Simulated seasonal and interannual variations of CO$_2$ in East Asia over 2004-2012

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How the interannual variation of terrestrial CO$_2$ flux would influence the atmospheric CO$_2$ concentration?

GEOS-Chem (v9-01-03)

- Nested CH (0.5x0.667)
- GEOS-5 meteorology field (2004-2012)

Terrestrial CO$_2$ flux

- Obtained from CarbonTracker (CT2013) (1x1; 3-hourly).
  - CarbonTracker is a CO$_2$ modeling system to keep track of sources and sinks which is developed by NOAA.

Monthly terrestrial flux anomaly (%)

Differences in annual mean CO$_2$ concentration as a result of interannual variation in terrestrial flux