

PG All Hands Telecon
Notes from 9/12/11 meeting at 11am EDT
Next Meeting: Tentatively Monday, November 7, 2011, ~1:30pm EST.
Author: Kathryn Mozer, ASRC Aerospace

Roll Call:

CIMSS

Scott Bachmeier, Wayne Feltz, Jordan Gerth, Scott Lindstrom

SPoRT

Kevin Fuell, Gary Jedlovec

CIRA

Renate Brummer, Hiro Gosden, Don Hillger, Steve Miller

NESDIS STAR ASPB

Jaime Daniels, Tim Schmit

NESDIS STAR

Shobha Kondragunta

CICS

Michael Folmer

OPC/HPC

Joe Sienkiewicz

NHC

Jack Beven, Michael Brennan

SPC

Chris Siewert

NWS-WFO Omaha

Dan Nietfeld

NWS-WFO Milwaukee/Sullivan

Jeff Craven

GINA

Dayne Broderson, Jiang Zhu (?), Tom Heinrichs

UMBC Air Quality

Ray Hoff, Amy Huff

NESDIS GPO

Jim Gurka

NWS Training
Tony Mostek, Brian Motta, Wendy Abshire (COMET)

NWS HQS
Bonnie Reed, Bill Sjoberg

OAR/ESRL
Ed Szoke

NWS/NCEP
Jim Yoe

Action Items:

*Template distribution for cohesiveness among provider websites. (Brian Motta)

*Providers working with WFOs need to send that information to Bonnie Reed (i.e. which WFOs you are providing data to and what data).

Request an update from JPSS PG at next meeting

Request that ESRC gives an update at next meeting

Closed Action Items:

*A better description of RGB should be made available (DeMaria, Kondragunta, Hillger)
-talked with CIRA about terminology about synthetic natural color was better than RGB

Summaries:

Program Update – Jim Gurka for Steve Goodman

Steve briefed Kathy Sullivan on PG. She liked PG and SPoRT and flew in one of the hurricane hunters. Steve presented PG talk at EUMETSAT along with other PG talks. Steve invited EUMETSAT to participate in PG experiments, official collaboration and further talks at GUC. Budget for 2012...expect travel budget to be reduced.

HPC/SAB/OPC – Michael Folmer

HPC/OPC sending out updates to people who were at AWG. Working with RBG and MODIS. Has near-real time with the product. Still have LDM with an issue. Working with a data flow specialist at NCEP. Hope to have it up today or tomorrow. Since we have RBG products, change schedule to bring in ABI products and convective products. Start evaluation process. Working with HPC international desk. Given all security/IT issues, we are a working PG.

Q&A:

Bonnie: Provide an updated list of products and dates that you plan to integrate?

Michael: Yes, hoping to do it today. Will have a new schedule out to everyone.

CIMSS – Wayne Feltz, Jordan Gerth, Tim Schmit

Break down where products are going by testbed. HWT...distributed intensity and hotspot. AWC testbed...low cloud/fog available in AWIPS and NAWIPS..interviews for AWC are Friday. Alaska....most

products available in AWIPS and AAWU. Volcanic ash WES case is nearly complete. UAF will be gathering feedback on products. Pacific testbed...coordinating with Mark and Steve, UH will hire a post-doc soon. Jordan may visit in November. HPC testbed...simulated ABI imagery and request for near casting products. OPC...simulated ABI imagery. GOES-15 will replace GOES-11 in December. Sending both imager and sounder data. Jordan: Mid-August participated in Technical Interchange Meeting in Omaha. Saw AWIPS II in operations at Omaha WFO, proposed a Tiger Team to handle stuff. Putting GRIB2 data into AWIPS II. Struggling to deliver some data to HPC. Continue to support testbed at Milwaukee WFO. Participating in GUC (GOES-R booth). Getting stuff available on 4D. AWIPS WES for ABI...final official version packaged and distributed.

