

100th Anniversary Oct. 2nd, 2015

Cataclysmic Earthquakes In the Western US

Probability and Consequences

Drs. Graham Kent and Ken Smith

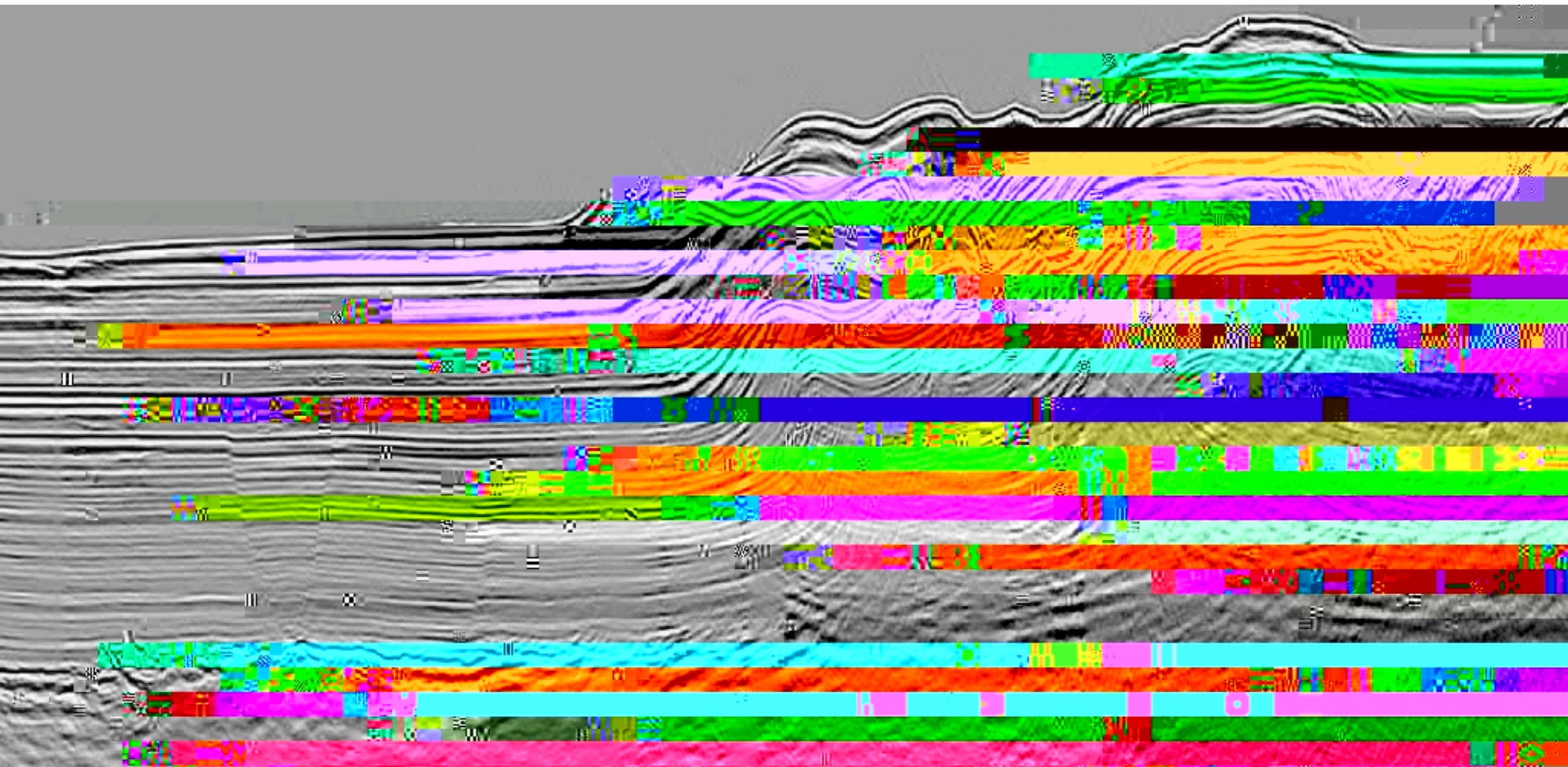
Nevada Seismological LaboratoryR

not a seismologist

