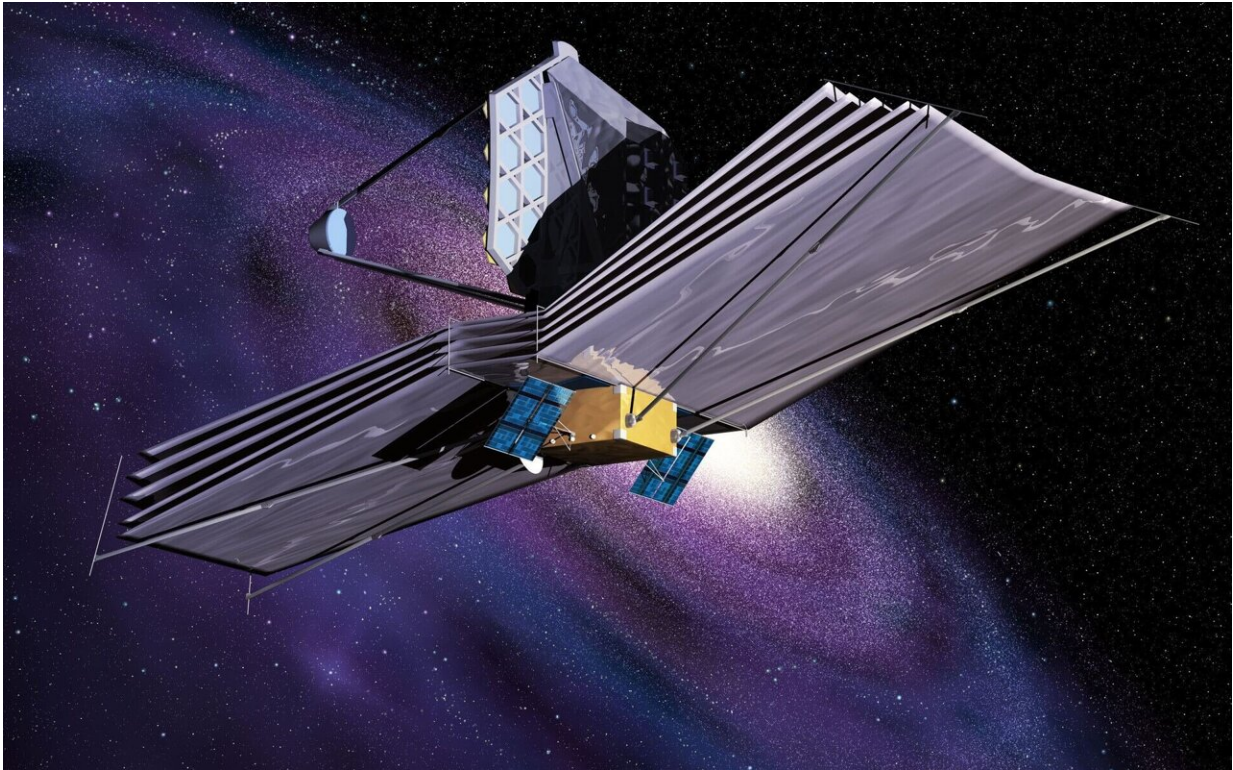


Instrument on JWST has gone offline

January 27 2023, by Evan Gough



Artist impression of the James Webb Space Telescope. Credit: ESA

The JWST is having a problem. One of its instruments, the Near Infrared Imager and Slitless Spectrograph (NIRISS), has gone offline. The NIRISS performs spectroscopy on exoplanet atmospheres, among other things.

It's been offline since Sunday, January 15 due to a communications

error.

The internal communications error led to the software timing out. There's no indication that the instrument is damaged in any way, and the rest of the spacecraft is operating normally.

NIRISS complements the other instruments on the JWST by providing "unique observational capabilities between 0.6 and 5 μm ," according to the Space Telescope Science Institute. It's used to investigate [exoplanet atmospheres](#), to detect first light, aka the Era of Recombination, and to detect exoplanets. It can also capture wide-field instruments to study populations of objects and has multiple filters that increase its versatility. It can also resolve the light from objects that are very close together.

The Canadian Space Agency (CSA) built the NIRISS as part of its contribution to the JWST mission. It also built the Fine Guidance Sensor (FGS), which is physically combined with the NIRISS but is a separate instrument.

It's unclear when the instrument will be back online, but it's bad news for observers. Observing time on the JWST is in high demand, and it's not clear how this delay will affect observations.

This isn't the first mishap the JWST has had to deal with. It went into [safe mode](#) for about three weeks in December due to a [software](#) fault in its attitude control system. The telescope's MIRI (Mid-Infrared Instrument) was also briefly non-operational.

Those issues were dealt with and resolved. Hopefully, this one will be, too.

Provided by Universe Today

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