

## *How to benefit from weather information when every raindrop counts*

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# Content of the presentation

- Challenges for water sensitive industries
- Exploration of opportunities between the South African Weather Service (SAWS) and Hydrologic
- From data to profitable solutions
- HydroNET and three applications
- Benefits of each



# Challenges for water sensitive industries

- Drought prone South Africa with little rain in parts
- Water stressed catchments with over allocations or illegal water use
- Water quality problems which affects
  - Industries such as Agriculture, Water management
- Need for decision support tools to identify priority areas
- Need for reliable information
  - Rainfall/evaporation/water use/water quality





hydro & meteo GmbH & Co. KG  
Wetter + Wasser



HydroLogic

# Cooperation with SAWS



# Why this cooperation?

- Large amounts of rainfall data available at the SAWS
- However, data not easily accessible for stakeholders
- Limited revenue from data with high costs for maintenance and data processes
- Backend processes are not fully automated requiring additional time from SAWS staff
- Need for innovative solutions



# Proposed solution

*Provide easy online access to the best available historical, actual (real-time) and forecasted rainfall information*

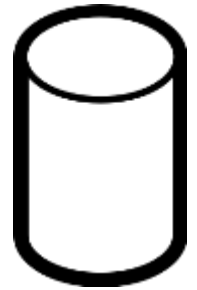
- Configure the HydroNET RainMap, Weather Station and Forecast applications with SAWS data
- Implement SCOUT to improve data quality and to automate data processing
- Automate processes so that client facing staff can focus on value-added activities



- **No data?** No information...
- **No information?** No knowledge...
- **No knowledge?** No good decisions...

*It all starts with data*









South  
Weather

ISO 9001 Certified

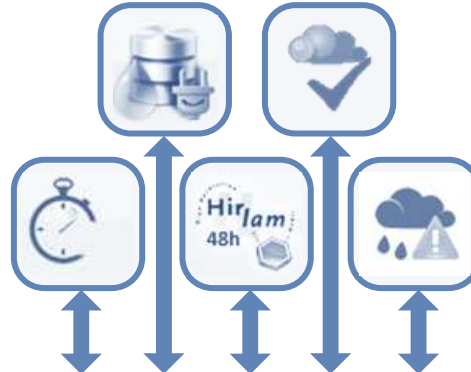
## Open platform:

