

# Rijnland data for HEPEx post-processing

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# Outline

- Rijnland water system
- Rijnland Ensemble Prediction System
- Verification framework available
- Some challenges
- Some questions



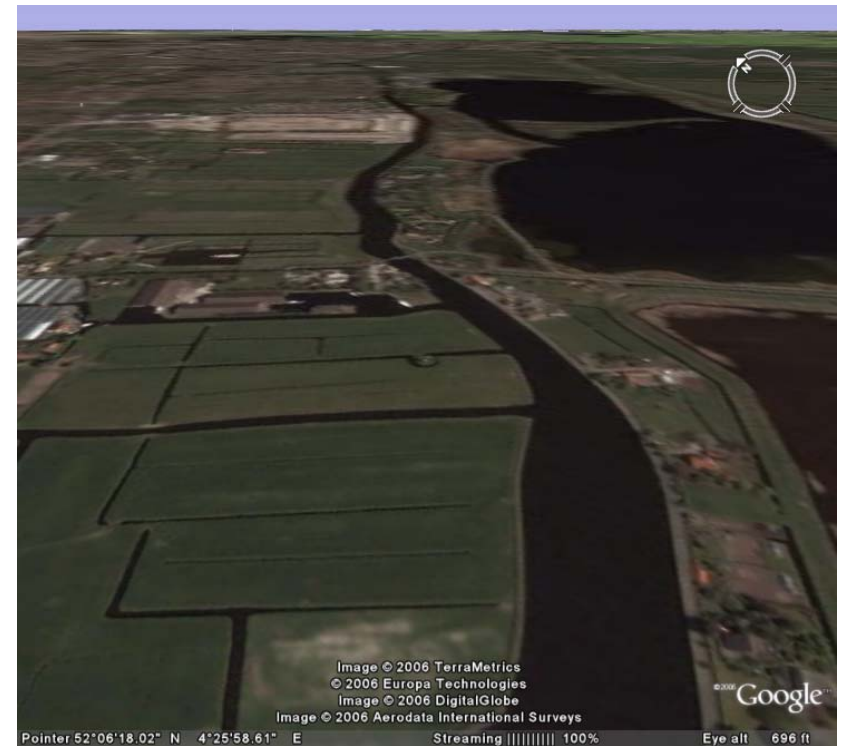
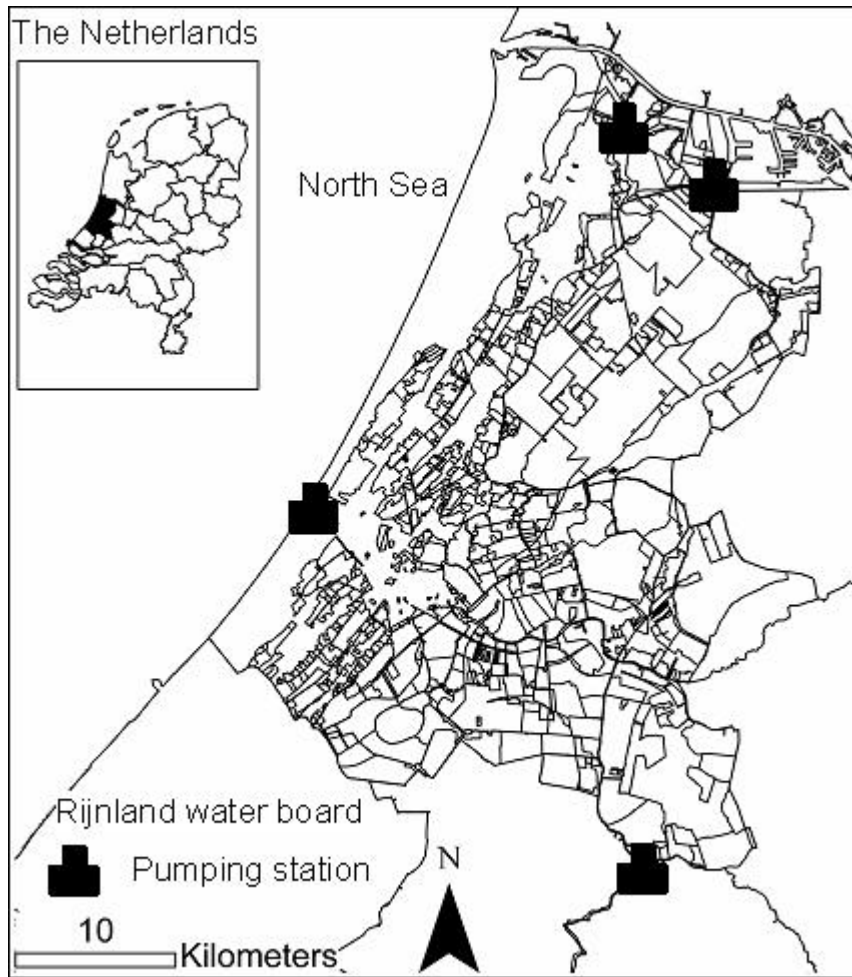
# Rijnland case study in MyWater project

