ABSTRACT

An updated earthquake catalogue for Greece and adjacent areas is presented, which includes over 6000 seismic events, primarily from instrumental observations conducted during the period 1900-2007. The catalogue is based on a re-examination of historical data, a review of existing seismic databases, and new data. The catalogue is intended for use in seismic risk assessments, as well as for historical and geological investigations. The catalogue also provides a basis for improving existing seismic maps and hazard assessments.

Previous Catalogue-Current Version

The current version of the instrumental earthquake catalogue for Greece and adjacent areas was updated from the previous catalogue published in 1999. The area of delineation is largely similar to the previous version, which was based on historical and instrumental data. However, the current version incorporates new data from various sources, such as new instrumental records, historical data, and geophysical studies. The catalogue is intended for use in the development of seismic hazard maps and in assessing the seismic risk in Greece and adjacent areas.

Historical period 1800-1900

Damaging earthquakes (Imax ≥ 7) were identified for this period from the existing databases, catalogues and geological studies. The historical period includes a significant number of events that affected the region, with many of them being recorded in the national and international Seismic Catalogues. These events are critical for understanding the seismic history of the region and for improving seismic risk assessments.

Conclusions

The updated earthquake catalogue for Greece and adjacent areas is a valuable resource for researchers and practitioners in the field of seismology. It provides a comprehensive and reliable source of data for the evaluation of seismic risk, the development of seismic hazard maps, and the assessment of the effectiveness of mitigation strategies. The catalogue also serves as a basis for further research and collaboration among seismologists in the region and beyond.