

Description of files submitted to WEMD for the Puget Sound (Elliott Bay and Port of Tacoma) tsunami inundation study.

The following folders and files description are contained in  
<ftp://ftp.pmel.noaa.gov/tsunami/WaEMD/PugetSound/>

**NOTE:**

Maximum tsunami wave amplitude is referred to Mean High Water (MHW)  
Flow depth is depth above local terrain elevation.

**GIS**

This folder contains output files that can be loaded in ArcGIS. There are two sub-folders: ElliottBay and PortOfTacoma. The files in both directories have the same filename format.

- \*L1-FlowDepth.\*, files for the simulated tsunami flow depth based on Cascadia source L1
- \*L1-Maxamp.\*, files for the simulated maximum tsunami wave amplitude distribution based on Cascadia source L1
- \*L1MaxSpeed.\*, files for the simulated maximum tsunami wave current distribution based on Cascadia source L1
- \*L1-extended\_FlowDepth.\*, files for the simulated tsunami flow depth based on an extended Cascadia source L1
- \*L1-extended\_Maxamp.\*, files for the simulated maximum tsunami wave amplitude distribution based on an extended Cascadia source L1
- \*L1-extended\_MaxSpd.\*, files for the simulated maximum tsunami wave current distribution based on an extended Cascadia source L1

**animations**

This folder contains animation files for Ports of Seattle and Tacoma.

- \*\_Amplitude\_L1.mov - animation of tsunami waves based on Cascadia source L1
- \*\_Amplitude\_L1extended.mov - animation of tsunami waves on an extended Cascadia source L1

**ascii**

This folder contains ASCII format files Digital Elevation Model (un-deformed grids) for grids A, B, and C. The 'C' grids are for Seattle and Tacoma.

The \*.most file format is:

# node in longitude   # node latitude  
List of longitude values  
List of latitude values  
Array of values

**documentation**

This folder contains the draft report for the Tsunami Inundation Modeling of Seattle and Tacoma, Washington due to Cascadia Subduction Zone Earthquake

## **images**

This folder contains image files (png and eps format) of simulated tsunami characteristics of Seattle and Tacoma based on Cascadia source L1 and extended Cascadia source L1. This has three sub-folders: FlowDepthPlots, MaximumDistributionPlots, and TimeSeriesPlots. The general filename for the files in each sub-folder is:

- \*FlowDepth\_L1.png or eps – simulated tsunami flow depth based on Cascadia source L1
- \*FlowDepth\_L1extended.png or eps – simulated tsunami flow depth based on an extended Cascadia source L1
- \*MaxAmp\_L1.png or eps – simulated maximum tsunami wave amplitude distribution based on Cascadia source L1
- \*MaxAmp\_L1extended.png or eps – simulated maximum tsunami wave amplitude distribution based on an extended Cascadia source L1
- \*MaxAmp\_L1.png or eps – simulated maximum tsunami wave amplitude distribution based on Cascadia source L1
- \*MaxAmp\_L1extended.png or eps – simulated maximum tsunami wave amplitude distribution based on an extended Cascadia source L1
- \*MaxCur\_L1.png or eps – simulated maximum tsunami wave current distribution based on Cascadia source L1
- \*MaxCur\_L1extended.png or eps – simulated maximum tsunami wave current distribution based on an extended Cascadia source L1
- \*MaxVor\_L1.png or eps – simulated maximum tsunami wave vorticity distribution based on Cascadia source L1
- \*MaxVor\_L1extended.png or eps – simulated maximum tsunami wave vorticity distribution based on an extended Cascadia source L1
- \*Timeseries\_Amp\_Set\*.png or eps – plot of simulated tsunami wave amplitude base on Cascadia source L1 and extended Cascadia source L1
- \*Timeseries\_Cur\_Set\*.png or eps – plot of simulated tsunami wave amplitude base Cascadia source L1 and extended Cascadia source L1

## **timeseries**

This folder contains asci files of tsunami time series of wave amplitude at selected locations at Seattle and Tacoma as presented in the report. Format of each file is described in READ\_ME\_FIRST.txt. Each file is a two column format: time (secs) and wave amplitude (cm).

There are four sub-folders: PugetSound, Seattle, StraitofJuanDeFuca, and Tacoma