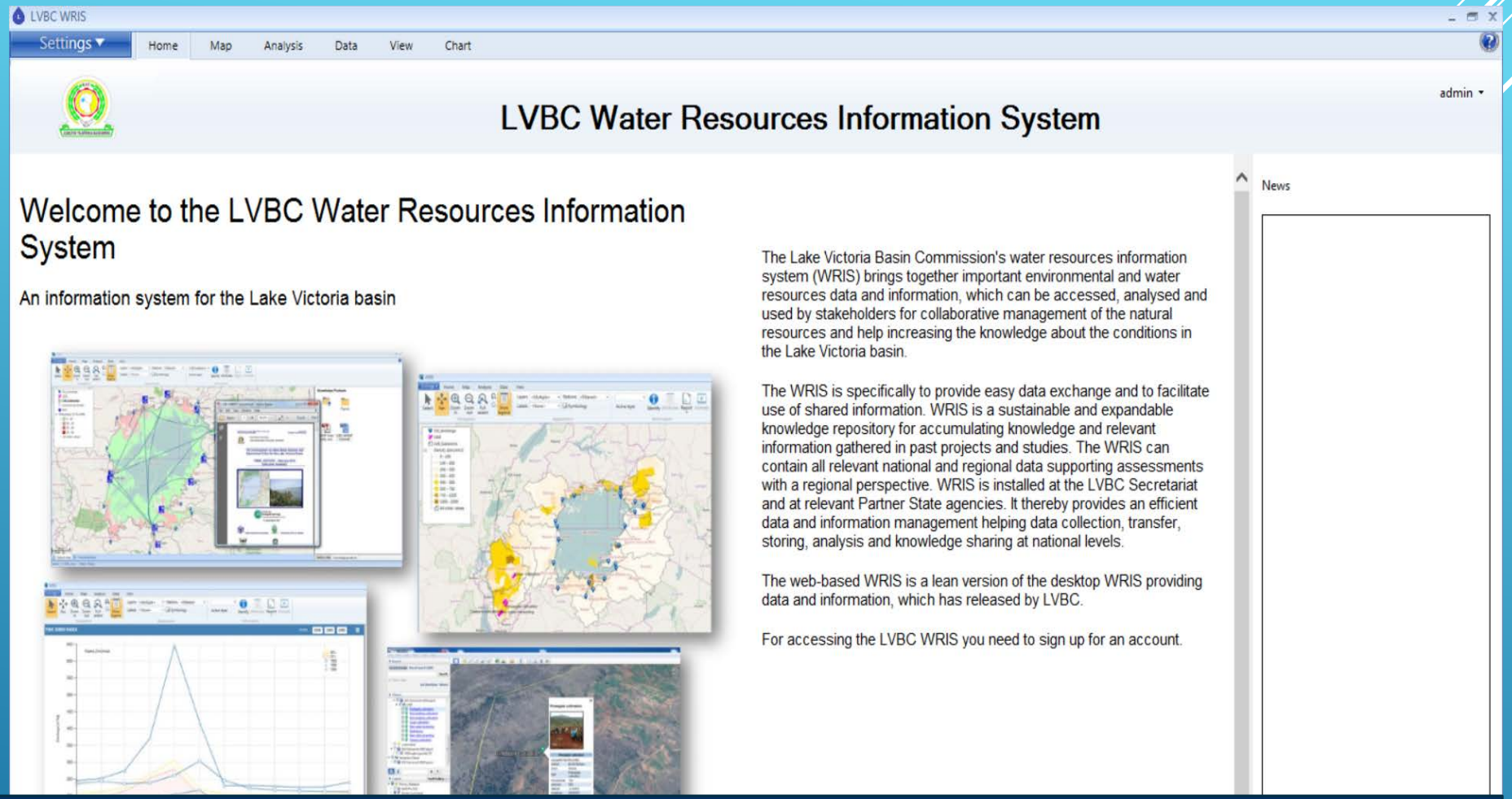


LAKE VICTORIA BASIN COMMISSION WATER RESOURCES INFORMATION SYSTEM - WRIS

Concerns about environmental changes and the strain to the basin's resources led to the creation of the large-scale ***Lake Victoria Environmental Management Project (LVEMP)***, supported by the Global Environment Facility (**GEF**) and the **Government of Sweden**.

In its Second phase LVEMP II's components were designed to:

- Improve the collaborative management of natural resources
- Identify and reduce environmental stress in hotspots and selected degraded sub-catchments
- Better utilize water resources

LVEMP Phase - II thus focused on developing a ***Water Resources Information System (WRIS)*** to monitor surface water, groundwater and effluent water quality, and making this key information available. It includes a GIS-based database for land-use, hydrology, and biodiversity in the Lake Victoria Basin.

