6th COPS Workshop

COPS Science Meeting

(Final Version)

27 – 29 February 2008

University of Hohenheim, Stuttgart

	Wed, 27 February	Thu, 28 February	Fri, 29 February
09:00		CI Oral 2	WG Meetings
09:30			
10:00		Water Vapor Validation	
10:30		ACM & PPL Poster	
11:00			
11:30			Final Discussion
12:00	Registration starts	ACM Oral	
12:30			
13:00	Overview 1		
13:30			
14:00		PPL Oral	ISSC Meeting
14:30			
15:00	Overview 2		
15:30		DAP Oral	
16:00			
16:30	CI Oral 1	DAP Poster	
17:00			
17:30	CI Poster		
18:00		Ad-Hoc WGs	
18:30			
19:00			
19:30		Reception	
20:00	Banquet		

13:00 – 13:15	**Inaugural greetings: Hans-Peter Liebig, Rector of University of Hohenheim**

13:15 – 14:30   **1st session: COPS Overview (Chair: Hans Volkert)**

13:15 – 13:30	COPS as WWRP RDP (Volker Wulfmeyer et al., University of Hohenheim, Germany)
13:30 – 13:45	D-PHASE (Mathias Rotach et al., Meteo Swiss, Switzerland)
13:45 – 13:55	COPS-UK (Stephen Mobbs et al., NCAS and University of Leeds, UK)
13:55 – 14:05	COPS-France (Evelyne Richard et al., Laboratoire d'Aérologie, University of Toulouse and CNRS, France)
14:05 – 14:15	COPS-Austria (Reinhold Steinacker et al., University of Vienna, Austria)
14:15 – 14:30	Discussion

14:30 – 15:00   *Coffee Break*

15:00 – 16:00   **2nd session: COPS Overview (Chair: Alan Blyth)**

15:00 – 15:10	How representative were the meteorological conditions in the COPS area during the summer 2007? (Heini Wernli et al., University of Mainz, Germany)
15:10 – 15:20	ETReC07 (George Craig et al., Deutsches Zentrum fuer Luft- und Raumfahrt (DLR), Germany, presentation given by Hans Volkert)
15:20 – 15:30	Status of the collection of GTS and non-GTS data (Manfred Dorninger et al., University of Vienna, Austria)
15:30 – 15:40	COPS-GOP-D-PHASE data archive (Claudia Wunram et al., Data management at WDCC, Max Planck Institute for Meteorology, Germany)
15:40 – 15:50	COPS synthesis: Which level-2 data products do we need to investigate the COPS science questions and how do we get them? (Andreas Behrendt et al., University of Hohenheim, Germany)
15:50 - 16:00	Discussion

16:00 – 16:30   *Coffee Break*

16:30 – 17:30   **3rd session: CI (Chair: Tammy Weckwerth)**

10 min	Interaction of boundary layer and land surface based processes with mesoscale convection initiation: COPS IOP 9c (Ulrich Corsmeier et al., Institute of Meteorology and Climate Research, Research Center Karlsruhe, Germany)
10 min	Characteristics of thermals as identified using Doppler lidar and microwave radiometer data (Chris Collier et al., University of Salford, UK)
10 min	Water vapour variability in the Rhine Valley and its role on convective initiation: first results from LEANDRE 2 (Cyrille Flamant et al., UPMC-CNRS-UVSQ Service d'Aéronomie, France)
10 min	Water Vapour and Wind Profiles from the DLR Falcon Lidars (Christoph Kiemle et al., Deutsches Zentrum fuer Luft- und Raumfahrt (DLR), Germany)
10 min	Discussion

17:30 – 19:00   **Poster 1: CI (Chair: Cyrille Flamant)**

20:00   *Banquet*

Thursday, 28. February

09:00 – 10:00   4th session: CI (Chair: Ulrich Corsmeier)

10 min	MSG SEVIRI products for COPS: Discussion of selected convective events (Wayne Feltz and Christopher Bedka, University of Wisconsin, USA, talk will be given by Dave Turner)
10 min	Retrieval and Validation of GPS Water Vapor and Slant Delays during COPS/GOP (Galina Dick et al., GeoForschungsZentrum Potsdam (GFZ), Germany)
10 min	First results from GPS tomography during the COPS field experiment (Cedric Champollion et al., Géosciences Montpellier UM2/CNRS & Service d'Aéronomie UPMC/IPSL, Fance)
10 min	An examination of atmospheric lids during COPS (Andrew Russel et al., Centre for Atmospheric Science, University of Manchester, UK)
10 min	The energy balance components for characteristic regions of the COPS domain: Examples from selected intensive observation periods (Norbert Kalthoff et al., Institute of Meteorology and Climate Research, Research Center Karlsruhe, Germany)
10 min	Discussion

