



The strong Mw6 earthquake of 26th January 2014 in Cephalonia island, Ionian Sea, Greece: a first report

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On 26 January 2014 a strong (Mw6) shallow earthquake ruptured the western side of Cephalonia island in the Ionian Sea, Greece. The main shock was followed by abundant aftershocks, one of them of Mw5.4. The earthquake caused damage but no human victims mainly in the area of Lixouri town in the western part of the island. However, the rest part of the island was only slightly affected. The earthquake caused also a series of ground failures, such as landslides and rockfalls which are geographically distributed in the meizoseismal area mainly along two tectonic lines trending NE-SW the first and about N-S the other. A spot of soil liquefaction was observed in the coastal zone near the port of Lixouri. According to first results the peak ground acceleration may have exceeded 0.35 g. The seismotectonic field appears complicated since the main shock was associated with about NE-SW strike-slip faulting while some of the strong aftershocks were associated with nearly N-S thrust. A relocation of the main shock and aftershocks was performed. We discuss the faulting associated with the earthquake sequence generation in relation to the relocated events and the ground failures observed in the field.