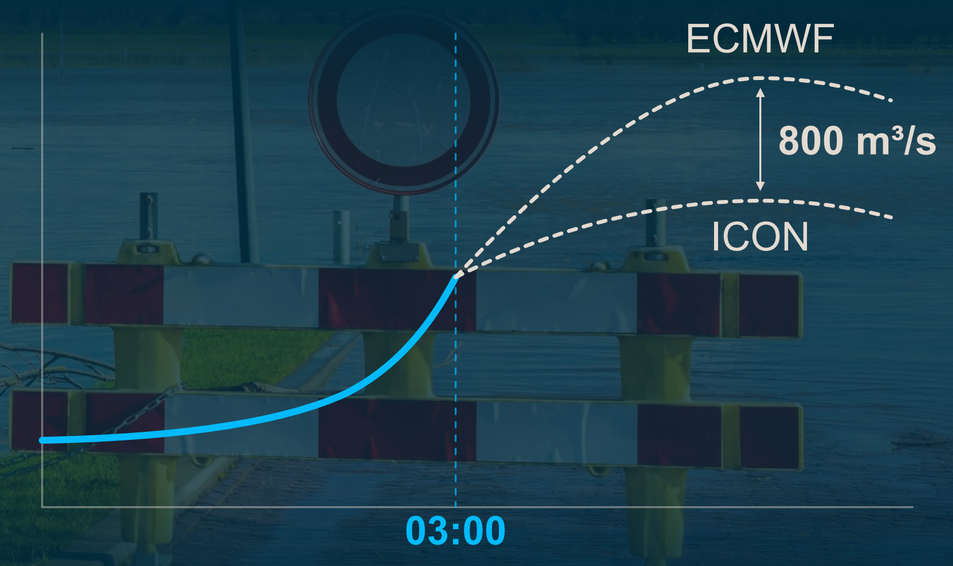
Facts and expert judgment in one Forecast Assistant

Bringing technical and human lines of reasoning together

03:00

The Rhine at Lobith is rising. The models disagree.

What does the senior forecaster do now?
And the junior who has just started?



LAYER 2 Human line of reasoning

Domain knowledge · Experience · Judgment calls

“Showers over the Ardennes? The Meuse responds faster than the model.”

“Message from upstream? Read it first.”



Forecast Assistant

LAYER 1 Technical line of reasoning

Data · Ensembles · Thresholds · Contingency plans

Layer 1 is technology. Layer 2 is where the difference lies.

We capture layer 2 by reconstructing past high-water events with forecasters.

Real-time impact by

- Supporting, never deciding
- Calculating with tools, explaining with language
- Turning expert knowledge into a shared asset
- Being honest about its limits
- Adapting to the user

Layer 2 in practice

Landelijke Redeneerlijn Watertekort
With water authorities and RWS

SAFER
ML forecasts linked to contingency plans

SYMPHONICA (in development)
Modular AI workflows for multi-hazard forecasts

Collaboration with partners

W2O with Weather Impact, 9 municipalities & water boards
Weather forecasts turned into local action, since 2019

GO-FEWS community with water boards & Deltares
Delft-FEWS for real-time operational water management

VIZIER with Esri & WSRL
Automated contingency plans driven by live data, since 2021

“The best AI assistant thinks along with you, like your best forecaster.”

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