Q&A

Jeff Craven: Forecasters enjoy this and schedule an extra forecaster to work with CIMSS people so they aren't distracted.

Ray Hoff: At last PG in May, discussion came up on building out AWIPS II in other PGs, we have that for AQ, the recommendation was to hold off until meeting in August. What is the feeling on when other PGs could build this in?

Jordan: The software is fairly stable but still not there with migrating product over. If it's in GRIB2 you can probably move it over but like NETCDF will take longer. Someone might have a better handle on deployment.

CIRA – Steve Miller and Hiro Gosden:

User interactions: Cheyenne request new PG products to evaluate. Visited and plan to visit again. Boulder ready for new PG products. San Diego...ingesting geocolor, lowcloud/fog and blowing dust. Monterey..ORI, synthetic imagery (wv and IR), interest in simulated fog products. NHC PG began Aug 1. 9 products evaluated...CIRA: GOES-R Natural Color, EUMETSAT RGB airmass and dust, rapid intensification index, and super rapid-scan operations. Mid-project review scheduled for tomorrow. Promising results so far. NHC established real-time global lightning dataset feed. Michael Folmer is providing RGB analysis. Developed a web page highlighting forecaster feedback on PG products including e-mails, AFDs, shift logs, blog entries and verbal feedback. Expanded LUT for green band synthesis. Added a Rayleigh correction and new method works better. Nighttime Visible Products: porting codes to GINA and setting up processing environment for near real-time production. Target to begin informal demos with users for coming winter season. System Developments: AWIPS II ...attended hands-on AWIPS II developer training held by Raytheon in August. Saw a demo of code from Raytheon group which was useful. Learned how to implement new products and capabilities in AWIPS II via java and python. Procured advanced hardware to implement new AWIPS II system at CIRA, configuration is underway. First task is to test McIDAS format data ingest & display. Issues-new system development. Attending various upcoming conferences (slide 8).

Q&A

Gary Jedlovec: Is NHC receiving RGB products?

Jack Beven: Yes it's all working well.

Jordan Gerth: Minor modifications with ...instructions. I don't think they've ever provided specific documentation correcting the bugs.

CIRA: Can you provide corrections to us?

Jordan Gerth: There should be an official change but I don't know where it is.

Bonnie Reed: Interactions with WFOs...any other stuff you are sending them that I could have?

Steve: Yes, we received feedback this morning and we will send all that to you.

SPoRT:

HWT/SPC experiment: PGLM products available in AWIPS, AWIPS II, N-AWIPS and ready to provide. LFA run from NSSL WRF. Provided future UWCI products for evaluation. SPoRT WRF demo. Staff out there for 4-5 weeks. Preparing for 2012 experiment...LMA mosaic, RGB suite of products, LFA enhancements, SPoRT WRF forecasts. Providing RGB and other products to national centers...OPC/HPC/SAB: air mass RGB, MODIS AM RGB, SEVIRI AM RGB. Initially single workstation. Michael Folmer using products with staff and writing several blog posts. Will work with full staff at centers in coming weeks. NHC: products available and being used in NHC. Future products: other RGBs, limb corrected MODIS RGB, SSTs, possible ABI QPE product. From OCONUS, obtained reliable access to Terra/Aqua MODIS from UAF. Windsat ocean sfc vector winds from NRL...data to 3 AK region WFOs and Monterey. Refining training...plan to transition to Eureka and Medford. Evaluation and transition of baseline QPE (Kuligowski)...iterated with AK Region. PG products to WFOs...~8 WFOs particularly in Southern Region. Number of examples presented at recent SPoRT Partner Virtual Workshop-hybrid products. PG Products to WFOs...CI product to WFOs (MFL, MLB, HUN). Conducted teletraining on Aug 18, and again on Aug 31 per WFO request. Recorded 2nd teletraining for other staff to use. User assessment questions developed with UAH for September evaluation.

