Operations Plan of the Day

Friday, 24 August 2007, 0830 UTC

General Remarks:

Synoptic Situation

Today, the axis of an elongated trough stretching from the Baltic Sea to Spain is located just to the north-west of the COPS domain. This should leave a marginally unstable stratification allowing for diurnally-driven convective storms to develop very locally on Friday and 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. On Monday 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. On Tuesday we will likely experience a return of the frontal zone from the south.

Today, **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 quite sunny day. Deep convection is unlikely.

Monday the COPS area is dominated by a strong area of high pressure. Some frontal stratocumulus may be present, but should not be widespread. Deep convection is unlikely.

On **Tuesday** the northward-moving frontal zone may produce rather widespread rain, which may be convective. Severe thunderstorms may even form if the front manages to return only slightly farther northward than the majority of models currently predict.

Operations summary:

# Day X (Friday)	**IOP 18a**
# Day X+1 (Saturday)	**IOP 18b**
# Day X+2 (Sunday)	**downday**
# Day X+3 (Monday)	**no IOP but COPS Party**
# Day X+4 (Tuesday)	**IOP possible**

Mission Plans:

Day X, Friday, August 24: IOP 18a

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. Arrival in the COPS domain between 10-11 UTC. Operations to be performed in a 3-h window from about 11–14 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+1, Saturday, August 25: IOP 18b

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

Specifications of vertical soundings:

# 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+2, Sunday, August 26: downday

Day X+3, Monday, August 27: no IOP and COPS Party

Day X+4, Tuesday, August 28: IOP possible

Details to be provided after Science Briefing on Monday morning, August 27.

Your COPS Operations Center Team

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