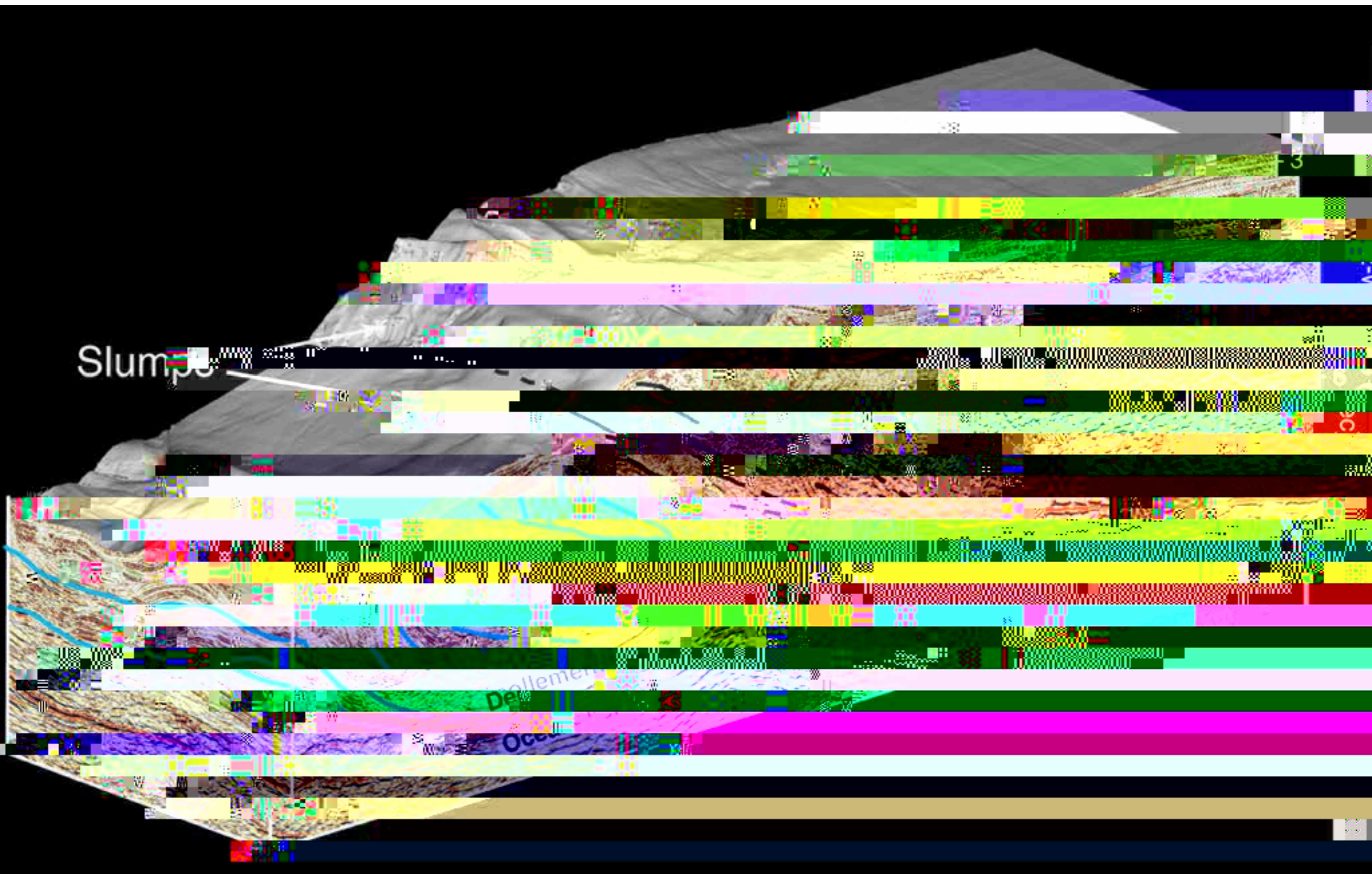
seismologist

RV Langseth Cruise

July, 2012



Nankai Trough in 3-D, Japan



Cascadia Chronology

100th Anniversary Oct. 2nd, 2015

OSU

Turbidites/debris flows

Tahoe turbidites too!

