

CWVC data management at the BADC - October 2003 to March 2004

Report to the CWVC Steering Committee

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1. CWVC data sets

(GST/02/2871) Kevin Smith has delivered data and documentation on the laboratory water vapour absorption measurements. The data have now been loaded into the CWVC web area and are available to CWVC participants.

(GST/02/2324) Clive Cook from the EMERALD group at Aberystwyth has responded to queries about data delivery, and discussions are on-going about data format and data delivery. There is around 1.5GB of data, but work is needed to ensure the accuracy of the data, and move them into a suitable data format.

The CWVC web pages contain links to more information about data formats, and software to help users check if their data sets comply with netCDF or NASA Ames conventions.

2. Supporting data sets

The CWVC web pages have been updated to include links to ISCCP, CLAUS and CWAVE web pages. The warning from ISCCP that due to incorrect snow map information, DX, D1 and D2 data from January 1998 to September 2001 will require reprocessing (issued in October 2003) has been added.

CWAVE is the Cloud and Water Vapour Experiment for model comparisons at CCLRC Chilbolton. The measurement campaign (the core of which occurred between 16 June 2003 and 11 July 2003) supported the two EC FP5 projects, CLOUDMAP2 and CLOUDNET by measuring a wide range of atmospheric properties from cloud parameters to water vapour. The measurements will also be compared with the results from a reduced resolution Unified Model run by the Met Office.

The data from the two SAGE II CDs have been made available. The existing data, available from BADC, covered the period from 1985 to 1993, and the new data (Version 6.1) extends this to 2001. NASA Langley Radiation and Aerosols Branch has recently issued an updated version of the data (Version 6.2) which has corrected an altitude registration problem and a problem with the transmission profiles. There is also an improvement in the water vapour product. Version 6.2 covers the period up to September 2003, and more data will be made available in the future. The BADC will acquire these data and replace the Version 6.1 data set with Version 6.2.

A proposal has been submitted to ESA to allow the BADC to archive and distribute Level 1b and Level 2 data from the MERIS instrument, a programmable medium-spectral resolution imaging spectrometer operating in the solar reflective spectral range, flown aboard the Envisat satellite. A variety of geophysical information can be retrieved from the radiances measured by MERIS. In particular, Level 2 data include cloud parameters and water vapour concentrations measured with an unprecedented accuracy. The proposal has been formally accepted by ESA, provided that a supporting letter from NERC is annexed to it, emphasising the interest of MERIS data for CWVC scientists. Contacts with Susanne Mecklenburg (NERC) and the CWVC science coordinator, Keith Bower, have been made and the writing of the letter is pending.

3. Further tasks

Effort continues to be focussed on obtaining and archiving newly produced CWVC datasets, and on obtaining data sets of use to the CWVC project.

Four recipients of third round grants will be contacted regarding their data delivery from their CWVC projects to the BADC. Three other PIs have informed the BADC that they might deliver data or information (papers, web links); they will be contacted again.

Negotiations about practical aspects of the MERIS data transfer and distribution are underway with ESA. The transfer of the MERIS data from ESA to the BADC is expected to start in the course of the next quarter. A formal procedure to allow CWVC PIs to apply for access to the data will be set up.