



# Cassini-Huygens : a Remarkable Example of International Cooperation

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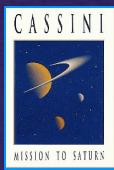
Agenzia Spaziale Italiana

Science and Technology Subcommittee

Vienna- 2014

# 3 Space Agencies 18 Countries





# Cassini-Huygens :A significant Italian participation



CASSINI



MISSION TO SATURN

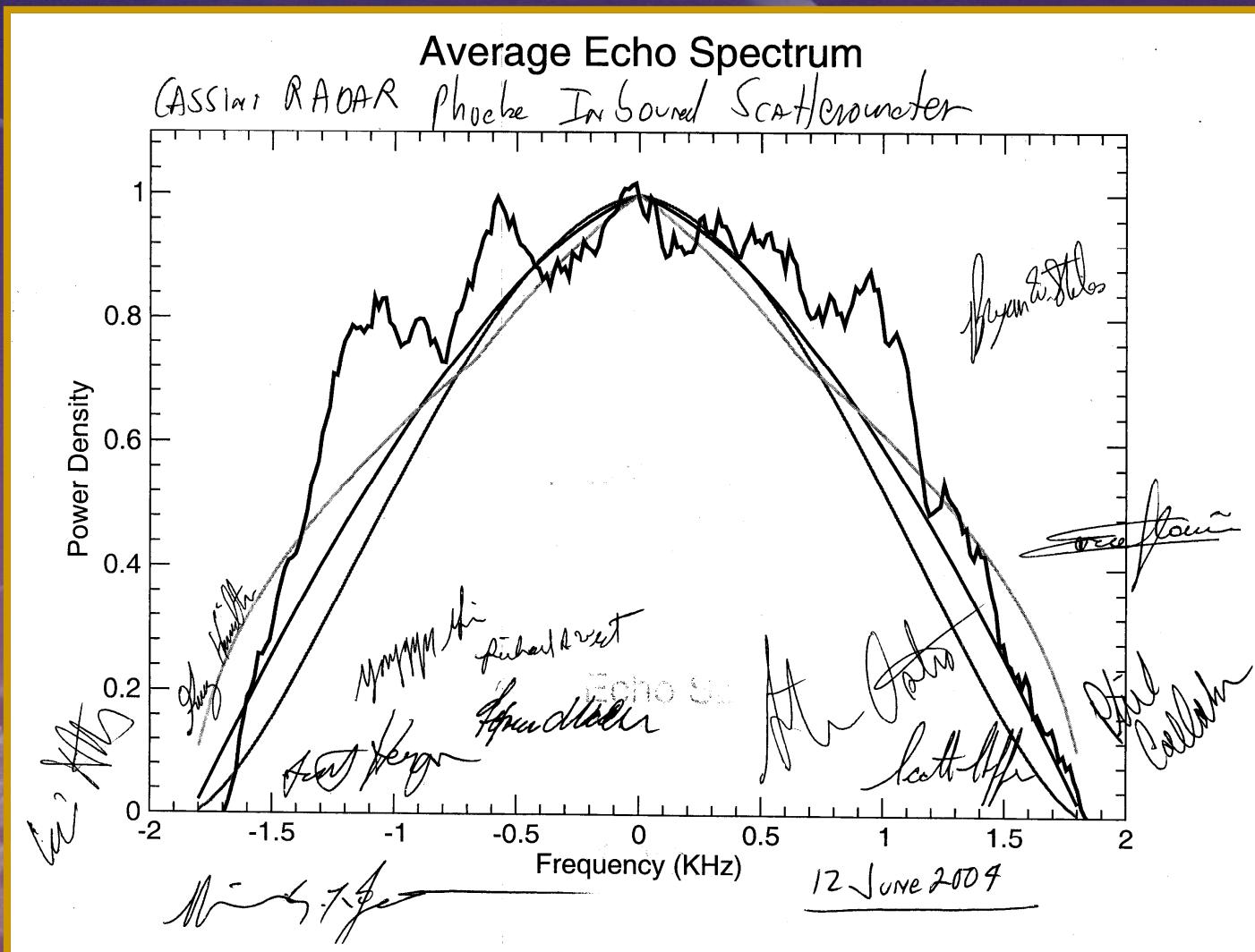


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# Phoebe: First Echo at Saturn

