In partnership with:

Tsunami Modelling for the Masses
Nick Horspool, Jeff Johnson & Ben Evans

2.2 million people within 3km of the coastline

Tsunami inundation modelling and evacuation maps completed
Pre-2011 Tsunami Modelling Capacity

Post-2011 Tsunami Modelling Capacity
Scientific data & tools

TsuDAT

Cloud Computing

Web-based geospatial apps

Data Flows

Deep Water Model

TsuDAT User
INPUT:
High resolution DEM

OUTPUT:
Inundation maps of AOI

TsuDAT Application

Offshore tsunami waveform DB of 270,000 events
Identify likely tsunami sources – Hazard Disaggregation
Interactively Define Area of Interest for Tsunami Inundation Simulation

Upload Elevation Data
Submit Simulation for Processing

Email Notification
Manage Results & Spatial Data

- Automatically generated metadata from input parameters
- Set permissions on result layers

Create/Edit/Share Results
TsuDAT Summary:

• A web-application to provide scientific data and tools to increase capacity of State & Territory Governments to conduct tsunami inundation modelling to underpin emergency management planning

• The web-server and tsunami simulations are hosted in a computing cloud at NCI (ANU) providing scalable and cost effective computing resources

• Spatial data is managed through a GeoNode that facilitates data uploading, editing and sharing via the web

• All data formats are OGC compliant and all software is open-source

• This framework can be applied to other scientific or non-scientific geospatial applications

Thank You

Questions?