

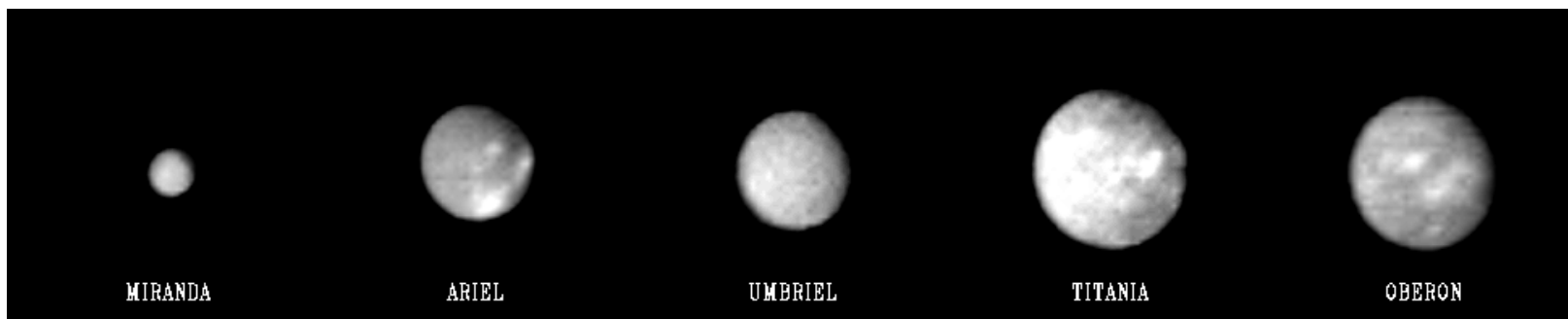
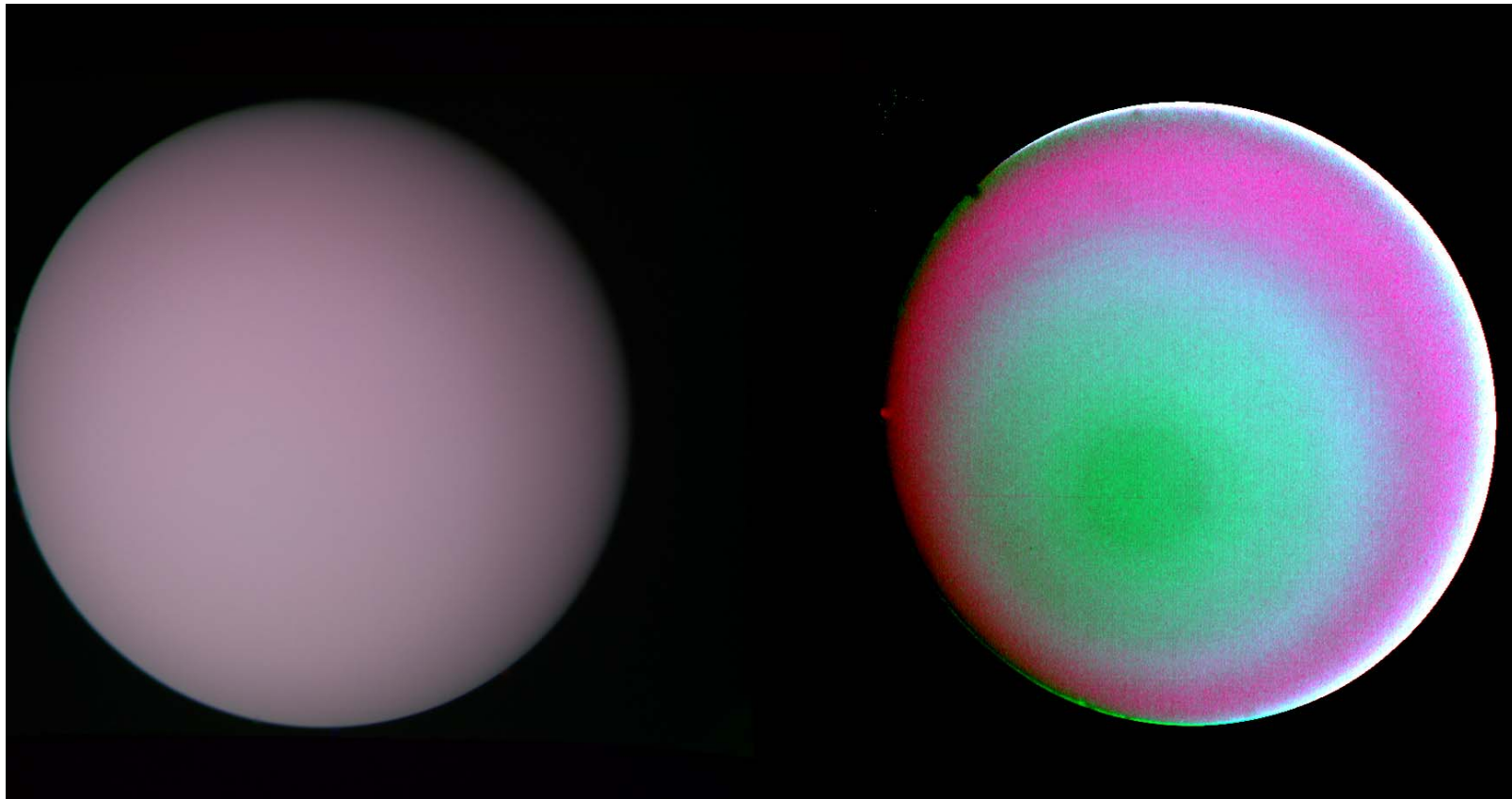
Spacecraft	Planet with radius (km)	Closest approach (km)	Date and hour (UTC)
Pioneer 10 (1)	Jupiter	130 354	04/12/1973 - 02:26
Pioneer 11 (2)	Jupiter 71492	42 500	03/12/1974 – 05:22
	Saturn 60268	20 900	01/09/1979 – 16:31
Mariner 10 (3)	Venus 6052	5 768	05/02/1974 – 17:01
	Mercury 2439.5	703	29/03/1974 – 20:47
	Mercury	48 069	21/09/1974 – 20:59
	Mercury	327 (1.13404)	16/03/1975 – 22:39
Voyager 1 (4)	Jupiter	280 000	05/03/1979 - 12:05
	Saturn	126 000	12/11/1980 – 23:46
Voyager 2 (5)	Jupiter	645 000	09/07/1979 – 22:29
	Saturn	101 000	26/08/1981 – 01:21
	Uranus	81 500	24/01/1986 – 19:59
	Neptune	4 800	25/08/1989 – 03:56
Galileo (6)	Venus	16 000	10/02/1990
	Earth	960	08/12/1990
		303	08/12/1992
	Gaspra	1 600	29/10/1991
	Ida	2 400	28/08/1993
Ulysses (7)	Jupiter	378 400	08/02/1992 – 12:02
MESSENGER (8)	Earth	2347.5	02/08/2005 – 19:13
	Venus	2987.3	24/10/2006 – 08:34
		338.3	05/06/2007 – 23:08
	Mercury	201.7	14/01/2008 – 19:04
		199.5	06/10/2008 – 08:40
		227.8	29/09/2009 – 21:54
Cassini (9)	Venus	284	25/04/1998
		600	24/06/1999
	Earth	1 100	17/08/1999
	Jupiter	10 000 000	30/12/2000
	Phoebe	2 000	10/06/2004
	Titan	1 200	21/10/2004
	Enceladus	25	08/10/2008
	Atlas	11 000	12/04/2017
	Titan	979	21/04/2017
Rosetta (10)	Earth	1954.7	04/03/2005 - 22:09
	Mars	250	25/02/2007

