

PG All Hands Telecon
Notes from 11/7/2011 meeting at 1:30pm EST
Next Meeting: Tentatively Monday, January 9, 2012 at 1:30pm EST
Author: Kathryn Mozer, ASRC Aerospace

Roll Call:

CIMSS

Scott Lindstrom, Wayne Feltz, Jordan Gerth, Kaba Bah, Cory Calvert

NESDIS STAR ASPB at CIMSS

Tim Schmit

SPoRT

Kevin Fuell, Geoffrey Stano

CIRA

Renate Brummer, Steve Miller, Dan Bikos, Bernie Connell, Hiro Gosden

NESDIS STAR RAMMB at CIRA

Dan Lindsey, Don Hillger, Deb Molenar, John Knaff

HPC/SAB/OPC/CICS

Michael Folmer

OPC

Joe Sienkiewicz

HPC

Ed Danaher

SPC

Chris Siewert

GINA

Dayne Broderson, Jiang Zhu (?), Tom Heinrichs, Scott Mcfarland (?)

UMBC Air Quality

Ray Hoff

NESDIS GPO

Jim Gurka

Steve Goodman

NWS Training
Brian Motta, Bryan Guarente (ESRC/COMET), Ross Vantil

NWS HQS
Bonnie Reed, Bill Sjoberg, Kevin Schrab

SWPC
Steven Hill

OAR/ESRL
Ed Szoke

Action Items:

Request an update from JPSS PG at next meeting

*News on PG BAMS article? Bonnie: got feedback sending it out.

Closed Action Items:

*Template distribution for cohesiveness among provider websites. (Brian Motta)
-Still working on this.

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

Summaries:

Program Update – Steve Goodman

Still working on new PG governance draft. A teleconference will be held on 11/8/2011 to discuss remaining issues on how PG will be operated and how science program can be better intertwined. NWS has given first crack at “future products”. Nov 14th Steve had next budget review and will be dealing with program budget to see what we can afford with risk reduction, cal/val, PG, etc. Steve visited Steve Hill and others on their PG and will be planning more during the next meeting in Kansas City. After budget review, Steve will try to get agenda and schedule together for that science week in Kansas City.

Jim: At COMET meeting last week, did discuss May Kansas City meeting and training needs. Training would like 1 full day.

CIMSS – Wayne Feltz

HWT Testbed...WRF simulated radiances, nearcasting, and UWCI evaluation took place in May-June 2011. Caribbean cloud top cooling still being worked on. Distributed fire hotspot and intensity proxy products to SPC for fire weather testbed. AIRS/CrIS stability ready to hand off to polar proving. AWC position being advertised again. NWSTC position->Chad Gravelle to start in MSN on 14th Nov for initial training for a few weeks and then stationed in Kansas City by mid-

Dec. UW-CIMSS “boot camp” for satellite champs (incorporating with COMET) delayed until spring 2012.

Bill S: Go back to the boot camp. Who is pulling that together?

Wayne: Steve suggested it and it’s where Steve Ackerman and Ralf Bennartz along with Paul Menzel would teach some coursework to get them up to speed.

Bill S: If there will be a team (suggest Bonnie be a part) I would pass that along to the team.

Steve G: Purpose is to increase the capacity of the satellite champs so they can do a better job explaining the products.

Bill S: If there’s a group I’d share it with others.

Wayne: This was supposed to happen in Nov so now we will wait until spring and I’ve been emailing with Bonnie.

Alaska/AAWU testbed – mostly Jordan Gerth and Mike Pavolonis. Most things have been delivered there. A volcanic ash WES case is nearly complete. UAF will be gathering formal feedback on all products.

Tom H: Conducted all the interviews and picking out next round of products for the next go round in the upcoming year.

PG pacific testbed – coordinated with Mark DeMaria and Steve Businger. U of H will hire a post-doc, integration will commence once hire is in place. CIMSS/ASPB Scientist/research transitions will occur in spring 2012. UWCI now working in Hawaii domain ready for 2012.

HPC – simulated ABI flowing, hourly ABI IR bands using NSSL WRF, request for nearcasting products.

OPC/SAB – Receiving simulated ABI. Overshooting top/enhanced V just got there and training is now available via VISITview. Volcanic Ash is due for integration on Nov 14th and derived stability indices delayed until 2012.

NHC – Overshooting Tops used this season. METEOSAT imagery with 15 min temporal resolution available June 1 and full Atlantic Basin imagery available at 30 min temporal resolution Oct 11.

