

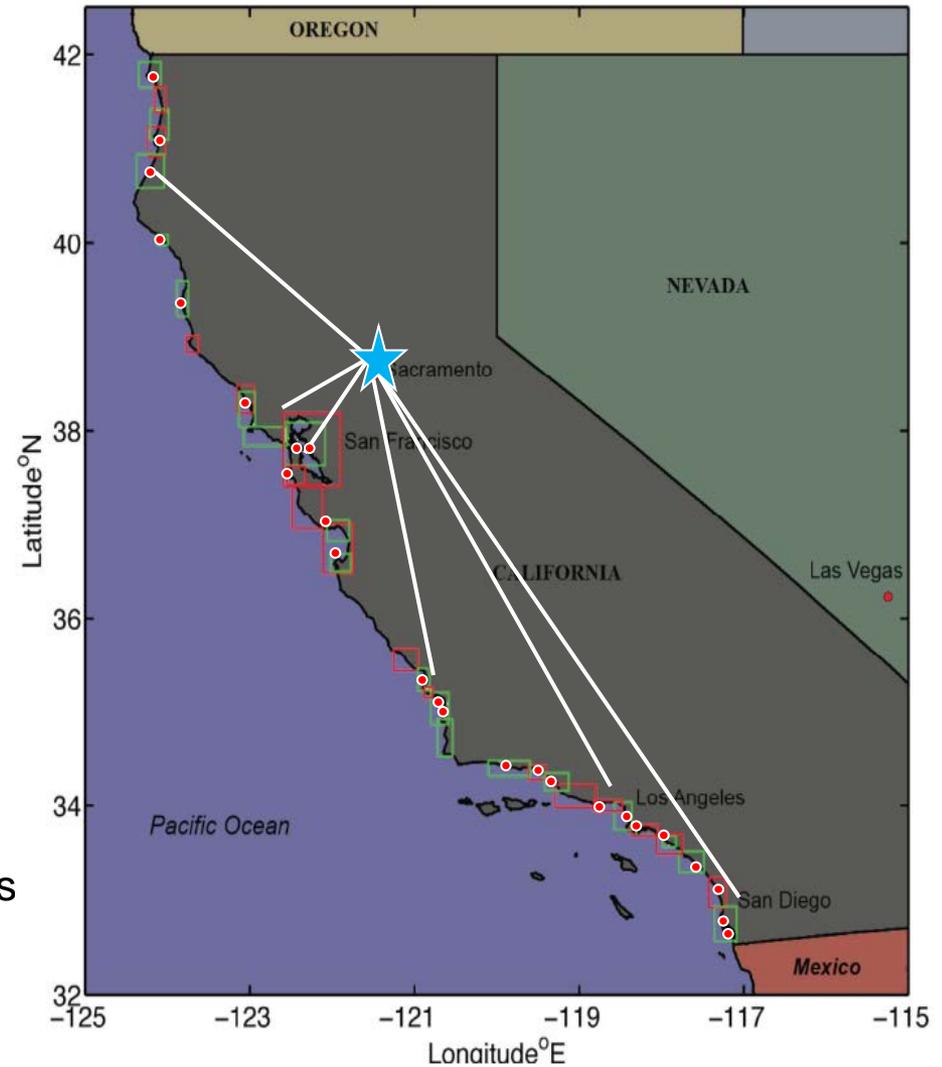
# Pre- and Post-Tsunami Field Team and Information Clearinghouse

## ▶ During tsunami...

- Developed tsunami observer program
- Real-time field data collection and clearinghouse
- Real-time instrument network
- Real-time video camera network

