The NEES@UCSB Data Portal: A Web-based Tool to Search, View Waveforms, and Download Data From Vertical Arrays

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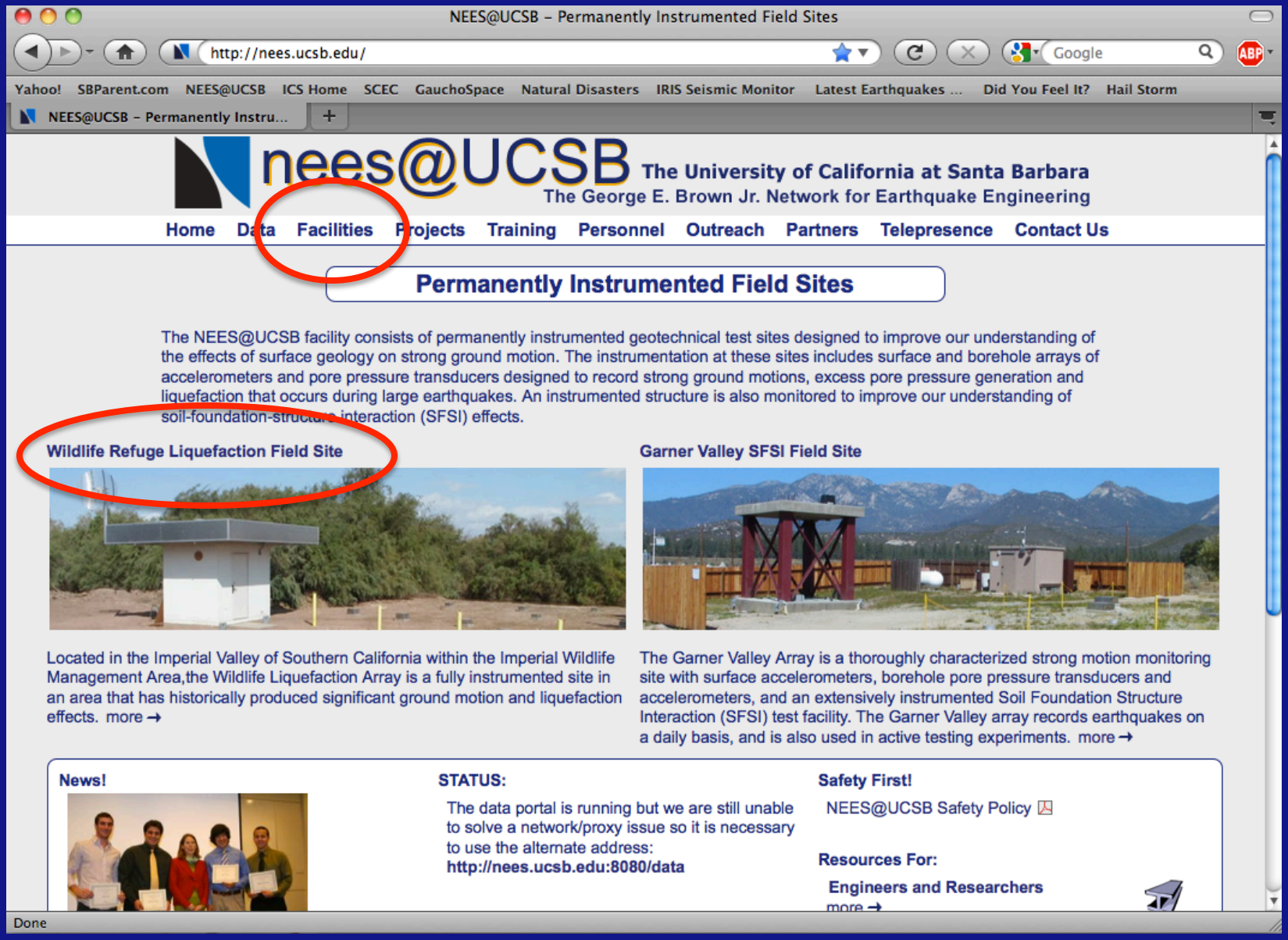
This Talk: How you can get to the earthquake data being recorded on Vertical Arrays every day

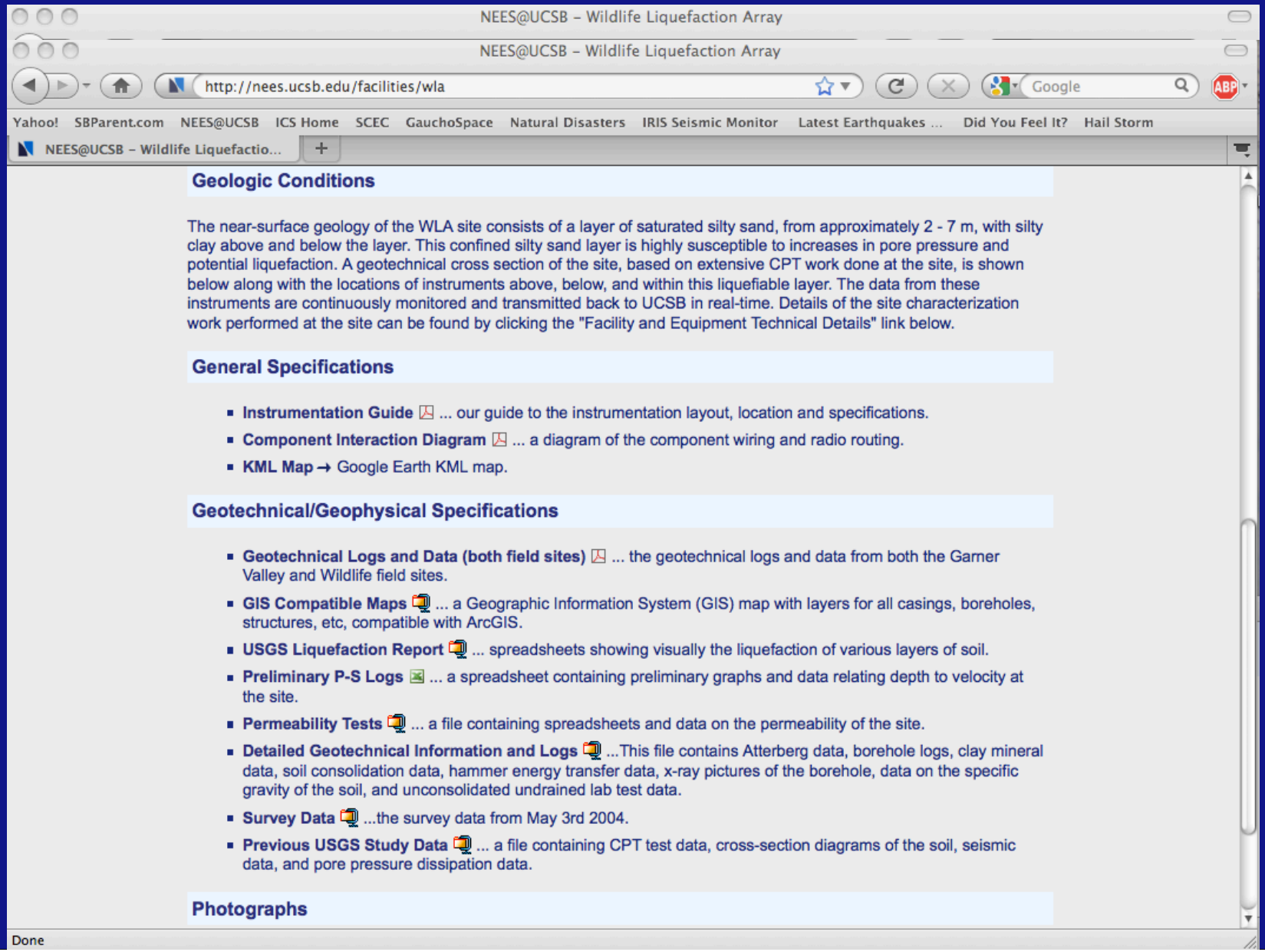
- New Web data dissemination tools:

Provide access to the data being collected from the permanently instrumented field sites to the engineering and seismology communities.

http://nees.ucsb.edu



http://nees.ucsb.edu/facilities



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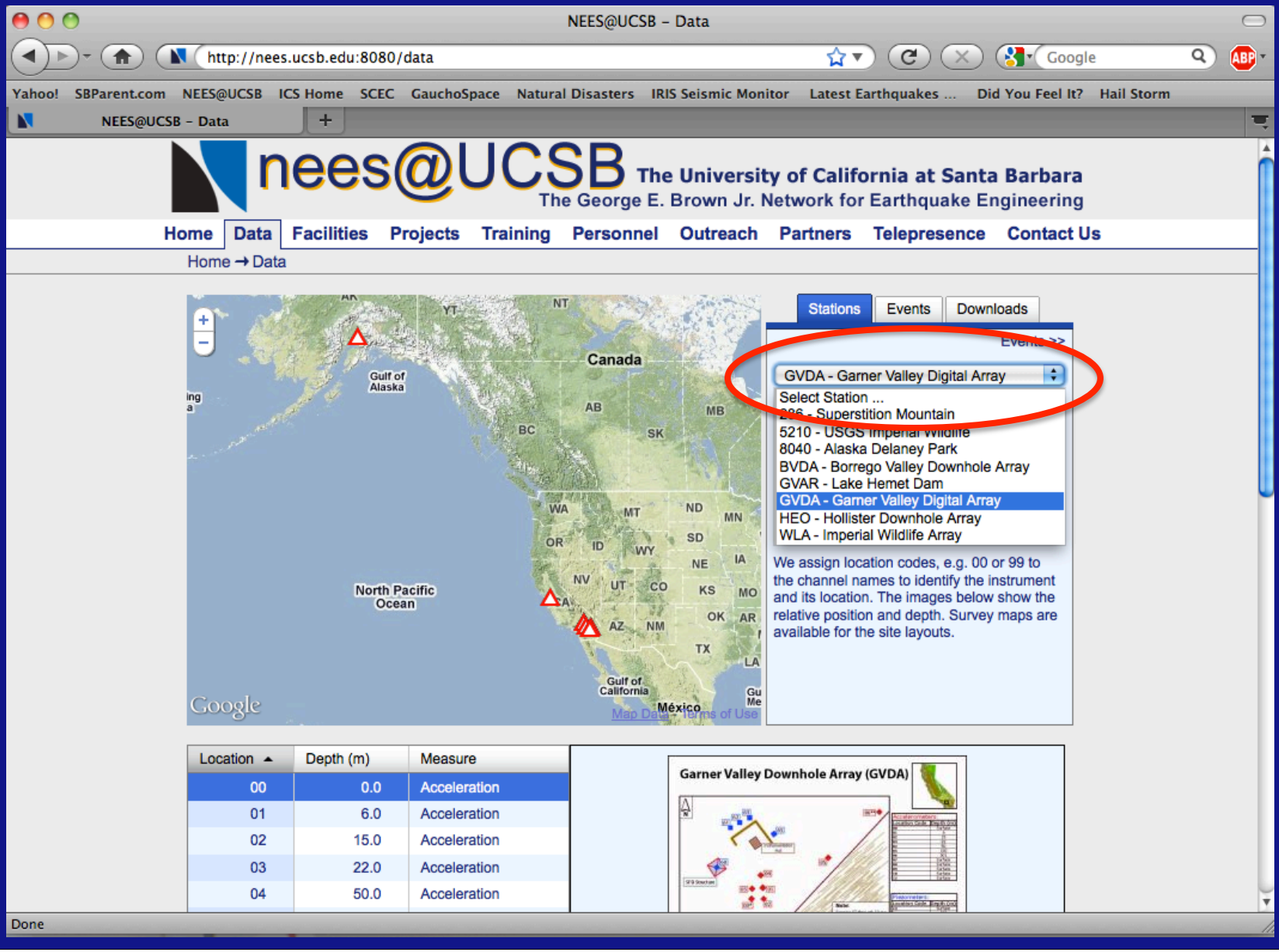
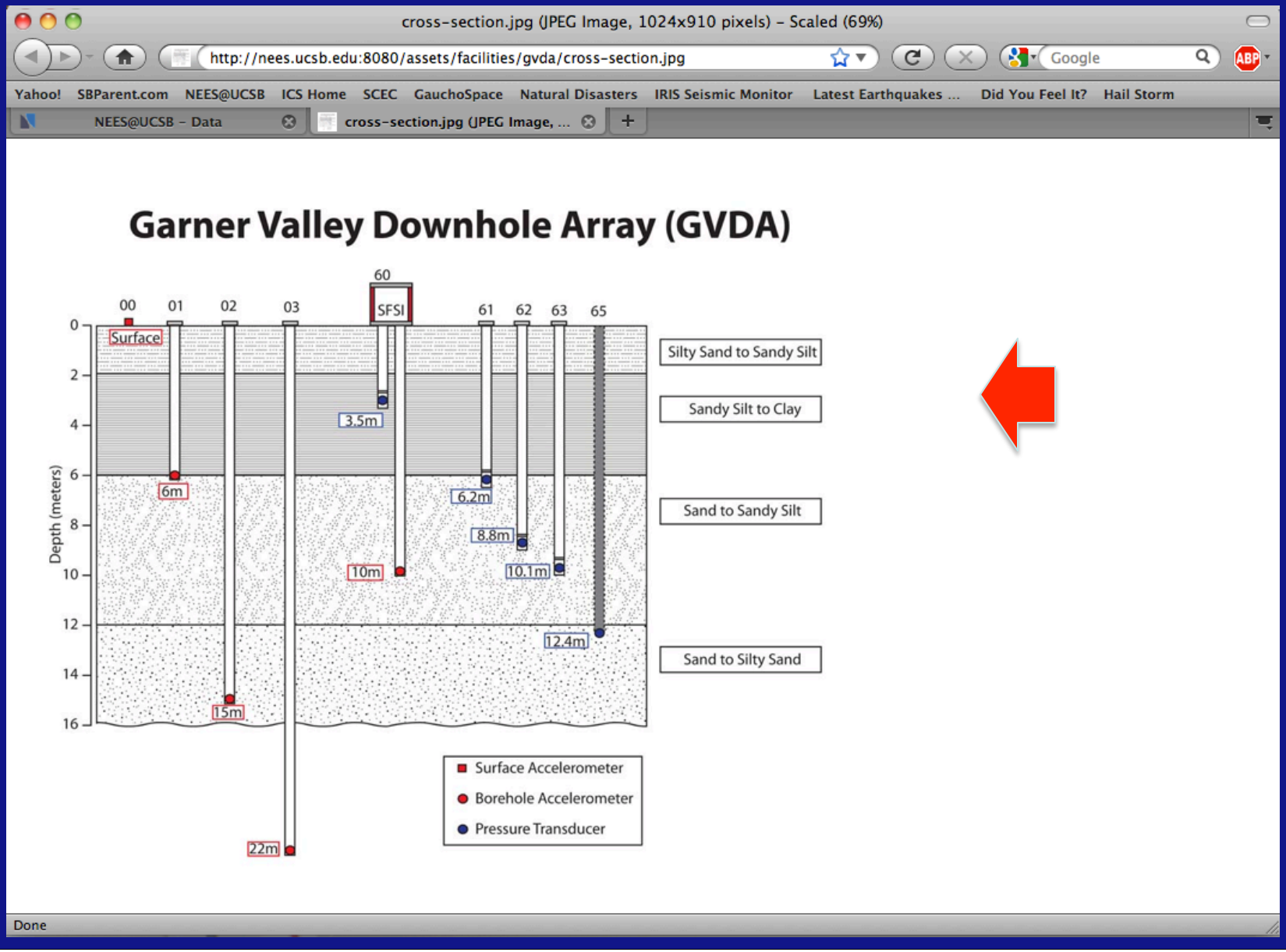
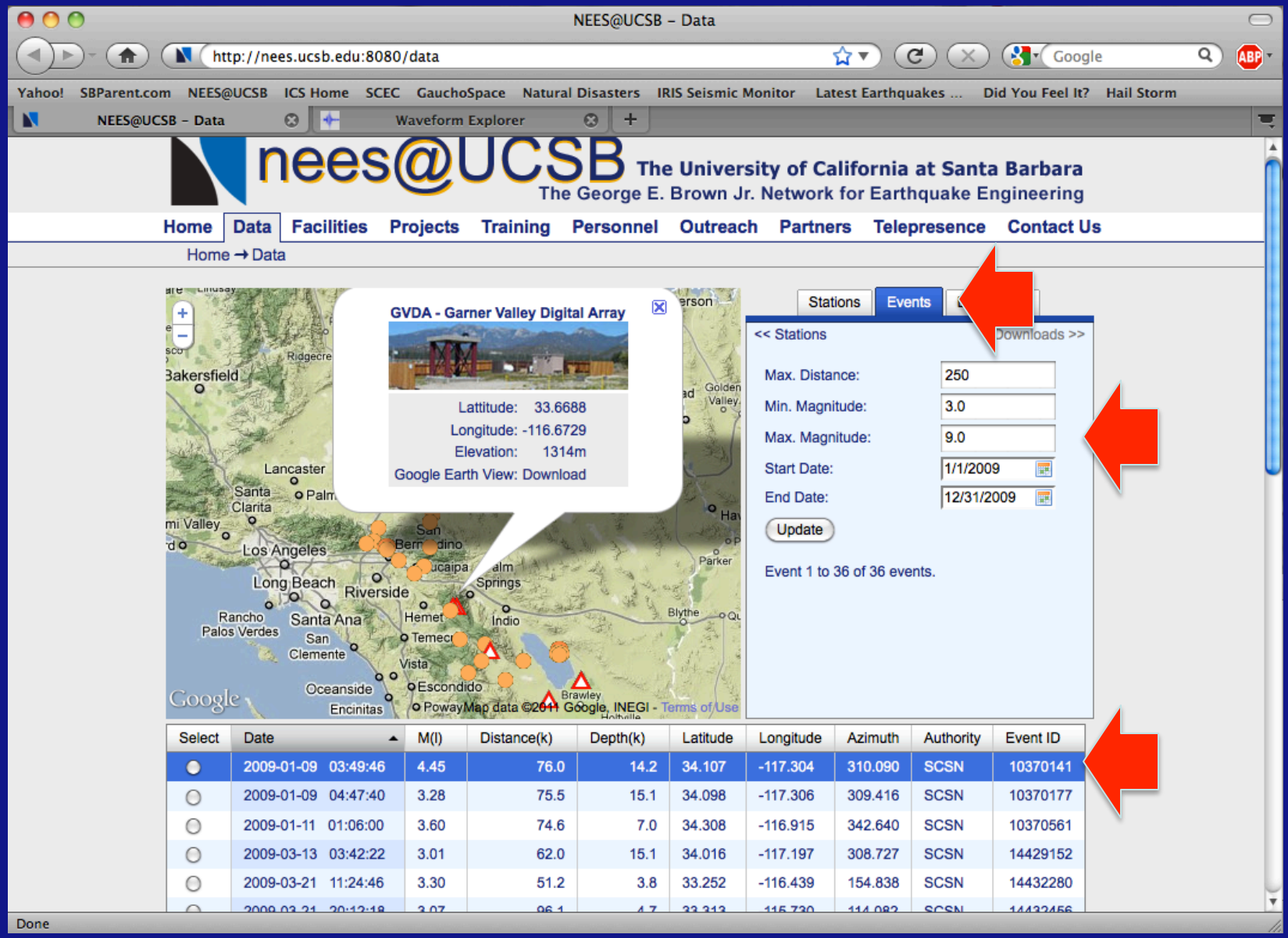
http://nees.ucsb.edu/data