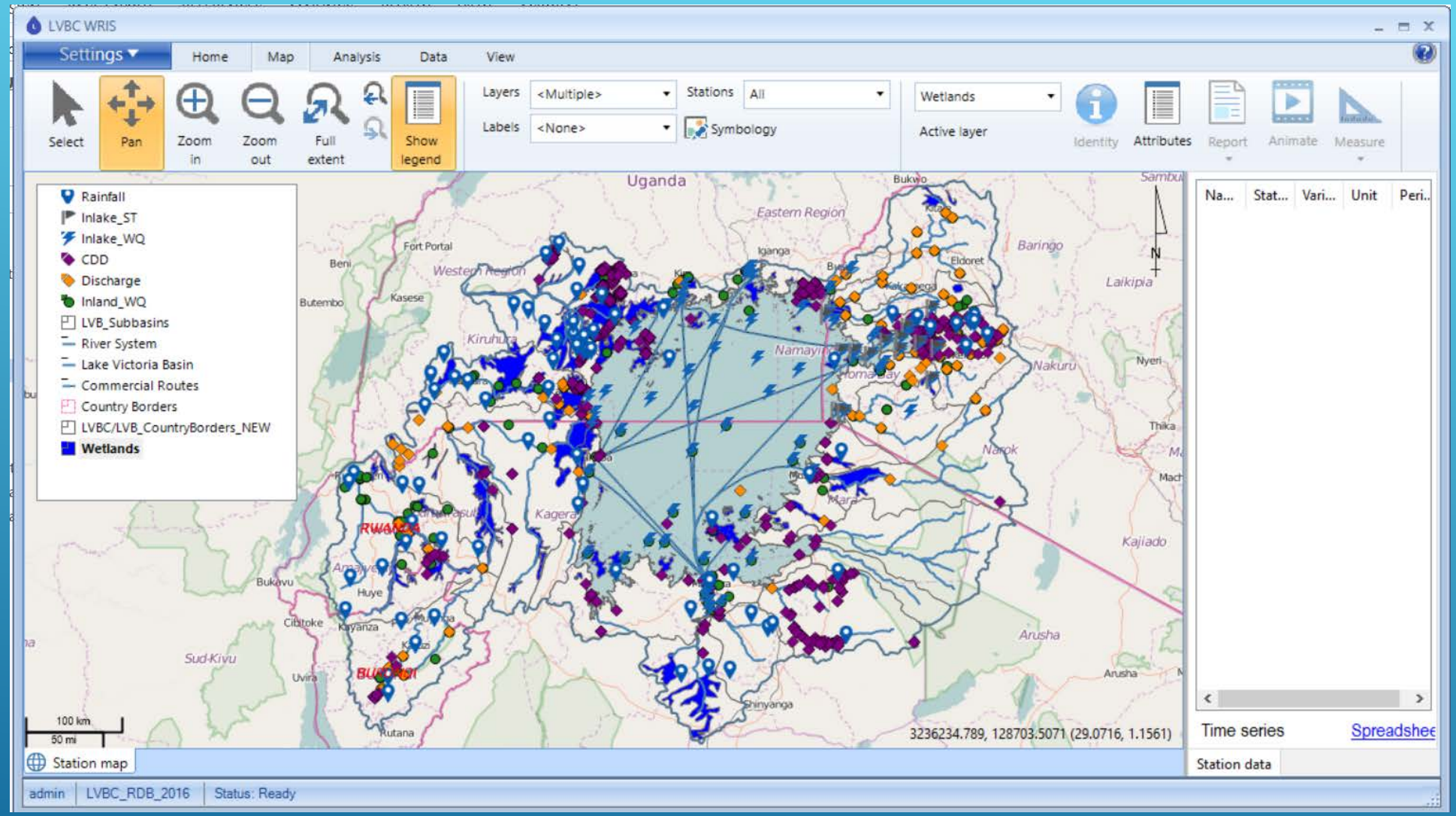
What is WRIS?

The WRIS is an innovative customized software solution based on MIKE INFO - DHI's proprietary software for data and information management that simplifies access to basic data in order to evaluate conditions within the Lake Victoria Basin and the lake itself. The simplicity of the system enables both water experts, environment professionals and professionals without in-depth training to use the WRIS in order to aid their assessments and decision making. With easy and robust data exchange, the system helps to:

- facilitate shared use of information
