Opportunity Title: Lidar Remote Sensing and Modeling of Surface Dynamics of Land and Ice
Opportunity Reference Code: 0142-NPP-MAR26-GSFC-EarthSci

Organization National Aeronautics and Space Administration (NASA)

Reference Code 0142-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 Laser Remote Sensing Laboratory at NASA Goddard Space Flight Center, is considered a leader in the development and application of airborne and spaceborne laser altimetry. A truly unique sensor, developed by members of the Laser Remote Sensing Laboratory, is the Land, Vegetation, and Ice Sensor (LVIS). LVIS is used as an airborne prototype for future spaceborne measurement approaches, science applications, and instrument technologies. Recently, this sensor has been used to collect an extensive datasets of wide-swath surface altimetry over the Greenland and Antarctic ice sheets including mapping of several complete glaciers for monitoring surface elevation change. Along with data collected by other airborne altimetry sensors and spaceborne NASA sensors such as ASTER, SPOT5 and ICESat-1, the high-altitude wide-swath LVIS altimetry data have the potential to increase our understanding of the role of ice sheets and forests in the Earth's climate system. This work involves the assembling of the various air- and space-borne data sets, and the development of algorithms and models to analyze surface differences in order to evolve our understanding of the current state of the cryosphere, ecosphere, and hydrosphere and how they are changing over time. Developing interactive visualization tools for exploring the Earth's surface is

also a priority. Example cryospheric study sites include the Antarctic Peninsula, Pine Island Glacier, Rink Isbrae, as well as regional analyses of southern Greenland and Marie Byrd Land. Ecosystems and topographic studies are possible in a wide array of regions across the U.S. See the LVIS website (http://lvis.gsfc.nasa.gov) for existing data sets and survey areas.

Because this research opportunity spans more than one Field of Science, it is listed separately in the NPP catalog under more than one research opportunity. All of those research opportunities have the same title, but those separate postings describe the same [single] research opportunity.

Location:
Goddard Space Flight Center
Greenbelt, Maryland

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.

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