



WIMS NATIONAL USER CONFERENCE

LEARNING LAB | GRAPH TRAINING



HELLO! MEET THE TEAM.



REBECCA HENZI

Implementation Specialist
Aquatic Informatics



SCOTT MOEHLING

Senior Software
Configuration Analyst
Aquatic Informatics



TODAY'S AGENDA

- Time Series Graphs
- Line Graph
- Variable Analysis Graph
 - Quick Trend
 - Year Over Year
 - Individual-Moving Range
 - Histogram

TIME SERIES GRAPH BASICS



8 DATA SETS

6 on one Y-axis
2 on overlay axis



GROUP DATA

By Frequency
And Summary Stat



HOT GRAPH

Click on a data point to
display the actual data
value



GRAPH PROPERTIES

Almost endless editing –
colors, styles, fonts, axis,
background, etc.

LEVEL UP WITH STATS

Dialog box displays statistical information that can be added to the graph for each of the variables

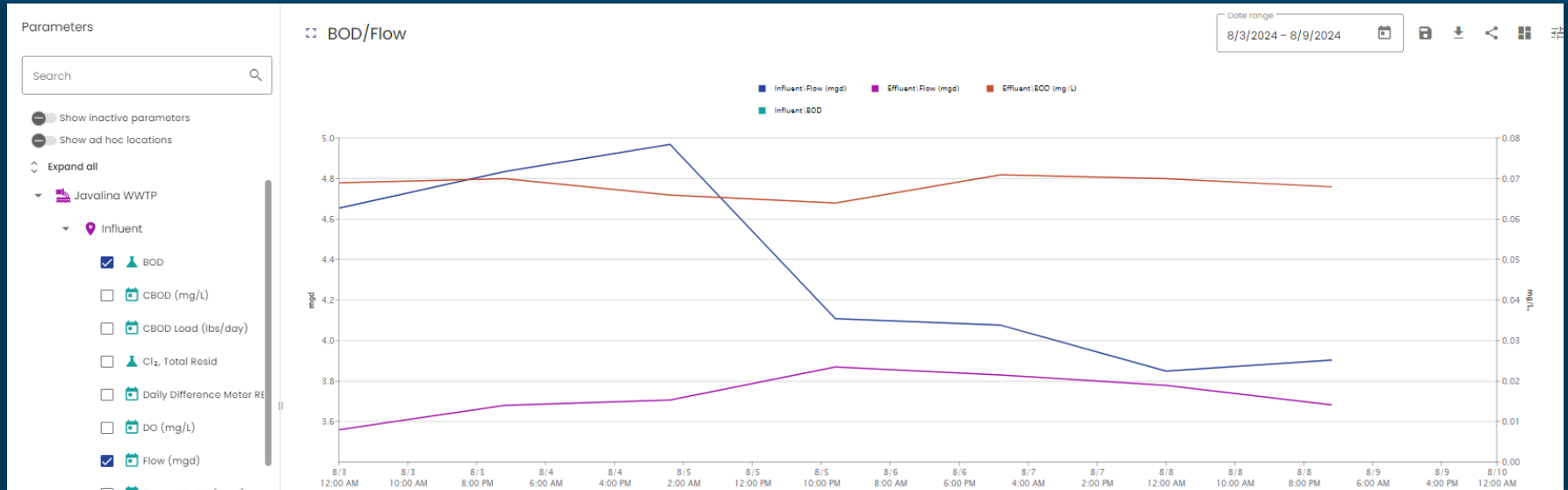
The screenshot shows a software dialog box titled "Time Series Stat Sheet" with tabs for "Tab 4", "Tab 5", "Tab 6", and "Tab 7". The active tab is "Inf Flow". The dialog box contains several sections for statistical analysis:

- Basic Statistics:** # Values: 31; Minimum: 2.500000; Maximum: 4.550000; Mean: 3.047097. Each value has a "Plot" checkbox.
- Limits:** Daily, Weekly, Monthly, Quarterly, and Annual frequency options, each with a "Plot" checkbox.
- Precision:** Mean x 3.27 = 9.9640 and Mean x 2.51 = 7.6482, each with a "Plot" checkbox.
- Standard Deviation:** Variance = 0.208408; StdDev, σ = 0.456517. Includes a section to "Multiply Standard Dev by ± 2 and ± 3 ".
- Quality Control:** A table with columns for Start Date, UCL, UWL, QC Mean, LWL, and LCL, each with a "Plot" checkbox.

Buttons on the right include "OK", "Cancel", "QC Rpt", and "Print Stats".

