

**A Translation of the Observations
of Meteors Recorded in the
*Koryō-sa***

PREPARED BY

Tom J. York

Department of Physics
University of Durham
Durham DH1 3LE
United Kingdom

AND PUBLISHED IN ASSOCIATION WITH

Matthew N. Wild

World Data Centre for Solar-Terrestrial Physics
Rutherford Appleton Laboratory
Chilton
Didcot
Oxfordshire OX11 0QX
United Kingdom

Preface

Tom J. York prepared the following translations of the ancient meteor observations from Korea while he was undertaking postgraduate research in the Department of Physics at the University of Durham, working under the supervision of Professor F. Richard Stephenson.

This catalogue of Korean meteor observations (AD 1000 - 1400) is being published as a Rutherford Appleton Laboratory Technical Report under the aegis of the World Data Centre for Solar-Terrestrial Physics. The historical records provide an invaluable source of information on the date of occurrence, position in the sky, size, motion and colour of meteors seen from Korea.

The intention is to publish a limited number of catalogues containing important historical data that may be of value to the wider scientific community. A catalogue of auroral observations from China, Korea and Japan (193 BC - AD 1770) was published in December 1995 (RAL-TR-95-073). It is hoped that the occasional publication of such detailed catalogues will promote further scholarly research on the various important historical aspects of atmospheric and solar-terrestrial physics.

Matthew N. Wild
World Data Centre for Solar-Terrestrial Physics
Rutherford Appleton Laboratory
(<http://www.wdc.rl.ac.uk>)
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Introduction

The following is a rendition into English of part of the astronomical treatise (chapters 47 to 49) of the *Koryŏ-sa* (History of the Kingdom of Koryŏ). The Koryŏ dynasty ruled Korea from AD918 to 1392; these chapters list a large number of astronomical observations of all kinds from approximately AD1000 to the dynasty's end.

The history, the earliest version of which was written in 1395, is based upon the *Sillok* (Veritable Records: detailed, day to day annals) of the Koryŏ dynasty, which no longer exist. The final version of the *Koryŏ-sa* was compiled between 1445 and 1451 under the direction of Chŏng In-ji. This report includes observations of meteors, which are indicated in the treatise by the standard phrase *liu xing*, flowing star.

Early Korean astronomy follows the Chinese system. Chinese constellations (asterisms) are used - traditionally, these number 283. Three larger enclosures are also mentioned frequently - *Tianshi* (the Celestial Market), which lies mostly in Hercules; *Taiweigong* (the Grand Forbidden Palace, often abbreviated to *Taiwei*), which occupies much of Leo and Virgo; and *Ziweigong* (the Purple Forbidden Palace, often abbreviated to *Ziwei*), which occupies the north polar region. Asterisms and enclosures are identified in the catalogue below by the use of italics.

In East Asian astronomy, 28 asterisms are of special importance: the *xiu* or lunar lodges. These star groups acted as coordinate markers and thus feature prominently in astronomical texts. They are listed in Table 1.1, along with their determinative star; these stars' positions were used to determine the western edge of each lodge.

Dates used in the treatise are expressed in the Chinese lunar calendar, but the year is numbered according to the reign of the Korean king. For each entry in the catalogue, the equivalent date on the Julian calendar is provided. The beginning of the Chinese year falls in the first two months of the Julian year. For the sake of convenience, the records are grouped by Julian year. It should be mentioned that when a Korean king died, although his successor took office almost immediately, a new year-count did not begin until the start of the following year. For example, King Hyŏnjong came to the throne on the death of King Mokchong (AD 1009) but the first (full) year of Hyŏnjong's reign was not regarded as commencing until the following year (AD 1010).

The *Koryŏ-sa* uses the Chinese sexagenary cycle of days throughout. Each individual day in the cycle is denoted by a combination of one of the ten celestial stems (*jia, yi, bing, ding, wu, ji, geng, xin, ren* and *kui*) and one of the twelve terrestrial branches (*zi, chou, yin, mao, chen, si, wu, wei, shen, you, xu* and *hai*). The cycle thus starts on a *jia-zi* day, cycling through both stems and branches simultaneously (i.e., the second day of the cycle is a *yi-chou* day), and is therefore sixty days long. For most recorded dates, the year, lunar month and cyclical day correspond, so that the date can be readily reduced to the Julian calendar. However, there are a number of dating errors. For instance, in the very first entry in the catalogue, there

	Name	Translation	Determinative Star
1	Jiao	Horn	α Vir
2	Kang	Neck	κ Vir
3	Di	Base	α Lib
4	Fang	Chamber	π Sco
5	Xin	Heart	σ Sco
6	Wei	Tail	μ Sco
7	Ji	Basket	γ Sgr
8	Nandou	Southern Dipper	ϕ Sgr
9	Qianniu	Ox	β Cap
10	Xunü	Maid	ϵ Aqr
11	Xu	Emptiness	β Aqr
12	Wei	Rooftop	α Aqr
13	Yingshi	Encampment	α Peg
14	Dongbi	Eastern Wall	γ Peg
15	Kui	Stride	ζ And
16	Lou	Harvester	β Ari
17	Wei	Stomach	35 Ari
18	Mao	Mane	17 Tau
19	Bi	Net	ϵ Tau
20	Zui	Turtle Beak	ϕ^1 Ori
21	Shen	Triad	δ Ori
22	Dongjing	Eastern Well	μ Gem
23	Yugui	Ghost Vehicle	θ Cnc
24	Liu	Willow	δ Hya
25	Qixing	Seven Stars	α Hya
26	Zhang	Extended Net	ν Hya
27	Yi	Wings	α Crt
28	Zhen	Axletree	γ Crv

Table 1.1: The twenty-eight lunar lodges

was no ding-si day in the 2nd month of the 6th year of King Mokchong's reign. To suggest alternatives would be little more than guesswork and the words "Dating error" are inserted in place of the Julian date.

The classical Chinese of the *Koryŏ-sa* contains no grammar or plurality; in order to provide an English version certain assumptions have been made about the structure of each record. Due to the formal way in which the records are set out, containing many standardisations (for example, each record always starts with the date, usually followed by the standard phrase *liu xing*), it has been possible to set out a consistent interpretation of the text. Occasional ambiguities are noted, but occur surprisingly rarely.

Where it is clearer to retain the Chinese phrases (the names of asterisms, for example), the pinyin system of romanisation has been used. The one exception to this is in the names of the Korean kings, for which the McCune-Reischauer system

is adopted. There are also some cases where it is debatable whether it is preferable to include the pinyin or English translation. This occurs primarily where records describe the apparent size of a meteor; "*it was as large as a bowl*", for instance. For clarity, the first instance of each description references the dictionary definition. Where the translation makes the original expression unclear, it has generally been left in pinyin. Translations are based on Matthews' Chinese-English dictionary (Matthews 1979).

The objects used to compare the apparent sizes of meteors are listed in Table 1.2. It should be noted that there is no way to establish the actual angular sizes of meteors from these, or to ascertain whether these comparisons were systematic. Those for which a translation is given in the table use the English version in the main text. The remainder represent those for which the translation is less clear cut; the translated meaning of each of these are detailed in a footnote at the point at which the term is first used.

<i>bei</i> (cup)	<i>gua</i> (melon)	<i>ji zi</i> (hen's egg)	<i>bo</i>
<i>deng</i> (lamp)	<i>kuan</i>	<i>ju</i> (torch)	<i>wan</i> (bowl)
<i>yu</i>	<i>fou</i>	<i>deng zhan</i> (lantern)	<i>pen</i>
<i>dou</i>	<i>li</i> (pear)	<i>weng</i>	<i>niu</i> (ox)
<i>hu</i>			

Table 1.2: Common comparison objects for the sizes of meteors

In addition to this, estimates of the apparent lengths for the tails of meteors are often given in *chi* (Chinese feet). As shown by Kiang(1971), there is an approximate equivalence between the degree and the *chi*. Lengths are occasionally also given in *zhang* or *cun*; ten *cun* equal one *chi*, and ten *chi* equal one *zhang*.

A number of other standard phrases used in the *Koryŏ-sa* deserve attention. The use of *you* ("also") at the beginning of a record is an indication that it is part of a larger entry for the night, of which the previous section or sections often do not refer to meteors. A "*gate*" usually refers to a section of sky between two prominent asterisms, but occasionally to part of a single asterism, e.g., an area between two stars.

A few lunar lodges are usually written in shortened form in the treatise. *Qianniu* is often written *Niu*; *Xunü* as *Nü*; *Dongbi* as *Bi*; *Dongjing* as *Jing*; *Yugui* as *Gui*; and *Qixing* as *Xing*.

Until now, this catalogue has never been presented in a western language. The aim is to make it generally available for those who would wish to study its content and make use of the astronomical information it provides.

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Reign of King Mokchong (997-1009)

1003

On a ding-si day in the 2nd month of the 6th year (Dating error), there was a meteor which shone on the ground like a candle.

Reign of King Hyŏnjong (1009-1031)

1011

On a geng-shen day in the 12th month of the 1st year (22nd January 1011), a great meteor fell in Guo county.

1013

On a gui-mao day in the 3rd month of the 4th year (24th April 1013), there was a great meteor from the east to the west, and a sound like thunder.

On a gui-si day in the 9th month (11th October 1013), a great meteor entered at the gate between *Zhang* and *Yi*.

1014

On a gui-si day in the 1st month of the 5th year (8th February 1014), a meteor entered *Yi*.

On a xin-hai day in the 11th month (23rd December 1014), a meteor entered *Di*.

1015

On a xin-chou day in the 5th month of the 6th year (11th June 1015), a great meteor fell in the southwest.

On a ren-yin day in the 8th month (10th October 1015), a meteor entered *Di*.

1016

On a wu-yin day in the 2nd month of the 7th year (14th March 1016), also a meteor appeared in *Xuanyuan* and entered *Santai*.

On a ji-chou day in the 4th month (24th May 1016), a great meteor came from the east and arrived in the west.

On a xin-chou day in the 8th month (3rd October 1016), there was a meteor like thunder. Its light shone on the ground, people were shocked and in commotion.

On a ren-zi day in the 9th month (14th October 1016), a meteor as large as the moon appeared in *Zhang* and *Xing*¹ and entered *Mingtang* and *Lingtai*.

1018

On a ding-you day in the 6th month of the 9th year (21st July 1018), a meteor appeared in *Tianshi* and entered *Beidou*².

1023

On a ji-chou day in the 9th month of the 14th year (15th October 1023), a meteor as large as the moon entered the gate between *Wangliang* and *Tianche*.

On a gui-mao day in the 10th month (Dating error), a meteor entered *Tianchan*.

On a ji-hai day in the 11th month (24th December 1023), a meteor entered *Sheti* gate.

1025

On a jia-chen day in the 6th month of the 16th year (Dating error), a great meteor appeared in *Jiao* and moved to the west.

1026

On a ren-yin day in the 1st month of the 17th year (14th February 1026), a meteor appeared in *Taiwei* and entered *Ziwei*.

1028

On a ji-hai day in the 7th month of the 19th year (30th July 1028), a great meteor moved from north to south. Its light shone on the ground.

1029

At the hour of *pu*³ on a ding-hai day in the 8th month of the 20th year (11th September 1029), a great meteor moved to the southwest.

1031

On a gui-mao day in the 4th month of the 22nd year (20th May 1031), a great meteor entered *Tianshi* wall⁴.

¹Since *xing* is both the name of a lunar lodge and the word for “star”, this could also refer to a bright star in *Zhang*; however, the two lodges neighbour each other, so this seems less likely.

²This asterism consists of the seven stars of the Plough.

³Between 3.00pm and 5.00pm

⁴The boundary of the *Tianshi* enclosure.

On a xin-si day in the 6th month (27th June 1031), there was a meteor as large as the moon in the northwest direction.

Reign of King Tǒkchong (1031-1034)

1032

On a ding-you day in the 3rd month of the 1st year (8th May 1032), a meteor appeared in *Taiwei* and entered *Xuanyuan*.

On a jia-zi day in the 8th month (2nd October 1032), a meteor appeared in *Wangliang* and entered *Tianji*.

On a bing-zi day in the 9th month (14th October 1032), a meteor appeared in *Beidou* and entered *Ziweigong*.

1034

On a gui-you day in the 7th month of the 3rd year (Dating error), a meteor appeared in *Wuche* and entered *Zhuwang*.

Reign of King Chǒngjong (1034-1046)

1035

On a ren-wu day in the 9th month of the 1st year (5th October 1035), a meteor appeared in *Tianchan*.

On a wu-chen day in the 10th month (20th November 1035), a meteor moved from the southwest to the northeast.

1036

On a ding-you day in the 1st month of the 2nd year (17th February 1036), a meteor appeared in *Taiwei* and entered *Zhen*.

On a wu-chen day in the 8th month (15th September 1036), a meteor appeared in *Wuche* and entered *Zhuwang*.

On a xin-si day in the 9th month (28th September 1036), a meteor appeared in *Tianyuan* and entered *Yulin*.

On a ding-wei day in the 10th month (24th October 1036), a meteor appeared in *Wuche* and entered *Luejuan*.

On a jia-chen day in the 11th month (20th December 1036), a great meteor appeared in *Jiao* and entered *Nilin*.

1037

On a ding-si day in the 4th month of the 3rd year (2nd May 1037), a meteor appeared in *Di* and entered *Taiwei*.

On a ding-mao day in the 7th month (9th September 1037), there were three meteors as large as a cup⁵. One appeared in *Juanshe* and entered *Wuche*. One appeared in *Tianchuan* and entered *Gouchen*. Both were coloured red. One appeared in *Bagu* and entered *Gouchen*. It was coloured white.

On a bing-zi day in the 10th month (17th November 1037), a meteor as large as the half moon appeared in *Yi* and entered the head of *Nandou*⁶. It was coloured red.

1038

On a gui-you day in the 8th month of the 4th year (10th September 1038), a meteor as large as the half moon appeared in *Tianyuan*.

On a ren-chen day in the 8th month (29th September 1038), a meteor as large as a cup appeared in *Wuzhuhou* and entered *Xuanyuan*.

1040

On a jia-yin day in the 11th month of the 6th year (9th December 1040), a meteor as large as *sheng*⁷ with a tail more than one *zhang* long appeared in *Dongjing* and entered *Xuanyuan*.

