2 PhD students wanted – starting 2019

The research project “Effects of bioturbation on rates of vertical and horizontal sediment and nutrient fluxes” is looking for two Chilean PhD students. The project is part of the 6-year priority program EarthShape that started in 2016 and is funded through the German Science Foundation. The project’s goal is to analyze the influence of burrowing animals on the density and composition of the vegetation as well as rates of matter and nutrient redistribution in the weathering zone and at the surface. Field work will take place along the Chilean Coastal Cordillera, between 25° and 40°S - one of the very few regions on Earth with uniquely rich conditions for quantifying biotic interactions with topography. The four primary areas for field work comprise the National Park Pan de Azúcar, the Private Reserve Santa Gracia, the National Park La Campana and the National Park Nahuelbuta.

You will be involved in the field work within the project:

- quantify the animal bioturbators and the vegetation in all four primary areas of the EarthShape project.
- relate spatial patterns of vegetation derived by remote sensing techniques along the climate gradient to the distribution and abundance of burrowing animals.
- quantify effects of bioturbators on soil, nutrients, and sediment redistribution.
- derive transfer functions between vegetation and animal bioturbation, based on measured and remote sensing data, to upscale bioturbation activity from the plots to the entire EarthShape catchments.

You will work in an international team with other students and researchers. You will spend two years in Chile for field work and analyses and a third year for analyses and writing of publications and thesis in Germany. Experience in field work and passion for work in nature is advantageous!

For more information please see the projects webpage [www.earthshape.net](http://www.earthshape.net) and contact Prof. Dr. Nina Farwig (nina.farwig@uni-marburg.de).