	Earth	5 295	13/11/2007
	2867 Steins	800	05/09/2008 – 18:58
	21 Lutetia	3 162	10/07/2010 – 16:10
Juno			
Parker (*)	Venus		03/10/2018 – 08:44
			26/12/2019 -
			11/06/2020
			20/02/2021
BepiColombo (**) (***)	Earth	12 700	10/04/2020
	Venus	10 720	15/10/2020
		550	10/08/2021-13:48
Solar Orbiter (***)	Venus	7995	09/08/2021-04:42

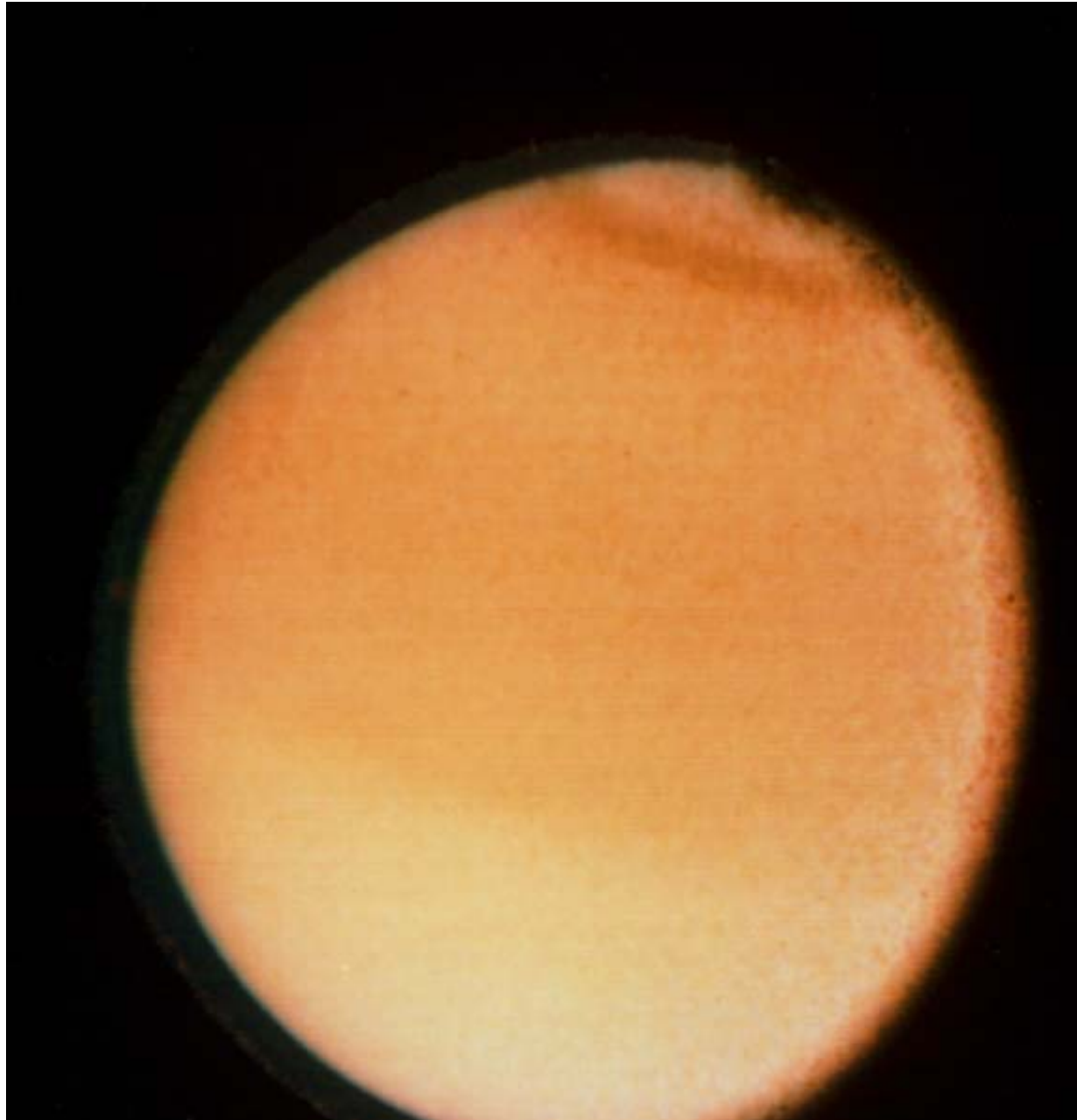
- (1) <https://solarsystem.nasa.gov/missions/pioneer-10/in-depth/>
- (2) <https://solarsystem.nasa.gov/missions/pioneer-11/in-depth/>
- (3) <https://solarsystem.nasa.gov/missions/mariner-10/in-depth/>
- (4) <https://solarsystem.nasa.gov/missions/voyager-1/in-depth/>
- (5) <https://solarsystem.nasa.gov/missions/voyager-2/in-depth/>
- (6) <https://solarsystem.nasa.gov/missions/galileo/in-depth/>
- (7) <https://solarsystem.nasa.gov/missions/ulysses/in-depth/>
- (8) <https://messenger.jhuapl.edu/Resources/Flyby-Information.html>
- (9) <https://solarsystem.nasa.gov/missions/cassini/the-journey/timeline/#first-venus-flyby>
- (10) <https://solarsystem.nasa.gov/missions/rosetta-philae/in-depth/>
- (\*) <http://parkersolarprobe.jhuapl.edu/The-Mission/index.php#Journey-to-the-Sun>
- (\*\*) <https://sci.esa.int/web/bepicolombo/news-archive>
- (\*\*\*) [https://www.esa.int/Science\\_Exploration/Space\\_Science/ESA\\_gets\\_ready\\_for\\_double\\_Venus\\_flyby](https://www.esa.int/Science_Exploration/Space_Science/ESA_gets_ready_for_double_Venus_flyby)