## 12 June 2004: First Radar Echo (distance from Phoebe = 50,000 km)



**15 January 2005**  
still an almost

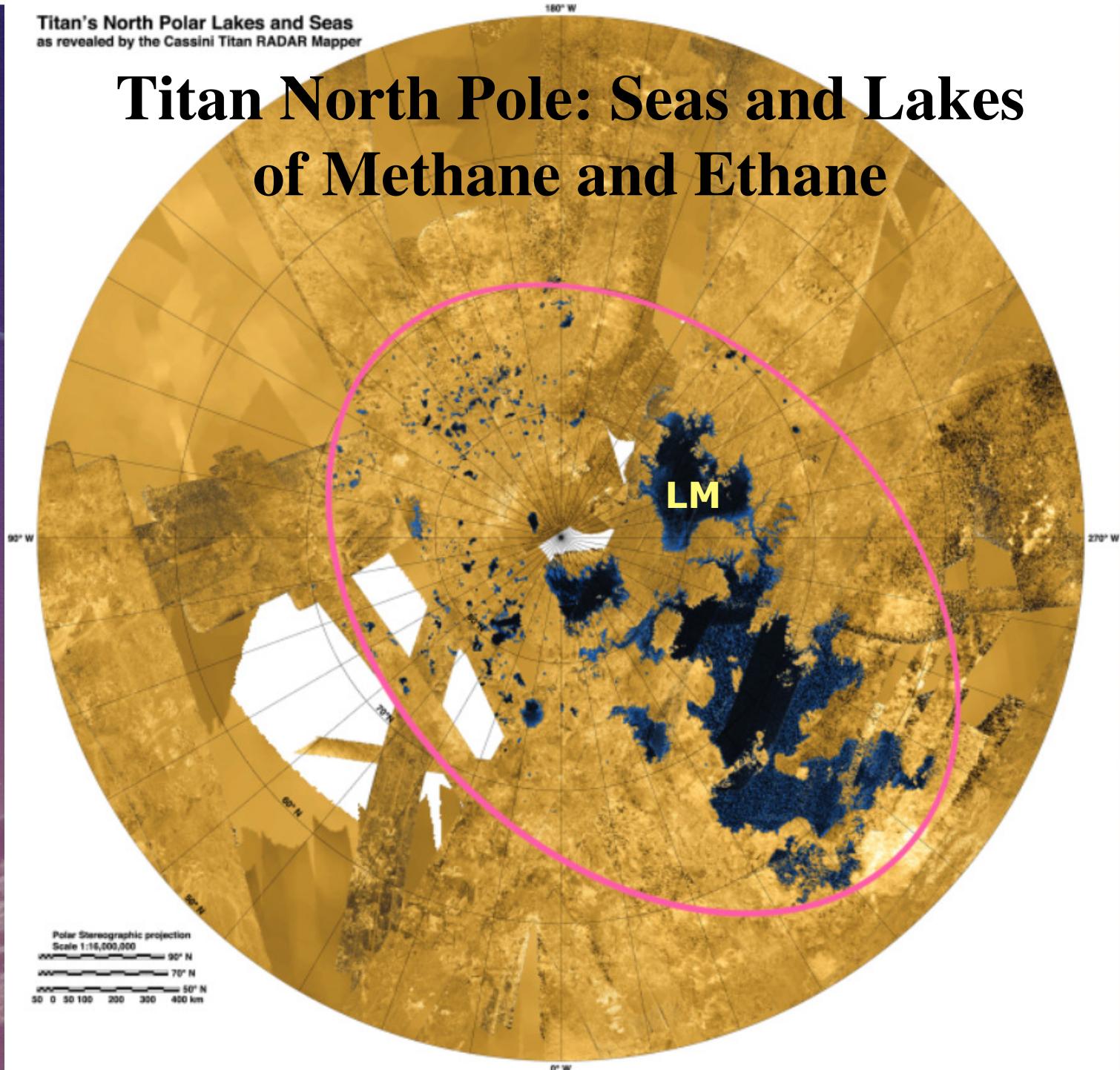
**15 January 2005**  
**Afternoon: Titan**  
**discovered**  
**Huygens is on the**  
**surface**

