

**Opportunity Title:** Earth Science: Tropospheric Photochemistry: Modeling and Data Analysis

**Opportunity Reference Code:** 0085-NPP-NOV23-GSFC-EarthSci

**Organization** National Aeronautics and Space Administration (NASA)

**Reference Code** 0085-NPP-NOV23-GSFC-EarthSci

**Application Deadline** 11/1/2023 6:00:59 PM Eastern Time Zone

**Description** Tropospheric ozone and transformation of photoreactive trace gases in the troposphere are the general topics of investigation in this project, which involves numerical modeling of photochemistry and analysis of data from NASA field experiments and satellites. Broad areas of research include but are not limited to the following: (1) simulations of changing levels of the atmospheric trace gases, especially methane and oxidants OH, ozone, and hydrogen peroxide; (2) analysis of satellite and field data from ground-based, ship-based, and aircraft experiments to improve understanding of biogeochemical cycles and processes affecting ozone distributions in the troposphere (particularly the marine atmosphere); and (3) ability to deal with uncertainties in photochemical models and to represent small-scale, highly variable processes (e.g., air-sea trace gas fluxes, convection, precipitation) in global models.

**Location:**

Goddard Space Flight Center  
Greenbelt, Maryland

**Field of Science:**Earth Science

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**Applications with citizens from Designated Countries will not be accepted at this time, unless they are Legal Permanent Residents of the United States.** A complete list of Designated Countries can be found at: <https://www.nasa.gov/oiiir/export-control>.

Eligibility is currently open to:

- U.S. Citizens;
- U.S. Lawful Permanent Residents (LPR);
- Foreign Nationals eligible for an Exchange Visitor J-1 visa status; and,
- Applicants for LPR, asylees, or refugees in the U.S. at the time of application with 1) a valid EAD card and 2) I-485 or I-589 forms in pending status

**Eligibility Requirements**

- **Degree:** Doctoral Degree.