

NWA Remote Sensing Committee Meeting Summary

Wednesday, October 17, 2007

4:30-6:40 p.m. (PDT)

Meeting Participants: Dennis Buechler, Kenneth Carey, James Gurka, Mike Haas, Steve Harned (NWA Executive Director), Pamela Heinselman, Thomas Lee, Wayne MacKenzie, Craig Nelson, Ralph Ferraro, Brian Motta, Walter Peterson, Pablo Santos, David Trask, Jeff Underwood, Jian Zhang

1. Welcome and opening remarks (Carey)

Ken noted the comprehensive initiatives we as a committee have undertaken and accomplished in 2007, praised the contributions from each committee member and lauded their positive and far-reaching impact on the NWA and our profession. He warmly welcomed new committee members Walt Peterson (University of Alabama at Huntsville), Pam Heinselman (National Severe Storms Laboratory) and Jeff Underwood (University of Nevada), and thanked each of them for participating in this committee meeting. Since Pam, Jeff, and Walt are all NWA members, they were easily approved at the Council/Committee Chair meeting by the NWA President to be new remote sensing committee members.

2. Recognition of departing committee members (Carey)

Ken thanked departing committee members Mike Haas, John Knox, Mike Eilts, David Trask, and Jian Zhang for their individual and collective outstanding service to the NWA and our Remote Sensing Committee. NWA Executive Director Steve Harned presented each committee member with a certificate of appreciation recognizing their selfless service. Steve will mail the certificates to those not able to attend in person.

3. Web page status and updates (Ellrod)

G. Ellrod continues to do an outstanding job maintaining our committee web site. We need to ensure the published training articles are all posted. He also has been monitoring actions by the NWA Information Technology (IT) Committee to align our committee web site with the look of the new NWA web site recently launched.

There was discussion surrounding the future of NWA web pages and a suggestion that our web page links be aligned with the same look and feel as the new NWA web page to make it easier for users and visitors and also to

maintain. We felt that an instrument description and glossary of common acronyms would be helpful. In addition, we also thought that it would be value-added to know who was and how many people were visiting our web page.

ACTIONS:

G. Ellrod: Stay in close contact with the NWA IT Committee to ensure we are aware of recent and planned developments for NWA and committee web pages, and align our committee web pages with planned NWA direction.

All: Review the NWA and committee web sites and provide feedback to committee colleagues on ways to align our committee web site with the NWA website, recommend new content for our web site, and suggest ways to improve our site to help our members.

B. Motta: Develop a description of primary instrument descriptions and a glossary of common acronyms.

G. Ellrod: On an on-going basis provide to the committee the number of visitors to our web and the domain (e.g., .com, .edu) of those who do visit our web site.

4. Undergraduate Meteorological Satellite Applications Award and Applicant Paper Review (Carey/Stanga/Knox)

The 2007 NWA Undergraduate Satellite Applications Award, established in 1999 to stimulate interest and foster the study and use of satellite remote sensing data in weather analysis and forecasting and sponsored by Frances Holt, was awarded to Jordan Joel Gerth (University of Wisconsin at Madison) for his paper, "Transitioning Satellite Imagery from Research to Operations."

Committee members also volunteered to review and provide comments on the six undergraduate meteorology award student paper applications that are planned to be published in the NWA Electronic Journal for Operational Meteorology. Each of the six applicants will have a "lead" reviewer" (the first name indicated in the list below for each paper). That person will collect, consolidate and integrate the feedback he/she received from the other members of our committee. The lead will send to K. Carey, not later than Oct 26, their consolidated review of that paper.

(1) Ms. Taylor A. Parlier/Meteorological Satellite Applications/Mitchell Community College Reviewers: Gurka, Haas, MacKenzie

(2) Ms. Nicole A. Hannon/Comparison of QuikSCAT SeaWind data with buoy data from the National Data Buoy Center for the Gulf of Alaska/SUNY Oswego Reviewers: Fox, Yoe, Ellrod

(3) Mr. Christopher Bianchi/A Complete Picture: Weather Satellites and Contemporary Meteorology/Boston University Reviewers: Haas, Gurka, MacKenzie

(4) Mr. Braden Ward/Integration of Fog Product Imagery and Geographic Information Systems to Examine Winter Season Fog/Kean University Reviewers: Ellrod, Carey, Gurka

(5) Ms. Chrissy Warrilow/Severe Weather in Texas and Louisiana on November 6, 2006 from 1700Z to 2100Z/GA Inst. Of Tech Reviewers: Zhang, Gurka, Stanga

(6) Mr. Jordan Joel Gerth/Transitioning Satellite Imagery from Research to Operations/University of Wisconsin at Madison Reviewers: Carey, Knox, Yoe

K. Carey developed a draft flyer to promote the 2008 award. This announcement was approved by the NWA Council, and the NWA President (Alan Gerard) authorized an effort to promote applicants for this award. G. Ellrod has uploaded the 2008 award announcement to the committee web site.

