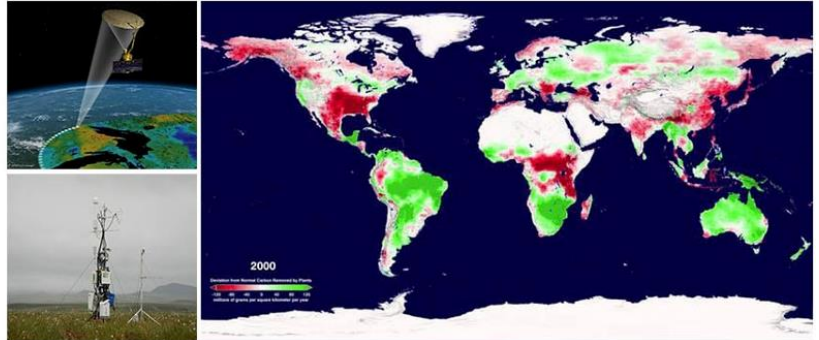


Postdoctoral Research Associate, Numerical Terradynamic Simulation Group (NTSG)

Tracking Code
1931-254

Job Description



Postdoctoral research opportunity in the application of satellite microwave remote sensing to Arctic hydrology

The Numerical Terradynamic Simulation Group (NTSG) at the University of Montana invites applications for a postdoctoral researcher to study satellite microwave remote sensing of surface soil freeze-thaw (FT) cycles and their influence on basin runoff and river discharge to the Arctic coastal zone. The successful candidate will be part of a NASA funded multidisciplinary research team integrating and applying satellite microwave remote sensing data from a variety of sensors and frequencies to derive surface soil freeze-thaw status. The resulting soil freeze-thaw record will be analyzed with available ground station measurements and a regional water balance model to evaluate soil FT impacts on surface runoff and river discharge over large Arctic basins.

Qualifications

We seek candidates with the following skills:

- Educational background and PhD in Environmental Engineering or related field
- Demonstrated knowledge of remote sensing fundamentals including satellite microwave remote sensing
- Understanding of numerical methods for data integration and analysis, including data assimilation and optimization techniques
- Expertise in hydrology and hydrological process modeling
- Programming ability in C/C++, Python, R or similar languages
- Proficiency with image processing software (e.g., Matlab, IDL) and Linux
- Proficiency in conducting independent scientific research and demonstrated ability to publish in the peer-reviewed scientific literature
- Ability to communicate and interact well with others in a large interdisciplinary research group

Position Details

- The successful applicant will be employed by the University of Montana on a 12-month Letter of Appointment, including competitive salary, medical/dental and retirement benefits.
- The position is located within NTSG on the University of Montana campus in Missoula, MT.
- Contracts are renewed annually and may continue for up to 5 years depending on funding availability and job performance.

About UM

The University of Montana is a unit of the Montana University System with approximately 12,000 undergraduate and graduate students and 500+ full-time faculty members. It is located in Missoula, a culturally vibrant community of about 70,000, surrounded by mountain grandeur which was recently ranked in the “top 20 best college towns with a population of less than 250,000” by the American Institute for Economic Research and ranked 9th in Outside Magazine’s “The 16 Greatest Places to Live in America” in 2014. Many national publications recognize Missoula for its high quality of life. Abundant recreational opportunities in surrounding state and national forests and nearby Glacier National Park and Yellowstone National Park complement a thriving intellectual atmosphere.

The University of Montana is an Affirmative Action/Equal Opportunity employer and has a strong institutional commitment to the principle of diversity in all areas. In that spirit, we are particularly interested in receiving applications from a broad spectrum of qualified people who would assist the University in demonstrating its essential values of innovation and creativity, impact, openness, and partnership.

To learn more about the University of Montana, Missoula, and the State of Montana, please visit the links below.

- University of Montana
 - University Highlights
- City of Missoula
 - Destination Missoula
 - Video: There's This Place
 - Missoula Area Chamber of Commerce
- State of Montana
 - Visit Montana

Criminal Background Investigation is required prior to Offer of Employment.

In accordance with University policy, finalists for this position will be subject to criminal background investigations.

ADA/EOE/AA/Veteran's Preference.

Reasonable accommodations are provided in the hiring process for persons with disabilities. For example, this material is available in alternative format upon request. As an Equal Opportunity/Affirmative Action employer, we encourage applications from minorities, veterans, and women. Qualified candidates may request veterans' or disabilities preference in accordance with state law.

References *References not listed on the application materials may be contacted; notice may be provided to the applicant.

Testing Individual hiring departments at UM may elect to administer pre-employment tests, which are relevant to essential job functions.

Employment Eligibility. All New Employees must be eligible and show employment eligibility verification by the first date of employment at UM, as legally required (e.g., Form I-9).

How to Apply

Priority Application Date: April 22, 2018. Position is open until filled.

Please submit the following application materials via "New Resume/CV" button below. Applications must be submitted via the UM Jobs system at <https://umjobs.silkroad.com>.

**Please note: only five (5) attachments are allowed per application. Please combine documents accordingly.*

- **Curriculum vitae**– listing education and describing work experience
- **Statement of research interests** – to the attention of Dr. John Kimball
- **Professional References** – names and contact information for three (3) professional references.

Job Location

Missoula, Montana, United States

Position Type

Full-Time/Regular