

# KNOWLEDGE IS SAFETY

NEAMTIC PROVIDES YOU KNOWLEDGE!

NEAMTIC work is supported by its webportal which allow to have access to information on risks from tsunamis and other sea level related hazards and safe behaviour to be adopted.

NEAMTIC webportal is an interactive tool thought to provide a platform for e exchange of information and experiences.

NEAMTIC products include educational posters, updated information on NEAMTWS, virtual library, good practices, and educational online course on tsunamis and other sea-level related hazards.

If you want to contribute contact us at  
<http://neamtic.ioc-tsunami.org>  
[www.ioc-unesco.org](http://www.ioc-unesco.org)

NEAMTIC is a two-year project funded by the European Union Directorate General Humanitarian Aid & Civil Protection

## Project coordinator

Intergovernmental Oceanographic Commission of UNESCO (IOC)

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NEAMTIC is done in partnership with the following institutions:

- Commissariat à l'énergie atomique et aux énergies alternatives (France)
- Presidenza del Consiglio dei Ministri – Dipartimento della Protezione Civile (Italy)
- National Observatory of Athens (Greece)
- Fundação da Faculdade de Ciências da Universidade de Lisboa (Portugal)

## Furthermore NEAMTIC is supported by:

- Kandili Observatory and Earthquake Research Institute (Turkey)
- Islamic Educational, Scientific and Cultural Organisation

(IOC/BRO/2011/3)



# NORTH-EASTERN ATLANTIC AND MEDITERRANEAN Tsunami Information Center

# NEAMTIC



United Nations  
Educational, Scientific and  
Cultural Organization

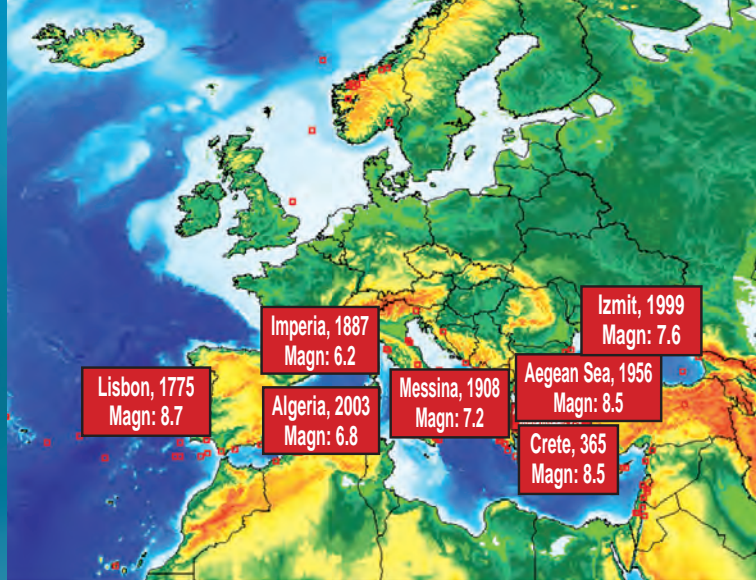
Intergovernmental  
Oceanographic  
Commission



# OBJECTIVES OF THE NEAMTIC

- **Providing information** to civil protection authorities and the general public on warning systems for tsunamis and other sea-level related hazards, and on the activities of IOC and European Union (EU) in the field of tsunami preparedness
- **Building capacity** through one training workshop on tsunami early warning systems, standard operating procedures, numerical models to determine tsunami travel time, and ISO signage
- **Making citizens, especially youth, aware of risks** of floods from the sea in coastal areas, such as tsunamis, storm surges and strong swells, providing them with knowledge on the phenomena and practices of safe behaviour
- **Identifying, sharing and disseminating** good practices in plans, methods and procedures to strengthen preparedness for sea level related hazards
- **Fostering linkages between the EU and IOC** on intergovernmental and transnational actions to develop NEAMTWS

The Tsunami Information Centre for the North eastern Atlantic and the Mediterranean and Connected Seas (NEAMTIC) is part of the activities coordinated by the Intergovernmental Oceanographic Commission (IOC) of UNESCO and carried out by Member States to develop the Tsunami Early Warning and Mitigation System for the NEAM region (NEAMTWS).



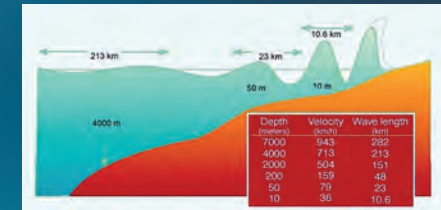
© Stefano Tinti

Although less frequent than in the Pacific and Indian Ocean, tsunamis can hit the Mediterranean and North East Atlantic coastal areas causing extensive loss of lives and properties. Major tsunamis with ten-thousands of casualties and severe damage to coastal cities happened for example in 365 (Crete), in 1775 (Lisbon), in 1908 (Messina), in 1956 (Aegean Sea). Even recently a tsunami has been generated in the Izmit Bay, and affected the coastline extensively following the 1999 Izmit earthquake. At some locality the inundation distance ranged up to 35 m. Furthermore, tsunamis have been generated in 2002 in Stromboli and in 2003 in Algeria though fortunately not very damaging. The Mediterranean area represents the collision between the European and the African plates, and comprises a number of geodynamic regions affected by different seismic activity extended from West to East. Furthermore volcanic and geomorphological processes could be at the origin of tsunamis in the area.



## TSUNAMI PROPAGATION

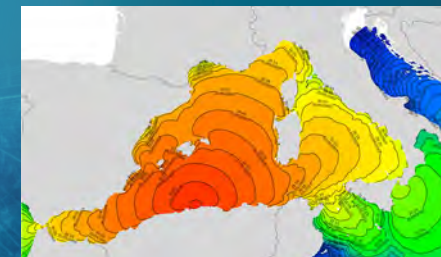
A tsunami is a series of very long waves created by an underwater disturbance usually associated with earthquakes occurring below or near the ocean. The tsunami propagation **speed** is **reduced** in shallow water while the **height** of its waves rapidly **increases**.



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## TSUNAMI TRAVEL TIME

Tsunamis propagate through the Mediterranean and North-East Atlantic region in a very short time. In the **Mediterranean basins** a large area of the coast near the tsunami source is hit in fifteen minutes and within **an hour** the tsunami **has crossed the basin** and arrived on the opposite coast.



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## TSUNAMI CHARACTERISTICS

- Tsunamis travel at jet airliner speeds in the deep ocean, where the waves are only tens of centimetres high. Tsunamis slow down and grow in height tremendously upon entering shallow water.
- Tsunami waves can crest to 10-m high heights, strike with devastating force, and quickly flood all low-lying coastal areas.
- An earthquake is one of nature's tsunami warning signs. If you're at the beach and you feel the ground shaking, a tsunami may have been generated.
- Tsunamis may be started by a rapid fall in sea level.
- The first wave may not be the largest.