Nevada Seismological Laboratory
University of Nevada Reno

Seismicity Update – 2018 To Date

NESC Meeting

August 1, 2018

NSL Catalog 2018 – To Date

7887 Located Events

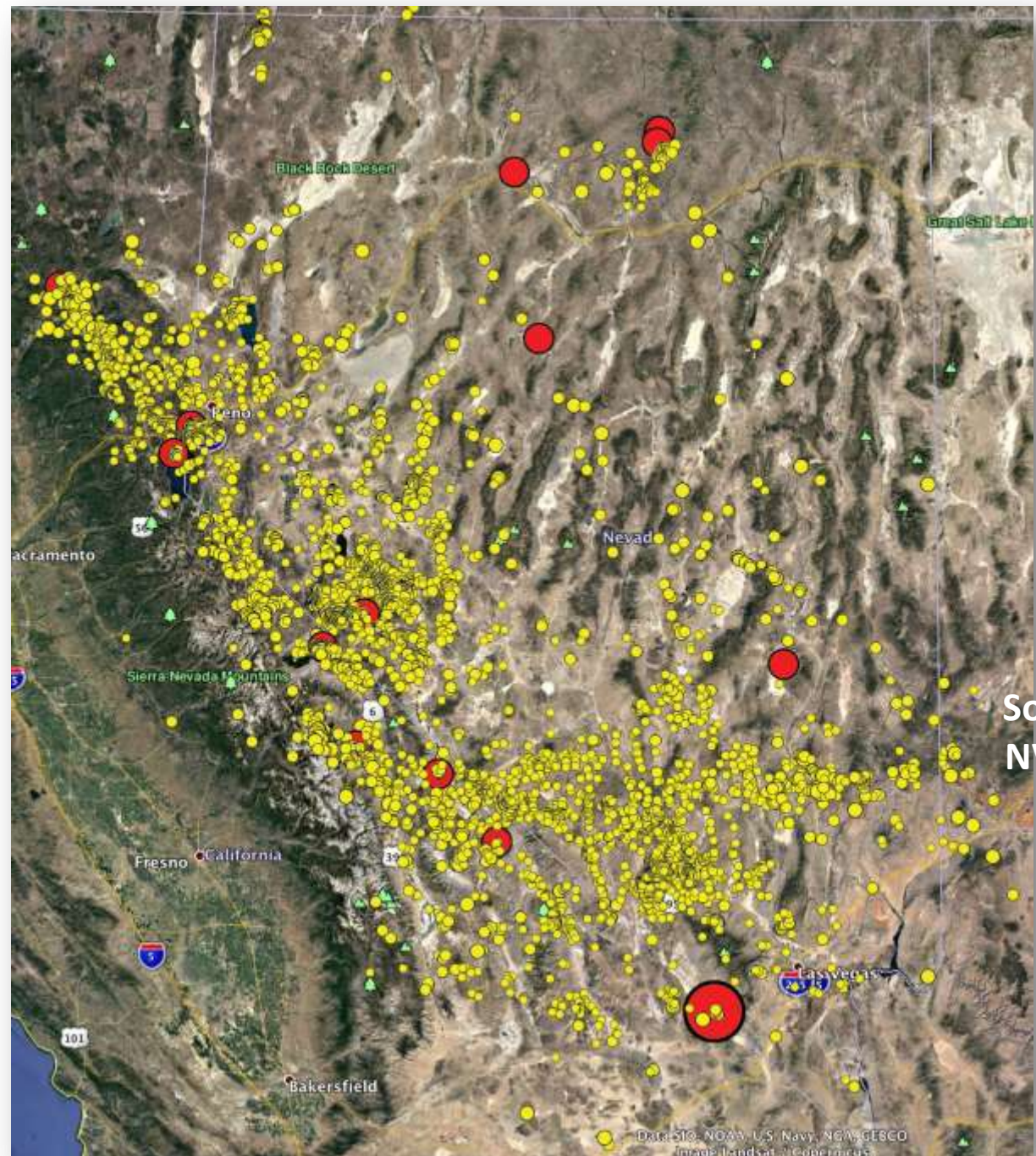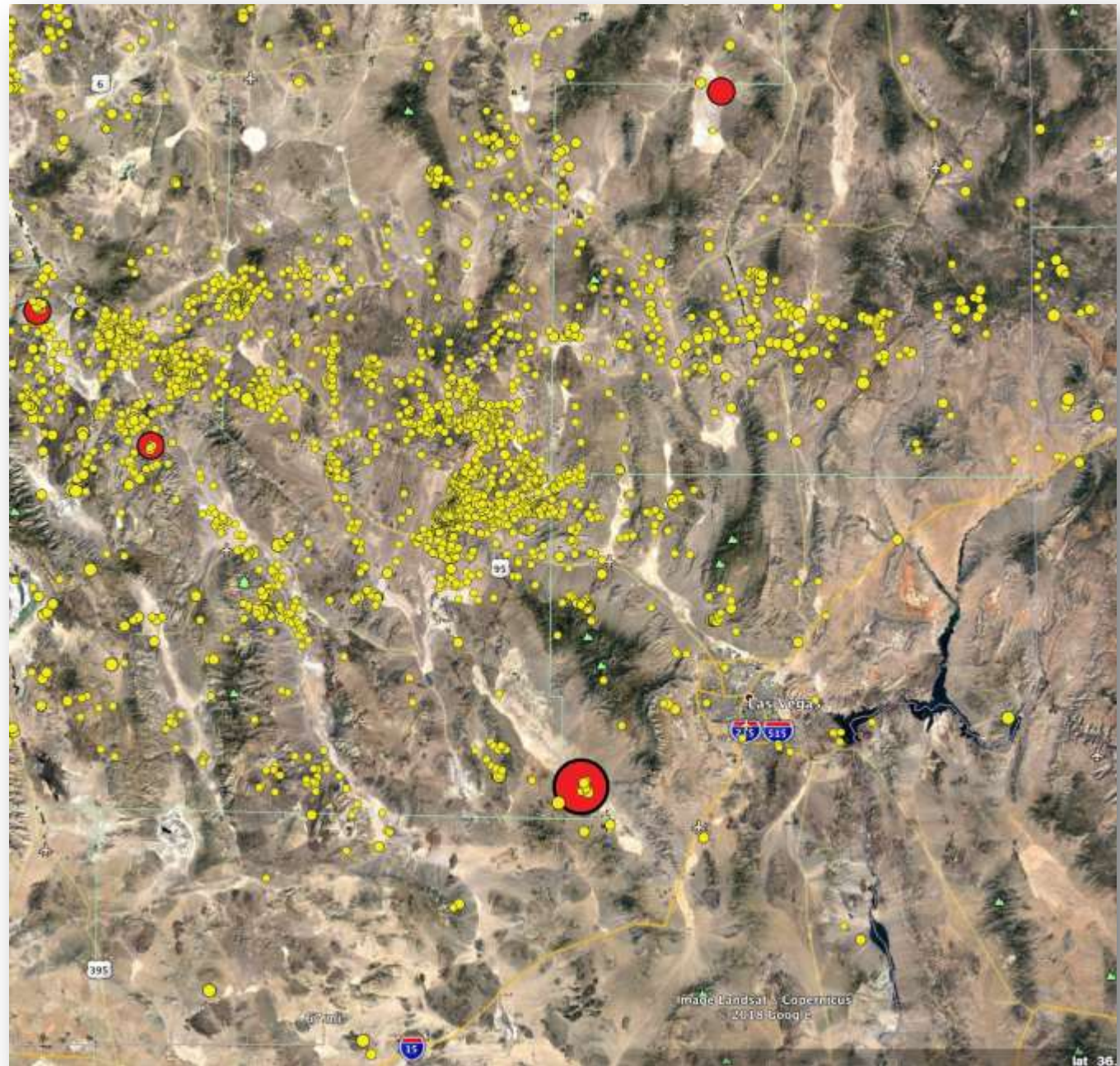(Red M >= 3)
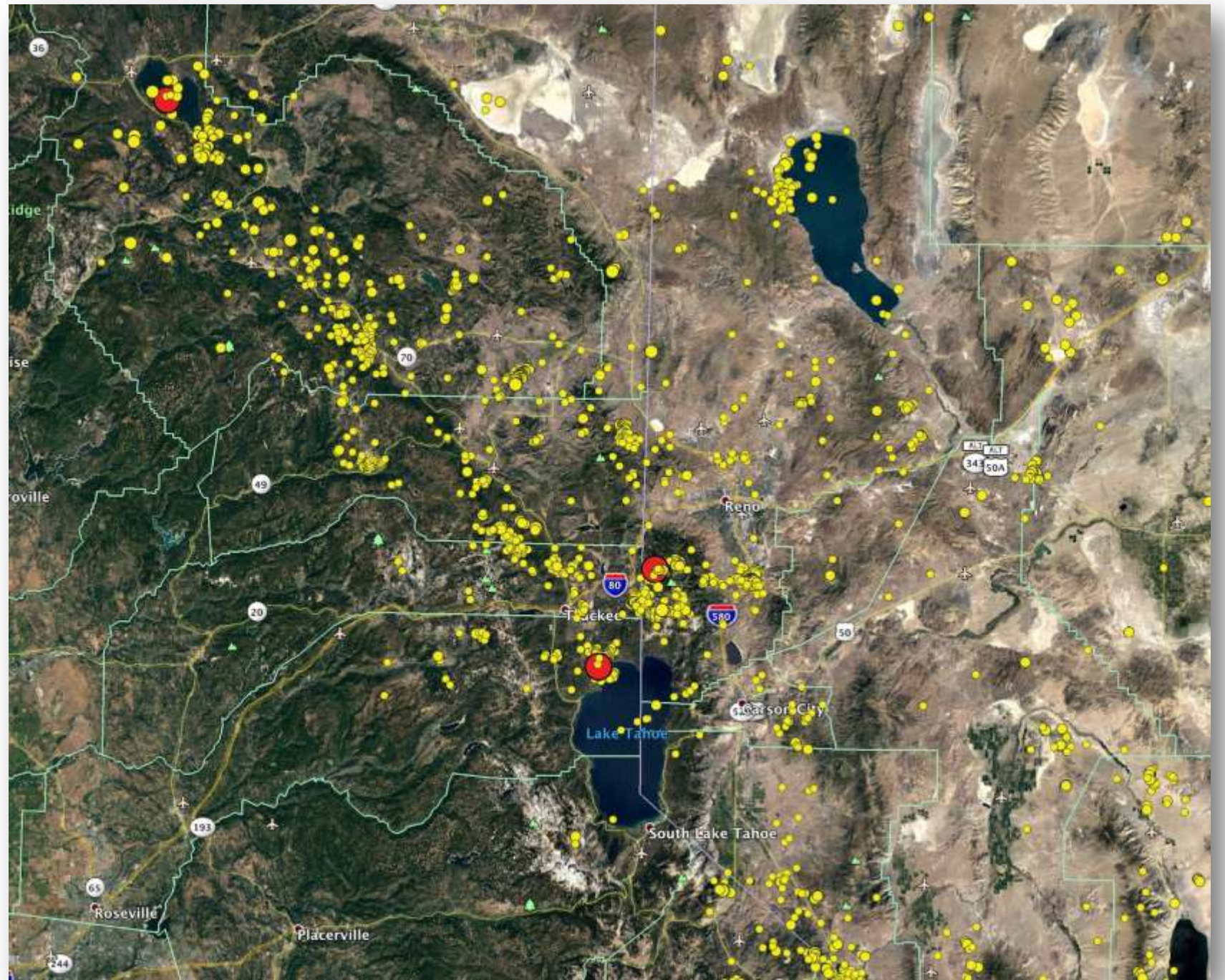
