

CONTACT:

Website:

www.eufar.net

EUFAR Office Email:
bureau@eufar.net

EUFAR Office Phone:
+33.5.61.07.98.38

▲ EUFAR meetings

▲ Forthcoming meetings

- ▶ **EUFAR FP6 - 8th Management Committee meeting:** EUFAR partners are invited to attend the 8th Management Committee meeting which will be held in Exeter, UK, on September 22nd-23rd 2008, hosted by the Met Office. The main objectives of this meeting are to make the assessment and conclusions regarding EUFAR in the 6th Framework Program.
- ▶ **EUFAR FP7 - 1st General Assembly:** EUFAR partners are invited to attend the 1st General Assembly which will be held in Exeter, UK, on September 23rd-24th 2008, hosted by the Met Office.

▲ Future Expert Working Group meetings

All EUFAR members registered in the EWG mailing lists will be informed of the dates and location of these meetings in due course:

- ▶ **EWG on "Active Remote Sensing from Aircraft (ARSA):** "Present status and future needs", on September 4-5th 2008, in Paris, hosted by Pierre et Marie Curie University.
The objectives of this meeting are to present and discuss recent developments made in the field of active remote sensing from aircraft using lidars and radars for the study of the atmosphere, as well as ocean and land surfaces. Attendees are encouraged to prepare presentations. The perspectives for new generation of instruments will be discussed with respect to scientific needs and results already obtained.
This meeting aims at helping information exchange in airborne remote sensing and prepare the evolution of the European fleet. A report presenting the state of the art, future developments and implementations, as well as needs will be finalized from the presentations and discussions. NASA and U. Wyoming experts have also been invited to the meeting.
- ▶ **EWG Plenary meeting on "Current Issues in Airborne Research: "Perspectives from Users and Infrastructure Providers"**, on September 8-10th 2008, in Toulouse, hosted by Météo-France.

The agenda will include the following items:

1. The future organization of EUFAR EWG activities: how can we create more impact on decisions made by aircraft operators and instrument developers? How can we best involve EWG members in a future Transnational Access application process?
2. Perspectives of new users and students on their involvement in airborne research: ease of access to aircraft facilities, ease of access to data, ease of access to information for flight-planning, decision-making etc.
3. Discussions on the preparation of a textbook on airborne measurements (a major topic for the Expert Working Groups in EUFAR FP7).

▲ Previous EUFAR meetings

All meeting reports are available at www.eufar.net (Select Search / Documents from top menu; Select "Meeting" in "Links with specific subject"; Choose your meeting).

- ▶ **EWG on Design of New Instruments & Installations** held on November 21st-23rd 2007, in Exeter, UK, hosted by the Met Office.
There were 17 participants. The objective was to examine some case studies of instrument installations that have taken place within the EUFAR fleet.
- ▶ **EWG on Stratospheric Measurements "SHARE - Small High Altitude Research aircraft for Europe"** held on January 31st 2008, in Winterthur, Switzerland.
There were 19 participants. The objective was to evaluate the future use of the ARA Egrett as a high altitude aircraft for European Research, intended to be operated in Switzerland by a consortium around ZHAW, and possible stronger inclusion in the EUFAR aircraft fleet.
- ▶ **EWG on Turbulence "Operation, maintenance and calibration of turbulent wind sensing systems on research aircraft"** held on February 19-20th 2008, in Noordwijk, Netherlands, hosted by ESTEC.

There were 19 participants. The objective was to "write down" the best practices that the operators have to do ensuring well calibrated wind/turbulence to deliver to the scientific community. Report available online soon.

- ▶ **6th TA meeting**, organized by webconference on March 30th 2008.
There were 8 participants. The aims were to evaluate 23 TA proposals and to allocate the TA remaining funds.
- ▶ **7th TA meeting**, organized by webconference on June 9th 2008.
There were 9 participants. The objectives were to evaluate the 12 last TA proposals and to discuss the new evaluation criteria to be used in EUFAR FP7.
- ▶ **6th Management Committee meeting**, organized by webconference on April 8th 2008.
There were 16 participants. The aims were to make a status on the EUFAR expenses and to vote the reallocation of the remaining funds.
- ▶ **7th Management Committee meeting**, organized by webconference on June 16th 2008.
There were 15 participants. This meeting was the continuation of the previous Management meeting.

