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On the source of the 24 September 2013 tsunami in Oman Sea

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Tsunami hazard along the coast of Makran and Oman is mainly due to the seismic activity at the Makran subduction zone. Large earthquakes along the Makran subduction zone are infrequent but they have the potential to generate destructive tsunamis along the coasts of Pakistan, Iran and Oman, all bordering the Oman Sea. The most recent tsunami occurred on November 1945 following an earthquake of magnitude 8.1, causing extensive damage along the Makran coast in Pakistan.
On September 24, 2013 an earthquake of magnitude 7.7 occurred in south Pakistan, 64 km onshore north of Awaran. The location is consistent with rupture within the Eurasian plate above the Makran subduction zone. The tide stations in the Oman sea recorded a tsunami less than one hour after the earthquake. The first wave reached Ormara in Pakistan with an amplitude of 15 cm. The highest amplitudes were observed along the coast of Oman between Muscat and Sur with a maximum of 40 cm in Qurayat.
In this study, we collected tsunami data recorded in the Oman sea. All records were filtered in order to isolate the tsunami signal and analyzed the in terms of travel times and amplitudes. The use of inversion techniques points to a submarine source located south of Ormara in the Murray ridge. Finally, we discuss the possible of tsunami induced landslide as a secondary effect of earthquake.