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2 Welcome

Dear colleagues,

we are happy to welcome you to the ninth EMS Annual Meeting and the biennial ninth European Conference on Applications of Meteorology (ECAM) that are being held jointly in Toulouse. These meetings are aimed at bringing together scientists, service providers, users, decision makers and manufacturers from across Europe. And be welcome to the vibrant city of Toulouse, a centre of cutting-edge technology, and a place with charm and cultural attractions that will provide an inspiring environment for the conference that lies ahead.

The theme of our meetings – “High resolution meteorology – applications and services” – reflects the new services being developed, and the increasing possibilities for many sectors to make use of the results from research into the use and modelling of high resolution meteorological and climatological data. It also highlights the need for raising the awareness of potential benefits but also the pitfalls involved with the use of such data. The challenge is to communicate both the opportunities and the uncertainties when exploiting high resolution data, for example in warning and alarm systems. Much closer interaction of developers, users, stakeholders and decision makers is needed and that is what in particular the *Applications of Meteorology Programme* tries to facilitate and achieve.

The programme has been designed to provide ample opportunities for the exchange of experience and ideas between people from different horizons; it has five programme themes

- *Applications of Meteorology (ECAM)*
- *The Atmosphere and the Water Cycle*
- *Communications and Education*
- *Climatology*
- *Numerical Weather Prediction*.

The numerous sessions provide an occasion to assess the progress of science, techniques and services in the relevant fields, and reflect that science and applications are constantly cross-fertilising each other.

A plenary *ROUND TABLE* discussion devoted to the vision for high resolution meteorology, applications and services, will focus on the different expectations and perspectives of the user community, modellers, forecasters and service providers.

The poster presentations offer a unique opportunity to have in-depth discussions on the studies and their results. The Programme and Science Committee was pleased to be able for the first time in many years to arrange the programme such that posters can all be displayed throughout the entire week, thus creating more opportunities to present and discuss these. Extended Poster sessions have this year been scheduled on Tuesday and Thursday afternoon between the two oral afternoon blocks, coinciding with coffee breaks.

A *POSTER AWARD* will be given for the first time during this conference. Convenors have all been asked to put forward one proposal from their session and a select committee will make a final evaluation. The Award winner will be announced during the poster session on Thursday, 1 October 2009, and all the short-listed posters will serve as show-cases of Best Practice on the EMS Internet site.

We are very pleased that many companies and associations have decided to exhibit their instruments, publications and information material at this conference to welcome you at their booths.

The ECAM after 14 years returns to Toulouse for a second time, and as in 1995, an *Area Chapiteau* has been constructed to accommodate all the exhibitors together with a large number of posters. It will provide ample space to scroll around, meet people and discuss – not to forget the provision of refreshments and snacks.

The EMS and ECAM meeting would not have been possible without the work of the convenors that publicised and developed the sessions. We extend our sincere thanks for their commitment and hard work. We are also grateful to all who have contributed to make this meeting in Toulouse a reality – the EMS Member Societies and Associates, the Copernicus organization and the Exhibitors. We are looking forward to a very interesting and enjoyable week.

Fritz Neuwirth
(EMS President)

Jean Jouzel
(Président Société Météorologique de France)

François Jacq
(Président-directeur général Météo France)

Location and Conference Address

The 9th Annual Meeting of the European Meteorological Society (EMS) and the 9th European Conference on Applications of Meteorology (ECAM) are held jointly at the Centre International de Conférence (CIC) de Météo France in Toulouse, France, from 28 September to 2 October 2009. The congress is open to the scientists of all nations.

The conference takes place on the premises of Météo France. It is organized jointly by Météo France, the Société Météorologique de France and the European Meteorological Society.

The conference centre hosts an amphithéâtre and two lecture rooms. One additional lecture room is located in the Restaurant building. Room for side meetings is available in building DSO, to the west of the CIC building. Please have a look on the cover of this programme book regarding the location of these three buildings. Floor plans can be found on page 9 to 12.

The Area Chapiteau, two large tents located to the east of the CIC building, will host the exhibition, the poster and catering area.

Conference Centre

Centre International de Conférence de Météo France
42 Av. G. Coriolis
1057 Toulouse Cedex 1
France
Phone: +33-5-61078051/52
cic-toulouse@meteo.fr

Rules of Conduct

- Smoking is prohibited in the entire congress centre.
- It is prohibited to copy any presentation from the desktops in the lecture rooms.
- Please switch off any mobile phones during the sessions.
- Please note that video-graphic recordings are not allowed.

Official Language

The official language of the 9th EMS / 9th ECAM is English. Simultaneous interpretation is not provided. It is therefore expected that authors are able to present their research in the English language.

Insurances

The organizers cannot accept liability for personal accident, loss or damage to private property, which may be incurred as a result of the participation in the 9th EMS / 9th ECAM. Participants are, therefore, advised to arrange appropriate insurance cover. This should extend not only to travel but also to cancellation costs.

Local Transportation Information

From Toulouse city centre to Météopole

By Metro: please plan for around 30 minutes travel time.

The Metro Line A runs from the centre of Toulouse (stations Marengo SNCF, Jean Jaurès, Capitole, Esquirol or Saint-Cyprien République) to "Basso Cambo", the final stop. This takes about 15 minutes.

At "Basso Cambo" take bus no. 8, the direction "Lycée Polyvalent" is given at the front of the bus.

Get off at stop "Météorologie". The trip by bus normally takes 5 minutes.

The Metro runs every 3 to 5 minutes during the day.

Bus no. 8 runs every 10 to 15 minutes during the day.

Additional Shuttle Busses

➤ Métro Basso Cambo ←→ Météopole

Monday, 28 September 2009
08:45–10:15 and 20:00–21:30

Tuesday, 29 September 2009
08:00–09:00 and 19:00–20:00

Wednesday, 30 September 2009
08:00–09:00

Thursday, 1 October 2009
08:00–09:00 and 19:00–20:00

➤ Météopole → Airport Blagnac

Friday, 2 October 2009
13:30

WLAN (Wifi)

WLAN (WiFi) is available free of charge in the Area Chapiteau as well as at the Cybercafé in the CIC in the back of the ground floor.

Registration & Information Desk

The registration & information desk is located on the ground floor of the CIC.

Opening Hours

Monday – Thursday, 28 September – 1 October 2009
08:00–18:00

Friday, 2 October 2009
08:00–10:00

Conference Hours

Oral Sessions

Monday, 28 September 2009

Opening: 10:00–13:00
Lunch break: 13:00–14:00
Block 3: 14:00–16:00
Coffee break: 16:00–16:30
Block 4: 16:30–18:30

Tuesday, 29 September 2009

Block 1: 08:30–10:30
Coffee break: 10:30–11:00
Block 2: 11:00–13:00
Lunch break: 13:00–14:00
Block 3: 14:00–16:00
Poster Sessions: 16:00–17:00
Block 4: 17:00–19:00

Wednesday, 30 September 2009

Block 1: 08:30–10:30
Coffee break: 10:30–11:00
Block 2: 11:00–13:00
Lunch break: 13:00–14:00
Block 3: 14:00–18:00

Thursday, 1 October 2009

Block 1: 08:30–10:30
Coffee break: 10:30–11:00
Block 2: 11:00–13:00
Lunch break: 13:00–14:00
Block 3: 14:00–16:00
Poster Sessions: 16:00–17:00
Block 4: 17:00–19:00

Friday, 2 October 2009

Block 1: 08:30–10:30
Coffee break: 10:30–11:00
Block 2: 11:00–13:00

Poster Sessions

The poster area is located in the Area Chapiteau (tents) in front of the conference centre. Fixing material is available directly in the poster area.

Outstanding Poster Award

The selected poster and the award winner will be announced at the beginning of the poster session on Thursday afternoon.

Display Time

Monday, 28 September 2009, 10:00 –
Friday, 2 October 2009, 13:00

Author in Attendance (by sessions)

Tuesday, 29 September 2009, 16:00–17:00:

AM1, AM2, AW3, AW5, AW6, AW10, AW11, AW14, CE4, CL1, CL4, NWP1, NWP5

Thursday, 1 October 2009, 16:00–17:00:

AM3, AW1, AW2, AW4, AW7, AW8, AW9, AW12, AW13, CE1, CE2, CE3, CL2, CL3/NWP4

Coffee Breaks & Lunch

Coffee Breaks

Free coffee/tea will be served during the Coffee Breaks. The coffee station is located in the Area Chapiteau (poster & exhibition area).

Monday, 28 September 2009

11:00–11:30 and 16:00–16:30

Tuesday, 29 September 2009

10:30–11:00 and 16:00–17:00

Wednesday, 30 September 2009

10:30–11:00 and 16:15–16:45

Thursday, 1 October 2009

10:30–11:00 and 16:00–17:00

Friday, 2 October 2009

10:30–11:00

Lunch

Lunch is available in the Restaurant building. You are advised to buy a payment card (initial value 30,-€). These cards will be sold by staff of the restaurant, next to the conference registration counter, at least on Monday and Tuesday (by cash only – a cash machine is available in the Restaurant building). Unused credit will be reimbursed on return of the payment card directly in the restaurant. The card can also be recharged at the restaurant, in case the 30,-€ have been spent.

Monday – Friday, 13:00–14:00

Icebreaker Reception

Location: Area Chapiteau

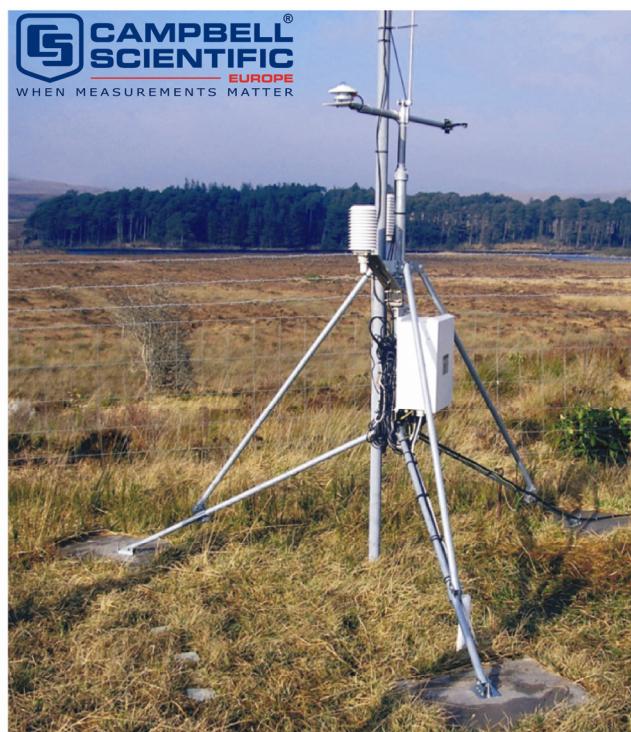
Date: Monday, 28 September 2009, 19:00–20:30

Programme and Science Committee 9th EMS Annual Meeting and 9th European Conference on Applications of Meteorology

Pierre Baüer (SMF, France)
Rasmus Benestad (NMF, Norway)
Horst Böttger (EMS)
Tanja Cegnar (EARS, Slovenia)
Jean-Pierre Chalon (Météo France)
Dominique Lapeyre de Chavardès (Météo France)
Ben Dieterink (HMEI)
Sylvain Joffre (FMI, Finland)
Martina Junge (EMS)
Haleh Kootval (WMO)
Ewen McCallum (MetOffice, United Kingdom)
Robert Mureau (The Netherlands)
Evangelina Oriol-Pibernat (ESA)
Manuel Palomares (AEMet, Spain)
Claude Pastre (SMF, France)
Hans Richner (SGM, Switzerland)
Pirkko Saarikivi (PRIMET)
Gerhard Steinhorst (DWD, Germany)
Heleen ter Pelkwick (NVBM, The Netherlands)
Aryan van Engelen (ECSN)
Walter Zwiefelhofer (ECMWF)

Registration & Abstract Management

Copernicus Meetings
Bahnhofsallee 1a
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Fax: +49-551-900339-70
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6 Exhibition

Exhibition Time

Monday, 12:00–18:00

Tuesday – Thursday, 09:00–18:00

Please use the opportunity to visit the exhibition in the Area Chapiteau. You will find the exhibits of the following companies, institutions and societies (in alphabetical order):

Association of Hydro-Meteorological Equipment Industry

7 bis, Avenue de la Paix

1211 Geneve 2

Switzerland

Phone: +41-22-730-8334

Fax: +41-22-730-8340

<http://www.hydrometeoindustry.org>

Booth #5

CAE – Monitoring your world

Via Colunga, 20

40068 San Lazzaro di Savena

Italy

Phone: +39-051-4992703

Fax: +39-051-4992949

<http://www.cae.it>

Booth #11

Campbell Scientific

80 Hatheron Road

Shepshed, LE12 9GX

United Kingdom

Phone: +44-1509-601141

Fax: +44-1509-601091

<http://www.campbellsci.co.uk>

Booth #10

EMS Member Societies

SMF Midi-Pyrénées

c/o Météo-France ENM

42, avenue G. Coriolis

31057 Toulouse

France

Phone: +33-05-61078306

Fax: +33-05-61078509

<http://www.smf.asso.fr>

Booth #6

Kipp & Zonen BV

Delftechpark 36

2628 XH Delft

Netherlands

Phone: +31-15-2755210

Fax: +31-15-2620351

<http://www.kippzonen.com>

Booth #3

Leosphere

42 rue de Clignancourt

75018 Paris

France

Phone: +33-01-69358817

Fax: + 33-01-69358711

<http://www.leosphere.fr>

Booth #14

METEK GmbH

Fritz-Strassmann-Strasse 4

25337 Elmshorn

Germany

Phone: +49-4121-43590

Fax: +49-4121-435920

<http://www.metek.de>

Booth #9

METEOMODEM

rue de Bessonville

77760 URY

France

Phone: +33-160-747460

Fax: +33 160-747419

<http://www.meteomodem.com>

Booth #7

PROMETEO

rue de Bussonville

77760 Ury

France

<http://www.prometeo.asso.fr>

Booth #13

REMTECH SA

P.O. Box 101

78143 Vélizy Cedex

France

Phone: +33-1-39465958

Fax: +33-1-39466310

<http://www.remtechinc.com>

Booth #12

Scintec AG

Wilhelm-Maybach-Strasse 14

72108 Rottenburg

Germany

Phone: +49-7472-986430

Fax: +49-7472-9808714

<http://www.scintec.com>

Booth #1

SELEX-Gemtronik

Raiffeisenstrasse 10

41470 Neuss-Rosellen

Germany

Phone: +49-2137-7820

Fax: +49-2137-78211

<http://www.gemtronik.com>

Booth #2

Vaisala

P.O. Box 26

00421 Helsinki

Finland

Phone: +358-9-89491

Fax: +358-9-89492227

<http://www.vaisala.com>

Booth #4

Wiley-Blackwell

9600 Garsington Road

Oxford, OX42DQ

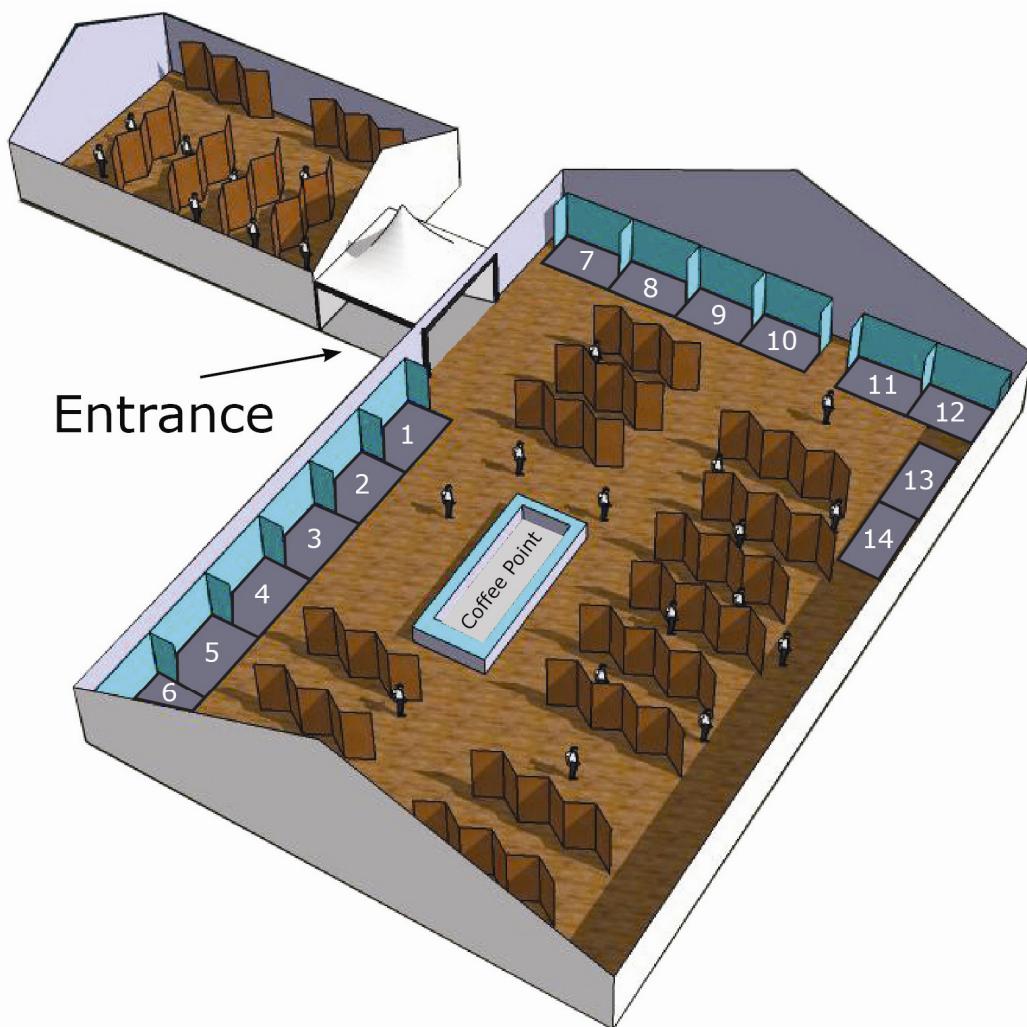
United Kingdom

Phone: +44-1865-476317

Fax: +44-1865-714591

<http://www.wiley.com>

Booth #8



Scintec AG #1

SELEX Gematronic #2

Kipp & Zonen BV #3

Vaisala #4

Association of Hydro-Meteorological

Equipment Industry #5

EMS Member Societies #6

METEOMODEM #7

Wiley-Blackwell #8

METEK GmbH #9

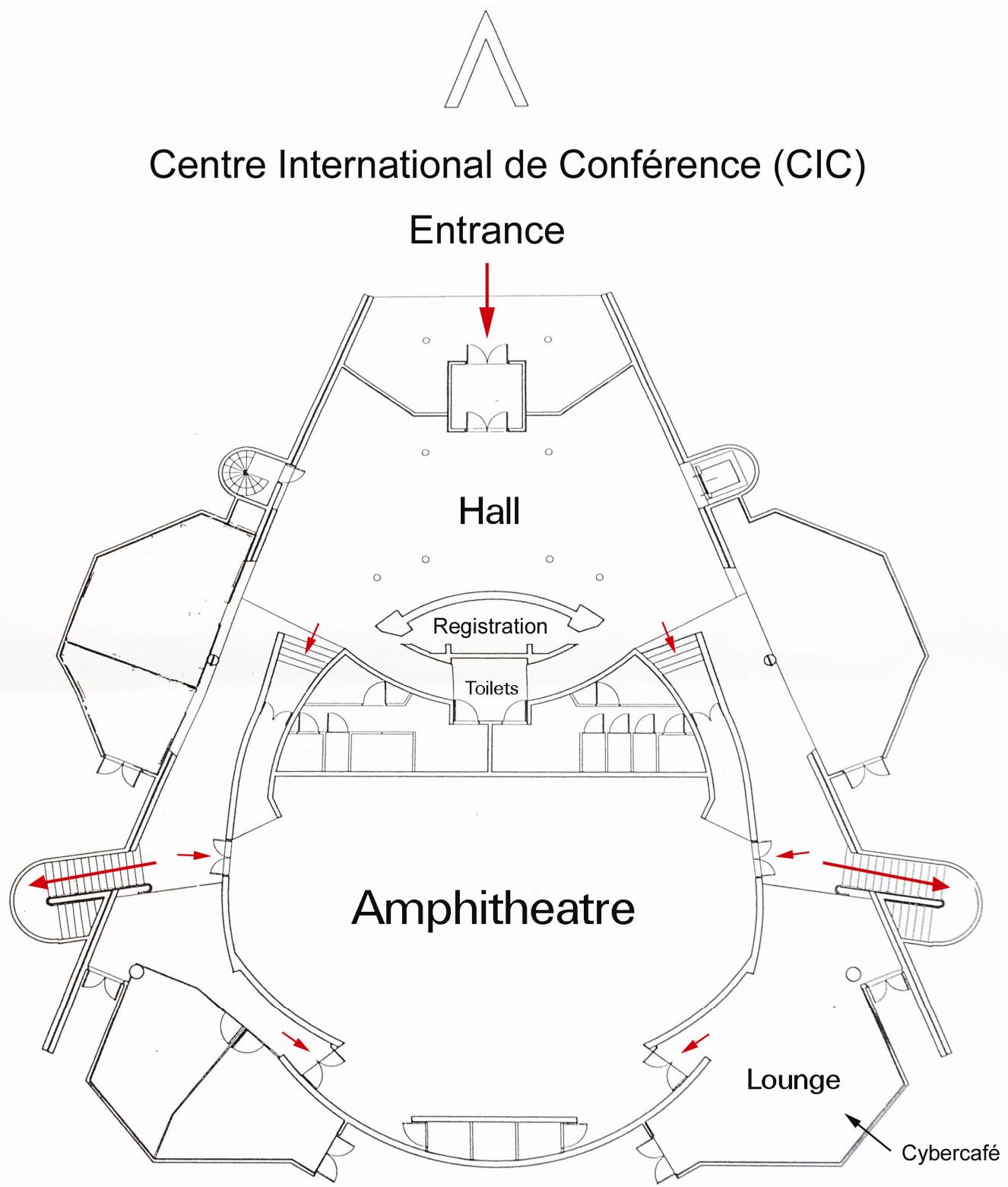
Campbell Scientific #10

CAE – Monitoring your world #11

REMTECH SA #12

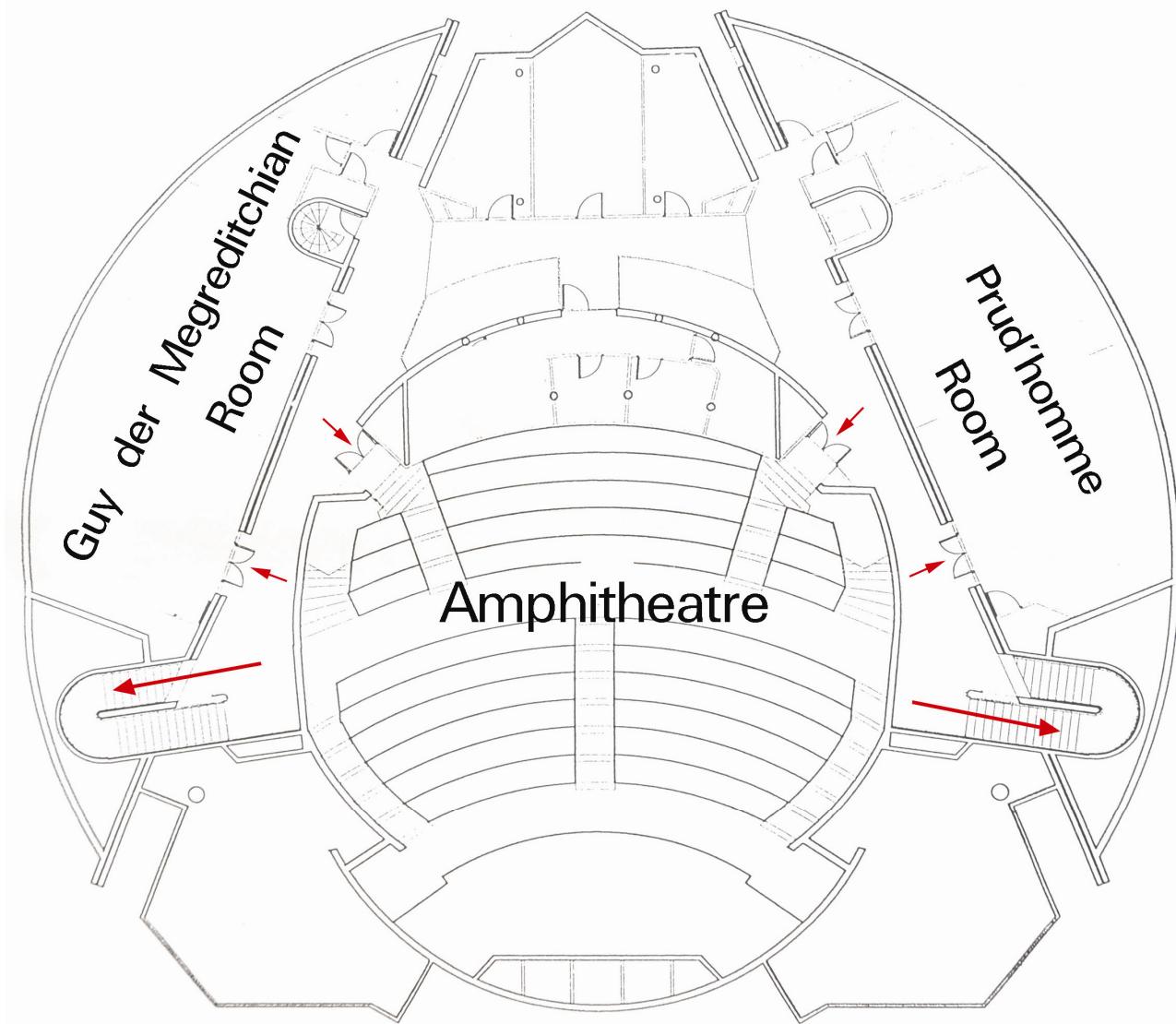
PROMETEO #13

Leosphere #14



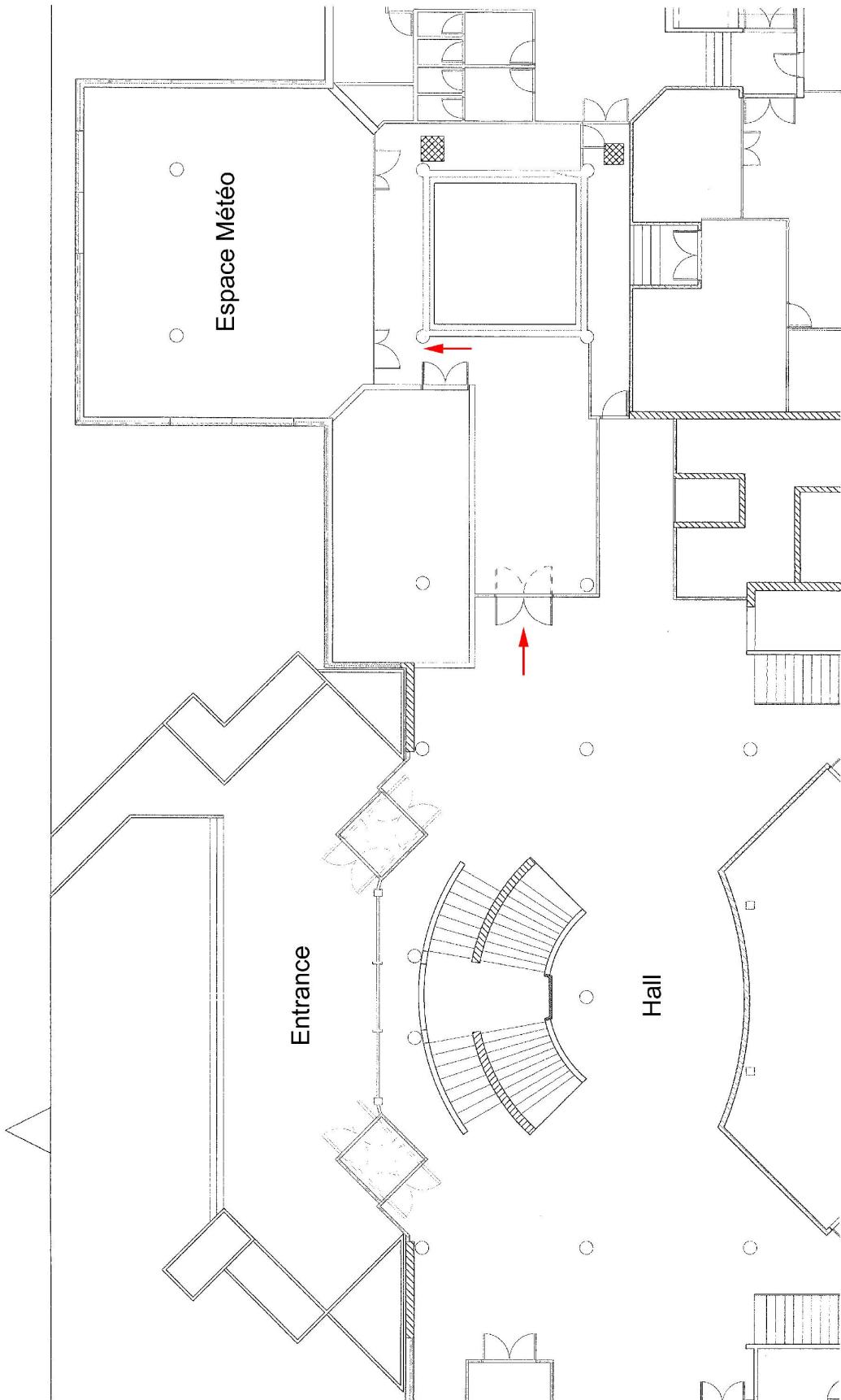


Centre International de Conférence (CIC)



10 Location Maps – Restaurant Building

Restaurant Building



Opening Session

Monday, 28 September 2009, Amphithéâtre

10:00 – 11:00 Welcome Addresses, Awards Ceremony and Presidential Lecture

Fritz Neuwirth, EMS President
Francois Jacq, President Director General Météo-France
Jean Jouzel, President SMF
Pirkko Saarikivi, PRIMET Board
Ben Dieterink, HMEI Council

Awards Ceremony

EMS Young Scientist Travel Awards
EMS Young Scientist Award
Kipp & Zonen Award for Boundary Layer Meteorology

Presidential Lecture: 10 years EMS

Fritz Neuwirth, EMS President

11:00 – 11:30 Coffee Break

11:30 – 13:00 Strategic Lectures: High resolution services

Chairperson: Fritz Neuwirth

Michel Jarraud, Secretary-General WMO
High resolution services: the role of WMO

Adrian Simmons, ECMWF and MACC-consortium
Evolution of the GMES Atmospheric Services

Dominique Bussereau, State Secretary of Transport, France

13:00 The End / Lunch

Plenary Round Table Discussion
– The vision for high resolution meteorological applications and services

Wednesday, 30 September 2009, Amphithéâtre

14:45 – 18:00

Moderator

Ewen McCallum, MetOffice, UK

Panelists

Olivier Moch, permanent secretary of the High Council for Meteorology: Expectations of user communities

Laurent Dubus, EDF: Energy sector perspective

Brian Golding, MetOffice: High resolution NWP and the use of high resolution data

David Richardson, ECMWF: The potential of probability forecasting

Robert Mureau, Meteo Consult: The forecaster perspective

PRIMET: Nowcast and forecast delivery using new Technology

The EMS Silver Medal 2009



Lennart Bengtsson

Silver Medal Lecture:

Why is the climate warming so irregular?
Wednesday, 30 September 2009
14:00 Amphithéâtre

Young Scientist Travel Awards

Irene Schicker

High resolution meteorological modelling of the Inn Valley atmosphere
(EMS2009-35)



Tuesday, 29 September 2009
17:30 – 17:45
Guy der Megreditchian



Peter Szabo

The evaluation of extreme precipitation and temperature indices based on regional climate models at the Hungarian Meteorological Service (EMS2009-33)

Friday, 02 October 2009
09:30 – 09:45
Amphithéâtre

Paul Williams

Application of the Lighthill-Ford Theory of Spontaneous Imbalance to Clear-Air Turbulence Forecasting (EMS2009-5)
Tuesday, 29 September 2009, 17:00–17:15, Amphithéâtre



Friday, 02 October 2009, Prud'homme, 12:15 – 12:30

Inertia-Gravity Waves Emitted from Balanced Flow: Observations, Properties, and Consequences (EMS2009-8)
P188: The role of mean ocean salinity in climate (EMS2009-7)
P206: A proposed modification to the Robert-Asselin time filter (EMS2009-22)



Alireza Shahabfar

Application of Perpendicular Drought Indices as a Dynamic Drought Monitoring Method (EMS2009-19)

Thursday, 01 October 2009
11:30 – 11:45
Espace Météo



Richard Foreman

Estimation of offshore humidity fluxes from sonic and mean temperature profile data (EMS2009-36)

Tuesday, 29 September 2009
10:15 – 10:30
Guy der Megreditchian

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Papers from **EMS/ECAM/ECAC**
2006–2008 are available in the
Open Access journal “Advances in
Science and Research”.

