

Subgroup for Radiative Transfer and Surface Property Models

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RTSP-WG Action Items from ITSC-15

- 26 action items.
- Main focii (based purely on action item count) are instrument characteristics and data required for cloudy radiance computations/comparisons.



Profile datasets

- 1) Marco Matricardi to announce to the RTSP-WG when a several thousand profile data set, including the trace gases, is available.
- 2) Tom Kleespies to document the various cloud droplet size distributions used for determining effective radius values.
- 3) Paul van Delst to document what CloudSat/Calypso and ARM site cloud profile datasets are available.

Instrument characteristics

- 4) Paul van Delst to list current IR SRF and μ W frequency information for all available instruments (current and historical) on the RTSP-WG website.
- 5) Paul van Delst to continue working with IPO to obtain CrIS instrument response information for US NWP centres, and determine the path/timeline for dissemination by IPO of the information to non-US NWP centres.
- 6) Paul van Delst to link the old *(date?)* CrIS ATBD (which is in the pubic domain) to the RTSP-WG website.
- 7) Paul van Delst to check with Walter Wolf (NOAA/NESDIS) on the status of CrIS sample datasets and data formats.



- Instrument characteristics(cont'd)
 - 8-11)Notification of SRFs/frequencies for Fengyun-3, COM-1(?), Electro-L, Meteor-M, NOAA-N', and MetOp-B instruments by the appropriate members. (Roger Saunders to contact Korean agency)
 - 12) Paul van Delst to discuss with NRL what SSMIS F-17,-18 bandpass information to use.
 - 13) Paul van Delst to make available links to recent work done on characterisng the SSU (S.Kobayashi and Q.Liu) and VTPR (L.Shi) historical instruments.
- Line-by-Line Modeling
 - 14) Raymond Armante to make available to the RTSP-WG the results of the LMD line mixing study when completed.
 - 15) Roger Saunders to provide a link to the CAVIAR results to be posted on the RTSP-WG website.
 - 16) Nicole Jacquinet to recommend what should be done to allow diversification of the source of spectroscopic data used in LBL models.



Fast RT Modeling

- 17) Paul van Delst to investigate a common format for optical properties data that will be made available on the RTSP-WG website.
- 18) Yong Han to provide information and reference about the results from a study by Y.Chen (CIRA/NESDIS) regarding the effect of spatial inhomogeniety when comparing cloudy calculations and observations. To be posted on the RTSP-WG website.
- 19) Fuzhong Weng to provide a dataset for AMSU-A(Aqua) observations and cloud profile information retrieved from collocated CloudSat observations. This dataset will be made available via the RTSP-WG website. (Sec.1?)
- 20) Roger Saunders (MetOffice), Ben Ruston (NRL), Marco Matricardi (ECMWF), Louis Garand (Environment Canada), Gang Ma (for NMC), and Paul van Delst (NCEP/EMC) to provide documentation of methodologies used in NWP centres to speed up the assimilation of radiances and quality control.
- 21) Roger Saunders (MetOffice), Ben Ruston (NRL), Marco Matricardi (ECMWF), Louis Garand (Environment Canada), Gang Ma (for NMC), and Paul van Delst (NCEP/EMC) to provide documentation of methodologies used in NWP centres to convert layer atmospheric state variables to level values.



- Fast RT Modeling(cont'd)
 - 22) Following Action RTSP-17, Paul van Delst will make available on the RTSP-WG website, optical property data for non-spherical particles used at the JCSDA, as well as any supplied by other attendee's organisations.
 - 23) Ben Ruston to contact colleagues at CSU to obtain additional cloud optical property data for non-spherical particles.
 - 24) Pascal Brunel to provide the TRATTORIA-2008 workshop summary when it becomes available for inclusion on the RTSP-WG website.
- Surface Property Modeling
 - 25) Ben Ruston and Filipe Aires to notify the RTSP-WG when the emissivity climatology intercomparisons and interface are completed.
- Validation Datasets
 - 26) Paul van Delst to add JAIVEx link and POC (Stuart Newman, MetOffice) to the RTSP-WG webpage.