10:00 – 10:30   5th session: Water Vapor Validation (Chair: Andreas Behrendt)

10 min	Water vapour intercomparison effort in the frame of the Convective and Orographically-induced Precipitation Study (Rohini Bhawar et al., Università degli Studi della Basilicata, Italy)
10 min	Long-term water vapour comparison at the ARM Mobile Facility (Susanne Crewell et al., University of Cologne, Germany)
10 min	Discussion

10:30 – 11:50   Poster 2: ACM (Chair: Susanne Crewell) & PPL (Chair: Martin Hagen)

with Coffee served 10:30 – 11:00

11:50 – 13:00   6th session: ACM (Chair: Dave Turner)

10 min	UK Bae-146 Aircraft Contributions to COPS (Alan Blyth et al., National Centre for Atmospheric Science, UK)
10 min	Comparison of observed cloud properties at the COPS AMF site in Germany with their representation in operational models (Ewan J. O'Connor and Anthony J. Illingworth, University of Reading, UK)
10 min	Integrated Profiling at the AMF (Kerstin Ebell et al., University of Cologne, Germany)
10 min	Temperature, water vapour and cloud liquid water measurements at Hornisgrinde using a microwave profiler (Fabio Madonna, Consiglio Nazionale delle Ricerche – Istituto di Metodologie per l'Analisi Ambientale (CNR-IMAA), Italy)
10 min	Observation of a Saharan dust outbreak on 1-2 August 2007: determination of microphysical particle parameters (Paolo Di Girolamo et al., Università degli Studi della Basilicata, Italy)
10 min	Multiwavelength aerosol lidar and vertical-wind lidar observations during COPS (Albert Ansmann et al, Institute for Tropospheric Research, Germany)
10 min	Discussion

13:00 – 14:00   Lunch Break

14:00 – 15:00   7th session: PPL (Chair: Reinhold Steinacker)

10 min	Observations with the polarimetric weather radar POLDIRAD and the lightning detection system LINET (Martin Hagen and Hartmut Hoeller, Deutsches Zentrum fuer Luft- und Raumfahrt (DLR), Germany)
10 min	Preliminary results on convective cells and rain fall studies during COPS 2007 using the LaMP X band radar and MRR (Joel Van Baelen et al., Observatoire de Physique du Globe de Clermont-Ferrand, France)

10 min	High resolution atmospheric profiling with the S-band Doppler polarimetric radar TARA (Christine Unal et al., Delft University of Technology, The Netherlands)
10 min	IMGI's contribution to the COPS 2007 field experiment - A short overview of the state of data preparation and first results (Simon Hölzl and Alexander Gohm, University of Innsbruck, Austria)
10 min	Measurements with the Doppler-On-Wheels (Tammy Weckwerth et al., NCAR, USA)
10 min	Discussion

15:00 – 15:30   Coffee Break

15:30 – 16:30   8th Session: DAP (Chair: Evelyne Richard)

10 min	Quantitative precipitation forecasts in the Alps – first results from the Forecast Demonstration Project MAP D-PHASE (Felix Ament et al., Meteo Swiss; given by Marco Arpagaus)
10 min	Daily runs and real time assimilation during the COPS campaign with AROME (Pierre Brousseau et al., Météo-France)
10 min	Possible contributions of MRI to COPS (Kazuo Saito, Meteorological Research Institute (MRI), Japan Meteorological Agency)
10 min	Assimilation of groundbased GPS observations with the MM5 4DVAR system (Florian Zus et al., University of Hohenheim, Germany)
10 min	Plans for Observing System Experiments and Re-Analyses for the COPS period at Deutscher Wetterdienst (Werner Wergen, Deutscher Wetterdienst, Germany; given by Hans-Joachim Koppert)
10 min	Discussion

16:30 – 18:00   Poster 3: DAP (Chair: Hans-Stefan Bauer)

18:00 – 18:30   9th Session: Informal Ad-Hoc Working Groups

19:30   Reception, Musical Surprise & Awards

Friday, 29. February

09:00 – 11:00   10th Session: COPS Working Group Meetings CI, ACM, PPL, and DAP (WG Chairs)

11:00 – 11:30   Coffee Break

11:30 – 13:00   11th session: Final Discussion (Chair: Volker Wulfmeyer)