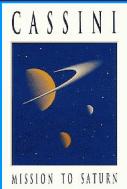




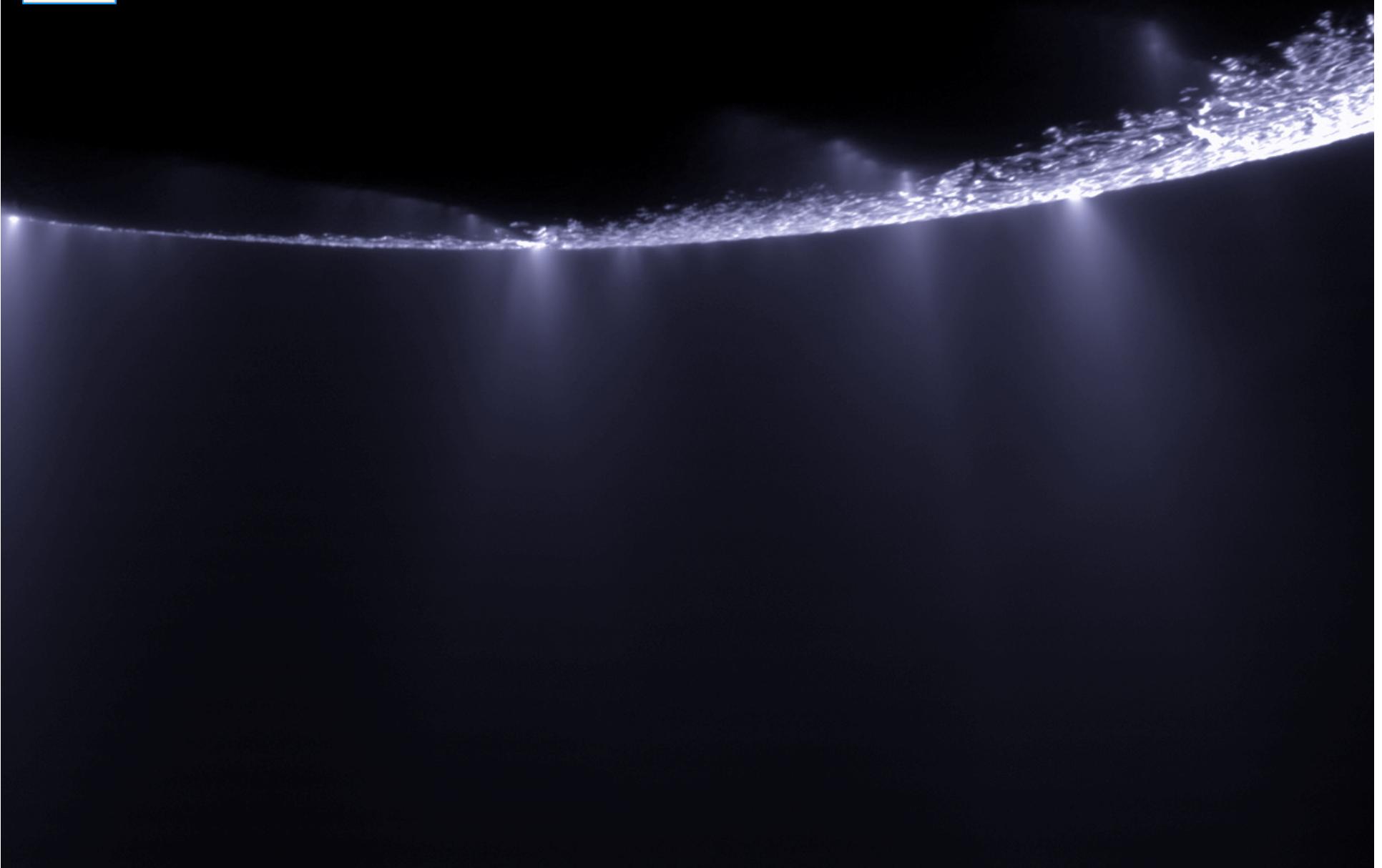
Titan's North Polar Lakes and Seas  
as revealed by the Cassini Titan RADAR Mapper

