Tools for analyzing climate model output II: practical examples

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Local Notes

- To use provided m-files, enter the following commands:
 - mkdir ~/matlab
 - cp /project/colloquium/util/m/startup.m ~/ matlab

help lindsay_utils

Tutorial Examples

- example1.m
 - Extract field from CMIP5 atmos output, make map
- example2.m
 - Same, but for ocean output
 - Use specialized POP plotting tool

Tutorial Examples

- example3.m
 - Extract 20 years of monthly surface intpp
 - Compute mean over Nino 3.4 region
 - Plot resulting timeseries
 - Do same for SST
 - Combine plots & compute correlation coeff
 - Do same for monthly anomalies
 - Correlate intpp monthly anoms w/ SST Nino 3.4

Tutorial Examples

- example4.m
 - Compute and display 1st EOF of fgco2 monthly anomalies across North Pacific
 - Plot reconstruction using 1st EOF at a few point
 - Show how much variance is explained