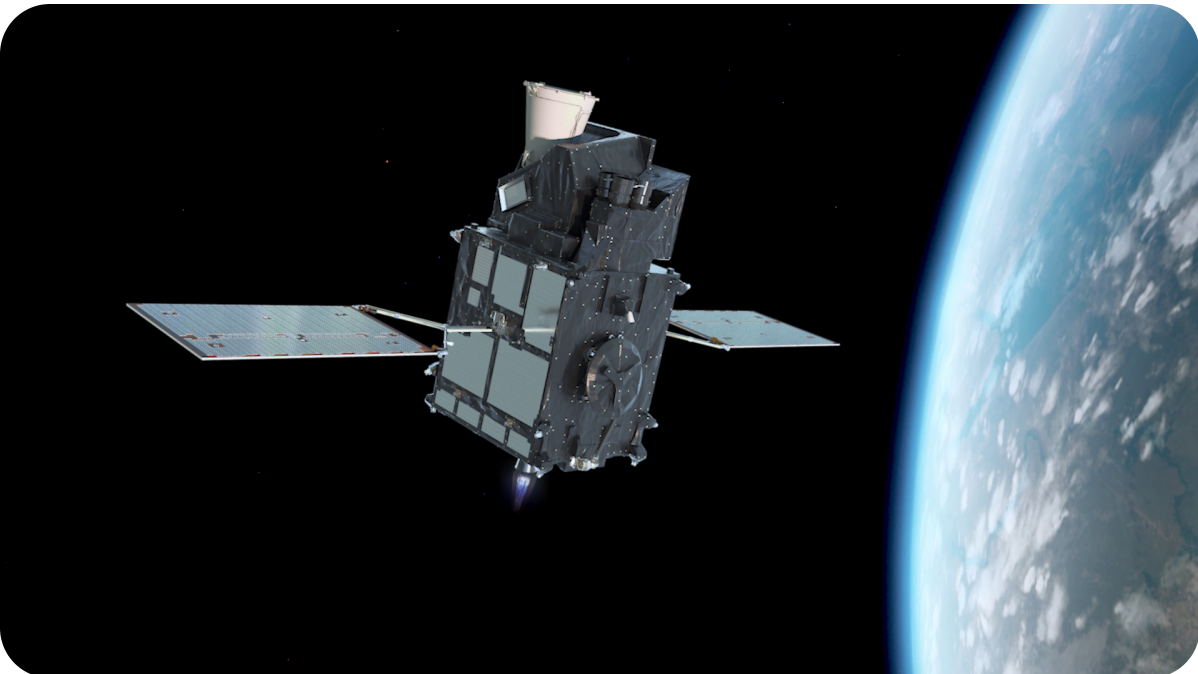


New weather satellite takes spectacular photos of planet Earth

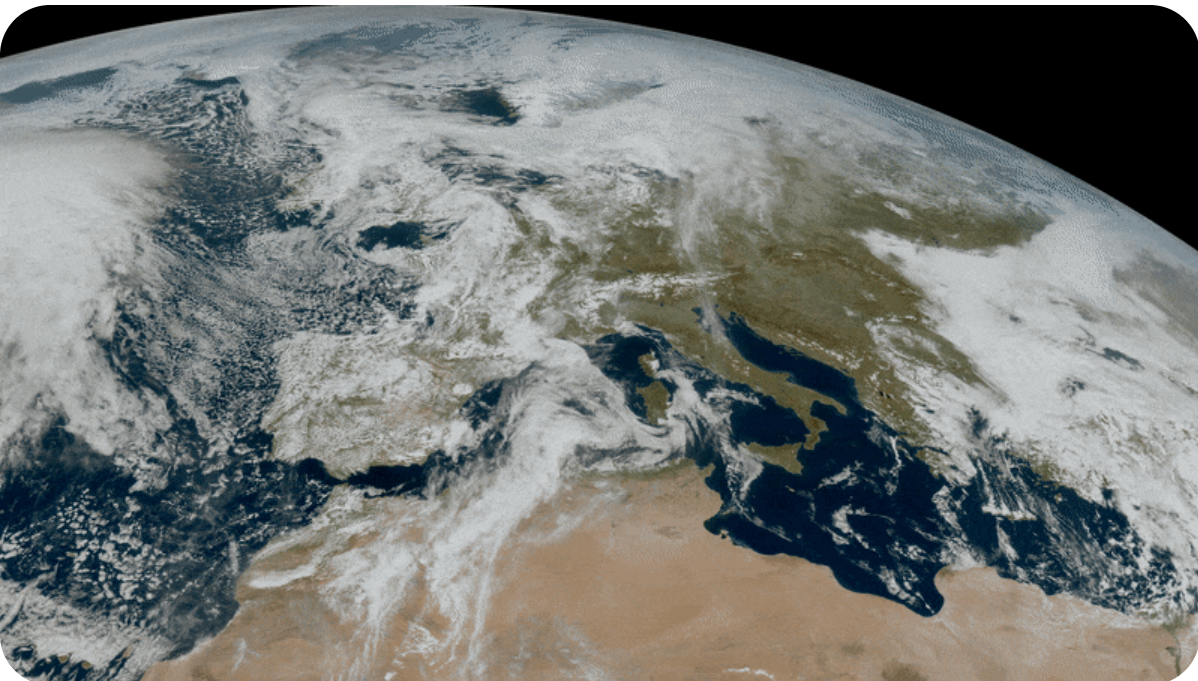


This picture by an artist shows what the Meteosat Third Generation Imager looks like in orbit around Earth.

[Access the image](#)

09 May 2023

Europe's latest weather satellite is called the [Meteosat Third Generation Imager](#) (MTG-I1 for short), and it has just taken its first photo of Earth. Despite orbiting 36,000 km above our planet, the close-up detail it has obtained is incredible!



