Operations Plan of the Day

Thursday, 23 August 2007, 0930 UTC

General Remarks:

Synoptic Situation

A large complex upper-level low filled with cold air is located over France, the Benelux, and western Germany. This system is expected to evolve into an elongated trough stretching from the Baltic Sea to Spain. On Friday, its axis will be located just to the north-west of the COPS domain. This should leave an unstable stratification allowing for diurnally-driven convective storms to develop on Friday and possibly on Saturday. Later on Saturday, weak subsidence is forecasted to warm the mid-troposphere so that the chance of convection should decrease. No deep convection is expected on Sunday. Sunday evening a cold front is expected to pass the COPS area from the north, with cool, dry air in its wake. Hence the convective storm potential is very low on Monday, too.

Today, on **Thursday**, some scattered mid-level cloudiness is expected over the COPS area. The near-neutral environment forecast by the models and weakening low-level cold air advection indicate that isolated showers should be possible mainly during the afternoon.

Friday should be a quite friendly day with quite some sunshine. In response to solar heating, scattered cumulus clouds will develop during the morning. Over the mountains, a few isolated thunderstorms are expected to develop in the early afternoon.

Under high pressure influence, **Saturday** will be mostly sunny. There is still a chance that isolated showers manage to form over the mountains.

Sunday will be a mostly dry and sunny day. A cold front is expected to pass in the evening, which should bring some clouds and perhaps a drop of rain.

Monday the COPS area is dominated by a strong area of high pressure. Some frontal stratocumulus will likely linger on before the sun breaks through and some shallow convective clouds develop. Deep convection is unlikely.

Operations summary:

# Day X (Thursday)	**no IOP**
# Day X+1 (Friday)	**IOP 18**
# Day X+2 (Saturday)	**IOP planned**
# Day X+3 (Sunday)	**downday**
# Day X+4 (Monday)	**no IOP but COPS Party**

Mission Plans:

Day X, Thursday, August 23: No IOP

Lidar test scans performed on Supersite H in the afternoon.

Day X+1, Friday, August 24: IOP 18

Specifications of vertical soundings:

# EUCOS-MeteoSwiss:	05, 17 UTC (Payerne; launching time)
# EUCOS-DWD:	05, 17 UTC (Meiningen, M, S; launching time)
# Achern (R):	05, 08, 11, 14, 17 UTC (RS92)
# Hornisgrinde (H):	05, 08, 11, 14, 17 UTC (RS92)
# Deckenpfronn (S):	2 soundings: morning (one time of 05, 08* or 11 UTC) and afternoon (one time of 14, 17*, 20 UTC)
	*Operations Center recommendation

Lidar systems:

05 - 18 UTC weather permitting, ensuring lidar operation during first radiosonde ascent, **scan scenario ScaS3**

Radar Systems:

Poldirad: standard daytime measurements

BAe mission:

Take off in Cranfield planned at 8:30 UTC. Detailed will be refined and distributed on Friday morning. Operations likely to be performed in a 4-h window from 10:00 – 16:00 UTC in COPS area. Overpasses of Supersites R, H, and M at different levels are envisioned combined with aerosol lags in Rhine valley and over Black Forest ridge. Furthermore, studies of convective clouds are planned in boxes A and B. Afterwards, the aircraft will return to Cranfield.

Day X+2, Saturday, August 25: IOP planned

Scan experiment ScaS3 shall be continued as long as the weather is favourable.

Specifications of vertical soundings:

# EUCOS-MeteoSwiss:	05, 17 UTC (Payerne; launching time)
# EUCOS-DWD:	05, 17 UTC (Meiningen, M, S; launching time)
# Achern (R):	05, 08, 11, 14, 17 UTC (RS92)
# Hornisgrinde (H):	05, 08, 11, 14, 17 UTC (RS92)
# Deckenpfronn (S):	2 soundings: morning (one time of 05, 08* or 11 UTC) and afternoon (one time of 14, 17*, 20 UTC)
	*Operations Center recommendation

Lidar systems:

05 - 18 UTC weather permitting, ensuring lidar operation during first radiosonde ascent, scan **scenario ScaS3**

Radar Systems:

Poldirad: standard daytime measurements

Day X+3, Sunday, August 26: downday

Day X+4, Monday, August 27: no IOP

Your COPS Operations Center Team

Volker Wulfmeyer
Science Director

Matthias Grzeschik
Operations Director

Christian Barthlott
Operations Supervisor

Pieter Groenemeijer and Christian Ehmann
Forecaster