Including ATM/Limit

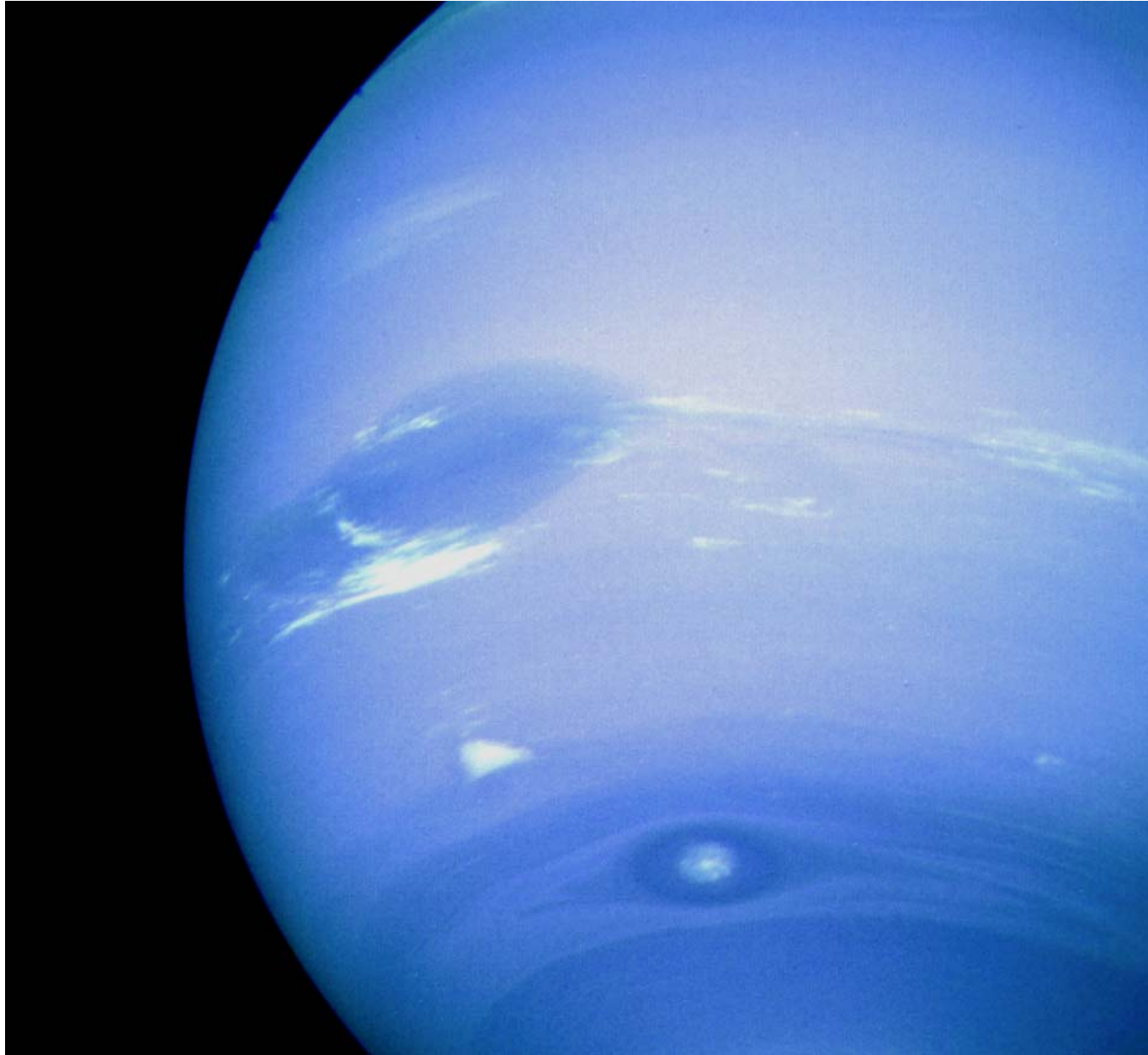
# Uranus and Satellites from Voyager 2



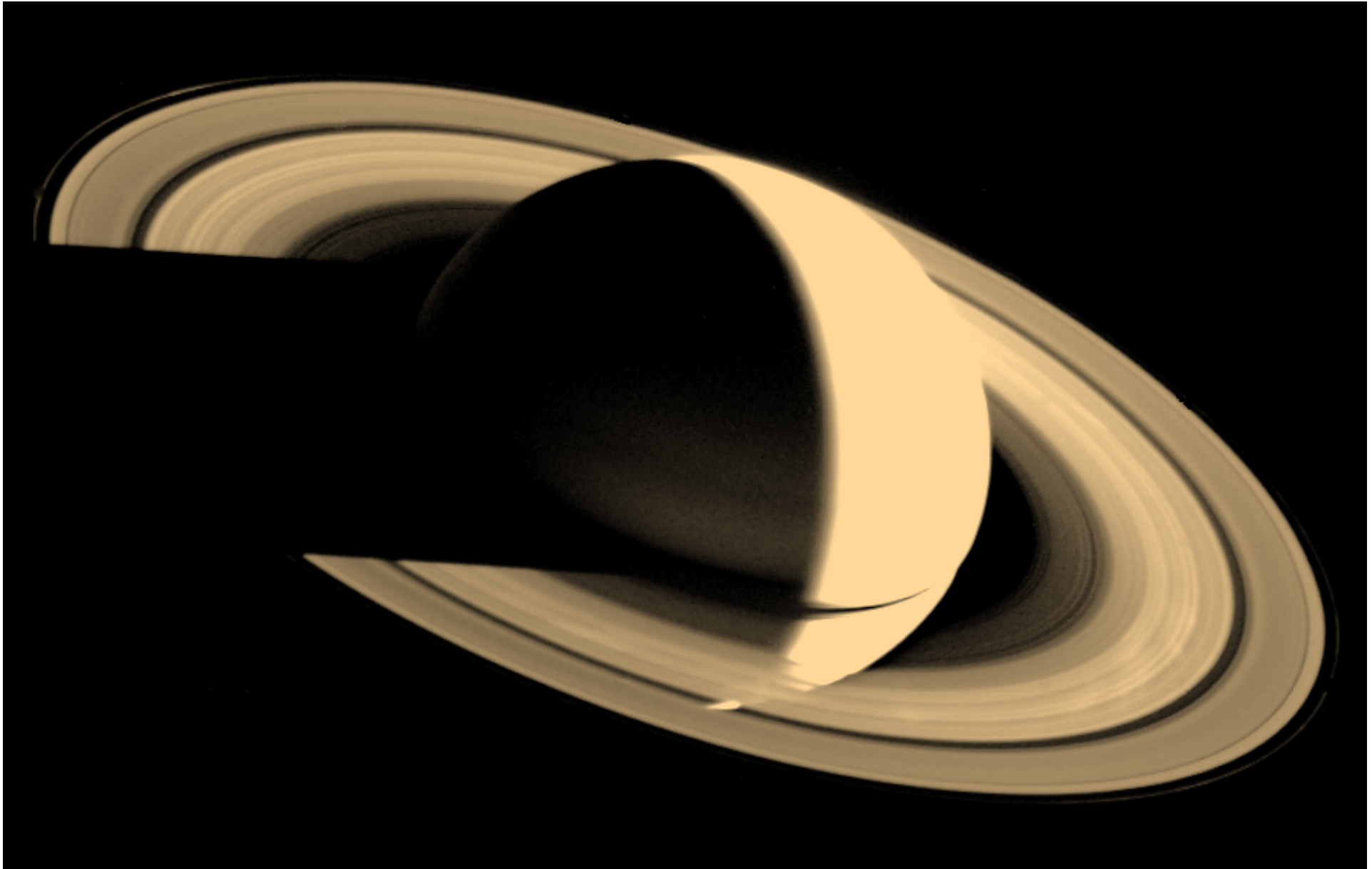
