Opportunity Title: Ocean Circulation Studies Combining Satellite Data and Models
Opportunity Reference Code: 0006-NPP-MAR26-JPL-EarthSci

Organization National Aeronautics and Space Administration (NASA)

Reference Code 0006-NPP-MAR26-JPL-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 research opportunity aims to describe and to understand physical processes governing large-scale global ocean circulation from assimilating satellite observations with models of the ocean. The process of combining data and models, i.e., data assimilation, is an emerging area of oceanographic research allowing quantitative syntheses of diverse observations into complete descriptions of the ocean. The study builds on analyses of the Consortium for "Estimating the Circulation and Climate of the Ocean" (ECCO, http://www.ecco-group.org/). Particular research emphasis is placed on the ocean's large-scale seasonal-to-decadal climate variability by analyzing fluxes and budgets of heat and freshwater, circulation pathways, dynamic balances, and causal mechanisms (e.g., Fukumori et al., 2021). Research opportunities include analysis of observations and modeling/assimilation results, development and application of advanced modeling and data assimilation tools including model adjoints, and investigation of the relative merits of different observing systems.

Fukumori, I., O. Wang, and I. Fenty, 2021: Causal Mechanisms of Sea-level and Freshwater Content Change in the Beaufort Sea. J. Phys. Oceanogr., 51, 3217-3234, https://doi.org/10.1175/jpo-d-21-0069.1.

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Location:
Jet Propulsion Laboratory
Pasadena, California

Field of Science: Earth Science

Advisors:
Ichiro Fukumori
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818-354-6965

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.