



Dto. de Geofísica y Meteorología  
Facultad de Ciencias Físicas  
Universidad Complutense de Madrid

Organized by:



Real Instituto  
y Observatorio de la Armada  
San Fernando, Cádiz (ROA)



Sociedad Española de Estudios  
para la Comunicación Fija a través  
del Estrecho de Gibraltar, S.A., Madrid



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# Workshop Earthquake Early Warning System Applications to the Ibero-Maghrebian Region

Madrid, Spain  
4-5 February, 2014



## Objetives

The Early Earthquake Warning Systems (EEWS) basic hypothesis is that all the information about the size and characteristics of an earthquake is contained in the very beginning of the P wave signal. In consequence, analyzing the first seconds of the P-wave it is possible to have an idea of the size of the earthquake, and therefore to know its possible damaging effects. The alert is given after an earthquake is detected by a network of seismographic stations, if some observed parameters exceed a threshold value. The EEWS are techniques that are already applied in some seismic regions (California, Japan, Taiwan, Mexico, Italy, etc). The Ibero-Maghrebian region is characterized by the occurrence of large earthquakes, in terms of intensity or magnitude, such as, the earthquakes of Lisbon (1755), Malaga (1680), Torreveja (1829) and Arenas del Rey (1884), all of them with felt intensities of IX-X (widespread destruction) or more recently the S. Vicente (1969), El Asnam (1980), Boumerdes (2003) and Al-Hoceima (2004). In consequence the earthquakes of this area have special interest for the implementation of the EEWS technologies

## Topics

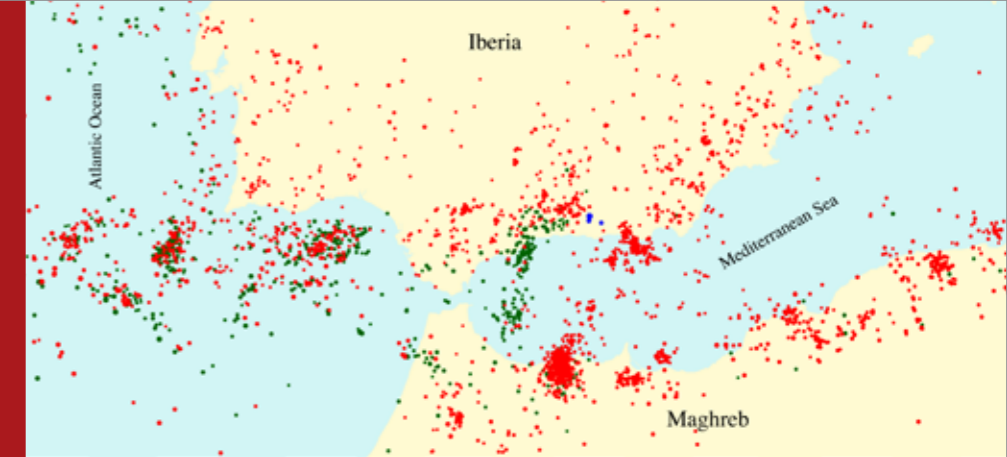
- Earthquake Early Warning System (EEWS)
- EEWS Application to Europe
- Regional stresses and deformation at the Ibero-Maghrebian region
- GPS as real-time seismology
- Seismicity and seismotectonics of the Ibero-Maghrebian region
- Seismic networks in real time
- EEWS and Civil Protection

## Invited lectures

- Prof. Hiroo Kanamori (CALTECH, Pasadena, EE.UU) "Earthquake hazard mitigation and real-time warning for tsunami and earthquakes"
- Prof. Yih-Min Wu (National Taiwan University, Taiwan). "A high density real-time strong motion network for earthquake early warning using low cost sensors in Taiwan"
- Prof. Aldo Zollo (Universidad Federico II, Naples University). "Exploring the feasibility of a nation-wide earthquake early warning system in Italy"

## Organizing Committee

- Prof. E. Buforn (UCM)
- Prof. M. Mattesini (UCM)
- M. Carranza (UCM)



## Scientific Committee

- Prof. E. Buforn (UCM)
- Prof. M. Mattesini (UCM)
- Prof. A. Udías (UCM)
- Dr. J. Martín Dávila (ROA, San Fernando Cádiz, Spain)
- Dr. A. Roca (ICC, Barcelona, Spain)
- Dr. N. Sandoval (SECEGSA)
- Prof. M. Bezzeghoud (Univ. Evora, Portugal)
- Prof. R. Madariaga (ENS, Paris, France)
- Prof. L. A. Rivera (Univ. Strasbourg, France)

## Financial support

- A limited number of fellowships are reserved for younger and more recently established scientists to attend the Workshop. The fellowships may be free registration payment or travel support.
- Official language of the Workshop is English.
- Some selected presentations will be published in a monographic volume.
- You may find additional details at the following location: [www.ucm.es/info/Geofis/](http://www.ucm.es/info/Geofis/) or by email to: [workshop\\_EEWS@ucm.es](mailto:workshop_EEWS@ucm.es).
- A second circular indicating details of dead line for abstracts, registration place of workshop, accommodation, etc will be send on September 2013.

Please indicate your interest at the Workshop before 5 September 2013