The new satellite takes an image every 10 minutes, allowing scientists on Earth to make amazing animations. Can you see day turning to night?

[Access the image](#)

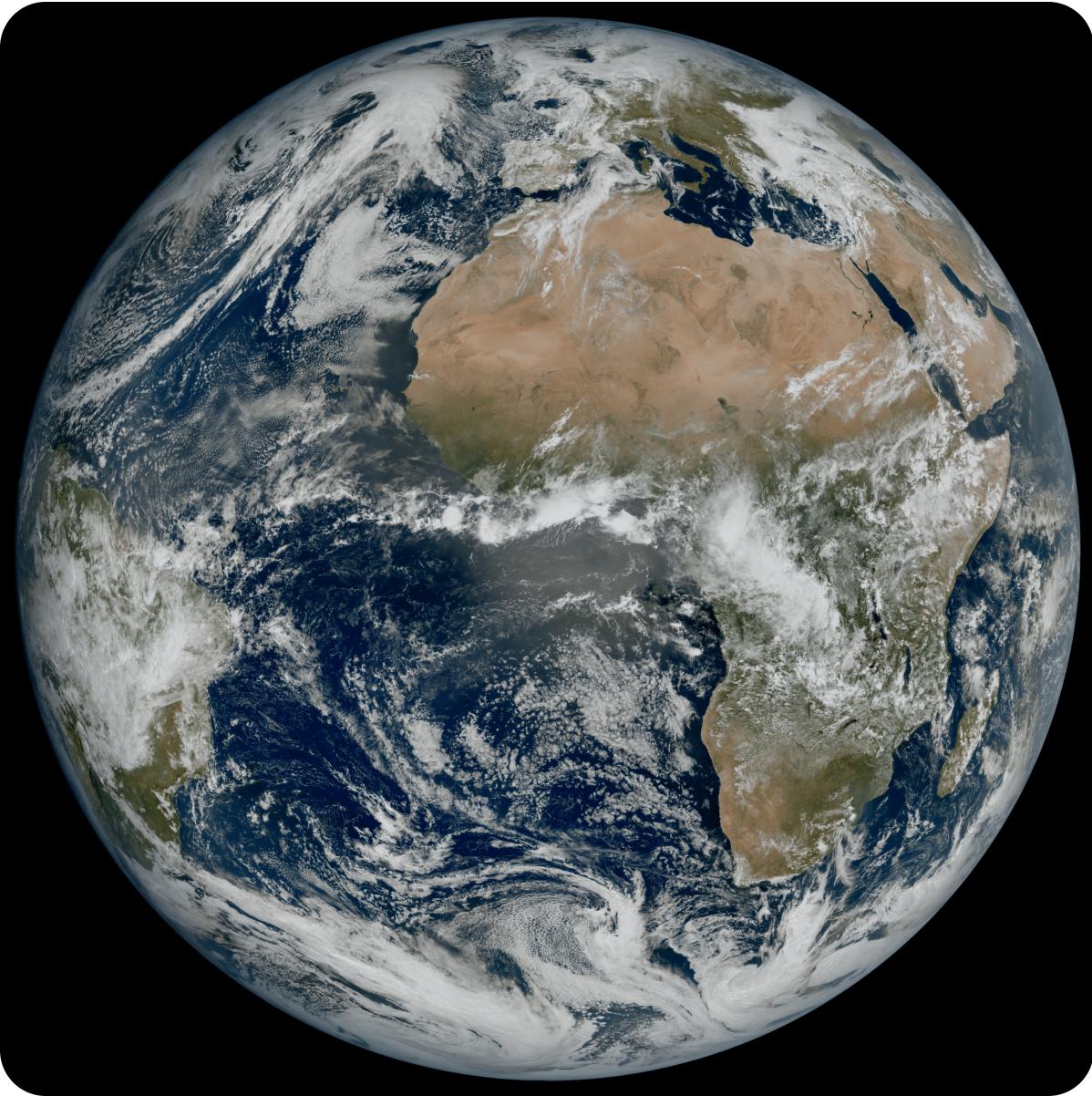
New technology means that the instruments aboard MTG-I1 can take images with much higher resolution – giving more detail – and more frequently than previous Meteosats. Sand and sediment in the waters around Italy are visible, as well as dust or smog being carried from South Asia. Perhaps most impressive are the clouds, which have been captured in remarkable detail – in particular the swirling patterns over the Canary Islands. This allows weather forecasters to watch how severe conditions like storms develop, and help to predict them in the future. This could save lives!

As well as improving our weather forecasting abilities, MTG-I1 will be vital for monitoring [climate change](#), giving us greater understanding of our planet and the weather systems that shape it, and helping to protect our precious world.

Phil Evans is Director General at [EUMETSAT](#), who worked with ESA on this satellite. He says, “it might sound odd to be so excited about a cloudy day in most of Europe. But the level of detail seen for the clouds in this image is extraordinarily important to weather forecasters. That additional detail from the higher resolution imagery, coupled with the fact that images will be produced more frequently, means forecasters will be able to more accurately and rapidly detect and predict severe weather events.”

MTG-I1 is now undergoing a year-long commissioning phase. This involves its instruments being carefully tested to ensure the data they produce are accurate. Once that is complete, by the end of 2023, the satellite will help to make the weather forecasts that we use in Europe better than ever. Five more satellites are planned for launch, and the entire system will hopefully be complete by 2026!

Cool fact: Orbiting 36,000 km above Earth means that MTG-I1 is [geostationary](#), so it always stays over the same part of Earth.



This is the first photo of the entire disc of the Earth taken by the Meteosat Third Generation Imager.

[Access the image](#)