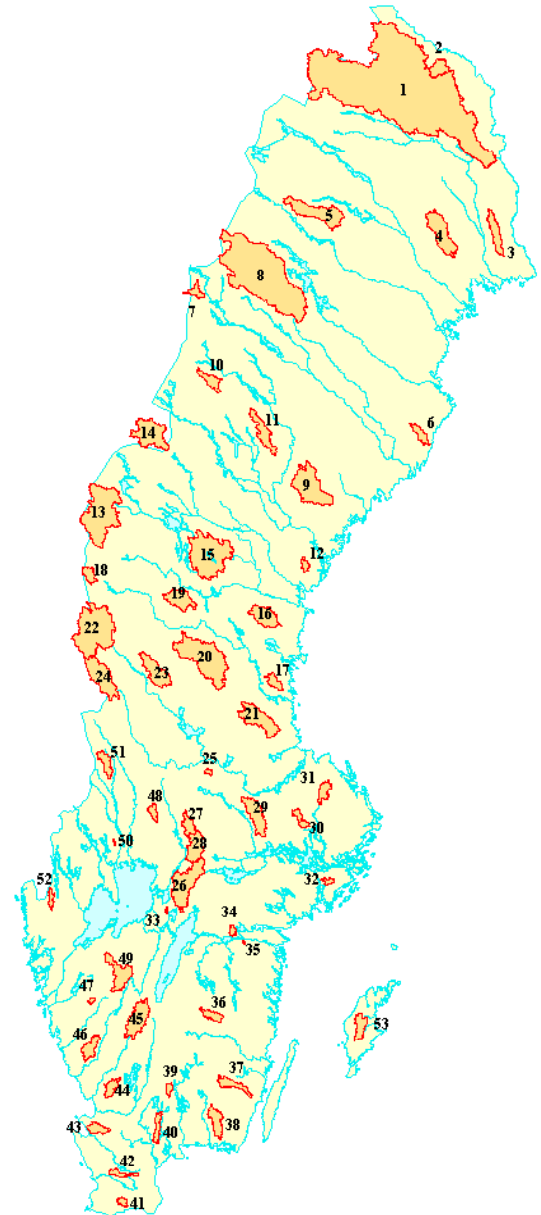


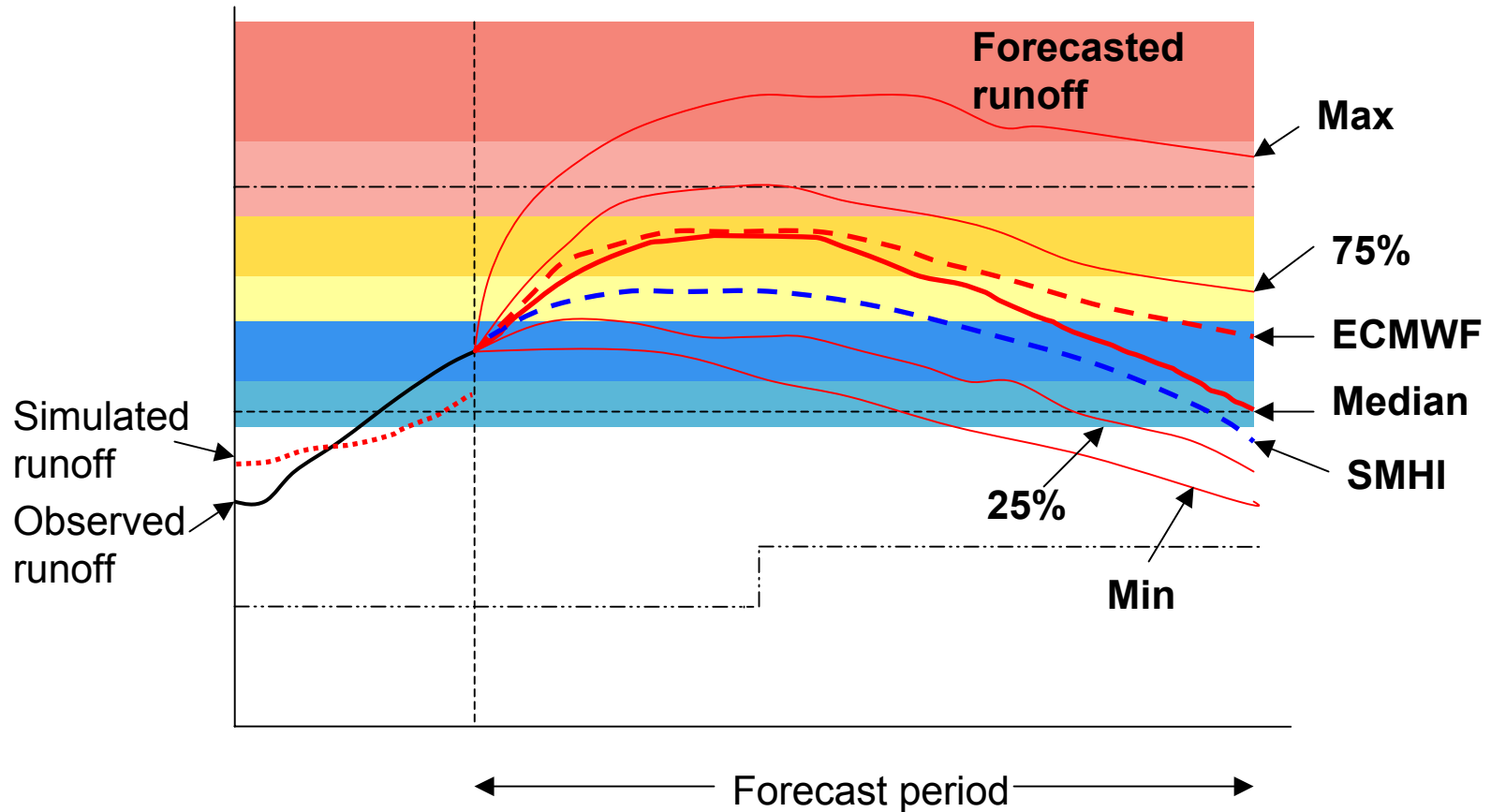
Hydrological ensemble forecasts at the SMHI