On a geng-shen day in the 11th month (15th December 1040), a meteor as large as *sheng* with a tail one *zhang* long appeared at the stars of *Shen* and entered *Queqiu*.

1041

On a gui-mao day in the 12th month (27th January 1041), a meteor as large as a cup with a length of approximately 30 *chi* appeared in *Zhinü* and entered *Tianshi* wall.

1042

On a ding-wei day in the 7th month of the 8th year (25th July 1042), there were many stars flowing and turning.

⁵*bei*: a cup, a tumbler, a glass. It should be noted that three separate symbols are used to denote *bei* in *Koryō-sa*.

⁶This is a lunar lodge of six stars in a similar pattern to *Beidou*. The “head” probably denotes the square of four stars in each asterism.

⁷In this context, the term probably refers to a measure of volume.

Reign of King Munjong (1046-1083)

1048

On a gui-you day in the 2nd month of the 2nd year (21st March 1048), a meteor appeared in the east of *Langjiang* and entered the gate between *Dajiao* and *Sheti*. It was as large as a melon⁸. Red light shone on the ground.

1050

On a ren-wu day in the 6th month of the 4th year (18th July 1050), a meteor appeared in *Nou* and entered *Ji*⁹. It was as large as a melon, and was coloured red.

1052

On a ji-hai day in the 6th month of the 6th year (24th July 1052), a meteor as large as a melon appeared in *Taiwei* and entered *Tianshi*. It was coloured red.

1053

On a jia-yin day in the 7th month of the 7th year (3rd August 1053), a meteor appeared in *Nou* and entered *Tiantian*. It was coloured red, and had a length of more than one *zhang*.

1061

At the hour of *pu* on a xin-chou day in the 1st month of the 15th year (9th February 1061), there was a meteor as large as a melon. It travelled to the northwest and faded.

1065

On a ji-chou day in the 10th month of the 19th year (3rd November 1065), a meteor appeared in *Shi* and entered *Tianjiangjun*. It was as large as a melon.

1067

On a xin-si day in the 7th month of the 21st year (17th August 1067), a meteor appeared in *Muliwei* and quickly entered *Zhinü* and divided into six or seven parts, looking like red tassels linked to a piece of white jade. The front part was as large as a melon. The back part was like a hen's egg¹⁰. There was a sound like thunder. It went on for a long time, then stopped.

⁸*gua*: melons, gourds, cucumbers, etc.

⁹This may or may not refer to the lunar lodge *Ji* (a basket) as the symbol used is *Ji* (a chicken). The relative proximity of the lodges *Nou* and *Ji* makes it more probable that it does, however.

¹⁰*ji zi*: hen's eggs. Occasionally the term *ji luan* is used instead.

1072

On a jia-yin day in the 2nd month of the 26th year (25th February 1072), a meteor appeared in *Kang* and entered *Fang*. It was as large as the moon.

1073

On a ji-you day in the 1st month of the 27th year (14th February 1073), a meteor appeared in *Dajiao* and entered within the head of *Beidou*.

On a gui-you day in the 1st month (10th March 1073), a meteor appeared in *Daling* and entered the south of *Lou* and *Wei*¹¹.

On a bing-wu day in the 7th month (10th August 1073), a meteor appeared in *Wangliang* and entered *Hegu*.

On a jia-xu day in the 10th month (6th November 1073), there was a meteor which appeared in *Liu* and entered *Xuanyuan*. It was as large as *bo*¹².

1074

On a wu-yin day in the 2nd month of the 28th year (10th March 1074), a meteor appeared in *Shen* and moved west. It was as large as a melon.

On a ji-hai day in the 11th month (26th November 1074), a meteor appeared in *Wenchang*. It arrived in the northwest and disappeared. It was as large as *bo*.

1075

On a geng-yin day in the 4th month of the 29th year (16th May 1075), a meteor appeared in *Jiao* and entered the gate between *Jing* and *Gui*.

On a gui-you day in the 7th month (27th August 1075), a meteor appeared in *Nandou*. It quickly moved from *Wei* and spread out. It had a length of more than one *zhang*.

On a xin-si day in the 9th month (3rd November 1075), a meteor entered *Tianshu*¹³. It was as large as a melon.

On a ren-wu day in the 9th month (4th November 1075), a meteor appeared in *Tianjin* and entered *Hegu*. It was as large as a cup.

¹¹These two lodges neighbour each other. This may refer to either an area within these asterisms or an area to the south of them.

¹²*bo*: an earthenware basin.

¹³This is an unusual reference to one of the individual stars of *Beidou*, the Plough.

On a ding-hai day in the 9th month (9th November 1075), a meteor appeared in the northeast of *Xiatai* and entered *Xuanyuan*.

On a wu-zi day in the 9th month (10th November 1075), a meteor entered *Huagai*. It was as large as a lamp¹⁴.

On a gui-si day in the 10th month (15th November 1075), a meteor appeared in the southern sky and entered *Zhen*. It was as large as a melon.

1078

On a ren-zi day in the 10th month of the 29th year (18th November 1078), a meteor appeared in *Daling* and entered *Tianyuan*. It was as large as a melon.

Reign of King Sŏnjong (1083-1094)

1086

On a xin-mao day in the 6th month of the 3rd year (18th July 1086), a meteor appeared in *Wenchang* and penetrated *Wei* and *Ku*. It had a length of more than 10 *chi*, and was curved like a ring with a gap at the east. It was coloured red, but presently changed to white. It only faded after a long time.

On a jia-chen day in the 8th month (29th September 1086), a meteor appeared in *Lou* and arrived in *Wangliang*. It was as large as a melon.

1087

On a xin-you day in the 7th month of the 4th year (12th August 1087), a meteor appeared in *Tianjun* and arrived in *Tianyuan*. It was as large as a melon.

On a wu-xu day in the 8th month (18th September 1087), a meteor appeared in *Lou* and arrived in *Wangliang*. It was as large as a melon.

1088

On a ji-si day in the 7th month of the 5th year (14th August 1088), a meteor appeared in *Tianjin* and arrived in *Dongbi*. It was as large as a melon.

1090

On a jia-xu day in the 9th month of the 7th year (8th October 1090), a meteor appeared like fire in *Gui* and entered *Taiwei*.

On a geng-yin day in the 9th month (24th October 1090), a meteor appeared in *Shangtai* and trespassed against the lower star of *Zhongtai*. It was as large as the

¹⁴*deng*: a lamp, a lantern.

sun.

On a ren-chen day in the 10th month, the first day of the month (26th October 1090), a meteor appeared in *Xuanyuan* and entered *Taiwei*. It was as large as a melon.

1091

On a ren-wu day in the 3rd month of the 8th year (14th April 1091), a meteor appeared in *Zhinü* and arrived in *Tianjin*.

On a ding-si day in the 4th month (19th May 1091), there were meteors; some were blue-green, some were red. They had tails more than 10 *chi* long. They appeared in *Fang* and entered *Xuanyuan*. There was a sound like thunder.

1092

On a wu-wu day in the 2nd month of the 9th year (15th March 1092), a meteor appeared in the north of *Taiwei* and arrived south of *Xing*.

1093

On a geng-yin day in the 3rd month of the 10th year (11th April 1093), a meteor appeared in *Zaofu* and arrived in *Wangliang*. It was coloured red, and was as large as a melon. It had a tail approximately 7 *chi* long.

Reign of King Hōnjong (1094-1095)

1095

On a yi-you day in the 6th month of the 1st year (25th July 1095), a meteor, which was as large as a melon and coloured red, with a tail approximately 9 *chi* long, appeared in *Yingshi* and entered the head of *Nandou*. There were many small stars flowing south.

Reign of King Sukchong (1095-1105)

1097

On a gui-wei day in the 8th month of the 2nd year (10th September 1097), a meteor appeared in *Zhinü* and arrived in *Wangliang*.

1098

On a yi-si day in the 2nd month of the 3rd year (31st March 1098), a meteor, which was coloured red, first large but later small, appeared in *Tengshe* and arrived in

Yingshi.

On a geng-shen day in the 11th month (11th December 1098), a meteor, which was coloured red, first large but later small, appeared in *Nanhe* and arrived in *Tianjun*.

1099

On a gui-wei day in the 11th month of the 4th year (29th December 1099), a meteor, which was coloured white, first small but later large, appeared in the stars of *Zhang* and arrived in *Tianchao*. It was as large as *kuan*¹⁵.

1100

On a geng-shen day in the 4th month of the 5th year (3rd June 1100), a meteor appeared in *Yi*. It was approximately 3 *chi* long, and fell to the southwest.

On a ren-xu day in the 10th month (2nd December 1100), a meteor appeared in *Yulin* and entered the stars of *Xu*. It was approximately 5 *chi* long. It was green and red, and its rays were very bright¹⁶. There was a sound like thunder.

1103

On a xin-hai day in the 8th month of the 8th year (7th September 1103), one meteor appeared in *Beiji* and entered *Tianjin*. It was as large as a torch¹⁷, and had a tail approximately 3 *zhang* long. One meteor appeared inside *Wuzhuhou* and entered *Shangtai*. It was as large as *kuan*, and had a tail approximately one *zhang* long. One meteor appeared in *Wangliang* and entered *Wenchang*. It was as large as a melon.

1105

On a geng-wu day in the 6th month of the 10th year (17th July 1105), at the beginning of the night, a meteor appeared within *Ziwei* wall and entered *Langwei*. It was coloured red, and was approximately 5 *cun* across round¹⁸. It had a tail approximately 1 *zhang* long. Two more appeared in *Tianjin* and entered *Tianshi*. They were coloured white, and their tails were 2 *zhang* long. On the fifth night, (a meteor)¹⁹ appeared in *Hegu* and entered the head of *Nandou*. It was coloured red, and as large as a hen's egg.

On a geng-zi day in the 9th month (15th October 1105), a meteor appeared in *Wuche* and entered *Tengshe*. It was as large as *kuan*, and had a length of approxi-

¹⁵*kuan*: a small wooden stand, a faggot, or a type of tree. (It is unclear which meaning is being referred to.)

¹⁶The exact description is ambiguous.

¹⁷*ju*: a torch, made of twisted reeds.

¹⁸*guan*: round, circular. Here it may be referring to the meteor's diameter.

¹⁹The phrase for *meteor* is omitted here, but it seems likely that this is a copying error.

mately one *zhang*.

On a xin-chou day in the 9th month (16th October 1105), one meteor appeared in the head of *Beidou* and entered *Langjiang*. It was coloured blue-green, and more than 5 *cun* across. It had a tail approximately one *zhang* long. One appeared in *Zhongtai* and entered *Langjiang*. It was coloured red, and was as large as a torch. It had a tail approximately one *zhang* long. One appeared in *Beihe* and entered *Beiji*. It was coloured red, and was as large as a torch. It had a tail one half *zhang* long.

On a jia-yin day in the 11th month (28th December 1105), at night, there was a meteor which appeared in *Shangtai* and entered *Beiji*. It was as large as a torch, and had a length of approximately one *zhang*.

Reign of King Yejong (1105-1122)

1106

On a ding-mao day in the 12th month (10th January 1106), a meteor appeared at the east of *Yi* and entered *Daling*. It was shaped like a hen's egg.

On a jia-shen day in the 6th month of the 1st year (26th July 1106), a meteor appeared in *Wangliang* and entered *Yingshi*. It was approximately two *zhang* long.

On a yi-you day in the 6th month (27th July 1106), a meteor appeared in *Tianjin* and entered *Zongren*. It was as large as a cup, and had a tail approximately 2 *zhang* long. Also, two meteors appeared in *Xu* and entered *Jiukan*, as large as a hen's egg. Also, from dusk until dawn, there were many stars flowing in the four directions.

On a gui-chou day in the 6th month (Dating error), a meteor appeared in *Wangliang* and entered *Yingshi*. It was as large as a hen's egg, and was approximately two *zhang* long.

On a yi-wei day in the 9th month (5th October 1106), also there was a meteor which appeared in *Shangtai* and entered *Langjiang*. It was as large as a hen's egg, and had a length of approximately 2 *zhang*.

On a ji-hai day in the 9th month (9th October 1106), a meteor appeared in *Chailang* and entered *Tianyuan*.

On a ding-hai day in the 11th month (26th November 1106), a meteor appeared in *Wei* and entered *Leibizhen* and *Yulin*. It was as large as a bowl²⁰.

²⁰*wan*: a bowl, a basin, a cup, a dish.

1107

On a ding-you day in the 1st month of the 2nd year (4th February 1107), a meteor appeared in *Huanzhe*, passed through the east of *Taiwei*, and entered the stars of *Ping*. It was as large as a hen's egg, and was approximately 2 *chi* long.

On a ji-chou day in the intercalary month (23rd November 1107), also a meteor appeared in *Dongjing* and entered *Junshi*. It was as large as a bowl, and had a tail approximately 5 *chi* long.

1108

On a ren-yin day in the 12th month (4th February 1108), a meteor appeared in *Xuanyuan*, moved into *Zhongtai*, and entered *Wenchang*. It was as large as a hen's egg.

On a bing-wu day in the 12th month (8th February 1108), a meteor appeared in *Huagai* and entered the sky²¹. It was as large as a hen's egg, and had a tail approximately one *zhang* long.

1109

On a ji-you day in the 5th month of the 4th year (5th June 1109), a meteor appeared in *Guansuo* and entered *Kang*. It was as large as *yu*²².

1110

On a ji-you day in the 1st month of the 5th year (31st January 1110), a meteor appeared in *Guansuo* and entered *Tianshi*, inside *Zongren*. It was shaped like a hen's egg.

On a xin-chou day in the 3rd month (24th March 1110), a meteor appeared in *Genghe* and entered *Tianchan*. It was as large as a hen's egg.

On a ting-mao day in the 3rd month (19th April 1110), a meteor trespassed against *Tianshi* wall, inside *Chesi*, and entered *Liesi*. It was as large as a cup, and had a length of approximately 9 *chi*.

On a yi-chou day in the intercalary 8th month (14th October 1110), a meteor appeared in *Dongjing* and entered *Yugui*²³. It was as large as a cup.

On a geng-wu day in the 9th month (19th October 1110), a meteor appeared in *Wenchang* and entered *Tianchang*. It was approximately 2 *zhang* long, and was as large as a hen's egg.

²¹This phrase may indicate that *Huagai* was very near the horizon, if it is not a copying error.

²²*yu*: a basin; a large cup.

