As the science and knowledge service of the Commission, the mission of DG Joint Research Centre is to support EU policies with independent evidence throughout the whole policy cycle. The JRC is located in 5 Member States (Belgium, Germany, Italy, the Netherlands and Spain). Further information is available at: [https://ec.europa.eu/jrc/](https://ec.europa.eu/jrc/)

The current vacancy is with the Disasters Risk Management Unit of the Space, Security and Migration Directorate. This Unit provides scientific and technical support to EU policies addressing global security and crisis management. The unit is responsible for the Copernicus Emergency Management Service (CEMS) as well as the Disaster Risk Management Knowledge Centre and the Global Human Settlements Layer (GHSL).

The position is for a FG IV scientific project officer to perform research and development, as well as knowledge management, on flood risk vulnerability in the context of EU disaster risk reduction and climate change adaptation policies.

The initial aim of the position is to create a unique, independent record of flood impact and losses at European and global level. This will be done by working on the interface between hydrology and remote sensing fusing different sources of information such as the newly introduced, satellite-based, global flood monitoring product of CEMS with the flood hazard and exposure data already existing in the JRC and other external data sources (e.g. gridded population datasets from the GHSL, other exposure indicators extracted from Open Street Maps, (social) media information on flood events, external databases or national datasets).

The further aim is to derive new knowledge on flood vulnerability and integrate it in early warning and risk solutions of the Unit as well as the Disaster Risk Management Knowledge Centre (DRMKC). The record on flood impact and loss data will support the implementation of the EU Floods Directive as well as the Sendai Framework for DRR and will serve as a basis to better understand the impact of climate change on flood risk.

The successful candidate will perform the following tasks:

- Combine the satellite based flood monitoring maps with modelled flood extent where needed to characterize flood events
- Cross the flood monitoring maps with gridded exposure information from GHSL, OSM, social media and external databases to estimate direct impacts
- Integrate the flood impact information into a
- Derive new knowledge on spatiotemporal patterns of flood vulnerability and contributing to the Unit’s work on multi-hazard vulnerability
- Produce annual reports on the impacts of and vulnerability to floods at European and global scale that, through the Disaster Risk Management Knowledge Centre, support the implementation of the EU Floods Directive as well as the Sendai Framework for DRR.
- Feed the flood impact and loss data into the solutions in the Unit, including the CEMS European/Global Flood Awareness System, the Global Disaster Alert and Coordination System and the Risk Data Hub of the DRMKC

Qualifications:

The ideal candidate must have a degree in a relevant scientific area (atmospheric/geo/hydrologic/natural sciences, environmental engineering, ICT) together with a minimum of 3 years of research experience or a Ph.D.

The following skills are essential:
- Experience in handling and analysing large datasets;
- Experience in flood impact assessment;
- Code proficiency in python;
- Experience in handling geodatabases;
- Experience in Geographic Information Systems;
- Demonstrated self-initiative with the ability to work in a team.

The following skills are useful:
- Experience with knowledge management;
- Experience in physically based flood models;
- Experience in flood mapping from remote sensing;
- Experience in statistical analysis;
- Experience in text mining;
- Experience with multi-disciplinary teams or multi-hazard solutions.

A very good knowledge of written and spoken English (C1) and good communication skills are essential.

The candidate should have a proven track record of peer reviewed scientific publications.

| Directorate Unit | Space, Security and Migration  
| Disaster Risk Management |  
| Further information: [https://ec.europa.eu/jrc/](https://ec.europa.eu/jrc/) |

| Indicative duration | 36 months initial contract with possible renewals up to maximum 6 years |
| Rules and eligibility | The candidate must be on a valid EPSO reserve list for Function Group IV contract staff. If you are not in any valid EPSO reserve list for Function Group IV contract staff, you can still apply by following these steps. You express your interest by applying to the CAST Permanent or to the permanent JRC Call for researchers. 1. CAST Permanent: open-ended selection procedure to create a pool of candidates from which the institutions, bodies, offices and agencies of the European Union (EU) can recruit contract agents. [https://epso.europa.eu/documents/2240_en](https://epso.europa.eu/documents/2240_en) 2. JRC Call COM/1/2015/GFIV – Research: open-ended selection procedure to create a pool of candidates from which mainly the JRC can recruit contract agents FGIV as researchers. Details available at the link below: [https://ec.europa.eu/jrc/en/working-with-us/jobs/vacancies/function-group-IV-researchers](https://ec.europa.eu/jrc/en/working-with-us/jobs/vacancies/function-group-IV-researchers) Only then you can apply for this specific position, through [http://recruitment.jrc.ec.europa.eu/?type=AX](http://recruitment.jrc.ec.europa.eu/?type=AX) **Auxiliary contract staff:** [https://ec.europa.eu/jrc/en/working-with-us/jobs/temporary-positions/contract-staff-members](https://ec.europa.eu/jrc/en/working-with-us/jobs/temporary-positions/contract-staff-members) Article 3b of the Conditions of Employment of Other Servants of the European Union applies: the actual period of employment within the Commission under this type of contract, including any period under renewal, shall not exceed 6 years. *Please note that in case a high number of applications is received only shortlisted candidates will be contacted.* |