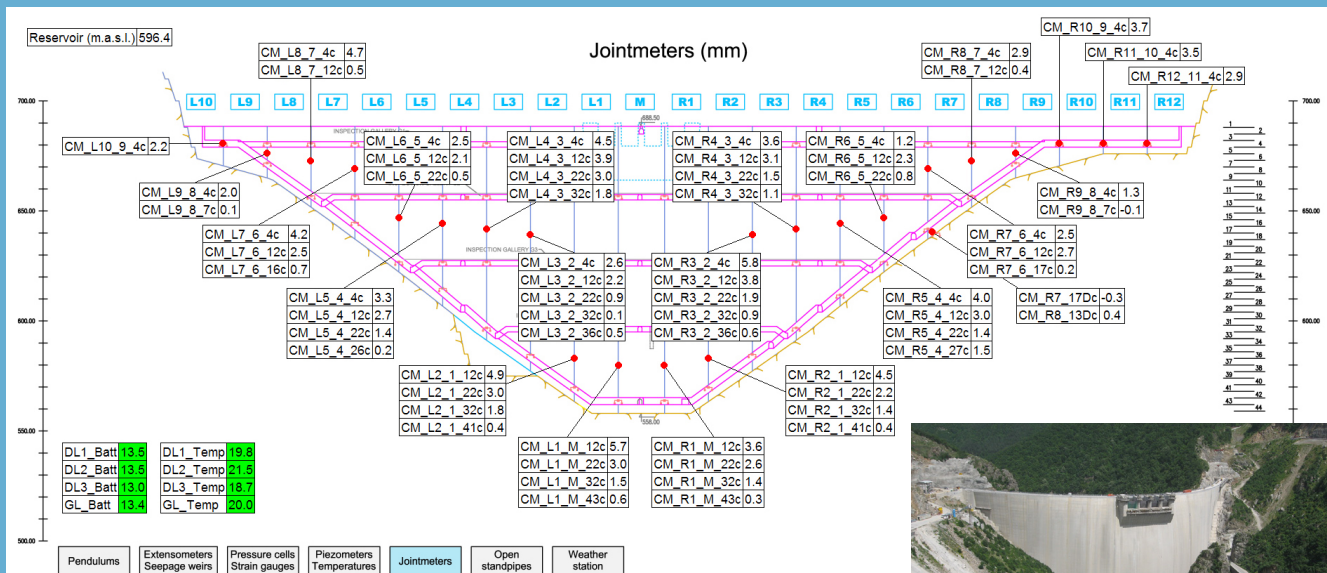




# VISTA DATA VISION

**SENSOR DATA MANAGEMENT  
FOR GEOTECHNICAL PROJECTS**



## What is Vista Data Vision

VDV is a comprehensive sensor data management system for monitoring measurements, storing data in a database, offering web access, alarm service, reports and application specific data handling toolkits for various disciplines.

## Who is using VDV

Our clients include consultants, contractors, researchers and educators in the fields of Civil Engineering, Geotechnical Engineering, Mining and Environmental Monitoring.

## Why use VDV

Use the advanced and robust VDV data management system to shorten time to deployment and lower operational cost as well as to provide the best tools for day-to-day operations and research work.

## TWENTY YEARS AND GOING STRONG

Since its beginning in 1984, Vista Engineering has been working with data monitoring systems. As soon as computers and programming became affordable we launched our first version of VDV in 1991.

VDV has since that day been in constant evolution adding new technologies to its core of functions.

Now, with its advanced Visualization Interface, and important features like Web Service, Displacement Graphs, Google Maps, Summary Reports, Alarm Service, Trend Lines, Web Cams, and Vibration Data support, VDV is the most powerful Data Management service available for any type of project.



## 2 WAYS TO RUN VDV

*Contact us and get a quote for your projects.*

### VDV In house

Install and Deploy VDV on your own server and run a data service. Data will be collected and stored in a database which is in-house. Users will use a web browser to access the real time data. We provide the software and you take care of the hardware and maintenance. You have full control of the system and can make all changes needed on your server.

