Science on a Sphere Interactivity

Leon Geschwind, Science Education Manager
Brad Evans, Senior Exhibit Designer

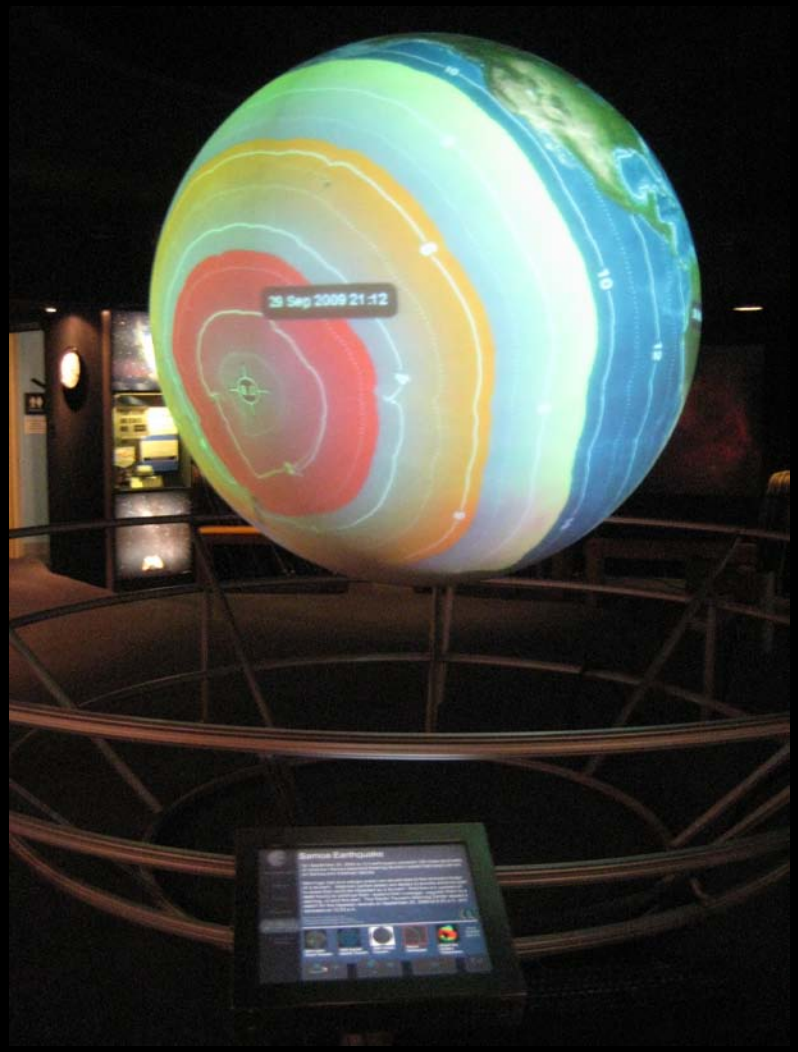
BISHOP MUSEUM

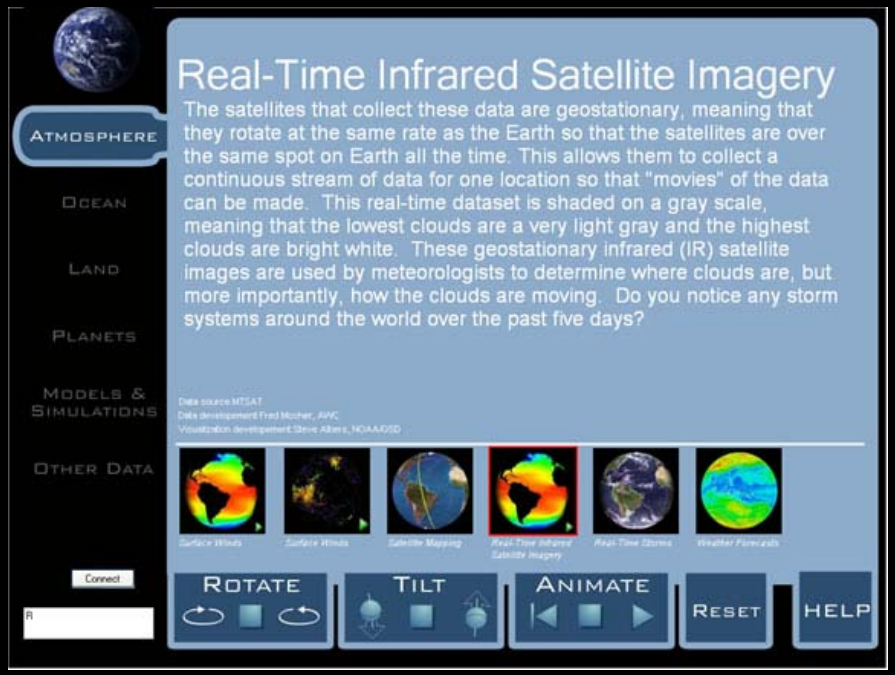
