

Meeting Summary Emphasis

Validation

- Two main items to validate/verify
 - GLM performance (e.g., location accuracy, detection efficiency)
 - L2 data products (Mach clustering algorithm)
- funding meeting in February 2011
 - immediate field campaigns
 - instrumentation
- how many validation sites needed?- **front range LMA, Taranis LEO**
 - instruments, proxy data- CHUVA
- traceability matrices needed- Blakeslee IOU
 - need to verify requirements
- OKLMA, NALMA, WTLMA, HAMMA, WWLLN (definite feeds into VaLiD)
 - Follow up with Jamie Daniels on volume 2 cal/val plan
- KSC LDARII should also be ingested into VaLiD, but NOAA will not have to pay
- Dugway LMA/White Sands LMA/others will get if available
- CHUVA
 - **Commercial networks should provide dynamic performance maps**
- Need to know Hartmut's plans for DC3
- GLM airborne simulator (GLM-AS) used for overflights of lightning networks
 - Will require RTMM data feed to VaLiD.
 - **incl Camp Blanding/AC campaign with GLM Simulator, HMT, Huntsville**
- **Continue network assessments (CHUVA, CONUS, Oceanic, HyMex, others?)**
- Deliver thresholds for lightning monitoring tool to AIT (Monte, Rachel)
- Make sure Harris is getting sufficient data to run through their algorithms

Proving Ground

- Need realistic products
- Aviation-type product, possibly outside of Spring Experiment
 - Need large scale convection aviation products
- Winter storm product
 - Need to show forecasters the significance of lightning in winter storms, integrating LMA
- WTLN product
- Fire weather product w. r. t. lightning, possibly continuing current?- **Update from Siewert**
 - Combine with existing non-lightning products (surface wetness, hot spots)
 - Combine with time continuity product
- Will GLM see continuing current?
 - Will be measured during CHUVA
 - Could be measured via airborne studies
 - May be related to horizontal extent
 - Combine with radar
 - Related to M-components?
- In general lightning data must be combined with other data- **National Lightning Test Demo, Breakout R3 Session discussion this week**
- Proving ground used to demonstrate GLM products
- Training on what GLM will see

- Need people to develop training modules- need to coordinate better with Brian Motta and NWS Operations Proving Ground Training Center in KC
 - WES
 - More funding needed if new modules added
 - Application development takes time
- Need to emphasize new applications as a result of data from previous field studies
- Need a means to track two-sigma lightning changes
 - Need an accurate cell tracking definition as part of this
 - Look at a way to track severe cells combining lightning data with other products
- Need a dedicated server for computing time-NSSL/Kristin, Stephen Smith funded
- Training 2011
 - HWT training before forecasters arrive; exercise after HWT
 - Expanding WES case for HWT (Brian, Kristin, WDTB)
- Find out about GLM data availability during on-orbit checkout period
- Monte- working on proxy data development from LF, long range data
 - Merge with WRF ensemble data- bring Brad Pierce into conversation
 - Proxy based on VHF (from LMA datasets) is preferable, especially outside Huntsville/NALMA
 - Archived datasets are larger than one person can work on- need procedure to bring in multiple people
- Need to know what to do with high frequency flash storms (already know it's strong/severe- what additional info can we obtain?)
- Need to (?) convert total lightning data into a threat score
- NWS- producing more products is the wrong direction
 - Need to know whether products' information content is useful