# ESRL PHYSICAL SCIENCES LABORATORY REVIEW

### March 9-12, 2010

## David Skaggs Research Center ~ Boulder, CO

http://www.esrl.noaa.gov/research/review/

Spinrad

Sandifer

McLean

MacDonald

Neff and Koch

Whitaker and Lee

Day 1 – Tuesday, March 9<sup>th</sup> (GC-402)

- 6:30 Breakfast at the Millennium Reviewers, Rick Spinrad, Craig McLean
- 7:20 Shuttle from Millennium Hotel to NOAA
- **8:00** Welcome *Reviewers/Introductions; Charge to the Reviewers*
- 8:05 Keynote: Paul Sandifer, Sr. Science Advisor to NOAA Administrator
- 8:20 Overview of NOAA Research Planning
- 8:35 Welcome; ESRL Organization Overview, Physical Sciences Research and Priority Setting
- 8:50 New Advances: Global Assimilation and Modeling
- 9:10 ESRL Research (30 mins each)
- **10:10** Break
- 10:30 Theme #1: Climate, Weather and Water Science (GC-402) Co-Leads: Chris Fairall, Jim Wilczak
- **10:30** Overview Chris Fairall
- 10:40 Air Sea Fluxes Chris Fairall
- 10:55 Misrepresentation of Tropical SSTs in Climate Models Prashant Sardeshmukh
- **11:10** Diagnosing Times Scales of Atmospheric Moisture Transport Matt Newman
- 11:25 Landfalling Impacts of Atmospheric Rivers: From Extreme Events to Long-term Consequences Paul Neiman
- **11:40** Summary and Way Forward Jim Wilczak
- 12:00 Theme #1: QA/Discussion
- 12:30 Lunch/Reviewer Closed Session (3B-504A, 75 min)
- 12:30 Lunch other guests (GB-124)
- 1:45 Theme #2: Modeling, Data Assimilation, and Advanced Computing (GC-402) Co-Leads: Stan Benjamin, Zoltan Toth
- 1:45 Overview and Global Modeling Stan Benjamin
- 2:05 Data Assimilation and HRRR Steve Weygandt
- **2:25** WRF-Chem Development and Applications Georg Grell
- **2:40** Forecast Uncertainty/Applications Paul Schultz
- 2:50 Advanced Computing Mark Govett
- **3:00** Summary and Way Forward Zoltan Toth
- 3:15 Theme #2: QA/Discussion
- 3:45 Themes 1&2 Poster Session for Reviewers only (GB-124)
- 4:30 Themes 1&2 Poster Session continued with reception open for guests (GB-124)
- 5:15 S.O.S. Demonstration for Reviewers and OAR Sr. Management (Planet Theater) MacDonald
- 6:00 Reviewers Leave for Dinner (The Cork Restaurant)

6:50 Breakfast at hotel

## 7:30 Shuttle from Millennium Hotel to NOAA

- 8:00 Theme #3: Climate, Weather and Water Services (GC-402) Co-Leads: Randy Dole, Robert Webb
- 8:00 Overview Randy Dole
- 8:15 Research to Improve Climate, Weather and Water Services Marty Ralph
- 8:30 Development of an Attribution Services Capability Martin Hoerling
  - 8:45 PSD's role and relationship to the WWA Kristen Averyt
  - 9:00 PSD's role and relationship to NIDIS Roger Pulwarty
  - 9:15 Summary and Way Forward Robert Webb

### 09:30 Theme #3: QA/Discussion

10:00	<b>Break/Theme 3</b>	<b>Poster Session</b> ,	Reviewers	and OAR S	Sr. Management	(45 min) (Atrium)
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- **10:00 PSD Tour Line Offices and Guests** (*Climate Weather Laboratory, 1D708*) **PSD Staff**
- **11:00 PSD Tour Reviewers** (*Climate Weather Laboratory*, 1D708) **Bill Neff**
- **11:00** Theme 3 Poster Session open for Line Offices and Guests until 1:15
- 12:00 Reviewers' Lunch with ESRL Scientists (2C-406, 75 min) Lunch – OAR, LO, and other Guests (GB-124)