Bishop Museum

Overview

- Kiosk
- Missions and Exhibits
- Spherecasting
- Citizen Science
- Applications

SOS Kiosk



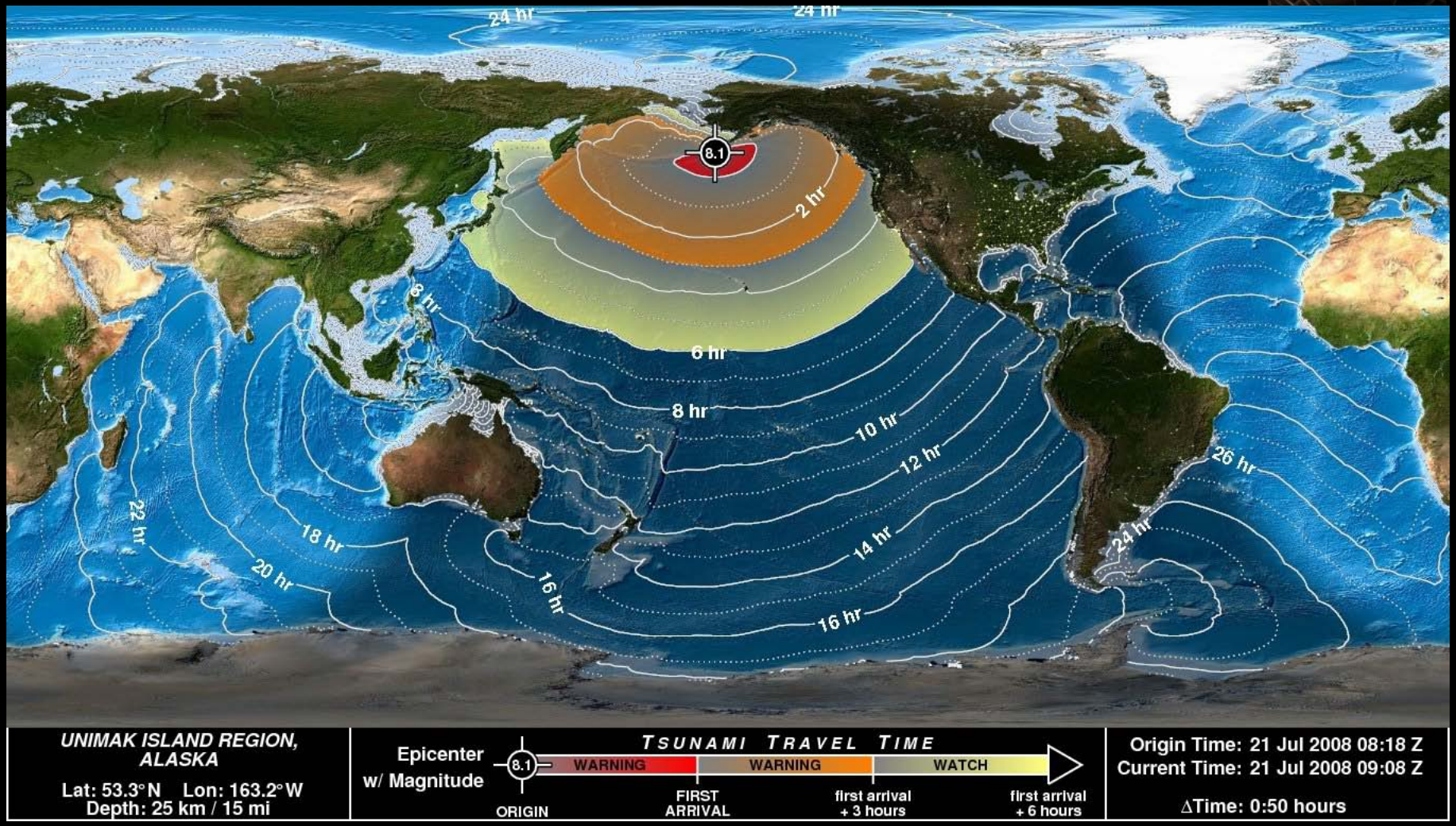


- Interactive touch screen
