



**/ HydroMet**

**/ WISKI**

# Water Management Information System

Hydrology | Meteorology | Groundwater | Water Quality | Water Treatment

**/ KISTERS**  
Empowering decisions of tomorrow



# Professional measurement data management for all water management tasks

The WISKI water management information system is a one-stop solution for all tasks in monitoring network management, data acquisition, monitoring and evaluation. Hydrology, meteorology, groundwater monitoring, flood forecasting and alarming, water quality control, urban water systems or power plant and dam operation: WISKI offers specialist functions for any water management and hydrological tasks, simplifies daily workflows and delivers meaningful results.

## Your Advantages with

### ✓ EXPERTISE

A tried and tested specialist application based on 35 years of KISTERS experience in water management, environmental monitoring and software development

### ✓ INVESTMENT SECURITY

Scalable to your needs and your company size; free updates

### ✓ FLEXIBILITY

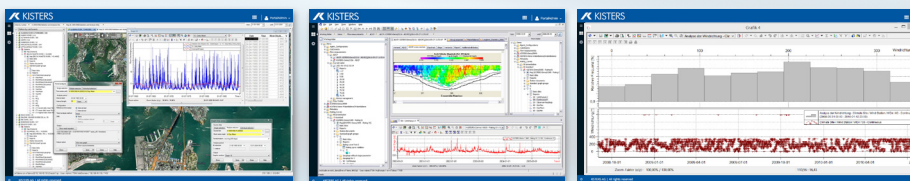
Choice of on-premise installation or secure cloud solution; many add-ons for customised solutions

## Data



- **Data loggers, sensors, IoT (Internet of Things)** Water level, water flow, precipitation, etc.
- **Telemetry** Telephone, mobile phone, satellite, internet, etc.
- **External data sources** Control systems, GIS, databases, internet
- **File import** Various import formats
- **Flow gauging devices** Current meters, sensors, ADCP
- **Manual input** Smartphone, tablet, notebook, web interfaces
- **Legacy data and data migration** Lists, archives, files, gauge charts

## Processing



## Results



- **Data presentation and editing in graphs, tables and in web-based interfaces**
- **Data validation and quality management**
- **Reports, lists, yearbooks: Reporting obligations and evidence**
- **Data exchange and interfaces**
- **Statistics and analysis, rated values, trends**
- **Internet and intranet publication of WISKI data**
- **Alarm management**

# The right functions for every measurement network

WISKI gets more out of your data: WISKI not only supports data management and plausibility checks to increase data quality, but also derives useful information and presents it in a way that is appropriate for the target group (experts, management, the public...). Easy-to-understand, web-based user interfaces allow you to conveniently use WISKI in your web browser.

## Hydrology

- Heterogeneous measurement networks (water levels, ultrasound, redundant systems)
- Management of all parameters (e.g. water level abs./rel., water flow, water temperature)
- Discharge measurement and rating curves
- Low water and extreme value statistics
- Data validation
- Digital data acquisition in the field

## Meteorology

- Management of all parameters (e.g. precipitation, snow, air temperature, air pressure, humidity, wind, evaporation, radiation)
- Storm analysis
- Spatial interpolation and areal precipitation
- Management of precipitation radar data and conversion to time series

## Groundwater

- Management of all parameters (e.g. dip, abs./rel. water level, groundwater depth, flow rates)
- Digital data acquisition in the field
- Comparison with measured data from surface waters and precipitation
- Borehole profiles and other geohydrological data
- Plans of ground water isohypses

## Flood

- Information and alarm management in extreme situations
- Automated monitoring of the measurement network
- Message templates
- Alarming using various media channels (e-mail, fax, phone, SMS)

## Water Quality & Biodiversity

- Samples management for all chemical-physical and biological parameters
- Digital sampling acquisition in the field and import of sampling data from laboratory information management systems (LIMS)
- Validation of measurement and analysis values
- Special graph types (e.g. box whiskers) and evaluation using comparison lists and classification methods
- Flexible reporting (e.g. in compliance with the European Water Flow Directive)
- Linking with quantity data (e.g. load calculations)

