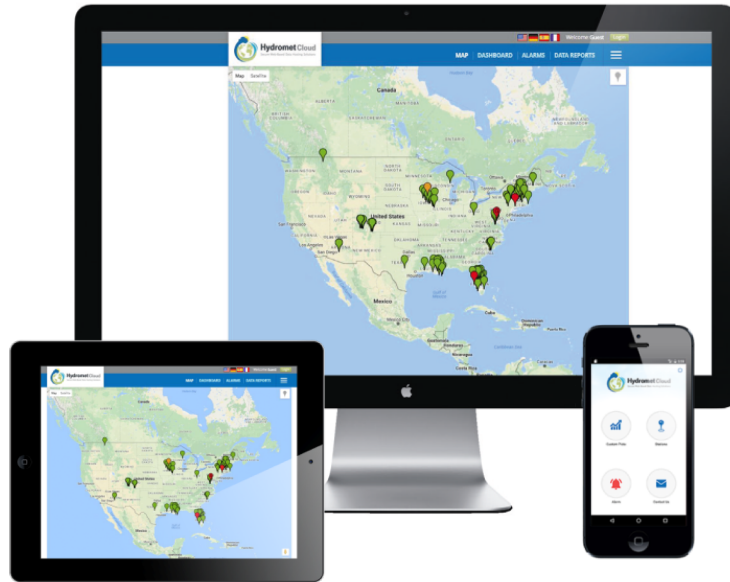




Hydromet Cloud Presentation

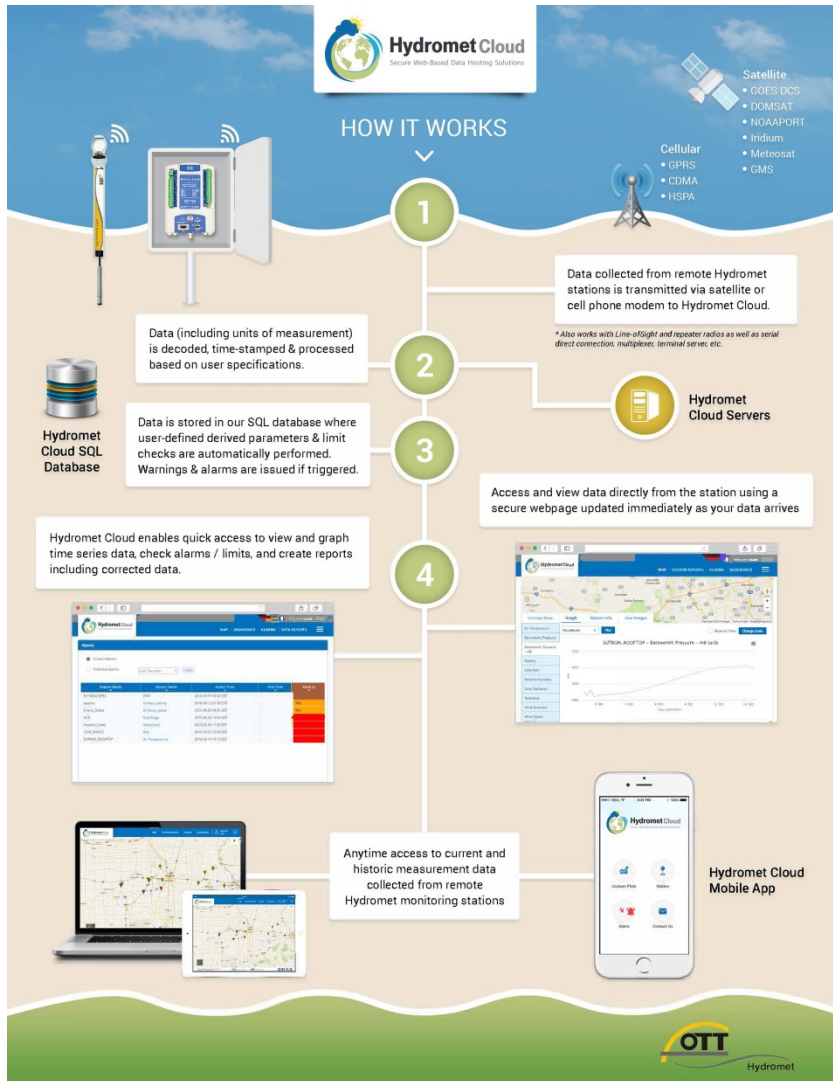


- Hydromet Cloud provides secure real-time data access from almost anywhere in the world via [Hydromet Cloud.com](https://HydrometCloud.com) and the Hydromet Cloud Mobile App.