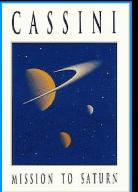
# Titan North Pole: Seas and Lakes of Methane and Ethane



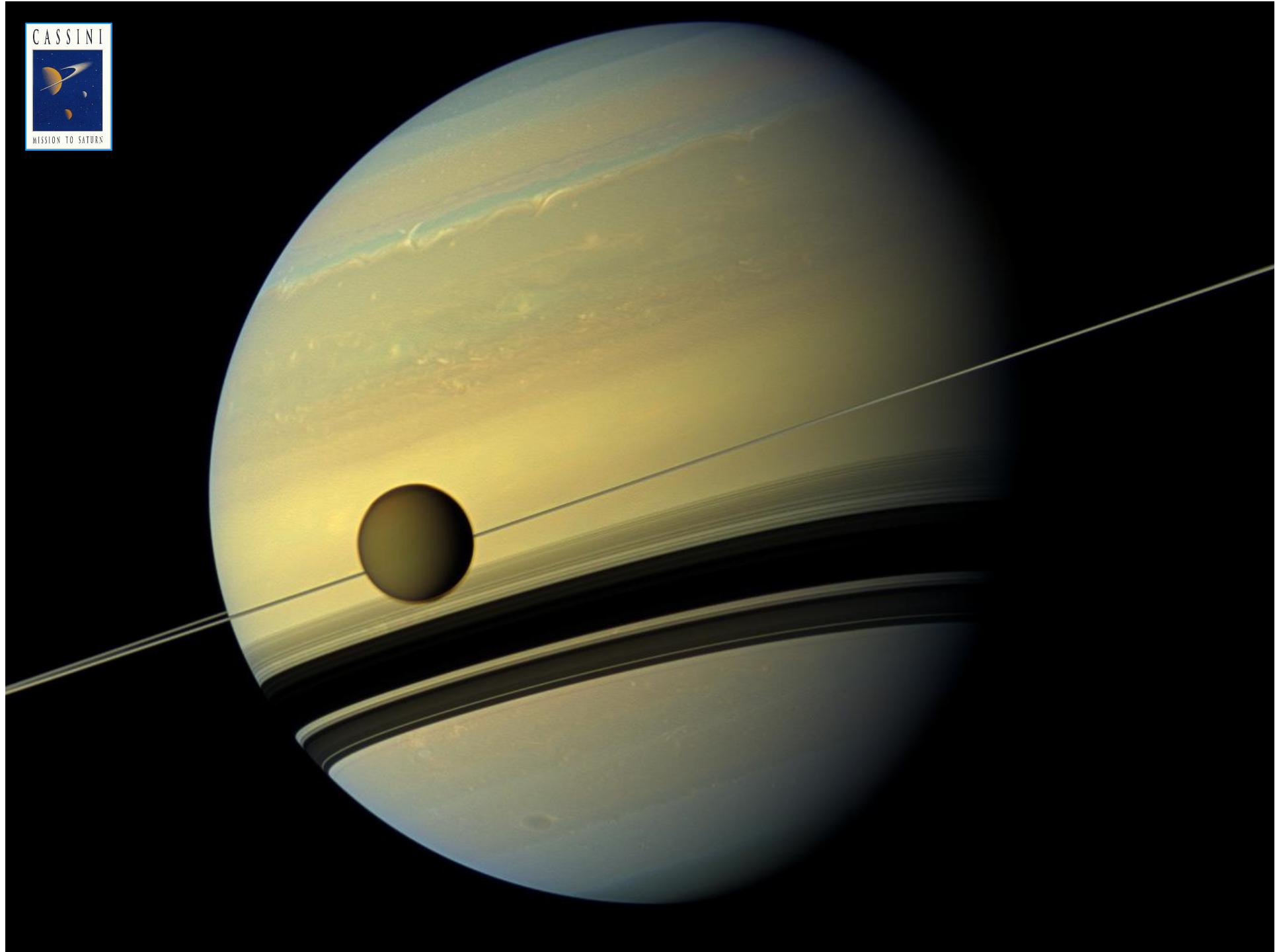


# Enceladus





CASSINI  
MISSION TO SATURN



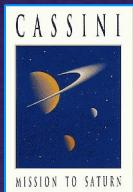
# The Saturn System after Cassini

## Saturn's Satellites and Ring