

Operations Plan of the Day

Saturday, 11 August 2007, 0930 UTC

General Remarks:

Between an upper cut-off low over the northern Adriatic that moves slowly eastward and a large trough with its axis near Ireland, a mobile ridge is located over western France. This ridge should move eastward passing the COPS region on Sunday morning. As a result of the associated subsidence, skies should start to clear on Saturday evening. A shortwave trough is expected to round the base of a larger trough to the west of the European continent and pass the COPS region in the night of Sunday to Monday. A surface cold front associated with this trough is expected to cross the COPS area during the first half of Monday. At the same time a mid/upper-low should cut off from the trough and move eastward into the Mediterranean region. On Tuesday, an increasing south-westerly flow is expected, as a rather intense shortwave trough rounds the base of the large trough over the eastern Atlantic, generating strong warm air advection over western Europe. Potential for high CAPE within this air-mass is rather small because of the lapse rates being not very steep. A cold front ahead of the large/scale trough is expected to progress slowly eastward and pass the COPS area late on Wednesday or early Thursday.

For **Saturday 11 August**, skies will likely remain overcast with little chance of deep convection.

On **Sunday**, a few diurnally-driven thunderstorms over the mountains are expected, with further development in the evening and night hours as upper-level forcing associated with an approaching trough affects the region.

Monday may start off cloudy and rainy in places owing to convective debris, but there is a reasonable chance that deep convection re-develops in the late morning hours. After passage of the cold front in the afternoon hours, the convective activity should cease.

On **Tuesday** there is little chance for deep convection in the wake of the cold front. Warm advection should set in during the second half of the day and cause increasing cloudiness and eventually some rain late Tuesday night.

On **Wednesday**, more rain is anticipated in the warm sector, which may partly be of convective nature, but deep cumulonimbi are currently not expected. Total rain amounts and intensity may be quite large.

Operations summary:

| | |
|-----------------------|--------------|
| # Day X (Saturday): | no IOP |
| # Day X+1 (Sunday): | IOP 15a |
| # Day X+2 (Monday) | IOP 15b |
| # Day X+3 (Tuesday) | IOP possible |
| # Day X+4 (Wednesday) | IOP possible |

Mission Plans:

Day X, Saturday, August 11: no IOP

Day X+1, Sunday, August 12: IOP 15a

Specifications of vertical soundings:

- # EUCOS-MeteoSwiss: 05, 17 UTC (Payerne; launching time)
- # EUCOS-DWD: 05, 17 UTC (Meiningen, M, S; launching time)
- # Hornisgrinde (H): 05, 11, 17 UTC (RS 80G), 08, 14, 20 UTC (RS 80H)
- # Achern (R): 05, 11, 17 UTC (RS 80G), 08, 14, 20 UTC (RS 80H)
- # 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**

- # IMK Dropupsondes: TBD

Lidar systems: 04 - 21 UTC, Scan scenario ScaS1, weather permitting

Radar Systems:

- # Poldirad: Standard daytime operations
- # Doppler-on-Wheels: Operation at DNW3 (Hohbühn) and DNE6 (Hallwangen) starting at 07 UTC until convection ceases

Day X+2, Monday, August 13: IOP 15b

Details of operations to be confirmed at the Science Briefing on Sunday morning

Specifications of vertical soundings:

- # EUCOS-MeteoSwiss: 05, 17 UTC (Payerne; launching time)
- # EUCOS-DWD: 05, 17 UTC (Meiningen, M, S; launching time)
- # Hornisgrinde (H): 05, 11, 17 UTC (RS80G), 08, 14, 20 UTC (RS 80H)
- # Achern (R): 05, 11, 17 UTC (RS80G), 08, 14, 20 UTC (RS 80H)
- # 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**

- # IMK Dropupsondes: TBD

Lidar systems: 04 - 21 UTC, Scan scenario ScaS1, weather permitting

Radar Systems:

Poldirad: Standard daytime operations but measurements continued after passage of cold front

Doppler-on-Wheels: Operation at DNW3 (Hohbühn) and DNE6 (Hallwangen) starting at 07 UTC until passage of cold front

Day X+3, Tuesday, August 14: IOP possible

Day X+4, Wednesday, August 15: IOP possible

Your COPS Operations Center Team

Volker Wulfmeyer
Science Director

Christian Hauck
Operations Director

Christian Barthlott
Operations Supervisor