Opportunity Title: Postgraduate Researcher in Geographic Information Systems (GIS) Analysis

Opportunity Reference Code: ORNL11-05-ESD

Organization	Oak Ridge National Laboratory (ORNL)
Reference Code	ORNL11-05-ESD

Description   The Environmental Sciences Division (ESD), http://www.esd.ornl.gov at the Oak Ridge National Laboratory (ORNL), http://www.ornl.gov has several openings for research associate positions beginning immediately. These positions involve the use of geographic information systems in modeling studies for carbon cycle, climate, hydrology, and ecological impacts. These projects are funded by NASA and are described on the Internet.

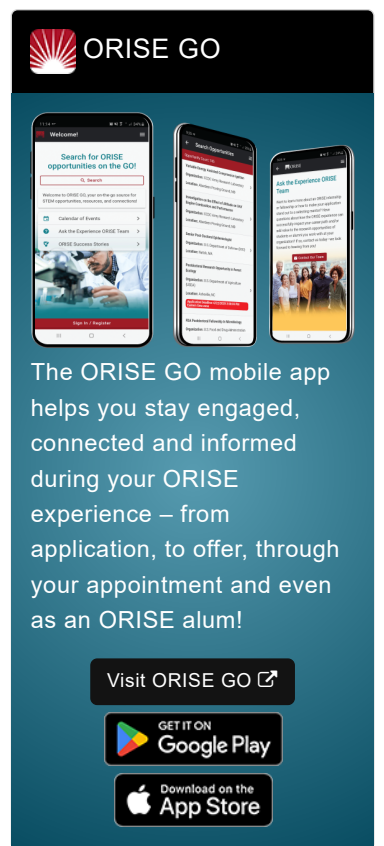Modeling and Synthesis Thematic Data Center (Robert Cook, PI)

http://nacp.ornl.gov/mast-dc/

ORNL Distributed Active Archive Center (DAAC) for Biogeochemical Dynamics.

http://daac.ornl.gov/

Annual salary depends on experience. The position will be based at ORNL in Oak Ridge, Tennessee. All travel expenses are provided. The position is for one year with the possibility of extending for up to three years.

Qualifications   Candidates should have an M.S. or Ph.D. in geography, ecology, soil science, forestry, or a related field. We seek a candidate with superior oral and written communication skills, excellent organizational skills, and strong personal motivation. The candidate must have knowledge and practical experience in using GIS software such as ESRI (workstation Arc/Info, ArcGIS, ArcView and associated modules such as GRID and Spatial Analyst) or other GIS/processing packages, and knowledge and experience in using image processing software such as ENVI or IDRSI. Experience with handling spatial data in netCDF and CF-compliant formats is a requirement. Familiarity with visualization tools like IDV, NCL (NCAR Command Language), IDL, or others is an advantage. The candidate must have experience in using Phyton, PERL, or other languages for managing GIS data. In addition, the candidate must have experience in acquiring and managing spatial data and familiarity with applying basic ecological and geographical principles within a spatial modeling framework. The candidate should have familiarity with UNIX and Windows operating systems, familiarity with environmentally relevant data layers, and programming experience, specifically in the context of developing GIS applications.

The candidate should be willing to work closely with other research staff in multiple capacities including contributing to a team designed to develop integrated ecological models and supporting the GIS and data needs of research team members. Responsibilities include managing and updating multiple spatial data sets, acquiring and assimilating new relevant spatial data sets, using GIS data and principles of landscape ecology to characterize landscape patterns at multiple scales, providing metadata and documentation for collected and newly created spatial data sets, and data integration.

Opportunity Title: Postgraduate Researcher in Geographic Information Systems (GIS) Analysis

Opportunity Reference Code: ORNL11-05-ESD

Applicants cannot have received the most recent degree more than five years prior to the da

Eligibility Requirements	**Degree:** Master's Degree or Doctoral Degree received within the last 60 month(s). **Discipline(s):** **Chemistry and Materials Sciences** (12 👁) **Earth and Geosciences** (21 👁) **Environmental and Marine Sciences** (2 👁)
Affirmation	I certify that I have completed coursework towards a degree in science, technology, engineering, mathematics, or a related field.