



The Geomatics Lab, Geography Department at Humboldt-Universität zu Berlin
seeks highly qualified and motivated candidates for

Four Ph.d. positions and one Postdoc position in Land Use Science, Remote Sensing and Spatial Modeling

PhD Position in Remote Sensing (Ref-#: AN/020/11)

(duration 36 months; payment according EGr. 13 (half time position) TV-L HU, starting date: 1st April 2011)

The successful applicant will develop his/her research in the EU-funded international research project '**VOLANTE: Visions of Land Use Transitions in Europe**'. VOLANTE seeks to develop a roadmap for future land resource management in Europe by developing novel, integrated approaches to understand analyze human-environment interactions, understand feedbacks in land use systems, assess land use transitions, and identify critical thresholds in land system dynamics. VOLANTE brings together a team of leading scholars in European land system science and is closely linked to the IGBP/IHDP Global Land Project. The Geomatics Lab participates in this project to map hotspots of recent land use transitions, analyze the drivers of these transitions, and to develop an understanding of archetypical pathways of land use transitions in Europe.

We seek a candidate with an above-average MSc degree or equivalent in Geography, Environmental Sciences, Landscape Ecology or related fields. This position will develop satellite-based tools to quantify land use conversions and intensification in Europe, and carry out European-wide mapping of recent land use transition hotspots. We expect a strong interest in land system science, sustainability science, and global change issues. Prior research experience in land use / land cover monitoring is an asset. A sound background in environmental remote sensing, satellite image processing, as well as excellent command of the English language, good communication skills, and willingness to integrate yourself in an international research environment are mandatory. The position includes teaching duties at the level of 2h/week (during teaching terms).

PhD Position in Land Use Science (Ref-#: DR/007/11)

(duration 36 months; payment according EGr. 13 (half time position) TV-L HU, starting date: 1st April 2011 or earlier)

The successful applicant will develop his/her research in the EU-funded international research project '**VOLANTE: Visions of Land Use Transitions in Europe**'. VOLANTE seeks to develop a roadmap for future land resource management in Europe by developing novel, integrated approaches to understand analyze human-environment interactions, understand feedbacks in land use systems, assess land use transitions, and identify critical thresholds in land system dynamics. VOLANTE brings together a team of leading scholars in European land system science and is closely linked to the IGBP/IHDP Global Land Project. The Geomatics Lab participates in this project to map hotspots of recent land use transitions, analyze the drivers of these transitions, and to develop an understanding of archetypical pathways of land use transitions in Europe.

We seek a candidate with an above-average MSc degree or equivalent in Geography, Environmental Sciences, Agricultural Economics, Landscape Ecology or related fields. This position will assess changes in land use intensity by integrating land use, environmental, and socio-economic data. A second task will be to analyze patterns and drivers of recent land use transitions in Europe. We expect a strong interest in land system science, sustainability science, and global change issues. Prior research experience in land use science and with spatial-statistical models is an asset. A sound background in geodata processing and statistics, as well as proficiency in relevant software packages is required. Excellent command of the English language, good communication skills, and willingness to integrate yourself in an international research environment are mandatory.

**PhD Position in Remote Sensing
(Ref-#: DR/010/11)**

(duration 36 months; payment according EGr. 13 (half time position) TV-L HU, starting date: 1st July 2011))

The successful applicant will develop his/her PhD study on „Remote sensing for assessing regional land use change“ within the BMBF funded research project ‘**„CarBioCial: Carbon sequestration, biodiversity and social structures in Southern Amazonia: models and implementation of carbon-optimized land management strategies“**’. The focus of this PhD study is on the application of remote sensing analysis for land use change on a regional scale. This study is closely linked to parallel PhD studies on land use modeling and ecosystem service analysis in the Geomatics lab. It is embedded in an international research project with the overall aim to analyse land use change and to develop adequate model-based decision-making strategies for land use conflicts in Brazil.

We seek a candidate with an above-average Master degree in Geography, Geoinformatics, environmental sciences, global change studies or similar fields. A sound knowledge in remote sensing and statistics as well as interest in global change and land use change science are required. An excellent command of the English language, good communication skills, and willingness to integrate yourself in an international research environment are mandatory. Additional skills in Portuguese would be an advantage.

