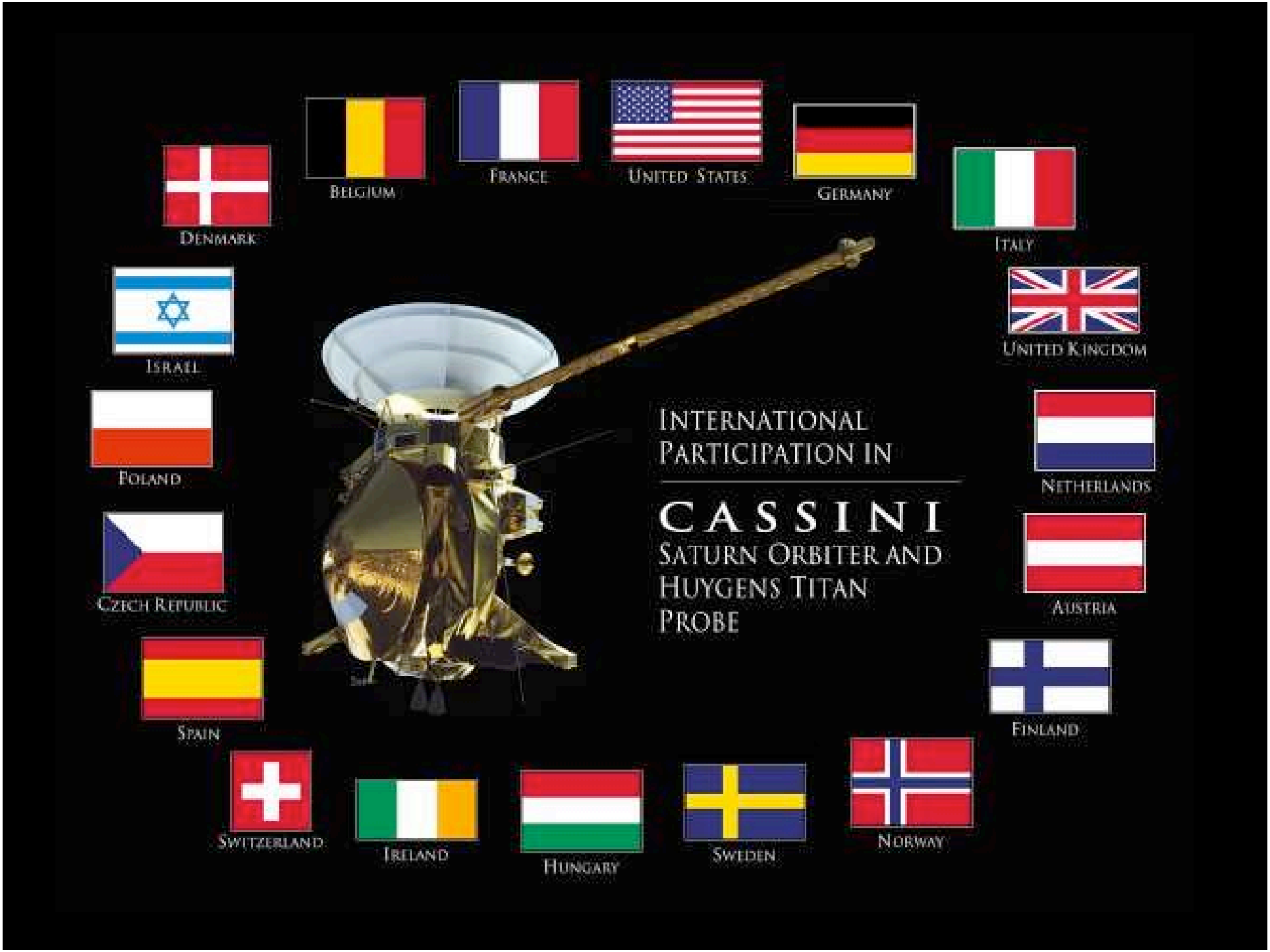
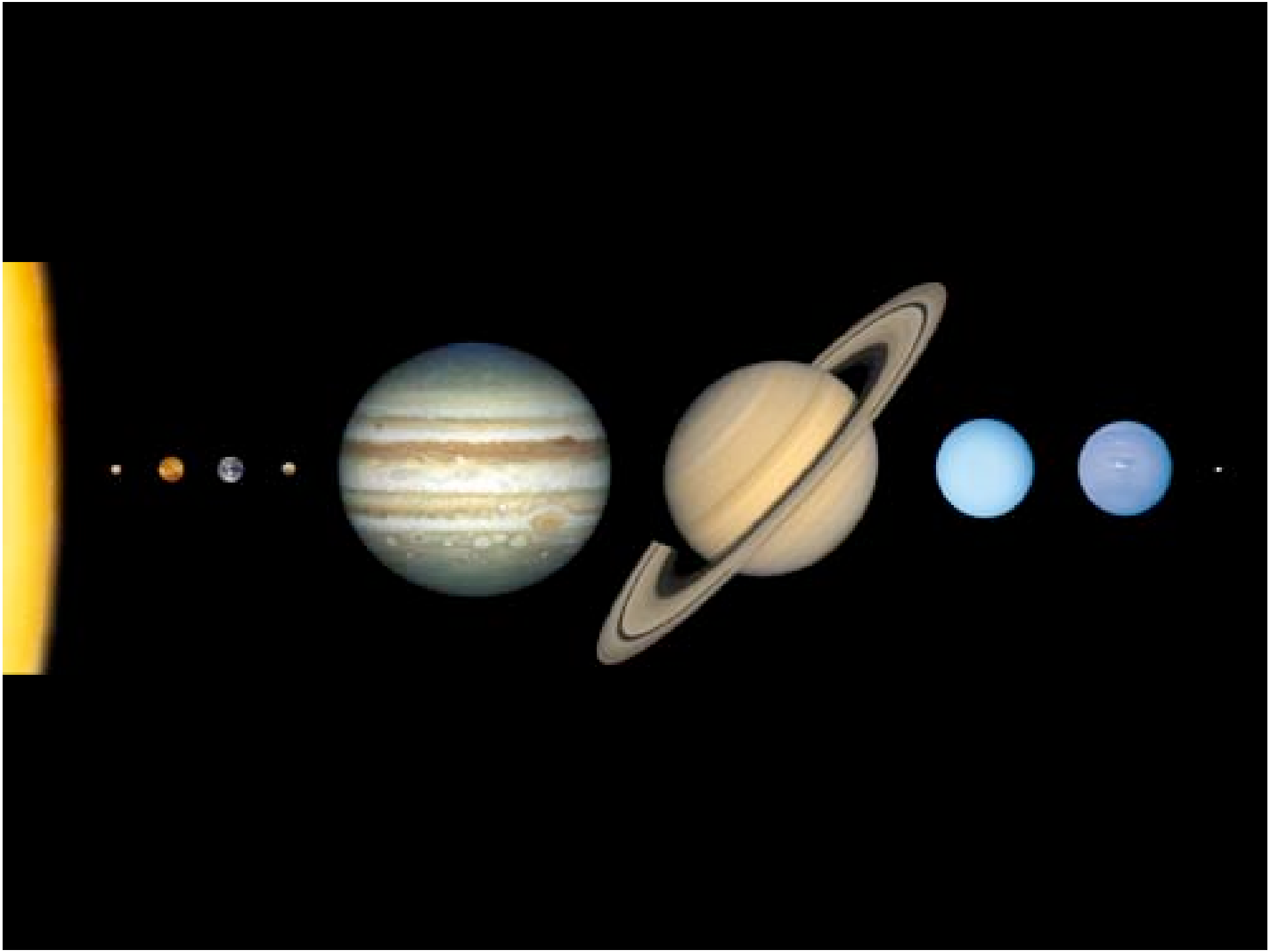
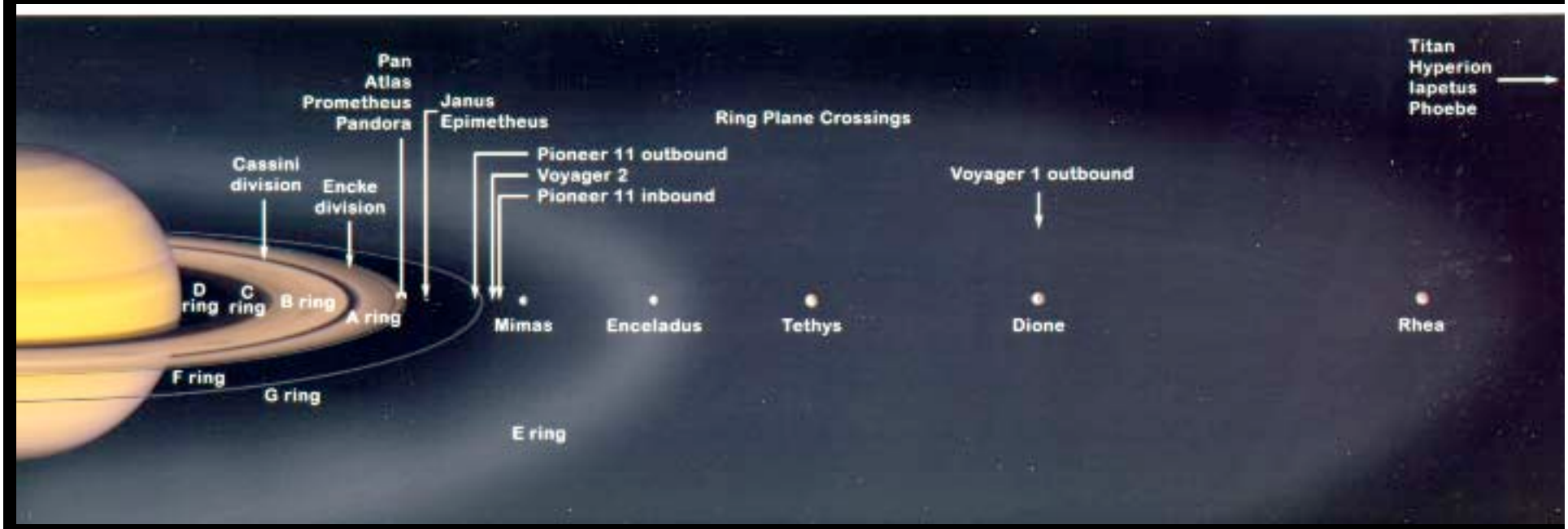
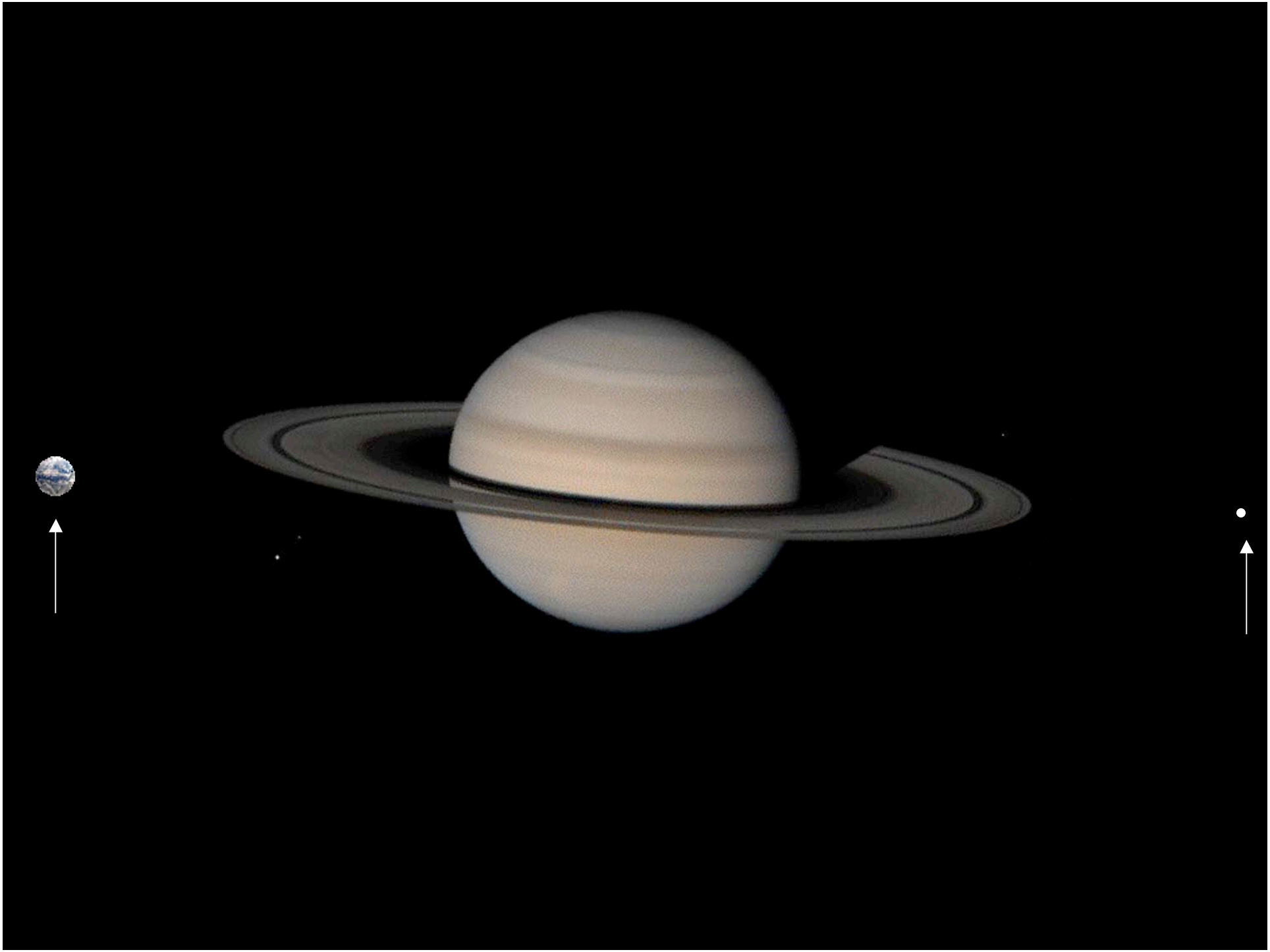

