

# RIFF

## River Flow forecasts for water resource management in France

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EUPORIAS G.A. - Zurich Sept. 2015



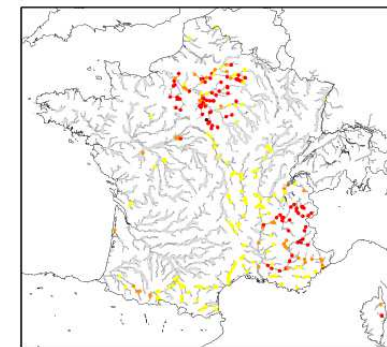
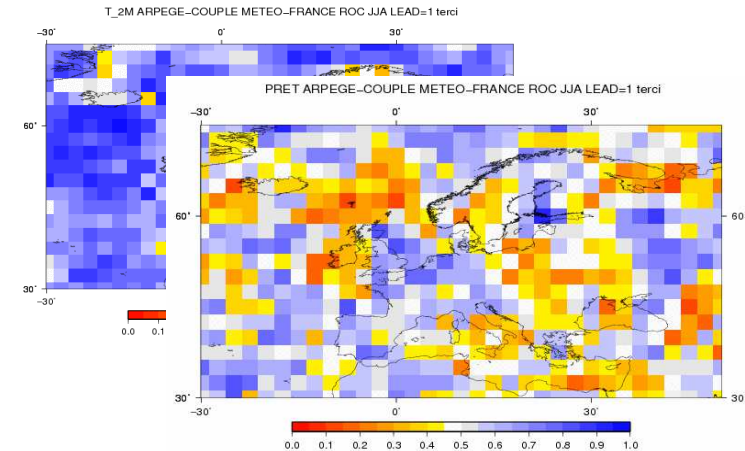
EUPORIAS



**METEO FRANCE**  
Toujours un temps d'avance

# Context

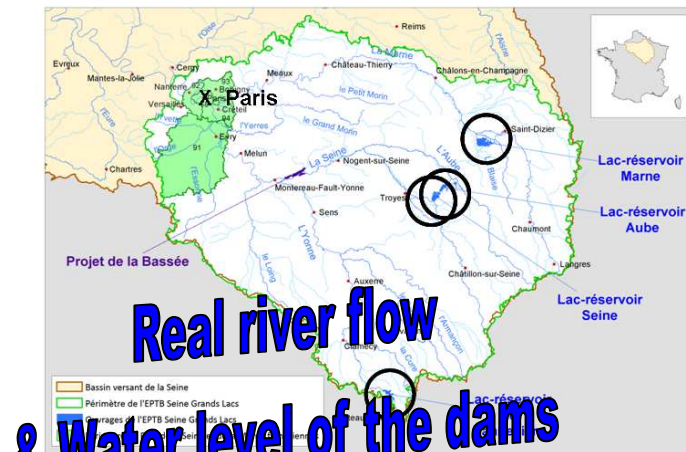
- Atmospheric seasonal predictability is globally low over Europe.  
“Low” but not “0” !
- This weak added-value (comparison to climatology) could be used as an input to hydrological models to gain predictability of some hydrological variables.  
This hydrological predictability comes from soil’s memory and from atmospheric predictability.



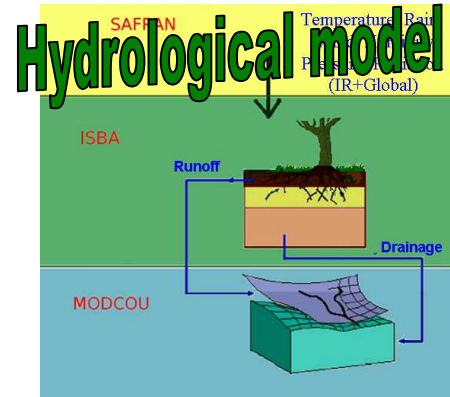
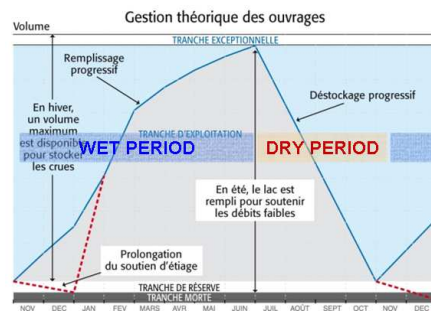
Singla, 2012

