



**Opportunity Title:** NASA Postdoctoral Program Fellow in Large scale hydrology



**Opportunity Reference Code:** 0131-NPP-MAR22-JPL-EarthSci



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

**Reference Code** 0131-NPP-MAR22-JPL-EarthSci

**Application Deadline** 3/1/2022 6:00:00 PM Eastern Time Zone

**Description** The storage and movement of water around our planet is linked to numerous climatological, chemical and biological processes. I conduct research using satellite observations and numerical simulations to better understand and characterize variability of water at the land surface - i.e. in soils, snow and groundwater - to help in predictions of future water availability, global water cycle dynamics and sea level change, and to better understand hydrologic extremes like flood and drought.

A postdoctoral fellow will participate in observation and/or modeling of the terrestrial water cycle. Generally, this work is to identify phenomena and processes in satellite observations that can inform and improve our understanding and ability to simulate the terrestrial water cycle and its relationship with global climate.

Observational work would include data from GRACE, SMAP, GPM or in-situ stations. Model diagnosis and analysis can include CLM, VIC, CLSM, and LIS frameworks including GLDAS and NLDAS. Model development work could focus on moving towards hyper-resolution land surface representations, assimilation or observations, or downscaling and improvement of forcing data.

**Location:**  
Jet Propulsion Laboratory  
Pasadena, California

**Field of Science:**Earth Science

**Advisors:**  
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818-354-0552

**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/oii/export-control>. Eligibility is currently open to:

- U.S. Citizens;
- U.S. Lawful Permanent Residents;

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- Foreign nationals who are in the U.S. at the time of application and on a valid J1 visa; and,
- Foreign nationals, asylees or refugees in the U.S. at the time of application with a valid EAD card and pending I-485 or I-589 forms.

These temporary eligibility limitations have been put in place due to inaccessible U.S. consulates and travel restrictions resulting from the COVID-19 pandemic. Foreign nationals have made many substantive contributions to NASA, as well as to the greater scientific community throughout the life of the NPP. Therefore, we look forward to the time when the program will be open, once again, to all qualified scientists and engineers.

**Eligibility  
Requirements**

- **Degree:** Doctoral Degree.