Please view the following
website for the Table of Contents:
<http://www.adv-sci-res.net/volumes.html>



www.advances-in-science-and-research.net

	Amphithéâtre			
10:00–11:00	Opening Session – Welcome Adresses			
11:00–11:30	Coffee Break: Area Chapiteau			
11:30–13:00	Opening Session – Strategic Lectures			
13:00–14:00	Lunch Break The exhibition opens at 12:00.			
	Amphithéâtre	Guy Der Megreditchian	Prud'homme	Espace Météo
14:00–16:00	AM1:High resolution meteorology – applications and services <i>Block 1 of 4: Safety</i>	AW3: Formulation, validation and parameterization of small-scale processes in atmospheric modelling <i>Block 1 of 2</i>	CL4: Documentary and natural proxy data for the study of climate anomalies and hydro-meteorological extremes <i>Block 1 of 2</i>	CE4/SpS1: Education & Sharing Knowledge <i>Block 1 of 2</i>
16:00–16:30	Coffee Break: Area Chapiteau			
16:30–18:30	AM1: High resolution meteorology – applications and services <i>Block 2 of 4: Tools for applied meteorology</i>	AW3: Formulation, validation and parameterization of small-scale processes in atmospheric modelling <i>Block 2 of 2 until 19:00</i>	CL4: Documentary and natural proxy data for the study of climate anomalies and hydro-meteorological extremes <i>Block 2 of 2</i>	CE4/SpS1: Education & Sharing Knowledge <i>Block 2 of 2 until 19:00</i>
19:00–20:30	ICE BREAKER: Area Chapiteau			

20:00 – 21:30: Shuttle bus from Météopole to the Metro Station “Basso Cambo”

Applications of Meteorology

AM1 High resolution meteorology – applications and services

Convener: D. Lapeyre De Chavardes

Co-Conveners: E. McCallum; R. Mureau; P. Saarikivi; G. Steinhorst

Lecture Room: Amphithéâtre

14:00–16:05

Chairperson: G. Steinhorst

Safety

14:00–14:15: EMS2009-11

Operational applications of high accuracy lighting data

Bonnet, M.

Météorage (marc.bonnet@meteorage.com)

14:15–14:30: EMS2009-565

Safety: relation with communication and use of weather information and forecast.

Palomares, M.; Alcazar, A.; Elizaga, F.; Pascual, R.

State Meteorological Agency (AEMET), Madrid, Spain
(palomares@innm.es)

14:30–14:45: EMS2009-95

AutoWARN - Automatic Support for the Weather Warning Service at Deutscher Wetterdienst

Reichert, B. K.

Deutscher Wetterdienst, Offenbach, Germany
(bernhard.reichert@dwd.de)

14:45–15:00: EMS2009-102

Meteoalarm - Latest developments for weather warnings in Europe

Staudinger, M.; Koppe, C.; Heikinheimo, M.;

Kroonenberg, F.

ZAMG, Salzburg, Austria

(michael.staudinger@zamg.ac.at)

15:00–15:15: EMS2009-226

Thunderstorm risk monitoring service

Brovelli, P.; Arbogast, E.; Bouzom, M.; Reynaud, J.; Autunes, F.; Guillou, Y.; Bernard-Boussières, I.; Sénési, S.

Météo-France - Forecast Department - Nowcasting Development - Toulouse France

(pascal.brovelli@meteo.fr)

15:15–15:30: EMS2009-474

Probabilistic prediction of severe weather using new products based on generalized extreme value theory

Prates, F.; Buizza, R.

ECMWF, Meteorological Operations Department, Reading, United Kingdom (fernando.prates@ecmwf.int)

15:30–15:45: EMS2009-13

Modeling and Forecasting the Onset and Duration of a Severe Dutch Fog Event

Steeneveld, G.J.; van der Velde, I.R.; Wicher Schreurs, B.G.J.; Holtlag, A.A.M.

Wageningen Univ., Meteorology and Air Quality Section, PO box 47, 6700 AA, Wageningen, Netherlands

(ivar.vandervelde@wur.nl)

15:45–16:05: EMS2009-624

The Human factor in issuing severe weather warnings

Kroonenberg, F.

Senior meteorologist and crisis coordinator at KNMI-Netherlands

16:05 Coffee Break

16:30–18:30

Chairperson: R. Mureau

Tools for applied meteorology

16:30–16:45: EMS2009-63

Correction Factors for COSMO-Wind Fields, used for operational forecasts in the Elbe River Estuary (Project OPTEL)

Ganske, A.; Rosenhagen, G.

Deutscher Wetterdienst, KU25, Hamburg, Germany
(anette.ganske@dwd.de)

16:45–17:00: EMS2009-115

Objective Mixed and Manually Controlled Data Base OMG

Kratzsch, T.; Rohn, M.

Deutscher Wetterdienst (DWD), Offenbach, Germany
(thomas.kratzsch@dwd.de)

17:00–17:15: EMS2009-246

Computations of convective parameters with the AROME model for the Hautmont (F4) tornado

Marquet, P.; Santurette, P.

Météo-France, DPrévi/LABO, Toulouse, France
(pascal.marquet@meteo.fr)

17:15–17:30: EMS2009-270

The use of a high resolution model in a private environment

van Dijke, D.; Malda, D.

MeteoGroup, Wageningen, Netherlands

17:30–17:45: EMS2009-346

Tropical cyclone genesis products at ECMWF

Prates, F.; Vitart, F.

ECMWF, Meteorological Operations Department, Reading, United Kingdom (fernando.prates@ecmwf.int)

17:45–18:00: EMS2009-456

High Resolution MOS Forecasts Based on a Low Resolution Model

Knüppfer, K.

METEO SERVICE weather research GmbH, D-14469 Berlin, Teltower Damm 25 (www.mswr.de)

18:00–18:15: EMS2009-520

EVA - An Interactive Online Tool for Extreme Value Analysis

Zingerle, C.; Buchauer, M.; Neururer, A.; Schellander, H.
ZAMG, Customer Service Tyrol and Vorarlberg,
Innsbruck, Austria (christoph.zingerle@zamg.ac.at)

18:15–18:30: EMS2009-589

On Demand Runs Of Mesoscale Models : Météo-France
multi-mission, multi-support GUI

Periard, C.; Pourret, V.; Chaupin, D.
Météo-France DP/SERV, Toulouse, France

END OF ORAL PROGRAMME AM1

Atmosphere and the Water Cycle

AW3 Formulation, validation and parameterization of small-scale processes in atmospheric modelling

Convener: B. Holtslag

Co-Conveners: T. Heus; GJ Steeneveld

Lecture Room: Guy der Megreditchian

14:00–16:00

Chairperson: G.-J. Steeneveld

14:00–14:30: EMS2009-306

Radiative flux divergence in the surface boundary layer from observational and model perspectives (solicited)

Hoch, S. W.

University of Utah, Atmospheric Sciences, Salt Lake City, United States (sebastian.hoch@utah.edu)

14:30–14:45: EMS2009-412

Local predictions of fog and low clouds for the hydrological bassin of Zurich airport

Liechti, O.

Analysen Konzepte, Winterthur, Switzerland (OlivierLiechtiAuK@compuserve.com)

14:45–15:00: EMS2009-457

Impact of shear and curvature on surface gravity wave stress

Miranda, P.M.A.; Martins, J.P.A.; Teixeira, M.A.C.

University of Lisbon, CGUL, IDL, Lisbon, Portugal (pmmiranda@fc.ul.pt)

15:00–15:15: EMS2009-439

Large-Eddy Simulation of turbulent wind flow over heterogeneous landscape

Dupont, S.; Brunet, Y.

INRA, UR1263 EPHYSE, Bordeaux, France (sdupont@bordeaux.inra.fr)

15:15–15:30: EMS2009-44

A new conceptual model for the nocturnal low level jet

Van de Wiel, B.J.H.; Moene, A.F.; Holtslag, A.A.M.; Baas, P.

Wageningen University, Meteorology, Wageningen, Netherlands (Bas.vandeWiel@wur.nl)

15:30–15:45: EMS2009-401

Current status of validating operational model forecasts at the DWD site Lindenberg

Beyrich, F.; Heret, C.; Vogel, G.

DWD, Meteorologisches Observatorium Lindenberg, Germany (frank.beyrich@dwd.de)

15:45–16:00: EMS2009-205

Modelling of the Wind Profile, effect of boundary-layer height, baroclinicity, Brunt-Vaisala frequency and surface roughness

Gryning, S.-E.; Batchvarova, E.

National Laboratory for Sustainable Energy, Risoe DTU, Roskilde, Denmark (sveg@risoe.dtu.dk)

16:00 Coffee Break

16:30–19:00

Chairperson: T. Heus

16:30–16:45: EMS2009-443

A framework to quantify the influence of land-atmosphere feedbacks on surface evaporation

van Heerwaarden, C.C.; Vila-Guerau de Arellano, J.

Moene, A.F.; Holtslag, A.A.M.

Wageningen University, Meteorology and Air Quality, Wageningen, Netherlands (chiel.vanheerwaarden@wur.nl)

16:45–17:00: EMS2009-287

Turbulence production in stratified Ekman flow

Mkhinini, N.; Dubos, T.; Drobinski, P.

Laboratoire de Météorologie Dynamique, Institut Pierre Simon Laplace, CNRS/Ecole Polytechnique/ENS/UPMC, Palaiseau, France

17:00–17:15: EMS2009-336

Stochastic fields method for sub-grid scale emission heterogeneity in mesoscale atmospheric dispersion models

Cassiani, M.; Galmarini, S.; Denby, B.; Vinuesa, J.F.

Norwegian Institute for Air Research, Kjeller, Norway (mc@nilu.no)

17:15–17:30: EMS2009-215

The 10th of July 2006 over Niamey: A golden case of daytime moist convection in a semi-arid environment

Couvreux, F.; Rio, C.; Guichard, F.; Gounou, A.; Lothon, M.; Campistron, B.; Chong, M.; Bouniol, D.

Météo-France and CNRS, CNRM-GAME, Toulouse, France

17:30–17:45: EMS2009-263

Observation and Modelling of Continental Diurnal Cycles in West Africa

Gounou, A.; Couvreux, F.; Giuchard, F.; Boone, A.; Koehler, M.

CNRM-GAME, Meteo-France/CNRS, Toulouse, France

17:45–18:00: EMS2009-272

Roles of low-level thermodynamics on surface-convection interactions over West-Africa

Guichard, F.; Couvreux, F.; Gounou, A.; Nuret, M.

CNRM-GAME (CNRS Météo-France), Toulouse, France (francoise.guichard@meteo.fr)

18:00–18:15: EMS2009-450

Evaluation of length scales on the transition from shallow to deep convection over land using a spectral method
Martins, J.; Soares, P.; Miranda, P.; Teixeira, J.
University of Lisbon, IDL, CGUL, Lisbon, Portugal
(jpmartins@fc.ul.pt)

18:15–18:30: EMS2009-455

3D experiments with a stochastic convective parameterisation scheme
Keane, R. J.; Plant, R. S.
University of Reading, UK

18:30–18:45: EMS2009-281

Improvement of LES boundary layer cloud parameterisations to study the entrainment mixing process
Thouron, O.; Brenguier, J.L.; Burnet, F.
CNRM/GAME,Météo-France/CNRS,Toulouse, France
(odile.thouron@cnrm.meteo.fr)

18:45–19:00: EMS2009-38

Automated large-eddy simulations of realistic atmospheric boundary layers
Heus, T.; Siebesma, A. P.; Neggers, R. A. J.
KNMI, Regional Climate, De Bilt, Netherlands
(thijs.heus@knmi.nl)

END OF ORAL PROGRAMME AW3

Communication and Education

CE4 Education and Sharing knowledge

Convener: T. Halenka
Co-Convener: A. Guillaume
Lecture Room: Espace Météo

14:00–16:00

Chairperson: T. Halenka

14:00–14:15: EMS2009-609

European Meteorological Society and education in atmospheric sciences

Halenka, T.

Charles University, Prague, Dept. of Meteorology and Environment Protection, Faculty of Mathematics and Physics, Czech Republic

14:15–14:30: EMS2009-239

Weather, Ocean and Climate topics in Geosciences, a new subject in Norwegian upper secondary education.

Hansen, P. J. K.

Faculty of Education and International Studies, Oslo University College (palkirkeby.hansen@lui.hio.no)

14:30–14:45: EMS2009-88

Using Forecasting to Teach Weather Science

Tsubota, Y.; Takahashi, T.

J. F. Oberlin University

14:45–15:00: EMS2009-599

Sample classroom activities based on climate science

Miler, T.

Masaryk University, Brno, Czech Republic

15:00–15:15: EMS2009-224

How to bring meteorology close to school

Jarosova, M.

Slovak Hydrometeorological Institute, Forecasts warnings, Bratislava, Slovakia
(miriam.jarosova@shmu.sk)

15:15–15:30: EMS2009-237

The most important single factor influencing learning is what the learner already knows - What do the learner know about clouds, precipitation, wind and greenhouse effect; a short review of research from 1883 to 2009

Hansen, P. J. K.

Faculty of Education and International Studies, Oslo University College (palkirkeby.hansen@lui.hio.no)

15:30–15:45: EMS2009-381

Air pollution linked to Remote Sensing tools - Science training using a Master's Level e-Learning Tool

Ladstaetter-Weissenmayer, A.; Kanakidou, M.; Richter, A.; Wagner, T.; Borrell, P.; Law, R. J.; Burrows, J. P. University of Bremen, Institute of Environmental Physics, Bremen, Germany (lad@iup.physik.uni-bremen.de)

15:45–16:00: EMS2009-238

How to use The National Gallery as a cross curricular approach to weather and climate studies at primary level.

Hansen, P. J. K.

Faculty of Education and International Studies, Oslo University College (palkirkeby.hansen@lui.hio.no)

16:00 Coffee Break

16:30–19:00

Chairpersons: T. Halenka, A. Guillaume

16:30–17:00: EMS2009-437

Eumetal blended courses: European cutting edge know-how and collaboration will into meteorological training (solicited)

Chiariello, A.; Nietosvaara, V.

Finnish Meteorological Institute, Helsinki, Finland

17:00–17:15: EMS2009-145

Severe Weather training

ter Pelkwick, H.

KNMI, De Bilt, Netherlands (pelkwick@knmi.nl)

17:15–17:30: EMS2009-610

No title available

Billard, Ch.

Météo-France, Ecole Nationale de la Météorologie, France

17:30–18:00: EMS2009-605

Round table discussion on Development of competency-based two-level curricula in Meteorology (TEMPUS JEP 26005-2005 COMBAT-METEO) (solicited)

Belotserkovsky, A.; Bashmakova, I.; Ivanov, V.; Karlin, L.; Petrosyan, A.; Room, R.; Serditova, N.; Tyuryakov, S.; Zilitinkevich, S.

TEMPUS JEP 26005-2005 COMBAT-METEO Team

Sharing knowledge - the role of libraries, publications, associations and learned societies at the age of internet

18:00–18:15: EMS2009-626

What is the future for the publishing of scientific journals?

Riddaway, B.

RMetS General Secretary, EMS Communications Project Team

18:15–18:30: EMS2009-623

The Open Access Model of Meteorologische Zeitschrift and other meteorological journals

Emeis, S.

(IMK-IFU) Forschungszentrum Karlsruhe GmbH, Garmisch-Partenkirchen, Germany
(stefan.emeis@imk.fzk.de)

18:30–18:45: EMS2009-320

Some Ideas and Questions about Meteorological Libraries' Roles at the Internet Age

Javelle, J.-P.; Cenac, N.

Météo-France, D2C/Documentation, Paris Cedex 07, France (jean-pierre.javelle@meteo.fr)

18:45–19:00: EMS2009-620

Infoclimat, an Internet platform for exchange
Garcelon, L.
Infoclimat team (l.garcelon@infoclimat.fr)

END OF ORAL PROGRAMME CE4

Climatology: New services Responding to climate change

CL4 Documentary and natural proxy data for the study of climate anomalies and hydro-meteorological extremes

Convener: R. Brázdil

Co-Conveners: D. Frank; R. García-Herrera; J. F. Gonzalez-Rouco; D. Wheeler

Lecture Room: Prud'homme

14:00–16:00

Chairpersons: R. Brázdil, R. García-Herrera

14:00–14:15: EMS2009-268

Precipitation Indices Low Countries

van Engelen, A.F.V.; Ynsen, F.; Buisman, J.; van der Schrier, G.

KNMI, Netherlands (aryan.van.engelen@knmi.nl)

14:15–14:30: EMS2009-186

Anomalies detected in Central European Temperature series reconstructed from documentary evidence and instrumental records for the last 500 years

Dobrovolný, P.; Brázdil, R.; Moberg, A.; Wilson, R.
Department of Geography, Masaryk University, Brno,
Czech Republic (dobro@sci.muni.cz)

14:30–14:45: EMS2009-593

European temperature records of the past five centuries based on documentary information compared to climate simulations

Zorita, E.

GKSS Research Centre, Department of Paleoclimate,
Geesthacht, Germany (eduardo.zorita@gkss.de)

14:45–15:00: EMS2009-144

Extense historical droughts in Spain derived from documentary sources

Dominguez-Castro, F.; García-Herrera, R.; Barriendos, M.

Universidad Complutense de Madrid, Física de la Tierra II, Facultad de CC Físicas, Madrid, Spain
(rgarciah@fis.ucm.es)

15:00–15:15: EMS2009-162

Past analogs of recent climate anomalies and impacts in Portugal. Droughts, storms and heat waves

Alcoforado, M.J.; Nunes, M. F.

University of Lisbon, Centre For Geographical Studies, Geography, Lisbon, Portugal (mjoao.alc@gmail.com)

15:15–15:30: EMS2009-176

Floods and windstorms in the Czech Republic during the past millennium: synthesis of documentary and instrumental data

Brázdil, R.; Dobrovolný, P.; Valášek, H.; Kotyza, O.
Masaryk University, Institute of Geography, Brno, Czech Republic (brazdil@sci.muni.cz)

15:30–15:45: EMS2009-15

Expanding the Territory of Historical Reconstruction: The Study of Frequency and Severity of Hail Storms, Based on 19th and 20th-Century Records from Swiss Insurance Archives

Mauelshagen, F.

Institute for Advanced Study in the Humanities, Essen, Germany (franz.mauelshagen@kwi-nrw.de)

15:45–16:00: EMS2009-307

Environmental drivers of Yersinia pestis - a holistic perspective on Medieval Europe

Buentgen, U.

WSL, Dendro Sciences, Zürich, Switzerland (buentgen@wsl.ch)

16:00 Coffee Break

16:30–19:00

Chairpersons: D. Frank, J.F. Gonzales-Rouco

16:30–16:45: EMS2009-583

Five centuries of Central European temperature extremes reconstructed from tree-ring density and documentary evidence

Battipaglia, G.; Frank, D.; Buentgen, U.; Dobrovolný, P.; Brázdil, R.; Pfister, C.; Esper, J.

Swiss Federal Research Institute WSL CH-8903 Birmensdorf (giovanna.battipaglia@wsl.ch)

16:45–17:00: EMS2009-20

Shortcomings in the tree-ring regional curve standardization and an improvement of the method

Datsenko, N.; Sonechkin, D.; Yang Bao, ; Quin Chun, Hydrometeorological Center, Moscow, Russia (datsenko@mecom.ru)

17:00–17:15: EMS2009-180

Climate reconstruction from boreholes: correcting for the influence of past temperature changes

Rath, V.; Gonzalez-Rouco, J. F.

Universidad Complutense de Madrid, Departamento de Física de la Tierra, Astronomía y Astrofísica, Madrid, Spain (vrath@fis.ucm.es)

17:15–17:30: EMS2009-192

The climate of the Iberian Peninsula during the last five centuries from a regional climate model perspective

Gómez-Navarro, J.J.; Montavez, J.P.; Jerez, S.; García-Valero, J.A.; Jiménez-Guerrero, P.; Zorita, E.; Gonzalez-Rouco, J.F.

Universidad de Murcia, Murcia, Spain (montavez@um.es)

17:30–17:45: EMS2009-99

Combining proxy data and model simulations to reconstruct European climate

Franke, J.; González Rouco, J. F.; Frank, D.

Swiss Federal Research Institute WSL, Dendro Sciences Unit, Birmensdorf, Switzerland (joerg.franke@wsl.ch)

17:45–18:00: EMS2009-170

Northern Hemisphere teleconnection patterns in ensemble simulation from 1500 to 2100: Stability and forcing impacts

Raible, C. C.

University of Bern, Climate and Environmental Physics, Bern, Switzerland (raible@climate.unibe.ch)

18:15–18:30: EMS2009-103

The 2007 flood in sub-Saharan Africa: spatio-temporal characteristics, potential causes, and future perspective

Paeth, H.; Fink, A.; Samimi, C.

Universität Würzburg, Geographisches Institut, Würzburg, Germany (heiko.paeth@mail.uni-wuerzburg.de)

18:00–18:15: EMS2009-536

When did human beings first change the Global Climate?

Weerasinghe, H.; Reick, C.

International Max Plank Institute for Meteorology (MPI-M)

University of Hamburg, Germany

(harshi.weerasinghe@zmaw.de)

A Joint Meeting of The Royal Meteorological Society and the European Meteorological Society, linked with AMMA
***Evaluating climate processes in West Africa:
New perspectives from the African Monsoon Multidisciplinary Analysis (AMMA)***



Date: Wednesday, 21 October 2009, London, UK
<http://www.rmets.org/events/detail.php?ID=4349>

Morning: AMMA and the operational environment in West Africa

- 09:00 Introduction to the AMMA operational programme
Jan Polcher (CNRS, France)
 - 09:15 Operational meteorology: observational networks, weather analysis and Forecasting
Andreas Fink (University of Cologne, Germany)
 - 09:40 Seasonal prediction for West Africa (joint with ENSEMBLES programme)
Nathalie Philippon-Blanc (University of Bourgogne, France)
 - 10:05 Agriculture and climate vulnerability
Ole Mertz (University of Copenhagen, Denmark)
- 10:30 Coffee
- 11:00 Climate and health
Andrew Morse (University of Liverpool, UK)
 - 11:25 Hydrological processes and water resource
Harouna Karambiri (International Inst. for Water and Environmental Engineering, Burkina Faso)
 - 11:50 Education in Meteorology and Climate in West Africa
Sylvester Danuor (Kwame Nkrumah University of Science and Technology, Ghana)
- 12:15 Lunch

Afternoon: AMMA science: Advances in understanding the West African monsoon

- 14:00 President's introduction
 - 14:05 Organiser's introduction: The AMMA scientific programme: Philosophy, achievements and lessons learned
Douglas Parker (Univ. of Leeds, UK)
 - 14:15 Evolution of our understanding of weather systems over West Africa
Jean-Philippe Lafore (CNRM, France)
 - 14:40 New perspectives on land-atmosphere interactions
Chris Taylor (CEH Wallingford, UK)
 - 15:05 The Water Cycle of the West African Monsoon
Anna Agusti-Panareda (ECMWF)
- 15:30 Tea
- 16:00 Atmospheric composition of West Africa and its role in the global climate
Celine Mari (CNRS / University of Toulouse, France)
 - 16:25 West African aerosol sources and their impact on the radiative balance
Jim Haywood (Met Office, UK)
 - 16:50 Equatorial upper-ocean dynamics and their interaction with the west African Monsoon
Peter Brandt (IFM-GEOMAR, Germany)
 - 17:15 Seasonal and Intraseasonal variability of the West African Monsoon
Serge Janicot (CNRS, France)
- 17:40 Closing remarks
- 17:45 Meeting closes

Tuesday	Amphithéâtre	Guy Der Megreditchian	Prud'homme	Espace Météo
8:30–10:30	AM1: High resolution meteorology –applications and services Block 3 of 4: Health and agrometeorology	AW10: Air-sea interactions and coastal meteorology Block 1 of 2	AW5: Space forcing of the Earth's and planets' climate Block 1 of 2	NWP1: Dynamics and predictability of high impact weather Block 1 of 2
10:30–11:00	Coffee Break: Area Chapiteau			
11:00 –13:00	AM1: High resolution meteorology –applications and services Block 4 of 4: Transport and hydrology	AW10: Air-sea interactions and coastal meteorology – until 12:00: Block 2 of 2 AW14: How to determine the atmospheric boundary layer height? – from 12:00 Block 1 of 2	AW5: Space forcing of the Earth's and planets' climate Block 2 of 2 <i>until 13:15</i>	NWP1: Dynamics and predictability of high impact weather – until 11:30: Block 2 of 2 NWP3: Observation targeting and observation impact studies – from 11:30 Block 1 of 1
13:00–14:00	Lunch Break			
14:00–16:00	AM2: Aviation Meteorology Block 1 of 3	AW14: How to determine the atmospheric boundary layer height Block 2 of 2	CL1: Climate observations and data management, monitoring, reconstruction, applications, climate change and society Block 1 of 2	NWP2: Ensemble forecasting Block 1 of 2
16:00–17:00	Poster Session: Area Chapiteau			
	Applications of Meteorology: AM1: P1–P12 ♦ AM2: P13–P24 Atmosphere and the water cycle: AW3: P40–P52 ♦ AW5: P61 ♦ AW6: P62–P76 ♦ AW10: P93–P99 ♦ AW11: P100–P117 ♦ AW14: P138–P143 Communication and Education CE4: P148–P154 Climatology: New services responding to climate change CL1: P155–P171 ♦ CL4: P197–P205 Numerical Weather Prediction NWP1: P206–P209 ♦ NWP5: P211–212			
17:00–19:00	AM2: Aviation Meteorology Block 2 of 3	AW11: Environmental Meteorology (from local to global) Block 1 of 3	CL1: Climate observations and data management, monitoring, reconstruction, applications, climate change and society Block 2 of 2	NWP2: Ensemble forecasting Block 2 of 2
20:00	RECEPTION MAYOR OF TOULOUSE: CITY HALL			

Applications of Meteorology

AM1 High resolution meteorology – applications and services

Convener: D. Lapeyre De Chavardes

Co-Conveners: E. McCallum; R. Mureau; P. Saarikivi; G. Steinhorst

Lecture Room: Amphithéâtre

08:30–10:30

Chairperson: P. Saarikivi

Health and agrometeorology

08:30–08:45: EMS2009-258

Forecasting SO₂ pollution : bypassing the limits of meso-scale modelling by analysing local features and creating quality indicators

Leroy, D.; Caro, D.; Buisson, E.; Brocheton, F.; Donnat, L.; Duclaux, O.; Puel, C.
NUMTECH, Clermont-Ferrand, France
(leroy@numtech.fr)

08:45–09:00: EMS2009-267

High resolution fire danger modeling: integration of quantitative precipitation amount estimates derived from weather radars as an input of FWI

Cloppet, E.; Regimbeau, M.
Météo-France, Agrometeorology, Toulouse, France
(emmanuel.cloppet@meteo.fr)

09:00–09:15: EMS2009-329

Online irrigation service for fruit und vegetable crops at farmers site

Janssen, W.
(wolfgang.janssen@dwd.de)

09:15–09:30: EMS2009-414

Comparison of evaporimeters in field experiments in Austria

Gerbersdorfer, T.; Eitzinger, J.; Holawe, F.; Laube, W.
Institute of Meteorology, University of Natural Resources and Applied Life Sciences, Vienna, Austria
(thomas.gerbersdorfer@boku.ac.at)

09:30–09:45: EMS2009-558

Rift Valley fever in a zone potentially occupied by Aedes vexans in Senegal: dynamics and risk mapping

Tourre, Y. M.; Vignalles, C.; Lacaux, J-P.; Bigeard, G.; Ndione, J-A.; Lafaye, M.
Météo-France

09:45–10:00: EMS2009-581

Integration of Thermal Indoor Conditions into Operational Heat Health Warning Systems

Koppe, C.; Becker, P.; Pfafferott, J.
Deutscher Wetterdienst, Human Biometeorology, Freiburg, Germany (christina.koppe@dwd.de)

10:00–10:15: EMS2009-595

Chemical weather forecasting: new concept and service for meteorological centers

Baklanov, A.A.

