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A Catalogue of Auroral Observations from China, Korea and Japan (193 B.C. – A.D. 1770)

K K C Yau F R Stephenson and D M Willis

December 1995

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A CATALOGUE OF AURORAL OBSERVATIONS FROM CHINA, KOREA AND JAPAN

(193 B.C. – A.D. 1770)

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FOREWORD

The following catalogue of ancient auroral observations from East Asia was compiled by Kevin K.C. Yau while he was undertaking postgraduate research in the Physics Department of the University of Durham under the direct supervision of Dr F.R. Stephenson.

This comprehensive catalogue is being published in its entirety as a Rutherford Appleton Laboratory Report because the Oriental records provide an invaluable source of information on the appearance, colour, duration, extent, frequency, location and variability of ancient aurorae seen at relatively low geomagnetic latitudes in East Asia. Such information is especially relevant to long-term changes in solar activity. It is hoped that the publication of this detailed catalogue will stimulate further scholarly research on the important historical aspects of solar-terrestrial physics.

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David M. Willis
Rutherford Appleton Laboratory
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INTRODUCTION

This is the first comprehensive catalogue of auroral records from East Asia to be published in a European language [1]. The catalogue, which extends from 193 B.C. to A.D. 1770, contains nearly 850 separate entries. Observations are compiled from the histories of China, Korea and Japan.

The earliest sightings (commencing in 193 B.C.) are all from China. Reliable Japanese records of the aurora started in A.D. 620, while Korean observations began in A.D. 993. After about A.D. 1000, observers in all three countries frequently reported displays of the *aurora borealis*, sometimes - although very rarely - giving independent descriptions of events on the same date (as in A.D. 1101).

Aurorae are often very spectacular events, but extensive historical records of these phenomena are only preserved from Europe and East Asia. Auroral observations from ancient and medieval Europe have been carefully compiled by Link [2]. A very useful catalogue for East Asia has been published by Dai and Chen [3]; this extends from earliest (legendary) times to A.D. 1747. Both the compilations of Link and also Dai and Chen quote the individual records in their original language: usually Latin for the European material and Chinese for the East Asian records.

The present catalogue has as its nucleus the work of both Keimatsu [1] and Dai and Chen [3]. An independent search of East Asian history for further records has also been made. Any observation derived from Keimatsu is denoted by the letters KE at the end of the appropriate entry. Those found in the paper by Dai and Chen are indicated by the letters DC. Many of the entries in the list of Keimatsu clearly relate to meteors rather than the aurora; this is indicated by their rapid motion across the sky, as well as use of the term *liu-hsing* ("flowing star") - the normal expression for a meteor. The work of Dai and Chen is more reliable but still contains several dubious observations. All these unreliable records have been expunged from the present list. Translations have been made with extreme care and it is hoped that this new catalogue will prove to be of considerable interest to both astronomers and historians.

Today, the principal scientific interest in early auroral records relates to their value in the study of long-term variations in solar activity. Unlike sunspot observations, auroral sightings provide only a proxy of solar activity. However, early records of aurorae are much more numerous than those of solar spots [4]. East Asian observations were made at significantly lower geomagnetic latitudes than those in Europe (some 20° to 35° compared with 35° to 65°). Most aurorae occur within the auroral ovals (one in each hemisphere), which are continuous bands centred near 67° magnetic latitude at magnetic midnight and near 77° at magnetic noon during periods of quiet or moderate geomagnetic activity. As the level of geomagnetic activity increases, due to enhanced interaction between the solar wind and the magnetosphere, the auroral ovals expand and extend to lower magnetic latitudes [5]. Moreover, stable auroral red (SAR) arcs sometimes form at the equatorward edges of the auroral ovals. During great magnetic storms, aurorae become widespread and the auroral ovals can extend to equatorial magnetic latitudes. Therefore, aurorae would normally have been seen in China, Korea and Japan only during large magnetic storms and intervals of greatly enhanced geomagnetic activity.

