

**Opportunity Title:** Earth Science: Water Cycle Extremes and Climate

**Opportunity Reference Code:** 0010-NPP-NOV23-GSFC-EarthSci

**Organization** National Aeronautics and Space Administration (NASA)

**Reference Code** 0010-NPP-NOV23-GSFC-EarthSci

**Application Deadline** 11/1/2023 6:00:59 PM Eastern Time Zone

**Description** This research focuses on better understanding the extreme fluctuations of global and regional atmospheric water cycles and their interactions with the Earth's surface using NASA Earth science satellite observations, in-situ measurements, modeling including IPCC CMIP model outputs. Topics include (1) statistical analysis of rainfall extreme characteristics (types, frequency and intensity), and associated changes in clouds, moisture and the large scale circulation, (2) analysis and modeling of extreme events clusters including flash flood, severe drought, atmospheric rivers, and tropical cyclones, and possible teleconnections among them, and (3) continental heat wave and prolonged droughts, role of remote forcing vs. local land-atmosphere feedback processes, and (4) High impact hydroclimate events, including estimation of return interval, attributions, and feedback processes involving large scale environment and climate variability and change.

**Location:**

Goddard Space Flight Center  
Greenbelt, Maryland

**Field of Science:**Earth Science

**Advisors:**

Kyu-Myong Kim  
kyu-myong.kim@nasa.gov  
301-614-6223

**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/oijr/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

**Eligibility Requirements** • **Degree:** Doctoral Degree.



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 [↗](#)