ACTIONS:

Lead Reviewers: By Oct 26 send to K. Carey a consolidated document that lists and describes constructive feedback for the undergraduate metsat paper authors.

K. Carey: Send the paper review comments to the Chief Editor of the NWA Electronic Journal of Operational Meteorology. Promote the 2008 award through AMS and NWA Local Chapters, Unidata, at the upcoming GOES Users' Conference, and to other NWA committee chairs.

All: Promote applications for the 2008 Meteorological Satellite Applications Award.

5. Remote Sensing Training and Education Initiatives (MacKenzie)

W. MacKenzie is leading a signature committee initiative to publish a series of articles on remote sensing training and education. We will publish all of these articles on our committee web page, and will consider publication in the NWA Electronic Journal of Operational Meteorology and NWA Digest, where appropriate. In September 2007 the NWA newsletter began incorporating color graphics.

Published:

- **November 2006: Heavy Precipitation Forecasting Using Microwave Total Precipitable Water (TPW) (T. Lee)**
- **December 2006: Remote Sensing and Forecasting Winter Weather's Impact on Our Roads (D. Trask)**
- **January/February 2007: Global Positioning System Meteorology: Ready to Move into Operations (P. Santos)**
- **April 07: Satellite Remote Sensing of Fog and Low Clouds (G. Ellrod)**
- **May 07: The Use of GOES Rapid Scan During Severe Weather Events (W. MacKenzie)**
- **June 07: The Hourly GOES Sounder Total Column Ozone Product (J. Knox)**
- **June 07: Phased Array Radar Evaluations (J. Zhang)**
- **July 07: Lightning Detection and Prediction Using Remote Sensing (D. Buechler)**
- **September 2007: Near-Realtime Remote Sensing of Tropical Cyclones on the Web (T. Lee)**

Submitted for Publication:

- **October 2007: Dual Polarization Radar (W. MacKenzie)**

Planned for Publication:

- **November 2007: Multifunction Phased Array Radar (P. Heinselman/J. Zhang)**
- **December 2007: Snow and Ice Products from the National Ice Center and National Snow and Ice Data Center (R. Ferraro)**
- **January 2008: Forecasting Winter Cyclogenesis (B. Motta)**
- **February 2008: Improving Forecasts Using Wind LIDAR (J. Yoe)**
- **March 2008: Remote Sensing of the Marine Environment: Harmful Algal Blooms/Coastal Jets (R. Ferraro)**
- **April 2008: NPOESS Preparatory Project: A New Generation of Remote Sensing (C. Nelson)**
- **May 2008: Observing and Forecasting Fire Weather (B. Motta)**

- **June 2008: Display and Visualization of Remote Sensing (J. Underwood/W. MacKenzie)**
- **July 2008: Hazardous Weather Testbed (P. Heinselman)**
- **August 2008: GEOSS/Societal Areas: How to Maximize Remote Sensing's Value (TBD)**
- **September 2008: A New Satellite Constellation -- Leveraging NPOESS and GOES-R (J. Gurka and C. Nelson)**
- **October 2008: Remote Sensing Training (TBD)**

ACTIONS:

W. MacKenzie: Ensure our committee articles are submitted for publication in time to meet NWA newsletter suspense deadlines. Work with G. Ellrod to ensure they get posted to our committee web page. Identify appropriate articles that should be published in the NWA Electronic Journal for Operational Meteorology. Leverage other NWA committees and other partnerships, wherever and whenever appropriate.

B. Motta/R. Ferraro: Through committee and Council broadcaster contacts, identify a potential training and/or education topic we could jointly develop with and for broadcasters.

P. Heinselman/J. Zhang: Ensure the proposed November newsletter article on MPAR is submitted by Oct 25 in time to meet NWA newsletter suspense deadlines. Work with G. Ellrod to ensure the article is posted to our committee web page.

R. Ferraro: By November 5 provide to the committee a draft article (~1 – page) on "Snow and Ice Products from the National Ice Center and National Snow and Ice Data Center" suitable for publication in the December NWA newsletter. Provide a color graphic as part of this article.

All: G. Ellrod, as the NWA Digest Editor, requested support for the Digest as Associate Editors. Consider volunteering to help review submitted articles, and submitting articles to the Digest.

6. Remote Sensing Training and Education for K-12/College/University Students (Nelson/Haas)

There was discussion on opportunities for us as a committee to invest time and effort into remote sensing education for K-12, college and university students. We agreed that we should explore initiatives that enhance

awareness of and support remote sensing for younger men, women and teachers.

