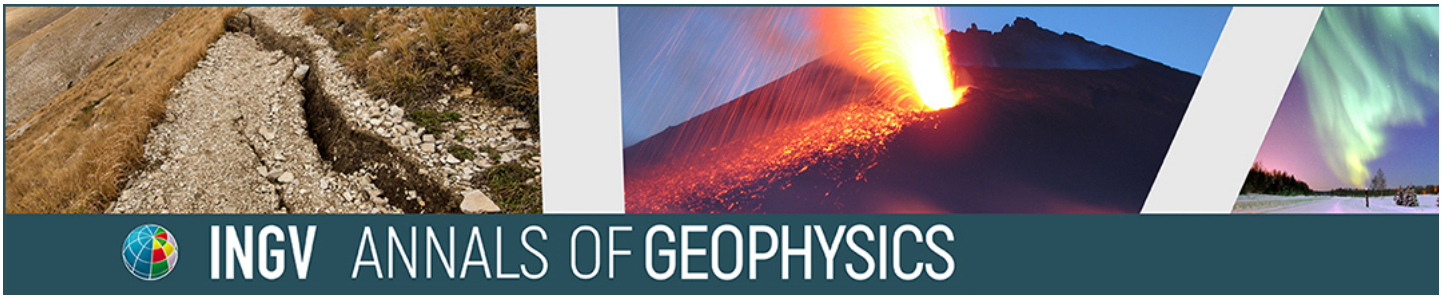




# Status of historical seismology in Japan

*K. Ishibashi*

## Abstract

Japan's combination of high seismicity and a long history has produced copious written records of historical earthquakes. Systematic collection and investigation of such historical documents began late in the 19th century. Now, almost all of Japan's known historical materials on earthquakes have been transcribed into 25 printed volumes. The collections include records of about 400 destructive earthquakes from A.D. 599 to 1872. Epicentral coordinates and magnitudes have been estimated for about half these events and details of earthquake and tsunami disasters have been summarized in catalogues. The space-time pattern of great Tokai and Nankai earthquakes is a good example of revealed earthquake history. The existing collections of historical sources, however, contain low-quality records that produce errors and fictitious (fake) earthquakes,
and are difficult of full utilization because of volumes. Moreover, there are peculiar problems to Japan's historical times such as calendar and time of day. Systematic ways of estimating seismic intensities, epicenters, focal depths and magnitudes have not yet been established. Therefore, historical earthquake catalogues
are yet incomplete. Constructing a reliable database of the whole historical documents in collaboration with historians to give wide-ranging researchers easy and full utilization of old earthquake records is
urgent task. Revision of earthquake catalogues and construction of a seismic intensity database with international
standard are also necessary.

## Keywords

historical seismology;historicaldocuments;earthquake catalogue;database

## Full Text:

PDF

## References

DOI: https://doi.org/10.4401/ag-3305

Published by INGV, Istituto Nazionale di Geofisica e Vulcanologia - **ISSN:** 2037-416X

Faculty of Science, Kobe University, Kobe, Japan