JPSS STAR Science Team Annual Meeting
OMPS SDR Team Discussions

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Outlines

• History
• Future
• Lessons learned
• New challenges for J1
History

• STAR needs to understand UV instruments and SDR/L1B process similar to those for the imaging and sounding instruments, in the VIS, IR, and MW spectra, and on GOES and POES.

• Flynn has been the most knowledgeable, but he has also been increasingly needed for EDR and ozone science in general.

• Wu was assigned to lead the OMPS SDR Team and started to ask the meaning of every acronym.
Future

• Partly because of that history, our roles have often been that STAR makes decision, NASA calibrates instruments, NGAS adapts for IDPS, Raytheon implements, and Aerospace coordinates.

• It has been necessary and served us well in the past, but in future STAR expects to
  – Perform cal/val and adapt for IDPS.
  – Collaborate with NASA broadly and indefinitely.
  – Get advice from NGAS for as long as possible.
  – Work with Raytheon and Aerospace as has been.
Lessons learned from S-NPP

• Inflexible code, esp. CAL SDR
• Update the DARK sooner
• Evaluate stray light and update the correction sooner.
• Wavelength registration may depend on temperature.
• Dichroic transmittance may change after orbit.
• Need offline science code.
• Need tools to interrogate the RDR / SRD
• Need tools and data to compare (GOME-2, SBUV/2, OMI, CRTM, MLS, ...)
• Need to access BATC documents
New challenges of J1

- Pre-processor
- Spectral gaps
- CAL RDR collection
- CAL SDR improvements