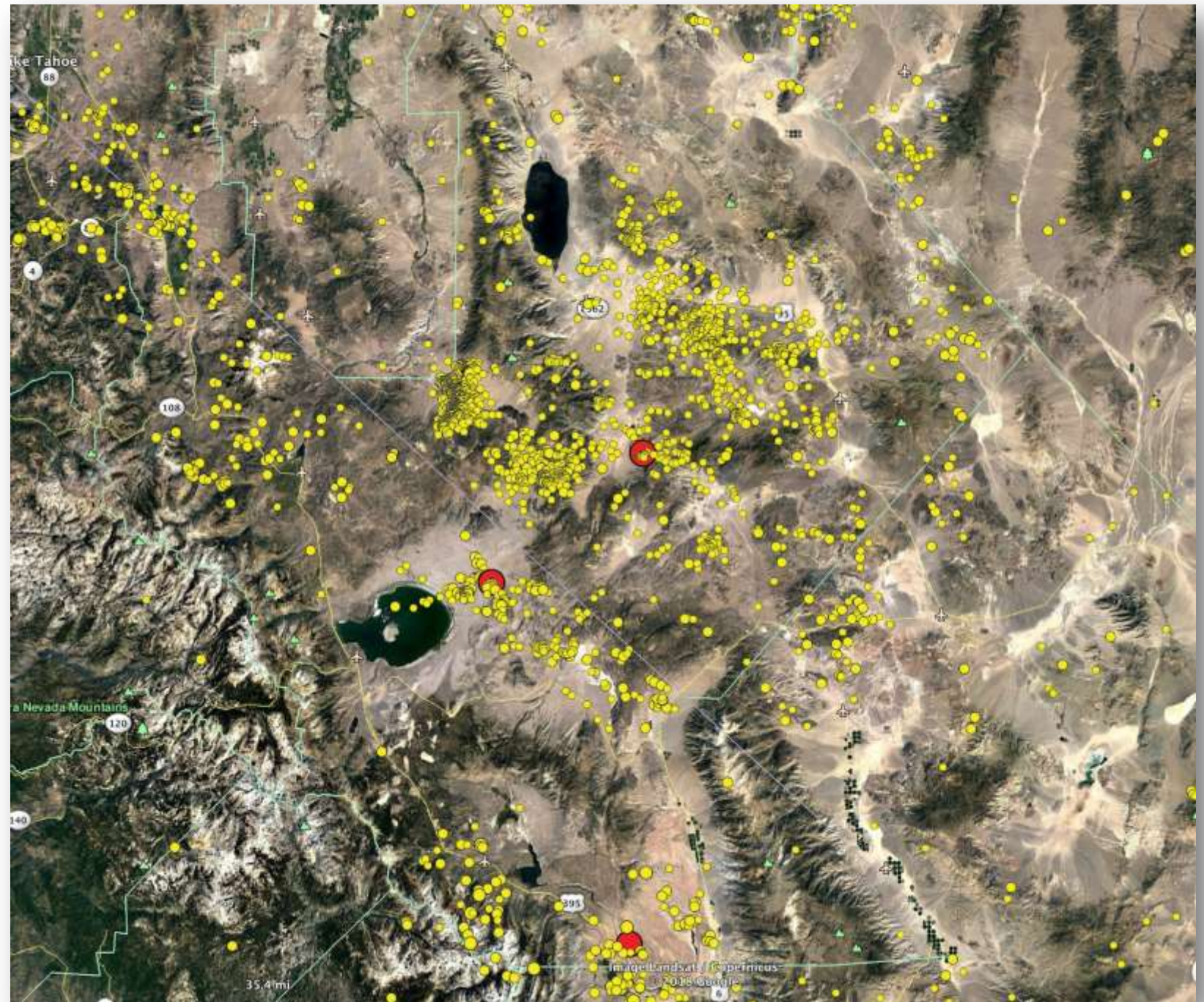1   M >= 4
15   M >= 3
150 M >= 2

