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WELCOME ON BEHALF OF EMS



Let me extend a welcome to you all, participating in the Fifth European Meteorological Society's Annual Meeting in Utrecht, The Netherlands! For the year 2005, we are proud to have as part and partner the well known ECAM = European Conference on Applications of Meteorology which is held biannually, the Open VOLTAIRE Conference on validation of multisensor precipitation fields in Mediterranean test sites as well as the participation of several COST actions.

Here in Utrecht, EMS and its part and partners will be able to host some 500 participants and present over 450 lectures and posters. All these contributions essentially have to do with applications. For the EMS-part of the Annual Meeting we are proud to feature five different topics in about 25 sessions:

- Atmosphere and the watercycle - a real-time look
- Climatology
- Computing in Atmospheric Sciences
- Instruments and methods of observations
- Information provision and education

More than 250 lectures and about 150 posters will be given in these sessions.

On Monday afternoon, the Annual Meeting will begin to "get to business", including a continuation of the series of special sessions on Future Meteorological Satellites with top-level speakers. We have to thank Prof. André Lebeau, former Director

of Météo France and Dr. Alain Ratier, Deputy Director of Météo France, for organising this lecture series, which so successfully was launched at the EMS/ECAM 2003 in Rome.

EMS is turning six years old this September and is very grateful for the ongoing and generous support of its 33 Member Societies from 26 European countries and 28 Associates who all together made it possible, e.g., to plan, develop, announce and organise such a conference. In its sessions, the EMS Annual Meeting places priority on a bottom-up structure which involves the scientific community in the composition of the programme. We are particularly grateful for the initiative and vision of the conveners.

For those of you presenting papers I would like to encourage you to make your results even more visible and sustainable by considering their publication in peer reviewed media.

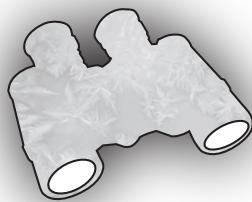
My thanks and gratitude go out to all our EMS Members and Associates and furthermore to all other contributing parties, e.g. the convenors, the chairpersons, the ECAM Conference Committee, the ECAC Advisory Board, the COST Programme and the exhibitors. Let me thank the co-organizing staff at KNMI, in particular Robert Mureau, Heleen ter Pelkwick and Marian Koning and the Copernicus-Gesellschaft, in particular to Ms. Anja Ziegenbein for her tireless

support as well as the experienced Copernicus staff. I personally have to thank the EMS Executive Secretary Arne Spekat, who was the contact hub and who, again, added his "human dimension" to the occasionally dry technical preparation of the Conference.

On behalf of EMS, I want to point out my expectations that this series of Annual Meetings shall be successfully growing together with the present parts and partners and many new ones, combining all areas of meteorology and its related applications.

Werner Wehry
President European Meteorological Society

WELCOME ON BEHALF OF ECAM



We would like to welcome you to the 7th European Conference on Applications of Meteorology (ECAM). This meeting is, this year for the first time, joint with the 5th Annual Meeting of the European Meteorological Society. We believe that this is a healthy cooperation as this will allow a very intense exchange of ideas between the worlds of science, applied meteorology and end users.

The goal of ECAM is and has always been to bring together the world of applied meteorology and end users. To make developers learn about the requirements of the users and to make users learn about the latest developments in meteorological science & development. The presence of EMS can only increase this exchange.

ECAM has also been a platform where commercial meteorology and national meteorological institutes could meet and exchange their opinions. In that sense this meeting in Utrecht is unique in that the National Meteorological Institute in the Netherlands (KNMI) and Meteo Consult (the largest commercial meteo provider in Europe) have worked together very intensely in the local programme committee to organize this meeting. This close co-operation proved to be an important in contacting the end-users.

The meeting has changed slightly with respect to other years. ECAM is now taking place over

a time span of 2 1/2 days, from Monday afternoon till Wednesday, in parallel sessions. The themes, which will deal explicitly with user requirements are: Economy, Energy, Safety & Extreme Weather, Verification (joint with EMS) Transport, Seasonal forecasting (joint with EMS), Health & Air quality. Also there will be a joint EMS/ECAM round table discussion on Wednesday afternoon on The Reengineering of the forecasting process.

We are proud, after a long and productive period of preparation, to present to you an interesting programme with a wide variety of themes, in which through an impressive number of contributions state-of-the-art developments of the scientific world are brought together.

This EMS/ECAM has been able to build upon the experience of those who worked for former ECAM/EMS programme committees and made it possible to initiate, develop, announce and organise such a conference. Much credit goes to the joint programme committee of both EMS and ECAM and to conveners. Thanks to their efforts this EMS/ECAM will become a platform that promotes a fruitful exchange of information on meteorology at a European level between all parties concerned.

Our thanks also go to all other contributing partners e.g. conveners, chairpersons, ECAC advisory board, the cost-programme, exhibitors, Copernicus (in par-

ticular Anja Ziegenbein), the EMS (in particular Arne Spekat). In the local programme we owe much to Heleen ter Pelkwick en Marian Koning.

We hope that this conference will be the beginning of a strong partnership between EMS, ECAM, ECAC.

Janneke Ottens, KNMI
Harry Otten, Meteo Consult

GENERAL INFORMATION

Location and Conference address

The 5th Annual meeting of the European Meteorological Society (EMS), together with the 7th European Conference on Applications of Meteorology and the Open VOLTAIRE Conference will be held at the Jaarbeurs in Utrecht, The Netherlands, from 12-16 September 2005.

Congress Centre

Jaarbeurs Utrecht
Jaarbeursplein 6
3521 AL Utrecht
The Netherlands
Tel: +31-30-295 59 11
Fax: +31-30-294 03 79
www.jaarbeursutrecht.nl

Jaarbeurs Utrecht is easily accessible by train. Utrecht Central Station is only five minutes walking away. Next to Utrecht Central Station is the bus station. This is where the regional buses stop, with fast connections to 30 centres in the area.

Jaarbeurs Utrecht has facilities for disabled people. There are several specially adapted lifts and toilets. The conference rooms are equipped with an infrared transmitter for the benefit of the hard hearing.

Important

It is prohibited to copy any presentation from the desktops in the lecture rooms. It is prohibited to take photo's of any scientific material at the conference.

Official language:

The official language of the conference is English. Simultaneous interpretation is not provided. It is therefore expected that authors are able to present their contribution in English.

EMS annual meeting Programme Committee

- | | |
|---------------------|---------------|
| • Walter Kirchhofer | MeteoSwiss |
| • Ernest Rudel | ZAMG |
| • Werner Wehry | DMG |
| • Rene Morin | SMF |
| • Harry Otten | Meteo Consult |
| • Janneke Ottens | KNMI |
| • Elena Manaenkova | WMO |
| • Arne Spekat | EMS secretary |

ECAM 2005 Programme Committee

- | | |
|----------------------------------|---------------------------|
| • Janneke Ottens | KNMI (chair) |
| • Harry Otten | Meteo Consult (co-chair) |
| • Robert Mureau | KNMI |
| • Heleen ter Pelkwick | NVBM (Dutch Met. Society) |
| • Ewen McCallum | UKMO |
| • Marta Salai | HMS |
| • Jörg Rapp | DWD |
| • Dominique Lapeyre de Chavardès | MeteoFrance |
| • Ernesto Rodriguez-Camino | INM |
| • Horst Böttger | ECMWF |
| • Werner Wehry | DMG |
| • Rene Morin | SMF |
| • Arne Spekat | EMS Secretary |

GENERAL INFORMATION

Conference Office and Hotel Bookings

On-site registration (On-Site Rates) will be possible at the Registration Counter located at the Irene Conference Hall. Monday 12 to Wednesday 14 September 8.00-18.00 Thursday 15 and Friday 16 September 8.00-12.00

Participants are required to complete an On-Site Registration Form and then to pay their registration fee at the corresponding Registration Counter. On-site registration payments may be made in cash in EURO (EUR), by Cheque or by Credit Card (American Express, Eurocard, Mastercard, VISA or JCB).

Attention: Cheques will be only be accepted when written in the currency of the country of the bank on which the cheques are actually drawn and when a cheque fee of the equivalent of €10,- per cheque has been added!

Lost and found and the support Awards are handled at the Registration Counter at any time during the opening hours.

For hotel reservations please contact:
De Jaarbeurs Hotel Service
P.O. Box 2115
3500 GC Utrecht
The Netherlands
Tel: +31-30-236 48 22
Fax: +31-30 236 48 42
<http://www.jaarbeurshotelservice.nl/>
ems2005

Childcare

Participants are kindly requested to arrange for their own childcare. The general contact is:
SKON, De Blauwe Dierenparade
Postbus 1246
3600 BE Maarssen
Tel: +31-346-55 95 00
www.skon.nl

Registration & abstract submission

Copernicus Gesellschaft
Max Planck Strasse 13
37191 Katlenburg Lindau
Germany
Tel: +49-5556-91099
Fax: +49-5556-4709
cop@copernicus.org

Conference hours

Oral presentations
Monday-Thursday 12-15 September
Timeblock 1: 08.30-10.30
Timeblock 2: 11.00-13.00
Timeblock 3: 14.00-16.00
Timeblock 4: 16.30-18.30
Friday 16 September
Timeblocks 1 and 2 only

Poster Presentations

Display Time
Monday-Friday 08.00-18.00

Poster Viewing Sessions

VOLTAIRE Tuesday 12.30-13.00 and 15.30-16.00
ECAM Wednesday 12.00-13.00
EMS Thursday 14.00-15.00

WIFI

There is a possibility to use WIFI in the Jaarbeurs. Ask the registration desk

Partner programme: ask Marian Koning at the Registration Desk

Meeting events

Opening Session
Monday 10.30-13.00
Irene Conference Hall
Invited speakers:
Michel Jarraud, WMO
Dominique Marabouty, ECMWF
David Burridge, President Elect of EMS

Session and Round Table on Future Meteorological Satellites

Chairs: Alain Ratier and André Lebeau
Monday 14.00-17.30
European room

Open Reception/Icebreaker

Monday 18.00-20.00
Sponsor: Gemeente Utrecht
Nationaal Museum van Speelklok tot Pierement
Steenweg 6
3511 JP Utrecht
Tel: +31-30-231 27 89
Fax: +31-30-232 22 85
<http://www.museumspeelklok.nl/speelklok/uk/>
The location "Speelklok tot Pierement" is on walking distance from the Conference Centre (See map)

Conference dinner

The Grand Night of Breughel
Tuesday 17.30-00.30
Sponsor: Kipp & Zonen
Transport to the conference dinner will be by bus. The meeting point is in front of the Jaarbeurs at 17.30 and leaving from the Jaarbeurs at 18.00 sharp.

Round Table on Re-engineering of the Forecasting process

Chair: Ewen McCallum and Co-Chair: Robert Mureau
Wednesday 16:30 - 18:00
Juliana I

In 2005 we celebrate our 175th anniversary. Our founder Petrus J. Kipp took over this Pharmacy on the Voorstraat in Delft, The Netherlands. Since then there have been many changes in the world. However, at Kipp & Zonen we continue the vision of P. J. Kipp to provide scientific measurements of the highest standard.



Kipp & Zonen on the Voorstraat, Delft in 1931

Scientific solutions to the climatology, hydrology, agronomy, public health, environmental and industrial markets with radiometers measuring ultraviolet, visible, infrared and far infrared solar radiation, sun trackers and instruments for measuring ozone, solar spectra, aerosols and temperature profiles.

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Logo from the 1960's

2005

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The Netherlands



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175 YEARS

In 1844 P. J. Kipp became famous in the scientific world for the "Kipp Generator". This unique glass laboratory instrument was designed to generate a regulated gas supply and the characteristic shape still forms part of our logo.

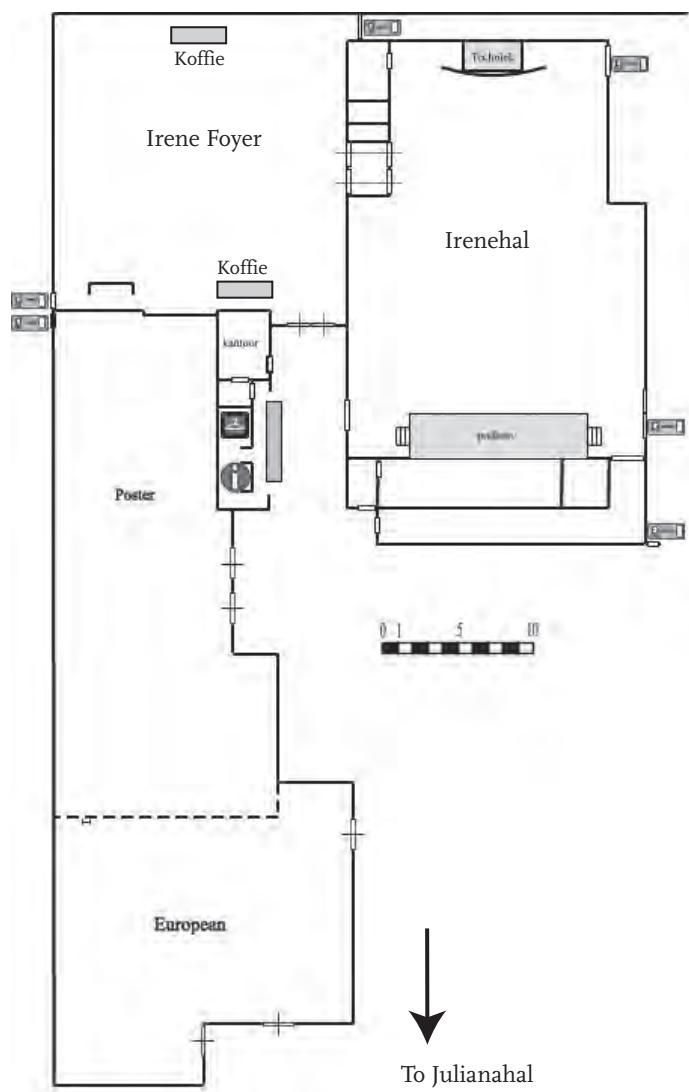
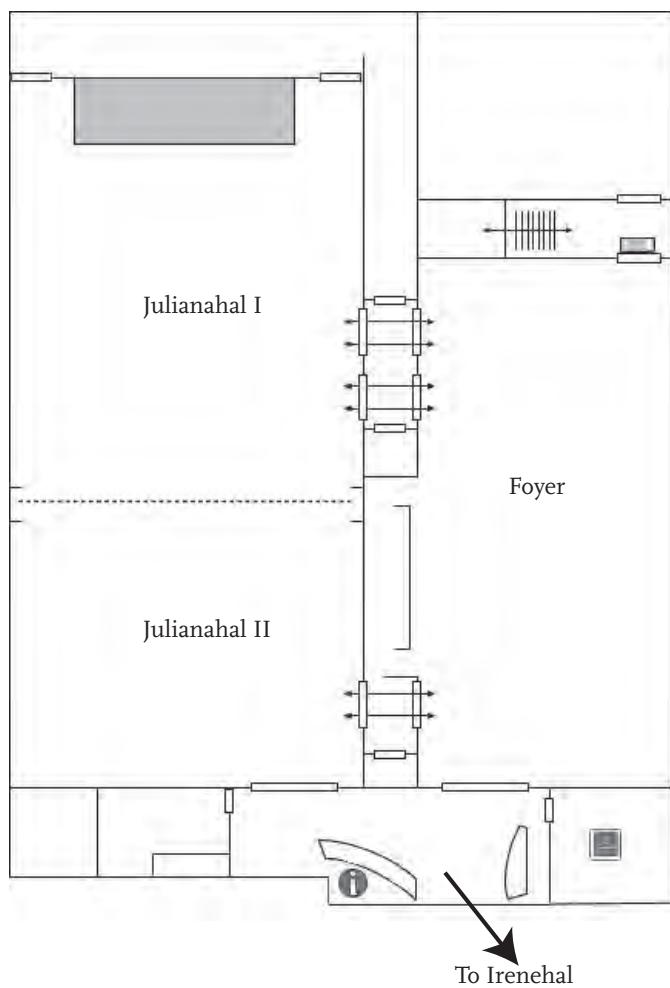


Kipp & Zonen is proud to announce that to coincide with its anniversary year it is launching a new award for an outstanding paper on Boundary Layer Meteorology by an aspiring young scientist. Eligible papers must be submitted in advance for the judging committee to review and must be presented at the 2005 EMS / ECAM conference. The author must be under 35 years of age and the paper must have specific relevance to solar radiation and its effects. The award will be presented during the conference.

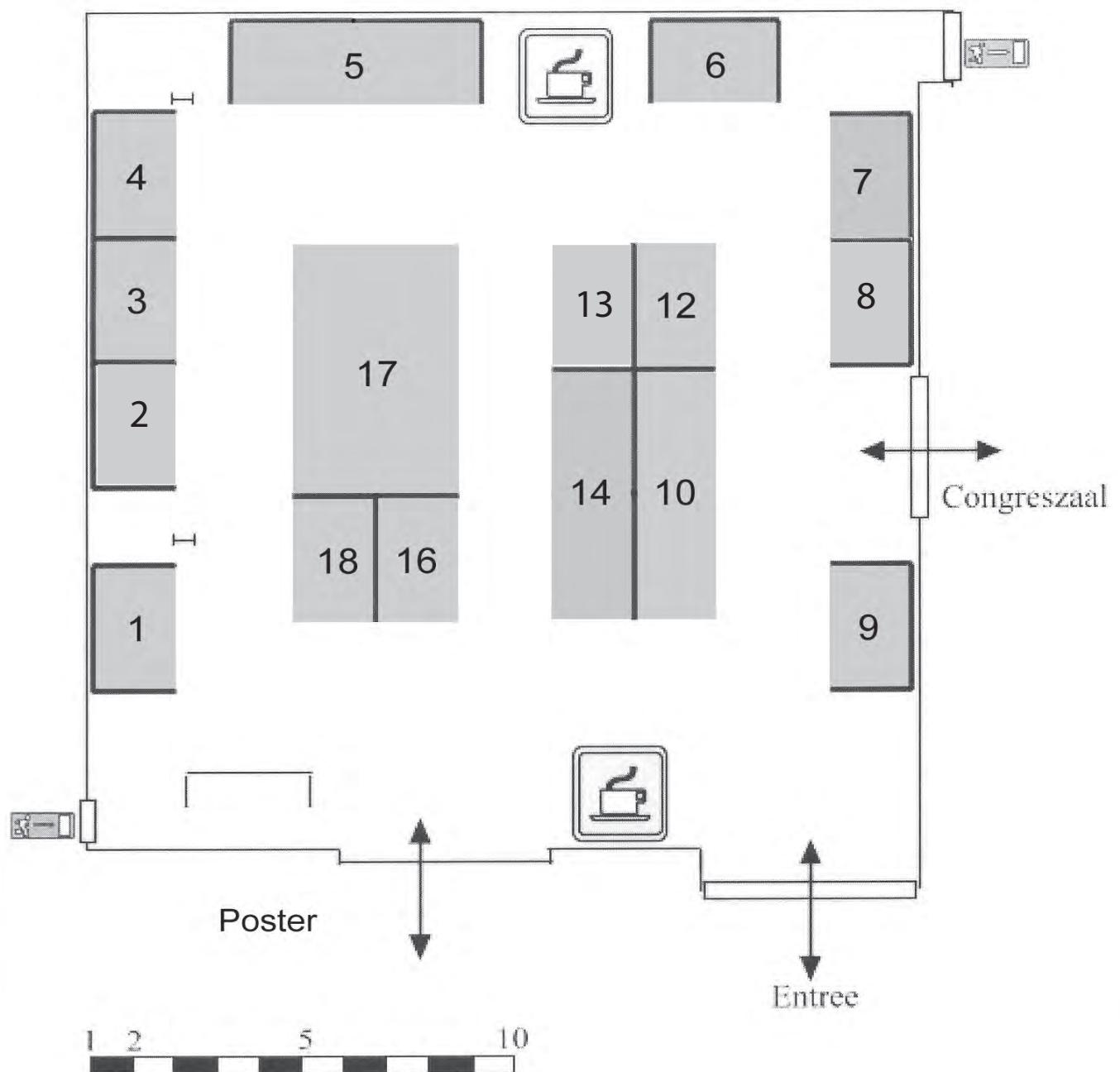
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JAARBEURS



PLAN OF EXHIBITIONS





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hss@biral.com

Biral

www.biral.com

EXHIBITIONS / LIST OF EXHIBITORS

Monday-Thursday, 12-16 September 2005, 08.00-18.00

The participants are invited to visit the exhibition stands. Here you will find the exhibits of the following companies and societies:

Campbell Scientific Ltd

Booth # 14

Campbell Park, 80 Hathern Road
Shepshed, Leicestershire LE 12 9GX
UK
Att. Stuart Cresswell
Tel: +44-1509-60-1141
Fax: +44-1509-60-1091
stuart@campbellsci.co.uk

COST

Booth # 5

Avenue Louise 149
1050 Brussels
Belgium
Attn: Gabi Egartner
Tel: +32-2-533-3803
Fax: +32-2-533-3890
gegartner@cost.esf.org

Deutscher Wetterdienst

Booth # 17

Kaiserleistrasse 29/35
63067 Offenbach am Main
Germany
Att: W. Lotz
Tel: +49-69-8062-4290
Fax: +49-69-8062-4591
wolfgang.lotz@dwd.de

Gill Instruments Ltd

Booth # 4

Saltmarsh Park
Lymington SO41 9EG
UK
Att. Chris Stock
Tel: +44-1590-61-3500
Fax: +44-1590-61-3501
chris.stock@gill.co.uk

Kipp & Zonen B. V.