http://nees.ucsb.edu/data



The Event Search

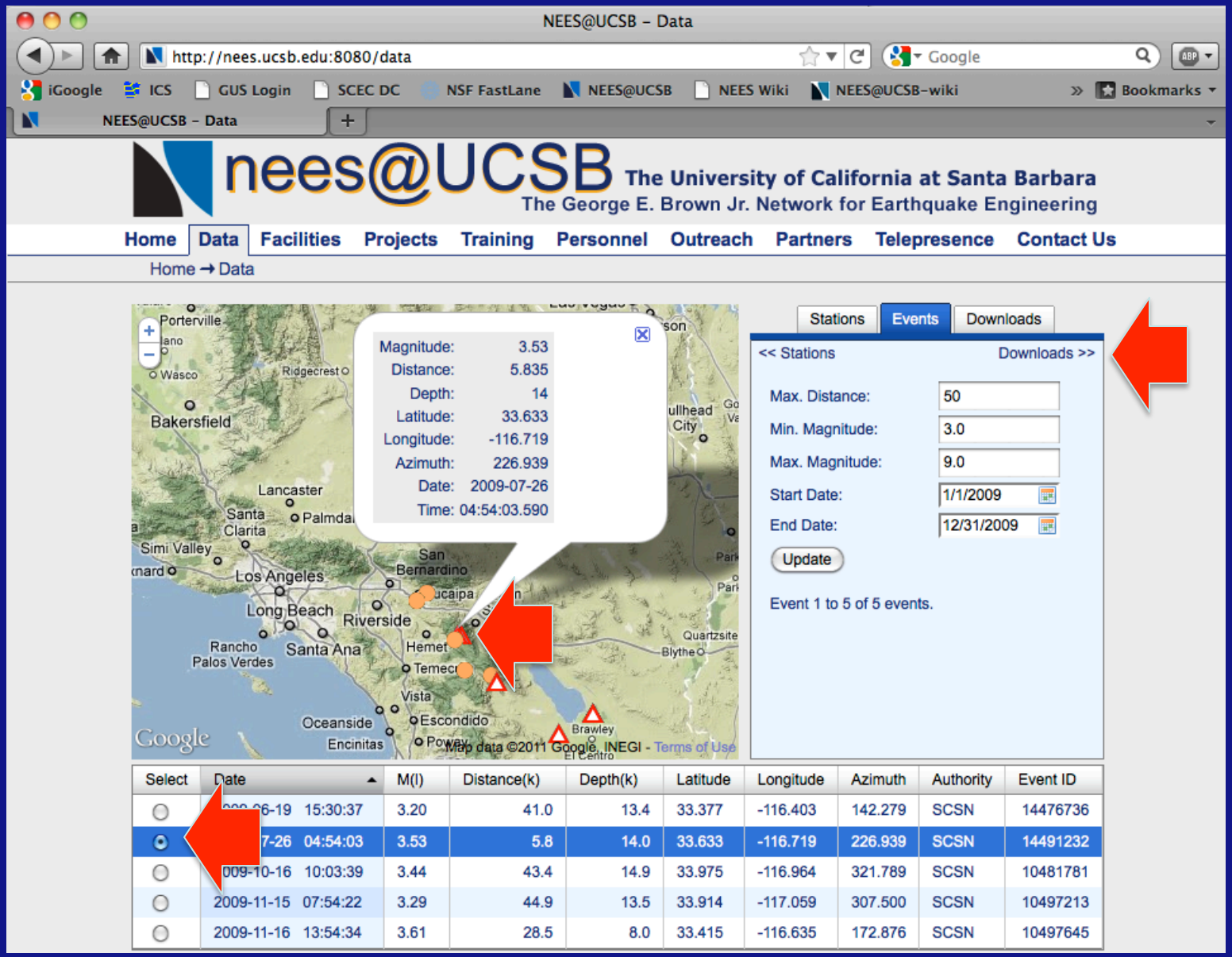


The Event Search

- From 1/1/2005 to 12/31/2010
  - 3748 M1+ events available at GVDA
  - 5309 M1+ events available at WLA

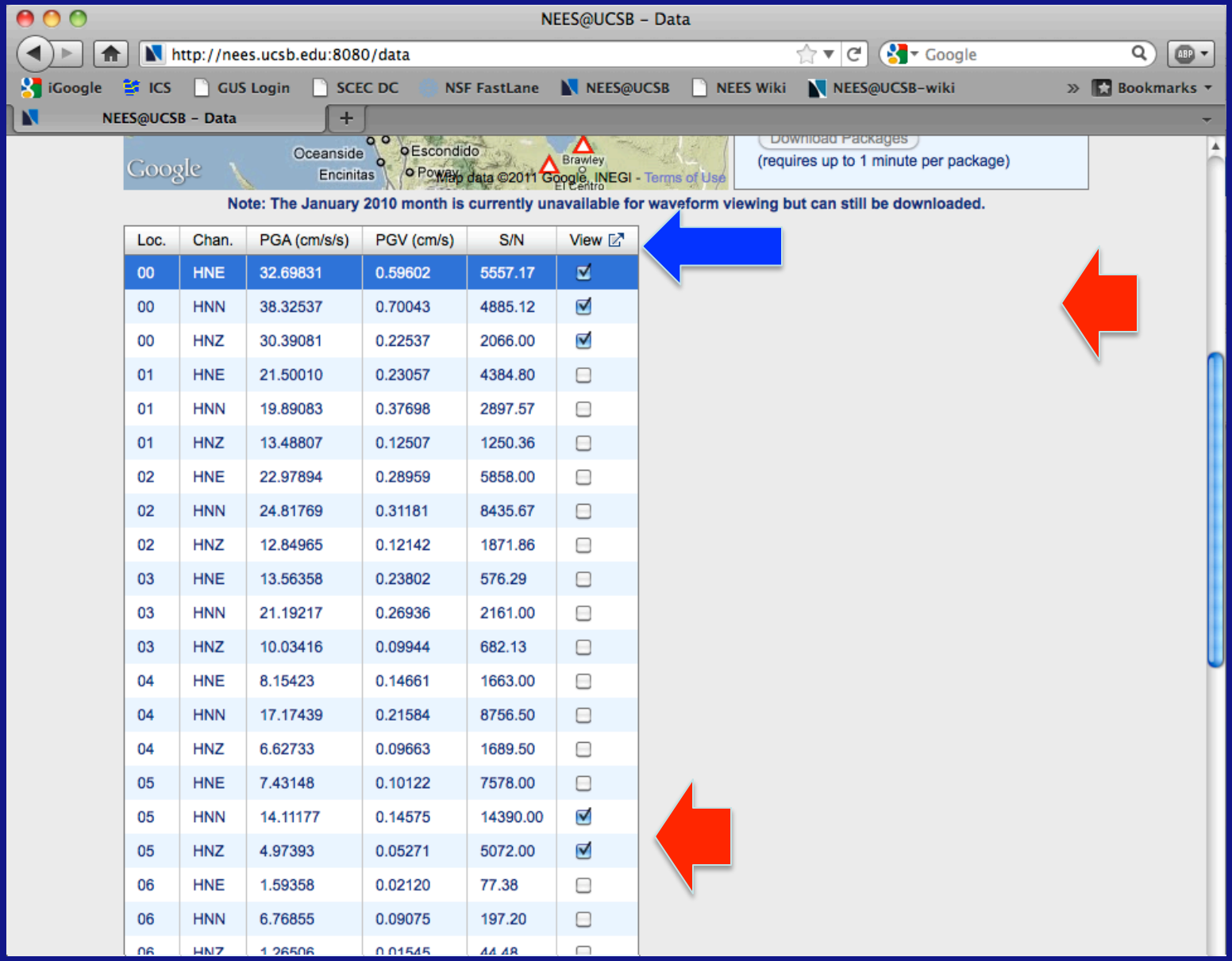
  - We use a radius that increases as magnitude increases, so small events only from very close to site. Progressively larger events from progressively farther away.

