

Opportunity Title: Impacts of wildfires on atmospheric composition and the Earth system

Opportunity Reference Code: 0349-NPP-NOV26-JPL-EarthSci

Organization National Aeronautics and Space Administration (NASA)

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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 11/1/2026 6:00:59 PM Eastern Time Zone

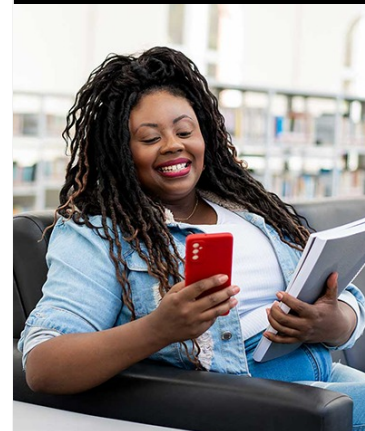
Description About the [NASA Postdoctoral Program](#)

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:

Wildfires have substantial effects on air quality, Earth's radiative balance, and the carbon cycle. Severe wildfire events are increasing in frequency and intensity, making it vital to be able to accurately quantify their effects in these areas both in the past and into the future. The current fleet of low earth orbiting (LEO) and geostationary (GEO) satellites provide a powerful mechanism to this end, with the capability to measure air pollutant and carbon cycle-relevant gases at good spatial resolution and now (with GEO satellites) better temporal resolution than has historically been possible from space.

We seek a postdoctoral scholar motivated to advance our understanding of the impacts of wildfires on the atmosphere and the Earth system. This could include, for example, studies to improve our interpretation of space-based observations of trace gases in fire plumes by addressing existing challenges associated with aerosol loading, radiative transfer and/or prior assumptions. This could also include studies to quantify the effect of wildland-urban interface fires on urban air quality, or to evaluate impacts of wildfires on the carbon cycle. Applicants are encouraged to develop a research plan that makes novel use of LEO (e.g., CrIS, OMPS, OCO-2/3, TROPOMI, Sentinel-5, GOSAT-1/2/GW, MicroCarb or others) and/or GEO



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(e.g., GOES, TEMPO, GEMS, Sentinel-4) platforms, in conjunction with airborne and ground observations as needed.

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

Qualifications The ideal candidate will have experience with the atmospheric chemistry of fire plumes and the use of remotely sensed data on atmospheric trace gas amounts, alone or in combination with *in situ* data or modeling.

Point of Contact [Mikeala](#)

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