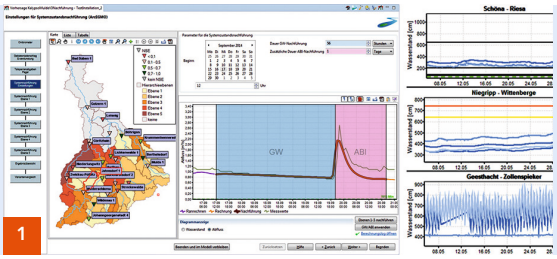
BJÖRNSEN CONSULTING ENGINEERS

Kalypso Forecast System for control of operating numerical forecasting



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Water
Environment
Civil Engineering
Informatics
Energy
Architecture

KalypsoForecast - the system for control of numerical forecasting in the fields of water resource management and ecology.

Use KalypsoForecast to depict complex work-flows for retrieving and validating data, for controlling simulation calculations and optimization, and for validating and disseminating results.

All work-flow components can be individually combined and customized.

Data retrieval from external sources

- Measurement and prediction sets from time series databases (e. g. WISKI Kisters AG)
- Raster-based measurement and forecast data (such as RADOLAN, COSMO-EU) via FTP, network, HTTP
- HQ relationships and additional reference data

Interactive display and processing

- User support through predefined workflows
- User and role management
- GIS-based map display with support of vector and raster data, WebMapServices, etc.
- Time series tables with display of warning values and quality criteria as well as deviations beyond maximum or minimum threshold limits
- Time series diagrams with display of warning values, main hydrographic data
- Administrative interface for configuration of the system (e. g. the sources of input data)

Simulation calculation

- Control of existing computer models
- Automated execution of model calculations (time-based or upon availability of certain input data)
- Auto-calibration of models using mathematical optimization based on the most currently available measured values

Result analysis

- Comparison with computed scenarios or historical events
- Calculation of hindcasts

Reports and results

- Reporting system and publication of results
- Storage of forecasts in time series databases
- Archiving of simulation scenarios in document management systems

Services

- Conceptual design of your forecasting system
- Adaptation to meet your individual needs
- Integration of existing forecasting models
- Creation of forecasting models based on proven modeling software
- Installation and configuration
- Training and support

1 Left: Auto-calibration through optimization
Right: Control of all input quantities at a glance

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