Hydromet Cloud

Secure Web-Based Data Hosting Solutions



Hydromet Cloud Monitoring Solution

- This includes the backend infrastructure to:
 - Receive
 - Ingest
 - Decode
 - Process
 - Display
 - Store measurement data

- From nearly any remote Hydromet monitoring station via a cloud-based data hosting platform

Hydrology – water level, flow/velocity, and precipitation

Groundwater – water level and water quality

Water quality – pH, DO, conductivity, salinity, temperature, turbidity, nutrients, ...

Meteorology – air temperature, relative humidity, wind speed, wind direction, barometric pressure, ...



Water Level



Depth



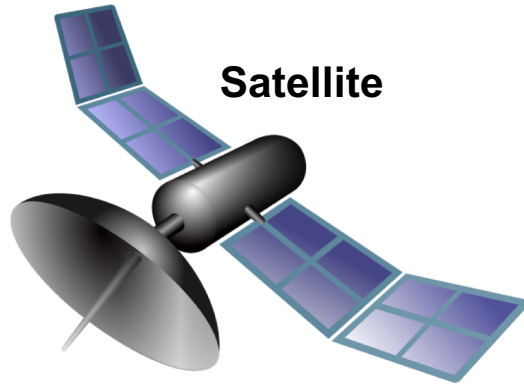
Flow



Precipitation



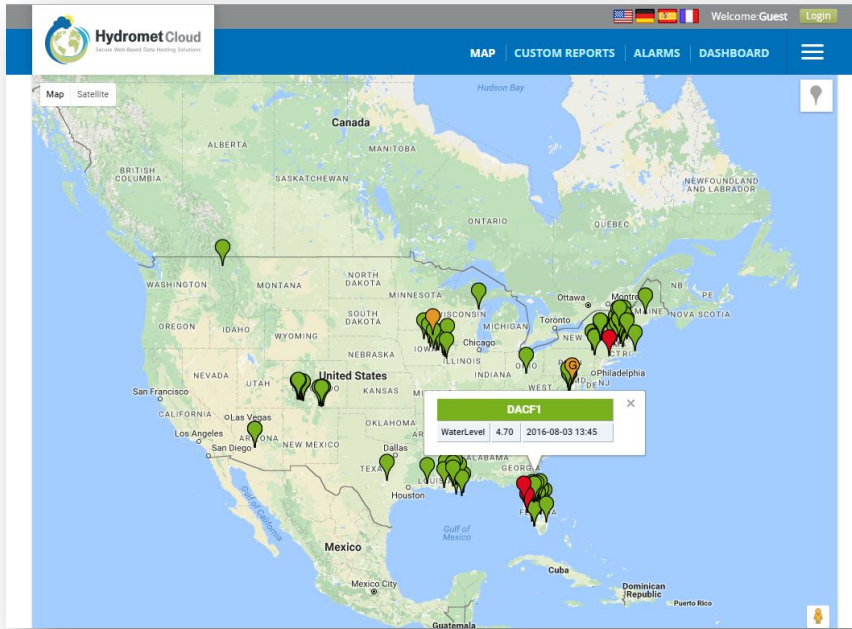
Water Quality



OTT, Sutron collect and transmit data through:

- **Satellite:** GOES DCS, DOMSAT, NOAAPORT, Iridium, Meteosat, GMS
- **Cellular:** GPRS/HSPA/CDMA Modems
- **Static IP:** connect to station with fixed IP on schedule

