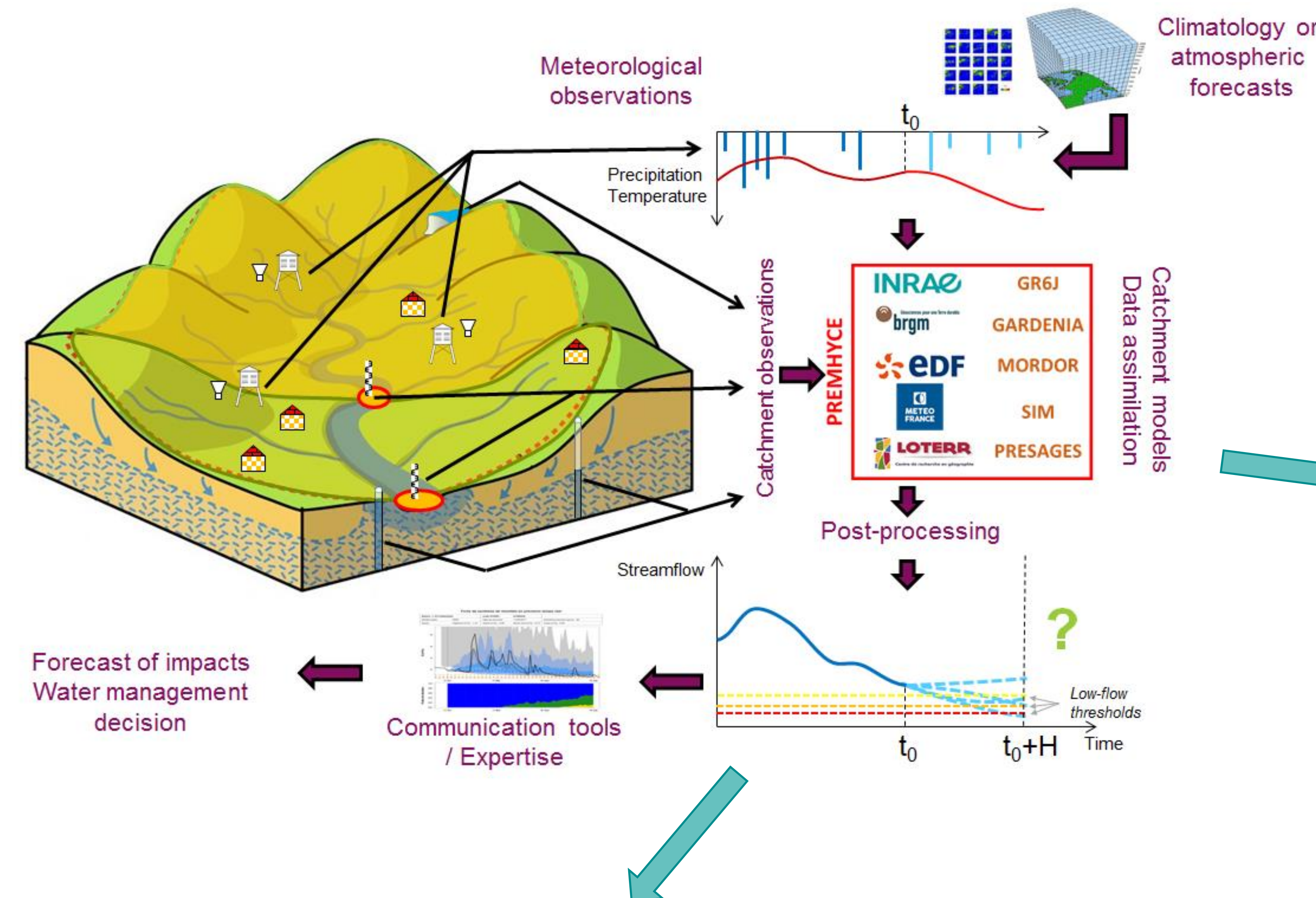




Integrated chain for the hydrometeorological forecasting of low flows and droughts in France – The CIPRHES project

