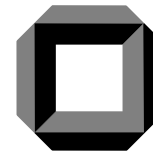


The COPS Operations Center - Tasks and possible locations -

Christian Barthlott, Ulrich Corsmeier, Christoph Kottmeier

**4. COPS Workshop
25./26.9.2006 Hohenheim**



Tasks

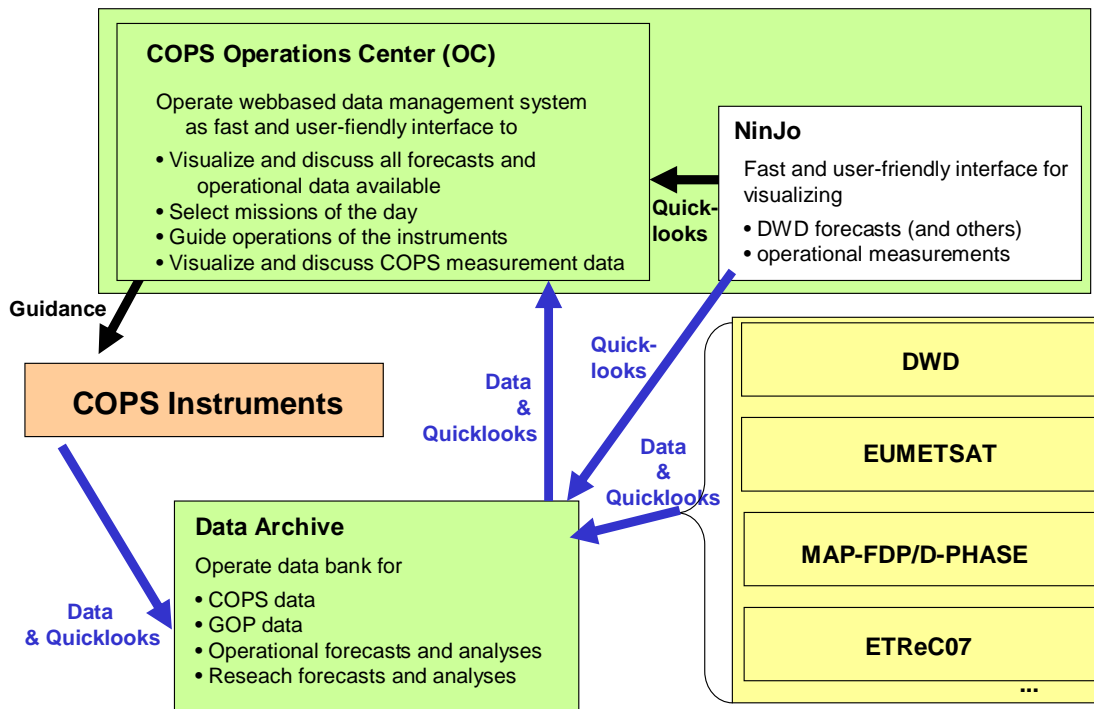
The COPS Operations Center (OC) shall collect and distribute all information necessary for guiding COPS. It also is the interface between modelers and experimentalists. The OC tasks are defined to:

- Monitor meteorological conditions and alert all COPS investigators,
- Collect data and information needed to make decisions,
- Distribute all operational information to the COPS investigators,
- Inform all COPS investigators about ongoing activities on intensive observation periods within COPS,
- Manage an advanced information system.

Tasks

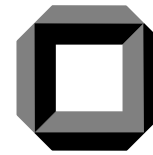
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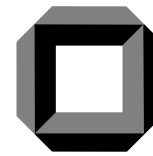
Possible data links in non-real time

COPS Post Real time



Web-based data management system shall:

- show the operational status of measurement systems (running, operational mode),
- visualize all operational data and forecasts,
- allow decisions about missions,
- give information about meteorological conditions and ongoing activities.



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Possible systems:

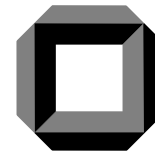
1. create own html-code

2. MediaWiki:

- free server-based software that uses PHP to process and display data stored in its MySQL database
- can manage image and multi-media files
- users (with assigned rights) can edit the page or submit plots and text
- image galleries and thumbnails can be generated very easy

3. other systems? suggestions?

