

### Rules for scoring system

Score	Certainty of data	Scale appropriateness and coverage	Overall importance of constraint or process
1	Uncertainty estimates not available; significant methodological issues may influence data quality	Site level observations with limited regional coverage and/or short temporal duration	Observations that have limited influence on carbon cycle processes; includes some driver datasets and land surface measurements (e.g., Lin)
2	Uncertainty estimates not available; some methodological issues may influence data quality	Partial regional coverage; data sets providing up to 1 year of coverage	Driver observations or land surface measurements that have direct influence on carbon cycle processes (e.g., PPT, Tair, and Sin)
3	Uncertainty estimates not available; some peer-review evaluation of quality; minor methodological issues may remain	Regional coverage for at least 1 year; mismatches may exist between site-level and model grid cells	Biosphere process that contributes to carbon dynamics; data are a useful constraint for this specific process
4	Qualitative uncertainty information available from peer-review evaluations; methodology is well accepted	Important regional coverage; at least 1 year or more of observations	Important biosphere process regulating carbon cycle dynamics; data are moderately well-suited for constraining this process
5	Well defined and traceable uncertainty estimates; relatively low uncertainty estimates relative to range of model estimates; uncertainties less than $\pm 20\%$ at regional scales	Global scale in coverage; time series spanning multiple years; data products appropriate in scale for comparing directly with model grid cells	Critical process or constraint regulating climate-carbon or carbon-concentration feedbacks; data are well suited for discriminating among different model estimates