

Agenda

Geophysical Fluid Dynamics Laboratory
201 Forrestal Road
Princeton, NJ
Smagorinsky Seminar Room

Day 0: Monday Evening, June 29

7:30 Closed Session - Executive Session for Review Team at Nassau Inn (Princeton Room)

Day 1: Tuesday Morning, June 30

6:45 Closed Session - Breakfast at the Nassau Inn with OAR AA, DAA, and Review Team (Princeton Room)

7:45 Review Team meets in Lobby for transportation to GFDL (Other attendees provide their own transportation or carpool, see website for directions)

WELCOMING TALKS

8:00 Welcome by OAR AA (Spinrad – 15 minutes)

8:15 Introduction of Reviewers and Overview of NOAA Research Planning by OAR DAA for LC&I (MacDonald – 25 minutes)

8:40 Lab Director's Welcome and Overview (Ramaswamy – 45 minutes)

ATMOSPHERIC AND OCEANIC MODELING

9:25 Atmospheric Chemistry and Physics - Introduction and Overview (Levy – 25 minutes)

9:50 Clouds and Global Atmospheric Model Development (Donner – 20 minutes)

10:10 Modeling of Atmospheric Chemistry (Horowitz – 20 minutes)

10:30 Break (20 minutes)

10:50 Climate and Air Quality (Fiore – 20 minutes)

11:10 Aerosol Modeling and Evaluation (Ginoux – 15 minutes)

11:25 Aerosol-Cloud-Climate Interactions (Ming – 20 minutes)

11:45 Atmospheric Chemistry and Physics – Synthesis and Future Directions (Levy – 10 minutes)

11:55 Discussion - Atmospheric Chemistry and Physics (30 minutes)

12:25 Lunch (Picnic at GFDL) (75 minutes)

Day 1: Tuesday Afternoon, June 30

1:40 Atmospheric Dynamics - Introduction and Overview (Held – 25 minutes)
2:05 Applications of High-Resolution AGCMs to Climate and Weather Studies (Lau – 20 minutes)
2:25 GFDL's Triply-Nested High Resolution Hurricane Model (Bender – 15 minutes)
2:40 Simulation of Global Hurricane Climatology, Variability, and Response to Global Warming (Zhao – 15 minutes)
2:55 Dynamical Core and Seamless Regional-Global Model Developments (Lin – 20 minutes)
3:15 Atmospheric Dynamics – Synthesis and Future Directions (Held – 10 minutes)

3:25 Discussion - Atmospheric Dynamics (30 minutes)

3:55 Break (15 minutes)

4:10 Ocean Modeling – Introduction and Overview (Hallberg – 20 minutes)
4:30 The GFDL Modular Ocean Model (MOM) (Griffies– 15 minutes)
4:45 Ocean Modeling Innovations (Adcroft – 10 minutes)
4:55 Ocean Processes and Parameterization (Legg – 15 minutes)
5:10 Climate and Biogeochemistry in a Turbulent, Adiabatic Ocean (Gnanadesikan– 20 minutes)
5:30 Ocean Modeling – Synthesis and Future Directions (Hallberg – 10 minutes)

5:40 Discussion - Ocean Modeling (30 minutes)

6:10 Break (15 minutes)

6:25 Closed Session (Review Team in room 217)

7:30 Dinner (Nassau Inn) and keynote address by Steve Pacala (Princeton University)

Day 2: Wednesday Morning, July 1

7:15 Closed Session - Breakfast (Review Team, Director, Deputy Director in Princeton)

PHYSICAL CLIMATE CHANGE: UNDERSTANDING AND PREDICTION

8:25 Introduction and Overview (Delworth – 20 minutes)
8:45 Do Rates of Warming at the Surface and the Lower Atmosphere Differ? (Lanzante – 10 minutes)
8:55 Response of the Tropical Climate System to Warming (Vecchi– 20 minutes)
9:15 Hurricanes and Climate Change (Knutson – 20 minutes)
9:35 Climate Change and ENSO (Wittenberg – 15 minutes)
9:50 Sahel Drought: Past and Future (Held – 20 minutes)

10:10 Break (15 minutes)

10:25 Atlantic Meridional Overturning Circulation and Climate (R. Zhang – 15 minutes)
10:40 Sea Level and Its Components (Dixon – 15 minutes)
10:55 Seasonal-Decadal Predictability, Prediction and Ensemble Coupled Data Assimilation (Rosati – 20 minutes)
11:15 GFDL Core Physical Climate Model Development (Winton – 25 minutes)
11:40 Synthesis and Future Directions (Delworth – 20 minutes)

12:00 Discussion – Physical Climate Change (30 minutes)

12:30 Lunch (30 minutes, Room 217 for Review Panel only), all others will lunch in the Smagorinsky Seminar Room

Day 2: Wednesday Afternoon, July 1

1:00 Closed Poster Session with Visiting Scientists (60 minutes, Room 217)

CARBON, BIOGEOCHEMISTRY, AND CLIMATE

2:00 Introduction and Overview (Stouffer – 25 minutes)
2:25 Land Ecosystems and Biogeochemical Cycling (Sentman – 15 minutes)
2:40 Research on Hydrology, Water Resources and Climate at GFDL (Milly – 15 minutes)
2:55 Effects of Land Use on Climate (Findell – 10 minutes)
3:05 Ocean Ecology and Biogeochemistry in GFDL's Earth System Model (Dunne – 20 minutes)
3:25 Ocean ecosystems and Climate Change (Stock – 10 minutes)
3:35 Synthesis and future directions (Stouffer – 10 minutes)

3:45 Discussion – Carbon, Biogeochemistry, and Climate (30 minutes)

4:15 Break (20 minutes), Poster Session in GFDL Lobby

4:35 Closed Session - Review Team conferences with Postdocs (30 minutes, Room 217)

5:05 Parallel Sessions (60 minutes)

- Closed Session – (Room 217) Review Team meets with Bench Scientists (no management present)
- Closed Session - (Smagorinsky Seminar Room) Line Office Representatives report to GFDL and OAR Management

7:00 Dinner for Review Team only (options to be provided on June 30)

Day 3: Thursday Morning, July 2

7:00 Closed Session - Breakfast (Review Team with Jorge Sarmiento and Geoff Vallis, CICS)

8:15 Closed Session - Review Team meets with Graduate Students (30 minutes, Room 217)

8:45 Cooperative Institute for Climate Science (Sarmiento/Vallis - 30 minutes)

9:15 NOAA's High-Performance Computing Infrastructure (Gross – 20 minutes)

9:35 Modeling Services (Balaji – 20 minutes)

9:55 GFDL's Response to IPCC AR5 and CMIP5 (Stouffer – 20 minutes)

10:15 GFDL Research and NOAA's Climate Goal (Westley – 15 minutes)

END OF PUBLIC SESSIONS

10:30 Break (15 minutes)

10:45 Wrap-up and Q&A with GFDL Management (30 minutes)

11:15 Closed Session – Review Team begins writing in Room 217 (60 minutes, lunch provided)

12:15 Review Team reflections and report to OAR and GFDL Management (30 minutes)

12:45 Thank Review Team and Adjourn