Air Quality – Shobha Kondragunta:

Summary of user feedback for summer experiment. Objectives: test the generation of ABI aerosol products using simulated radiances, distribute the products to users in near real time, obtain feedback from users on the usability of the products. Proxy aerosol products: AOD, aerosol type, RGB. Domain: SE U.S., streaming hourly images. Done during DISCOVERY-AQ. Selected members of AWPAG Advisory Group providing feedback on streaming NRT proxy images. Feedback on products: see slides.

Q&A

Steve Miller: The table Don gave you is the older version. A part of the algorithm is that there is a search process that goes out until it finds a value. Should cover spectra you need.

Shobha: Hiro was telling me there is something like that.

Brad: Add satellite derived winds. Not sure how much they inform. Could you add just NWP winds?

Shobha: Yes but they won't be as high of temporal/spatial resolution. Our water vapor winds are available over non-cloudy regions.

HWT/SPC – Chris Siewert:

2011 Spring Experiment: Focus on CI and QPF. 24 NWS forecasters and many visiting scientists. 8 PG products demonstrated. Real-time forecast and warning exercises using N-AWIPS, AWIPS, and flaws in AWIPS II so hopefully use that next year. WES cases developed for training purposes. Examples of products and feedback: PGLM...had instantaneous flash extent density, instantaneous flash initiation density (which was pulled halfway through), 60 min max track and 60 min accumulated track. Hard to use due to coarse resolution. Convective Initiation...SATCAST V.2 removed blue cloud identification which was confusing to forecasters. Most forecasters were comfortable. Not interested in yes/no values...more valuable to have some kind of intensity value. UWCI/Cloud-top cooling rate...added cloud mask at request of last experiment. Overall...created "ultimate CI" AWIPS 4-panel which has UWCI, SATCAST, PGLM, and MRMS reflectivity at -10c. False alarms were still useful in identifying clouds trying to break the cap. Simulated Satellite Imagery/Lightning Threat...produced from the Oz 4km NSSL-WRF...all 9 non-solar ABI IR bands. Folks at CIRA provided some band differencing which were useful. More work will need to be done but something new this year. Overlaid NSSL onto VIS to get a quick look at what atmosphere is forecast to be doing and forecasters found useful. Differential Theta E/PW Nearcast...advected using a Lagrangian model..up to 9hr forecast...often utilized in 0-2 hour warning

operations. Not what product was intended for, but forecasters found it useful. Fire Weather Experiment...2-week period (22 Aug-2 Sept) during Western US fire weather season...main focus on dry thunder forecasting. 6 NWS forecasters and several internal guests participated..SPC and Norman WFO. 6 PG products demonstrated in N-AWIPS..forecast 24 hr. Used NDVI, NDVI Change, Surface Dryness, Dryness Anomaly...from Bob Rabin. Final Reports...Spring experiment available, fire weather in development.

Q&A

Bill Sjoberg: Since you've been doing this for 3 years, are you tracking these results and how it changes next year?

Chris: To some degree...web based surveys available short time last year. Questions now are more robust.

Bill: Share survey approach with others?

Chris: Available for anyone to look at. I can send link around. We use surveymonkey or another survey version and have forecasters fill it out after each forecast.

Bill: It may be beneficial to bring survey approaches in line with each other.

Training – Tony Mostek and Brian Motta:

Training for PG: How are these products helping decision support? Dedicated NWS training division-1 center and 2 branches...lots of partners. NOAA/UCAR/COMET got funding approved for next 5 years. Other U.S. agencies beginning to be involved. International collaboration. NOAA & partners working together for satellite training...VISIT, WMO, EUMETSAT, UCAR/COMET, NWS Training Division. Feedback is very important to relay to trainers. Prepare NOAA Users & Developers...rapidly evolving technology & operations, human performance yields support services, evolving societal needs & impacts. Shows various PG Product list websites (CIMSS, CIRA, SPoRT). VISIT has a table highlighting training. COMET is producing a lot of modules as well. NWS Weather Ready Nation has 9 pilot projects...MetWatch is one and Brian Motta has been on a 90 day detail with it...a NWS desk to monitor real-time events. Had operations during Irene and other TSs, earthquake, and wildfire outbreak in TX. A lot of info being passed up the chain of command all the way to the President. Steve Goodman did a briefing where he included the RBG from Irene. Training is a broad community and the focus is on human performance. Working with Siewert on revisions for planning phase of next experiment and will combine with other testbeds.