Booth # 7
Rontgenweg 1
2624 Delft
The Netherlands
Att: P. Akkermans
Tel: +31-15-2698-003
Fax: +31-15-2620-351
patrick.akkermans@kippzonnen.com

Wilh. Lambrecht GmbH

Booth # 3
P.O. Box 1235
3330 CE Zwijndrecht
The Netherlands
Att: A. Zweep
Tel: +31-78-623-1116
Fax: +31-78-623-1121
azweep@bakker-co.nl

Leosphere Lidars

Booth # 18
134 Avenue Parmentier
75011 Paris
France
Att: A. Sauvage
Tel: +33-1-6982-4240
Fax: +33-1-6982-4895
asauvage@leosphere.fr

MicroStep-MIS s.r.o.

Booth # 1
Cavojskeho 1
84104 Bratislava
Slovak Republic
Att: D. Mazurek
Tel.: +421-2 602 00 111
Fax: +421-2 602 00 180
mazurek@microstep-mis.sk

MODEM

Booth # 16
AZ de l'orme a bonnet
91750 Chevannes
France
Att: R. Pepin
Tel.: +33-164 99 77 52
Fax: +33-164 99 77 53
rpepin@meteodem.com

OTT Hydrometry – Koenders Instruments B.V.

Booth # 12
Randstad 2212
1316 BX Almere
The Netherlands
Att: R. van der Veen
Tel: +31-36-548-6180
Fax: +31-36-548-6189
robert.vanderveen@koenders-instruments.com

Scintec AG

Booth # 9
Europaplatz 3
72072 Tuebingen
Germany
Att: B. Schrauf
Tel.: +49-7071-921 410
Fax: +49-7071-551 431
bettina.schrauf@scintec.com

Adolf Thies GmbH & Co. KG

Booth # 6
Hauptstr. 76
37083 Göttingen
Germany
Att: T. Stadie
Tel: +49-551-79001-112
Fax: +49-551-79001-65
Thomas.Stadie@thiesclima.com

EGU '05 / Booth #11
WWW.LIDAR.FR
info@leosphere.fr



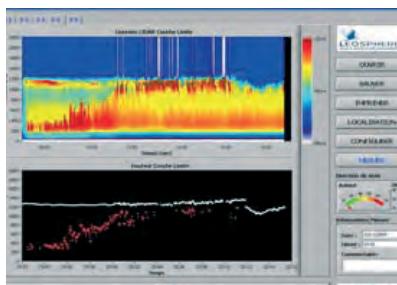
LEOSPHERE
Lidar Environmental Observations



Vaisala Oyj
Booth # 10
P.O. Box 26
00421 Helsinki
Finland
Att: N. Linnermo
Tel.: +358-9-8949 2699
Fax: +358-9-8949 2210
tiina.kiianlehto@vaisala.com

Mr. Gerhard Pevny
Booth # 8
Sales
LOGOTRONIC GmbH
Phorusgasse 8
1040 Wien
Austria
email: gerhard.pevny@logotronic.co.at
Tel: +43-1-58 72 971-0
Fax: +43-1-58 72 971-41

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Netherlands



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 - Meteorological numeric models

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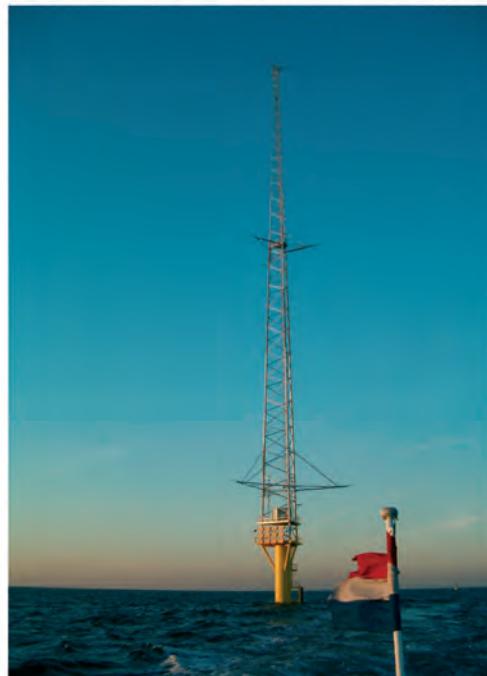
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Inside of the highly accurate Rain gauge 170-1

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ICE BREAKER:

In the "Nationaal Museum van Speelklok tot Pierement",
Monday 12 September
18.00-20.00



A former church in the city of Utrecht houses a living collection of mechanical music. Carillon clocks, musical boxes, pianolas, belly organs, orchestrions, as well as full-size street-, fairground- and dance hall organs are all on show. A tour of this unique museum tells the story of automated musical instruments through the ages.

During the tour (highly recommended!) drinks and snacks are served, but, for the late comers, there is also the possibility to enjoy your drinks without doing the tour.

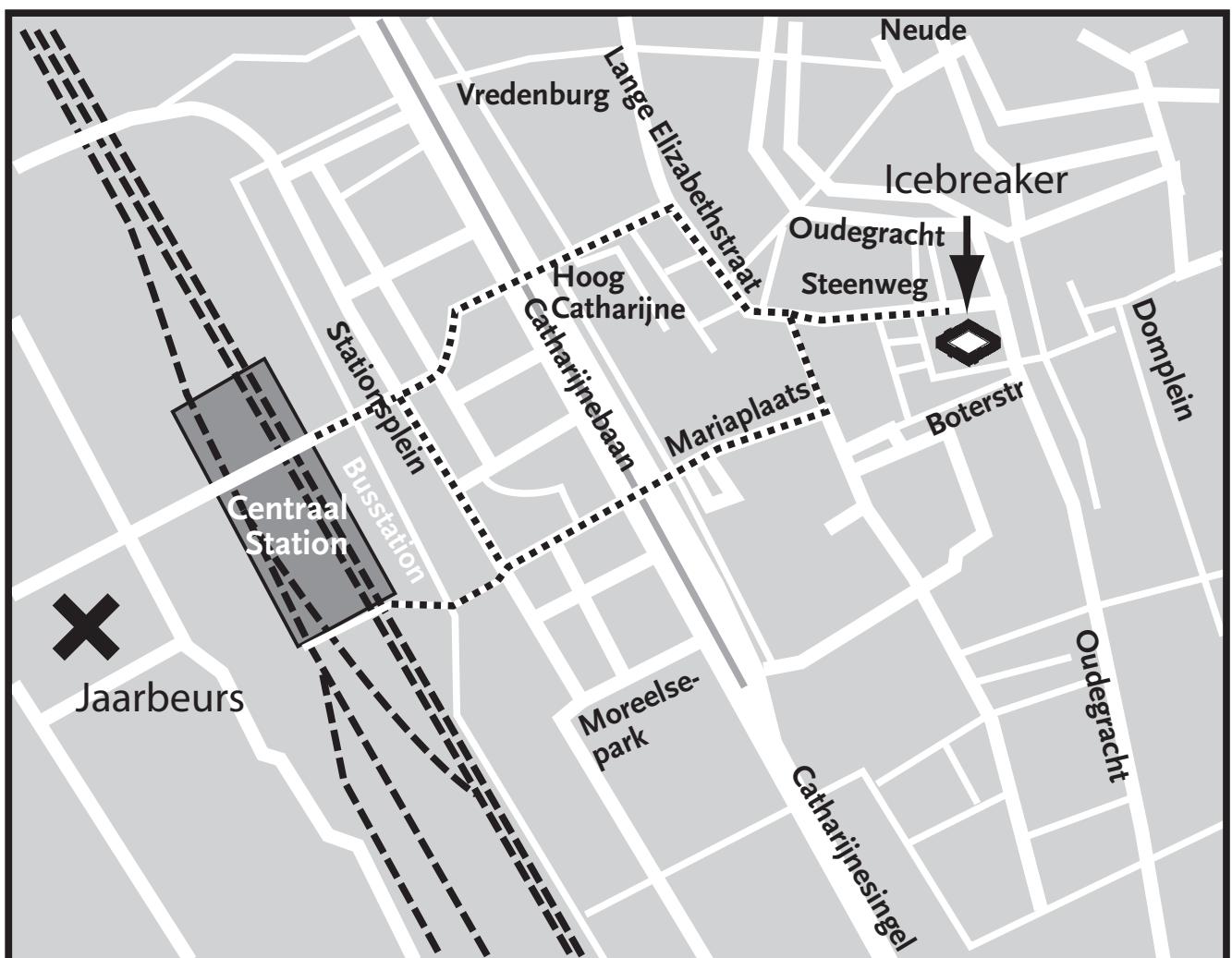


The Icebreaker is sponsored by: The City of Utrecht

The address:
Nationaal Museum van Speelklok tot Pierement
Steenweg 6
3511 JP Utrecht

The location "Speelklok tot Pierement" is on walking distance from the Conference Centre. Please walk straight through the Shopping Centre "Hoog Catherijne" to the Centre of Utrecht. Turn right at the Lange Elizabethstraat. This street will go into the Steenweg (see map).



Route to museum van Speelklok tot Pierement

CONFERENCE DINNER

On Tuesday 13 September 17.30-00.30

The grand night of Breughel

Do you belong to the fellow lovers of life, who feel most at home amongst troubadours, golden frothy beer and succulent smoked ham? Then take a step back to the time of Breughel in the tavern of Soete Lieve. Here, in this cosy tavern with its arches and niches, you will be immersed in Burgundian festivities.

An evening full of surprises awaits you because a tavern not only attracts the attention of people with a taste for food, drink and pleasure, it also acts as a magnet for shady characters from various walks of life. So what are you waiting for? No sooner have you seated yourself at one of the sturdy wooden tables, then Soete Lieve welcomes you. Indeed, if you want anything to eat or drink take a plate and a tankard and have them filled. As for the

tankards, the brewer has not only the cellars but the tavern itself full to the brim with barrels of wine and beer. So pay a visit to the barrels, you can drink as much as you desire the whole evening.

Should you wish for something stronger that can always be arranged at one of our bars. Regarding the replenishment of your plate, the landlady has instructed her cooks to ensure that only the very best is prepared for your pallet. All the markets in the city are gleamed daily, because fresh meat, fresh fish and fresh vegetables are the most important ingredients in the banquet that awaits you.

Don't be shocked if suddenly the Witch of the House with rolling thunder and lightning makes her flying entrance. Sing along with the troubadours if you feel like it. Have your hand read by the fortune-teller. But take care, she knows more than your partner does and says more than you'd like her to. Because yes, you're either a fortune teller or you're not. More than likely you'll happen upon the pedlar with his donkey. Beware of this man, with his charms and wares he tries to steal the hearts of the ladies. And with his potions he promises eternal life, but take one sip and you'll be eternally silent.

During all the merriment perhaps your shoes have lost their shine? Not a problem, there's always someone busy polishing shoes at the tavern. You don't need to look for them; you're bound to trip over them sooner or later. Keep a good lookout for the magician. Everywhere he appears, something you love disappears.

During all the festivities the cooks have been in the thick of things. They've carved the meat, filleted the fish and brought the fire up to heat. After this hearty meal the floor is cleared as the party bursts into full swing. The singer and the troubadours ensure that the dancing and singing shakes the tavern to its very foundations. Before you know it the party is over. A memorable end to an unforgettable evening, the doorman will see to that!



The Conference Dinner is sponsored by: Kipp & Zonen B.V.

The price for this Conference dinner is:

EMS/ECAM Participants: €40,-

Accompanying Person: €90,-

EMS 5th Annual Meeting - Time grid									
SUN									
11	KNMI	EMS Council		OPENING SESSION		AM 2.3 Safety		AM 2.4 Verification	
MON		Juliana 1	Juliana 2	L	AM 2.2 Energy	AM 2.2 Seas.	VOLTAIRE	T	DINNER
12		Irene	European		AW4	P	COST 733	T	ICE BREAKER
TUE		Juliana 1	Juliana 2	C	AW8	VAISALA	VAISALA	T	Voltaire-Meeting
13		Irene	European						AW1.2_B
		Juliana 1	Juliana 2						EMS RT Sat.
		Irene	European						AW1.1_B
WED		Juliana 1	Juliana 2	C	CL1_A	AW5.1_A	AM2.1 Transport	AM2.1	AM 2.5 Economy
14		Irene	European		AW7			P	AW1.2_A
		Juliana 1	Juliana 2						EMIS Satellites
		Irene	European						AW1.1_A
THU		Juliana 1	Juliana 2	C	IP1	IP2	CL4	L	AM 2.6 / CL3 Seasonal
15		Irene	European		AW5.2	AW3	IO5_B	P	VOLTAIRE
		Juliana 1	Juliana 2		IO5_A				COST 733
		Irene	European						VAISALA
FRI		Juliana 1	Juliana 2	C	IP3	IP4	CL2	IP3	ECAM RT Forecast
16		Irene	European		AW2_A	AW2_B	CO1	CO1	AW1.2_F
		Juliana 1	Juliana 2						CL1_D
		Irene	European						AW5.1_C
		Juliana 1	Juliana 2						Accred
		Irene	European						IO1
		Juliana 1	Juliana 2						C: Coffee Break
		Irene	European						L: Lunch Break
		Juliana 1	Juliana 2						T: Tea Break
		Irene	European						P: Poster viewing



LAMBRECHT

Wilh. LAMBRECHT GmbH

Meteorological Instruments
Friedländer Weg 65-67
D-37085 Göttingen
fon 0049-(0)551-4958-0
fax 0049-(0)551-4958-312
info@lambrecht.net
www.lambrecht.net

In The Netherlands via:



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PROGRAMME

MONDAY

12 SEPTEMBER 2005

MORNING

10:30 – 12:45

**Joint opening session of the 5th EMS
Annual Meeting, the 7th European
Conference on Applications of Meteorology
(ECAM) and the Open VOLTAIRE
Conference**

Room: Irene

10:30 – 11:00 Welcome and introduction

WERNER WEHRY: President, EMS
JANNEKE OTTENS: KNMI
HARRY OTTEN: Meteo Consult

11:00 – 11:45 Adresses

FRITS BROUWER: KNMI
WALT LYONS: AMS
ARNE RICHTER: EGU
STEFANO BRUZZI: ESA
LARS PRAHM: EUMETSAT
SEIJO KRUIZINGA: NVBM
BEN DIETERING: Kipp&Zonen
GIOVANNI PERONA: Voltaire Project

11:45 – 12:45 Strategic lectures

Chair: Werner Wehry

MICHEL JARRAUD: Director WMO
Meteorology and society in a global context

DOMINIQUE MARABOUTY: Director ECMWF
Meteorology in a European context

DAVID BURRIDGE: President elect, EMS
THORPEX and the user perspective

12:45 SESSION ENDS

12:45 – 14:00 Lunch Break

MONDAY

12 SEPTEMBER 2005

AFTERNOON

14:00 – 16:00

ECAM Session AM 2.5 ECONOMY: PRODUCTION PLANNING AND DATA POLICY

Room: Juliana 1

Chair: Ernesto Rodriguez Camino

14:00 - 14:15 0701

GENOVESE, G.: Joint Research Centre (JRC), Ispra, Italy
Calculating crop yields

14:15 - 14:30 0702

RATHKE, M.: Market Research, MC-Wetter GmbH, Berlin, Germany
Weather exposure of the beverage industry

14:30 - 15:00 0177

ZACH, G.; LIPA, W.; POTZMANN, R.; KOCH, E.; RUDEL, E.: ZAMG, Vienna, Austria
Speeding up weather related insurance claims

15:00 - 15:15 0703

PETROVA, M.V.; GERSHINKOVA, D.: Meteoagency of Roshydromet, Russia
Information services to insurance in the Russian Federation

15:15 - 15:30 0298

HADERLEIN, K.: Deutscher Wetterdienst, Offenbach, Germany
A balanced pricing concept for public sector information

15:30 - 15:45 0726

BLONDIN, C.: Météo France
The economical model of Météo France in the WMO and European context

15:45 - 16:00 0087

ANDREEVA, T.; YOTOVA, A.: National Institute of Meteorology and Hydrology, Sofia, Bulgaria
Application and verification of long-range weather forecasting to Bulgarian economy

16:00 SESSION AM2.5 ENDS**16:00 – 16:30 Tea Break****14:00 – 16:00**

EMS Session AW1.2: BOUNDARY LAYER PHYSICS IN WEATHER AND CLIMATE PREDICTIONS – Part 1

Room: Juliana 2

Chair: S. Zilitinkevich

14:00 - 14:30 0065

HOLTSLAG, A.A.M.; BEARE, R.; CUXART, J.; SVENSSON, G.: Wageningen University, The Netherlands
Stable boundary layers and land surface climate: Results from the GEWEX atmospheric boundary layer study (GABLs) (solicited)

14:30 - 14:45 0127

STEENEVELD, G.J.; VAN DE WIEL, B.J.H.; HOLTSLAG, A.A.M.: Wageningen University, The Netherlands
Modelling the Evolution of the atmospheric boundary layer coupled to the land surface and its sensitivity to parameter values and resolution

14:45 - 15:00 0185

VAN DE WIEL, B.J.H.; MOENE, A.F.; STEENEVELD, G.J.; HOLTSLAG, A.A.M.: Wageningen University, The Netherlands
Towards an understanding of stable boundary layer decoupling

15:00 - 15:15 0189

CUXART, J.; JIMÉNEZ, M.A.: Universitat de les Illes Balears, Palma de Mallorca, Spain
Mixing processes in a nocturnal low-level jet

15:15 - 15:30 0245

MCCABE, A.; BEARE, R.: The Met Office, Exeter, United Kingdom
Modelling the stable boundary layer

MONDAY

12 SEPTEMBER 2005

AFTERNOON

15:30 - 15:45 0053

STEENEVELD, G.J.; VAN DE WIEL, B.J.H.; HOLTSLAG, A.A.M.: Wageningen University, The Netherlands

Revisiting the height of the stable boundary layer over land

15:45 - 16:00 0553

ELPERIN, T.; KLEORIN, N.; ROGACHEVSKII, I.; ZILITINKEVICH, S.: Ben-Gurion University, Beer-Sheva, Israel

New turbulence closure equations for stable boundary layer: return to Kolmogorov (1941)

16:00 – 16:30 Tea Break**16:30 – 18:30**

EMS Session AW1.2: BOUNDARY LAYER PHYSICS IN WEATHER AND CLIMATE PREDICTIONS – Part 2

Room: Juliana 2

Chair: B. Holtslag

16:30 - 17:00 0456

LOCK, A.: The Met Office, Exeter, United Kingdom
Representation of boundary-layer clouds in MET Office Unified Model (solicited)

17:00 - 17:15 0475

ROTACH, M.; BUZZI, M.; ARPAGAUS, M.; BETTEMPS, J-M.: MeteoSwiss, Zurich, Switzerland
High-resolution operational simulation of boundary layer processes in complex terrain

17:15 - 17:30 0202

LAPPEN, C.; RANDALL, D.: Colorado State University, Durango, United States of America
Parameterization of momentum fluxes in a PBL mass-flux model

17:30 - 17:45 0152

CHELTON, D.: Oregon State University, Corvallis,

United States of America

The impact of sea-surface temperature specification on surface winds in numerical weather prediction and climate models

17:45 - 18:00 0328

DURANTE, F.; DE PAUS, T.; BERAN, J.; LANGE, B.: German Wind Energy Institute, Wilhelmshaven, Germany

A sensitivity study of mesoscale wind profile simulations to planetary boundary layer parameterization

18:00 - 18:15 0342

HELMIS, C.; WANG, Q.; HALIOS, C.; KATSOUVAS, G.; SGOUROS, G.: University of Athens, Greece

Vertical structure and characteristics of the marine low-level jet

18:15 - 18:30 0555

BAAS, P.; STEENEVELD, G.J.; VAN DE WIEL, B.J.; HOLTSLAG, A.A.M.: KNMI, De Bilt, The Netherlands

On spurious correlation in the flux-profile relationships for the stable boundary layer

18:30 SESSION AW1.2 ENDS FOR TODAY

Session AW1.2 continues on Wednesday morning

14:00 – 16:00

EMS SPECIAL SESSION ON FUTURE METEOROLOGICAL SATELLITES – Part 1: Lectures

Room: Irene

Chairs: A. Ratier and A. Lebeau

14:00 – 14:05

LEBEAU, A.; RATIER, A.: Météo France
Introduction

14:05 – 14:30

HINSMAN, D.: WMO
The WMO space programme and the GEOSS implementation plan

MONDAY

12 SEPTEMBER 2005

AFTERNOON

14:30 - 15:00

Speakers to be designated by ESA and EUMETSAT
MTG mission concepts and outcome of second MTG
user consultation

15:00 - 15:25

Speaker to be designated by NOAA/NESDIS
Mission concepts for GOES-R

15:25 - 15:50

GINATI, A.: Head, Earth Observation Future Programs,
European Space Agency
Mission concepts for GMES sentinels 3,4,5

15:50 - 16:00

Speaker to be designated by ESA and EUMETSAT
Overall planning for MTG, post EPS, GMES missions

16:00 - 16:30 Tea Break**16:30 - 17:30**

EMS SPECIAL SESSION ON FUTURE METEOROLOGICAL SATELLITES – Part 2: Round Table

Participants

ANDRÉ LEBEAU (MODERATOR),
MICHEL JARRAUD, SECRETARY GENERAL OF WMO
VOLKER LIEBIG, DIRECTOR OF ESA EARTH
OBSERVATION PROGRAMMES
DOMINIQUE MARBOUTY, DIRECTOR OF ECMWF
LARS PRAHM, DIRECTOR-GENERAL OF EUMETSAT
ALAIN RATIER, DEPUTY-DIRECTOR GENERAL OF
MÉTÉO-FRANCE
PAUL WEISSENBERG, DIRECTOR, EC/DG ENTERPRISE
GREGORY WITHEE, NOAA, ASSISTANT ADMINISTRATOR
FOR NESDIS

17:30 SPECIAL SESSION ON FUTURE METEOROLOGICAL SATELLITES ENDS**14:00 - 16:00**

EMS Session AW1.1: WEATHER ANALYSIS AND FORECASTING IN DIFFERENT SCALES - Part 1

Room: European
Chair: N.N.

