

A short introduction to historical earthquakes in Libya

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Abstract

As a result of the relative motion of the African and European plates, Libya, located at the north central margin of the African continent, has experienced a considerable intraplate tectonism, particularly in its northern coastal regions. If the seismic activity of the last fifty years, at most, is known from instrumental recording, macroseismic effects of those earthquakes which affected Libya in the past centuries are still imperfectly known. To try and partly overcome this lack of information, in this contribution we present a short introduction to historical earthquakes in Libya, focusing on the period up to 1935. According to the studies published in the last twenty years, the earliest records of earthquakes in Libya are documented in the Roman period (3rd and 4th century AD.). There is a gap in information along the Middle and Modern Ages, while the 19th and early 20th century evidence is concentrated on effects in Tripoli, in the western part of nowadays Libya. The Hun Graben area (western part of the Gulf of Sirt) has been identified as the location of many earthquakes affecting Libya, and it is in this area that the 19 April 1935 earthquake ($M_w = 7.1$) struck, followed by many aftershocks. Further investigations are needed, and some hints are here given at historical sources potentially reporting on earthquake effects in Libya. Their investigation could result in the needed improvement to lay the foundations of a database and a catalogue of the historical seismicity of Libya.

Keywords

historical seismicity;Libya

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References

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
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