Orphan tsunami, 1700

TeraShake Project

100th Anniversary Oct. 2nd, 2015

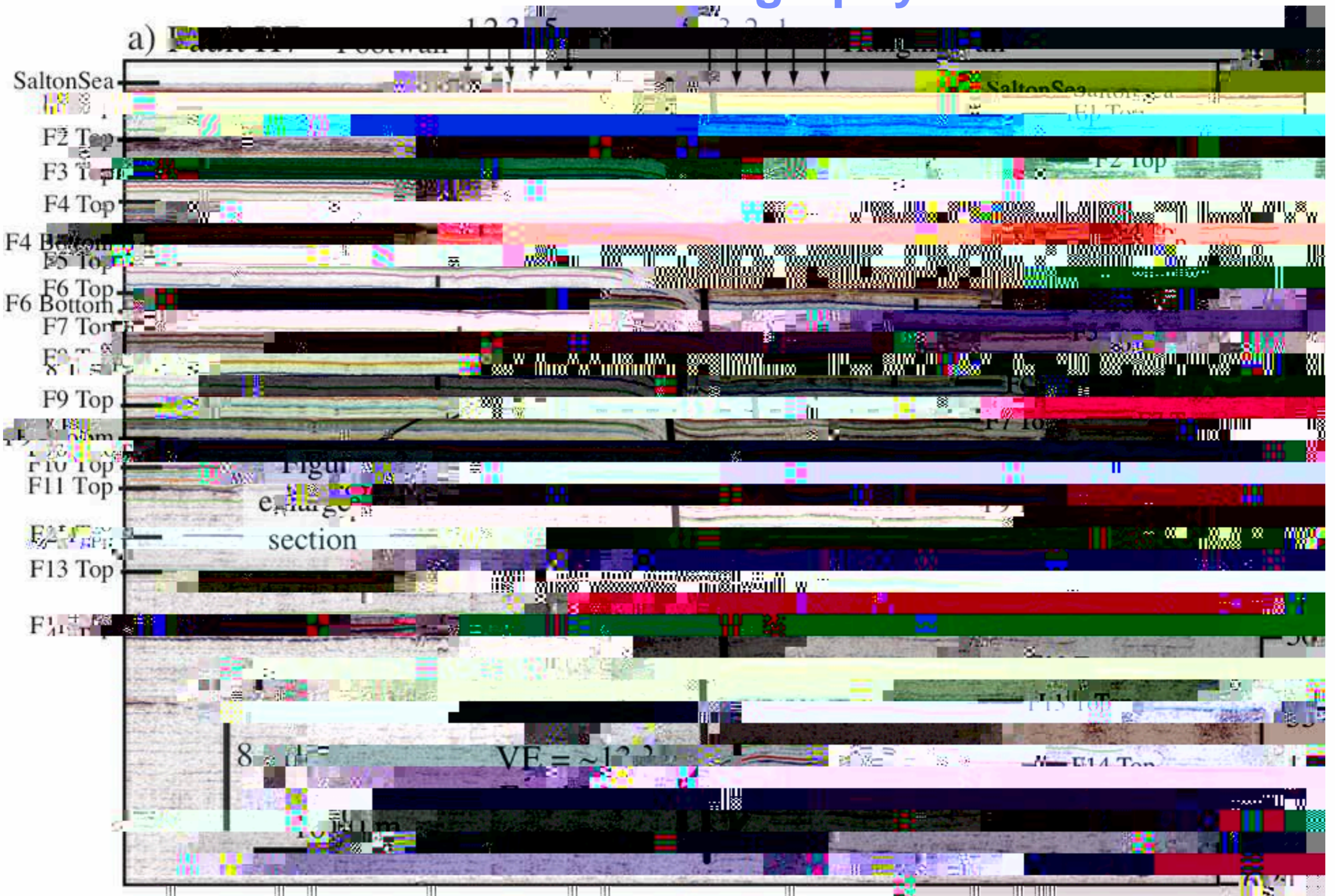
~M8 Southern

Lake Cahuilla—Salton Sea

100th Anniversary Oct. 2nd, 2015

**Faults connecting Imperial to San Andreas
fault may trigger the big one!**

H7 Fault Stratigraphy



A 14 event earthquake record beneath the Salton Sea

End of SS7A record

e) Corru

SS7A 1657
Events 1713 1662 1489 1234
yrs A.D.:



Q&A with the Chief Executive Officer

Resilience.