- 8 countries
- > 2000 users
- 23 partners



Easy access for  
Informed  
Decisions

## Decision Support Applications



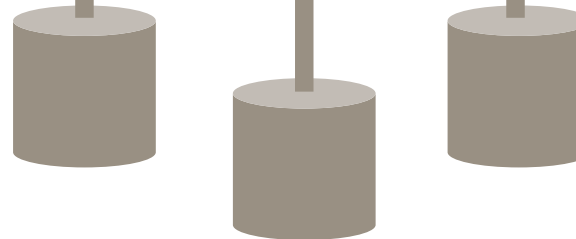
Other Platforms

Information  
Services



Processed  
data

HydroNET Platform



Data Services



**NATIONAL  
ICT AWARDS  
2013**



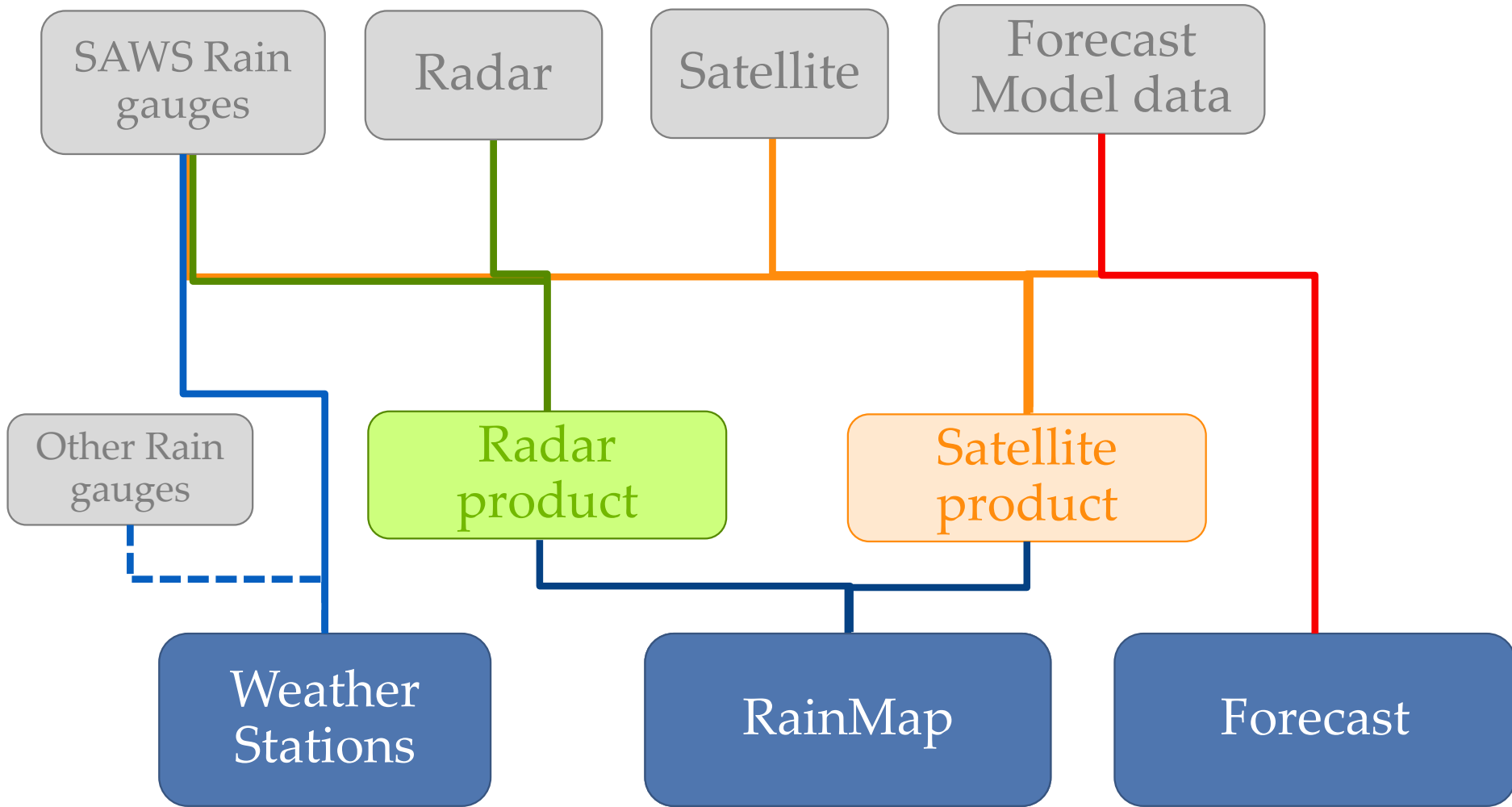
## HydroNET Web Portal:

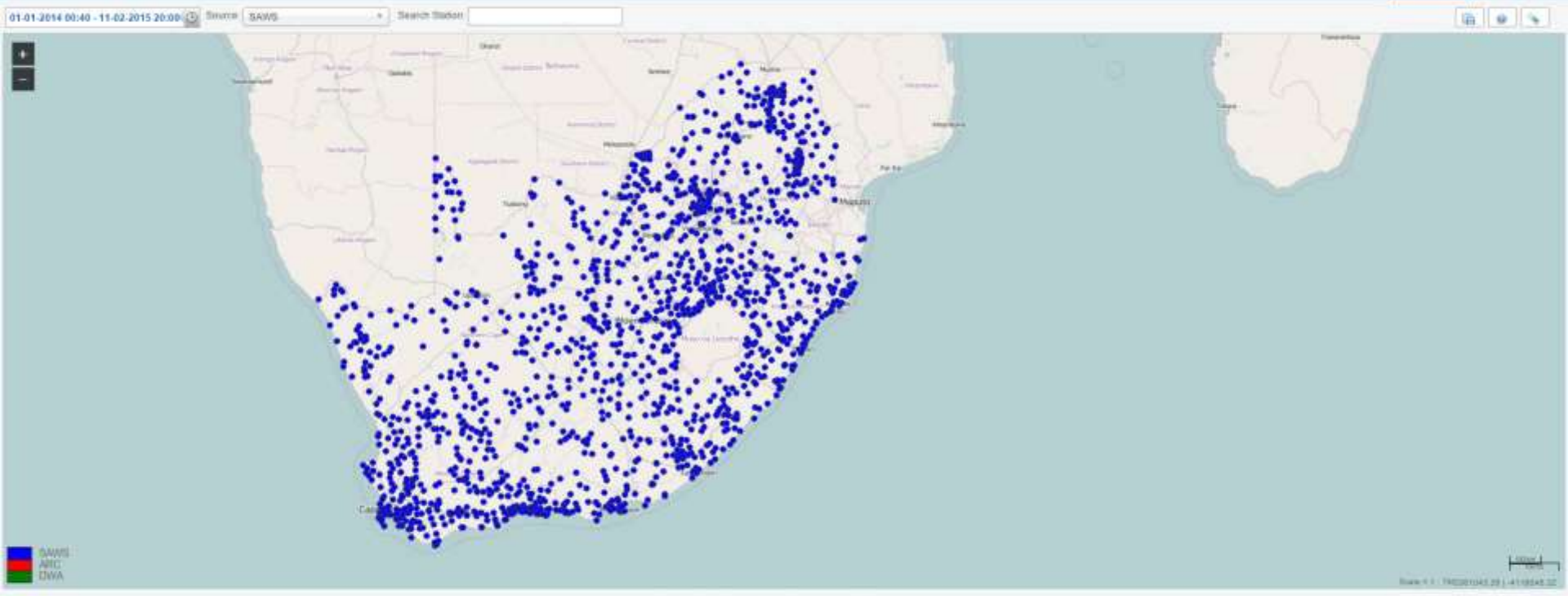
Provides data and applications via the Internet to support weather sensitive industries to reduce water related challenges

