

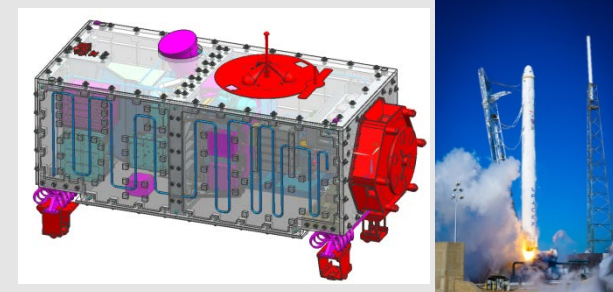


Mission Summary: Orbit Carbon Observatory 3 (OCO-3)



Salient Features

- Category 3 mission; Risk classification C
- High-resolution, three-channel grating spectrometer (JPL)
- Partnership between SMD and HEOMD
- To deploy on the International Space Station
- Launch: May 4, 2019
- Operational Life: 3 years after 90 days in orbit Checkout
- Project Manager: Ralph Basillo, JPL
- NASA Program Executive: Charles Webb, HQ
- NASA Program Scientist: Ken Jucks, HQ
- ESSP Program Manager: Greg Stover, HQ-LaRC
- ESSP Mission Manager: Brooke Thornton, HQ-LaRC



Primary Mission Objectives:

Collect the space-based measurements needed to quantify variations in the column averaged atmospheric carbon dioxide (CO₂) dry air mole fraction, XCO₂, with the precision, resolution, and coverage needed to improve our understanding of surface CO₂ sources and sinks (fluxes) on regional scales (≥ 1000 km).

Measurement precision and accuracy requirements same as OCO-2

Operation on ISS allows latitudinal coverage from 51 deg S to 51 deg N