# Titan from Voyager



# Neptune from Voyager 2

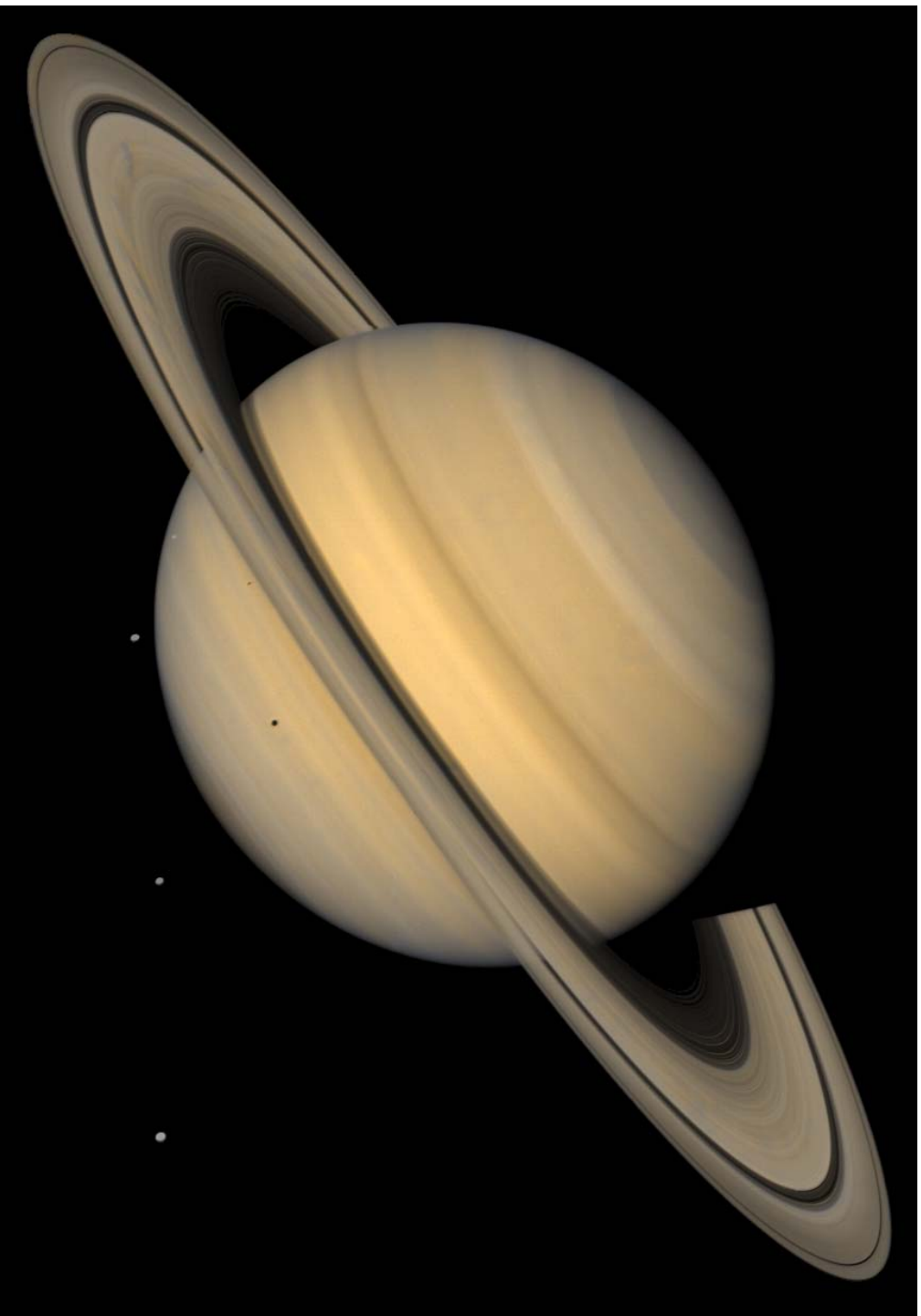


# Saturn from Voyager 