➔ RIFF benefits from this principle

# Prototype development

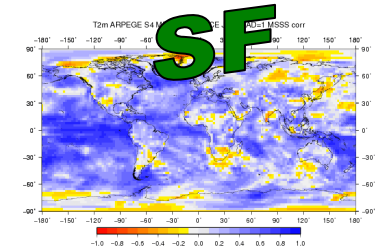


EPTB Seine Grands-Lacs  
(public institution)



Operational SVAT suite  
(since 2004) over France :  
8km daily analysis of soil  
parameters and river flow +

**model initial conditions**



Seasonal Forecast  
model ARPEGE-S3  
Hindcast 1979-2007

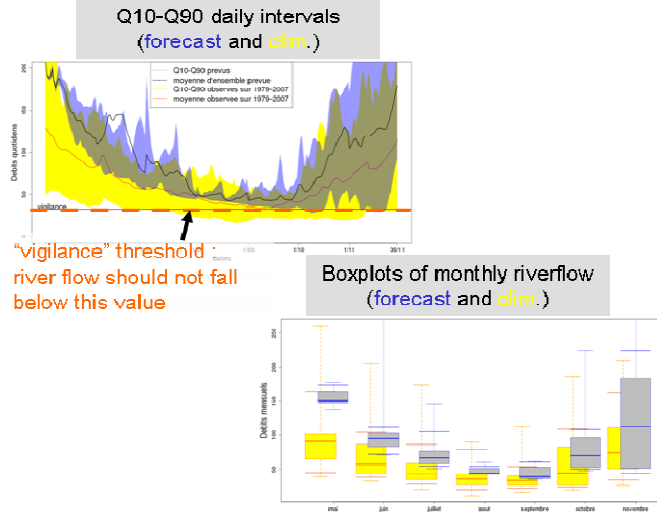
Prototype development :

- 1 : tailoring climate outputs to stakeholder requirements
- 2 : assessment of the forecasting chain (objective scores)
- 3 : evaluation of the impact of forecasts on the DMP

# RIFF prototype

## River Flow forecasts for water resource management in France

- 1 : tailoring climate outputs to stakeholder requirements

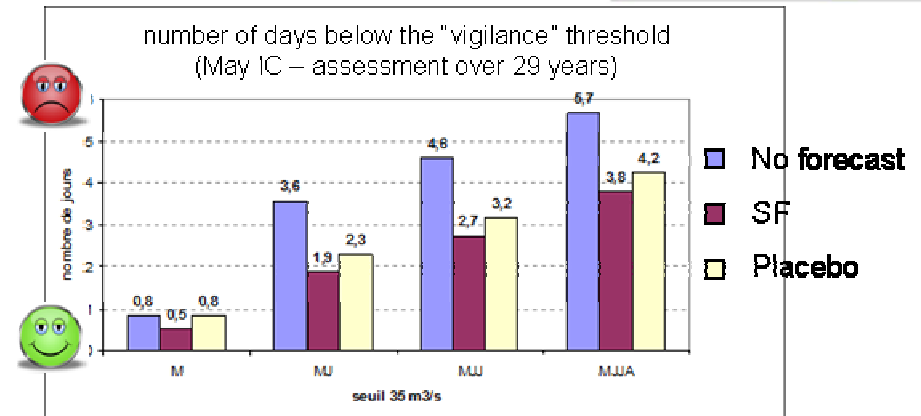


- 2 : assessment of the forecasting chain (objective scores)

### Recommendations :

“Prefer integrated indices (monthly means, number of days below “vigilance” threshold) to daily indices (daily Q10-Q90 is to be taken with cautious).  
For the May initialisation, no significant information beyond August.”

- 3 : evaluation by the stakeholder of the impact of forecasts on the DMP  
(« placebo » protocol)



**Thank you for your attention**

<http://riff.predictia.es/en>  
<http://riff.predictia.es/fr>