14:00 - 14:30 0019

OVHED, M.; NOER, G.: Norwegian Meteorological Institute, Oslo, Norway
High resolution models over sea, a case study with polar lows (solicited)

14:30 - 14:45 0005

PASQUI, M.; GOZZINI, B.; PASI, F.: Institute of Biometeorology (IBIMET), National Research Council, Florence, Italy
Initial and boundary conditions sensitivity on severe storm events: assessment of value added using the Regional Atmospheric Modeling System (RAMS)

14:45 - 15:00 0016

BOJARIU, R.; VELEA, L.; DUMITRACHE, R.: Facultade de Ciencias, Universidad de Vigo, Ourense, Spain
Wind variability related to upwelling events at the eastern coast of the Black Sea in a regional climate modeling experiment

15:00 - 15:15 0272

CRISTOFORI, E.; PEZZOLI, A.; TEDESCHI, G.; RESCH, F.: Politecnico di Torino, Italy
Analysis of numerical simulations of vertical strong wind profiles in the French Mediterranean coastal region

15:15 - 15:30 0360

MENEZES, I.C.; AZEVEDO, M.G.; RAMOS, A.M.: University of Évora, Portugal
Extremes analysis associated with intertropical convergence zone over Angola: A case study

MONDAY

12 SEPTEMBER 2005

AFTERNOON

15:30 - 15:45 0271

CELIE, S.; TEDESCHI, G.; RESCH, F.: University of Toulon-Var, La Vallette du Var, France
Breeze events on the French Mediterranean coast during the ESCOMPTE campaign: numerical simulations and experimental data analysis

15:45 - 16:00 0074

AOKI, T.: National Institute for Environmental Studies, Tsukuba, Japan
The performance of the hypothetical channel system for compressing the multi-channel spectral data

16:00 – 16:30 Tea Break**16:30 – 18:15**

EMS Session AW1.1: WEATHER ANALYSIS AND FORECASTING IN DIFFERENT SCALES - Part 2

Room: European
Chair: N.N.

16:30 - 17:00 0332

PASTOR, F.; PISONI, E.: University of Brescia, Italy
A methodology for preprocessing SST NOAA/AVHRR satellite data for assimilation in a prognostic meteorological model (solicited)

17:00 - 17:15 0211

MURPHY, M.; DEMETRIADES, N.: Vaisala Inc., Tucson, United States of America
The role of total lightning in thunderstorm nowcasting

17:15 - 17:30 0028

DIACONU, O.; WILSON, L.; PEEL, S. ; VALLEE, M.: Environment Canada, Toronto, Canada
Marine wind forecasting with the Canadian updateable MOS system using buoy and QuikSCAT data

17:30 - 17:45 0049

VILLICAÑA, J.; BUENDÍA, E.; AZPRA, E.; DELGADO, O.: University of Guadalajara, Mexico
Improving forecasted trajectory from hurricanes Ivan and Jeanne (2004)

17:45 - 18:00 0010

WALSER, A.; MARSIGLI, C.; MONTANI, A.; LININGER, M.A.: MeteoSwiss, Zurich, Switzerland
Probabilistic regional weather forecasts with COSMO-LEPS

18:00 - 18:15 0530

BAJO, M.; UMGIESSER, G.; ZAMPATO, L.: ISMAR-CNR, Venice, Italy
An operational finite element model for storm surge in the Adriatic Sea

18:15 SESSION AW1.1 ENDS**18:00 – 20:00 Ice Breaker**

Doors open at 18:00

Guided tours at the museum start at 18:30

TUESDAY

13 SEPTEMBER 2005

MORNING

08:30 – 10:30

ECAM Session AM 2.3 SAFETY AND EXTREME WEATHER – Part 1

Room: Juliana 1
 Chair: Ernest Rudel

08:30 - 09:00 0509

STAUDINGER, M.: ZAMG, Vienna, Austria
 Meteorisk - an Alpine-wide project to enhance collaboration between the weather services in cases of extreme weather (Keynote)

09:00 – 10:30 WARNING SYSTEMS**09:00 - 09:15 0510**

GMOSEN, H.; ZWATZ-MEISE, V.: ZAMG, Vienna, Austria
 The use of the high resolution model INCA for warning purposes

09:15 - 09:30 0707

KROONENBERG, F.: KNMI, De Bilt, The Netherlands
 European Multiservice Meteorological Awareness system (EMMA)

09:30 - 09:45 0708

MUREAU, R.: KNMI, De Bilt, The Netherlands
 An automated early warning system based on EPS

09:45 - 10:00 0015

FJUKSTAD, B.; JOHANSEN, D.; BRENNA, D.: Norwegian Meteorological Institute, Oslo, Norway
 Using the WAIF framework for personalized meteorological alarms

10:00 - 10:15 0709

HELMER, M.: Head Red Cross / Red Crescent Climate Centre, The Hague, The Netherlands
 Preparedness form climate change - knowledge driven or disaster driven

10:15 - 10:30 0710

GRAEFLING, W.: Berlin Fire Brigade, Germany
 Extreme weather – lessons learned by the Berlin Fire Brigade

10:30 – 11:00 Coffee Break**11:00 – 12:15**

ECAM Session AM 2.3 SAFETY AND EXTREME WEATHER – Part 2

Room: Juliana 1
 Chair: Janneke Ottens

11:00 – 12:00 WATER**11:00 - 11:15 0713**

KOK, K.; VOGELEZANG, D.: KNMI, De Bilt, The Netherlands
 Warning system of extreme precipitation amounts for the Dutch Water Boards

11:15 - 11:30 0714

SCHAPER, P.: Water Board Fryslân, The Netherlands
 Managing the unexpected water

11:30 - 11:45 0537

KROOS, J.: Rijkswaterstaat RIKZ, The Netherlands
 The Storm Surge Warning Service in the Netherlands

11:45 – 12:15 FIRE FORECASTING**11:45 - 12:00 0046**

ROADS, J.; TRIPP, P.; JUANG, H.; WANG, J.: Scripps Institution of Oceanography, UCSD, La Jolla, United States of America
 Experimental weekly to seasonal ensemble fire danger forecasts

12:00- 12:15 0538

MOKORIC, M.; KALIN, L.: Meteorological and Hydrological Service, Zagreb, Croatia
 Meteorological support for forest fires protection in Croatia

12:15 SESSION AM2.3 ENDS

TUESDAY

13 SEPTEMBER 2005

MORNING

08:30 - 10:30

ECAM Session AM2.2: ENERGY (MERGED WITH SESSION AM5.3 METEOROLOGY AND ENVIRONMENTAL IMPACTS ON REGENERATIVE ENERGY) – Part 1

Room: Juliana 2
Chair: Harry Otten

08:30 - 09:00 0703

DEN ROOIJEN, H.: VP Development, Shell Wind Energy, The Netherlands
From reservoir modelling to weather Forecasting: energy flows

09:00 - 10:00 TRADING**09:00 - 09:15 0540**

MEULEMANS, S.: Sempra Trading, London, United Kingdom
Energy weather forecasting and the impact of temperature and demand on the energy markets

09:15 - 09:30 0704

STENSON, K.: RWE, Essen, Germany
Impact of Wind and Precipitation on a Pan-European Energy Trading Market

09:30 - 09:45 0705

CAROL, TH.: PowerNext, France
Energy trading

09:45 - 10:00 0706

VISSEER, M.: Gasunie Trade & Supply, The Netherlands
The impact of Temperature Forecasts on the Gas Market

10:00 - 10:30

WINDPOWER, HYDROPOWER AND SOLAR POWER – Part 1

10:00 - 10:15 0507

REITER, CH.; SCHWEIGER, F.; GOMSER, H.; ZWATZ-MEISE, V.; HAIDEN, TH.; WIMMER, F.: WIEN ENERGIE Fernwärme Wien (District Heating

Vienna), Austria

Improved temperature and cloud forecasts for planning purposes in the energy industry

10:15 - 10:30 0518

SCHWARTZ, H.; JACOB, D.: anemos-jacob, Oldershausen, Germany
Which information do wind energy resource specialists wish to obtain from meteorological experts?

10:30 - 11:00 Coffee Break**11:00 - 12:15**

ECAM Session AM2.2: ENERGY (MERGED WITH SESSION AM5.3 METEOROLOGY AND ENVIRONMENTAL IMPACTS ON REGENERATIVE ENERGY) – Part 2

Room: Juliana 2

Chair: Daniela Jacob

11:00 - 12:15 WINDPOWER, HYDROPOWER AND SOLAR POWER – Part 2**11:00 - 11:15 0402**

VON BREMEN, L.; TAMBKE, J.; POPPINGA, C.; GRAEWE, U.; HEINEMANN, D.: ForWind - Center for Wind Energy Research, University of Oldenburg, Germany
On the decision to take forecasted or analysed wind speeds for the development of statistical wind power prediction algorithms

11:15 - 11:30 0352

CLAVERI, L.; BERAN, J.; DURANTE, F.; LANGE, B.; VON BREMEN, L.; LANGE, M.: ForWind - Center for Wind Energy Research, University of Oldenburg, Germany
Offshore wind resource assessment with a mesoscale model

11:30 - 11:45 0508

HEBENSTREIT, K.; HAIDEN, TH.: VERBUND-Austrian Hydro Power AG (AHP), Vienna, Austria
Experiences about the use of areal precipitation fore-

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TUESDAY

13 SEPTEMBER 2005

MORNING

casts in hydropower generation

11:45 - 12:00 0006

GIRODO, M.; LORENZ, E.; MUELLER, R.W., HEINEMANN, D.: Energy and Semiconductor Research Laboratory, University of Oldenburg, Germany
Analysis of different approaches to predict solar irradiance

12:00 - 12:15 0018

BETCKE, J.: Energy and Semiconductor Research Laboratory, University of Oldenburg, Germany
The Heliosat-3 Project, energy-specific solar radiation from Meteosat Second Generation, results and example applications

12:15 Session AM2.2 ENDS

12:30 - 13:00

JOINT ECAM Session AM2.6 and EMS Session CL3: SEASONAL FORECASTING AND ITS POTENTIAL – Part I

Room: Juliana 2
Chair: Mark Liniger

12:30 - 13:00 0711

DUTTON, J.: Weather Ventures Ltd., United States of America
Seasonal forecast performance from a user perspective (Keynote)

13:00 - 14:00 Lunch Break

08:30 - 09:45

**EMS Session AW4:
HYDROMETEOROLOGY**

Room: Irene

Chair: Th. Einfalt

08:30 - 08:45 0430

KAUSAR, R.; BARI, A.; RAFIQ, U.; HASHMI, S.; FAIZ, A.: Quaid-i-Azam University, Islamabad, Pakistan
Status of cloud seeding in Pakistan

08:45 - 09:00 0397

MIGUEZ-MACHO, G.; FAN, Y.; WEAVER, C. P.; ROBOCK, A.: University of Santiago de Compostela, Galicia, Spain
Incorporating water table dynamics in a regional climate model: impact on soil moisture and precipitation at continental scale

09:00 - 09:15 0030

NAZARENKO, O.: Rostov State University, Rostov-On-Don, Russia
Transformation of groundwater recharge in Rostov region and climate influence during second half of the XX century

09:15 - 09:30 0182

GÜNEL, M.S.; DEMIREL, M.C.; KÜÇÜK, M.; AGIRALIOGLU, N.: Istanbul Technical University, Turkey
Determination of rainfall time distributions of Turkey by using cluster analysis

09:30 - 09:45 0257

SARADJIAN, M.R.; TAGHVA KISH, S.: Faculty of Engineering, University of Tehran, Iran
Snow cover monitoring using temperature adaptive NDSI method on MODIS data

09:45

Session AW4 ENDS

10:30 - 11:00 Coffee break

TUESDAY

13 SEPTEMBER 2005

MORNING

11:00 - 13:00**OPEN VOLTAIRE CONFERENCE – Part 1**

Room: Irene
 Chair: N.N.

11:00 - 11:15 0561

PERONA, G.; JOSS, J.: Dipartimento di Elettronica,
 Politecnico di Torino, Italy
 VOLTAIRE introduction

11:15 - 11:30 0466

GOLZ, C.; EIFNALT, TH.: einfalt & hydrotec GbR,
 Lübeck, Germany
 Radar data quality control methods

11:30 - 11:45 0454

FRANCO, M.; SÀNCHEZ-DIEZMA, R.; SEMPERE-TORRES, D.: Universitat Politècnica de Catalunya (UPC), Barcelona, Spain
 A new criterion for classifying convective and stratiform rain based on the vertical development of the precipitation

11:45 - 12:00 0451

BERNE, A.; UIJLENHOET, R.: Wageningen University, The Netherlands
 A stochastic model of range profiles of raindrop size distributions: Application to radar attenuation correction

12:00 - 12:15 0465

MORIN, E.; KARKLINSKY, M.: Hebrew University of Jerusalem, Israel
 Spatial characteristics of radar-derived convective rain cells over Southern Israel

12:15 - 12:30 0564

SKOK, G.: University of Ljubljana, Slovenia
 Overview of VOLTAIRE posters

12:30 - 13:00

Time for poster viewing

13:00 - 14:00 Lunch Break**08:30 - 10:30****EMS Session AW8: WEATHER TYPES CLASSIFICATION**

Room: European
 Chair: E. Dittmann

08:30 - 08:45 0300

HUTH, R.; USTRNUL, Z.; DITTMANN, E.; BISSOLLI, P.; PASQUI, M.; JAMES, P.: Charles-University, Praha, Czech Republic
 Results of a survey of circulation classification methods and their applications in Europe within the COST 733 action (solicited)

08:45 - 09:00 0273

JAMES, P.: The Met Office, Exeter, United Kingdom
 An objective classification of Hess and Brezowsky Grosswetterlagen over Europe and its application in climate modelling

09:00 - 09:15 0255

PHILIPP, A.; JACOBET, J.; DELLA-MARTA, P.: University of Würzburg, Germany
 Classifying reconstructed daily pressure patterns for the period 1850 to 2003 in the North-Atlantic - European region by simulated annealing clustering

09:15 - 09:30 0294

BORONEANT, C.; PLAUT, G.; IONITA, M.: National Institute of Meteorology and Hydrology, Bucharest, Romania
 Heavy precipitation over the south of Romania and associated large scale circulation

09:30 - 09:45 0295

BISSOLLI, P.; MÜLLER-WESTERMEIER, G.: Deutscher Wetterdienst, Offenbach, Germany
 The spatial distribution of precipitation in Germany for different Weather Types

09:45 - 10:00 0297

BARTHOLY, J.; PONGRACZ, R.; PATTANTYUS-ABRAHAM, M.; PATKAI, ZS.: Eötvös Lorand University, Budapest, Hungary
 Analysis of the European cyclone tracks, the corresponding frontal activity, and changes in MCP frequency

TUESDAY

13 SEPTEMBER 2005

MORNING

cy distribution

10:00 - 10:15 0348

LINIGER, M.A.; BADER, S.; APPENZELLER, C.: MeteoSwiss, Zurich, Switzerland
Weather type classification: Approaches in Switzerland

10:15 - 10:30 0333

DE CHIARA, G.; CRISCI, A. ; VACCARI, F.P.: Institute of Biometeorology (IBIMET), National Research Council, Florence, Italy
Weather type and wave height distribution changes in Tyrrhenian and Adriatic basins

10:30

SESSION AW8 ENDS

TUESDAY

13 SEPTEMBER 2005

AFTERNOON

14:00 - 16:00

JOINT EMS and ECAM Session AM3.4: VERIFICATION

Room: Juliana 1

Chair: Pertti Nurmi

14:00 - 14:15 0492

MAILIER, P.; JOLLIFFE, I.; STEPHENSON, D.: University of Reading, United Kingdom
Quality of weather forecasts – a survey of providers and users in the UK (Keynote)

14:15 - 14:30 0265

GÖBER, M.: Deutscher Wetterdienst, Offenbach, Germany
How well do Europe's national weather services forecast temperature?

14:30 - 14:45 0003

BONTA, I.: Hungarian Meteorological Service, Budapest, Hungary
Performance of the models during inversion situation considering the demands of energy supply

14:45 - 15:00 0410

TAMBKE, J.; POPPINGA, C.; CLAVERI, L.; VON BREMEN, L.; GRAEWE, U.: Institute of Physics, University of Oldenburg, Germany
Quality of two different wind speed forecasts for the North and Baltic Sea –Verification with synoptic offshore measurements between 10m and 100m height

Chair: Martin Göber

15:00 - 15:15 0390

NURMI, P.; KILPINEN, J.; SARKANEN, A.: Finnish Meteorological Institute, Helsinki, Finland
Verification of probabilistic forecasts to be used as decision-making guidance for warnings against near-gale force winds

15:15 - 15:30 0262

MITTERMAIER, M.; WILSON, C.: The Met Office, Exeter, United Kingdom
The use of radar-rainfall accumulations in assessing operational mesoscale precipitation forecasts

TUESDAY

13 SEPTEMBER 2005

AFTERNOON

15:30 - 15:45 0319

JENKNER, J.; SCHWIERZ, C.: ETH Zurich, Switzerland
 Verification of precipitation forecasts from the limited area model of MeteoSwiss (aLMo)

15:45 - 16:00 0007

FEHER, B.: Hungarian Meteorological Service, Budapest, Hungary
 Verification of the precipitation forecasts of the Hungarian Meteorological Service

16:00 SESSION AM3.4 ENDS**14:00 - 16:00**

JOINT ECAM Session AM2.6 and EMS Session CL3: SEASONAL FORECASTING AND ITS POTENTIAL – Part 2

Room: Juliana 2
 Chair: John Dutton

14:00 - 14:15 0546

TROCCOLI, A.: ECMWF, United Kingdom
 What can seasonal and monthly forecasts offer to their users? - Improving communication between providers and users

14:15 - 14:30 0009

LINIGER, M.A.: MeteoSwiss, Zurich, Switzerland
 The potential predictability of near surface temperature in seasonal forecasts

14:30 - 14:45 0183

BENESTAD, R.E.: Norwegian Meteorological Institute, Oslo, Norway
 The Norwegian experience with seasonal forecasting

14:45 - 15:00 0545

VAN OLDENBURGH, G.J.: KNMI, De Bilt, The Netherlands
 Statistical vs dynamical seasonal forecasts in Europe

15:00 - 15:15 0151

DE AZEVEDO, M.G.; LUCIO, P.S.; MOLION, L.C.: University of Évora, Portugal

Rainfall climatology and phenomenology over Angola
 - Stochastic approach for meteorological properties of convective systems

15:15 - 15:30 0292

ORTIZ BEVIÁ, M.J.; CABOS NARVÁEZ, W.; SÁNCHEZ GÓMEZ, E.; ALVÁREZ GARCÍA, F.J.: University of Alcalá, Spain
 Impact of global warming on ENSO predictability

15:30 - 16:45 0313

GUARNIERI, F.; CAPECCHI, V.; CRISCI, A.: Institute of Biometeorology (IBIMET), National Research Council, Florence, Italy
 A wavelet analysis of 500 hPa Euro-Atlantic geopotential height field on Mediterranean rainfall and temperature

15:45 - 16:00 0282

PIANI, F.; PASQUI, M.; MENEGUZZO, F.; MARACCHI, G.: Institute of Biometeorology (IBIMET), National Research Council, Florence, Italy
 Rainfall seasonal forecasting in the Sahel region: an analogue algorithm approach

16:00 SESSION AM2.6/CL3 ENDS**14:00 - 16:00**

OPEN VOLTAIRE CONFERENCE – Part 2

Room: Irene
 Chair: N.N.

