

COMMUNITY MEETING

The Future of the US Weather Prediction Enterprise

*Organized by the American Meteorological Society in Partnership with the Weather Coalition
Financial Support Provided by AMS Commission on the Weather and Climate Enterprise,
National Center for Atmospheric Research, and the following members of the Weather Coalition:
University of Oklahoma, University Corporation for Atmospheric Research,
Reinsurance Association of America, and The Weather Channel*

OBJECTIVES

- **Examine the strengths and weaknesses of the U.S. weather prediction enterprise**
- **Discuss the evolving composition of the weather prediction community and how community decisions should be made**
- **Examine the need for a more cooperative and coordinated approach to weather prediction operations and research**
- **Discuss concrete next steps, consistent with the consensus of the meeting**

AGENDA

26-28 July 2005

**The Stadium Club at Folsom Field
University of Colorado, Boulder**

26 July, Tuesday

- 1:30-1:35 Welcome: George Frederick, Commissioner, AMS Weather and Climate Enterprise Commission
- 1:35-1:50 Introduction and meeting orientation. Why this meeting now? What are the major issues? Cliff Mass, University of Washington

***Session I: Examining the Strengths and Weaknesses of the U.S. Weather Prediction Enterprise.
Session Chair: John Gaynor, NOAA***

Session Objective: Set the stage for the workshop. Provide background and varying viewpoints on the challenges faced by the U.S. weather prediction community.

The Big Picture

- 1:50-2:15 Strengths and Weaknesses of the U.S. Weather Prediction and Dissemination Enterprise—An International Point of View. Michel Béland, Meteorological Services of Canada, Director General, Atmospheric and Climate Science Directorate
- 2:15-2:40 Strengths and Weaknesses of the U.S. Weather Prediction and Dissemination Enterprise—A National Point of View. Rick Anthes, President, University Corporation for Atmospheric Research.
- 2:40-3:00 Discussion
- 3:00-3:30 Break
- 3:30-3:50 Six Heretical Notions About Weather Policy, Roger A. Pielke, Jr. Environmental and Societal Impacts Group, University of Colorado
- 3:50-4:00 Discussion

Community Assessment

- 4:00-4:15 NOAA and the Weather Research Community, Rick Rosen, NOAA/OAR
- 4:15-4:30 Lessons Learned from the USWRP: From Onset to Reset: Bob Gall, NCAR (Presentation given by John Gaynor in Bob's absence)
- 4:30-4:50 NCEP Operational Prediction: Problems, Strengths, and Resource Issues: Steve Lord, NOAA/NCEP
- 4:50-5:05 Development of the WRF model: Lessons Learned on Community Model Development: Joe Klemp, NCAR
- 5:05-5:20 Private Sector Viewpoint: Ray Ban, The Weather Channel
- 5:20-5:35 Challenges for the Weather Academic Community. John Snow, Dean, College of Geoscience, University of Oklahoma
- 5:35-6:00 Plenary Discussion: Is the U.S. Weather Prediction Community Fulfilling Its Potential? Are We Effectively Using the Available Resources?
- 6:00-7:00 **Icebreaker Reception with Cash Bar**

27 July, Wednesday

7:00-8:25 Continental Breakfast.

Session II: Bringing the Weather Prediction Community Together. Session Chair: Maria Pirone, AER

Session Objective: Stimulate discussion on how the private-public-academic partnership can evolve to optimize weather prediction activities

8:30-8:50 NWS perspectives on strengthening the Weather Enterprise. BGen DL Johnson, NOAA/NWS

8:50-9:10 The NRC Fair Weather Report: Implications for the Future, and the New AMS Commission on the Weather Enterprise. George Frederick, Vaisala, Inc.

9:10-9:30 The Weather Coalition. Cindy Schmidt, UCAR.

9:30-9:50 Regional Weather Prediction: A New National Model? Cliff Mass, University of Washington

9:50-10:20 Break

10:20-11:10 Panel Discussion with the community. Panelists are: BGen Johnson, George Frederick, Ray Ban, John Snow, Cliff Mass, and Amy Carroll

- a. Tensions between the sectors of the weather enterprise: serious problem or a sign of healthy expansion? A specific issue: the implications of pending federal legislation such as the Organic Act and the Santorum Bill.
- b. Do we need new institutions or mechanisms to organize and coordinate the evolving weather prediction community?

Session III: Case Study of Community Cooperation: Sharing and Expanding Use of Mesoscale Data. Session Chair: Walt Dabberdt, Vaisala, Inc.

