

Discussion Draft

Meeting Minutes of the Subcommittee on Disaster Reduction

06 March 2008, 10:00 a.m. to 12:00 p.m., Department of Commerce Room 5215

Italics indicate absent members. "T" indicate members participating via teleconference.

Officers

David Applegate (USGS), Chair
Margaret Davidson (NOAA), Vice-Chair (T)

NSTC Liaison

Gene Whitney (OSTP)

Working Group Chairs

Earth Observations Working Group

Steve Ambrose (NASA), Co-Chair
Tim Battista (NOAA), Co-Chair
Bruce Quirk (USGS), Co-Chair

Infrastructure Task Group

Joy Pauschke (NSF), Chair

Resource Impacts Task Group

Susan Conard (USFS), Chair

Designated Representatives

BLM *Ronald Huntsinger*
CDC *Mark Keim*
DHS Bruce Davis
DHS/FEMA *David Maurstad*
DHS/USCG *Steven Cohen*
DOD *Al Johnson*
DOE *Patricia Hoffman*
DOT *Sheila Duwadi*
EOP / OSTP Gene Whitney

EPA *Peter Jutro*
HUD *David Engel*
NASA Steve Ambrose
NGB Daniel Bochicchio
NIH Allen Dearry (T)
NIST William Grosshandler
NOAA Margaret Davidson (T)
NSF Joy Pauschke

OPHS Sven Rodenbeck (T)
State *Jordan Muller*
Fernando Echavarria
USACE *Barbara J. Sotirin*
USAID *Peter Morris*
USDA / USFS *Susan Conard*
USGS David Applegate
Paula Gori

Other Attendees

DOE Anthony
NSF Dennis Wenger
NOAA Nell Codner
Mike Tanner

Kurt Hondl
Ken Graham
DOC/OFCMS
Mark Gunzelman

NGB Leonard Kosicki
Secretariat Emily Wallace
Barbara Haines-Parmele

Agenda

10:00 Welcome and Introductions
10:05 Presentation – USGEO SAG
10:30 Presentation - Tornados
11:15 Approval of Meeting Minutes
11:20 Report from the Chair
11:25 Report from the Vice-chair
11:30 Report from the NSTC Liaison
11:35 Grand Challenges Outreach Strategy
11:45 Close and Next Actions

Handouts

- Agenda
- USGEO SAG Presentation
- February Meeting Minutes
- Disasters Roundtable Workshop on Disaster Risk Management in an Age of Climate Change
- Grand Challenges Implementation Plans
- Grand Challenges Outreach and Distribution Plan
- National Academics All-Staff Memorandum for March 6th Appreciation Talk on Indian Ocean Tsunami Fund

Discussion Draft

I. Call to Order and Introductions

Subcommittee on Disaster Reduction (SDR) Chair Dr. David Applegate (USGS) called the meeting to order at 10:00 a.m. and noted that the agenda would be reversed to allow for early presentations.

Dennis Wenger announced a joint NSF/NOAA solicitation for hurricane warnings, which can be found online at

http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=503246&org=SBE&from=home.

II. Presentations

USGEO Strategic Assessment Group (SAG) Presentation – Mike Tanner

Dr. Applegate introduced Mr. Tanner to discuss the USGEO Strategic Assessment Group.

Mr. Tanner informed the group that the USGEO SAG is developing a national portfolio of high national priority Earth observations by Societal Benefit Area for the purpose of informing decision makers (OSTP, OMB, Congress, Agencies) and improving investment opportunities.

The near term goal of the USGEO SAG is to leverage existing documents and publications (i.e. IEOS) to focus on document requirements and recommendations. Mr. Tanner indicated that a longer term goal of the SAG is to develop a more analytical framework for evaluating gaps and solutions.

Mr. Tanner indicated that the USGEO SAG is organized by societal benefit area (SBA) and shared with the group the team lead for each SBA and their key linkage to sister CENR Subcommittees. Mr. Tanner indicated that representation is still needed in the Human Health Societal Benefit Area. Both Allen Dearry and Sven Rodenbeck agreed to further review the USGEO SAG needs and suggest potential contributors. Margaret Davidson agreed to send the “4H” report from JSOST that shows human health links to the SAG for review.

