

# HydroMaster

Live web service to minimise the impact of precipitation on operations, assets and infrastructure





Water is a prerequisite for life. However, water can also be a severe hazard – to people as well as infrastructure. In your professional capacity, you are responsible for efficiently and safely operating public and private assets and in order to do this you need to effectively manage precipitation related risk.

You cannot influence the weather, but you can be better prepared to minimise its impacts on your operations. HydroMaster provides a sophisticated suite of tools to effciently analyse observed and forecasted precipitation data.

HydroMaster is a live web service that allows you to view, analyse and archive historical and upcoming precipitation events. You have access to radar-based observation and forecast data, as well as refined deterministic and probabilistic forecast data for your defined hotspots, zones of interest and catchments.

HydroMaster's customisable alerting functions enable you to take preventive actions: You set the thresholds for your places of interest, while HydroMaster provides reliable rain gauge and radar data, and tools to evaluate all aspects of past, current or future precipitation events.

You can master the rain thanks to HydroMaster!

## Highlights



### Radar visualisation and analysis tools

Animate high-resolution precipitation radar imagery (historical and forecast) and retrieve rain gauge-calibrated cumulative precipitation amounts for any defined period, with assessment and actioning of events available via a simple mouse-click.



### Customise your HydroMaster

Add your catchment areas, zones of interest, hotspots and rain gauge data to

obtain localised precipitation observations and forecasts within seconds. Evaluate how significant the impact will be for your area by comparing with return periods, and take appropriate measures.



#### Tailored warnings and alerts

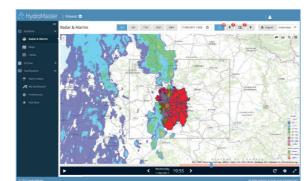
Combine past, near real-time and future precipitation data to generate automated warnings when threshold criteria are met. For timely and effective dissemination of warnings you decide who, how and when messages will be issued.



### Archive

View and analyse past precipitation events using the same tools as in real-time. Save your work in comprehensive postevent analytical reports with various pre-formatting options.





# Know what's coming and mitigate your risks

HydroMaster empowers you with access to the very latest high resolution precipitation radar in real time, updated on a continuous basis. With radar-based nowcasts paired with multi-model deterministic and probabilistic forecasts up to 15 days in advance, you can be assured of timely and accurate information to support your operational decisions.

To give users an indication of rainfall event severity, forecasts are contextualised using a dedicated severity index which takes into account both location and season.

With HydroMaster you not only know what's coming but also when, where, and the expected impact.

# Make yourself comfortable

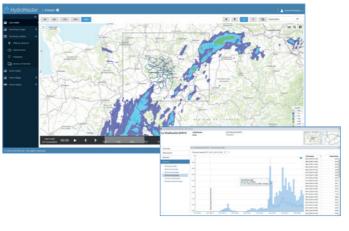
HydroMaster offers you a series of interactive maps, charts and tables, radar maps, precipitation totals, alarm status and return periods.

Add your favourite view to your own private dashboard with a single click.

Build your personal view by repositioning and resizing the elements.

With the HydroMaster Dashboard you have everything under your control.





# Tailor forecast and warnings to your area of interest

HydroMaster acts for your area of interest instead of giving you an arbitrary forecast. With a few clicks you can draw your area of interest or highlight your personal assets and hotspots.

If you have your polygons (such as catchments) derived from a GIS system, you can upload them rather than creating them again.

Once HydroMaster knows your objects it will automatically calculate precipitation totals and forecasts. Access your individual results from maps, charts and tables.

## Set up your alarms and warnings

Save time while HydroMaster monitors the screens for you. Set up individual alarms and warnings for your objects and organise notifications via sms, e-mail or even twitter. You can choose your preferred media channel. All alarm and warning situations are recorded and displayed on screen. A rich set of statistics including storm analysis with return periods are presented during alarm conditions or for post event analysis.

### Share HydroMaster with your team

HydroMaster's access permission allows you to set up HydroMaster for your team. Spread all the great features across your team by adding more users from your organisation. As a local administrator it is you who decides their access level. This is ideal for setting up HydroMaster for 24/7 operation rooms, or sharing alerts and warnings with others.



### **About HydroMaster**

HydroMaster is a product of KISTERS Group. KISTERS is a medium-sized IT company with more than 750 employees, headquartered in Aachen/Germany, and with numerous international subsidiaries.

Environmental data management is the core of our business and passion right from the founding of the company as an engineering consultancy in 1963.

Today, our IT experts and engineers develop professional software solutions for early warning and emergency management, for environmental protection and for the sustainable management of water, energy and air resources.

KISTERS' Global Water Solution is a framework for building efficient customer solutions based on modern technology and in-depth understanding of application areas and markets. Solutions are deployed worldwide by local, regional, national and supra-national authorities, associations, engineering offices and research institutions.