Danish Meteorological Institute, Lyngbyvej 100, DK-2100 København Ø, Denmark (alb@dmi.dk)

10:15–10:30: EMS2009-616

A better taking into account of the climatic risk with new agrometeorological services and applications

Boisgontier, D.; Magneron, C.

CAP2020

10:30 Coffee Break

11:00–13:00

Chairperson: D. Lapeyre de Chavardès

Transport and hydrology

11:00–11:15: EMS2009-262

A new forecast presentation tool for offshore contractors

Jørgensen, M.

Danish Meteorological Institute, Forecasting Services, Copenhagen, Denmark (mij@dmi.dk)

11:15–11:30: EMS2009-271

Route based forecasting

Zuurendonk, I.W.; Wokke, M.J.J.

MeteoGroup, Meteorological Research and Development, Wageningen, Netherlands (ingeborg@weer.nl)

11:30–11:45: EMS2009-578

Decision support forecast for the intervention of transhipment actions at Amsterdam harbour

Bult, M.F.

KNMI, The Netherlands (Marcel.Bult@knmi.nl)

11:45–12:00: EMS2009-584

High resolution data, forecasts and services for hydrological applications

Rudolf, B.

Deutscher Wetterdienst, Hydrometeorologie, Offenbach, Germany (bruno.rudolf@dwd.de)

12:00–12:15: EMS2009-594

The Flood Forecasting Centre (FFC) in the UK

Davies, P

Met Office, UK

12:15–12:30: EMS2009-621

ROADIDEA- Roadmap for radical innovations in European transport services

Saarikivi, P.

Foreca Consulting Ltd., Tammasaarenkatu 5, FI-00180 Helsinki, Finland (pirkko.saarikivi@foreca.com)

12:30–12:45: EMS2009-622

Feedback on flood risk management

Moreau, K.; Roumagnac, A.

PREDICT Services, France
(karine.moreau@predictservices.com)

12:45–13:00: EMS2009-625

Data Management needs in Hydrometeorological Institutes
Roschier, T.; Eriksson, P.
Vaisala OYJ, Finland (timo.roschier@vaisala.com)

END OF ORAL PROGRAMME AM1**AM2 Aviation Meteorology****Convener:** C. Drüe**Co-Convener:** J. Bange**Lecture Room:** Amphithéâtre**14:00–16:00****Chairperson:** C. Drüe**Next Generation Pilot Support****14:00–14:15: EMS2009-535**

Weather-enabled future onboard surveillance and navigation systems
Mutuel, L.; Baillon, B.; Barnetche, B.; Delpy, P.
THALES, Toulouse, France
(laurence.mutuel@fr.thalesgroup.com)

14:15–14:30: EMS2009-394

An overview of the FLYSAFE datalink solution for the exchange of weather information: supporting aircrew decision making processes.
Mirza, A.; Drouin, A.
Met Office, FitzRoy Road, Exeter, United Kingdom

14:30–14:45: EMS2009-423

Verification of FLYSAFE Clear Air Turbulence (CAT) objects against aircraft turbulence measurements
Lunnon, R.; Gill, P.; Reid, L.; Mirza, A.
(bob.lunnon@metoffice.gov.uk)

14:45–15:00: EMS2009-289

Nowcasting of in-flight hazard thunderstorm, supporting aircrew and ATM decision making process
Guillou, Y.; Senesi, S.; Tafferner, A.; Forster, C.
Météo-France - Forecast Department - Nowcasting Development, Toulouse, France (yann.guillou@meteo.fr)

15:00–15:15: EMS2009-304

Environmental Information for the U.S. Next Generation Air Transportation System (NextGen)
Murray, J.; Miner, C.; Pace, D.; Minnis, P.; Mecikalski, J.; Feltz, W.; Johnson, D.; Iskendarian, H.; Haynes, J.
NASA Langley Research Center, Hampton, VA, United States (john.j.murray@nasa.gov)

15:15–15:30: EMS2009-527

Global Turbulence Decision Support for Aviation
Williams, J.; Sharman, R.; Kessinger, C.; Feltz, W.; Wimmers, A.
Research Applications Laboratory, National Center for Atmospheric Research, Boulder, CO, USA
(jkwillia@ucar.edu)

Clouds and Icing**15:30–15:45: EMS2009-590**

Cloud Property Retrievals from Geostationary Satellites for Aviation Weather Applications
Minnis, P.; Palikonda, R.; Smith, W. L.; Chee, T.; Spangenberg, D. A.; Ayers, J. K.; Chang, F.-L.; Heck, P. W.
NASA Langley Research Center, Hampton, VA, USA (Patrick.Minnis-1@nasa.gov)

15:45–16:00: EMS2009-448

Jet Engine Powerloss in Ice Particle Conditions: An Aviation Industry Problem
Strapp, J.W.
Environment Canada, Toronto, Canada (walter.strapp@ec.gc.ca)

16:00 Coffee Break**17:00–19:00****Chairperson:** C. Drüe**Turbulence****17:00–17:15: EMS2009-5**

Application of the Lighthill-Ford Theory of Spontaneous Imbalance to Clear-Air Turbulence Forecasting
Williams, P.D.; Knox, J.A.; McCann, D.W.
University of Reading, Department of Meteorology, Reading, United Kingdom (p.d.williams@reading.ac.uk)

17:15–17:30: EMS2009-500

Improvement of EDR forecast for aviation by the extended turbulence scheme of the COSMO model using the concept of scale separation
Raschendorfer, M.
Deutscher Wetterdienst, Abt. FE1, Offenbach, Germany (Matthias.Raschendorfer@dwd.de)

Airport terminal area**17:30–17:45: EMS2009-68**

Improved low visibility forecasts at Amsterdam Airport
Wijngaard, J.; Vogezelang, D.; Maat, N.; van Bruggen, H.
KNMI, 3730 AE De Bilt, The Netherlands (Janet.Wijngaard@knmi.nl)

17:45–18:00: EMS2009-94

High resolution numerical modeling over the Nice Côte d'Azur International airport
Boilley, A.; Mahfouf, J.F.; Seity, Y.; Auger, L.
Météo France, CNRM/GMME/TURBAU, Toulouse, France (alexandre.boilley@cnrm.meteo.fr)

18:00–18:15: EMS2009-131

Innovative radar products for the 3D, high-resolution and real-time monitoring of the convective activity in the airspace around airports
Tabary, P.; Bousquet, O.; Sénési, S.; Josse, P.
Météo France, Centre de Météorologie Radar - Direction des Systèmes d'Observation (pierre.tabary@meteo.fr)

28 Oral Conference Programme – Tuesday

18:15–18:30: EMS2009-280

Prediction of Aircraft-induced Lightning at Amsterdam Airport

Maat, N.; Hemink, J.; Gough, W.R.; Fahey III, T.H.; Niemeijer, S. (presented by H. ter Peilwijk)

KNMI, Weather Service, De Bilt, Netherlands
(maat@knmi.nl)

18:45–19:00: EMS2009-495

Reducing the impact of noise abatement strategies on aircraft capacity by forecasting noise using a combined NWP-sound propagation model

Sharman, R.; Keller, T.

NCAR, RAL, Boulder, United States (sharman@ucar.edu)

END OF ORAL PROGRAMME AM2

18:30–18:45: EMS2009-169

Punctuality modelling and forecasting: Frankfurt Airport case study

Hauf, T.; Röhner, P.

Leibniz Universität Hannover, Institut für Meteorologie und Klimatologie, Hannover, Germany
(roehner@muk.uni-hannover.de)

Atmosphere and the Water Cycle

AW5 Space forcing of the Earth's and planets' climate

Convener: M. Messerotti
Co-Conveners: H. Lundstedt; K. Matthes
Lecture Room: Prud'homme

08:30–10:30
Chairperson: H. Lundstedt

08:30–09:00: EMS2009-519
 Cosmoclimatology: The influence of Cosmic rays on Climate (solicited)
Svensmark, H.
 National Space Institute, Technical University of Denmark, Copenhagen, Denmark (hsv@space.dtu.dk)

09:00–09:30: EMS2009-597
 Solar forcing, implications for the Terrestrial planets - Earth, Venus and Mars (solicited)
Lundin, R.
 Swedish Institute of Space Physics, Box 812, SE-981 28 Kiruna, Sweden (rickard.lundin@irf.se)

09:30–10:00: EMS2009-400
 Solar Influence on Climate (solicited)
Gray, L.
 National Centre for Atmospheric Science (NCAS), University of Reading, Reading, UK. (l.j.gray@rdg.ac.uk)

10:00–10:30: EMS2009-284
 Solar radiation and clouds - an overview on processes, interactions and trends (solicited)
Quante, M.
 GKSS Research Center, Institute for Coastal Research, Geesthacht, Germany (markus.quante@gkss.de)

10:30 Coffee Break

11:00–13:15
Chairperson: M. Messerotti

11:00–11:30: EMS2009-464
 Forced and internal 20th century climate variability (solicited)
Keenlyside, N.; Strehz, A.; Dommegård, D.; Latif, M.; Park, W.
 Leibniz Institut für Meereswissenschaften, Kiel, Germany (nkeenlyside@ifm-geomar.de)

11:30–12:00: EMS2009-614
 The role of water in the fate of carbon dioxide: Implications for the climate system (solicited)
Veizer, J.
 University of Ottawa, Canada (jveizer@uottawa.ca)

12:00–12:15: EMS2009-132

Effects of the 11-year solar cycle on the cyclonic and blocking activity in the Euro-Atlantic sector
Huth, R.; Barriopédro, D.; Trigo, I.F.; Trigo, R.M.
 Institute of Atmospheric Physics, Dept. of Climatology, Prague 4, Czech Republic (huth@ufa.cas.cz)

12:15–12:30: EMS2009-334

Solar Coronal Topological Activity and Global Weather Patterns
Lundstedt, H.
 Swedish Institute of Space Physics, Lund, Sweden (henrik@lund.irf.se)

12:30–12:45: EMS2009-183

A knowledge discovery approach to explore some Sun/Earth's climate relationships
Pou, A.; Valdés, J.
 Department of Ecology, Faculty of Sciences, Autonomous University of Madrid, Spain (antonio.pou@uam.es)

12:45–13:00: EMS2009-601

Earth and space climatic indices: a multivariate analysis for the identification of space forcing at different spatial and temporal scales
Messerotti, M.; Stravisi, F.; Crisciani, F.; Raicich, F.
 INAF-Astronomical Observatory of Trieste, Trieste, Italy (messerotti@oats.inaf.it), Department of Physics, University of Trieste, Trieste, Italy

13:00–13:15: EMS2009-373

Relation between the ionosphere F2 region and stratosphere in different space weather conditions
Vanina-Dart, L.
 Space Research Institute, Earth remote sensing, Moscow, Russian Federation (vandart@seeingear.org)

END OF ORAL PROGRAMME AW5

AW10 Air-sea interactions and coastal meteorology

Convener: AM Sempreviva
Co-Conveners: S.-E. Gryning; M.M. Miglietta; Dr. Sørensen
Lecture Room: Guy der Megreditchian

08:30–10:30
Chairpersons: A.M. Sempreviva; S.-E. Gryning

08:30–09:00: EMS2009-122

How should air-sea interaction processes be introduced in models? (solicited)
Rutgersson, A.
 Uppsala University, Department of Earth Sciences, Uppsala, Sweden (anna.rutgersson@met.uu.se)

30 Oral Conference Programme – Tuesday

09:00–09:15: EMS2009-202

Air-Sea physics parameterizations and assimilation of sea surface satellite temperatures for the Mediterranean Forecasting System (MFS)
Pettenuzzo, D.; Pinardi, N.; Dobricic, S.; Large, W. G.
Gruppo Nazionale Oceanografia Operativa, INGV
Sezione di Bologna, Italy

09:15–09:30: EMS2009-274

Operational coupled atmosphere - ocean - ice forecast system for the Gulf of St. Lawrence, Canada
Faucher, M.; Roy, F.; Desjardins, S.; Fogarty, C.; Pellerin, P.; Ritchie, H.; Denis, B.
Canadian Meteorological Centre (CMC), Environment Canada, Dorval, Canada (manon.faucher@ec.gc.ca)

09:30–09:45: EMS2009-568

Application of a subfilter-scale flux model over the ocean
Kelly, M. C.; Wyngaard, J. C.; Sullivan, P. P.
Wind Energy Division, Risø National Lab-Danish Technical University, Roskilde, Denmark (mark.c.kelly@risoe.dk)

09:45–10:00: EMS2009-372

Validating coastal, near and far offshore boundary layer parameterizations with airborne helipod turbulence probe
Bange, J.; Sood, A.
Technische Universitaet Braunschweig Institut fuer Institute of Aerospace Systems, Technical University of Braunschweig, Braunschweig, Germany

10:00–10:15: EMS2009-427

Velocity spectra in the marine atmospheric boundary layer
Smedman, A.-S.
Uppsala University, Department of Earth Sciences, Uppsala, Sweden (ann-sofi.smedman@met.uu.se)

10:15–10:30: EMS2009-36

Estimation of offshore humidity fluxes from sonic and mean temperature profile data
Foreman, R.J.; Emeis, S.M.
Institut für Meteorologie und Klimaforschung, Forschungszentrum Karlsruhe GmbH, Garmisch-Partenkirchen, Germany (richard.foreman@imk.fzk.de)

10:30 Coffee Break

11:00–12:00

Chairperson: M.M. Miglietta

11:00–11:15: EMS2009-573

Turbulence structure of the marine boundary layer during mixed sea and growing sea conditions
Högström, U.; Smedman, A-S
Department of Earth Sciences, Uppsala University, Sweden (ulf.hogstrom@met.uu.se)

11:15–11:30: EMS2009-311

Climatology of the sea breeze and its micro-scale structure at a coastal Mediterranean site
Federico, S.; Pasqualoni, L.; Sempreviva, A.M.; De Leo, L.; Avolio, E.; Calidonna, C.R.; Bellecci, C.
Institute of Atmospheric Sciences and Climate, ISAC - CNR, Lamezia Terme, Italy (s.federico@isac.cnr.it)

11:30–11:45: EMS2009-10

On the application of a numerical model to simulate the onshore normalized wind profile up to 160 m
Nissen, J.; Gryning, S.-E.
Risoe-DTU National Laboratory for Sustainable Energy

11:45–12:00: EMS2009-380

Impact of mesoscale dynamic and thermodynamic changes in sea ice on the development of low pressure systems in the Fram Strait
Büngert, U.; Schlünzen, K.H.; Ries, H.
Meteorological Institute, University of Hamburg, Hamburg, Germany (ursula.büngert@zmaw.de)

END OF ORAL PROGRAMME AW10

AW11 Environmental Meteorology (from local to global)

Convener: S. M. Joffre

Co-Conveners: A. Baklanov; P. Builtjes; M. Piringer; R. Sokhi

Lecture Room: Guy der Megreditchian

17:00–19:00

Chairperson: S. Joffre

Local scale

17:00–17:15: EMS2009-3

Field, Laboratory and Numerical Study of Turbulent Dispersion in Built Environments
Princevac, M.; Pan, H.; Bartolome, C.
University of California at Riverside, Mechanical Engineering, Riverside, CA, USA (marko@engr.ucr.edu)

17:15–17:30: EMS2009-31

Large-Eddy Simulation on Turbulent Flow and Plume Dispersion over A 2-Dimensional Hill
Nakayama, H.; Nagai, H.
Japan Atomic Energy Agency, Ibaraki, Japan (nakayama.hiromasa@jaea.go.jp)

17:30–17:45: EMS2009-35

High resolution meteorological modelling of the Inn Valley atmosphere, Part I
Schicker, I.
University of Natural Resources and Applied Life Sciences, Water-Atmosphere-Environment, Meteorology, Vienna, Austria (irene.schicker@boku.ac.at)

17:45–18:00: EMS2009-66

Dispersion modeling of accidental releases of toxic gases - utility for the fire brigades.
Stenzel, S.; Baumann-Stanzer, K.
Central Institute for Meteorology and Geodynamics (ZAMG), Environmental Meteorology, Austria
(sirma.stenzel@zamg.ac.at)

18:00–18:15: EMS2009-114

Impacts of atmospheric aerosols on urban boundary layer dynamics: Application during the CAPITOUL field experiment
Aouizerats, B.; Tulet, P.; Gomes, L.; Pigeon, G.; Masson, V.
Météo-France/CNRS, CNRM/GAME, Toulouse, France

18:15–18:30: EMS2009-309

Continuous measurements of PM at ground level over an industrial area of Evia (Greece) using synergy of a scanning Lidar system and in situ sensors during TAMEX campaign
Veenstra, M.; Georgoussis, G.; Papayannis, A.; Remoudaki, E.; Tsaknakis, G.; Mamouri, R.; Avdikos, G.; Chontidiadis, C.; Kokkalis, P.; Tzezos, M.
Kipp & Zonen, Netherlands
(martin.veenstra@kippzonnen.com)

18:30–18:45: EMS2009-383

Investigation of spectrally resolved actinic flux in mountainous terrain
Wagner, J.E.; Blumthaler, M.; Fitzka, M.; Gobbi, J.P.; Kift, R.; Kreuter, A.; Rieder, H.E.; Simic, S.; Webb, A.; Weihs, P.
BOKU - Universität für Bodenkultur, Department of Meteorology, Wien, Austria (jochen.wagner@boku.ac.at)

18:45–19:00: EMS2009-136

Future Ozone projections for a rural mid-latituded site using a statistical downscaling approach
Demuzere, M.; van Lipzig, N.P.M.
Katholieke Universiteit Leuven - GEO Institute, Earth and Environmental Sciences, Physical Geography, Leuven, Belgium (matthias.demuzere@ees.kuleuven.be)

ORAL PROGRAMME AW11 CONTINUES

WEDNESDAY, 08:30

AW14 How to determine the atmospheric boundary layer height from measurements and model data? (co-sponsored by AW3, AW8, AW10, AW11)

Convener: F. Beyrich
Co-Conveners: B. Holtslag; S. M. Joffre; A.M. Sempreviva; S. Zilitinkevich
Lecture Room: Guy der Megreditchian

12:00–13:00

Chairperson: F. Beyrich

12:00–12:15: EMS2009-369

Boundary Layer Height and Structure during the NATO LASIE Campaign
Tomé, R.; Sempreviva, A.M.; Schiano, E.; Bozzano, R.; Miranda, P.M.; Pensieri, S.; Semedo, A.; Teixeira, J. CCMMG, Azores University, Portugal (rftome@gmail.com), CGUL/IDL, Lisbon University, Portugal

12:15–12:30: EMS2009-563

Aircraft observations in the atmospheric boundary layer over the thermally non-homogeneous surface: determination of the height and applying similarity models
Strunin, M.
Central Aerological Observatory, Dolgoprudny, Russia

12:30–12:45: EMS2009-53

Estimation of Boundary Layer Height over flat-terrain in a coastal site using remote sensing and surface measurements
Contini, D.; Cava, D.; Martano, P.; Donateo, A.; Elefante, C.; Grasso, F. M.
Institute of Atmospheric Science and Climate, ISAC-CNR, U. O. di Lecce, Lecce, Italy (d.contini@isac.cnr.it)

12:45–13:00: EMS2009-431

Boundary layer heights from Doppler lidar using aerosol backscatter and wind data
Träumner, K.; Wieser, A.; Corsmeier, U.; Kottmeier, Ch. Institut für Meteorologie und Klimaforschung, Karlsruhe Institute of Technology (KIT)

13:00 Lunch Break

14:00–16:00

Chairperson: S. Joffre

14:00–14:15: EMS2009-175

Some new results of operational mixing height determination from routine radiosoundings
Beyrich, F.; Leps, J.-P.
Deutscher Wetterdienst, Meteorologisches Observatorium Lindenberg, Tauche - OT Lindenberg, Germany (frank.beyrich@dwd.de)

32 Oral Conference Programme – Tuesday

14:15–14:30: EMS2009-315

PBL Height in a Clear and Cloudy Layer
Moraes, O.
(osvaldo.moraes@pesquisador.cnpq.br)

14:30–14:45: EMS2009-48

Determination of mixing-layer height by ground-based remote sensing
Emeis, S.; Schäfer, K.; Münkel, C.
Forschungszentrum Karlsruhe GmbH, Institut für Meteorologie und Klimaforschung - Atmosphärische Umweltforschung (IMK-IFU), Garmisch-Partenkirchen, Germany (stefan.emeis@imk.fzk.de)

14:45–15:00: EMS2009-163

Boundary Layer Profiles of Winds and Turbulence Statistics using a Scanning Doppler Lidar
Frehlich, R.; Meillier, Y.
University of Colorado, CIRES, Boulder, United States (rgf@cires.colorado.edu)

15:00–15:15: EMS2009-249

Retrieval of mixing layer depth from existing ceilometer/lidar networks in Europe
Haeffelin, M.; Morille, Y.
Institut Pierre-Simon Laplace, Paris, France (martial.haeffelin@ipsl.polytechnique.fr)

15:15–15:30: EMS2009-256

Comparison of the mixing layer height by sodar and ceilometer
Angelini, F.; Argentini, S.; Barnaba, F.; Caporaso, L.; Gobbi, G.; Landi, T. C.; Mastrantonio, G.; Pietroni, I.
ISAC-CNR, via del fosso del cavaliere, 100, 00133 Roma, Italy (f.angelini@isac.cnr.it)

15:30–15:45: EMS2009-596

The mixing height in urban areas - recent experimental and modelling results
Baklanov, A.A.; Joffre, S.; Kuchin, A.; Piringer, M.; Zilitinkevich, S.
Danish Meteorological Institute, Lyngbyvej 100, DK-2100 København Ø, Denmark (alb@dmi.dk)

15:45–16:00

Discussion: What do we know and what is still questionable about the stable PBL height? by S. Zilitinkevich

END OF ORAL PROGRAMME AW14

Climatology: New services responding to climate change

CL1 Climate observations and data management, climate monitoring, reconstruction and mapping, applications for decision support on adaptation and mitigation, climate change and society

Convener: P. Dandin

Co-Conveners: I. Auer; E. Forland; S. Szalai

Lecture Room: Prud'homme

14:00–16:00

Chairperson: I. Auer

14:00–14:30: EMS2009-79

A high-resolution 1961-1990 monthly temperature climatology for the greater Alpine region (solicited)

Hiebl, J.; Auer, I.; Böhm, R.; Schöner, W.; Maugeri, M.; Lentini, G.; Spinoni, J.; Brunetti, M.; Nanni, T.; Perćec Tadić, M.; Bihari, Z.; Dolinar, M.; Müller-Westermeier, G. Central Institute for Meteorology and Geodynamics (ZAMG), Vienna, Austria

14:30–14:45: EMS2009-2

Abstraction the public from the scientific-applied meteorology-climatologically data

Trajanoska, L.
Hydrometeorology Servis, Meteorology, Skopje
(lidija@meteo.gov.mk)

14:45–15:00: EMS2009-530

SnowClim: Snow climate monitoring for Europe

Bissolli, P.; Maier, U.
Deutscher Wetterdienst, Dep. Climate Monitoring, Offenbach, Germany (peter.bissolli@dwd.de)

15:00–15:15: EMS2009-227

www.zamg.ac.at/HISTALP - a new climate data and information website for the greater Alpine region of Europe.

Boehm, R.; Orlik, A.; Ungersboeck, M.; Jurkovic, A.; Auer, I.
Central Institute for Meteorology and Geodynamics, Vienna, Austria (reinhard.boehm@zamg.ac.at)

15:15–15:30: EMS2009-397

Homogenization of long-term series of air temperature in Bulgaria

Alexandrov, V.
National Institute of Meteorology and Hydrology, Department of Meteorology, Sofia, Bulgaria
(Vesselin.Alexandrov@meteo.bg)

15:30–15:45: EMS2009-185

Software solution for data quality control and homogenization of time series

Stepanek, P.; Zahradnicek, P.

Czech Hydrometeorological Institute, Meteorology and Climatology, Brno, Czech Republic
(petr.stepanek@chmi.cz)

15:45–16:00: EMS2009-290

Drought forecasting over Europe using Standardized Precipitation Index and monthly forecasts

Kurnik, B.

European Commission -Joint Research Centre, Desert Action, Ispra (Va), Italy (blaz.kurnik@jrc.it)

16:00 Coffee Break

17:00–18:45

Chairperson: S. Szalai

17:00–17:15: EMS2009-59

A multi-scalar drought index sensitive to global warming: The Standardized Precipitation Evapotranspiration Index - SPEI

Vicente-Serrano, S.M.; Beguería, S.; López-Moreno, J.I. CSIC, Zaragoza, Spain (svicen@ipe.csic.es)

17:15–17:30: EMS2009-502

Regional analysis of Intensity-Duration-Frequency Relationships in Slovakia using Scaling Model Approach

Pecho, J.; Fasko, P.; Gaal, L.; Lapin, M.; Stastny, P. Slovak Hydrometeorological Institute, Climatological Service Department, Bratislava, Slovakia
(jozef.pecho@shmu.sk)

17:30–17:45: EMS2009-499

Spatial analysis of PMP over Iran

Alijani, B.; Ebrahimi, H.
Tarbiat Moallek University, Tehran, Iran

17:45–18:00: EMS2009-569

Climatological Modeling of Monthly Air Temperature and Precipitation in Egypt through GIS Techniques

Ei Kenawy, A.

Instituto Pirenaico de Ecología, CSIC, Zaragoza, Spain, (kenawy@ipe.csic.es)

18:00–18:15: EMS2009-592

Effect of climate change in herbivorous livestock systems, including arable crops, in the French area.

Ruget, F.; Moreau, J.-C.; Ferrand, M.; Poisson, S.; Gate, P.; Lacroix, B.; Lorgeou, J.; Cloppet, E.; Souverain, F. UMR 1114 EMMAH INRA 84914 Avignon cedex 9 (ruget@avignon.inra.fr)

18:15–18:30: EMS2009-148

Spatial impacts of heat waves in mortality. Evaluating current risks and future threats

Canario, P.; Andrade, H.; Nogueira, H

(pmSCANARIO@gmail.com) Centre of Geographical Studies, University of Lisbon, Faculdade de Letras, Alameda da Universidade, 1600-214, Lisboa, Portugal

18:30–18:45: EMS2009-570

Variability of Hot and Cold Spells in North-eastern Spain
(1955–2006)

El Kenawy, A.

Instituto Pirenaico de Ecología-CSIC, Zaragoza, Spain,
(kenawy@ipe.csic.es)

END OF ORAL PROGRAMME CL1

Numerical Weather Prediction

NWP1 Dynamics and predictability of high impact weather

Convener: E. Andersson

Co-Convener: H. Böttger

Lecture Room: Espace Météo

08:30–10:30

Chairperson: H. Böttger

Case studies

08:30–08:45: EMS2009-91

A case study of heavy snowfall in North Rhine-Westphalia (25-27 Nov 2005): Observations, dynamics and forecast performance

Frick, C.; Wernli, H.

Johannes Gutenberg University at Mainz, Institute for Atmospheric Physics, Germany (frick@uni-mainz.de)

08:45–09:00: EMS2009-362

Impact of upper-level fine-scale structures in the deepening of a Mediterranean "hurricane"

Claud, C.; Chaboureau, J.-P.; Argence, S.; Lambert, D.; Richard, E.; Gauthier, N.; Funatsu, B.; Arbogast, P.; Maynard, K.; Hauchecorne, A.

Laboratoire de Meteorologie Dynamique, CNRS/IPSL, Palaiseau, France

09:00–09:15: EMS2009-96

An unusual Saharan dust outbreak into central Europe and heavy precipitation at the southern side of the Alps in May 2008: A TIGGE case study

Wiegand, L.; Twitchett, A.; Schwierz, C.; Knippertz, P. Institute for Atmospheric Physics, University of Mainz, Mainz, Germany (wiegandl@uni-mainz.de), Institute for Climate and Atmospheric Science, University of Leeds, Leeds, United Kingdom

Predictability

09:15–09:30: EMS2009-556

Multivariate weather regimes in the Mediterranean, a perspective to increase Heavy Precipitating Events predictability using medium range ensemble forecasting?

Joly, B.; Arbogast, P.; Descamps, L.; Labadie, C. Meteo France, CNRM, Toulouse, France (bruno.joly@meteo.fr)

09:30–09:45: EMS2009-92

Is it possible to place an upper bound on the predictability of tropical cyclone tracks?

Plu, M.

Météo-France, LACy (UMR 8105 CNRS/Météo-France/Université de La Réunion), La Réunion, France (matthieu.plu@meteo.fr)

09:45–10:00: EMS2009-21

Monitoring of the predictability loss in the medium-range H500 forecasts, and conclusion about the lack of prospects for the further complication of the present-day weather forecasting models

Sonechkin, D.M.

P.P. Shirshov Oceanology Institute, RAS, laboratory of the ocean and river discharge interactions and the antropogenic processes, Moscow, Russian Federation (dsonech@mecom.ru)

10:00–10:15: EMS2009-18

Software INCAS (Convective Clouds Indicator to Seeding Activities) to convective clouds class forecast in Mendoza (Argentina).

Pérez, R. C.

Universidad Tecnológica Nacional, Ingeniería Civil, San Martín. Mendoza, Argentina (rcperez@gmail.com)

10:15–10:30: EMS2009-484

Investigating the relation of thermodynamic processes to local budgets Investigating the relation of thermodynamic processes to local budgets in a mesoscale weather prediction model

Petrik, R.; Gassmann, A.; Schlünzen, H.

Max-Planck Institute, Meteorology, Hamburg, Germany (ronny.petrik@zmaw.de)

10:30 Coffee Break

11:00–11:30

Chairperson: E. Andersson

Seasonal prediction

11:00–11:15: EMS2009-57

Prediction of Dry-Season Precipitation in Tropical West Africa and its Relation to Forcing from the Extratropics

Knippertz, P.; Fink, A.H.

University of Leeds, Institute for Climate and Atmospheric Science, Leeds, United Kingdom (p.knippertz@leeds.ac.uk)

11:15–11:30: EMS2009-364

Exploring the relationship between the Arctic sea-ice and mid-latitude storm frequency

Benestad, R.E.; Senan, R.; Balmaseda, M.; Ferranti, L.; Orsolini, Y.; Melsom, A.

