Postdoctoral position in crustal deformation and geodesy at the Institute of Earth Sciences (IES), Academia Sinica, Taipei (Taiwan)

In the framework of the 2026 Academia Sinica Career Development (CDA) 5-yr project 'Fine-grained multidisciplinary analysis of the continuum of fault slip modes during active fault deformation in the Longitudinal Valley (Taiwan)', I am recruting a postdoctoral student for 2 years (with possible extension of 1-2 years). The position is opened immediately. The project combines fine-scale seismological and geodetic analysis across the seismic cycle, including the deployment of fiber-optic strainmeter arrays alongside the existing borehole strainmeter and GNSS networks.

What you would work on

The position is not restricted to one task. It can be built around any of the following, and strength in one is enough:

- **Detecting and modeling slow slip and its interaction with seismicity, using 20-25 years of geodetic and seismological records**
- **Time-series methods: transient detection in correlated noise, environmental corrections, template matching, machine learning**
- **Source modeling and inversion from strain, GNSS and InSAR data, including stress transfer between earthquakes**
- **Deployment, calibration and noise characterization of fiber-optic and borehole strainmeters, with field campaigns in eastern Taiwan**

There is also room to develop your own line of research, including on related topics the group works on: strainmeter calibration, typhoon- and hydrology-induced deformation, and strain in the seismological band.

Who we are looking for

Required: a PhD (obtained or near completion) in geophysics, seismology, geodesy, physics or a related quantitative field; a solid background in physics and mathematics; practical experience with time-series analysis; and scientific programming in MATLAB, Python or similar.

Welcome, not required: geodetic data (strainmeters, GNSS, InSAR), earthquake source modeling, machine learning on geophysical signals, optical instrumentation, field experience. Candidates from outside solid Earth geophysics with strong signal-processing or inverse-problem skills are

encouraged to apply.

What you get

One of the densest geophysical networks in any active orogen: 15+ years of continuous borehole strain, dense GNSS and seismic coverage, creepmeters, and the new fiber-optic arrays. Funding for conferences, fieldwork and computing. The institute works in English, no Chinese needed, and Academia Sinica assists with visas and work permits.

How to apply

Email a CV with publication list, a one-page statement of research interests, and two referees to Alexandre Canitano, canitano@earth.sinica.edu.tw. Applications are reviewed as they arrive. Informal enquiries are welcome.