In East Asian documents, aurorae are frequently described as vapours (*chi*). However, whereas many accounts are laconic, other descriptions are very rich and varied. Colours are regularly mentioned, notably red. Often aurorae were recorded because they left such a profound impression on eyewitnesses, but they were also regarded as important astrological portents.

Some preliminary remarks with regard to such matters as calendar conversion and observational details are relevant here.

The Chinese calendar, which was luni-solar, was adopted with little change in both Korea and Japan. However, in each country years were numbered relative to the reign of the appropriate ruler. Throughout almost the entire range of the present catalogue (apart from the very first entry in 193 B.C.) years were counted in China from the start of a "reign-period". This was a somewhat arbitrary subdivision of a reign. In Japan, this same practice was also followed, but never in Korea - where years were always numbered from the time when a king ascended the throne. Lists of reigns and reign periods, giving the equivalent years B.C. or A.D., are readily available. In all three countries, most years contained twelve lunar months, each of length 29 or 30 days. Every three years or so an intercalary month was inserted in order to keep the calendar in step with the seasons. Intercalation was not always practised simultaneously in China, Korea and Japan, but differences were usually slight. Days were sometimes counted from the start of each month. However, a 60-day (sexagenary) cycle was also adopted. This cycle, which covered a little over two lunar months, was independent of any astronomical parameter. Its regular use, especially in China and Korea, materially assists in the conversion of dates to the Julian or Gregorian calendars. For a list of the cyclical days see Table 1.

To give an example of a typical date pattern, we may take the fifth entry in the catalogue (112 B.C.). This begins as follows: "Yuan-ting reign-period, 5th year, 11th month, day *hsin-mao*....". The Yuan-ting reign-period, the second subdivision of the reign of Emperor Hsiao Wu, began in 117 B.C. and lasted until 111 B.C. The 11th lunar month of the 5th year commenced on Dec 24 (Julian), while *hsin-mao* was the 28th day of the sexagenary cycle. From tables, the Julian date is readily reduced to Jan 3 in 112 B.C. We have also devised a computer program to effect rapid date conversion. In the catalogue, all Western dates prior to Oct 5 A.D. 1582 are on the Julian calendar, while for subsequent dates the Gregorian calendar is used instead.

It should be noted that certain cyclical signs – notably *i* and *chi* – are very similar in manuscript form and are often interchanged by mistake. Also the written characters for 7 and 10 closely resemble one another. Where the recorded cyclical date does not fit the appropriate month, an alternative date has usually been suggested on this basis.

Studies of records of events such as eclipses and occultations of stars by the Moon – which can be independently dated by retrospective astronomical computation – show that something like 95% of East Asian dates are precisely correct. However, occasionally only the month or even no more than the season or year is specified.

Most records give only a very general time of night - if at all. Occasionally the night watches (*keng*) are used. The interval from dusk (roughly 37 minutes after sunset) to dawn (the same time before sunrise) was divided into five equal night-watches. Around the equinoxes these were each equal to about 2.2 hours but at the solstices they could range in length from about 1.7 hours (summer) to 2.6 hours (winter). The third watch was centred on midnight. Sometimes the double hours (*shih*) were utilised instead. These were twelve regular divisions of the day and night. The night-time hours were *yu* (17 – 19 h); *hsu* (19 – 21 h); *hai*; (21 – 23 h); *tzu* (23 – 1 h); *chou* (1 – 3 h); *yin* (3 – 5 h); and *mao* (5 – 7 h). Very occasionally the time unit known as the *k'o* (equal to about 15 minutes) was also used.

Azimuthal directions were usually very crude, no more than N, NE, E, SE, S, SW, W and NW. Sometimes an angular extent of the auroral display is given. This is usually quoted either in terms of *ch'ih* (roughly 1°) or *chang* (approximately 10°). It should be

noted that there is no plural in Classical Chinese. Unless the number of items is specified, whether the singular or plural is intended can only be judged from the context. For example a "red vapour" seen in the N, SE and W directions implies plural, but if only one direction is indicated the singular may be assumed.