Belgium
France
United States
Germany
Denmark
Italy
Israel
United Kingdom
Poland
Netherlands
Czech Republic
Austria
Spain
Finland
Switzerland
Ireland
Hungary
Sweden
Norway
International Participation In
CASSINI
Saturn Orbiter and Huygens Titan Probe

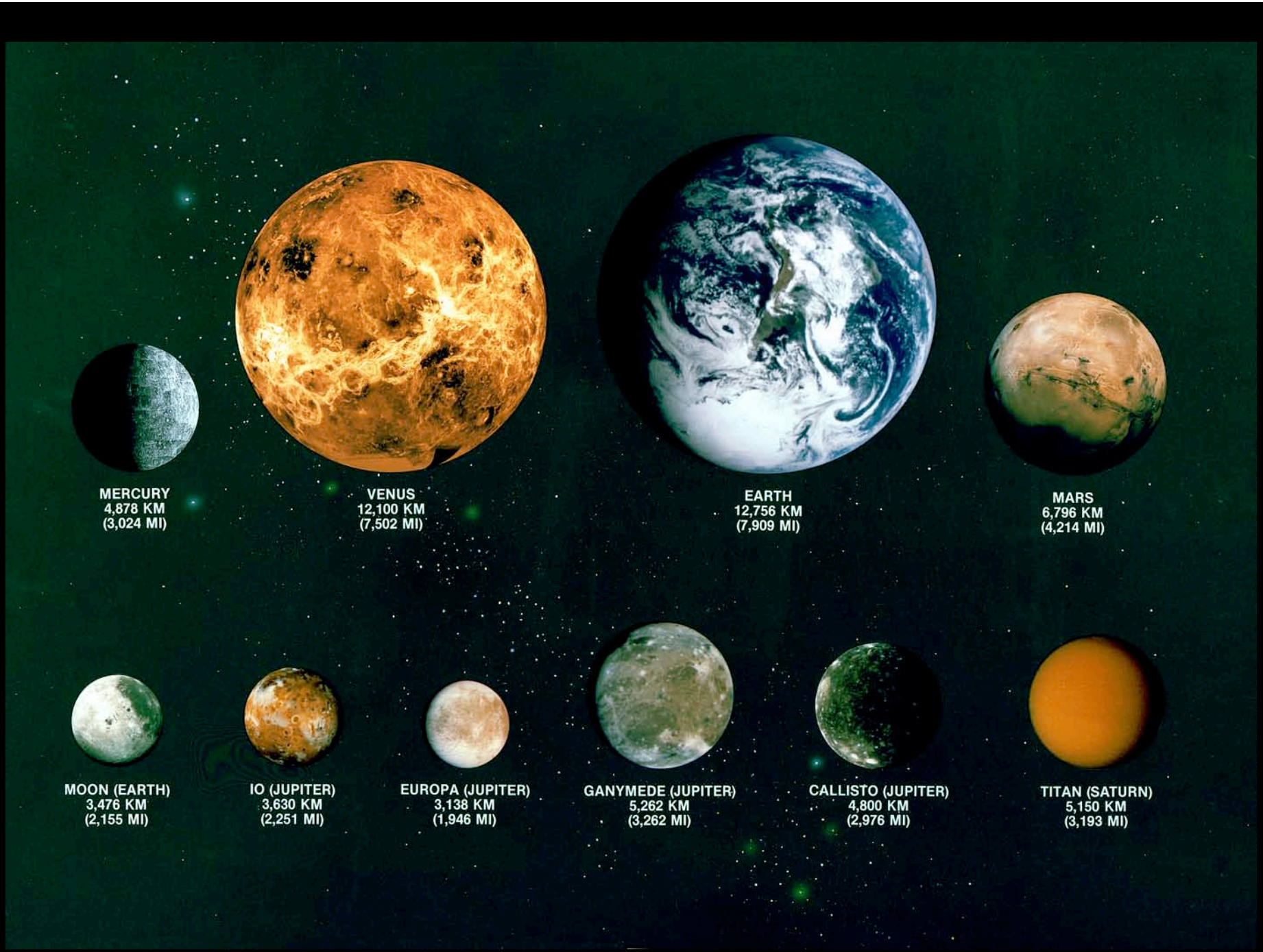


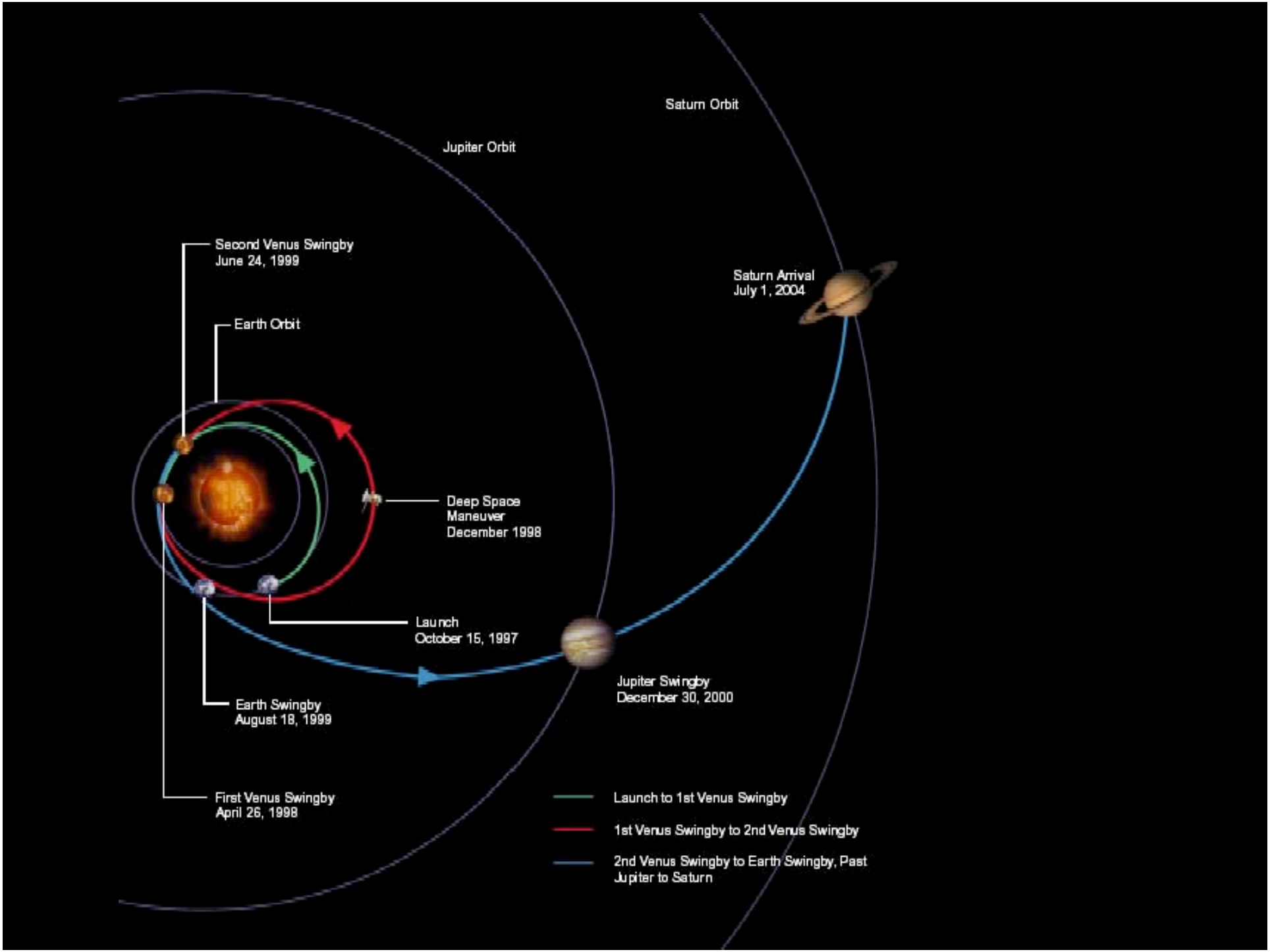

Pan
Atlas
Prometheus
Pandora
Janus
Epimetheus
Ring Plane Crossings
Titan
Hyperion
Iapetus
Phoebe
Pioneer 11 outbound
Voyager 2
Pioneer 11 inbound
Voyager 1 outbound
Cassini division
Encke division
D ring
C ring
B ring
A ring
F ring
G ring
E ring
Mimas
Enceladus
Tethys
Dione
Rhea