- provide a sustainable and expandable knowledge repository with information from past and future projects

The WRIS contains relevant national and regional data, supporting assessments with a regional perspective. It is not intended as a substitute for national information systems, but instead complements existing ones. As an important platform, it will enable stakeholders to make better use of data and utilize study findings. This will encourage the creation and sharing of knowledge, leading to improved management and planning.

WHAT WRIS CAN DO



Display of GIS maps over various thematic subjects

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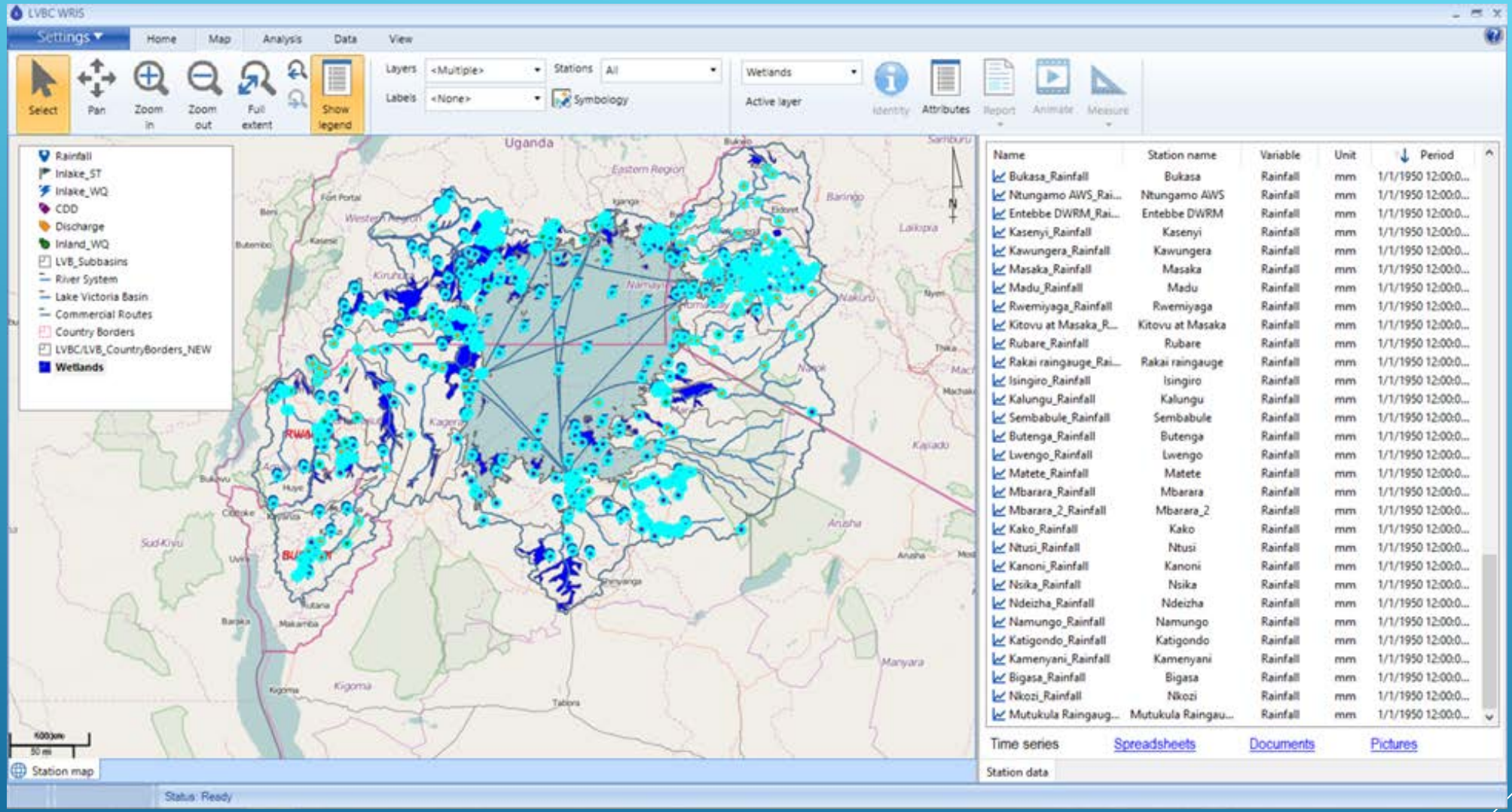