WES cases finished – April 27, 2011 distributed at GUC and working on Alaska Volcanic WES case.

MKX PG...Aug-Oct 2011. Emphasis on low cloud/fog probabilities and synthetic imagery.

Jordan: New panning and zooming in AWIPS II. The challenge is assuring CIMSS products are available in AWIPS II. Working on some data fusion stuff. Example of Mike’s MVFR probability in AWIPS II. Building an RGB composite in AWIPS II. Moving forward with development.

NWA/GUC: oral and poster presentations and a booth where WES cases were passed out. Forecasters seemed to like that. 2012 NWA meeting to be held in Madison with substantial CIMSS participation.

Bill S: Is there a method where you can get feedback from the forecasters after they look over the WES cases?

Jordan: We always ask them for feedback. Try to actively engage with them. Maybe we need a more formalized method. The first WES case has a guide with follow-up questions.

Tim: GOES-15 goes operational Dec 6th. New sub-CONUS sectors.

CIRA: Renate Brummer and Steve Miller

See slide 2 for most updates. CIRA has proposed edits to the GOES-R products list web-page. Now they link anyone's training for a product. Discuss at next VISIT meeting and talk to CIMSS. Steve Miller: A few examples (see slides). Shows an area of Hawaii where they were mentioning local problems with volcanic fog. Brainstormed with Steve Businger, so Dan Lindsey and Steve Miller looked at aerosol indirect effect (looking at low cloud effective radius). Looking at where ER is low (red areas). A very preliminary thing and hoping to get more case studies in order to determine if theory is robust. Received first snow in CO. Wanted to demonstrate with GOES-R snow cover, so there is a snow/cloud enhancement (Snow Cover Discrimination Product). Magenta are cirrus clouds. This can be done with high time refresh with GOES-R. Also doing synthetic imagery. This is a simulation with the 3.9 band and difference between 10.35-3.9 which is what a lot of people use as "the fog product" in standard GOES. This image is based on the 10-hr forecast of the NSSL WRF-ARW as viewed in AWIPS and it is being run operationally on AWIPS (Slide 6). Here is the 26 October snowstorm (Slide 8). Bring in 1.38 band to distinguish between cloud heights. New Snow/Cloud Discriminator Product just turned on. Magenta is snow on the ground and green is low cloud (slide 10). Slide 11 shows WRF synthetic imagery band difference product 10.35-3.9 on Oct 26th. This did verify so can add a lot to a low cloud/fog forecast with snow cover.

Deb Molenaar: 2 sites that we are sending products to: WFO Omaha (OAX) and Boulder (BOU) are requesting that we make the PG products available in AWIPS II. What is our goal with these sites that go live? Do we want to have a formal agreement between NWS and PG Program Office for AWIPS II training? Goes back to SSD chief suggestions. Something to think about. Maybe to discuss at May meeting. OAX is scheduled to go live at the end of Nov.

Bill S: What does it mean that OAX will go live?

Deb: They will have AWIPS II and will want all products that they get from PG to AWIPS I to their AWIPS II system. Not sure how they want to get the products etc.

Renate (slide 14) – NWS WFO product interaction. MODIS based snow/cloud layer product installation instructions sent to Cheyenne office. GeoColor product installation instructions sent to MKX. Sounder RGB product requests from MKX and CYS. Working with Southern Region HQ to distribute NSSL WRF simulated products to their WFOs. New Products.: NSSL WRF simulated 3.9 and 7.34 ABI bands to generate 10.35-3.9 band difference for WFOs, GOES-R snow/cloud product added into AWIPS, and coordinating with CIMSS to provide fire products to BOU and other WFOs.

Steve G: Comments. Doing amazing stuff and getting out ahead of us. Snow product...have you coordinated with our AWG snow lead Tom Painter?

Steve M: Don Hillger just left the room but I know Tom and haven't discussed the MODIS things yet and I don't know if Don has but I will let him know to talk to Tom.

Steve G: Regarding governance, Greg Mandt and I had a meeting with ESRL people who are making plans of operation for a future testbed. To get GOES-R synchronized with all that, they mentioned Boulder and some other office to be main testbeds. We have John Ogren in the loop and OAX. Need to get the players on board.

Renate: Maybe a training session for the systems people?

Steve G: I suppose anything is possible. Coordination is a good thing to do.

Ed Szoke: Haven't heard specifics about this testbed.

Tim: About coordination with the particle size radius, that is a baseline product with ABI so coordinate there.

Steve M: It's hard to explain that this is a viable product it's really a proxy for vog right now. Need to verify it works and then see which baseline products fit into it and decide if we want to include other parameters in this.