Norwegian Meteorological Institute, Climate, Oslo, Norway (rasmus.benestad@met.no)

END OF ORAL PROGRAMME NWP1

NWP2 Ensemble forecasting

Convener: J. Barkmeijer

Co-Convener: A. Montani

Lecture Room: Espace Météo

14:00–16:00

Chairperson: M. Leutbecher

14:00–14:30: EMS2009-326

Ensemble forecasting at ECMWF (solicited)

Leutbecher, M.; Buizza, R.; Hagedorn, R.; Palmer, T.N.; Shutts, G.J.; Steinheimer, M.
ECMWF, Reading, United Kingdom

14:30–14:45: EMS2009-379

COSMO-DE-EPS - construction, diagnoses and verification of a limited-area ensemble prediction system on the convective scale

Paulat, M.; Theis, S.; Gebhardt, C.; Ben Boualleque, Z.; Buchhold, M.; Ohl, R.
German Weather Service (DWD), Offenbach, Germany
(marcus.paulat@dwd.de)

14:45–15:00: EMS2009-60

Limited-area ensemble activities at the Hydro-Meteorological service ARPA-SIMC: the COSMO-LEPS system

Montani, A.; Marsigli, C.; Paccagnella, T.
ARPA-SIMC, Regional Meteorological Service, Bologna, Italy (amontani@arpa.emr.it)

15:00–15:15: EMS2009-377

Test of calibration techniques based on reforecasts for limited-area ensemble precipitation forecasts

Diomede, T.; Marsigli, C.; Montani, A.; Paccagnella, T.
ARPA-SIMC, HydroMeteorological and Climate Service of the Emilia-Romagna Regional Agency for Environmental Protection, Bologna, Italy (tdiomede@arpa.emr.it), CIMA Research Foundation, International Center on Environmental Monitoring, Savona, Italy

15:15–15:30: EMS2009-212

PEARP, the Meteo-France Ensemble Prediction system

Labadie, C.; Descamps, L.
Météo-France, CNRM/GMAP/RECYF, Toulouse France
(laurent.descamps@meteo.fr, carole.labadie@meteo.fr)

15:30–15:45: EMS2009-207

Ensemble methods for evaluating the convective-scale predictability of Mediterranean Heavy Precipitation Events.

Vié, B.; Nuissier, O.; Ducrocq, V.
CNRM-GAME (CNRS - Météo-France), Toulouse, France (olivier.nuissier@meteo.fr)

15:45–16:00: EMS2009-140

New technique for ensemble dressing combining Multimodel SuperEnsemble and precipitation PDF

Cane, D.; Milelli, M.
Regional Environmental Protection Agency - ARPA Piemonte, Torino, Italy (daniele.cane@arpa.piemonte.it)

16:00 Coffee Break

17:00–18:30

Chairperson: A. Montani

17:00–17:15: EMS2009-514

Contrasting Convective-Scale Perturbation Growth in Two Cases Over the UK

Leoncini, G.; Plant, R. S.; Gray, S. L.
Meteorology Department, University of Reading, Early Gate PO box 243 Reading, RG6 6BB, UK

17:15–17:30: EMS2009-98

Upper-level disturbances over the low-latitude North Atlantic: Forecast quality, predictability and dynamics.

Wiegand, L.; Knippertz, P.
Institute for Atmospheric Physics, University of Mainz, Mainz, Germany (wiegandl@uni-mainz.de), Institute for Climate and Atmospheric Science, University of Leeds, Leeds, United Kingdom

17:30–17:45: EMS2009-167

Probabilistic nowcast of PBL profiles with a single column model and ensemble filter assimilation of surface observations

Rostkier-Edelstein, D.; Hacker, J. P.
IIBR, Ness-Ziona, Israel (drostkier@yahoo.com)

17:45–18:00: EMS2009-277

Hybrid wavelet/diffusion background error covariance matrix modelling

Pannekoucke, O.
(olivier.pannekoucke@meteo.fr)

18:00–18:15: EMS2009-297

Definition of Ensemble Error Statistics for Optimal Ensemble Data Assimilation

Frehlich, R.
University of Colorado, CIRES, Boulder, United States (rgf@cires.colorado.edu)

18:15–18:30: EMS2009-461

Combination of ensemble weather forecasts and runoff simulations

Rögnvaldsson, Ó.; Guðjónsson, E.; Sigurjónsson, H.
Institute for Meteorological Research, Research and Developement, Reykjavík, Iceland (or@belgingur.is), Bergen School of Meteorology, Geophysical Institute, University of Bergen, Norway

END OF ORAL PROGRAMME NWP2

NWP3 Observation targeting and observation impact studies

Convener: N. Fourrié

Co-Convener: J. Pailleux

Lecture Room: Espace Météo

11:30–13:00

Chairperson: J. Pailleux

Observation targeting

11:30–11:45: EMS2009-611

Targeted observations during the THORPEX-IPY/Norway
Randriamampianina, R.; Irving, E.; Aspelien, Trygve; Iversen, Trond
Norwegian Meteorological Institute, Oslo, Norway,
(roger@met.no)

11:45–12:00: EMS2009-222

Adaptive observation with drifting platforms
Doerenbecher, A.; Pannekoucke, O.; Verdier, N.; Basdevant, C.; Drobinski, P.; Fesquet, C.; Durand, P.
METEO-FRANCE, Toulouse, France

Observation impact studies

12:00–12:15: EMS2009-552

Assimilation of satellite data in the framework of the Concordiasi campaign.
Bouchard, A.; Rabier, F.; Guidard, V.; Karbou, F.; Guedj, S.
(aurelie.bouchard@cnrm.meteo.fr)

12:15–12:30: EMS2009-554

The impact of the AMMA radiosonde data on the French global assimilation and forecast system
Rabier, F.; Faccani, C.; Fourrié, N.; Agusti-Panareda, A.; Karbou, F.; Moll, P.; Lafore, J-P.; Nuret, M.; Hdidou, F.; Bock, O.
Meteo-France and CNRS, CNRM-GAME, Toulouse, France (florence.rabier@meteo.fr)

12:30–12:45: EMS2009-298

The impact of assimilating microwave surface sensitive observations over land on the representation of humidity in the ARPEGE 4D-VAR system
Karbou, F.; Rabier, F.; Lafore, J-P.; Redelsperger, J.-L.; Bock, O.
CNRM/GAME, METEO-FRANCE CNRS (fatima.karbou@meteo.fr)

12:45–13:00: EMS2009-560

Impact of advanced infrared sounder radiances in the french global numerical weather prediction ARPEGE model.
Fourrie, N.; Pangaud, T.; Guidard, V.; Rabier, F.
Meteo France and CNRS, CNRM-GAME, Toulouse Cedex, France

Applications of Meteorology

AM1 High resolution meteorology - applications and services

Convener: D. Lapeyre De Chavardes

Co-Conveners: E. McCallum; R. Mureau; P. Saarikivi; G. Steinhorst

Poster Area: Area Chapiteau

Chairperson: D. Lapeyre de Chavardès

Attendance Time: 16:00–17:00

Safety

P1: EMS2009-389

Snowfall induced severe pile-ups in southern Finland on 17 March 2005

Juga, I.; Hippi, M.

Finnish Meteorological Institute, Meteorological Research, Helsinki, Finland (ilkka.juga@fmi.fi)

Tools for applied meteorology

P2: EMS2009-74

Wind power evaluation around complex coastal area using WRF 3DVAR with inhomogeneous vertical data

Park, S. Y.; Lee, H. W.; Lee, S. H.; Lim, H. H.; Kim, D. H. Division of Earth Environment System, Pusan National University, Busan, Korea (soon@pusan.ac.kr)

P3: EMS2009-248

A popular web interface to access local meteorological data

Minardi, G.P.; Lussana, C.; Ranci, M.

ARPA Lombardia - Servizio Meteorologico Regionale

P4: EMS2009-617

Downscaling of MOS forecasts

Bijlsma, F.

Meteogroup, Wageningen, The Netherlands

P4b

A Comparison of Ground-based Lightning Observation Methods

Cummins, K.L.; Murphy, M.J.; Lojou, J.Y.

Health and agrometeorology

P5: EMS2009-111

Operational forecasting of daily temperatures in the Valencia Region. Part I: maximum temperatures in summer

Gómez, I.; Estrela, M.

Lab. de Meteorología y Climatología, Paterna, Spain (igor@ceam.es)

P6: EMS2009-112

Operational forecasting of daily temperatures in the Valencia Region. Part II: minimum temperatures in winter

Gómez, I.; Estrela, M.

Lab. de Meteorología y Climatología, Paterna, Spain

P7: EMS2009-149

Influence of wind velocity on pollen concentration in urban canopy layer

Jicha, M.; Pospisil, J.

Brno University of Technology, Faculty of Mechanical Engineering, Brno, Czech Republic;
pospisil.j@fme.vutbr.cz, jicha@fme.vutbr.cz

P8: EMS2009-160

Modelling the perception of weather conditions by users of outdoor public spaces

Andrade, H.; Oliveira, S; Alcoforado, M-J

(henr.andr@gmail.com) Centre of Geographical Studies, University of Lisbon, Faculdade de Letras, Alameda da Universidade, 1600-214, Lisboa, Portugal

P9: EMS2009-376

Should the Polish people be afraid of the heat waves in the changing world?

Szwed, M.

Polish Academy of Sciences, Institute for Agricultural and Forest Environment, Poznan, Poland
(mszwed@man.poznan.pl)

Transport

P10: EMS2009-71

Fine-Scale Road Stretch Forecasting along Main Danish Roads

Mahura, A.; Petersen, C.; Sattler, K.; Sass, B.

Danish Meteorological Institute, Research Department, Copenhagen, Denmark (ama@dmi.dk)

P11: EMS2009-81

Improvement of Road Forecasting using Effects of Shadowing due to Terrain and Distance to Seashore

Mahura, A.; Sattler, K.; Petersen, C.; Sass, B.

Danish Meteorological Institute, Research Department, Copenhagen, Denmark (ama@dmi.dk)

P12: EMS2009-378

A statistical model for road surface friction forecasting applying optical road weather measurements

Hippi, M.; Juga, I.; Nurmi, P.

Finnish Meteorological Institute, Meteorological Research, Helsinki, Finland (marjo.hippi@fmi.fi)

END OF POSTER PROGRAMME AM1

AM2 Aviation Meteorology

Convener: C. Drüe
Co-Convener: J. Bange
Poster Area: Area Chapiteau
Chairperson: J. Bange
Attendance Time: 16:00–17:00

Aviation and weather interaction

P13: EMS2009-600

Modeling the weather impact on aviation in a global air traffic model
Himmelsbach, S.; Hauf, T.; Rokitansky, C. H.
 Institute of Meteorology and Climatology, Leibniz Universität Hannover

P14: EMS2009-213

Atmospheric Refraction Effects on Sonic Boom Propagation from Overland Flights
Kästner, M.
 German Aerospace Center, Institute of Atmospheric Physics, Oberpfaffenhofen, Germany
 (martina.kaestner@dlr.de)

P15: EMS2009-255

FLYSAFE, nowcasting of in flight icing supporting aircrew decision making process
Drouin, A.; Le Bot, C.
 Météo France, Toulouse, France

P16: EMS2009-348

Automatic forecast of low-level clouds height
Malikov, B. M.; Huseynov, N. Sh.

P17: EMS2009-591

A Survey of the Optical Properties of Line-shaped Persistent Contrails over the Contiguous United States by Satellite Imagery
Duda, D.; Minnis, P.; Palikonda, R.; Heck, P.
 National Institute of Aerospace, Hampton, VA, United States (david.p.duda@nasa.gov)

P18: EMS2009-452

Meteorological Conditions Causing Jet-Engine Powerloss Events: Current Understanding
Strapp, J. W.; Ratvasky, T.P.
 Environment Canada, Toronto, Canada
 (walter.strapp@ec.gc.ca)

Turbulence

P19: EMS2009-422

Observations and simulations of severe turbulence in the wake of SE-Iceland
Rögnvaldsson, Ó.; Ágústsson, H.; Ólafsson, H.
 Institute for Meteorological Research, Reykjavik, Iceland, Bergen School of Meteorology, Geophysical Institute, University of Bergen, Norway

P20: EMS2009-576

Implementation and preliminary test of a regression model for EDR forecast using COSMO predictors and aircraft observations
Nonnenmacher, M.; Raschendorfer, M.
 (matthias.nonnenmacher@dwd.de)

P21: EMS2009-492

Climatology of Upper-level Turbulence Statistics Determined from Rawinsonde and ACARS/AMDAR Data
Sharman, R.; Frehlich, R.
 NCAR, RAL, Boulder, United States (sharman@ucar.edu)

Programs and Facilities

P22: EMS2009-467

Online interactive meteorological self-briefing for soaring flights in isolated and aligned lift
Liechti, O.
 Analysen & Konzepte, Winterthur, Switzerland
 (OlivierLiechtiAuK@compuserve.com)

P23: EMS2009-559

SAFIRE
Pontaud, M.; Perrin, Th.
 SAFIRE - Base Aérienne Toulouse Francazal - BP 20016, 31270 Cugnaux

P24: EMS2009-302

The DLR Project "Weather& Flying"
Gerz, T.
 Institut für Physik der Atmosphäre, DLR Oberpfaffenhofen, Germany (thomas.gerz@dlr.de)

END OF POSTER PROGRAMME AM2

Atmosphere and the Water Cycle

AW3 Formulation, validation and parameterization of small-scale processes in atmospheric modelling

Convener: B. Holtslag
Co-Conveners: T. Heus; GJ Steeneveld
Poster Area: Area Chapiteau
Attendance Time: 16:00–17:00

P40: EMS2009-470

Influence of entrainment and countergradient on the ABL diurnal development
Hernández-Ceballos, M.A.
 National Institute for Aerospace Technology (INTA). Atmospheric Research and Instrumentation Branch. Atmospheric Sounding Station "El Arenosillo", Crta. Huelva-Matalascañas km 34. 21130, Mazagón - Huelva, Spain, Department of Applied Physics. Facultad de Ciencias Experimentales, Universidad de Huelva, Campus de El Carmen, 21071, Huelva, Spain

P41: EMS2009-24

Evaluation of the atmospheric boundary layer schemes in the mesoscale models WRF and RAMS using scintillometry and in situ observations at Cabauw
Steenneveld, GJ; Tolk, LF
Wageningen University, Meteorology and Air Quality Group, Wageningen, Netherlands
(gert-jan.steenneveld@wur.nl)

P42: EMS2009-67

Parametrization of the subgrid-scale condensation in mesoscale NWP models
Perraud, E.; Malardel, S.; Lac, C.; Couvreux, F.; Masson, V.
Météo-France, France (emilie.perraud@meteo.fr)

P43: EMS2009-218

Resolved versus parametrized boundary-layer plumes
Couvreux, F.; Rio, C.; Hourdin, F.
Meteo-France, CNRM-GAME, Toulouse, France
(fleur.couvreux@meteo.fr)

P44: EMS2009-283

A satellite-based study of the links between soil moisture and convection initiation in West Africa
Gounou, A.; Guichard, F.; Couvreux, F.; Taylor, C.; Harris, P.; Ellis, R.
CNRM-GAME, Meteo-France/CNRS, Toulouse, France

P45: EMS2009-385

Adaption of soil vegetation atmosphere transfer model parameters and determination of their impact on numerical weather prediction with the COSMO model
Helmert, J.; Vogel, G.; Ament, F.
Deutscher Wetterdienst, Offenbach, Germany
(juergen.helmert@dwd.de)

P46: EMS2009-391

Simulation of momentum transfer by vegetation using 3-D non-hydrostatic meso-scale Model
Jung, E.; Shao, Y.
Institute of Geophysics and meteorology, Univ. of Koeln, Koeln, Germany (jungej@meteo.uni-koeln.de)

P47: EMS2009-430

The sensitivity of convective precipitation to soil texture distribution and soil hydraulic characteristics
Breuer, H.; Ács, F.; Rubel, F.; Horváth, Á.
Eötvös Loránd University, Department of Meteorology, Budapest, Hungary (bhajni@nimbus.elte.hu,acs@elite.hu)

P48: EMS2009-264

Coupling of the atmospheric mesoscale model FOOT3DK to a photosynthesis model
Reyers, M.; Zacharias, S.; Kerschgens, M.
Institute for Geophysics and Meteorology, University of Cologne, Cologne, Germany (mreyers@meteo.uni-koeln.de)

P49: EMS2009-446

On the performance of the COSMO model regarding the planetary boundary layer structure and clouds
Volker, P.; Mironov, D.; Raschendorfer, M.; Helmert, J.; Beyrich, F.
(Deutscher Wetterdienst, Offenbach am Main, Germany, patrick.volker@dwd.de)

P50: EMS2009-496

Towards a consistent turbulence parameterisation by a scale separation approach and the problem of an universal sub grid scale parameterisation
Raschendorfer, M.
Deutscher Wetterdienst, Abt. FE1, Offenbach, Germany (Matthias.Raschendorfer@dwd.de)

P51: EMS2009-172

Representation of fine scale atmospheric variability in a nudged limited area quasi-geostrophic model: application to regional climate modelling
Omrani, H.; Drobinski, P.; Dubos, T.
Laboratoire de Météorologie Dynamique, Institut Pierre Simon Laplace, CNRS/Ecole Polytechnique/ENS/UPMC, Palaiseau, France

P52: EMS2009-471

Estimates of boundary layer parameters using measured wind and temperature profile near the ground
Popov, Z.; Rajkovic, B.
Republic of Serbia, Hidrometeorological institute, Meteorological Observatory Novi Sad, Novi Sad, Serbia (zlatica.popov@hidmet.gov.rs)

END OF POSTER PROGRAMME AW3

AW5 Space forcing of the Earth's and planets' climate

Convener: M. Messerotti

Co-Conveners: H. Lundstedt; K. Matthes

Poster Area: Area Chapiteau

Chairperson: M. Messerotti

Attendance Time: 16:00–17:00

P61: EMS2009-488

The impact of interplanetary magnetic field intensity on stratospheric polar air circulation form
Todorovich, N.; Vujovic, D.
Hydrometeorological Service of Serbia, Belgrade, Serbia (nedeljko.todorovic@hidmet.gov.rs)

END OF POSTER PROGRAMME AW5

AW6 Atmospheric measurements from local to regional scale: Networks, scintillometers, airborne platforms, and remote sensing techniques

Convener: F. Beyrich

Co-Conveners: F. C. Bosveld; H. de Bruin

Poster Area: Area Chapiteau

Attendance Time: 16:00–17:00

P62: EMS2009-1

Robotsonde: New concept of automatic radiosonde launcher

Pepin, R.; Charpentier, P.; Ricaud, G

MODEM, Sales, Ury, France

(rpepin@meteomodem.com)

P63: EMS2009-478

A water vapor Raman lidar as part of the Swiss meteorology service

Dineov, T.; Arshinov, Y.; Bobrovnikov, S.; Ristori, P.; Calpini, B.; van den Bergh, H.; Parlange, M. B.; Simeonov, V.

EPFL, School of Architecture, Civil and Environmental Engineering, Station2, CH-1015 Lausanne, Switzerland

P64: EMS2009-110

Anisotropy of thermal infrared remote sensing over urban areas : assessment from airborne data and modeling approach

Mestayer, P.; Hénon, A.; Lagouarde, J.-P.; Lee, J.H.

Laboratoire de Mécanique des Fluides, UMR CNRS 6598, Institut de Recherche en Sciences et Techniques de la Ville, Ecole Centrale de Nantes, France
(patrice.mestayer@ec-nantes.fr)

P65: EMS2009-188

Spatial-temporal variability of precipitation in Mountainous Regions in the Southern Appalachians

Prat, O.P.; Barros, A.P.

Duke University, Civil and Environmental Department, Durham, United States (oprat@duke.edu)

P66: EMS2009-223

On the outer scale of turbulence in the atmospheric surface layer

de Bruin, H.A.R.; Beyrich, F.

Freelance Consultant, Bilthoven, the Netherlands
(hardb@xs4all.nl)

P67: EMS2009-352

An attempt to account for within-footprint heterogeneity in scintillometry

Timmermans, W.J.; Su, Z.; Olioso, A.

International Institute for Geo-information Sciences and Earth Observation, Dept. of Water Resources, Box 6, 7500 AA, Enschede, The Netherlands

P68: EMS2009-415

Retrieval of cloud optical properties using airborne hyperspectral cameras during the VOCALS campaign.

Labrador, L.; Vaughan, G.

University of Manchester, Centre for Atmospheric Science, Manchester, UK

(lorenzo.labrador@manchester.ac.uk)

P69: EMS2009-251

Documentation of cloud characteristics inferred from ground and satellite measurements within West Africa

Couvreux, F.; Bouniol, D.; Kamsu-Tamo, P.-H.; Leplay, M.; Guichard, F.; O'Connor, E.

Meteo-France, CNRM-GAME, Toulouse, France
(fleur.couvreux@meteo.fr)

P70: EMS2009-398

Assessment of actual transpiration rate in olive tree field combining sap-flow, leaf area index and scintillometer measurements

Agnese, C.; Cammalleri, C.; Ciraolo, G.; Minacapilli, M.; Provenzano, G.; Rallo, G.; de Bruin, H.A.R.

Dept. of Engineering and Agro-Forest Technology (ITAF), Università degli Studi di Palermo, Palermo, Italy

P71: EMS2009-440

An integrated approach applied to the Dutch delta region

Ter Maat, H. W.; Moors, E.J.; Jacobs, C.M.J.; Vermeulen, A.T.; Hutjes, R.W.A.; Dolman, A.J.

Alterra - Wageningen UR, Earth System Science-Climate Change, Wageningen, Netherlands

(herbert.termaat@wur.nl)

P72: EMS2009-444

Parameterization of atmospheric water vapor and cloud liquid water distribution using microwave radiometer profiler

Iassamen, A.; Sauvageot, H.; Youcef-Ettoumi, F.; Jeannin, N.; Ameur, S.

Laboratoire d'Aérologie, Observatoire Midi-Pyrénées, Université Paul Sabatier, Toulouse, France
(sauh@aero.obs-mip.fr), LAMPA, Université Mouloud Mammeri, Tizi-Ouzou, Algeria (ioalia@yahoo.fr)

P73: EMS2009-473

Evaluation of sensible heat fluxes derived from Large Aperture Scintillometer measurements over irrigated and dryland cotton during BEAREX08

Hartogensis, O.; Gowda, P.; Howell, T.; Scanlon, B.

Atmospheric Sciences Group, Center for Water and Climate, Wageningen University, Wageningen, Netherlands (oscar.hartogensis@wur.in)

P74: EMS2009-479

Assessing the energy balance over flooded rice cultivation in Southern Brazil

Roberti, D.; Gonçalves, L. G.; Comin, A.; Martins, C.; Moraes, O.; Acevedo, O.

Dpto Fisica, Universidade Federal de Santa Maria, Santa Maria, RS, Brasil (debora.roberti@pq.cnpq.br)

P76: EMS2009-628

Validation of Long Range Wind Lidar for Atmospheric Dynamics Studies during inter comparison campaign
Boquet, M.; Cariou, J.P.; Lolli, S.; Sauvage, L.; Parmentier, R.
Leosphere, 76 Rue Monceau 75008 Paris, France
(mboquet@leosphere.fr)

END OF POSTER PROGRAMME AW6

AW10 Air-sea interactions and coastal meteorology

Convener: AM Sempreviva

Co-Conveners: S.-E. Gryning; M.M. Miglietta; L.L. Sørensen

Poster Area: Area Chapiteau

Chairperson: L.L. Sørensen

Attendance Time: 16:00–17:00

P93: EMS2009-72

Numerical mesoscale air-sea coupling over the Gulf of Lions during two Tramontane/Mistral events

Lebeaupin Brossier, C.; Drobinski, P.

Institut Pierre Simon Laplace, Laboratoire de Météorologie Dynamique, Palaiseau, France

P94: EMS2009-77

Comparison of sea surface wind fields derived from WRF model and ASAR images over eastern Mediterranean Sea

Miglietta, M.M.; Zecchetto, S.; De Biasio, F.
ISAC-CNR, Padua, Italy (m.miglietta@isac.cnr.it)

P95: EMS2009-86

Variability of scaling time series in the wind-forced sea ice drift in the Arctic Ocean

Chmel, A.; Smirnov, V.N.; Sheikin, I.B.
Ioffe Physico-Technical Institute, 194021 St. Petersburg,
Russian Federation (chmel@mail.ioffe.ru)

P96: EMS2009-382

Case Study of the California Low Level Coastal Jet - Comparisons Between Observed and Model-Estimated Winds

Semedo, A.; Tomé, R.
Uppsala University, Earth Sciences, Uppsala, Sweden
(alvaro.semedo@met.uu.se)

P97: EMS2009-540

Large-eddy simulation modeling of the unstable boundary layer over sea

Cassol, M.; Lanotte, A.; Miglietta, M.M.; Rizza, U.; Sempreviva, A.M.
Institute of atmospheric Sciences and Climate - CNR, ISAC, Lecce, Italy (Cassol@le.isac.cnr.it)

P98: EMS2009-421

The impact of the representation of the water surface temperature evolution on mesoscale modelling of the heat fluxes over lakes

Salgado, R.; Le Moigne, P.

Universidade de Évora, Física, évora, Portugal
(rsal@uevora.pt)

END OF POSTER PROGRAMME AW6

AW10 Air-sea interactions and coastal meteorology

Convener: AM Sempreviva

Co-Conveners: S.-E. Gryning; M.M. Miglietta; L.L. Sørensen

Poster Area: Area Chapiteau

Chairperson: L.L. Sørensen

Attendance Time: 16:00–17:00

END OF POSTER PROGRAMME AW10

AW11 Environmental Meteorology (from local to global)

Convener: S. M. Joffre

Co-Conveners: A. Baklanov; P. Builtjes; M. Piringer; R. Sokhi

Poster Area: Area Chapiteau

Chairperson: A. Baklanov

Attendance Time: 16:00–17:00

P100: EMS2009-343

Wind shear, sensible heat flux and atmospheric stability within a forest canopy

Piringer, M.; Polreich, E.
Central Institute for Meteorology & Geodynamics,
Environmental Meteorology, Vienna, Austria
(martin.piringer@zamg.ac.at)

P101: EMS2009-312

Low-frequency coherent motions within the spruce canopy on the upwind vs. downwind side of a forested ridge

Potuzníková, K.; Sedlák, P.; Saulí, P.
IAP ASCR, Meteorology, Prague, Czech Republic
(kaca@ufa.cas.cz)

P102: EMS2009-365

Formation of a spot-like pollution structure of the underlying surface by a powerful elevated finite source

Skrynyk, O.; Chernysh, R.; Hrytsyuk, Yu.
Ukrainian Research Hydrometeorological Institute,
Physics of Atmosphere, Kiev, Ukraine
(skrynyk@univ.kiev.ua)

P103: EMS2009-403

Urban air quality forecast for the city of Budapest, Hungary
Baranka, G.; Labancz, K.
Hungarian Meteorological Service, Analysis of Air Quality, Budapest, Hungary (baranka.gy@met.hu)

P104: EMS2009-359

Analysis and Forecast about spatial layout of extreme temperatures in Murcia city (Spain)
Banon, L.; Hernandez, E.; Belda, F.
Delegación Territorial en Murcia. AEMET (parapen@innm.es)

P105: EMS2009-54

High resolution meteorological modelling of the Inntal valley atmosphere, Part II: applications to dispersion modelling
Arnold, D.; Schicker, I.; Seibert, P.
University of Natural Resources and Applied Life Sciences, Water-Atmosphere-Environment, Meteorology, Vienna, Austria (irene.schicker@boku.ac.at), Technical University of Catalonia, Institute of Energy and Technologies

P106: EMS2009-70

Elevated Ozone Levels in Denmark: Analysis Employing Trajectory and Chemical Transport Modelling
Mahura, A.; Gross, A.; Petrova, I.
Danish Meteorological Institute, DMI, Research Department, Copenhagen, Denmark (ama@dmi.dk)

P107: EMS2009-197

A modelling case study to evaluate control strategies for ozone reduction in Southwestern Spain
Castell, N.; Mantilla, E.; Salvador, R.; Stein, A. F.; Millán, M.
Fundación Centro de Estudios Ambientales del Mediterráneo (CEAM), Spain (nuria@ceam.es)

P108: EMS2009-206

Evaluation of the Unified EMEP model (EMEP4HR setup)
Mihajlovic, D.; Kraljevic, L.
Meteorological and Hydrological Service of Croatia, Air quality department, Zagreb, (mihajlovic@cirus.dhz.hr)

P109: EMS2009-269

High-resolution dispersion modeling input based on ALADIN model data, station data and profile measurements
Stenzel, S.; Baumann-Stanzer, K.; Haiden, T.
Central Institute for Meteorology and Geodynamics, Dep. of Environmental Meteorology, Vienna, Austria (k.baumann-stanzer@zamg.ac.at)

P110: EMS2009-291

Numerical Simulation of a Sahara Dust Storm Event
Klose, M.; Shao, Y.; Fink, A.
Universität Köln, Germany (mklose@uni-koeln.de)

P111: EMS2009-333

MOCAGE-accident: From research to operational applications
Martet, M.; Josse, M.; Peuch, Mr.; Peuch, M.; Bonnardot, Mr.
Météo-France, DP/Serv/Env, Toulouse, France

P112: EMS2009-358

Numerical modeling of sulfur and ammonium chemistry in the clouds
Vujovic, D.
Department of Meteorology, University of Belgrade, Faculty of Physics, Belgrade, Serbia (dvujovic@ff.bg.ac.rs)

P113: EMS2009-497

Objective classification of the tropospheric vertical structure in SE Spain from radiosonde data
Orza, J. A. G.; Leyva, E.; Cabello, M.; Galiano, V.
SCOLAb, Física Aplicada, Universidad Miguel Hernández, Elche, Spain (ja.garcia@umh.es)

P114: EMS2009-407

Application of Remote Sensing Technique in the Monitoring of Anthropogenic Emissions
Santa Cruz, F.; Roselló, J.I.; Palau, J.L.; Millán, M.
Fundacion CEAM, Pollutant dynamic, Paterna, Spain (fernando@ceam.es)

P115: EMS2009-490

Comparison of OMI ozone and UV irradiance data with ground-based measurements in Austria
Simic, S.; Weihs, P.; Wagner, J.; Fitzka, M.
Institute of Meteorology, BOKU, Vienna, Austria (stana.simic@boku.ac.at)

P116: EMS2009-254

The ozone trend in the last 5 years at mid latitudes
Mendeva, B.; Gogosheva, Ts.; Krastev, D.
Solar Terrestrial Influences Laboratory, Bulgarian Academy of Sciences, Department Stara Zagora, Stara Zagora, Bulgaria (bmendeva@abv.bg)

P117: EMS2009-353

Gravito-photophoresis and lidar observations
Cheremisin, A.; Shnipov, I.; Marichev, V.; Nikolashkin, S.; Bychkov, V.
Siberian Federal University, Krasnoyarsk, Russia (cher@akadem.ru)

END OF POSTER PROGRAMME AW11

AW14 How to determine the atmospheric boundary layer height from measurements and model data? (co-sponsored by AW3, AW8, AW10, AW11)

Convener: F. Beyrich

Co-Conveners: B. Holtslag; S. M. Joffre; AM Sempreviva; S. Zilitinkevich

Poster Area: Area Chapiteau

Attendance Time: 16:00–17:00

P138: EMS2009-32

Behaviour of Atmospheric Boundary Layer Height at Dome C, Antarctica

Pietroni, I.; Argentini, S.