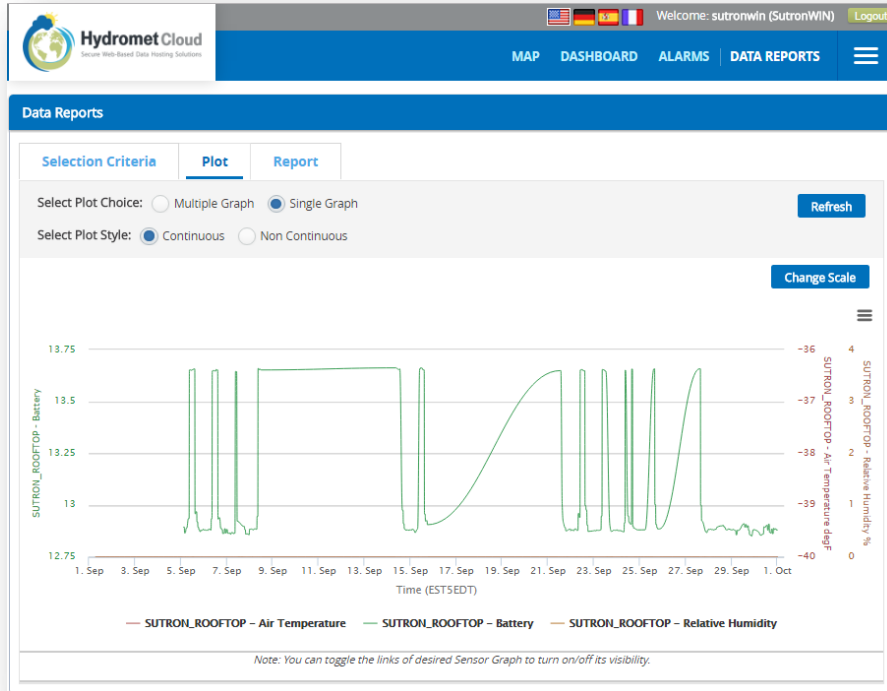




Hydromet Cloud Map View

Anytime access to current and historic measurement data collected from remote hydrometeorological monitoring stations

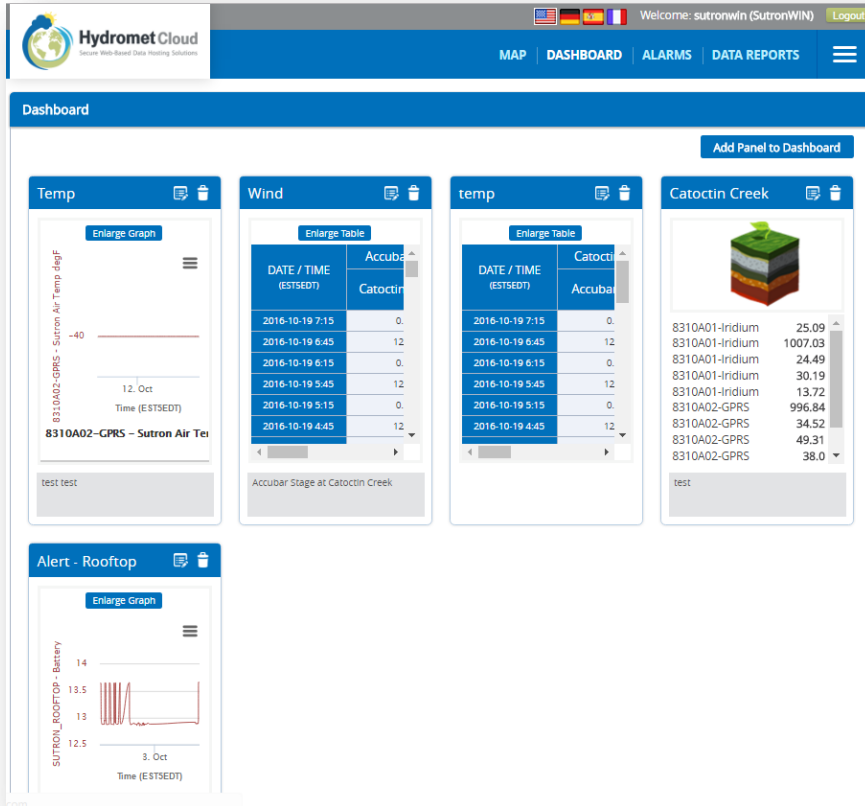
- Secure password protected log-in for multiple users
- User-established management / administration
- Measurement data backed-up in the cloud and stored for at least one year