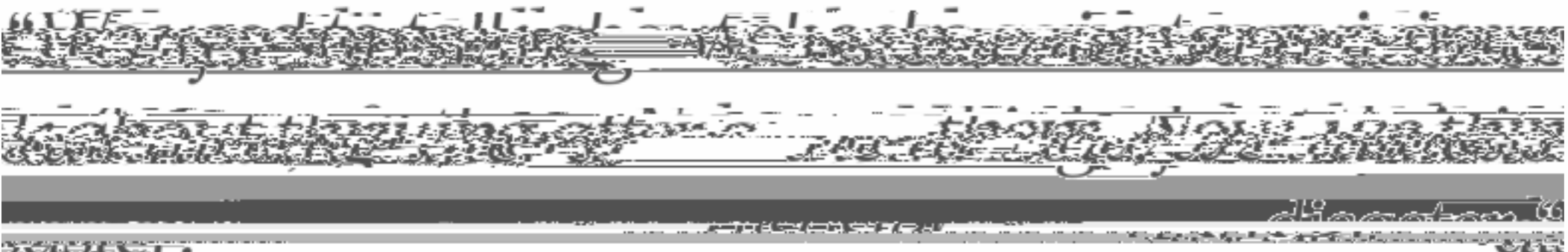
A version of

Oct. 2nd, 2015

-All private equity \$\$\$

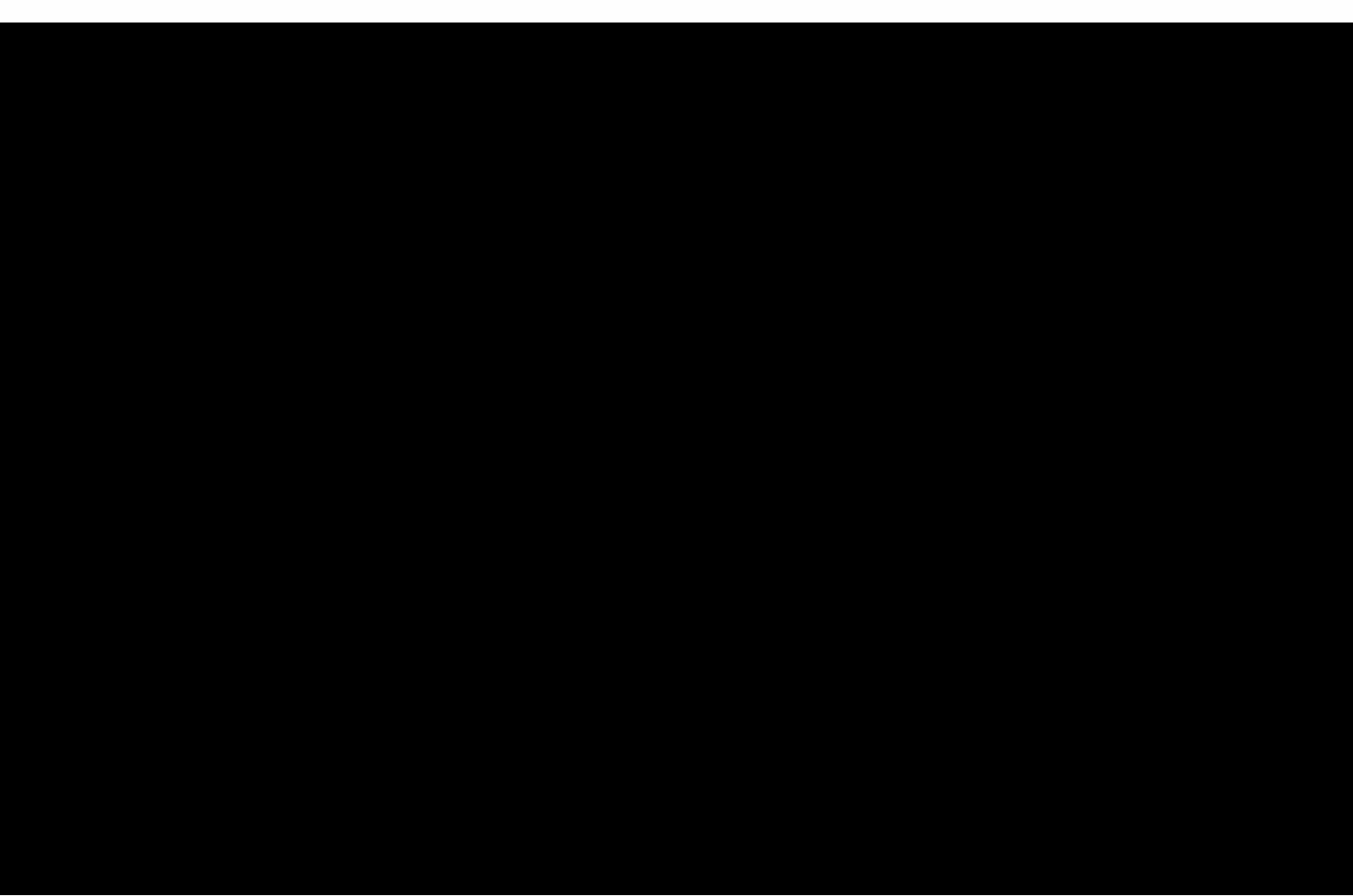


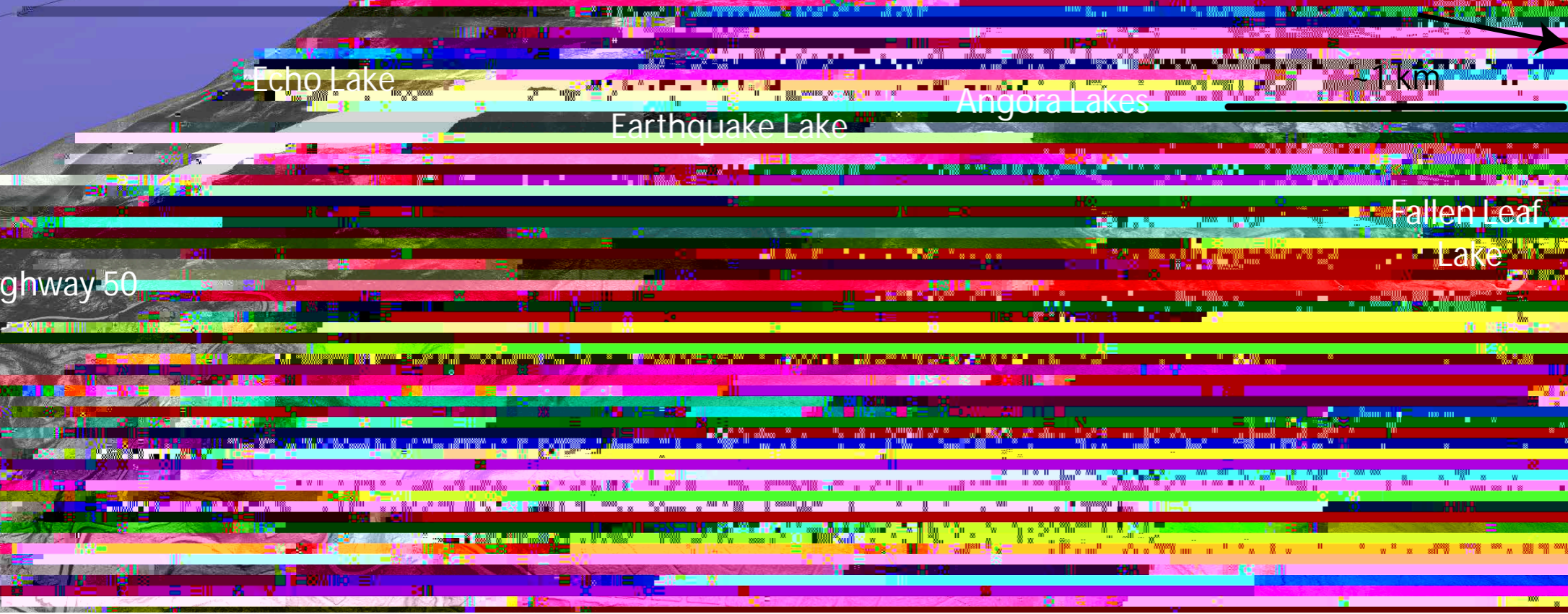
100RESILIENTCITIES.ORG



Pleasant Valley (M7.3) 1915

100th Anniversary Oct. 2nd, 2015





Echo Lake

Earthquake Lake

Angora Lakes

Fallen Leaf

Lake

Highway 50

1 km

DOI 12

0.00
0.20 TWTT (s)



