Minutes of NCEO-ORAC meeting, Tues 17th Nov 2009, 10 am, AOPP Brewer Room

Present: Chris Arnold, Don Grainger (via telephone), Haiyan Huang, Caroline Poulsen, Andy Sayer, Richard Siddans, Gareth Thomas.

Status of GRAPE/GEWEX

AATSR processing is up to 2007, and data up to the end of 2008 are expected to be processed by the end of December. Pressure to remove the GRAPE machines by the end of the year has eased; when the run has finished, we plan to keep a few of the machines to carry on processing as new data become available, and in case any testing is needed. Caroline will acquire the 2009 ECMWF data so we can carry on.

The BADC are currently arranging the upload of our new data.

Chris has been testing some different quality control settings for the GEWEX comparison, and is making progress calculating joint histograms of cloud variables to be included.

Andy has been doing some cloud-top height validation with Chilbolton ground radar data (data from ARM sites is currently being delivered). Use of the 'zstar' approximation appears to lead to a better comparison than the height present in level 2 files. Andy will investigate whether there is a bug somewhere in the code, or whether this is more likely an issue with the ECMWF profiles in this region. Richard and Caroline made suggestions about the best way to present some of these comparisons. Andy hopes to circulate a reasonably-complete first draft of 2 GRAPE cloud validation documents around the time of the next meeting.

Status of GlobAerosol

Gareth reported that GMV are currently producing the 'pixel map' files for ATSR-2.

Gareth and Caroline have been looking into the reason for a discrepancy of abut 0.03 in AOD over the southern oceans between AATSR (higher) and ATSR-2. It does not appear to depend on whether all ATSR-2 channels were available or not. The current reason is not known for sure.

Status of ADIENT

Nothing to report.

Recent meetings (NCEO-Edinburgh, Cloud Model-Darmstadt)

Andy previously provided a summary of ORAC-relevant points from the NCEO AC theme meeting in Edinburgh.

Richard, Caroline and Andy attended the cloud model final review meeting at EUMetSat in Darmstadt. The meeting went well and a draft final report has been produced. Richard went through some summary slides from the project. Phil Watts mentioned there may be more money for future studies next year, and that they are looking to overhaul and streamline their operational code.

Follow-up on ORAC/Geos-Chem comparison

Andy will deal with this in the new year.

ESA ECV ITTs next steps

ESA have released details and we are anticipating email discussion in the consortiums in the next few weeks. Richard has spoken with Chris Merchant about the possibility of having an optional work package using ORAC to assess the benefit to SST retrievals of aerosol retrievals. Don comments that it might be best to try to get this packaged into the SST ECV bid.

Abstracts for Living Planet symposium: Bergen, Norway (28 June-2 July 2010)

We will discuss abstracts amongst ourselves; Don feels that a strong presence is not required, although someone should be there. We can always submit an abstract and withdraw later if there are other commitments.

Code version control (SVN)

The BADC is implementing this soon; RAL are acting as a 'test-bed' and if all goes well then we will adopt SVN for the next version of ORAC. This will likely happen through the ECV bids, although we want to make sure that key routines do not become 'hardcoded' to one version of the processor.

Student progress

Don asked whether Andy Smith had come to any conclusions about the best use of the different desert dust aerosol models he had come up with for his thesis. He has since been asked.

Chris has been looking at ERS-2 ice mask data (derived from a wind-scatterometer) to flag out GRAPE retrievals over ice. He thinks that moving to weekly or monthly shapefiles from the NSIDC may be a better move than ingesting the scatterometer data directly. Caroline suggested use of an ECMWF ice mask.

Haiyan has got Elisa's IR forward model working in the AATSR ORAC code. The results are 'horrible' but it has compiled and is running, which is a good start.

Publications

Gareth reported that the GRAPE aerosol algorithm has now been published in AMT and the GRAPE aerosol validation algorithm has been published on ACPD.

Caroline is intending to submit the GRAPE cloud algorithm paper to the RSE special issue, following some updates she has been doing (deadline is end of November).

Don and Andy are reviewing papers as part of the special issue.

Richard reported that Clare Bulgin is preparing a paper based on some of the work she presented in Edinburgh (use of SEVIRI with a Saharan dust index and model CO fields to identify dust and biomass burning aerosol), as well as a look at different desert dust models.

AOB/next meeting

Gareth will chase up Mark about getting an extra 6 TB of disk space.

Caroline and Richard have been doing some comparison between the ORAC cloud retrieval as applied to SEVIRI with different cloud products from MIPAS, as part of the study led by Reinhold Spang.

Andy will be away on holiday (but with intermittent email access) for the rest of November.

The next meeting was set for Tuesday December 15th, at RAL. Haiyan will be on holiday for this.