1



# Saturn from Voyager 1

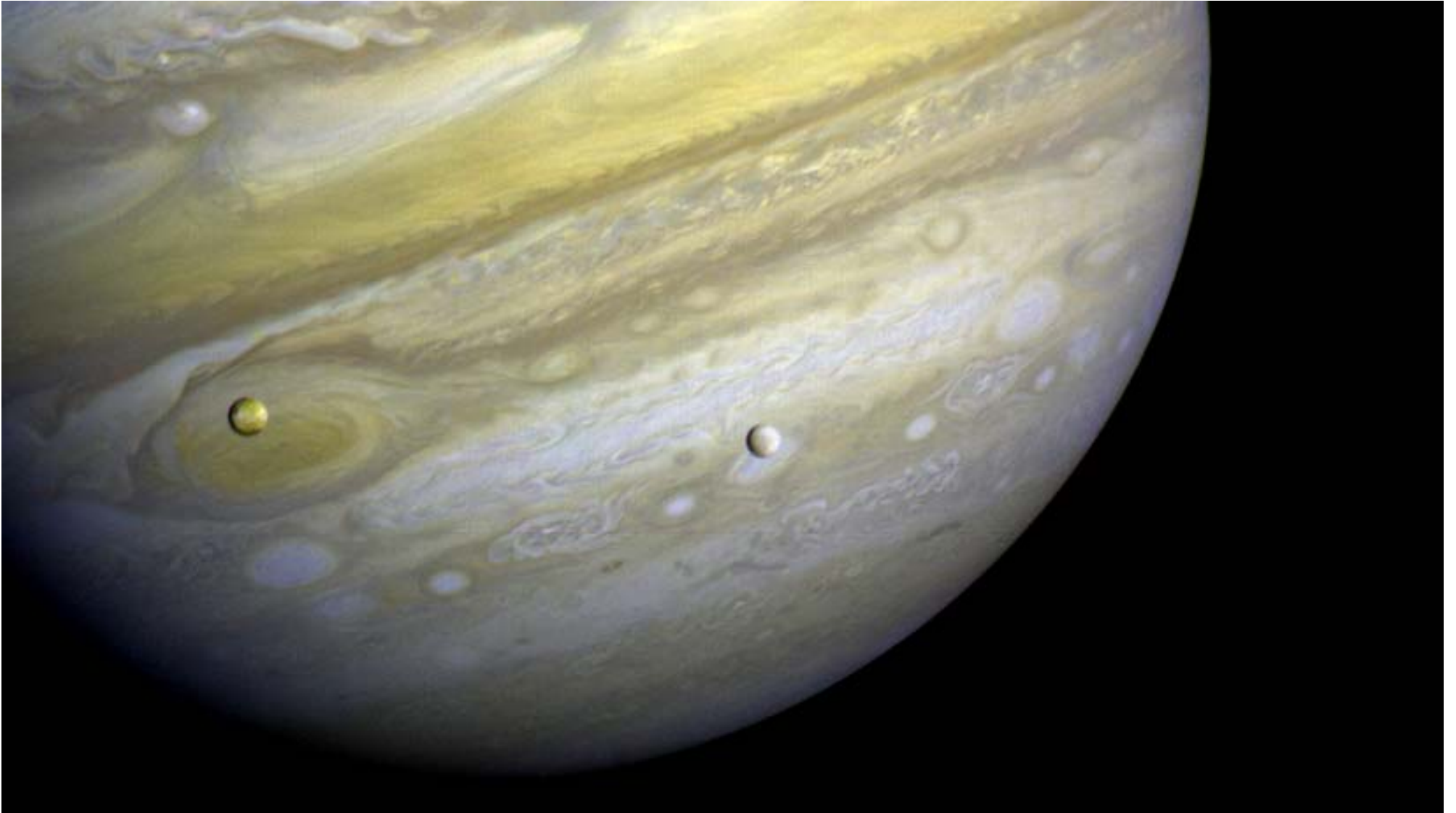




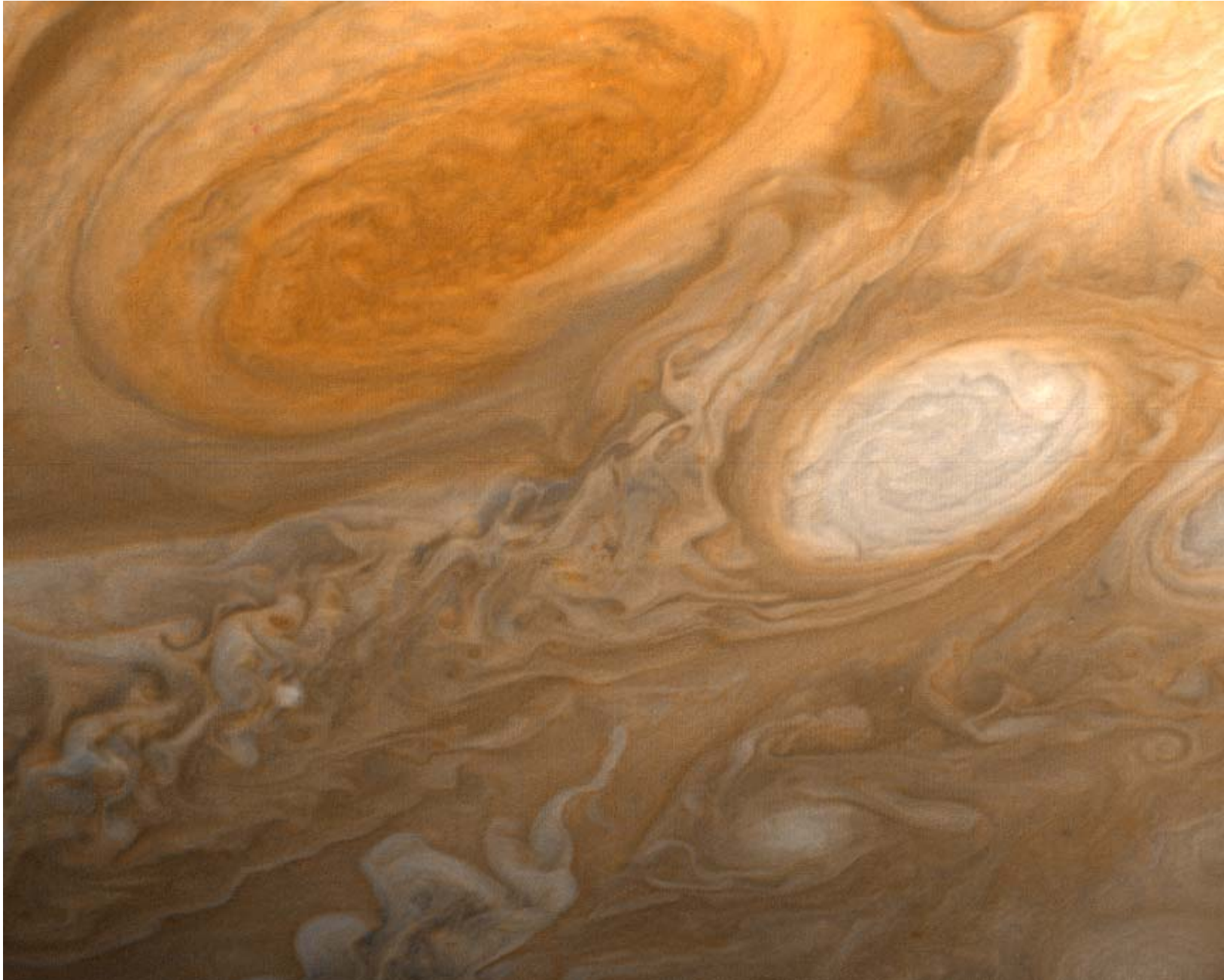
**Saturn  
from  
