Morning AGENDA  
Wednesday, April 3rd, 2013

- **06:45 - 07:45**  Millennium Hotel, informal breakfast buffet, Thyme on the Creek, Reviewers and Steve Fine

- **07:45**  Transportation, front door of hotel, NOAA van will leave promptly at 7:45  
  DSRC check-in, Proceed to Room GC-402 (Multi-Purpose Room)

**Session 1  Welcome and Overview (08:30-09:30)**
- 08:30 – 08:40  Welcome & Introductions  
  *Dr. Alexander MacDonald, Director, NOAA Earth System Research Laboratory*
- 08:40 – 08:45  Logistic Details, Updates  
  *Dr. Russ Schnell, Deputy Director, GMD*
- 08:45 – 09:05  Overview of NOAA/OAR Research  
  *Dr. Steve Fine, OAR Deputy Assistant Administrator*
- 09:05 – 09:30  GMD Overview  
  *Dr. James Butler, Director, GMD*

**Session 2  Theme 1: Climate Forcing (09:30-10:10)**
- 09:30 – 09:50  Overview – Climate Forcing  
  *Dr. John Miller, Carbon Cycle Group*
  *Dr. Pieter Tans, Chief, Carbon Cycle Group*

**10:10 - 10:30**  Morning Break

**Session 3  Theme 1: Climate Forcing (10:30-12:15)**
- 10:30 – 10:45  The Carbon Cycle and Anthropogenic Carbon Emissions  
  *Dr. John Miller, Carbon Cycle Group*
- 10:45 – 11:00  Vertical Profiles  
  *Dr. Colm Sweeney, Carbon Cycle Group*
- 11:00 – 11:15  CarbonTracker  
  *Dr. Andy Jacobson, Carbon Cycle Group*
- 11:15 – 11:30  Methane  
  *Dr. Ed Dlugokencky, Carbon Cycle Group*
- 11:30 – 11:45  Detection and Monitoring of Changing Methane Emissions in the Arctic  
  *Dr. Lori Bruhwiler, Carbon Cycle Group*
- 11:45 – 12:00  Greenhouse Gas Measurement Program Future Directions  
  *Dr. Arlyn Andrews, Carbon Cycle Group*
- 12:00 – 12:15  Summary – Climate Forcing Gases and the Annual Greenhouse Gas Index  
  *Dr. Steve Montzka, Halocarbons and Trace Species*
Afternoon AGENDA  
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- **Session 4**  Lunch and Poster Viewing (12:15-14:15)  
  13:15 – 14:15  Poster Session 1: Atrium, Climate Forcing

- **Session 5**  Theme 1: Climate Forcing (14:15-15:15)  
  14:15 – 14:30  Long-Term Monitoring of Water Vapor in the Upper Troposphere and Lower Stratosphere  (CF-10)  
  Dr. Dale Hurst, Ozone and Water Vapor  
  14:30 – 14:45  Aerosol Direct Climate Forcing (CF-11)  
  Dr. John Ogren, Group Chief, Aerosols  
  14:45 – 15:00  Radiation Contributions to Climate Forcing, Ozone, and Air Quality  (CF-12)  
  Dr. Joe Michalsky, Group Chief, Radiation  
  15:00 – 15:15  Summary – Climate Forcing  (CF-13)  
  Dr. James Butler, Director, GMD

- **15:15 - 15:30**  Afternoon Break

- **Session 6**  GMD Tour and Reviewer Work Session (15:30-17:45)  
  15:30 – 16:45  Tour of Global Monitoring Division Boulder Operations for reviewers  
  16:45 – 17:45  Reviewer closed session in room GB-124  
  17:45  Adjourn, sign out, and shuttle for hotel

- **18:30 - 20:30**  Dinner at Carelli’s Restorante Italiano,  
  645 30th Street, Boulder, – Anne Thompson, Bev Law, Ken Jucks, Oystein Hov, Carl Brenninkmeijer, Mike McElroy, Steve Fine, Sandy MacDonald, Rick Rosen, Jim Butler, Russ Schnell, Mike Uhart
Morning AGENDA
Thursday, April 4th, 2013

- **07:00 - 08:00**  
  Millennium Hotel, informal breakfast buffet, Thyme on the Creek

- **08:00**  
  Transportation, front door of hotel, NOAA vans  
  DSRC check-in, Proceed to Room GB-124 (Outreach Classroom)

- **Session 7**  
  Stakeholder Telephone Calls, Room GB-124 (08:30 - 09:40)  
  (Closed session with reviewers and phone assistants)