#### 1:15 ALL RETURN Thoma #4: Technology Trans

Theme #4: Technology Transfer and Outreach Activities (GC-402) Co-Leads: Sher Schranz, Jennifer Mahoney

- 1:15 Overview Sher Schranz
- **1:30** Science Transition Processes Mike Kraus
- 1:45 Weather Information Display Systems Tom Lefebvre
- **2:10** Outreach and Education Beth Russell/Eric Hackathorn
- **2:30** Summary and Way Forward Jennifer Mahoney
- 2:45 Theme #4 QA/Discussion
- **3:15 Break/Theme 4 Poster Session and Refreshments for Reviewers (45 min)** (*Cafeteria*)
- **3:15 GSD Tour Line Offices and Guests** (2B201), (Planet Theater) **GSD Staff**
- **4:00 GSD Tour Reviewers** (2B201), (Planet Theater)
- 4:15 **Open Theme 4 Poster Session with refreshments for Line Offices and guests** (*Cafeteria*)

**Steve Koch** 

- **5:00** Reviewer Closed Work Session (3B-504A)
- **5:00 SOS Demonstration for Line Offices and Guests** (*Planet Theater*)
- 6:00 Reviewers Shuttle leaves for Millennium
- **6:45 ESRL-Hosted Dinner** (*Reviewers, OAR leaders, Lab Directors at Laudisio's Restaurant*)

- 6:50 Breakfast at Hotel
- 7:30 Shuttle from Millennium to NOAA
- 8:00 Theme #5a: Weather System Observations and Analysis (GC-402) Lead: Bill Moninger
- 8:00 Overview- Bill Moninger
- 8:20 Unmanned Aircraft Systems Sara Summers
- 8:35 GPS-Met Seth Gutman
- 8:50 Summary and Way Forward: John Brown

#### 9:00 Theme #5b: Climate System Observations and Analysis Lead: Marty Ralph

- 9:00 Overview: Randy Dole
- 9:10 Arctic Observatories- Taneil Uttal
- 9:25 Historical Reanalysis Gil Compo
- 9:45 Summary and Way Forward Marty Ralph
- 10:00 Theme #5: QA/Discussion
- **10:30** Break/Theme 5 Posters, Reviewers (45 min) (Atrium)
- 11:15 Wrap-up (15 mins each) (GC-402)
- 11:45 Lunch Reviewer Closed Session (3B-504A, 90 min)
- 11:45 Lunch OAR. LO, and other Guests (on your own)
- **1:00** Theme 5 Poster Session OAR, LO and other Guests (Atrium)
- 1:00 Reviewers Meeting with Students and ESRL Post Docs (GB-124)
- **1:45 Tour of DSRC OAR, LO and other Guests** (meet in lobby)
- 2:00 Reviewers Meeting with Cooperative Institute Directors (CIRES, CIRA) (GB-124)
- **2:00** Presentation from CIRES Director
- **2:20** Presentation from CIRA Director
- 2:40 Q&A/Discussion with Reviewers and CI Directors

(Focus: To gain an understanding from the Directors how they (a) collaborate with NOAA, and (b) contribute to NOAA's mission.)

**2:45** ALL Closing briefing (GC-402)

MacDonald

Koch/Neff

3:15 Open Q&A with Reviewers, OAR Managers and Lab Directors

#### **End of Public Review Sessions**

- **3:45 Reviewers Closed Session** (*3B-504A*)
- 3:45 OAR Closeout: roundtable with NOAA Line-Offices and OAR Management (GB-124)
- **6:00 Dinner on your own** (*A brochure of local restaurants within walking distance and shuttle distance of the Millennium will be provided.*)

- 7:45 Breakfast at Hotel
- 8:30 Shuttle from Millennium to NOAA
- **9:00** Reviewers Working Session (GC-402)
- 10:30 Reviewers meet with OAR AA (optional by request of Review Team)
- 11:00 Reviewers Report-out to OAR and ESRL Management (GC-402)
- 12:00 Meeting adjourned
- 12:30 Meet for shuttle service pick-up in lobby for airport transportation.