Steve G: Is Bill Ward in this?

Steve M: Our initial correspondence has been with Businger.

SPoRT - Kevin Fuell and Geoffrey Stano

Transition and use of RGB imagery...about 6 SEVIRI, 3 MODIS, and 1 GOES Sounder imagery. All products available in AWIPS and now available in N-AWIPS and AWIPS II. Distributed via ftp and LDM. Another valuable use of the RGB air mass product-WAA identification and comparison to model (10/3). Transitioning UAH Convective Initiation product to WFOs..testbeds in Miami, Melbourne and Huntsville to test next spring as well. MLB office had positive experience. Training module from developers and feedback form on SPoRT website. GOES rapid scan ops were going on at time of experiment which helped with verification. End of hurricane season so less going on right now. Geoffrey Stano had a talk about PGLM products in the 2011 spring program. Looking to work with QPE product from Bob Kuligowski...expecting sample data in near future.

Geoffrey: SPoRT fully supporting products in AWIPS II. PGLM will be used in 2012 spring program. Flash extent/initiation and max flash density, new training underway to update training on NOAA training site and want to include new events. Upgrades planned based on September's GLM Science Meeting...PGLM still designed as demo and training tool. May only be available for the North Alabama network for now. Trying to clean-up PGLM to more closely mimic what GLM will look like. Working with mosaic product in development and can display it in AWIPS II. Working to obtain more network data. West Texas (TX Tech) will be joining spring program and also working to obtain data from New Mexico. Trying to work around Army protocols to get White Sands data. New AIPS II features: loop tracker which can be added to any product and time series graph. Jason Birch in Huntsville has been working on a time series graph for storms in AWIPS II which will answer a big request. Want to see time series of lightning data to see lightning jumps.

Kevin: In the future: all SPoRT products will be available in AWIPS II (early 2012), Edex and CAVE plug-ins being developed/modified. Also demonstrating some of these things in Southern

Region ROC. Continue testing in HWT Spring Experiment: SPoRT WRF, enhanced lightning suite, RGB products, UAH CI upgrades. VIIRS Imagery access to create high res RGB and hybrid products (spring 2012).

Tim: Do you have a path to acquire VIIRS data in real time?

Geoffrey: I think we will have a path but I don't have the details.

Tom H: We are upgrading receiving station to get VIIRS from NPP. Will only apply to Alaska.

Bill S: I though SPoRT would get data via CIMSS?

Tim: I don't know but that should be confirmed.

Kevin: I know we were trying to look at the VIIRS proxy data but I don't know if that contact is the same one to get real time data.

Jordan: CIMSS is funded to distribute VIIRS imagery to WFOs.

Deb: Is that something separate?

Jordan: Yes

NHC and Pacific PG update - John Knaff

2011 NHC PG Aug 1-Nov 30th. 9 products being demonstrated... Slide 3 shows demoed products. New products are GOES-R natural color imagery from CIRA, pseudo natural color imagery, and tropical overshooting top detection from CIMSS. Highlights from this year:

HIE used to upgrade TD12 to Katia

SPoRT-CIRA collaboration resulted in RGB air mass and dust products available in NHC N-AWIPS. Got a lot of use in N-AWIPS.

Michael Folmer looking at and assisting with RGB air mass analysis and archive.

NHC obtained real time Vaisala GLD360 lightning feed for this season.

Slide 6. Air Mass Sounder product for Irene. Michael Folmer and NHC looked at this and Michael put out a nice blog. Slide 7-mid-project review in Sept. Each group got some suggestions and this is what we've done:

CIMSS provided NHC with missing Katia HIE estimate for post-season evaluation. Web page set-up for SRSO cases (see slide 7 for website)

GOES-R natural color algorithm modified by CIRA to reduce green bias seen during NHC PG Domain of CIMSS tropical overshooting page extended to include GOES-east

Jack Beven gave NHC PG update at GUC and a poster submitted to AMS tropical conference.

Slide 8-New domain of CIMSS tropical overshooting tops product is a nice product overall. Next Steps for NHC PG: Nov 30th 2011 project ends. Post season evaluation of HIE and lightning-based rapid intensity change index, early 2012 prepare final report, March 2012 presentation on 2011 PG at the Interdepartmental hurricane Conference, spring/summer 2012 prepare for 2012 NHC PG.

