

MINUTES OF FINAL PROGRESS MEETING and SYMPOSIUM (v11nov05).

PROGRESS MEETING: 10 Oct 2005, Beeskow, Germany.

Present: J Pelon, (IPSL); Martial Haeffelin, (LMD); David Donovan, Henk Klein-Baltink, Gerd-Jan van Zadelhoff (KNMI); Charles Wrench (RCRU); Oleg Krasnov, Herman Russchenberg, (TUD); Robin Hogan, Ewan O'Connor, A Illingworth (co-ordinator.) (U of R), M Brooks, D Wilson (Met Office); Ulrika Willen (SMHI), A Seifert, U Goersdorf, (DWD), F Gehart (Gematronik), P Ravila (Vaisala), T Ackerman (PNL-UoW).

1. GENERAL REMARKS and ACTIONS ARISING FROM THE MINUTES.

1.0 Apologies for absence. A Tomkins (ECMWF), J-M Piriou (Meteo-France).

1.1 Actions arising from the minutes:

1.1.1 The contract for the extension to 1 Oct 2005 arrived in late September and was distributed to the partners.

1.1.2 The importance of completed cost statements for the period 1 April 2004 – 30 Sep 2005 which corresponded to the amount available on the distributed spreadsheet to each partner was emphasised. These must be submitted to by the end of this month.

1.1.3 AJI reported on the reaction of the BAMS editor to the proposed article on Cloudnet. An 8 page article would cost \$1500, rising to \$6060 for 19 pages. It was agreed that those responsible for the work packages WP2, 3, 4 and 5 (CLW, DD, RJH and AJI) would draft a few pages each to the article.

1.17 ACTION 1.7-1.9 Satellite data. EOC would put a link to the site of Pat Minnis for MSG data over Cloudnet SITES, and to the KNMI data archived over the sites. MH would ask the SAF at Lannion to start archiving satellite data over the Cloudnet sites - and inform EOC where this data was being stored.

1.1.8 Outstanding action: AJI to contact EP at the UKMO regarding the effect of the coding on the folding velocity.

2. DELIVERABLE 10. – Optimised algorithms and performance

DD introduced his draft document. The following suggestions were made.

Section A – target classification.

a) To be re-ordered with level 3 at the end.

b) CARPRO-CP and STRAT – need link to web site (EOC). More detail on STRAT.

Section B – liquid water.

c) Reorder – new section on lwp from radiometer, then scaled adiabatic, rad/lid (with link to web address), drizzle, and finally lwc evaluation statistics.

d) OK/HJWR to send document to DD on rad/lid algorithm performance with comparison to independent lwp etc.

Section C – ice cloud

e) Reorder – start with new section Z-IWC-T, then RADON, KNMI radar-lidar, IPSL radar-lidar. Capra-OT, and + level 3 example section to be inserted.

f) IPSL – need figures from DB via AP.

g) CAPRA-OT (needs web link).

3. Operation of cloud stations. CW introduced his paper. Some small modifications were suggested. Colour pictures of each site to be included. Categorisation discussion to go to deliverable 10.

4. RJH introduced his draft document for deliverable 11 (comparison with models) Several points arose during the discussion including:

- a) Include JP's recent 'convection study' paper.
- b) Include statistics on TARA lwc performance – document from OK/HR

DW introduced a document on the current and future use of Cloudnet products at the UKMO. DW and RJH will work to integrate the two documents.

5. AJI introduced his draft document for deliverable 14 . (Instrument fit for observing stations) The following points were made:

- a) Mention C-band operational radars for IWC profiles during ppn.
- b) Possibility of X-band for cloud radar to be explored (Action FG supply document).
- c) Structure so two options: low cost with ceilometer and moderate sensitivity radar; higher cost with good lidar and higher sensitivity radar.

6. Future plans for Cloudnet activity.

The following avenues are to be explored:

- a) Eumetnet could possibility fund the manpower for a continuation of the analysis activity. They have done this for the wind profilers so this is a precedent. DD to enquire at KNMI, DW at UKMO how this might be set in motion. AJI to ask Volker Lehman who was involved in setting up the wind profiler activity in Eumetnet.
- b) COST 210 (integrated observing systems) is proposing a follow-on which involves using the data for NWP and specifically mentions cloud radar and lidar.

CLOUDNET SYMPOSIUM 12 October at Beeskow.

Present: as above less A. Protat, and F. Gehart, but in addition Adrian Tompkins (ECMWF), A. Protat (IPSL), D. Engelbart, and various other members of DWD, G. Pappalardo(Italy), Susanne Crewell (Munich).

7. Nineteen presentation were given. They are all now on the web site.

During the vigorous discussions the following specific queries arose:

7.1 The Lindenberg 35Ghz cloud radar is only calibrated via a link-budget. A more direct calibration is desirable, possibly by looking at Z in rain at short range. IPSL (Protat) to supply mean profile of Z at all four stations.

7.2 Does the MH lidar technique lead to too much supercooled water being identified. Are such returns accompanied by high beta which rapidly attenuates as expected?

7.3 GJZ. Normalisation technique. Does this lead to thick high clouds having a higher re, and lower thin clouds having a smaller re than previous parameterisations, and does this agree with SW radiation observations on the ground.

7.4 It would be useful to have pdfs within the grid box as a product on the web site. Also useful to see different ice cloud retrievals have different radiative effects. (AP & UW).

8. Subsequent to the meeting A Tompkins suggested that the Cloudnet material form the basis of an ECMWF technical note. From email responses this was agreed.

9. Date of next (unfunded) Cloudnet meeting: Provisionally set for 10-11 April 2005 at Chilbolton.