- MyWater research project to use Earth Observation information for added information for calibration, forcing, data assimilation, post-processing, and verification of ensemble predictions
- EO data, together with well-covered telemetric ground station network providing ideal research setting to test our methods

# Rijnland case study

- Rijnland water system limited storage capacity
- Water board interested to expand forecast and control horizon for anticipatory actions in case of critical rainfall events
- Pilot off-line real-time EPS running
- Control strategies on the basis of ensemble predictions

# Rijnland case study

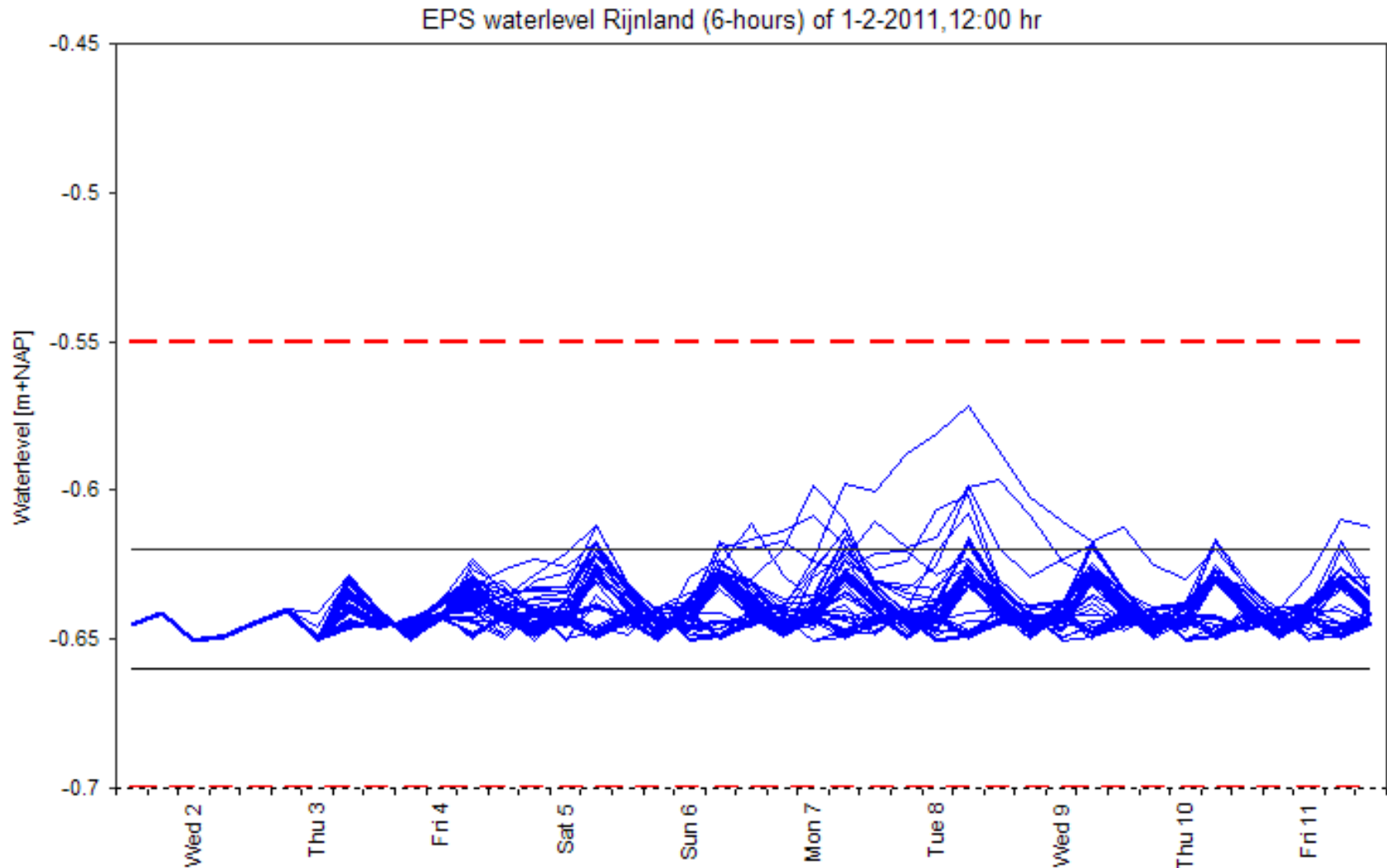




