## Theme 2: GHG estimation for effectiveness assessment of emission reduction and validation of Earth system model

## Objectives

This theme conducts global-scale evaluations of greenhouse gas budget taking account of atmospheric greenhouse gas variations, and studies on Earth system models in terms of validation of greenhouse gas dynamics, model development, and evaluation of effectiveness for global warming prevention.



Intercomparison of GHG budget

Budget data for integrated analyses
Data for GHG concentration retrievals

Theme 1: Multi-scale evaluation of GHG budgets based on atmospheric observations

Theme 3: GHG budget estimation based on emission inventories, observational data, and biogeochemical models