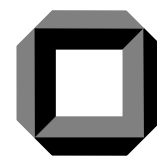
The screenshot shows the MediaWiki.org homepage. At the top, there are navigation tabs for 'article', 'discussion', 'view source', and 'history'. A banner at the top right says 'Log in / create account'. Below the banner, a message reads: 'All active members of Wikimedia projects are invited to vote in the 2006 Election to the Board of Trustees'. The main heading is 'MediaWiki'. Below this, a large orange heading says 'Welcome to MediaWiki.org'. The main content area contains a paragraph about MediaWiki being a free software wiki package originally written for Wikipedia. Below this, there are links for 'Download MediaWiki right away' and 'explore the basic site contents'. A 'News' section lists several updates from 2006-07-08, 2006-07-07, and 2006-06-06. On the right side, there are two boxes: 'Current Versions' showing versions 1.7.1, 1.6.8, and 1.5.8, and 'Fundamental Introduction to MediaWiki' with a 'Contents' list. On the left side, there is a 'navigation (this wiki)' box with links like 'Main page', 'Community portcl', 'Recent changes', 'Help', 'Manual', 'FAQ', 'Forum', and 'Support desk'. Below that is a 'resources (elsewhere)' box with links like 'IRC #mediawiki', 'Mailing list', 'Bug tracker', 'Browse SVN', 'Code', 'documentation', 'SourceForge project', 'Extensions (on meta)', and 'Skins (on meta)'.



Possible locations

Requirements:

- 2-3 rooms for 8-10 people with 30-45 m² each:
 - ⇒ 1 room for OC, 1-2 additional room(s) as separate working places
- Internet access, phone, fax, video projector, computers, NinJo access, ...



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Possibility 1: IMK, University of Karlsruhe

- 3 rooms between 30 and 40 m² (PRINCE-OC)
- no rental or internet costs
- support from IMK-staff: secretary, electrical engineer, computing expert
- high-speed internet, computers, phone mainlines, fax, copier on location
- NinJo reception is assured
- view over the measurement area

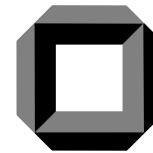


north east Black Forest south west

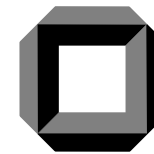
Possibility 2: Baden Airpark - Airpark Business Center

- rooms in the first floor with 43.66, 35.64 or 31 m²
- costs:
 - monthly rent: 10 €/m²
 - additional costs: 1.5 €/m² (electricity,...)
 - Internet access (100 Mbit): 180 €/month
 - Internet traffic: 40 €/GByte
 - phone costs: 44 €/month access + 9,41 €/month phone rental + phone costs