2018 Pace: 13,500/yr

S NV & SE Cal 2018

NW NV & NE Cal 2018

C NV & E Cal 2018
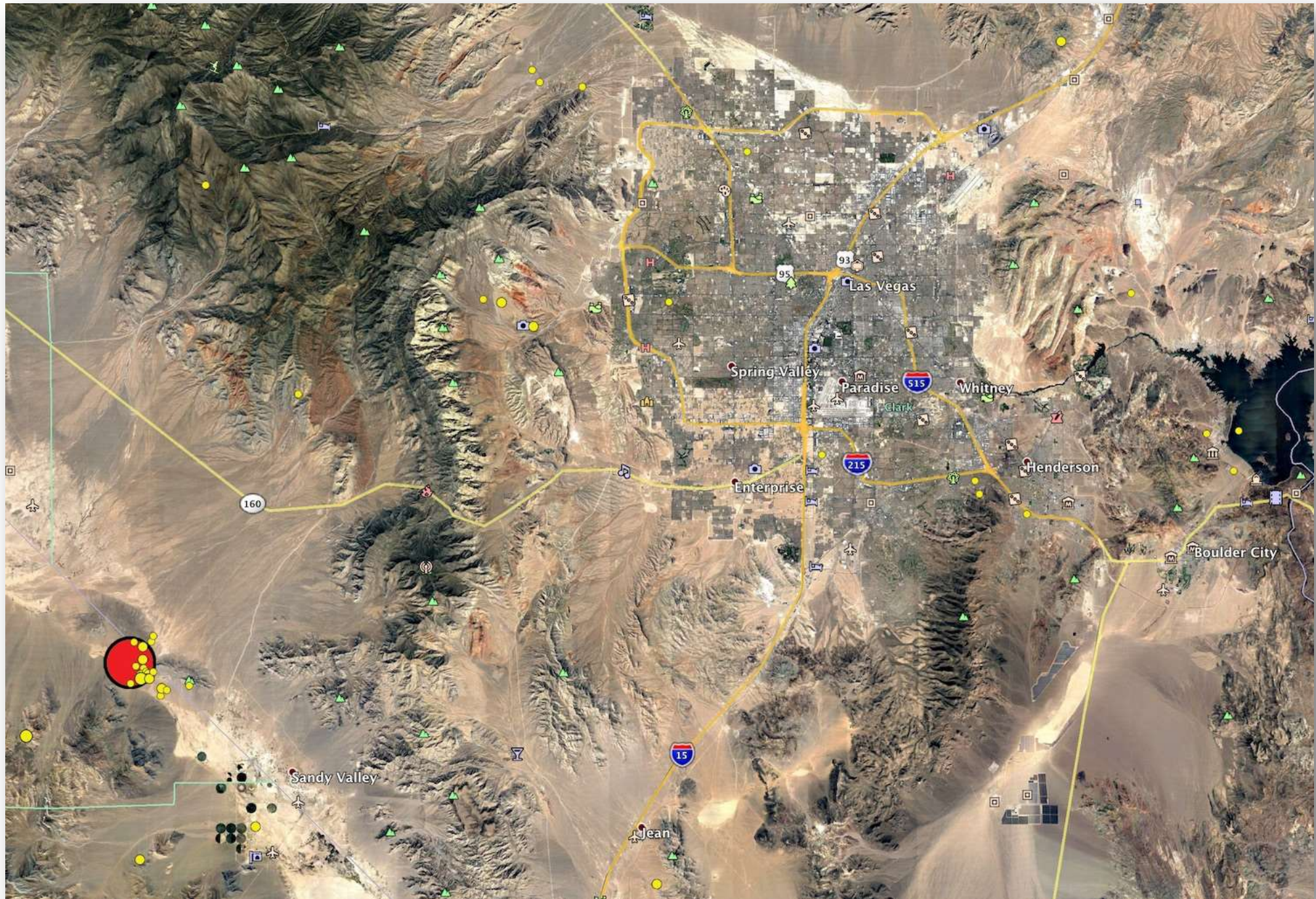
Central Walker Lane

Mw 4.11
50 km from 215

July 5, 2018
15:17 UTC