²³This is the lunar lodge usually referred to as *Gui*.

On a ren-shen day in the 9th month (21st October 1110), a meteor appeared in *Chuanshe* and entered *Tianpou*. It was as large as a torch, and was approximately 4 *zhang* long. Light shot down onto the ground.

1111

On a ji-hai day in the 4th month of the 6th year (16th May 1111), a meteor moved from west of *Beiji* and entered the first gate between *Zongren* and *Zong*.

On a bing-shen day in the 11th month (Dating error), a meteor appeared in *Xuanyuan* and entered the stars of *Zhang*. It was as large as a bowl, and its tail was approximately 6 *chi* long.

1112

On a gui-chou day in the 6th month of the 7th year (23rd July 1112), a meteor appeared in *Wangliang* and entered *Wei*. Its tail was approximately one *zhang* long.

On a yi-mao day in the 9th month, the first day of the month (23rd September 1112), a meteor appeared in the northwest of *Wuche* and entered *Beihe*. It was as large as *yu*, and had a tail approximately 7 *chi* long.

On a bing-chen day in the 9th month (24th September 1112), a meteor appeared in *Juanshe*. It was as large as a cup, and had a tail approximately 5 *chi* long.

On a ding-si day in the 9th month (25th September 1112), a meteor appeared in the stars of *Tianchuan* and *Fang*²⁴, and entered the northwest of *Wuche*. It was as large as *yu*, and had a tail approximately 7 *chi* long.

On a ding-chou day in the 9th month (15th October 1112), a meteor appeared in the east of *Bi* and entered *Tianyuan*. It was as large as *yu*.

On a ji-mao day in the 9th month (17th October 1112), a meteor appeared in *Hegu*, approached *Tianji*, and faded. It was as large as a cup.

On a ren-wu day in the 9th month (20th October 1112), a meteor appeared in *Xuanyuan* and entered *Ziwei*. It was as large as *yu*, and had a tail approximately 3 *chi* long.

On a gui-si day in the 10th month (31st October 1112), a meteor appeared in *Zhongtai* and entered the west of *Ziwei*. It was as large as a cup, and had a tail approximately 10 *chi* long.

On a bing-shen day in the 10th month (3rd November 1112), a meteor appeared in *Mao* and entered *Bi*. It was as large as *yu*.

²⁴This record is ambiguous; it may be referring to *Tianchuan*, *Xing* and *Fang*, for example, although the lunar lodges *Xing* and *Fang* are widely separated.

On a wu-yin day in the 11th month (15th December 1112), a meteor appeared in *Leibizhen* and entered *Yulin*. It was as large as a cup, and had a tail approximately 5 *chi* long. Light shone on the ground. Also, a meteor appeared in the east of *Sheti* and entered *Kang*. It was as large as *yu*, and was approximately 10 *chi* long.

1113

On a jia-yin day in the 8th month of the 8th year (17th September 1113), a meteor appeared in *Xuanyuan* and entered *Shaowei*. It was as large as a cup, and was approximately 6 *chi* long. Also, a meteor appeared in *Tianjun* and entered *Junjing*. It was approximately 3 *chi* long.

On a ji-si day in the 8th month (2nd October 1113), a meteor appeared in *Lou* and entered *Yingshi*. It was as large as a cup.

On a bing-wu day in the 9th month (8th November 1113), also a meteor appeared in *Tianjun* and entered *Tianchang*. It was as large as a bowl, and was 15 *chi* long.

On a ji-you day in the 10th month (11th November 1113), a meteor appeared in the north, fell into *Shimen*, and entered *Baku*²⁵. It was as large as a cup, and was approximately 20 *chi* long.

On a jia-shen day in the 11th month (16th December 1113), a meteor appeared in *Zhongtai* and entered *Taiwei*. It was as large as a cup, and had a length of approximately 15 *chi*.

1114

On a bing-chen day in the 2nd month of the 9th year (18th March 1114), a meteor appeared in *Beidou* and *Ziwei*, and entered *Wangliang*. It was as large as a bowl.

On a geng-zi day in the 3rd month (1st May 1114), a meteor appeared in *Guqi* and entered *Tianji* and *Gouguo*²⁶.

1116

On a ji-wei day in the 1st month of the 11th year (Dating error), a meteor appeared within *Taiwei* and entered the northeast star of *Zhen*.

On a geng-xu day in the 3rd month (30th April 1116), a meteor appeared in *Qigong* and the stars of *Guansuo*, and entered *Tianshi*. It was as large as a hen's egg, and was approximately 3 *chi* long.

²⁵This record is ambiguous.

²⁶This record is ambiguous.

On a wu-xu day in the 9th month (15th October 1116), a meteor appeared in *Zhongtai* and entered *Taiyang*. It was as large as a hen's egg.

1117

On a geng-chen day in the 12th month (25th January 1117), a meteor appeared in *Kang* and entered *Di*. It was as large as a hen's egg.

On a jia-zi day in the 4th month of the 12th year (9th May 1117), a meteor appeared in the north of *Zhaoyao* and entered within the head of *Beidou*. It was as large as a hen's egg, and had a length of approximately 7 *chi*.

On a ding-chou day in the 4th month (22nd May 1117), a meteor appeared in *Guanxing* and entered *Waichu*. It was as large as a bowl, and had a length of approximately 5 *chi*.

On a xin-si day in the 4th month (26th May 1117), a meteor appeared in the north-east star of *Jiao* and entered *Qifu*. It was as large as a hen's egg, and had a length of approximately 15 *chi*. Also, a meteor appeared at the gate of *Tianshi* and entered into the midst of the stars of *Chuanshuo yu*²⁷. It had a length of approximately 7 *chi*.

On a gui-si day in the 5th month (7th June 1117), a meteor appeared in *Zhaoyao*, entered within the head of *Beidou*, and trespassed against the 4th star.

On a wu-wu day in the 8th month (31st August 1117), at dusk, a meteor trespassed against the moon and fell down to the southeast.

On a geng-shen day in the 10th month (1st November 1117), a meteor appeared in *Wuche* and entered *Tianjun*. It was as large as a bowl, and had a length of approximately 10 *chi*.

1118

On a bing-xu day in the 9th month of the 13th year (23rd September 1118), a meteor appeared in the north of *Youqi* and entered the east of *Tianshi*. It had a length of approximately 10 *chi*.

On a geng-zi day in the 9th month (7th October 1118), a meteor appeared in the stars of *Kui* and entered *Tianchan*.

On a jia-chen day in the 9th month (11th October 1118), a meteor appeared in *Beihe* and entered *Xuanyuan*.

²⁷There are several possible interpretations here, but it seems likely that it refers to only one asterism.

1119

On a ji-mao day in the 12th month (14th January 1119), a meteor appeared in *Xuanyuan* and entered *Taiwei*. It had a length of approximately 5 *chi*.

On a bing-xu day in the 12th month (21st January 1119), a meteor appeared in *Ziwei* and entered the gate between *Suo*²⁸ and *Nülin*. It had a length of approximately 30 *chi*.

1121

On a ji-hai day in the 6th month of the 16th year (22nd July 1121), one meteor appeared in the north of *Zhinü* and entered *Ziwei*. One appeared in *Ziwei* and entered *Gouchen*. One appeared in the stars of *Kui* and entered *Leidian*.

On a xin-chou day in the 6th month (24th July 1121), a meteor appeared in *Tianjin* and entered *Tianbian*.

On a jia-chen day in the 7th month (Dating error), a meteor appeared in *Hegu* and entered *Nandou*.

1122

On a wu-shen day in the 12th month (27th January 1122), a meteor appeared in *Gedao* and entered *Tianjian*. It had a length of approximately 7 *chi*.

On a bing-shen day in the 2nd month of the 17th year (16th March 1122), a meteor appeared inside *Beidou* and entered the gate between *Tianchu* and *Chuanshe*. Also, one appeared in the 1st star of *Beidou*, divided into two, then faded.

On a ding-hai day in the 8th month, the first day of the month (3rd September 1122), a meteor appeared in the east wall of *Taiwei* and entered *Wei*. First it was large, but later it was small. It had a tail approximately 2 *chi* long.

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On a wu-zi day in the 12th month (2nd January 1123), a meteor appeared in *Xuanyuan* and entered *Yugui*. It had a tail approximately 4 *chi* long.

1124

On a wu-wu day in the 6th month of the 2nd year (25th July 1124), a meteor appeared in *Ziwei* and entered *Sheti*. It had a tail approximately 30 *chi* long.

²⁸This may be either a copying error or shortening of *Guansuo*.

On a bing-wu day in the 8th month (11th September 1124), a meteor appeared in *Wenchang* and entered *Beidou*.

On a yi-chou day in the 8th month (30th September 1124), a meteor appeared in *Daling* and entered *Ziwei*.

On a yi-wei day in the 9th month (30th October 1124), also there was a meteor which was as large as a torch.

On a ren-yin day in the 9th month (6th November 1124), a meteor appeared in the northeast. It was as large as a torch.

On a yi-mao day in the 10th month (19th November 1124), a meteor appeared in *Wenchang*, entered *Ziwei*, penetrated *Beiji* and faded at the eastern *fan*²⁹ of *Taiwei*.

On a gui-you day in the 10th month (7th December 1124), a meteor appeared in the right foot of *Shen* and entered *Junyin*.

On a yi-hai day in the 11th month (9th December 1124), a meteor appeared in *Wuche* and entered *Tianyuan*. Also one appeared within the head of *Beidou* and entered *Ziwei*.

1125

On a geng-shen day in the 12th month (23rd January 1125), a meteor appeared in *Kulou* and entered *Gouchen*.

1126

On a ren-chen day in the 3rd month of the 4th year (20th April 1126), a meteor appeared in *Tianshi* and entered the stars of *Xin*.

On a jia-shen day in the 9th month (9th October 1126), a meteor appeared in *Yingshi* and entered *Ziwei*. It had a length of approximately 7 *chi*.

On a bing-xu day in the 9th month (11th October 1126), a meteor appeared in *Ziwei* and entered the eastern *fan*.

On a jia-wu day in the 10th month (19th October 1126), a meteor appeared in *Tianjiangjun* and entered *Gouchen*. It was as large as a melon, and had a length of approximately 10 *chi*.

On a geng-zi day in the 10th month (25th October 1126), a meteor appeared in *Tianjiangjun* and entered *Ziwei*. Also, a meteor entered *Taiwei* and *Wudizuo*.

²⁹ *fan*: a hedge, a boundary, a frontier.

On a ding-hai day in the 11th month (11th December 1126), a meteor appeared in *Shuiwei* and entered *Zhang*. There was a sound like thunder. It was as large as a bowl, and had a length of approximately 1 *zhang*.

On a gui-si day in the intercalary month (17th December 1126), a meteor appeared in *Taiwei* and entered *Dizuo*. It was as large as a lamp.

On a ding-you day in the intercalary month (21st December 1126), a meteor appeared in *Beidou* and *Zhongtai*. It was as large as a melon.

1127

On a bing-xu day in the 12th month (8th February 1127), a meteor appeared in *Kulou* and entered *Taiwei*.

On a jia-zi day in the 2nd month of the 5th year (18th March 1127), a meteor appeared in *Jian* and entered *Fang*. It was as large as a melon.

On a wu-zi day in the 2nd month (11th April 1127), a meteor appeared large in *Jiao* and entered *Shi*³⁰ wall within *Huanzhe*.

On a jia-wu day in the 3rd month (17th April 1127), a meteor appeared in *Jian* and entered *Fang*. It was as large as a melon, and had a length of approximately 15 *chi*.

On a geng-shen day in the 6th month (12th July 1127), a meteor appeared in *Ying-shi* and entered *Wei*. It was as large as a melon.

On a geng-yin day in the 7th month (11th August 1127), a meteor appeared in *Lou* and entered *Wuche*. It was coloured yellow, and as large as a melon.

On a gui-mao day in the 9th month (23rd October 1127), a meteor appeared in *Dongbi* and entered *Yulin*. It was as large as a bowl.

On a ren-zi day in the 9th month (1st November 1127), a meteor appeared in *Wuche* and entered *Beidou*.

On a wu-wu day in the 10th month (7th November 1127), a meteor appeared in *Dongbi* and entered *Yulin*.

1128

On a wu-wu day in the 12th month (6th January 1128), a meteor appeared in *Kulou* and entered *Taiwei*. It was as large as a hen's egg.

³⁰This is almost certainly a shortening of *Tianshi*.

On a xin-si day in the 4th month of the 6th year (28th May 1128), a meteor appeared in *Niu* and entered *Tiantian*. It was as large as a melon.

On a ding-hai day in the 5th month (3rd June 1128), a meteor appeared in *Tianjin* and entered *Yingshi*. It was as large as a melon and coloured red.

On a xin-hai day in the 5th month (27th June 1128), a meteor appeared in *Tianjin* and entered *Yingshi*.

On a ding-chou day in the 6th month (23rd July 1128), there was a meteor as large as *fou*³¹. It was coloured white, and there was light. It appeared in *Ziweigong*, and was approximately 10 *chi* long. It quickly moved and entered the stars of *Lishi*. Also, a meteor as large as *bo* appeared in the stars of *Tianshi*. It was coloured red, and had a length of approximately 5 *chi*. It quickly moved and entered the stars of *Di*. Also, a meteor as large as a lantern³² appeared in the stars of *Zhen*. It was coloured red, and had a length of approximately 7 *chi*. It quickly moved and entered the left star of *Jiao*. 4 more meteors, as large as *bo*, appeared in the stars of *Tianjin*. They were coloured like fire, and were approximately 3 *chi* long. They quickly moved and entered the stars of *Hegu*. 5 more meteors, as large as a lantern, appeared in *Leibizhen*. They were coloured white. They entered *Yulin*. Also, a meteor as large as a lantern, with a length of approximately 10 *chi*, entered the stars of *Mao*.

On a gui-wei day in the 9th month (27th September 1128), a meteor appeared in *Bi*, entered *Wangliang*, moved and entered *Yingshi*.

On a bing-wu day in the 9th month (20th October 1128), a meteor appeared in *Kui* and entered *Yingshi*.

On a ji-wei day in the 10th month (2nd November 1128), a meteor, which was as large as a torch and coloured red, appeared in *Yi* and entered the stars of *Jiao*.

On a wu-chen day in the 10th month (11th November 1128), a meteor appeared in *Yi* and entered the left (star)³³ of *Jiao*. It was as large as a torch.

