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Opportunity Title: Modeling path delay in the neutral atmosphere
Opportunity Reference Code: 0203-NPP-MAR26-GSFC-EarthSci

Organization National Aeronautics and Space Administration (NASA)

Reference Code 0203-NPP-MAR26-GSFC-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).

The accuracy of space geodesy is limited by mis-modeling path delay in the neutral atmosphere. The focus of the research is to improve path delay models for analysis of Space Geodesy data including data from Very Long Baseline Interferometry (VLBI), Global Navigation Satellite Systems (GNSS), and Doppler Orbitography Radiopositioning Integrated by Satellite (DORIS) by, (1) investigating the use of global numerical weather models, regional weather models, results of InSAR data analysis, water vapor radiometers for determination of errors in path delay modeling; (2) understanding the origin of these errors; and (3) working to develop methodologies for mitigation of these wet-delay errors. In addition to deterministic modeling the path delay in the neutral atmosphere, this research also explores the applicability of the use of big datasets for evaluation of stochastic properties of the atmosphere for given geodetic stations over a defined time interval by utilizing advances of turbulence theory.

Location:
Goddard Space Flight Center
Greenbelt, Maryland

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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/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.