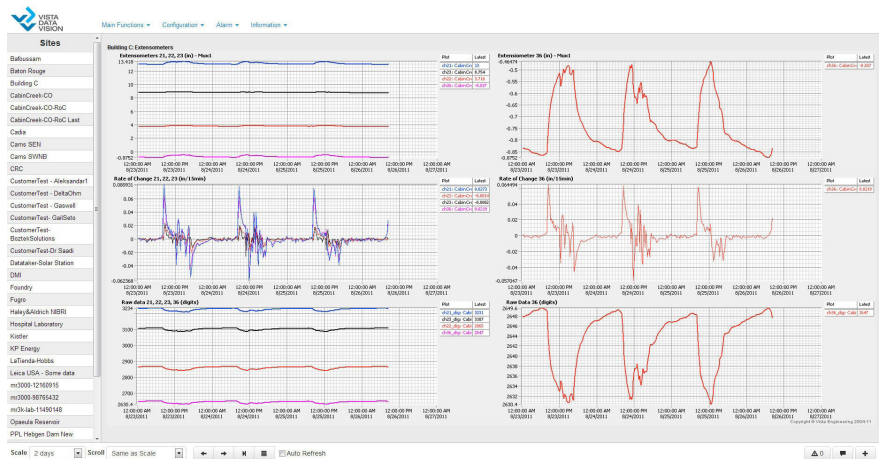
### VDV Hosting

Data is sent to our server and users can access the data through a web browser. We take care of all software and hardware maintenance and you can focus on the monitoring project. You have access to a VDV Specialist to get your projects up and running quickly.



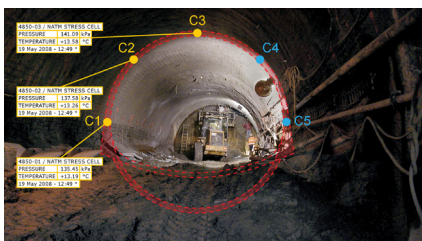
VDV is mobile ready - Access sensor data anywhere and anytime

**VDV makes it easy to store data from different sources, handle large amounts of data and view it on the web.**



Vista Data Vision web page layout

## THIS IS VISTA DATA VISION



Real Time Displays

### All Included

The Vista Data Vision (VDV) Data Management System contains powerful tools to store and organize data collected from a wide variety of data loggers. Using an intuitive interface, it only takes a few mouse-clicks to configure data storage, data visualization, alarm settings and web service.

### Powerful

VDV operates on top of small and large data logger networks containing tens and hundreds of dataloggers connected to thousands of sensors and serving a large number of users.

### Visualization

A picture is worth a thousand words - This is the philosophy of VDV, with its graphical interface for all functions like Trend Lines, Alarm Notifications, Real-Time Displays, Google-Maps and Dashboards.

### Quick Reports

Data is more than trend lines. VDV offers Quick Reports to help users gain more information from time series. Quick Reports include XY graphs, Intensity Graphs, Overlay Graphs, Sort by Size, Histogram, Wind Rose and Download of Data.

### Geotechnical Data Handling

VDV offers various visualization options useful for the Geotechnical Industry. This includes the display of typical inclinometer data, SAA data, displacement graphs, vibration data and much more.

### Web Service

VDV has a built-in comprehensive Web Service serving any number of web-based users.

