# 中国历史强震目录

## （公元前 23 世纪 —— 公元 1911 年）

国家地震局震害防御司　编

地震出版社

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## 内 容 提 要

本目录根据近年历史地震研究成果编纂而成，共收入公元前 23 世纪至公元 1911 年间$4\frac{3}{4}$级以上地震 1034 次。

本目录收入的历史强震较《中国地震目录》相应时段增加 415 次；在编辑方法上，也作了重要补充和改进，在震情记述中，增加了前震、余震及震前、震后相关现象和抗震救灾、地震对策等方面的有关资料；在震级估定方面，分别给出了大陆东部、西部及台湾地区的震级-烈度关系；在等震线图上，尽可能标出各资料点的烈度值和地表破坏现象及重大的次生灾害；对有争议的事件分别作了研究，并将有疑义的编入附录。

本目录可供地震、工程抗震和防震减灾方面的有关学者参考使用。

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(公元前 23 世纪—公元 1911 年)

国家地震局震害防御司　编

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# 序

地震活动性是地震科研工作的基础资料。强震很少发生，需有长期资料才能探索其活动规律。我国历史悠久，地震活动频繁，分布地区较广。最早的一条地震记载约在公元前23世纪。殷代(公元前13—11世纪)设史官以后，不仅记载政治事件，对天文、气象、地震等自然现象都有记述。宋、元以来，盛行地方志书，地震资料的数量大为增加，内容更为详细、具体。我国地震历史资料延续时间之长、内容之丰富，均居世界领先地位。

除了零散的记载外，早在公元977年李昉等所编的《太平御览》里就有专门汇集地震资料的《咎徵部》。19世纪中叶起，国内外学者陆续发表了一些中国地震目录。

建国以后，由于大规模经济建设的需要，结合任务地区的现场调查，掀起了搜集整理地震史料的高潮。在此基础上，1956年中国科学院地震工作委员会编辑出版了《中国地震资料年表》，得到国内外科学界很高的评价。在李善邦教授主持下，于1960年编辑出版了《中国地震目录》。1971年和1983年相继增补、修订，并更新了版本。

近年来，历史地震资料汇集和历史地震研究工作取得了不少新的进展，出版了《中国地震历史资料汇编》、一些省的地震史料汇编和《地震志》，并发表了一些历史地震的专题研究报告和提高估定地震参数方法的论文。国家地震局震害防御司及时成立项目组，编辑《中国历史强震目录》。

在编辑方法上，项目组作了一些重要的补充和改进。在震情记述中，增加了前震、余震及震前、震后相关现象和抗震救灾、地震对策等方面的有关资料。在震级估定方面，考虑到地区特点，除大陆东部、大陆西部和台湾地区外，对地震较多的地区也分别建立了震级–烈度关系。在等震线图上，尽可能标出各资料点的烈度值和地表破坏现象及重大的次生灾害。对有争议的事件分别作了专题研究，删除了一些非地震事件，并将有疑义的编入附录。对1604年等6次特大地震的震级或震中位置作了修改，并增加了1411年和1833年两次西藏8级地震。对14次7级以上地震的参数做了订正。对虽无破坏记载，但涉及面较广的地震，通过Ⅳ度烈度区等效半径与震级的经验关系估定震级，增加了$4\frac{3}{4}$级以上的地震222次，部分处理了历次编目工作中弃置不用的地震史料。凡此种种反映了地震学基础资料研究和编目工作的一大进展。

《中国历史强震目录》共录公元前约23世纪至公元1911年间$4\frac{3}{4}$级以上地震1034次，较旧版本有较多增加，资料范畴也较前广泛，为地震预报、防震抗震和地震社会学等领域的科研生产工作提供了比较充实可靠的基础资料，具有很大的科学和实用价值。

谢毓寿

1993年8月

# PREFACE

Seismicity is the basic material for seismic study. As strong earthquakes occur very rarely, it is necessary to have a long-term data accumulation to find out the pattern of seismic activity. China has a very long history. Its seismicity is high and seismic zones are widely distributed. The earliest record of Chinese earthquake goes back to the 23rd century B.C. Since the appointment of an official historian in the Ying Dynasty (13-11th century B.C.), besides political events, astronomical, meteorological, seismological and other natural phenomena were recorded. Since the Yuan Dynasty, i.e. after the 14th century, local annals and records of different provinces, prefactures and counties became popular, and the seismological materials increased greatly in number and their contents turned more concrete and in detail. The time duration of the historical materials of Chinese earthquakes is the longest and the content is the most abundant all over the world.