Data Analysis : Time-series from Discharge and Rainfall stations in the basin imported via excel bridge

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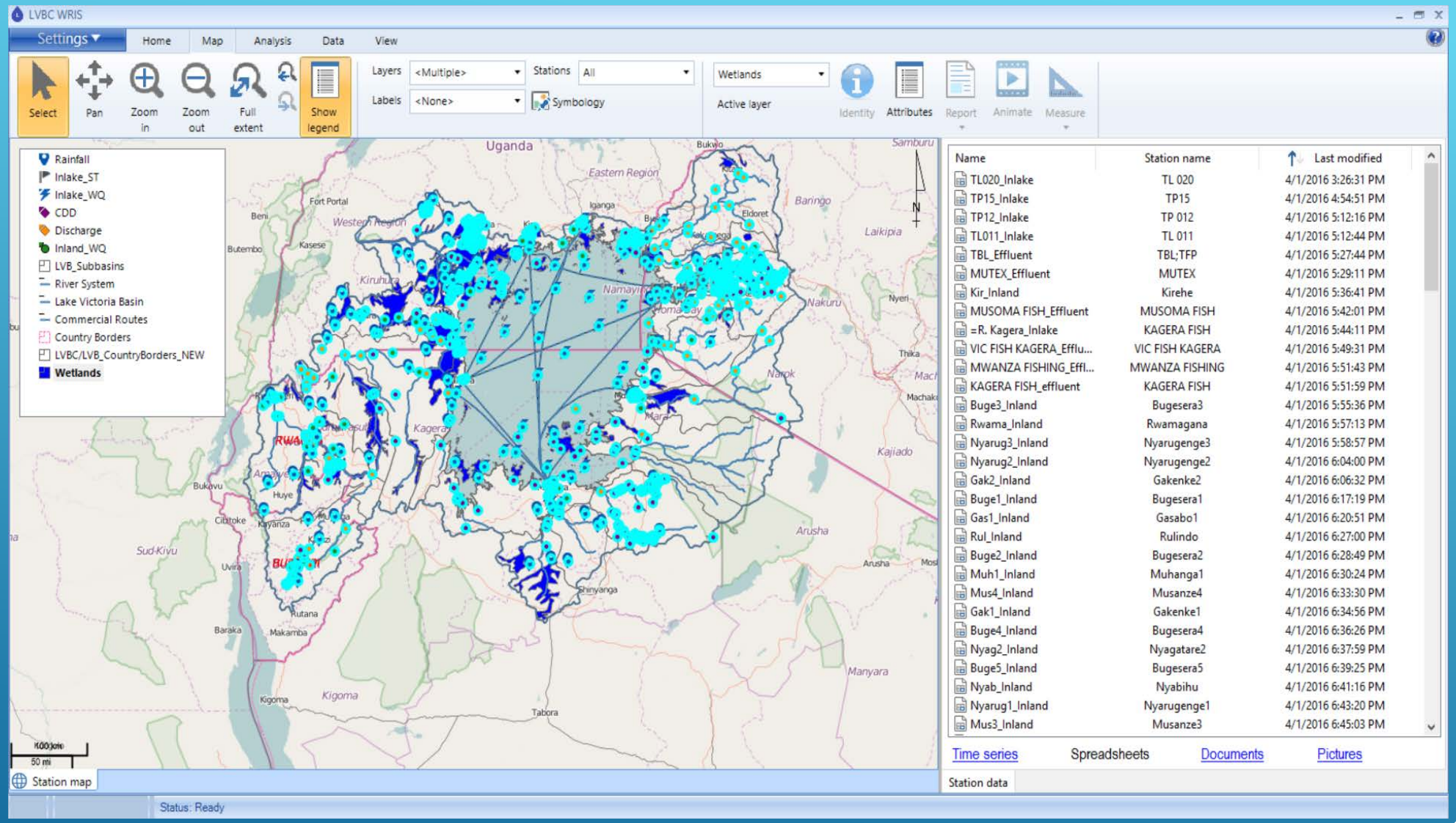
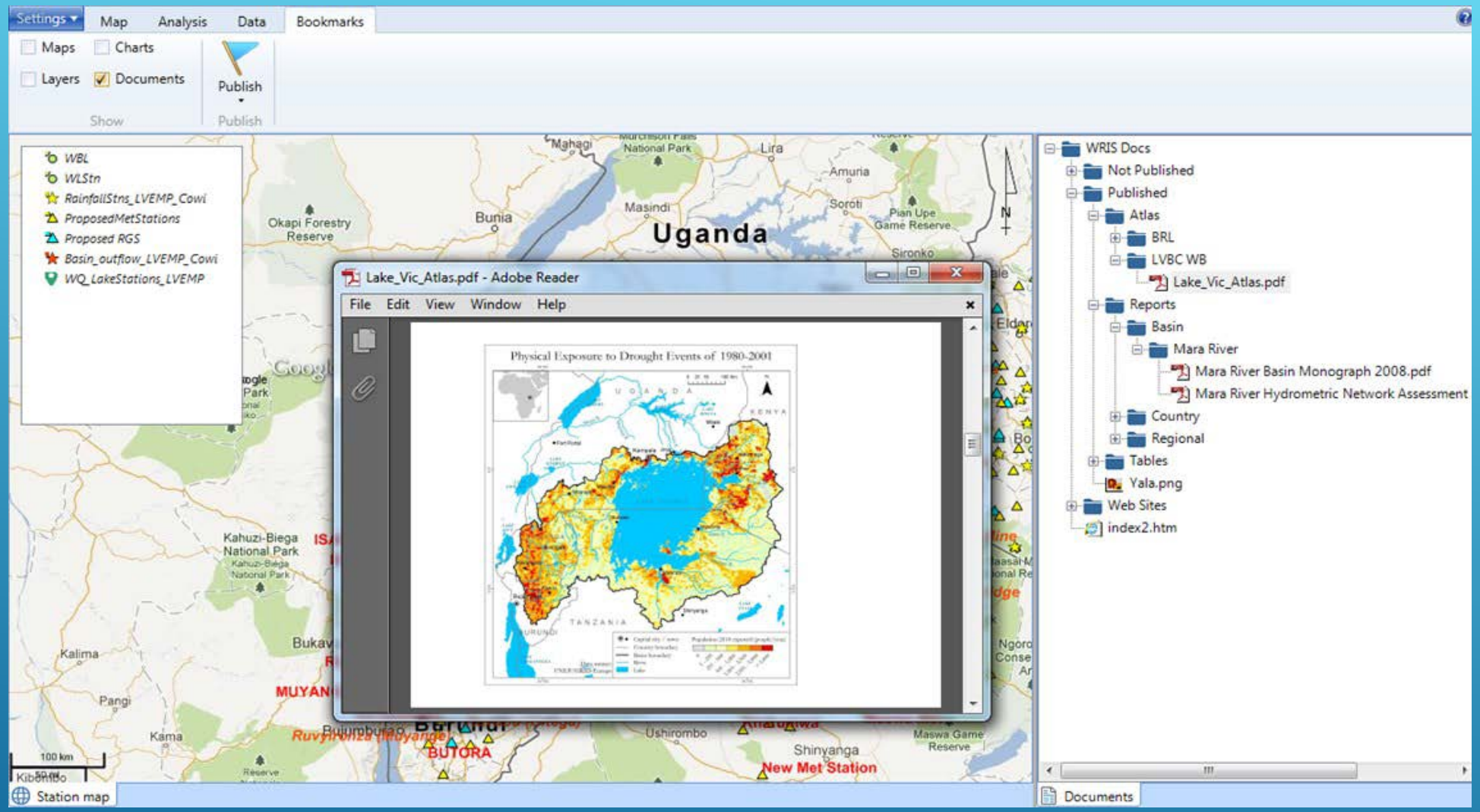
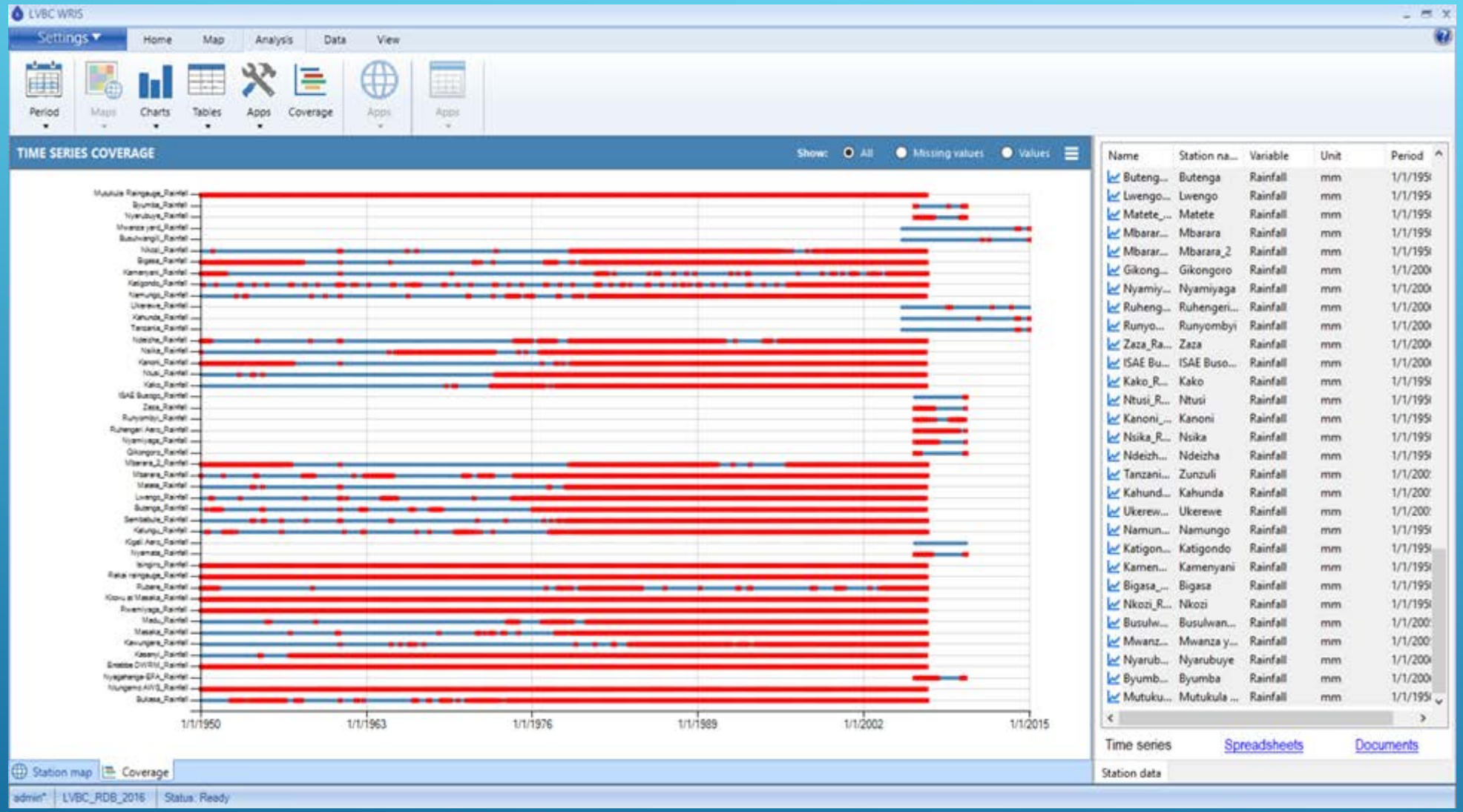