**PhD Position in Land Use Modeling
(Ref-#: DR/009/11)**

(duration 36 months; payment according EGr. 13 (half time position) TV-L HU, starting date: 1st July 2011)

The successful applicant will develop his/her research on „Spatio-temporal regional land use modeling“ within the BMBF funded research project ‘**„CarBioCial: Carbon sequestration, biodiversity and social structures in Southern Amazonia: models and implementation of carbon-optimized land management strategies“**’. The focus of this PhD study is on the identification of driving factors, the spatio-temporal modeling of land use change and the analysis of land use conflicts and impacts on a regional scale. This study is closely linked to parallel PhD studies on remote sensing and ecosystem service analysis in the Geomatics lab. It is embedded in an international research project with the overall aim to analyse land use change and to develop adequate model-based decision-making strategies for land use conflicts in Brazil.

We seek a candidate with an above-average Master degree in Geography, Geoinformatics or similar fields. A sound knowledge in spatial analysis and modeling, particularly in land use modeling, and statistics as well as interest in global change and land use change science are required. An excellent command of the English language, good communication skills, and willingness to integrate yourself in an international research environment are mandatory. Additional skills in Portuguese would be an advantage.

**Postdoc Position in Remote Sensing
(Ref-#: DR/008/11)**

(duration 36 months; payment according EGr. 13 (full time position) TV-L HU, starting date: 1st March 2011)

The successful applicant will develop his/her research in a project on „Remote sensing based monitoring of change in land use and biomass“ within the EU funded research project ‘**I-REDD+: Impacts of Reducing Emissions from Deforestation and Forest Degradation and Enhancing Carbon Stocks**’. The overall objective of I-REDD+ is to obtain an improved understanding of how REDD+ may 1) reduce emissions of GHG and maintain or enhance existing stocks of carbon in vegetation and soil; 2) impact livelihoods and welfare of local communities; 3) impact biodiversity conservation, and 4) provide a realistic framework for monitoring, reporting and verification of REDD+. I-REDD+ partners are leading European and Southeast Asian research institutions and international research organizations.

We seek a candidate with an above-average Ph.D. in Remote Sensing. He/she will monitor forest change in SW-China, Lao PDR, Vietnam and Indonesia on sub-national scales based on different remote sensing sources and techniques. We expect a strong interest in REDD, land system science, and remote sensing methods. Prior research experience in related research fields is an asset. A sound background in environmental remote sensing, satellite image processing, as well as excellent command of the English language, good communication skills, and willingness to integrate yourself in an international research environment are mandatory.

What we offer

We offer positions in an international, young and dynamic team with an excellent scientific record. Funding for participating in scientific conferences, summer schools, and relevant workshops is available. The employment at Humboldt-Universität zu Berlin offers all benefits of the German public service, including health insurance.

At the **Geomatics Lab** at the Geography Department of Humboldt-Universität zu Berlin, we develop and apply spatially explicit approaches grounded in remote sensing, spatial statistics, and spatial modelling to better understand coupled human-natural systems. We contribute to the emerging discipline of Land System Science by *analyzing the rates and spatial patterns of land system change, understanding the drivers of these changes, developing scenarios, and assessing the impacts of land system changes* on ecosystems, biodiversity, and the services they provide. We work highly collaborative with researchers and science institutions worldwide and are active contributors to the IHDP/IGPB Global Land Project and DIVERSITAS.

Humboldt-Universität zu Berlin is located in the Berlin-Brandenburg research area and closely linked to neighbouring institutions like the Potsdam Institute for Climate Impact Research (PIK) or the German Research Centre for Geosciences (GFZ). The German capital Berlin is Germany's largest city with an inspiring metropolitan flair and great scientific networking opportunities.

Researchers of all nationalities are welcome to apply. Humboldt-Universität zu Berlin strives to increase the share of women in research, is a certified **family-friendly** university and strongly encourages women to apply. We are committed to promoting handicapped individuals and **applicants with disabilities** who are equally qualified will be favored.

Applications including a letter of motivation, full CV, a sample writing representative of the candidate's work (e.g. a scientific article), and the names and contact details for two references shall be sent in a single PDF file to Dagmar Wörister (dagmar.woerister@geo.hu-berlin.de). Please include the reference number in the content line of your email.