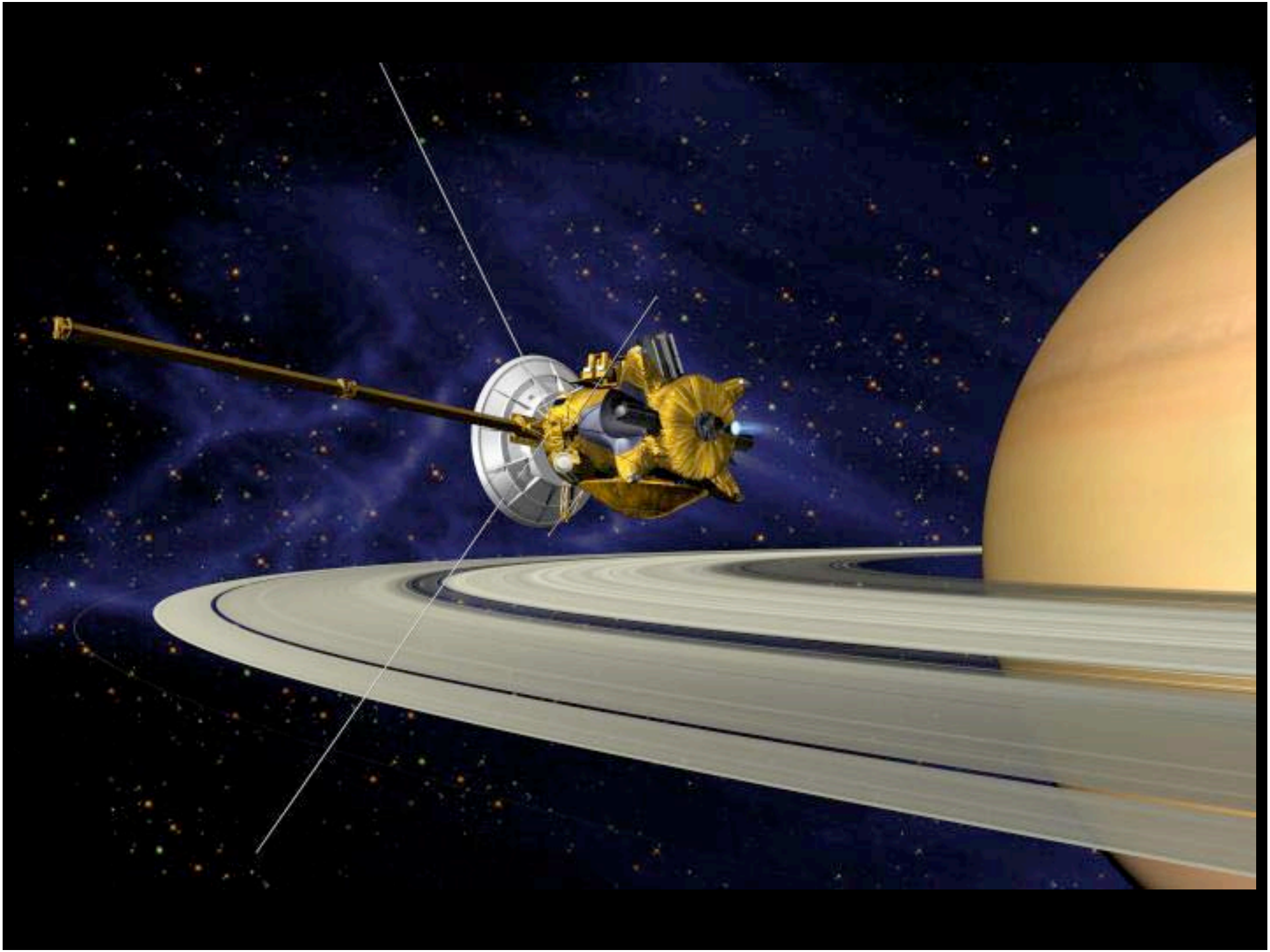
Jean Dominique Cassini

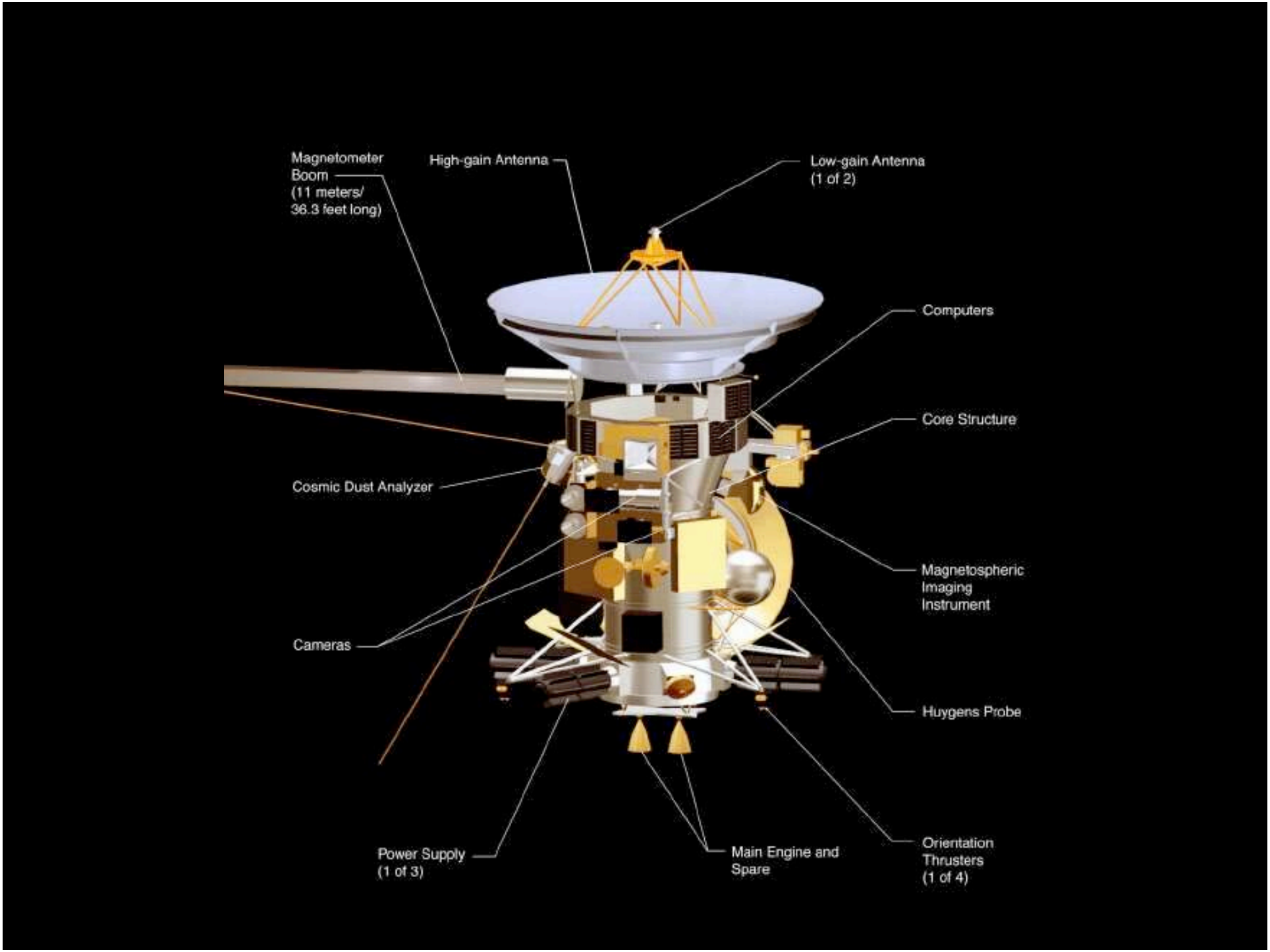
Christiaan Huygens



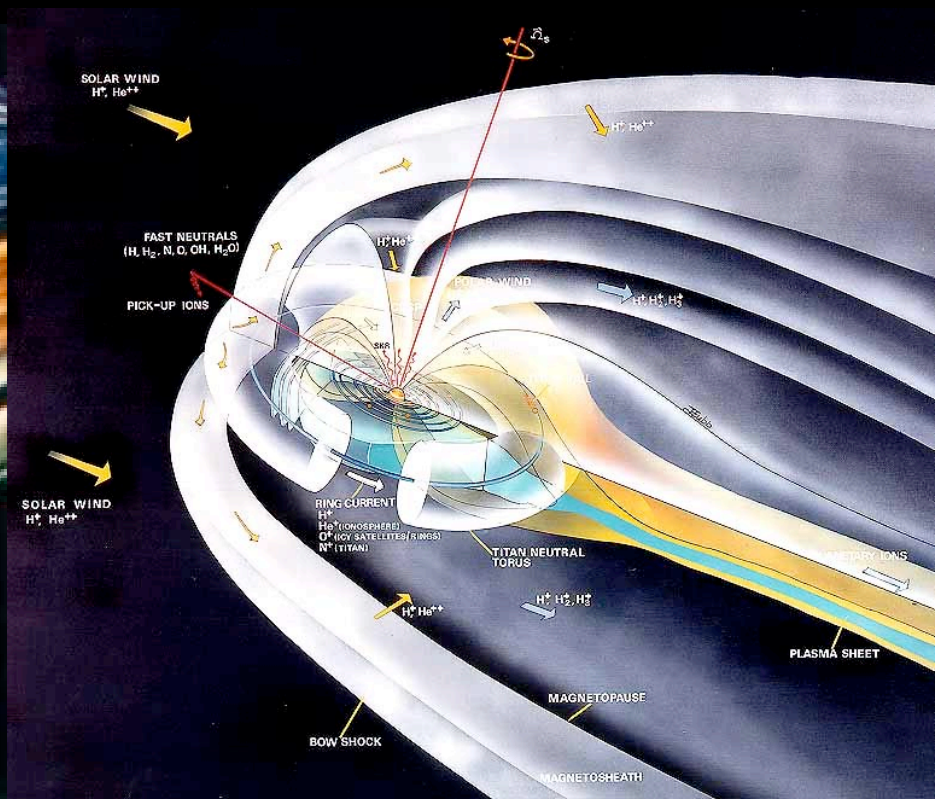

MERCURY
4,878 KM
(3,024 MI)
VENUS
12,100 KM
(7,502 MI)
EARTH
12,756 KM
(7,909 MI)
MARS
6,796 KM
(4,214 MI)
MOON (EARTH)
3,476 KM
(2,155 MI)
IO (JUPITER)
3,630 KM
(2,251 MI)
EUROPA (JUPITER)
3,138 KM
(1,946 MI)
GANYMEDE (JUPITER)
5,262 KM
(3,262 MI)
CALLISTO (JUPITER)
4,800 KM
(2,976 MI)
TITAN (SATURN)
5,150 KM
(3,193 MI)


Saturn Orbit
Jupiter Orbit
Second Venus Swingby
June 24, 1999
Saturn Arrival
July 1, 2004
Earth Orbit
Deep Space
Maneuver
December 1998
Launch
October 15, 1997
Jupiter Swingby
December 30, 2000
Earth Swingby
August 18, 1999
First Venus Swingby
April 26, 1998
Launch to 1st Venus Swingby
1st Venus Swingby to 2nd Venus Swingby
2nd Venus Swingby to Earth Swingby, Past
Jupiter to Saturn