Select Your Event



Select	Date	M(l)	Distance(k)	Depth(k)	Latitude	Longitude	Azimuth	Authority	Event ID
○	009-06-19 15:30:37	3.20	41.0	13.4	33.377	-116.403	142.279	SCSN	14476736
◉	009-07-26 04:54:03	3.53	5.8	14.0	33.633	-116.719	226.939	SCSN	14491232
○	2009-10-16 10:03:39	3.44	43.4	14.9	33.975	-116.964	321.789	SCSN	10481781
○	2009-11-15 07:54:22	3.29	44.9	13.5	33.914	-117.059	307.500	SCSN	10497213
○	2009-11-16 13:54:34	3.61	28.5	8.0	33.415	-116.635	172.876	SCSN	10497645

Choose Waveforms to View



Loc.	Chan.	PGA (cm/s/s)	PGV (cm/s)	S/N	View
00	HNE	32.69831	0.59602	5557.17	☑
00	HNN	38.32537	0.70043	4885.12	☑
00	HNZ	30.39081	0.22537	2066.00	☑
01	HNE	21.50010	0.23057	4384.80	☐
01	HNN	19.89083	0.37698	2897.57	☐
01	HNZ	13.48807	0.12507	1250.36	☐
02	HNE	22.97894	0.28959	5858.00	☐
02	HNN	24.81769	0.31181	8435.67	☐
02	HNZ	12.84965	0.12142	1871.86	☐
03	HNE	13.56358	0.23802	576.29	☐
03	HNN	21.19217	0.26936	2161.00	☐
03	HNZ	10.03416	0.09944	682.13	☐
04	HNE	8.15423	0.14661	1663.00	☐
04	HNN	17.17439	0.21584	8756.50	☐
04	HNZ	6.62733	0.09663	1689.50	☐
05	HNE	7.43148	0.10122	7578.00	☐
05	HNN	14.11177	0.14575	14390.00	☑
05	HNZ	4.97393	0.05271	5072.00	☑
06	HNE	1.59358	0.02120	77.38	☐
06	HNN	6.76855	0.09075	197.20	☐
06	HNZ	1.26506	0.01545	44.48	☐