Data Analysis : Water quality spreadsheets from each of the inland and in lake water quality stations

JUMUIYA YA AFRIKA MASHARIKI



Knowledge products with a simplified sharing and Association process



Data Analysis: Rainfall coverage data

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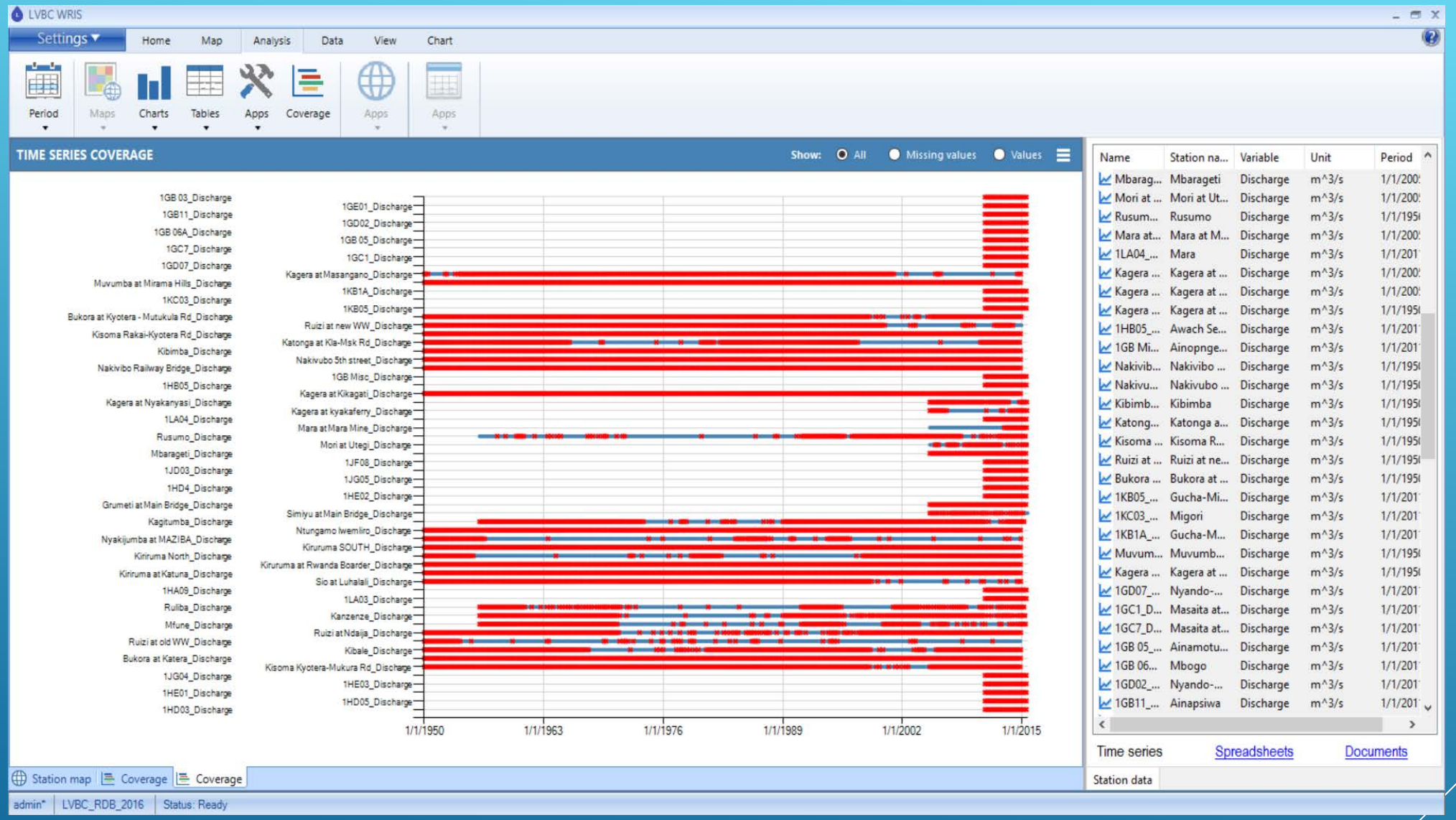
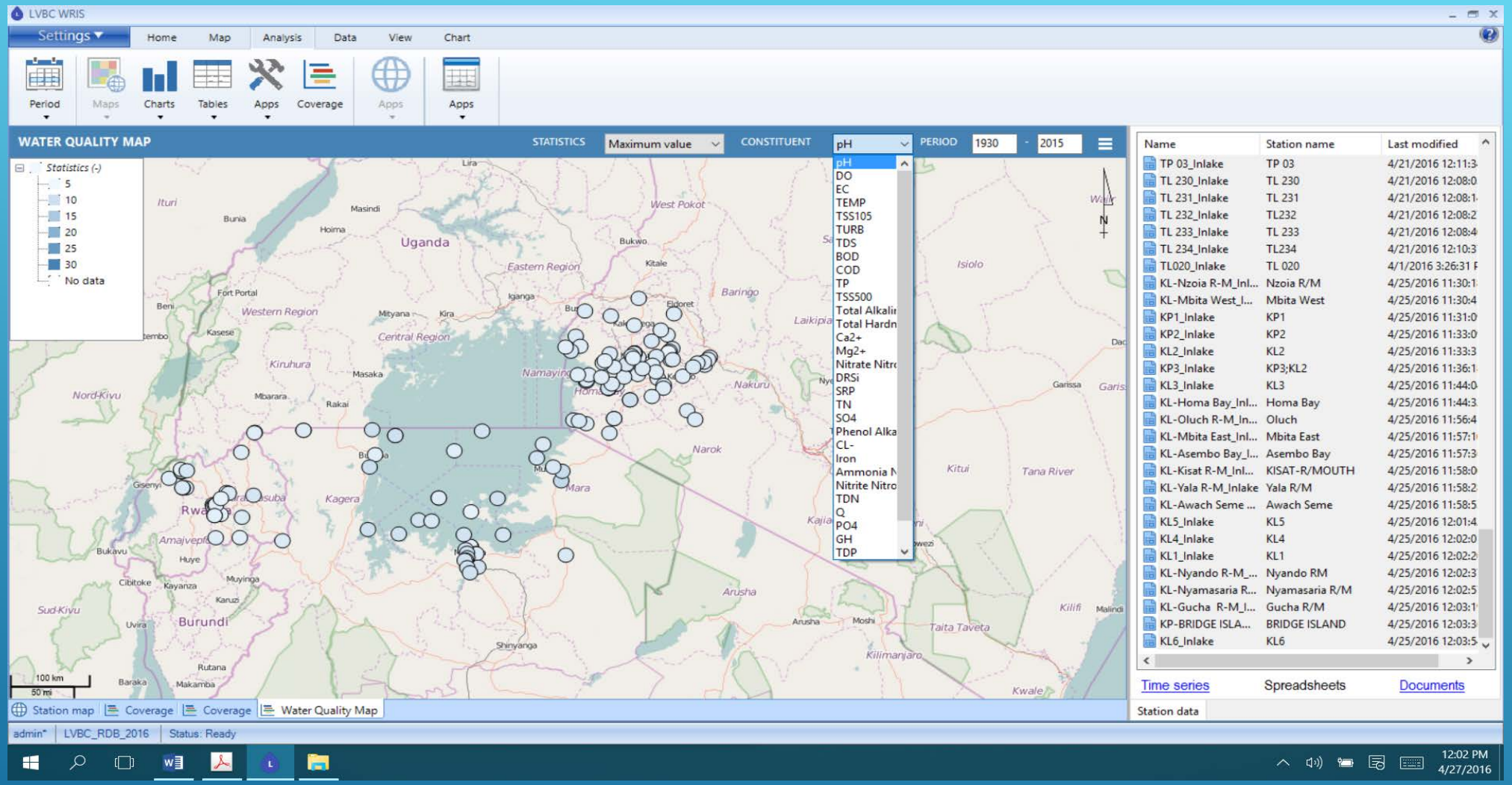


Data Analysis: Discharge coverage data

JUMUIYA YA AFRIKA MASHARIKI



Water Quality map per parameter (dropdown shows some from the list of parameters)