▲ Summer School On Airborne Cloud and Aerosol Science

The 2nd EUFAR summer school, ACAS (Airborne Cloud and Aerosol Science), was organized by KNMI (Koninklijk Netherlands Meteorological Institute) on April 17-25th 2008 and was based at Utrecht. There were 19 students attending this summer school. The main scope was to provide a comprehensive overview to Ph.D? students on airborne measurement techniques, data analysis and specifics of airborne measurements of aerosol and cloud properties.

During the first part of the summer school, students attended lectures focused not only on scientific issues and data analysis, but also on the design of airborne experiments, including technical and safety constraints. The lectures were accompanied by a visit of the FAAM BAe146 research aircraft. The lectures and presentations given during the school are available on the EUFAR website.

In the second part of the school, the students were grouped in 3 major groups and then prepared together a flight plan that suited everyone's scientific interest. Each group (of 6 students) participated to a 2h20min flight and then were asked to write a short scientific report about their flight preparation and what they have learnt about flight planning and performance. These reports are expected for the beginning of July and will be published on the EUFAR website.

During each step, students were helped by the lecturers and the FAAM crew. The whole flight preparation was interactive training because of the direct contact with pilots, aircraft operators, and scientific experts. Thus, we expect that the students are now able to design their own experiments.

▲ Transnational Access / Education & Training

First of all, we would like to thank the scientific reviewers very much for the effort they've put in to reviewing application forms for flight time on the EUFAR fleet. Their time was much appreciated and contributed to the success of the Transnational Access activity

▲ Some statistics:

- ▶ **Transnational Access:** 58 projects have been submitted so far, of which 37 have already been accepted, 20 have been rejected (16 during the selection procedure; 4 do not fit the eligibility criteria) and 1 is still evaluated.
EUFAR FP6 Transnational Access program is now closed.
We plan the new program (EUFAR FP7) to open soon.
- ▶ **Education & Training – Transnational Access:** 16 projects have been submitted so far, of which 8 have already been accepted and 8 rejected (7 during the selection procedure; 1 does not fit the eligibility criteria).
EUFAR FP6 Education & Training program is now closed.
The access to aircraft for students will be addressed differently in EUFAR FP7. More information will be published later.
- ▶ **Education & Training – Join existing research Campaigns:**

48 students have applied so far: 30 were successfully evaluated by the N5ET coordinator and the various research project responsables, and were selected to participate in a research campaign. Up to now, the aircraft operators that have welcomed students during their research campaigns are: NERC, AWI, CNR-ISAFoM, FAAM, Enviscope, SAFIRE, METAIR, DLR, NLR and FZK. The students confirmed in their report that the training was very useful and also a very good opportunity to interact with experienced scientists.



▲ Achieved Transnational Access campaigns:

Up to now, 37 projects were flown. Since the last newsletter, 11 more projects were flown:

- ▶ **THORPEXGREENEX**: Weather systems downstream of Greenland and Iceland.
 Scientific Theme: The impact of major topographic obstacles such as Greenland on weather systems and weather forecasts far downstream of the obstacles.
 This campaign took place in March 2008 in Keflavík, Iceland and was flown with the [DLR-FALCON 20](#).
- ▶ **ThorpexIPY**: Improved forecasting of adverse weather in the Arctic region – present and future.
 Scientific Theme: Improvement of the accuracy of high-impact weather forecasts in the Arctic region for the benefit of society, the economy and the environment.
 This campaign took place in March 2008 in Andenes, Andøya, Northern Norway and was flown with the [DLR-FALCON 20](#).
- ▶ **AMAPUV**: Airborne Measurements of Aerosol Profiles and Validation of OMI ground UV-Products.
 Scientific Theme: Validation of OMI-UV Products, Aerosol optical properties, radiation and climate.
 This campaign took place in June 2008 in Vienna/Grossenzersdorf and was flown with the [DLR-FALCON 20](#).
- ▶ **Perform PINC**: Airborne measurements of tropospheric ice-nucleating aerosol particles using the Portable Ice Nucleation Chamber (PINC): Instrument performance test and data analysis.
 Scientific Theme: Airborne in-situ measurements of ice-nucleating aerosol particles in the troposphere: The role of ice nucleating particles in cloud processes and their micro-physical properties.
 This campaign took place in May 2008 in Germany and was flown with the [Enviscope-Learjet](#).
- ▶ **SEASALT**: Signatures of Evaporation of Artificial Snow in Alpine Lower Troposphere
 Scientific Theme: Impact of artificial snow production on the atmospheric-context of the water budget of Alpine ski-resort surroundings.
 This campaign took place in March 2008 in Europe (Alpine environment) and was flown with the [FZK-ENDURO](#).
- ▶ **REGAFLUXES**: Regionalisation of carbon dioxide and water vapor fluxes in an agricultural region, and the effect of urban air.
 Scientific Theme: The exchange fluxes of carbon dioxide and water vapor between the surface (rural and urban areas) and the atmosphere.
 This campaign took place in May 2008 in Germany and was flown with the [METAIR-DIMONA](#).
- ▶ **ACAS**: Airborne Cloud and Aerosol Science
 Scientific Theme: Education and Training in a field of airborne measurements of aerosol and cloud microphysical and chemical properties.
 This campaign took place in April 2008 in Netherlands and was flown with the [FAAM-BAe146](#).
- ▶ **AFEGC**: Atmospheric Forcing of the East Greenland Current.
 Scientific Theme: Simultaneous observations of the atmosphere and the ocean in the East Greenland Current region.
 This campaign took place in March 2008 in East Greenland Current mooring array and was flown with the [DLR-FALCON 20](#).
- ▶ **GAMARF**: Estimation of the aerosol shortwave and longwave radiative forcing from surface and

airborne measurements above the island of Lampedusa (central Mediterranean).
Scientific Theme: Measurement and model simulation of the aerosol direct effect on shortwave and longwave radiative fluxes.

This campaign took place in May 2008 in The island of Lampedusa and was flown with the [FZK-ENDURO](#).

- ▶ **POLUVIS**: Contribution to the POLARCAT experiment with an airborne UV-Vis limb sounder.
Scientific Theme: Study of the vertical distribution of several reactive gases involved in the chemistry of the lower atmosphere during the POLARCAT campaign in Spring 2008.
This campaign took place in April 2008 in Kiruna, Sweden and was flown with the [SAFIRE-ATR-42](#).
- ▶ **BAYWIND**: Wind stress mapping on sheltered bays.
Scientific Theme: Spatial structure in wind forcing and upper ocean circulation.
This campaign took place in June 2008 on the coast of Lisbon, Portugal and was flown with the [NLR-CITATION](#).
- ▶ **REGAN**: Regional Exchange of Greenhouse gases and their Atmospheric transport in the Netherlands.
Scientific Theme: Regional atmospheric transport of greenhouse gases.
This campaign took place in June 2008 in the Netherlands and was flown with the [METAIR-DIMONA](#).

▲ **EUFAR article in eStrategies Projects publication**

The article about the EUFAR network published in the eStrategies Projects publication is now available [here](#).

Please also note that this edition is being hosted online indefinitely and can be previewed on <http://www.bpldigital.magtank.com>

▲ **EUFAR FP7 Proposal**

The EUFAR FP7 proposal has been positively evaluated with a mark of 14/15. The contract negotiations are now in progress. The financial contribution of the European Commission will be up to 8 000 000€.

▲ **EUFAR needs Scientific Reviewers for Transnational Access proposals**

We are creating a panel of scientific reviewers containing experts from a range of hyperspectral, meteorological, atmospheric, environmental and geo-science disciplines, to evaluate the future EUFAR FP7 Transnational Access proposals. If you are interested to become a reviewer, please send an expression of interest to bureau@eufar.net. The selection of the reviewers will be made by our Expert Working Group coordinators, based on papers.