14:00 - 14:15 0433

EINFALT, TH.: einfalt & hydrotec GbR, Lübeck, Germany
 Looking into the future: towards ensemble radar measurements?

14:15 - 14:30 0479

GABELLA, M.; NOTARPIETRO, R.: Dipartimento di Elettronica, Politecnico di Torino, Italy
 Optimized/adjusted radar observations in VOLTAIRE test sites

TUESDAY

13 SEPTEMBER 2005

AFTERNOON

14:30 - 14:45 0450

TARTAGLIONE, N.; MARIANI, S.; ACCADIA, C.; CASAIOLI, M.; GABELLA, M.; MICHAELIDES, S.; SPERANZA, A.: Department of Physics, University of Camerino, Italy
Model verification sensitivity to different radar adjustment techniques

14:45 - 15:00 0458

SKOK, G.; VRHOVEC, T.: University of Ljubljana, Slovenia
Interpolation considerations when comparing model and raingauge precipitation. Heavy precipitation cases analysis for Slovenia

15:00 - 15:15 0449

BOLLIGER, M.; GERMANI, U.; GALLI, G.: MeteoSvizzera, Locarno, Switzerland
Estimate the representativeness error of point measurements for area-averages using radar data

15:15 - 15:30 0453

UIJLENHOET, R.; PORRÀ, J.M.; TORRES, D.S.; CREUTIN, J.-D.: Wageningen University, The Netherlands
Analytical solutions to sampling effects in drop size distribution measurements during stationary rainfall

15:30 - 16:00

Time for poster viewing

16:00 – 16:30 Tea Break

16:30 – 18:30

OPEN VOLTAIRE CONFERENCE – Part 3

Room: Irene
Chair: N.N.

16:30 - 16:45 0439

SKOK, G.: University of Ljubljana, Slovenia
On the relationship between the radius of influence and the number of neighbors in 2D local precipitation interpolation

16:45 - 17:00 0446

GABELLA, M.; JOSS, J.; PERONA, G.; MICHAELIDES, S.: Dipartimento di Elettronica, Politecnico di Torino, Italy
Variation of the sensitivity of weather radars at ground level and from space

17:00 - 17:15 0444

LLORT, X.; BERENGUER, M.; SÀNCHEZ-DIEZMA, R.; SEMPERE-TORRES, D.: Universitat Politècnica de Catalunya (UPC), Barcelona, Spain
Downscaling 3D precipitation fields for radar measurement simulations

17:15 - 17:30 0435

AMITAI, E.; SMITH, E.A.: George Mason University & NASA/GSFC, Greenbelt, United States of America
Opportunities & challenges for quantifying precipitation uncertainties during future GPM mission

17:30 - 17:45 0437

SMITH, E.A.: NASA/ Goddard Space Flight Center, Greenbelt, United States of America
Prospects for GPM's Supersite Network and its relationship to VOLTAIRE

17:45 - 18:30 0565

SKOK, G.: University of Ljubljana, Slovenia
VOLTAIRE general discussion

18:30 VOLTAIRE CONFERENCE ENDS

18:00-01:00 CONFERENCE DINNER

WEDNESDAY

14 SEPTEMBER 2005

MORNING

08:30-10:30

ECAM Session AM2.1: TRANSPORT Part 1

Room: Juliana 1
Chair: N.N.

09:00 – 09:30 SPORTING EVENTS

09:00 - 09:15 0505

PUEMPEL, H.: Working Group TREND, Austrocontrol, Innsbruck, Austria
In the line of fire: Site-specific forecasting for major sporting events

09:15 - 09:30 0721

HOREAU, D.: Vendee Globe, France
Vendee sailing race/ship routing

09:30 – 10:15 AVIATION

09:30 - 09:45 0532

JOHNSON, D.: The Met Office, Exeter, United Kingdom
The changing requirements for meteorological service provision to the civil aviation community in Europe

09:45 - 10:00 0717

VAN LAMMEREN, A.; HART, D; MURPHY, D.; FLETZER, G.; HÄFLIGER, M.; DE KEYSER, N.: KNMI, De Bilt, The Netherlands
User tailored products for support of ATM within the MET Alliance

10:00 - 10:15 0718

NIEMEYER, S.; VAN ASTEN, B.: KLM, The Netherlands
Capacity forecast Schiphol

10:15 - 10:25 0715

SCHULTZ-VAN HAEGEN, M.: State Secretary of Transport, Public Works and Water, The Netherlands
SPECIAL ADDRESS

10:30 – 11:00 Coffee Break**11:00 – 12:00**

ECAM Session AM2.1: TRANSPORT Part 2

11:00 – 12:00 ROAD AND RAIL TRAFFIC**11:00 - 11:15 0531**

SULAN, J.: Czech Hydrometeorological Institute, Pilsen, Czech Republic
Hoar-frost on the roads - danger for drivers, road maintenance dispatchers and forecasters

11:15 - 11:30 0719

POTGRAVEN, P.: Traffic Information Service (VerkeersInformatieDienst), The Netherlands
Forecasting travel times

11:30 - 11:45 0534

ŠKUTHAN, M.: Czech Hydrometeorological Institute, Praha, Czech Republic
International exchange of road weather data

11:45 - 12:00 0720

TE BRAKE, T.: Prorail, The Netherlands
Rail infrastructure and Weather - Slippery Tracks

12:00 SESSION AM2.1 ENDS**12:00 – 13:00 ECAM POSTER VIEWING****13:00 – 14:00 Lunch Break****08:30 – 10:30**

EMS Session AW1.2: BOUNDARY LAYER PHYSICS IN WEATHER AND CLIMATE PREDICTIONS – Part 3 (Continuation from Monday afternoon)

Room: Juliana 2
Chair: A. Petrosyan

WEDNESDAY

14 SEPTEMBER 2005

MORNING

08:30 - 09:00 0225

VAN DEN BROEKE, M.R.: Institute for Marine and Atmospheric Research, Utrecht University, The Netherlands
Structure and dynamics of the Antarctic atmospheric boundary layer (solicited)

09:00 - 09:15 0231

ZILITINKEVICH, S.; ESAU, I.: Department of Physical Sciences, University of Helsinki, Finland
Heat and mass transfer laws for turbulent convective flows in the atmosphere over leads in Ice covered oceans

09:15 - 09:45 0261

MAKIN, V.K.: KNMI, De Bilt, The Netherlands
Wind-over-waves coupling - a modern theory of microscale air-sea interaction (solicited)

09:45 - 10:00 0233

TAMSALU, R.; ZALESNY, V.; ZASLAVSKII, M.; KABATCHENKO, I.: Tartu University, Estonia
The influence of the wind waves to the sea boundary layer dynamics

10:00 - 10:15 0391

HARLANDER, U.; MAAS, L.R.M.: Netherlands Institute for Sea Research (NIOZ), Texel, The Netherlands
On internal boundary layers in the equatorial wave-guide

10:15 - 10:30 0487

ARTALE, V.: ENEA Casaccia, Rome, Italy
Decadal variability of the thermohaline circulation of Mediterranean Sea (solicited)

10:30 - 11:00 Coffee Break**11:00 - 13:00**

EMS Session AW1.2: BOUNDARY LAYER PHYSICS IN WEATHER AND CLIMATE PREDICTIONS – Part 4

Room: Juliana 2
Chair: A. Baklanov

11:00 - 11:15 0378

DROBINSKI, P.; REDELSPERGER, J.L.; PIETRAS, C.; HAEFFELIN, M.: UPMC-CNRS, Paris, France
Evaluation of a PBL subgrid model that accounts for turbulence anisotropy using observations from the SIRTA observatory (solicited)

11:15 - 11:30 0560

BAUMERT, H.: Institute for Applied Marine Studies - IAMARIS, Hamburg, Germany
Monin-Obukhov scaling at very high Reynolds numbers: analytical theory and consequences for the momentum balance (solicited)

11:30 - 11:45 0314

FERRERO, E.; DELERCE, G.; GENOVESE, R.; GIRAUD, C.; LONGHETTO, A.; MANFRIN, M.; MONTABONE, L.; MORTARINI, L.: University of Alessandria, Italy
Experimental measurements of turbulence higher order moments

11:45 - 12:00 0235

COUVREUX, F.; GUICHARD, F.; REDELSPERGER, J.-L.; FLAMANT, C.; MASSON, V.; LAFORE, J.-P.: CNRM-GAME, Meteo France, Toulouse, France
Importance of dry intrusions for the water vapour variability in the convective boundary layer assessed by LES and observations

12:00 - 12:15 0496

NEGGER, R.; STEVENS, B.; NEELIN, D.: University of California, Los Angeles, United States of America
A simple equilibrium model for shallow cumulus topped mixed layers

12:15 - 12:30 0208

KOGAN, Y.: The University of Oklahoma, Norman, United States of America
LES study of turbulence mixing and air cycling in marine boundary layer clouds

12:30 - 12:45 0425

HEUS, T.; JONKER, H.J.J.: Delft University of Tech-

WEDNESDAY

14 SEPTEMBER 2005

MORNING

nology, The Netherlands
Why do descending shells around cumulus clouds exist?

12:45 - 13:00 0494
OWINOH, A.Z.; MIKUSKY, E.; KLEIN, R.: Potsdam Institute for Climate Impact Research (PIK), Germany
Effects of distributed surface properties on the Ekman Boundary Layer

13:00 - 14:00 Lunch Break

08:30 - 10:30
EMS Session CLi: CLIMATE CHANGE Part 1

Room: Irene
Chair: R. Heino

08:30-08:45 0579
van der HOEVEN, M.: KNMI, De Bilt, The Netherlands, European Climate Assessment & Dataset: current status and future (solicited)

08:45 - 09:00 0458
KLOK, L.; KLEIN TANK, A.: KNMI, De Bilt, The Netherlands
A European daily gridded dataset for the evaluation of extreme weather events (solicited)

09:00 - 09:15 0129
MIRANDA, P.M.A.; TOMÉ, A.R.: University of Lisbon, Portugal
Spatial structure of the evolution of temperature in global datasets

09:15 - 09:30 0083
LABITZKE, K.; KUNZE, M.: Free University of Berlin, Germany
Stratospheric temperatures over the Arctic: Comparison of three data sets

09:30 - 09:45 0398
IHRIG, D.F.; IHRIG, C.: University for Applied Sciences, Iserlohn, Germany
A Fourier enhanced Monte-Carlo-Method to extract climate trends

09:45 - 10:00 0422
NIEDZWIEDZ, T.: University of Silesia in Katowice, Faculty of Earth Sciences, Sosnowiecz, Poland
Summer temperature patterns over the Tatra Mountains (Central Europe) from 1550 to 2004

10:00 - 10:15 0384
VAN WEVERBERG, K.; DE RIDDER, K.: Catholic University Leuven, Belgium
A modelling approach for the assessment of the share of urban heat in the temperature record of Uccle, Belgium

10:15 - 10:30 0302
KÜCHLER, W.; MELLENTIN, U.; KREIENKAMP, F.: Saxon State Agency for Environment and Geology, Dresden, Germany
The integrated climate protection concept of Saxonia

10:30 - 11:00 Coffee Break

11:00 - 12:45
EMS Session CLi: CLIMATE CHANGE Part 2

Room: Irene
Chair: R. Heino

11:00 - 11:30 0383
WIBIG, J.: University of Lodz, Poland
Precipitation variability in the second half of the 20th century: changes in seasonality and extremes (solicited)

11:30 - 11:45 0237
NORRANT, C.; DOUGUÉDROIT, A.: University Aix-Marseille I, Aix-en-Provence, France
Precipitation trends in the Mediterranean Basin during the last half-century

WEDNESDAY

14 SEPTEMBER 2005

MORNING

11:45 - 12:00 0293

ALVÁREZ GARCÍA, F.J.; CORTÁZAR, A.; ORTIZ BEVIÁ, M.J.; CABOS NARVÁEZ, W.: University of Alcalá, Spain

Assessing the regional coherence of trends in indices of climate extremes: a study in central Spain

12:00 - 12:15 0115

LUCIO, P.S.: University of Évora, Portugal
Changes in occurrences of meteorological extreme events over Continental Portugal

12:15 - 12:30 0395

DE LIMA, M.I.P.; MARQUES, A.C.P.; DE LIMA, J.L.M.P.; COELHO, M.F.E.S.: Agrarian Technical School of Coimbra, Portugal
Recent trends in annual and monthly precipitation in Mainland Portugal

12:30 - 12:45 0095

CHEVAL, S.; BACIU, M.; BREZA, T.; DUMITRESCU, A.: National Institute of Meteorology and Hydrology, Bucharest, Romania
Variability of the precipitation extremes in Romania

12:45 - 13:00 0580

NORDLI, Ø.: Norwegian Meteorological Institute, Oslo, Analysis of Spring Phenophase occurrences related to Air Temperature variations within three Norwegian Climate Regions

13:00 - 14:00 Lunch Break**08:30 - 10:30**

EMS Session AW7: GIS AND METEOROLOGICAL APPLICATIONS

Room: European
Chair: F. van der Wel

08:30 - 09:00 0431

WEGEHENKEL, M.: Institute of Landscape Systems Analysis, Centre of Agricultural Landscape Research (ZALF), Müncheberg, Germany

Potential interactions between meteorological and climatological GIS-applications and regional ecological modelling approaches (solicited)

09:00 - 09:15 0399

SZENTIMREY, T.; BIHARI, Z.; SZALAI, S.: Hungarian Meteorological Service, Budapest, Hungary
Limitations of the present GIS methods in respect of meteorological purposes

09:15 - 09:30 0279

FOSS, A.; BERGHOLT, L.; CHRISTOFFERSEN, A.; KORSMO, H.; SCHULZE, J.; MARTINSEN, E.A.: Norwegian Meteorological Institute, Oslo, Norway
Diana: a public domain application for weather analysis, diagnostics and products

09:30 - 09:45 0331

CANESSA, B.; DE FILIPPIS, T.; VAN DER WEL, F.J.M.; DYRAS, I.; MADEJ, P.: Institute of Biometeorology (IBIMET), National Research Council, Florence, Italy
Using MapServer technology to access meteorological data over the Internet

09:45 - 10:00 0414

DYRAS, I.: Institute of Meteorology and Water Management, Krakow, Poland
The precipitation monitoring from satellite data using GIS

10:00 - 10:15 0099

MARINOVA, T.; FIDANOVA, L.: National Institute of Meteorology and Hydrology, Sofia, Bulgaria
Meteorological database of the NIMH of Bulgaria

10:15 - 10:30 0259

TVEITO, O.E.; BARTNICKA, H.S.: Norwegian Meteorological Institute, Oslo, Norway
Gridding meteorological and climatological information in Norway by GIS

10:30 SESSION AW7 ENDS**10:30 - 11:00 Coffee Break**

WEDNESDAY

14 SEPTEMBER 2005

MORNING

11:00 – 13:00

EMS Session AW5.1: ENVIRONMENTAL METEOROLOGY. METEOROLOGY AND ATMOSPHERIC POLLUTION: FROM THE URBAN TO MESO AND GLOBAL SCALE

Part 1

Room: European
Chair: S. Joffre

11:00 – 12:30 LOCAL SCALE**11:00 - 11:15 0136**

GRYNING, S.-E.; BATCHVAROVA, E.; JENSEN, N.O.: Riso Forskningscenter, Roskilde, Denmark
On the extension of the wind profile beyond the surface boundary layer

11:15 - 11:30 0418

BONAFÉ, G.; DESERTI, M.; JONGEN, S.; MIN-GUZZI, E.; STORTINI, M.: ARPA Emilia Romagna, Bologna, Italy
Testing different methods to evaluate the mixing height in urban and rural sites

11:30 - 11:45 0105

ZORAN, M.: National Institute of R&D for Optoelectronics, Bucharest, Romania
Urban air quality analysis by satellite and in-situ monitoring data

11:45 - 12:00 0373

KHLAIFI, A.; DAHECH, S.; IONESCU, A.; BELTRANDO, G.; CANDAU, Y.: CERTES, University of Paris, Créteil, France
Sirocco climatology and its impact on atmospheric pollution in Sfax

12:00 - 12:15 0139

PIRINGER, M.; SCHÄUBERGER, G.; PETZ, E.: ZAMG, Vienna, Austria
Direction – dependent separation distances for livestock farms – sensitivity to meteorological input data

12:15 - 12:30 0392

CHEMEL, C.; RIESENMEY, C.; CHOLLET, J.-P.; BATTON-HUBERT, M.: Fourier University/CNRS/INP,

Grenoble, France

Characterization of odour emissions from a landfill through numerical simulations

12:30 – 13:00 MESO SCALE – Part 1**12:30 - 13:00 0411**

BAKLANOV, A.; THE FUMAPEX TEAM: Danish Meteorological Institute, Copenhagen, Denmark
Urban parameterisations for operational NWP models (solicited)

13:00 – 14:00 Lunch Break

WEDNESDAY

14 SEPTEMBER 2005

AFTERNOON

14:00 - 15:45**ECAM Session AM2.4: HEALTH AND AIR QUALITY**

Room: Juliana 1

Chair: Domique Lapeyre de Chavardès

14:00 - 14:30 0722

T.B.A.: Ministry of Health, France

Action plans on extreme heat and cold in France
(Keynote)**14:30 - 14:45 0008**ROUSSEAU, D.: Conseil Supérieur de la Météorologie, Toulouse, France
Heat wave intensity and excess mortality**14:45 - 15:00 0730**MARACCHI, G.; ORLANDINI, S.; BALDI, M.: CNR - Institute of Biometeorology – Florence, Italy
Heat waves variability in the Mediterranean Region, and the use of a biometeorological approach in an operative watch/warning system in Italy**15:00 - 15:15 0723**BIRD, W.: The Met Office, Exeter, United Kingdom
Weather and health**15:15 - 15:30 0724**CRESSMAN, K.: FAO, Rome, Italy
Using seasonal predictions in desert locust forecasts**15:30 - 15:45 0725**ESKES, H.; KELDER, H.; VAN VELTHOVEN, P.: KNMI, De Bilt, The Netherlands
Air quality forecasts and observations over the Netherlands**15:45 SESSION AM2.4 ENDS****16:00 - 16:30 Tea Break****16:30 - 18:00****ECAM ROUND TABLE ON RE-ENGINEERING OF THE FORECASTING PROCESS**

Room: Juliana 1

Chair: Ewen McCallum

Co-Chair: Robert Mureau

Panellists

JANNEKE OTTENS, KNMI
HARRY OTTEN, Meteo Consult
NICK GRAHAME, WGCEF
DIRK HEINZENREDER, DWD
BERNARD STRAUSS, Météo France**18:00 ROUND TABLE ENDS****14:00 - 16:00****EMS Session AW1.2: BOUNDARY LAYER PHYSICS IN WEATHER AND CLIMATE PREDICTIONS – Part 5**

Room: Juliana 2

Chair: H. Baumert

14:00 - 14:30 0355CANUTO, V.M.; CHENG, Y.; ZAMPIERI, M.: NASA Goddard Institute for Space Studies, New York, United States of America
New equation for the dissipation (solicited)**14:30 - 14:45 0064**SPIEß, T.; BANGE, J.: Technical University of Braunschweig, Germany
The shallow convective boundary layer in the morning
- Analysis of Helipod measurements**14:45 - 15:00 0138**TRINI CASTELLI, S.; HARA, T.; OHBA, R.; TREMBACK, C.J.: ISAC-CNR, Torino, Italy
Turbulence closure schemes for high resolutions in mesoscale meteorological models over complex terrain

WEDNESDAY

14 SEPTEMBER 2005

AFTERNOON

15:00 - 15:15 0128

PINO, D.; VILÀ-GUERAU DE ARELLANO, J.; KIM, S.-W.: Institute for Space Studies of Catalonia, Barcelona, Spain

Representing sheared convective boundary layer by mixed layer models: Large-eddy simulation verification

15:15 - 15:30 0482

KUMAR, V.; KLEISL, J.; MENEVEAU, C.; PARLANGE, M.: Johns Hopkins University, Baltimore, United States of America

Large-Eddy-Simulation of a diurnal cycle of ABL using a scale-dependent dynamic sub-grid scale models

15:30 - 15:45 0133

JANSEN, H.; RAASCH, S.: University of Hanover, Germany

Investigations on mesoscale cellular convection with high resolution large eddy simulations

15:45 - 16:00 0344

BROWN, R.: University of Washington, United States of America

Remote sensing – PBL modeling synergism

16:00 – 16:30 Tea Break**16:30 – 18:30**

EMS Session AW1.2: BOUNDARY LAYER PHYSICS IN WEATHER AND CLIMATE PREDICTIONS – Part 6

Room: Juliana 2
Chair: W. Bach

16:30 - 17:00 0157

ANFOSSI, D.; OETTL, D.: ISAC-CNR, Torino, Italy
Meandering atmospheric flows occurrence in low wind speed conditions and related dispersion characteristics (solicited)

17:00 - 17:15 0230

PETROSYAN, A.S.: Space Research Institute of the Russian Academy of Sciences, Moscow, Russia
Boundary layer model for transport aerosols in complex area

17:15 - 17:30 0419

SOGACHEV, A.: University of Helsinki, Finland
Using two-equation models modified to account for plant drag in environmental research

