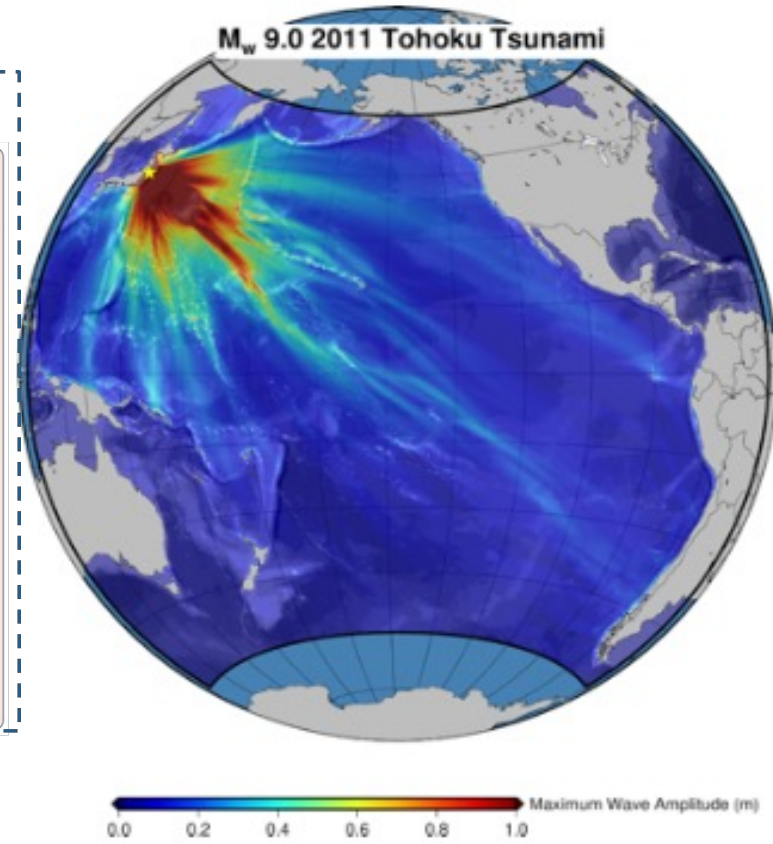
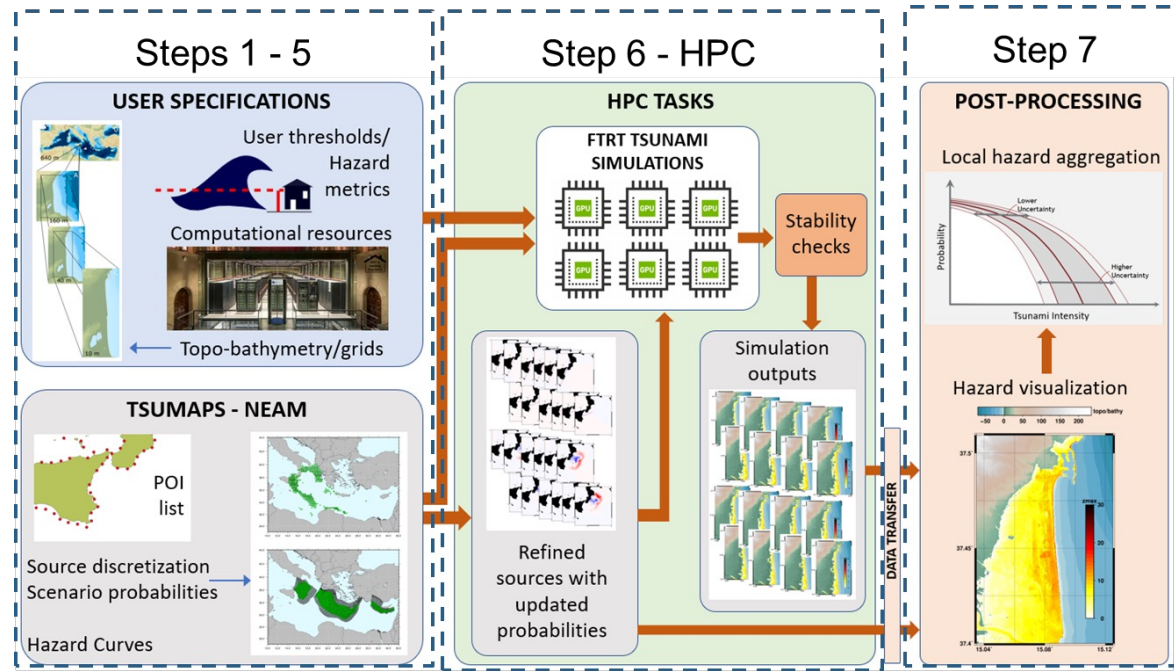
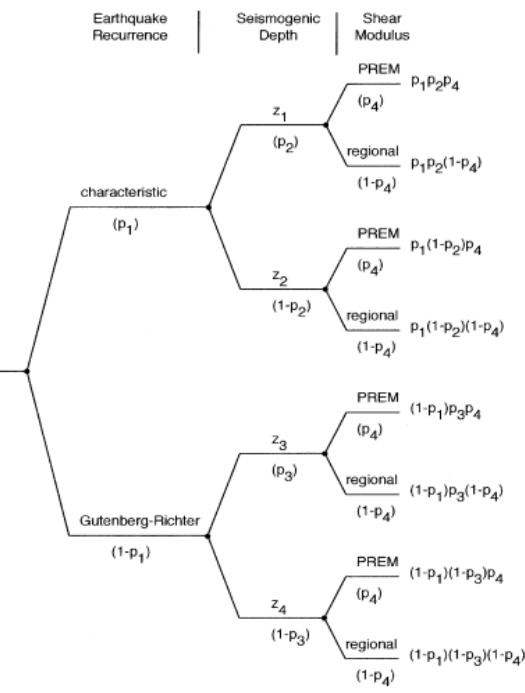