Lat: 35.8945
Lon: -115.7758
Depth: 8.56
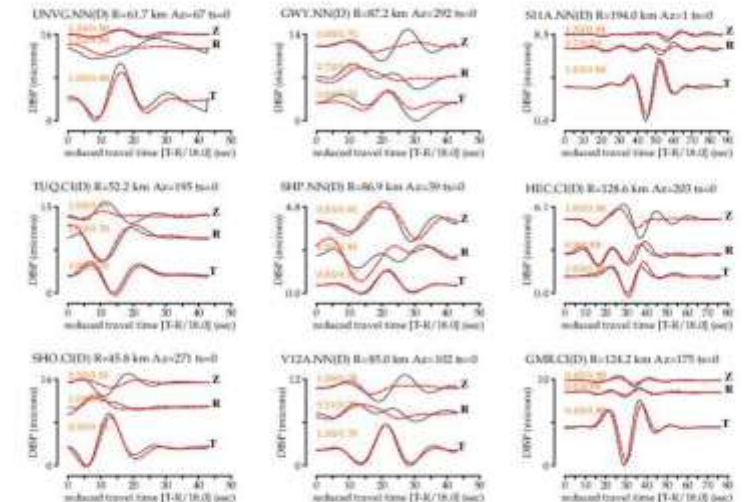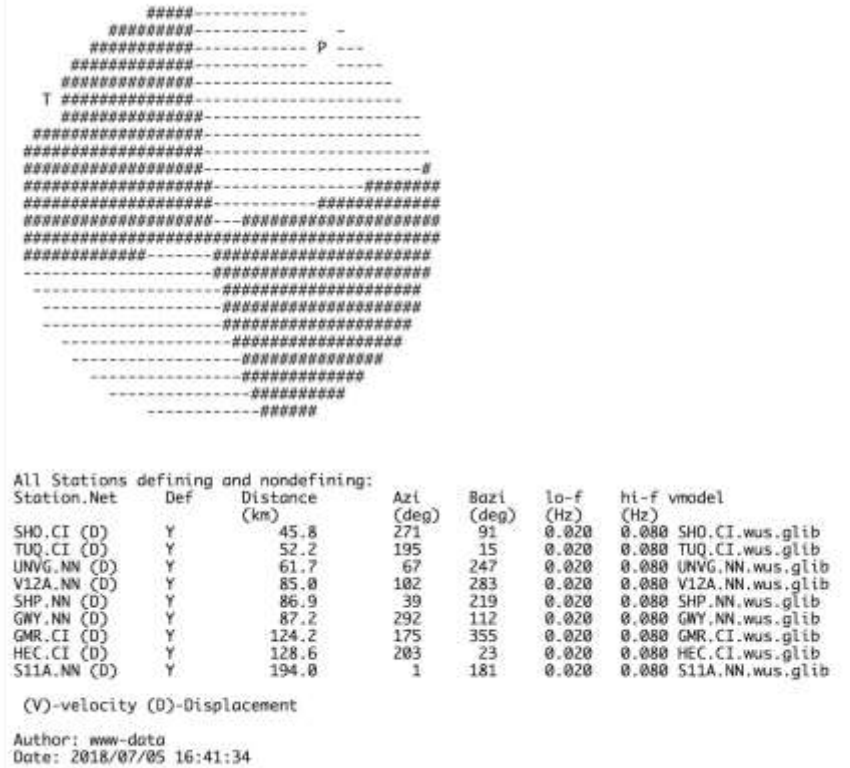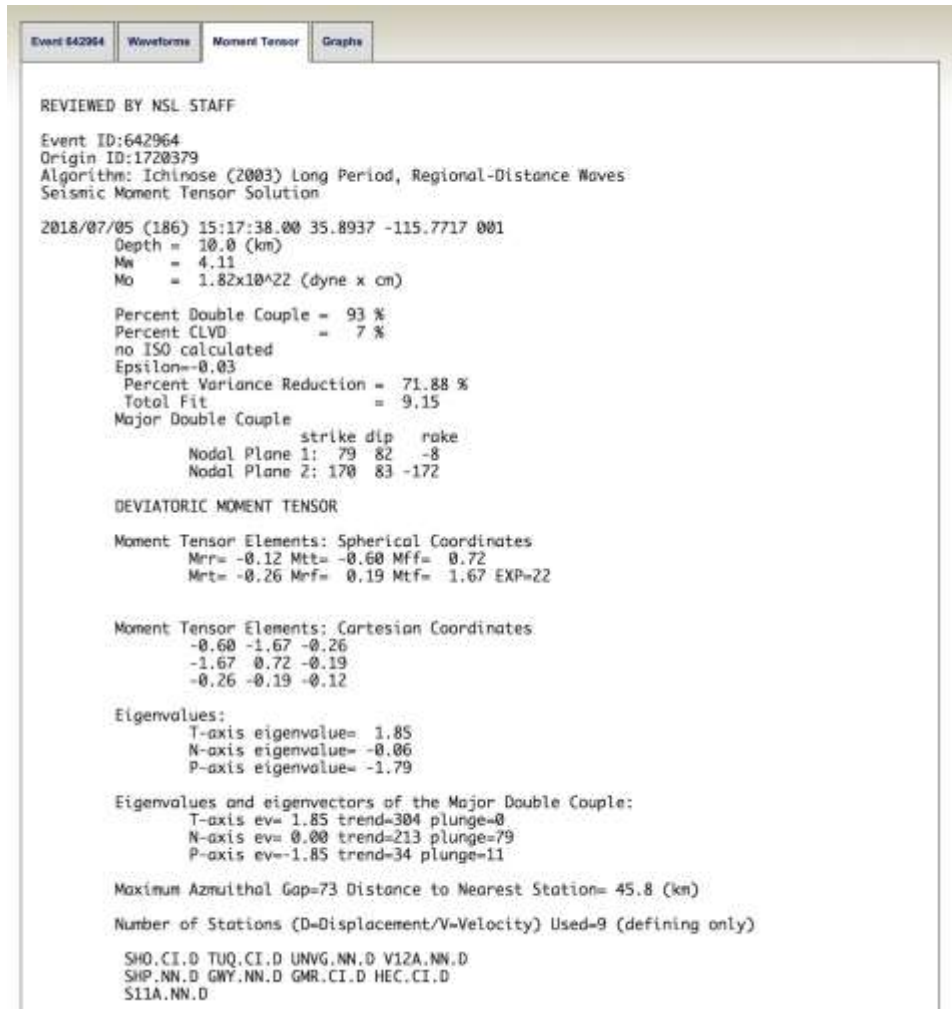
Number of
aftershocks