- Daily hydrological forecasts are made for ~ 50 Swedish catchments.
 - Presented on the Internet to subscribers
- From May 2004, the ECMWF 10-day ensemble forecasts will be used as input (50 forecasts)
- The resulting hydrological forecasts will be evaluated during the following year.

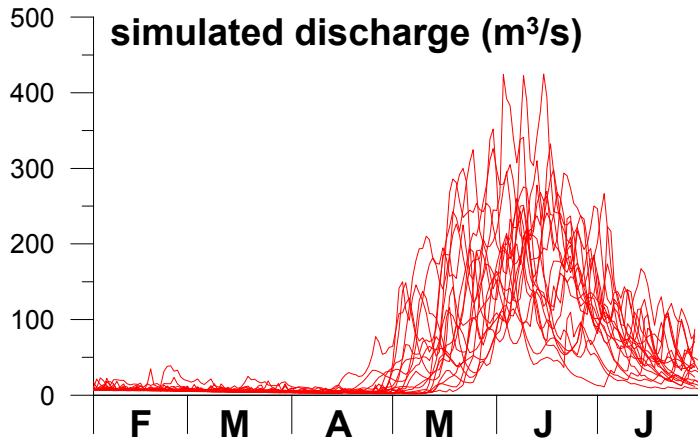


Hydrological ensemble forecasts at SMHI

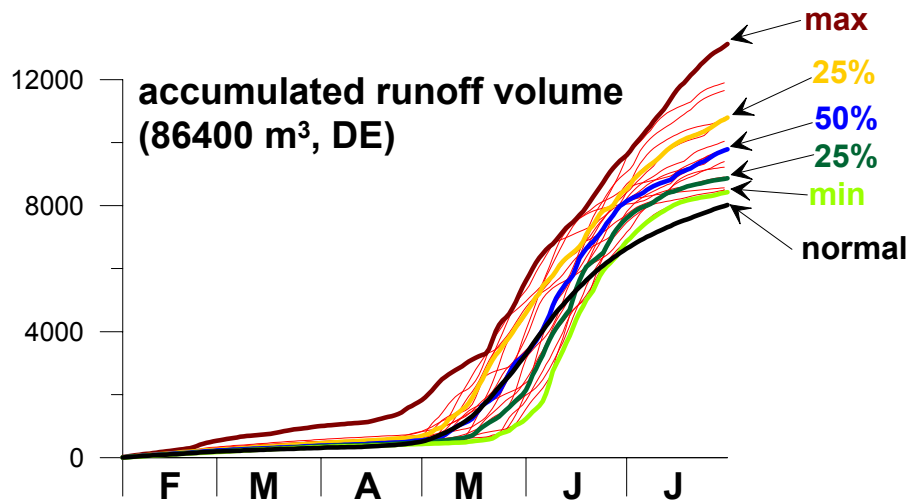
Proposed presentation before evaluation



Long-range “ensemble” forecasts



Simulations made for February to July with precipitation and temperature series from many different years, but with the initial state from the current year



A statistical analysis is made to estimate the probable runoff volume over the forecast period

Some questions

- Are the probability levels in the meteorological forecasts representative for the hydrological forecast?
- Is the standard deviation in the meteorological ensemble forecast a good measure of the uncertainty?
- Which is the “best” meteorological forecast for flood prediction?
- How do we combine the 10-day meteorological forecast with the long-range forecast?
- How do we present probability forecasts to the users (hydropower producers, rescue services.....)?