Testing & adapting Pan-European data for Jucar River Basin planning and management

Abel Solera Solera
Institute of Water and Environmental Engineering
Universitat Politècnica de Valencia
European climate services

http://swicca.climate.copernicus.eu/
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http://www.imprex.eu/
EU H2020: 2016-2019

SWICCA
Service for Water Indicators in Climate Change

SWICCA offers readily available climate-impact data to speed up the work of adaptation of water management across Europe.
Our goal

- Make useful climate change information to basin planning and management
  - At long time planning
  - As a better prediction of short time management
- Case study Jucar basin

➢ Design line of work to get solutions on basin planning and management
SWICCA: long time planning.

- Different data
  - Climate
  - Flow
  - Water quality
  - ...

- At different formats
  - Grid
  - Catchments

- Different future periods
What are we doing?

  - Precipitation
  - Evapotranspiration
  - River inflows
- Define “bias correction”
- Future horizons correction

- Basin management models
  - Probabilities of water deliveries
  - Future reliability & vulnerability indicators
IMPREX: climate predictions

• IMPREX will develop and deliver a semi-operational tool able to inform decision-makers about the likelihood of occurrence of high risk hydrological extreme events in the forthcoming months

1. Historical period (validation)
   → Monthly ensembles generation (daily) for next 7 months
   → Statistic score of prediction → bias correction →
   → hydrological models →
   → Basin management models → Risk assessment on basin management

2. Real time prediction