**Institute of Atmospheric Sciences and Climate** of the Italian National Research Council (**CNR-ISAC)** is opening a 16-month position in **Torino, Italy** aiming at developing km-scale climate simulations within the [Climate Digital Twin of the climate system for adaptation studies](), part of the **[Destination Earth]() initiative**. The **project** represents [the second phase]() (in a series of four planned phases), and it is the result of a joint effort of 12 European institutions, coordinated by [CSC](), planning to deliver **km-scale global climate simulations on pre-operational scale**.

The candidate will join an **international team** of almost 100 people working across Europe, and will closely collaborate with a team based at CNR-ISAC and Politecnico di Torino, contributing to:

1. Develop and optimize a python modular and scalable **framework for km-scale climate data analysis** to be used within the Climate DT workflow and in other projects
2. Improve and develop **process-oriented climate model diagnostics** by providing informative graphical products to be published on a real-time monitoring dashboard
3. Develop a **state-of-the-art uncertainty quantification framework** for multi-model coupled climate simulations making use also of **AI/ML approaches**.

**Details**
- **Degree**: physics, engineering, informatics. PhD welcome but not required.
- **Experience**: HPC environments, parallel computing, computing workflow development. Possible experience with ML/AI. Experience in Earth-system modeling, climate data analysis and earth system dynamics is welcome but not fundamental. Experience working in European or Copernicus projects and past participation in software development projects is welcome.
- **Coding**: Python (required) with a focus on xarray and dask, other languages welcome (R, Julia, Fortran, etc.), version control (git), GitHub and GitLab platforms.
- **Salary level:** between 1450 net per month
- **Starting date**: December 2024.
- **Contract lengths**: 16 months.
- **Institutes:** ISAC-CNR
- **Location**: Torino, Italy. Torino is the fourth largest in Italy, with an international and vibrant atmosphere, where cost of living (e.g. rent) is considerably lower than other big Italian cities.
- **Full remote working:** Possible, with initial local training period and regular meetings with the local team.

Due to the short timeframe for the start date and the lengthy process required to issue new work visas by the Italian government, we regret that we can only consider candidates who are either already resident in Italy or who hold an EU passport.

**If you are interested in joining our team or for any further information please contact:**
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