

Multidisciplinary efforts towards regional to global scale CO₂ budget estimation

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The estimation of greenhouse gas (GHG) emissions and removals from the country to the global scales is essential to assess progress towards the goals of the Paris Agreement. The “global stocktake” , specifically aiming to track such progress, provides an important opportunity for the scientific community to contribute towards the development of key indices and measures. The development of country-scale CO₂ budgets are one of such measures. In the Asia-Oceania GEO (AO-GEO) framework, Taskgroup-3: Carbon and GHG Monitoring is expected to contribute to the development of greenhouse gases budgets.

In this presentation, we will show the current activities on this Task group. In particular, we will report on the refinements of both top-down and bottom-up estimate approaches, high-level syntheses , and application of recently available new observation datasets to better understand and constrain carbon budgets at the country, continental, and global scales.

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