On a geng-wu day in the 10th month (13th November 1128), a meteor appeared at the great star of *Xing* and entered within the stars of *Yi*.

On a jia-chen day in the 11th month (17th December 1128), a meteor appeared in *Tianshi* wall and entered *Yi*.

On a ding-wei day in the 11th month (20th December 1128), a meteor appeared in *Tianjun* and entered *Shen*. It was as large as a torch.

³¹*fou*: pottery, earthenware.

³²*deng zhan*: lamps, collectively; also part of a lamp.

³³“Star” is missing, but this is a common reference.

On a ji-yu day in the 11th month (22nd December 1128), a meteor appeared in *Wuche* and entered *Shen*. It was as large as a melon.

1129

On a wu-chen day in the 8th month of the 7th year (7th September 1129), a meteor appeared in *Kui*. It was as large as a bowl, and had a tail approximately 15 *chi* long. The people in the village lanes cried out in alarm. Also, a meteor appeared in *Wei* and entered *Tianlin*. It was as large as a torch.

On a wu-yin day in the intercalary month (17th September 1129), a meteor appeared in *Lou* and entered *Tianchan*. It was as large as a bowl.

On a yi-si day in the intercalary month (14th October 1129), a meteor, which was as large as a melon, appeared in the stars of *Bi* and entered *Tianjun*. Also, a meteor, which was as large as a lantern, appeared in the stars of *Bi* and entered the stars of *Shen*.

On a ding-wei day in the 9th month (16th October 1129), a meteor, which was as large as a melon, appeared in the stars of *Bi* and entered *Tianjun*.

On a xin-hai day in the 9th month (20th October 1129), a meteor, which was as large as a melon, appeared in *Yingshi* and entered *Wei*. Its tail was approximately 8 *chi* long. Also, there was a meteor as large as a hen's egg, which appeared in *Shen* and *Ji*, and entered the stars of *Gou*³⁴.

On a bing-zi day in the 10th month, the first day of the month (14th November 1129), a meteor appeared in *Taiwei* and entered *Tiangou*. It was as large as a bowl, and had a length of approximately 10 *chi*.

1130

On a ren-shen day in the 11th month (9th January 1130), a meteor appeared in *Yi* and entered *Zhongtai*. Its tail was approximately 7 *chi* long.

On a ding-chou day in the 12th month (14th January 1130), there was a meteor from the southwest direction. It was pointing northeast, and fell to the ground. There was a sound like thunder. It was as large as *pen*³⁵, and had a length of approximately 6 *chi*.

On a ji-mao day in the 4th month of the 8th year (16th May 1130), a meteor appeared in the stars of *Zong* and entered *Shilou*.

³⁴This is either a shortening of another asterism (*Gouchen*, for example) or an individual *Gou* (dog) star.

³⁵*pen*: a basin, a tub, a pot, a bowl.

On a xin-si day in the 6th month (17th July 1130), a meteor appeared at the western *fan* of *Ziwei* and entered *Hegu*. It had a length of approximately 5 *chi*. There was a sound like thunder.

On a bing-xu day in the 6th month (22nd July 1130), a meteor appeared in *Tianshi* wall and entered *Hegu*.

On a ji-chou day in the 6th month (25th July 1130), a meteor appeared in *Wei* and entered *Nou*.

On a ding-wei day in the 7th month (12th August 1130), a meteor, which was as large as a hen's egg, appeared in *Tianlin* and entered *Yulin*.

On a ding-chou day in the 8th month (11th September 1130), a meteor, which was as large as a cup, appeared in *Wuche* and entered *Dongjing*.

On a yi-si day in the 9th month (9th October 1130), a meteor appeared in *Kui* and entered *Wei*. It was as large as a hen's egg, and had a tail approximately 9 *chi* long.

On a ding-wei day in the 9th month (11th October 1130), a meteor appeared in *Zui* and entered *Shuiwei*. It was as large as a hen's egg, and had a tail approximately 5 *chi* long.

On a yi-hai day in the 10th month (8th November 1130), a meteor appeared in *Bi* and entered *Tianjun*. It was as large as a bowl, and had a length of approximately 10 *chi*.

On a geng-chen day in the 10th month (13th November 1130), a meteor, which was as large as a hen's egg, appeared in *Beidou* and entered *Ziwei* and *Dizuo*.

On a ren-xu day in the 11th month (25th December 1130), a meteor, which was as large as a hen's egg, appeared in *Neijie* and entered *Gouchen*.

1131

On a xin-mao day in the 6th month of the 9th year (22nd July 1131), a meteor appeared in *Hegu* and entered *Nandou*. It was as large as a torch, and had a length of approximately 10 *chi*.

On a jia-wu day in the 6th month (25th July 1131), a meteor appeared in *Tianji* and entered *Ji*. Also, a meteor appeared in *Shiligong* and entered *Hegu*.

On a yi-wei day in the 7th month (26th July 1131), a meteor, which was as large as a hen's egg, appeared in *Tianji* and entered *Ji*. Also, a meteor, which was as large as a cup, appeared in *Shiligong* and entered *Ji*.

On a ji-wei day in the 7th month (19th August 1131), a meteor appeared in *Wei*

and entered *Nou*. It was as large as a torch, and had a length of more than 10 *chi*.

On a bing-xu day in the 8th month (15th September 1131), a meteor appeared in *Bi* and entered *Zui*. It was as large as a bowl, and had a length of more than 10 *chi*.

On a wu-xu day in the 9th month (27th September 1131), also there was a meteor, which was as large as a cup. It appeared in *Beiji* and entered *Langjiang*.

On a yi-you day in the 10th month (13th November 1131), a meteor, which was as large as a hen's egg, appeared in *Tianjun* and entered *Tianchan*.

1132

On a geng-xu day in the 1st month of the 10th year (6th February 1132), a meteor appeared in *Qigong* and entered *Kang*.

On a bing-chen day in the 1st month (12th February 1132), a meteor appeared in *Taiwei* and entered *Zhen*. It had a length of approximately 10 *chi*.

On a ding-si day in the 1st month (13th February 1132), a meteor appeared in *Taiwei* and entered *Beidou*. It had a length of approximately 10 *chi*.

On a gui-si day in the 8th month (16th September 1132), also a meteor appeared in *Tianjiangjun* and entered *Wuche*.

On a ren-yin day in the 10th month (24th November 1132), a meteor appeared in *Langwei* and entered *Sheti*. It was as large as a bowl, and had a length of approximately 30 *chi*.

On a ding-si day in the 10th month (9th December 1132), a meteor appeared in *Beidou* and *ba*³⁶ *Gouchen*.

1133

On a xin-si day in the 3rd month of the 11th year (2nd May 1133), a meteor appeared at the gate between *Di* and *Kang*, and entered the stars of *Qiguan*. It was approximately 5 *chi* long.

On a ding-chou day in the 5th month (27th June 1133), a meteor, which was as large as a melon, appeared in *Yingshi* and arrived in *Tianshi* and *Dizuo*. Its tail was approximately 20 *chi* long.

On a jia-chen day in the 6th month (24th July 1133), a meteor appeared in *Tianjin* and entered the wall of *Tianshi*. Its tail was approximately 7 *chi* long.

³⁶*ba*: eight. Almost certainly a misprint for *ru* (entered).

On a ding-wei day in the 6th month (27th July 1133), a meteor appeared in *Zhuan-she* and entered *Zhinü*.

On a gui-hai day in the 7th month (12th August 1133), a meteor appeared in *Tianji* and entered *Tianshi*.

On a ji-you day in the 8th month (27th September 1133), a meteor appeared in *Wuche* and entered *Yingshi*.

1134

On a ji-hai day in the 12th month (15th January 1134), a meteor appeared within the south of *Beihe* and trespassed against the left *jian*³⁷ of *Shen*. It was as large as a melon and had a tail 5 *chi* long. Also, a meteor appeared within *Nanhe* and entered *Lang xing*³⁸. It was as if it had hit something; it broke up, and *Lang xing* shook.

On a xin-chou day in the 12th month (17th January 1134), a meteor appeared in *Dongjing* and entered the stars of *Hu*. It had a tail approximately 10 *chi* long.

On a ji-wei day in the 3rd month of the 12th year (5th April 1134), a meteor fell to the ground. It was as large as *dou*³⁹.

On a jia-shen day in the 4th month (30th April 1134), a meteor appeared in *Wan-gliang* and entered *Nandou*.

On a jia-yin day in the 5th month (30th May 1134), a meteor appeared in *Wan-gliang* and entered *Nandou*. It was as large as a torch, and had a tail approximately 5 *chi* long.

On a xin-chou day in the 6th month (16th July 1134), a meteor appeared in *Tengshe* and entered *Hegu*. It was as large as a melon, and had a length of approximately 10 *chi*.

On a ren-yin day in the 6th month (17th July 1134), a meteor appeared in *Wan-gliang* and entered *Gedao*. It was as large as a lamp.

On a jia-chen day in the 6th month (19th July 1134), a meteor appeared in *Yingshi* and entered *Beidou*. It was as large as *fou*.

On a ren-zi day in the 7th month (27th July 1134), a meteor appeared in the handle of *Beidou* and entered *Sheti*. Also, a meteor appeared in *Wei* and entered *Nou*. Also, a meteor appeared in *Yingshi* and entered *Leibizhen*.

³⁷*jian*: the top of the shoulder.

³⁸Sirius.

³⁹*dou*: a dry measure.

On a yi-mao day in the 9th month (28th September 1134), a meteor appeared in *Lou*, penetrated *Tianchan*, and fell to the south.

On a ding-si day in the 9th month (30th September 1134), a meteor appeared in *Xuanyuan* and entered the stars of *Xiatai*.

On a geng-zi day in the 10th month (12th November 1134), a meteor appeared in *Shen* and *Ji*, and fell to the south.

1135

On a ding-wei day in the intercalary 2nd month of the 13th year (19th March 1135), a meteor appeared at the western wall of *Tianshi* and entered *Sheti*.

On a geng-wu day in the intercalary 2nd month (11th April 1135), a meteor appeared in *Jiao* and entered *Zhen*.

On a gui-you day in the intercalary 2nd month (14th April 1135), a meteor appeared in *Nandou*, passed over *Fang* and *Xin*, and entered the left of *Jiao*⁴⁰. It was as large as a melon, and had a length of approximately 40 *chi*.

On a wu-yin day in the 5th month (18th June 1135), a meteor appeared in *Dongbi* and entered *Wei*.

On a wu-shen day in the 6th month (18th July 1135), a meteor appeared in *Hegu* and entered *Nou*.

On a gui-hai day in the 6th month (2nd August 1135), a meteor appeared in *Tianbian* and entered *Nandou*.

On a wu-xu day in the 7th month (6th September 1135), a meteor appeared in *Tianguan* and entered the northeast star of *Wuche*.

1136

On a geng-yin day in the 6th month of the 14th year (Dating error), a meteor appeared in *Huagai* and entered *Wenchang*.

On a xin-mao day in the 6th month (Dating error), a meteor appeared in the stars of *Jin*⁴¹ and entered *Ji*. It was as large as a bowl, and had a length of 6 *chi*. Also, a meteor appeared in *Hegu* and entered *Nandou*. It was as large as a bowl, and had a length of approximately 20 *chi*.

⁴⁰This could also read ...entered the left corner., although “the left star of *Jiao*” commonly refers to ζ Vir, and the asterism is in the right part of the sky.

⁴¹This is probably a shortening; possibly of *Tianjin*.

1137

On a ding-si day in the 12th month (17th January 1137), a meteor appeared in *Sheti* and entered *Di*. It was as large as a torch and had a length of approximately 2 *zhang*.

On a yi-you day in the 1st month of the 15th year (14th February 1137), a meteor appeared in *Zhang* and entered *Tianchao*.

On a ding-hai day in the 7th month (15th August 1137), a meteor appeared in *Tianjun* and arrived in *Lou*. It had a length of approximately 15 *chi*.

1138

On a ding-wei day in the 11th month (2nd January 1138), a meteor appeared in *Zhen* and arrived in *Kulou*.

On a jia-yin day in the 11th month (9th January 1138), a meteor appeared in *Tianjiangjun* and entered *Yulin*.

On a jia-shen day in the 2nd month of the 16th year (9th April 1138), a meteor appeared in *Di* and entered *Zhen*.

On a jia-yin day in the 8th month, the first day of the month (6th September 1138), one meteor appeared in *Lou* and entered *Tianchan*. One appeared in *Shen* and entered *Tiangou*.

On a ji-wei day in the 10th month (10th November 1138), a meteor appeared in *Junshi* and entered *Shen*.

1139

On a bing-yin day in the 12th month (16th January 1139), one meteor appeared in *Wangliang* and entered *Lou*. One appeared in *Tianshi* and entered *Nandou*.

1140

On a wu-shen day in the 9th month of the 18th year (19th October 1140), a meteor appeared in *Wuche* and entered *Beidou*.

1141

On a geng-xu day in the 5th month of the 19th year (18th June 1141), a meteor appeared in *Hegu* and entered *Nandou*.

On a geng-wu day in the 10th month (5th November 1141), a meteor appeared in *Nanhe* and entered *Junshi*. It was as large as a melon, and had a tail 3 *chi* long.

On a xin-wei day in the 10th month (6th November 1141), a meteor appeared in *Xing* and entered *Yi*. It was as large as a melon, and had a tail 2 *zhang* long.

1142

On a ren-chen day in the 7th month of the 20th year, the first day of the month (25th July 1142), a meteor appeared in *Tianjie* and entered *Bi*.

On a gui-hai day in the 12th month (23rd December 1142), a meteor appeared in *Sheti*. It had a length of approximately 10 *chi*.

1143

On a ding-wei day in the intercalary 4th month of the 21st year (5th June 1143), a meteor appeared in *Gouchen* and entered *Dizuo*. Also one appeared in *Zhaoyao* and entered *Beidou*.

On a geng-chen day in the 7th month (6th September 1143), a meteor appeared in *Nandou* and entered *Tiantian*. Also one appeared in *Kui* and entered *Tianchuan*.

On a ji-mao day in the 9th month (4th November 1143), a meteor appeared in *Shen* and entered *Junshi*.

1144

On a geng-xu day in the 4th month of the 22nd year (2nd June 1144), a meteor appeared in *Tianshi* and entered *Dongxian*. It was as large as a melon, and had a length of approximately 5 *chi*.

