



VACANCY NOTICE – 2026-JRC.E.1-IPR-FGIV-002672

Scientific Project Officer - Hydrologic/hydrodynamic modeller to improve EFAS and GloFAS

Type of contract	Member of the European Commission 's contract staff, Function Group IV (article 3b of the Conditions of Employment of Other Servants)
Duration of contract	36 months (renewable up to maximum 6 years)
Area	Flood forecasting and modeling
Place of employment	Ispra (IT)
Indicative basic salary	4.449,31 - 6.444,59 € (applicable as of 1 st of July 2025) For more detailed information please consult: Working Conditions

WE ARE

The [Joint Research Centre \(JRC\)](#) provides independent, evidence-based knowledge and science, supporting EU policies to positively impact society.

The current vacancy is in the **Disaster Risk Management Unit** of the **Directorate for Space, Security and Migration** which provides scientific and technical support to EU policies addressing global security and crisis management.

Amongst other tasks, the Unit is responsible for the Copernicus Emergency Management Service which includes the flood early warning and monitoring component with its European and Global Flood Awareness Systems (EFAS and GloFAS). Both systems deliver crucial flood early warning information through a variety of products such as medium-range, probabilistic forecasts, flash-flood forecasts and impact-based forecasts. Common to many products of EFAS and GloFAS is the usage of the hydrological model LISFLOOD. LISFLOOD (<https://ec-jrc.github.io/lisflood/>) is an open-source, spatially distributed rainfall-runoff model which was developed at the JRC and is used not only for hydrological forecasting, but also other water related policies.

We are looking for a hydrologic/hydrodynamic modeller that helps us in further improving EFAS and GloFAS. This includes most importantly developments related to the hydrological model LISFLOOD as well as developments to further improve other products such as the impact-based or flash-flood forecasts. The scientific work will be done in strong collaboration with numerous external stakeholders such as ECMWF, hydro-meteorological authorities, and research institutions across Europe.

We offer:

An exciting job opportunity in Italy to contribute to the flood research team's efforts in strengthening the EU's disaster risk management capabilities. The selected candidate will be part of a multi-disciplinary and multi-cultural team working closely with different policy services from the EC as well as with major international actors in the field of flood forecasting and modelling. The post is in a family-friendly working environment with ample opportunities for



collaboration. The Disaster Risk Management Unit highly values inclusivity, transparency, trust, collaboration and a healthy work-life balance.

Please see also [Working at the Commission – conditions and environment \(europa.eu\)](https://european-commission.europa.eu)

WE PROPOSE

The jobholder will work on improving the European and Global Flood Awareness Systems of the Copernicus Emergency Management Service through the following tasks:

- Advance large-scale hydrological modelling with the open-source model LISFLOOD through improving process representation or integrating machine learning into the modelling chain
- Contribute to maintenance, documentation and support of the open-source LISFLOOD GitHub repository including associated tools such as LISVAP, calibration tool, etc.
- Contribute to the further development of existing forecast products in EFAS and GloFAS such as impact-based forecasts or flash-flood forecasts.
- Collaborate and coordinate with other teams inside the JRC as well as external entities such as ECMWF and other European research institutions
- Contribute to networks and partnerships related to flood risk management such as the JRC's Disaster Risk Management Knowledge Center
- Communicate scientific results in line with the EC/JRC rules.
- Contribute to the scientific output through peer reviewed publications as well as through science for policy briefs

WE LOOK FOR

The ideal candidate has the following **essential** requirements:

- A University degree (M.Sc. or comparable) in a relevant scientific area (atmospheric/geo/hydrologic /natural sciences/environmental engineering) together with a minimum of 3 years of research experience or a Ph.D. in the relevant scientific area;
- Advanced experience in hydrologic and/or hydrodynamic modeling;
- Good programming skills in Python;
- Experience in machine learning methods;
- Good interpersonal skills with demonstrated ability to work in a team and be willing to learn and adapt to new tasks;
- Good communication skills (verbal and written) in English (B2);
- A proven track record of peer reviewed scientific publications;

Any of the following skills are an **advantage**:

- Experience with operational flood forecasting systems
- Experience with large-scale (continental, global) modeling incl. handling of datasets;
- Experience in hydrological model development and version control using Git

HOW TO APPLY

If you are **already on a valid CAST FG IV reserve list**, or you **have already applied to one of the calls below**, you can directly submit your application at [JRC Recruitment Portal](https://european-commission.europa.eu).



If not, before applying to this position, **you must register** for one of the two following databases:

- the [Call for Expressions of Interest | EU Careers \(europa.eu\)](https://europa.eu) (CAST Permanent FGIV), which is used by a wide range of organisations (institutions, bodies, offices and agencies of the European Union), or
- the [call for researchers](#) (JRC Call COM/1/2015/GFIV – Research), which is mainly used by the JRC.

Note that each of the calls above has **different minimum eligibility requirements and different selection tests**.

The JRC cultivates a workplace based on respect for other people and the environment, and embraces non-discriminatory practices and equality of opportunity. In case of equal merit, preference will be given to the gender in minority.