17:30 - 17:45 0443

SOFIEV, M.; GENIKHOVICH, E.: Finnish Meteorological Institute, Helsinki, Finland
On re-stating the boundary layer characteristics in dispersion models

17:45 - 18:00 0455

TRINI CASTELLI, S.: Institute of Atmospheric Sciences and Climate, National Research Council, Torino, Italy

Turbulence closure coefficients in stratified atmospheric boundary layer flows (solicited)

18:00 - 18:30 0554

BACH, W.
Research and development needs and priorities for atmospheric transport and diffusion modeling (Round Table)

18:30

SESSION AW1.2 ENDS

14:00 – 16:00

EMS Session CL1: CLIMATE CHANGE Part 3

Room: Irene
Chair: A. Klein-Tank

14:00 - 14:30 0284

POMMIER, A.: Université Jean Moulin, Lyon, France
Analysis of north atlantic highs and lows from 1950 to 2000 and their relationships with the NAO (solicited)

WEDNESDAY

14 SEPTEMBER 2005

AFTERNOON

14:30 - 14:45 0251

LIND, P.G.; MORA, A.; GALLAS, J.A.C.; HAASE, M.: Institute for Computational Physics, University of Stuttgart, Germany
A variational problem to reduce stochasticity in the North Atlantic Oscillation index

14:45 - 15:00 0114

BARAI, E.; LUCIO, P.S.; MOLION, L.C.; CONDE, F.C.: University of Évora, Portugal
Towards the role of subtropical highs' intensity and frequency over the Sahel region – Diagnostic of cyclic events

15:00 - 15:15 0148

LORENZO, M.N.; TABOADA, J.J.: University of Vigo, Spain
Thermohaline circulation under the effect of the synoptic scale variability

15:15 - 15:30 0092

SHMAKIN, A.B.; POPOVA, V.V.: Institute of Geography, Moscow, Russia
Quantitative analysis of regional structure of climatic fields and their variations in North Eurasia

15:30 - 15:45 0132

RUCKSTUHL, C.; PHILIPONA, R.; DUERR, B.; OHMURA, A.: ETH Zurich, Switzerland
Water vapor feedback enhances greenhouse forcing in Europe

15:45 - 16:00 0385

BALDI, M.; DALU, G.A.; CESARONE, F.; MARACCHI, G.: Institute of Biometeorology (IBIMET), National Research Council, Florence, Italy
Mediterranean jetstream and mediterranean winter anomalies

16:00 - 16:30 Tea Break**16:30 - 18:30**

EMS Session CL1: CLIMATE CHANGE Part 4

Room: Irene

Chair: A. Klein-Tank

16:30 - 17:00 0168

HEINO, R.: Finnish Meteorological Institute, Helsinki, Finland
Cryospheric changes in Europe (solicited)

17:00 - 17:15 0260

TVEITO, O.E.; FØRLAND, E.J.: Norwegian Meteorological Institute, Oslo, Norway
Spatio-temporal trends of the snow cover in northern Eurasia

17:15 - 17:30 0091

POPOVA, V.V.: Institute of Geography, Moscow, Russia
Variations of snow accumulation and annual river runoff in North Eurasia and their relation to atmospheric circulation changes in 20th century

17:30 - 17:45 0113

IONITA, M.; BORONEANT, C.: National Institute of Meteorology and Hydrology, Bucharest, Romania
Assessment of some statistical climatic parameters for the present-day climate at regional scale over Romania and future projections of climate change for the period 2010-2100

17:45 - 18:00 0221

ENKE, W.; DEUTSCHLÄNDER, TH.; KREIENKAMP, F.: Meteo-Research, Stahnsdorf, Germany
How will the frequency and duration of extreme weather events change – A study for the State Saxony

18:00 - 18:15 0387

DUBROVSKY, M.; TRNKA, M.; HAYES, M.; SVOBO-DA, M.; WILHITE, D.; ZALUD, Z.; SEMERADOVA, D.: Institute of Atmospheric Physics, Charles University, Hradec Kralove, Czech Republic
Application of three drought indices to assess impact of climate change on drought conditions

WEDNESDAY

14 SEPTEMBER 2005

AFTERNOON

18:15 - 18:30 0368

SOLMAN, S.; NUÑEZ, M.; CABRÉ, M.F.: CONICET, University of Buenos Aires, Argentina
Regional climate change simulation over southern South America: Analysis of precipitation and extreme temperature changes

18:30 SESSION CL1 ENDS

14:00 – 16:00

EMS Session AW5.i: ENVIRONMENTAL METEOROLOGY. METEOROLOGY AND ATMOSPHERIC POLLUTION: FROM THE URBAN TO MESO AND GLOBAL SCALE Part 2

Room: European
Chair: P. Builtjes

14:00 – 16:00 MESO SCALE – Part 2

14:00 – 14:15 0551

BJERGENE, N.: Norwegian Meteorological Institute, Oslo, Norway
Oslo UAQIFS (Urban Air Quality Information and Forecast System)

14:15 – 14:30 0036

BAUMANN-STANZER, K.; HIRTL, M.; KRÜGER, B.C.: ZAMG, Vienna, Austria
Regional-scale air quality forecasts for Austria

14:30 - 14:45 0253

MAHURA, A.; LEROYER, S.; CALMET, I.; MEST-AYER, P.; BAKLANOV, A.; PETERSEN, C.; SATTLER, K.: Danish Meteorological Institute, Copenhagen, Denmark
Large eddy simulation of typical climatological heat fluxes for urbanized areas

14:45 - 15:00 0317

COPPALLE, A.; PHILIPPE, C.; BELLIVIER, A.; DUPONT, S.: INSA Rouen, Saint Etienne du Rouvray, France

Sensitivity and improvements of urban air quality calculations using urbanised MM5 meteorological data, application to Paris area

15:00 - 15:15 0552

YU, Y.; SOKHI, R.S.; FAY, B.; NEUNHÄUSERER, L.; KUKKONEN, J.: University of Hertfordshire, Hatfield, United Kingdom
Evaluation of mesoscale meteorological model MM5 for forecasting urban air pollution episodes in Helsinki, Finland

15:15 - 15:30 0324

BUNGERT, U.; SCHROEDER, G.; SCHLUENZEN, K.H.: ZMAW, University of Hamburg, Germany
Impact of nesting methods on model performance

15:30 - 15:45 0326

RASMUSSEN, A.; BAKLANOV, A.; AMSTRUP, B.; FAY, B.; NEUNHÄUSERER, L.; BONAFÉ, G.; DESERTI, M.; JONGEN, S.: Danish Meteorological Institute, Copenhagen, Denmark
FUMAPEX - Analysis and inter-comparison of operational meteorological simulations with DMI-HIRLAM and the Lokalmodell of DWD and ARPA-SMI for the target city of Bologna

15:45 - 16:00 0354

CARNEVALE, C.; PISONI, E.: University of Brescia, Italy
Prognostic and diagnostic meteorological models driving air quality simulations over Northern Italy

16:00 – 16:30 Tea Break

16:30 – 18:30

EMS Session AW5.i: ENVIRONMENTAL METEOROLOGY. METEOROLOGY AND ATMOSPHERIC POLLUTION: FROM THE URBAN TO MESO AND GLOBAL SCALE – Part 3

Room: European
Chair: R. Sokhi

WEDNESDAY

14 SEPTEMBER 2005

AFTERNOON

16:30 - 16:45 0380

JONGEN, S.; MINGUZZI, E.; BONAFÉ, G.; DESERTI, M.; STORTINI, M.: ARPA - Emilia Romagna, Bologna, Italy
Suitability of LAMI for air-quality forecasts

16:45 - 17:00 0170

HALENKA, T.; CESARI, R.; BRECHLER, J.: Charles University in Prague, Praha, Czech Republic
On the role of biogenic emission on tropospheric ozone production in model SMOG

17:00 - 18:30: LONG-RANGE AND GLOBAL SCALE

17:00 - 17:30 0468

PALIOURAS, E.: DLR - German Aerospace Center, Wessling, Germany
Air quality monitoring and forecasting in the GMES Service Element Project: PROMOTE (solicited)

17:30 - 17:45 0031

KAZAOKA, R.; KIDA, H.: Kyoto University, Japan
Global map of scale in space and time of air parcel's displacement

17:45 - 18:00 0289

DOTZEK, N.; SAUSEN, R.: DLR - Institute of Atmospheric Physics, Oberpfaffenhofen, Germany
Effective emissions: From local sources to global scale

18:00 - 18:15 0287

UBL, S.; KAUFMANN, P.; FOLINI, D.: EMPA (ETH Zuerich), Duebendorf, Switzerland
Reconstruction of source regions for high-alpine concentration measurements using a lagrangian particle dispersion model

18:15 - 18:30 0214

HATZIANASTASSIOU, N.; MIRONAKIS, K.; KATSOULIS, B.D.: Ioannina University, Greece
Aerosol properties, transport and episodes over the Mediterranean basin

18:30

SESSION AW5.1 ENDS

THURSDAY

15 SEPTEMBER 2005

MORNING

08:30 – 10:30

EMS Session IO₂: INSTRUMENTS AND OBSERVATIONS - SATELLITE METEOROLOGY

Room: Juliana 1
Chair: N.N.

08:30 - 09:00 0519

WANNOP, S.: Eumetsat, Darmstadt, Germany
Current Status and future upgrade plans - Services to the user community (solicited)

09:00 - 09:30 0578

Mancini, P.; Bensi, P.; Silvestrin, P.; ESA, Paris
Relevance Of Future High Bandwidth Satellite Communication Systems To Operational Meteorology (solicited)

09:30 - 10:00 0528

VOGELZANG, J.; PORTABELLA, M.; STOFFELEN, A.: KNMI, De Bilt, The Netherlands
A probabilistic approach for sea winds data assimilation (solicited)

10:00 - 10:15 0541

VERHOEF, A.; STOFFELEN, A.: KNMI, De Bilt, The Netherlands
Scatterometer wind products from KNMI

10:15 - 10:30 0058

SHAHABFAR, A.R.; RAMESH, A.: I.R.of Iran Meteorological Organization, Bojnourd, Iran
Construction of drought early detection system in I.R. of Iran using NDVI from NOAA/AVHRR data

10:30 SESSION IO₂ ENDS**10:30 – 11:00 Coffee Break****11:00 – 12:30**

EMS Session CL4: CLIMATOLOGY DERIVED FROM SATELLITE OBSERVATIONS

Room: Juliana 1

Chair: J. Schulz

11:00 - 11:30 0241

LÖSCHER, A.: GRAS SAF, Danish Meteorological Institute, Copenhagen, Denmark
Optimal fusion of radio-occultation profiles with GCM background fields within a 3D-Var framework to conduct climate studies (solicited)

11:30 - 11:45 0213

HATZIANASTASSIOU, N.: Ioannina University, Greece
A global cloud cover climatology from 17-year ISCCP-D2 data

11:45 - 12:00 0514

DOUSSET, B.: National Oceanic & Atmospheric Administration, Silver Spring, United States of America
Surface temperatures variability of the Paris basin during the 2003 heat wave, derived from satellite multi-sensors observation

12:00 - 12:15 0258

MATKAN, A.: Shahid Beheshti University, Tehran, Iran
Passive microwave remote sensing of snow depth estimation over Iran

12:15 - 12:30 0025

SINGH, C.: Centre For Energy Studies, New Delhi, India
Principal component analysis of satellite-observed outgoing long-wave radiation during the monsoon period (June-September) over India

12:30 SESSION CL4 ENDS**13:00 – 14:00 Lunch Break****08:30 – 10:30**

EMS Session IP₁: INFORMATION PROVISION - BRINGING METEOROLOGY CLOSER TO SOCIETY

Room: Juliana 2
Chair: N.N.

THURSDAY

15 SEPTEMBER 2005

MORNING

08:30 - 09:00 0556

RICHARD-VAN MAELE, C.: World Meteorological Organization, Geneva, Switzerland
Placing National Meteorological and Hydrological Services on the map (solicited)

09:00 - 09:15 0169

HEINO, R.: Finnish Meteorological Institute, Helsinki, Finland
Improving the climate research and monitoring capabilities in Europe

09:15 - 09:45 0186

BENESTAD, R.E.: Norwegian Meteorological Institute, Oslo, Norway
Public and climate change: The challenge of explaining complicated scientific issues (solicited)

09:45 - 10:00 0088

SIMEONOV, P.; YOTOVA, A.: National Institute of Meteorology and Hydrology, Sofia, Bulgaria
Presentation and dissemination of meteorological and climatological information in Bulgaria

10:00 - 10:15 0483

HEINO, R.: Finnish Meteorological Institute, Helsinki, Finland
Meteorology on stamps

10:15 - 10:30 056

WEHRY, W.: Free University of Berlin, Germany
The European Meteorological Calendar - bringing meteorology to 10,000 offices and homes

10:30 SESSION IP1 ENDS**10:30 – 11:00 Coffee Break**
11:00 – 13:15 EMS Session IP2: INFORMATION PROVISION - MEDIA

Room: Juliana 2
Chair: N.N.

11:00 - 11:30 0304

FLEMING, G.; KOOTVAL, H.; DOURIS, J.: Met Eireann, Dublin, Ireland
The new WMO Manual on Weather Broadcasting (solicited)

11:30 - 11:45 0517

BENESTAD, R.E.; LIPPESTAD, H.; HYGEN, H.O.: Norwegian Meteorological Institute, Oslo, Norway
Internet as a medium of dissemination for climate and weather information

11:45 - 12:15 0527

TROBEC, J.: Chief Meteorologist, KELO-TV, Sioux Falls, United States of America
Trends in American TV weathercasting (solicited)

12:15 - 12:45 0575

RUDEL, E.: ZAMG, Vienna, Austria
The importance of media information within National Hydro Meteorological Services (solicited)

12:45 - 13:00 0574

VINCENDON, J.C.: Radio Sud, France
Radio, quick and efficient

13:00 - 13:15 0576

CACIC, I.: Meteorological and Hydrological Service, Zagreb, Croatia
Education and training in media presentation skills

13:15 SESSION IP2 ENDS**13:00 – 14:00 Lunch Break****08:30 – 10:30**

EMS Session AW5.2: ENVIRONMENTAL METEOROLOGY: URBAN CLIMATE, URBAN PLANNING AND IMPACTS OF CLIMATE CHANGES AT THE MICRO- / MESOSCALE

Room: Irene
Chair: W. Kuttler

THURSDAY

15 SEPTEMBER 2005

MORNING

08:30 - 09:00 0493

ROTACH, M.: MeteoSwiss, Zurich, Switzerland
The structure of the urban boundary layer and urban climate (solicited)

09:00 - 09:15 0432

LATACZ, T.; KUTTLER, W.: University of Duisburg-Essen, Campus Essen
Thermal and hydrological properties of an urban soil and its effects on the urban climate

09:15 - 09:30 0203

HAMDI, R.; SCHAYES, G.: Catholic University Leuven, Belgium
Using the Martilli's urban boundary layer scheme to study the urban heat island intensity of a western European city

09:30 - 09:45 0140

PIRINGER, M.; BAUMANN-STANZER, K.: ZAMG, Vienna, Austria
Examples of counteraction of local circulation patterns and urban air quality

09:45 - 10:00 0200

BAUMANN-STANZER, K.; DE WEKKER, S.; HAIDEN, T.; PIRINGER, M.: ZAMG, Vienna, Austria
A closer look into a winter smog episode in Linz, Austria

10:00 - 10:15 0135

EMEIS, S.; SCHÄFER, K.: Institut für Meteorologie und Klimaforschung - Atmosphärische Umweltforschung (IMK-IFU), Garnisch-Partenkirchen, Germany
Determination of mixing-layer height and its relevance for urban air pollution

10:15 - 10:30 0239

HENNIGER, S.; KUTTLER, W.: University of Duisburg-Essen, Campus Essen
A method of mobile urban carbon dioxide measuring

10:30**SESSION AW5.2 ENDS****10:30 - 11:00 Coffee Break****11:00 - 13:00**

EMS Session AW3: AVIATION METEOROLOGY

Room: Irene
Chair: J. Bange

11:00 - 11:15 0335

HAUF, T.; SPEHR, U.; PEER, C.; RÖHNER, P.: University of Hanover, Germany
A review of recent European studies on the weather impact on aviation

11:15 - 11:30 0126

UTNES, T.; NORDENG, T.E.: Sintef, Trondheim, Norway
Nested simulation of mountainous turbulence and internal waves

11:30 - 11:45 0542

SRINIVASAN, R.; BROWN, A.P.; DILLON, J.: Flight Research Laboratory, National Research Council, Canada
Recent developments in NRC atmospheric research aircraft instrumentation

11:45 - 12:00 0062

SPIEK, T.; BANGE, J.; BUSCHMANN, M.; KRÜGER, L.; VÖRSMANN, P.: Technical University of Braunschweig, Germany
Airborne meteorological measurements with the mini-UAV 'Carolo T200'

12:00 - 12:15 0234

HAMAN, K.E.: Institute of Geophysics, Warsaw University, Poland
Aircraft hygrometer for measurements in rain shafts

12:15 - 12:30 0345

SMIT, H.G.J.; STRAETER, W.; VOLZ-THOMAS, A.; BRUST, H.: Research Centre Jülich, Germany
On the performance of a new airborne water vapour sensor (WVSS-II) for real time measurements onboard commercial aircraft

THURSDAY

15 SEPTEMBER 2005

MORNING

12:30 - 12:45 0124

VAN DEN KROONENBERG, A.C.; BANGE, J.: Technical University of Braunschweig, Germany
Characteristics of turbulence in the Arctic stable boundary layer: Helicopter-borne observations

12:45 - 13:00 0543

BROWN, A.P.; BASTIAN, M.: Flight Research Laboratory, National Research Council, Canada
Enroute configuration wake vortex instability

13:00 SESSION AW3 ENDS**13:00 - 14:00 Coffee Break****08:30 - 10:30**

EMS Session IO5: SCINTILLOMETRY: TOWARDS OPERATIONAL OBSERVATIONS OF SURFACE FLUXES ON GRID BOX SCALES – Part I

Room: European
Chair: Wim Kohsieck

08:30 - 09:00 0490

BELJAARS, A.C.M.; NEGGERS, R.A.J.; HOLLINGWORTH, T.: ECMWF, United Kingdom
On the relevance of flux observations for large scale model development and for large scale budget studies (solicited)

09:00 - 09:15 0569

DE BRUIN, H.A.R.: Wageningen University, The Netherlands
An introduction to scintillometry

09:15 - 09:30 0047

MEIJNINGER, W.M.L.; BEYRICH, F.; LÜDI, A.; KOHSIEK, W.; DE BRUIN, H.A.R.: Wageningen University, The Netherlands
Scintillometer fluxes of sensible and latent heat over a heterogeneous land surface

09:30 - 09:45 0155

BEYRICH, F.; THE EVA-GRIPS TEAM: Meteorologisches Observatorium Lindenberg, Deutscher Wetterdienst, Germany
Surface fluxes at model grid scale - results from LITFASS-2003

09:45 - 10:00 0163

EVANS, J.G.; BANTGES, R.; MURRAY, T.; BLYTH, E.; FINCH, J.W.; HARDING, R.J.: Centre for Ecology & Hydrology, Wallingford, United Kingdom
Large aperture scintillometry over complex terrain: Results from chalk down-land

10:00 - 10:15 0351

HARTOGENESIS, O.K.; DE BRUIN, H.A.R.: Wageningen University, The Netherlands
Derivation of an effective height for scintillometers: La Poza experiment in Northwest-Mexico

10:15 - 10:30 0100

EVERSON, C.; DYE, P.; GUSH, M.; CLULOW, A.: CSIR, Pietermaritzburg, South Africa
Evaporation and energy fluxes above a mixed evergreen indigenous forest in the Southern Cape - A comparison of scintillometry, eddy covariance and Bowen ratio techniques

10:30 - 11:00 Coffee Break

THURSDAY

15 SEPTEMBER 2005

MORNING

11:00 – 13:00

EMS Session IO5: SCINTILLOMETRY: TOWARDS OPERATIONAL OBSERVATIONS OF SURFACE FLUXES ON GRID BOX SCALES – Part 2

Room: European
Chair: Henk de Bruin

11:00 - 11:15 0159

JARMAIN, C.: CSIR, Stellenbosch, South Africa
A comparison on the total evaporation of indigenous and invading vegetation types in South Africa, with the use of a large aperture scintillometer: Constraints

11:15 - 11:30 0229

VON RANDOW, C.; KRUIJT, B.; HOLTSLAG, B.: Wageningen University, The Netherlands
Eddy covariance and scintillometer measurements in the Amazon rain forest

11:30 - 11:45 0489

LAGOUARDE, J.-P.; IRVINE, M.; DAYAU, S.: INRA Bioclimatologie, Villeneuve d'Ornon, France
LAS measurements of integrated sensible heat flux over urban areas: preliminary results of the Toulouse/CAPITOUL experiment

11:45 - 12:00 0350

KOHSIEK, W.; MEIJNINGER, W.M.L.; DE BRUIN, H.A.R.: Wageningen University, The Netherlands
An extra large aperture scintillometer for operational long range applications