Many texts mention the constellation(s) in which an auroral display was visible. These are identified in the text by italicised names beginning with a capital letter – e.g. *Tzu-kung* (as in entry 11) or *Niu* (entry 21). In particular, the 28 lunar lodges (*hsiu*) are often referred to. These star groups, in the vicinity of the celestial equator, were particularly important in astrology and were also used for specifying right ascension.

It will be noted that only about ten per cent of the entries in the catalogue date from before A.D. 1000. This is largely a selection effect, due to better preservation of more recent records. A particularly remarkable circumstance is the very large number of Korean entries between about A.D. 1510 and 1560 and again around 1625. These follow a very repetitive style, in which the phenomenon observed is likened to fire. At these relatively recent epochs, the geomagnetic latitude of Korea was probably very similar to that at present (30°), so that the expected frequency of bright aurorae would be perhaps once in ten years. As yet, no satisfactory explanation has been given for the huge excess of Korean sightings around these periods.

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(N.B. This catalogue – which contains translations into English of individual reports – only extends in detail down to A.D. 1130. Subsequent observations are summarised in tabular form).

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Table 1: The Chinese sexagenary cycle.

	tzu	ch'ou	yin	mao	ch'en	szu	wu	wei	shen	yu	hsu	hai
chia	1		51		41		31		21		11	
i		2		52		42		32		22		12
ping	13		3		53		43		33		23	
ting		14		4		54		44		34		24
wu	25		15		5		55		45		35	
chi		26		16		6		56		46		36
keng	37		27		17		7		57		47	
hsin		38		28		18		8		58		48
jen	49		39		29		19		9		59	
kuei		50		40		30		20		10		60

Part 1. The Period from 193 BC to AD 1200

1. 193 BC
   [China] Emperor Hui-ti, 2nd year. "The sky opened in the NE, it was more than 10 *chang* (about 100 deg) in width and more than 20 *chang* (about 200 deg) in length." (*Han-shu*, 26) (DC10)

2. 154 BC Aug/Sep
   [China] Emperor Ching-ti, Ch'ien-yuan reign-period, 3rd year, 7th month. "In the N sky there was a red object like a mat. It was more than 10 *chang* in length. Some said that it was a red vapour; others said that the sky had been split apart." (*Han-shu*, 26) (DC12)

3. 139 BC Jun 11
   [China] Emperor Wu-ti, Chien-yuan reign-period, 2nd year, 4th month, summer, day *wu-shen* (45). "It was as if the Sun appeared at night." (*Han-shu*, 6) (DC13, KE7)

4. 113 BC Dec 24
   [China] Yuan-ting reign-period, 5th year, 11th month, day *hsin-szu* (18), 1st day of the month, the day of winter solstice. "... this night, there was a beautiful light." (*Han-shu*, 25) (DC15)

5. 112 BC Jan 3
   [China] Yuan-ting reign-period, 5th year, 11th month, day *hsin-mao* (28). "At night, there seemed to be ten auspicious lights; two of these were bright." (*Han-shu*, 6) (DC16)

6. 32 BC May 13
   [China] Chien-shih reign-period, 1st year, 4th month, day *hsin-ch'ou* (38). "At night, in the NW it was as if there were flames." (*Han-shu*, 27) (DC31)

7. 30 BC Aug/Sep
   [China] Chien-shih reign-period, 3rd year, 7th month. "At night, there was a blue and yellow-white vapour. It was more than 10 *chang* in length and shining on the ground with a brilliant light. It was said that the sky had been split apart or broken." (*Ku-chin T'u-shu Chi-ch'eng*, 68) (DC32)

