

UPDATE: Terra data and imagery outage starting 10 October 2022

Summary

- There will be a data and imagery outage in GIBS and Worldview **starting 10 October 2022 and will last 10+ days** for layers created from the MODIS, MISR, CERES, and ASTER sensors aboard the Terra satellite.
- MOPITT NRT imagery will be unavailable for a longer period of time, from **3 October to 28 October 2022**.
- Worldview will set the Aqua/MODIS Corrected Reflectance layer as the default layer for that period. Note that Aqua has a later overpass time (1:30PM mean local time) than Terra (10:30AM mean local time), so there will be a longer delay for Corrected Reflectance imagery to appear in Worldview.
- We will include notifications in Worldview to remind users of the outage.

Details

The Terra satellite is scheduled to exit the “Morning Constellation” of the Earth Observing System (EOS) satellite program in October 2022. The initial Terra Constellation Exit Maneuver (CEM) is scheduled for 12 October 2022 around 7:30AM EDT and 19 October 2022. All Science and Near Real-Time (NRT) **data will not be acquired starting 10 October 2022 until 19 October 2022**. Post-CEM, more time will be needed to bring all Terra instruments back up to their nominal states and necessary calibrations and Lookup Table (LUT) updates will occur as needed. Users should **exercise caution while using Terra data between 19 - 26 October** as all instruments will still be recovering, after the outage. This will impact all sensors aboard Terra including [MODIS](#), MISR, MOPITT, ASTER, and CERES.

Due to onboard fuel shortage, the last Terra mission maneuver was performed on 27 February 2020 to maintain the mean local time (MLT) of 10:30AM. Terra has since been drifting from its MLT, earlier and earlier, where it will reach and exceed 10:15AM MLT by October 2022. The Constellation Exit Maneuver (CEM) will start on 12 October 2022 and when it exits the constellation, it will have a lowered orbit of 694 km, 11 km closer to Earth from its previous 20+ year orbit of 705 km.

Terra is still expected to remain operational for at least another five years, though with earlier crossing times, there may be longer shadows, and being closer to Earth, the sensor views will narrow and data/imagery swath widths may narrow. Despite these changes, the impact to science is expected to be minimal and some of these changes could help with areas of research such as land morphology, surface temperature and climate research.

- Learn more about Terra's orbital drift: [Terra Orbital Drift Information](#)
- Read about Terra's eventual decommissioning: [From Terra to Terra Firma](#)
- Request for Information: [NASA's Terra, Aqua and Aura Drifting Orbits Workshop](#)