

Special Issue

China's First Dedicated Carbon Satellite Mission (TanSat)

Message from the Guest Editors

In China, a series of ambitious projects aiming to mitigate carbon emissions have been in effect for the last 15 years, including the first Chinese greenhouse gas monitoring satellite mission (TanSat). This Special Issue will provide an overview of the latest progress and research on TanSat measurement, focusing especially on the satellite and instrument technics, retrieval algorithm, data application, and calibration/validation. TanSat is China's first carbon satellite providing XCO₂ measurement to scientific research on the global carbon cycle. The next generation of the TanSat mission is current in the design phase, whose goal is to support global stocktake and China's carbon peaking and carbon neutrality goals. We are inviting contributions on new scientific results on topics such as: Measurement technics, incl. satellite and instrument performance; Retrieval algorithm and XCO₂ data product; Carbon flux inversion and data assimilation; TanSat data application, e.g., CO₂ emission/sink investigation; Val/Cal for TanSat measurement. Papers that exploit TanSat data application in global and regional carbon monitoring research are especially encouraged.

Guest Editors

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Deadline for manuscript submissions

closed (15 August 2023)



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Message from the Editor-in-Chief

Remote Sensing is now a prominent international journal of repute in the world of remote sensing and spatial sciences, as a pioneer and pathfinder in open access format. It has highly accomplished global remote sensing scientists on the editorial board and a dedicated team of associate editors. The journal emphasizes quality and novelty and has a rigorous peer-review process. It is now one of the top remote sensing journals with a significant Impact Factor, and a goal to become the best journal in remote sensing in the coming years. I strongly recommend *Remote Sensing* for your best research publications for a fast dissemination of your research.

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