CNR, ISAC, Rome, Italy (ilaria.pietroni@artov.isac.cnr.it)

P139: EMS2009-75

Intercomparison of Methods for the Determination of Mixing-Layer Heights Using a New Network of Advanced Ceilometers in Germany

Engelbart, D. A.M.; Reichardt, J.; Teschke, G.

German Meteorol. Service (DWD), Richard-Aßmann Observatory, Lindenberg, Germany
(Dirk.Engelbart@dwd.de)

P140: EMS2009-159

Mixing of Ozone at Boundary Layer Top - A Lidar Study

Vaughan, G.; Ricketts, H.M.A.; Norton, E. G.; Wareing, D.P.

University of Manchester, School of Earth, Atmospheric and Environmental Sciences, Manchester, United Kingdom (geraint.vaughan@manchester.ac.uk)

P141: EMS2009-366

Comparison of the Mixing Layer Height determined by ceilometer and Optical Particle Counter and simulated by MM5 model

Angelini, F.; Barnaba, F.; Bolzacchini, E.; Caporaso, L.; Curci, G.; Ferrero, L.; Ferretti, R.; Gobbi, G. P.; Landi, T. C.; Stocchi, P.

ISAC-CNR, Roma, Italy (f.angelini@isac.cnr.it)

P142: EMS2009-310

Intercomparison of lidar and ceilometer retrievals for PBL and aerosol profiling over Athens, Greece

Veenstra, M.; Amiridis, V.; Kambezidis, H.; Tsaknakis, G.; Papayannis, A.; Mamouri, R. E.; Kokkalis, P.; Georgouassis, G.; Avdikos, G.

Kipp & Zonen, Delft, Netherlands
(martin.veenstra@kippzonnen.com)

P143: EMS2009-629

An automatic Planetary Boundary Layer height retrieval method with compact EZ backscattering Lidar

Loaec, S.; Sauvage, L.; Boquet, M.; Lolli, S.; Rouget, V.

Leosphere, 78 rue Monceau, Paris, France

END OF POSTER PROGRAMME AW14

Communication and Education

CE4 Education and Sharing knowledge

Convener: T. Halenka

Co-Convener: A. Guillaume

Poster Area: Area Chapiteau

Chairperson: T. Halenka

Attendance Time: 16:00–17:00

P148: EMS2009-87

Wind-Energy Education: Making Paper Windmills

Tsubota, Y.; Takasaki, A.

J. F. Oberlin University

P149: EMS2009-357

Meteorology workshops in summer school: the euskalmet meteorologist experience with teachers.

Gaztelumendi, S.; Egaña, J.

Basque Meteorology Agency (EUSKALMET) Álava, Spain, Meteorology Division, EUVE foundation. Vitoria-Gasteiz, Álava, Spain (sgaztelumendi@euve.org)

P150: EMS2009-410

A case study of weather forecast methodology defined by students

Macario, M.; Massetti, L.; Bini, F.; Ugolini, F.; Marandola, D.; Lanini, M.; Raschi, A.

Liceo Scientifico Niccolò Copernico, Prato, Italy

P151: EMS2009-494

Three-level university program in meteorology at the Eotvos Lorand University

Bartholy, J.; Meszaros, R.; Pongracz, R.

Eotvos Lorand University, Hungary (bari@ludens.elte.hu)

P152: EMS2009-539

EMS media group activities

Cegnar, T.

Environmental Agency of Slovenia, Ljubljana, Slovenia (tanja.cegnar@gov.si)

P152b

E-klima: educational learning of e-learning for lifelong learning in selected branches of environment

Holtanova, E.

Czech Hydrometeorological Institute (holtanova.eva@seznam.cz)

Sharing knowledge - the role of libraries, publications, associations & learned societies at the age of internet

P153: EMS2009-627

PROMET - The Journal of Meteorological Education issued by DWD

Rapp, J.

Deutscher Wetterdienst

P154: EMS2009-564

The making of the on-line version of “La Météorologie”

Guillaume, A.; Javelle, J.-P.; Pastre, C.; Rochas, M.

Météo-France, Paris, France (anne.guillaume@meteo.fr)

Climatology: New services responding to climate change

CL1 Climate observations and data management, climate monitoring, reconstruction and mapping, applications for decision support on adaptation and mitigation, climate change and society

Convener: P. Dandin

Co-Conveners: I. Auer; E. Forland; S. Szalai

Poster Area: Area Chapiteau

Chairperson(s): S. Szalai

Attendance Time: 16:00–17:00

P155: EMS2009-245

Climate Atlas of Croatia 1961-1990, 1971-2000

Zaninovic, K.

Meteorological and Hydrological Service of Croatia, Zagreb, Croatia (zaninovic@cirus.dhz.hr)

P156: EMS2009-273

Wind map of the Czech Republic

Hanslian, D.; Pop, L.; Chladova, Z.; Hosek, J.; Svoboda, J.

Institute of Atmospheric Physics, Academy of Sciences, Praha, Czech Republic (hanslian@ufa.cas.cz), Faculty of Mathematics and Physics, Charles University, Praha, Czech Republic

P157: EMS2009-585

Classification into weather types for climate monitoring of temperatures over France

Lassègues, P.; Jourdain, S.; Veysseire, J.-M.

Météo-France, Direction de la Climatologie, Toulouse, France (jean-michel.veysseire@meteo.fr)

P158: EMS2009-322

Living with extreme weather events - perspectives from climatology, geomorphological analysis, chronicles and opinion polls

Auer, I.; Kirchengast, A.; Proske, H.

Central Institute for Meteorology and Geodynamics, Climatology, Vienna, Austria (ingeborg.auer@zamg.ac.at)

P159: EMS2009-118

Application of GEV and GP distributions on annual maxima and partial duration series of dry spells in Croatia

Cindric, K.; Pasaric, Z.

Meteorological and Hydrological Service of Croatia, Zagreb, Croatia (cindric@cirus.dhz.hr)

P160: EMS2009-288

Credibility of statistical modeling of extreme wind speed

Pop, L.

Institute of Atmospheric Physics, Wind energy, Praha, Czech Republic (pop@ufa.cas.cz), Charles University in Prague, Faculty of Mathematics and Physics, Department of Meteorology and Environment Protection, Praha, Czech Republic

P161: EMS2009-151

Processing of extreme wind speed and gust data in the Czech Republic, digitizing of old instrumental records, metadata, quality control and archiving by means of CLIDATA database system

Repka, M.; Lipina, P.; Zemankova, K.; Zahradnicek, P.

Czech Hydrometeorological Institute, Czech Republic (repka@chmi.cz)

P162: EMS2009-332

Regional tendencies of extreme wind characteristics in Hungary

Bartholy, Dr.; Radics, Dr.; Péliné,

Eotvos Lorand University, Department of Meteorology, Budapest, Hungary (bari@ludens.elte.hu)

P163: EMS2009-93

A global dataset of multiscalar drought indices (SPI and SPEI)

Beguería, S.; Vicente-Serrano, S.M.; López-Moreno, I.; Angulo-Martínez, M.

Aula Dei Experimental Station (CSIC), Dept. Soil and Water, Zaragoza, Spain

P164: EMS2009-340

Multi-daily rainfall climatology and change for water resource management

Gajic-Capka, M.; Capka, B.

Meteorological and Hydrological Service of Croatia, Zagreb, Croatia (capka@cirus.dhz.hr)

P165: EMS2009-134

Characteristics of inhomogeneities in temperature data derived from an application of daily homogenization methods to Austrian time series

Auer, I.; Gruber, C.

Central Institute for Meteorology and Geodynamics, Vienna, Austria (christine.gruber@zamg.ac.at)

P166: EMS2009-232

Homogenized air temperature series of Brno in the period 1799-2008

Reznickova, L.; Stepanek, P.; Brazdil, R.; Dobrovolny, P. Masaryk University, Department of Geography, Brno, Czech Republic

P167: EMS2009-158

The impact of the recent climatic change on grapevine phenophases and the prediction for the future

Zahradnicek, P.

Czech Hydrometeorological Institute, Brno, Czech Republic, (zahradnicek@chmi.cz)

P168: EMS2009-406

A Methodology for the Parametric Reconstruction of Non-Steady and Noisy Meteorological Time Series
Rovira, F.; Palau, J.L.; Millán, M.
Fundación CEAM, Paterna (Valencia), Spain
(frovira@ceam.es)

P169: EMS2009-447

Comparison of Cloud Diurnal Cycles: Satellite, Synop and Regional Climate Model Data
Pfeifroth, U.; Hollmann, R.; Ahrens, B.
University of Frankfurt, Institute for Atmospheric and Environmental Sciences, Frankfurt am Main, Germany
(uwepfeif@stud.uni-frankfurt.de)

P170: EMS2009-426

Atmospheric observations in the arctic Boundary-Layer at the Gufuskálar mast, W-Iceland
Rögnvaldsson, Ó.; Ólafsson, H.; Reuder, J.; Ágústsson, H.; Petersen, G.N.; Kristjánsson, J.E.
Institute for Meteorological Research, Reykjavik, Iceland
Bergen School of Meteorology, Geophysical Institute, University of Bergen, Norway

P171: EMS2009-9

On atmospheric turbidity factor given by Linke
Suleymanov, N.
Azerbaijan National Aerospace Agency, Baku
(nsuleymanov@rambler.ru)

END OF POSTER PROGRAMME CL1

CL4 Documentary and natural proxy data for the study of climate anomalies and hydro-meteorological extremes

Convener: R. Brázil

Co-Conveners: D. Frank; R. García-Herrera; J.F. Gonzalez-Rouco; D. Wheeler

Poster Area: Area Chapiteau

Chairpersons: R. García-Herrera, J.F. Gonzales-Rouco

Attendance Time: 16:00–17:00

P197: EMS2009-454

Geothermics and Climate Change: joint analysis of borehole temperature and meteorological data
Santos, J. A.; Leite, S. M.; Correia, A.; Safanda, J.; Corte-Real, J.
Centre for the Research and Technology of Agro-Environment and Biological Sciences, UTAD, P.O. Box 1013, 5000-911 Vila Real, Portugal (jsantos@utad.pt)

P198: EMS2009-459

Ground versus Surface Air Temperature Trends: implications for borehole surface temperature reconstructions
Santos, J. A.; Leite, S. M.; Correia, A.; Safanda, J.; Corte-Real, J.
Centre for the Research and Technology of Agro-Environment and Biological Sciences, UTAD, P.O. Box 1013, 5000-911 Vila Real, Portugal (jsantos@utad.pt)

P199: EMS2009-574

A 550-year long bi-proxy reconstruction of Western Europe growing season maximum temperature
Etien, N.; Daux, V.; Stievenard, M.; Pierre, M.; Durost, S.; Bernard, V.; Masson-Delmotte, V.
LSCE, Gif-sur-Yvette, France (nathalie.etien@lsce.ipsl.fr)

P200: EMS2009-146

The Salvá-Sinobas project: Characterization of Iberian climate during the 1750-1850 period.
García-Herrera, R.
Universidad Complutense de Madrid, Física de la Tierra II, Facultad de CC Físicas, Madrid, Spain
(rgarciah@fis.ucm.es)

P201: EMS2009-177

Floods in Brno: history, causes and impacts
Brázil, R.; Dobrovolny, P.; Halickova, M.; Mackova, Reznickova, L.; Soukalová, E.; Valásek, H.
Masaryk University, Institute of Geography, Brno, Czech Republic (brazdil@sci.muni.cz)

P202: EMS2009-566

Reconstructing hydroclimatic variability of the Bermejo River (Subtropical Andes of Argentina-Bolivia) through Archival Documents - 17th to 20th centuries
del Rosario Prieto, M.; Cueto, C.
Environmental Unit, IANIGLA-CCT CONICET Mendoza, Sede CRICYT, A. Ruiz Leal s/n, Parque S. Martin, (5500) Mendoza- Argentina (mrprieto@lab.cricyt.edu.ar)

P203: EMS2009-491

Heat waves frequency analysis and spatial-temporal variability of daily maximum temperature in southern Slovakia within the 1951, respectively 1961-2008 periods
Pecho, J.; Fasko, P.; Mikulová, K.; Stastny, P.
Slovak Hydrometeorological Institute, Climatological Service Department, Bratislava, Slovakia
(jozef.pecho@shmu.sk)

P204: EMS2009-101

Destructive winds in the Czech Republic
Honsova, D.
Metepress, Weather Prediction, Prague, Czech Republic (dagmar.honsova@seznam.cz)

P205: EMS2009-47

Spatial patterns of climate extreme anomalies in the French Alps between 1500 to 2000 revealed from a dense tree ring chronology network
Corona, C.; Saulnier, M.; Edouard, J.-L.; Guibal, F.
christophe.corona@gmail.com,melanie.saulnier@etu.univ-cezanne.fr

END OF POSTER PROGRAMME CL4

Numerical Weather Prediction

NWP1 Dynamics and predictability of high impact weather

Convener: E. Andersson

Co-Convener: H. Böttger

Poster Area: Area Chapiteau

Chairperson: E. Andersson

Attendance Time: 16:00–17:00

P206: EMS2009-22

A proposed modification to the Robert-Asselin time filter

Williams, PD

University of Reading, Department of Meteorology,
Reading, United Kingdom (p.d.williams@reading.ac.uk)

P207: EMS2009-327

Extratropical cyclone tracks in the TIGGE data set

Campa, J.; Wernli, H.

University of Mainz, Institute for Atmospheric Physics,
Mainz, Germany (campa@uni-mainz.de)

P208: EMS2009-107

Using WRF-ARW model for prediction of dangerous
meteorological phenomena in southern regions of
Russian Far East

Gonchukov, L.V.; Lamash, B.E.

Far East State University, Department of Geophysics,
Vladivostok, Russian Federation
(lamash@meteo.dvgu.ru)

P209: EMS2009-51

Investigate the MM5 model ability to simulate and predict
convective precipitation over southwest of Iran

Ghandhari, S.; Meshkatee, A.; Mazraee Farahani, M.;
Jafari, S.; Khazanehdari, L.

sh.ghandhari@gmail.com

END OF POSTER PROGRAMME NWP1

NWP5 Verification

Conveners: M. Göber; P. Nurmi

Co-Convenor:

Poster Area: Area Chapiteau

Chairperson(s): Pertti Nurmi

Attendance Time: 16:00–17:00

P211: EMS2009-200

Evaluation of year 2007 operational WRF-NMM on Italy

Pasi, F.; Gozzini, B.; Bartolini, G.; Grifoni, D.; Messeri,
G.; Piani, F.; Rossi, M.; Tei, C.

CNR - IBIMET, Via Caproni, 8 50145 Firenze, Italy
LaMMA Consortium, Via Madonna del Piano, 10 50019
Sesto Fiorentino (FI), Italy

P212: EMS2009-204

Validation of AROME wind speed forecasts against mast
observations in the Finnish wind power resource
mapping project

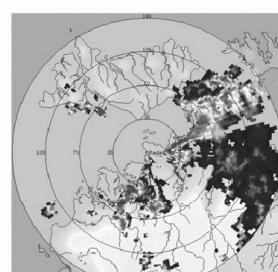
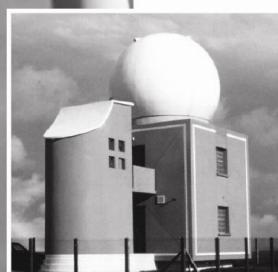
Kilpinen, J.

Finnish Meteorological Institute, Meteorological Research,
Helsinki, Finland (juha.kilpinen@fmi.fi)

END OF POSTER PROGRAMME NWP5

TECHNOLOGY LEADER IN WEATHER RADAR SYSTEMS

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Wednesday	Amphithéâtre	Guy Der Megreditchian	Prud'homme	Espace Météo
8 :30–10:30	AM2: Aviation Meteorology Block 3 of 3	AW11: Environmental Meteorology (from local to global) Block 2 of 3	AW7: Atmospheric hazards Block 1 of 2	AW13: Spatial interpolation and GIS modelling in earth system science Block 1 of 1
10:30–11:00	Coffee Break: Area Chapiteau			
11:00–13:00	NWP5: Verification Block 1 of 1 <i>until 13:15</i>	AW11: Environmental Meteorology (from local to global) Block 3 of 3	AW7: Atmospheric hazards – until 11:30 Block 2 of 2	AW2: Cyclone tracking Algorithms Block 1 of 1
13:00–14:00	Lunch Break			
14:00–18:00	14:00–14:45: Silver Medal Lecture L. Bengtsson: <i>"Why is the climate warming so irregular?"</i>	14:00–16:00: Seminar on solar radiation measurements		
	14:45–18:00: Round Table Discussion <i>"The vision for high resolution meteorological applications and services"</i> Coffee Break app: 16:15			
18:15	CONFERENCE DINNER: BUSES LEAVE AT 18:15 from Météopole			

Applications of Meteorology

AM2 Aviation Meteorology

Convener: C. Drüe
Co-Convener: J. Bange
Lecture Room: Amphithéâtre

08:30–10:30

Chairperson: J. Bange

Ground-based measurements

08:30–08:45: EMS2009-299

The Wake Vortex Prediction and Monitoring System WSVBS

Gerz, T.; Holzapfel, F.
Institut für Physik der Atmosphäre, DLR
Oberpfaffenhofen, Germany (Thomas.Gerz@dlr.de)

08:45–09:00: EMS2009-156

Observation of fog by a sodar at Roissy-CDG airport
Dabas, A.

Météo-France, CNRM, Toulouse, France
(alain.dabas@meteo.fr)

09:00–09:15: EMS2009-137

Inversion and shear layer detection using AMDAR and wind profiler soundings

Drüe, C.; Hauf, T.; Hoff, A.
Universität Trier, Umweltmeteorologie, Trier, Germany
(druee@uni-trier.de)

Airborne measurements

09:15–09:30: EMS2009-472

Aircraft Measurements of Temperature and Liquid Water Content in Entrainment Interface Layer of Stratocumulus Clouds.

Haman, K. E.; Gerber, H.; Kumala, W.; Malinowski, S. P.
Institute of Geophysics, University of Warsaw, Warsaw, Poland (khaman@igf.fuw.edu.pl)

09:30–09:45: EMS2009-396

A novel modular multi-sensor dropsonde system for high resolution measurements

Wieser, A.; Franke, H.; Fütterer, D.; Hankers, R.; Kottmeier, Ch.; Corsmeier, U.
Institut für Meteorologie und Klimaforschung, Karlsruhe Institute of Technology (KIT)

09:45–10:00: EMS2009-130

Turbulent Fluxes of Sensible Heat Measured by Research UAV 'M2AV Carolo'

Martin, S.; Bange, J.
Institute of Aerospace Systems, Technische Universität Braunschweig, Germany (sabrina.martin@tu-bs.de)

10:00–10:15: EMS2009-265

A new airborne tandem measurement platform for cloud-radiation interaction studies: The AIRcraft Towed Sensor Shuttle (AIRTOSS)

Frey, W.; de Reus, M.; Eichler, H.; Maser, R.; Wendisch, M.; Borrmann, S.
Institute for Atmospheric Physics, University of Mainz, Germany

10:15–10:30: EMS2009-219

Measuring the turbulent wind vector with a weight-shift Microlight Aircraft

Metzger, S.; Junkermann, W.; Neidl, F.; Butterbach-Bahl, K.; Schmid, H.P.; Beyrich, F.; Zheng, X.H.; Foken, T.
Karlsruhe Research Center, Institute for Meteorology and Climate Research, Atmospheric Environmental Research Division, Garmisch-Partenkirchen, Germany (stefan.metzger@imk.fzk.de)

END OF ORAL PROGRAMME AM2

Atmosphere and the Water Cycle

AW2 Cyclone Tracking Algorithms

Convener: R. Blender
Co-Conveners: C. C. Raible; H. Wernli
Lecture Room: Espace Météo

11:00–12:45

Chairperson: R. Blender

11:00–11:15: EMS2009-120

Sensitivities and applications of a cyclone tracking algorithm
Pinto, J.G.; Ulbrich, U.; Leckebusch, G.C.; Donat, M.; Nissen, K.M.; Spangehl, T.; Ulbrich, S.; Zacharias, S.
 Institute for Geophysics and Meteorology, University of Cologne, Germany (jpinto@meteo.uni-koeln.de)

11:15–11:30: EMS2009-216

Successful tracking of cyclonic features at 50km resolution
Hewson, T.D.; Titley, H.A.
 ECMWF, Reading, UK (tim.hewson@ecmwf.int)

11:30–11:45: EMS2009-285

Coherent structure tracking
Gilet, J.B.; Arbogast, P.; Joly, A.; Plu, M.
 METEO-FRANCE-INSU, CNRM-GAME, Toulouse, France (philippe.arbogast@meteo.fr)

11:45–12:00: EMS2009-316

Extending tracking algorithms to estimation of cyclone geometry and compositing
Gulev, S.; Rudeva, I.
 IORAS, SAIL, Moscow, Russian Federation (gul@sail.msk.ru)

12:00–12:15: EMS2009-388

Deriving cyclone tracks for use in an automated classification
Spekat, A.; Kreienkamp, F.; Enke, W.
 Climate and Environment Consulting Potsdam GmbH, Potsdam, Germany (arne.spekat@cec-potsdam.de)

12:15–12:30: EMS2009-435

North Atlantic cyclones, geometry, life cycles and extremes
Schneidereit, A.; Sienz, F.; Blender, R.; Lunkeit, F.; Fraedrich, K.
 Meteorologisches Institut, Universität Hamburg, Hamburg, Germany (andrea.schneidereit@zmaw.de)

12:30–12:45: EMS2009-462

Extending the definition of a cyclone system
Hanley, J.; Caballero, R.
 University College Dublin, Mathematical Sciences, Dublin, Ireland (jhanlester@gmail.com)

AW7 Atmospheric hazards

Convener: F. Stel
Co-Convener: D. Giaiotti
Lecture Room: Prud'homme

08:30–10:30

Chairpersons: F. Stel and D. B. Giaiotti

08:30–08:45: EMS2009-37

Nonlinear model of stationary atmospheric vortex with moisture transport
Rutkevich, P.B.; Rutkevich, P.P.
 Space Research Institute RAN, Dep 056, Moscow, Russian Federation (pbrutkevich@gmail.com)

08:45–09:00: EMS2009-125

Application Of Seasonal Weather Forecasts In Fire Hazard Prediction
Kalin, L.; Mokoric, M.
 Croatian Meteorological Service, DHMZ, Zagreb, (kalin@cirus.dhz.hr)

09:00–09:15: EMS2009-477

Thunderstorm Forecast System over Spain using Optimized Analogs
Oviedo-Bocanegra, L.M.; Ancell, R.; Pons, M.R.
 Agencia Estatal de Meteorología (AEMET), Santander, Spain

09:15–09:30: EMS2009-528

Empirical Data Fusion for Convective Weather Hazard Nowcasting
Williams, J.; Ahijevych, D.; Steiner, M.; Dettling, S.
 Research Applications Laboratory, National Center for Atmospheric Research, Boulder, CO, USA (jkwillia@ucar.edu)

09:30–09:45: EMS2009-551

The EUMETSAT Meteosat Third Generation Lightning Imager (MTG-LI): Applications and Product Processing
Grandell, J.; Finke, U.; Stuhlmann, R.
 EUMETSAT, Darmstadt, Germany (jochen.grandell@eumetsat.int)

09:45–10:00: EMS2009-279

On the evening onset of deep moist convection in complex orography
Gladich, I.; Gallai, I.; Giaiotti, D. B.; Stel, F.
 Purdue University, Lafayette, Indiana, USA (igladich@purdue.edu)

10:00–10:15: EMS2009-577

Intense trough on Venetian Alps with problem of heavy rains prognosis and difficulties of snow level forecasting
Robert-Luciani, T.; Marigo, G.
 Avalanche Centre of Arabba, ARPAV (Venetian Agency for Environment Protection), Italy

END OF ORAL PROGRAMME AW2

10:15–10:30: EMS2009-41

Structure of a Typhoon Spiral Rainband Observed by Dual-Doppler Radar
Haiguang, Z.
(State Key Laboratory of Severe Weather, Chinese Academy of Meteorological Science, Beijing 100081, P.R. China, zhg@cams.cma.gov.cn)

10:30 Coffee Break

11:00–11:30

Chairpersons: D. B. Giaiotti and F. Stel

Severe rain events and hydrological models

11:00–11:15: EMS2009-168

Using the probability density function of radar reflectivity to identify precipitation in thunderstorms
DIOP, C.A.
Laboratoire d'Aérologie UMR 5560 CNRS/UPS - OMP - Toulouse - France, (dioca@aero.obs-mip.fr)

11:15–11:30: EMS2009-65

A high resolution, radar-based tool for nowcasting rainfall in mountainous catchments
Clementi, L.; Germann, U.; Panziera, L.
MeteoSwiss, Locarno-Monti, Switzerland
(lorenzo.clementi@meteoswiss.ch)

END OF ORAL PROGRAMME AW7

AW9 Interfacing hydrological and meteorological models in forecasting systems

Convener: N. Hjerdt

Co-Conveners: G. Balint; J. Olsson; M.-H. Ramos

Lecture Room: Prud'homme

11:30–13:00

Chairpersons: Giaiotti, D. and Hjerdt, N.

11:30–11:45: EMS2009-52

Hydrometeorological ensemble forecasting of Mediterranean flash-flood events
Vincendon, B.; Ducrocq, V.; Nuissier, O.; Vié, B.; Saulnier, G.-M.
Météo-France, GAME/CNRM (Météo-France, CNRS), Toulouse, France (beatrice.vincendon@meteo.fr)

11:45–12:00: EMS2009-198

Description and validation of a streamflow assimilation system for a distributed hydrometeorological model over France. Impacts on the ensemble streamflow forecasts.
Thirel, G.; Martin, E.; Mahfouf, J. F.; Massart, S.; Ricci, S.; Regimbeau, F.; Habets, F.
Météo-France CNRM-GAME/GMME/MOSAYC, Toulouse, France (guillaume.thirel@meteo.fr)

12:00–12:15: EMS2009-84

High resolution WRF-FDDA seasonal precipitation over complex terrain
Rostkier-Edelstein, D.; Liu, Y.; Roux, G.; Givati, A.; Pietrkowski, A.; Ge, M.; Hahmann, A.; Pinto, J.; Warner, T.; Swerdlin, S.
IIBR, Israel (drostkier@yahoo.com)

12:15–12:30: EMS2009-532

Evaluation of a probabilistic hydrometeorological forecast system
Ahrens, B.; Jaun, S.
University of Frankfurt, Institute for Atmospheric and Environmental Sciences, Frankfurt am Main, Germany (bodo.ahrens@iau.uni-frankfurt.de)

12:30–12:45: EMS2009-562

Operational hydrological ensemble forecasts in France, taking into account rainfall and hydrological model uncertainties.
Mathevret, T.; Garavaglia, F.; Gailhard, J.; Garçon, R.; Dubus, L.
Electricité de France, Direction Technique Générale, Hydrology and hydro-meteorological forecast, Grenoble, France (thibault.mathevret@edf.fr)

12:45–13:00: EMS2009-441

Impact of feedbacks between land and atmosphere to the efficacy of adaptation measures in the Rhine basin under a combined climate and land use change scenario for a wet and a dry extreme event
Ter Maat, H. W.; Moors, E.J.; Franssen, W.H.P.; Hurkmans, R.T.W.L.; Terink, W.; Tuinenburg, O.A.; Uijlenhoet, R.
Alterra - Wageningen UR, Earth System Science-Climate Change, Wageningen, Netherlands (herbert.termaat@wur.nl)

END OF ORAL PROGRAMME AW9

AW11 Environmental Meteorology (from local to global)

Convener: S. M. Joffre

Co-Conveners: A. Baklanov; P. Builtjes; M. Piringer; R. Sokhi

Lecture Room: Guy der Megreditchian

08:30–10:30

Chairperson: P. Builtjes

Meso- and Regional Scale

08:30–08:45: EMS2009-349

Transport of pollen to and from a Central European forest
Piringer, M.; Polreich, E.; Schüler, S.; Robitschek, K.
Central Institute for Meteorology
Geodynamics, Environmental Meteorology, Vienna, Austria (martin.piringer@zamg.ac.at)

08:45–09:00: EMS2009-261

Forecasting the transport of pollution using a numerical weather prediction model

Dacre, H.

University of Reading, Department of Meteorology, Reading, United Kingdom (h.f.dacre@reading.ac.uk)

09:00–09:15: EMS2009-113

AQA - Air Quality model for Austria: comparison of ALADIN and ALARO forecasts with observed meteorological profiles and PM10 predictions with CAMx

Hirtl, M.; Krüger, B.C.; Kaiser, A.