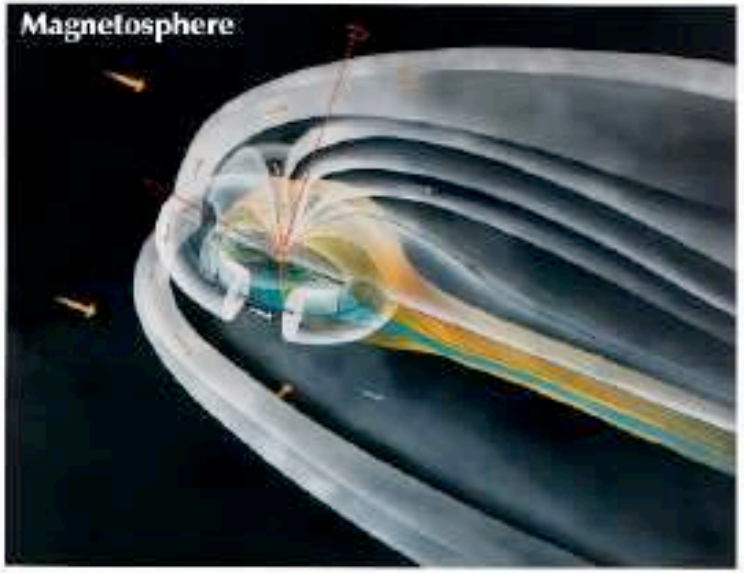


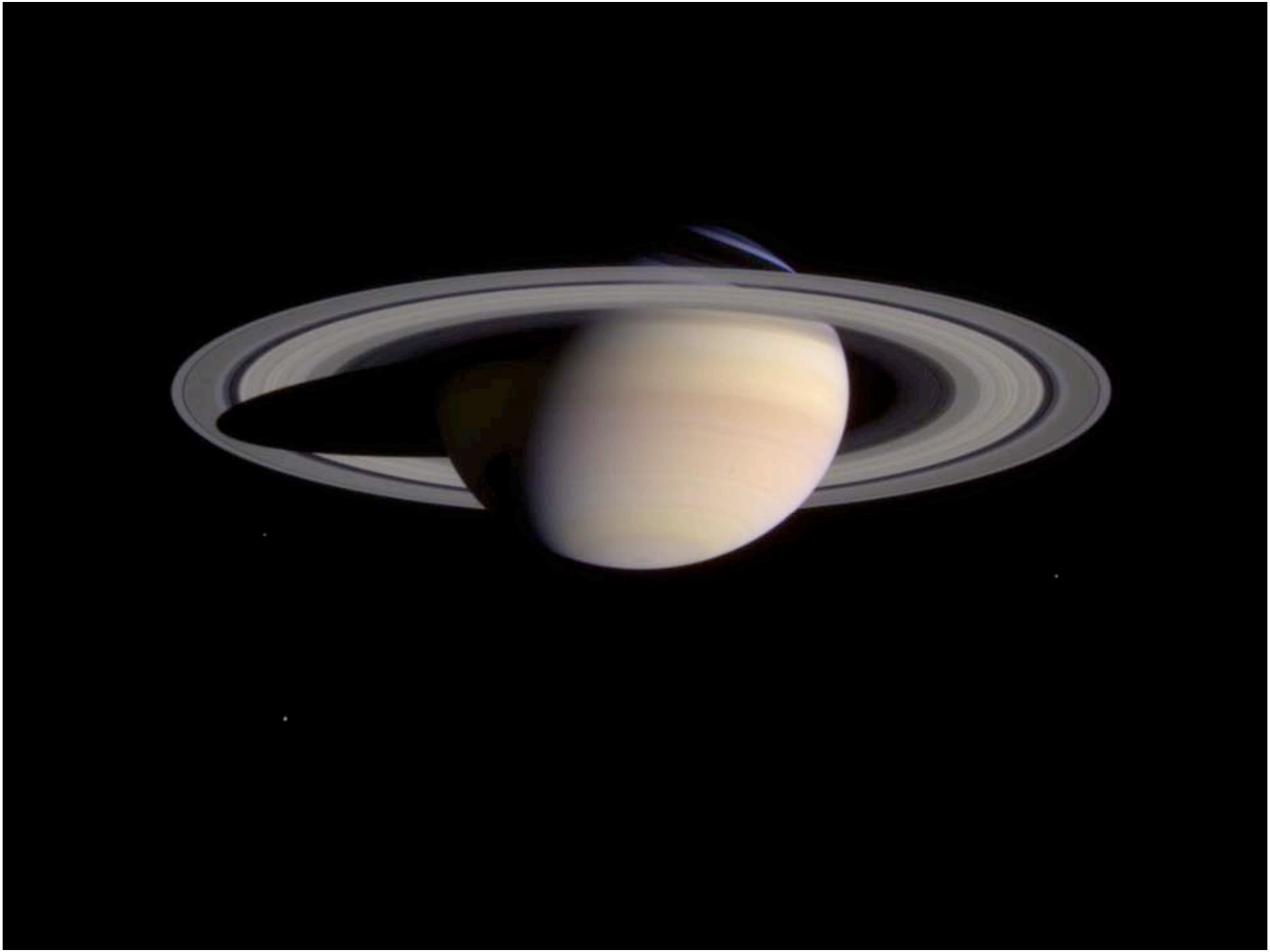

Magnetometer Boom (11 meters/ 36.3 feet long)
High-gain Antenna
Low-gain Antenna (1 of 2)
Computers
Core Structure
Cosmic Dust Analyzer
Magnetospheric Imaging Instrument
Cameras
Huygens Probe
Power Supply (1 of 3)
Main Engine and Spare
Orientation Thrusters (1 of 4)