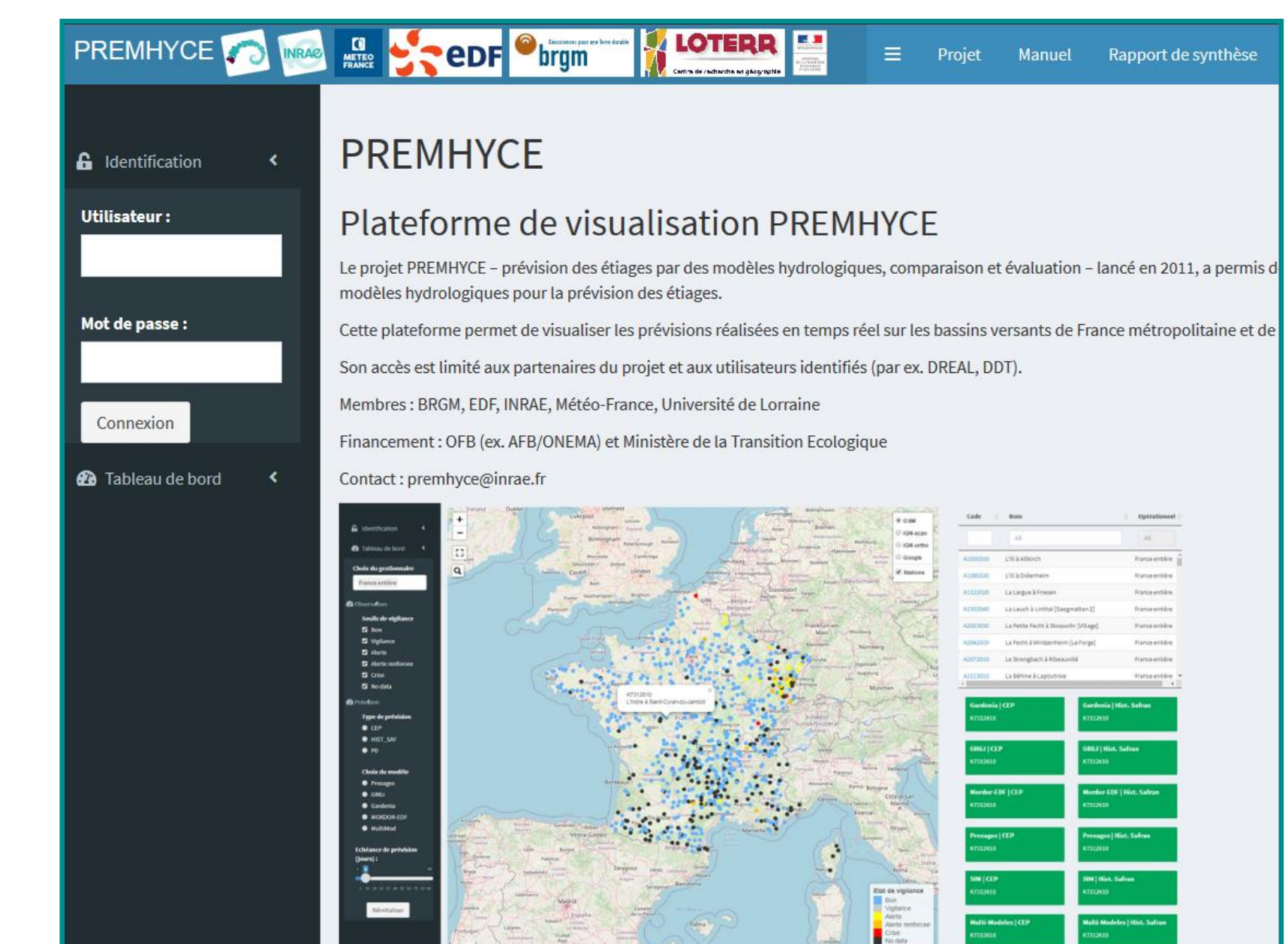
➤ The CIPRHES key scientific and operational challenges

1. To produce efficient seamless atmospheric forecasts
2. To develop an integrated hydrometeorological modelling approach for low-flow forecasting
3. To develop approaches to identify and quantify the various sources of uncertainty affecting low-flow forecasts
4. To set up and apply advanced ‘crash-testing’ frameworks to better evaluate the performance and robustness of low-flow forecasts
5. To design a robust and user-tailored online hydrometeorological service for nation-wide forecasts based on the PREMHYCE platform



