ATS/CIRA Colloquium

Annmarie Eldering

Visiting ATS from NASA/JPL

Watching the Earth Breathe from Space: The OCO-2 and OCO-3 missions

Hosted by Chris Kummerow

Friday, Nov. 16, 2018

ATS room 101
Discussion will begin at 11:15 a.m.
Refreshments will be served at 10:45 a.m. in the weather lab

Global carbon dioxide measurements by the Orbiting Carbon Observatory-2 and the upcoming Orbiting Carbon Observatory-3 are a new way to watch the earth breathe from space. These missions are motivated by the large, yet poorly understood, interannual variability in the fraction of human CO2 emissions that are removed by plants and the ocean each year. I will discuss the measurements technique, some of the key findings to date from OCO-2, and the remaining challenges. I will also describe the OCO-3 payload, slated for installation on the International Space Station in February 2019. With this new platform, we will collect measurements across the full range of sunlight hours, and add unique, focused measurements of emission hotspots and other local areas of interest.

Annmarie Eldering is the Deputy Project Scientist of OCO-2 and the Project Scientist of OCO-3 at NASA's Jet Propulsion Laboratory.

Link to colloquia page: https://www.atmos.colostate.edu/colloquia/