



## COPS science questions revisited: What have we learned so far from COPS?

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The Convective and Orographically-induced Precipitation Study (COPS) was an international field campaign carried out in summer 2007 with the overall goal to advance the quality of forecasts of orographically-induced convective precipitation by 4-dimensional observations and modeling of its life cycle. The pre-convective environment, the formation of clouds and the onset and development of precipitation were observed in a low-mountain area in south-western Germany and eastern France covering the Vosges Mountains, the Rhine Valley, and the Black Forest Mountains during 18 Intensive Observations Periods from June 1 to August 31, 2007, under different forcing conditions. Meanwhile, in the nearly five years since the COPS field phase, a large number of results on analyses of selected COPS IOPs and of continuous measurements during the COPS period have been published; in a special issue of the Quarterly Journal of the Royal Meteorological Society alone, 21 papers appeared in January 2011. A second special issue on COPS results is currently in preparation for the Meteorologische Zeitschrift (MetZ). In this contribution, we will revisit the original science questions of COPS, summarize the results gained so far from COPS, and discuss questions which still remain open.