

**Opportunity Title:** Postdoctoral Research - Crop Water Use and Phenology **Opportunity Reference Code:** ARS-HRSL-2015-0078

**Organization** U.S. Department of Agriculture (USDA)

Reference Code ARS-HRSL-2015-0078

How to Apply A complete application consists of:

- An application
- Transcript(s) <u>Click here for detailed information about acceptable</u> <u>transcripts</u>
- A current resume/CV

If you have questions, send an email to <u>USDA-ARS@orau.org</u>. Please include the reference code for this opportunity in your email.

- **Description** A postdoctoral research opportunity is available with the Hydrology and Remote Sensing Laboratory (HRSL) in Beltsville, Maryland. The overall objective of the project is to create high temporal and spatial remote sensing data products from MODIS, Landsat, and Landsat-like sensors, along with geostationary satellite datasets, for time-continuous monitoring of crop condition and water use at scales resolving individual farm fields. The expected outcomes from the project include:
  - 1. analysis of trends/drivers of crop phenology change in the Cornbelt for 2000 to present;
  - 2. assessment of spatial variability in water use and drought resilience over agricultural landscapes; and
  - 3. evaluation of evapotranspiration anomalies from thermal infrared imagery as an early indicator of crop stress and yield impacts.

The appointment is full-time for one year and may be renewed upon recommendation of the ARS and availability of funding. The participant must show proof of health and medical insurance. Health insurance can be obtained through ORISE. The participant does not become an employee of the ARS or ORISE.

This opportunity is available to U.S. Citizens, Lawful Permanent Residents (LPR), and foreign nationals.

This is an equal opportunity program open to all qualified individuals without regard to race, color, age, sex, religion, national origin, mental or physical disability, genetic information, sexual orientation, or covered veteran's status.

For more information about the ARS Research Participation Program, please visit <u>http://www.orise.orau.gov/usda-ars</u>.

Qualifications To be eligible, applicants must have received a doctorate degree in remote sensing, hydrology, or a related field is required. Knowledge of crop water use and crop growth stages is a plus. Strong programming expertise analyzing large remote sensing images using C, Fortran, IDL or similar computing language is preferred.

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- Eligibility Degree: Doctoral Degree.
- Requirements Discipline(s):

  - Earth and Geosciences (<u>1</u>
  - Environmental and Marine Sciences (1. )
  - Life Health and Medical Sciences (2.)
  - Mathematics and Statistics (1. )