# Papers using the GFDL CM2.6 climate model and its ocean/sea-ice configuration

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November 10, 2018

#### Atmosphere/Ocean

- 1. Simulated climate and climate change in the GFDL CM2.5 high-resolution coupled climate model: *Delworth et al.* (2012)
- 2. Analysis of the characteristics and mechanisms of the Pacific Decadal Oscillation in a suite of coupled models from the Geophysical Fluid Dynamics Laboratory: *Zhang and Delworth* (2015)
- 3. The impact of horizontal resolution on North American monsoon Gulf of California moisture surges in a suite of high-resolution coupled models: *Pascale et al.* (2016)

# Ocean Physics

- 1. Has coarse ocean resolution biased simulations of transient climate sensitivity: Winton et al. (2014)
- 2. Climate modeling with an energetic ocean mesoscale: Griffies (2014)
- 3. Impacts on ocean heat from transient mesoscale eddies in a hierarchy of climate models: Griffies et al. (2015)
- 4. Atlantic multi-decadal oscillation covaries with Agulhas leakage: Biastoch et al. (2015)
- 5. An extreme event of sea-level rise along the northeast coast of North America in 2009-2010: Goddard et al. (2015)
- 6. Enhanced warming of the northwest Atlantic Ocean under climate change: Saba et al. (2016)
- 7. Mechanisms of Southern Ocean heat uptake and transport in a global eddying climate model: *Morrison et al.* (2016)
- 8. Preconditioning of the Weddell Sea polynya by the ocean mesoscale and dense water overflows: *Dufour et al.* (2017)
- 9. Spiraling pathways of global deep waters to the surface of the Southern Ocean: Tamsitt et al. (2017)
- 10.  $CO_2$ -induced ocean warming of the Antarctic continental shelf in an eddying global climate model: Goddard et al. (2017)
- 11. Frequency-domain analysis of atmospherically forced versus intrinsic ocean surface kinetic energy variability in GFDL's CM2-O model hierarchy: O'Rourke et al. (2018)
- 12. Lagrangian timescales of Southern Ocean upwelling in a hierarchy of model resolutions: Drake et al. (2018)
- 13. IDENTIFYING LAGRANGIAN COHERENT VORTICES IN A MESOCALE OCEAN MODEL: Tarshish et al. (2018)
- 14. Observed fingerprint of a weakening Atlantic Ocean overturning circulation: Caesar et al. (2018)

# Ocean Biogeochemistry/Physics

- 1. The Southern Ocean Carbon and Climate Observations and Modeling Program (SOCCOM): Russell et al. (2014)
- 2. Role of mesoscale eddies in cross-frontal transport of heat and biogeochemical tracers in the Southern Ocean: *Dufour et al.* (2015)
- 3. Representation of Eastern Boundary Currents in GFDL's Earth System Models: Dunne et al. (2015)
- 4. Multidecadal wind-driven shifts in northwest Pacific temperature, salinity, O2, and PO4: Kwon et al. (2016)
- 5. Observing System simulation experiments for an array of autonomous biogeochemical profiling floats in the Southern Ocean: *Kamenkovich et al.* (2017)

- 6. Oxygen in the Southern Ocean from Argo floats: determination of processes driving air-sea fluxes: Bushinsky et al. (2017)
- 7. Roles of the ocean mesoscale in the lateral supply of mass, heat, carbon and nutrients to the Northern Hemisphere subtropical gyres: *Yamamoto et al.* (2018)
- 8. Response of O2 and pH to ENSO in the California Current System in a high resolution global climate model: Turi et al. (2017)
- 9. BIOGEOCHEMICAL ROLE OF SUBSURFACE COHERENT EDDIES IN THE OCEAN: TRACER CANNONBALLS, HYPOXIC STORMS, AND MICROBIAL STEWPOTS?: Frenger et al. (2017)
- 10. Rapid coastal deoxygenation due to ocean circulation shift in the northwest Atlantic: Claret et al. (2018)

### Ocean Ecosystem/Fisheries

- 1. Diversity in thermal affinity among key piscivores buffers impacts of ocean warming on predator-prey interactions: Selden et al. (2017)
- 2. Projecting the effects of climate change on Calanus finnmarchicus distribution within the U.S. Northeast Continental Shelf: *Grieve et al.* (2017)
- 3. Marine species distribution shifts in the U.S. Northeast Continental Shelf under continued ocean warming: *Kleisner et al.* (2017)
- 4. The growth of finfish in global open-ocean aquaculture under climate change: Klinger et al. (2017)
- 5. Reconciling fisheries catch and ocean productivity: Stock et al. (2017)
- 6. Managing living marine resources in a dynamic environment: The role of seasonal to decadal climate forecasts: *Tommasi et al.* (2017)
- 7. Projected asymmetric response of Adélie penguins to Antarctic climate change: Cimino et al. (2016)

#### Ocean/sea-ice

- 1. Localized rapid warming of West Antarctic subsurface waters by remote winds: Spence et al. (2017)
- 2. Vertical resolution of baroclinic modes in global ocean models: Stewart et al. (2017)

### Computational

- 1. NOAA holistic climate and earth system model strategy phase I: current state: DeWitt et al. (2015)
- 2. CPMIP: measurements of real computational performance of Earth system models in CMIP6: Balaji et al. (2017)
- 3. Prospects for improving the representation of coastal and shelf seas in global ocean models: *Holt et al.* (2017)

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