## ▶ After tsunami...

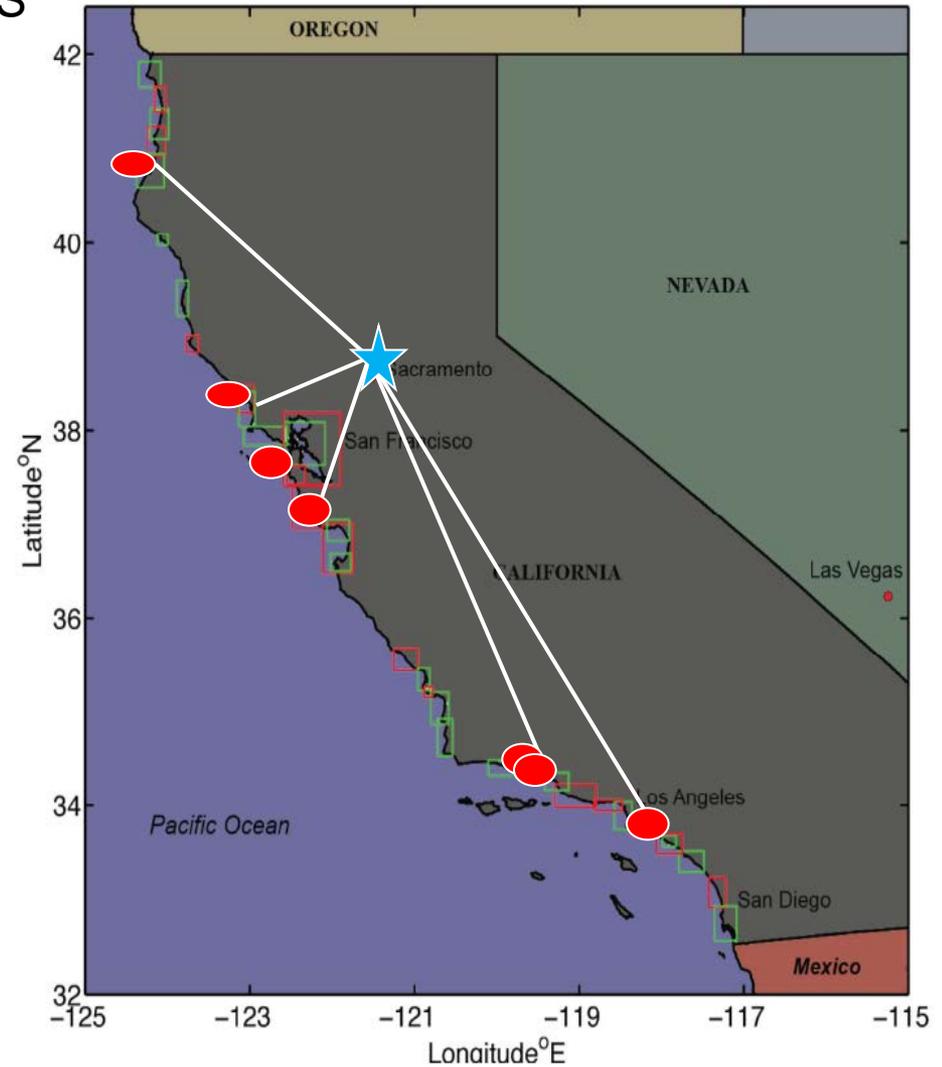
- Collect perishable post-tsunami data
- Establish post-event information clearinghouse
- Provide observations of hazardous conditions and damage to CalOES, others



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# Response to March 11, 2011 Event