On a yi-chou day in the 5th month (17th June 1144), a meteor appeared in *Dajiao* and entered *Tianpou*. It was as large as a melon, and had a length of approximately 10 *chi*.

On a xin-chou day in the 6th month (23rd July 1144), a meteor appeared in *Ji* and entered *Wei*. It was as large as a melon, and had a length of approximately 5 *chi*.

On a geng-chen day in the 8th month (31st August 1144), a meteor appeared in *Tianjian*.

On a gui-si day in the 8th month (13th September 1144), a meteor appeared in *Wangliang* and entered *Tianchuan*.

1145

On a wu-xu day in the 2nd month of the 23rd year (17th March 1145), a meteor appeared in *Dajiao* and entered *Di*. It was as large as a melon, and had a length of approximately 5 *chi*.

On a ren-chen day in the 4th month (10th May 1145), a meteor appeared in *Yi* and entered *Tianchao*. It had a length of approximately 15 *chi*.

On a ji-si day in the 5th month (16th June 1145), a meteor appeared in *Sheti* and entered *Zhen*.

On a wu-xu day in the 6th month (15th July 1145), a meteor appeared in *Sheti* and entered *Zhen*. It was as large as a melon.

Reign of King Ūijong (1146-1170)

1147

On a bing-chen day in the 6th month of the 1st year (23rd July 1147), a meteor appeared in *Hegu* and entered *Xunü*.

On a ji-chou day in the 9th month (30th September 1147), a meteor appeared and arrived in *Hushi*.

1148

On a geng-zi day in the 2nd month of the 2nd year (3rd March 1148), a meteor appeared in *Xu* and entered *Wei*.

On a ji-wei day in the 7th month (20th July 1148), a meteor appeared in *Kui* and entered *Yulin*.

On a xin-si day in the intercalary month (10th October 1148), a meteor appeared in *Bagu* and entered *Gedao*.

1149

On a geng-yin day in the 1st month of the 3rd year (16th February 1149), there was a meteor which looked like *Tiangou*⁴². It came from the east and pointed west.

On a ji-wei day in the 2nd month (17th March 1149), a meteor appeared in *Ziwei* and entered *Wei*.

On a ding-wei day in the 3rd month (4th May 1149), a meteor appeared in *Xuanyuan* and entered *Beihe*. Its tail was approximately 7 *chi* long.

On a geng-wu day in the 4th month (27th May 1149), a meteor appeared in *Zhang* and entered *Kulou*. It was as large as a cup.

⁴²Literally *heavenly dog*. It may or may not refer to the asterism of the same name.

On a jia-xu day in the 6th month (30th July 1149), there was a meteor from the west and the south. It was as large as *fou*. There were two small stars which followed it. It faded, later there was a sound like thunder.

On a xin-si day in the 9th month (5th October 1149), a meteor appeared in *Wuche* and entered *Tianchan*. Also, there was a meteor which appeared in *Bi* and entered *Tianjun*. It was as large as a cup, and had a length of approximately one *zhang*.

On a yi-you day in the 9th month (9th October 1149), a meteor appeared in *Lang* and entered the stars of *Hu*.

On a xin-chou day in the 9th month (25th October 1149), a meteor appeared in *Hu* and entered *Junshi*. It was as large as a melon, and had a tail approximately 6 *chi* long.

On a ren-shen day in the 10th month (25th November 1149), a meteor appeared in *Lou* and entered *Tianpou*. It was as large as *bo*, and had a tail approximately one *zhang* long. There was a sound like thunder.

On a bing-zi day in the 10th month (29th November 1149), a meteor appeared in *Zui* and entered *Tianyuan*. Also, a meteor appeared in *Beidou* and entered the eastern *fan* of *Ziwei*.

1150

On a jia-chen day in the 1st month of the 4th year (25th February 1150), a meteor appeared in *Tianshi* and entered *Nandou*.

1151

On a yi-si day in the 2nd month of the 5th year (21st February 1151), there was a meteor, and the people of the capital were alarmed.

On a jia-chen day in the 4th month (21st April 1151), a meteor appeared in *Xu* and *Wei*, and entered *Yingshi* and *Dongbi*.

On a gui-chou day in the 5th month (29th June 1151), a meteor appeared in *Kang* and entered *Fang*. It was as large as a melon.

On a wu-chen day in the 8th month, the first day of the month (12th September 1151), a meteor appeared at the eastern *fan* of *Ziwei* and entered *Gouchen*.

On a gui-si day in the 8th month (7th October 1151), a meteor appeared at the gate between *Jiao* and *Kang*, crossed *Taiwei* within *Xiatai*, *Wenchang*, *Tianchuan*, *Daling*, *Bagu*, and *Tianjiangjun*, and arrived at the gate between *Kui* and *Lou*. It was as large as a cup, and had a tail approximately 7 *chi* long.

1156

On a bing-yin day in the 5th month of the 10th year (15th June 1156), a meteor appeared in *Xiatai* and entered *Zhongtai*. It was as large as *bo*.

On a gui-mao day in the 7th month (22nd July 1156), a meteor appeared in *Ziwei* and entered *Qigong*. It was as large as a melon.

On a xin-you day in the 7th month (9th August 1156), a meteor from the south entered *Wei*. It was as large as a melon, and had a length of approximately 3 *chi*.

On a xin-mao day in the 8th month (8th September 1156), a meteor appeared in *Wuzhuhou*. It was as large as a melon.

1157

On a yi-you day in the 5th month of the 11th year (29th June 1157), a meteor trespassed against the north of *Dizuo*. It was as large as a melon, and had a length of approximately 10 *chi*.

1159

On a ji-chou day in the 2nd month of the 13th year (23rd February 1159), a meteor appeared in *Zhongtai* and entered the eastern *fan* of *Ziwei*. It was as large as *bo*, and had a tail approximately 3 *chi* long.

1161

On a ren-shen day in the 7th month of the 15th year (25th July 1161), a meteor appeared in *Gouchen* and entered *Beidou*. Also one appeared in *Yingshi* and entered *Nou*.

On a bing-shen day in the 11th month (16th December 1161), a meteor appeared in *Tianlin* and entered *Yulin*.

1162

On a xin-chou day in the 9th month of the 16th year (17th October 1162), a meteor appeared in *Wangliang* and entered *Tianyuan*.

On a bing-chen day in the 11th month (31st December 1162), a meteor appeared in *Wuche* and entered *Daling*.

1163

On a xin-you day in the 11th month (5th January 1163), also a meteor appeared in *Wei*, crossed *Xuanyuan*, *Taiwei* and *Dizuo*, and entered the eastern *fan* of *Ziwei*.

On a wu-yin day in the 4th month of the 17th year (22nd May 1163), there was a meteor from the northwest. It faced the southeast and moved.

1165

On a ren-yin day in the 12th month of the 18th year (4th February 1165), a meteor appeared in *Dongjing* and entered *Junshi*.

1169

On a ren-xu day in the 5th month of the 23rd year (3rd June 1169), a meteor appeared in *Yi* and entered the great star of *Hegu*. It was as large as a torch, and had a length of approximately 5 *chi*.

Reign of King Myōngjong (1170-1197)

1173

On a xin-chou day in the 7th month of the 3rd year (20th August 1173), a meteor appeared in *Hegu* and entered *Tianpou*.

On a ding-si day in the 7th month (5th September 1173), a meteor appeared in *He*⁴³ and entered *Liu*.

1175

On a bing-xu day in the 7th month of the 5th year (26th July 1175), a meteor appeared in *Xu* and entered *Jian*.

On a geng-xu day in the intercalary month (18th October 1175), a meteor appeared in *Tianyuan* and entered *Yulin*.

On a ren-shen day in the intercalary month (9th November 1175), a meteor appeared in *Kui* and entered *Ligong*.

On a gui-you day in the intercalary month (10th November 1175), a meteor appeared in *Lang* and entered *Kui*.

On a bing-shen day in the 10th month (3rd December 1175), a meteor appeared in the great star of *Xuanyuan* and entered *Taiwei* and *Wudizuo*.

1176

On a yi-wei day in the 12th month (31st January 1176), a meteor appeared in the south of the five stars of *Ji* and entered *Tianji*⁴⁴.

⁴³Literally *river*; possibly the Milky Way, or a short form of an asterism.

⁴⁴This probably refers to the horizon.

On a ji-si day in the 1st month of the 6th year (10th February 1176), a meteor appeared in *Kangchi* and entered *Xixian*. It was as large as a melon, and had a length of approximately 3 *chi*.

On a yi-wei day in the 2nd month (31st March 1176), a meteor appeared in *Taiwei* and entered *Mingtang*.

On a ji-chou day in the 4th month (24th May 1176), a meteor appeared in *Tianjin* and entered *Tianchan*.

On a yi-hai day in the 6th month (9th July 1176), a meteor appeared in *Dizuo* and entered *Huanzhe*.

On a bing-zi day in the 6th month (10th July 1176), a meteor appeared in *Xunü* and entered *Qi*. It was as large as a melon.

On a geng-zi day in the 6th month (3rd August 1176), a meteor appeared in *Leibizhen* and entered *Chubao*. It was as large as *fou*, and had a tail approximately 10 *chi* long.

On a yi-chou day in the 7th month (28th August 1176), a meteor appeared in *Tengshe* and entered the south star of *Xu*.

On a gui-you day in the 8th month (5th September 1176), one meteor appeared in *Leibizhen* and entered *Yulin*. It was as large as a melon. One appeared in *Tianjun* and entered *Taiyin*. It had a tail approximately 3 *chi* long.

On a wu-chen day in the 9th month (30th October 1176), a meteor appeared in *Bi* and entered *Tianjun*. It had a tail approximately 4 *chi* long.

1177

On a ding-you day in the 12th month (27th January 1177), a meteor appeared in *Sangong* and entered *Ziwei*. It was as large as *fou*, and had a tail approximately 15 *chi* long.

On a gui-hai day in the 1st month of the 7th year (22nd February 1177), a meteor appeared in *Sangong* and entered *Qigong*. It was as large as *fou*, and had a tail approximately 10 *chi* long.

On a geng-wu day in the 1st month (1st March 1177), a meteor appeared in *Xuanyuan* and entered *Zhang*. It was as large as a pear⁴⁵, and had a tail approximately 3 *chi* long.

⁴⁵ *li*: a pear.

On a bing-zi day in the 2nd month (7th March 1177), also a meteor appeared in *Fang* and entered *Tianmen*. It had a tail approximately 2 *chi* long.

On a wu-shen day in the 3rd month (8th April 1177), a meteor appeared in *Youwei*⁴⁶ and entered *Beidou* and the stars of *Shaowei*. It was as large as a pear.

On a ding-hai day in the 4th month (17th May 1177), a meteor appeared in *Dongxian* and entered *Tianjiang*.

On a xin-mao day in the 4th month (21st May 1177), a meteor appeared in *Taiwei* and entered *Zhen*. It was as large as a pear, and had a tail approximately 3 *chi* long.

On a wu-shen day in the 7th month (6th August 1177), a meteor appeared in *Bagu* and entered *Ziwei*. It was as large as a pear, and had a tail approximately 5 *chi* long.

On a wu-wu day in the 7th month (16th August 1177), a meteor appeared in *Yulin* and entered *Wei*. It was as large as a pear, and had a tail approximately 6 *chi* long.

On a gui-hai day in the 9th month (20th October 1177), a meteor appeared in *Tianlin* and entered *Tianyuan*. It had a tail approximately 3 *chi* long.

On a ji-hai day in the 11th month (25th November 1177), a meteor appeared in *Bi* and entered *Yulin*. It was as large as *fou*, and had a tail approximately one *zhang* long.

On a jia-yin day in the 11th month (10th December 1177), one meteor appeared in *Tianchan* and entered *Yulin*. It was as large as a pear, and had a tail approximately 3 *chi* long. One appeared in *Zhu* and entered *Beiji*. It was as large as a melon.

1178

On a jia-shen day in the 7th month of the 8th year (6th September 1178), a meteor appeared in *Wuche* and entered *Zhen*. It was as large as a melon, and had a length of approximately 3 *chi*.

On a yi-wei day in the 8th month (17th September 1178), one meteor appeared in the stars of *Kui* and entered *Tusikong*. It was as large as a melon. One appeared in *Neiping* and entered *Xuanyuan*. It had a tail approximately one *zhang* long. One appeared in the seven stars of *Xing* and entered *Zhang*. It was as large as a melon, and had a tail approximately 7 *chi* long. One appeared in the five stars of *Guan* and entered *Gu*. It had a tail approximately 5 *chi* long. One appeared in *Xiang* and entered *Changchen*. It was as large a melon, and had a tail approximately 15 *chi* long. One appeared in *Dongjing* and entered *Wuzhuhou*. It was as large as a melon, and had a tail approximately 5 *zhang* long. One appeared in *Yi*, pointing south, and entered *Tianji*. It had a tail approximately 1 *zhang* long. Also, there were

⁴⁶This could also be *to the right of Wei*.

many stars flowing in all directions. There were so many they could not be counted.

In the 10th month⁴⁷ (11th November to 10th December 1178), a meteor appeared in *Juanshe* and entered *Shen*. It had a tail one *zhang* long.

On a ding-chou day in the 11th month (28th December 1178), a meteor appeared in *Wei* and entered *Tianjun*. It was as large as a melon.

1179

On a gui-wei day in the 11th month (3rd January 1179), a meteor appeared in the southwest of *Tianshi* and entered *Tianji*. It was as large as *fou*.

On a ding-mao day in the 1st month of the 9th year (16th February 1179), a meteor appeared in *Yi* and entered *Qifu*. It was as large as a cup, and had a tail approximately 4 *chi* long.

On a bing-shen day in the 2nd month (17th March 1179), a meteor appeared in *Wei* and entered *Gui*. It was as large as a pear.

On a ding-si day in the 4th month (6th June 1179), a meteor appeared in *Wei* and entered *Jizu*. It was as large as a cup.

On a yi-chou day in the 5th month (14th June 1179), a meteor appeared in the western wall of *Tianshi* and entered *Wei*. It was as large as a cup, and had a tail approximately 10 *chi* long.

On a gui-wei day in the 5th month (2nd July 1179), a meteor appeared in *Tianchan* and entered *Bakui*. It was as large as a cup, and had a tail approximately 7 *chi* long.

