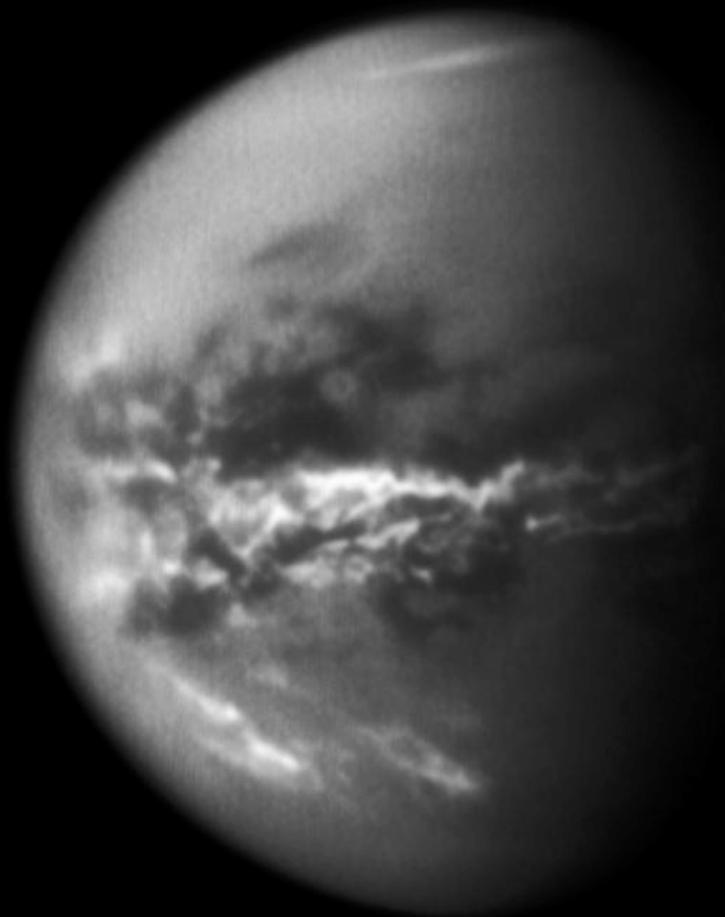
2 μm I1.27 μm

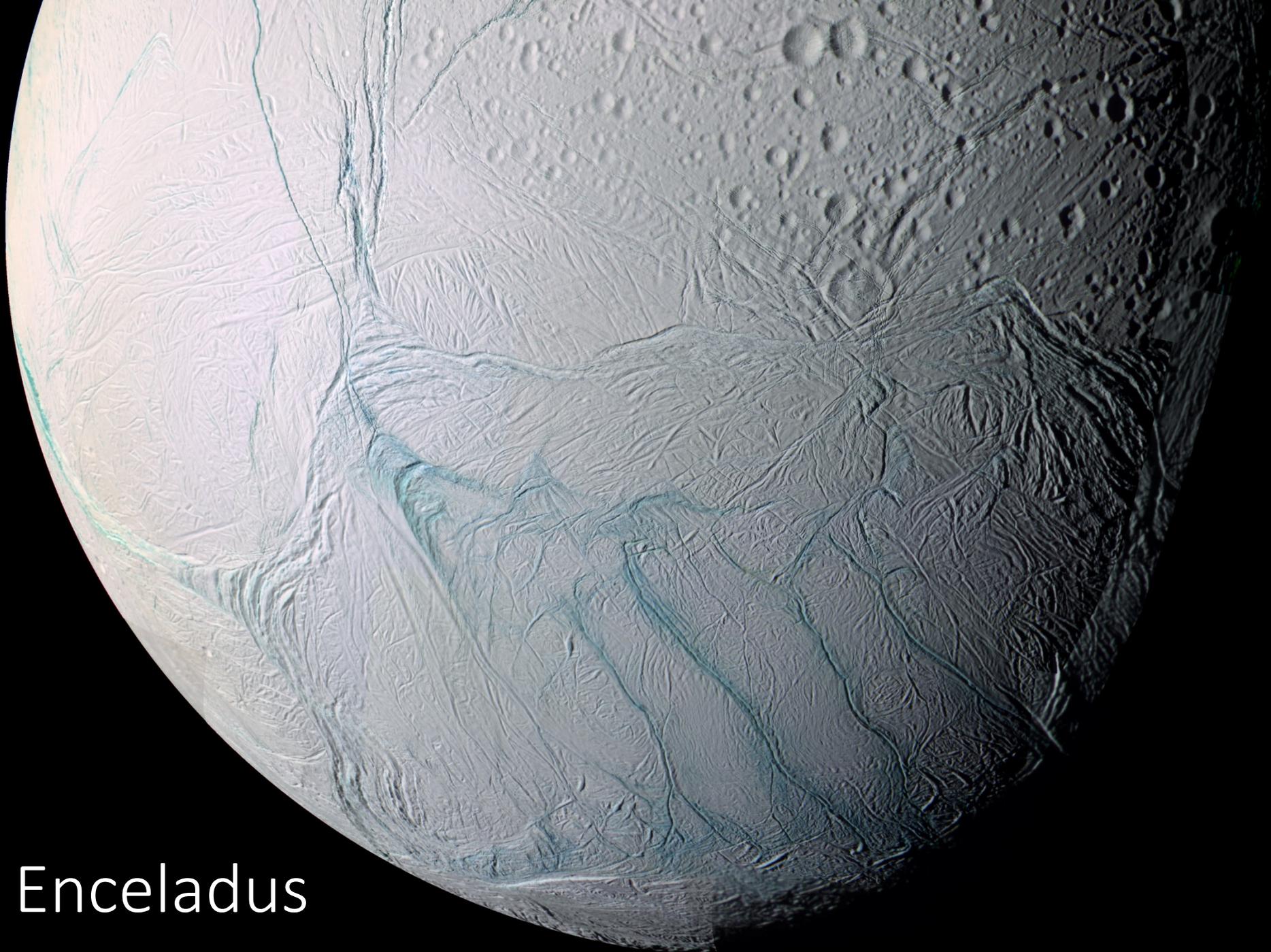
R=5 μm G=2 μm B=1.27 μm
corrected from scattering and geometry