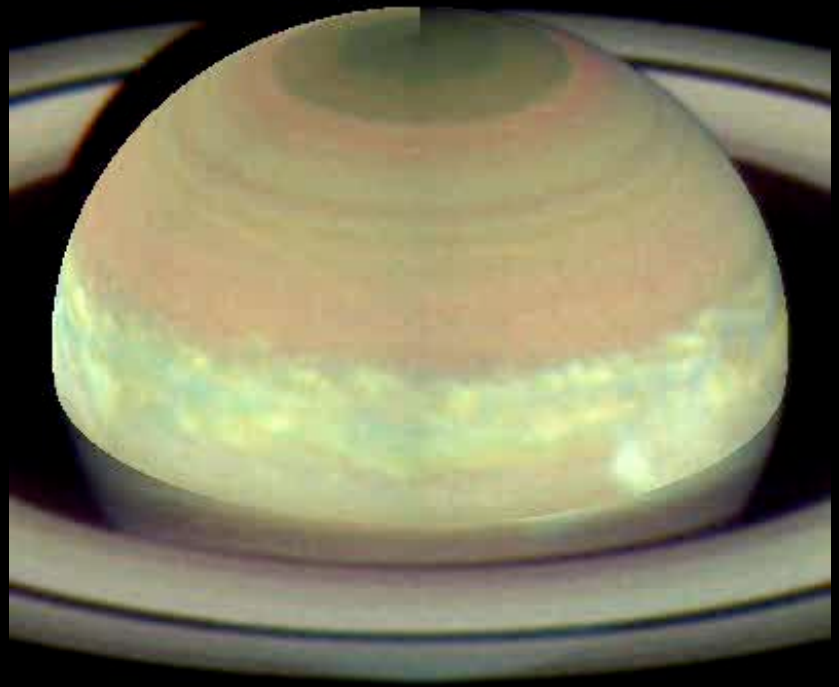
Science Targets

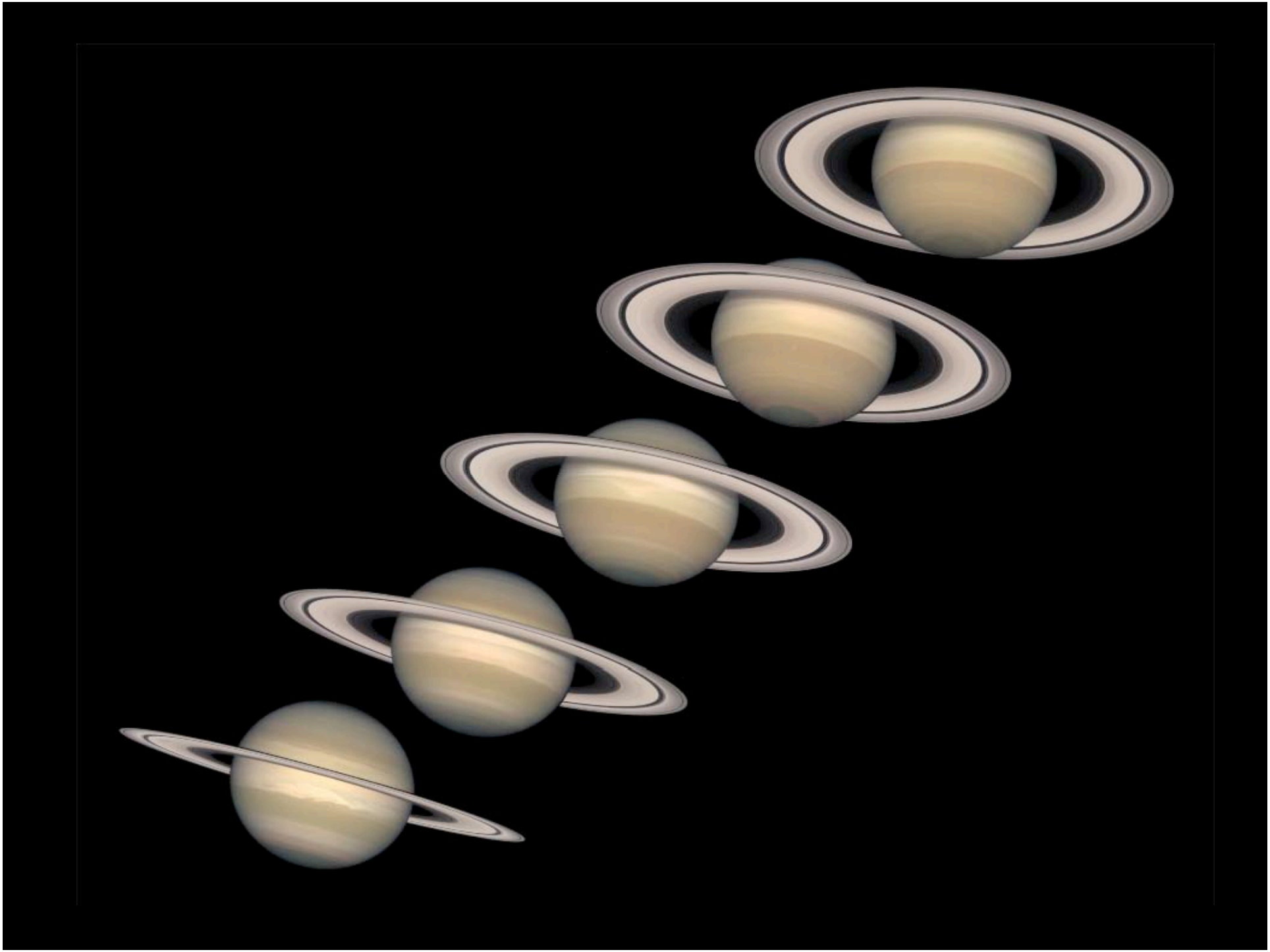


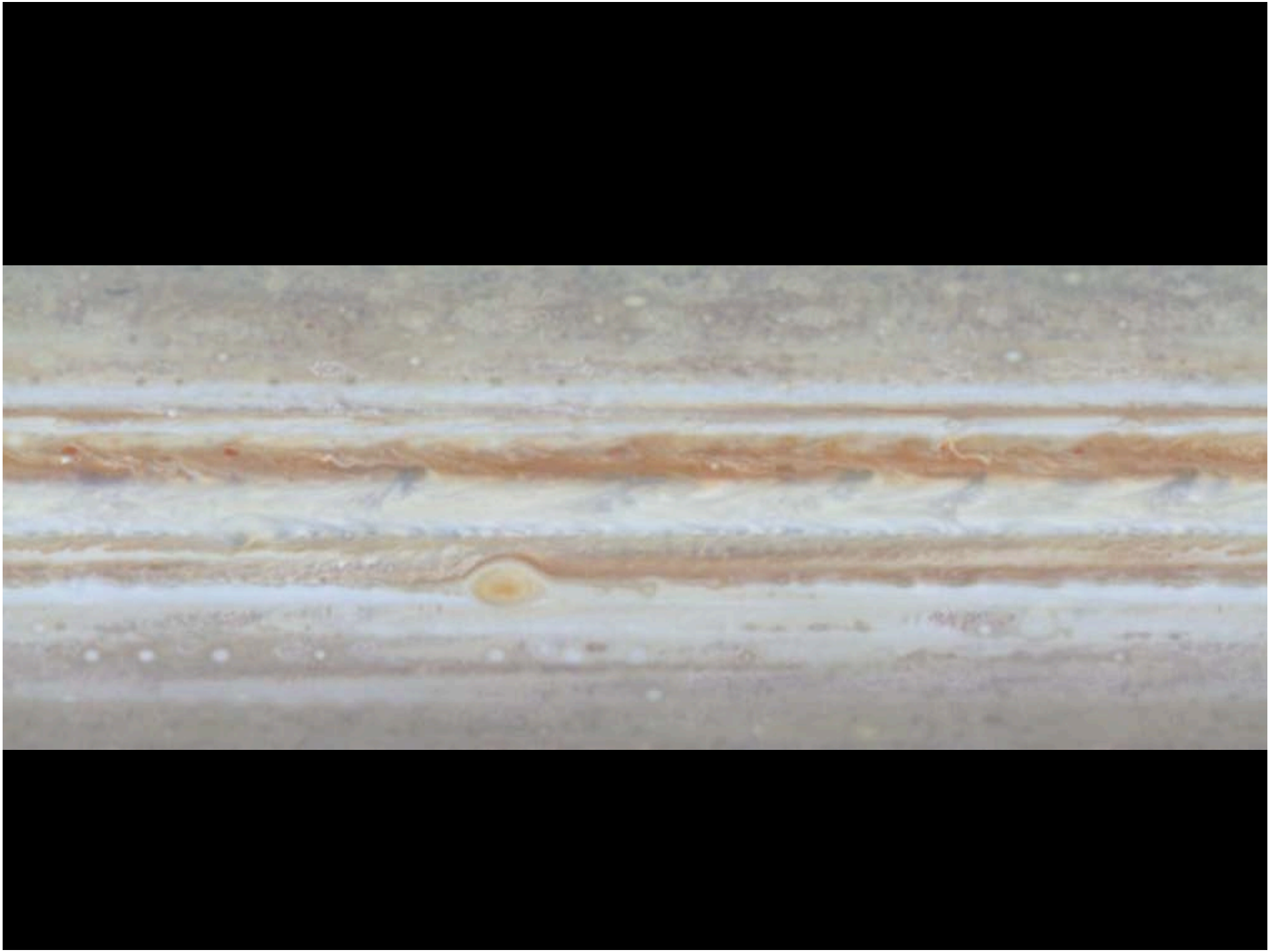
Cassini Science Targets

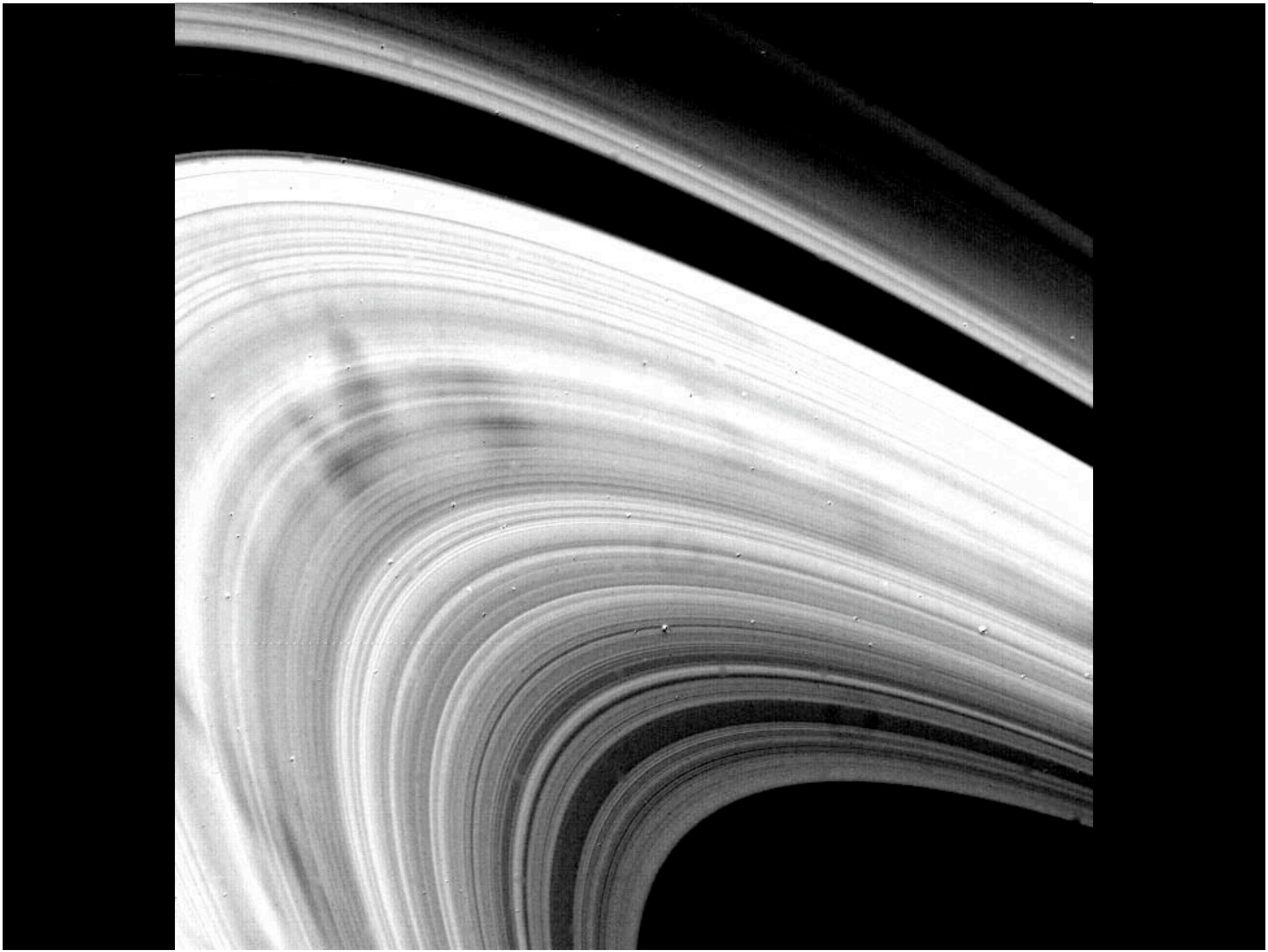




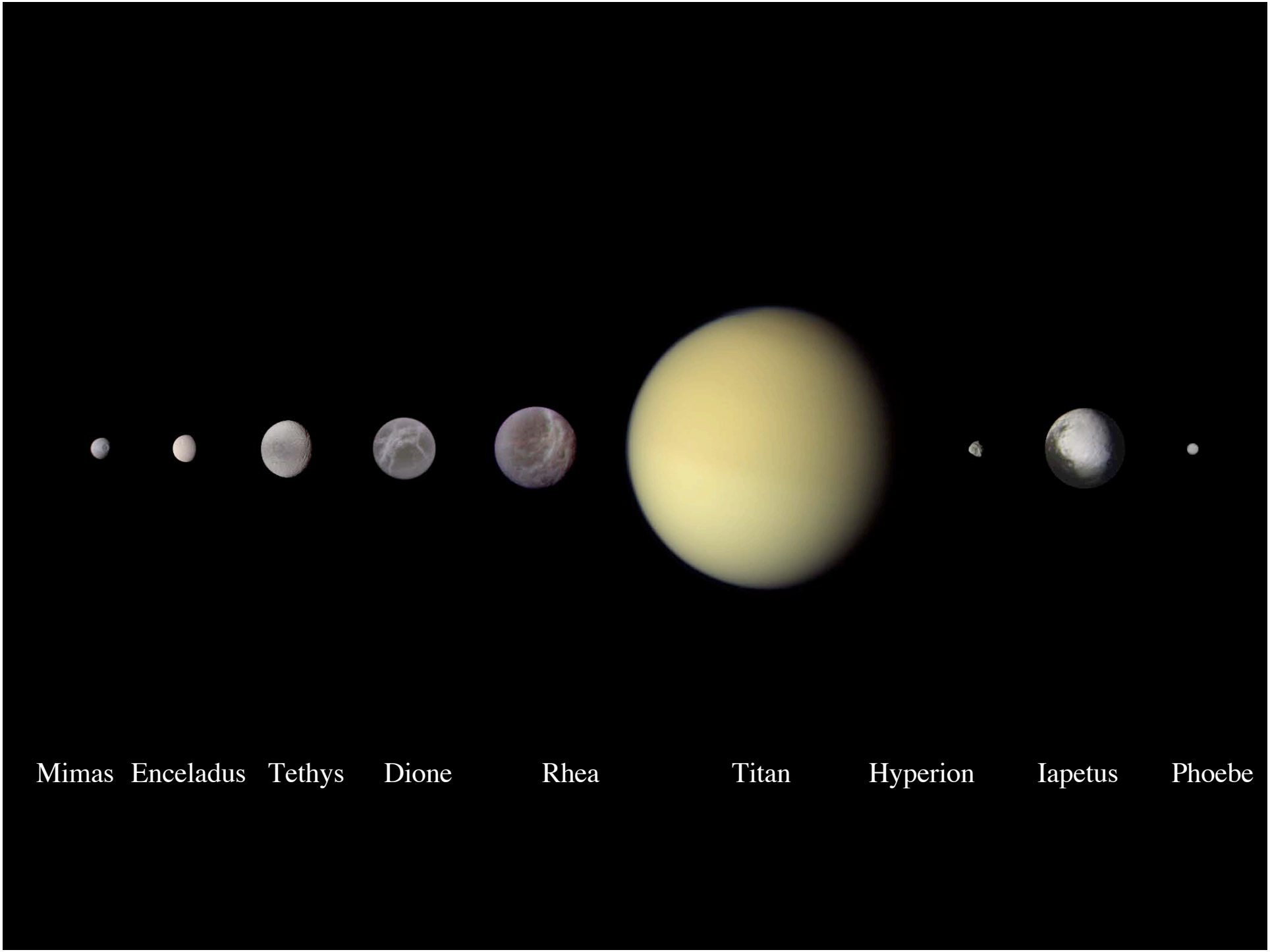


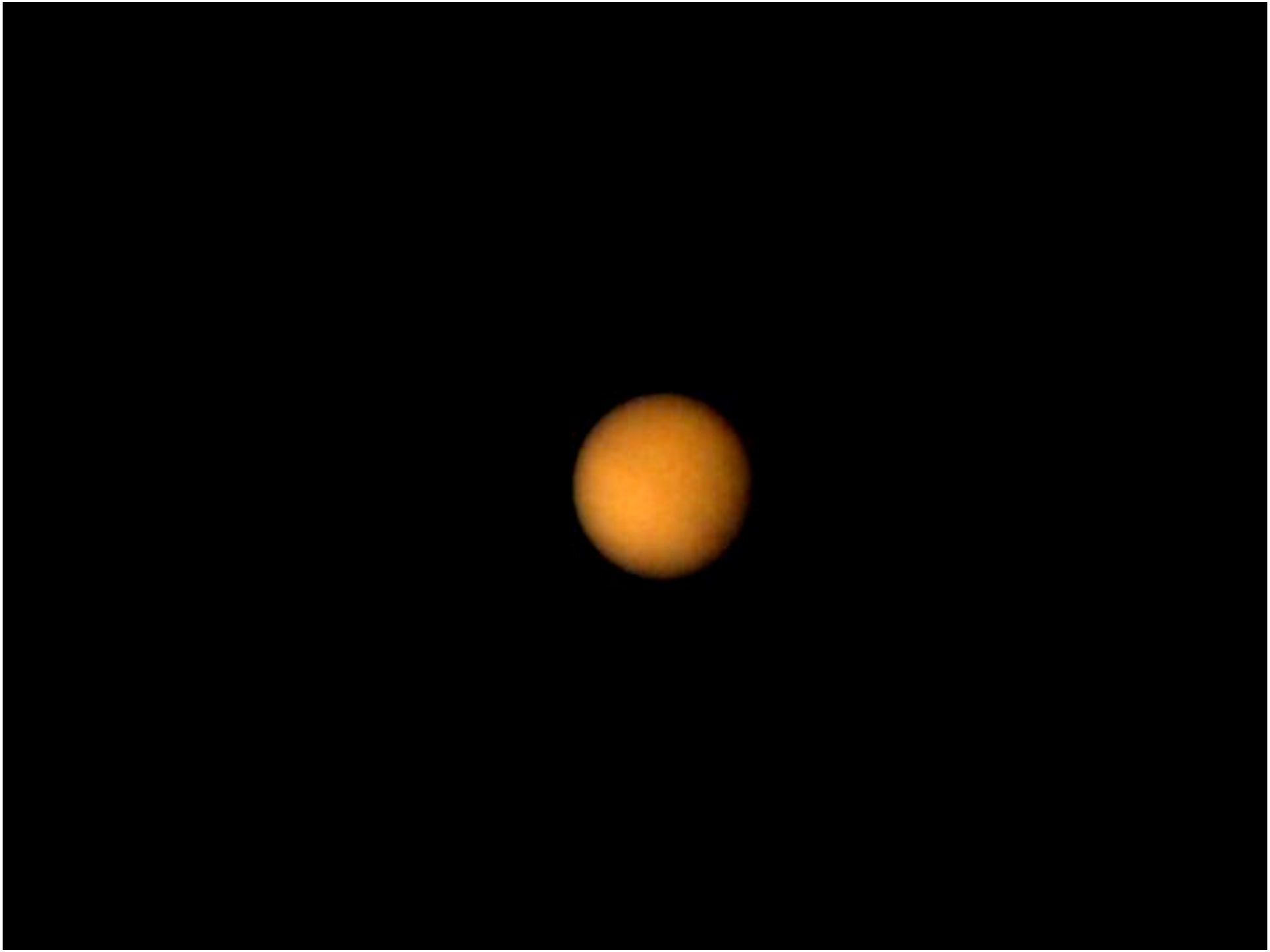






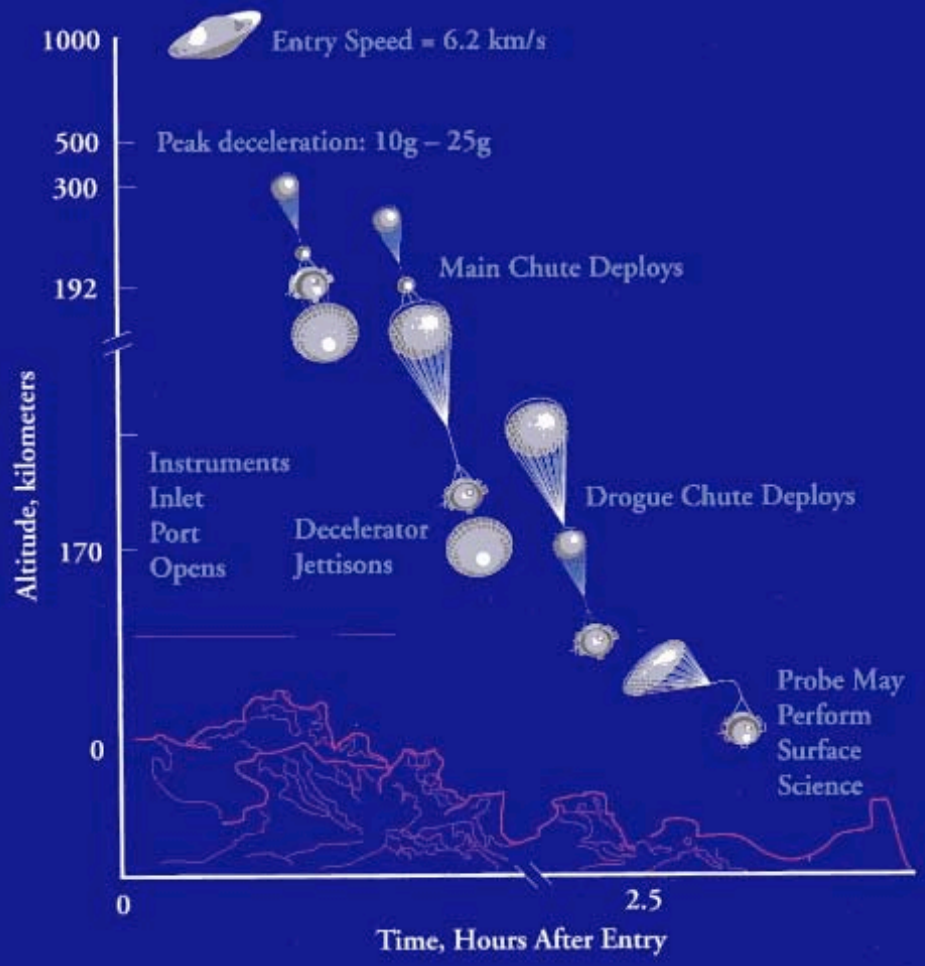
Saturn's Eight Major Icy Satellites


