



(www.knmi.nl/samenw/cliwa-net)

BBC Management Plan

André van Lammeren (KNMI)

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1 Introduction

The BBC campaign is part of the EU-funded CLIWA-NET project. However, since the approval of the project the BBC campaign has expanded considerably. The experimental campaign of the German 4D-Wolken project will be combined with the BBC campaign. The contributions from other projects and the participation of several individual institutes and universities have made the BBC campaign a major undertaking. At this moment it is expected that approx. 20 research groups will be active during the campaign. In the observational plan and on the CLIWA-NET web site the most recent overview of instrumentation and participants can be found.

In order to structure the activities around the BBC campaign within KNMI the "BBC Local Organising Committee" (BBC-LOC) was established. The BBC-LOC is responsible for all non-scientific organisational aspects of the BBC campaigns e.g.:

- Technical and infra-structural aspects of Cabauw and the BBC network
- Collecting and providing information on housing possibilities to the participants
- Data management

The BBC-LOC has the policy to put all their findings and related documents on the CLIWA-NET web site. In this way the latest updated versions of the various documents can be obtained.

In this document the organisational structure of the BBC campaign is described. In section 2 the organisation around the Cabauw site and the BBC network is described. The organisation around the aircraft measurements is described in section 3. In section 4 some concluding remarks are made.

2 Cabauw site and BBC Network

The organisation around the Cabauw site is organised by KNMI. KNMI is solely responsible for all activities at Cabauw. In the week before and during the BBC campaign the "Site Engineer" (SE) will be the point of contact. He is responsible for providing the participants with the necessary information and support, the agreed maintenance and the access to the site. Before the campaign a schedule will be distributed with the names of the SE's and how to contact them. In principle there will always be one SE present at the site. During the weekends the SE can be contacted in case of emergencies.

The BBC network stations are a joint responsibility of the Royal Dutch Air Force (KLU) and KNMI. The KLU have agreed to host the CLIWA-NET participants at their sites. The precise conditions set by the KLU on technical support and site access are at this moment not yet known. These conditions may differ from site to site. The groups that install their microwave radiometer at one of the KLU sites will be contacted on the regulations that apply for that specific site.

3 Aircraft measurements

During the BBC campaign three aircraft are participating. In order to obtain well co-ordinated aircraft measurements a decision making protocol is required. During the BBC Aircraft Planning Meeting at KNMI on January 12, 2001 the initial flight patterns were discussed and agreed upon. These are described in the minutes of that meeting. The flight patterns will be discussed with the Air Traffic Control authorities in the following weeks. This will lead to a commonly agreed set of flight patterns which will be used during the BBC campaign.

During the campaign the planning, organisation and decision making process to fly or not (and which pattern) has to be well organised. It is proposed that the Flight Planning Meteorologist (FPM) monitors the meteorological situation and has regular briefings with the operational meteorological department of KNMI. Based on his information he may propose a flight for the next day. If the forecast is such that a flight is feasible he will inform the two flight co-ordinators. In the discussion between the FPM and the two flight co-ordinators a decision is made to start the preparations for a flight and a suggested flight plan will be discussed.

If a flight is planned for the next day, the aircraft crew and the groups at Cabauw will be informed. A briefing will be given at both sites describing the meteorological information and the preliminary flight plans. After the decision for a flight on the next day is taken, the meteorological situation will be monitored continuously. A flight can be cancelled any moment after consultation of the FPM with the two Flight Planning Co-ordinators.

After discussions at the BBC planning meeting in De Bilt (March 1-2, 2001) the following schedule for the flight planning has been agreed upon:

08:30 LT

Flight Planning Meteorologist (FPM) consults Operational Meteorologist

10:00 LT

Briefing on Atmospheric Conditions for next days

Includes representatives of aircraft and Flight Planning Co-ordinator (FPC)

Preferably at Rotterdam airport or Delft University

Initial decision on flight-plan. Responsible for the decision is the FPC.

17:00 LT

Briefing on Atmospheric Conditions for next days

Includes representatives of aircraft and Flight Planning Co-ordinator (FPC)

Preferably at Rotterdam airport or Delft University

Decision on flight-plan. Responsible for the decision is the FPC.

18:00 LT

Latest time to proclaim a day-off or an early flight.

Procedure for a flight:

- 4 hours before take off: Final consultation Meteorologists / MeteoInfo
- 3.5 hours before take-off: Final briefing on MeteoInfo.
- 3 hours before take-off: Final decision on flight plan (FPC)

During the flight there will be two main communication channels:

- Communication between FPC and aircraft scientist
- Communication between FPC and other experimentalists (Cabauw, De Bilt)

This requires 2 frequencies for communication

1. Air Traffic Control, Pilots
2. FPC, Aircraft scientists

On basis of information from the aircraft scientists and the Cabauw measurements the flight plan may be adjusted. The FPC should discuss possible changes to the flight plan with Air Traffic Control. The FPC and Air Traffic Control communicate the new flight plan to the pilot and the aircraft scientists.

It will be tried to make the meteorological data and the proposed flight plans available in real-time on the CLIWA-NET website. Before the campaign a schedule will be distributed with names and ways to contact the FPM.

It is proposed that the project leaders of CLIWA-NET and CAATER (André van Lammeren) and 4D-Wolken (Clemens Simmer) act as Flight Planning Co-ordinators. If they are not present their replacements will be contacted (names to be announced later).

4 Concluding remarks

In this document a brief description of the organisation of the BBC campaign is given. It is expected that an updated versions of this document will be generated in the next few months. The latest version of this document can always be retrieved from the CLIWA-NET website: www.knmi.nl/samenw/cliwa-net.