R=1.591.27 G=2.031.27 B=1.271.08

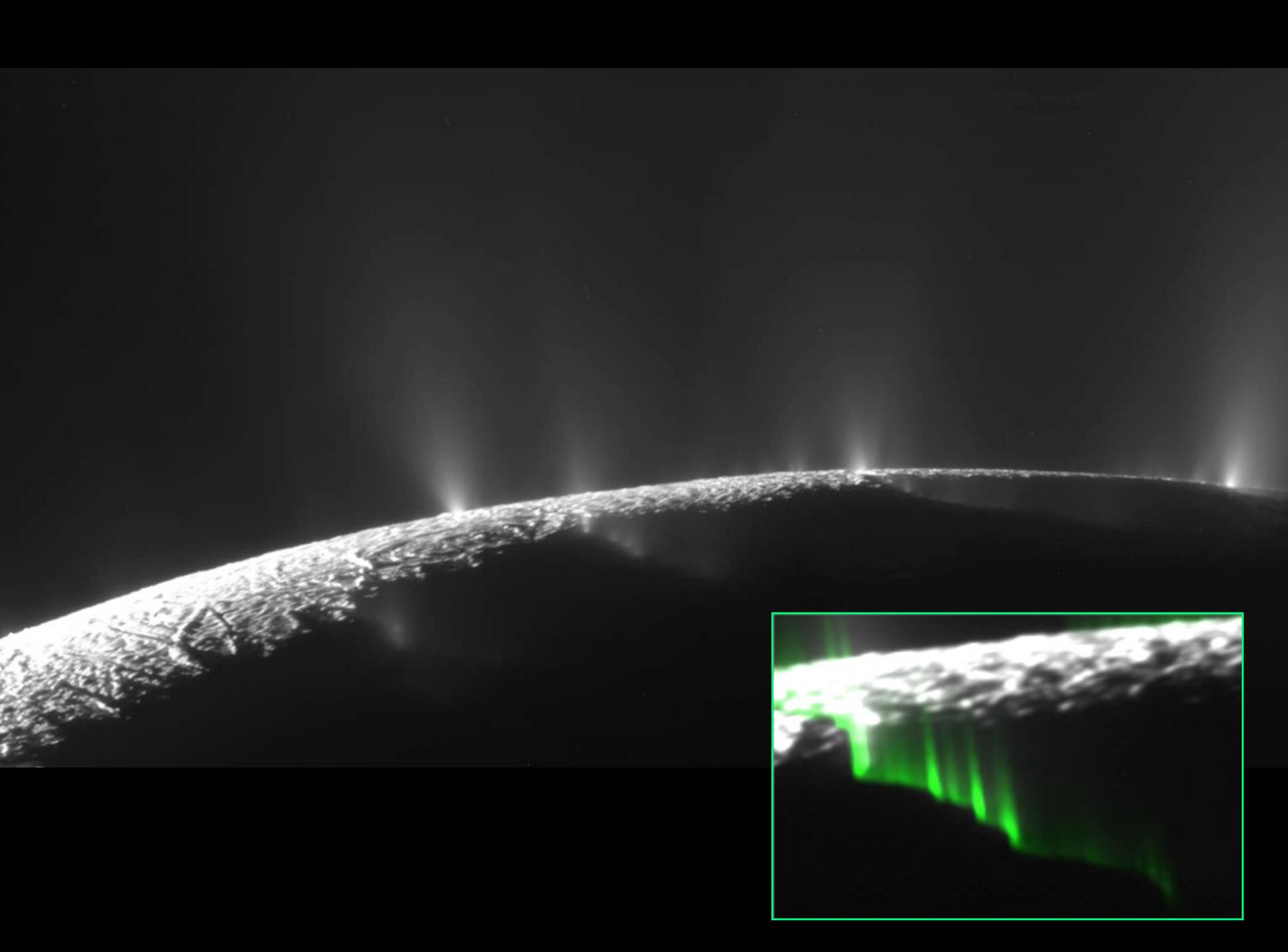