Dr. Whitney, knowing that the SAG is looking at national needs, asked about the scope of the assessment and how far in the weeds they will be analyzing regarding observation systems. Mr. Tanner indicated that they are looking at all observing systems from the large space systems down to buoys and rain gauges.

NOAA Presentation on Tornado Outbreak – Ken Graham

Dr. Applegate introduced Ken Graham from the NOAA Chief Meteorological Services Division to brief the SDR on how forecasting and warning systems performed and any initial lessons learned from damage caused by the February 5-6, 2008 Tornado Outbreak.

Mr. Graham indicated that it has been a busy 2008 in terms of tornados; there have been 285 tornados to date this year. On Super Tuesday (February 5, 2008), 63 tornados were confirmed making it the worst outbreak in 20 years and the deadliest since 1971.

Mr. Graham informed the group that a good job was done regarding advance communication of the weather. Communication was made six days prior to the outbreak. During the communication, the telephone proved too slow, 82 offices utilized chat to communicate with the field. Despite the advanced communication, 57 people were killed and more than 350 were injured in five states.

Discussion Draft

During the outbreak, the average lead time for tornado warnings was 16 minutes, exceeding all established performance goals. After the events, local WFO experts including a social scientist and national assessment teams surveyed the impacted areas, talked to victims, local EMS, and media. Preliminary findings show people knew they were in danger but thought they were in a safe place. It was determined, however, that most didn't have tornado shelters or bunkers to seek shelter, with an EF 4 or higher tornado, the best way to survive is to be underground.

Mr. Graham concluded his presentation by highlighting future service improvements including radar advancements such as super resolution Doppler radar, dual-polarization radars, and phased array radar; improving warning dissemination by increasing the use of Common Alerting Protocol (CAP); providing more storm decision aids; improving the integration of social science; and continuing the partnership with NOAA Weather Radio and All Hazard Partnership.

NOAA Presentation “Tornado Research at the NOAA/OAR National Severe Storms Laboratory” - Kurt Hondl

Dr. Applegate introduced Kurt Hondl from the NOAA National Severe Storms Laboratory to brief the SDR on the development of tools and applications for tornado forecasts and warnings and the development and testing of observational systems.

Mr. Hondl began his presentation by providing a historical review of tornado forecasts and warnings. Current tornado forecast and warning tools provide a lot of raw data to forecasters often resulting in information overload. As a result, forecasters need “Decision Assistance Tools” such as automated weather detection algorithms using various image processing and artificial intelligence techniques; graphical displays to “slice & dice” the data, and trends and tabular information.

Mr. Hondl explained that the future vision of warning decision making science is to evolve from WSR-88D to Dual-Polarization Radar and CASA by 2017 then to multi-function phased array radar by 2025. Multi-function Phased Array Radar (MPAR) provides faster scanning, adaptive scanning, and is multi-mission.

Operationally, the existing Polarimetric Tornado Detection (WSR-88D) can detect the tornadic debris signature (TDS) to verify warnings and to pinpoint the tornado location. By confirming the presence of a tornado, forecasters can be alerted that a particular storm has a history of producing tornadoes. The polarimetric TDS also provides additional utility when the tornado is not observable visually. If a tornado is completely wrapped in rain or occurs at night, storm spotters on the ground may not be able to confirm the presence of a tornado

Phased Array Radar is being developed via a 3 sector partnership between government, academia, and industry. The goal of the partnership is to develop and implement adaptive scanning strategies and analyze and compare storm structure and evolution using data collected by both PAR and WSR-88D. The primary advantage of using of Phased Array Radar is to avoid beam smearing and vertical displacement of structure common in high shear wind environments. More coherent circulations, Earlier detection of tornadic vortex signature

Numerical Modeling & Prediction. Future of Tornado Forecasts & Warnings

– “Warn On Forecast

- Hazardous Weather Testbed. Collaborative testing of research projects within a pseudo-operational environment

Discussion Draft

- Brings together diverse research scientists and operational forecasters from academia, NOAA, foreign weather services, and the private sector
- Accelerates technology transfer from research to operations
- Feeds practical knowledge and insight from operations to research
- Programs for both tornado forecasts & warnings
 - Spring Program
 - Experimental Warning Program

III. Approval of Minutes

Minutes from the previous meeting (February 7, 2008) were approved as presented.

