



2019-IPR-A5-FGIV-011520

**FGIV – Scientist - Exploratory Research Project  
THERmal MONitoring for urban climate  
adaptation POLICieS (THERMOPOLIS)**

**Position for:**

**FG IV Scientist**

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 <http://ec.europa.eu/jrc/>

The JRC offers a vacancy for a Contract Agent within the Exploratory Research Project THERMOPOLIS (THERmal MONitoring for urban climate adaptation POLICieS).

The JRC Exploratory Research Programme (ER) is a strategic initiative characterised by ideas that might lead to novel results to qualitatively enrich current JRC scientific work.

The ER Project THERMOPOLIS will explore the synergy between diverse existing remotely sensed thermal data and sophisticated computational systems, with the vision to build an advanced heat stress monitoring framework for the urban context. The specific goal is to produce a database of thermal fingerprints for European and African cities based on a novel decametric and sub-daily temperature dataset constructed from the fusion of different complementary products. This will become the baseline for a tool to assist city planners in designing and deploying climate mitigation and adaptation strategies and assessing their efficiency.

The successful candidate will be in charge of:

- Design a novel approach of data fusion between various complementary sources of thermic remote sensing data;
- Implement and apply this technique within the in-house JRC super-computing platform: the JRC Earth Observation Data and Processing Platform (JEODPP);
- Contribute to the development of a tool to monitor urban heat stress across European and African cities using the newly produced data;
- Dissemination/publication of results.

Qualifications:

- Completed university studies of at least three years attested by a diploma and at least five years professional experience in a field relevant to the position, alternatively a doctoral diploma in environmental, physical, biological or computing sciences or related field;
- Extensive knowledge/experience in geospatial analysis and remote sensing with strong scripting skills is essential;
- Broad knowledge in the area of data analysis using large datasets is essential;
- Knowledge of thermal remote sensing and super-computing is an advantage;
- Solid record of research activities relevant for the post

	<p>including publications in international peer-reviewed journals is an advantage;</p> <ul style="list-style-type: none"> <li>• Good oral and written communication skills in English (B2) are essential, knowledge of other languages is an advantage.</li> </ul> <p>In addition, the following competences will be considered as an advantage:</p> <ul style="list-style-type: none"> <li>• Ability to work in a team and in a multi-cultural environment;</li> <li>• The candidate is expected to be creative and work independently.</li> </ul>
<p><b>Directorate Unit</b></p> <p><b>Project</b></p>	<p>Sustainably Resources Bio-economy</p> <p>The Scientific Development Unit of the Directorate for Strategy and Work Programme Coordination is in charge of the overall JRC Exploratory Research Programme.</p> <p>The operational scientific research will take place in the Bioeconomy Unit in Ispra (Italy).</p> <p>Exploratory Research Project: THERmal MONitoring for urban climate adaptation POLIcieS (THERMOPOLIS)</p> <p>Further information is available at: <a href="https://ec.europa.eu/jrc/en">https://ec.europa.eu/jrc/en</a></p>
<b>Indicative Duration</b>	24 months
<p><b>JRC Site</b></p> <p><b>Country</b></p>	<p>Ispra</p> <p>Italy</p>
<b>Rules and eligibility</b>	<p>The candidate must be on any valid EPSO reserve list for Function Group IV contract staff.</p> <p>Applicants to the following Calls for expression of interest can also be considered:</p> <ol style="list-style-type: none"> <li>1. CAST Permanent - EPSO has launched in January 2017 an 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. Details available at the link below: <a href="https://epso.europa.eu/documents/2240_en">https://epso.europa.eu/documents/2240_en</a></li> <li>2. Call COM/1/2015/GFIV – Research - The JRC has launched in January 2015 a permanent call for researchers FG IV. Details available at the link below: <a href="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</a></li> </ol> <p><b>Auxiliary contract staff:</b> <a href="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</a></p> <p>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.</p>

	<p><i>Please note that in case a high number of applications is received only shortlisted candidates will be contacted.</i></p>
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