ZAMG, Section Environmental Meteorology, Vienna, Austria (marcus.hirtl@zamg.ac.at)

09:15–09:30: EMS2009-418

Air quality over Europe and Iberian Peninsula for 2004 at high horizontal resolution: evaluation of the CALIOPE modelling system

Jorba, O.; Piot, M.; Pay, M.T.; Jiménez-Guerrero, P.; López, E.; Pérez, C.; Gassó, S.; Baldasano, J.M.
Earth Sciences Department, Barcelona Supercomputing Center, Barcelona, Spain

09:30–09:45: EMS2009-598

MEGAPOLI: concept and first results of multi-scale modelling of megacity impacts (solicited)

Baklanov, A.A.; Lawrence, M.; Pandis, S.
Danish Meteorological Institute, Lyngbyvej 100, DK-2100 København Ø, Denmark, email: alb@dmi.dk

09:45–10:00: EMS2009-433

The MEGAPOLI Paris campaign for urban aerosol characterisation -first results

Beekmann, M.; Baltensperger, U.; Borbon, A.; Sciare, J.; Gros, V.; Baklanov, A.; Lawrence, M.; Pandis, S.
Univ. Paris 7 and 12, CNRS, LISA, Créteil, France (beekmann@lisa.univ-paris12.fr)

10:00–10:15: EMS2009-475

An Integrated Analysis of Particulate Matter Episodes over Megacities using Multi-scale Modelling, Ground-based and Space-based Observations

Hu, R; Sokhi, R; Chemel, C; Fisher, B
University of Hertfordshire, Science and Technology Research Institute (STRI), Hatfield, United Kingdom (r.hu@herts.ac.uk)

10:15–10:30: EMS2009-523

Implementation of an improved urban parametrisation into the mesoscale meteorology model METRAS and application to London, UK

Grawe, D; Thompson, H L; Salmond, J; Cai, X-M; Schluenzen, K H
University of Birmingham, UK, KlimaCampus, University of Birmingham, Germany

10:30 Coffee Break**11:00–13:00**

Chairperson: M. Piringer

Regional and Global scale**11:00–11:30: EMS2009-511**

Towards European-scale Air Quality operational services for GMES Atmosphere (solicited)

Peuch, V.-H.; Rouil, L.; Tarrason, L.; Elbern, H.; GEMS/MACC regional subprojects teams, the CNRM-GAME, Météo-France and CNRS URA1357, GMGEC/CARMA, Toulouse Cedex 1, France (VINCENT-HENRI.PEUCH@METEO.FR)

11:30–11:45: EMS2009-510

Meteorological analyses data set for air quality assessment modelling from national to local scale: verification and applications

Finardi, S.; Pace, G.; Tinarelli, G.; Vitali, C.
Arianet s.r.l., Milano, Italy (s.finardi@aria-net.it)

11:45–12:00: EMS2009-368

Development of an integrated chemical weather prediction system for environmental applications at meso to global scales: NMMB/BSC-CHEM

Jorba, O.; Pérez, C.; Karsten, K.; Janjic, Z.; Dabdub, D.; Baldasano, J.M.
Earth Sciences Department, Barcelona Supercomputing Center, Barcelona, Spain

12:00–12:15: EMS2009-468

Simulation of wet deposition in the CTM REM-CALGRID using a diagnostic and a prognostic meteorological driver

Banzhaf, S.; Reimer, E.; Kerschbaumer, A.; Buitjes, P.; Stern, R.
Institut für Meteorologie, Freie Universität Berlin, Berlin, Germany (sabine.banzhaf@met.fu-berlin.de)

12:15–12:30: EMS2009-506

Discussing the scope of numerical indices characterizing compound phenomena of nature, and especially the scope of the UV index

Sivertsen, T.H.; Gailis, J.
Norwegian Institute for Agricultural and Env. Res. Aas, Norway (thsivert@online.no)

12:30–12:45: EMS2009-524

Climate Change Impact on Air Quality in High Resolution Simulations

Halenka, T.; Huszar, P.; Belda, M.
Charles University in Prague, Fac. of Math. Physics, Dept. of Meteorology and Environment Protection, Prague, Czech Republic (tomas.halenka@mff.cuni.cz)

12:45–13:00: EMS2009-550

Towards the assessment of the vertical structure of Saharan dust over the western Mediterranean from rawinsonde data

Orza, J. A. G.; Leyva, E.; Cabello, M.
SCOLAb, Física Aplicada, Universidad Miguel Hernández, Elche, Spain (ja.garcia@umh.es)

END OF ORAL PROGRAMME AW11

AW13 Spatial interpolation and GIS modelling in earth system science

Convener: M. Dolinar

Co-Convener: O. E. Tveito

Lecture Room: Espace Météo

08:30–10:30

08:30–09:00: EMS2009-476

Generation of observational rainfall ensembles by means of stochastic simulation (solicited)

Krähenmann, S.; Ahrens, B.

University of Frankfurt, Institute for Atmospheric and Environmental Sciences, Frankfurt am Main, Germany
(bodo.ahrens@iau.uni-frankfurt.de)

09:00–09:15: EMS2009-211

Spatial analysis of sunshine duration by combination of satellite and station data (solicited)

Frei, C.; Stöckli, R.; Dürr, B.

Federal Office of Meteorology and Climatology MeteoSwiss, Zürich, Switzerland

09:15–09:30: EMS2009-209

High-resolution precipitation mapping over Switzerland: A case study on the combination of radar and station data

Erdin, R.; Frei, C.; Stahel, W.A.

Federal Office of Meteorology and Climatology MeteoSwiss, Zürich, Switzerland

09:30–09:45: EMS2009-420

Estimation of uncertainty of daily climate maps from cross-validation

Mohr, M.; Tveito, O. E.

(matthias.mohr@met.no)

09:45–10:00: EMS2009-338

Testing the performance of a spatial consistency test for data quality control

Lussana, C.; Salvati, M.R.; Ubaldi, F.

ARPA Lombardia, Servizio Meteorologico Regionale, Milano, Italy (c.lussana@arpalombardia.it)

10:00–10:15: EMS2009-417

Spatial interpolation of global solar radiation in Poland

Walawender, J.

Satellite Remote Sensing Centre, Institute of Meteorology and Water Management, Krakow, Poland
(jakub.walawender@imgw.pl), Department of Climatology, Institute of Geography and Spatial Management, Jagiellonian University, Krakow, Poland
(j.walawender@geo.uj.edu.pl)

10:15–10:30:

Oral introductions to posters (please see Poster Programme on page 72 for details of presentations)

END OF ORAL PROGRAMME AW13

Numerical Weather Prediction

NWP5 Verification

Conveners: M. Göber; P. Nurmi
Lecture Room: Amphithéâtre

11:00–13:15

Chairperson: P. Nurmi

11:00–11:15: EMS2009-23

Spatial Forecast Verification

Gilleland, E.

National Center for Atmospheric Research, Research Applications Laboratory, Boulder, United States
(EricG@ucar.edu)

11:15–11:30: EMS2009-152

Weather-type stratified verification of quantitative precipitation forecasts with the feature based technique SAL

Zimmer, M.; Wernli, H.

IPA Mainz, Mainz, Germany (zimmerm@uni-mainz.de)

11:30–11:45: EMS2009-402

Evaluating multi-scale model forecasts using high resolution analysis

Kann, A.; Wittmann, C.

ZAMG, Vienna, Austria (alexander.kann@zamg.ac.at)

11:45–12:00: EMS2009-328

Verification of wind fields by means of rain cell tracking

Herbort, F.

(herbort@muk.uni-hannover.de)

12:00–12:15: EMS2009-587

Deterministic and fuzzy verification of the cloudiness of High Resolution operational models

Amodei, M.; Sanchez, I.; Stein, J.

Météo-France, DPREVI/ COMPAS, Toulouse, France
(marielle.amodei@meteo.fr)

12:15–12:30: EMS2009-586

Another look at the contingency tables : Scores based on Manhattan distances in the error space

Stein, J.

Meteo-France, DPREVI/COMPAS, Toulouse, France
(joel.stein@meteo.fr)

12:30–12:45: EMS2009-321

Verification of different forecasts of Hungarian Meteorological Service

Feher, B.

Hungarian Meteorological Service, Weather Forecast Division, Budapest, Hungary (feher.b@met.hu)

12:45–13:00: EMS2009-579

The forecaster's added value

Turco, M.; Milelli, M.

ARPA Piemonte, Italy (marco.turco@arpa.piemonte.it)

13:00–13:15: EMS2009-323

On evaluation of ensemble precipitation forecasts with observation-based ensembles

Ahrens, B.

University of Frankfurt, Institute for Atmospheric and Environmental Sciences, Frankfurt am Main, Germany (bodo.ahrens@iau.uni-frankfurt.de)

END OF ORAL PROGRAMME NWP5

Special Sessions

Seminar on solar radiation measurements

Convener: J. Mes

Co-Convener: L. Van Wely

Lecture Room: Guy der Megreditchian

14:00–16:00

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Thursday	Amphithéâtre	Guy Der Megreditchian	Prud'homme	Espace Météo
8 :30 –10:30	CE1: Media and Communication Block 1 of 2: Debate on climate change communication	AW6: Atmospheric measurements from local to regional scale: networks, scintillometers, airborne platforms, remote sensing techniques Block 1 of 4	CL3/NWP4: Climate prediction and scenarios from seasons to century Block 1 of 3	AM3: Operational Oceanography Block 1 of 1
10:30–11:00	Coffee Break: Area Chapiteau			
11:00–13:00	CE1: Media and Communication Block 2 of 2: Providing weather information Presentation of the Media Awards	AW6: Atmospheric measurements from local to regional scale Block 2 of 4	CL3/NWP4: Climate prediction and scenarios from seasons to century Block 2 of 3	AW12: Phenology and Agrometeorology Block 1 of 2
13:00–14:00	Lunch Break			
14:00–16:00	CL3/NWP4: Climate prediction and scenarios from seasons to century Block 3 of 3	AW6: Atmospheric measurements from local to regional scale Block 3 of 4	AW4: Large-scale air-sea & land-atmosphere interaction processes and their influence on the European and Mediterranean regional climate Block 1 of 2	AW12: Phenology and Agrometeorology Block 2 of 2
16:00–17:00	Poster Session & Outstanding Poster Award: Area Chapiteau Applications of Meteorology: AM3: P25–P26 Atmosphere and the water cycle: AW1: P27–P35 ♦ AW2: P36–P39 ♦ AW4: P53–P60 ♦ AW7: P77–P89 ♦ AW8: P90–P91 ♦ AW9: P92 ♦ AW12: P118–P130 ♦ AW13: P131–P137 Communication and Education CE1: P144 ♦ CE2: P145–P146 ♦ CE3: P146–P147 Climatology: New services responding to climate change CL2: P172–P187 ♦ CL3/NWP4: P188–P196			
17:00–19:00	CL2: Climate change assessments and trends of variability Block 1 of 3	AW6: Atmospheric measurements from local to regional scale Block 4 of 4	AW4: Large-scale air-sea and land atmosphere interaction processes Block 2 of 2	CE2: Climatological and meteorological information in the context of decision making Block 1 of 1

Applications of Meteorology

AM3 Operational Oceanography

Convener: P. Baüer

Co-Convener:

Lecture Room: Espace Météo

08:30–10:10

Chairperson: P. Baüer

08:30–09:00: EMS2009-613

MyOcean: towards a European Marine Core Service
(solicited)

MyOcean Board,

GIP Mercator Ocean, Parc technologique du canal, 8-10
rue Hermès, 31520 Ramonville Saint Agne, France,
alain.podaire@cnrs.fr

09:00–09:15: EMS2009-190

PREVIMER : Meteorological inputs and outputs

Ravenel, H.; Lecornu, F.; Kerléguer, L.

Météo-France, Direction ouest, Rennes Cédex 9, France
(hugues.ravenel@meteo.fr)

09:15–09:30: EMS2009-236

An Operational Coastal Forecasting System in Galicia
(NW Spain)

Pérez, V.; Balseiro, C.F.; Carracedo, P.; Pérez, E.;
Taboada, J.; Venacio, A.; Vilasa, L.

MeteoGalicia, Rúa Roma 6, E-15707 Santiago de
Compostela, Spain (vicente.perez@cesga.es)

09:30–09:45: EMS2009-345

Validation of ocean-meteorological models in the
Southeastern Bay of Biscay

Gaztelumendi, S.; Rubio, A.; Egaña, J.; Fontán, A.;
Gelpí, I. R.; González, M.; Otxoa de Alda, K.; Mader, J.;
Alchaarani, N.; Ferrer, L.; Caballero, A.; Larreta, J.

EUVE, Meteorology Division, Vitoria-Gasteiz, Spain
(sgaztelumendi@euve.org), Basque Meteorology
Agency, EUSKALMET, Miñano, Álava, Spain

09:45–10:00: EMS2009-588

Operational oceanography and drift predictions at Meteo-
France

Daniel, P.

(pierre.daniel@meteo.fr)

10:00–10:10: Posters presentations

END OF ORAL PROGRAMME AM3

Atmosphere and the Water Cycle

AW4 Large scale air-sea and land-atmosphere interaction processes and their influence on the European and Mediterranean regional climate

Convener: S. Gualdi
Co-Conveners: W. May; S. Somot
Lecture Room: Prud'homme

14:00–16:00

Chairperson: C. Uvo

14:00–14:15: EMS2009-97

Influence of ENSO areas in the rainfall of the NW Iberian Peninsula
 Lorenzo, M.N.; Taboada, J.J.; Iglesias, I.; Gómez-Gesteira, M.
 Facultad de Ciencias, Universidad de Vigo, Física Aplicada, Ourense, Spain (uscfmmlg@cesga.es)

14:15–14:30: EMS2009-557

Patterns of Coherent Low-frequency Climate Variability in the Atlantic basin during the 20th Century
 Tourre, Y. M.; Paz, S.; Kushnir, Y.; White, W. B.
 Météo-France

14:30–14:45: EMS2009-62

Interannual Variability of the Key Elements of Hydrological Cycle over Europe during Summer Season
 Zvereva, I.I.; Rudeva, I.A.; Allan, R.P.
 P.P. Shirshov Institute of Oceanology, Moscow, Russian Federation (igorz@sail.msk.ru)

14:45–15:00: EMS2009-165

On the characteristics of daily precipitation in the Mediterranean region
 May, W.
 Danish Meteorological Institute, Danish Climate Centre, Copenhagen, Denmark (wm@dmi.dk)

15:00–15:15: EMS2009-408

Parametric Reconstruction of Water Vapour Accumulation Modes in the Western and the Eastern Mediterranean Basins
 Palau, J.L.; Rovira, F.; Millan, M.
 Fundacion CEAM, Pollutant Dynamics, Paterna, Spain (jlp@confluencia.biz)

15:15–15:30: EMS2009-40

Evaluation of variations in precipitation component of the water cycle for the EU FP6 CIRCE Project
 Krichak, S.O.; Breitgand, J.S.
 Tel Aviv University, Dept. of Geophysics and Planetary Sciences, Ramat Aviv, Israel (shimon@cyclone.tau.ac.il)

15:30–15:45: EMS2009-58

Estimating the Mediterranean Sea Water Budget: impact of RCM design
 Somot, S.; Elguindi, N.; Sanchez-Gomez, E.; Herrmann, M.; Déqué, M.
 Meteo-France/CNRS, CNRM-GAME, Toulouse, France (samuel.somot@meteo.fr)

15:45–16:00: EMS2009-154

Future changes in the Mediterranean water budget projected by an ensemble of Regional Climate Models
 SanchezGomez, E.; Somot, S.; Mariotti, A.
 CERFACS, Toulouse, France (sanchez@cerfacs.fr)

16:00 Coffee Break

17:00–19:00

Chairperson: S. Krichak

17:00–17:15: EMS2009-547

Assessment of the Mediterranean Water Cycle using an atmosphere-ocean coupled model
 Elizalde, A.; Jacob, D.; Mikolajewicz, U.
 MPI-M, Atmosphere, Hamburg, Germany (alberto.elizalde@zmaw.de)

17:15–17:30: EMS2009-150

Climate scenarios for the Mediterranean basin with a regional coupled system
 Dell'Aquila, A.; Calmant, S.; Artale, V.; Ruti, PM; Carillo, A; Sannino, G; Pisacane, G; Struglia, MV; Giorgi, F; Bi, X
 ENEA, ACS-CLIM MOD, Italy (alessandro.dellaquila@enea.it)

17:30–17:45: EMS2009-90

Heat fluxes at the Mediterranean sea surface and the relation to the atmospheric large-scale dynamics with a regional coupled model
 Casado-Lopez, A.; Li, L.
 LMD-UPMC, Paris, France (alberto.casado@lmd.jussieu.fr)

17:45–18:00: EMS2009-73

Modelling of the Mediterranean circulation using atmospheric fields from the WRF model at different space-time resolutions
 Lebeaupin Brossier, C.; Béranger, K.; Drobinski, P.
 IPSL, Laboratoire de Météorologie Dynamique, Palaiseau, France, Ecole Nationale des Sciences et Techniques Avancées, Palaiseau, France, IPSL, Laboratoire d'Océanographie et du Climat, Paris, France

18:00–18:15: EMS2009-548

Hydrological and Energy Budgets in the Alpine Area during present and future climate
 Cassardo, C.; Galli, M.; Oh, S. M.; Park, S. K.
 Department of General Physics "A. Avogadro", Alma Universitas Taurinensis, Torino, Italy (claudio.cassardo@unito.it)

18:15–18:30: EMS2009-508

Groundwater influence on soil moisture dynamics and land surface fluxes over the Iberian Peninsula
Gestal-Souto, L.; Miguez-Macho, G.
Non-linear physics group, Universidade de Santiago de Compostela, Santiago de Compostela, Galicia, Spain (lucia@fmares.usc.es, gonzalo@fmares.usc.es)

18:30–18:45: EMS2009-214

Long-term discharge variability of the main rivers in the Mediterranean Sea basin
Uvo, C. B.; Gualdi, S.; Scoccimarro, E.; Bellucci, A.
Lund University, TVRL, Lund, Sweden (cintia.uvo@tvrl.lth.se)

18:45–19:00: EMS2009-424

Sensitivity of river discharge to the quality of external meteorological forcings
Materia, S.; Dirmeyer, P.; Guo, Z.; Alessandri, A.; Navarra, A.
CMCC - Centro Euro-Mediterraneo per i Cambiamenti Climatici, Numerical Applications and Scenarios (ANS), Bologna, Italy

END OF ORAL PROGRAMME AW4

AW6 Atmospheric measurements from local to regional scale: Networks, scintillometers, airborne platforms, and remote sensing techniques

Convener: F. Beyrich

Co-Conveners: F. C. Bosveld; H. de Bruin

Lecture Room: Guy der Megreditchian

08:30–10:30

Chairperson: F. Bosveld

08:30–09:00: EMS2009-296

The turbulence underside of the West African Monsoon (solicited)
Lothon, M.; Lohou, F.; Saïd, F.; Campistron, B.; Canut, G.; Couvreux, F.; Durand, P.; Kalapureddy, M. C.; Lee, Y.; Madougou, S.; Serça, D.
Laboratoire d'Aérologie, CNRS UMR-5560, University of Toulouse, Toulouse, France

09:00–09:15: EMS2009-458

Simultaneous profiling of the Arctic Atmospheric Boundary Layer
Mayer, S.; Jonassen, M.; Reuder, J.
University of Bergen, Geophysical Institute, Bergen, Norway (stephanie.mayer@gfi.uib.no)

09:15–09:30: EMS2009-64

Measuring Vertical Profiles of Wind, Temperature and Humidity within the Atmospheric Boundary Layer using the Research UAVs 'M2AV Carolo'
Martin, S.; Bange, J.
Institute of Aerospace Systems, Technische Universität Braunschweig, Germany (sabrina.martin@tu-bs.de)

09:30–09:45: EMS2009-174

Validation of scintillometer measurements over a heterogeneous landscape: The LITFASS-2009 Experiment
Beyrich, F.; Bange, J.; Hartogensis, O.; Raasch, S.
Deutscher Wetterdienst, Meteorologisches Observatorium Lindenberg, Tauche - OT Lindenberg, Germany (frank.beyrich@dwd.de)

09:45–10:00: EMS2009-413

Regionalization of turbulent fluxes in an inhomogeneous landscape by combining aircraft measurements and footprint analysis
El-Madany, T.; Geiß, H.; Schmidt, A.; Klemm, O.
Institute for Landscape Ecology, University of Münster, Robert-Koch-Straße 26, 48149, Münster, Germany (t_elma02@uni-muenster.de)

10:00–10:15: EMS2009-201

A new look to land-atmosphere interactions with water vapour and temperature Raman lidar
Froidevaux, M.; Simeonov, V.; Higgins, C.; Ristori, P.; Serikov, I.; Van den Bergh, H.; Parlange, M.B.
EPFL Swiss Federal Institute of Technology at Lausanne, School of Architecture, Civil and Environmental Engineering, Lausanne, Switzerland (martin.froidevaux@epfl.ch)

10:15–10:30: EMS2009-434

Turbulence structure of the convective boundary layer by means of Doppler lidar measurements
Arnold, K.; Wieser, A.; Träumner, K.; Kalthoff, N.; Corsmeier, U.; Hankers, R.; Kottmeier, Ch.
Institut für Meteorologie und Klimaforschung, Karlsruhe Institute of Technology (KIT)

10:30 Coffee Break

11:00–13:00

11:00–11:15: EMS2009-337

On temporal spectra of scintillometers
Evans, J.G.; de Bruin, H.A.R.
Centre for Ecology Hydrology, Wallingford, OX10 8BB United Kingdom (jge@ceh.ac.uk)

11:15–11:30: EMS2009-286

A scintillometer variance approach to measure vertical scalar fluxes
de Bruin, H.A.R.; Hartogensis, O.K.
Freelance consultant, Bilthoven, the Netherlands (hardb@xs4all.nl)

11:30–11:45: EMS2009-432

The impact of Humidity Fluctuations on Sensible Heat Fluxes Measured with Scintillometers
Higgins, C.; Froidevaux, M.; Parlange, M.B.
EPFL School Of Architecture, Civil and Environmental Engineering, Lausanne, Switzerland (chad.higgins@epfl.ch)

11:45–12:00: EMS2009-341

The TNO 7-wavelength transmissometer
De Jong, A.N.; Kusmierczyk-Michulec, J.T.; Fritz, P.J.; Cohen, L.H.; Van Eijk, A.M.J.
 TNO Defense, Security and Safety, POB 96864, 2509 JG The Hague, The Netherlands (lex.vaneijk@tno.nl)

12:00–12:15: EMS2009-303

Humidity quantification over the Mediterranean Sea by GPS on board a ship : methodology and validation
Boniface, K.; Rocken, C.; Champollion, C.; Chery, J.; Collard, P.; Doerflinger, E.; Ducrocq, V.; Jaubert, G.; Masson, F.
 Géosciences Montpellier, UMII / CNRS - UMR 5243, Montpellier Cedex 5, France (karen.boniface@gm.univ-montp2.fr)

12:15–12:30: EMS2009-109

Airborne VNIR-SWIR hyperspectral remote sensing for environmental urban mapping, application to Nantes, France
Mestayer, P.; Roy, R.; Launeau, P.; Andrieu, H.; Rouaud, J.-M.; Rodriguez, F.
 Institut de Recherche Sciences et Techniques de la Ville, IRSTV, FR CNRS 2488, Nantes, France, Laboratoire de Mécanique des Fluides, UMR CNRS 6598, Ecole Centrale de Nantes, BP 92101, 44321 Nantes cedex 3, France (patrice.mestayer@ec-nantes.fr)

12:30–12:45: EMS2009-189

Ultra-high-resolution turbulence, flux, and wind profiles using new acoustic profiler designs
Bradley, S. G.; von Hünerbein, S.
 Acoustics Research Centre, University of Salford, Salford, M5 4WT, UK, Physics Department, University of Auckland, Auckland, New Zealand (s.bradley@auckland.ac.nz)

12:45–13:00: EMS2009-126

Reliability of Turbulence Measurements by Radars
Dehghan, A.; Hocking, W.K.
 Department of Physics and Astronomy, University of Western Ontario, London, Ontario, Canada

13:00 Lunch Break**14:00–16:00****14:00–14:30: EMS2009-80**

Quantifying green water flows for improved Integrated Land and Water Resource Management under the National Water Act of South Africa: A review on hydrological research in South Africa. (solicited)
Jarmain, C.; Everson, C.S.; Gush, M.B.; Clulow, A.D.
 CSIR, Natural Resources and the Environment Unit, Stellenbosch, South Africa (cjarmain@csir.co.za)

14:30–14:45: EMS2009-572

Scintillometry, Eddy Covariance and Remote Sensing for Evapotranspiration Mapping in West-Africa
Falk, U.; Conrad, C.; Hendrickx, J. M. H.; Vlek, P. L. G.
 University Bonn, Center for Development Research ZEF, Bonn, Germany (ulrike.falk@gmail.com)

14:45–15:00: EMS2009-330

Evapotranspiration Measurements over Different Surfaces in the Heihe River Basin
Xu, Z.W.; Liu, S.M.; Bai, J.
 State Key Laboratory of Remote Sensing Science, School of Geography, Beijing Normal University, Beijing, China (smliu@bnu.edu.cn)

15:00–15:15: EMS2009-395

Applicability of a displaced-beam laser scintillometer in a sparse tall Mediterranean vegetation
Agnese, C.; Cammalleri, C.; D'Urso, G.; Georgiadis, T.; La Loggia, G.; Sciortino, M.; de Bruin, H.A.R.
 Dept. of Engineering and Agro-Forestal Technology (ITAF), Università degli Studi di Palermo, Palermo, Italy

15:15–15:30: EMS2009-127

Integrated sensible and latent heat surface fluxes from scintillometry
Irvine, M.R.; Lagouarde, J.P.; Dayau, S.; Garrigou, D.
 INRA-EPHYSE Villenave d'Ornon, France (irvine@bordeaux.inra.fr)

15:30–15:45: EMS2009-155

Combining scintillometry and scalar turbulence measurements to obtain minute interval mass fluxes of H₂O and CO₂
Hartogensis, O.K.; Van Dithner, D.; De Bruin, H.A.R.; Moene, A.F.; Van Kesteren, A.J.H.; Schüttemeyer, D.; Graf, A.
 Wageningen University, Meteorology and Air Quality, Wageningen, Netherlands (oscar.hartogensis@wur.nl)

15:45–16:00: EMS2009-42

Up-scaling methods of greenhouse gas fluxes between the soil and the atmosphere using a measuring tunnel as well as open-path measurement techniques for the flux-gradient method
Emeis, S.; Schäfer, K.; Jahn, C.; Wiworra, M.; von der Heide, C.; Böttcher, J.; Deurer, M.; Weymann, D.; Schleichardt, A.; Raabe, A.
 Forschungszentrum Karlsruhe GmbH, IMK-IFU, Garmisch-Partenkirchen, Germany (klaus.schaefer@imk.fzk.de)

16:00 Coffee Break**17:00–19:00**
Chairperson: F. Beyrich**17:00–17:15: EMS2009-116**

The operational radar based quantitative precipitation estimation in Denmark and its responses to range dependent raingauge adjustment
He, X.; Vejen, F.
 Danish Meteorological Institute, Copenhagen, Denmark (xh@dmi.dk)

17:15–17:30: EMS2009-480

MICRORADARNET: An innovative high-resolution low-cost X-band weather radar network
Turso, S.; Zambotto, M.; Gabella, M.; Orione, F.; Notarpietro, R.; Perona, G.
 Politecnico di Torino, Electronics Department, Remote Sensing Group, Turin, Italy

17:30–17:45: EMS2009-28

A hybrid numerical prediction scheme for solar radiation estimation in un-gauged catchments.
Shamim, M. A.; Bray, M.; Ishak, A. M.; Remesan, R.; Han, D.
University of Bristol, WEMRC, Civil Engineering, Bristol, United Kingdom (mali.shamim@bristol.ac.uk)

17:45–18:00: EMS2009-375

Operational determination of air pollution dispersion parameters
Hennemuth, B.; Kirtzel, H.-J.
Consulting Meteorologist, Hamburg, Germany (barbara.hennemuth@zmaw.de)

18:00–18:15: EMS2009-582

The Use of Scintillation for Astronomical Site Testing
Tokovinin, A.; Sarazin, M. S.
Cerro Tololo Inter-American Observatory , Chile (atokovinin@ctio.noao.edu)

18:15–18:30: EMS2009-335

An automated data quality control procedure applied to a mesoscale meteorological network
Lussana, C.; Ranci, M.
ARPA Lombardia, Servizio Meteorologico Regionale, Milano, Italy (c.lussana@arpalombardia.it)

18:30–18:45: EMS2009-453

SwissMetNet: operational quality control on raw data of the new automatic meteorological ground-based network of Switzerland
Landi, B.; Roulet, Y.-A.; Calpini, B.
MeteoSwiss - Federal Office of Meteorology and Climatology, Switzerland

18:45–19:00: EMS2009-370

Gap filling procedures for surface flux observations at the grassland site Cabauw.
Bosveld, F.C.
Royal Netherlands Meteorological Institute, De Bilt, The Netherlands (Fred.Bosveld@knmi.nl)

END OF ORAL PROGRAMME AW6

AW12 Phenology and Agrometeorology

Convener: E. Koch

Co-Conveners: J. Eitzinger; B. Lalic

Lecture Room: Espace Météo

11:00–13:00

Chairperson: E. Koch

11:00–11:15: EMS2009-173

Regional aspects of climate change impacts and related adaptation options in European agriculture
Eitzinger, J.
Univ. of Natural Resources, Applied Life Science, WAU, Vienna, Austria (josef.eitzinger@boku.ac.at)

11:15–11:30: EMS2009-399

Climate change impacts on cereal crops in Northeast Bulgaria
Alexandrov, V.
National Institute of Meteorology and Hydrology, Department of Meteorology, Sofia, Bulgaria (Vesselin.Alexandrov@meteo.bg)

11:30–11:45: EMS2009-19

Application of Perpendicular Drought Indices as a Dynamic Drought Monitoring Method
Shahabfar, A.; Eitzinger, J.
University of Natural Resources and Applied Life Sciences (BOKU), Institute of Meteorology (BOKU-Met), Department of Water, Atmosphere and Environment (WAU), Vienna, Austria (alireza.shahabfar@boku.ac.at, josef.eitzinger@boku.ac.at)

11:45–12:00: EMS2009-247

COST 734-CLIVAGRI: Impacts of Climate change and Variability on European Agriculture
Orlandini, S.; Nejedlik, P.; Eitzinger, J.; Alexandrov, V.; Toulios, L.; Kajfez Bogataj, L.; Calanca, P.; Trnka, M.; Olesen, J.E.
University of Firenze, Agronomy and Land Management, Firenze, Italy (simone.orlandini@unifi.it)

12:00–12:15: EMS2009-108

Homogeneous regions in Italy: an analysis of the mean and extreme climate characteristics and their impact on agriculture.
Baldi, M.; Coccimiglio, P.
Institute of Biometeorology, Ibmibet-CNR, Rome (Italy) (m.baldi@ibimet.cnr.it)

12:15–12:30: EMS2009-138

Water balance components and climate change in Croatia
Vucetic, V.
Meteorological and Hydrological Service of Croatia, Zagreb, (vucetic@cirus.dhz.hr)

12:30–12:45: EMS2009-194

Climate Change Case Study for Hungary using Soil Moisture Data
Dunkel, Z.; Bella, Sz.
OMSZ - Hungarian Meteorological Service, Budapest, Hungary (dunkel.z@met.hu, bella.sz@met.hu)

12:45–13:00: EMS2009-195

Categorisation of Drought Indices Used in Agricultural Meteorology
Dunkel, Z.
OMSZ - Hungarian Meteorological Service, Budapest, Hungary (dunkel.z@met.hu)

13:00 Lunch Break

14:00–16:00

Chairperson: J. Eitzinger

14:00–14:15: EMS2009-208

Soil Moisture and Temperature Changes in the Czech Republic: In Situ Data.