Q&A:

Renate Brummer: Suggest that training division comes up with a perfect PG product table...a template so that we can all have something identical.

Brian Motta: I agree and I will work with the providers to get a final template and send that around.

Bill Sjoberg: Tony had mentioned that there needs to be focus on developers and I continue to hear good things from the meeting in Omaha and I hope that initiative holds on.

Brian Motta: I think that will happen as Omaha becomes more stable and other sites start getting deployed.

Jordan Gerth: Regarding the template, the CIMSS table has been updated and is online and tried to make it more intuitive for the forecasters.

Tim Schmit: That's the one to use.

GINA – Tom Heinrichs:

Fog/low cloud...started evaluation process last week and will continue. Report due in October. Interview with Fairbanks SOO who really likes the fog probability product and finds it useful. Training has been

given high marks. More interviews with Fairbanks forecasters as well as Anchorage. SOO in Fairbanks is leading interview process. Tony Hall is helping to work PG stuff. Also had ongoing work with CIRA. Gary Jedlovec mentioned SPoRT data flows are going well. We want to get some feedback. Working on GOES/POES polar images with CIMSS (Key and Lazzara). Lubchencho here for a ribbon cutting. We are moving equipment to new facility. New hardware in place and running. Mary Kieczka and Kathy Kelly came by and we showed them GINA and briefed them on PG stuff. Mary asked about JPSS involvement and told her we are in the process of transitioning from a GOES PG to a high latitude PG which includes JPSS. Good to see other PG groups.

Pacific Region – Bill Ward (update via email):

1.) We have successfully been able to get the lightning data from WWLLN in to our LDM and will be sharing with UH as well as our offices for GOES-R work. We have AWIPS II at PBP (NWS PRH) and will begin work to see how this will get incorporated into AWIPS II.... There may be a few challenges, but we believe we have the expertise to work on this. We will share with others once completed. Thanks go to Steve Goodman for acquiring this!

1a.) NWSHQ is currently working to acquire a new national lightning vendor and PR has been working with the NWSHQ folks to ensure we get lightning data that is comparable to the WWLLN data set we have been using. To date, the WWLLN data has provided us the best data for our requirements to meet our mission, thus making it our ideal choice to support the GOES-R program to develop future GOES-R products over the Pacific.

2.) We have had limited success in ingesting geostationary satellite data into AWIPS II. We have been working on getting in the Polar data, but have not had enough resources to complete the task to date.

3.) I have been out of office on annual leave over the past few weeks and therefore have no additional information at this time for acquiring backup polar satellite data for GOES-R product development with the local DoD folks. I should have more information for the next meeting on this item.

NWS-WFO Omaha – Dan Nietfeld (via email):

Just to follow up on Bill's e-mail and to keep you all posted on AWIPS2 progress, here at WFO Omaha (OAX) we have been running AWIPS2 "live" in a dual-operations fashion (alongside a live AWIPS1) since early August. Developers from Raytheon have been on-sight most days for sys admin purposes along with troubleshooting problems, etc.

At a WFO, most of the GOES-R products are ingested into AWIPS1 via LDM. Unfortunately we will not have a live LDM feed for AWIPS2 until we cut off the LDM feed into AWIPS1, which should take place around Nov. 1. However, AWIPS2 is ready to ingest whatever we feed it and over the next couple of months we'll be able to test as many GOES-R products that we can send into AWIPS2...from the perspective of a live AWIPS2 running in a WFO environment.