12:00 - 12:15 0180

LEIJNSE, H.; UIJLENHOET, R.; STRICKER, J.N.M.; MEIJNINGER, W.M.L.: Wageningen University, The Netherlands
Estimating the latent and sensible heat fluxes using a stand-alone radio wave scintillometer in combination with radiation measurements

12:15 - 12:30 0156

BEYRICH, F.; MEIJNINGER, W.M.L.; DE BRUIN, H.A.R.: Meteorologisches Observatorium Lindenberg, Deutscher Wetterdienst, Germany
Surfaces fluxes from scintillometer measurements:

Experiences from long-term scintillometer operation at MOL

12:30 - 12:45 0570

Manufacturer's presentation (Scintec): 15 Years Displaced Beam Scintillometer

12:45 - 13:00 0571

Manufacturer's presentation (Kipp & Zonen): Large Aperture Scintillometers by Kipp & Zonen - Surface Fluxes at Kilometer Scale

13:00 SESSION IO5 ENDS**13:00 – 14:00 Coffee Break**

THURSDAY

15 SEPTEMBER 2005

AFTERNOON

14:00 - 15:00
POSTER VIEWING FOR EMS SESSIONS

15:00 - 17:00
EMS Session CL2: WEATHER AND CLIMATE EXTREMES (WIND-RELATED EXTREMES, CLIMATOLOGY OF STORMS)

Room: Juliana 1
Chair: A. van Engelen

15:00 - 15:15 0283
POMMIER, A.: Université Jean Moulin, Lyon, France
A decription of storms dynamics (Lows under 990hPa) at surface level in the north atlantic sector during winter (JFM) from 1950 to 2000

15:15 - 15:30 0198
SABRE, M.: CAPE-CSTB, Nantes, France
Wind speed and snow load extremes over France: climate change response with two AGCMs scenarios

15:30 - 15:45 0097
SIMEONOV, P.; BOCHEVA, L.; MARINOVA, T.: National Institute of Meteorology and Hydrology, Sofia, Bulgaria
On climate variation and its impact over frequency distribution and intensity of severe convective storms

15:45 - 16:00 0371
DOTZEK, N.; KURGANSKY, M.; GRIESER, J.; FEUERSTEIN, B.: DLR - Institute of Atmospheric Physics, Oberpfaffenhofen, Germany
Intensity distribution of extreme wind events: A synthesis of statistical modeling approaches

16:00 - 16:15 0572
DAILEY, P.S.: AIR Worldwide, Inc., Boston, United States of America
Modeling extreme European windstorms using a hybrid numerical-stochastic approach

16:15 - 16:30 0104
LUCIO, P.S.: University of Évora, Portugal
Solar influence on extreme weather over continental Portugal: Artificial neural network contrasts of tempe-

rature and precipitation with sunspots and cosmic ray intensity

16:30 - 16:45 0396
GOCHEVA, A.; HECHLER, P.: National Institute of Meteorology and Hydrology, Sofia, Bulgaria
On the status of climate extremes investigations and services in WMO RA VI NMHSs

16:45 - 17:00 0400
GOCHEVA, A.; MARINOVA, T.; TRIFONOVA, L.; BOCHEVA, L.: National Institute of Meteorology and Hydrology, Sofia, Bulgaria
Extreme drought and dry wind conditions in Bulgaria assessed on temperature-humidity basis

17:00 **SESSION CL2 ENDS**

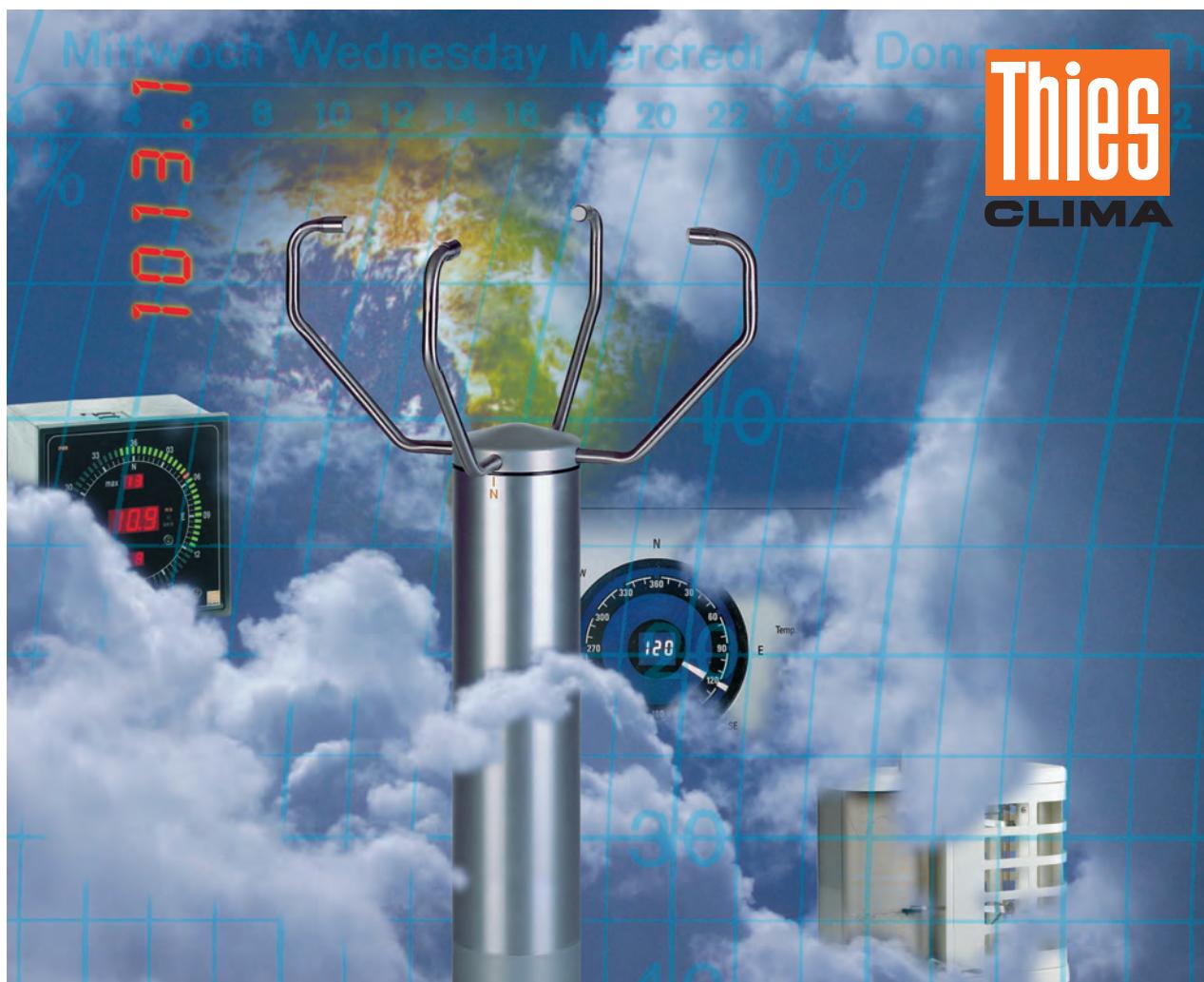
15:00 - 17:00
EMS Session IP3: EDUCATION IN METEOROLOGY AND CLIMATOLOGY - FROM THE BASIS FOR UNDERSTANDING SCIENCE TO THE SCIENCE OF EARTH SYSTEM DEVELOPMENT

Room: Juliana 2
Chair: J. Wieringa

15:00 - 15:15 0440
SPEKAT, A.; WIERINGA, J.: European Meteorological Society e.V., Secretariat, Berlin, Germany
Weather and climate in European school curricula, an update

15:15 - 15:30 0086
STEPANENKO, S.; VOLOCHSHUK, V.; BOYCHENKO, S.: University of Kiev, Ukraine
Organization of education in meteorology and climatology in Ukraine

15:30 - 15:45 0442
HANSEN, P.K.: Oslo University College, Norway
Weather and climate topics in Norwegian primary and secondary education from 2006



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to DIN EN ISO 9001:2000 carries for us the obligation to guarantee the high quality standard and continuous improvement of our products.

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THURSDAY

15 SEPTEMBER 2005

AFTERNOON

15:45 - 16:00 0082

WALTERS, E.; ARKAN, I.: MARYMOUNT SCHOOL: Marymount School of New York, United States of America
It's all about connections! Developing and implementing an interdisciplinary project in meteorology and statistics

16:00 - 16:15 0191

JASINSKI, J.; PIETREK, S.: Aviomet Ltd., Warsaw, Poland
Meteorological conditions of aircraft icing – A guide for air and ground crews

16:15 - 16:30 0526

WEHRY, W.: Free University of Berlin, Germany
Educational series of the German Meteorological Society for secondary school teachers

16:30 - 16:45 0372

DOTZEK, N.; SAUSEN, R.: DLR - Institute of Atmospheric Physics, Oberpfaffenhofen, Germany
Global transport and climate change: Education and training training components of the FP6 Integrated Project QUANTIFY

16:45 - 17:00 0512

BENISTON, M.: University of Fribourg, Switzerland
Education in the climate sciences: the example of the EU-ENSEMBLES project

17:00 SESSION IP₃ ENDS**17:00 - 18:30**

EMS ACCREDITATION COMMITTEE WORKSHOP

Room: Juliana 2
Chair: D. Axford

18:30 WORKSHOP ENDS**15:00 - 17:00**

EMS Session CO₁: NUMERICAL METHODS

Room: Irene
Chair: N.N.

15:00 - 15:15 0417

GALIANO, V.G.; PENADES, J.P.; MIGALLÓN, V.M.: Universidad Miguel Hernández, Elche, Spain
Parallel access for NetCDF files in high level languages: PyPNetCDF

15:15 - 15:45 0116

SERRANO, A.I.; LUCIO, P.S.; SILVA, A.M.; LEITE, S.M.: University of Évora, Portugal
Recovering and homogenising meteorological time series – The Stochastic Artificial Neural Network approach. (solicited)

15:45 - 16:00 0137

TOMÉ, A.R.; MIRANDA, P.M.A.: Universidade da Beira Interior, Covilhá, Portugal
Selecting intervals of monotonous linear behavior in time series

16:00 - 16:15 0330

SCHROEDER, G.; SCHLUENZEN, K.H.: University of Hamburg, Germany
Flux integrated (weighted) essentially non-oscillating advection schemes

16:15 - 16:30 0303

RÖÖM, R.; ZIRK, M.: University of Tartu, Estonia
Semi-Lagrangian approach to solve the 4D-discrete, linear equations of atmospheric dynamics with arbitrary stratification and orography

16:30 - 16:45 0415

FIEBIG-WITTMAACK, M.: University of La Serena, Chile
Gridsize induced error in the discretization of exchange processes at the tropopause

THURSDAY

15 SEPTEMBER 2005

AFTERNOON

16:45 - 17:00 0361

HSU, W.R.; WU, C.C.; SUN, W.Y.: National Taiwan University, Taipei, Taiwan
A time-split, forward-backward numerical model for solving a nonhydrostatic and compressible system of equations

17:00 SESSION CO1 ENDS

sland at Zagreb-Maksimir Observatory

16:30 - 16:45 0275

SOM DE CERFF, W.J.; VAN DE VEGTE, J.; VAN DER WEL, F; VAN DER NEUT, I.: KNMI, De Bilt, The Netherlands
Development of the KNMI Operational Data Center (KODAC)

16:45 SESSION IO1 ENDS

15:00 - 16:45

EMS Session IO1: MEASUREMENTS AND MEASUREMENT NETWORKS

Room: European
Chair: H. Böttger

15:00 - 15:30 0486

CAUGHEY, J.; TRUSCOTT, B.; GOLDSTRAW, S.: The Met Office, Exeter, United Kingdom
Recent developments in the EUCOS Programme (solicited)

15:30 - 15:45 0242

CHARPENTIER, P.; RICAUD, G.; PÉPIN, R.: MODEM, Chevannes, France
Modem's upper-air sounding system - Latest developments

15:45 - 16:00 0403

DRÜE, C.; HAUF, T.; FINKE, U.; KREYER, O.: University of Hanover, Germany
Comparison of a SAFIR lightning detection network in northern Germany to the operational BLIDS network

16:00 - 16:15 0426

ELLIS, R.A.; COUPLAND, J.M.; PETZING, J.; SANDFORD, A.P.; JONES, G.; RICHARDS, J.: Loughborough University, United Kingdom
Laser present weather detector system

16:15 - 16:30 0162

LIKSO, T.: Meteorological and Hydrological Service, Zagreb, Croatia
Estimation of air temperature at 5 cm above the grass

FRIDAY

16 SEPTEMBER 2005

MORNING

08:30 - 10:30

EMS Session AW6: AGROMETEOROLOGY Part 1

Room: Juliana 1
Chair: Z. Dunkel

08:30 - 08:45 0219

PASQUI, M.; CECCARELLI, C.; GOZZINI, B.: Institute of Biometeorology (IBIMET), National Research Council, Florence, Italy
Atmospheric regional reanalysis simulations, based on RAMS model, as input for crop modeling

08:45 - 09:00 0318

CLOPPET, E.; SOUVERAIN, F.; ADNOT, M.; RABAUD, V; LE BAS, C.: Department of Agrometeorology, Meteo France, Toulouse, France
The OSIRIS system: estimating water requirements of irrigated crops in France

09:00 - 09:15 0143

EITZINGER, J.; FORMAYER, H.; GRUSZCZYNSKI, G.; SCHAUMBERGER, A.; TRNKA, M.: Institute for Meteorology and Physics /BOKU, Vienna, Austria
Evaluation of a decision support system for irrigation scheduling and drought management

09:15 - 09:30 0035

LOGLISCI, N.; CASSARDO, C.; FERRARIS, S.; SPANNA, F.: ARPA Piemonte, Torino, Italy
Soil moisture verification using observed, derived SYNOP and LAM initialization soil moisture data

09:30 - 09:45 0264

SIVERTSEN, T.H.: The Norwegian Crop Research Institute, Aas, Norway
Comparing measurements of precipitation by weather radars to measurements by rain gauges in a local area of Southern Norway

09:45 - 10:00 0013

SAVIN, E.; STANCALIE, G.; NERTAN, A.; FLUERARU, C.: National Institute of Meteorology and Hydrology, Bucharest, Romania
Analysis of 2000 year drought in Romania using remote sensing data and meteorological indices

10:00 - 10:15 0401

PANKOVIC, L.; LALIC, B.; MIHAILOVIC, D.T.: University Center for Meteorology and Environmental Modelling, Novi Sad, Serbia and Montenegro
The simulating algorithm on population structures studies of cereal leaf beetle (*Lema melanopus* L.)

10:15 - 10:30 0325

KAZANDJIEV, V.; SLAVOV, N.: National Institute of Meteorology and Hydrology, Sofia, Bulgaria
The Climatic factors variability and their impact on the development of locust (*Robinia pseudoacacia* L.) forest trees in Bulgaria

10:30 - 11:00 Coffee Break**11:00 - 12:45**

EMS Session AW6: AGROMETEOROLOGY Part 2

Room: Juliana 1
Chair: B. Lalic

11:00 - 11:15 0027

ANDA, A.: Veszprém University, Keszthely, Hungary
Evapotranspiration and stand architecture in maize at mechanically simulated hail injury

11:15 - 11:30 0285

FERRARI, R.; PASQUI, M.; BOTTAI, L.; ESPOSITO, S.; DI GIUSEPPE, E.: Institute of Biometeorology (IBIMET), National Research Council, Florence, Italy
Assessment of soil erosion estimate based on a high temporal resolution rainfall dataset

11:30 - 11:45 0306

CHIAUDANI, A.; TRIDELLO, G.; BORIN, M.; ROSSA, A.: ARPA Veneto, Teolo-Padova, Italy
The incidence of extreme weather events on veneto region agriculture in the period 1978-2003

11:45 - 12:00 0089

JACOBS, A.F.G.; HEUSINKVELD, B.G.; HOLTSLAG, A.A.M.; BERKOWICZ, S.M.: Wageningen University, The Netherlands

FRIDAY

16 SEPTEMBER 2005

MORNING

Contribution of dew to the water budget of a grassland area, Netherlands

12:00 - 12:15 0045

SOUKUP, M.: Research Institute for Soil & Water Conservation, Praha, Czech Republic
Operation of drainage constructions of agriculture lands in the Czech Republic under changed climatic and farminig conditions

12:15 - 12:30 0196

LALIC, B.; PANKOVIC, L.; MIHAILOVIC, D.: University Center for Meteorology and Environmental Modelling, Novi Sad, Serbia and Montenegro
Prediction of malting barley phenology based on air and soil temperature accumulation

12:30 - 12:45 0216

DALLA MARTA, A.; ORLANDINI, S.; PUGLISI, A.: University of Florence, Italy
Analysis of spatial variability of leaf wetness duration in a grapevine canopy and its role in the simulation of Plasmopara viticola infections

12:45 SESSION AW6 ENDS

09:00 - 10:15

EMS Session IO3: REMOTE SENSING: GPS AND RADAR

Room: Juliana 2
Chair: N.N.

09:00 - 09:30 0525

DE HAAN, S.: KNMI, De Bilt, The Netherlands
GPS meteorology in The Netherlands: status and plans (solicited)

09:30 - 09:45 0070

ALI, M.T.; ZAIN, A.F.; ABDULLAH, M.: University of Tecnology Mara, Telangor, Malaysia
The analysis GPS data of the JUPEM Network for

earthquake prediction based on TEC measurement

09:45 - 10:15 0247

BECHINI, R.; CASSARDO, C.; CREMONINI, R.; BERNARDI, A.: University of Torino, Italy
Use of meteorological radar for thunderstorm analysis and nowcasting over north-western Italy (solicited)

10:15

SESSION IO3 ENDS

10:30 - 11:00 Coffee Break

11:00 - 12:30

EMS Session IP4: HISTORY OF INTERNATIONAL CO-OPERATION IN METEOROLOGY

Room: Juliana 2
Chair: C. Lüdecke

11:00 - 11:15 0173

GERSHINKOVA, D.: Meteoagency of Roshydromet, Moscow, Russia
Latvian roots in Russian meteorology and visa versa

11:15 - 11:30 0485

ZHU, M.: Binghamton University, United States of America
A Far-Eastern European concert and its conductor—International meteorology cooperation in the late 19th century Western-North Pacific and Sir Robert Hart

11:30 - 11:45 0404

FUCHS, A.; NATHANS, J.: American Meteorological Society, Boston, United States of America
Their heads in the clouds: The International Meteorological Committee Meeting of 1894 and the publication of the International Cloud Atlas

11:45 - 12:00 0130

LÜDECKE, C.: Centre for History of Natural Sciences, University of Munich, Germany
New weather data for the Cape Horn route: A resulte of the international meteorological co-operation in Antarctica (1901-1904)

FRIDAY

16 SEPTEMBER 2005

MORNING

12:00 - 12:15 0409

DE ORY, F.; PALOMARES, M.: Instituto Nacional de Meteorología, Madrid, Spain
Meteorological co-operation and political frame of early 20th century in the origin of the Tenerife mountain observatory

12:15 - 12:30 0573

MURTY, K.S.: Nagpur, India
Pioneering contributions of western meteorologists to early Indian meteorological studies

12:30 SESSION IP4 ENDS**08:30 - 10:30**

EMS Session AW2: ATMOSPHERIC HAZARDS – Part 1

Room: Irene
Chair: A. Stan-Sion

08:30 - 08:45 0072

PYLE, D.: Rhodes University, Grahamstown, South Africa
Temporal and spatial perspectives on severe convective storm hazard in South Africa

08:45 - 09:00 0205

MARKOŠEK, J.: Environmental Agency of the Republic of Slovenia, Ljubljana, Slovenia
Severe weather warnings issued by the Meteorological Office in Slovenia in 2004 and their verification

09:00 - 09:15 0477

MICHELETTI, S.: Regional Meteorological Observatory, Visco, Italy
Heavy rain warnings: issuing and verification on a regional base.

09:15 - 09:30 0215

SCHUSTER, S.S.; BLONG, R.J.; SPEER, M.S.; LEIGH, R.J.: Risk Frontiers, Sydney, Australia
Climatology of hailstorms in New South Wales (Australia) and implication for estimating property damage with radar

09:30 - 09:45 0267

WIERINGA, J.; HOLLEMAN, I.: De Bilt, The Netherlands
If cannons cannot fight hail, what else?

