

Video: Solar Orbiter speeds toward its next rendezvous with the sun

October 13 2022



Credit: ESA & NASA/Solar Orbiter/EUI Team

The ESA-led Solar Orbiter mission arrives at its next close approach to

the sun on 12 October 2022 at 19:12 UTC (21:12 CEST). This sequence of images shows the progress of the ESA/NASA spacecraft as it heads inwards on its voyage of discovery. The sequence begins on 20 September and finishes on 10 October.

The sequence was taken by the Extreme Ultraviolet Imager (EUI) using the Full sun Imager (FSI) telescope, and shows the sun at a wavelength of 17 nanometers. This wavelength is emitted by gas in the sun's atmosphere with a temperature of around one million degrees. The color on this image has been artificially added because the original [wavelength](#) detected by the instrument is invisible to the human eye.

So much of modern society relies on spacecraft in orbit around Earth to provide essential communications and navigation. Understanding more about the sun and the "space weather" it generates will help companies operate their satellites around Earth safely and securely.

Towards the end of the sequence, the image appears to jump slightly. This happens on the days that EUI was not returning data to Earth. The colored bar at the top of the image shows the impressive amount of data collected in this period, together with these brief gaps in the data coverage.

Depending on where Solar Orbiter is along its [orbit](#), it can take days or weeks for the data it records to be transmitted back to Earth. Data from the current perihelion passage is downlinked within a couple of weeks of it being collected.

Provided by European Space Agency

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