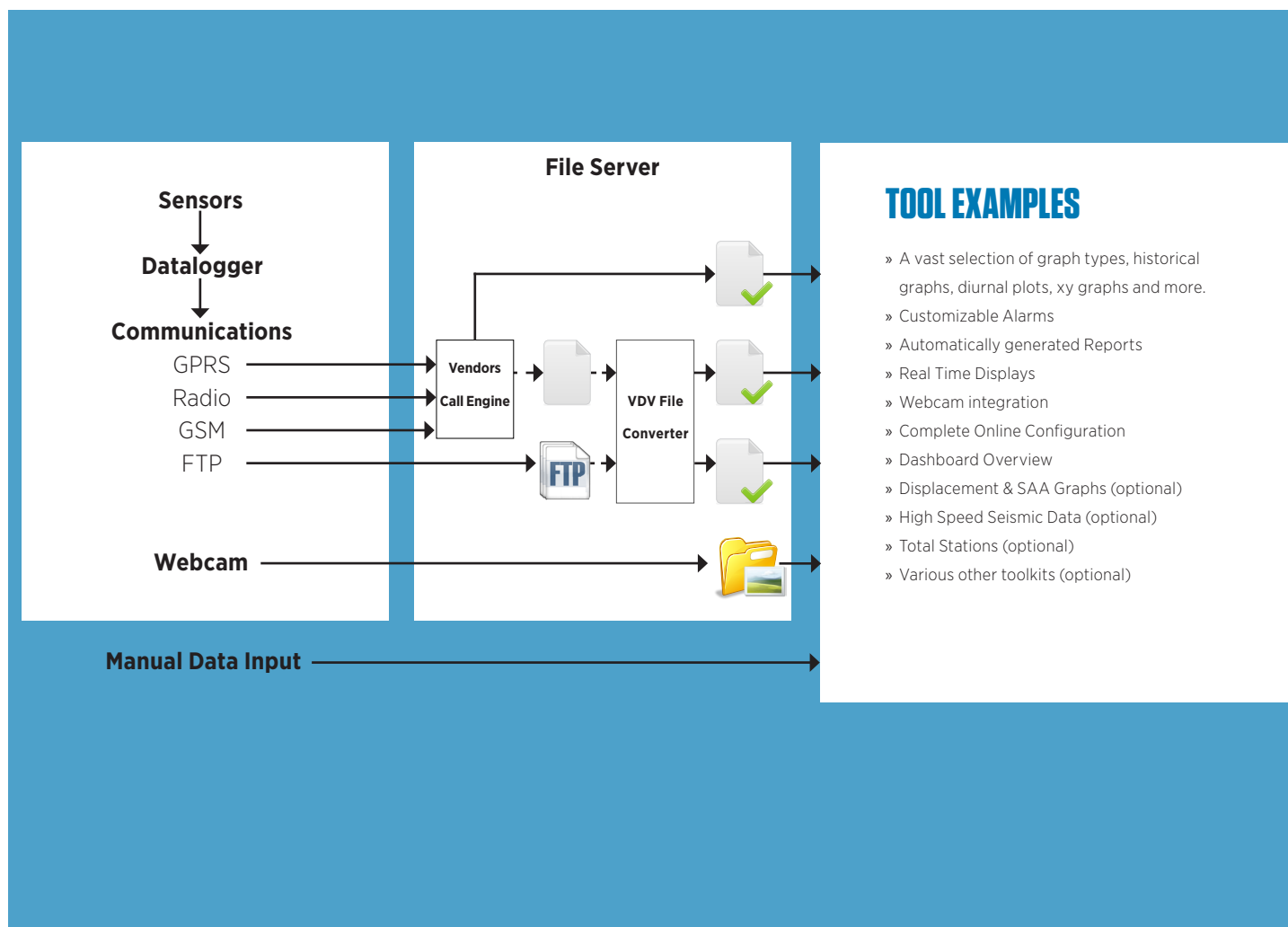
### Hosting Service

VDV is the perfect choice for running a web based Data Hosting Service for your colleges and clients.

### Operating System

Vista Data Vision can fully exploit the latest technology for improved performance. VDV may be installed on Windows 7, 8 & 10 and Windows Server 2008/2012. Full support is given for both 32bit and 64bit operating systems. VDV can run as a Service.

## VISTA DATA VISION OVERVIEW



### VDV in short

VDV offers data handling, storage, visualization, alarming, reporting and web access to data from any size of datalogger system. VDV is a complete solution offering both fundamental and advanced tools for Geotechnical data handling and analysis.

### Systems Supported

VDV can import data from almost any data logger system, either directly or using the VDV File Converter.

### Call Engine

Vendor's Call Engine is used to collect data; thereafter VDV is pointed to import that data.

### Manual Input of data

VDV offers Manual Input of data via web interface and via data files. New records may be added and edited online. This is useful for manual input of sensor readings.

### Scalable

VDV supports everything from small projects with just a few dataloggers up to huge projects with hundreds of dataloggers and thousands of tags.

