

COPS Weather Summary

27 August 2007

Issued: Monday 27 August 10:00 UTC

Valid: Monday 27 August 10:00 UTC to Saturday 1 September 00:00 UTC

Forecasters: Pieter Groenemeijer, Christian Ehmann

Synoptic Overview

The COPS region is situated on the southern periphery of a broad longwave trough over Scandinavia. A cut-off low located to the west of the Iberian Peninsula is expected to move towards the east in the coming days. Increasing northward warm-air advection is expected ahead of that system. An inactive zonally-oriented front over central Germany moves slowly southward reaching the COPS area late on Monday. The front will likely be the focus for stratiform and - embedded convective - precipitation late on Tuesday and into Wednesday.

Analysis and Forecast of Synoptic Controls in the COPS Region

Monday, 27 August

A cold front is expected to move into the COPS area from the north and become quasi-stationary over the area. Little clouds and no rain are forecast with this system.

Tuesday, 28 August

In southern France and the Alps, the increased warm-air advection will likely cause the initiation of scattered storms within the warm air-mass. Stratiform and elevated convective precipitation is expected to commence in the range of the frontal zone later in the day and may also affect southern parts of the COPS domain.

Wednesday, 29 August

The frontal zone is still located over the COPS region. Widespread stratiform and elevated convective precipitation is expected over the southern and perhaps central parts of the COPS area. The rain will probably in part occur in concert with mesoscale convective systems that pass to the south of the COPS area. Only the stratiform rain of the MCS's should affect the COPS region.

Thursday, 30 August

On Thursday the front should finally start to move off to the southeast, but some stratiform rain will likely affect the COPS area.

Friday, 31 August

As a surface ridge builds up and cloudiness moves off to the southeast a friendly and moderately warm day with shallow cumulus clouds is expected.

Today, Monday 27 August

Time/location of first convective cloud development	Only a few shallow cumulus clouds in the afternoon.
Time/location of convective storm initiation	-
Mode/coverage/evolution	-
Convective cloud base	Around 1500 m.
Storm motion	-
Maximum temperature	Up to 28 °C in the southern Rhine Valley.
Precipitation	-
Severe weather threat	-

Tomorrow, Tuesday 28 August

Time/location of first convective cloud development	Only a few shallow cumulus clouds below some mid- and high-level clouds in the afternoon. Chance of an embedded shower over the southern Black Forest towards the evening.
Time/location of convective storm initiation	
Mode/coverage/evolution	
Cloud base	Around 1400 m.
Storm motion	At about 5 m/s from the southwest.
Maximum temperature	22-24 °C.
Precipitation	Up to 5 mm in the southern Black Forest with a single shower in the evening, otherwise dry.
Severe weather threat	Low.

Wednesday 29 August

Time/location of first convective cloud development	Mainly stratiform precipitation/convective rain of only embedded nature is to be expected preferably over the southern parts of COPS area.
Time/location of convective storm initiation	
Mode/coverage/evolution	
Cloud base	Around 1400 m, but much lower in rain.
Storm motion	At about 10 m/s from the southwest.
Maximum temperature	20-22 °C with sufficient insolation towards the north, around 15 °C in longer rainy episodes.
Precipitation	Up to 40 mm with lasting rain in the southern Black Forest.
Severe weather threat	Low, except for local flooding problems in the southern Black Forest.

Thursday 30 August

Time/location of convective storm initiation, Mode/coverage, Evolution	Large scale precipitation might extend a bit farther north than on Wednesday, before moving off to the southeast towards the evening.
Maximum temperature	16-21 °C, depending on precipitation and insolation.
Precipitation	Up to 20 mm with highest amounts in the south.
Severe weather threat	Low, except for local flooding problems in the southern Black Forest.

Friday 31 August

Time/location of convective storm initiation, Mode/coverage, Evolution	-
Maximum temperature	21-23 °C.
Precipitation	-
Severe weather threat	-

Suggestions for IOP's and down days

Today only a few shallow cumulus clouds and no precipitation are expected. Tomorrow there is a chance for a shower or a little stratiform rain in the southern Black Forest towards the evening, otherwise it will stay dry. The set-up appears rather unfavourable for an IOP. Wednesday and Thursday rain will be mostly of stratiform character which is of lower interest. Regarding the forecast for Friday, an IOP is not recommend either.