

Operations Plan of the Day

Monday, 20 August 2007, 1000 UTC

General Remarks:

Synoptic Situation

The major feature on the forecast maps is a trough that has its axis over the British Isles and western France. This trough is filled with relatively unstable air and should move eastward very slowly during the next days while evolving into a slack cut-off low over south-eastern France. At the surface, a low-pressure system should develop in the Gulf of Genua on Monday and later the low should "jump over" the Alps on Tuesday as cyclogenesis is expected over south-western Germany.

On **Monday**, scattered cumulus clouds are expected over the area. A few showers are still possible in the morning, but it should be dry during the remainder of the day.

On **Tuesday** pressure falls are expected over the COPS area, ahead of a shortwave rotating about the cut-off low over eastern France. As a result, warm-air advection from the east is expected north of the Alps, which should act to steepen the low-level lapse rates sufficiently to support storm development during the afternoon over the COPS area. The warm advection regime will likely favour rather rapid clustering of the storms into a small convective system that will likely persist until late evening or into the night.

On **Wednesday**, weak cold-air advection is expected over the area which should lead to weak subsidence and the dissolution of any remnant stratiform clouds covering the area during the early morning. Rather clear weather with medium-sized cumulus clouds is forecast. As another mid/upper-level vorticity maximum approaches, clouds should be able to deepen during the afternoon and grow into a few showers and/or thunderstorms, most likely over the mountains. The convective activity will likely cease after sunset.

Models suggest that on **Thursday** an area of stratiform precipitation belonging to a back-bent occlusion will likely move into the COPS region during the afternoon, leading to rainy weather.

On **Friday** a rather inactive section of the occluded front will likely linger on in the vicinity of the COPS area on Friday, so that the chance exists that there will be a few longer periods of light rain and quite a lot of cloudiness. Within large breaks in the stratiform cloud-deck a few showers can be expected to form once again.

Operations summary:

# Day X (Monday)	no IOP
	Debriefing (IOPs 14, 15, 16) at 1400 local at the Operation Center
# Day X+1 (Tuesday)	IOP 17a
# Day X+2 (Wednesday)	IOP 17b
# Day X+3 (Thursday)	no IOP
# Day X+4 (Friday)	IOP possible

Mission Plans:

Day X, Monday, August 20: no IOP

Debriefing (IOPs 14, 15, 16) at 1400 local at the Operation Center.

Day X+1, Tuesday, August 21:

Aircraft:

BAe 146: Flight possible and under discussion.

Specifications of vertical soundings:

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

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

Achern (R): 8, 11, 14, 17 UTC (RS92)

Hornisgrinde (H): 8, 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**

IMK Dropup-sondes 2 Dropup-sondes launches with FLYP'S at Seibelseckle
or Hornisgrinde between 10-18 UTC

Lidar systems:

07 - 18 UTC, Scan scenario ScaS1, weather permitting.

Radar Systems:

Poldirad: standard daytime measurements

Day X+2, Wednesday, August 22:

Aircraft:

BAe 146: Flight possible and under discussion.

Specifications of vertical soundings:

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

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

Achern (R): 5, 8, 11, 14, 17, 20 UTC (RS92)
Hornisgrinde (H): 5, 8, 11, 14, 17, 20 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:

04 - 21 UTC, Scan scenario ScaS1, weather permitting.

Radar Systems:

Poldirad: standard daytime measurements

Day X+3, Thursday, August 23: no IOP

Day X+4, Friday, August 24: IOP possible

Your COPS Operations Center Team

Paolo Di Girolamo
Science Director

Hans-Stefan Bauer
Operations Director

Christian Barthlott
Operations Supervisor

Pieter Groenemeijer and Christian Ehmann
Forecaster