Besides records of individual historical earthquakes, as early as 977 A.D. a collection of 45 items of earthquakes between the 11th century B.C. and 618 A.D. was published in a chapter of *Taiping Yulan*, a classic compiled by Li Fang et al. Since the mid-19th century, domestic and foreign scholars published some catalogues of Chinese earthquakes successively.

To serve the purpose of the assessment of seismic risk of construction sites, in the mid-50's, besides in-situ expedition, historians and seismologists were organized to search for materials of historical earthquakes systematically. On this basis, a 2-volume Chronological Table of Chinese Earthquakes was published by the Seismological Committee of Academia Sinica in 1956. It was highly evaluated by domestic and foreign colleagues. On this basis, a Catalogue of Chinese Earthquakes was compiled in 1960 with Professor Li Shanbang as the editor-in-chief. New editions of the catalogue were published in 1971 and 1983 successively with supplements and revisions.

In recent years, collection of materials and study of historical earthquakes developed greatly. A five-volume *Compilation of Historical Materials of Chinese Earthquakes* totalling around 6500000 words was published from 1983 to 1987. Earthquake materials of some provinces (autonomous regions and metropolitans) were published seperately or as special volume or chapter in regional annals and records. In the mean time, papers on individual historical earthquakes and on the method of estimation of parameters of historical earthquakes were published. The Earthquake Disaster Prevention Department of the State Seismological Bureau timely organized a research group to compile a new *Catalogue of Chinese Historical Strong Earthquakes*.

The research group made some important improvements in the method of editing and supplemented many new materials. Foreshocks, aftershocks, accompanying phenomena before and after earthquake occurrence, disaster relief, seismic countermeasures, etc., were included in the description of earthquake phenomena. Considering the influence of local conditions, emperical formulas between magnitude and intensity were established seperately for the east and the west

China mainland, Taiwan region and localities with high seismic activity. Intensity at various data points, surfacial phenomena and obvious secondary disasters were indicated on the isoseismic maps. Special study was carried out for individual debatable events. Non-seismic events were eliminated and doubtful ones were put in the appendix. The magnitude or epicenter of the 1604 and five other great earthquakes were corrected, and the two Tibetan earthquakes with magnitude 8 occurred in 1411 and 1833 respectively were added. The parameters of fourteen earthquakes with magnitudes over 7 were revised. Earthquakes with widely distributed data points without any damage record were rejected formerly. The research group estimated their magnitudes by using the emperical relation between the magnitude and the mean equivalent radius of the intensity IV isoseismal. Thus, 222 earthquakes with $M \geqslant 4\frac{3}{4}$ were supplemented. All these reflect great progress in the treatment of basic seismic materials and the method of cataloging.

The new *Catalogue of Chinese Historical Strong Earthquakes* collected 1034 earthquakes with $M \geqslant 4\frac{3}{4}$ with a time span from the 23rd century B.C. to 1911 A.D. In comparison with the old editions, the number of events is greatly increased and the scope of materials is more extensive. It provides substantial reliable basic data for the study of earthquake prediction, anti-seismic measures, mitigation of seismic disaster, seismo-sociology, etc., and has high scientific and practical value.

Xie Yushou
August, 1993

# 编 辑 说 明

我国是多地震的国家，强烈地震常常给人民的生命财产造成重大的损失。自新中国建立以来，为考虑国家建设地区的地震问题及地震预测预报的需要，我国的地震目录已编辑出版过多次，并在广大地震工作者的努力下，不断研究和修订，正逐渐系统、完善。

以前的《中国地震目录》(1960 年版、1971 年版和 1983 年版)主要是在《中国地震资料年表(1957 年)》、地震调查研究和各种仪器观测资料的基础上编辑完成的。这些地震目录在国民经济建设、地震预测预报、工程抗震、地震减灾等研究工作中发挥了重要的作用。

为了进一步发掘我国丰富的地震史料，1983 年至 1987 年由国家地震局、中国社会科学院和中国科学院组织编辑出版了《中国地震历史资料汇编》(共 5 卷 7 册)，其间又相继出版了各省、自治区和直辖市的地震历史资料汇编。这些资料的编辑出版，使我国地震历史资料的汇集得到了进一步丰富和完整，并补充了许多地震事件。