Seasonal Rains Transform Titan's Surface

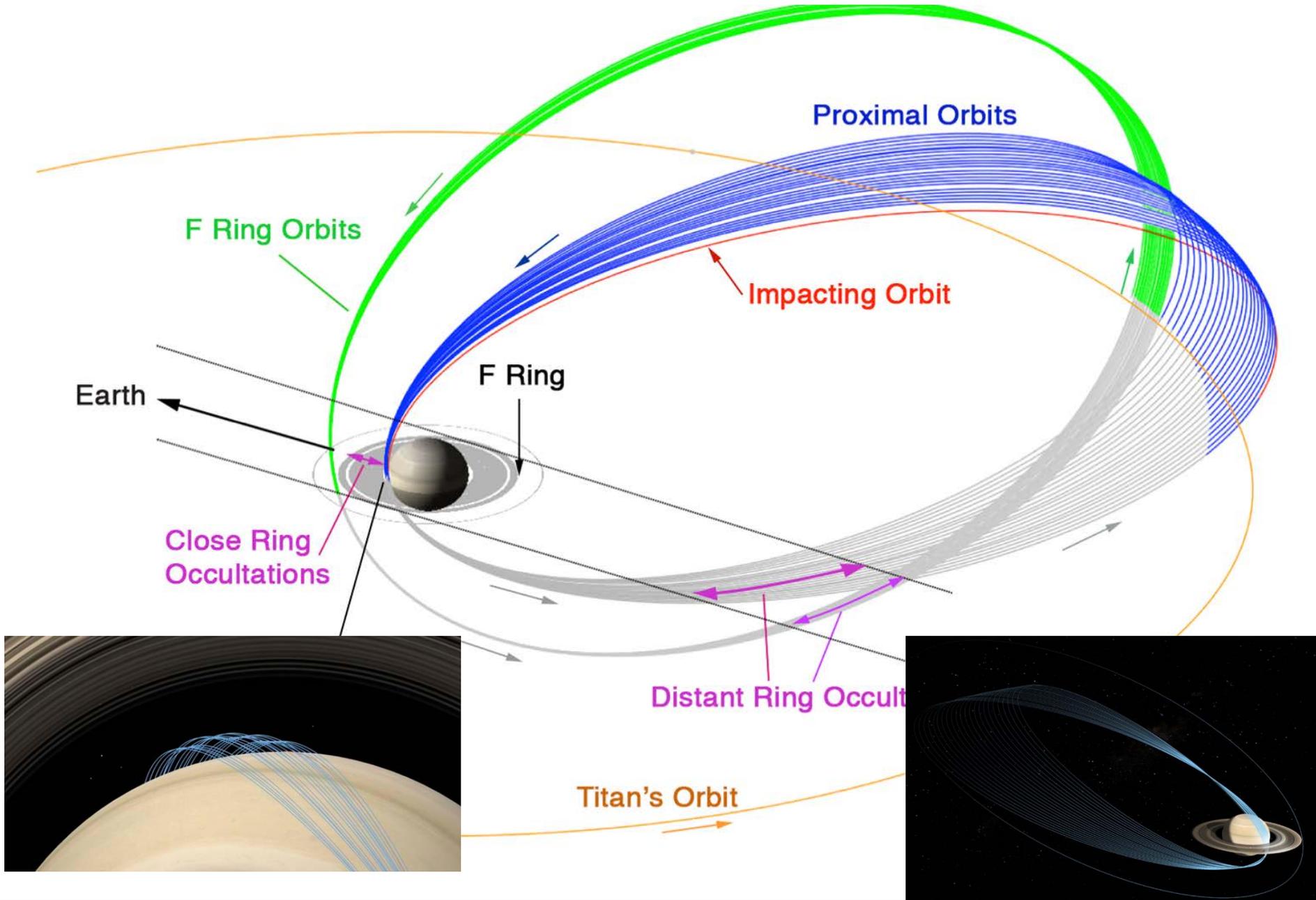