The scientific reviewers will be responsible for the evaluation of the applications in terms of the practicality, value and scientific merit (detailed evaluation criteria and guidance for reviewers will be published later). Note that application forms are limited to just one page of science description of the work plus supporting information. We hope that the review can be accomplished within about an hour. Over the four years of EUFAR FP7 project, each reviewer will be asked for about 5 to 10 reviews. Before each review, reviewers will be asked by email if they are willing to perform the review, and reminded how to proceed. They are, of course, free to decline to review a proposal, or ask to be removed from our panel at any time.

In order to assist in identifying appropriate reviewers, it would be helpful if you could visit the EUFAR website (<http://www.eufar.net>) to check your personal details. In particular, you should ensure that the details of your areas of scientific expertise are correct.

Thank you in anticipation. We appreciate very much your help in using EU funding wisely and in helping to make EUFAR a successful program."

▲ **COPAL**

COmmunity heavy-**PA**ylod **L**ong endurance Instrumented Aircraft for Tropospheric Research in Environmental and Geo-Sciences.

The COPAL project has started on November 1st 2007 for 4 years. It has the objective of providing the European scientific community with a unique research aircraft platform, capable of operating in any remote area in the world and offering a heavy-payload for the integration of a large range of

instruments for the research in environmental and Geo-sciences.

The Consortium, coordinated by Météo-France/CNRM (Jean-Louis Brenguier), consists of 11 national research funding institutions, a SME and a pan-European law firm.

▲ COPAL particularly aims at:

1. Precisely quantifying the construction and maintenance costs of a HPLE aircraft (WP3)
2. Identifying the potential aircraft and data management operators (WP4)
3. Establishing a community of experts in airborne measurements to support the development of innovative instrumentation (WP5)
4. Defining the governance procedures for a balanced use of the facility (WP6).

The results of the workpackages shall help in reaching an accurate definition of the most suitable research infrastructure, possibly a European Research Infrastructure "ERI", to manage such specific activities (WP2).

▲ COPAL PARTNERS

N°	Organization (name, city, country)	Short Name
1	Météo-France, Centre National de Recherches Météorologiques, Toulouse, France	CNRM
2	Instituto Nacional de Técnica Aeroespacial, Madrid, Spain	INTA
3	Finnish Meteorological Institute, Helsinki, Finland	FMI
4	Natural Environment Research Council, Swindon, United Kingdom	NERC
5	Fundação para a Ciência e a Tecnologia, Lisboa, Portugal	FCT
6	Consiglio Nazionale delle Ricerche, Rome, Italy	CNR
7	General Secretariat for Research and Technology, Athens, Greece	GSRT
8	University of Warsaw, Poland	UW
9	Enviscope GmbH, Frankfurt/Main, Germany	Enviscope
10	Met Office, Exeter, United Kingdom	Met Office
11	Centre National de la Recherche Scientifique, Paris, France	CNRS
12	SJ Berwin LLP, Brussels, Belgium	SJ Berwin
13	Deutsches Zentrum für Luft- und Raumfahrt e.V., Köln, Germany	DLR

▲ COPAL New Comer



In February 2008, COPAL welcomed Nadège Nankou, the project manager. She will assist the law firm SJ Berwin in setting up the research infrastructure.

▲ COPAL meetings

▲ Future COPAL Meetings

- ▶ 1st Steering Committee Meeting
COPAL beneficiaries are invited to the 1st Steering Committee meeting.
The meeting will be held in Exeter, England, on September 25-26th 2008 hosted by MetOffice.
- ▶ 1st Governing Board Meeting
COPAL authorized representatives are invited to the 1st Governing Board meeting.
The meeting will be held in Toulouse, France, on October 9-10th 2008 hosted by Météo-France.

▲ Previous COPAL Meetings

The COPAL kick-off meeting took place on December 4-5th, 2007.
For more information, please refer to the [report](#).



longer, please [click here](#).