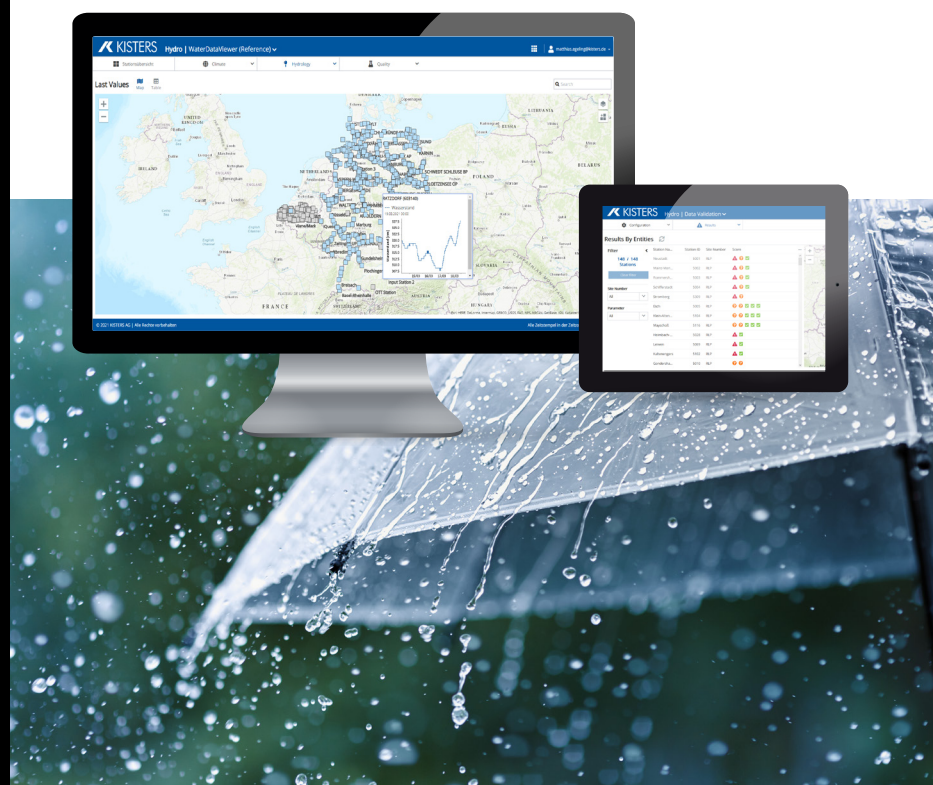
## Other Areas of Application

- Dam monitoring (with long-term archiving of control system data)
- Hydropower plants (with optimisation tools)
- River area management
- Urban hydrology
- Drinking water, waste water
- and many more

## Cloud Solution: Simple, affordable, flexible

WISKI is optionally available as Software-as-a-Service (SaaS). We host the system in the **certified KISTERScloud**, and your employees use it via their web browser. We reduce your workload by taking care of all IT-related tasks, so that you can concentrate exclusively on your core business. Your company will not need an expensive IT infrastructure or qualified staff to manage and update the software. With KISTERScloud, you get a **modern, high-availability system at manageable cost**.

We look forward to work with you on finding the right SaaS solution for your company.



# WISKI Features & Functions



## Monitoring network management & Measurement data management

- Monitoring network management of an unlimited number of measuring stations, parameters and observation variables
- Metadata management, variably arranged by station types and subjects, all subject parameters are included, historisation
- Measurement Data Management: Instantaneous and mean values for each time interval and non-limited time periods, non-equidistant and rasterised, non-/interpolatable, audit trail
- Additional data types: Ensemble data, spatial data (raster), sampling, ecological observations
- Data access via tree views with flexible arrangement options and an integrated default map, favourites views



## Data quality & Validation

- Data validation and correction in graphs and tables via various editing functions (individual values, time ranges, gap fills, copy/pasting of values, and many other functionalities)
- Adding quality flags characteristics and remarks to measurement data values to improve data quality



## Evaluation & Statistics

- Default and extreme value statistics: automated min., max. and mean value calculations, low and high water statistics, trend analyses and many other statistical processes
- Calculation and evaluation: powerful, customisable algorithms for data calculation and data analysis
- Discharge measurement / rating curves: Capture and analysis of discharge measurements, rating curve editor with many rating curve procedures and analysis methods



## Reporting & Data publication

- Reporting: standardised reports and customised, customer-specific reports
- Publication of data online and on the intranet (own portal applications)



## Data Exchange, Import & Export

- Data Exchange: Import and export functions for time series/ measurement values and metadata; support of open standards with Web Services, ODATA, WATERML and REST API
- Integration of time and spatial data via interfaces to GIS systems (ESRI, QGIS)
- IoT (Internet of Things) and LoRaWAN support
- Telemetry: Own remote data systems SODA & HydroTel with dedicated communication software and hardware



## Software Technology

- Easy integration into existing IT environments (MS Windows, Linux, Web GUIs)
- High availability data and applications via a client-server architecture with central database (Oracle, MS SQL Server, PostgreSQL)
- Individual workflow adjustments via integrated programming environments (KiScript, Python)

## About KISTERS

Do more than react to the effects of climate change; help plan climate resilience with us as we work closely with our customers. We develop digital solutions to advance the monitoring and forecasting of water and the environment, so environmental managers have salient information to plan for and face difficult decisions about flooding and drought as well as ensuring the delivery of clean water. Monitoring of ground and surface water, meteorological measurements, flood forecasts, storage operation and safety, preservation of water quality or urban drainage: The daily processes and decisions in authorities and companies are optimally supported by the efficient KISTERS water solutions - from the collection, processing and analysis to the publication of water data. The tailor-made solutions are used worldwide by local, regional, national and supra-national authorities, associations, engineering offices and research institutions.