

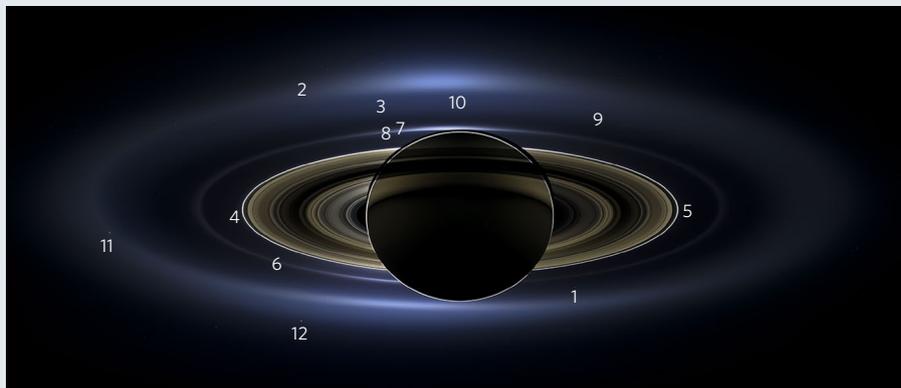
CASSINI-HUYGENS

# The day the Earth smiled

This mosaic, a ‘family photo’ of Saturn, its rings, seven of its moons and three inner planets (Earth, Mars and Venus), was shot on 19 July 2013, while Cassini was flying in the shadow of Saturn’s disk, with the Sun shining behind the planet. This unique view, impossible for an observer on the Earth, allows us, among other things, to observe the sunlight scattered by icy particles within the tenuous E ring, continuously resupplied by Enceladus’s plumes. Close to the rings appears a pale dot, our Earth, more than 1.4 billion kilometres away.

Looking at this remarkable image the prophetic words of Arthur C. Clarke, written well before Cassini arrived at Saturn in 2004, come to mind:

“However long you look at Saturn, and fly in and out among its moons, you can never quite believe it. Every so often you find yourself thinking: ‘It’s all a dream, a thing like that can’t be real.’ And you go to the nearest view-port — and there it is, taking your breath away. You must remember that, altogether apart from our nearness, we were able to look at the rings from angles and vantage points that are quite impossible from Earth, where you always see them turned towards the Sun.



1 Earth/Moon	3 Venus	5 Pandora	7 Janus	9 Mimas	11 Enceladus
2 Mars	4 Prometheus	6 Epimetheus	8 Janus's ring	10 Pallene's ring	12 Tethys

Image credit: NASA/JPL-Caltech/SSI

We could fly into their shadow, and then they no longer gleam like silver — they would be a faint blaze, a bridge of smoke across the stars. And most of the time we could see the shadow of Saturn lying across the full width of the rings, eclipsing them so completely that it seemed as if a great bite had taken out of them...”

Among the numerous images returned by Cassini, this is the one

that for me best collects the richness of Saturn’s system.

**Gianrico Filacchione**

*INAF-IAPS, Istituto di Astrofisica e Planetologia Spaziali, Via Fosso del Cavaliere 100, 00133 Rome, Italy. e-mail: gianrico.filacchione@iaps.inaf.it*

Published online: 5 September 2017  
DOI: 10.1038/s41550-017-0255-5