Il CAT-INGV e i “nuovi” tipi di dati

Stefano Lorito – ONT, Centro Allerta Tsunami



Probabilistic Tsunami Hazard Analysis - PTHA



Probabilistic Tsunami Forecasting - PTF

The PTF concept

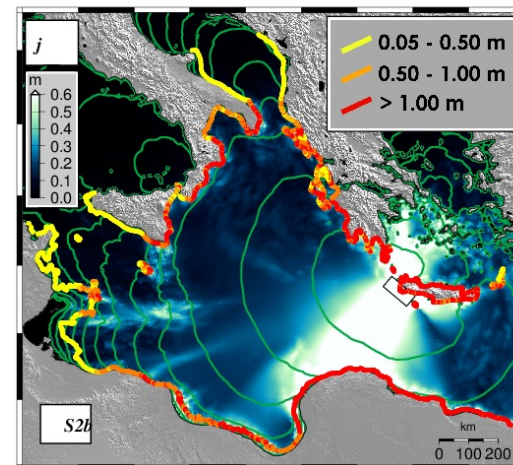
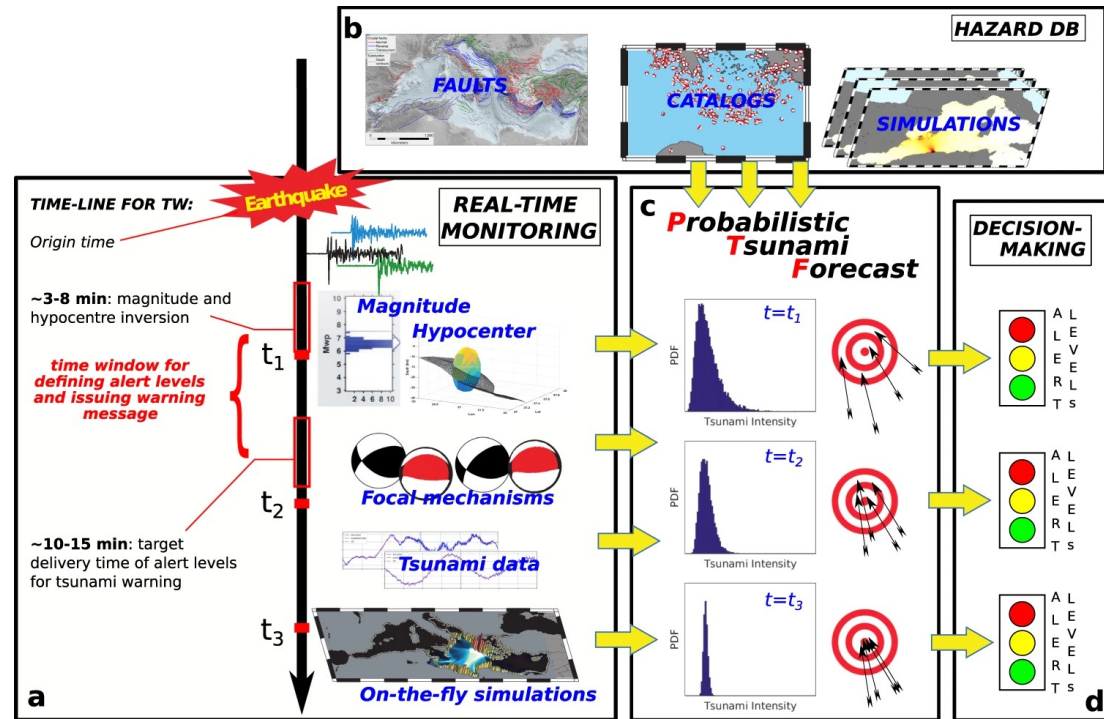
Selva et al., 2021 Nature Communications