Structure



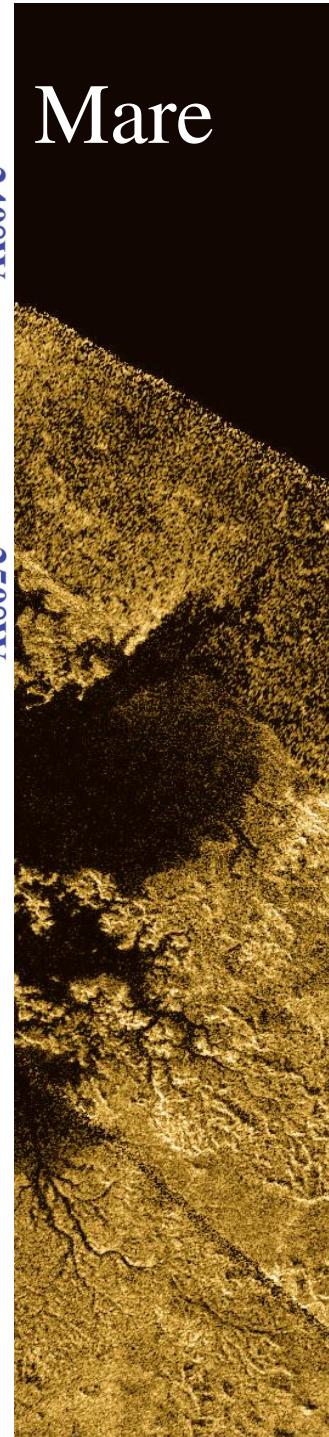
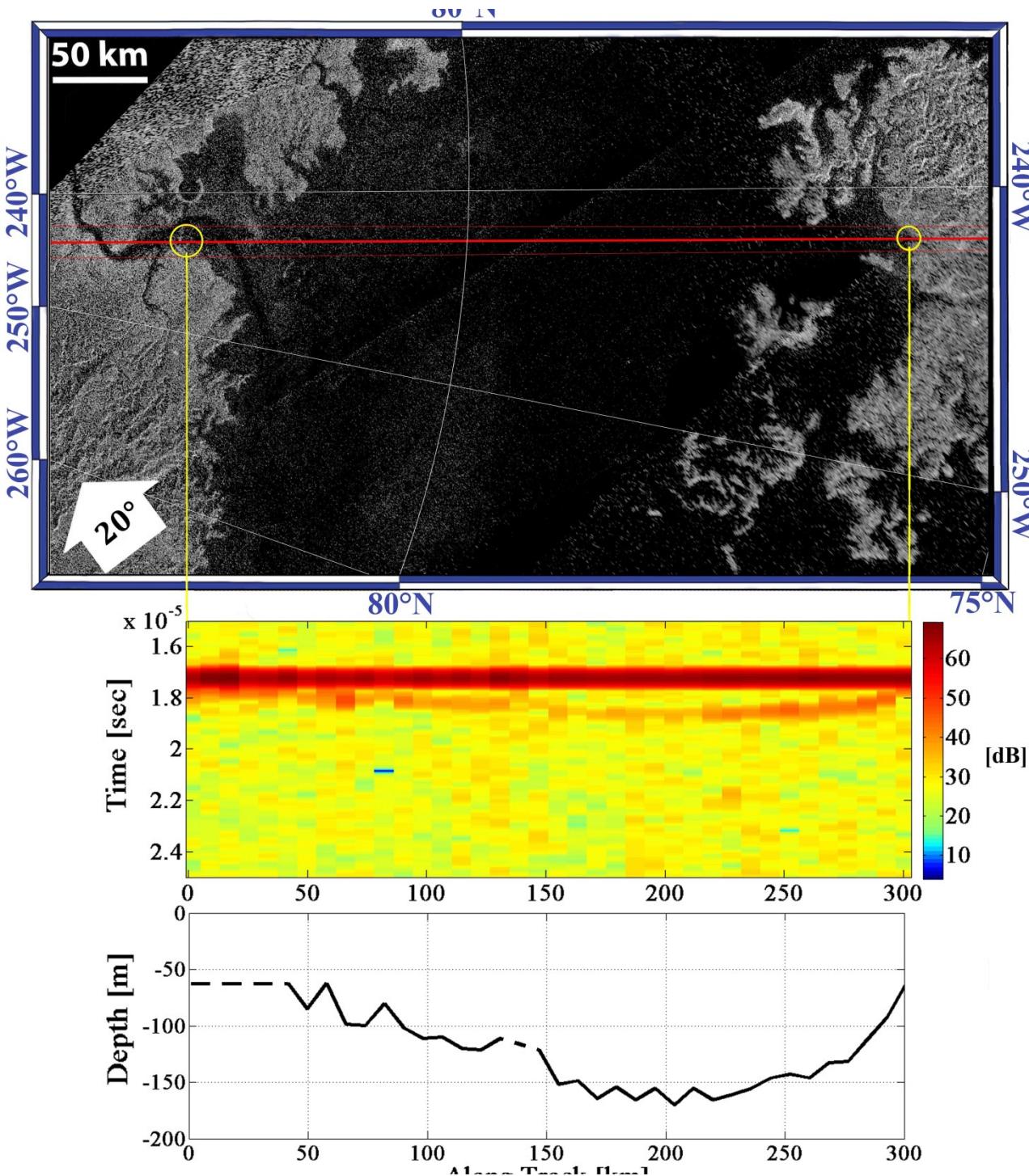
Before Cassini arrival 18 moons were known, today 52 moons have a name : Aegir, Albiorix, Anthe, Atlas, Bebhionn, Bergelmir, Bestla, Calypso, Daphnis, Dione, Enceladus, Epimetheus, Erriapus, Farbauti, Fenrir, Fornjot, Greip, Hati, Helene, Hyperion, Hyrokkin, Iapetus, Ijiraq, Janus, Jarnsaxa, Kari, Kiviuq, Loge, Methone, Mimas, Mundilfari, Narvi, Paaliaq, Pallene, Pan, Pandora, Phoebe, Polydeuces, Prometheus, Rhea, Siarnaq, Skadi, Skoll, Surtur, Suttung, Tarqe, Tarvos, Telesto, Tethys, Thrym, Titan and Ymir.