On a yi-you day in the 5th month (4th July 1179), a meteor appeared in *Tianjiangjun* and entered *Wei*. It was as large as a melon, and had a tail approximately 3 *chi* long.

On a ren-zi day in the 6th month (31st July 1179), a meteor appeared in *Tianjun* and entered *Tianlin*. It was as large as a melon.

On a jia-zi day in the 7th month (12th August 1179), a meteor appeared in *Yulin* and entered *Baijiu*. It was as large as a pear.

On a ji-mao day in the 7th month (27th August 1179), a meteor appeared in *Tianji* and entered the eastern *fan* of *Ziwei*. It was as large as a cup.

On a bing-chen day in the 9th month, the first day of the month (3rd October 1179), a meteor appeared in *Tianchan* and entered *Tianyu*. It was as large as a

⁴⁷No date is given.

melon, and had a length of approximately 9 *chi*.

On a ren-xu day in the 9th month (9th October 1179), a meteor appeared in *Shenqi* and entered the left part of *Shen* and *Jian*⁴⁸. It was as large as a cup, and had a length of approximately 5 *chi*.

On a bing-yin day in the 9th month (13th October 1179), a meteor appeared in *Wuche* and entered *Wenchang*. It was as large as a cup, was coloured red, and had a tail approximately 6 *chi* long.

On a bing-zi day in the 9th month (23rd October 1179), a meteor appeared in *Yulin* and entered *Beiluo*. It was as large as a cup, and had a tail 3 *chi* long.

On a ji-mao day in the 9th month (26th October 1179), a meteor appeared in *Xiang* and entered *Dachio*.

1180

On a ji-yu day in the 4th month of the 10th year (23rd May 1180), a meteor appeared in *Di* and entered *Yi*. It was as large as a melon, and had a tail 7 *chi* long.

On a gui-hai day in the 9th month (4th October 1180), a meteor appeared in *Jiuyou* and entered *Tiangou*. It was as large as a cup, and had a tail approximately 7 *chi* long.

On a yi-wei day in the 10th month (5th November 1180), a meteor appeared in *Yingshi* and entered *Leibizhen*.

On a bing-yin day in the 11th month (6th December 1180), one meteor appeared in *Tiangou* and entered *Junshi*. It was as large as *fou*, and had a tail approximately 10 *chi* long. One appeared in *Tianjun* and entered *Tianchan*. It was as large as a cup, and had a tail 15 *chi* long.

1181

On a yi-wei day in the 2nd month of the 11th year (5th March 1181), a meteor appeared in the western *fan* of *Taiwei* and entered *Yi*. It was as large as a melon, and had a tail approximately 1 *chi* long.

On a wu-shen day in the 6th month (16th July 1181), a meteor appeared in *Tianchan* and entered *Yulin*. It was as large as a cup, and had a length of approximately 7 *chi*.

On a yi-si day in the 8th month, the first day of the month (11th September 1181), a meteor appeared in *Tiantian* and entered *Nandou*. It was as large as a pear, and

⁴⁸This description is ambiguous.

had a tail approximately 3 *chi* long.

On a bing-wu day in the 8th month (12th September 1181), a meteor appeared in *Hegu* and entered *Dongbi*. It was as large as a pear, and had a tail approximately 7 *chi* long.

On a bing-zi day in the 9th month (12th October 1181), one meteor appeared in *Tianhang* and entered *Ziwei*. It was as large as *fou*, and had a tail approximately 2 *chi* long. One appeared in *Wangliang* and entered *Tianjin*. It was as large as a melon, and had a tail approximately 15 *chi* long.

On a yi-wei day in the 9th month (31st October 1181), a meteor appeared in *Tianjun* and entered *Tianchan*. It was as large as a cup.

On a bing-wu day in the 10th month (11th November 1181), a meteor appeared in *Xuanyuan* and entered *Taiwei*. It was as large as a melon, and had a tail approximately 7 *chi* long.

On a ding-wei day in the 10th month (12th November 1181), a meteor appeared in *Wei* and entered *Tianjin*. It was as large as a melon, and had a length of approximately 6 *chi*.

On a wu-shen day in the 10th month (13th November 1181), a meteor appeared in the western wall of *Taiwei* and *Shangjiang*, and entered *Wuzhuhou*.

On a ding-hai day in the 11th month (22nd December 1181), a meteor appeared in *Kang* and entered *Di*. It was as large as a melon, and had a tail approximately 3 *chi* long.

1182

On a ren-xu day in the 6th month of the 12th year (25th July 1182), a meteor appeared in *Nandou* and entered *Wei*. It was as large as a pear, and had a tail approximately 5 *chi* long.

On a yi-chou day in the 6th month (28th July 1182), a meteor appeared in *Tianjin* and entered *Hegu*. It was as large as a pear.

On a xin-mao day in the 9th month (22nd October 1182), a meteor appeared in *Xuanyuan* and entered *Zhang*. It was as large as a pear, and had a tail approximately 5 *chi* long.

On a wu-shen day in the 10th month (8th November 1182), a meteor moved from the north to the south. It was as large as *fou*, and had a tail approximately 5 *chi* long.

1183

On a yi-wei day in the 4th month of the 13th year (24th April 1183), a meteor entered *Wangliang* and moved to the south. It was as large as *fou*, and had a tail approximately 10 *chi* long.

On a ji-mao day in the 5th month (7th June 1183), a meteor appeared in *Leibizhen* and entered *Yulin*. It was as large as a melon.

On a wu-chen day in the 7th month (26th July 1183), a meteor appeared in *Tianbei* and entered *Tianjin*. It was as large as a cup.

On a ding-hai day in the 7th month (14th August 1183), a meteor appeared in *Tengshe* and entered *Hegu*. It was as large as a melon, and had a tail approximately 10 *chi* long.

On a ji-hai day in the 8th month (26th August 1183), a meteor appeared in *Hegu* and entered *Tianlei*. It was as large as a pear, and had a length of approximately 7 *chi*.

On a geng-yin day in the 9th month (16th October 1183), a meteor appeared in *Tianjin* and entered *Hegu*. It was as large as a cup, and had a tail approximately 10 *chi* long.

On a xin-wei day in the 11th month (26th November 1183), a meteor appeared in the stars of *Liu* and *Xing* and entered *Xuanyuan*. It was as large as *fou*, and had a tail approximately 10 *chi* long. Also, a meteor entered within *Tianshi*. It was as large as a melon, and had a tail approximately 6 *chi* long.

1184

On a ren-xu day in the 12th month (16th January 1184), a meteor appeared in *Xing* and entered *Zhang*. It was as large as *fou*, and had a length of approximately 7 *chi*.

On a ren-chen day in the 3rd month of the 14th year (15th April 1184), a meteor appeared in *Wei* and entered *Yulin*. It was as large as a melon, and had a tail approximately 7 *chi* long. It was coloured white and moved quickly.

On a jia-wu day in the 3rd month (17th April 1184), a meteor appeared in *Taiwei* and entered *Kulou*. It was as large as *fou*, and had a tail approximately 7 *chi* long.

On a xin-mao day in the 5th month (13th June 1184), the first day of the month, a meteor from *Leibizhen* entered *Yulin*. It was as large as a melon.

On a gui-you day in the 6th month (25th July 1184), a meteor appeared in *Tianjin* and entered the wall of *Tianshi*.

On a ji-mao day in the 8th month (29th September 1184), a meteor appeared in *Wuche* and entered *Shen*. It was as large as a pear.

On a ji-hai day in the 9th month (19th October 1184), a meteor trespassed against *Xuanyuan*.

On a wu-shen day in the 9th month (28th October 1184), a meteor appeared in *Daling* and entered *Wangliang*.

On a gui-chou day in the 9th month (2nd November 1184), a meteor appeared in *Tianjie* and entered *Tianyuan*.

On a jia-zi day in the 10th month (13th November 1184), a meteor appeared in *Wenchang* and entered the head of *Beidou*. It was as large as a pear.

On a ding-mao day in the 10th month (16th November 1184), a meteor appeared in *Lang* and entered *Zhang*.

On a wu-chen day in the 10th month (17th November 1184), one meteor appeared in *Tianjin* and entered *Hegu*. One appeared in *Wangliang* and entered *Gedao*.

On a ji-chou day in the 11th month (8th December 1184), a meteor appeared in *Lou* and entered *Tianchan*. It was as large as a melon, and had a tail approximately 3 *chi* long.

1185

On a ren-xu day in the 12th month (10th January 1185), a meteor appeared in the left part of *Jiao* and entered *Kulou*.

On a jia-chen day in the 1st month of the 15th year (21st February 1185), a meteor appeared in *Yi* and entered *Shen*.

On a gui-you day in the 6th month (20th July 1185), a meteor appeared in *Wei* and entered *Bi*. It was as large as a pear.

1186

On a ding-mao day in the 4th month of the 16th year (10th May 1186), a meteor appeared in *Langwei* and entered *Taiwei*.

On a bing-wu day in the intercalary month, the first day of the month (17th August 1186), a meteor appeared in *Mao* and entered *Shen*.

On a ren-yin day in the 10th month (12th December 1186), a meteor appeared in *Tianjun* and entered *Tianchan*.

1187

On a ren-shen day in the 11th month (10th January 1187), one meteor appeared in *Daling* and entered *Wei*. One appeared in *Xixian* and entered *Fang*.

On a yi-mao day in the 5th month of the 17th year (22nd June 1187), a meteor appeared in *Daling* and entered *Wei*.

On a wu-chen day in the 5th month (5th July 1187), a meteor trespassed against *Taiwei* and entered *Duanmen*.

On a bing-shen day in the 6th month (2nd August 1187), a meteor appeared in *Tengshe* and entered *Yingshi*.

On a jia-xu day in the 8th month (9th September 1187), a meteor appeared in *Shen* and entered *Dongjing*.

On a jia-chen day in the 9th month (9th October 1187), a meteor moved quickly from the northeast to the southwest. It had a tail approximately 20 *chi* long.

On a gui-hai day in the 9th month (28th October 1187), a meteor appeared in *Yulin* and entered *Tiezhi*.

On a xin-wei day in the 10th month (5th November 1187), a meteor appeared in *Dongjing* and entered *Shen*.

On a wu-yin day in the 10th month (12th November 1187), a meteor appeared in the stars of *Xuanyuan* and entered the stars of *Beihe*.

On a ji-wei day in the 11th month (23rd December 1187), a meteor appeared in *Ziwei* and entered *Beiji*.

1188

On a gui-you day in the 2nd month of the 18th year (6th March 1188), a meteor appeared in *Kulou* and entered *Qiguan*.

On a wu-zi day in the 2nd month (21st March 1188), a meteor appeared in *Wei* and entered *Nandou*.

On a yi-wei day in the 7th month (26th July 1188), a meteor moved from the east to the west. It had a tail approximately 15 *chi* long.

On a geng-xu day in the 9th month (9th October 1188), a meteor appeared in *Wei* and entered the left *qi*⁴⁹ of *Hegu*.

⁴⁹ *qi*: a flag, a banner.

On a wu-chen day in the 12th month (26th December 1188), a meteor appeared and entered the sixth star of *Beidou*.

1189

On a jia-yin day in the 8th month of the 19th year (8th October 1189), a meteor, which was as large as *weng*⁵⁰, moved from the northeast to the southwest. Light rays shone on the ground.

On a ding-si day in the 8th month (11th October 1189), a meteor appeared in *Yulin*.

On a geng-shen day in the 9th month (14th October 1189), a meteor appeared in the head of *Nandou* and entered the stars of *Ji*.

On a ding-hai day in the 10th month, the first day of the month (10th November 1189), a meteor appeared in *Beidou* and entered *Beiji*.

On a xin-mao day in the 10th month (14th November 1189), a meteor appeared in *Junshi*.

1190

On a xin-you day in the 1st month of the 20th year (12th February 1190), a meteor appeared in *Tianyuan*.

On a yi-wei day in the 2nd month (18th March 1190), a meteor appeared in *Tianjin* and entered *Hugua*. It was as large as *fou*.

On a gui-wei day in the 8th month (2nd September 1190), a meteor, which was as large as a pear, appeared in *Kui* and entered *Tianjiangjun*.

On a ren-zi day in the the 11th month (30th November 1190), a meteor appeared in *Wangliang* and entered *Tengshe*.

1191

On a ji-you day in the 6th month of the 21st year (25th July 1191), a meteor appeared in *Wangliang* and entered *Tengshe*.

On a xin-hai day in the 6th month (Dating error), a meteor appeared in *Dongbi* and entered *Leibizhen*.

On a wu-yin day in the 10th month (22nd October 1191), a meteor appeared in *Shen* and entered *Junshi*. It was as large as a melon. Also, one appeared in *Queqiu* and entered *Waichu*. It was as large as a cup.

⁵⁰*weng*: an earthen jar.

On a geng-chen day in the 10th month (24th October 1191), a meteor appeared in *Junshi* and entered *Wenren*. It was as large as *fou*.

On a yi-si day in the 10th month (18th November 1191), a meteor appeared in *Xing* and entered *Yi*.

On a yi-you day in the 12th month (28th December 1191), a meteor appeared in *Xuanyuan* and entered *Langjiang*. It was as large as a cup.

1192

On a jia-chen day in the 8th month of the 22nd year (12th September 1192), a meteor appeared in *Nandou*.

On a xin-you day in the 8th month (29th September 1192), a meteor appeared in *Lou* and entered *Wei*. It had a tail approximately 10 *chi* long.

On a ding-mao day in the 8th month (5th October 1192), one meteor appeared to the southwest of *Jiukan* and entered *Tianji*. One appeared in *Leibizhen* towards *Yulin*. One appeared in *Wuche* and entered *Mao*.

On a gui-you day in the 9th month (11th October 1192), a meteor appeared in *Lang* and entered *Liu*.

On a gui-wei day in the 9th month (21st October 1192), a meteor appeared in *Wuzuhou* and entered *Xuanyuan*.

On a gui-mao day in the 10th month (10th November 1192), a meteor appeared in *Xuanyuan* and entered *Zhang*.

1193

On a yi-you day in the 1st month of the 23rd year (20th February 1193), a meteor appeared in *Jiao* and entered *Fang*.

On a geng-xu day in the 4th month (16th May 1193), a meteor appeared in *Kulou* and entered *Wei*.