Earthquake parameters
w/
uncertainty

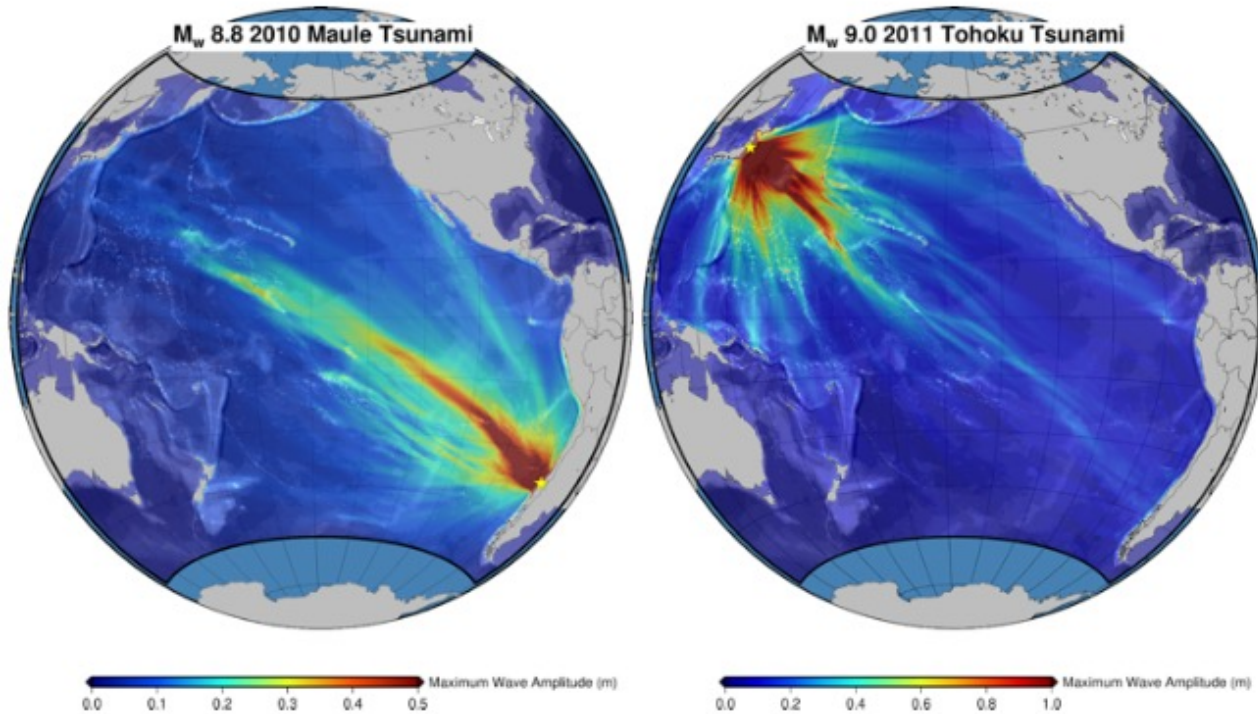
PTF
Workflow

Probability
of tsunami
impact

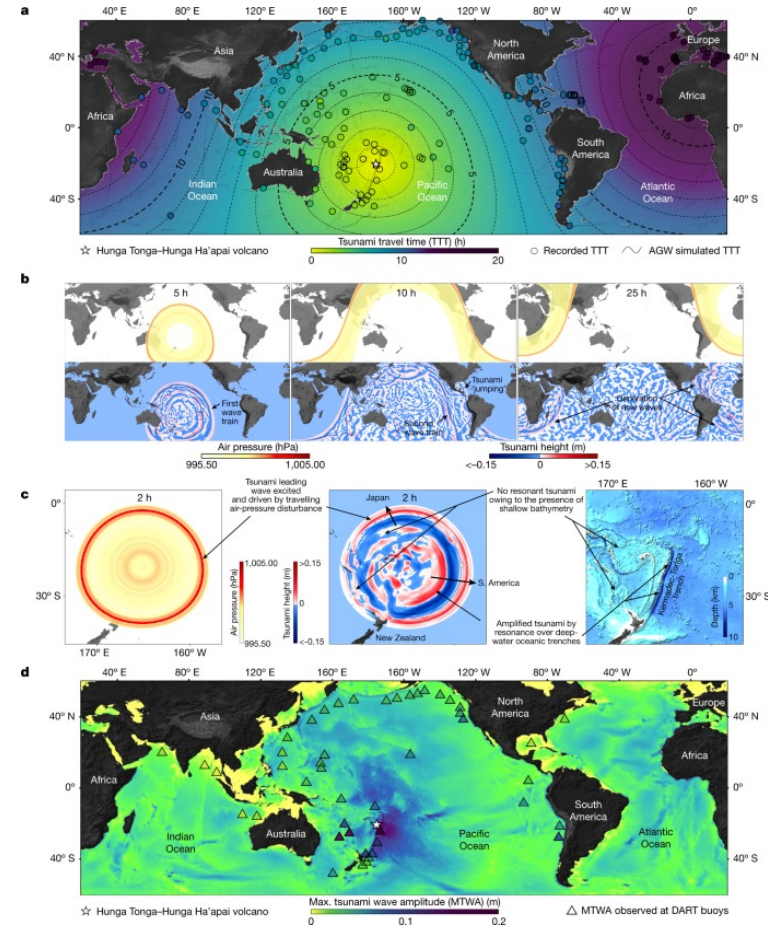
Alert
Levels



