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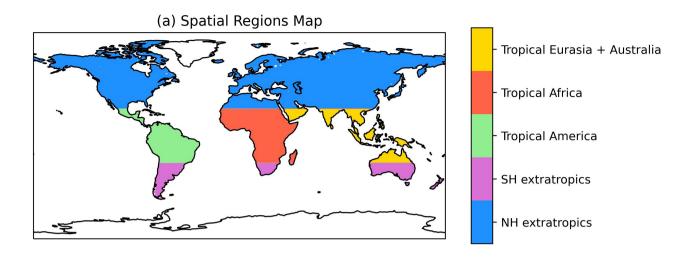
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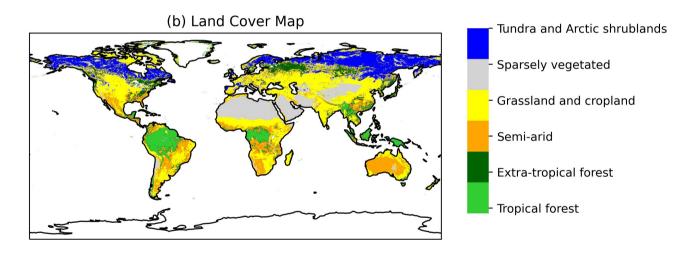
## Strong relation between atmospheric $CO_2$ growth rate and terrestrial water storage in tropical forests on interannual timescales

Samantha Petch et al.

Correspondence to: Samantha Petch (s.petch@pgr.reading.ac.uk)

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**Figure S1.** (a) Map of spatial regions used in study. Percentage land area coverage: Northern Hemisphere extratropics (54%), Southern Hemisphere extratropics (8%), Tropical America (12%), Tropical Africa (18%), Tropical Eurasia and Australia (8%). (b) Land cover vegetation types developed from MODIS data and used for regional flux analysis. Percentage land area coverage: Grassland and croplands (32%), Semi-arid (25%), Tundra and Arctic shrubland (15%), Sparsely vegetated (12%), Tropical forest (10%), and Extratropical forest (5%).

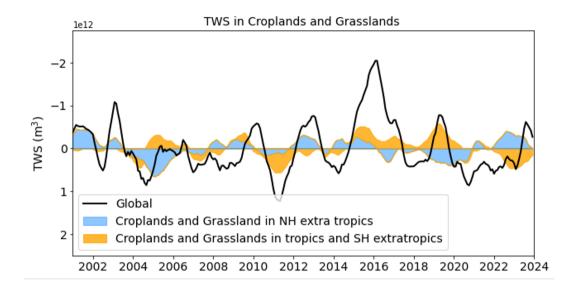


Figure S2. Terrestrial water storage interannual variability for cropland and grassland regions aggregated by Northern Hemisphere (NH) extratropics (blue) and by tropical regions and Southern Hemisphere extratropics (orange).

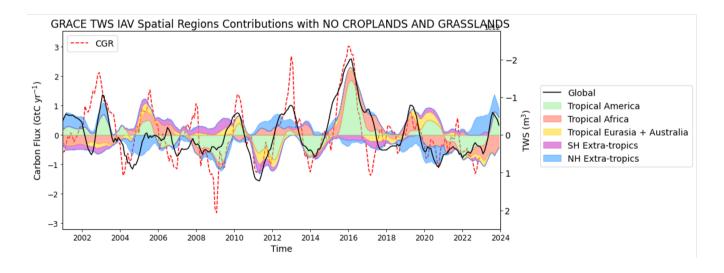


Figure S3. Same figure as Figure 4a in main article, except no cropland and grassland regions are included