《中国历史强震目录》就是在以上资料的基础上，为了充分利用新发现的地震历史资料和历史地震领域研究的新成果，对我国 1911 年前历史强震的地震基本参数、震情记述内容和等震线图等作了进一步的分析、考证、修改和充实。

本目录采用编年体，时间跨度自公元前 23 世纪至公元 1911 年共 4100 多年，共编入$4\frac{3}{4}$级以上地震 1034 次。有关问题说明如下:

**1. 编目原则**

(1) 凡有文字记载、仪器记录或经实地考察的资料，经分析能确认是一次地震事件(包括前震和余震)、能给出地震基本参数，且震级等于或大于$4\frac{3}{4}$级者，编入本目录。

(2) 在史料中虽无破坏记载，但地震波及范围较大，根据Ⅳ度烈度区等效圆半径与地震震级的经验关系估算地震震级，且等于或大于$4\frac{3}{4}$级者，亦编入本目录。

(3) 为便于进一步研究，将那些记载语意不详、或震中难以确定、或记载有疑义的地震资料编入本目录第三部分附录，作为参考。

**2. 发震时间**

1900 年前的地震，对日期记载明确的，标出年、月、日(有的还标出地震发生的时辰)。只记年、月或只记年、季的，依据史料如实标出。在农历换算为公历时，其农历月跨公历两个月者，以起跨的月标示。

农历换算为公历时，考虑到地震研究工作的方便，又照顾到史学界的需要，统一使用格列历(对 1582 年 10 月 5 日前的地震，并附注儒略历)和农历，西藏的地震还注明藏历。附录内农历换算为公历时，只取格列历。

1900 年后有仪器记录的地震，发震时间均采用北京时间。

**3. 震中位置**

1900 年前无仪器记录的地震，一般以震害最重的地方作为最可能的震中位置；对于以县，或以州、府为单位记载的地震，以当时的县城位置或以州、府的行政首府作为可能的震中位置；能绘出等震线的地震，以最内圈等震线的几何中心作为震中位置。震中位置的经纬度以度表示，写至一位小数；海域地震精度较差，一般写至半度。

1900 年至 1911 年有仪器记录的地震，多直接引用《国际地震中心记录汇编》或国内外地震观测报告公布的震中参数。

对这一部分早期仪器测定震中位置的经纬度亦以度表示，写至一位小数。

1900 年至 1911 年有仪器记录又经过实地考察的地震同时给出宏观震中参数，少数没有仪器测定震中参数的地震，则采用宏观震中位置参数，加注括号。震中分布插图采用宏观震中数据。

震中位置精度确定如下：

(1) 1900 年前以宏观震害确定的震中位置，按记载的详简程度或最内圈等震线范围的大小分为 5 类，即

| | |
|---|---|
| 1 类 | ≤ 10 km |
| 2 类 | ≤ 25 km |
| 3 类 | ≤ 50 km |
| 4 类 | ≤ 100 km |
| 5 类 | > 100 km |

(2) 1900 年至 1911 年期间，根据仪器记录测定的震中位置，其精度如实给出。

**4. 地震强度**

编入《中国历史强震目录》的地震，均用烈度和震级表示其强度。

地震烈度主要根据《新的中国地震烈度表》评定，同时参考了《烈度、震级简表》。

对 1900 年前无仪器测定震级的地震，先根据历史记载评定震中烈度，再按震级–烈度关系换算出近似震级。由于我国幅员辽阔，考虑到地区性特点，建立了我国大陆东部地区、大陆西部地区和台湾地区的震级–烈度关系，对地震较多的一些地区，也分别建立了各自的震级–烈度关系：

| | |
|---|---|
| 大陆东部地区 | $M_S = 0.579I_0 + 1.403$ |
| 大陆西部地区 | $M_S = 0.605I_0 + 1.376$ |
| 台湾地区 | $M_S = 0.507I_0 + 2.108$ |

1900 年至 1911 年期间有仪器记录的地震，以仪器记录测定的震级为准。

**5. 震源深度**

有仪器测定的震源深度数据，如实给出。

**6. 关于地震情况记述**

考虑到强震及其序列特征对地震预测预报、抗震减灾、震害评估、工程地震以及地震社会学等研究的需要，除了记述主震震害外，还尽可能地辑录了前震、余震、震前震后相关异常现象及抗震救灾、地震对策等方面的资料。