Custom data reports

Quickly view current data to check current conditions and know the station is running properly

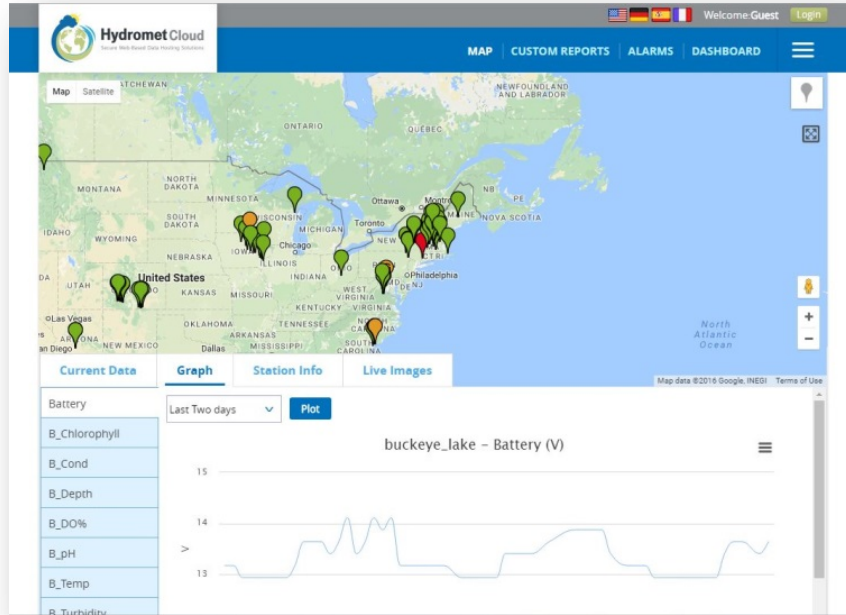
- Map view, based on Google Maps, provides quick view of station location and most recent station data
- Station tab provides quick access to current and recent data, including graphs
- Customizable dashboard enables user defined views of time series data



Dashboard

Design your own dashboard to quickly view and export current and recent measurement data

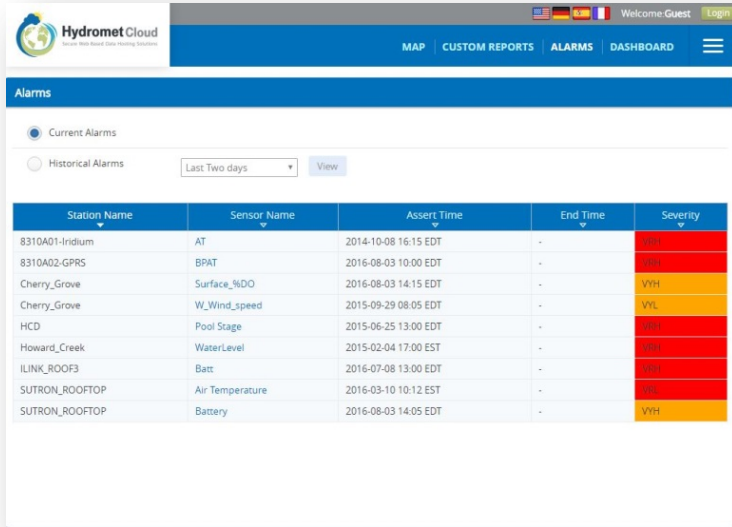
- Customize dashboard to quickly view data from multiple stations or sensors
- Add dashboard panels to view time series or tabular data
- Simple export option for .CSV and .MIS data files



