zintellect
climb higher

Opportunity Title: Stratosphere-Troposphere Coupling and Impacts on Surface Climate and Composition
Opportunity Reference Code: 0013-NPP-MAR26-GISS-EarthSci

Organization National Aeronautics and Space Administration (NASA)

Reference Code 0013-NPP-MAR26-GISS-EarthSci

How to Apply All applications must be submitted in Zintellect

Please visit the NASA Postdoctoral Program website for application instructions and requirements: How to Apply | NASA Postdoctoral Program (orau.org)

A complete application to the NASA Postdoctoral Program includes:

1. Research proposal
2. Three letters of recommendation
3. Official doctoral transcript documents

Application Deadline 4/2/2026 6:00:59 PM Eastern Time Zone

Description **About the NASA Postdoctoral Program**

The NASA Postdoctoral Program (NPP) offers unique research opportunities to highly-talented scientists to engage in ongoing NASA research projects at a NASA Center, NASA Headquarters, or at a NASA-affiliated research institute. These one- to three-year fellowships are competitive and are designed to advance NASA's missions in space science, Earth science, aeronautics, space operations, exploration systems, and astrobiology.

Description:

This opportunity is closed to applicants who are Senior Fellows (5-years or more past PhD).

Stratospheric variability impacts surface weather and climate on timescales ranging from days to decades. In addition, the stratosphere affects tropospheric composition not only through the stratosphere-to-troposphere transport of ozone but also indirectly by modulating tropospheric dynamics. This project is broadly oriented towards using the Goddard Institute for Space Studies (GISS) ModelE middle atmosphere climate model in concert with both NASA reanalyses and remote sensing (e.g., Aura, UARS) as well as ground-based observation networks (e.g., SHADOZ) to identify the mechanisms and timescales by which the stratosphere influences surface climate and composition. Sample topics include stratospheric modulation of Arctic sea ice loss and Northern Hemisphere midlatitude circulation extremes, stratospheric sudden warmings and their relationship with the El Nino-Southern Oscillation (ENSO), interactions between the Quasi-Biennial Oscillation (QBO) and tropical precipitation, etc. Research feeding back on model development (e.g., gravity-wave drag parameterizations) is strongly encouraged.

zintellect
climb higher

Opportunity Title: Stratosphere-Troposphere Coupling and Impacts on Surface Climate and Composition
Opportunity Reference Code: 0013-NPP-MAR26-GISS-EarthSci

Location:
Goddard Institute for Space Studies
New York City, New York

Field of Science: Earth Science

Advisors:
Clara Orbe
clara.orbe@nasa.gov
212-678-5572

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/oiir/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

Questions about this opportunity? Please email npp@orau.org

Point of Contact Mikeala

Eligibility Requirements

- **Degree:** Doctoral Degree.