

GitHub Repository: https://github.com/rebeccamayvarney/soiltau_ec

This repository contains analysis and plotting python scripts for the study:
Spatial emergent constraint on the sensitivity of soil carbon turnover to global warming –
Varney et al. 2020, Nature Communications

Full information on the methods used in this study are attached to this paper and are available online; this includes information about datasets used, as well as the motivation and reasoning behind the analysis.

Initial analysis

- Figure1.py
- SupplementaryFigure1.py
- Figure2.py

Spatial sensitivity analysis:

1. obs_spatial_sensitivity_analysis.py
 2. pofp_analysis_cmip6.py
 3. pofp_analysis_cmip5.py
 4. Figure3.py
- SupplementaryFigure2.py
 - SupplementaryFigure3.py

Spatial emergent constraint analysis

1. paris_agreement_cmip6_analysis.py
2. paris_agreement_cmip5_analysis.py
3. paris_agreement_cmip5_cmip6_plotting.py
4. emergent_constraint_cmip5_cmip6_analysis.py
5. Figure4.py

Observational sensitivity study

- SupplementaryFigure4.py
- SupplementaryFigure5.py
- SupplementaryFigure6.py

Note: Python scripts must run in numbered order: starting with numbered spatial sensitivity analysis scripts and then followed by numbered spatial emergent constraint analysis scripts.