

# Operations Plan of the Day

## Thursday, 9 August 2007, 0930 UTC

### General Remarks:

The upper cut-off low centred over northern Italy will make only very slow eastward progress during the next days. Warm/moist air is wrapping around this feature, so that a frontal boundary has established over southern Germany, with cool air to its south and warm air to its north. In its wake, slight mid/upper ridging is anticipated on Saturday, before the next Atlantic trough approaches western continental Europe from the northwest. A vorticity maximum at its periphery will move north-eastwards and graze the COPS domain on Sunday afternoon. A more amplified trough will establish over the eastern Atlantic/western Europe towards the beginning of next week, expected to support a convectively active episode.

On **Thursday 9 August**, the west-east oriented frontal zone is located just north of the COPS area. It seems that the maximum of precipitation will occur north and west of the COPS area. However, light rain will likely continue in the COPS area through most of the day.

On **Friday**, the front will make slow southward progress during the day, while weak CAPE is expected in the warm air mass north of it. Current thinking is that grey skies and rain will persist for most of the day, with a slight chance of mostly embedded convection in the evening hours. However, only the very northern regions of the COPS area could be affected.

For **Saturday**, models indicate a transition from initially stratiform rain to convective precipitation during the day. This may be associated with breaks in the clouds which would rather quickly result in surface-based convection given nearly uncapped and nearly neutral thermodynamic profiles. However, this will strongly depend on how successful the sun will be in breaking the low-level clouds (mainly stratocumulus).

**Sunday** should start with little cloudiness and weak instability should develop with surface heating, resulting in isolated convective cells developing primarily over the mountains around mid day and during the afternoon. This situation appears to be favourable for the COPS objectives.

It appears that a very similar evolution could take place on **Monday** as well.

## Operations summary:

- # Day X (Thursday):** **IOP 14c: IOP addressing heavy precipitation event - only reduced operations required in the COPS area**  
**Despite the IOP, a debriefing discussing IOPs 12 and 13 will take place at 14 LT in the meeting room Venezia.**
- # Day X+1 (Friday):** **Down Day**
- # Day X+2 (Saturday):** **no IOP**
- # Day X+3 (Sunday):** **IOP possible**
- # Day X+4 (Monday):** **IOP possible**

## Mission Plans:

### Day X, Thursday, August 09: IOP 14c

#### Specifications of vertical soundings:

- # EUCOS-MeteoSwiss: 05, 17 UTC (Payerne; launching time)
- # EUCOS-DWD: 05, 17 UTC (Meiningen, M, S; launching time)
- # Hornisgrinde (H): no operations
- # Achern (R): 11, 17 UTC (RS 80G)
- # Deckenpfronn (S): no operations
- # IMK Dropupsondes: 3-4 launches with regular dropupsondes and FLYPS between 12 and 16 LT at Supersite H

**Lidar systems:** no operations

#### Radar Systems:

- # Poldirad: standard daytime measurements
- # Doppler-on-Wheels: no operations

**Despite the IOP, a debriefing discussing IOPs 12 and 13 will take place at 14 LT in the meeting room Venezia.**

**Day X+1, Friday, August 10: Down Day**

**Day X+2, Saturday, August 11: no IOP**

**Day X+3, Sunday, August 12: IOP planned**

**Planned operations based upon today's forecast – to be confirmed on Saturday**

**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 (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: to be specified

**Lidar systems:** operations from 04 till 21 UTC; Scan scenario ScaS1.

**Radar Systems:**

- # Doppler-on-Wheels: location for operations to be determined

**Day X+4, Monday, August 13: IOP possible**

**Your COPS Operations Center Team**

Heini Wernli  
Science Director

Christian Hauck  
Operations Director

Christian Barthlott  
Operations Supervisor