### Keep Alive Monitor

VDV includes a Keep Alive Monitor to let Network Monitoring programs know if it is up and running. This is a must in 24/7/365 systems.

### MySQL Database

VDV stores its data in the speedy and robust MySQL relational database. All operations are automatic and invisible to the user, so there is no need to be a database specialist. A MySQL commercial license is included with the purchase of VDV.

### One system for all data

VDV is perfect for combining Geotechnical Data, Ambient Weather Data and Industrial Data into a single Data Handling system, offering an intuitive and very powerful graphical interface to data presentation and other data handling.

## PROJECT EXAMPLES

- » Canada: Bridge monitoring
- » USA: Embankment monitoring (SAA)
- » USA: Waste water tunnel (TBM)
- » Norway: Ground water monitoring
- » Germany: Rockfall monitoring
- » Malaysia: Dam monitoring
- » Czech Republic: Landslide monitoring
- » Canada: Pile Testing
- » Botswana: Mine monitoring
- » USA: Vibration monitoring
- » USA: Foundation monitoring
- » USA: Pipe monitoring

### Local Users



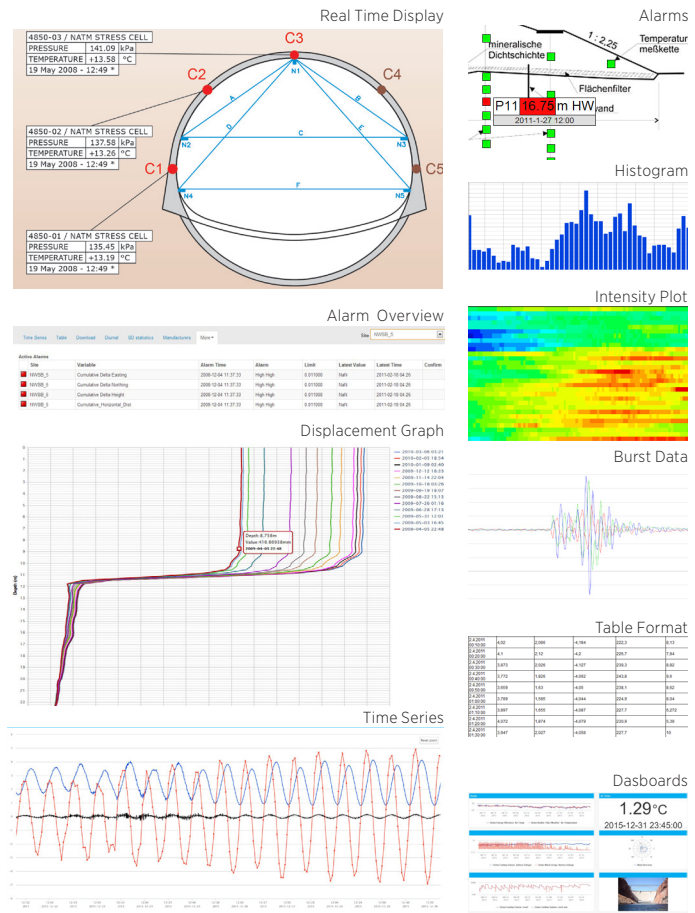
### Web Users



**Contacts** Alarms & Summary Reports



## Visualization Examples



## VDV Web Service

The built-in VDV Web Service includes everything needed for publishing data to the Internet. Web based users have access to Graphs and Trends Lines, Quick Reports, Acknowledge of Alarms, some of the most needed configuration features, comprehensive Access Control, Real-Time display and Google-Map display.

## New calculated values

VDV includes Virtual Variables for calculating new results based on sensor readings from one or more dataloggers across the network. This is useful for rescaling and to obtain results not calculated in the datalogger.

## Alarms

VDV monitors all new sensor readings entered into its database for alarm conditions. Alarms are sent as email and/or SMS. Acknowledgement of alarms is via the web interface.

## Multi-Language

VDV has a built-in multi-language service for its web interface. English, German and Spanish are provided as default. A built-in Language Editor is used to add new languages.

