Geophysical Research Abstracts Vol. 19, EGU2017-2005, 2017 EGU General Assembly 2017 © Author(s) 2016. CC Attribution 3.0 License.



## The Oran (Northwest Algeria) earthquake of 9 October 1790

Elisa Buforn (1), Pilar Coca (1), Agustín Udías (1), and Mourad Bezzeghoud (2)

(1) Universidad Complutense, Fac. CC. Fisicas, Geofisica y Meteorlogia, Madrid, Spain (ebufornp@ucm.es), (2) Universidade de Evora-CGE, Evora, Portugal

On the 9th of October of 1790, one of the largest earthquakes in the western Mediterranean took place that destroyed almost completely the city of Oran in the Northwest coast of Algeria, produced a small tsunami and was followed by an aftershock series. At that time, Oran was a Spanish presidium-city of small dimensions surrounded by relevant defensive walls and fortifications with five outside defense forts. Contemporary reports preserved at Spanish archives give very detailed information of the damage, including maps of the destruction suffered by the buildings and the number of casualties, approximately 2,000 of its 9,500 inhabitants. Due to its total destruction, Spain abandoned the site in 1792. Based on contemporary documents, seismic intensities according to EMS-98 scale have been estimated for the city and its fortifications, as well as in other Spanish and Algerian sites. Generation of the tsunami, which affected Spanish and Algerian coasts, locate the epicenter offshore very near to the city itself. The source may be assigned to the off-shore NE-SW trending faults.