View recent data and trends

Plot data to view and analyze recent and historic trends to identify how the data is trending and the duration of the trend

- Quickly plot predefined range (ex: 24 hrs, 2-day, 7-day, month, etc. or customized date range)
- Compare current or recent measurements from multiple sensors or stations
- Create and save custom plot templates using the mobile App to quickly view current and historic measurement data from one or more sensors



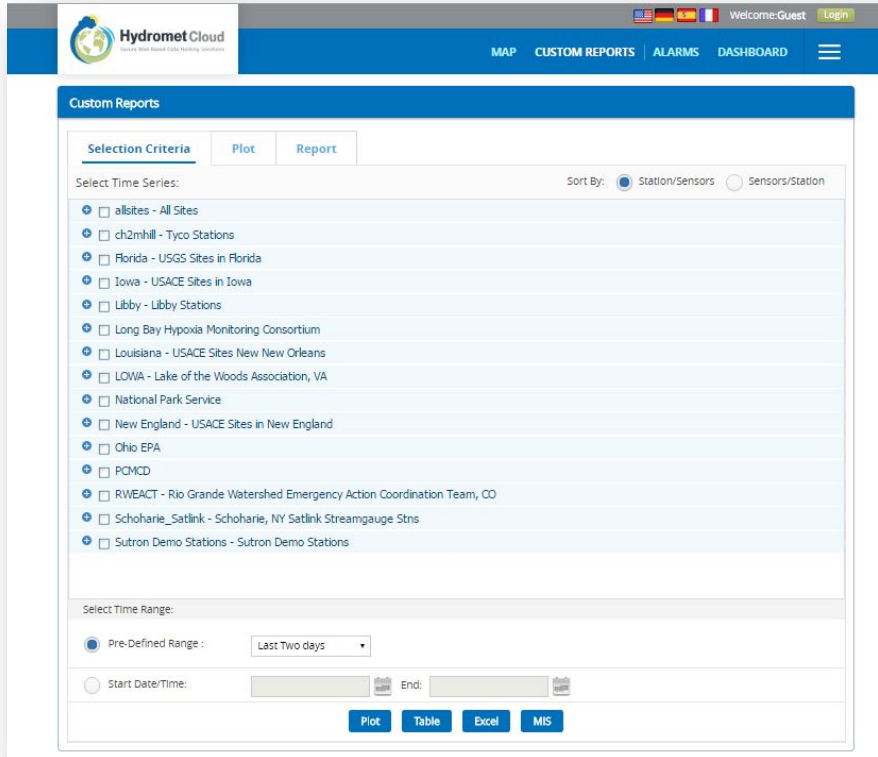
The screenshot shows the Hydromet Cloud interface with the 'ALARMS' tab selected. The 'Current Alarms' section is active, displaying a table of alarm events. The table has columns for Station Name, Sensor Name, Assert Time, End Time, and Severity. The severity levels are color-coded: red for 'VHI', yellow for 'VH', and green for 'VLL'.

Station Name	Sensor Name	Assert Time	End Time	Severity
8310A01-Iridium	AT	2014-10-08 16:15 EDT	-	VHI
8310A02-GPRS	BPAT	2016-08-03 10:00 EDT	-	VHI
Cherry_Grove	Surface_WDO	2016-08-03 14:15 EDT	-	VH
Cherry_Grove	W_Wind_speed	2015-09-29 08:05 EDT	-	VLL
HCD	Pool Stage	2015-06-25 13:00 EDT	-	VHI
Howard_Creek	WaterLevel	2015-02-04 17:00 EST	-	VHI
ILINK_ROOF3	Batt	2016-07-08 13:00 EDT	-	VHI
SUTRON_ROOFTOP	Air Temperature	2016-03-10 10:12 EST	-	VHI
SUTRON_ROOFTOP	Battery	2016-08-03 14:05 EDT	-	VH

Automatic Alarms

Receive automatic alarm messages via email, text message, or voice message for sensor values triggering alarm limits