Start Date	UCL	UWL	QC Mean	LWL	LCL
	<input type="checkbox"/> Plot	<input type="checkbox"/> Plot	<input type="checkbox"/> Plot	<input type="checkbox"/> Plot	<input type="checkbox"/> Plot

WIMS RIO GRAPH BASICS



LINE GRAPH BASICS



10 Variables on
separate y-axis



Heatmap shows
correlation
between
variables



Plot raw data or
averages



Display limit
lines



Zoom in and out



Customize



LEVEL UP CORRELATION GRAPH

CORRELATION STATISTICS



LINEAR

Default statistic.
Measures the strength and direction of a relationship between two variables



GEOMETRIC

Measures the relationship between two variables based on the idea the correlation is the angle between their observation vectors.



EXPONENTIAL

Shows a non-linear correlation between two variables that can be tested using the linear correlation coefficient



THIRD ORDER POLYNOMIAL

A type of correlation which establishes the accurate relation between the given data.

VARIABLE ANALYSIS GRAPH **BASICS**

01

TREND GRAPH

Data over time

02

YEAR OVER YEAR

Overlaid data for one variable for the same time range for up to 5 years

03

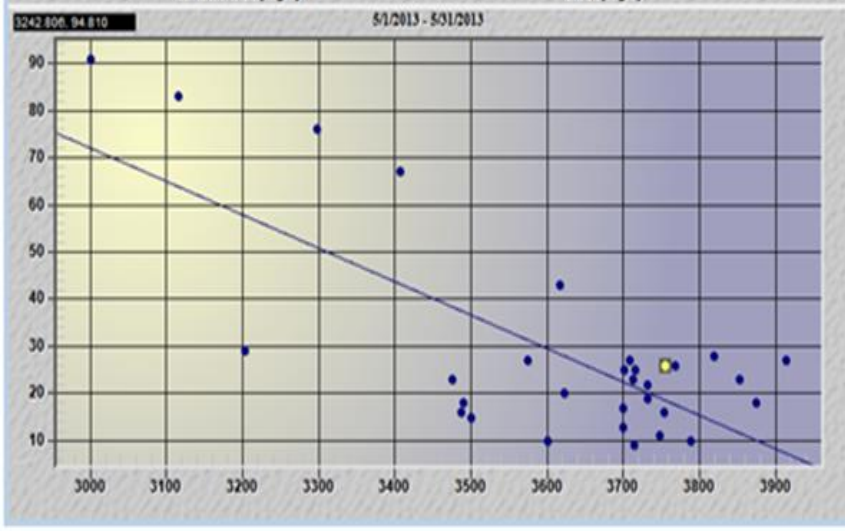
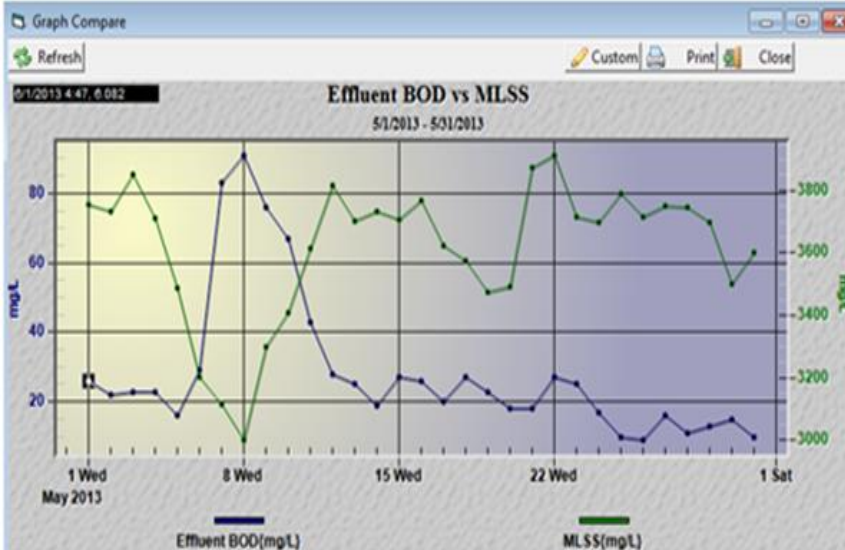
MOVING RANGE GRAPH

Creates a picture of how the system changes over time and if the process is stable and predictable

04

HISTOGRAM

Shows the frequency of certain variables values in a bar chart



LEVEL UP

COMPARE GRAPH

Two variable trend graph and scatter graph to determine if there is a statistical correlation between two parameters

Suggest button will display the correlation calculations for selected variable

QUESTIONS & DEMO



THANKS!

ANY QUESTIONS
OR COMMENTS?

AQUATIC INFORMATICS