Virág, M.; Mozny, M.; Nekovar, J.; Trnka, M.; Zalud, Z.; Hlavinka, P.

AS Consulting, METEO systems, 27601 Melnik, Czech Republic, meteo@asconsult.cz

14:15–14:30: EMS2009-225

Trend analysis of long frosts series in Spain and Italy

Di Stefano, V.; Mestre Barcelo, A; Orlandini, S
university, Department of Agronomy and Land Management, florence, Italy (valentina.distefano@unifi.it)

14:30–14:45: EMS2009-354

The influence of synoptic patterns on wild plant phenology in the mountainous areas of Central Europe

Nejedlik, P.; Kott, I.; Nekovar, J.; Tekusova, M.
Slovak Hydrometeorological Institute, Meteorological service, Bratislava, Slovakia (nejedlik@yahoo.com)

14:45–15:00: EMS2009-503

Discussing a method for calculating leaf wetness duration in fields of potato and in apple orchards

Sivertsen, T.H.; Nærstad, R.
Norwegian Institute for Agricultural and Env. Res., Aas, Norway (thsivert@online.no)

15:00–15:15: EMS2009-542

Climate change and impact on phenological development of some trees in Bulgaria

Kazandjiev, V.

National Institute of Meteorology and Hydrology, BAS
1784 Sofia, 66 Tsarigradsko shausse, Bulgaria
(Valentin.Kazandjiev@meteo.bg)

15:15–15:30: EMS2009-543

Climate change, agroclimatic resources and agroclimatic zoning of agriculture in Bulgaria

Kazandjiev, V.; Moteva, M.; Georgieva, V.

National Institute of Meteorology and Hydrology, BAS
1784 Sofia, 66 Tsarigradsko shausse, Bulgaria
(Valentin.Kazandjiev@meteo.bg)

15:30–15:45: EMS2009-45

Evaluation of selected wild plants flowering season 1991 - 2009 (1991 - 2000 & 2001 - 2009)

Hajkova, L.; Nekovar, J.; Novak, M.; Richterova, D.
Czech Hydrometeorological Institute, Czechia
(hajkova@chmi.cz)

15:45–16:00: EMS2009-425

Tendencies of phenological spring season shifting start date in Poland according to changes of vegetative period duration

Jatczak, K.; Walawender, J.

Meteorology Centre, Institute of Meteorology and Water Management, Warsaw, Poland
(katarzyna.jatczak@imgw.pl)

END OF ORAL PROGRAMME AW12

Communication and Education

CE1 Media and Communication

Convener: T. Cegnar

Co-Convener: G. Fleming

Lecture Room: Amphithéâtre

08:30–10:30

Chairperson: T. Cegnar

08:30–08:40

Opening the debate on climate change communication

08:40–09:10: EMS2009-26

A need for a code of ethics in science communication?
(solicited)

Benestad, R.E.

Norwegian Meteorological Institute, Climate, Oslo,
Norway (rasmus.benestad@met.no)

09:10–09:35: EMS2009-631

Communicating Uncertainties on Climate Change

Planton, S.

Météo France, Toulouse, France
(serge.planton@meteo.fr)

09:35–09:50: EMS2009-534

Environmental agency aiming to raise the awareness of
people about the environment

Cegnar, T.

Environmental Agency of Slovenia, Ljubljana, Slovenia
(tanja.cegnar@gov.si)

09:50–10:05

6th International Weather Forum

Daudier, M.

French Meteorological Society
(morgane.daudier@meteo.fr, claude.pastre@free.fr)

10:05–10:20: EMS2009-525

Meteorologica, multilanguages Quarterly Journal of Friuli
Venezia Giulia Meteorological Union

Colucci, R.R.; Stel, F.; Virgilio, M.

CNR ISMAR - Institute for Marine Sciences of Trieste,
National Research Council of Italy . Trieste, Italy
(r.colucci@ts.ismar.cnr.it), UMFVG - Unione
Meteorologica del Friuli Venezia Giulia, ONLUS

10:20–10:30

Wrapping Up

10:30 Coffee Break

11:00–13:00

Chairperson: G. Fleming

11:00–11:20

Esa and the media

Meissner, R.

ESA, Robert.Meissner@esa.int

11:20–11:35

Public Weather Services: Enhanced Communication
Skills for Improved Service Delivery by S.W. Muchemi

11:35–11:50: EMS2009-157

Medium Range Forecasts Representation (and Long
Range Forecasts?)

Vincendon, J.-C.

METEO-FRANCE, Météorologue, Toulouse, France
(jean-christophe.vincendon@meteo.fr)

11:50–12:05: EMS2009-507

The Climatic Observatory of the Karst (O.C.C.), a
scientific facility within an important tourist framework

Colucci, R.R.; Micheletti, S.; Fabbo, R.

Institute for Marine Sciences - Trieste, National
Research Council of Italy - CNR, ISMAR. Trieste, Italy
(r.colucci@ts.ismar.cnr.it), Friuli Venezia Giulia
Meteorological Union - UMFVG. Italy

12:05–12:20: EMS2009-100

Comparison of Weather Shows in Eastern Europe

Najman, M.

Meteopress, s.r.o., Marketing, Prague, Czech Republic
(marketing@meteopress.cz)

12:20–12:35

TV weather - providing timely and local information

Trobec, J.

KELO-TV, (jay@trobek.net)

12:35–12:45

Awards

12:45–13:00: EMS2009-538

Do TV weather presenters networks make a difference?
(solicited)

Fleming, G.; Cegnar, T.

Met Éireann

END OF ORAL PROGRAMME CE1

CE2 Climatological and meteorological information in the context of decision making

Convener: I. Meinke

Co-Convener: A. Spekat

Lecture Room: Espace Météo

17:00–19:00

Chairperson: A. Spekat

17:00–17:30: EMS2009-191

Climate change at local level : let's look around downscaling (solicited)

Ravenel, H.; Jan, J.; Moisselin, J.M.

Météo-France, Direction ouest, Rennes Cédex 9, France
(hugues.ravenel@meteo.fr)

17:30–17:45: EMS2009-615

Climate projections in the force field of adaptation strategies

Spekat, A.; Kreienkamp, F.

Climate Environment Consulting Potsdam GmbH
(arne.spekat@cec-potsdam.de)

17:45–18:00: EMS2009-544

The MeteoSalute Project: a way adopted by the Tuscany Region (Italy) to support the Health System with biometeorological forecast

Petralli, M.; Morabito, M.; Crisci, A.; Torrigiani Malaspina, T.; Capecchi, V.; Bartolini, G.; Cecchi, L.; Gensini, G. F.; Maracchi, G.; Orlandini, S.

Interdepartmental Centre of Bioclimatology, University of Florence, Florence, Italy

18:00–18:15: EMS2009-619

Environmental agency providing policy relevant information (solicited)

Cegnar, T.; Urbancic, J.

Agencija Republike Slovenije Za Okolje (ARSO, Environmental Agency of the Republic of Slovenia) - tanja.cegnar@gov.si

18:15–18:30: EMS2009-166

Cooperation between public administration and scientific research in raising awareness on the role of urban planning in responding to climate change in Portugal

Alcoforado, M.J.; Campos, V.; Oliveira, S.; Andrade, H.; Festas, M.J.

University of Lisbon, Centre For Geographical Studies, Geography, Lisbon, Portugal (mjoao.alc@gmail.com)

18:30–18:40

Poster Presentation

18:40–19:00

Discussion

END OF ORAL PROGRAMME CE2

Climatology: New services responding to climate change

CL2 Climate change assessments of trends and variability

Convener: A. M. G. Klein Tank

Co-Convener: R. Heino

Lecture Room: Amphithéâtre

17:00–19:00

Chairperson: R Heino

Part One

17:00–17:30: EMS2009-259

How reliable are the estimates of climate variability in extreme precipitation? (solicited)

Zolina, O.; Simmer, C.; Gulev, S.

Meteorological Institute University of Bonn, Bonn, Germany (ozolina@uni-bonn.de)

17:30–17:45: EMS2009-313

Calabria Daily Rainfall Trends over 1970-2006

Federico, S.; Avolio, E; Sempreviva, AM; Pasqualoni, L; De Leo, L; Calidonna, CR; Bellecci, C

Institute of Atmospheric Sciences and Climate, ISAC-CNR, Lamezia Terme, Italy (s.federico@isac.cnr.it)

17:45–18:00: EMS2009-517

Multi-scale investigation of recent trends in precipitation in Portugal

de Lima, M.I.P.; Coelho, M.F.E.S.; de Lima, J.L.M.P.

Institute of Marine Research - Marine and Environmental Research Centre, Portugal, Forestry Department/ESAC, Polytechnic Institute of Coimbra, Portugal (iplima@esac.pt)

18:00–18:15: EMS2009-384

Weather conditions suitable for spring floods in North Eurasia and their frequency during the last decades

Shmakin, A.B.; Popova, V.V.

Institute of Geography, Laboratory of Climatology, Moscow, Russian Federation (andrey_shmakin@mail15.com)

18:15–18:30: EMS2009-141

Dry spells and droughts in Poland, 1951-2006

Wibig, J.

University of Lodz, Meteorology and Climatology, Lodz, Poland (zameteo@uni.lodz.pl)

18:30–18:45: EMS2009-575

Potential impact of climate change on fire meteorological danger in France : observed trends and projections

Cloppet, E.; Regimbeau, M.

Meteo-France, Department of Agrometeorology, Toulouse, France (emmanuel.cloppet@meteo.fr)

18:45–19:00: EMS2009-339

Recent annual and seasonal temperature trends for a Trans-Pyrenean region, 1950-2008

Prohom, M. J.; Aguilar, E.; Esteban, P.; Mestre, O.

Meteorological Service of Catalonia, Area of Climatology, Barcelona, Catalonia, Spain (mprohom@meteo.cat)

ORAL PROGRAMME CL2 CONTINUES FRIDAY, 08:30

CL3/NWP4 Climate prediction and scenarios from seasons to century (co-organized)

Convener: C. Appenzeller

Co-Conveners: J.-P. Céron; M. Deque; CM Goodess; A. Troccoli

Lecture Room: Prud'homme

08:30–10:30

Chairperson: C. Appenzeller

08:30–08:45: EMS2009-522

Potential seasonal predictability associated with wintertime Arctic sea-ice

Orsolini, Y. J.; Senan, R.; Benestad, R.E.; Melsom, A.; Balmaseda, M. A.

Norwegian Institute for Air Research, Kjeller, Norway

08:45–09:00: EMS2009-485

Climate Variability in the Stratosphere during the 20th Century

Fischer, A.; Brönnimann, S.; Rozanov, E.; Schraner, M. Federal Office of Meteorology and Climatology, MeteoSwiss, Zurich, Switzerland (andreas.fischer@meteoswiss.ch)

09:00–09:15: EMS2009-314

Uncertainties in multi-model climate projections

Dubrovsky, M.

Institute of Atmospheric Physics, Prague, Czech Republic (dub@ufa.cas.cz)

09:15–09:30: EMS2009-512

On the Validation of ENSEMBLES Regional Climate Simulations in Terms of Reproducing Annual Cycle

Halenka, T.; Skalak, P.; Huszar, P.; Belda, M.

Charles University in Prague, Fac. of Math. Physics, Dept. of Meteorology and Environment Protection, Prague, Czech Republic (tomas.halenka@mff.cuni.cz)

09:30–09:45: EMS2009-393

Statistical downscaling of GCM scenarios - what can we learn from using different models as forcing sources?

Spekat, A.; Kreienkamp, F.; Enke, W.

Climate and Environment Consulting Potsdam GmbH, Potsdam, Germany (arne.spekat@cec-potsdam.de)

09:45–10:00: EMS2009-133

A comparative extended validation of statistical downscaling and regional climate models on a common dense grid in Central Europe

Huth, R.; Miksovský, J.; Stepánek, P.

Institute of Atmospheric Physics, Dept. of Climatology, Prague 4, Czech Republic (huth@ufa.cas.cz)

10:00–10:15: EMS2009-34

High resolution experiments with the ALADIN-Climate regional climate model

Csima, G.

HMS, NMO, Budapest, Hungary (csima.g@met.hu)

10:15–10:30: EMS2009-319

Application of a regional climate model mini-ensemble for the Carpathian Basin

Horanyi, A.; Csima, G.; Szabo, P.; Szepszo, G.; Bartholy, J.; Hunyady, A.; Pieczka, I.; Pongracz, R.; Torma, Cs.

Hungarian Meteorological Service (horanyi.a@met.hu)

10:30 Coffee Break**11:00–12:30**

Chairperson: M. Déqué

11:00–11:15: EMS2009-371

The evolution of extreme precipitations in high resolution scenarios over France

Colin, J.; Déqué, M.; Somot, S.

CNRM/GAME, Météo-France, Toulouse, France (jeanne.colin@cnrm.meteo.fr)

11:15–11:30: EMS2009-217

High precipitating events in Mediterranean regions: a climate downscaling approach

Beaulant, A.-L.; Nuissier, N.; Joly, B.; Ducrocq, V.; Joly, A.; Somot, S.; Sevault, F.; Deque, M.

Meteo-France/CNRM, Toulouse Cedex, France (annelise.beaulant@cnrm.meteo.fr)

11:30–11:45: EMS2009-387

Moroccan precipitation in a regional climate change simulation, evaluating a statistical downscaling approach

Driouech, F.; Déqué, M.; Sánchez-Gómez, E.

Direction de la Météorologie Nationale/CNRM, Casablanca, Maroc (driouechfatima@yahoo.fr)

11:45–12:00: EMS2009-142

Extreme dryness events in Poland, their synoptic scale drivers and trial of downscaling

Wibig, J.

University of Lodz, Meteorology and Climatology, Lodz, Poland (zameteo@uni.lodz.pl)

12:00–12:15: EMS2009-516

Regional Climate Change Scenarios in High Resolution for Impact Assessment in Central and Eastern Europe - Project CECILIA

Halenka, T.

Charles University in Prague, Fac. of Math. Physics, Dept. of Meteorology and Environment Protection, Prague, Czech Republic (tomas.halenka@mff.cuni.cz)

12:15–12:30: EMS2009-27

Improving the communication of local climate scenarios and uncertainties

Benestad, R.E.

Norwegian Meteorological Institute, Climate, Oslo, Norway (rasmus.benestad@met.no)

12:30 Lunch Break**14:00–16:00**

Chairperson: N.N.

Lecture Room: Amphithéâtre

14:00–14:15: EMS2009-466

Diagnosis of spatial distribution and severity of mid-latitude storms in an ensemble of European AOGCMs under anthropogenic climate change

Leckebusch, G.C.; Donat, M.; Renggli, D.; Ulbrich, U.; Pinto, J.G.

Freie Universität Berlin, Institut für Meteorologie, Berlin, Germany (gcl@met.fu-berlin.de)

14:15–14:30: EMS2009-465

European winter storm losses in relation to extreme wind speeds in a multi-model ensemble of GCM and RCM simulations

Donat, M.G.; Leckebusch, G.C.; Wild, S.; Ulbrich, U.

Freie Universität Berlin, Institut für Meteorologie, Berlin, Germany (markus.donat@met.fu-berlin.de)

14:30–14:45: EMS2009-119

The statistical uncertainty of changes in winter storms over the North Atlantic and Europe in an ensemble of transient climate simulations

Pinto, J.G.; Della-Marta, P.M.

Institute for Geophysics and Meteorology, University of Cologne, Germany (jpinto@meteo.uni-koeln.de)

14:45–15:00: EMS2009-553

Downscaling of seasonal forecasts and possible application to hydro-power production forecasts in France

Dubus, L.; Berthelot, M; Qu, Z; Gailhard, J

EDF R

D / MFEE, Applied Meteorology and Atmospheric Environment, CHATOU CEDEX, France (laurent.dubus@edf.fr)

15:00–15:15: EMS2009-571

The future bioclimatic conditions in Austria under the aspect of climate change scenarios

Rudel, E.; Matzarakis, A.; Neumke, R.; Endler, Ch.; Koch, E.

ZAMG, Vienna, Austria, ernest.rudel@zamg.ac.at)

15:15–16:00

Oral introductions of posters

Applications of Meteorology

AM3 Operational Oceanography

Convener: P. Baüer

Poster Area: Area Chapiteau

Chairperson: P. Baüer

Attendance Time: 16:00–17:00

P25: EMS2009-234

Lagrangian Coherent Structures and drifter experiments in a tidal driven flow in the Ria de Arousa (Galicia, Spain)
Pérez-Muñozuri, V.; Huhn, F.; Montero, P.

Group of Nonlinear Physics, Faculty of Physics, University of Santiago de Compostela, E-15782 Santiago de Compostela, Spain

P26: EMS2009-505

Upwelling conditions at the Ria de Aveiro (NW Portugal)
Iglesias, I.; Alvarez, I.; Dias, J.M.; Vaz, N.; deCastro, M. Universidad de Vigo, Fisica Aplicada, Ourense, Spain (ialvarez@uvigo.es)

END OF POSTER PROGRAMME AM3

Atmosphere and the Water Cycle

AW1 Dynamical Meteorology

Convener: T. Frisia

Co-Conveners: F. Lunkeit; P. M. Rutledge

Poster Area: Area Chapiteau

Chairperson: T. Frisia

Attendance Time: 16:00–17:00

P27: EMS2009-493

The Energy-Vorticity Adjustment (EVA) Principle of the Atmosphere
Schartner, T.; Névir, P.; Leckebusch, G.C.; Ulbrich, U. Freie Universität Berlin, Berlin, Germany (thomas.schartner@met.fu-berlin.de)

P28: EMS2009-463

A North Atlantic circulation wavelet analysis
Andrade, C.; Santos, J. A.; Corte-Real, J. Instituto Politécnico de Tomar, Escola Superior de Gestão de Tomar, Área Interdepartamental de Matemática, Tomar, Portugal (c.andrade@ipt.pt)

P29: EMS2009-104

Two Dimension Larger-Scale Stability and Subtropical High Zonal Behaviours
Wang, W.-L.; Wang, Z.-W.; Cui, C.-G.; Xie, Y.-Q. Wuhan Regional Climate Centre, Wuhan, 430074, China (xiaowanw2002@yahoo.com)

P30: EMS2009-233

The essential dynamical ingredients leading to the explosive growth stage of the European wind storm "Lothar"

Rivière, G.; Arbogast, P.; Maynard, K.; Joly, A. CNRM-GAME, Météo-France/CNRS, Toulouse, France (gwenda.riviere@meteo.fr)

P31: EMS2009-153

Wind profiler observations of a sting jet

Vaughan, G.; Parton, G. University of Manchester, School of Earth, Atmospheric and Environmental Sciences, Manchester, United Kingdom (geraint.vaughan@manchester.ac.uk)

P32: EMS2009-56

High-Resolution Simulations of Convective Cold Pools over the Northwestern Sahara

Knippertz, P.; Trentmann, J.; Seifert, A. University of Leeds, Institute for Climate and Atmospheric Science, Leeds, UK (p.knippertz@leeds.ac.uk)

P33: EMS2009-178

Atmospheric forcing in the occurrence of precipitation extremes in Iberia: comparison between the eastern and western sectors

Santos, J. A.; Mendes, A. R. CITAB, University of Tras-os-Montes e Alto Douro, Vila Real, Portugal (jsantos@utad.pt)

P34: EMS2009-436

Extreme precipitation events in the eastern Mediterranean and their relation to dynamical forcing factors under recent and anthropogenic climate conditions

Leckebusch, G.C.; Müller, M.; Ulbrich, U. Freie Universität Berlin, Institut für Meteorologie, Berlin, Germany (gcl@met.fu-berlin.de)

P35: EMS2009-361

Solar activity influence on the interaction between the lower equatorial ionosphere and the middle atmosphere according to rocket sounding

Vanina-Dart, L. Space Research Institute, Earth remote sensing, Moscow, Russian Federation (vandart@seeingear.org)

END OF POSTER PROGRAMME AW1

AW2 Cyclone Tracking Algorithms

Convener: R. Blender
Co-Conveners: C. C. Raible; H. Wernli
Poster Area: Area Chapiteau
Chairperson: C. C. Raible
Attendance Time: 16:00–17:00

P36: EMS2009-171

Comparing different methods to detect and track Northern Hemisphere midlatitude cyclones
Raible, C. C.; Della-Marta, P.; Schwierz, C.; Wernli, H.;
 Blender, R.
 University of Bern, Climate and Environmental Physics,
 Bern, Switzerland (raible@climate.unibe.ch), Oeschger
 Centre for Climate Change Research, University of Bern,
 Switzerland

P37: EMS2009-228

The spatial distribution and evolution characteristics of North Atlantic cyclones
Dacre, H.; Gray, S.
 University of Reading, Department of Meteorology,
 Reading, United Kingdom (h.f.dacre@reading.ac.uk)

P38: EMS2009-318

Storm activity in North Atlantic and precipitation anomalies in European region during winter seasons
Vyazilova, N. A.; Vyazilova, A. E.
 Russian Research Institute of Hydrometeorological Information - World Data Center, Obrinsk, Russian Federation (nav@meteo.ru)

P39: EMS2009-489

Evaluation of cyclone track and frequency changes in the western Mediterranean region
Bartholy, J.; Pongracz, R.; Pattantus-Abraham, M.
 Eotvos Lorand University, Department of Meteorology,
 Budapest, Hungary (bari@ludens.elte.hu)

END OF POSTER PROGRAMME AW2

AW4 Large scale air-sea and land-atmosphere interaction processes and their influence on the European and Mediterranean regional climate

Convener: S. Gualdi
Co-Conveners: W. May; S. Somot
Poster Area: Area Chapiteau
Chairperson(s): S. Somot
Attendance Time: 16:00–17:00

P53: EMS2009-25

About thermal structure of the mixing layer of the Black Sea under non-stationary atmospheric forcing
Kvaratskhelia, D.U.; Demetashvili, D.I.
 M. Nodia Institute of Geophysics, Department of Mathematical Modeling of Geophysical Processes in the Sea and Atmosphere, Tbilisi, Georgia , 0193,
 (dikas709@yahoo.com)

P54: EMS2009-221

Teleconnections between the Indian Ocean Dipole Mode and climate variability over the Eastern Mediterranean Sea, as simulated by a coupled General Circulation Model

Roxy, M.; Gualdi, S.
 CMCC, Bologna, Italy (roxy.mathew@cmcc.it)

P55: EMS2009-29

Evaluating the effect of Mediterranean oscillation (MO) on the variability of seasonal precipitation over North West of Iran

Pourasghar, F.; Ghaemi, H.
 Climatology group, Geography Department, Tabriz University, Tabriz, Iran (farnaz_pourasghar@yahoo.com)

P56: EMS2009-105

Atmospheric modes influence on Sea Surface Temperature variability along the northwestern coast of the Iberian Peninsula from 1985 to 2006

Iglesias, I.; deCastro, M.; Gómez-Gesteira, M.; Alvarez, I.; Crespo, A.J.C.

P57: EMS2009-260

The role of moisture advection from the North Atlantic basin to extreme precipitation events over the Western Mediterranean

Ulbrich, S.; Pinto, J.G.; Rudari, R.; Parodi, A.
 Institute for Geophysics and Meteorology, University of Cologne, Germany (ulbrich@meteo.uni-koeln.de)

P58: EMS2009-469

Assessment of climate change for the Mediterranean basin with a regional coupled model

Li, L.; Casado, A.; Musat, I.
 CNRS, LMD, Paris, France (li@lmd.jussieu.fr)

P59: EMS2009-549

The Hydrological Cycle in the Mediterranean Basin Simulated with a global AOGCM coupled with an interactive high-resolution model of the Mediterranean Sea

Gualdi, S.; Scoccimarro, E.; Bellucci, A.; Sanna, A.; Oddo, P.
 Istituto Nazionale di Geofisica e Vulcanologia, INGV, Bologna, Italy (gualdi@bo.ingv.it)

P60: EMS2009-147

The role of ocean dynamics on NAO variability under global warming conditions

Bellucci, A.; Gualdi, S.; Scoccimarro, E.; Navarra, A.
 Centro Euro-Mediterraneo per i Cambiamenti Climatici (CMCC), Bologna, Italy

END OF POSTER PROGRAMME AW4

AW7 Atmospheric hazards

Convener: F. Stel

Co-Convener: D. Gaiotti

Poster Area: Area Chapiteau

Chairpersons: D. Gaiotti and F. Stel

Attendance Time: 16:00–17:00

P77: EMS2009-164

Temperature extremes in Western Europe and associated atmospheric anomalies

Santos, J. A.; Carvalho, V. A.

CITAB, University of Tras-os-Montes e Alto Douro, Vila Real, Portugal (jsantos@utad.pt)

P78: EMS2009-363

Synoptic characteristics of extreme heat episodes in the Basque Country

Egaña, J.; Gaztelumendi, S; Otxoa de Alda, K; Gelpi, I R Meteorology Division, EUVE Foundation, Vitoria-Gasteiz, Álava, (Spain), Basque Meteorology Agency (EUSKALMET) Miñano, Álava, (Spain).

P79: EMS2009-76

Sensitivity of a Mediterranean 'hurricane' to sea surface temperature

Miglietta, M. M.; Moscatello, A.; Rotunno, R.

ISAC-CNR, Padua, Italy

P80: EMS2009-121

The European storm Kyrill in January 2007: synoptic evolution, meteorological impacts and some considerations with respect to climate change

Pinto, J.G.; Fink, A.H.; Brücher, T.; Ermert, V.; Krüger, A. Institute for Geophysics and Meteorology, University of Cologne, Germany (jpinto@meteo.uni-koeln.de)

P81: EMS2009-301

Influence of storm duration on insured losses associated with European winter storms

Kirchhübel, L.; Pinto, J.G.; Bistry, T.; Kerschgens, M. Institute for Geophysics and Meteorology, University of Cologne, Germany (kirch@meteo.uni-koeln.de)

P82: EMS2009-305

The July 27, 2002 tornado event in Athens, Greece

Nastos, P.T.; Matsaggouras, J.

Laboratory of Climatology and Atmospheric Environment, Faculty of Geology and Geoenvironment, University of Athens, Greece (nastos@geol.uoa.gr)

P83: EMS2009-529

Use of satellite data for severe storm nowcasting and monitoring

PAJEK, M.

IMWM, Satellite Remote Sensing Centre, Krakow, Poland (monika.pajek@imgw.pl)

P84: EMS2009-355

A severe wind storm affecting the Basque country: the Klaus case study

Gaztelumendi, S.; Egaña, J; Gelpi, I R; Otxoa de Alda, K; Hernandez, R; Pierna, D

Basque Meteorology Agency (EUSKALMET) Miñano, Álava, (Spain) , Meteorology Division, EUVE Foundation, Vitoria-Gasteiz, Álava, (Spain). sgaztelumendi@euve.org

P85: EMS2009-356

Flash-floods and heavy rain over Bilbao: the first june 2008 case

Egaña, J.; Gaztelumendi, S; Pierna, D; Gelpi, I R; Hernandez, R; Otxoa de Alda, K

Meteorology Division, EUVE Foundation, Vitoria-Gasteiz, Álava, (Spain). (jegana@euve.org), Basque Meteorology Agency (EUSKALMET) Miñano, Álava, (Spain)

P86: EMS2009-404

Modeling lake effect snow on December 24, 2001 over Lake Erie using mesoscale models MM5 and WRF - Sensitivity to convection and microphysics schemes and the temperature of Lake Erie

Steeneveld, G.J.; Theeuwes, N.; Krikken, F.; Holtslag, A.A.M.

Wageningen University, Meteorology and Air Quality Group, Netherlands (gert-jan.steeneveld@wur.nl)

P87: EMS2009-438

Cold Lows in the Tropical Upper Tropospheric Trough and its relationship to severe thunderstorms outbreaks in Cuba.

Taboada, J.; Oro, G.A.; Naranjo, L.

MeteoGalicia - CINAM - Consellería de Medio Ambiente - Xunta de Galicia. Santiago de Compostela - Spain

P88: EMS2009-513

Evolution of Mesoscale Convective System in Southern Serbia

Rabrenovic, M.; Majstorovic, T.

maja_saska@yahoo.com

P89: EMS2009-278

Severe Local Storms Cultural Heritage

Gladich, I.; Gallai, I.; Gaiotti, D. B.; Morgan, G. M.; Stel, F.

Purdue University, Lafayette, Indiana, USA

(igladich@purdue.edu)

END OF POSTER PROGRAMME AW7

AW8 Boundary-layer physics and parameterizations in weather and climate forecast

Convener: S. Zilitinkevich

Co-Convener: A. Petrosyan

Poster Area: Area Chapiteau

Attendance Time: 16:00–17:00

P90: EMS2009-241

Large eddy simulation of the influence of CCN and thermodynamic conditions on marine stratocumulus cloud development

Song, K.; Yum, S. S.

Department of Atmospheric Sciences, Yonsei University, Seoul, Korea

P91: EMS2009-308

Numerical simulation of radiation fog in complex terrain

Zhang, X.; Musson-Genon, L.; Carissimo, B.; Dupont, E. Research and Teaching Center for Atmospheric Environment (CEREA), Chatou, France
(zhang.xiaojing@cerea.enpc.fr)

END OF POSTER PROGRAMME AW8

AW9 Interfacing hydrological and meteorological models in forecasting systems

Convener: N. Hjerdt

Co-Conveners: G. Balint; J. Olsson; M.-H. Ramos

Poster Area: Area Chapiteau

Chairperson: M.-H. Ramos

Attendance Time: 16:00–17:00

P92: EMS2009-89

Uncertainty reduction of hydrological ensemble forecasts provided by the COSMO-LEPS quantitative precipitation ensemble forecasts

Nerozzi, F.; Tibaldi, S.; Todini, E.; Diomede, T.; Montani, A.; Paccagnella, T.; Cacciamenti, C.
ARPA-SIMC Emilia-Romagna, Bologna, Italy

END OF POSTER PROGRAMME AW9

AW12 Phenology and Agrometeorology

Convener: E. Koch

Co-Conveners: J. Eitzinger; B. Lalic

Poster Area: Area Chapiteau

Chairperson: J. Eitzinger

Attendance Time: 16:00–17:00

P118: EMS2009-129

Phenophases onset and air temperatures differences in the Czech Republic between two 25-years periods (1956-1980 and 1981-2005)

Striz, M.; Nekovar, J.