**7. 关于无破坏记载的地震**

现代地震宏观考察经验表明，由于各种原因，一些中强地震并不出现建筑物或地表的破坏，或者地震发生在远离城镇的偏僻地区而无破坏记载。因此，一些史籍上只记“地震”或“地大震”而有感范围又较大的地震，其震级有可能达到或高于$4\frac{3}{4}$。

对近年来既有仪器记录又经过宏观考察的地震进行分析研究，回归出了一些地区Ⅳ度(或Ⅲ度、Ⅴ度)等震线范围与震级的经验关系。据此，对史籍无破坏记载，但波及范围较大的地震也给出了参考震级。因此而增加的地震有 222 次。这类地震在本目录的第二部分分省

“简目”编号栏内加注＊号表示。

我国东、西部地区Ⅳ度等效圆半径 $R$(单位为 km)与震级 $M$ 的关系式为

$$\text{东部地区}\qquad M=1.60\lg R+2.12$$

$$\text{西部地区}\qquad M=1.68\lg R+2.24$$

概括有关地区的研究结果，Ⅳ度等效圆半径($R$)与震级($M$)的经验关系如下表所示。

**Ⅳ度等效圆半径 $R$ 与震级的经验关系**

| 震　级 | | $4\frac{3}{4}$—5 | $5\frac{1}{4}$—$5\frac{1}{2}$ | $5\frac{3}{4}$—6 | $6\frac{1}{4}$—$6\frac{1}{2}$ | $>6\frac{1}{2}$ |
|---|---|---|---|---|---|---|
| $R$(km) | 东部地区 | 40—70 | 90—150 | 200—300 | 350—500 | >500 |
| | 西部地区 | 30—50 | 60—100 | 120—200 | 250—350 | >350 |

**8. 关于等震线图**

在等震线图上尽可能评定每一破坏地点的烈度，并尽可能标出地表破坏现象(如山崩、地裂、喷水、冒砂等)及重大的次生灾害(如火灾、水灾等)。图上行政区划资料依据《中华人民共和国分省地图集(1987 年)》。

**9. 对 8 级以上特大地震的增、减和修改**

对 8 级以上特大地震的修改特别慎重，经反复分析研究，并广泛征询意见后，有以下一些变动:

(1) 1556 年陕西华县地震，改定为$8\frac{1}{4}$级;

(2) 1604 年福建泉州海外地震，改定为$7\frac{1}{2}$级;

(3) 1668 年山东郯城$8\frac{1}{2}$级地震的震中位置改定为 34.8°N，118.5°E;

(4) 1695 年山西临汾地震，改定为$7\frac{1}{4}$;

(5) 1812 年新疆尼勒克地震，改定为 8 级;

(6) 1906 年新疆沙湾地震，改定为 7.7 级;

(7) 西藏新增两次 8 级地震，即 1411 年当雄西南地震和 1833 年聂拉木地震。

本目录所依据的资料、除特别注明(详见文献资料目录)者外，均取自《中国地震历史资料汇编(1—5 卷)》。

这次编目工作得到云南省地震局、辽宁省地震局、国家地震局地球物理研究所、四川省地震局、上海市地震局、安徽省安庆市科委、新疆维吾尔族自治区地震局、国家地震局兰州地震研究所、江苏省地震局、广东省地震局及河南省地震局的大力支持，在此表示衷心感谢。

前后参加过编目及专题研究的人员还有杨智娴、沈德高、金赤兵、睢建设、黎捷。

文中图件由周郧生、赵桂英、张海鹰清绘。张德英、翟文杰、孙文福对文字做了微机输录并绘制震中分布图。

本书虽经一再修改、校订，仍难免有错误和疏漏，希望读者随时指出以便修正。

# EXPLANATORY REMARKS

China is a country with high seismicity. Strong earthquakes usually cause heavy casualties and enormous property losses. Since the founding of the People's Republic of China, several editions of earthquake catalogue have been published for use in the assessment of seismic risk of construction sites and earthquake prediction. Seismologists studied and revised the catalogue incessently to make it more systematic and perfect.

The 1960, 1971 and 1983 editions of the Catalogue of Chinese Earthquakes were compiled mainly on the basis of the *Chronological Table of Chinese Earthquakes* (1957), field expedition and instrumental data. These catologues play an important role in the study of seismic risk of economic constructions, earthquake prediction, anti-seismic measures, mitigation of seismic hazards, etc.