M7 capable fault



Mogul–Somerset M5.0 earthquake, 2008

100th Anniversary Oct 2nd 2015



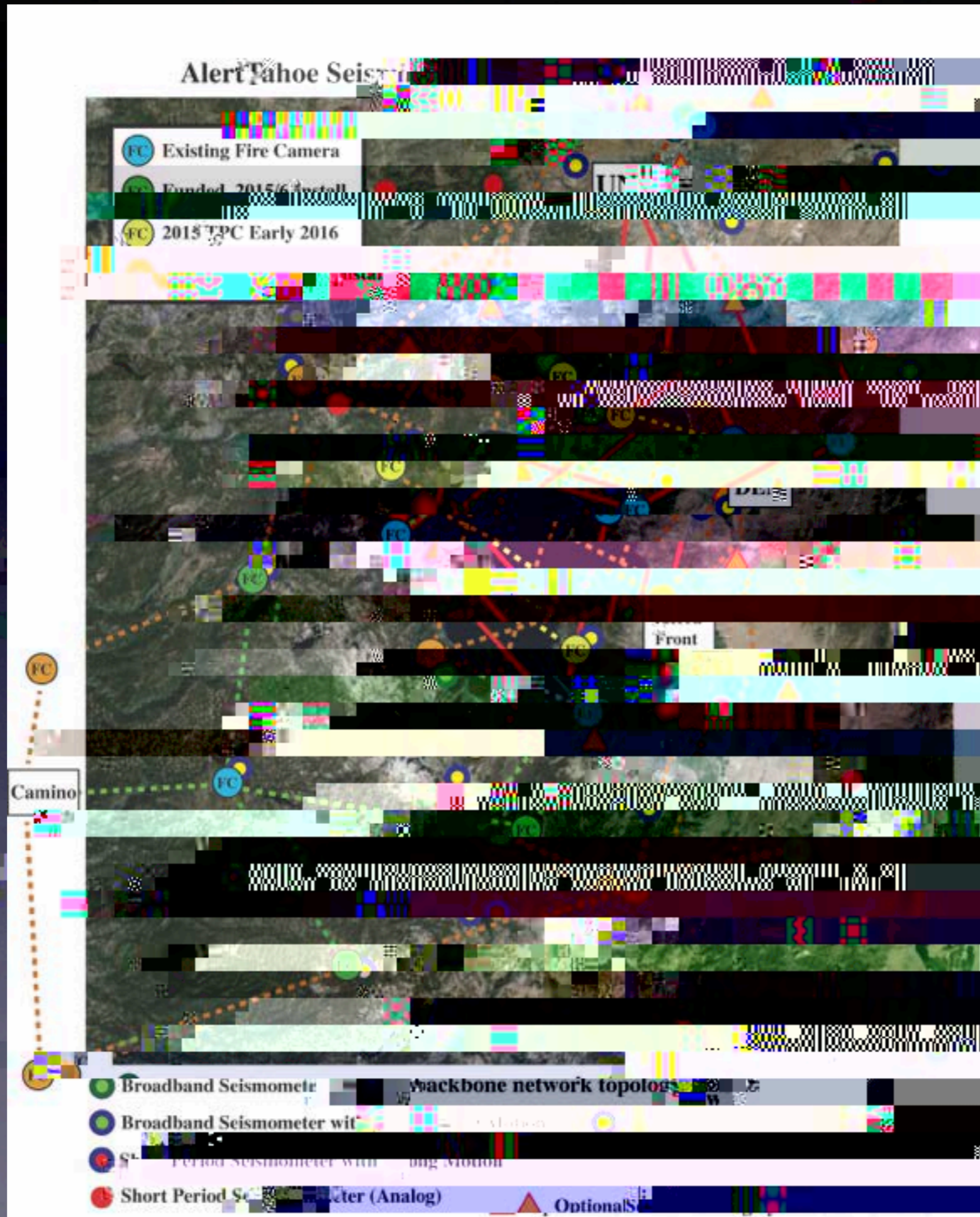
... has our community followed in Napa's footsteps? No!