Click the view button and launch waveform viewer

dbwfserver

NEES / EarthScope Collaboration

Thanks to EarthScope Array Network Facility

Rob Newman

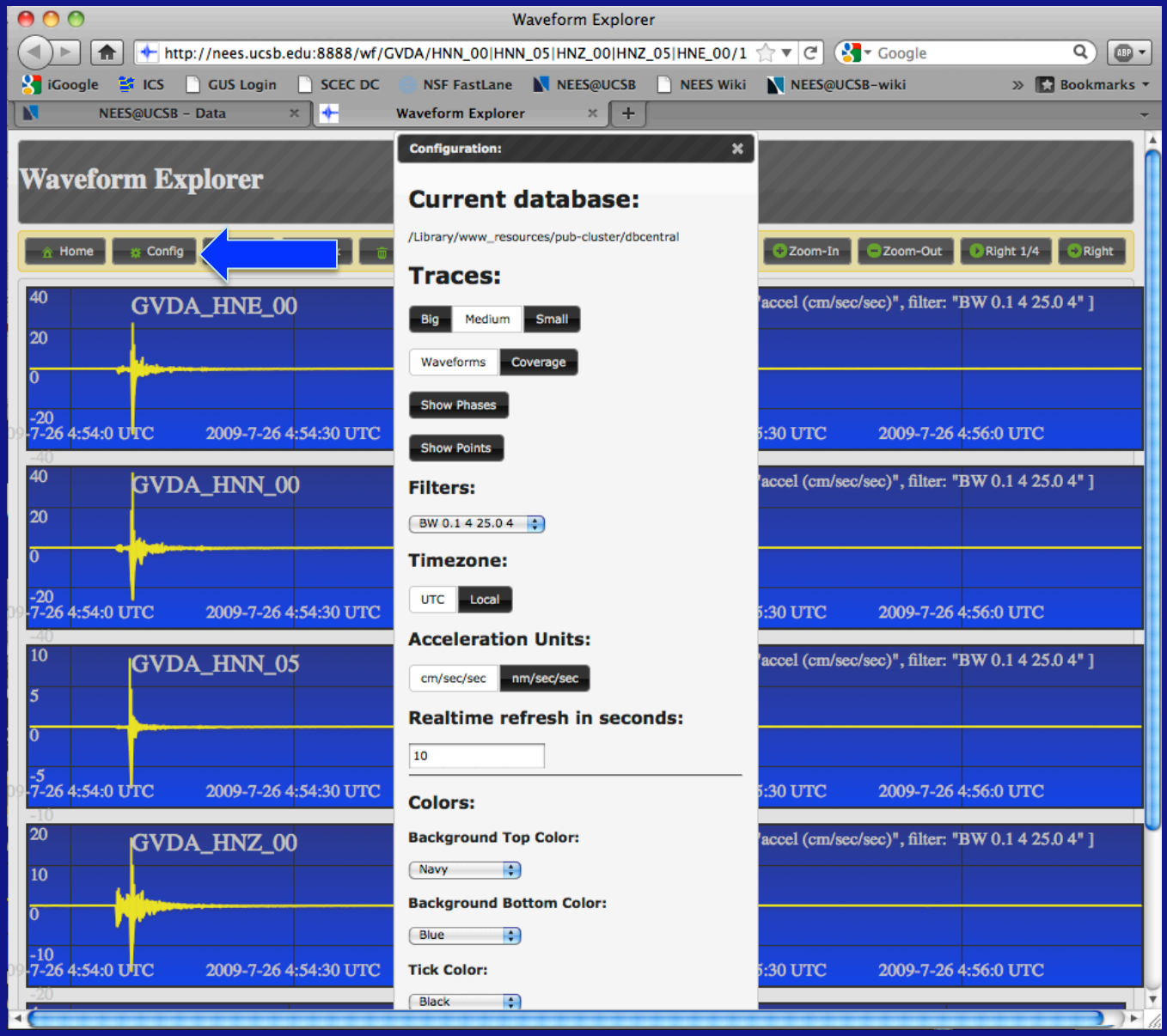
Juan Reyes

Kent Lindquist

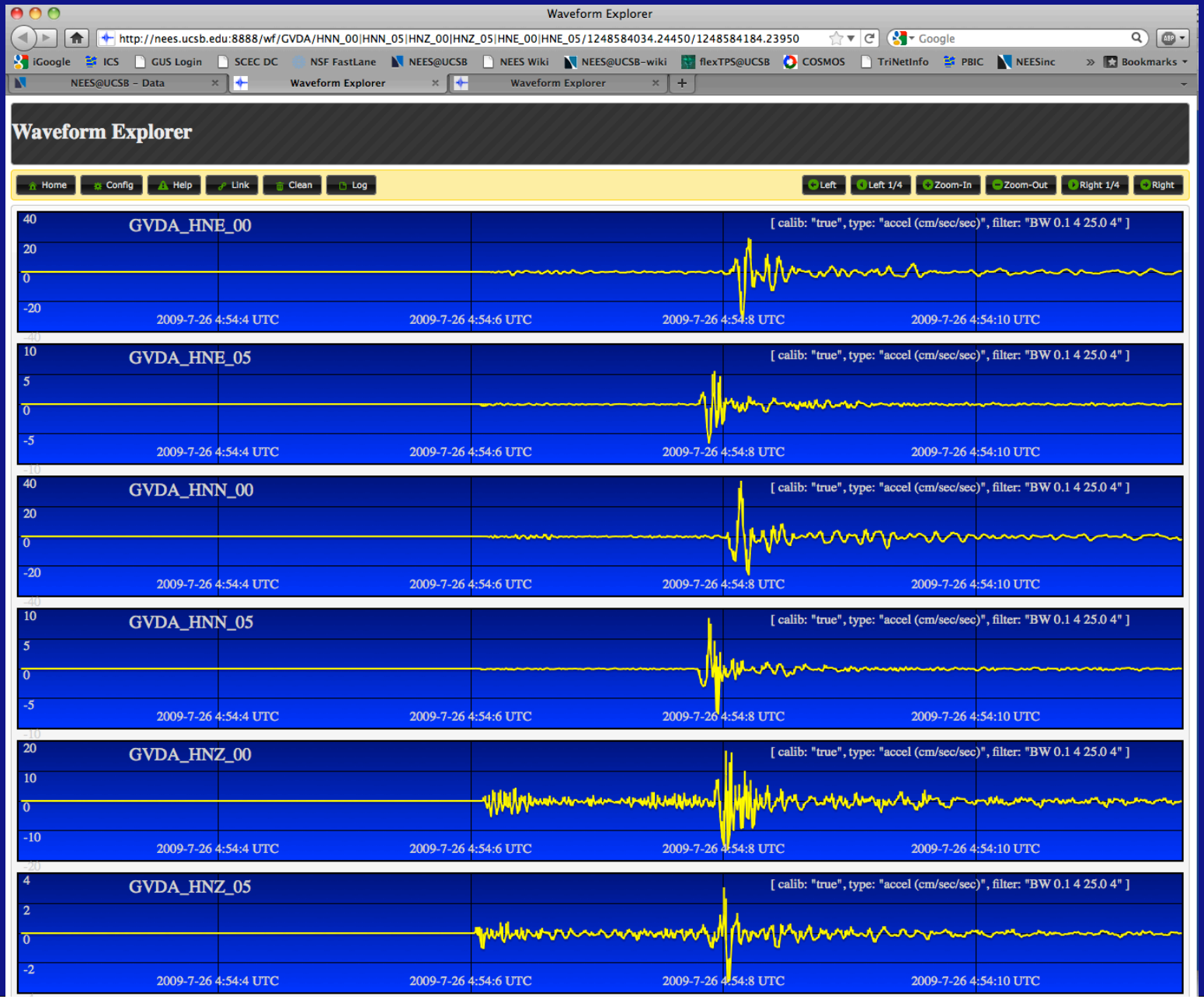
Frank Vernon

Waveform Viewer

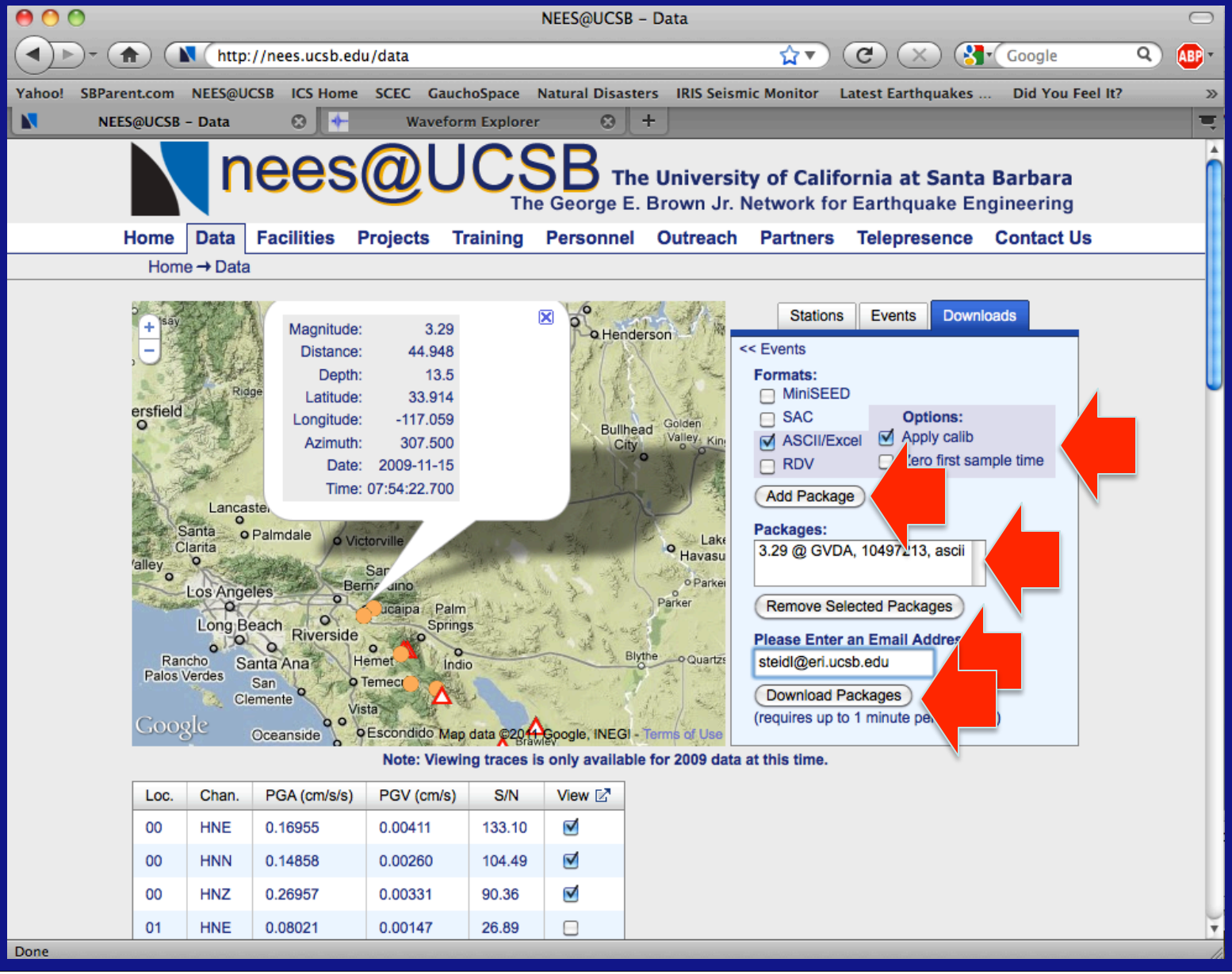
Waveform Viewer User Config

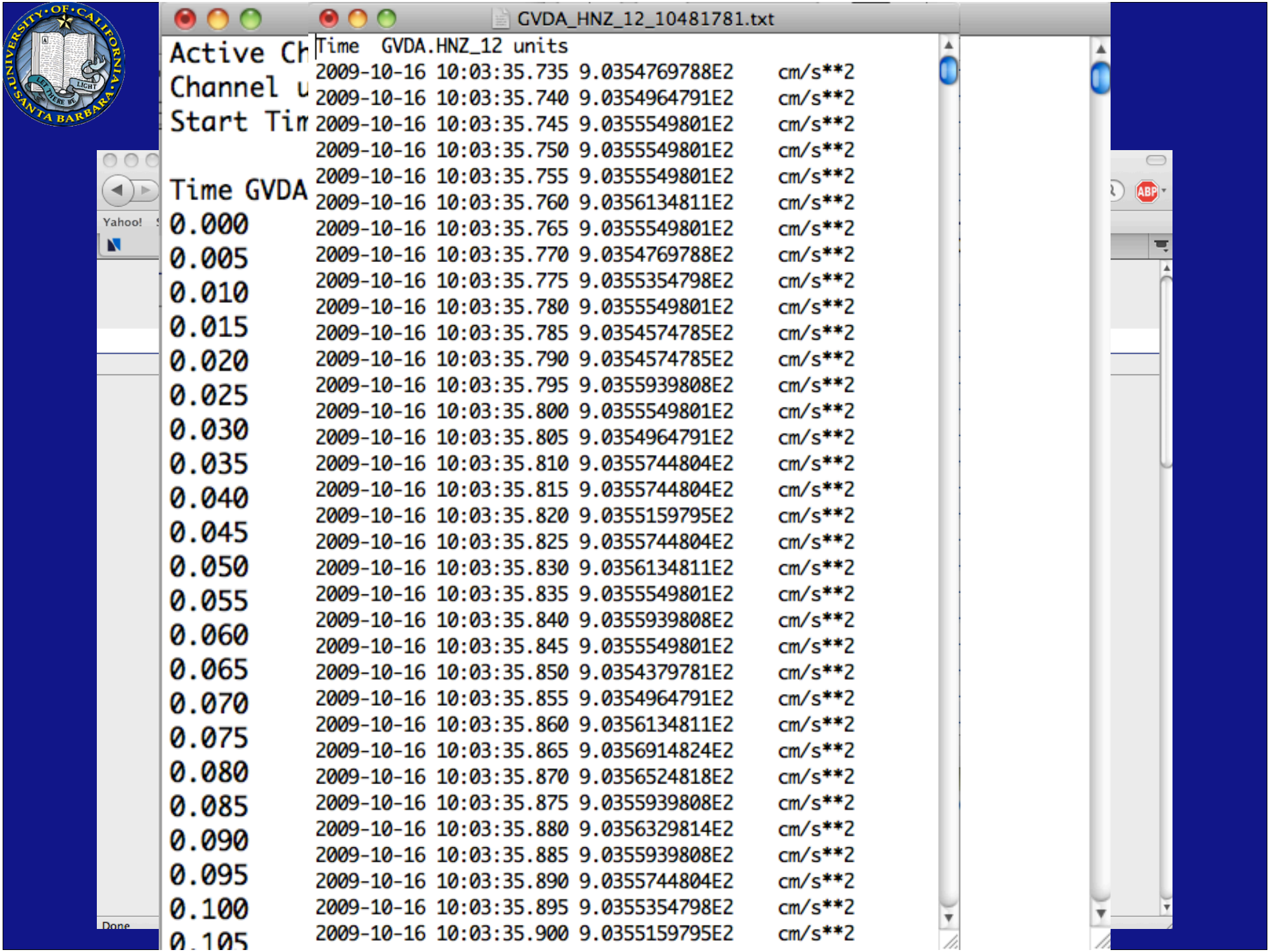


Waveform Viewer Zoom & Scroll

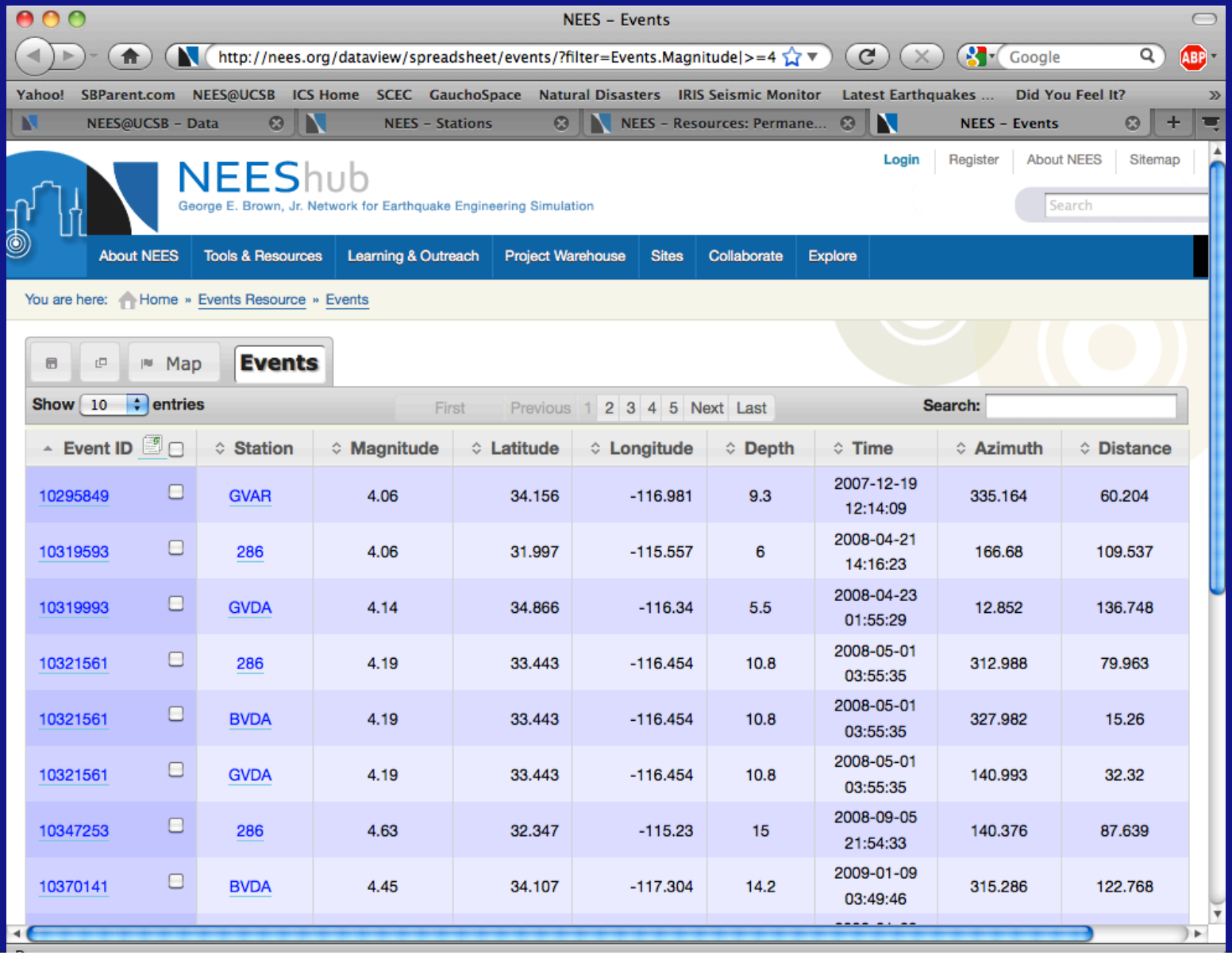


Download Data




GVDA_HNZ_12_10481781.txt
Active Ch
Channel u
Start Tim
Time GVDA
0.000
0.005
0.010
0.015
0.020
0.025
0.030
0.035
0.040
0.045
0.050
0.055
0.060
0.065
0.070
0.075
0.080
0.085
0.090
0.095
0.100
0.105
Time GVDA.HNZ_12 units
2009-10-16 10:03:35.735 9.0354769788E2 cm/s**2
2009-10-16 10:03:35.740 9.0354964791E2 cm/s**2
2009-10-16 10:03:35.745 9.0355549801E2 cm/s**2
2009-10-16 10:03:35.750 9.0355549801E2 cm/s**2
2009-10-16 10:03:35.755 9.0355549801E2 cm/s**2
2009-10-16 10:03:35.760 9.0356134811E2 cm/s**2
2009-10-16 10:03:35.765 9.0355549801E2 cm/s**2
2009-10-16 10:03:35.770 9.0354769788E2 cm/s**2
