

Establishing Connectivity between the COSMOS Strong Motion VDC and Geotechnical VDC

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J2SE, England....

Establishing Connectivity between the COSMOS Strong Motion VDC and Geotechnical VDC

- Benefits
 - User searching for both Strong Motion and Geotechnical data only has to conduct one search
 - The existing flow and functionality of both data centers are maintained
 - Provides Google Earth functionality for viewing data
- Newly Funded by USC WiSE Program
- Anticipated project completion date: December 2006

COSMOS Geotechnical Virtual Data Center

<https://geodata.cosmos-data.org>



Carl Stepp, Consortium of Organization for Strong Motion Observation Systems

Daniel J. Ponti, United States Geological Survey

Loren Turner, Caltrans

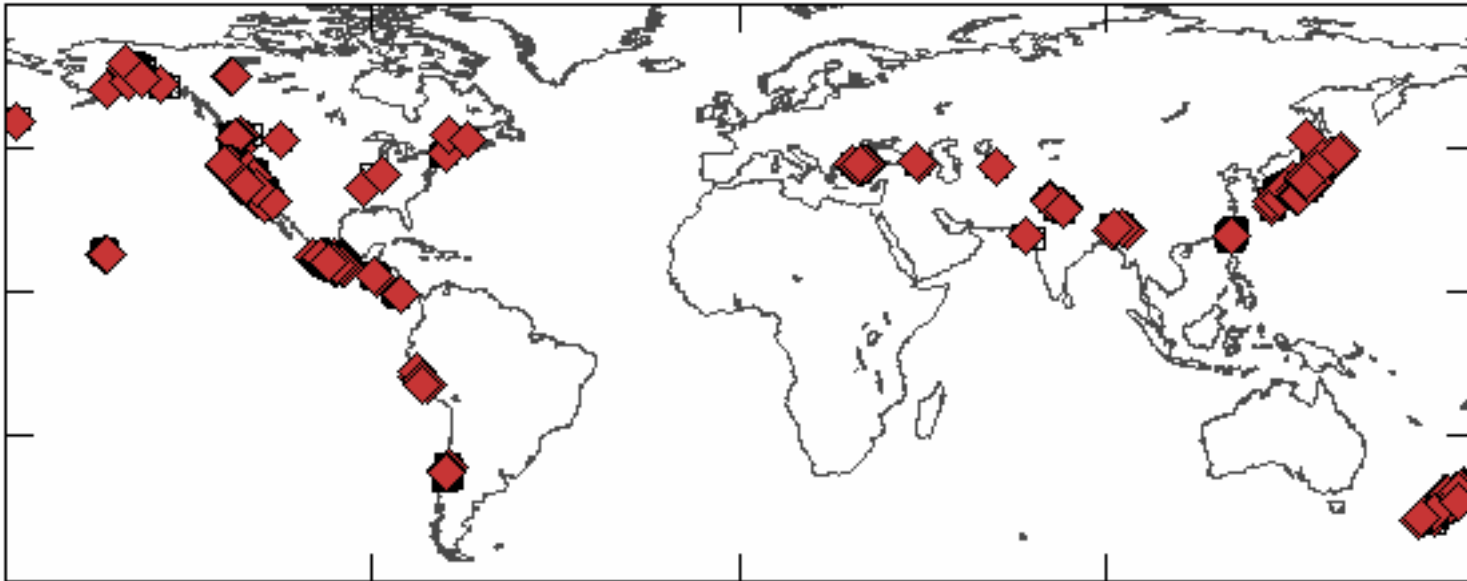
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Jean Benoit, University of New Hampshire

John Bobbitt, Petrotechnical Open Software Consortium

COSMOS Strong-Motion Virtual Data Center

<http://db.cosmos-eq.org>



Professor Ralph J. Archuleta

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COSMOS VIRTUAL DATA CENTER

Consortium of Organizations for Strong-Motion Observation Systems

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San Francisco 1957-03-22 19:44:21 UTC

Region: California
Latitude: 37.6670
Longitude: -122.4830
Depth: 10.00 km
Mechanism: Reverse
Strike: 119
Dip: 75
Rake: 80
Seismic Moment: 9.3325e+23
ML: 5.3
Mw: 5.3

[References](#)

Jump within page to:

[Choose a Station]

Add all data on this page to the download bin

Go to Download Bin [View Map](#)