On a jia-xu day in the 5th month (9th June 1193), a meteor appeared in *Tianji* and entered *Jiantai*. It was as large as a melon.

On a ren-shen day in the 7th month (6th August 1193), a meteor appeared in *Nandou* and entered *Tianji*.

On a bing-shen day in the 8th month (30th August 1193), a meteor appeared in *Shen* and entered *Dongjing*.

On a wu-xu day in the 8th month (1st September 1193), a meteor appeared in *Wuche* and entered *Tianjun*.

On a ren-wu day in the 9th month (15th October 1193), a meteor appeared in the southwest and entered the northeast. It was as large as *fou*.

On a gui-wei day in the 11th month (15th December 1193), a meteor appeared in *Tianchao* and entered *Hushi*.

On a ding-hai day in the 11th month (19th December 1193), a meteor appeared in *Tianchao* and entered *Hushi*. It was coloured red, like fire.

On a wu-xu day in the 12th month (30th December 1193), a meteor appeared at the western *fan* of *Ziwei*. It was as large as a melon.

1194

On a yi-mao day in the 12th month (16th January 1194), a meteor appeared in *Sidu* and entered *Hushi*.

On a ren-shen day in the 1st month of the 24th year (2nd February 1194), a meteor appeared in *Guansuo* and entered the wall of *Tianshi*. It had a tail approximately 3 *chi* long.

On a geng-wu day in the 5th month (31st May 1194), a meteor from *Wei* entered *Jian*. It was as large as a cup, and was 3 *chi* long.

1195

On a ji-wei day in the 12th month (15th January 1195), a meteor appeared at the western *fan* of *Ziwei* and divided into two. It penetrated *Ziweigong*, and also *Qin* and *Beiji*, as far as the eastern *fan* of *Ziwei*.

On a hsin-mao day in the 3rd month of the 25th year (17th April 1195), a meteor appeared in *Nandou* and entered *Jiukan*.

On a xin-si day in the 6th month (5th August 1195), a meteor appeared in *Fang*. It was as large as *fou*.

On a ji-hai day in the 9th month (22nd October 1195), a meteor appeared in *Shang-tai*.

On a ren-yin day in the 9th month (25th October 1195), a meteor entered *Yulin*.

On a wu-wu day in the 10th month (10th November 1195), a meteor appeared in *Beihe* and entered *Mao*.

1196

On a yi-mao day in the 12th month (6th January 1196), a meteor appeared in *Sheti* and entered the wall of *Tianshi*.

On a yi-hai day in the 6th month of the 26th year (24th July 1196), a meteor appeared in *Dongbi* and entered *Yulin*.

On a bing-yin day in the 8th month (13th September 1196), a meteor appeared in *Wei* and entered *Yulin*.

On a xin-wei day in the 8th month (18th September 1196), a meteor appeared in the head of *Beidou* and entered *Hu*.

On a ji-si day in the 11th month (Dating error), one meteor appeared in *Hu* and entered *Tianshe*. One appeared at the western *fan* of *Ziwei* and entered *Wangliang*.

1197

On a ji-mao day in the intercalary 6th month of the 27th year (23rd July 1197), a meteor appeared in *Dongbi* and entered *Yulin*.

On a ren-wu day in the 8th month (24th September 1197), a meteor appeared in *Ziwei* and entered *Wenchang*.

On a geng-yin day in the 10th month (1st December 1197), a meteor (appeared in)⁵¹ *Tengshe* and entered the great star of *He*.

Reign of King Shinjong (1197-1204)**1198**

On a ren-wu day in the 12th month (22nd January 1198), a meteor appeared in *Tianji*. It was as large as *fou*. There was a sound like a drum.

On a yi-chou day in the 1st month of the 1st year (6th March 1198), a meteor appeared in *Wenchang*.

On a ji-chou day in the 2nd month (30th March 1198), a meteor entered *Jizu*.

On a geng-yin day in the 2nd month (31st March 1198), a meteor appeared in *Dajiao* and entered *Di*.

On a yi-mao day in the 3rd month (25th April 1198), a meteor appeared in *Xuanyuan* and entered *Beihe*.

⁵¹ "Appeared in" is missing.

On a ren-xu day in the 3rd month (2nd May 1198), a meteor appeared in *Hegu* and entered *Tianbei*.

On a xin-chou day in the 5th month (10th June 1198), a meteor appeared in *Tianshi* and entered *Taiwei*.

1199

On a wu-zi day in the 2nd month of the 2nd year (24th March 1199), a meteor appeared in *Beidou* and entered *Taiyi*.

On a geng-xu day in the 7th month (13th August 1199), a meteor appeared in *Wuche* and entered *Tianjie*.

On a yi-mao day in the 7th month (18th August 1199), a meteor appeared in *Xu* and entered *Jiukan*.

On a wu-wu day in the 7th month (21st August 1199), a meteor appeared in *Wei* and entered *Tianji*.

On a geng-shen day in the 7th month (23rd August 1199), a meteor appeared in *Tianchan* and entered *Tianji*.

On a bing-yin day in the 8th month (29th August 1199), a meteor appeared in *Wuzhuhou*.

On a ji-mao day in the 8th month (11th September 1199), a meteor appeared in *Wuzhuhou* and entered *Liu*.

On a geng-yin day in the 9th month (22nd September 1199), a meteor appeared in *Tengshe* and entered *Kui*.

On a xin-chou day in the 9th month (3rd October 1199), a meteor appeared in *Nanhe* and entered *Tianyuan*.

On a ding-wei day in the 9th month (9th October 1199), a meteor appeared in the wall of *Tianshi* and entered *Tianji*.

On a wu-shen day in the 9th month (10th October 1199), one meteor appeared in *Tianji* and entered *Zongren*. One appeared in *Tianjun* and entered *Tianyuan*.

On a bing-chen day in the 9th month (18th October 1199), one meteor appeared in *Zuoqi* and entered *Dongjing*. One appeared in *Shenqi* and entered *Shen*.

On a ren-xu day in the 10th month (24th October 1199), a meteor appeared in *Xuanyuan* and entered *Taiwei*.

On a ding-mao day in the 10th month (29th October 1199), a meteor appeared in *Xuanyuan* and entered *Taiwei*.

On a ren-wu day in the 10th month (13th November 1199), a meteor appeared in the left of *Jiao* and entered *Tianji*.

On a ji-chou day in the 11th month, the first day of the month (20th November 1199), one meteor appeared in *Tianji* and entered *Tianyuan*. One appeared in *Zuoqi* and entered *Neiping*.

1200

On a ding-si day in the 5th month of the 3rd year (15th June 1200), a meteor appeared in *Ziwei* and entered *Tengshe*. It was as large as *fou*.

On a ji-mao day in the 7th month (5th September 1200), a meteor appeared in *Ziwei* and entered *Tianji*. It was as large as a melon, and had a tail approximately 10 *chi* long.

On a jia-shen day in the 8th month (10th September 1200), a meteor entered *Yugui*.

1201

On a yi-mao day in the 3rd month of the 4th year (9th April 1201), a meteor appeared in *Shaowei* and entered *Yi*.

On a bing-wu day in the 6th month (29th July 1201), a meteor appeared in *Kui* and entered *Yulin*. It was as large as a cup, and had a tail approximately 10 *chi* long.

On a ji-mao day in the 8th month (31st August 1201), a meteor appeared in the wall of *Tianshi* and entered *Xin*. It was as large as a cup.

On a ren-zi day in the 9th month (3rd October 1201), a meteor appeared in *Tianchan* and entered *Chuyao*. It was as large as a melon.

On a wu-chen day in the 9th month (19th October 1201), a meteor appeared in *Leibizhen* and entered *Wei*. It was as large as a pear.

On a bing-zi day in the 9th month (27th October 1201), a meteor appeared in *Kui* and entered *Tianjin*. It was as large as *fou*, and had a tail approximately 10 *chi* long.

On a ji-you day in the 11th month (29th November 1201), a meteor appeared in *Tianjun* and entered *Tianchan*.

On a ding-chou day in the 12th month, the first day of the month (27th December 1201), a meteor appeared in *Nanhe* and entered *Tiangou*. It was as large as a cup.

1202

On a geng-zi day in the 10th month of the 5th year (15th November 1202), a meteor appeared in *Beihe*, pointing north, and entered *Tianji*. It was as large as *fou*, and had a tail approximately 10 *chi* long.

1204

On a ding-si day in the 6th month of the 7th year (24th July 1204), a meteor appeared in *Wangliang* and entered *Wei*. It was as large as a melon, and had a tail approximately 10 *chi* long.

Reign of King Hǔijong (1204-1211)**1207**

On a yi-hai day in the 4th month of the 3rd year (28th May 1207), a meteor appeared in *Beidou* and entered *Wenchang*. It was as large as *fou*, and had a tail approximately 10 *chi* long.

Reign of King Kojong (1213-1259)**1218**

On a xin-you day in the 8th month of the 5th year (13th September 1218), there was a meteor which appeared in *Wuche* and entered *Ziwei*. It was as large as *fou*.

On a bing-xu day in the 9th month (8th October 1218), a meteor appeared in *Yulin* and entered *Leibizhen*. It was as large as a melon.

1219

On a ji-chou day in the 8th month of the 6th year (6th October 1219), a meteor appeared northeast of *Li*, *Ji*, and *Dou*, penetrated *Nandou*, and fell. It was as large as an ox⁵², and had a length of approximately three hundred *chi*.

1222

On a geng-chen day in the 12th month of the 8th year (14th January 1222), a meteor appeared in *Gedao* and entered *Yingshi*. It was as large as *fou*, and had a tail approximately 5 *chi* long.

On a jia-xu day in the 7th month of the 9th year (5th September 1222), a meteor appeared in *Xu* and entered *Yulin*. It was as large as *fou*, and had a length of approximately 3 *chi*.

⁵²*niu*: an ox, a cow.

On a a ji-si day in the 9th month (30th October 1222), a meteor appeared in *Yingshi*. It was as large as *fou*, and had a tail approximately 3 *chi* long.

On a ren-shen day in the 9th month (2nd November 1222), a meteor appeared in *Wei* and entered *Kui*. It was as large as a melon, and had a tail approximately 3 *chi* long.

1225

On a xin-wei day in the 3rd month of the 12th year (19th April 1225), a meteor appeared in *Jizu* and entered *Wei*. It was as large as a melon, and had a tail approximately 3 *chi* long.

On a ren-xu day in the 11th month (6th December 1225), a meteor appeared in *Ziwei* and entered *Beiji*. It was as large as *fou*.

1227

On a jia-chen day in the 7th month of the 14th year (9th September 1227), a meteor appeared in *Zhinü*. It was as large as a melon, and had a tail approximately 5 *chi* long.

On a bing-shen day in the 11th month (30th December 1227), a meteor appeared in *Taiwei* and *Dizuo*, and arrived in *Ziwei* and *Gouchen*. It was as large as a melon, and had a tail more than 10 *chi* long.

1229

On a xin-mao day in the 3rd month of the 16th year (18th April 1229), a meteor appeared in *Tianji* and entered *Hegu*. It was as large as *fou*.

On a wu-chen day in the 5th month, the first day of the month (25th May 1229), a meteor appeared in *Yingshi* and entered *Lou*. It was as large as a melon, and had a length of approximately 7 *chi*.

On a geng-yin day in the 7th month (15th August 1229), a meteor appeared in *Kui*. It was as large as *fou*.

On a ji-wei day in the 10th month (12th November 1229), a meteor trespassed against the western *fan* of *Ziwei*, and also trespassed against *Gouchen* and *Dizuo*.

1243

On a jia-xu day in the 2nd month of the 30th year (19th March 1243), a meteor appeared in *Wei* and entered *Tianji*. It was as large as a melon, and had a tail approximately 3 *chi* long.

1245

On a ren-yin day in the 9th month of the 32nd year (2nd October 1245), a meteor came from the west and arrived in the east. It was as large as *fou*, and had a tail more than 10 *chi* long.

On a ding-mao day in the 10th month (27th October 1245), a meteor came from the west and arrived in the east. It was as large as a melon.

1246

On a ding-you day in the intercalary 4th month of the 33rd year (25th May 1246), a meteor appeared in the southeast, towards the south, and arrived in the east. It entered *Tianji*. It was as large as *fou*.

1250

On a geng-wu day in the 7th month of the 37th year (5th August 1250), a meteor appeared at the western *fan* of *Ziwei* and entered *Tianji*.

On a yi-si day in the 10th month (8th November 1250), a meteor entered in the eastern direction. Its lower part; there was sound.⁵³

1251

On a ding-hai day in the 3rd month of the 38th year (19th April 1251), a meteor appeared in *Kulou* and entered *Kang*.

1252

On a yi-wei day in the 7th month of the 39th year (19th August 1252), a meteor came from the north and arrived in the south. There were light rays like lightning.

1253

On a ji-hai day in the 5th month of the 40th year (19th June 1253), a meteor appeared in the north of *Tianji* and entered *Ziwei*. It was as large as a pear.

On a gui-hai day in the 8th month (11th September 1253), a meteor appeared in the north of *Tianchuan* and entered *Wuche*. It was as large as a pear.

On a xin-si day in the 9th month (29th September 1253), a meteor appeared in *Shen* and entered *Tianyuan*. It was as large as a melon, and had a tail approximately 5 *chi* long.

⁵³There may be words missing in this record.

On a wu-zi day in the 9th month (6th October 1253), a meteor appeared in *Bi* and entered *Dongjing*.

On a jia-xu day in the 10th month (21st November 1253), a meteor appeared in *Tianjun* and entered *Tianchan*.

1254

On a gui-you day in the 10th month of the 41st year (15th November 1254), a meteor appeared in *Liu* and entered *Xing*. It was as large as a melon.

1256

On a ding-you day in the 11th month of the 43rd year (28th November 1256), a meteor appeared in *Taiwei* and trespassed against *Youzhifa*.

1257

On a ding-hai day in the 8th month of the 44th year (14th September 1257), some meteors appeared in *Liu*, and some appeared in *Jing*. Together they entered *Hushi*.

On a ding-hai day in the 10th month (13th November 1257), a meteor appeared in *Tusikong* and entered *Tianji*. It was as large as *fou*, and had a tail approximately 10 *chi* long.

1258

On a ren-shen day in the 9th month of the 45th year (24th October 1258), one meteor penetrated *Zhuwang* and entered the gate between *Bi* and *Mao*. One appeared in *Wenchang* and entered *Tianlao*.