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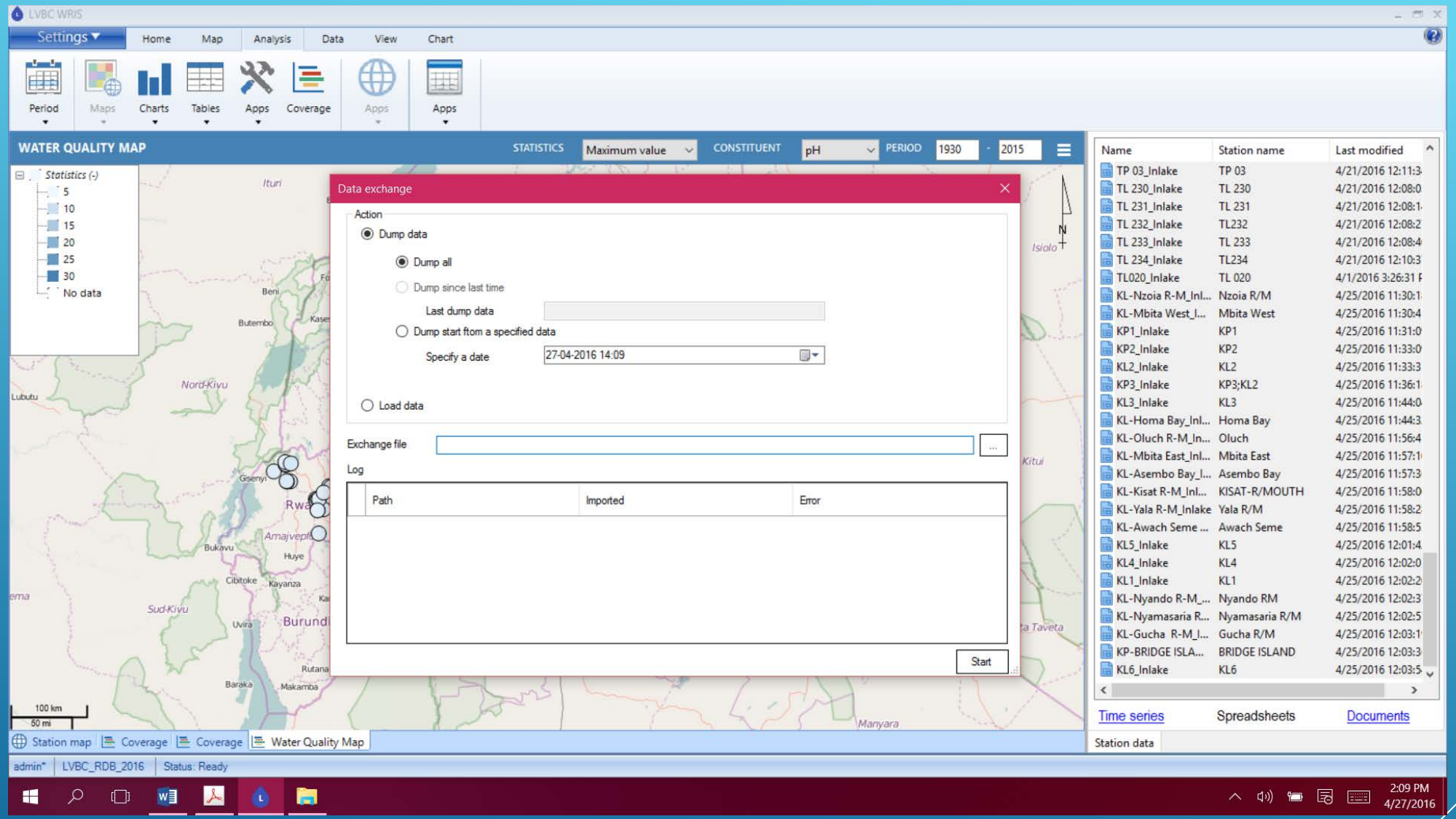

Simplified and Robust Data Exchange

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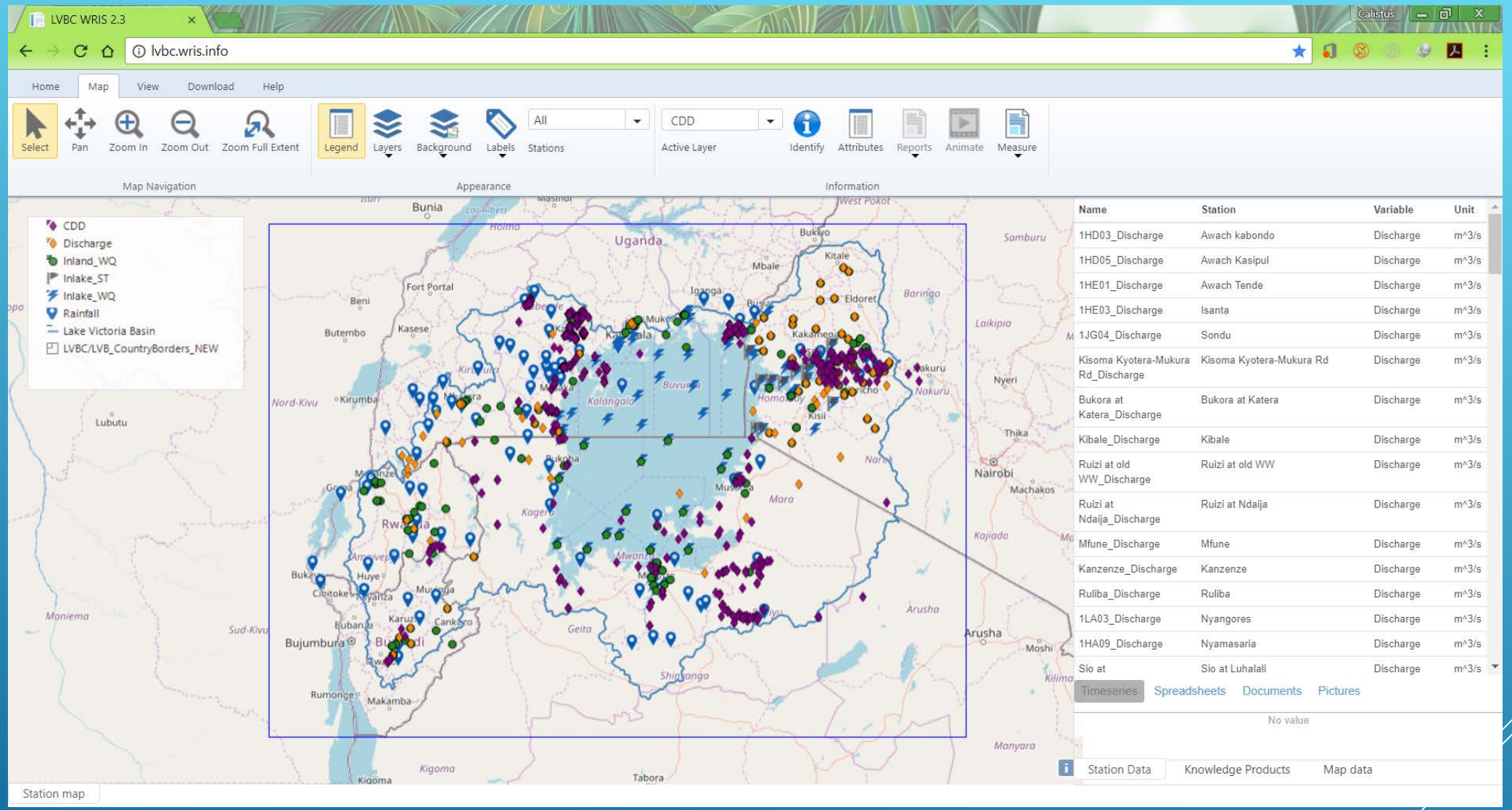