09:45 - 10:00 0460

WEBB, J.D.C.; ELSOM, D.M.; MEADEN, G.T.: Tornado & Storm Research Organisation (TORRO), Oxford Brookes University, United Kingdom
Severe hailstorms as a climatological hazard in the British Isles

10:00 - 10:15 0521

NEROZZI, F.; GIOIA, A.; PAPETTI, P.; MARSIGLI, C.; PACCAGNELLA, T.; ALBERONI, P.P.: ARPA - Emilia Romagna, Bologna, Italy
Analysis of severe weather event of the RISK AWARE project

10:15 - 10:30 0052

GAIA, M.; AMBROSETTI, P.: MeteoSwiss, Locarno, Switzerland
Development of a heat wave watch-warning system in a pre-alpine region – the Swiss experience

10:30 - 11:00 Coffee Break**11:00 - 12:45**

EMS Session AW2: ATMOSPHERIC HAZARDS – Part 2

Room: Irene
Chair: D. Gaiotti

11:00 - 11:15 0243

SCHNEIDER, S.; STEINACKER, R.; DORNINGER, M.; PISTOTNIK, G.: University of Vienna, Austria
Nowcasting of a Supercell Storm with VERA

11:15 - 11:30 0474

STAN-SION, A.; SOCI, C.: National Institute of Meteorology and Hydrology, Bucharest, Romania
Supercell environment in Southeastern Romania

FRIDAY

16 SEPTEMBER 2005

MORNING

11:30 - 11:45 0459

KNIGHTLEY, R.P.: PA WeatherCentre, London and Tornado & Storm Research Organisation, Tornado Forecasting Division, United Kingdom
On the occurrence of low-topped supercells across the British Isles and their potential dangers

11:45 - 12:00 0461

MEADEN, G.T.; ROWE, M.W.: Tornado & Storm Research Organisation (TORRO), Oxford Brookes University, United Kingdom
Tornadoes as a meteorological hazard in Britain

12:00 - 12:15 0291

DOTZEK, N.; LANG, P.; FEHR, T.; HELLMISS, W.: DLR - Institute of Atmospheric Physics, Oberpfaffenhofen, Germany
Doppler radar observation, CG lightning activity, and aerial survey of a multiple downburst in southern Germany on 23 March 2001

12:15 - 12:30 0457

ANTONESCU, B.; TANASE, A.: National Institute of Meteorology and Hydrology, Bucharest, Romania
Lightning data and severe storms forecasting in Romania

12:30 - 12:45 0472

GROENEMEIJER, P.; DOTZEK, N.; STEL, F.; GIAIOTTI, D.: ESWD, The Netherlands
First results of the European Severe Weather Database ESWD

12:45

SESSION AW2 ENDS

POSTERS OF ECAM

WEDNESDAY, 13 SEPTEMBER 2005

VIEWING TIME 12:00 – 13:00

SESSION AM2.1: TRANSPORT

- P250 0547**
FOVENYI, A.: Hungarian Meteorological Service, Aviation Meteorological Centre, Budapest, Hungary
Forecasting of visibility range

- P251 0026**
NIELSEN, B.: Danish Meteorological Institute, Copenhagen, Denmark
World wide weather routeing. The weather routeing offered by DMI

- P252 0423**
ZIAKOPOLOUS, D.; VLASSI, A.: Hellenic National Meteorological Service, Athens, Greece
Decision making in weather forecasting: The case of Olympic Games 2004

- P253 0002**
BAJIC, A.: Meteorological and Hydrological Service, Zagreb, Croatia
Natural ventilation of the Sv. Rok Tunnel

SESSION AM2.2: ENERGY (MERGED WITH SESSION AM5.3 METEOROLOGY AND ENVIRONMENTAL IMPACTS ON REGENERATIVE ENERGY)

- P254 0515**
WALTER, A.; KEULER, K.; JACOB, D.; BLOCK, A.; KOTLARSKI, S.; MÜLLER-WESTERMEIER, G.; AHRENS, W.: Deutscher Wetterdienst, Offenbach, Germany
A high resolution reference data set of german wind velocity 1951 - 2001 for regional climate model evaluation

- P255 0117**
RADICS, K.; BARTHOLDY, J.: Eötvös Loránd University, Budapest, Hungary
Simulating the available wind power field of Hungary

- P256 0506**
KURY, G.: ENAIRGY Windenergie GmbH, Vienna,

Austria

Examples of co-operation with the Austrian Climate Department in wind farm planning in Alpine regions

SESSION AM2.3: SAFETY AND EXTREME WEATHER

- P257 0376**
KIM, S.-H.; GONG, J.-U.; HA, C.-H.; KIM, S.-Y.; PARK, K.-J.: Korea Meteorological Administration
Applied meteorological information services in Korea

- P258 0123**
GROEN, G.; MUREAU, R.: KNMI, De Bilt, The Netherlands
Severe Weather Catalogue Netherlands 1950 – today

- P259 0536**
MANGUL, I.; MANGUL, S.: State Hydrometeorological Service, Republic of Moldova
Improvement of weather and climate extremes monitoring in the Republic of Moldova

- P260 0011**
HIRSCH, T.: Hungarian Meteorological Service, Aviation Meteorological Centre, Budapest, Hungary
Objective classification of weather systems causing heavy precipitation in winter in Hungary using ERA40 data

- P261 0327**
ZORIN, S.; KARTAVSEV, O.: Scientific and industrial enterprise Ecomedservice, Kiev, Ukraine
GIS implementation for emergency prevention in government information-analytical system concerning meteorological emergencies

- P262 0366**
RAPP, J.: Deutscher Wetterdienst, Offenbach, Germany
New procedures and tools within the development of weather forecasting process in the German Meteorological Service (DWD)

POSTERS OF ECAM

WEDNESDAY, 13 SEPTEMBER 2005

VIEWING TIME 12:00 – 13:00

P263 **0246**

CONWAY, J.; FORMENTINEI, G.; BARRERE, C.; LAGO, L.: Weather Decision Technologies, Norman, United States of America
The ARPAV Hydromet Decision Support System: Operational applications in nowcasting and hydrology

SESSION AM2.4: HEALTH AND AIR QUALITY

P264 **0256**

TORRES, J.G.; LEYVA, E.; YUBERO, E.; NICOLÁS, J.F.; GALIANO, V.; ORZA, J.A.G.: Universidad Miguel Hernández de Elche, Spain
Daytime mixing height evolution and its influence on ground-level pollutants in Southeastern Spain

SESSION AM2.5: ECONOMY

P266 **0535**

MATZARAKIS, A.: University of Freiburg, Germany
Thermal sensation, comfort analysis and tourism potential for Crete, Greece

SESSION AM2.6: SEASONAL FORECASTING AND ITS POTENTIAL (JOINT SESSION OF ECAM WITH EMS-SESSION CL3)

P267 **0228**

CASADO, M.J.; DOBLAS-REYES, F.J.; PASTOR, M.A.: Instituto Nacional de Meteorología, Madrid, Spain
A sensitivity study of climate modes of variability

P268 **0240**

HERCEG BULIC, I.; BRANKOVIC, C.: Faculty of Science, University of Zagreb, Croatia
An ensemble analysis of model climate response to tropical Pacific SST anomalies

P269 **0407**

FERNANDES, A.S.; GANDU, A.W.; RAMOS, A.M.; SOUZA, A.L.: IAG/USP, São Paulo, Brazil

Influence of sea surface temperature in climate numerical simulations over Brazilian Northeast

P270 **0122**

MELKONYAN, H.; BALOYAN, H.: Armstatehydromet, Yerevan, Armenia
To a question of monthly and seasonal air temperature forecasting

SESSION AM3.4: VERIFICATION (JOINT SESSION OF ECAM AND EMS)

P271 **0524**

GELPI, I.R.; GAZTELUMENDI, S.; EGAÑA, J.; MUGERZA, I.: European Virtual Engineering (EUVE), Basque Service of Meteorology, Vitoria, Spain
A Mesoscale Operational Verification System: Design and preliminary results

P272 **0346**

SMIT, H.G.J.; HELTEN, M.; KLEY, D.: Research Centre Juelich, Germany
Evaluation of the upper tropospheric humidity fields by ECMWF with the climatology derived from 10 years of aircraft observations in MOZAIC

POSTERS OF VOLTAIRE

TUESDAY 12 SEPTEMBER 2005

VIEWING TIME 12:30 – 13:00 AND 15:30 – 16:00

P200 0434

EINFALT, TH.; GOLZ, C.; GALLI, G.: einfalt & hydro-tec GbR, Lübeck, Germany
An operational generalised metadata concept for radar data

P201 0436

DOLINAR, M.; ZGONC, A.: Environmental Agency of the Republic of Slovenia, Ljubljana, Slovenia
Spatialisation of precipitation in different time scales

P202 0447

GABELLA, M.; TURSO, S.; JOSS, J.; LLORT, X.; SEMPRE-TORRES, D.; PERONA, G.: Politecnico di Torino, Italy
Consequences of non-uniform beam filling when up- and downscaling weather radar data

P203 0448

MARCOVINA, M.; GABELLA, M.; PERONA, G.: Politecnico di Torino, Italy
Effects of intense rain events in the western Alps on satellite communications in the Ka band

P204 0452

UIJLENHOET, R.; PORRÀ, J.M.; TORRES, D.S.; CREUTIN, J.-D.: Wageningen University, The Netherlands
An explanation for the apparent fractal correlation dimension of homogeneously distributed raindrops

P205 0478

GABELLA, M.; NOTARPIETRO, R.; ZAMBOTTO, M.; TURSO, S.; PERONA, G.: Politecnico di Torino, Italy
The radar-ombrometer: a portable, low-cost, short-range X-band radar for rain estimation within valleys

POSTERS OF THE EMS ANNUAL MEETING

THURSDAY 14 SEPTEMBER

VIEWING TIME 2005, 14:00 – 15:00

SESSION AW1.1 WEATHER ANALYSIS AND FORECASTING ON DIFFERENT SCALES

Po01 **0012**
 RADU, R.: National Institute of Meteorology and Hydrology, Bucharest, Romania
 Developing a spectral coupling method for improving the forecast of high resolution models

Po02 **0017**
 BOJARIU, R.: National Institute of Meteorology and Hydrology, Bucharest, Romania
 NAO-related predictability of Eurasian snow cover

Po03 **0024**
 TAVARES, M.: Universidade Federal Fluminense, Niteroi, Brazil
 Plasma waves formation from lightnings

Po04 **0037**
 SOMSIKOV, V.M.; YAMPOLSKY, YU.M.; DUNGEN-BAEVA, K; ZALIZOVSKY, A.V.; INCHIN, A.S.: Institute of Ionosphere, Almaty, Kazakhstan
 Non-equilibrium effects in the atmospheric acoustic-gravity waves spectrum

Po05 **0048**
 BUENDÍA, E.; VILLICAÑA, J.; AZPRA, E.; DEL-GADO, O.; ALCALÁ, J.: University of Guadalajara, Mexico
 About tropical cyclones formed from poli-vortexes in the North-eastern Pacific Ocean

Po06 **0066**
 KOSTRIKOV, A.: Vernadsky Institute, Moscow, Russia
 Katabatic wind over axisymmetric ice domes

Po07 **0131**
 CHMEL, A.; SMIRNOV, V.: Ioffe Physico-Technical Institute, St. Petersburg, Russia
 Forestalling response of the correlated sea-ice drift dynamics to the approaching atmospheric depression

Po08 **0491**
 ZANDY, Y.: Tabriz Islamic Azad University, Iran
 Flow in small-scale dry bed model

Po09 **0548**
 WILSON, L.; BEAUREGARD, S.; RAFTERY, A.: Environment Canada, Toronto, Canada
 Probabilistic temperature forecasts from the Canadian Ensemble System using Bayesian Model Averaging

SESSION AW1.2 BOUNDARY LAYER PHYSICS IN WEATHER AND CLIMATE PREDICTIONS

Po10 **0288**
 LEE, L.Y.H.: Kyungpook National University, Daegu, Korea
 An evaluation of CO₂ flux and latent heat flux in open canopies with a modified soil-plant-atmosphere model

Po11 **0069**
 VILA-GUERAU DE ARELLANO, J.; KIM, S.W.; BARTH, M.; PATTON, E.G.: Wageningen University, The Netherlands
 Transport and chemical transformations influenced by shallow cumulus

Po12 **0141**
 LOPEZ-BUSTINS, J.A.; AZORIN-MOLINA, C.: University of Barcelona, Spain
 The Western Mediterranean Oscillation index: An objective primary filter for finding sea breeze days on the east coast of the Iberian Peninsula (Spain)

Po13 **0176**
 NODA, A.; IWASAKI, T.; UJIIE, M.: Tohoku University, Sendai, Japan
 Development of a shallow cloud parameterization scheme

Po14 **0187**
 JASINSKI, J.; BROJEWSKI, R.: Aviomet Ltd., Warsaw, Poland
 Boundary layer of the Atmosphere Research Project

POSTERS OF THE EMS ANNUAL MEETING

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Po15	0227	KAVCIC, I.; STIPERSKI, I.; GRISOGONO, B.: Faculty of Science, University of Zagreb, Croatia Katabatic flow in f-plane	Po23	0339	KIELY, G.; VORONOVICH, V.: University College Cork, Ireland On the gap in the spectra of atmospheric turbulence
Po16	0252	SOARES, P.M.M.; MIRANDA, P.M.A.; CATARINO, A.: University of Lisbon, Portugal Numerical simulation of boundary layer clouds	Po24	0381	LALIC, B.: University Center for Meteorology and Environmental Modelling, Novi Sad, Serbia and Montenegro New approach to forest-atmosphere interaction modelling: Implication on momentum turbulent transport
Po17	0254	TAMBKE, J.; BYE, J.A.T.; CLAVERI, L.; VON BREMEN, L.; LANGE, B.; WOLFF, J.-O.: Institute of Physics, University of Oldenburg, Germany Wind speeds and momentum fluxes in the marine boundary layer of the North Sea - Predictions and 1 year measurements up to 100m height	Po25	0416	KESARKAR, A.; RATNAM, J.V.; KAGINALKAR, A. ; GIRI, R.: Pune University Campus, India Simulation of boundary layer interaction with mesoscale convection over peninsular India using WRF
Po18	0263	SIVERTSEN, T.H.: The Norwegian Crop Research Institute, Aas, Norway Discussing the scientific method and a documentation system of meteorological parameters	Po26	0469	SYRAKOV, E.; CHOLAKOV, E.: Department of Meteorology and Geophysics, University of Sofia, Bulgaria Parameterization scheme for determination of relationships and co-ordination between basic BL and PBL turbulent and stability parameters in conventional and non-local turbulent regimes
Po19	0266	SIVERTSEN, T.H.: The Norwegian Crop Research Institute, Aas, Norway Discussing the continuum hypothesis of fluid mechanics and the concept of turbulence	Po27	0471	SYRAKOV, E.: Department of Meteorology and Geophysics, University of Sofia, Bulgaria On the local similarity of the PBL with application to the resistance and heat transfer laws
Po20	0268	SIVERTSEN, T.H.: The Norwegian Crop Research Institute, Aas, Norway The concept of energy in stationary mountain waves	Po28	0480	RAJKOVIC, B.; DJURDJEVIC, V.: Faculty of Physics, Belgrade University, Serbia and Montenegro The surface fluxes calculations for use in air-sea interaction studies in the Mediterranean area
Po21	0308	SCHLUENZEN, K.H.; BOHNENSTENGEL, S.; TRUKENMUELLER, A.: ZMAW, University of Hamburg, Germany Relevance of surface flux aggregation for different meteorological situations	Po29	0481	BOSVELD, F.C.; KOHSIEK, W.; KROON, P.; MOORS, E.; WERNER, C.: KNMI, De Bilt, The Netherlands Imbalances in the surface energy budget at the grassland site Cabauw, The Netherlands
Po22	0316	FERRERO, E.; COLONNA, N.: University of Alessandria, Italy Turbulence closure with higher order moments			

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- Po30 0549**
CVITAN, L.: Meteorological and Hydrological Service, Zagreb, Croatia
 Wind speed profiles and the Kazanski-Monin parameter under near-neutral conditions
- Po31 0421**
KALOGIROS, J.; WANG, Q.; RAMP, S.; BUZORIUS, G.; JONSSON, H.: NOA, Athens, Greece
 Measurements of near-surface turbulent fluxes in the coastal zone
- SESSION AW2 ATMOSPHERIC HAZARDS**
- Po32 0060**
RAMESH, A.; SHAHABFAR, A.R.: I.R.of Iran Meteorological Organization, Bojnourd, Iran
 Construction of a flood risk management system in a watershed by using statistical models (Case study: Kardeh watershed)
- Po33 0075**
PÉREZ, R.C.; MARTINEZ, H.H.; CALIGULI, R.: IDEPRN: Universidad Nacional de Cuyo, San Martin, Mendoza, Argentina
 A C band radar parameter in order to characterize the hailstorms cells with big damage in Mendoza (Argentina): The 40 Dbz. zone Volume (Vol)
- Po34 0207**
STAROSTIN, A.N.; ANABOR, V.; GORLACH, I.A.: Hydrometeorological Center of Russia, Moscow, Russia
 Structure and evolution of multitude long-lived mesoscale convective systems over South America
- Po35 0276**
LONFAT, M.; BOISSONNADE, A.; MUIR-WOOD, R.: Risk Management Solutions, London, United Kingdom
 Modeling rainfall and inland flooding in tropical cyclones for the assessment of financial losses
- Po36 0280**
PALJAK, T.: Estonian Meteorological and Hydrological Institute, Tallinn, Estonia
 Estonia at the mercy of hurricane Erwin (Gudrun)
- Po37 0238**
MERILAIN, M.; JOEMAA, U.; MATLIK, O.: Estonian Meteorological and Hydrological Institute, Tallinn, Estonia
 Heavy rainfall and local flooding - only two last summer features in Estonia ?
- Po38 0305**
DIOMEDE, T.; PAPETTI, P.; MARSIGLI, C.; PACAGNELLA, T.; NEROZZI, F.: University of Bologna, Italy
 Coupling high resolution precipitation forecasts and discharge predictions to evaluate the impact of spatial uncertainty in NWP model output
- Po39 0323**
BUZZI, A.; ZAMPIERI, M.: ISAC-CNR, Torino, Italy
 Sensitivity of quantitative precipitation and wind forecasts over the sea to turbulence parameterization: case studies in the Mediterranean Sea
- Po40 0467**
TEODORESCU, I.; NICHITA, C.; HAUER, E.: National Institute of Meteorology and Hydrology, Bucharest, Romania
 The role of precipitations and air temperatures in the floods registered in April 2005 on the rivers in the western part of Romania (Banat)
- Po41 0462**
BANICA, R.; OPREA, C.I.: National Institute of Meteorology and Hydrology, Bucharest, Romania
 A case study of a flash flood and the connectivity with a steep catchement
- Po42 0473**
OPREA, I.C.; ANTONESCU, B.; BANICA, R.; TANASE, A.; STAN-SION, A.: National Institute of Meteorology and Hydrology, Bucharest, Romania
 A severe convection case in Muntenia - Southern Romania
- Po43 0250**
SHPYG, V.M.; PIRNACH, A.M.: UHRI, Kiev, Ukraine
 Application of the numerical models for research of

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frontal cloud systems accompanied by squall lines
and heavy rainfall

SESSION AW3: AVIATION METEOROLOGY

- Po44 0220**
TIMOFTE, A.; CAPSA, D.: National Institute of Meteorology and Hydrology, Bucharest, Romania
The snow storm that affected the east of Romania in 3-5 February 2005
- Po45 0523**
MUGERZA, I.; GAZTELUMENDI, S.; EGAÑA, J.; GELPI, I.R.: European Virtual Engineering (EUVE), Basque Service of Meteorology, Vitoria, Spain
Rainfall and snowmelt: a dangerous meld for flooding
- Po46 0522**
GAZTELUMENDI, S.; EGAÑA, J.; GELPI, I.R.; MUGERZA, I.: European Virtual Engineering (EUVE), Basque Service of Meteorology, Vitoria, Spain
An automatic warning and alert system: Design and validation
- Po47 0150**
PIRNACH, A.M.; SHPYG, V.M.; DUDAR, S.: UHRI, Kiev, Ukraine
Modelling of atmospheric damaging events observed in Ukraine
- Po48 0464**
ALATISE, M.O.: Federal University of Technology, Akure, Nigeria
Evaluation of drought from rainfall data for Lokoja - A confluence of two major rivers in Nigeria
- Po49 0463**
SIOUTAS, M.V.; MEADEN, G.T.; WEBB, J.D.C.: ELGA-Meteorological Applications Center, Airport Macedonia, Thessaloniki, Greece
Hailfall frequency and intensity in Northern Greece
- Po50 0248**
CREMONINI, R.; CASSARDO, C.; BECHINI, R.; BRUSSOLO, E.: University of Torino, Italy
Analysis of north foehn events in Italian western Alps

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SESSION AW4: HYDROMETEOROLOGY

Po53 0160

GARCIA-MARIN, A.P.; JIMÉNEZ-HORNERO, F.J.; AYUSO, J.L.: University of Cordoba, Spain
Analysis of rainfall data recorded in Cordoba (Andalusia, Southern Spain) using the self-organized criticality approach

Po54 0206

CRUZ GUERRERO, R.; LAGO NÚÑEZ, M.A.; LAGE GONZÁLEZ, A.; SALSÓN CASADO, S.; MÍGUEZ MACHO, G.: University of Santiago de Compostela, Spain
Spatial patterns of daily precipitation in Galicia (NW of Spain)

Po55 0311

EPIFANI, C.; DI GIUSEPPE, E.; ESPOSITO, S.; VENTO, D.: Ufficio Centrale di Ecologia Agraria, Rome, Italy
Extreme events of precipitation over Italy and their probability of occurrence