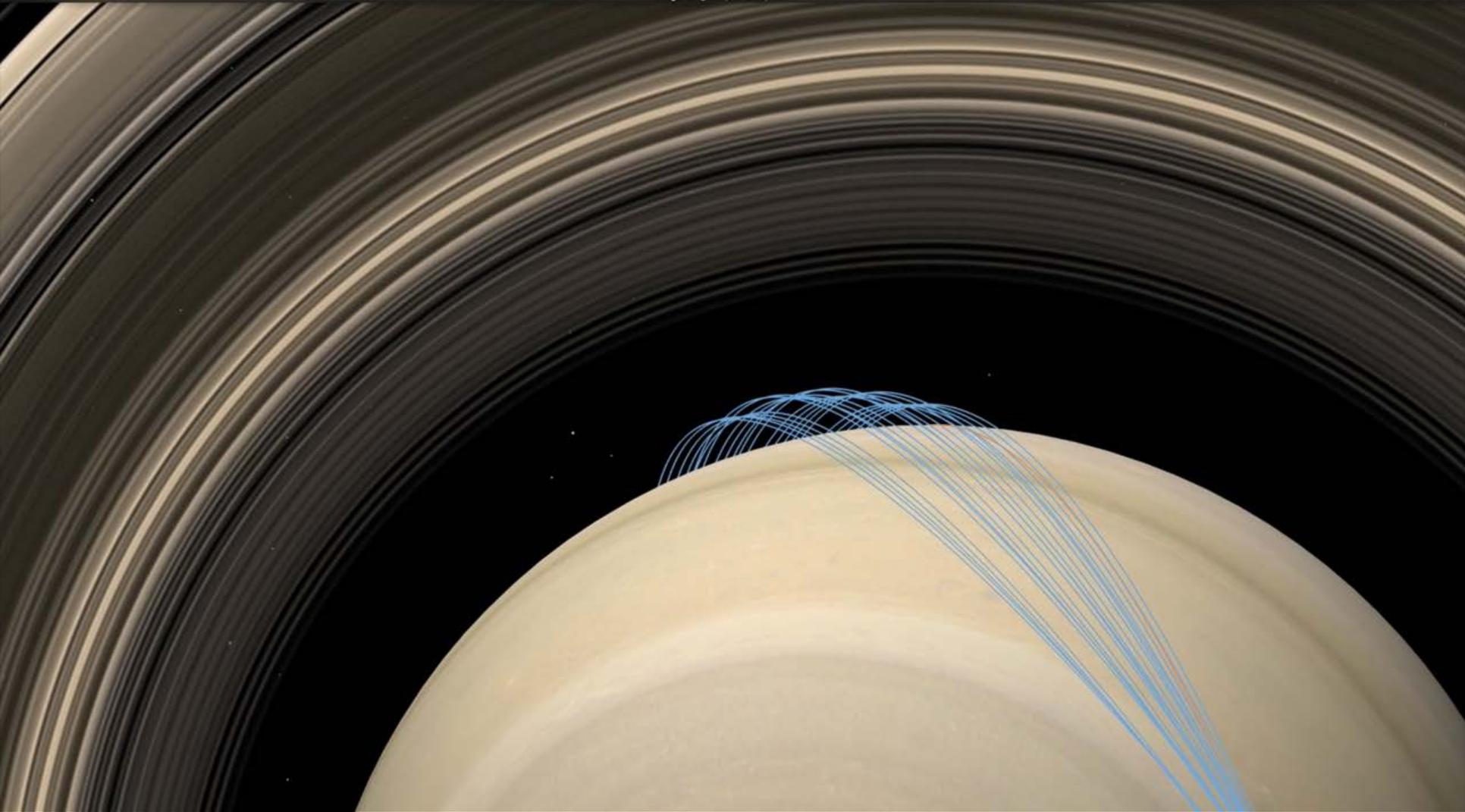


Enceladus



Grande Finale Orbits





Thank you!