In 1978, the State Seismological Bureau, the Academy of Social Sciences of China and the Academia Sinica jointly organized scientists with different disciplines to further explore our abundant historical materials. A five-volume *Compilation of Historical Materials of Chinese Earthquakes* was published from 1983 to 1987. Besides, some provinces, autonomous regions and metropolitans published their own regional compilations. These publications made the collection of our historical earthquake materials more abundant and complete, and many seismic events were supplemented.

On the basis of these materials, by fully utilizing the achievements in the field of historical earthquake study, through further analysis, textural research, revision and supplementation of the seismic basic parameters, description of seismic events and isoseismal maps, the authors compiled the new *Catalogue of Chinese Historical Strong Earthquakes*, which includes all earthquakes before 1911.

This catalogue is arranged chronologically, beginning from the 23rd century B.C. and ending at 1911, with a time span of more than 4100 years. It contains 1034 earthquakes with magnitude greater than $4\frac{3}{4}$. Related problems are explained as follows:

**1. Principles of Editing**

(1) All events with written records, instrumental data, or on the spot investigation findings, which can be identified as an earthquake (including foreshocks and aftershocks) with $M \geqslant 4\frac{3}{4}$ are included in this catalogue.

(2) For earthquakes recorded in a vast region with no damaging account whatsoever, the emperical relation between the magnitude and the equivalent radius of the intensity Ⅳ isoseismal is used to estimate their magnitudes. Those with $M \geqslant 4\frac{3}{4}$ are also included in this catalogue.

(3) Doubtful materials and earthquakes with undeterminable epicenters are listed in the appendix for further study.

**2. Time of Occurrence**

For earthquakes occurred before 1900, if the date is definitely recorded, years, months and days (sometimes even the time within a day) are given. If year and month or year and season are recorded only, they are listed accordingly. If one month in the lunar calender spans two months in the Gregorian calender, the earlier month is used in their conversion.

Gregorian and lunar calenders are universally used. For earthquakes occurred before Oct. 5, 1582, Julian calender is also noted. For Tibetan earthquakes, Tibetan calender is cited too. In the appendix, only Gregorian calender is used.

For earthquakes occurred after 1900 with instrumental data, Beijing local time is used.

**3. Epicenter Location**

For earthquakes with no instrumental data, the most strongly stricken place is taken as the most probable epicenter. Usually the administrative center of a county or a prefacture is used. When an isoseismal map can be drawn, the geometrical center of the innermost isoseismal is taken as the epicenter. The location of the epicenter is given in degrees of latitude and longitude to one decimal place. For epicenters in sea regions, the accuracy is relatively low and they are given to half a degree only.

For earthquakes with instrumental data, epicenters are quoted from bulletins of the International Seismological Center or other domestic and foreign agencies. Their latitudes and longitudes are also given in degrees to one decimal place.

For earthquakes between 1900 and 1911 with instrumental data and field expedition materials, both microseismic and macroseismic epicenters are given. For those without instrumentally determined parameters, macroseismic epicenters are used and put in brackets. Only macroseismic epicenters are used in the map of epicentral distribution.

Accuracy of epicenter location:

Epicenters of earthquakes before 1900 are determined from macroseismic materials. They are classified into five categories according to the quality of the available materials or the area of the innermost isoseismal.

| | |
|---|---|
| Category 1 | $\leqslant$ 10 km |
| Catagory 2 | $\leqslant$ 25 km |
| Catagory 3 | $\leqslant$ 50 km |
| Catagory 4 | $\leqslant$ 100 km |
| Catagory 5 | $>$ 100 km |

The accuracies of instrumentally determined epicenters are cited from seismological bulletins.

**4. Earthquake Magnitude**

Both magnitude and intensity are given for earthquakes listed in this catalogue.

Intensities are determined according to *A New Scale of Seismic Intersity Adapted to the Conditions in Chinese Territories* with reference to the *Simplified Table of Intensity versus Magnitude*.

For earthquakes with no instrumentally determined magnitudes, the epicentral intensities are determined from historical materials, and the magnitudes are calculated by using the

magnitude–intensity emperical equations. Considering the influence of local conditions, the equations for the east and the west China mainland, the Taiwan region and localities with high seismicity were established seperately.

