

Published on *American Geosciences Institute* (https://www.americangeosciences.org) Home > NASA launches satellite aimed at measuring carbon dioxide levels

## NASA launches satellite aimed at measuring carbon dioxide levels

## July 2, 2014

On the morning of July 2, NASA launched a satellite tasked with measuring the global distribution of carbon dioxide. The Orbiting Carbon Observatory-2 (OCO-2), NASA's first successfully launched spacecraft dedicated to studying carbon dioxide in the atmosphere, was sent into orbit after a one-day delay. NASA's previous attempts to launch similar satellites, OCO and Glory, each resulted in launch failures.

Following a three-week calibration process, OCO-2 will begin collecting millions of samples uniformly distributed across the atmosphere, land, and water of Earth. This data will enable researchers to more precisely determine the sources of carbon dioxide in the atmosphere and the location of carbon sinks, areas that absorb carbon dioxide emissions.

NASA scientists have highlighted the importance of measuring global carbon dioxide levels and locating global carbon sources and sinks. Dr. David Crisp, principal director for the OCO-2 mission, stated that more accurate measures of carbon sinks, along with carbon sources, will enable regulators and industry to better manage carbon dioxide levels. Dr. Michael Frelich, Director of NASA's Earth Sciences Division, stated that OCO-2 will lay the foundation for more informed policy decisions on climate change. The mission, which is planned to last for at least two years, will provide its first estimates of global carbon dioxide concentrations in early 2015.

Sources: E&E News, NASA Updated 8/8/14