  Climate Forcing, 3 calls (~30 min)
  - 8:30 – 8:40 - Dr. Steven Wofsy, Professor of Atmospheric and Environmental Science, Harvard University; (Also Ozone)
  - 8:40 – 8:50 - Dr. Deon Terblanche, Director, Atmospheric Research and Environment, Global Atmospheric Watch Programme (Also Ozone)
  - 8:50 – 9:00 - Chris Sloop, Chief Technical Officer, Earth Networks (for Bob Marshall)

  Ozone, 3 calls (~30 min)
  - 9:00 – 9:10 - Dr. Mack McFarland, Global Environmental Manager, Dupont Chemicals and Fluoroproducts
  - 9:10 – 9:20 - Dr. Ron Prinn, Professor, MIT (Also Climate Forcing)
  - 9:20 – 9:30 - Dr. Paul Newman, Senior Scientist, NASA/Goddard Space Flight Center

  Air Quality, 1 call (~10 min)
  - 9:30 – 9:40 - Brock LeBaron, Deputy Director, Division of Air Quality, State of Utah

- **Session 8**  
  Observatories and Common Elements, Room GC-402 (09:40-10:30)

  09:40 – 09:55  
  Global Monitoring Division Observing Facilities and Operations (OC-1)  
  **Dr. Russ Schnell, Deputy Director, GMD**

  09:55 – 10:10  
  Calibration and Standards Activities (OC-2)  
  **Dr. Brad Hall, Halocarbons and Trace Species**

  10:10 – 10:30  
  Data management and quality control (OC-3)  
  **Ken Masarie, Carbon Cycle Group**

- **10:30 - 10:45**  
  Morning Break

- **Session 9**  
  Theme 2: Ozone and Ozone Depleting Gases (10:45-12:00)

  10:45 – 11:00  
  Overview – Ozone and Ozone Depleting Gases (OD-1)  
  **Dr. James Elkins, Group Chief, Halocarbons and Trace Species**

  11:00 – 11:15  
  Measurements and Analysis of Stratospheric Ozone (OD-2)  
  **Dr. Irina Petropavlovskikh, Group Chief, Ozone and Water Vapor**

  11:15 – 11:30  
  South Pole Ozone (OD-3)  
  **Dr. Bryan Johnson, Ozone and Water Vapor**

  11:30 – 11:45  
  Stratospheric Transport (OD-4)  
  **Dr. Fred Moore, Halocarbons and Trace Species**

  11:45 – 12:00  
  Ozone Depleting Gas Index and Summary (OD-5)  
  **Dr. Steve Montzka, Halocarbons and Trace Species**
Afternoon AGENDA
Thursday, April 4th, 2013

• Session 10  Lunch and Poster Viewing (12:00-13:45)
  12:00 – 12:50 Lunch: Room GB-124 with review committee and GMD Scientists
  12:50 – 13:45 Poster Session 2: Atrium, Ozone and Air Quality

• Session 11  Theme 3: Air Quality (AQ) and Regional Studies (13:45-14:45)
  13:45 – 14:00 Overview of GMD AQ and Regional Studies (AR-1)
    Dr. Russ Schnell, Deputy Director, GMD
  14:00 – 14:15 Tropospheric Ozone (AR-2)
    Sam Oltmans, Ozone Group
  14:15 – 14:30 Aerosol Optical Depth Measurements and Related Research (AR-3)
    John Augustine, Radiation Group
  14:30 – 14:45 Methane and Volatile Organic Compounds Emissions from Oil and Gas Operations (AR-4)
    Dr. Gabrielle Petron, Carbon Cycle Group

• Session 12  Conclusion and GMD Review Summary (14:45-15:00)
  14:45 – 15:00 Review summary (RS-1)
    Dr. James Butler, Director, GMD

• 15:00 - 15:15  Afternoon Break – End of Public Review Sessions

• Session 13  Reviewer Closed Session (15:15-17:45)
  15:15 – 16:00 Reviewer closed session with GMD and OAR Management, Room GC-402
  16:00 – 17:45 Reviewer closed session, Room GB-124
  17:45 Adjourn and shuttle for hotel

• 18:30 - 20:30  Dinner
    Reviewer’s executive dinner – please see Boulder restaurant map for selections.
Morning AGENDA
Friday, April 5th, 2013

- **07:00 - 08:00** Millennium Hotel, informal breakfast buffet, Thyme on the Creek

- **08:00** Transportation, front door of hotel, NOAA vans
  DSRC check-in, Proceed to Room GB-124 (Outreach Classroom)

- **Session 14 Reviewer Comments**
  08:30 – 11:00 Review team formulates recommendations and begins writing, GB-124
  11:00 – 12:00 Review team provides preliminary feedback to OAR and GMD Management, GC-402

- **12:00** Adjourn