➤ The PREMHYCE operational platform

- ⇒ Low-flow forecasting tool
- ⇒ Multi-model approach (5 hydrological models)
- ⇒ Use of historical data and CEP meteorological forecasts
- ⇒ Currently about 30 end-users

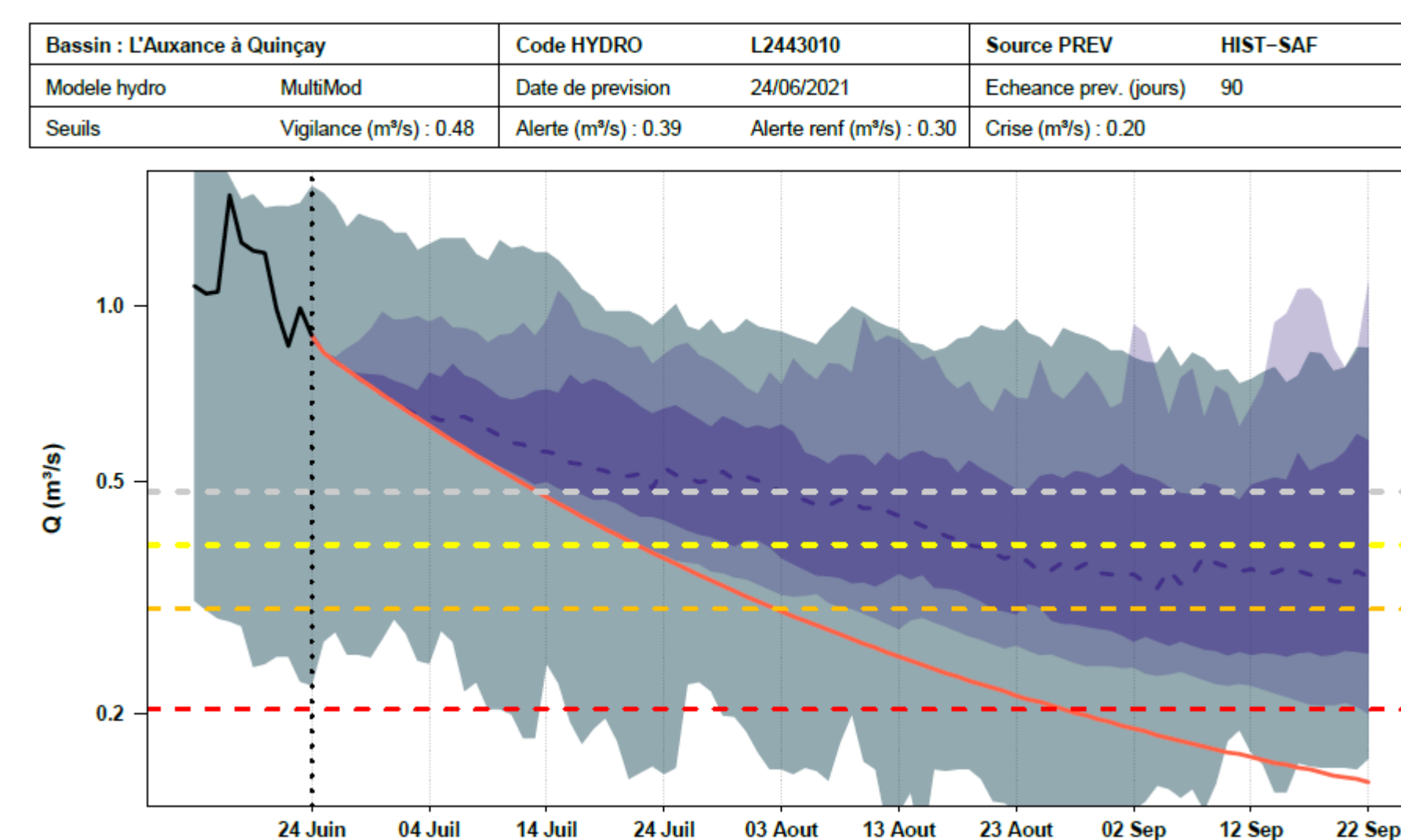


➤ CIPRHES ID

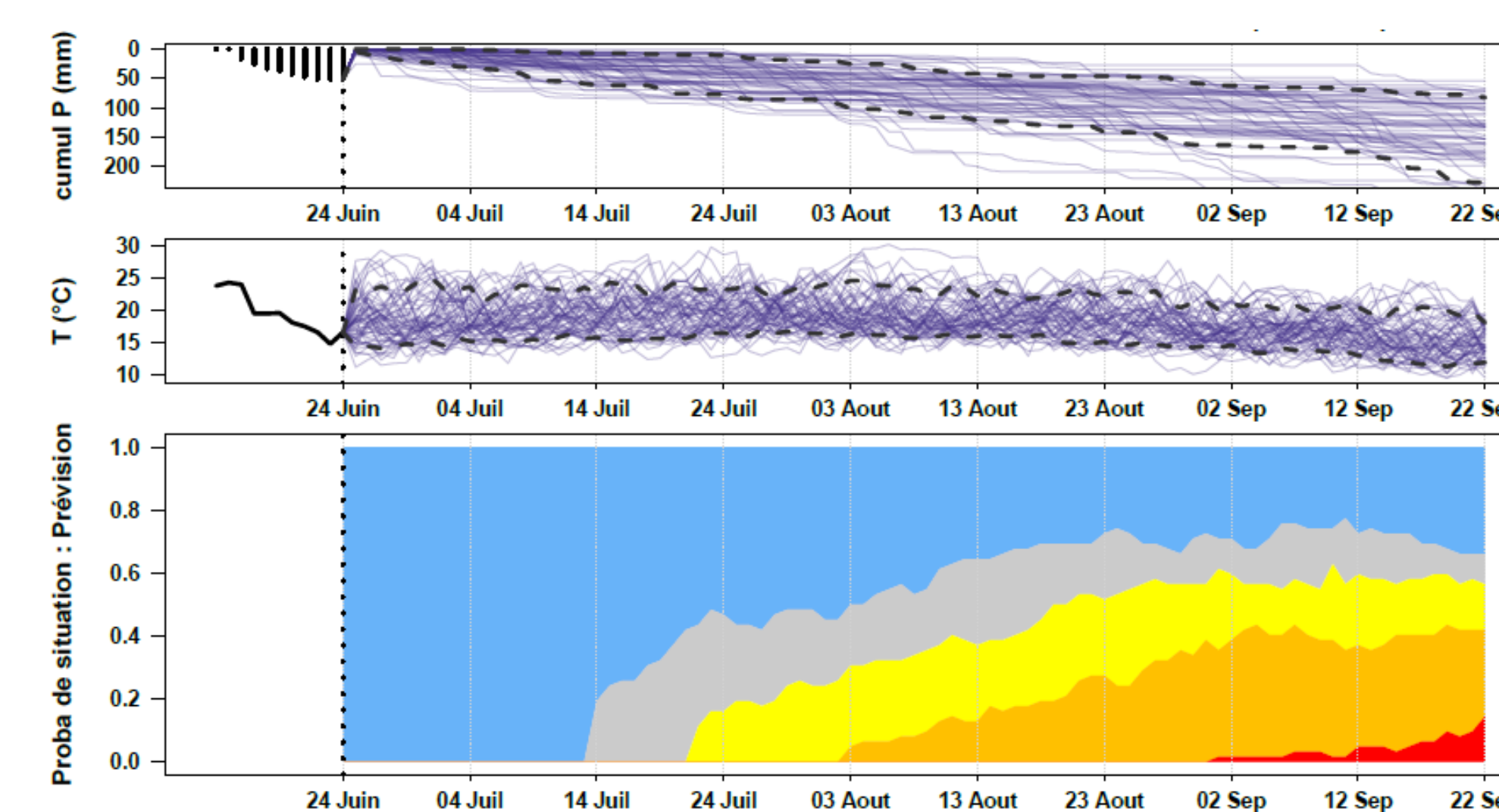
- ⇒ Four years (03/2021-02/2025)
- ⇒ Full budget: 1.8 M€
- ⇒ Funded by the French Agency for Research (ANR) (0.75 M€)
- ⇒ 263 person-months
- ⇒ 5 post-docs, 2 PhD, 5 trainees, 1 engineer hired for the project
- ⇒ 27 deliverables



➤ Multimodel PREMHYCE outputs



Ensemble forecasts and comparison with historical flows



Probability to be under operational low-flow thresholds

For more information

CIPRHES

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PREMHYCE

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