



EFAS Bulletin

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EFAS news

The EFAS team would like to draw your attention to an interesting workshop being organised within the framework of the Hydrological Ensemble Prediction Experiment (HEPEX). HEPEX promotes the use of ensemble prediction products in hydrology.

Preliminary announcement for

HEPEX workshop on post-processing and downscaling of atmospheric ensemble forecasts for hydrologic applications

(June 15-19, 2009, Toulouse, France)

The workshop will focus on scientific questions concerning how atmospheric ensemble prediction systems can be used for hydrologic ensemble streamflow applications and probabilistic quantitative precipitation forecasting. Topics for the workshop may include: (1) diagnosis of problems with atmospheric weather and climate ensemble forecast systems and how they affect hydrologic predictions; (2) methods for statistically correcting the

ensemble forecasts to provide reliable input to hydrologic models; (3) novel techniques for using ensemble input in hydrologic models; (4) methods of verifying ensemble forecasts and evaluating their effect on hydrologic prediction systems, (5) requirements for new databases and collaborative activities that will support the hydrologic prediction system development.

The workshop is meant to be interdisciplinary, fostering communication between research meteorologists and hydrologists. This contributes to the HEPEX goal of helping the hydrologic community develop hydrologic ensemble prediction systems that can be used with confidence by emergency and water resource managers. For more information: http://hydis8.eng.uci.edu/hepex/#special_to_pics

EFAS alerts September/October 2008

Informal and external flood alerts have been sent out during September and October 2008 for the following river basins: Prut, Siret, Mures, Tisza, Jiu, Olt [all RO], Po [IT], Loire and Rhone [FR].

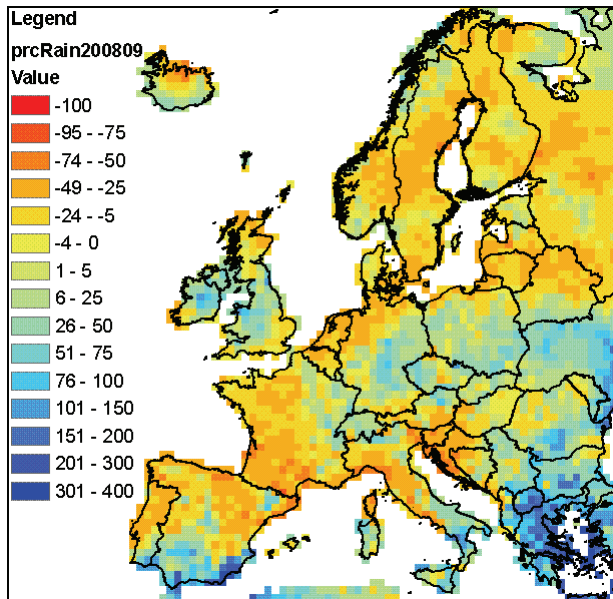


Figure 1: Difference in precipitation [%] for September 2008 in comparison to long term average (1990-2004)

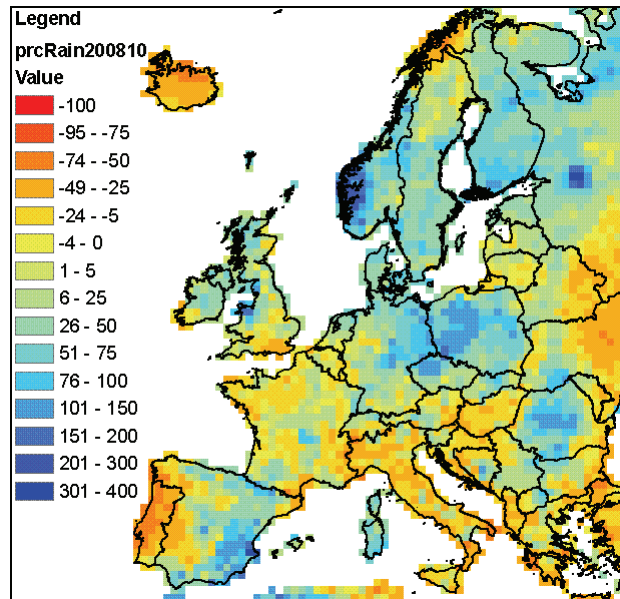


Figure 2: Difference in precipitation [%] for October 2008 in comparison to long term average (1990-2004)