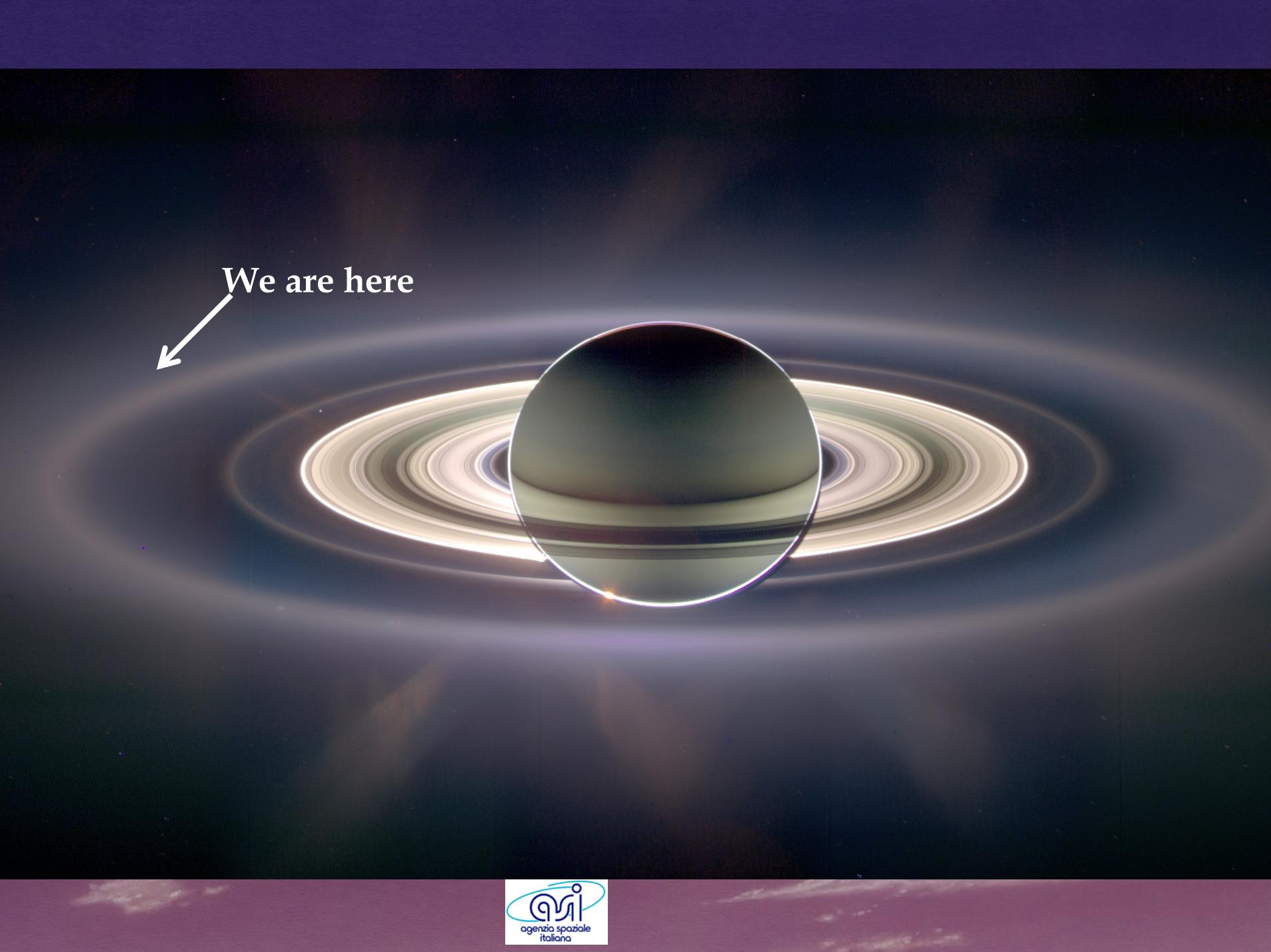
DSeal



2004-2014: 10 years, 2 seasons

CASSINI  
SOLSTICE  
2014





We are here

