

# **Post-Doctoral Fellow: A Prototype High-Resolution Data-Assimilation System and Reanalysis for Israel**

**Location of the position:** Agricultural Research Organization (Volcani Institute), Israel

**Starting date:** as soon as possible

## **Project description**

We invite you to join our multidisciplinary team, which includes experts in mesoscale climate modeling, remote sensing, and agroclimatology. The project, funded by the Israeli Ministry of Science, Technology, and Space, will build a prototype data assimilation system and reanalysis for Israel. The project will include an investigation of various methods, including machine learning tools, to combine regional climate model (WRF) simulations at convection-permitting resolution with satellite and in-situ observations into a regularly spaced grid. A special focus will be placed on accurately representing air-land processes. The system will be used to study high-resolution and high-frequency air-land interactions.

The candidate will be involved in running model simulations on our High-Performance Computing (HPC) environment, satellite and in-situ data acquisition and analysis, designing and scientific programming of the data-assimilation system, verification of the model and the data-assimilation system, publishing results in scientific journals, and communicating research in scientific meetings and conferences.

## **Required skills**

The candidate should have: (a) Background in Earth sciences, Physics, or Engineering; (c) scientific programming skills and experience working in an HPC environment; (d) Experience with gridded spatial datasets (e.g., NetCDF, satellite imagery); and (e) The ability and desire to communicate research in scientific papers and conferences

The ideal candidate will also have (a) experience in setting up and running the WRF model and (b) Experience in earth system data assimilation

## **Salary and conditions:**

The position is offered for two years with a possible extension for an additional year. The annual expected scholarship is 120-150 K NIS/year (about 32-40 K USD/year), contingent upon prior experience.

## **Application**

Please email a cover letter and CV before December 9, 2024 for full consideration. However, applications will be considered until the position is filled.

For more information and/or to apply for the position, please contact Udi Strobach (udist@volcani.agri.gov.il)