Mimas
Enceladus
Tethys
Dione
Rhea
Titan
Hyperion
Iapetus
Phoebe

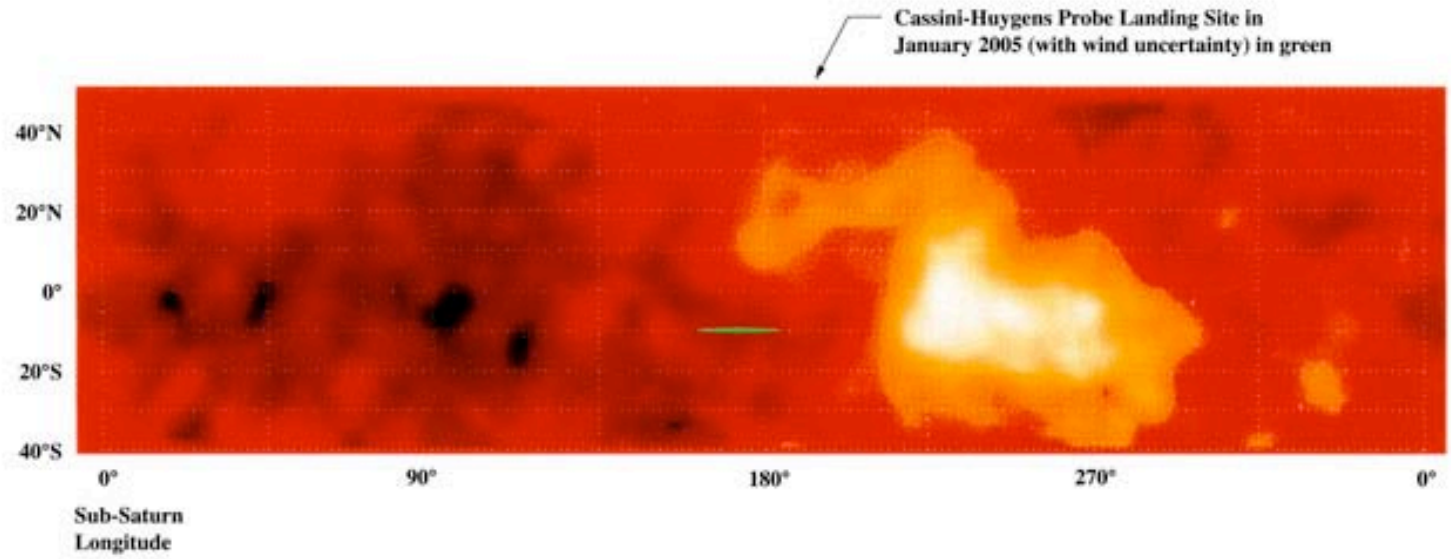


esa
SPACE
RING UNIT
3-D
WEIGHT 450Kg
FORK HERE
HUYGENS MGSE

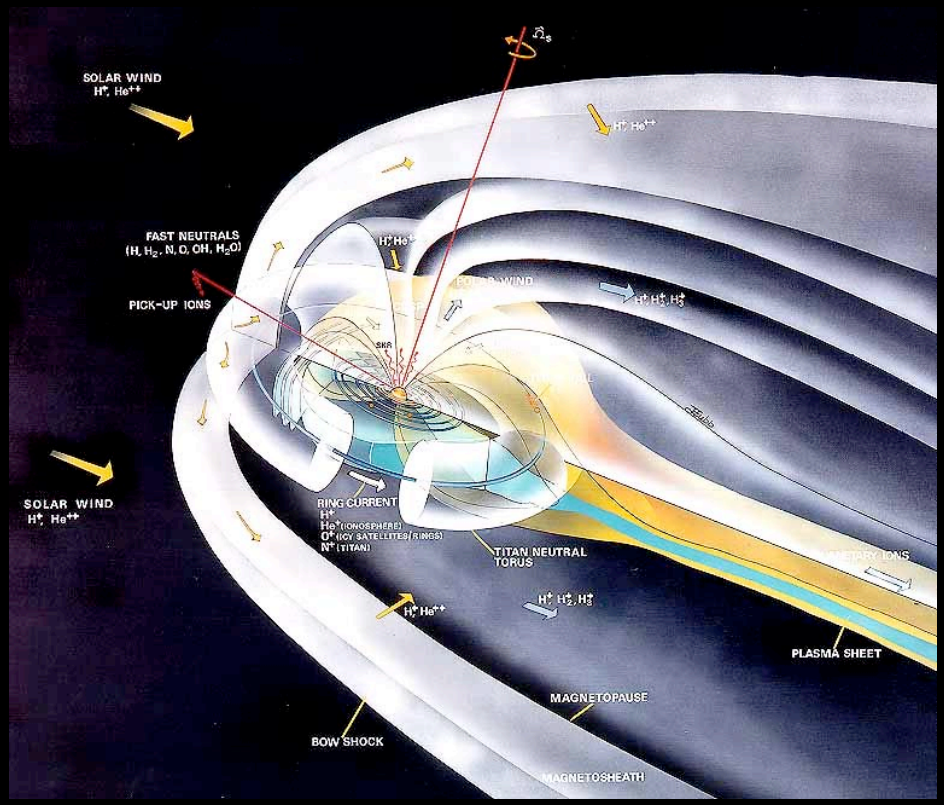
Huygens Probe Descent Profile

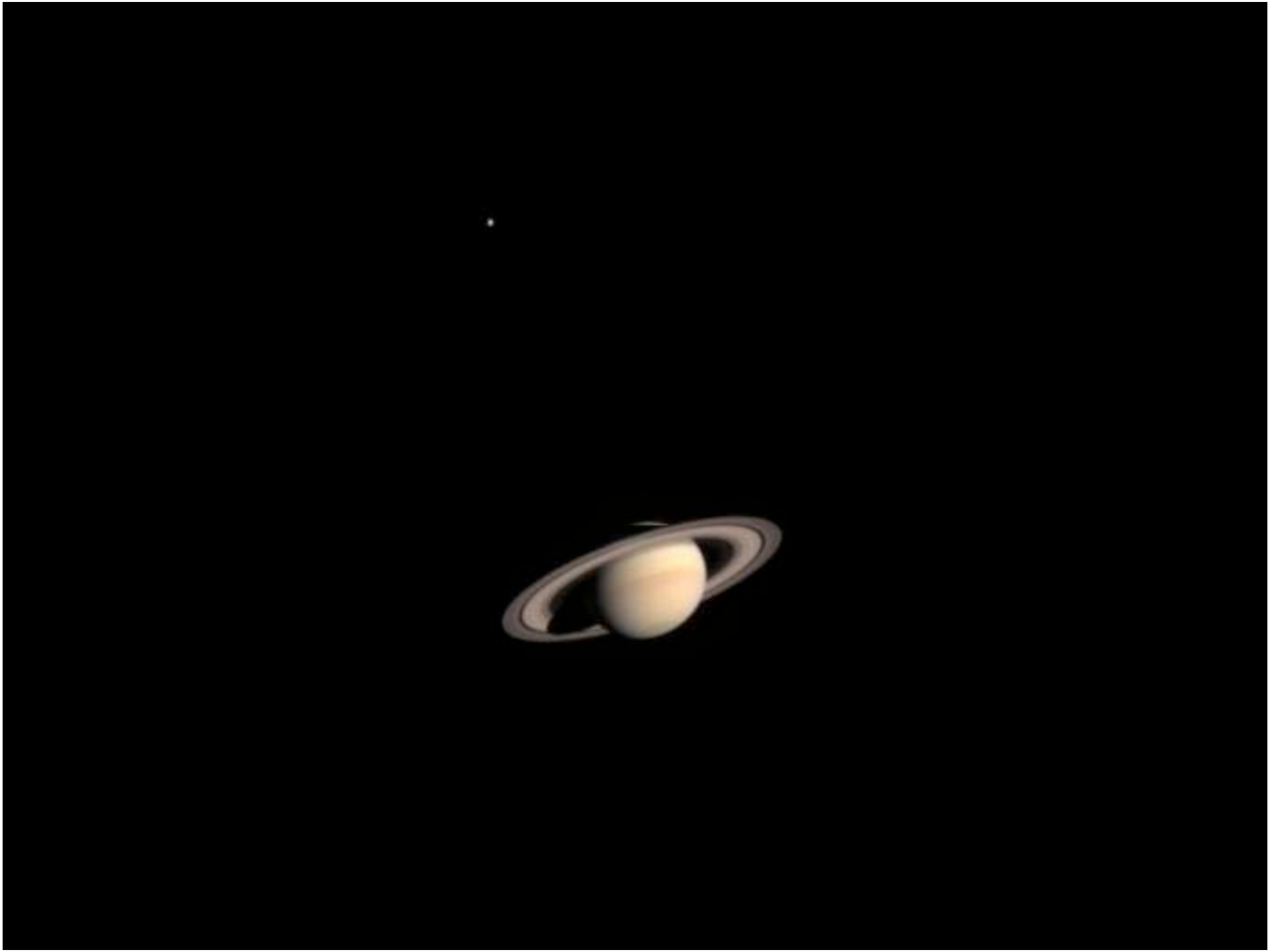


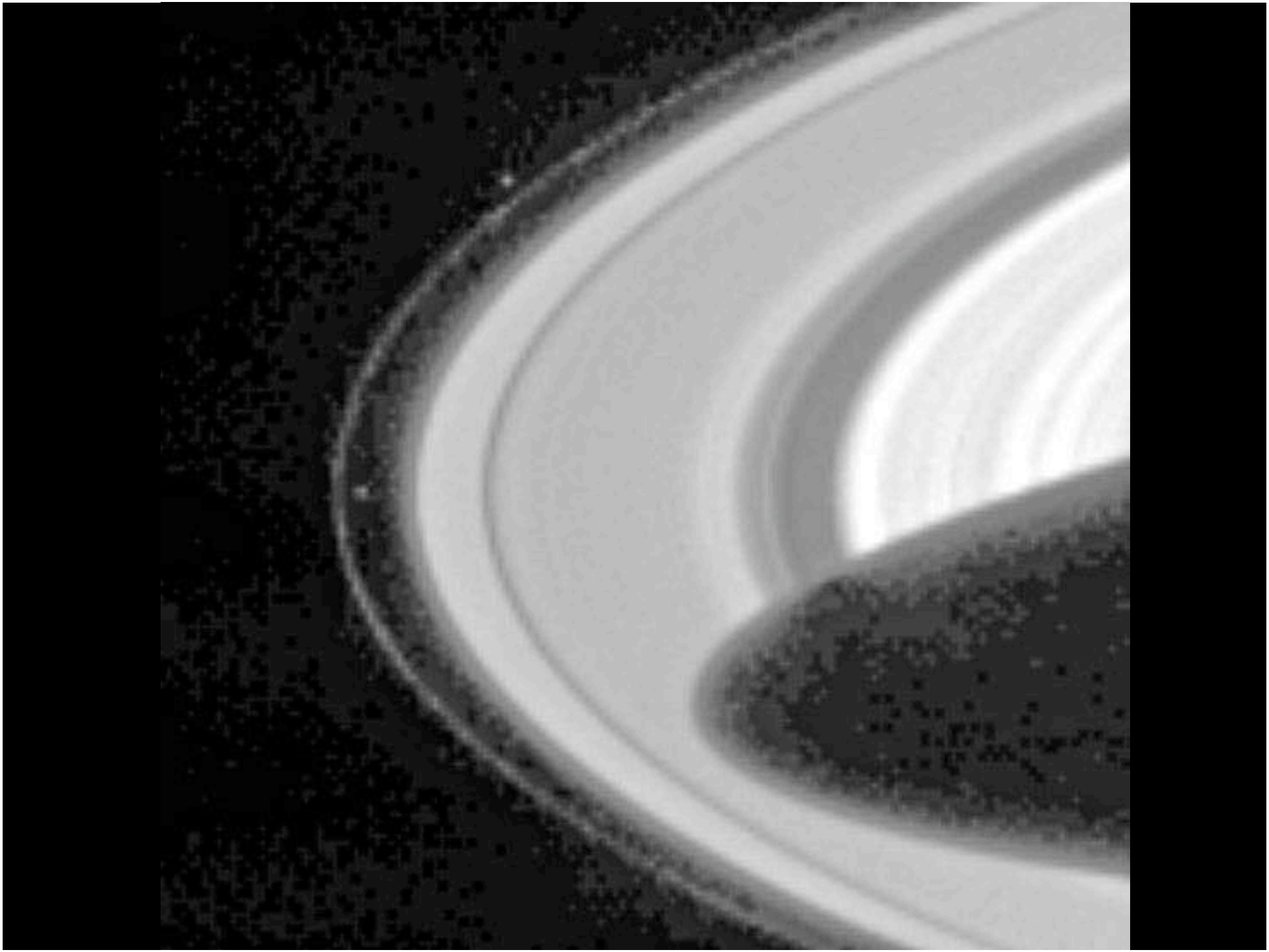
Titan Mercator Projection