3 M4.8 Earthquakes this year alone

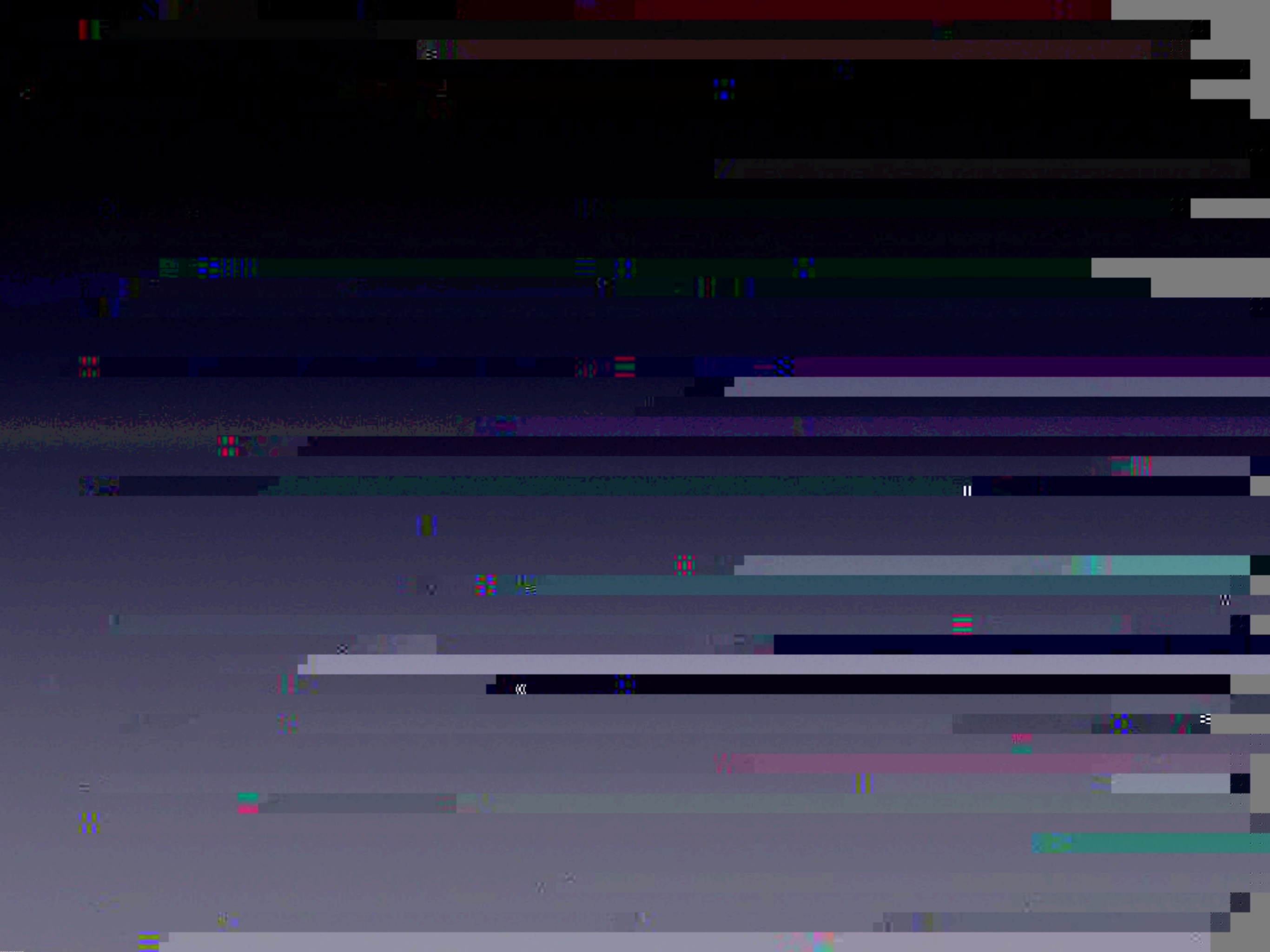


13,862 EQs located this year so far ... on a pace to hit ~18K in 2015

AlertTahoe



Multi-Hazard



Blm Tahoe Camera Program

Spoooner Lake Incident

Midas Incident

Elephant Fire

King Holdover Incident

King Incident

Jordan Valley Fire

Boulder Incident

Washington Fire

Jobs Ranch Incident

Midas 2 Incident

Logan Creek&Mallard Incident

4th of July Incident

Kahle Meadows Incident

Scout Peak Incident

Lake Village Incident

Caughlin Incident

Red Rocks Incident

Multi-Hazard Networks

Next Steps... ShakeOut 2.0

- business resiliency (can we survive after Day 1)
- earthquake authority/insurance (stimulus after quake)
- hazard warning system aka AlertTahoe (reduce losses)
- execute the "Napa model" (start yesterday!)

Onto the panel ...



Dixie Valley M6.8 EQ