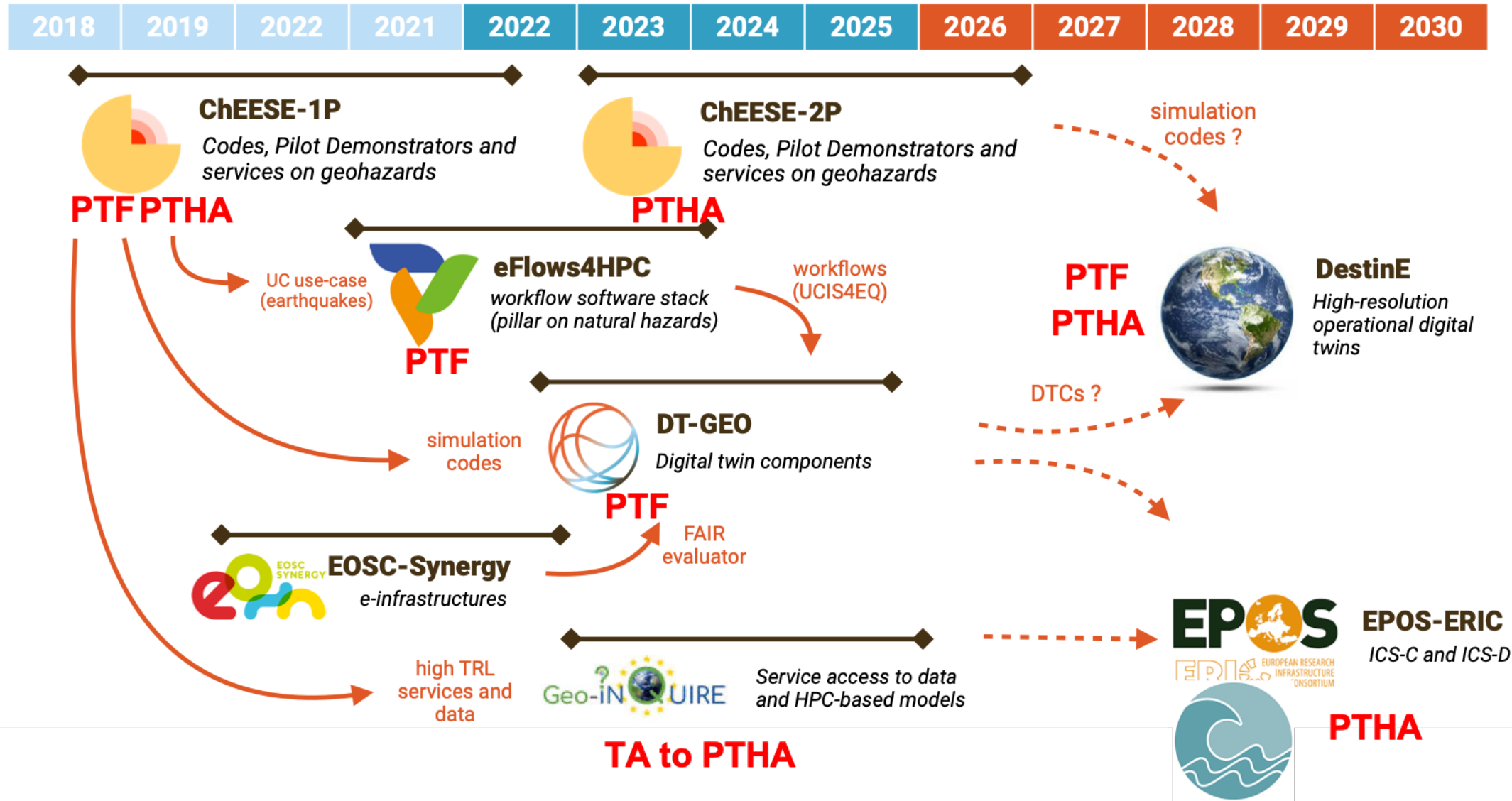
Urgent Computing - UC



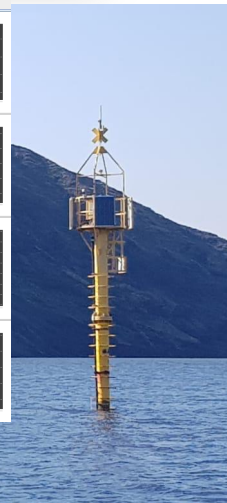
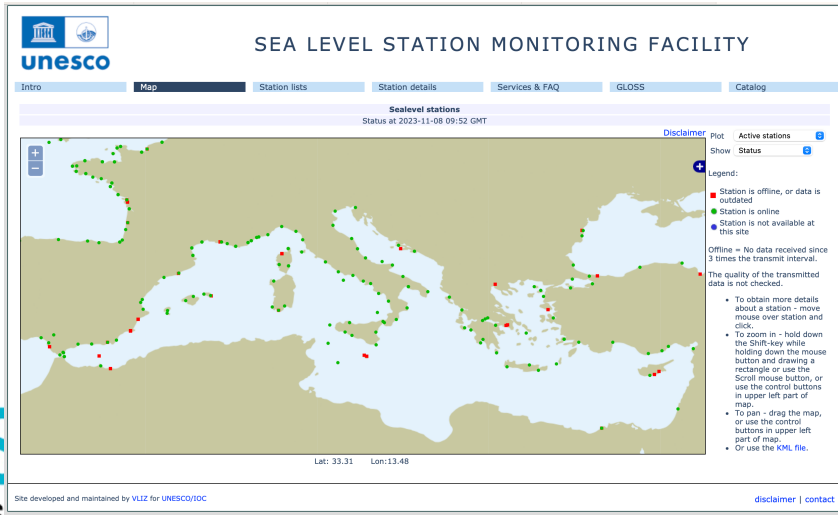
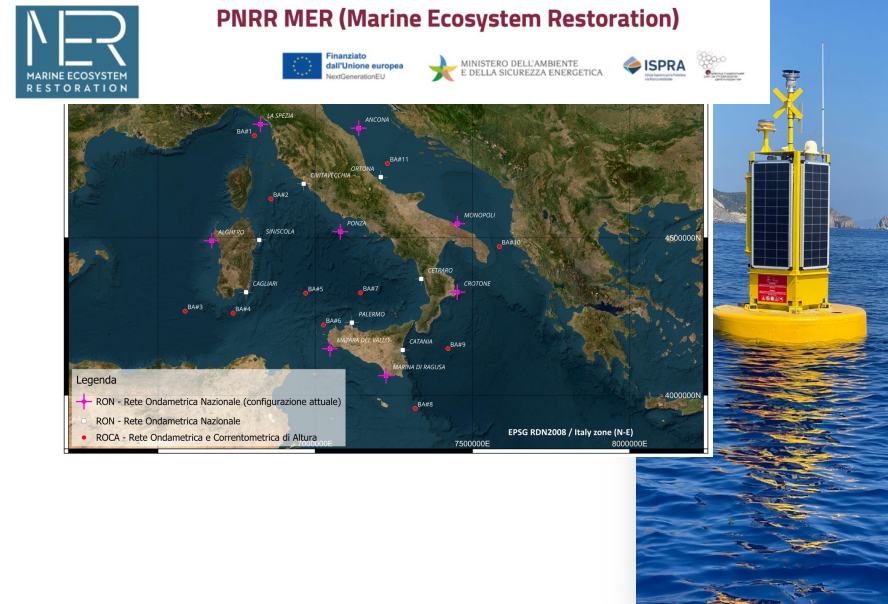
