

MBCA Annual Meeting Lecture
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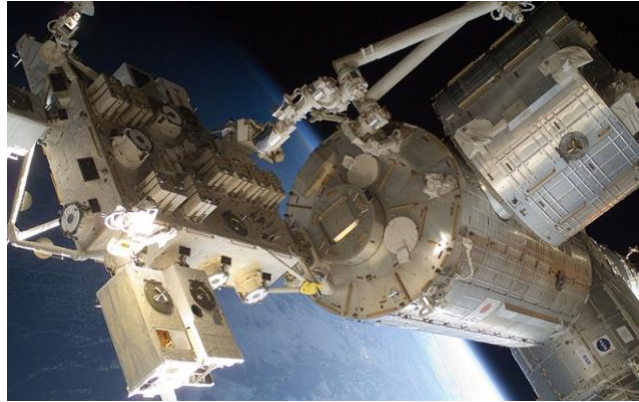


Image of the part of the International Space Station where JPL's Orbiting Carbon Observatory-3 is installed (The Japanese Exposed Module, or JEM).

The Orbiting Carbon Observatory-2 was NASA first mission focused on space-born measurements of carbon dioxide. It launched in 2014, and a follow-on, OCO-3 was installed on the international Space Station in 2019. These two missions are providing a new view of carbon dioxide around the earth with coverage and precision never seen before. This talk will review some key aspects of how carbon dioxide moves between Earth's atmosphere, plants, and ocean, and then show what we see from space with these two instruments. Results will include the seasonal cycles in carbon dioxide from space, the influence of plants, city emissions, and how phenomena like El Nino impact carbon dioxide.