Moment Tensor Solution

Mw 4.11

50 km from 215

**July 5, 2018
15:17 UTC**

| Event 642964 | Waveforms | Moment Tensor | Graphs |

REVIEWED BY NSL STAFF

Event ID:642964
Origin ID:1720379
Algorithm: Ichinose (2003) Long Period, Regional-Distance Waves
Seismic Moment Tensor Solution

2018/07/05 (186) 15:17:38.00 35.8937 -115.7717 001
    Depth = 10.0 (km)
    Mw   = 4.11
    Mo   = 1.82x10^22 (dyne x cm)

    Percent Double Couple = 93 %
    Percent CLVD   = 7 %
    no ISO calculated
    Epsilon=-0.03
    Percent Variance Reduction = 71.88 %
    Total Fit   = 9.15
    Major Double Couple
                strike dip rake
      Nodal Plane 1: 79 82   -8
      Nodal Plane 2: 170 83 -172

DEVIATORIC MOMENT TENSOR

Moment Tensor Elements: Spherical Coordinates
    Mrr= -0.12 Mtt= -0.60 Mff= 0.72
    Mrt= -0.26 Mrf= 0.19 Mtf= 1.67 EXP=22

Moment Tensor Elements: Cartesian Coordinates
    -0.60 -1.67 -0.26
    -1.67 0.72 -0.19
    -0.26 -0.19 -0.12

Eigenvalues:
    T-axis eigenvalue= 1.85
    N-axis eigenvalue= -0.06
    P-axis eigenvalue= -1.79

Eigenvalues and eigenvectors of the Major Double Couple:
    T-axis ev= 1.85 trend=304 plunge=0
    N-axis ev= 0.00 trend=213 plunge=79
    P-axis ev=-1.85 trend=34 plunge=11

Maximum Azmuithal Gap=73 Distance to Nearest Station= 45.8 (km)

Number of Stations (D=Displacement/V=Velocity) Used=9 (defining only)

    SHO.CI.D TUQ.CI.D UNVG.NN.D V12A.NN.D
    SHP.NN.D GWY.NN.D GMR.CI.D HEC.CI.D
    S11A.NN.D

All Stations defining and nondefining:

Station.Net	Def	Distance (km)	Azi (deg)	Bazi (deg)	lo-f (Hz)	hi-f (Hz)	vmodel
SHO.CI (D)	Y	45.8	271	91	0.020	0.080	SHO.CI.wus.glib
TUQ.CI (D)	Y	52.2	195	15	0.020	0.080	TUQ.CI.wus.glib
UNVG.NN (D)	Y	61.7	67	247	0.020	0.080	UNVG.NN.wus.glib
V12A.NN (D)	Y	85.0	102	283	0.020	0.080	V12A.NN.wus.glib
SHP.NN (D)	Y	86.9	39	219	0.020	0.080	SHP.NN.wus.glib
GWY.NN (D)	Y	87.2	292	112	0.020	0.080	GWY.NN.wus.glib
GMR.CI (D)	Y	124.2	175	355	0.020	0.080	GMR.CI.wus.glib
HEC.CI (D)	Y	128.6	203	23	0.020	0.080	HEC.CI.wus.glib
S11A.NN (D)	Y	194.0	1	181	0.020	0.080	S11A.NN.wus.glib

(V)-velocity (D)-Displacement

Author: www-data
Date: 2018/07/05 16:41:34

Responses vs. Time Plot

Vegas Area Mw 4.11

GS: Did You Feel It?

~100 Responses

https://earthquake.usgs.gov/earthquakes/eventpage/nn00642964#executive