Visualizing Destructive Tsunamis

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Animation Library Details

- 10 tsunamis (so far) covering 18\textsuperscript{th} to 21\textsuperscript{st} Centuries
- Mastered at 8k (8192 x 4096) at 60 FPS
- 48 hours of simulated time - waves wrap the sphere
- Consistent color scheme across all animations
Search for tsunami historical series or PTWC
Picture-in-Picture

**Elapsed Time:**
- 00 hr
- 00 min

**UTC:**
- 2011
- 11 Mar
- 05:46 Z

**Tsunami Wave Amplitude:**
- feet
- meters
- < 0.0
- ~0
- ~1
- ~3
- ~10
- > 10
- > 3.0
Starting point

Elapsed Time:
00 hr 00 min

UTC:
2011 11 Mar 05:46 Z

Tsunami Wave Amplitude:
Coastal Runup

Elapsed Time:
48 hr 00 min

UTC:
2011 13 Mar 05:46 Z

Tsunami Wave Amplitude:

- < 0.0 feet
- ~1 feet
- ~3 feet
- ~10 feet
- > 10 feet

- < 0.0 meters
- 0.0 meters
- 0.3 meters
- 1.0 meters
- 3.0 meters
- > 3.0 meters
Earthquake Animations Too!
NOAA Science-on-a-Sphere Companion Videos

PacificTWC • 12 videos • 149 views • Last updated on Mar 25, 2017

Companion "flat earth" animations for PTWC's contributions to NOAA Science-on-a-Sphere exhibits

http://sos.noaa.gov/Datasets/search.php?q=ptwc

1. Perspective: a graphical comparison of earthquake energy release
   by PacificTWC
   1:53

2. Earthquakes of the First 15 Years of the 21st Century
   by PacificTWC
   3:50

3. Tsunami Forecast Model Animation: Alaska 1964
   by PacificTWC
   1:27

4. Tsunami Forecast Model Animation: Aleutian Islands 1946
   by PacificTWC
   1:50

5. Tsunami Forecast Model Animation: Aleutian Islands 1957
   by PacificTWC
   1:57
Final Thoughts

• A comprehensive, consistent library of tsunami animations allows for side-by-side comparison of these complex global phenomena

• Such a library also helps prepare audiences and docents for future tsunami presentations, including those given in real-time