

DGPF Annual Conference – Darmstadt, 25-27 March 2026

Call for papers for special thematic session

Remote sensing and sustainability: Using geodata to support climate and environmental protection

This interdisciplinary session is dedicated to the use of remote sensing and geoinformatics to support environmental, climate, and nature conservation. The analysis of aerial and satellite images plays a central role in monitoring ecosystems, assessing environmental changes, and planning adaptation strategies in response to the consequences of climate change.

The central theme of the session is how natural ecosystems can contribute to greenhouse gas sequestration and how this contribution can be made visible and quantifiable using geodata-based analyses. Forests, peatlands, and water bodies play a key role as carbon sinks and provide essential ecosystem services.

Thematic emphasis is placed on applications that deal, for example, with the remote sensing-based recording of environmental parameters of these ecosystems or climate-related events such as heat waves and droughts, forest fires, and floods. In addition to the analysis of near-natural areas, urban applications are also of interest, for example, for the detection of heat islands and the evaluation of climate adaptation measures in cities.

With this call, we aim to highlight this highly relevant topic and examine it across working groups. We invite experts from various disciplines to present cutting-edge research. Our goal is to identify current challenges and develop the future direction of research on the use of geodata for climate and environmental protection in an interdisciplinary context. The session is open to contributions from the fields of nature preservation, spatial planning, climate science, and geoinformatics, and promotes integrated approaches to strengthening climate resilience and environmental protection.

All submissions will undergo a review process. The abstract should be no longer than 500 words and include the following points: (i) motivation/problem statement, (ii) method/investigation, (iii) results. Proposals and completed papers must be submitted exclusively via the conference management system "ConfTool." All further information about the event is available on the conference website https://dgpf.de/con/jt2026.html and will be updated regularly. The deadline for submitting abstracts is November 30, 2025

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