13:00 Adjourn

14:00 – 15:30   ISSC Meeting

| First Author	Topic	Institution	Number	Poster Title
Convective Initiation (CI)				
Aoshima	CI	IPM UHOH	CI 1	Analysis of convective initiation using Meteosat Reduced Scans
Behrendt	CI	IPM UHOH	CI 2	Exploiting the synergy of remote sensing data to analyse convective initiation processes in complex terrain
Bhawar	CI, IOP9c	UNIBAS, Italy	CI 3	Raman lidar Observations of a MCS on July 20th
Bosser	CI; ACM, RS	LOEMI, France	CI 4	Raman lidar measurements at the COPS Vosges supersite
Davis	CI, ABL, IOP8b	U Salford	CI 5	Doppler lidar measurements of boundary layer winds and sensible heat flux
Holland	CI, TRACKS	FZ Jülich	CI 6	First deployment of the airship ZEPPELIN NT as a carrier for instruments probing the chemical composition of the planetary boundary layer during ZEPTER-1
Imbery	CI	U. Freiburg	CI 15	SODAR-based Investigation of the Boundary Layer in the Rench Valley during COPS
Pal	CI	IPM UHOH	CI 7	Measuremants with the IPM UHOH scanning water vapour DIAL during COPS
Radlach	CI	IPM UHOH	CI 8	Measurements with the IPM UHOH scanning rotational Raman lidar during COPS
Schaefler	CI	DLR	CI 9	Water vapor transport in the pre-convective environment during COPS IOP 13a on 1 August 2007
Schneider	CI, PPL	U Vienna	CI 10	High resolution ground measurements
Schween	CI, EUFAR	U Cologne	CI 11	Inhomogeneity of water vapour in the boundary layer derived from ground-based microwave measurements
Smith	CI, AWS	U Leeds	CI 12	Surface layer observations from a network of 22 automatic weather stations covering the northern COPS region
Traeumner	CI, RS	IMK	CI 13	Simultaneous wind measurements with lidar and cloud radar - complementary and quality check
Vogt	CI, RS	IMK	CI 14	Profiling the lower troposphere with an UHF-wind-temperature-radar at the supersite S

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Aerosol Cloud Microphysics (ACM)				
Brandau	ACM, EUFAR	U Delft	ACM 1	Partenavia P68B D-Gery aircraft flight missions July 2007
Cuesta	ACM, RS, TRESS	IPSL/LMD/CNRS	ACM 2	Multi-platform monitoring of aerosols, clouds and atmospheric boundary layer dynamics in Vosges supersite in the framework of the COPS field campaign
Dufournet	ACM, EUFAR	IRCTR, U Delft	ACM 3	Characterization of mixed-phase clouds - description of EUFAR ATR42 aircraft
Kneifel	ACM, CI	LMU, Munich	ACM 4	Observations of the spatial distribution of integrated water vapour and liquid water path in the Murg valley with scanning microwave radiometer
Summa	ACM, CI, RS	UNIBAS, Italy	ACM 5	Lidar and radar measurements of the melting layer at supersite R: observations dark and bright band phenomena

Precipitation Processes and Life Cycle (PPL)				
Battaglia	PPL	U Bonn	PPL 1	Ground-based observations of precipitating clouds by a scanning polarimetric triple-frequency microwave radiometer
Dorninger	PPL, AWS	U Vienna	PPL 2	Overview and measurement examples from instruments operated by the University of Vienna
Groenemeijer	PPL	IMK	PPL 3	PRINCE: Pre-COPS measurements of a convective cluster in the northern Black Forest
Handwerker	PPL	IMK	PPL 4	Tracks of convective storms as observed during IOP
Mahlke	PPL	IMK	PPL 5	Modification of atmospheric parameters by convective cells derived from measurements of mobile dropup-radiosonde-systems
Reimer	PPL	FU Berlin	PPL 6	High resolution analysis of precipitation
Riede	PPL	IPM UHOH	PPL 7	Measurements with the IPM-UHOH X-band precipitation radar during COPS