- Built-in counter
- Nearly 50 data sets, including narrated SOS movies
- Missions (in development)

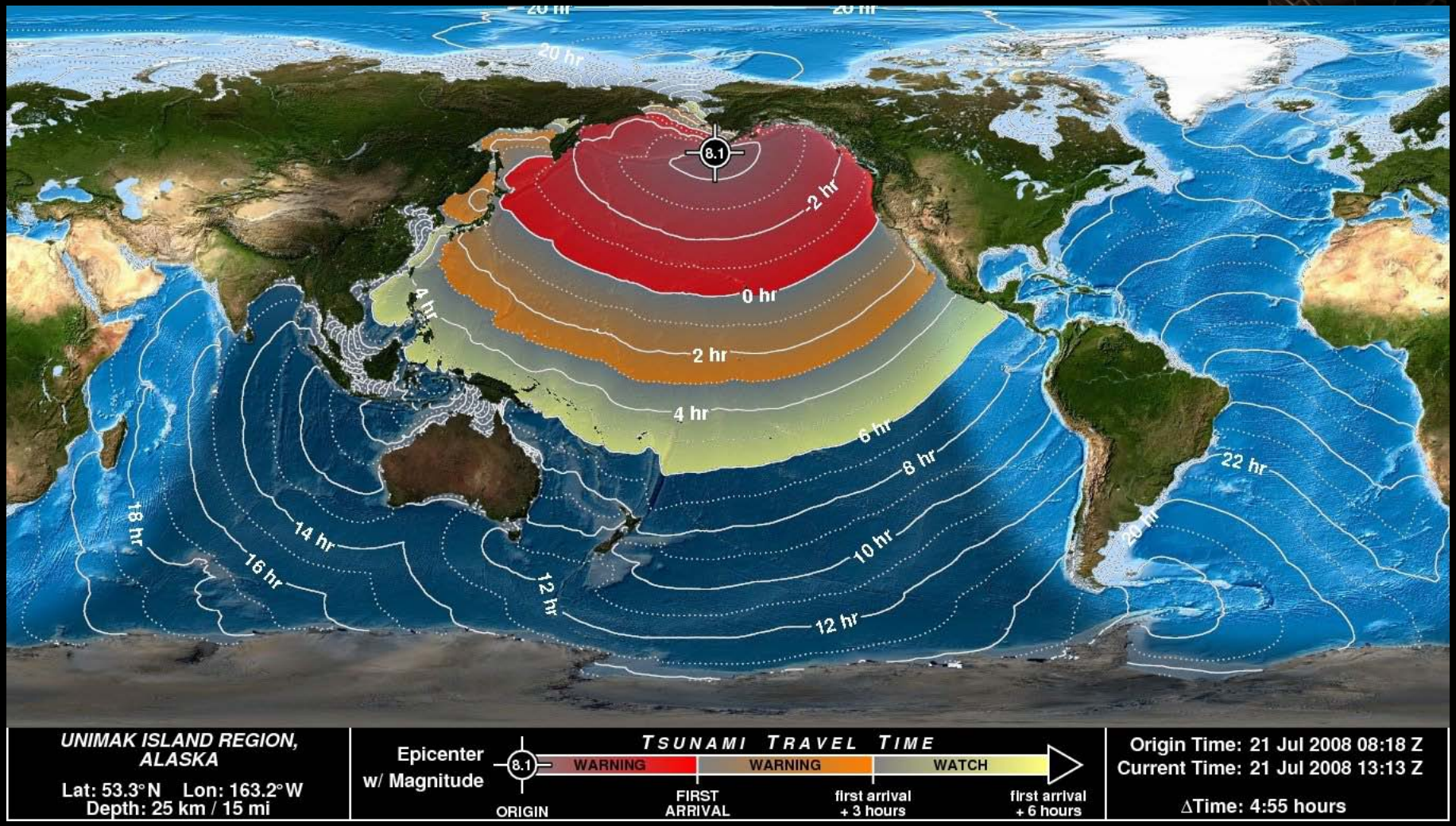
Interactive Missions and Exhibits
(in development)