## Graphs and Trend Lines

VDV has a powerful and flexible control of all aspects of trend lines and graphs, including, color, thickness, Moving Average, single or dual Y-scales, automatic and fixed Y-scales and linear and logarithmic Y-scale and X-scale (time axis).

## Useful Accessories

VDV includes useful features to associate sensor data with various information; Notes, Web Cam, Information Pages, links to sensor data sheets and links to information found on other web sites.

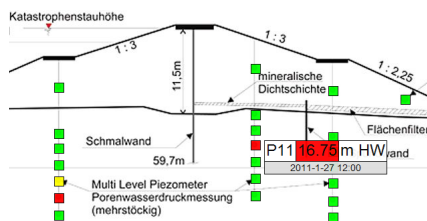


## VDV ADVANCED FEATURES

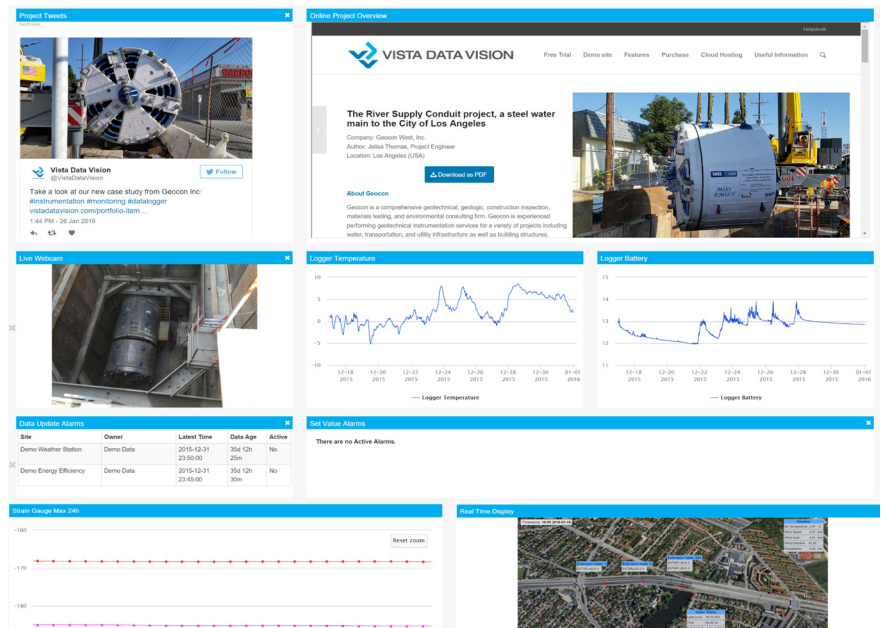
VDV with its advanced features is capable of serving any size of data-logger network. VDV serves all three classes of data users, i.e. SCADA, Consultants and Researchers.



Displacement Graph showing Temperature Profiles



Real Time Display showing Alarm status



Dashboard - Project overview

### Access Control

The comprehensive Access Control to VDV's web service give users a secure access to their data. Any number of User Accesses may be created with any combination of Access Rights. It is easy to give full access to colleges and clients but limited access for less demanding users.

### Alarms

Relax and let VDV inform you when sensor values are outside limits. Alarms are a powerful feature that simplify the operation of datalogger networks and eases the workload of the operator. Alarm thresholds (LL, L, H, HH) are easily adjusted using the VDV web interface.

### Automatic Reports

VDV offers a special Report toolkit for creation of automatic reports, to be issued daily, weekly, monthly, quarterly and yearly. Reports include Tables, Graphs, list of Alarms, Sensor Readings, Notes and more. An unlimited number of user defined report types are supported. Reports are written to a file and sent automatically by email to user groups.

### Dashboards

Create custom dashboards with multiple components and have full project overview in a single layout.

### VDV Burst Data

VDV supports data from seismic recorders. Easily view and report seismic data along with other project data.

### SAA Data

View SAA data as in SAAview with X and Y plot along with XY Plot and Time Series.