# *RainWatch*

- Three applications:
- Weather Stations
  - RainMap
  - Weather Forecast







# WeatherSmart Stations

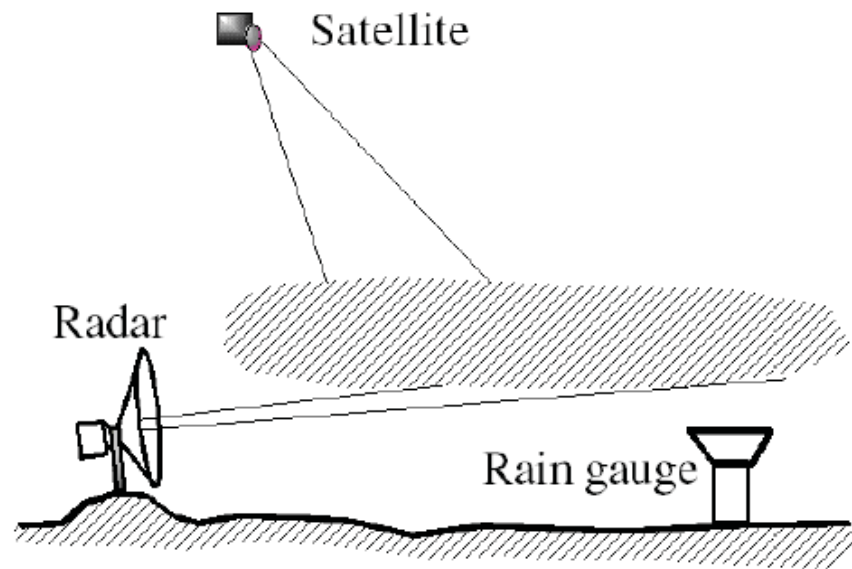
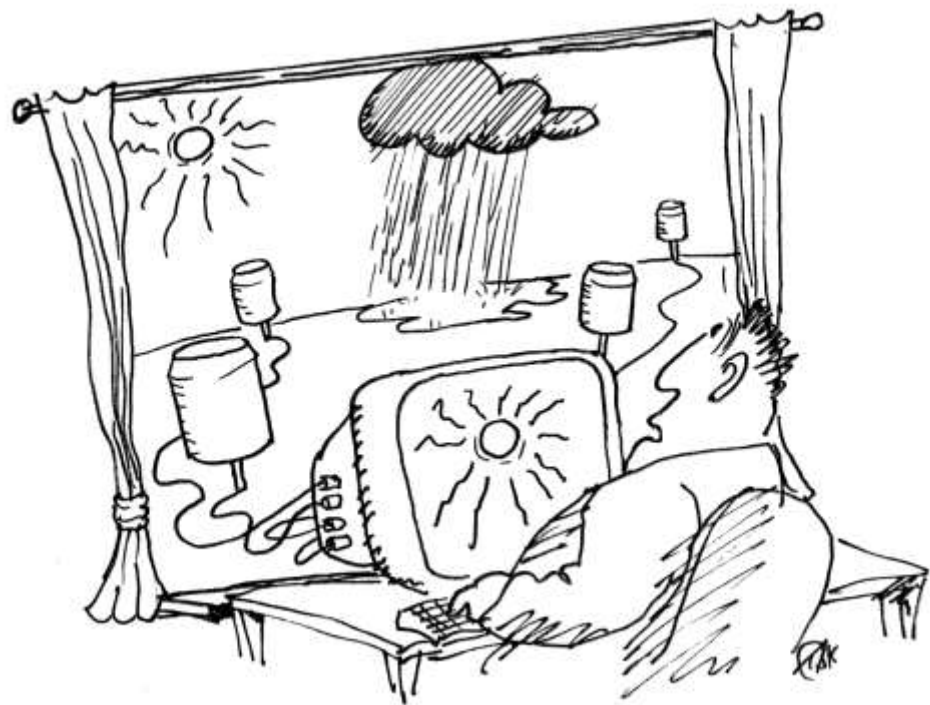