Pacific Tsunami Warning Center Operations Room, Director of the PTWC

Tsunami Travel Time (TTT) + 1 Hour



TTT Map + 5 Hours



sunami Hazard Information Service - Mozilla Firefox

Edit View History Bookmarks Tools Help

http://www.csc.noaa.gov/psc/riskmgmt/tsunami.html

tsunami csc

ost Visited | Bishop Museum Intranet | Access to FedBizOpps | http://beta.howtosmil... | My Food Affair | Phone | CC | Latest Headlines | BM1 | HPU

Tsunami Hazard Information Service

Overview

The Tsunami Hazard Information Service provides residents and visitors of the State of Hawai`i easy, online access to the State's tsunami evacuation zone maps as well as information about potential risks, how to prepare, and what to do in the event of a tsunami.

This service was created by the NOAA Pacific Services Center in partnership with the State of Hawai`i. To find out if you are located in a tsunami evacuation zone, enter your address or island area in the search boxes below.

Tsunami Evacuation Zones

The Tsunami Map Viewer returns a map of areas with Tsunami Evacuation Zones based on information that you enter.

Search By Address

Address:

City:

Zip:

Search Address

Search By Island Area

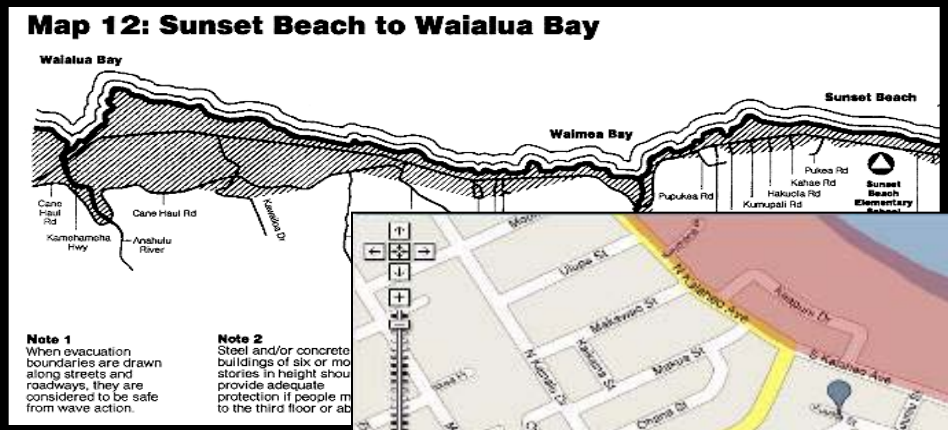
Island Area

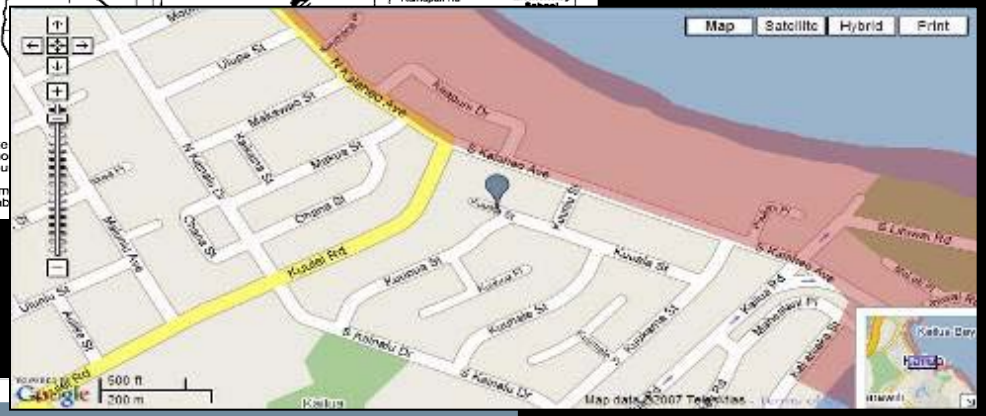
Island Area:

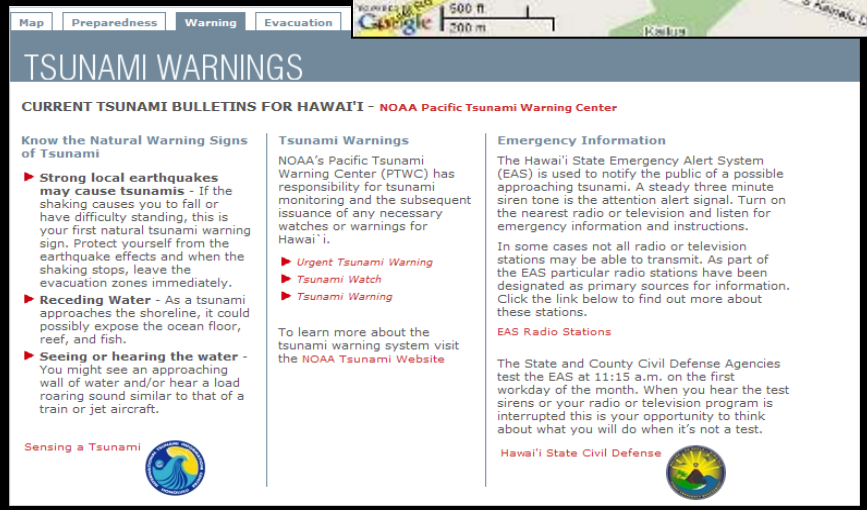
Search Island Area

NOAA PSC: http://www5.hawaii.gov/tsunami/

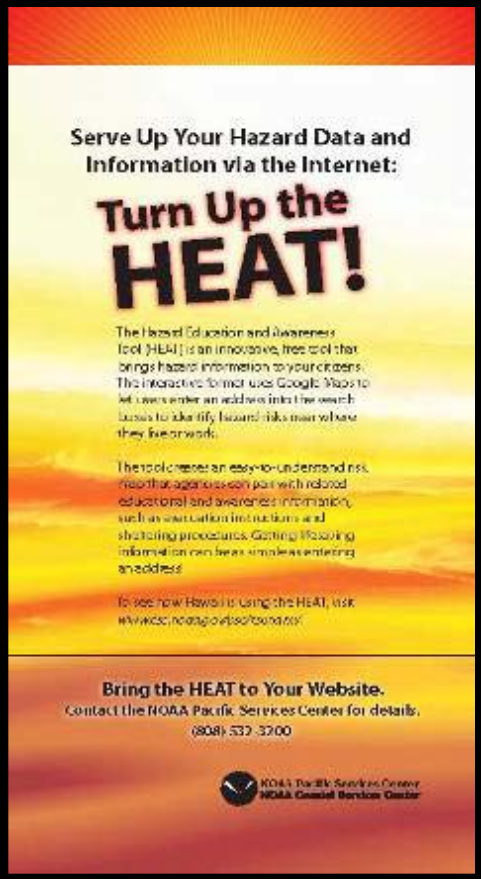
Hazard Education and Awareness Tool (HEAT)