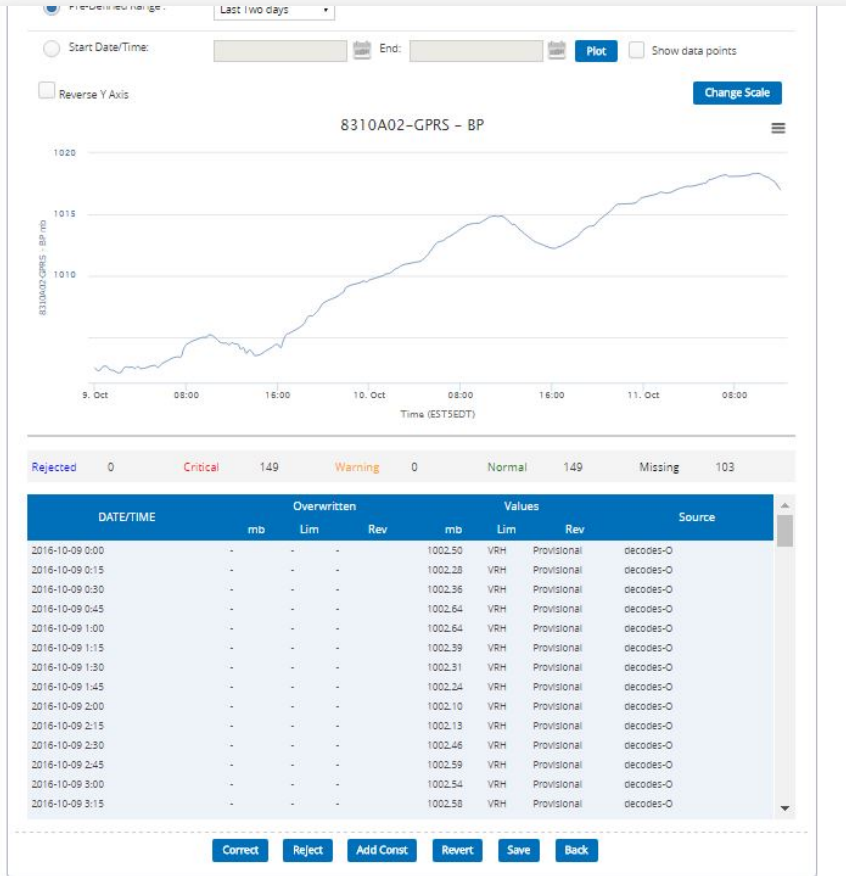
- User definable value limits, rate of change limits, and alarm groups
- Automatic limit checking includes data value and rate-of-change limits
- Separate limits can be set for warning/critical levels
- Colored-coded (green, yellow, red) map pins, data values, and limit lines based on received alert and level
- Use mobile App to receive automatic push notification on your iOS or Android smart phone