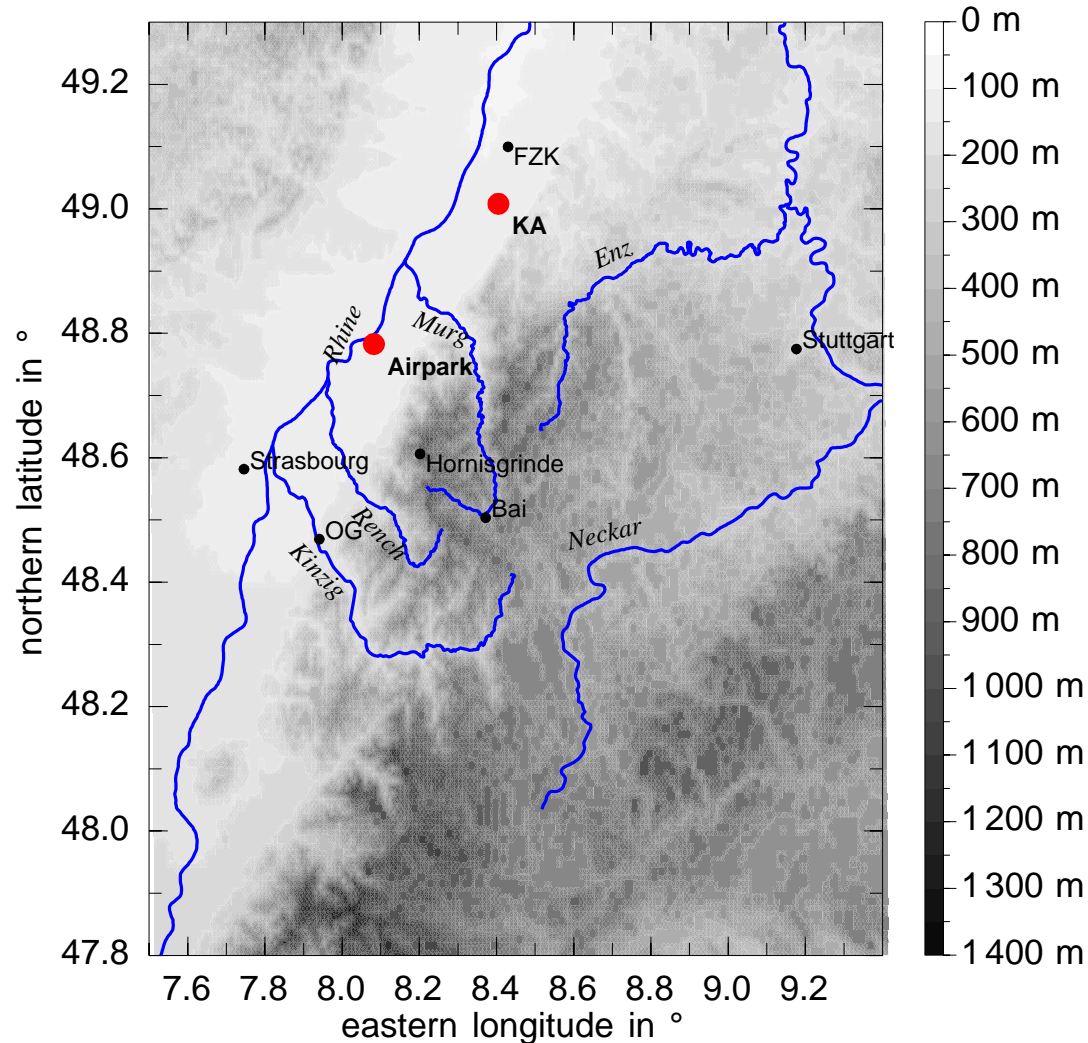




	IMK Karlsruhe (3 rooms: 110 m²)	Baden Airpark (2 rooms: 44 and 36 m²)
monthly rent	0 €	10 €/m ² month
additional costs	0 €	1.5 €/m ² month
internet access	0 €	180 €/month
internet traffic	0 €	40 €/GByte
phone access	0 €	44 €/month
phone rental	0 €	9,41 €/month
4 month period	0 € + phone costs	4573.16 € + 40 €/GByte + phone costs
pro's	<ul style="list-style-type: none"> + economic + support from IMK staff (secretary, electrical engineer, computing expert) + NinJo reception assured + technical equipment on location + view over measurement area 	<ul style="list-style-type: none"> + closer to measurement area + same location as aircraft crew (DO-128, French Falcon? BAE?)
con's	<ul style="list-style-type: none"> - longer journey times from some parts of the measurement area - car-entrance restricted: authorisations have to be requested 	<ul style="list-style-type: none"> - expensive - NinJo access feasible? - no support from IMK staff - large expenditure of time for transportation and installation of technical equipment (manpower)



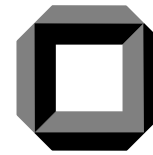
Journey times to Karlsruhe or Baden Airpark:



	Uni. of KA	Airpark	Δt
Stuttgart	59 min	1 h 14 min	15 min
Freudenstadt	1 h 19 min	1 h 7 min	12 min
Gaggenau	33 min	28 min	5 min
Heselbach	1 h 6 min	1 h 3 min	3 min
Hornisgrinde	1 h 3 min	31 min	32 min
Oppenau (Rench val.)	1 h 6 min	44 min	22 min
Strasbourg	1 h 10 min	43 min	27 min

(After route planner ViaMichelin)

⇒ considerably longer journey times
only from Hornisgrinde or southwestern
part of measurement area

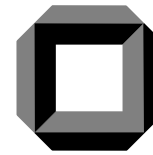


Karlsruhe has more hotels, guest houses, restaurants and cultural possibilities as Baden Airpark and its surroundings.

Baden Airpark:

- guest house with single rooms, 1 shower per floor
- 1 restaurant: "Da Vinci" (self-service, only at noon, closed on week-ends)
- gastronomy area in new terminal (5 - 23 h)
- 23 km away from Baden-Baden

⇒ important for OC-members during 3 month period



Debriefings

Requirements:

- room for approx. 100 persons
- located in or in close vicinity of the measurement area
- video projector, internet access, maybe stage and sound system?
- reservation needs to be variable or fixed 1 day per week?

