

Opportunity Title: Climate studies through analyzing satellite observations and climate model simulations

Opportunity Reference Code: 0173-NPP-MAR26-JPL-EarthSci

Organization National Aeronautics and Space Administration (NASA)

Reference Code 0173-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 3/1/2026 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.

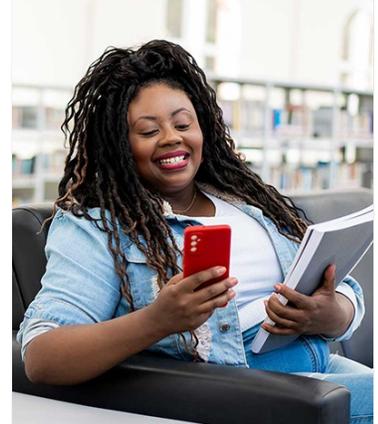
Description:

The NPP scholar will perform climate studies through analyzing observations from the state-of-the-art satellite and reanalysis datasets (e.g., AIRS, CERES, GPM, ERA5, and MERRA-2) as well as climate model simulations from the latest phases of the Coupled Model Intercomparison Project (e.g., CMIP6). The scholar can pursue a wide range of research topics depending on his/her research interests. However, several possible research topics are listed below. How well do CMIP6 models simulate the historical climate in comparison to observations? Has the double-ITCZ bias been reduced in CMIP6 models in comparison to CMIP3 or CMIP5 models? Why does the double-ITCZ bias persist in CMIP models and how to reduce or remove it from the models? Why is there a spread of model climate sensitivity in CMIP6 models and how to constrain the model climate sensitivity using observations? How does the double-ITCZ bias influence model cloud feedback and climate sensitivity?

References:

Tian, B. (2015), Spread of model climate sensitivity linked to double-Intertropical Convergence Zone bias, *Geophysical Research Letters*, 42(10), 4133-4141, doi:10.1002/2015gl064119

Tian, B., & Dong, X. (2020), The double-ITCZ bias in CMIP3, CMIP5, and CMIP6 models based on annual mean precipitation, *Geophys. Res. Lett.*,



Whether you are just starting your career or already at a senior level, ORAU offers internships, fellowships, research opportunities, and contract positions that can provide you with invaluable experience. Download the ORAU Pathfinder mobile app and find the right opportunity to propel you along your career path!

Visit ORAU Pathfinder [↗](#)



Opportunity Title: Climate studies through analyzing satellite observations and climate model simulations

Opportunity Reference Code: 0173-NPP-MAR26-JPL-EarthSci

47(8), 11, doi:10.1029/2020gl087232

Location:

Jet Propulsion Laboratory
Pasadena, California

Field of Science:Earth Science

Advisors:

Baijun Tian
baijun.tian@jpl.nasa.gov
6267207512

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.