

Full steam ahead for Aeolus launch

10 July 2018



Aeolus arrives in French Guiana after a 12-day journey from western France. Credit: European Space Agency

Having set sail from France on 15 June—Global Wind Day, ESA's Aeolus wind satellite has arrived safe and sound at the launch site in French Guiana.

While almost all satellites travel by aircraft, Aeolus' journey was rather different – it travelled all the way across the Atlantic from Saint Nazare, western France to the Port of Cayenne, French Guiana by ship.

Aeolus carries one of the most sophisticated instruments ever to be put into orbit. A 12-day journey was undertaken to avoid potential damage caused by air re-pressurisation during descent had the satellite travelled by air – a quicker but decidedly riskier option.

Upon its long-awaited arrival, the team unloaded Aeolus and its support equipment. The containers were then carefully positioned on a truck to be transported to the launch site about 60 km away, where the satellite container was moved into the airlock, to stabilise after its long journey.

The satellite was then removed from its container, placed on its integration trolley for testing and connected to its electrical support equipment. Initial checks indicate that Aeolus has withstood its journey from France in good condition.

ESA's Aeolus project manager, Anders Elfving, said, "We are obviously all extremely pleased that Aeolus has now arrived at the [launch site](#). An awful lot of work and planning went into making sure it arrived safe and sound – now it's full steam ahead for preparing the satellite for liftoff on 21 August."



ESA's Aeolus wind satellite on the integration trolley in Kourou, French Guiana. Credit: European Space Agency

A range of checks will be carried out on the [satellite](#)

in the cleanroom before the scheduled liftoff on a Vega rocket on 21 August at 21:20 GMT (23:20 CEST) from Europe's spaceport near Kourou.

This pioneering mission is set to provide global [wind](#)-profile data, using powerful laser technology that probes the lowermost 30 km of our atmosphere to yield vertical profiles of the wind and information on aerosols and clouds.

The mission will improve our understanding of how atmosphere dynamics work and contribute to climate change research. At the same time, it will also help to predict extreme events such as hurricanes and help us to better understand and model large-scale wind patterns driving weather such as El Niño.

It is also expected to bring considerable benefits to society by improving weather forecasts. Its global wind measurements, delivered almost in real time, are exactly what meteorological centres are looking for to improve their forecasts.

ESA's Aeolus mission scientist, Anne Grete Straume, added, "We expect Aeolus to advance science, whilst at the same time having a range of potential practical application areas by improving forecasts, which is of importance to the wind energy industry, for example. Accurate forecasts are just one of the ways in which our mission will be able to help."

Provided by European Space Agency

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