Opportunity Title: NASA Foundation Models for Earth Science (Ecosystems, Biodiversity, Environmental Variable Downscaling)
Opportunity Reference Code: 0146-NPP-MAR26-ARC-EarthSci

Organization	National Aeronautics and Space Administration (NASA)
Reference Code	0146-NPP-MAR26-ARC-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:

The NASA Earth eXchange (NEX) seeks a post-doctoral fellow to conduct research related to developing and applying foundation models, including the recently developed Prithvi WxC model. The fellow's work will be conducted in the context of NASA's Earth Science programs with particular emphasis, but not restricted to, on one or more of the following topics: (1) downscaling environmental variables, (2) incorporating foundation model outputs into traditional ecosystem, biodiversity, and/or ecological conservation models/products, and (3) evaluating the impact and utility of the foundation model in these fields of science.

NASA has recently developed several foundation models, some in partnership with industry, such as Prithvi WxC and SatVision. These models leverage ongoing growth in computing power and rapid development of advanced statistical methods (e.g., AI/ML) in recent years. These foundation models represent significant advances in the field of modeling and computer science. The challenge today is to explore how these models advance NASA's science and applications domains, documenting improvements, and contributing to increasingly refined foundation models.

The fellow will be a part of the NASA Earth eXchange (NEX), a cross-cutting activity in NASA's Earth Action portfolio. Current NEX activities include exploiting global geostationary operational satellites for Earth

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science research and applications, modeling and data assimilation, and developing digital twin technologies. Candidates can expect to work with collaborative and dynamic environment that includes fundamental and applied research performed within NASA and with external partners in government, industry, and academia.

Candidates are highly encouraged to contact the NEX team to discuss fellowship research topics related to foundation models prior to submitting an application.

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 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

Qualifications NEX is building a team to conduct research and related activities at the intersection of NASA's Earth Science programs and foundation modeling. The ideal candidates for this fellowship will have domain expertise in either foundation models or one of the NASA Earth Science focus areas, and be familiar with the other. The ideal candidate will also have experience with high performance computing, including NASA's High End Computing Capability (HECC). Candidates experienced with foundation models who lack experience with any Earth Science domain should also apply after discussion with the NEX team.

Point of Contact Mikeala

Eligibility
- **Degree:** Doctoral Degree.

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Requirements