**Opportunity Title:** USDA-FS Data Fellow: Geospatial Tool for Climate Change Models and Information
**Opportunity Reference Code:** USDA-FS-NRS-2024-0318

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| **Organization** | U.S. Department of Agriculture (USDA) |
| **Reference Code** | USDA-FS-NRS-2024-0318 |
| **How to Apply** | *To submit your application, scroll to the bottom of this opportunity and click APPLY.* |

A complete application consists of:

- An application
- Transcript(s) – For this opportunity, an unofficial transcript or copy of the student academic records printed by the applicant or by academic advisors from internal institution systems may be submitted. Click here for detailed information about acceptable transcripts.
- A current resume/CV, including academic history, employment history, relevant experiences, and publication list
- Two educational or professional recommendations. At least one recommendation must be submitted in order for the mentor to view your application.

All documents must be in English or include an official English translation.

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| **Application Deadline** | 11/8/2024 3:00:00 PM Eastern Time Zone |
| **Description** | **\*Applications will be reviewed on a rolling-basis.** |

**USDA Forest Service Office/Lab and Location:** A fellowship opportunity is available with the US Department of Agriculture (USDA) Forest Service (FS) within the Forest Service Northern Research Station (NRS) located in Delaware Ohio. The fellow may be expected to travel some during this opportunity.

At the heart of the USDA Forest Service's mission is their purpose. Everything they do is intended to help sustain forests and grasslands for present and future generations. Why? Because their stewardship work supports nature in sustaining life. This is the purpose that drives the agency's mission and motivates their work across the agency. It's been there from the agency's very beginning, and it still drives them. To advance the mission and serve their purpose, the USDA Forest Service balances the short and long-term needs of people and nature by: working in collaboration with communities and our partners; providing access to resources and experiences that promote economic, ecological, and social vitality; connecting people to the land and one another; and delivering world-class science, technology and land management.

**Research Project:** Habitat suitability models provide useful information to forest managers, resource managers, landowners, and a wide range of interested users. Considering the potential impacts of climate change on tree and bird species habitats provides important information for forest

management planning. The USDA Forest Service Northern Research Station has provided modeled habitat suitability for eastern United States trees and birds since the early 2000s. The [Climate Change Atlas](#) content is currently being migrated to ArcGIS Online (AGOL) which will expand the ability to include more dynamic spatial content. Representatives from multiple teams within the USDA Forest Service are supporting work to transition the Climate Change Atlas content to the AGOL platform.

The opportunity will be a part of a small group of researchers in transitioning online content to ArcGIS Online content to serve a wide user base and expand functionality. This content is part on on-going research exploring the potential changes in habitat suitability for tree and bird species in the eastern United States as climate conditions change during the century.

**Learning Objectives:** The fellow will have the opportunity to:

- Contribute to the implementation of content within the developed AGOL products.
- Enhance collaborative skills by participating as a member of a multidisciplinary team of research scientists and natural resource specialists from federal agencies and universities.
- Strengthen their research, analysis, and writing skills in spatial analysis, science synthesis, and assessments of forest assets and conditions.
- Enhance their communication skills through participating in team meetings and project documentation.

**Mentor:** The mentors for this opportunity are Matthew Peters ([matthew.p.peters@usda.gov](mailto:matthew.p.peters@usda.gov)) and Maria Janowiak ([maria.janowiak@usda.gov](mailto:maria.janowiak@usda.gov)). If you have questions about the nature of the research, please contact the mentor.

**Anticipated Appointment Start Date: September 2024.** Start date is flexible and will depend on a variety of factors.

**Appointment Length:** The appointment will initially be for one year and three months but may be extended upon recommendation of USDA Forest Service and is contingent on the availability of funds.

**Level of Participation:** The appointment is full time.

**Participant Stipend:** The participant will receive a monthly stipend commensurate with educational level and experience.

**Citizenship Requirements:** This opportunity is available to U.S. citizens only.

**ORISE Information:** This program, administered by ORAU through its contract with the U.S. Department of Energy (DOE) to manage the Oak Ridge Institute for Science and Education (ORISE), was established through an interagency agreement between DOE and USDA Forest Service. Participants do not become employees of USDA, USDA Forest Service, DOE or the program administrator, and there are no employment-

related benefits. Proof of health insurance is required for participation in this program. Health insurance can be obtained through ORISE.

**Questions:** Please visit our [Program Website](). After reading, if you have additional questions about the application process please email [ORISE.USFS.NRS@orau.org]() and include the reference code for this opportunity.

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| **Qualifications** | The qualified candidate should have received a master's or doctoral degree in one of the relevant fields ( Geography, Ecology, Environmental Science, Earth System Science, or related field). Degree must have been received within the past five years. |

**Preferred Skills:**

- Creative and highly motivated individual with strong scientific background and excellent oral and written communication skills in English.
- Detailed oriented, able to act both independently and in a small group collaboration, able to conceptualize linkages between various data sets to develop products.
- Prior experience working in ArcGIS Online (AGOL) is preferred.
- A familiarity with R or Python programming languages.
- Some combination of the following skills for which opportunities to strengthen these skills will be provided: some background in geographic information systems (GIS), data entry and database design, metadata and documentation, and familiarity with Python, R, and/or ArcGIS Online. Experience with AGOL Experience Builder, Dashboards, Hub, and/or StoryMaps is regarded as additional merits.

**Eligibility Requirements**

- **Citizenship:** U.S. Citizen Only
- **Degree:** Master's Degree or Doctoral Degree received within the last 60 month(s).
- **Discipline(s):**
  - **Computer, Information, and Data Sciences** (3 👁)
  - **Earth and Geosciences** (2 👁)
  - **Environmental and Marine Sciences** (4 👁)
  - **Life Health and Medical Sciences** (3 👁)
  - **Social and Behavioral Sciences** (1 👁)