Custom data reports

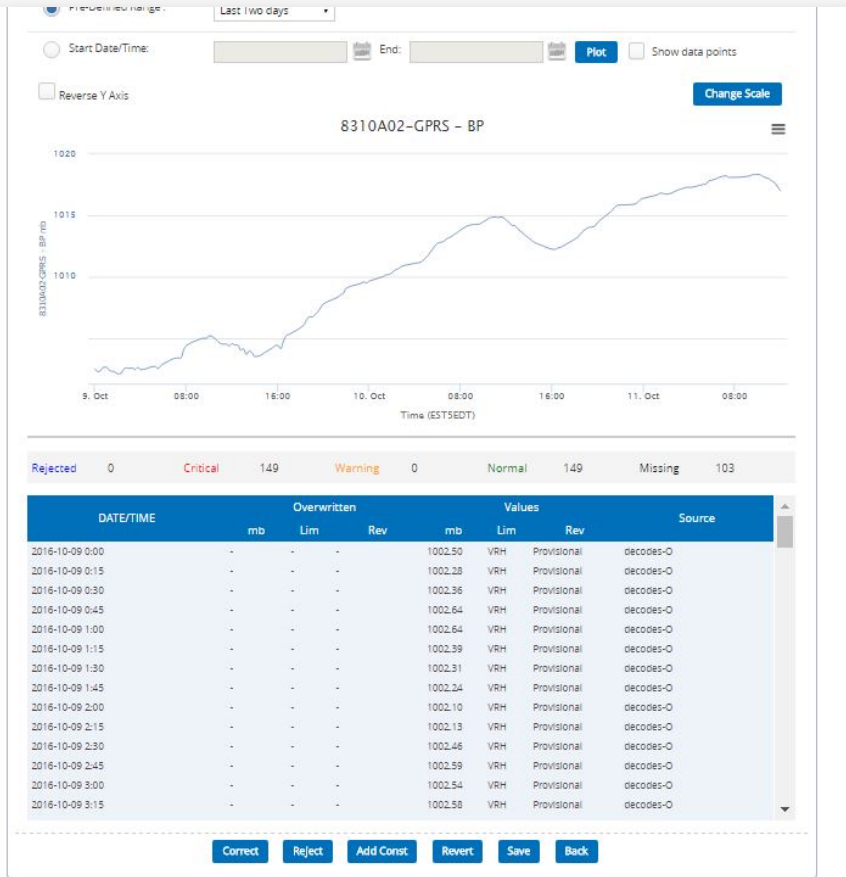
Create and download custom data reports in tabular or graphical format

- Export predefined range (ex: 24 hrs, 2-day, 7-day, etc...) or customized date range
- Export data report as an Excel or OTT MIS file
- User configurable Dashboard to retrieve frequently viewed data displayed as a plot, table, or values
- Use mobile App to view and send/share data directly from your smart phone



Use data corrections to reject or correct measurement data

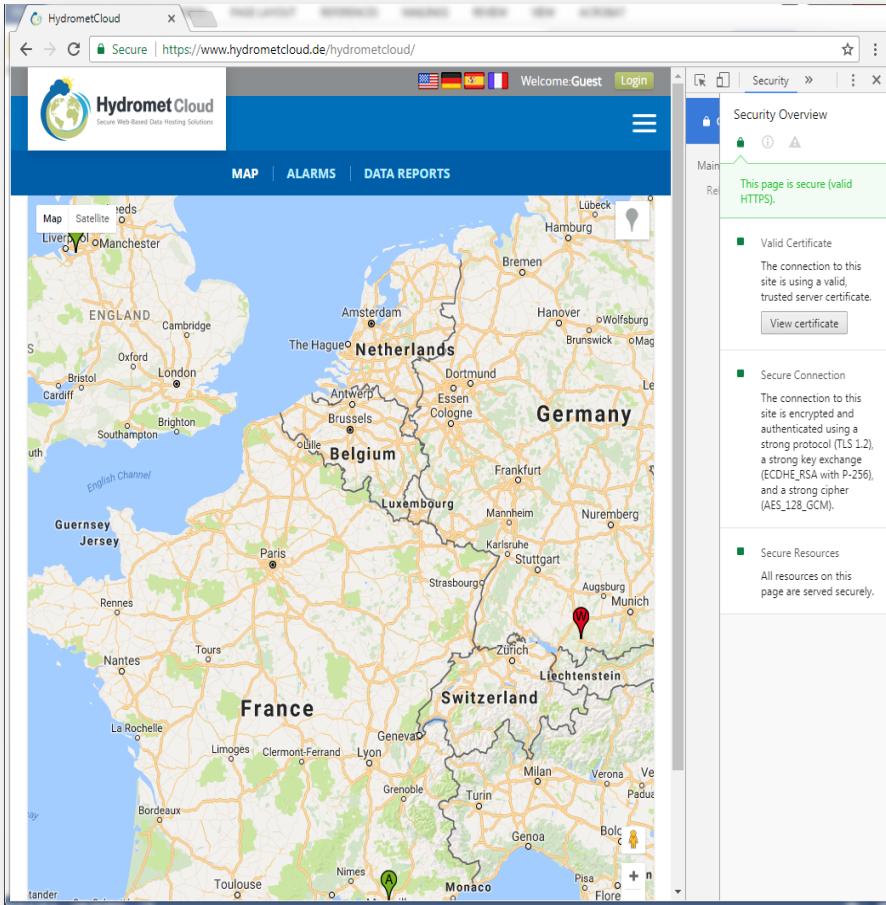
- Reject or accept provisional data
- Enter correct value for individual measurements
- Apply offset to multiple measurement values