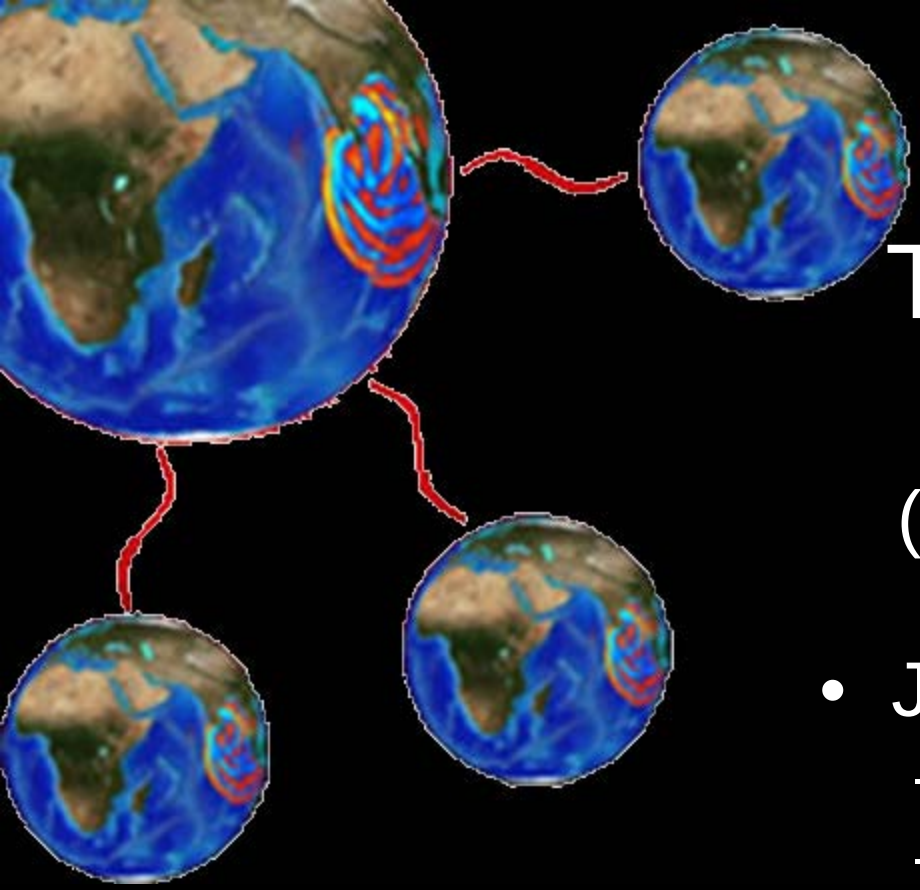






NOAA PSC





Proposed Tsunami Spherecast April 2010

(Tsunami Awareness Month)

- Joint presentation:
  - NOAA PTWC Scientists
  - NOAA PSC
  - Bishop Museum
- NOAA Viz team auto-run
- Tsunami Mission Interactive

Citizen Science: Bishop Museum and Reef Check

- Public participation in scientific-driven research
- Monitoring of coral reefs bleaching around Hawaii

Reef Check Hawai'i/ Hawai'i Institute of Marine Biology/DAR

EYES OF THE REEF Network

Coral Bleaching/Disease/COTS Reporting Form

Online Forms: www.reefcheckhawaii/eyesofthereef

We value your time and assistance.

