VACANCY NOTICE – 2026-JRC.D.2-IPR-FGIV-002529

Project Officer - Water Management Expert - AI and Remote Sensing

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	*Water Management and Remote Sensing*
Place of employment	Ispra (IT)
Indicative basic salary	4.449,31 - 6.444,59 € (applicable as of 1st 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 within the **Unit Ocean and Water** of the **Directorate for Sustainable Resources**.

The Directorate science, positioned at the crossroads of the environment, economy and society, coupled with scientific networks across the EU and beyond, informs policies to ensure that present and future generations enjoy a sustainable planet.

The Ocean and Water's cross-disciplinary science provides independent evidence to support EU policies that underpin freshwater and ocean governance, aligned with the European Water Resilience Strategy and European Ocean Pact. The Unit develops innovative solutions and support Member States in enabling a sustainable and competitive future for water and marine resources in the context of the triple crises of climate change, pollution and biodiversity decline.

We are seeking a highly skilled expert in spatial-temporal analysis to join our team as a Scientific Officer, providing critical expertise to inform water management decisions under the remit of the European water resilience strategy. The successful candidate will design and deliver robust, reproducible analyses at various scales, from individual basins to multi-country regions, with a focus on enhancing water and climate resilience in the Mediterranean and Africa. This will involve integrating multispectral and SAR satellite imagery with cutting-edge data management and processing practices, ensuring rigorous quality assurance and quality control (QA/QC) to support the development of effective water resilience strategies and policies.

As a key member of our team, the selected candidate will contribute to the development and implementation of innovative, spatial-temporal models that address pressing water management challenges, enabling informed decision-making for sustainable water use and

climate adaptation. Collaborating with international partners, including research institutions, governmental bodies, and NGOs, the candidate will drive the development of impactful solutions for water and climate resilience.

The role requires active participation in multi-disciplinary research efforts, stakeholder meetings, and workshops, where the candidate will translate complex scientific findings into actionable insights for policymakers and operational users in the Mediterranean and Africa. Working alongside experts in hydrology, environmental science, and artificial intelligence, the candidate will integrate diverse data sources and methodologies to create innovative solutions that tackle regional water management issues. This is an exciting opportunity to join a dynamic team and make a meaningful contribution to enhancing water and climate resilience in regions that need it most.

We offer:

- A unique opportunity to be part of a dynamic, multidisciplinary and multi-cultural team, tackling the critical issue of water resilience.

- Hands-on experience in shaping and implementing impactful EU policies, driving real change in the area of water resilience.

- Collaboration with a broad network of academics and policymakers and participation in meetings, conferences and workshops that advance research on cutting-edge technologies.

- The opportunity to contribute to high-impact projects and collaborate with leading experts in the field.

- A chance to be at the forefront of innovation, experimenting with new approaches and solutions.

Please see also Working at the Commission – conditions and environment (europa.eu)

WE PROPOSE

The jobholder will have the opportunity to join a dynamic team as a highly skilled scientist in water management and spatial-temporal analysis, making a significant impact on addressing critical water management challenges in Africa and the Mediterranean. This role will reinforce the JRC's support to the European water resilience strategy, EU Cooperation and Development, and related policies, ultimately contributing to the EU Global Gateway strategy. As a member of our team, you will:

- Develop and implement innovative spatial-temporal models that leverage multispectral and SAR imagery to support water management and policy development across various sectors, including water, energy, agriculture, and ecosystems.

- Engage in multi-disciplinary research efforts focused on generating operational and policy-relevant products to tackle water scarcity and quality issues in regions such as the Mediterranean and Sub-Saharan Africa.

- Collaborate with Commission services, international partners, including academic and research institutions, governmental bodies, and NGOs, to drive impactful solutions for water resilience and climate adaptation in the Mediterranean and Sub-Saharan Africa.

- Participate actively in stakeholder meetings and workshops, translating complex scientific findings into actionable insights for policymakers and operational users.

- Work alongside experts in hydrology, environmental science, and AI to integrate diverse data sources and methodologies, fostering innovative solutions for regional water management issues.
- Produce reports, oral presentations, data portals/dashboards and publications in peer-reviewed journals to disseminate results.

WE LOOK FOR

We are looking for a candidate with the following skills and experience, considered essential:

- **University degree** in a relevant scientific or technical field (hydrology, environmental sciences, computer science) with at least 5 years of relevant experience, or a PhD in the field. A master's degree in GIS and Remote Rensing will be an asset.

- **Remote sensing and geospatial expertise:** Demonstrated strong knowledge in remote sensing and geospatial principles and methods, including the application of artificial intelligence (AI) and machine learning (ML) techniques for land and water-cover classification processes, as well as change and anomaly detection to assess impacts on water management and natural resources. Proficiency in processing multispectral (Sentinel-2/Landsat) and SAR (Sentinel-1) imagery on both local and cloud platforms is crucial.

- **Satellite altimetry and water variability assessment:** Experience with satellite altimetry, particularly the SWOT mission, and the ability to accurately assess water variability through rigorous cross-validation with complementary data sources.

- **Climate variability and extremes analysis:** Expertise in analysing climate variability and extremes, including flood and drought impact assessments. Ability to integrate water-quality proxies into quantitative assessments is essential.

- **Geospatial Programming and Data Management:** Advanced programming skills in Python or JavaScript for Google Earth Engine (GEE) are required, along with proven experience in large-scale image processing, analysis, and operational workflow development. Strong GIS and data management skills using both proprietary and open-source platforms (ArcGIS Pro, QGIS) are necessary, with a focus on robust QA/QC practices and a solid understanding of spatial databases.

- **Global Geospatial Datasets:** Familiarity with global geospatial datasets spanning abiotic, biotic, and socio-economic domains.

- **Communication and stakeholder engagement:** Excellent communication skills with experience working in multi-partner and multi-stakeholder project settings. Ability to translate complex technical results into actionable insights for operational users and decision-makers.

- **Good level of English (B2)**

Desirable skills include:

- **Field surveying and ground-truthing**: Extensive knowledge of field surveying techniques for ground-truthing purposes.

- **Training and documentation**: A proven track record in training, documentation, and the deployment of dashboards or applications for operational users.

- **Standards and reproducibility**: Experience in ensuring reproducibility, implementing version control, and adhering to Open Geospatial Consortium (OGC) standards.

Candidates will also be assessed against the following personal attributes:

- **Problem-solving approach**: A methodical, quality-oriented, and pragmatic approach to problem-solving.

- **Teamwork and independence**: Ability to work independently and as part of multidisciplinary teams; comfortable in both technical development and stakeholder-facing roles.

- **Commitment to open science**: Strong commitment to reproducibility, open standards, and transparent science.

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.

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) (CAST Permanent FG IV), which is used by a wide range of organisations (institutions, bodies, offices and agencies of the European Union), or
- the specialised 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.