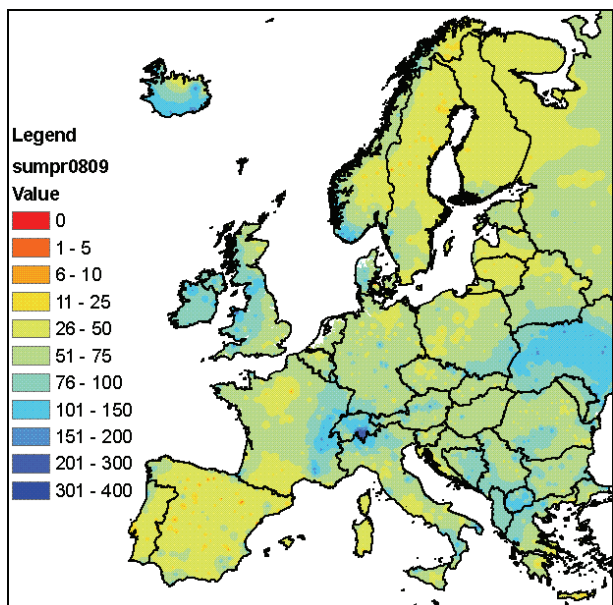


Figure 3: Accumulated Precipitation [mm] for September 2008

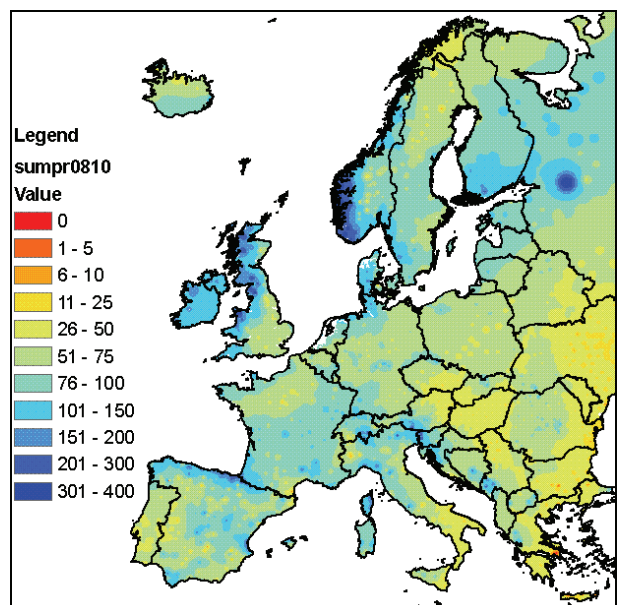


Figure 4: Accumulated Precipitation [mm] for October 2008

Meteorological situation September / October 2008

In September southern Spain, Greece, and parts of Bulgaria received more than average precipitation amounts for this month, whereas the rest of Europe received slightly less rain than normal (from 1990 to 2004, observed JRC MARS data) (Fig.1). However, the accumulated precipitation

does not show any extremely high amounts during September (Fig 3.). During October parts of Norway, Poland, eastern Germany, and Rumania received more than average precipitation for this month (Fig. 2). Nevertheless, only at the coast of Norway very high amounts of precipitation could be observed which did not result in severe flooding events (see Fig. 4). The remaining

parts of Europe received average amounts of precipitation for the month of October. For actual soil moisture distribution, see also: <http://natural-hazards.jrc.it/>.

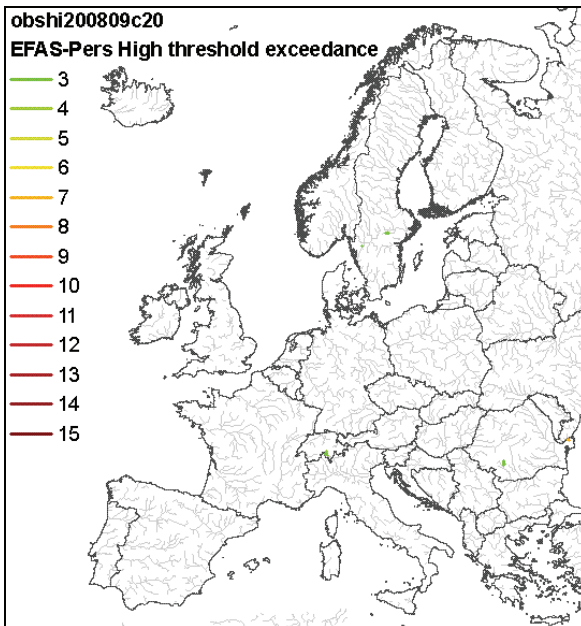


Figure 5: EFAS high threshold exceedance (September 2008) for LISFLOOD simulations with observed meteorological data

Simulated hydrological situation by EFAS

An overview of the threshold exceedances resulting from LISFLOOD simulations using observed meteorological data (JRC-MARS) is shown in Figs. 5 and 6.

As already mentioned in the previous section, almost no extremely high precipitation amounts could be observed during September and October 2008. Only some Romanian rivers exceeded the high

threshold for a certain period and an EFAS alert was sent in that case. Other than that, no significant exceedance of the high threshold alert could be observed for the months of September and October.

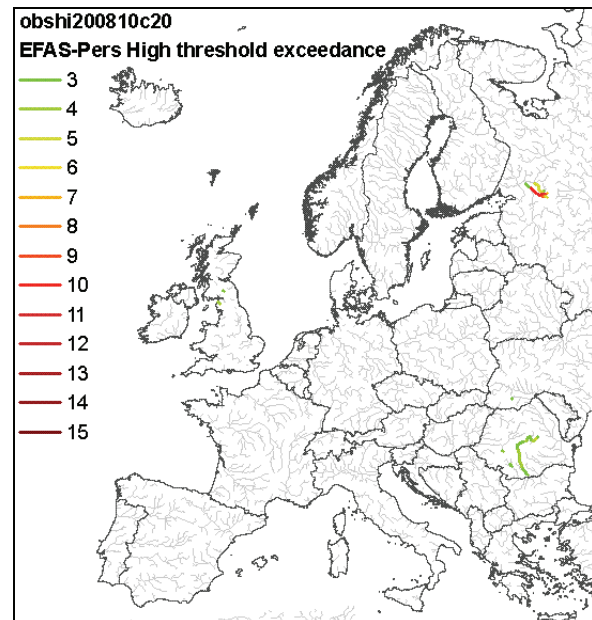


Figure 6: EFAS high threshold exceedance (October 2008) for LISFLOOD simulations with observed meteorological data

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Abstract

EFAS Bulletin summarizes the meteorological and simulated hydrological information for the corresponding months.

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