

Meteosat-10 replaces Meteosat-9 as EUMETSAT's prime operational geostationary weather satellite

January 22 2013

Launched on 5 July, Meteosat-10 is the latest satellite in the Meteosat Second Generation (MSG) series, which provides the operational weather and climate monitoring service over Europe and Africa.

In April 2013, Meteosat-9 will take over the Rapid Scanning Service (RSS) from Meteosat-8, the first MSG [satellite](#) launched in 2002. Meteosat-9 and -10 will then form the two-satellite configuration, with Meteosat-10 providing full disc imagery of the European and African continents and adjacent seas every 15 minutes and Meteosat-9 delivering more frequent images every five minutes (RSS) over Europe and North Africa.

This two-[satellite system](#) supports [weather forecasters](#) in one of their most challenging tasks, nowcasting, which involves detecting and monitoring rapidly developing high impact [weather phenomena](#) like thunderstorms or fog and issuing related warnings.

About Meteosat second generation

MSG is a joint programme undertaken by ESA and EUMETSAT. ESA is responsible for the development of satellites fulfilling user and system requirements defined by EUMETSAT and of the procurement of recurrent satellites on its behalf. Following the satellite separation from the [launch vehicle](#), ESA also performs the Launch and Early Orbit Phase

operations required to place the spacecraft in geostationary orbit, before handing it over to EUMETSAT for commissioning and exploitation.

EUMETSAT develops all ground systems required to deliver products and services to users and to respond to their evolving needs, procures launch services and operates the full system for the benefit of users.

Launched on 5 July, MSG-3 is the third in a series of four geostationary satellites introduced in 2002. These spin-stabilised satellites carry the primary Spinning Enhanced Visible and [Infrared Imager](#), or SEVIRI. The prime contractor for the MSG satellites is Thales Alenia Space, with the SEVIRI instrument built by Astrium.

SEVIRI delivers enhanced weather coverage over Europe and Africa in order to improve very short range forecasts, in particular for rapidly developing thunder storms or fog. It scans Earth's surface and atmosphere every 15 minutes in 12 different wavelengths, to track cloud development.

SEVIRI can pick out features as small as a kilometre across in the visible bands, and three kilometres in the infrared.

In addition to its weather-watching mission and collection of climate records, MSG-3 has two secondary payloads:

- The Geostationary Earth Radiation Budget sensor measures both the amount of solar energy that is reflected back into space and the infrared energy radiated by the Earth system, to better understand climate processes.
- A Search & Rescue transponder will turn the satellite into a relay for distress signals from emergency beacons.

The MSG satellites were built in Cannes, France, by a European industrial team led by Thales Alenia Space, France. More than 50 subcontractors from 13 European countries are involved.

The last of the series, MSG-4, is planned for launch in 2015.

Provided by EUMETSTAT

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