Model studies, Data assimilation, Predictability (DAP)				
Bauer	DAP	IPM UHOH	DAP 1	High-resolution reanalyses and impact studies for improving process understanding and precipitation forecast skill based on the COPS data set
Cardwell	DAP, CI, IOP8b	U Manchester	DAP 2	Modelling of an isolated thunderstorm during COPS 15/7/2007
Caumont	DAP	MeteoFrance	DAP 10	First results from Meteo-NH simulations for the COPS IOP 9 (18 – 20 July 2007)
Chaboureau	DAP, ACM	U Toulouse, CNRS	DAP 3	Verification of cloud forecasts with satellite observations during COPS
Grzeschik	DAP	IPM UHOH	DAP 4	Assimilation of GPS observations into the MM5 4d-Var system during a six month period covering D-PHASE and COPS
Kawabata	DAP	MRI/JMA, Japan	DAP 5	Development and result of a cloud-resolving non-hydrostatic 4DVAR assimilation system (NHM-4DVAR)
Kuell	DAP, CI	U Bonn	DAP 6	HYMACS: A hybrid mass flux convection scheme for non-hydrostatic NWP models
Sasse	DAP, CI, GPS	IMK	DAP 7	Comparison of water balance components derived from GPS data and COSMO simulations
Trentmann	DAP, CI, IOP8b	U Mainz	DAP 8	COSMO model simulations for COPS IOP 8b, 15 July 2007
Wulfmeyer	DAP	IPM UHOH	DAP 9	Studies of the process chain and the predictability of precipitation with the D-PHASE ensemble and COPS observations
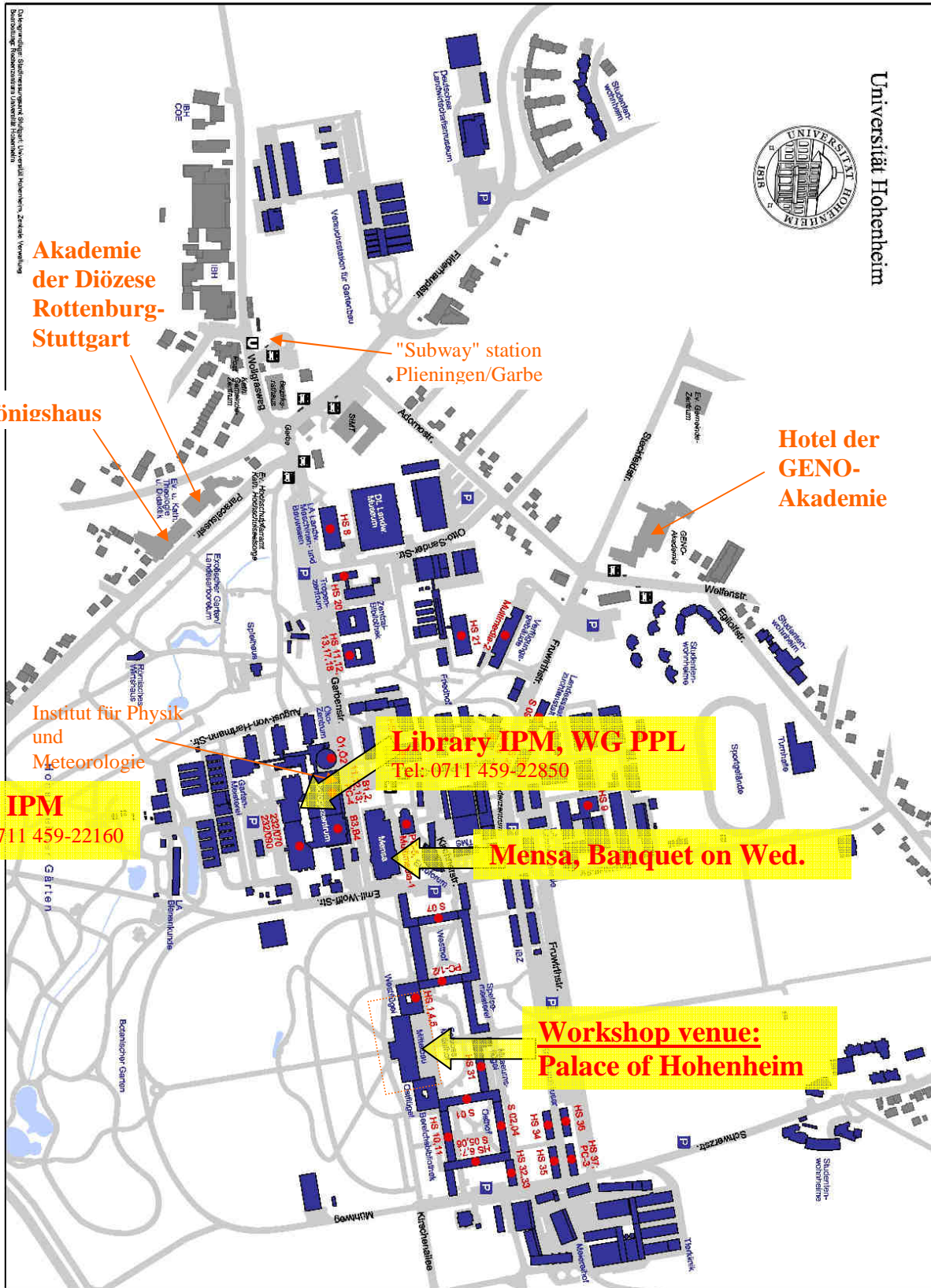
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http://www.tagungshaus.net/christkoenigshaus/index.htm

Workshop venue

Courtyard side, Schlosshofseite

Poster

Poster

EINGANGSHALLE EG

Entrance

KLEINES FOYER

GROSSES FOYER

D

AULA

Workshop

TANNEN ZAPFEN ZIMMER

BLAUER SAAL

BALKONSAAL

GELBER SAAL

BLAUES. ZI.

TP

GRÜNER SAAL

Plenum

WG ACM
Tel: -23390

Entrance

WG DAP
Tel: -22884

WG CI
Tel: -22062

Musical
Surprise on
Thursday

Palace of Hohenheim, 2nd Floor
Schloss Mittelbau OG