Voyager  
1**



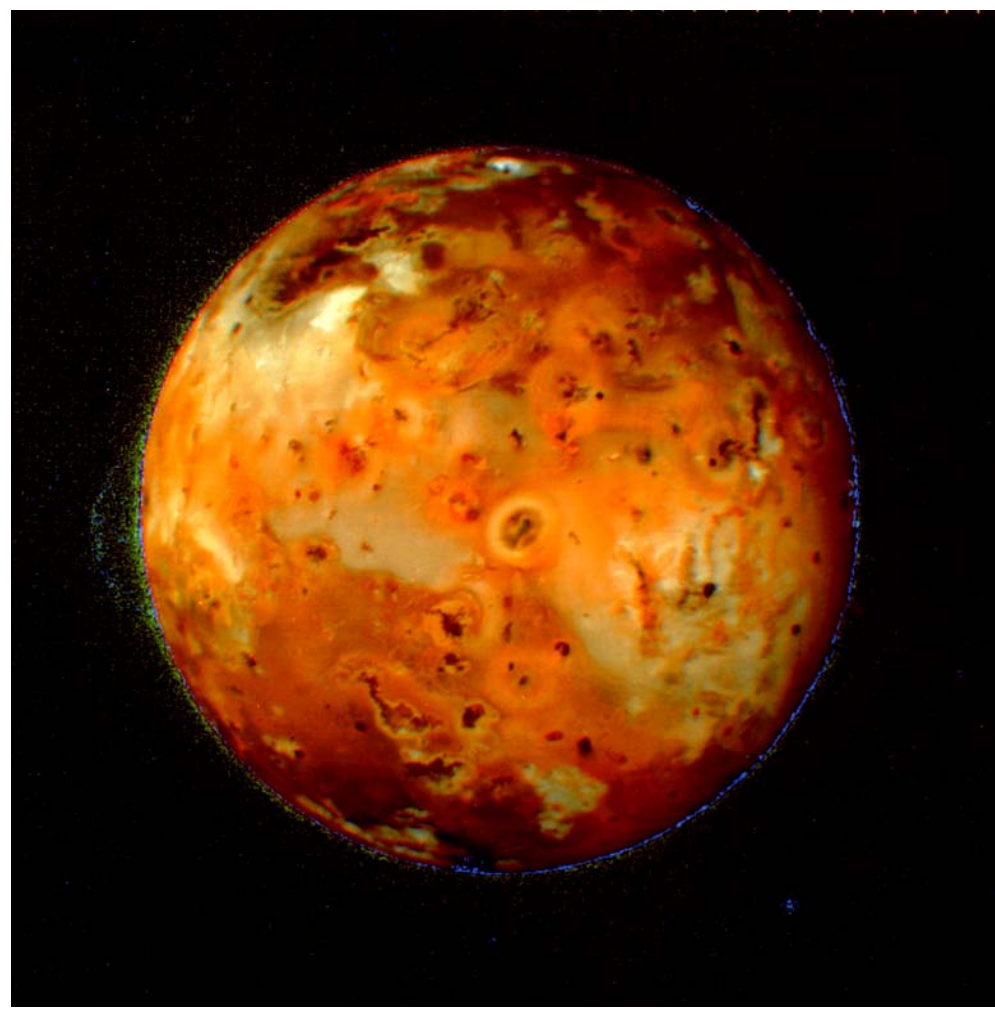
# Jupiter from Voyager



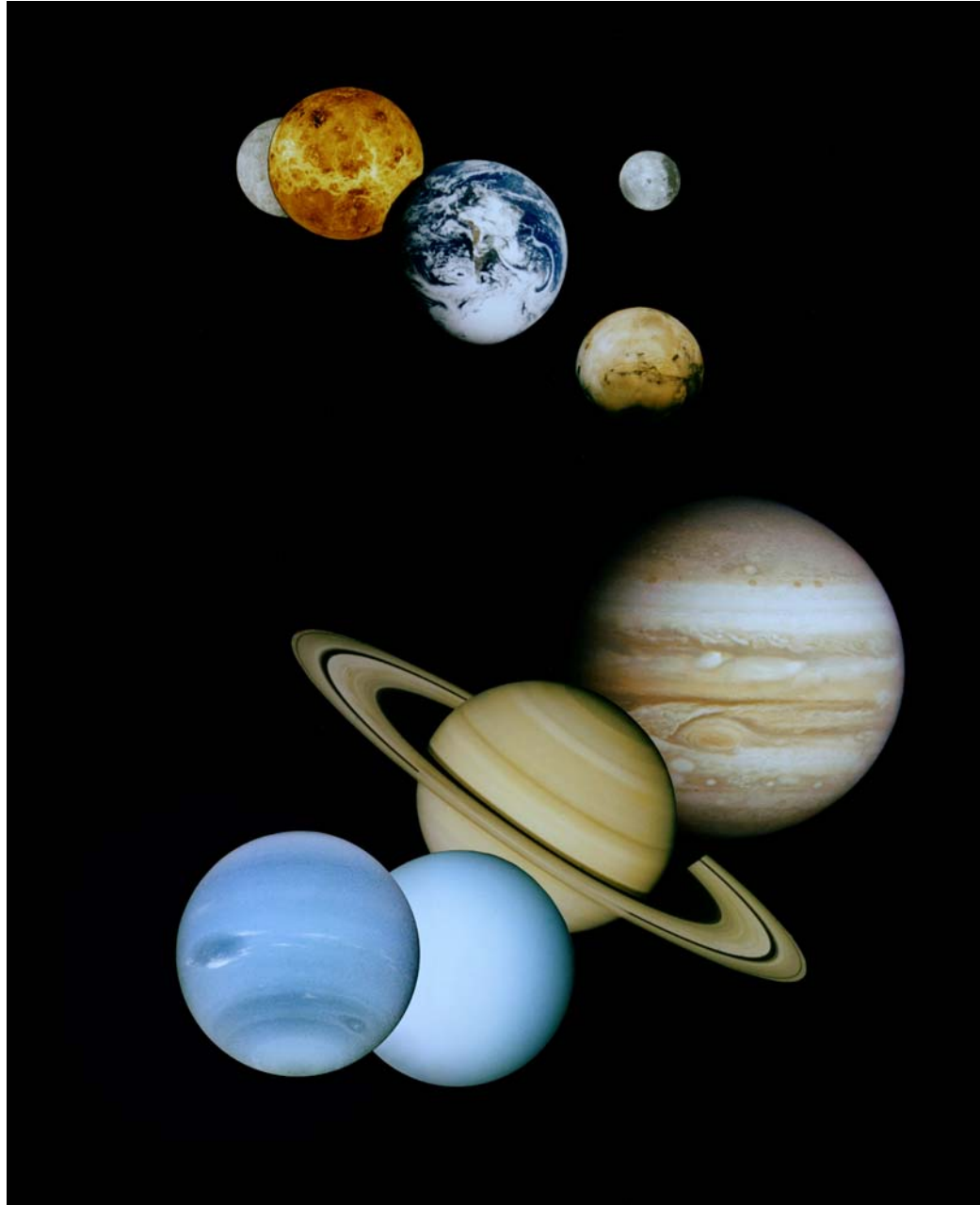