Po56 0356

LUCIO, P.S.; MENDES, D.; MENDES, M.D.; RAMOS, A.M.; CONDE, F.C.: University of Évora, Portugal
Rainfall reconstruction and homogenisation over the Brazilian Amazon

Po57 0412

CONDE, F.C.; RAMOS, A.M.; CORTE-REAL, J.M.: University of Évora, Portugal
Application of artificial neural network in the behaviour of precipitation in continental Portugal

Po58 0357

LUCIO, P.S.; MENDES, D.; MENDES, M.D.; RAMOS, A.M.; CONDE, F.C.: University of Évora, Portugal
Persistent Oscillation Patterns (ENSO, PDO and NAO) events in connection with rainfall variability over Brazilian Amazon

Po59 0096

ÁCS, F.; BREUER, H.: Eötvös Loránd University, Budapest, Hungary

The climate/soil respiration relationship in Hungary

Po60

0090

STONEVICIUS, E.; STANKUNAVICIUS, G.; KILKUS, K.: Vinius University, Lithuania
Atmospheric forcing on Nemunas river long term ice regime

P112

0539

EGAÑA, J.; GAZTELUMENDI, S.; GELPI, I.R.; MUGERZA, I.: European Virtual Engineering (EUVE), Basque Service of Meteorology, Vitoria, Spain
Synoptic patterns associated to very heavy precipitation events in the Basque Country

SESSION AW5.1: ENVIRONMENTAL METEOROLOGY, METEOROLOGY AND ATMOSPHERIC POLLUTION: FROM THE URBAN TO MESO AND GLOBAL SCALE

Po61

0199

OSRODKA, L.; SKUBACZ, K.; WOJTYLAK, M.; MICHALIK, B.; KRAJNY, E.: Institute of Meteorology and Water Management, Katowice, Poland
Attempt at automatization of measurement mixing layer and radioactive contamination in the lower troposphere

Po62

0393

RIESENMEY, C.; CHEMEL, C.; BATTON-HUBERT, M.; CHOLLET, J.-P.: J. Fourier University/CNRS/INP, Grenoble, France
Influence of the topography on odour dispersion from a landfill located in complex terrain

Po63

0193

MAHURA, A.; BAKLANOV, A.; PETERSEN, C.; SATTLER, K.: Danish Meteorological Institute, Copenhagen, Denmark
Effects of urbanized areas for high resolution DMI-HIRLAM simulations

Po64

0033

DEMUZERE, M.; DE RIDDER, K.: Catholic University Leuven, Belgium

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A meteorological based validation of ARPS during ESCOMPTE 2001: A case study from IOP2a and IOP2b

- Po65 0204**
HAMDI, R.; SCHAYES, G.: Catholic University Leuven, Belgium
Validation of the Martilli's urban boundary layer scheme with measurements from Marseilles's city center
- Po66 0078**
VINCZE, CS.; LAGZI, I.; MÉSZÁROS, R.; LOVAS, R.; KACSUK, P.; TURÁNYI, T.; KULLMANN, L.; HORÁNYI, A.: Eötvös Loránd University, Budapest, Hungary
Parallelization of an accidental release code using P-GRADE environment

- Po67 0217**
KREIENKAMP, F.; ENKE, W.: Meteo Research, Stahnsdorf, Germany
SYSTWARN – An real time data control tool

- Po68 0081**
JUHÁSZ, Á.; MÉSZÁROS, R.; LAGZI, I.; VINCZE, CS.; SZINYEI, D.; ÁCS, F.; HORÁNYI, A.; KULLMANN, L.: Eötvös Loránd University, Budapest, Hungary
Estimating stomatal ozone fluxes using a coupled transport-deposition model

- Po69 0374**
RAMOS, A.M.; FREITAS, S.; LONGO, K.; CONDE, F.C.; CORTE-REAL, J.M.; FAZENDA, A.L.; RODRIGUES, L.F.; RECUERO, F.S.; MOREIRA, D.S.: University of Évora, Portugal
The use of high resolution numerical simulations to study the transport of biomass burning pollution over Europe in August 2003

- Po70 0338**
STORTINI, M.; BONAFÉ, G.; DESERTI, M.; MINGUZZI, E.; JONGEN, S.: ARPA - Emilia Romagna, Bologna, Italy
NINFA: an operational air quality modelling system to forecast air quality in northern Italy

- Po71 0388**
WIND, P.: Norwegian Meteorological Institute, Oslo, Norway
Modelling of air pollution with the EMEP model: from regional to global and local scales

- Po72 0370**
SERRANO, C.; HEITOR REIS, A.; ROSA, R.; LUCIO, P.S.: University of Évora, Portugal
Local meteorology influences upon the atmospheric electric field in Lisbon in the period 1970-91

SESSION AW5.2: ENVIRONMENTAL METEOROLOGY: URBAN CLIMATE, URBAN PLANNING AND IMPACTS OF CLIMATE CHANGES AT THE MICRO- / MESOSCALE

- Po73 0109**
BARTHOLY, J.; PONGRACZ, R.; DEZSO, Z.S.: Eötvös Loránd University, Budapest, Hungary
Using remotely sensed thermal information for analyzing the urban heat island effects of Hungarian and European large cities

- Po74 0290**
HENNINGER, S.; KUTTLER, W.; BRANDT, K.: University of Duisburg-Essen, Campus Essen, Germany
Fairground heat island effect investigations

- Po75 0106**
ZORAN, M.; ZORAN, L.F.: National Institute of R&D for Optoelectronics, Bucharest, Romania
Urban heat island analysis by remote sensing satellite data

SESSION AW6: AGROMETEOROLOGY

- Po76 0079**
SZINYEI, D.; VINCZE, CS.; MÉSZÁROS, R.; LAGZI, I.; ÁCS, F.; PINTÉR, K.; HASZPRA, L.: Eötvös Loránd University, Budapest, Hungary
Estimation of root-zone soil water content by a simple bucket model: applications on Hungarian datasets

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Po77**0110**

PONGRACZ, R.; BARTHOLY, J.: Eötvös Loránd University, Budapest, Hungary
 Analysis of extreme climate indices based on daily precipitation and temperature observations in the Carpathian Basin

Po78**0209**

ZORAN, M.; ZORAN, L.F.; DIDA, A.: National Institute of R&D for Optoelectronics, Bucharest, Romania
 Significance of atmospheric effects on spectral vegetation indices for forested areas analysis from satellite data

Po79**0210**

ZORAN, L.F.; GOLOVANOV, C.; ZORAN, M.; DIDA, A.: National Institute of R&D for Optoelectronics, Bucharest, Romania
 Spectral mixing analysis of an agricultural area changes from satellite data

Po80**0296**

MICHAELIDES, S.; KYRMITSIS, M.: Meteorological Service of Cyprus, Larnaka Airport, Cyprus
 A simulation model of potato blight development running on data from automatic weather observing systems

Po81**0309**

CHIAUDANI, A.; CACCIATORI, G.; TRIDELLO, G.; GANI, M.; CICOGNA, A.A.N.: ARPA Veneto, Teolo-Padova, Italy
 GELAVENETO: an application for the spring and autumn frost nowcasting

Po82**0347**

RUBIO, M.A.; BATLLES, F.J.: Universidad de Granada, Spain
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DANUSO, F.; SANDRA, M.; BORIN, M.; BONAMANO, A.: Facoltà di Agraria di Padova, Italy
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Po84**0021**

UNDERWOOD, J.: University of Nevada, Reno, United States of America
 Utilizing GIS for cloud-to-ground lightning analysis: Applications for urban flash flood warnings

Po85**0056**

SHAHABFAR, A.R.; SHARIFI, M.B.: I.R. of Iran Meteorological Organization, Bojnourd, Iran
 Application of remote sensing & GIS in snow hydrology

Po86**0329**

ZORIN, S.; KARTAVTSEV, O.; KOSOVEC, O.; SHVEN, N.: Scientific and industrial enterprise Ecomedservice, Kiev, Ukraine
 Perspective of GIS implementation in Ukrainian meteorological Services

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Po87**0299**

HUTH, R.: Charles-University, Praha, Czech Republic
 The use of circulation classifications in climate change research

Po88**0322**

JAMES, P.: The Met Office, Exeter, United Kingdom
 Empirical weather type classification using a natural clustering of patterns derived from North Atlantic climate indices

Po89**0218**

ENKE, W.; KREIENKAMP, F.; DEUTSCHLÄNDER, TH.: Meteo Research, Stahnsdorf, Germany
 A simple approach to derive objective circulation pattern classifications

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NIEDZWIEDZ, T.; MICHALCZYK, Z.; STARTEL, L.; USTRNUL, Z.: Faculty of Earth Sciences, University

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 Meteorological, hydrological and geomorphological extreme events in Central Europe – an attempt of classification

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 Spatial and temporal variance of cyclones in the Baltic Sea region
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LUCIO, P.S.; CONDE, F.C.; RAMOS, A.M.: University of Évora, Portugal
 Stochastic contrasts for rainfall variability over continental Portugal. Persistent oscillation weather patterns
- P093** **0429**
DAHECH, S.; BELTRANDO, G.: University of Paris, France
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LUCIO, P.S.; CONDE, F.C.: University of Évora, Portugal
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- P095** **0223**
DUBROVSKY, M.; METELKA, L.; TRNKA, M.; RUZICKA, M.; NEMESOVA, I.; KLIEGROVA, S.; PROSOVA, O.; ZALUD, Z.: Institute of Atmospheric Physics, Charles University, Hradec Kralove, Czech Republic
 The CaliM&Ro project: Calibration of Met&Roll weather generator for sites without or with incomplete meteorological observations

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 Solar variability effects in long series of air temperature and precipitation data in Romania
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PATARCIC, M.: Meteorological and Hydrological Service, Zagreb, Croatia
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MYLLYS, H.; PURANEN, U.; VENÄLÄINEN, A.: Finnish Meteorological Institute, Helsinki, Finland
Classification of storms in Finland based on four different methods

P107 0286

KYSELY, J.; DOMONKOS, P.: Institute of Atmospheric Physics, Charles University, Praha, Czech Republic
Long-term variations in the persistence of atmospheric circulation over Europe and their implications for the occurrence of temperature extremes

P108 0195

PALUS, M.; NOVOTNA, D.: Institute of Atmospheric Physics, Charles University, Praha, Czech Republic
Searching for phase synchronization and causality relations in NAO and temperature

P109 0495

ALCALÁ, J.; BUENDIA, B.; GARCIA, A.R.; MEULENERT, P.: Institute of Meteorology and Astronomy, University of Guadalajara, Mexico
Midsummer (canícula) during the presence of “El Niño / Southern Oscillation (ENSO)” in the Mexican Republic

P110 0386

BALDI, M.; DALU, G.A.; CESARONE, F.; MARACCHI, G.: Institute of Biometeorology (IBIMET), National Research Council, Florence, Italy
Mediterranean jetstream and mediterranean summer anomalies

P111**0167**

LASHKARIPOUR, G.R.: University of Sistan and

Baluchestan, Zahedan, Iran

The effect of periodic drought on Hamoon Lake, eastern Iran

P113**0118**

GLUSHKOV, A.; KHOKHLOV, V.; TSENENKO, I.: Innovative Geosciences Research Centre, Odessa, Ukraine

Atmospheric teleconnection patterns and eddy kinetic energy content: wavelet analysis

P114**0119**

GLUSHKOV, A.; RUSOV, V.; VASCHENKO, V.: Innovative Geosciences Research Centre, Odessa, Ukraine
Energy-balance model of global climate and its connection with Milankovich's theory of ice age rhythm

P115**0120**

LOBODA, N.; SVINARENKO, A.: Innovative Geosciences Research Centre, Odessa, Ukraine

On the nonlinear interaction between global teleconnection patterns

P116**0121**

LOBODA, N.; SOLONKO, T.: Innovative Geosciences Research Centre, Odessa, Ukraine

Modelling global cycle of carbon dioxide in system of atmosphere-ocean and global warming effect

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P117**0320**

FRÖHLICH, E.L.; PINTO, J.G.; LECKEBUSCH, G.C.; ULRICH, U.; KERSCHGENS, M.: Institute of Geophysics and Meteorology, University of Cologne, Germany

Assessment of changes in the storm loss potential over Europe under modified climate conditions based on three ensemble simulations of the ECHAM5/MPI-OM1

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DARADUR, M.; CAZAC, V.; THE HYDROMETEO TEAM: State Hydrometeorological Service, Republic of Moldova
Dynamics of the unfavorable weather conditions and climatic monitoring.

P126**0343**

DREBS, A.; TUOMENVIRTA, H.: Finnish Meteorological Institute, Helsinki, Finland
The Nordklim Data Set (NkDS) Version 2.0 - 15 years of Nordic cooperation in climatology

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SESSION CL4: CLIMATOLOGY DERIVED FROM SATELLITE OBSERVATIONS

P123**0108**

BARTHOLY, J.; PONGRACZ, R.; DEZSO, ZS.; KERN, A.; BARCZA, Z.: Eötvös Loránd University, Budapest, Hungary
Remotely sensed detection of land cover change at the Upper-Tisza watershed located in the mountain Carpathes

P124**0405**

MANEV, A.; PALAZOV, K.; ZHEKOV, J.; GETHOV, P.; MARDIROSSYAN, G.; STOIANOV, ST.: Stara Zagora, Bulgaria
Temperature anomalies on the Black sea surface and accompanying meteorological phenomena in 1989 - 1999

P125**0274**

AFANASYEV, I.M.; AVAKYAN, S.V.: S.I. Vavilov State Optical Institute, St. Petersburg, Russia
The future Space Solar Patrol mission for climate science and solar-terrestrial physics

SESSION CL5: CLIMATE DATA PRODUCTS (PURELY A POSTER SESSION)

P127**0406**

BARTOK, J.; MAZUREK, D.; POTURNAJ, K.: MicroStep-MIS, Bratislava, Slovak Republic
Modular database system for climatology, meteorology and environmental sciences

SESSION CO1: NUMERICAL METHODS

P128**0201**

TODOROVIC, N.; VUJOVIC, D.: University of Belgrade, Serbia and Montenegro
The relationship between the Solar wind, height of the electronic enclosure base and ground meteorological data for Belgrade region

SESSION CO2: GEODATA INFRASTRUCTURE (PURELY A POSTER SESSION)

P129**0511**

TOUSSAINT, F.; LAUTENSCHLAGER, M.: Max-Planck-Institut für Meteorology, Hamburg, Germany
The World Data Center cluster "Earth System Research" and its collaborations

P130**0499**

TOUSSAINT, F.; LAUTENSCHLAGER, M.: Max-Planck-Institut für Meteorology, Hamburg, Germany
The World Data Center for Climate

P131**0502**

LAWRENCE, B.; STEPHENS, A.: The Met Office, Exeter, United Kingdom
BADC, the British Atmospheric Data Centre

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P132**0503**

PALIOURAS, E.; BITTNER, M.: DLR - German Aerospace Center, Wessling, Germany
The World Data Centre for Remote Sensing of the Atmosphere (WDC-RSAT): Facilitating research on earth system modelling

P133**0497**

DIEPENBROEK, M.: MARUM, Bremen, Germany
wdc-mare

P134**0500**

KLUMP, J.; WÄCHTER, J.: GeoForschungsZentrum (GFZ) Potsdam, Germany
The proposed World Data Center of the Lithosphere (WDC-TERRA) at GFZ Potsdam

P135**0504**

RUDOLF, B.; SCHNEIDER, U.; BECK, C.; GRIESER, J.: GPCC, Deutscher Wetterdienst, Germany
Analysis products of the Global Precipitation Climatology Centre for the period since 1951

P136**0498**

BECK, C.; GRIESER, J.; RUDOLF, B.: GPCC, Deutscher Wetterdienst, Germany
A homogeneous 50-Year monthly precipitation climatology for the global land-surface

SESSION IOI: MEASUREMENTS AND MEASUREMENT NETWORKS

P137**0014**

DREWS, A.; LORENZ, E.; BETCKE, J.; HEINEMANN, D.; VAN SARK, W.; SCHNEIDER, M.; STETTLER, S.; WIEMKEN, E.; HEYDENREICH, W.; BEYER, H.G.: Institute of Physics/Oldenburg University, Germany
PVSAT-2: An automated performance check for photovoltaic systems based on solar irradiance information from satellite data

P138**0034**

ASADOV, H.H.: Azerbaijan National Aerospace Agency, Baku, Azerbaijan

How to modernize the Dobson and Brewer type spectrometers for high accuracy ground network of ozone measurements

P139**0161**

PANDZIC, K.; SIMUNIC, I.; LIKSO, T.: Meteorological and Hydrological Service, Zagreb, Croatia
Comparison of three mathematical models for estimation of 10-day drain discharge

P140**0184**

JASINSKI, J.; KUMOCH, L.: Aviomet Ltd., Warsaw, Poland
Meteorological measurement systems with dispersed intelligence

P141**0197**

MILETA, M.; BEYSENS, D.; NIKOLAYEV, V.; MILIMOUK, I.; CLUS, O.; MUSELLI, M.: Meteorological and Hydrological Service, Zagreb, Croatia
Dew and fog collection in Croatia

P142**0312**

SABZIPARVAR, A.A.: Bou-Ali Sina University, Hamadan, Iran
Hourly distribution of sunshine hours and its effect on total solar radiation received at the surface. Case study: Tehran (IRAN)

P143**0359**

LUCIO, P.S.; CONDE, F.C.; RAMOS, A.M.: University of Évora, Portugal
Selecting the best spatial distribution to optimise local meteorological network design

P144**0445**

MORADI, I.; KAMALI, GH.: KNMI, De Bilt, The Netherlands
Quality control and reconstruction of total solar radiation based on sunshine duration

P145**0340**

MALINOVIC, S.; MIHAJLOVIC, D. T.; MIJATOVIC, Z.; KAPOR, D.; ARSENIC, I.D.; LALIC, B.: University Center for Meteorology and Environmental Modelling, Novi Sad, Serbia and Montenegro
UV index activity at Novi Sad (Serbia)

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 Detection and quantification of radiative effects on satellite retrievals of cloud characteristics
- P147** **0520**
WOLF, L.: Eumetsat, Darmstadt, Germany
 EUMETCAST: Current status and future upgrade plans - EUMETCast System

SESSION IO3: REMOTE SENSING: GPS AND RADAR

- P148** **0307**
HOLLEMAN, I.; HUUSKONEN, A.; ZGONC, A.: KNMI, De Bilt, The Netherlands
 OPERA: Operational Programme for the Exchange of Weather Radar information
- P149** **0476**
DE HAAN, S.: KNMI, De Bilt, The Netherlands
 Measuring atmospheric stability with GPS
- P163** **0577**
GREBENITCHARSKY, R.; HANSEN, R.: University of Delft, The Netherlands
 Spatial modeling of atmospheric delays for InSAR and GPS sensors

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- P0162** **0484**
HEINO, R.: Finnish Meteorological Institute, Helsinki, Finland
 WEATHER - from weather gods to modern meteorology

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GEORGE, D.; CLEWETT, J.; PARTRIDGE, I.; CLARKSON, N.; ALLEN, W.; BIRCH, C.: University of Queensland, Australia
 An approach to applied climate education in Australia
- P0151** **0112**
PONGRACZ, R.; BARTHOLY, J.; KERN, A.; DEZSO, ZS.: Eötvös Loránd University, Budapest, Hungary
 A new curriculum for satellite meteorology - teaching high-school and undergraduate students to download, understand and use satellite images
- P0152** **0190**
JASINSKI, J.; PIETREK, S.: Aviomet Ltd., Warsaw, Poland
 Usage of weather data by emergency commissions
- P0153** **0441**
HANSEN, P.J.K.: Oslo University College, Norway
 Comparing knowledge about greenhouse effect and ozone layer among Norwegian pupils finishing compulsory education in 1989, 1993 and 2005
- P0154** **0513**
HALENKA, T.; BELDA, M.: Charles University in Prague, Fac. of Math. & Physics, Praha, Czech Republic
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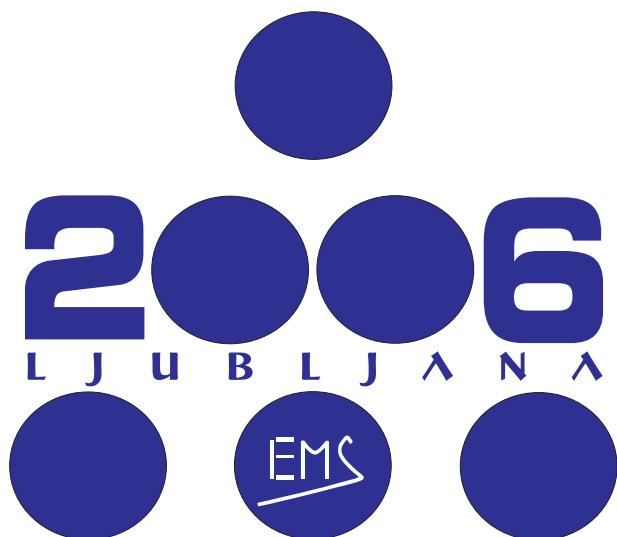
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