

Preface

This Seismological Data Catalogue contains data from local and regional earthquakes in Germany and adjacent areas. The seismic stations from which seismogram readings were available are listed in Table I. The locations of these stations are shown in Figure 1. Information on the instrumentation of the German seismographic stations is provided in Table II.

Most of the epicenter data in this catalogue are based on recordings of these stations. In addition, earthquake data from international agencies and European seismological institutes are included. In general, the data refer to earthquakes within the political boundaries of Germany as shown in Fig. 2. Earthquakes outside the German territory are only documented if they are located in prominent earthquake-prone regions, e.g. Rhein Graben or Vogtland. Also included are strong earthquakes in adjacent countries for which either a magnitude value of 4.0 and higher was determined or which was felt in Germany.

Data from chemical explosions in mines or quarries are normally excluded from the catalogue. Exceptions are made in those cases where a foreign institution declared such an event to be an earthquake. Moreover, all explosions that cannot be clearly identified as such are marked as "presumably explosion".

In general, only events with magnitudes equal to or greater than local magnitude (ML) 2.0 are included in this catalogue. Exceptions to this rule may be made if the event is of special interest, for example, if the epicenter of an earthquake is in an area of low seismic activity or if a low magnitude event in Germany has already been reported by another agency.

More than one hypocenter solution is provided for many of the earthquakes in this catalogue. The result considered to be the most reliable was taken as the reference. The highest priority was given to the epicenter data from a local network covering the epicenter region. A number of geophysical institutes and agencies in various federal states operate these networks (Table I). This data is very important for the quality and completeness of the German earthquake data catalogue, compiled and processed by the Bundesanstalt für Geowissenschaften und Rohstoffe (BGR), Hannover.

This edition has been published in digital form, which was used for the first time for the data catalogue 1995. The complete seismological data catalogue can be found under the internet address

<http://www.seismologie.bgr.de/>

Seismograms and detailed descriptions of the seismological stations should be requested directly from the corresponding institutes. Digital waveform data from GRSN stations,

yellow in Figure 1, can be retrieved automatically either by e-mail or interactively from the Seismological Central Observatory Gräfenberg (SZGRF) or the Seismic Data Analysis Center of BGR. Detailed information on these retrieval methods can be found on the corresponding Web pages. The internet addresses of the two BGR facilities, as well as those of other German seismological institutes are listed in Table I. Other requests for GRSN data should be addressed to SZGRF. It is worth noting that the GRSN network forms the backbone for monitoring seismic activity in Germany. It was started in 1989 as a joint research project between BGR and the geophysical research institutes and funded by the German Research Association (DFG – Deutsche Forschungsgemeinschaft).

We thank all seismologists from the various institutes who contributed data from their stations or seismic networks.

Hannover, October 2005

The Editors