8. 15 BC Mar 27
   [China] Yung-shih reign-period, 2nd year, 2nd month, day *kuei-wei* (20). "At night, a red coloration as large as 3 to 4 arm-stretches was in the E direction. It was 2 to 3 *chang* in length and shaking like a tree. In the S direction, a fire of 4 to 5 arm-stretches moved downwards for more than 10 *chang*. They were all extinguished before reaching the ground." (*Han-shu*, 26 and *Hsi-Han Hui-yao*, 28) (DC33, KE16)

9. AD 12 Summer
   [China] Shih-chien-ku reign-period, 4th year, summer. "A red vapour appeared in the SE and extended across the sky." (*Han-shu*, 99 and *T'ai-p'ing Yu-lan*, 877) (DC35, KE20)

10. AD 22
    [China] Ti-huang reign-period, 3rd year. "In the early days of Emperor Kuang-wu-ti ...

a light in the form of a bright red fire was seen. It disappeared after a short time." (*Lun-heng*, 2) (DC36)

11. AD 104 May 30
[China] Yung-yuan reign-period, 16th year, 4th month, day *ting-wei* (44). "A white vapour like unspun silk emerged at *Tzu-kung* (in the circumpolar region of the sky)." (*Hou-Han-shu*, 21) (DC39, KE30)

12. AD 127 Oct 28
[China] Yung-chien reign-period, 2nd year, 9th month, day *wu-yin* (15). "A white vapour, 3 *ch'ih* in width and over 10 *chang* in length, extended from the south of *Pei-lao Shih-men* to *(Nan-)tou*." (*Hou-Han-shu*, 28) (KE31)

13. AD 166 Apr 21
[China] Yen-hsi reign-period, 9th year, 3rd month, day *kuei-szu* (30). "At night, in the capital, there was a flame in a rolling motion. The people were alarmed." (*Hou-Han-shu*, 24) (DC40)

14. AD 182 Apr 18
[Korea] King Kogukch'on Wang 4th year, 3rd month spring, day *chia-yin* (51). "At night, a red vapour penetrated *T'ai-wei*. It was like a snake." (*Samguk Sagi*, 16) (DC41, KE35)

15. AD 195 Nov 24
[China] Hsing-p'ing reign-period, 2nd year, 10th month winter, day *jen-yin* (39). "This night, a red vapour penetrated *Tzu-kung*." (*Hou-Han-shu*, 9) (DC42)

16. AD 215
[China] Chien-an reign-period, 20th year. "... In the SW, there were frequently yellow vapours standing vertically several *chang*." (*San-kuo-chih*, 32) (DC43)

17. AD 216
[China] Chien-an reign-period, 21st year. "During this year, on several occasions there were vapours like flags. They extended from W to E and moved along the zenith." (*San-kuo-chih*, 2) (KE39)

18. AD 222 Jun/Jul
[China] Chang-wu reign-period, 2nd year, 6th month, summer. "A yellow vapour was seen... It was several tens of *chang* in width." (*San-kuo-chih*, 32) (DC44)

19. AD 254 Nov/Dec
[China] Cheng-yuan reign-period, 1st year, 11th month. "A white vapour appeared beside *Nan-tou*. It was several *chang* in width and its length extended across the sky." (*Chin-shu*, 13 and *Sung-shu*, 23) (KE43)

20. AD 280 Feb/Mar
[China] T'ai-k'ang reign-period, 1st year, 1st month. "A multi-coloured vapour penetrated *Nan-tou*." (*An-ching Fu-chih* and *Tang-tu Hsien-chih*) (DC46)

21. AD 286
[China] T'ai-k'ang reign-period, 7th year. "... A violet vapour was seen between *Nan-tou* and *Niu*." (*Nan-ch'ang Fu-chih*) (DC47)

22. AD 292 Mar/Apr
[China] Yuan-k'ang reign-period, 2nd year, 2nd month. "In the north-western sky there was a large fissure." (*Chin-shu*, 12 and *Sung-shu*, 24) (DC48)

23. 303 Jan 1
[China] Yung-ning reign-period, 2nd year, 11th month, day *jen-yin* (39). "At night, a red vapour extended across the sky; it had an obscure sound." (*Chin-shu*, 4 and *Wen-hsien T'ung-k'ao*, 298) (DC51, KE49)

