

Two Remote Sensing Global Croplands Positions

Position 1: Research Scientist position in Remote Sensing

Background: The National Aeronautics and Space Administration (NASA) Making Earth System Data Records for Use in Research Environments (MEaSUREs) funded a ~3.5 million dollar U.S. Geological Survey (USGS) led proposal entitled: “*Global Cropland Area Database (GCAD30) through Landsat and MODIS Data Fusion for the Years 2010 and 1990 and Its Dynamics Over Four Decades using AVHRR and MODIS*” for 5 years starting January 2013. The project will be a multi-institute effort involving: USGS, NASA, California State University Monterey Bay, Bay Area Environment Research Institute (BAERI), University of Wisconsin, University of New Hampshire, and a number of national and international partners. The project aims to create a Global Cropland Area Database at nominal 30m for four decades with 4 distinct products:

1. Cropland extent\area;
2. Crop type, with focus on 8 crops that occupy 70% of the global cropland areas;
3. Irrigated *versus* rainfed; and
4. Cropping intensity.

Position Summary: The Bay Area Environment Research Institute (BAERI, <http://baeri.org/>) has an immediate opening for a Research Scientist to be based in USGS Flagstaff, AZ, where she/he will be working under guidance of the project PI. The research scientist’s responsibilities will be to develop and implement algorithms for image processing and remotely sensed global cropland identification, statistical analysis, and data and product synthesis dissemination. BAERI seeks an individual familiar with multi-sensor remote sensing data, large data management, and software programming in parallel computing environments. The successful candidate will be expected to work diligently and cooperatively with the multidisciplinary project team, and her/his responsibilities may include other work as assigned by the PI and Co-investigators from time to time. **The position is hired by BAERI, but located in USGS Flagstaff office.** BAERI is an Equal Opportunity Employer.

Qualifications: The ideal candidate has a Ph.D. in physical sciences or engineering with post-doctoral experience in cropland mapping, strong computing skills and an understanding of agriculture, irrigation, and water issues; has a solid statistical background; is familiar with ERDAS, ArcGIS, Arcview, ERMapper, ENVI, and SAS or R. Candidates with a Masters Degree in Computer Science and considerable remote sensing data processing and GIS demonstrated through a track of publications may also be considered. **This position needs higher experience and skills than position 2.**

Candidates must reside within the United States and be willing to obtain the appropriate security clearance.

Salary and Benefits: Starting compensation for this position is \$69,000/yr, commensurate with experience and education, plus fantastic benefits (e.g., healthcare, retirement plans, annual leave, personal days, and scheduled holiday leave days).

Start date, duration, and commitment: January 1, 2013 or soon after (but no later than March 1, 2013). The position is available for 5 years. Candidates committing for the full duration of the project will be given precedence.

How to Apply: Please submit the applications directly to Dr. Prasad S. Thenkabail, Research Geographer, and USGS (pthenkabail@usgs.gov; thenkabail@gmail.com; Tel.: 928-556-7221) by email ASAP. The application packet should include: (a) cover letter, (b) CV, (c) 3 most relevant publications concerning the project, and (d) 3 letters of references. The letters of references should be e-mailed by the referees directly to Dr. Thenkabail. Review of applications will begin immediately and the best/most suitable candidate hired at earliest opportunity.

Posting date: October 29, 2012.

Position 2: Postdoctoral position in Remote Sensing

(Note: on rare cases Master's with excellent remote sensing skills maybe considered)

Background: The National Aeronautics and Space Administration (NASA) Making Earth System Data Records for Use in Research Environments (MEaSUREs) funded a ~3.5 million dollar U.S. Geological Survey (USGS) led proposal entitled: “*Global Cropland Area Database (GCAD30) through Landsat and MODIS Data Fusion for the Years 2010 and 1990 and Its Dynamics Over Four Decades using AVHRR and MODIS*” for 5 years starting January 2013. The project will be a multi-institute effort involving: USGS, NASA, California State University Monterey Bay, Bay Area Environment Research Institute (BAERI), University of Wisconsin, University of New Hampshire, and a number of national and international partners. The project aims to create a Global Cropland Area Database at nominal 30m for four decades with 4 distinct products:

1. Cropland extent/area;
2. Crop type, with focus on 8 crops that occupy 70% of the global cropland areas;
3. Irrigated *versus* rainfed; and
4. Cropping intensity.

Position summary: The USGS Flagstaff, AZ office has an immediate opening for a post doctoral researcher where she/he will be working under guidance of the project PI. The post doctoral researcher responsibilities will be to develop and implement algorithms for image processing and remotely sensed global cropland identification, statistical analysis, and data and product synthesis dissemination. Position requires an individual familiar with multi-sensor remote sensing data, large data management, and software programming in parallel computing environments. The successful candidate will be expected to work diligently and cooperatively with the multidisciplinary project team, and her/his responsibilities may include other work as assigned by the PI and Co-investigators from time to time. USGS is an Equal Opportunity

Employer. **This position is hired through USGS or Northern Arizona University or through an alternative Institute that is currently worked on. However, the position will be based in USGS Flagstaff, AZ office.**

Qualifications: A Ph.D with excellent credentials in heavy volume remote sensing computing experience maybe considered. The candidate should be very knowledgeable in remote sensing and GIS with strong understanding of agriculture, irrigation, and water issues. He\she is expected to have worked on cropland mapping over several years using remote sensing data and methods. Excellent skills in hyperspectral remote sensing (spectroradiometer, Hyperion) and GIS software tools: ERDAS, ArcGIS, Arcview, ERMapper, and ENVI are a must. Highly knowledgeable in statistics (preferred SAS analysis skills). Excellent skills in processing and managing multi-sensor remote sensing data from wide array of sensors such as Landsat, MODIS, AVHRR, SPOT, IRS, and other systems. Graphics and spreadsheet skills. Candidates must reside within the United States and be willing to obtain the appropriate security clearance. **This position, while entailing nearly the same skills as position 1, requires slightly less experience.**

Salary and Benefits: Starting compensation for this position is \$62,000/yr, commensurate with experience and education, plus fantastic benefits (e.g., healthcare, retirement plans, annual leave, personal days, and scheduled holiday leave days).

Start date, duration, and commitment: January 1, 2013 or soon after (but no later than March 1, 2013). The position is available for 5 years. Candidates committing for the full duration of the project will be given precedence.

How to Apply: Please submit the applications directly to Dr. Prasad S. Thenkabail, Research Geographer, and USGS (pthenkabail@usgs.gov; thenkabail@gmail.com; Tel.: 928-556-7221) by email ASAP. The application packet should include: (a) cover letter, (b) CV, (c) 3 most relevant publications concerning the project, and (d) 3 letters of references. The letters of references should be e-mailed by the referees directly to Dr. Thenkabail. Review of applications will begin immediately and the best\most suitable candidate hired at earliest opportunity.

Posting date: October 29, 2012.