1259

On a wu-xu day in the 12th month (18th January 1259), a meteor appeared in the third, northwestern star of *Yi*. It was as large as a pear, and had a tail which was approximately 2 *chi* long and yellow.

On a jia-zi day in the 1st month of the 46th year (13th February 1259), a meteor appeared in *Tianjie* and entered *Tianyuan*.

On a ji-mao day in the 6th month (28th June 1259), a meteor appeared in *Yingshi* and entered *Dongbi*.

On a ren-yin day in the 9th month (19th September 1259), a meteor appeared in *Beiji* and entered *Gouchen*.

On a yi-si day in the 9th month (22nd September 1259), two meteors appeared in *Beihe* and separately entered *Dongjing* and *Yugui*.

On a geng-chen day in the 10th month (27th October 1259), a meteor appeared in *Tianguan* and entered the stars of *Shen*.

Reign of King Wǒnjong (1259-1274)

1260

On a gui-hai day in the 2nd month of the 1st year (7th April 1260), a meteor appeared in *Santai* and entered within the head of *Beidou*.

On a ji-wei day in the 6th month (1st August 1260), a meteor appeared in *Qigong* and entered *Sheti*.

On a yi-chou day in the 6th month (7th August 1260), a meteor appeared in the south of the gate between *Kang* and *Di* and entered *Tianji*.

On a xin-you day in the 10th month (1st December 1260), a meteor appeared in the head of *Beidou* and entered within *Ziwei*. It was as large as a melon.

On a gui-wei day in the 11th month (23rd December 1260), a meteor entered within *Tianyuan*.

On a yi-you day in the 11th month (25th December 1260), a meteor appeared in *Zhang* and entered *Tianji*. It was as large as a melon.

1261

On a gui-mao day in the 2nd month of the 2nd year (13th March 1261), a meteor appeared in *Pingdao* and entered *Kulou*.

1262

On a ren-xu day in the 7th month of the 3rd year (25th July 1262), one meteor appeared in *Tianjin* and entered *Lizhu*. One appeared in *Tianpou* and entered *Tianji*.

On a yi-chou day in the 7th month (28th July 1262), a meteor appeared in *Bi* and entered *Zui*.

On a wu-yin day in the 7th month (10th August 1262), a meteor appeared in *Wuping* and entered *Tianchan*.

On a ding-hai day in the 7th month (19th August 1262), a meteor appeared in *Paogua* and entered the stars of *Jian*.

On a yi-you day in the intercalary 9th month (16th October 1262), a meteor appeared in *Wuzhuhou* and entered *Yugui*. One appeared in *Jishui* and *Wenchang* and entered *Yugui*.

On a ji-chou day in the intercalary 9th month (20th October 1262), a meteor appeared in *Juanshe* and entered *Lou*.

1263

On a yi-si day in the 11th month (4th January 1263), a meteor appeared in *Beihe* and entered *Lang*.

On a ji-mao day in the 11th month of the 4th year (4th December 1263), a meteor appeared in *Shen* and entered the wall of *Tian*⁵⁴.

1264

On a yi-mao day in the 2nd month of the 5th year (9th March 1264), a meteor appeared in *Zhang* and entered the western direction.

On a gui-wei day in the 3rd month (6th April 1264), a meteor appeared in *Liu* and entered *Shen*.

On a bing-xu day in the 5th month (8th June 1264), a meteor appeared in *Kui* and entered *Wei*.

On a bing-wu day in the 6th month (28th June 1264), a meteor appeared in *Tianjin* and *Ziweigong*, and entered *Beiji*.

On a ren-xu day in the 8th month (12th September 1264), a meteor appeared in *Shen* and penetrated within the centre of the main star.

On a gui-hai day in the 8th month (13th September 1264), a meteor appeared to the east. It was as large as a bowl, and had a tail approximately 15 *chi* long.

On a yi-si day in the 10th month (25th October 1264), a meteor appeared in *Wan-gliang* and entered *Ziwei*.

On a ding-mao day in the 10th month (16th November 1264), a meteor appeared in *Tianjun* and entered *Shuifu*.

1268

On a geng-yin day in the 10th month of the 9th year (18th November 1268), a meteor entered *Jiao*.

⁵⁴Almost certainly *Tianshi*.

On a ji-wei day in the 11th month (17th December 1268), a meteor appeared in *Zhen*, penetrated *Kulou*, and entered *Tianji*. It was as large as *fou*.

1269

On a geng-xu day in the 1st month of the 10th year (6th February 1269), a meteor appeared at the eastern *fan* of *Taiwei*, trespassed against *Cijiang*, arrived in *Langwei* and trespassed against *Dajiao*.

On a ding-hai day in the 2nd month (15th March 1269), a meteor appeared in *Taiwei*, trespassed against *Youzhifa*, and entered *Zhen*.

On a gui-you day in the 5th month (29th June 1269), a meteor concealed the great star of *Xin* and entered *Di*.

1270

On a wu-yin day in the 10th month of the 11th year (27th October 1270), a meteor appeared in *Langwei* and entered *Taiwei* and *Shangxiang*.

1271

On a gui-si day in the 10th month of the 12th year (6th November 1271), a meteor appeared in *Wangliang* and entered *Zhinü*.

1273

On a wu-chen day in the 8th month of the 14th year (1st October 1273), a meteor appeared in *Zhinü* and entered the wall of *Tianshi*.

On a gui-you day in the 8th month (6th October 1273), a meteor appeared in *Hegu* and entered the wall of *Tianshi*.

On a ji-you day in the 10th month, the first day of the month (11th November 1273), a meteor appeared in *Shangtai* and entered *Xiatai*.

1274

On a jia-yin day in the 12th month (15th January 1274), a meteor appeared in *Fang* and trespassed against the wall of *Tianshi*; the western *fan*.

Reign of King Ch'ungyǒl Wang (1274-1308)

1275

On a ding-you day in the 7th month of the 1st year (21st August 1275), a meteor, which was as large as *fou*, moved from the east to the west and fell. Light rays shone on the ground.

1276

On a ren-shen day in the 6th month of the 2nd year (21st July 1276), a meteor, which was as large as *pen*, fell towards the sleeping hall.

On a jia-wu day in the 7th month (12th August 1276), a meteor moved from the west to the east. It was as large as a bowl.

On a jia-yin day in the 7th month (1st September 1276), a meteor appeared in *Tianbian* and entered *Tianjiang*.

1277

On a ding-si day in the 3rd month of the 3rd year (2nd May 1277), a meteor appeared in *Wei* and entered *Yulin*.

On a jia-xu day in the 6th month (18th July 1277), a meteor appeared in *Kang* and entered *Chiguan*.

On a ren-wu day in the 6th month (26th July 1277), a meteor appeared in *Wei* and entered *Xu*.

On a ji-hai day in the 7th month (12th August 1277), a meteor appeared in *Tianshi* and entered *Fang*. It was as large as a melon.

1278

On a gui-hai day in the 12th month (3rd January 1278), a meteor appeared in *Wuche* and entered *Qigong*.

On a jia-zi day in the 12th month (4th January 1278), one meteor appeared in *Wuche* and entered *Beihe*. One appeared in *Yi* and entered *Qigong*. It was as large as *bo*.

On a ding-you day in the 3rd month of the 4th year (7th April 1278), a meteor appeared in *Ziwei* and arrived in *Tianjiangjun*.

On a bing-zi day in the 8th month (13th September 1278), a meteor appeared in *Wenchang* and entered *Beiji*. It was as large as a pear and was coloured red. There was light. Its tail was approximately 5 *chi* long.

1279

On a wu-yin day in the intercalary month (13th January 1279), a meteor came from the south and arrived in the west. It was as large as a melon.

On a gui-hai day in the 1st month of the 5th year (27th February 1279), a meteor appeared in *Taiwei* and entered the stars of *Di*.

On a jia-yin day in the 3rd month (19th April 1279), a meteor appeared in *Paogua* and entered the wall of *Tianshi* and *Dizuo*.

On a xin-mao day in the 10th month (22nd November 1279), a meteor appeared in the northwest and arrived in the southwest.

1280

On a yi-wei day in the 2nd month of the 6th year (25th March 1280), a meteor appeared in *Yulin* and entered *Baijiu*. It had a length of approximately 7 *chi*.

1281

On a xin-mao day in the 4th month of the 7th year (15th May 1281), a meteor appeared in *Ji* and entered *Tiangou*.

On a jia-wu day in the 4th month (18th May 1281), a meteor trespassed against *Tiangou*.

1282

On a ji-wei day in the 4th month of the 8th year (7th June 1282), a meteor appeared in *Ji* and entered *Tiangou*.

On a gui-hai day in the 9th month (9th October 1282), a meteor appeared in *Tianping* and entered the wall of *Tianshi* and *Zongren*.

1288

On a wu-wu day in the 2nd month of the 14th year (6th March 1288), a meteor was seen in daytime, and entered *Tianshi*.

1289

On a gui-wei day in the 7th month of the 15th year (24th July 1289), a meteor appeared in *Dajiao* and entered *Kulou*. It was as large as a pear, and had a length of approximately 1 *chi*. Also, a meteor appeared in the stars of *Fang* and entered *Kulou*. It was as large as a melon, and had a length of approximately 2 *chi*.

On a ding-you day in the 7th month (7th August 1289), a meteor appeared in *Hegu* and entered *Beiji* and *Gouchen*.

1291

On a ding-hai day in the 8th month of the 17th year (16th September 1291), also a meteor entered *Xuanyuan*. It was as large as a melon, and had a tail approximately 5 *chi* long.

1293

On a geng-shen day in the 3rd month of the 19th year (11th April 1293), a meteor appeared in the north of *Liu xing*, penetrated *Yi* and *Zhen*, and entered *Jiao* and the second star of *Nanping*.

On a geng-shen day in the 5th month (10th June 1293), a meteor appeared in *Zhinü* and entered *Beidou*.

On a ji-you day in the 8th month (27th September 1293), in daytime, there were stars flowing in the northwest corner.

1298

On a bing-chen day in the 10th month of the 24th year (7th November 1298), a meteor appeared in *Shen* and entered *Bi*.

On a wu-yin day in the 10th month (29th November 1298), a meteor appeared in *Yugui* and entered *Ziwei*.

On a xin-si day in the 10th month (12th December 1298), a meteor appeared in *Yi* and entered *Taiwei*.

1304

On a ren-xu day in the 5th month of the 30th year (14th June 1304), a meteor appeared in *Ziwei* and entered the gate between *Xu* and *Wei*.

Reign of King Ch'ungsŏn Wang (1308-1313)**1309**

On a gui-mao day in the 6th month of the 1st year (Dating error), a meteor appeared in *Nandou* and entered *Fang*.

On a gui-mao day in the 7th month (28th August 1309), a meteor appeared in *Nandou* and entered *Fang*. It was coloured red.

1309-1310

In the 11th month (3rd December 1309 to 1st January 1310), a meteor fell in the southwest, and it was as bright as if it were daytime.

Reign of King Ch'ungsuk Wang (1313-1330)

1320

On a ji-you day in the 8th month of the 7th year (5th September 1320), a meteor, as large as *fou* and coloured red, entered *Gedao*.

On a ren-yin day in the 9th month (28th October 1320), a meteor appeared in *Nandou*. It had a length of more than one *zhang*.

1328

On a geng-chen day in the 9th month of the 15th year (24th October 1328), a meteor entered *Yuyuefen*.

1329

On a wu-yin day in the 9th month of the 16th year (17th October 1329), a meteor appeared in *Ziwei* and entered within *Taiwei*.

1330

On a geng-zi day in the 4th month of the 17th year (7th May 1330), a meteor entered *Taiwei* and trespassed against *Kang*.

On a gui-chou day in the 5th month (20th May 1330), a meteor appeared in the stars of *Xin* and fell to the ground.

Reign of King Ch'ungsuk Wang (1332-1339)

Note: Ch'ungsuk Wang ruled from 1313-1330 and from 1332-1339; the intermediate ruler, King Ch'unghye Wang, also ruled from 1339-1344. No records of meteors survive from his reign.

1338

On a xin-si day in the 8th month of the 7th year (3rd September 1338), a meteor appeared in the wall of *Tianshi* and entered the stars of *Xin*.

Reign of King Ch'ungjǒng Wang (1348-1351)

1349

On a ren-chen day in the 1st month of the 1st year, the first day of the month (19th January 1349), a meteor appeared in the south of *Kui*. It was as large as *fou*.

Reign of King Kongmin Wang (1351-1374)

1354

On a ren-chen day in the 8th month of the 3rd year (21st August 1354), a meteor appeared in *Wangliang*. It fell in the northeast direction. It was as large as *fou*.

1357

On a yi-si day in the 8th month of the 6th year (18th August 1357), a meteor appeared in *Mao* and entered *Shen*.

1359

On a jia-chen day in the 9th month of the 8th year (6th October 1359), a meteor appeared in the east of *Dongshi*. There was a light like a mirror.

1365

On a gui-chou day in the 10th month of the 14th year (12th November 1365), a meteor moved to the northeast corner.

1366

On a xin-si day in the 9th month of the 15th year (6th October 1366), in the western direction, a meteor fell in the daytime.

1372

On a ji-mao day in the 10th month of the 21st year (1st November 1372), a meteor appeared in the north of *Wei* and fell to the ground. It was as large as *bo*.

Reign of King U Wang (1374-1388)

1376

On a ji-chou day in the 2nd month of the 2nd year (24th February 1376), a meteor appeared in the head of *Dou*.

On a gui-wei day in the 5th month (17th June 1376), a meteor, which was as large as *hu*⁵⁵, appeared in *Xuanyuan*, pointing east, and disappeared.

1380

On a wu-chen day in the 6th month of the 6th year (11th July 1380), a meteor appeared in the southern direction, crossed the southern wall of *Taiwei*, and moved in the northwest direction. It was as large as *dou*. It divided into four.

⁵⁵*hu*: a pot; a jug; a vase.

1381

On a ren-zi day in the 3rd month of the 7th year (21st April 1381), a meteor appeared in the south and moved to the northwest corner.

1382

On a xin-chou day in the 6th month of the 8th year (3rd August 1382), a great meteor, also from the south, fell to the north.

1385

On a ji-chou day in the 3rd month of the 11th year (7th May 1385), a meteor emerged from the south and pointed to the west.