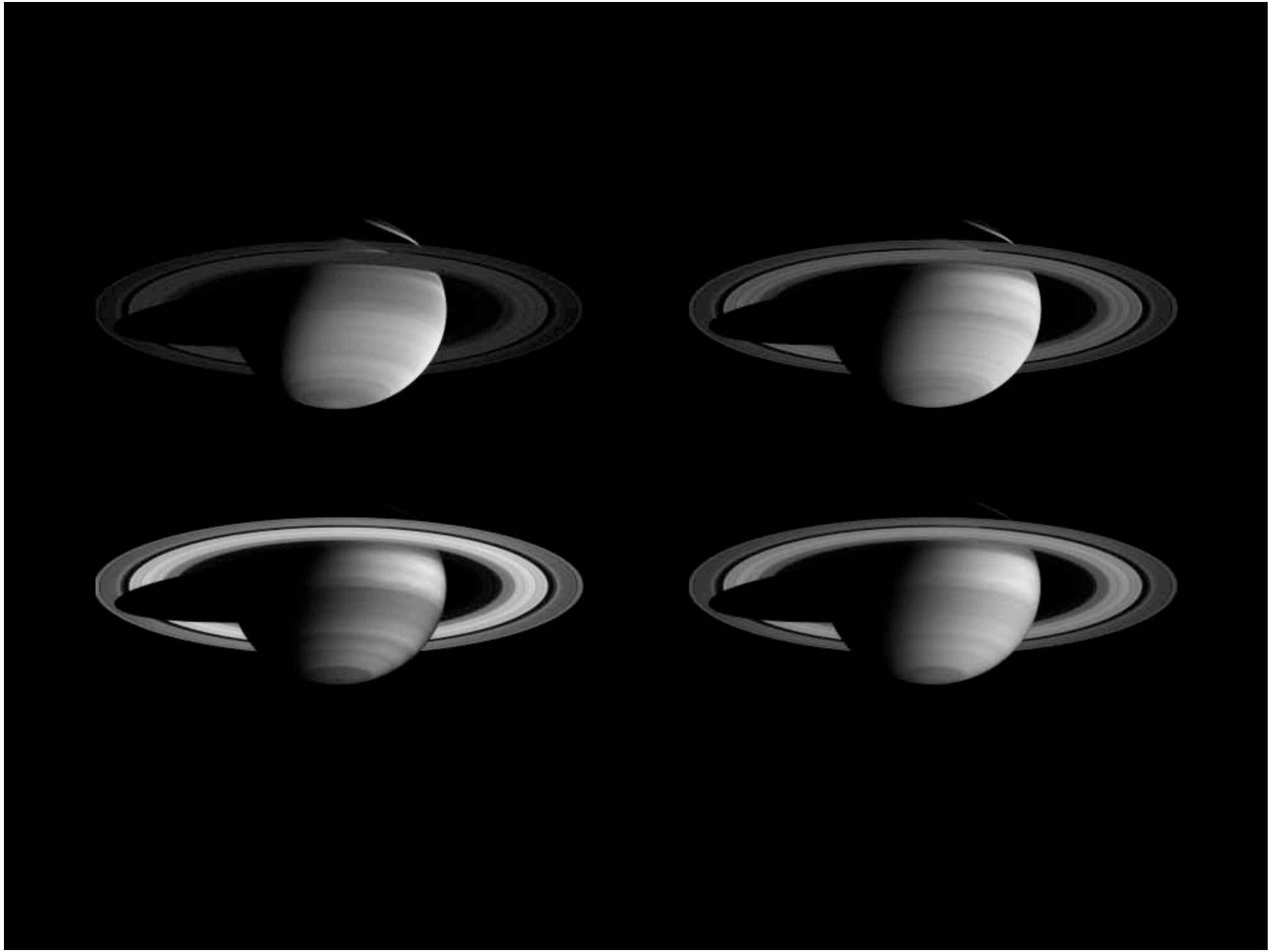


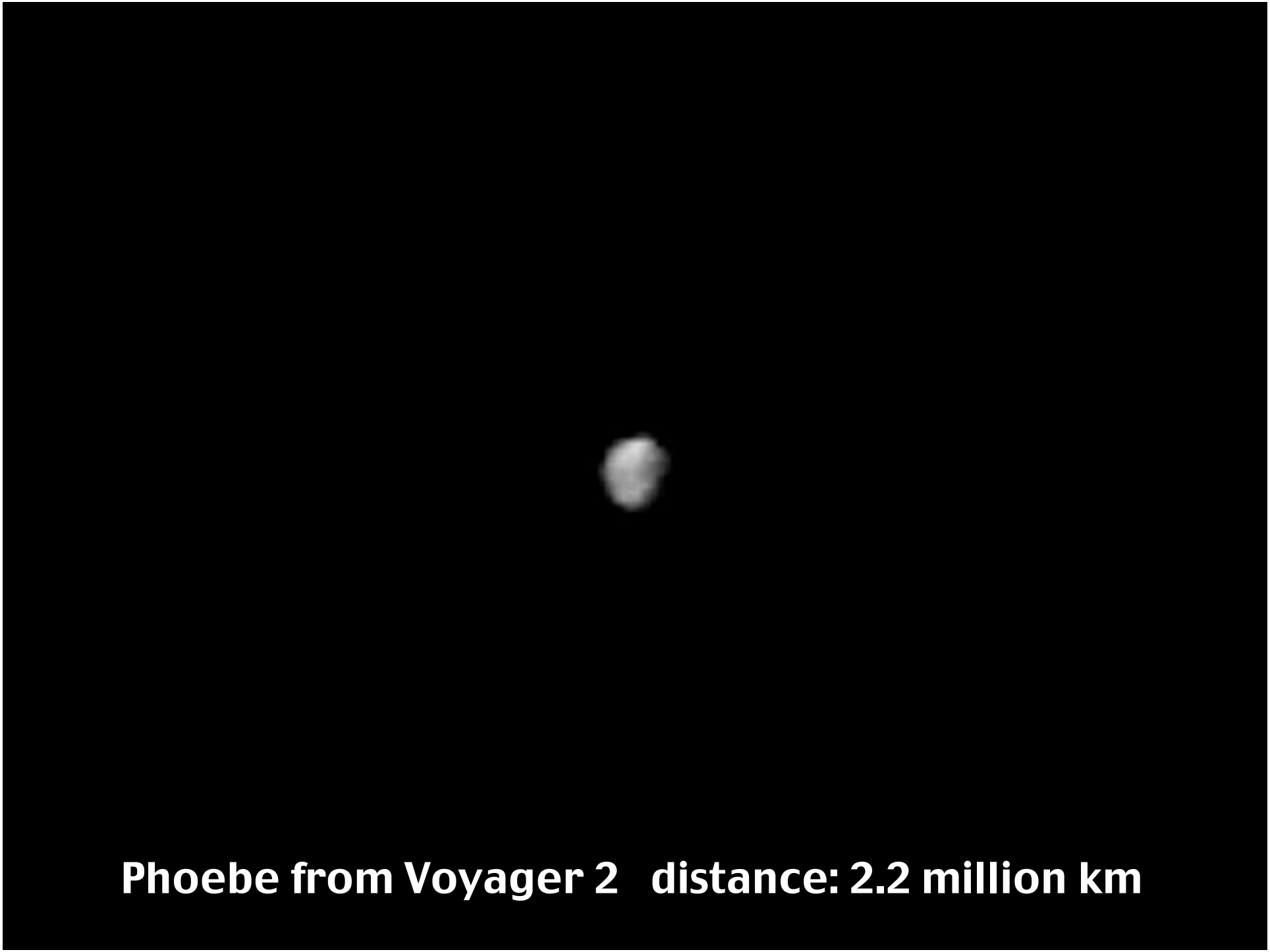
Data taken by the Hubble Space Telescope Wide Field Planetary Camera-2 in October 1994 at the 0.94 micron methane window (850LP filter) by Peter Smith, et al.


SOLAR WIND
H+, He++
FAST NEUTRALS
(H, H2, N, O, OH, H2O)
PICK-UP IONS
SOLAR WIND
H+, He++
RING CURRENT
H+
He+ (IONOSPHERE)
