

Europe's next weather satellite gears up for launch

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MetOp-B being readied for testing after arriving at the launch facilities at Baikonur. Credits: ESA

(PhysOrg.com) -- Following the safe arrival of the MetOp-B weather satellite in Kazakhstan, the sophisticated craft is now being carefully assembled and tested before launch on 23 May. MetOp-B will provide essential data for weather forecasting and climate monitoring.

Developed as a joint undertaking between ESA and Eumetsat, the MetOp programme comprises a series of three identical satellites for

continuous observations until 2020.

The first in the series, MetOp-A, was launched in 2006 and marked a new era in operational meteorology – it was Europe’s first [weather satellite](#) to orbit Earth from pole to pole.

It is now time to launch the second in the series: MetOp-B.



The shipment from France to Kazakhstan was made by three Antonov AN 124/100 cargo aircraft. The first carried 12 containers of equipment needed to prepare the satellite for launch, the second carried the MetOp-B satellite plus six containers and the third flight carried the solar array along with 10 more containers of equipment. The shipments were transported from the airfield to the Baikonur Cosmodrome by train. Bad weather caused difficulties for all three flights. The flight carrying the satellite was held up in Moscow for three days because of snow. Credits: ESA

The satellites carry a host of sensitive instruments to provide key information on a wide range of variables such as temperature and humidity, wind speed and direction over oceans, ozone and other atmospheric gases for numerical weather prediction and [climate monitoring](#).

With MetOp-A still in service, the two satellites will orbit in tandem, increasing the wealth of data even further.

MetOp-B arrived at the Baikonur Cosmodrome on 6 March after being transported from Toulouse, France on an Antonov cargo aircraft.

Two separate flights carried the [satellite](#)'s solar array and the supporting equipment that is being used to prepare the satellite for launch.

MetOp-B will be launched on a Soyuz rocket with a Fregat upper stage.

Now that the satellite and support equipment has been unpacked and inspected to make sure that it wasn't damaged in transit, it will spend the next weeks being thoroughly tested before being encapsulated in the rocket fairing.



The MetOp-B satellite payload module being lowered onto the trolley for its first inspection after arrival at the launch facilities in Baikonur. The satellite service module in the corner of the cleanroom to the right. The satellite will spend the coming weeks being tested before being encapsulated in the fairing and joining a Soyuz rocket. MetOp-B is scheduled to be launched on 23 May. Credits: ESA

“We are extremely pleased to see MetOp-B arrive safely at the launch facilities,” said Luciano Di Napoli, ESA’s project manager.

“The next weeks are extremely important to make sure this advanced satellite is in perfect condition for [launch](#).”

The MetOp satellites are built by a European consortium led by EADS Astrium.

The MetOp programme is Europe’s contribution to a cooperative venture with the US National Oceanic and Atmospheric Administration (NOAA). The satellites are designed to work in conjunction with the NOAA satellite system, flying in complementary orbits to offer maximum coverage.

Provided by European Space Agency

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