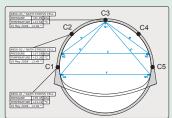
## **Data Visualization Software**

## **Key Features**

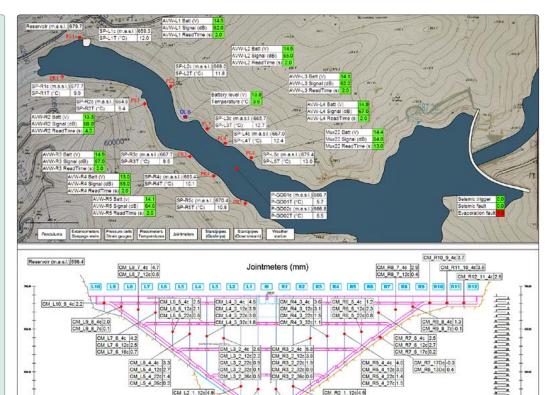
- Presents the project as a series of maps or photographs with icons indicating instrument locations with live updates
- Custom graphing capability including x-y, dual y-axis, and displacement (IPI) plots
- Programmable alarm limits
- Functions to output max, min, sum, average and rolling average
- Automatic reports
- Data validation function





 VDV screen shot showing sensor locations and data on a site photo (bottom image shows the same information using an engineering drawing).

\*VDV screen shots provided courtesy of: **GKM Consultants, Inc.** | www.gkmconsultants.com



VDV screen shot\* showing sensor locations and data on a site map (above) and dam cross section (below).

## **Overview**

Vista Data Vision (VDV) is a hosted software package that organizes and displays data collected from almost any datalogger system including the **GEOKON®** 8600 Series, Micro-1000, Micro-800 and LC-2 Series Dataloggers for viewing over the Internet via all major web browsers, such as IE, Firefox, Chrome and Safari among others.

The software platform provides the user of a system comprising one or more dataloggers with a customized sign-in page (with corporate logos and text) which leads to an overview of all the data on a single web page configured with a map or a photograph showing (where space permits) data boxes with latest values (including alarms).

Users can view and display data from multiple sensors in graphical format which makes it possible to identify max,

min and average for any period of time. Data can also be viewed as a table and downloaded into a .txt file. Graphical options include x-y, dual y-axis, histogram, sort by size and displacement plots (for In-place Inclinometer profiles).

**GKIVI** Consultants

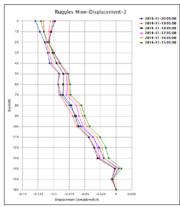
An optional add-on "VDV Burst Data" allows dynamic data, in waveform or histogram format, into VDV for online display and reporting.

Up to 6 graphs can be displayed per page, and each graph can be toggled to view in a larger format. The number of pages that can be created is unlimited and functions are included to manipulate and convert data and to provide automated reports. Reports can include Tables, Graphs, list of Alarms, Sensor Readings, Notes among others, and can be sent automatically on daily, weekly or monthly intervals to specified users.

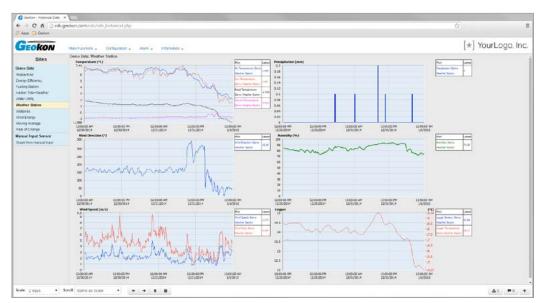




• Custom Login screen, for data access and viewing via the Internet.



Typical IPI displacement graph.



• Typical data overview page (6 graphs per page).

Documents & Notes can be assigned to any site (datalogger) to provide valuable information and site-related details and to keep a maintenance diary for the project by adding text and/or photographs, etc. via the web interface. Instrument instruction manuals and calibrations can also be uploaded in similar fashion.

A built-in diagnostic confirms ongoing datalogger activity and a data update monitor will indicate if there are any problems with the data collection interval. Thresholds

(including LL, L, H, and HH limits) can be configured for each sensor such that alarms can be sent via email or SMS\* to authorized personnel in the event that the threshold values are crossed. Acknowledgement of alarms is achieved via the web interface.

Where required, customers can be given password-controlled access to automatically download or to enter manually collected data, view tables and graphs, edit alarm thresholds etc.

## **Data Hosting Service Configuration**

Provided by GEOKON	Provided by Client	Notes and Disclaimer
Graph per sensor or per group of sensors	Correct name for each sensor, initial reading for each sensor (default is the first logged reading) and the corresponding unit(s) of measurement	It is the Client's responsibility to program the datalogger, to install and configure the IP Cellular Modem, to test that it is connected to the Cellular Network and to verify that data is being collected.  The operational cost of the IP Cellular Modem is paid by the Client.
Setup of alarm for low battery voltage/missing data collection	n/a	
Scaling of sensor readings	Calibration sheets for each sensor, and sensor name as found in the datalogger dat file	
Missing data alarms (issued if there has been no data collection for a certain number of user specified intervals)	Number of missed intervals before alarm is raised (default is 2 intervals)	
Creating cumulative displacement graphs for In Place Inclinometers	Drawing showing IPI locations and depths	
Creating Real-Time Displays (RTD) showing latest data of each location on top of a background image	Background image (1000 px × 650 px) for each RTD display	Although the Data Hosting Service runs 24/7 there is no guarantee that it will never stop or that there
Creating Information Page for each datalogger, attached sensors and other pertinent info	Photo or photos of the site, the datalogger enclosures and equipment along with descriptive text	will never be any errors. In the event that errors are discovered or iw the service stops then the fault will be corrected as soon as possible.  It is the Client's responsibility to check that the data is being displayed correctly and all its associated handling including alarm settings and functions is correct and performs as expected.
Setup of (1 to 3) contacts who will receive sensor alarms (emails or SMS*)	Email addresses of staff members authorized to receive alarm messages	
Add documents to the Clients project (5 docs max)	Documents to be accessible for download from the Data Hosting Service	
Setting alarm thresholds	Settings, LL, L, H and HH for each sensor with alarms	
Setup of 3 usernames and passwords for access to the web based data hosting service	Specify Admin, Technical or General (Admin users have rights to alter graph layouts, create new graphs, adjust alarm settings, etc.)	
n/a	Corporate logo (if required)	No liability is accepted, neither for direct nor consequential damages.
n/a	The Cellular Modem's IP Address and port number or WiFi Modem	
n/a	The Datalogger's PakBus Address and Security Code	

<sup>\*</sup>Please contact GEOKON for details regarding SMS.



