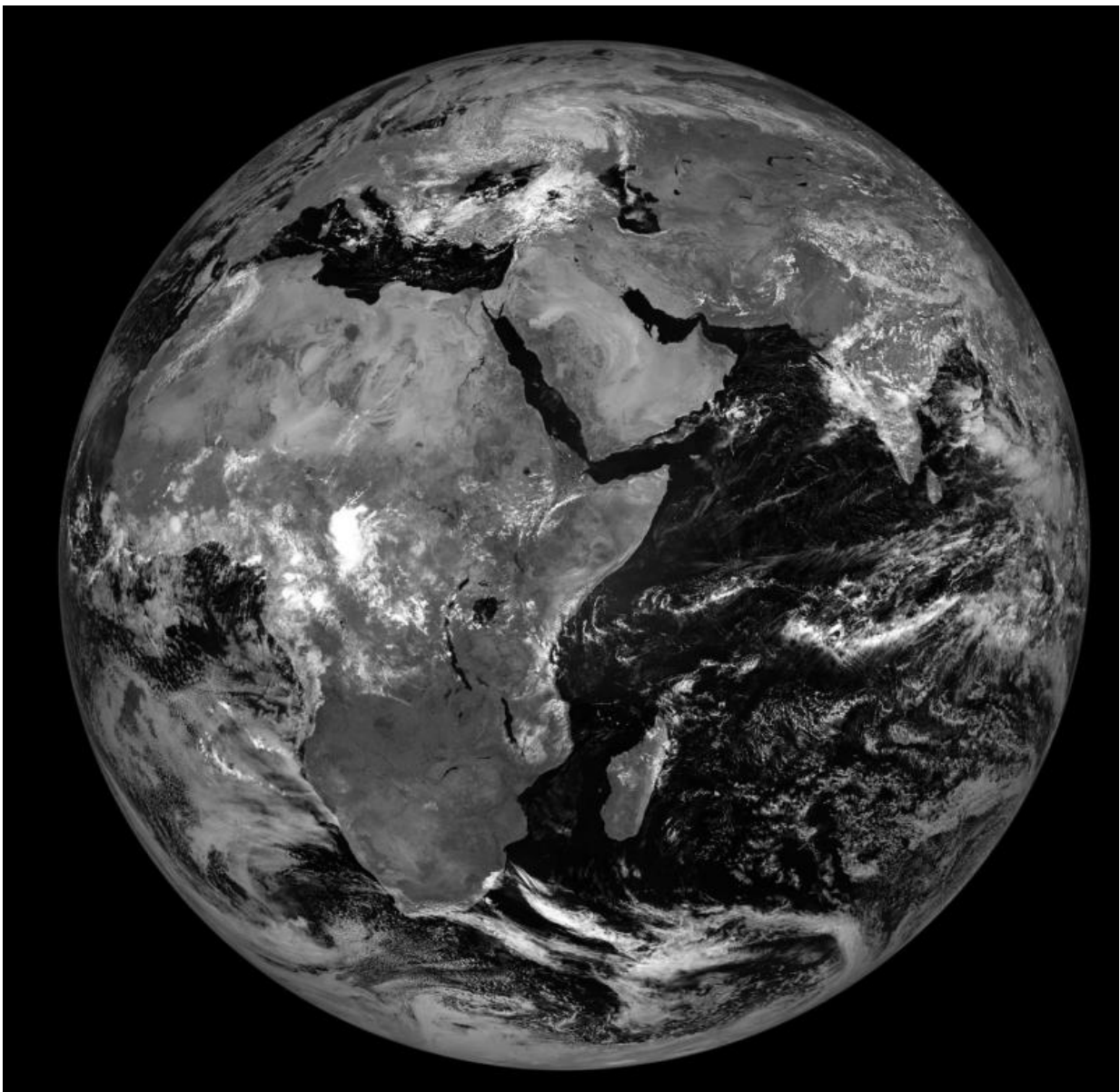


Meteosat-8 satellite's new position of 41.5E provides weather and climate view over the Indian Ocean

September 23 2016



An image taken by Meteosat-8 at 41.5 degrees East after the satellite's journey to its new "home". Credit: EUMETSAT

Meteosat-8 is EUMETSAT's contribution to the Indian Ocean Data Coverage (IODC) service, and will provide this crucial function together with India's INSAT-3-D, at 82°E, China's FY-2E at 86.5°E and Russia's Elektro L N2 at 77.8°E in an international, cooperative arrangement.

Meteosat-8, the first of EUMETSAT's Meteosat Second Generation (MSG) meteorological satellites, will replace the soon-to-be-de-orbited Meteosat-7, the last of the first generation satellites, which had been providing the IODC service but is approaching the end of its nearly 20-year-long lifetime in space.

EUMETSAT's Head of Strategy, Communication and International Relations Paul Counet said the benefits of the IODC cooperation were wide-reaching.

"The provision of better and more frequent observations by Meteosat- 8 from this new position will bring benefits to countries, such as Indian Ocean islands and the east African coast, which experience tropical cyclones," Paul said.

"Additionally, this arrangement will allow for better observations of [severe weather](#) over EUMETSAT Member States in Central Europe."

EUMETSAT's fleet of MSG satellites fly in a geostationary orbit 36,000km above the Earth. Their primary instrument is the SEVIRI imager.

Meteosat-9, launched in 2005, takes an image of Europe every 5 minutes from its position at 9.5°E. Meteosat-10, launched in 2012, takes an image of the "full-disk" or hemisphere, showing Europe and Africa, every 15 minutes and is stationed at 0°.

This imagery provides crucial information for "nowcasting" severe weather events.

Meteosat-8 was, until recently, stationed at 3.5°E, serving as a "hot back-up" for those two satellites.

However, in early July, the EUMETSAT Flight Operations team set the spacecraft on an ~80-day drift journey to bring it to its new position.

"Preparations for this complex project started back in October 2015," EUMETSAT MSG Indian Ocean Data Service Project Manager Flavio Murolo said.

"The drift orbit to bring Meteosat-8 over to 41.5°E was carefully chosen to save fuel and to keep a safe distance from other satellites throughout the relocation.

"During the drift, a number of tests were carried out on the satellite's instruments and the complete validation test campaign for the new service will be carried out now that the spacecraft has reached its destination. This will include about two months of parallel operations with Meteosat-7, with data dissemination to users.

"The results of the service validation tests will be reviewed and a formal Operational Readiness Review will be held before Meteosat-8 begins its IODC operational service early next year.

"The start of the operations of Meteosat-8 over the Indian Ocean region

will mark an important change for the services provided to users because it is a transition from the first to the second generation Meteosat satellites.

"This transition will significantly improve the service, offering a wider suite of products, more observation channels, an enhanced image spatial resolution and more frequent imaging."

Two manoeuvres, conducted 12 hours apart, were required to stop the Meteosat-8 drift.

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Provided by EUMETSAT

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