

Extended Data Table 1 | Estimates of total ecosystem carbon for the globe and discriminated per biome

| Biome type | Total stocks (PgC) | | | Carbon density (kgC m ⁻²) | | |
|-------------------------------------|--------------------|-------------|-------------|---------------------------------------|-------------|-------------|
| | Mean | P 2.5 | P 97.5 | Mean | P 2.5 | P 97.5 |
| Tropical forests | 702 | 573 | 899 | 35.0 | 28.6 | 44.8 |
| Temperate forests | 292 | 235 | 382 | 23.4 | 18.8 | 30.6 |
| Boreal forests | 505 | 431 | 696 | 34.2 | 29.2 | 47.1 |
| Tropical savannahs and grasslands | 338 | 257 | 467 | 17.7 | 13.4 | 24.4 |
| Temperate grasslands and shrublands | 182 | 145 | 239 | 16.7 | 13.3 | 22.0 |
| Deserts | 250 | 189 | 346 | 9.4 | 7.1 | 13.0 |
| Tundra | 156 | 106 | 186 | 20.5 | 14.0 | 24.5 |
| Croplands | 362 | 279 | 494 | 23.9 | 18.4 | 32.6 |
| Wetlands | 20 | 15 | 27 | 21.1 | 16.3 | 28.6 |
| Total | 2807 | 2252 | 3662 | 22.0 | 17.7 | 28.7 |

Estimates of total ecosystem carbon per biome. Biomes defined according to Prentice *et al.*⁶⁶ as in Beer *et al.*⁶⁷. The ranges report the 2.5th (P2.5) and 97.5th (P97.5) percentiles from each ensemble member aggregated by biome.

66. Prentice, I. C. *et al.* in *Climate Change 2001: The Scientific Basis* (eds Houghton, J. T. *et al.*) 183–237 (Cambridge Univ Press, 2001).
67. Beer, C. *et al.* Terrestrial gross carbon dioxide uptake: global distribution and covariation with climate. *Science* **329**, 834–838 (2010).