Almost all functionality replicated and available online

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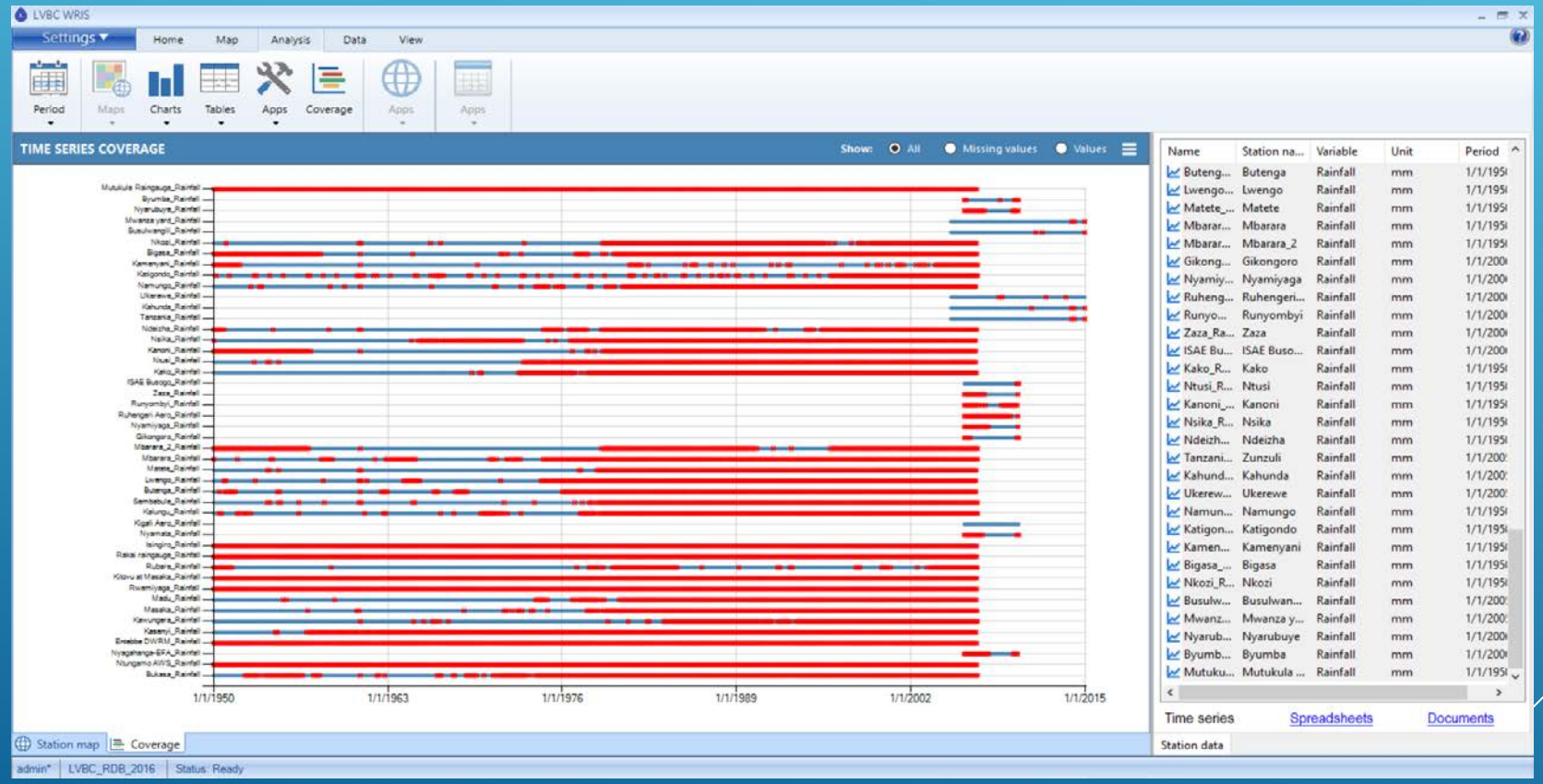
CHALLENGES

- Data Collection and Format adherence conflicts due to different national data standards.
- Missing, Unverified and irregular submission of data



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RECOMMENDATION

Additional funding for the next phase of LVEMP/ alternate funding to:

- Support regular data collection in the partner states to take into consideration data gaps
- Undertake regular regional Data Expeditions
- Support further development of the tool to include additional suggested capabilities from the water experts and partner states' requirements. So that the tools readily and more robustly provides information on the basin and its condition.

LAKE VICTORIA BASIN COMMISSION

THANK YOU!

LAKE VICTORIA BASIN COMMISSION

https://www.lvbcom.org
http://lvbc.wris.info/

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