Pacific Region PG: Tried to jump start Pacific PG project (see slide for list of new participants). WFO/JTWC/UH/NESDIS Meeting (13 Sept 2011). Product candidate list discussed. The products themselves, some are well developed and some aren't. Wide range of delivery methods. Training is needed on most products. Many technical issues (local ingest, AWIPS II for JTWC etc.) need to be resolved. Suggested next steps: in the next 2 weeks revisit project outline.

Before calendar year end, develop ops plan with Bonnie, and science committee needs to be finalized.

Steve G: 2 comments. I just sent an email that Businger ...something. Sarooshian...? Kuligowski is hydro lead and Scott Rudlosky is doing lightning stuff so we should include those guys. John: We'll gather this in next few weeks.

ESRC Update - Bryan Guarente

Trying to build a site for centralized satellite resource. PG could leverage this. Seemed like ESRC could help by tagging individual resources that you submit with certain tags that would notify others and tell you that it's from the PG. If we take some time to show you how the website works. You submit the resource as a link. You can search for things in order to find information, near real time products, training, etc. (Bryan demonstrates by sharing his screen for the meeting.) Showing, "submit a resource", page. You can include keywords, however you want to spell them, in addition to others. You can submit keywords that we already have as possibilities. Could add things like Proving Ground, Satellite Proving Ground, GOES-R Proving Ground. Then we can use that to find resources within ESRC that are all related to the PG. At the moment, only 2 items of interest. Does this sound like something that would be useful for the PG?

Bonnie: I think this is a great idea for PG training materials or anything else where outsiders can come to look for resources when they might not know to go to the individual cooperative institute pages. I think it would help a lot.

Bryan: I think there are a lot of times where people wouldn't know where exactly to find the information. Useful for anyone, even outside of the PG community. I just wanted to make sure that everyone had seen the ESRC, and saw this Satellite PG as an additional keyword if you wanted to use it. www.meted.ucar.edu/esrc. ESRC is a community site-built from a satellite community request, populated by the satellite community, can be leveraged by the PG, maintained and QAed by COMET. Satellite PG can leverage the ESRC as a library. Submit PG relevant resources, add "Satellite Proving Ground (PG)" in the "Additional Keywords", include training status in the title.

Steve G: There was a COMET training workshop for 24 university faculty this summer, are you doing any follow up? Like making sure they know about resources?

Bryan: I know some are leveraging ESRC. They are doing the same kind of method. A few people are submitting resources to the ESRC and tagging it with a keyword for their class so that the class can get satellite info.

HPC/SAB/OPC - Michael Folmer

OPC has RGB real time. Gave a presentation about status to UMD. Schedule of implementation has been slightly modified (see slide 1). Volcanic Ash is specific to SAB. RGB to cloud phase products are specific to SAB precipitation desk. Trying to set up an ADDE feed for Volcanic Ash (working with Pavolonis). This is an animation that I show during introductory presentation. Giving presentation to ESSIC this week and an SAB presentation on Nov 28th. Slide 2-Image on Katia using RGB air mass product. Training slide included with presentation. I give them my

email address to schedule a time. Goal is to have as much participation from all 3 branches as possible. When I meet with forecasters, I was able to find SEVIRI specific RGB info from EUMETSAT. Give them a hard copy of this. I then show them 2 examples: transition from hurricane Phillipe from tropical and absorbed by extratropical low, and the mid-Atlantic snow storm a few weeks ago. I will make movies available for whoever would like them. Trained 7 different forecasters and analysts so far. Good case study to show. Went from a snow storm to a large N. Atlantic low, split, and a piece is a subtropical Mediterranean low. Last part of training is sending additional info on MODIS. Continue working with Andrew and Kevin at SPoRT on how to combine into a more useful training. For now, this works and forecasters are excited about it. Also coordinated with Bob Rabin from SPC who used RGB for model stuff? Can see PV anomalies well and to compare with NAM and other models is useful.

Geoffrey: Do you have more details on lightning detection and what you're using.

Michael: Putting something together with Scott Rudlosky. Going to coordinate soon but he has been gone for work.

Geoffrey: Wanted to make sure we were talking about the same thing.

Air Quality – Ray Hoff

Summer experiment has been written up and submitted to program office and management committee. Our spring 2012 user group meeting is on Jan 12th and back-to-back with an EPA group on Jan 10-11. Idea is to get a broader community of EPA analysts to take a look at GOES-R stuff.

Steve: You and Shobha put a nice package together for the GOES-R status review and there was a lot of interest.

Steve: emailed Mitch Goldberg and he will be providing some funding to keep some Future Capabilities Products going forward. Trying to figure out budgets.