

Opportunity Title: Earth Science: Cryospheric Sciences Research **Opportunity Reference Code:** 0174-NPP-MAR24-GSFC-EarthSci

Organization National Aeronautics and Space Administration (NASA)

Reference Code 0174-NPP-MAR24-GSFC-EarthSci

Application Deadline 3/1/2024 6:00:59 PM Eastern Time Zone

Description Our research centers on understanding the dynamics and thermodynamics of the sea ice, ice sheets, glaciers, and snow of the Earth (the cryosphere) and the interactions of the cryosphere with the Earth's atmosphere and ocean.

This work focuses on better understanding the role of ice and snow in the Earth System by analyzing data and developing remote sensing methods, algorithms, and physical models to address several important questions. These include understanding the current state of the cryosphere and how it is changing; determining the mechanisms that control those changes; and examining how these changes impact the rest of the Earth System. Our sea ice research efforts focus on understanding the variability of ice cover over time, how the sea ice modulates the exchange of energy and moisture between the ocean and atmosphere, and the influences of sea ice on ocean circulation. Studies of glaciers and ice sheets are targeted toward understanding where these ice masses are growing or shrinking and why, their contributions to sea level rise, and their interactions with the climate system either in response to or as indicators of climate change. The work involves the collection and analysis of in situ, aircraft, and satellite observations along with the development and use of sophisticated models to characterize the behavior of snow and ice and understand the processes at work.

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: <u>https://www.nasa.gov/oiir/export-control</u>.

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

Eligibility • Degree: Doctoral Degree. Requirements