

Breakout Session Tasks

CrIS Trace Gas Data Users Workshop

18-19 September 2014

College Park, Maryland

Summary

- AQ Session: Dylan Millet
- GHG Session: Shawn Xiong
- (a) ID users and applications
- (b) Describe status of current CrIS products
- (c) ID validation needs
- (d) ID needed product changes/refinements
- (e) Discuss potential new products

(a) ID users and applications

- Not just *current* users of CrIS data, but also *potential* users
 - E.g., Current users of TES, MOPITT, AIRS, and IASI who will need the data to continue
 - List specific users to extent possible
- ID both *research* and *operational* users
 - “Operational” may include NOAA centers (GFDL, etc.), air quality managers/forecasters and other NRT modeling groups
- Note different needs of different user groups
 - NRT operational use
 - Long-term trend analysis
 - Field campaign support

(b) Describe status of current CrIS products

- What products exist?
- Are they available in NRT?
 - If not in NRT, can NRT be done for specific periods in support of field campaigns?
- What validation has already been performed?
- What are the known biases/issues?

(c) ID validation needs

- What past or already planned field campaigns can be used to perform the validation?
 - Also long-term data sets e.g. surface data?
 - Add to VALAR?
- What other field efforts would be needed to validate the products?
 - Keep in mind what airborne and surface instruments would actually be available.
 - Dream big – if you really need another 5 HIPPO flights, say so!
- What comparisons with past sounders are needed to make consistent data records?

(d) ID needed product changes/ refinements

- Focus on what the user needs, not retrieval algorithm changes
- What data be delivered to the user and how?
 - File compression options for AKs
 - Apply known bias corrections, etc?
 - TES “Lite” files
- What instructions need to be passed to the user?
- Are changes in the processing schedule needed for NRT processing or long-term trend analysis?
- Product testbed for trace gases?
- What about visualization?
 - Common/Community package of plotting scripts?
 - Online maps to explore the data?

(e) Discuss potential new products

- What additional products are needed to allow CrIS to continue the records of other TIR sounders?
- What new, unique products could be possible with CrIS?
- What additional products would you get if NOAA “closed the gaps” for JPSS-2?
- How could validation of these new products be performed?
- Is infrastructure sufficient to distribute the new products?