## GEMS-aerosol breakout session

# 2006 GEMS general assembly

7-8 February 2006

#### Agenda of the AEROSOL session of the GEMS general assembly

#### 7 Feb 13.45-17.15 Presentations by WP and task leaders

- 13.45 Welcome and practical issues Olivier Boucher
- 13.55 WP1 Jean-Jacques Morcrette
- 14.10 WP1 Nicolas Huneeus
- 14.25 WP1 Slimane Bekki
- 14.40 WP2 Mikhail Sofiev
- 14.55 WP2 Yves Balkanski
- 15.10 WP3 & PRO Angela Benedetti
- 15.25 WP3 David Fillmore
- 15.40 WP3 Jean-Francois Leon
- 15.55 Coffee/tea break
- 16.10 WP4 Colin O'Dowd
- 16.20 WP4 Stefan Kinne
- 16.30 WP4 Isabelle Chiapello
- 16.40 WP4 Hugo de Backer/Steven Dewitte
- 16.50 WP4 Harald Flentje/Harald Berresheim
- 16.00 Wrap-up
- 17.15 Adjourn

17.30-18.30 Coktail at ECMWF

#### Agenda of the AEROSOL session of the GEMS general assembly

#### 8 February 09.00-12.30

- 09.00 Breakout AER sessions: 1/ model configuration, 2/ satellite & 4D-VAR Large Committee Room / Classroom
- 10.30 Coffee/tea break
- 11.00 Plenary AER session: report of breakout groups to plenary
- 11.30 Discussion on model sources BB sources and injection height, industrial sources
- 12.30 Lunch break

#### 8 February 13.30-17.00

- 13.30 Discussion on model sources Dust, sea-salt, stratospheric sources, trends, variability
- 14.30 Aircraft aerosol measurements Andreas Milikin DLR
- 14.35 Discussion on model evaluation
- 15.30 Coffee/tea break
- 16.00 Months 13-30 implementation plan, reporting, and wrap-up
- 17.00 Adjourn

### List of people hired under GEMS-aerosol January 2006

**ECMWF** MetOffice CNRS LOA MPI-M **CEA-IPSL-LSCE** NUIG SA UPMC FMI DWD RMIB

Noone hired yet Noone hired, internal resources are used **Bertrand Crouzille** Since 01 Jan 06 Since 01 Mar 05 Stefan Kinne David Fillmore Since 01 July 05 **Conor Milroy** Since 01 April 05 Noone hired, internal resources are used Noone hired, internal resources are used Harald Flentje Since 01 August 05 Alexander Mangold Since 06 June 05

Corrections?



→ GEMS-aerosol consists of many bricks which need to be assembled with each other
 → Availability and timeliness are needed from all partners!

Risk #1: delay in one deliverable delays the whole project.

Risk #2: Two GEMS projects develop aside from each other



Who is doing what at ECMWF, related to GEMS-aerosol?

- Jean-Jacques Morcrette: direct modelling, radiance direct and adjoint codes, simulations

- Angela Benedetti: satellite data, error covariance matrices, simulations
- Erik Andersson: overseeing data assimilation of aerosol quantities
- Soumia Serrar, Richard Engelen: GHG sub-project
- Johannes Kaiser: HALO, emissions
- Johannes Flemming: GRG sub-project
- Claude Gibert, Miha Razinger: GEMS Web site
- Agathe Untch, Anton Beljaars, Peter Bechtold: transport of tracers
- Martin Suttie: Acquisition, archival and pre-processing of satellite data

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GEMS Collaboration Tools	Welcome to the collaboration tools of the GEMS project.						
Child Areas							
<u>News</u> Reporting Documents	Here you will find applications for reporting, document exchange and discussions. Hopefully they will help in the exchange of ideas and opinions within the GEMS community.						
<u>Events</u> Discussions <u>Help</u>	You can find help about how to use the tools, input data, attach files and more in the <u>tutorial</u> pages.						
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## **Objectives of the meeting**

1/ Review progress from all partners

2/ Make a number of key decisions

- model set up for the next year or so
- emission datasets
- satellite datasets for data assimilation
- interfaces with other sub-projects
- evaluation strategy

3/ Agree on and polish workplan for months 13 to 30

4/ Decide if interim aerosol meetings are needed

Project	MAM 2006	JJA 2006	SON 2006	DJF 2006/7	MAM 2007	JJA 2007
GHG_ Modelling at ECMWF	Continue validation of model transport, surface fluxes	Continue validation of model transport, surface fluxes	Assessment of GHG model performance in Data Assimilation	Assessment of GHG model performance in Data Assimilation	Assessment of GHG model performance in Data Assimilation	Prepare upgrades of GHG model
AER Modelling at ECMWF	Continue Validation of Aerosol Model	Continue Validation of Aerosol Model	Assessment of AER model performance in Data Assimilation	Assessment of AER model performance in Data Assimilation	Assessment of AER model performance in Data Assimilation	Prepare upgrades of AER model
GRG Modelling at ECMWF	Finalise Interfacing to CTM1	Continue Validation of IFS_CTM1 Interfacing	Continue Validation of IFS_CTM1 Interfacing	Assessment of GRG model performance in Data Assimilation	Assessment of GRG model performance in Data Assimilation	Assessment of GRG model performance in Data Assimilation
Pro 1	Validation of GHG	First trial GHG	Production of GHG	Production of GHG	Production of GHG	Prepare upgrades of
GHG DA System & Reanalysis	Assimilation System	reanalyses	reanalysis 2003-2004, with reruns as needed	reanalysis 2003-2004, with reruns as needed	reanalysis 2003-2004, with reruns as needed	GHG data assimilation system
Pro2 AER DA System & Reanalysis	Validation of GHG Assimilation System	First trial AER reanalyses	Production of AER reanalysis 2003-2004, with reruns as needed	Production of AER reanalysis 2003-2004, with reruns as needed	Production of AER reanalysis 2003-2004, with reruns as needed	Prepare upgrades of AER data assimilation system
Pro3 GRG DA System & Reanalysis	Validation of GHG Assimilation System	Validation of IFS_CTM1 Interfacing in 4D-Var	First trial GRG reanalyses	Production of GRG reanalysis 2003-2004, with reruns as needed	Production of GRG reanalysis 2003-2004, with reruns as needed	Production of GRG reanalysis 2003-2004, with reruns as needed
Pro 4 Technical Support &CTM Interfaces	GUI for Process control of IFS, OASIS4, CTM1	Complete GUI for Process control of IFS, OASIS4, CTM1	Interface IFS_CTM2, PREPIFS support for GEMS, incuding I remote users	Interface IFS_CTM3 and PREPIFS support for GEMS, incuding I remote users	Support for CTM interfaces & PREPIFS support for GEMS, incuding I remote users	Support for CTM interfaces & PREPIFS support for GEMS, incuding I remote users
Pro5 Technical observation processing	Complete data acquisition & re- formatting for 2003-2004	Begin data acquisition for 2000- 2002 & 2005-2006	Data formats and converters for GEMS observations and field variables	Data formats and converters for GEMS observations and field variables	Data formats and converters for GEMS observations and field variables	Data formats and converters for GEMS observations and field variables
Pro 6 Web interface and verification tools	Build web access to boundary conditions	Complete web-access to boundary conditions Begin archive of LAM runs	RAQ Data acquisition, Displays & Verification tools	RAQ Data acquisition, Displays & Verification tools	RAQ Data acquisition, Displays & Verification tools	RAQ Data acquisition, Displays & Verification tools