Opportunity Title: Observational Constraints on Processes Controlling Atmospheric Composition
Opportunity Reference Code: 0032-NPP-MAR26-JPL-EarthSci

Organization National Aeronautics and Space Administration (NASA)

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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:

The postdoctoral fellow will focus their research interests to broadly cover the use of satellite data to provide observational constraints on general circulation and chemical transport models through the use of optimal state estimation (data assimilation) techniques. Interesting aspects of this problem include the application of these techniques to understanding processes controlling ozone and their impact on air quality and climate, providing "top-down" constraints on carbon dioxide fluxes, and creating a framework to reduce uncertainty in the climate response to anthropogenic forcing. At JPL, 4D variational assimilation based on the adjoint of GEOS-Chem has been used. Other approaches, including ensemble Kalman filtering techniques, could also be used.

Location:
Jet Propulsion Laboratory
Pasadena, California

Field of Science: Earth Science

Advisors:
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Applications with citizens from Designated Countries will not be accepted at this time, unless they are Legal Permanent Residents of

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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.