South African  
Weather Service

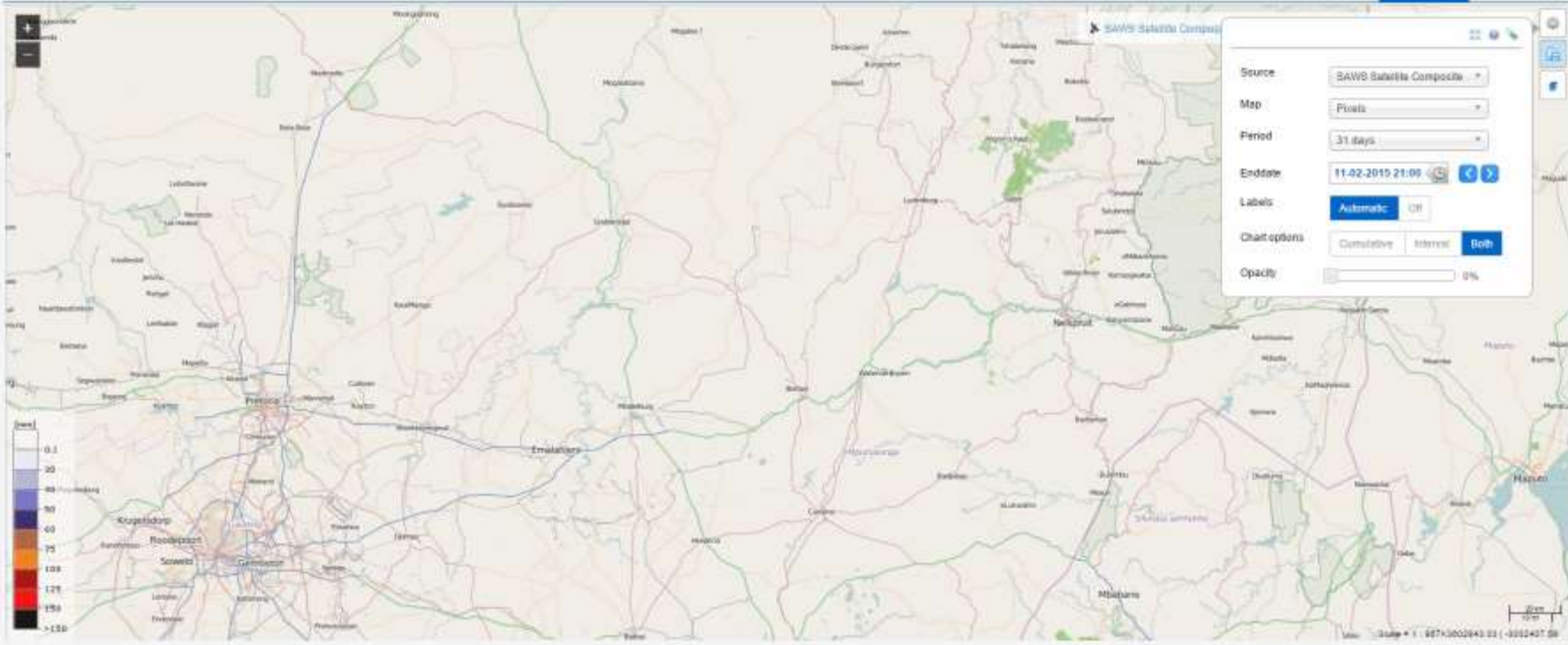
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## Weather Station Application - Benefits:

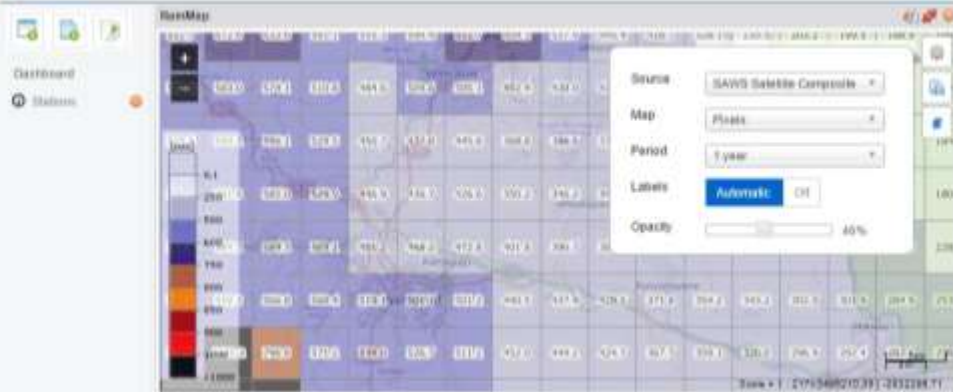
- At a click of a button - direct access to actual (real-time) and historical rainfall information
- SAWS observation network data for planning & reporting purposes
- Amount of rainfall at a specific location per hour / per day / per time series