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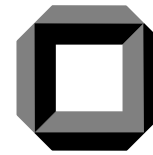
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Possibility 1: Baden Airpark - Airpark Business Center

- conference room “Venezia“, 300 m² with video projector, screen, stage, sound system



- 150 € for 1 half day (more than 10 days: 15% reduction)
- approx. 13 days: 1657 € + internet and phone bills
- located near Northern Black Forest, variable reservation possible



Possibility 2: Lauterbad - Hotel Zollernblick

- near Freudenstadt
- cooperation with University of Karlsruhe
- hall for up to 90 people
- 150 € per day, 13 days: 1950 € + internet and phone bills
- WLAN available, good location in measurement area
- variable reservation not possible (room is reserved by other groups mostly for 1 whole week), reservation of a fixed day is possible 1-2 months before COPS \implies **not feasible for COPS**

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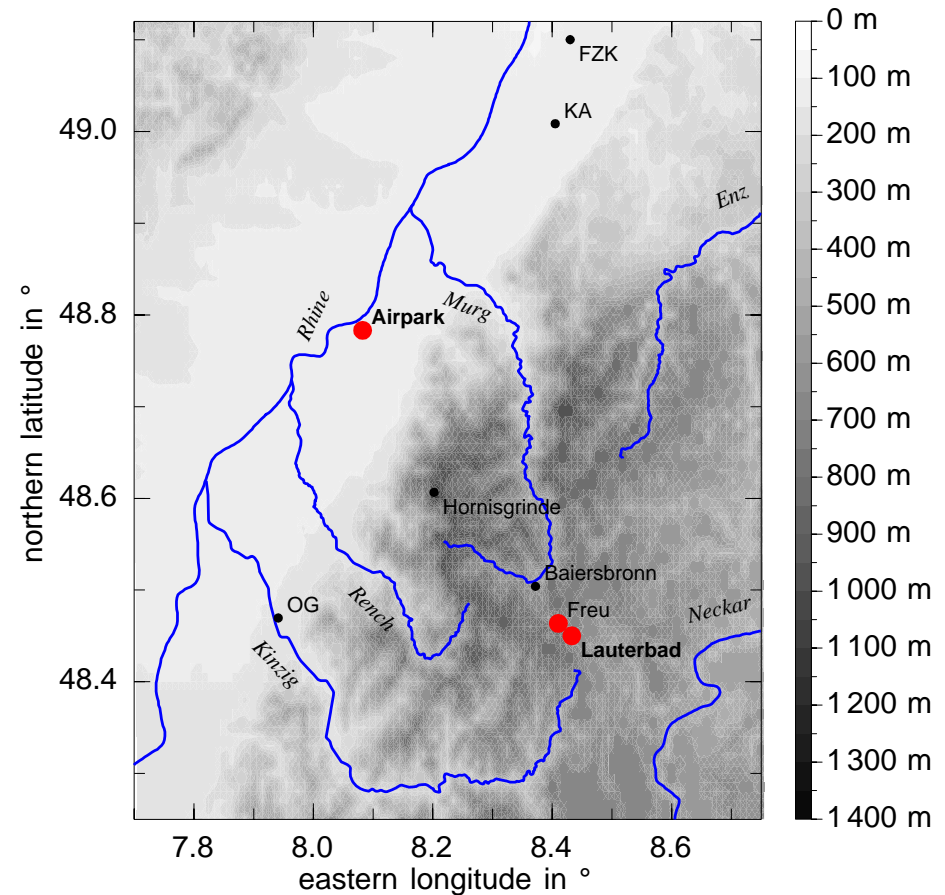
Possibility 3: Convention Center/Spa Hotel Freudenstadt

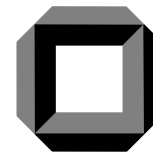
- “Kienbergsaal“: 175 € per day, 13 days: 2275 € + internet and phone bills
- variable reservation not possible, reservation of every Monday is possible
- video projector + screen: 150 € per day
- no internet: access has to be placed by German Telekom for every day \implies **probably not feasible for COPS**



Best choice for location of Debriefings: \Rightarrow Baden Airpark

- conference room “Venezia“ is large enough with all required technical equipment
- variable reservation possible
- location accessible for most of researchers in a reasonable expenditure of time
- outside of airport safety area: for everyone accessible
- costs are in reasonable range (cheapest of all three possibilities)





Open points:

OC:

- location?
- members?
 - the WG Chairs,
 - the COPS coordinator,
 - members of the ISSC,
 - Principal Investigators,
 - technical staff.
- weather consulting service: support from DWD requested, own forecast meteorologists?
- data links and web-based data management system?
- NinJo: definition of the NWP products to be generated in batch mode (will probably be similar to products defined in D-PHASE, table of forecast products will be provided by Marco Arpagaus)
- decision process?

Debriefings:

- location?
- one fixed day per week or flexible?