

APPENDIX E—Ideas for Tsunami Wave Container Variables

Ideas for Tsunami Wave Container Variables to Explore

1. How do coastal land features affect tsunami run-up?

Variables: straight coastline vs a coastline with a stream, river, or inlet



2. How would mountains or cliffs around a coastal river affect tsunami run-up?

Variables: cliffs or mountains vs. flat terrain around a river



3. How does the size of the river or inlet at a coastline affect tsunami run-up?

Variables: wide river vs. narrow river



4. How does the angle of a bay or inlet in relation to coastline affect tsunami run-up?

Variables: Inlet perpendicular to the coastline vs. Inlet at an angle



5. How does the shape of a river at a coastline affect tsunami run-up?

Variables: straight river vs. meandering river



6. How do islands, sea stacks, or sea wall affect tsunami run-up on a coastline?

Variables: Islands vs. no Islands off a coastline



7. How does the amount of energy in a tsunami wave affect tsunami run-up?

Variables: lower energy waves vs. higher energy waves



8. How does the slope of the near shore ground underwater affect tsunami run-up?

Variables: shallow slope angle vs. steep slope angle

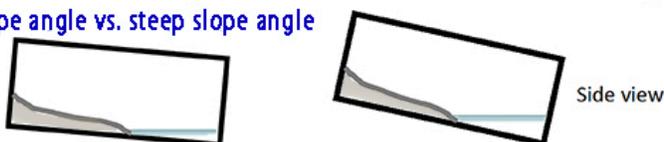


Figure A (Left): Example of variables that can be used to alter the dynamic of the tsunami behavior at the coast. Variables 1–6 are a bird's-eye view; 7 and 8 are side views.
Image source: [Investigating Factors that Affect Tsunami Inundation](#)



Figure B: View looking into the wave container. The variable in this example is a narrow inlet perpendicular to the coastline that is wider at the mouth. In this example, toothpicks mark points on the landscape.