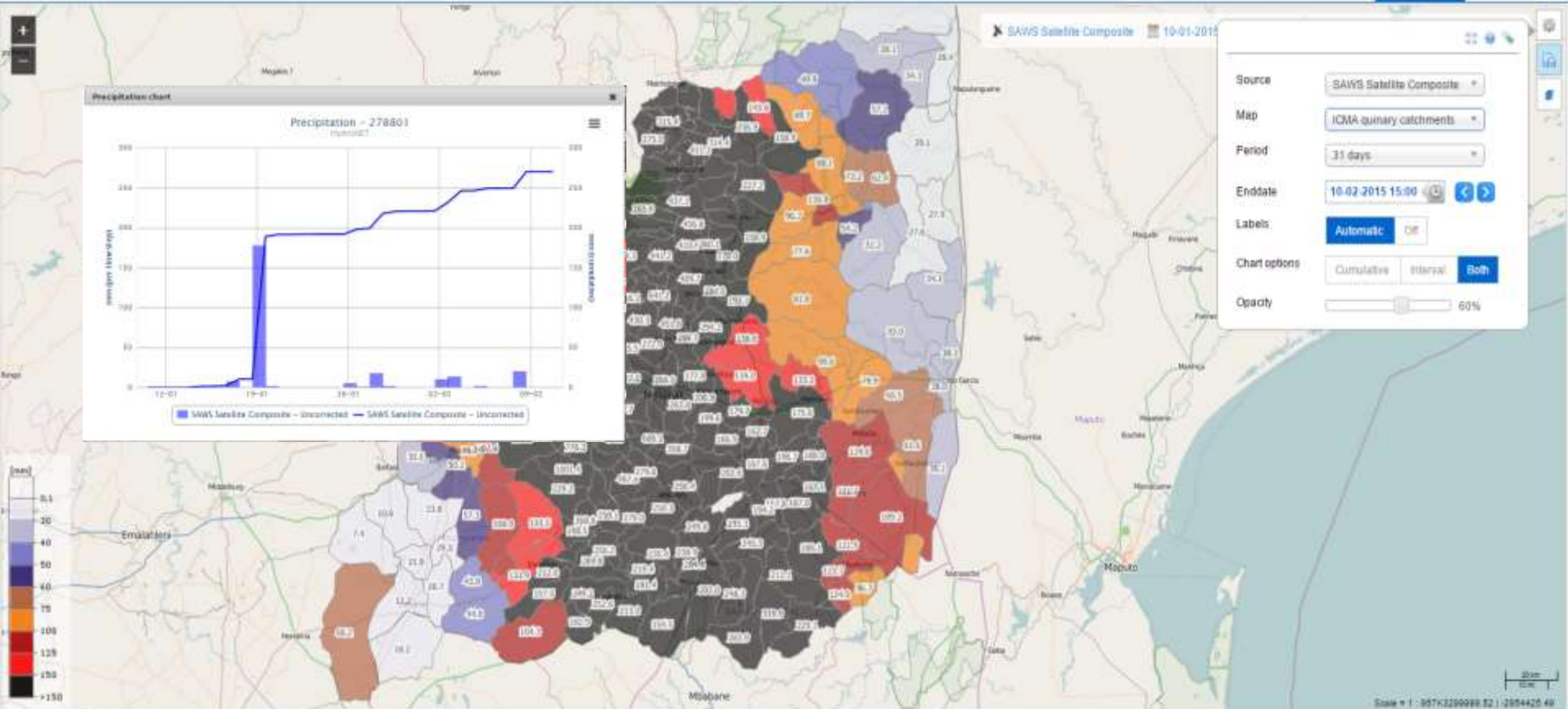
# WeatherSmart RainWatch



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# RainWatch dashboards

# Reliable rainfall information for any location



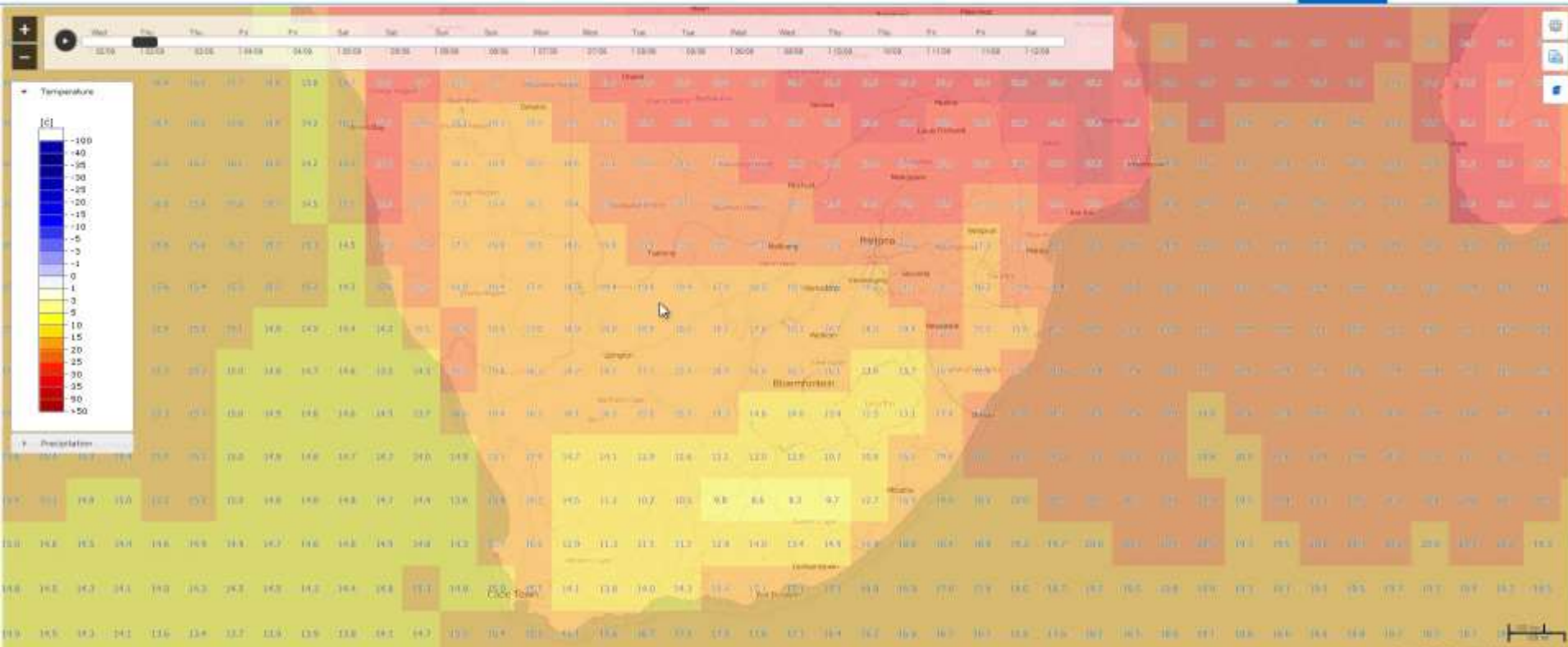


South African  
Weather Service

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## RainMap Application - Benefits:

- To optimize the proactive scheduling of weather sensitive activities to manage water resources
- Reduce the need for additional rain gauges
- Easily accessible information as quality checks improve the data
- Personalised dashboards linked to own strategic indicators



# WeatherSmart Forecasts



## Weather Forecast Application - Benefits:

- Weather forecasts for specific locations over different time periods
- Improves risk related planning
- Reduces exposure to possible impacts of forecasted factors

*HydroLogic*



South African  
Weather Service

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*From data to profitable solutions*

*When every raindrop counts.....*