O+ (ICY SATELLITES/RINGS)
N+ (TITAN)
TITAN NEUTRAL
TORUS
H+, He++
H+, H2+, H3+
PLASMA SHEET
MAGNETOPAUSE
BOW SHOCK
MAGNETOSHEATH
SKR

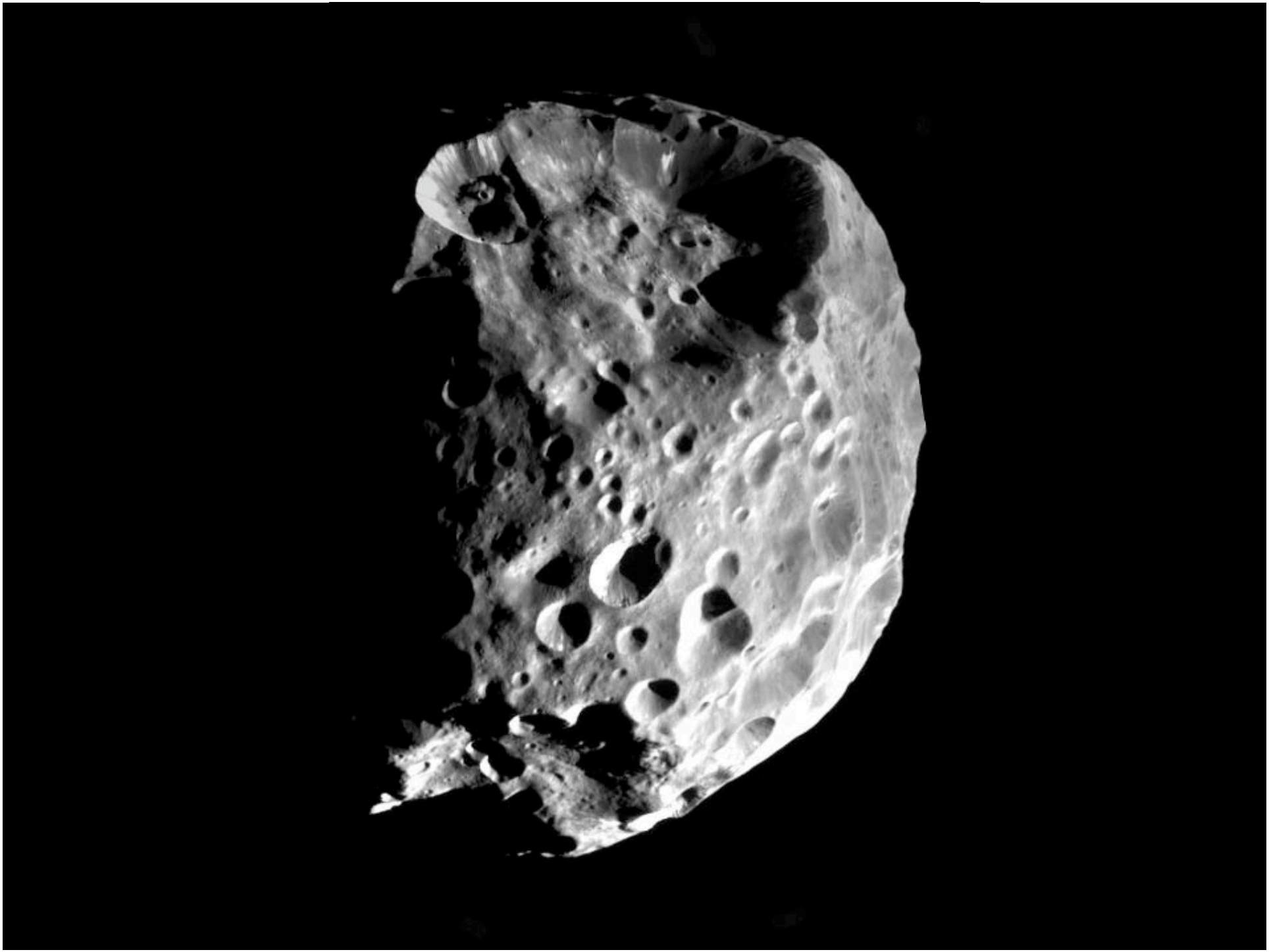


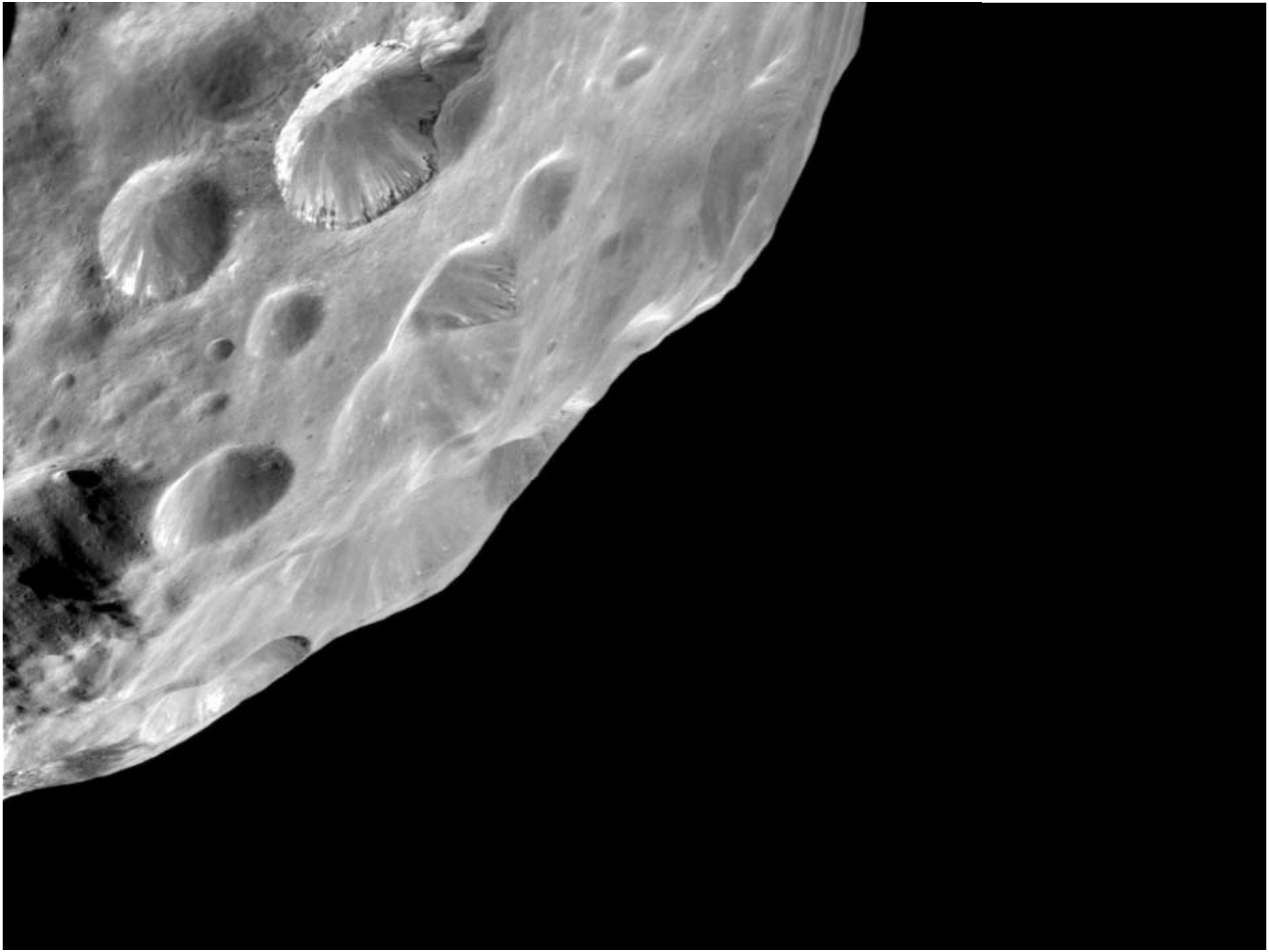






Phoebe from Voyager 2 distance: 2.2 million km





For more information about the Cassini Huygens mission
http://saturn.jpl.nasa.gov