San Francisco, CA - Golden Gate Park

Hypocentral dist: 15.2 km

USGS station 1117

Processing by: null

Data Available: corrected acceleration, velocity, displacement, & spectra

[Summary Page for this Station](#)

Site Geology: Chert

Structure: Inst Shelter C

[Plot Acceleration](#)

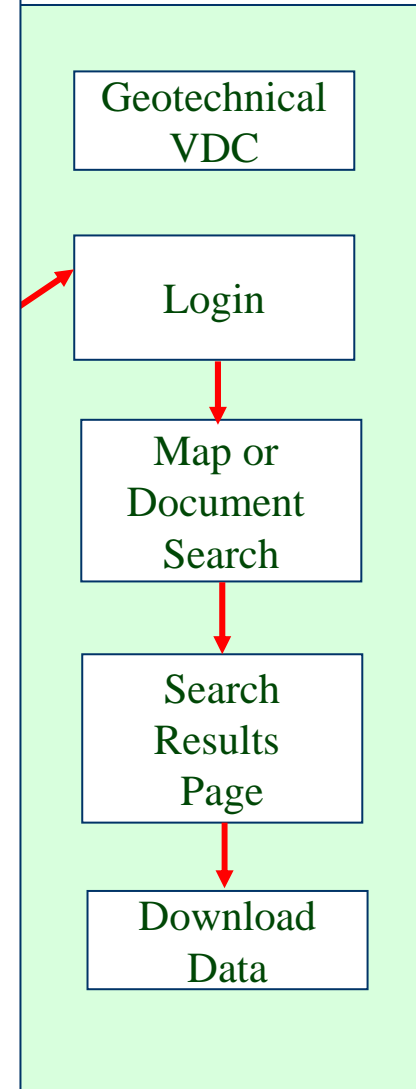
Spectra: [Log](#) [Lin](#)

Add all of this station's data to the download bin

Go to Bin

Component: Up	PGA (cm/s/s): 37.20	PGV (cm/s): -1.21	<input type="checkbox"/> Add this to bin
Component: 100	PGA (cm/s/s): -102.80	PGV (cm/s): -4.61	<input type="checkbox"/> Add this to bin
Component: 10	PGA (cm/s/s): -81.79	PGV (cm/s): -4.92	<input type="checkbox"/> Add this to bin

Technical Data



From Geotechnical to Strong-Motion Data

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USGS: San Francisco, CA
 State Bldg
 350 McAllister

Geotechnical
VDC

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[About Zipping data](#)

Zip the checked files

[Start over with a new bin](#)

Earthquake	Station	Instrument	Component	Download		
United States Geological Survey stations:						
San Francisco 1957-03-22 19:44:21	San Francisco, CA 350 McAllister State Bldg	Basement	171	Uncorrected <input checked="" type="checkbox"/>	Acceleration-Velocity-Displacement <input checked="" type="checkbox"/>	Fourier-Response <input checked="" type="checkbox"/>
			261	Uncorrected <input checked="" type="checkbox"/>	Acceleration-Velocity-Displacement <input checked="" type="checkbox"/>	Fourier-Response <input checked="" type="checkbox"/>
			UP	Uncorrected <input checked="" type="checkbox"/>	Acceleration-Velocity-Displacement <input checked="" type="checkbox"/>	Fourier-Response <input checked="" type="checkbox"/>

Previous download bins

COSMOS Strong-Motion Virtual Data Center

<http://db.cosmos-eq.org>

Issues in GVDC-Strong-Motion VDC connection

- Must decide on mapping technology to use and get licenses before we can begin planning.
- Enterprise-Lite GoogleEarth
 - Expensive (?)
 - Requires a server; Who would manage the server?
 - Much easier to program
 - GVDC and VDC layers would reside with the server, so faster
- User-downloaded GoogleEarth
 - Free but requires user to download and install
 - Not configurable
 - Difficult to launch on user's computer
 - Must pass in not only lat and long ranges, but station and event info
- Long-term stability of both GVDC and Strong-Motion VDC.

Following Completion of 2L03 and VDC-GVDC Connectivity Projects

- **Additional Tasks → March 2007**
 - Revise existing Borehole Previewer – same modular technology as new curve previewer
 - Revise GVDC Front End Mapping application (ERSI ArcIMS) to Open Source Software
 - Gather feedback on GVDC updates, previewers and VDC-GVDC connectivity
 - Seek long-term funding opportunities

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