2009-10-16 10:03:35.775 9.0355354798E2 cm/s**2
2009-10-16 10:03:35.780 9.0355549801E2 cm/s**2
2009-10-16 10:03:35.785 9.0354574785E2 cm/s**2
2009-10-16 10:03:35.790 9.0354574785E2 cm/s**2
2009-10-16 10:03:35.795 9.0355939808E2 cm/s**2
2009-10-16 10:03:35.800 9.0355549801E2 cm/s**2
2009-10-16 10:03:35.805 9.0354964791E2 cm/s**2
2009-10-16 10:03:35.810 9.0355744804E2 cm/s**2
2009-10-16 10:03:35.815 9.0355744804E2 cm/s**2
2009-10-16 10:03:35.820 9.0355159795E2 cm/s**2
2009-10-16 10:03:35.825 9.0355744804E2 cm/s**2
2009-10-16 10:03:35.830 9.0356134811E2 cm/s**2
2009-10-16 10:03:35.835 9.0355549801E2 cm/s**2
2009-10-16 10:03:35.840 9.0355939808E2 cm/s**2
2009-10-16 10:03:35.845 9.0355549801E2 cm/s**2
2009-10-16 10:03:35.850 9.0354379781E2 cm/s**2
2009-10-16 10:03:35.855 9.0354964791E2 cm/s**2
2009-10-16 10:03:35.860 9.0356134811E2 cm/s**2
2009-10-16 10:03:35.865 9.0356914824E2 cm/s**2
2009-10-16 10:03:35.870 9.0356524818E2 cm/s**2
2009-10-16 10:03:35.875 9.0355939808E2 cm/s**2
2009-10-16 10:03:35.880 9.0356329814E2 cm/s**2
2009-10-16 10:03:35.885 9.0355939808E2 cm/s**2
2009-10-16 10:03:35.890 9.0355744804E2 cm/s**2