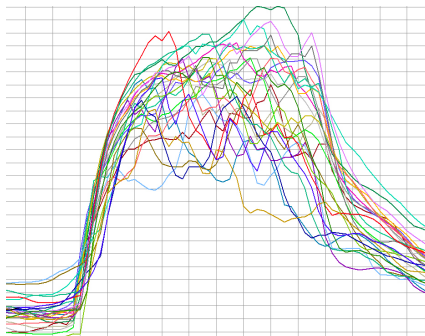
Auto detect XYZ axis and update positions on each sensor with 1 click. Get your SAA dashboard ready in minutes.

### Data Update Monitor

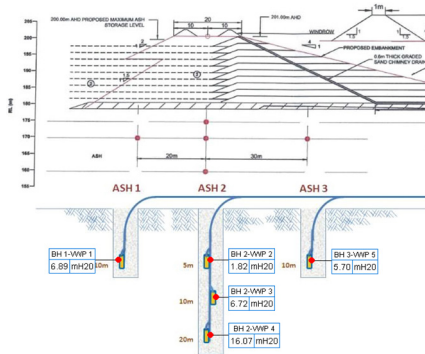
This is the process of monitoring data arrival and will greatly lower the workload of the Datalogger Network Manager. VDV monitors data update and sends Alarms if data is not updating, indicating loss of datalogger communications, loss of power or any other failure along the transmission route.

## VDV ADVANCED FEATURES

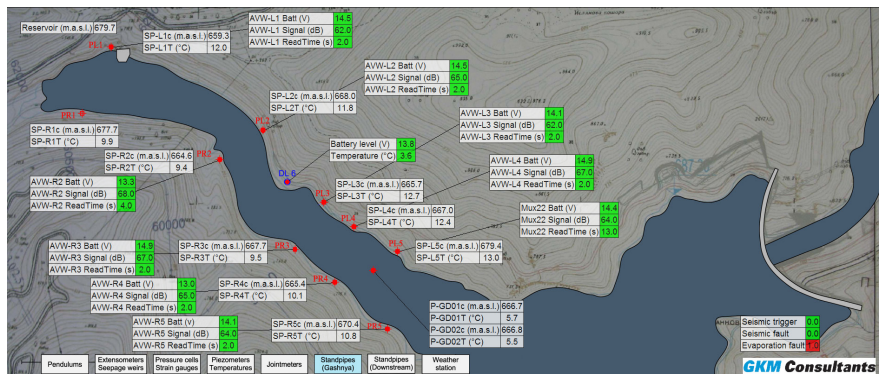
*Professionals in 6 continents trust VDV for their monitoring projects.*



Overlay Graph comparing 28 days of data



Real Time Display showing latest data



Real Time Display - TK Dam Bulgaria

### Documents

Upload documents and files to VDV and make them available to other users. This includes Images, Manuals, PDFs, Calibration Sheets and Excel Files

### Displacement Graphs

The VDV Displacement Graph Toolkit is for plotting data from Displacement Sensors at various depths at certain time intervals. The layout is fully customizable where users may select Background Layers, Alarm Limits, Limit Profile and Annotations. VDV Displacement Graphs are also useful for Temperature Profiles and to display any set of measurements that are based on a set of sensors.

### Notes

Notes are very useful to keep a maintenance diary for projects by adding text and images. With Notes, multiple users may enter text through the web interface. Notes may be added to Reports for automatic publication.

### Real-Time Display

Real Time Displays are used to give users a clear overview of all data on a single page or multilevel pages. Latest data can be viewed on numerical indicators and as trend lines on top of background images. Furthermore, Alarm Status and Data Update Monitoring of each variable may be indicated with a background color.

### Validation

Validation is a method used to clean-up trend lines with out-of-range sensor readings. If sensors readings are affected by noise or spikes that are clearly outside the normal range of readings then the validation process will replace that value with the last known good value. There are several validation options to choose from.