# Rijnland case study



# This is how it looks like



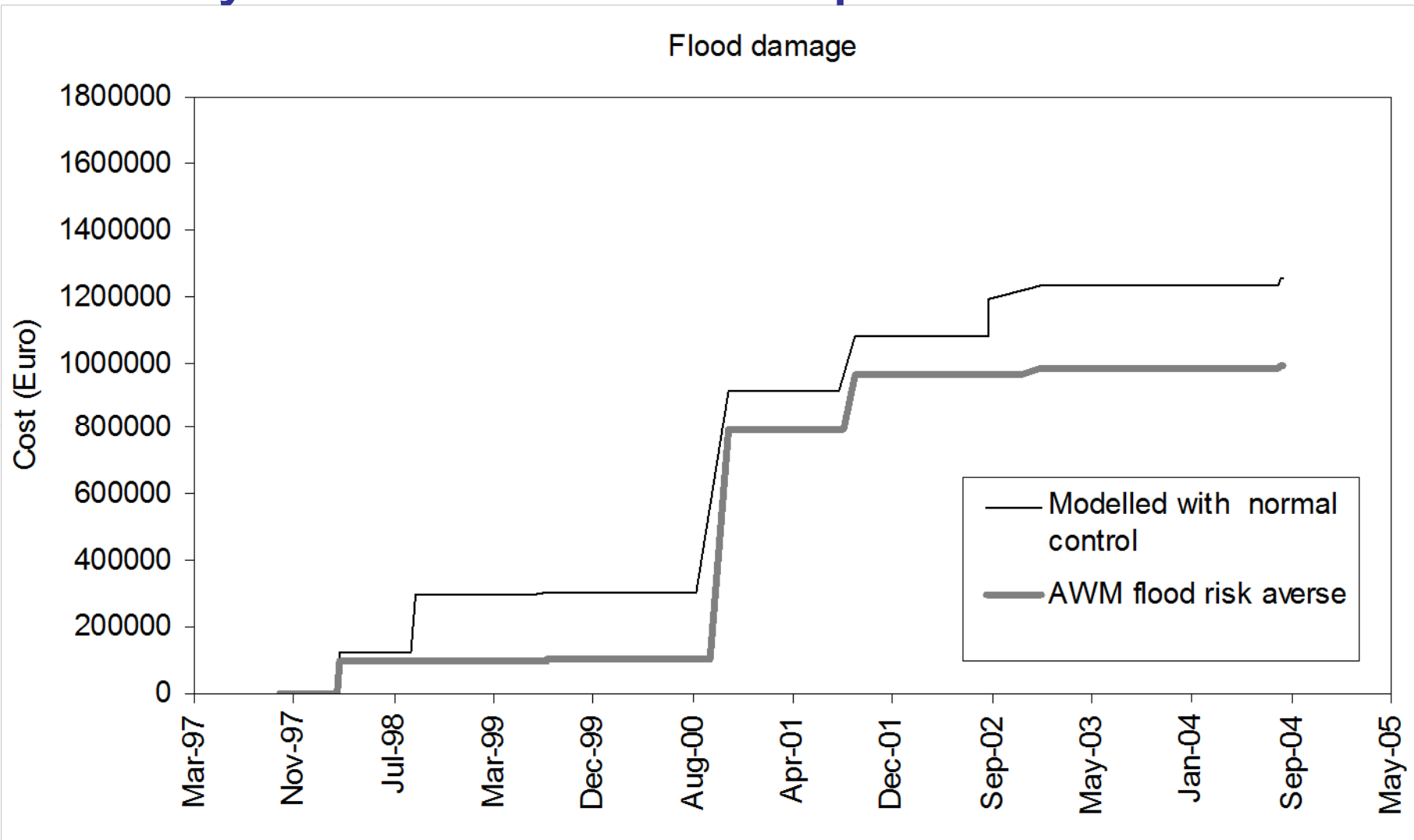


# The data available and pilot real-time system

- ECMWF EPS rainfall predictions as forcing: available from 1997 (but not hindcast, so not fixed system)
- Hydrological and reservoir control simulations and eps hindcast from 1997 – 2004
- Damage costs model, verification method



Verification method available;  
Try to beat the raw eps result !



# Questions to you

- Continuous simulation or spin-up period hydrological model?
- Homogeneous versus long time series?
- Hydrological simulation or controlled system simulation?