Czech Hydrometeorological Institute, Regional Office Ostrava, Czech Republic (striz@chmi.cz)

P119: EMS2009-135

The dates of harvest cereal from the Czech Republic in the period 1517-2008

Mozny, M.; Hajkova, L.; Novak, M.; Nekovar, J.; Bares, D.

Czech Hydrometeorological Institute, Doksany Observatory, Doksany, Czech Republic
(martin.mozny@chmi.cz)

P120: EMS2009-182

Is the Central Europe more inclined to wildfires?

Mozny, M.; Virag, M.; Bares, D.; Trnka, M.; Zalud, Z.; Hlavinka, P.

Czech Hydrometeorological Institute, Doksany Observatory, Doksany, Czech Republic
(martin.mozny@chmi.cz)

P121: EMS2009-541

High-resolution simulations of vegetation growth over France between 1994-2007: Analysis of its inter-annual variation.

Lafont, S.; Calvet, J.-C.; Peylin, P.; Zhao, Y.
CNRM-GAME, Météo-France, Toulouse, France
(sebla@orange.fr), LSCE, CEA, Gif-sur-Yvette, France

P122: EMS2009-275

Inter-annual climate variability and productivity models for grapevines in Portugal

Santos, J. A.; Martinho, M.; Malheiro, A. C.; Pinto, J. G. CITAB, University of Tras-os-Montes e Alto Douro, Vila Real, Portugal (jsantos@utad.pt)

P123: EMS2009-276

Application of agroclimatic indices for viticultural zoning at macroscale level

Santos, J. A.; Fraga, H.; Malheiro, A. C.; Pinto, J. G. CITAB, University of Tras-os-Montes e Alto Douro, Vila Real, Portugal (jsantos@utad.pt)

P124: EMS2009-390

Future development of heavy precipitation - an important factor for soil erosion

Spekat, A.; Kreienkamp, F.; Enke, W.
Climate and Environment Consulting Potsdam GmbH, Potsdam, Germany (arne.spekat@cec-potsdam.de)

P125: EMS2009-504

Assessment of climate change impact on phenology dynamic in Vojvodina region

Lalic, B.; Mihailovic, D.T.
Faculty of Agriculture, Department for Field & Vegetable Crops, Novi Sad, Serbia (branka@polj.ns.ac.yu)

P126: EMS2009-518

Parameterisation of pollution diffusion in presence of forest canopy

Lalic, B.; Mihailovic, D.T.
Faculty of Agriculture, Department for Field & Vegetable Crops, Novi Sad, Serbia (branka@polj.ns.ac.yu)

P127: EMS2009-612

Application of a crop model forced with remote sensing data at high spatio-temporal resolution to estimate evaporation and yields of irrigated grasslands in the South Eastern France

Courault, D.; Hadria, R.; Ruget, F.; Duchemin, B.; Hagolle, O.

INRA, UMR 1114 EMMAH, Domaine St Paul, 84914, Avignon, France (courault@avignon.inra.fr)

P128: EMS2009-199

The database of land surface parameters ECOCLIMAP-II on Europe.

Faroux, S.; Roujean, J.L.; Kaptue, A.; Masson, V. CNRM-GAME, Météo-France, CNRS, GMME, Toulouse, France (stephanie.faroux@meteo.fr)

P129: EMS2009-46

Phenology Atlas of Czechia in preparation - aim & content

Hajkova, L.; Nekovar, J.; Novak, M.; Richterova, D. Czech Hydrometeorological Institute, Regional Branch Usti nad Labem, Czechia (hajkova@chmi.cz)

P130: EMS2009-210

Use of digital monitoring in the Czech Phenology Network

Virag, M.; Mozny, M.; Nekovar, J.; Striz, M.; Bares, D.; Hajkova, L. AS&Consulting, METEO systems, 27601 Melnik, Czech Republic, meteo@asconsult.cz

END OF POSTER PROGRAMME AW12

AW13 Spatial interpolation and GIS modelling in earth system science

Convener: M. Dolinar

Co-Convener: O. E. Tveito

Poster Area: Area Chapiteau

Attendance Time: 16:00–17:00

P131: EMS2009-128

Spatial analysis of Snow Water Equivalent (SWE) using Multi Weighted Linear Regression (MWLR) in Czech Republic

STRIZ, M.

Czech Hydrometeorological Institute, Regional Office Ostrava, Czech Republic (striz@chmi.cz)

P132: EMS2009-43

High resolution interpolation of monthly temperatures

Boi, P.; Fiori, M.; Canu, S.

ARPAS Dip. Idrometeoclimatico, Sassari, Italy (pboi@arpa.sardegna.it)

P133: EMS2009-69

Assessment of Geostatistical Methods in Drought Monitoring Systems

Shahabfar, A.; Eitzinger, J.

University of Natural Resources and Applied Life Sciences (BOKU), Vienna, Austria (alireza.shahabfar@boku.ac.at, josef.eitzinger@boku.ac.at)

P134: EMS2009-405

Statistical modelling of diurnal temperature courses by using topographic information and weather type classification schemes

Käsmacher, O.; Sauter, T.; Schneider, C.

RWTH Aachen University, Department of Geography, Physical Geography and Climatology, Aachen, Germany

P135: EMS2009-416

Air temperature and precipitation spatial evaluation in Slovakia using the regularized splain with tension method

Pecho, J.; Mikulova, K.; Stastny, P.; Fasko, P.; Siska, B. Slovak Hydrometeorological Institute, Climatological Service Department, Bratislava, Slovakia (jozef.pecho@shmu.sk)

P136: EMS2009-555

Using GIS geostatistical techniques to study the temporal and spatial rainfall characteristics in Romania

Nertan, A. T.; Panaitescu, V.; Stancalie, Gh.

National Meteorological Administration, Remote Sensing&GIS Laboratory, Bucharest, Romania, gheorghe.stancalie@meteoromania.ro

P137: EMS2009-561

Methodological proposals for estimating the price of climate in France

Joly, D.; Brossard, T.; Cardot, H.; Cavailhes, J.; Hilal, M.; Wavresky, P.

THéMA, Université de Franche-Comté, CNRS, Besançon (daniel.joly@univ-fcomte.fr)

END OF POSTER PROGRAMME AW13

Communication and Education

CE1 Media and Communication

Convener: T. Cegnar

Co-Convener: G. Fleming

Poster Area: Area Chapiteau

Chairperson: T. Cegnar

Attendance Time: 16:00–17:00

P144: EMS2009-360

Basque meteorology monthly meteorological bulletins

Gaztelumendi, S.; Hernandez, R.; Otxoa de Alda, K.; Egaña, J.; Gelpi, I.R.

Meteorology Division, EUVE foundation, Vitoria-Gasteiz, Álava, Spain., Basque Meteorology Agency (EUSKALMET) Miñano, Álava, Spain

END OF POSTER PROGRAMME CE1

CE2 Climatological and meteorological information in the context of decision making

Convener: I. Meinke

Co-Convener: A. Spekat

Poster Area: Area Chapiteau

Chairperson(s): A. Spekat

Attendance Time: 16:00–17:00

P145: EMS2009-231

Urban planning as a tool to cope with climate change. Cooperation between the University of Lisbon and the Municipality

Alcoforado, M.J.; Andrade, H.; Lopes, A.

University of Lisbon, Centre Fof Geographical Studies, Geography, Lisbon, Portugal (mjoao.alc@gmail.com)

P146: EMS2009-545

Climatology and Biometeorology: two new topics of the State of Environment Report for Policymakers in the Florentine Area

Petralli, M.; Massetti, L.; Pozzi, R.; Orlandini, S.

Interdepartmental Centre of Bioclimatology, University of Florence, Italy

END OF POSTER PROGRAMME CE2

CE3 Gender Equality

Convener: H. Huebener

Poster Area: Area Chapiteau

Attendance Time: 16:00–17:00

P147: EMS2009-537

Informal Network of Physicists in Slovenia

Remskar, M.

Institut Jozef Stefan, Ljubljana, Slovenia

(maja.remskar@ijs.si)

Climatology: New services responding to climate change

CL2 Climate change assessments of trends and variability

Convener: A. M. G. Klein Tank

Co-Convener: R. Heino

Poster Area: Area Chapiteau

Chairperson: R. Heino

Attendance Time: 16:00–17:00

P172: EMS2009-39

Adiabatic profiles in a planet atmosphere with account of a greenhouse gas

Rutkevich, P.B.; Rutkevich, B.P.

Space Research Institute RAN, Dep 056, Moscow, Russian Federation (pbrutkevich@gmail.com)

P173: EMS2009-82

Winter Rainfall Prediction Based on climatic large scale signals by Using Adaptive Neuro Fuzzy Inference System (ANFIS)

Fallah Ghahary, G.A.; Khoshhal, J.; Habibi Nokhandan, M.

Isfahan University, Climatological research inistitue, Mashhad, Islamic Republic Of Iran (ab_fa789@yahoo.com)

P174: EMS2009-230

An Assessment of the Impact of Climate Change in India

Nair, K.S.

Nansen Environmental Research Centre (India), Climate and Water, Kochi, India (nair59@yahoo.com)

P175: EMS2009-266

Temporal and spatial variability of long-term daily precipitation observations

Bachner, S.; Kapala, A.; Simmer, C.

University of Bonn, Meteorological Institute, Bonn, Germany (s.bachner@uni-bonn.de)

P176: EMS2009-351

Teleconnection cluster patterns: a novel class of teleconnection patterns and results for decadal changes.

Faulwetter, R.

Universität Leipzig, Institut für Meteorologie, Leipzig, Germany (faulwett@rz.uni-leipzig.de)

P177: EMS2009-106

Monthly shortage trends for Central and Western Europe

Martinez, M.D.; Lana, X.; Burgueño, A.; Serra, C.

Universitat Politecnica de Catalunya, Dept. de Fisica Aplicada, Barcelona, Spain (dolors.martinez@upc.edu)

P178: EMS2009-240

Linking changes in daily precipitation values and extremes with weather patterns

Taboada, JJ.; Lago, A.; Lage, A.; Cruz, R.; Salsón, S.

Meteogalicia. CINAM - Consellería de Medio Ambiente. Xunta de Galicia. Santiago de Compostela, Spain

P179: EMS2009-143

Relationships between temperature extremes over the Iberian Peninsula and teleconnection indices

Encinas, A.H.; Rodriguez-Puebla, C.; García-Casado, L.A.

University of Salamanca, Applied Mathematics, Salamanca, Spain (ascen@usal.es)

P180: EMS2009-244

Possible changes in the return period of loss associated with European wind storms in a future climate

Karremann, M.K.; Pinto, J.G.; Klawar, M.; Della-Marta, P.M.; Stowasser, M.

Institute for Geophysics and Meteorology, University of Cologne, Germany (mkarre@meteo.uni-koeln.de)

P181: EMS2009-300

Changes in frequency of weather types and their relationship with precipitation patterns over South-East of the Iberian Peninsula.

Garcia-Valero, J.A.; Montávez, J.P.; Jerez, S.; Gómez-Navarro, J.J.; Jiménez, P.A.; González-Rouco, J.F.
Grupo de Modelización Atmosférica Regional (MAR), Dpto.de Física, Universidad de Murcia, Spain , Agencia Estatal de Meteorología (AEMET), Delegación Territorial en Murcia, Spain (agvalero@inm.es)

P182: EMS2009-344

Regional Changes in Extreme Monsoon Rainfall Deficit and Excess in India

Pal, I.; Al-Tabbaa, A.
(ip250@cam.ac.uk) Department of Engineering, University of Cambridge, Cambridge, UK

P183: EMS2009-428

Long-term changes of snow cover regime in connection with observed solid, liquid and mixed precipitation ratio trends in Slovakia

Pecho, J.; Fasko, P.; Mikulova, K.; Lapin, M.; Stastny, P.
Slovak Hydrometeorological Institute, Climatological Service department, Bratislava, Slovakia
(jozef.pecho@shmu.sk)

P184: EMS2009-486

Trend analysis of extreme climate indices using simulated temperature and precipitation time series for the Carpathian basin

Pongracz, R.; Bartholy, J.; Szabo, P.; Kovacs, G.
Eotvos Lorand University, Department of Meteorology, Budapest, Hungary (prita@caesar.elte.hu)

P185: EMS2009-526

The range and seasonality of the contemporary climatic warming in Polish Tatras

Mudzka, E.
Faculty of Geography and Regional Studies, University of Warsaw, of Climatology, Warsaw, Poland
(elwiraz@uw.edu.pl)

P186: EMS2009-184

Relationships between highs tracks in south and north atlantic and sahelian precipitation from 1950-1990

Pommier, A.
Université Jean Moulin, LCRE CNRS UMR 5600, Lyon Cedex 07, France (shedseven7@yahoo.fr)

P187: EMS2009-419

Observed changes in Weather Types over Spain

Bermejo, M.; Ancell, R.; Oviedo, L. M.
Spanish Meteorological Agency, AEMet, Santander, Spain (rct@inm.es)

END OF POSTER PROGRAMME CL2

CL3/NWP4 Climate prediction and scenarios from seasons to century (co-organized)

Convenor: C. Appenzeller

Co-Convenors: J.-P. Céron; M. Deque; CM Goodess; A. Troccoli

Poster Area: Area Chapiteau

Chairperson(s): Christof Appenzeller

Attendance Time: 16:00–17:00

P188: EMS2009-7

The role of mean ocean salinity in climate

Williams, PD; Guilyardi, E; Madec, G; Gualdi, S; Scoccimarro, E
University of Reading, Department of Meteorology, Reading, United Kingdom (p.d.williams@reading.ac.uk)

P189: EMS2009-533

Impact of snow cover on inter-annual variability of the NH winter circulation in an ensemble GCM simulation forced by satellite observations

Orsolini, Y.; Kvamsto, N.; Balsamo, G.
Norwegian Institute for Air Research (NILU), Kjeller, Norway (orsolini@nilu.no)

P190: EMS2009-521

Regional Climate Change Scenarios - Benefits of Modeling in High Resolution for Central and Eastern Europe

Halenka, T.; Miksovsky, J.; Belda, M.
Charles University in Prague, Fac. of Math. & Physics, Dept. of Meteorology and Environment Protection, Prague, Czech Republic (tomas.halenka@mff.cuni.cz)

P191: EMS2009-515

Climate scenarios for weather extremes as simulated by high resolution RegCM over Romania

Boroneant, C.; Caian, M.; Enculescu, A.; Matei, M.
National Meteorological Administration, Climate Research Group, Bucharest, Romania
(boroneant@meteoromania.ro)

P192: EMS2009-483

RCM-based climate prediction for the Carpathian basin using PRECIS simulations

Pongracz, R.; Bartholy, J.; Pieczka, I.; Hunyady, A.
Eotvos Lorand University, Department of Meteorology, Budapest, Hungary (prita@caesar.elte.hu)

P193: EMS2009-482

RCM-based climate prediction for the Carpathian basin using RegCM simulations

Bartholy, J.; Pongracz, R.; Torma, CS.
Eotvos Lorand University, Department of Meteorology, Budapest, Hungary (bari@ludens.elte.hu)

P194: EMS2009-187

RCM ALADIN-Climate/CZ simulations of 2021-2050 and 2071-2100 climate over the Central Europe region with emphasis on analysis of extreme events

Stepanek, P.; Farda, A.; Skalak, P.

Czech Hydrometeorological Institute, Czech Republic
(petr.stepanek@chmi.cz)

P196: EMS2009-139

Spectral nudging with COSMO-CLM: Improvement or deterioration?

Demuzere, M.; van Lipzig, N.P.M.; Brisson, E.

Katholieke Universiteit Leuven - GEO Institute, Earth and Environmental Sciences, Physical Geography, Leuven, Belgium (matthias.demuzere@ees.kuleuven.be)

P195: EMS2009-50

Drought Prediction in Iran during Next 30 Years

Khazanedari, L.; Zabol Abbasi, F.; Ghandhari, Sh.; Kouhi, M.; Malbousi, Sh.

(l.khazanedari@gmail.com)

END OF POSTER PROGRAMME CL3/NWP4

Friday	Amphithéâtre	Guy Der Megreditchian	Prud'homme	Espace Météo
8 :30–10:30	CL2: Climate change assessments of trends and variability Block 2 of 3	AW8: Boundary-layer physics and parameterizations in weather and climate forecast Block 1 of 2	AW1: Dynamical Meteorology Block 1 of 2	
10:30–11:00	Coffee Break: Area Chapiteau			
11:00–13:00	CL2: Climate change assessments of trends and variability Block 2 of 3	AW8: Boundary-layer physics and parameterizations in weather and climate forecast Block 2 of 2	AW1: Dynamical Meteorology Block 2 of 2	
13:00	The End			

13:30 Shuttle bus from Météopole to the Airport Toulouse-Blagnac

Atmosphere and the Water Cycle

AW1 Dynamical Meteorology

Convener: T. Frisius

Co-Conveners: F. Lunkeit; P. M. Ruti

Lecture Room: Prud'homme

08:30–10:30

Chairperson: T. Frisius

08:30–09:00: EMS2009-294

Stratospheric polar vortex influence on Northern Hemisphere winter climate variability (solicited)

Douville, H.

Météo-France, CNRM, Toulouse, France
(herve.douville@meteo.fr)

09:00–09:15: EMS2009-367

The lower equatorial ionosphere as the indicator of climatic processes

Vanina-Dart, L.; Sharkov, E.

Space Research Institute, Earth remote sensing, Moscow, Russian Federation (vandart@seeingear.org)

09:15–09:30: EMS2009-325

A climatology of potential vorticity towers associated with extratropical cyclones

Wernli, H.; Campa, J.

University of Mainz, Institute for Atmospheric Physics, Mainz, Germany (campa@uni-mainz.de)

09:30–09:45: EMS2009-78

A case study of an explosively deepening, diabatic Rossby-wave induced cyclone: the influence of environmental conditions

Böttcher, M.; Wernli, H.

Institute for Atmospheric Physics, University of Mainz, Germany (boettchm@uni-mainz.de)

09:45–10:00: EMS2009-235

Effect of latitudinal variations in low-level baroclinicity on eddy life cycles and upper-tropospheric wave-breaking processes

Rivière, G.

CNRM-GAME, Météo-France/CNRS, Toulouse, France
(gwendal.riviere@meteo.fr)

10:00–10:15: EMS2009-386

Upper tropospheric divergence and its impact on pathways of severe extra-tropical storms under anthropogenic climate change conditions

Stege, S.; Leckebusch, G.C.; Ulbrich, U.

Freie Universität Berlin, Institute for Meteorology, Germany (sara.stege@met.fu-berlin.de)

10:15–10:30: EMS2009-124

Development of strong and persistent ridge episodes in the Eastern North Atlantic

Santos, J. A.; Pinto, J. G.; Ulbrich, U.

University of Tras-os-Montes e Alto Douro, CITAB, Vila Real, Portugal (jsantos@utad.pt)

10:30 Coffee Break

11:00–13:00

Chairperson: P. Ruti

11:00–11:15: EMS2009-85

Interactions between weather regimes and marine surface in the North-Atlantic region

Guemas, V.; Salas-Mélia, D.; Kageyama, M.; Giordani, H.; Volodire, A.; Sanchez-Gomez, E.

CNRM/GAME, Météo-France, CNRS, Toulouse, France , LSCE, CEA-CNRS-UVSQ, Gif-Sur-Yvette, France

11:15–11:30: EMS2009-608

Heat waves and storm track variability in North Atlantic and Euromediterranean region: The effects of sea-land contrast in a multimodel ensemble simulations

Sanna, A.; Alessandri, A.; Gualdi, S.

CMCC, Italy

11:30–11:45: EMS2009-55

A Lagrangian Climatology of Tropical Moisture Exports to the Northern Hemispheric Extratropics

Knippertz, P.; Wernli, H.

University of Leeds, Institute for Climate and Atmospheric Science, Leeds, UK
(p.knippertz@leeds.ac.uk)

11:45–12:00: EMS2009-193

Interaction of tropical cyclone Ivan (South-West Indian Ocean, 2007) with the ocean

Plu, M.; Samson, G.; Barbary, D.; Roux, F.; Giordani, H.

Météo-France, Lacy (UMR 8105 CNRS/Météo-

France/Université de La Réunion), La Réunion, France

12:00–12:15: EMS2009-12

Gravity-vorticity wave action at a distance interaction

Heifetz, E.; Harnik, N.; Rabinovich, A.; Umurhan, O.M.; Lott, F.

Tel-Aviv University, Geophysics and Planetary Sciences, Tel-Aviv, Israel (eyalh@cyclone.tau.ac.il)

12:15–12:30: EMS2009-8

Inertia-Gravity Waves Emitted from Balanced Flow: Observations, Properties, and Consequences

Williams, P.D.; Haine, T.W.N.; Read, P.L.

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12:30–12:45: EMS2009-618

Cloud resolving modelling of the life cycle of a MCS: Sensitivity to soil conditions over West Africa

Gantner, L.; Kalthoff, N.

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12:45–13:00: EMS2009-342

Density-driven convection between horizontal planes in a conditionally unstable fluid

Weber, J. E. H.; Broström, G.

Department of Geosciences, University of Oslo, Oslo, Norway

AW8 Boundary-layer physics and parameterizations in weather and climate forecast

Convener: S. Zilitinkevich
Co-Convener: A. Petrosyan
Lecture Room: Guy der Megreditchian

08:30–10:30

08:30–09:00: EMS2009-531

The effect of surface type on the decay of turbulence in the surface layer during evening transition (solicited)
Pardyjak, E.R.; Fernando, H.J.S.
 University of Utah, Salt Lake City, UT, USA
 (pardyjak@eng.utah.edu)

09:00–09:15: EMS2009-460

Evaluation of interpolation procedures to input turbulence fields from a prognostic model to a diagnostic mass consistent model
Trini Castelli, S.; Anfossi, D.
 C.N.R., ISAC, Torino, Italy (trini@to.infn.it)

09:15–09:30: EMS2009-498

The concept of a vertically resolved roughness layer in the framework of a scale separated turbulence scheme
Raschendorfer, M.
 Deutscher Wetterdienst, Abt. FE1, Offenbach, Germany
 (Matthias.Raschendorfer@dwd.de)

09:30–09:45: EMS2009-509

Low Cloud Feedback Diagnosed from Observations and LES Modeling
Xu, K.-M.; Cheng, A.; Eitzen, Z. A.
 NASA Langley Research Center, Climate Science Branch, Hampton, United States
 (Kuan-Man.Xu@nasa.gov)

09:45–10:00: EMS2009-606

Transportation of particulate plumes in boundary layer with obstacles
Petrosyan, A.; Karelsky, K.; Smirnov, I.
 Space Research Institute of the Russian Academy of Sciences, Profsoyuznaya 84/32, Moscow 117997, Russia (apetrosy@iki.rssi.ru)

10:00–10:15: EMS2009-179

Impact of the ocean diurnal variations on the intraseasonal variability of Sea Surface Temperatures in the Atlantic Ocean
Guemas, V.; Salas-Mélia, D.; Kageyama, M.; Giordani, H.; Volodire, A.
 CNRM/GAME, Meteo-France, CNRS, Toulouse, France, LSCE, CEA-CNRS-UVSQ, Gif-Sur-Yvette, France

10:15–10:30: EMS2009-203

Large-eddy simulations of the convective atmospheric boundary layer over heterogeneous land surfaces
Nadeau, D. F.; Kumar, V.; Higgins, C. W.; Parlange, M. B.
 Ecole Polytechnique Fédérale de Lausanne, Environmental Engineering Institute, Lausanne, Switzerland (daniel.nadeau@epfl.ch)

10:30 Coffee Break

11:00–11:15: EMS2009-603

Planetary boundary layer feedbacks in climate system
Esau, I.; Zilitinkevich, S.
 Environmental and Remote Sensing Centre, Bergen, Norway igore@nersc.no

11:15–11:30: EMS2009-243

Improvement of the subgrid vertical mixing parameterization in operational hydrostatic models at Météo-France
Bouteloup, Y.; Bazile, E.; Bouyssel, F.; Marquet, P.
 CNRM/GAME Météo-France and CNRS (yves.bouteloup@meteo.fr)

11:30–11:45: EMS2009-481

Comparison of Synthetic Turbulent Wind Fields with Large-Eddy Simulations of the Atmospheric Boundary Layer
Auerswald, T.; Bange, J.; Radespiel, R.; Weinreis, C.; Raasch, S.
 TU Braunschweig, Institute of Aerospace Systems, Braunschweig, Germany (t.auerswald@tu-bs.de)

11:45–12:00: EMS2009-196

A high-resolution large-eddy simulation of turbulent flow within and above urban-like canopies
Maché, M.; Calmet, I.; Sini, J.-F.
 Laboratoire de Mécanique de Fluides, UMR6598 CNRS-Ecole Centrale de Nantes, Nantes, France

12:00–12:15: EMS2009-602

Turbulent diffusion of momentum and scalar in flows with internal and Rossby waves
Galperin, B.; Sukoriansky, S.; Dikovskaya, N.
 College of Marine Science, University of South Florida, St. Petersburg, Florida, USA

12:15–12:30: EMS2009-117

Large Eddy Simulation over three-dimensional mountain topography
Diebold, M.; Higgins, C.; Kumar, V.; Lehning, M.; Parlange, M.B.
 Ecole Polytechnique Fédérale de Lausanne (EPFL), School of Architecture, Civil and Environmental Engineering (marc.diebold@epfl.ch)

12:30–12:45: EMS2009-229

Heat and water vapor fluxes over a lake: a LES and field campaign investigation.

Vercauteren, N.; Froidevaux, M.; Kumar, V.; Higgins, C.; Bou-Zeid, E.; Parlange, M.

School of Architecture, Civil and Environmental Engineering, Ecole Polytechnique Fédérale de Lausanne EPFL, Switzerland (nikki.vercauteren@epfl.ch)

12:45–13:00: EMS2009-607

Planetary Boundary Layers - Physics, Modelling and Role in Earth System: Summary of New ERC Grant (2009-2013)

Zilitinkevich, S.

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END OF ORAL PROGRAMME AW8

Climatology: New services responding to climate change

CL2 Climate change assessments of trends and variability

Convener: A. M. G. Klein Tank

Co-Convener: R. Heino

Lecture Room: Amphithéâtre

08:30–10:30

Chairperson: A. M. G. Klein Tank

Part Two

08:30–08:45: EMS2009-411

Spatial structure of the recent surface air temperature changes over the North Eurasia according to the observations and modeling

Popova, V.V.; Shmakin, A.B.; Mikhailov, A.Yu.

Institute of Geography, Russian Academy of Sciences, Laboratory of Climatology, Moscow, Russian Federation (valeria_popova@mail.ru)

08:45–09:00: EMS2009-161

Actual and future trends of extreme values of temperature for the NW Iberian Peninsula

Taboada, J.; Brands, S.; Lorenzo, N.

Meteogalicia. CINAM - Consellería de Medio Ambiente. Xunta de Galicia. Santiago de Compostela, Spain

09:00–09:15: EMS2009-392

Intercomparison of four regional climate models for the German State of Saxonia

Kreienkamp, F.; Spekat, A.; Enke, W.

Climate and Environment Consulting Potsdam GmbH, Potsdam, Germany (frank.kreienkamp@cec-potsdam.de)

09:15–09:30: EMS2009-580

Identification of trends in European temperature mean, variance and extremes and their use to derive future extreme values

Parey, S.; Hoang, T.T.H.; Dacunha-Castelle, D.

EDF, R&D, CHATOU, France (sylvie.parey@edf.fr)

09:30–09:45: EMS2009-33

The evaluation of extreme precipitation and temperature indices based on regional climate models at the Hungarian Meteorological Service

Szabo, P.

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09:45–10:00: EMS2009-445

Trends of abiotic damage in forest ecosystems in Germany at regional scale under SRES A1B, B1

Panferov, O.; Doering, C.; Sogachev, A.; Merklein, J.; Ahrends, B.

University of Goettingen, Department of Bioclimatology, Goettingen, Germany (opanfyo@gwdg.de)

10:00–10:15: EMS2009-295

Regional climate change detection based on smooth temporal patterns

Planton, S.; Ribes, A.; Azaïs, J.-M.

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10:15–10:30: EMS2009-487

Detection of climate trends from local time series using a Monte-Carlo-enhanced filtering process

Ihrig, D.F.; Ihrig, C.

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10:30 Coffee Break

11:00–13:00

Chairperson: A. M. G. Klein Tank

Part Three

11:00–11:15: EMS2009-83

Winter Rainfall Prediction Based on climatic large scale signals by Using Artificial Neural Network

Fallah-Ghalhary, G.-A.; Habibi Nokhandan, M.; Khoshhal, J.

Department of geography, Isfahan University, Climatological research institute, Mashhad, I.R of Iran (ab_fa789@yahoo.com)

11:15–11:30: EMS2009-123

The use of normalized climatological anomalies to rank synoptic-scale events and their relation to Weather Types

Ramos, A. M.; Lorenzo, M.N.; Gimeno, L.; Nieto, R.; Añel, J.A.

Universidade de Vigo, Grupo de fisica de la Atmosfera y del Oceano, Ourense, Spain (alexramos@uvigo.es)

11:30–11:45: EMS2009-350

Teleconnection clusters: a novel concept and results for decadal changes.

Faulwetter, R.

Universität Leipzig, Institut für Meteorologie, Leipzig, Germany (faulwett@rz.uni-leipzig.de)

11:45–12:00: EMS2009-181

Variations of the Northern Atlantic climate dynamic. Assessment at two time scales : a modern and a past one

Pommier, A.; Soto, D

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12:00–12:15: EMS2009-442

Rainfall variability over southern Africa: remote controls from SST versus local controls from vegetation cover

Williams, C. J. R.; Kniveton, D. R.; Layberry, R.

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12:15–12:30: EMS2009-282

Southern Hemisphere Storminess under recent and anthropogenic climate conditions based on a multi model ensemble analysis

Grieger, J.; Leckebusch, G.C.; Schuster, M.; Ulbrich, U.

12:45–13:00: EMS2009-451

Wind energy in a changing climate

Bakker, A.M.R.; Bessembinder, J.

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12:30–12:45: EMS2009-317

Global changes in extreme wind waves, marine storminess and cyclone activity

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