# Jupiter from Voyager



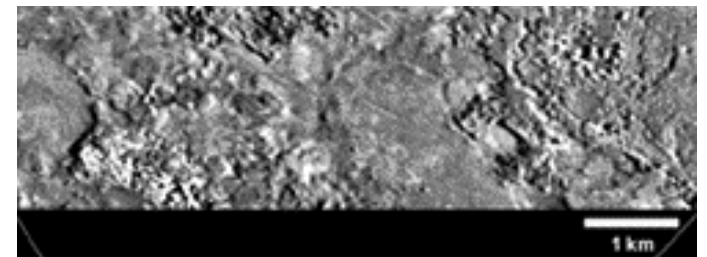
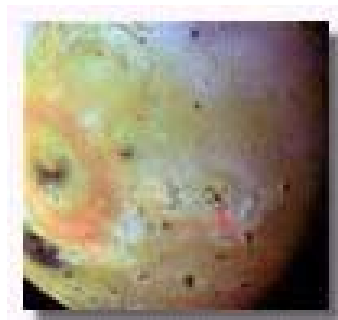
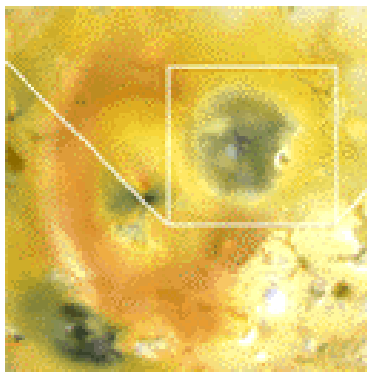
