

HydroMaster

Take preventive action and minimize the impact on your operations by actively monitoring precipitation-related risks



Water is a prerequisite for life. However, water can also be a severe hazard to people and their assets. Understanding precipitation-related challenges is key to risk mitigation. If water managers are to accurately assess these risks, they need a deep understanding of observed precipitation data combined with weather forecasts. To address these challenges, MeteoGroup teamed up with KISTERS and developed HydroMaster.

Benefits

HydroMaster creates precipitation risk scenarios that combine radar-based observations, nowcast and forecast data. Water managers can use these scenarios to identify threats and protect assets by taking preventive action. With HydroMaster you can:

Minimize the impact on operations, assets and infrastructure

- Monitor precipitation and assess precipitation-related risks.

Optimize staffing costs

- Calculate accurate staffing and deployment requirements for heavy precipitation events.

Mitigate disaster fall-out

- Assess risks and minimize potential casualties or damage by taking preventive action, for example evacuations or road closures.

Users and key use cases

HydroMaster supports flood risk and operations managers responsible for assessing precipitation-related risks. It allows them to:

- **Assess the impact of heavy precipitation on water quality and water retention** - Use HydroMaster warning tools to manage raw water storage capacity and avoid overflows into drinking water retention facilities.
- **Plan extra staffing during heavy precipitation events** - Have sufficient staff in place to carry out preventive and reactive terrain action.
- **Mitigate the risk of sewer overflow in surface water and assets** - Act on your customized HydroMaster alerts and warnings to avoid or mitigate flooding of your assets.
- **Minimize the impact of drought on water supplies** - Use the HydroMaster archive and ensemble forecasts to assess the impact of lengthy dry periods and take any necessary preventive measures.
- **Optimize inundation prevention and run-off** - Use HydroMaster forecasts and warning tools to maximize storage capacity and lower drainage channel water levels ahead of time.

Customers

Leading companies and government agencies, such as SNCF, Yorkshire Water and Veolia, put their trust in us. Contact us to learn more about how we help these prestigious organizations to assess precipitation-related risks and take preventive action.



Features

HydroMaster enables precipitation monitoring, allowing precipitation risks to be managed so their impact on operations is minimized. HydroMaster has the following features:

- **Radar visualization and analysis tools** - Perform quantitative analysis on visualizations of past and future precipitation events.
 - **Integration of customer-specific objects** - Add your own catchments, hotspots or zones of interest so you can track precipitation where it really matters to you.
 - **Combination of past, near-real-time and forecast precipitation data** - Combine historical data with near-real-time radar and forecast precipitation data to build a more accurate picture of future impact.
 - **Location- and customer-specific alarm settings** - Set location- and customer-specific alerts and warnings and get a visual representation of the impact on operations.
 - **Easy archiving and post-event analysis reporting** - Archive events of interest and analyze them by using the live environment tools to create custom reports.
 - **Dashboard** - Drag and drop views of interest into your personal dashboard.
 - **Return times of precipitation events** - Determine the exceptionality of precipitation events and assess the impact on selected infrastructure.
- HydroMaster also offers a Data API add-on which allows users to query the observation or forecast data for customer objects or locations of interest.**

HydroMaster unique capabilities

- **Powerful analysis tools** - Find the precipitation details for past or upcoming events at your chosen locations with a simple mouse-click.
- **MOS forecast and MG proper observation stations** - Access the best precipitation forecasts via our unique Multi-MOS system. You can also discover hundreds of new observations from the MG proper observation network.
- **Integration of customer-specific objects and rain gauges** - Receive, display and analyze forecasts for your customer-specific objects and rain gauges when and where you need them. You can also access MOS-modelling for enhanced forecasts.
- **Integrate your own rain gauges** - Set up an operational stream of your own rain gauges data and apply all capabilities of HydroMaster on your private data.
- **Return times on precipitation events** - Choose the IDF reference curve source that works best for you. You can also identify and select the intensity durations that help you get the most out of HydroMaster.
- **Hands on configuration of location- and client-specific alarms** - Use the quick and easy-to-use administration tool to manage your objects, alarm thresholds and receivers.

Why MeteoGroup & KISTERS

MeteoGroup is the global weather authority. We combine accurate science with advanced technology and local expertise with global reach. MeteoGroup is trusted by hundreds of government agencies, thousands of companies and millions of consumers. With offices in 12 countries around the world, MeteoGroup is perfectly placed to provide local services to a global audience.

KISTERS develops world leading professional software solutions for early warning and emergency management, for environmental protection. Combined with worldwide presence, KISTERS stands for a proximity partner trusted by several hundreds of governmental and private entities.