$M_S = 0.579I_0 + 1.403$ for the eastern part of China mainland

$M_S = 0.605I_0 + 1.376$ for the western part of China mainland

$M_S = 0.507I_0 + 2.108$ for the Taiwan region

For earthquakes with instrumental data, the microseismic magnitudes are adopted.

**5. Focal Depth**

Focal depths are quoted from seismological bulletins.

**6. Earthquake Information**

Besides the disasters caused by earthquake events, materials concerning foreshocks, aftershocks, anomalous phenomena before and after main shocks, disaster relief, and seismic countermeasures were collected to the best for use in the study of earthquake prediction, antiseismic measures, disaster relief, assessment of seismic risk, engineering seismology and seismo–sociology.

**7. Earthquakes Without Damage Records**

Recent macroseismic expeditions show that some moderately strong earthquakes do not cause any destruction to buildings or landscape. Besides, seismic effects of earthquakes occurred in remote regions are usually not well known. Thus, the magnitudes of earthquakes recorded simply as "the earth shaked" or "the earth shaked violently" covering a vast region in historical documents may attain $4\frac{3}{4}$ or even more.

By studying modern earthquakes with both instrumental data and macroseismic materials, emperical relations between magnitude and the scope of intensity Ⅳ (sometimes Ⅲ or Ⅴ) isoseismals were regressed. On this basis, referential magnitudes of historical earthquakes recorded in vast region without any damage description were estimated. Thus, 222 earthquakes were supplemented. Such earthquakes are marked with * in the serial number column in Part Ⅱ "Simplified Provincial Catalogue".

The emperical equations between magnitude $M$, and equivalent radius of intensity Ⅳ isoseismal $R$ (in km), are:

$M = 1.60 \lg R + 2.12$ for the eastern part of China

$M = 1.68 \lg R + 2.24$ for the western part of China

The relation between magnitude and equivalent radius of intensity Ⅳ isoseismal is summarized in Table 1.

**Table 1 Emperical relation between magnitude $M$ and equivalent radius of intensity Ⅳ isoseismal $R$**

| $M$ | | $4\frac{3}{4}$—5 | $5\frac{1}{4}$—$5\frac{1}{2}$ | $5\frac{3}{4}$—6 | $6\frac{1}{4}$—$6\frac{1}{2}$ | $>6\frac{1}{2}$ |
|---|---|---|---|---|---|---|
| $R$(km) | East region | 40—70 | 90—150 | 200—300 | 350—500 | >500 |
| | West region | 30—50 | 60—100 | 120—200 | 250—350 | >350 |

**8. Isoseismal Maps**

On isoseismal maps, the intensities at data points are indicated whenever possible, and surfacial phenomena (such as landslide, ground fissure, water eruption, sand effusion, etc) and serious secondary disasters (such as fire, flood, etc) are marked to the best. The administrative zones are based on the *Provincial Atlas of the People's Republic of China* (1987).

**9. Correction of Great Earthquakes with $M \geqslant 8$**

Through deep study and thorough discussion, the following corrections were made:

(1) The magnitude of the 1556 Huaxian, Shaanxi Province, earthquake is changed to $8\frac{1}{4}$.

(2) The magnitude of the 1604 offshore Quanzhou, Fujian Province, earthquake is changed to $7\frac{1}{2}$.

(3) The epicenter of the 1668 Tancheng, Shandong Province, $M8\frac{1}{2}$ earthquake is changed to 34.8°N, 118.5°E.

(4) The magnitude of the 1695 Linfen, Shanxi Province, earthquake is changed to $7\frac{3}{4}$.

(5) The magnitude of the 1812 Nilka, Xinjiang Autonomous Region, earthquake is changed to 8.

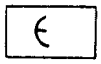
(6) The magnitude of the 1906 Shawan, Xinjiang Autonomous Region, earthquake is changed to 7.7.

(7) Two Tibetan $M8$ earthquakes are added, i.e., the 1411 southwest of Damxung earthquake and the 1833 Nyalam earthquake.

All materials except those specially noted were taken from the *Compilation of Historical Materials of Chinese Earthquakes*, Vol. 1–5.

Though this catalogue has been checked and revised repeatedly, mistakes and omissions may still exist. Any comment will be appreciated.

