Opportunity Title: Heliophysics Science: Global Magnetospheric Simulation
Opportunity Reference Code: 0030-NPP-MAR26-GSFC-HelioSci

Organization	National Aeronautics and Space Administration (NASA)
Reference Code	0030-NPP-MAR26-GSFC-HelioSci
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
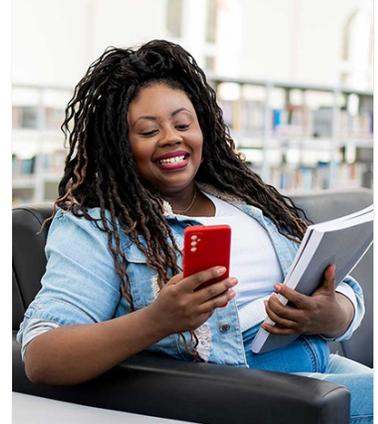3. Official doctoral transcript documents

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:

Current research focuses on developing the next generation of global simulations of the terrestrial magnetosphere and on intercalibrating existing simulation codes against themselves, data-based global models (e.g., those due to Tsyganenko), and against direct spacecraft observations. World-class research capabilities exist in all of these areas. A long-range objective is to develop global magnetosphere simulations, which allow for a quantitatively correct description of the terrestrial magnetosphere system. The presence of the SEC/LWS Programs at Goddard and their goal of understanding the global magnetosphere as a system provide a strong motivation for these research activities. The principal new techniques in global magnetohydrodynamics (MHD) code development include the construction of a finite element; a fully adaptive grid global MHD magnetospheric code, which will allow us to test the limits of MHD methods to modeling the global magnetosphere and on a longer timescale; and the use of hybrid and kinetic code patches to regions of the global MHD code where MHD is not applicable.

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Location:
Goddard Space Flight Center
Greenbelt, Maryland

Field of Science: Heliophysics Science

Advisors:
Alex Glocer
alex.glocer-1@nasa.gov
301-286-9475

Lutz Rastaetter
lutz.rastaetter-1@nasa.gov
301-286-1085

Hyunju Kim Connor
Hyunju.k.connor@nasa.gov
301.286.7417

Christopher Bard
christopher.bard@nasa.gov

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.