Session Objective: Present the results of a previous effort to bring the various sectors of the enterprise together to achieve common goals. Stimulate discussion on how these lessons learned can be applied to the challenge of weather prediction.

11:10-11:25 Summary of the December 2003 Workshop on the Design and Development of Multi-Functional Mesoscale Observing Networks in Support of Integrated Forecasting Systems: Recommendations for implementation and participation by government, private and academic sectors. Fred Carr, University of Oklahoma

11:25-11:40 Challenges and Opportunities Associated with Multiple-Source Mesoscale Observations. Tom Schlatter, CIRES.

11:40-11:55 Analysis of Record: An opportunity for Community Cooperation? Brad Colman, Commissioner, AMS Scientific and Technological Activities Commission (STAC)

11:55-12:30 Discussion led by previous presenters: What are the next steps towards developing a national-scale, multiple-source, 3D mesoscale observing system? How can the public, private, and academic sectors cooperate in the deployment of this system and the collection, processing, and use of the data it provides.

12:30-2:00 **Lunch**

Session IV: Resources for the Weather Prediction Enterprise: Session Chair: Cindy Schmidt, UCAR

Session Objective: Examine the resources available for weather prediction, what other communities have achieved, and propose courses of action to take advantage of resources in a more effective way.

2:00-3:00 Panel Discussion. Each panelist will have 5-10 minutes to address the following issues:

- a. Strategies for Success? Lessons from the Astronomy, Oceanography, and Biomedical Communities – Joel Widder, Lewis-Burke Associates, Inc.
- b. The Global Change Community Accomplishments: What Are the Lessons Learned? – Jack Fellows, UCAR
- c. Sufficient Support or Not Enough? Is there a Resource Problem for the Weather Research Community?
 - A Congressional Perspective – Amy Carroll, House Science Committee
 - An Agency Perspective – Mary Glackin, NOAA
 - A Private Sector Perspective – Maria Pirone, AER
 - An Academic Sector Perspective – Jim Hansen, MIT
- d. Needs of the User Community -- Are They Being Met? Mike Nelson, Chief Meteorologist, KMGH, Denver

3:00-3:30 Plenary Discussion: Adequacy of Resources

3:30-4:00 Break

Session V: Who represents the community? Is there a need for communal decisions? If so, how should they be made? Session Chair: Cliff Mass, University of Washington

Session Objective: Examine the roles of the various sectors and whether some mechanism for coordination and cooperation is needed. Suggest ways that the sectors can harmonize or coordinate their activities for the common good.

4:00-4:30 Panel Discussion: Representatives from NOAA (Ed Johnson, NWS), DOT (Paul Pisano), Academia (Steve Mullen, Univ. of Arizona), ONR (Steve Tracton), and the Private Sector (Elliott Abrams, Accuweather). Each panelist will have 5 minutes.

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4:30-5:15 Plenary Discussion

5:30-7:00 **Hosted Meeting Reception**

28 July, Thursday

Session VI: Designing the Future. This session will include specific strawman proposals for new modes of organization. Session Chair: Steve Root, WeatherBank, Inc. and Commercial Weather Services Association

Session Objective: Suggest ways the enterprise can approach the weather prediction challenge. Draw from the presentations the common points and strive to resolve any conflicts.

7:30-8:25 Continental Breakfast. NOAA partnership policy dialog hosted by BGen DL Johnson, NWS

8:30-8:50 A New Model for the Weather Enterprise, an academic sector view: Cliff Mass, University of Washington

8:50-9:10 A New Model for the Weather Enterprise: a private sector view. Dr. Richard Carpenter, VP of NWP, Weather Decision Technologies, Inc.

9:10-9:40 Plenary Discussion: Future Coordination and Organization of the Weather Prediction Enterprise

9:40-10:10 Break

Session VII: Concrete Next Steps. Session Chair: George Frederick, AMS Commission on the Weather and Climate Enterprise

Session Objective: Summarize the salient points that were discussed during the workshop. Draw some conclusions and make plans for future activities.

10:10-10:30 Review of specific proposals generated during the course of the meeting on possible ways to proceed. These may include future gatherings to explore the major issues, setting up a community-organizing group, etc. Ray Ban, The Weather Channel and Cliff Mass, University of Washington

10:30-11:45 Plenary Discussion: How Should We Proceed?

11:45-12:00 Meeting Summary and Adjourn