### VDV File Converter

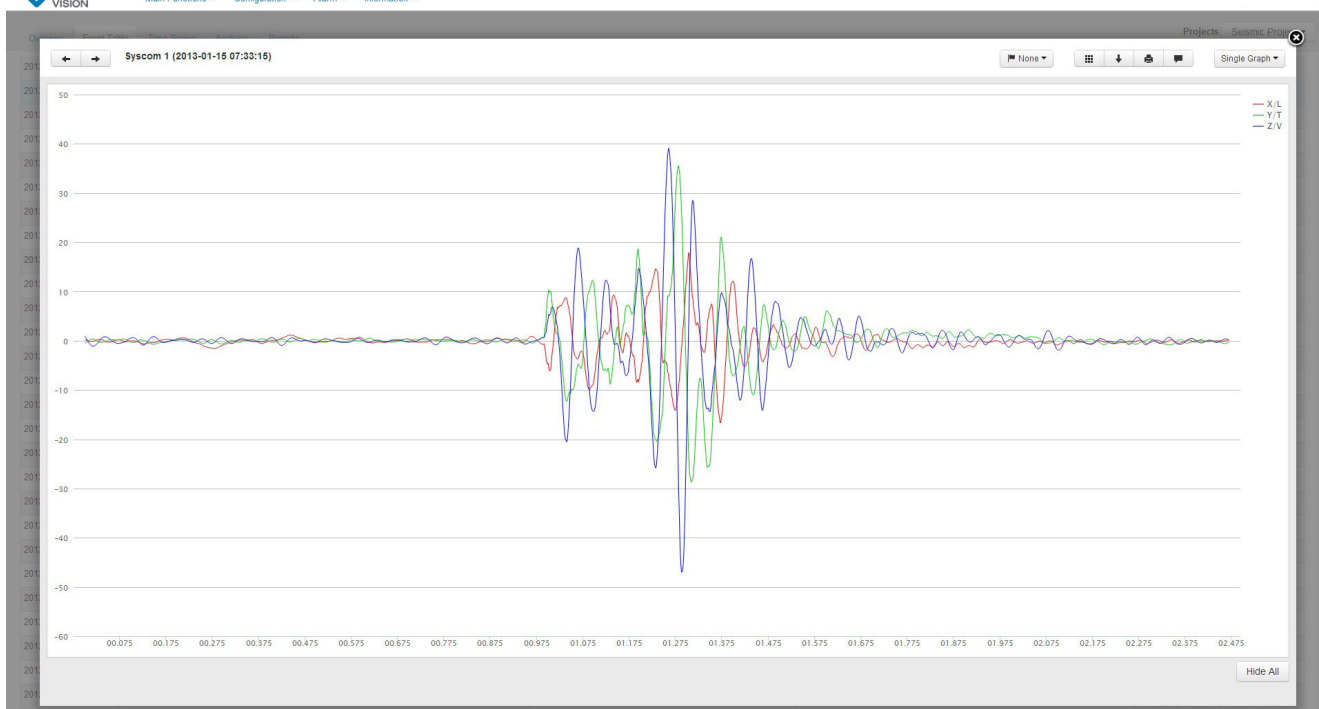
With VDV File Converter you can import any text based data file.

- » Data from standalone data loggers or instruments that have their own data formats.
- » Data from one of the new breed of dataloggers that send data via FTP to the host computer.
- » Manual entry schema that needs to be inserted into VDV.

VDV File Converter was built to convert a wide variety of data formats into a standard VDV format ready to be automatically imported to VDV.

### Web Cam

Include pictures from Web Cams in VDV and see on-site pictures with the Data individually or incorporated into Real Time Displays or Dashboards.



**VDV Burst Data** - View and report seismic data

## SERVICES AND SUPPORT

### We offer

- » Onsite Installation and configuration in any part of the world
- » Configuration of VDV systems using internet access
- » Creation of Custom Features
- » Online VDV Courses for Staff and Users

### Our Service

We assist our clients to successfully implement VDV.

## HOW TO START?

### Get a free trial

Contact us with information about your projects. We will assist you in your evaluation of VDV either in a Cloud hosted solution or an on-site installation

### [demo.vdvcloud.com](http://demo.vdvcloud.com)

Try our live demo website.

## CONTACT

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### VDV Online

[www.vistadatavision.com](http://www.vistadatavision.com)  
[www.facebook.com/vistadatavision](https://www.facebook.com/vistadatavision)  
[www.youtube.com/vistadatavision](https://www.youtube.com/vistadatavision)  
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### For local contact, see our Representatives list.

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