



ATOC COLLOQUIUM

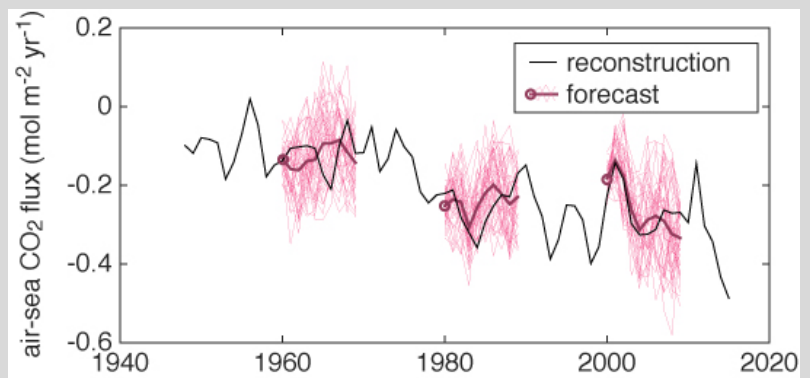
Welcome!

Please join us for the ATOC Colloquium on **October 5, 2018** from **11:00am-noon** in **SEEC N125** featuring **ATOC Professor Nikki Lovenduski**. Come early for coffee starting at 10:45am, and lunch will be served after!

A Change in the Forecast: Ocean Biogeochemistry over the Next Decade

Observations collected over the past few decades and projections from climate models suggest that anthropogenic climate change has influenced and will continue to alter ocean biogeochemistry. Superimposed on the background of long-term changes in ocean biogeochemistry is natural variability that manifests on inter-annual to decadal timescales. While there has been considerable research devoted to forecasting inter-annual to decadal variations (so-called “decadal predictions”) of the physical climate system, decadal predictions of ocean biogeochemistry remain relatively unexplored.

Here, we investigate the predictability and predictive skill of ocean biogeochemistry using a novel set of decadal forecasts of the Earth system. Our promising first results indicate that year-to-year variations in ocean carbon uptake and marine phytoplankton productivity may be predictable several years in advance, with relevance for carbon emissions mitigation strategies and fisheries potential catch.



About the ATOC Colloquium

The Department of Atmospheric and Oceanic Sciences Colloquium will be held **every other Friday** from **11:00 AM-noon** in **SEEC N125**. Colloquia will alternate between the following formats: (A) Full-length talk by a faculty member or invited speaker, (B) Three conference-length talks by graduate students. If you would like to nominate a speaker (including self), please email the ATOC Colloquium Committee Chair, Prof. Jan Lenaerts (jan.lenaerts@colorado.edu). Please visit www.colorado.edu/atoc/colloquium for further details and the upcoming schedule.