

Operations Plan of the Day

Monday, 6 August 2007, 1000 UTC

General Remarks:

Today, **Monday 6 August**, a diffuse frontal zone extending from the Benelux countries over central France to Spain forms the western boundary of a plume of warm air. East of this zone, a convergence line has formed, partly in response to a 500-hPa vorticity maximum moving north-eastward over France. Along the zone, surface-based convective storms are expected to form during Monday. These storms will likely affect the COPS area late Monday afternoon and during the evening. Elevated convection and stratiform rain is expected near the cold front.

On **Tuesday**, the position on the back of the aforementioned vorticity maximum should suppress any precipitation initially. Later the large-scale trough approaching the COPS region from western France is expected to cause widespread upward vertical motion resulting in stratiform and partly convective rain. The numerical models are in disagreement about the exact evolution on **Tuesday** and **Wednesday**, which is dependent on the location and timing of small vorticity maxima rotating around the mid-tropospheric low. It appears that an event with widespread heavy rain over or near the COPS area is quite likely either late on Tuesday or on Wednesday.

A polar air-mass in north-westerly flow is expected to be over the COPS area on **Thursday**, in which shallow convective showers may form. Another possibility is that the mid-tropospheric low will still linger on over the COPS area. The weather on **Friday** is rather uncertain as models disagree strongly on the synoptic evolution after Thursday: ECMWF lets the mid/upper low linger on longer than GFS.

Operations summary:

- # Day X (Monday): no IOP (- but some measurements already starting)
 - # Day X+1 (Tuesday): IOP 14a
 - # Day X+2 (Wednesday): IOP 14b
 - # Day X+3 (Thursday): IOP possible
- If no IOP is performed, a debriefing discussing IOPs 12 and 13 will take place in the meeting room Venezia.
- # Day X+4 (Friday): IOP possible

Mission Plans:

Day X, Monday, August 06: no IOP

Specifications of vertical soundings:

- # IMK-FZK: no operations
- # IMK-Burnhaupt: no operations
- # Hornisgrinde (H): 11, 14, 17, 20 UTC (RS 92)
- # Achern (R): 11, 17 (RS80G), 14, 20 UTC (RS 80H)
- # Deckenpfronn (S): 1 sounding: afternoon (one time of 14*, 17, 20 UTC)
*Operations Center recommendation
- # IMK Dropupsondes: no operations

Lidar systems:

- # Operation period 1300 – 2400 UTC if weather conditions permit
Scan scenario ScaS1.

Radar Systems:

- # Operations to start 15 UTC (or earlier) and continue through the night to Tuesday
- # Doppler-on-Wheels: Coordinated operations from 11 UTC with two DOWs in the southern side of the COPS region, DSW4 (Fessenheim) and DSW2 (Ohnenheim)

Day X+1, Tuesday, August 07: IOP 14a

Specifications of vertical soundings:

- # IMK-FZK: no operations
- # IMK-Burnhaupt: no operations
- # EUCOS-MeteoSwiss: 05, 17 UTC (Payerne; launching time)
- # EUCOS-DWD: 05, 17 UTC (Meiningen, M, S; launching time)
- # Hornisgrinde (H): 05, 11, 17 (RS 92), 08, 14, 20 UTC (RS 80H)
- # Achern (R): 05, 11, 17 (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: no operations

Lidar systems:

Operation period 0500 – 1800 UTC if weather conditions permit
Scan scenario ScaS1.

Radar Systems:

Operations continue if staff permitting throughout the day

Doppler-on-Wheels: Coordinated operations with two DOWs in the southern side of the COPS region; DSW4 (Fessenheim) and DSW2 (Ohnenheim)

Day X+2, Wednesday, August 08: IOP 14b

Specifications of vertical soundings:

IMK-FZK: 05, 08, 11, 14, 17, 20 UTC

IMK-Burnhaupt: 05, 08, 11, 14, 17, 20 UTC

EUCOS-MeteoSwiss: 05, 17 UTC (Payerne; launching time)

EUCOS-DWD: 05, 17 UTC (Meiningen, M, S; launching time)

Hornisgrinde (H): 05, 11, 17 (RS 80G), 08, 14, 20 UTC (RS 80H)

Achern (R): 05, 11, 17 (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: 3-4 teams with at least 4 sondes each (to be confirmed)

Lidar systems:

Operation period 0500 – 1800 UTC if weather conditions permit
Scan scenario ScaS1.

Radar Systems:

Operation period 0500 – 1800 UTC

Doppler-on-Wheels: Coordinated operations with two DOWs in the southern side of the COPS region; DSW4 (Fessenheim) and DSW2 (Ohnenheim)

Day X+3, Thursday, August 09: IOP possible

If no IOP is performed, a debriefing discussing IOPs 12 and 13 will take place in the meeting room Venezia.

Day X+4, Friday, August 10: IOP possible

Your COPS Operations Center Team

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