# 图　　例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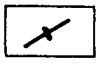
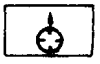
滑坡


地裂

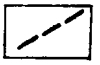

地裂冒水


地陷


地陷冒水

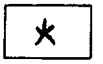

地基下沉，水体侵注


山崩塞江

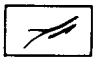

地震断层


海啸


沿江次生水灾


次生火灾

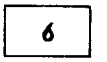

山峰


河流及流向

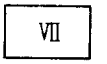

地震记载地点
大者为县以上城市，小者为乡镇


首都


参考地点



记载点烈度值



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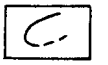
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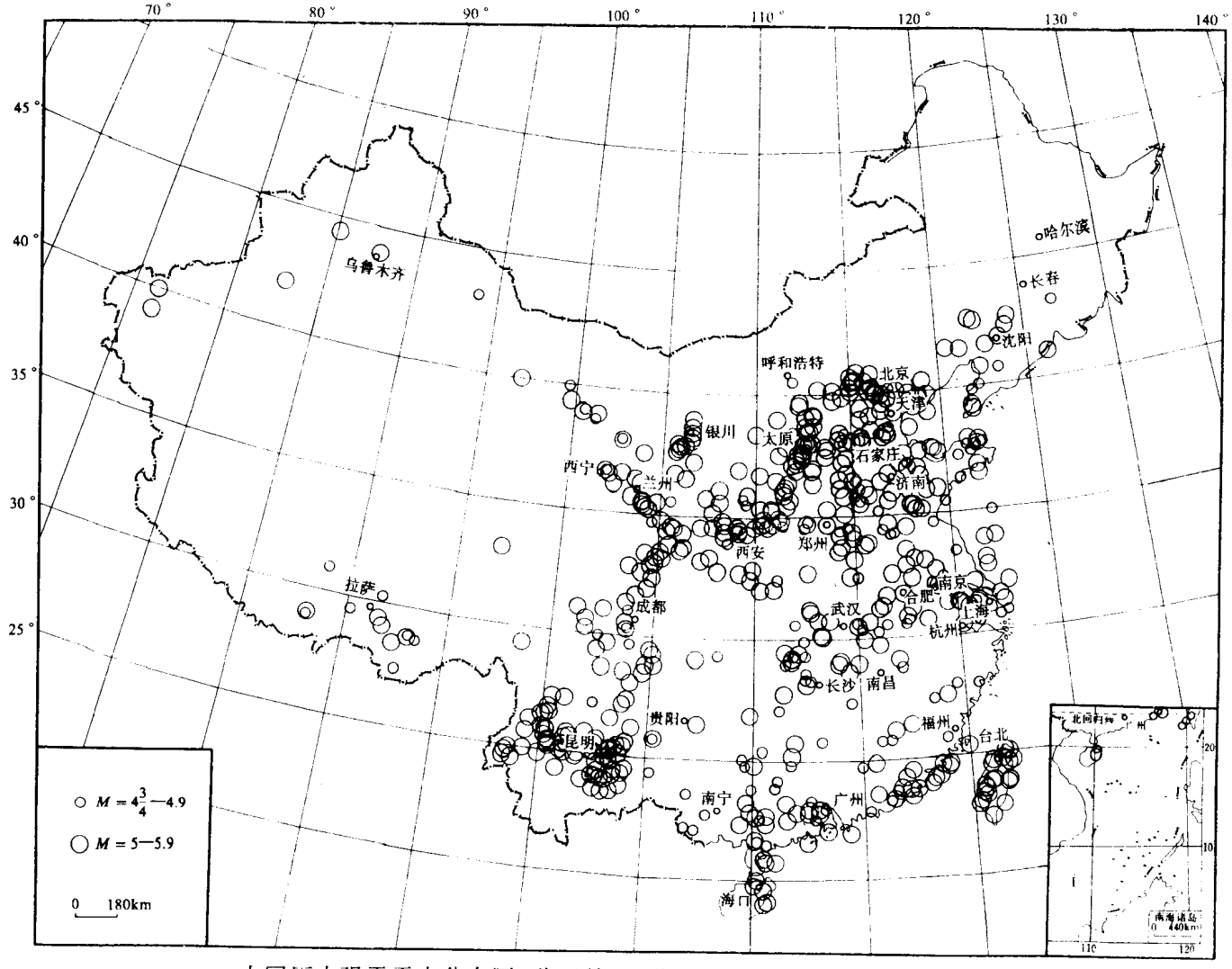
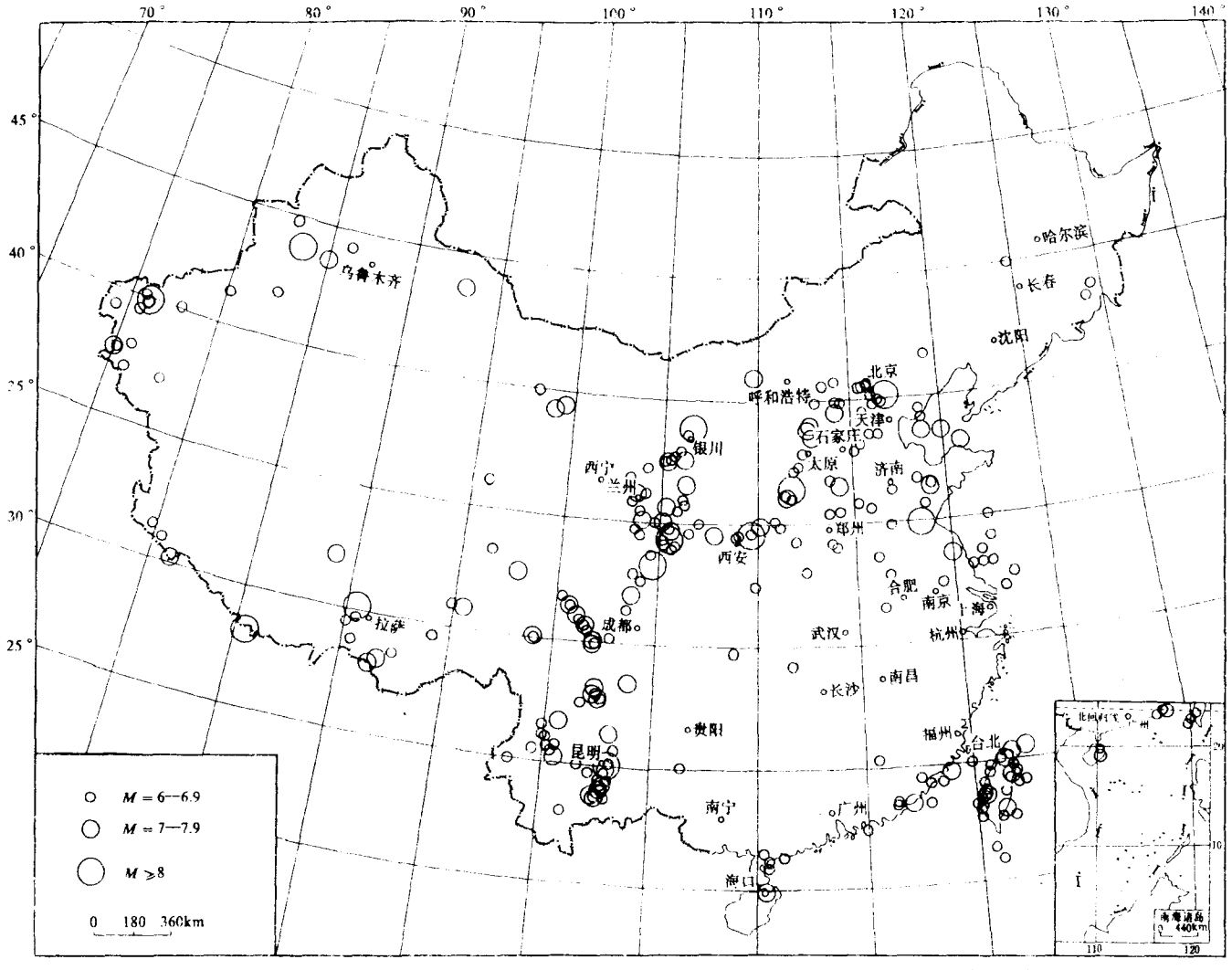



中国历史强震震中分布图 (公元前 23 世纪—公元 1911 年，震级$4\frac{3}{4}$—5.9)

Epicentral Map of Chinese Historical Strong Earthquakes (23rd century B.C.—1911 A.D., magnitude $4\frac{3}{4}$—5.9)




中国历史强震震中分布图(公元前23世纪—公元1911年，震级6—8级以上)

Epicentral Map of Chinese Historical Strong Earthquakes (23rd century B.C.—1911 A.D., magnitude 6 — ≥8)