

ALERTES: An Earthquake Early Warning System for the Ibero-Maghrebian region

Elisa Buforn (1), Antonio Pazos (2), Antoni Roca (3), Marta Carranza (1), José Martín Dávila (2), Aldo Zollo (4), Mireia López (2), and the ALERTES Team

(1) Universidad Complutense, Fac. CC. Fisicas, Geofisica y Meteorlogia, Madrid, Spain (ebufornp@ucm.es), (2) Real Observatorio de la Armada, San Fernando , Spain, (3) Institut Cartogràfic i Geològic de Catalunya, Barcelona, Spain, (4) Universitá Federica II, Naples, Italy

We present the main results obtained in the ALERTES and ALERTES-RIM projects to develop an EEWS for the Ibero-Maghrebian region. The occurrence of large an destructive earthquakes, in this region, such as those of Lisbon 1755 or Boumerdes (Algeria) 2003, justify the need to develop an EEWS. We have checked empirical correlations to homogenize the different magnitude scales used. Specific correlations between τ_c , Pd and Mw have been developed. The study of the blind zone for SW Iberia shows the feasibility of an EEWS for the region. Results obtained from prototypes of EEWS developed for the region and the PRESTo software show the utility of an EEWS for the region.