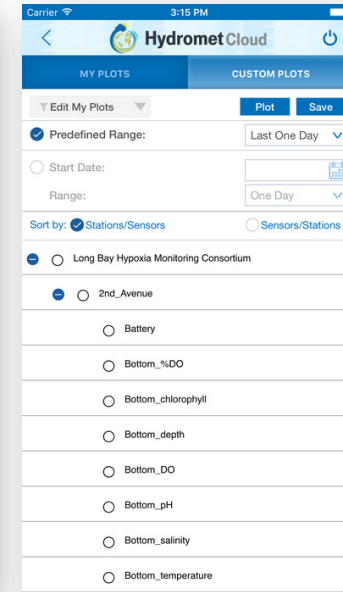
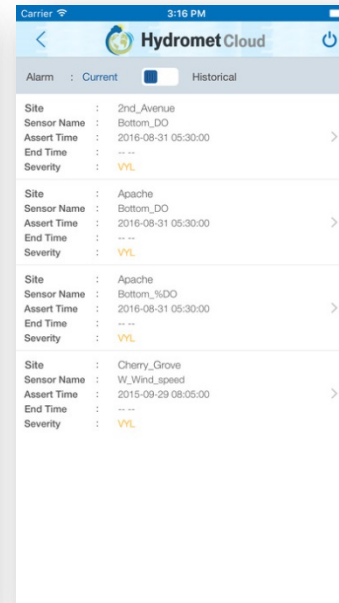
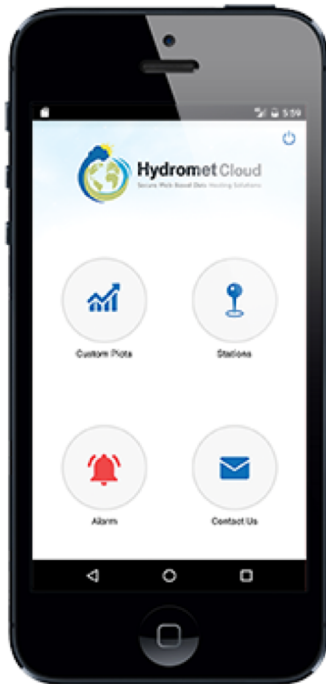
Option to create derived parameters

- Combine parameters (e.g. add coefficients), stage/ flow rating calculation, periodic averages, incremental precip, sum, min /max, etc.

Secure Connection to the Cloud



- HTTP is a hypertext mark-up protocol used for communicating website information between a web server and a web browser. HTTPS adds a secure transport layer (TLS) by encrypting the HTTP protocol messages to protect against eavesdropping, tampering or forgery.
- A certificate, signed by a Certification Authority (CA), is exchanged at the start of the session to authenticate the connection and to establish the encryption scheme and keys.



- Hydromet Cloud allows users to easily access their remote data from their field stations. Hydromet Clouds provides the latest station data and alarm status.
- Users can quickly view data in tabular and graphical form and save frequently graphed data as shortcuts for future use and recall.
- Quickly view current alarms
- Supports HTTPS secure connection.

- **9400-0400** Hydromet Cloud Client Set Up (1-time fee for new Web Account)
- **9400-0402** Hydromet Cloud Station Set Up (1-time fee per new station)
- **9400-0403** Hydromet Cloud per Station Annual Fee for first 25 Stations
- **9400-0404** Hydromet Cloud Service Discounted Recurring Fee for Stations 26-50
- **9400-0405** Hydromet Cloud Service Discounted Recurring Fee for Stations 51+