Please direct any questions to: **Krista Heide**- Program Coordinator-Reef Check Hawai'i

Phone: **(808) 953-4044** Email: contact@reefcheckhawaii.org

A. OBSERVER INFORMATION: **Date of Visit:**_____ **Time :**_____

Name:_____ Phone:_____ Email:_____

Address:_____

(*please circle*): Resident Visitor Tourism Industry Commercial Research Education Other

Vessel/Organization (*if applicable*):_____

B. SITE INFORMATION: **Latitude:**_____ **Longitude:**_____

Island:_____ Location/Site Name:_____ Max. Depth:_____

Buoy #/ Area of Reef:_____ Estimated area affected:_____

Environmental Conditions (if available)

Wind Speed:_____ Air Temp:_____ Water Surface Temp:_____ Water Bottom Temp:_____

Cloud Cover (circle): Clear Partly Cloudy Mostly Cloudy Overcast

Reef Condition (please circle)

Percent of live coral cover? 0% 1-10% 11-30% 31-50% 51-75% 76-100%

Most abundant coral type? (Table 2) Smooth ____ Distinct Branching ____ Rice ____ Other:_____

C. INCIDENT INFORMATION **ARE PHOTOGRAPHS AVAILABLE?**

Did you observe signs of bleaching? If yes continue to Section D. ___Yes ___No

Did you observe signs of disease? If yes skip to Section E.

Did you observe signs of a Crown-of-Thorns Sea Star (COTS) outbreak? If yes skip to section F.

D. BLEACHING INFORMATION **(Please enter a check mark (√) into the appropriate space.)**

Types of Corals Bleached? (Table 2)	*Percent of coral bleached?*	*In general, how severe was the bleaching?*
____**Smooth Coral (*Porites*)**	____0%	____Bleached only on upper surface
____Mounding (*P. lobata*)	____1-10%	____Pale (very light brown, purple or yellowish)
____Finger (*P. compressa*)	____11-30%	____Totally Bleached White
____Plating (*P. rus*)	____31-50%	____Bleached Coral with Algae
____**Rice Coral (*Montipora*)**	____51-75%	
____Red rice (*M. capitata*)	____76-100%	
____Blue rice (*M. flabellata*)		*Depth where bleaching was observed?*
____Tan/Purple rice (*M. patula*)		____MIN (ft)
____**Distinct Branching Coral (*Pocillopora*)**		____MAX (ft)
____Cauliflower (*P. meandrina*)		
____Lace (*P. damicornis*)		
____Antler (*P. eydouxi*)		
____**Other**_____(specify)		