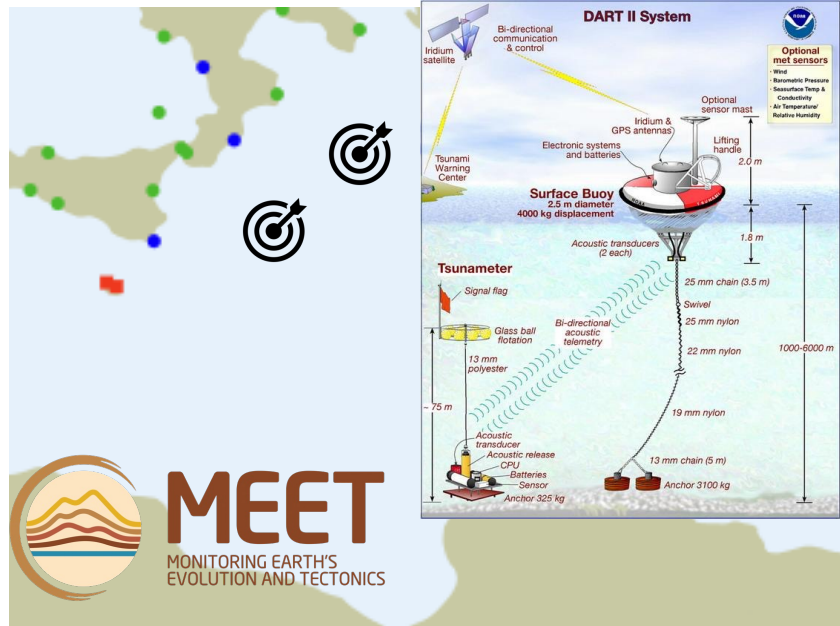
Hunga-Tonga 15 January 2022



Project Ecosystem



Infrastrutture per il monitoraggio del livello del mare



INGV

Open issues

- Standardization of emerging data types (e.g. sea level data)
- Software/Workflow Registry
- Software/Workflow as a Service
- Simulation Data Lake
- Fusion of Experimental and Simulated Data with Simulations

GRAZIE!