ACTION: C. Nelson/J. Gerth: Explore opportunities (e.g., 7th Olympiad) to raise awareness of remote sensing education and training for young men and women. Contact Steve Ackerman (Univ. of Wisconsin at Madison) to follow-up on his contacts and connections. Follow-up with Faith Borden and her “box” of goodies and science fair initiatives.

7. Disposition of the geostationary hyperspectral sounder capability letter of support (Carey/Ferraro)

The NWA Council has endorsed our letter of support, and the NWA Executive Director has signed and distributed this letter to the National Academy of Sciences, National Research Council, and National Oceanic and Atmospheric Administration.

ACTIONS:

R. Ferraro:

- (1) Request from the NWA Executive Director, President and Council that we be provided any feedback received by the NWA on this letter.
- (2) Follow-up with the NWA to ensure that future letters of support contain a distribution list so that individuals receiving these letters know who else received these letters.

8. Status of the GPS-Met Article in the NWA Electronic Journal of Operational Meteorology (Santos)

The GPS-Met article has been approved for publication in the NWA Electronic Journal for Operational Meteorology and was posted on the E-Journal web site in early October.

ACTIONS:

P. Santos: Provide G. Ellrod the approved version of the GPS-Met published in the NWA Electronic Operational Journal for publication on our committee web site.

G. Ellrod: Post the GPS-Met journal article on our committee web site.

9. Expected Benefits of NPP/NPOESS Instruments and User Awareness of those Benefits (C. Nelson/M. Haas)

Consistent with our 2007 committee goal #5, to “document expected benefits of potential or planned National Polar-orbiting Operational Environmental Satellite System (NPOESS) Preparatory Project (NPP) and GOES-R instruments and promote user awareness of those benefits,” we will develop a document describing the NPP/NPOESS instruments and benefits of those instruments.

ACTION: C. Nelson/M. Haas: By Nov 30 complete the NPP/NPOESS document that describes the instruments planned for NPP and NPOESS and benefits of those instruments, and send it to committee members for discussion.

10. Newsletter input (Nelson)

We have been very active in developing and submitting articles on current remote sensing events of interest to NWA members. We need to stay aware and vigilant for appropriate articles that should be published in the newsletter and on our web page. For example, we should draft an article on the L-3 Communications and Baron Services joint venture.

ACTIONS:

C. Nelson:

- (1) Draft an article on the \$43 million joint venture between Baron Services and L-3 Communications to perform NEXRAD dual-polarimetric upgrades.**
- (2) Send a request for committee newsletter input on the 1st of each month.**
- (3) Ensure committee newsletter articles are received by the NWA newsletter staff by the 20th of each month.**

11. Recap of this year’s remote sensing session at the 32nd NWA Annual Meeting in Reno, NV (13-18 Oct 07) (Carey/Ferraro)

In spite of the challenges of coordinating a joint session with the WAF, Education, and Professional Development committees, the committee consensus was that the joint session went better than expected. The panel on QuikSCAT was good, although we wanted to get closure on next steps or a follow-on to QuikSCAT to address both short-term and long-term challenges.

ACTION: P. Santos/T. Lee: Identify options to acquire a long-term solution for QuikSCAT.

12. Ideas for next year's remote sensing session at the 33rd NWA Annual Meeting in Louisville, KY (11-16 Oct 07) (All)

The committee consensus was that we should consider some sort of special session or workshop for users at next year's meeting. The NWA has invited the GOES Users' Conference to participate in this meeting.

ACTION: J. Gurka: Develop an outline for a day-long satellite, radar, and lightning user's education and training session at the October 2008 annual meeting, to include a short session during the broadcaster's workshop.

13. Goals for 2008 (All)

After some discussion we agreed to complete the following goals in 2008:

- **Raise awareness of the value of remote sensing capabilities, to include use of radar, profiler, lightning, satellite and GPS Meteorology (GPS-Met) data network sensors**
- **Identify NWA member needs for remote sensing education and training. Publish regular articles on remote sensing training and education topics in the NWA newsletter, on the NWA web site and in NWA journals, as appropriate**
- **Host a special session or workshop on remote sensing topics at the 2008 NWA Annual Meeting**
- **Promote and solicit applications for the NWA Meteorological Satellite Applications Award Grant (for undergraduate students)**
- **Document expected benefits of potential or planned National Polar-orbiting Operational Environmental Satellite System (NPOESS) Preparatory Project (NPP) and promote user awareness of those benefits**
- **Participate and support scientific and technical exchanges at conference and symposia remote sensing fora**
- **Support the NWA awards process by developing and submitting at least one NWA annual award nomination package**
- **Modify web pages as needed to comply with new NWA IT committee standards**

ACTIONS: K. Carey: Finalize and post the list of committee 2008 goals.

14. Next committee conference call (Carey)

Our next Remote Sensing Committee conference call will be during the week of January 7, 2008.

ACTION: K. Carey: Schedule and coordinate our January 2008 committee conference call.