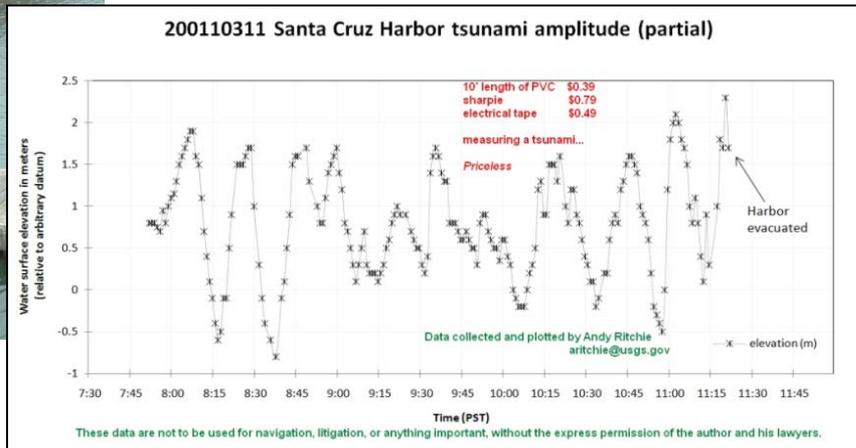
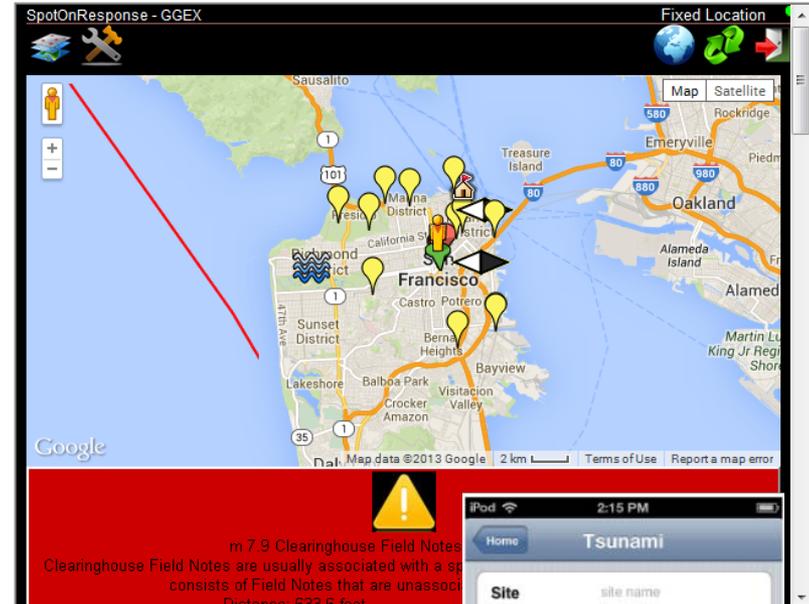
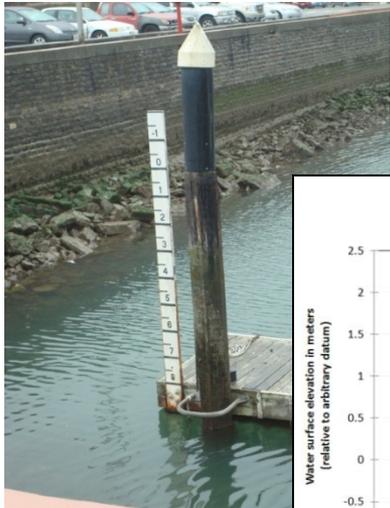
- ▶ Early March, 2011 - Four regional CGS personnel selected, then....March 11, 2011 Japan tsunami occurred
- ▶ Before event
  - Six people in field at prime locations
  - Contacted and assisted local officials
- ▶ During event
  - Clearinghouse to CalOES
  - Collect real-time information
- ▶ After event
  - Eight field teams and email surveys collect information at 160 coastal locations; Use of EQ Clearinghouse website
  - Damage reports to CalOES; helped with Federal Disaster Declaration
  - Reported results in peer-reviewed articles
  - Implementing new work based on results



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# Tsunami Observation Team Data Collection

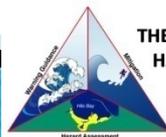
- Information collected/provided during tsunami to clearinghouse and counties:
  - Location, wave height, current velocity, area of inundation, damage, photos/videos, actions taken by locals



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# Expand Tide Gauge and ADCP Currents Network

- Tide gauges assist Warning Center and emergency managers
  - Forecast updates
  - Changes to Alert level
  - Post-tsunami evaluation
- Tide gauges through NOAA-NOS and Warning Centers
- New tide gauges = Ft Bragg, Santa Cruz, Ventura, Newport Beach
- ADCP = Acoustic Doppler Current Profiler: Humboldt Bay, Crescent City, and Santa Cruz (proposed)



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# Develop Real-time Online Webcam Network

- Cameras either mobile (with field team members) or fixed locations
- Locations – primarily harbors where strong currents or damage expected
- Objectives:
  - Real-time “eyes on the water” for emergency managers
  - Data collection for scientific evaluation



*Idealized multiple webcams statewide capturing tsunami in real time*



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