IV. Report from the Chair

Dr. Applegate announced that the Grand Challenges Implementation Plan on Space Weather would begin the SDR clearance process next week. SDR members should expect less than 2 weeks to review the document.

Also in March, the SDR will begin its annual re-vetting of the membership with memos faxed to agency heads. SDR members should expect to receive copies of the documents faxed to their agencies so they can follow up internally. This process should conclude by mid-April.

The Disasters Roundtable will hold its 22nd Workshop, Disaster Risk Management in an Age of Climate Change on Thursday, April 3rd. In order to participate, the SDR will need to shift its meeting to Tuesday, April 8th at 10:00 a.m. in Department of Commerce Room 5215.

Also, Dr. Applegate advised members to mark their calendars because the July SDR meeting has been slated as an all-day retreat to discuss transition strategy and deliverables through 2009.

In the interest of time, the Vice Chair and NSTC Liaison did not give reports.

V. Distribute Grand Challenges for Disaster Reduction Implementation Plans and Discuss Outreach Strategy

Dr. Applegate congratulated and thanked all SDR members for their hard work on the Grand Challenges Implementation Plans, which were officially released by the White House at the end of February. He reminded members to order their documents for distribution within their own agencies and advised them to expect a PowerPoint presentation they can tailor for their internal briefings.

Dr. Whitney reminded members that these documents are to be USED in their agency budget processes and offered to personally brief senior agency officials.

VI. Adjournment

The meeting adjourned at 11:57 a.m.

Future Meetings

The SDR meets on the first or second Thursday of every month from 10 a.m. to 12 p.m unless otherwise noted.

April 3, 2008

May 1, 2008

June 5, 2008

July 17, 2008

Discussion Draft

August 7, 2008
September 4, 2008
October 3, 2008
November 6, 2008
December 4, 2008

VII. Agenda Items and Other Communications with the Subcommittee

Please send proposed agenda items and any other items intended for distribution to the full Subcommittee to Emily Wallace (ewallace@grs-solutions.com).

VIII. Contact Information SDR Leadership

David Applegate, Chair, 703-648-6715, applegate@usgs.gov
Margaret Davidson, Vice Chair, 843-740-1220, Margaret.davidson@noaa.gov
Gene Whitney, NSTC Liaison, 202-456-6081, gwhitney@ostp.eop.gov

International Working Group

Ralph Braibanti, Chair, 202-663-2330, braibantirl@state.gov

Earth Observations Working Group

Steve Ambrose, Co-Chair, 202-358-0851, sambrose@nasa.gov
Tim Battista, Co-Chair, 301-713-3028 x171, tim.battista@noaa.gov
Bruce Quirk, Co-Chair, 605-594-6040, quirk@usgs.gov

Secretariat

Emily Wallace, 703-560-7448, ewallace@grs-solutions.com

IX. Summary of March Actions

Action	Lead	By When
Contact Dave (applegate@usgs.gov) if you would like a personalized support request letter to the SDR representative or someone else in your agency	SDR Members	Standing
Contact Emily (ewallace@grs-solutions.com) to receive copies of the Grand Challenges for Disaster Reduction Implementation Plan packets	SDR Members	Standing
Let Emily or Dave know how you use the implementation plans, including when you link to the plans from your agency websites.	SDR Members	Standing
Send Emily or Dave additional distribution suggestions, including relevant contact information	SDR Members	Standing
Distribute Grand Challenges PowerPoint presentation that can be tailored for internal agency briefings	Secretariat	14 March
Initiate SDR Space Weather document clearance	Secretariat	14 March
Initiate SDR membership re-vetting	OSTP/NSTC/Secretariat	14 March

Discussion Draft

Update SDR internal website	Secretariat	31 March
-----------------------------	-------------	----------