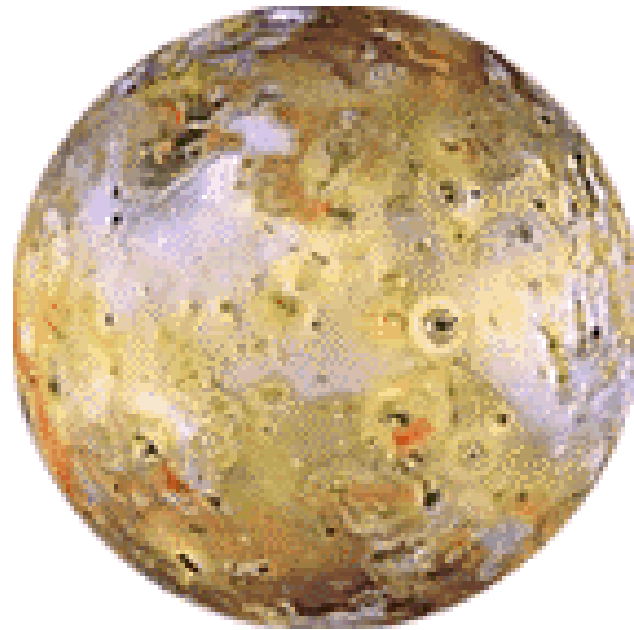
# Jupiter and Io



# Solar System from Voyager



10



# Jupiter