2009-10-16 10:03:35.895 9.0355354798E2 cm/s**2
2009-10-16 10:03:35.900 9.0355159795E2 cm/s**2

Concurrent Development at NEEShub



Event ID	Station	Magnitude	Latitude	Longitude	Depth	Time	Azimuth	Distance
10295849	GVAR	4.06	34.156	-116.981	9.3	2007-12-19 12:14:09	335.164	60.204
10319593	286	4.06	31.997	-115.557	6	2008-04-21 14:16:23	166.68	109.537
10319993	GVDA	4.14	34.866	-116.34	5.5	2008-04-23 01:55:29	12.852	136.748
10321561	286	4.19	33.443	-116.454	10.8	2008-05-01 03:55:35	312.988	79.963
10321561	BVDA	4.19	33.443	-116.454	10.8	2008-05-01 03:55:35	327.982	15.26
10321561	GVDA	4.19	33.443	-116.454	10.8	2008-05-01 03:55:35	140.993	32.32
10347253	286	4.63	32.347	-115.23	15	2008-09-05 21:54:33	140.376	87.639
10370141	BVDA	4.45	34.107	-117.304	14.2	2009-01-09 03:49:46	315.286	122.768

Future Work

- Matlab reader automatically added to download package for MiniSEED files
- Choose relative or absolute scaling for waveform viewer

- Expand Holdings: Include vertical array data from other national and international providers
  - Greece
  - Turkey
  - Taiwan
  - Japan

Questions?

Thank You!