E. DISEASE INFORMATION

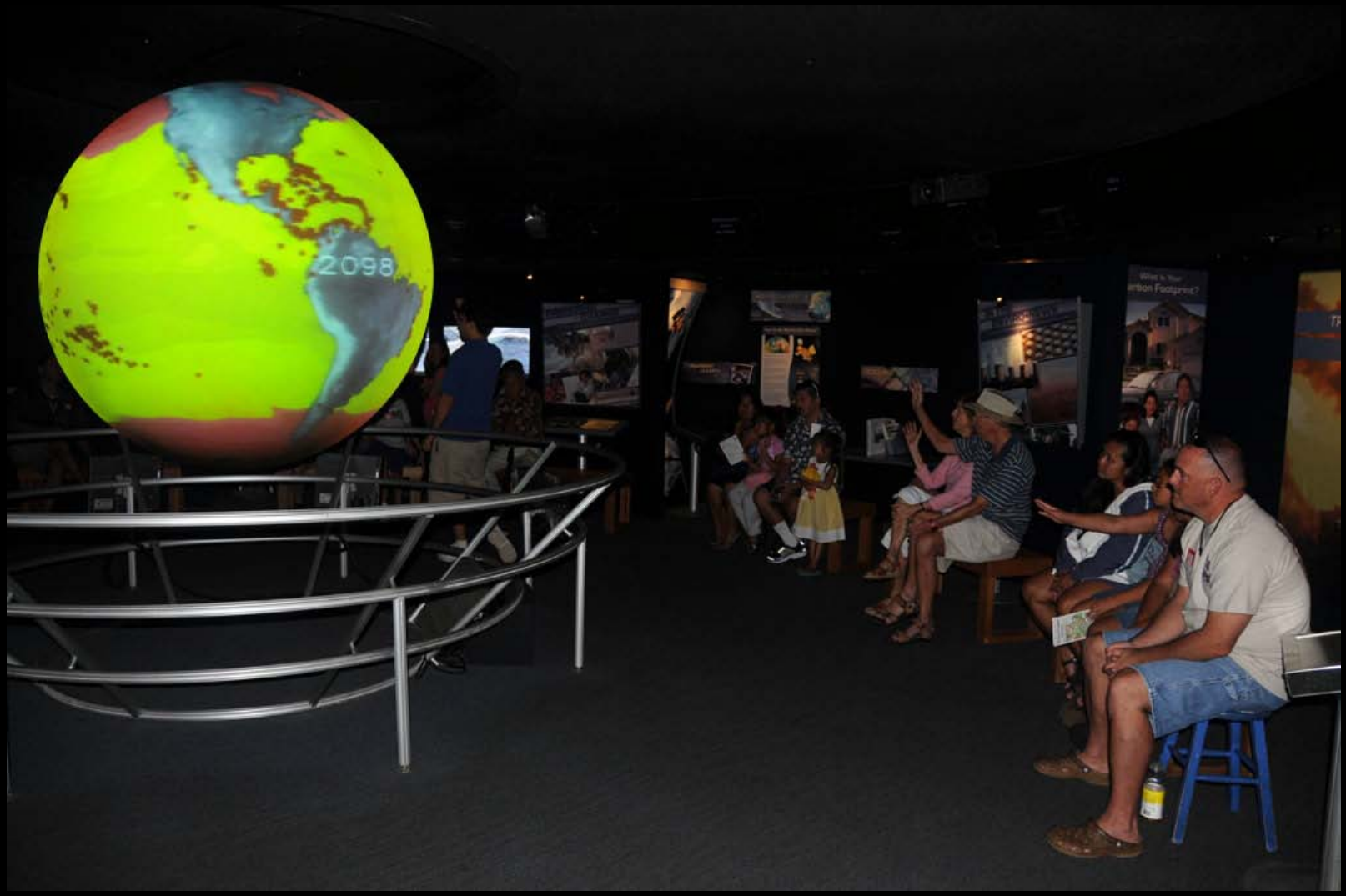
Types of Corals affected? (Table 2)	*Lesion type?*
____**Smooth Coral (*Porites*)**	____Tissue Loss
____Mounding (*P. lobata*)	____Growth Anomaly
____Finger (*P. compressa*)	____Discoloration
____Plating (*P. rus*)	
____**Rice Coral (*Montipora*)**	
____Red rice (*M. capitata*)	
____Blue rice (*M. flabellata*)	*Percent of coral affected?*
____Tan/Purple rice (*M. patula*)	____0%
____**Distinct Branching Coral (*Pocillopora*)**	____1-10%
____Cauliflower (*P. meandrina*)	____11-30%
____Lace (*P. damicornis*)	____31-50%
____Antler (*P. eydouxi*)	____51-75%
____**Other**_____(specify)	____76-100%

F. CROWN-OF-THORNS INFORMATION

Types of Corals affected?	*Estimated number of animals?*
____**Smooth Coral (*Porites*)**	____1-50
____Mounding (*P. lobata*)	____51-100
____Finger (*P. compressa*)	____101-250
____Plating (*P. rus*)	____251-500
____**Rice Coral (*Montipora*)**	____501-1000
____Red rice (*M. capitata*)	____1001-3000
____Blue rice (*M. flabellata*)	____3000+
____Tan/Purple rice (*M. patula*)	
____**Distinct Branching Coral (*Pocillopora*)**	
____Cauliflower (*P. meandrina*)	
____Lace (*P. damicornis*)	
____Antler (*P. eydouxi*)	
____**Other**_____(specify)	

Form: Reef Check Hawaii / HIMB / DAR

SOS Intro for Citizen Science



Applications

- School and public programs
- University students creating maps for climate class on SOS kiosk
- Science Cafe lectures (often non-linear)
- Senate Hearing on Climate Change (various emission scenarios)
- Citizen Science post-wrap on SOS
  - local to global

Contact

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