24. 305 Jan 20
[China] Yung-hsing reign-period, 1st year, 12th month, day *jen-yin* (39). "At night, there was a red vapour stretching across the sky; it had an obscure crashing sound." (*Chin-shu*, 13 and *Sung-shu*, 24) (DC52)

25. 305 Nov 21
[China] Yung-hsing reign-period, 2nd year, 10th month, day *ting-ch'ou* (14). "A red vapour was seen in the N direction. It extended across the sky from E to W." (*Chin-shu*, 13 and *Sung-shu*, 24) (DC53, KE20)

26. 307 Jan 22-26
[China] Kuang-hsi reign-period, 1st year, 12th month, day *chia-shen* (21). "A white vapour, similar to a rainbow, extended downwards from the north of the zenith onto the ground. It was seen altogether for 5 nights; then it was extinguished." (*Chin-shu*, 13 and *Sung-shu*, 24) (KE52)

27. 309 Dec 28
[China] Yung-chia reign-period, 3rd year, 11th month, day *i-hai* (12). "White vapours like ribbons appeared in the S and N with two in each direction. They rose from the Earth towards the sky and penetrated *Shen* and *Fa*." (*Chin-shu*, 5, 13 and *Sung-shu*, 24) (KE54)

28. 313 Dec 1
[China] Chien-hsing reign-period, 1st year, 10th month, day *chi-szu* (6). "At night, a red vapour shone brilliantly in the NW." (*Chin-shu*, 13) (DC55, KE55)

29. 318 Dec 21
[China] Ta-hsing reign-period, 1st year, 11th month, day *i-mao* (52). "The Sun appeared at night at a height of 3 *chang*. Within it there was a reddish-blue *erh* ('ear-ring')." (*Chin-shu*, 12) (DC56, KE57)

30. 329
[China] Hsien-ho reign-period, 4th year. "This year, the sky split apart at the NW." (*Chin-shu*, 9) (DC57)

31. 411 Feb/Mar
[China] I-hsi reign-period, 7th year. "The Grand Astronomer, Jen-i said to Yao-hsing, 'A white vapour appeared in the N direction and extended 500 *li* across the sky from E to W. There is bound to be defeat and bloodshed' " (*Chin-shu*, 118) (KE70)

32. 426 Jan 27
[China] Yuan-chia reign-period, 3rd year, 1st month, day *chia-yin* (51). "At night, there

was a dark vapour in the south-eastern sky. It was 1 *chang* in width and more than 10 *chang* in length." (*Sung-shu*, 26 and *Wei-shu*, 112) (KE71)

33. 430 Dec 1
[China] Yuan-chia reign-period, 7th year, 11th month, day *kuei-wei* (20). "At the SW there was a vapour with a red top and bottom, and a dark middle. It was 3 *ch'ih* in width and more than 30 *chang* in length with a form similar to a flag." (*Sung-shu*, 26) (DC59, KE72)

34. 441 Aug/Sep
[China] T'ai-p'ing-chen-chun reign-period, 2nd year, 7th month. "A yellow light was shining brilliantly in the sky." (*Wei-shu*, 112) (DC60)

35. 441 Aug 14
[China] Yuan-chia reign-period, 18th year, 7th month, day *jen-ch'en* (29). "At night, there was a yellow light shining brilliantly in the sky." (*Sung-shu*, 34) (DC61, KE78)

36. 449 Dec
[China] Yuan-chia reign-period, 26th year, 11th month. "A white vapour penetrated *Pei-tou*." (*Sung-shu*, 26) (KE82)

37. 459 Feb/Mar
[China] Ta-ming reign-period, 3rd year, 1st month. "At night, there was a thin misty cloud all over the sky. In all directions, there appeared red vapours 3 or 4 *chang* in length, now disappearing and now reappearing. Soon afterwards, they all vanished. The "Book of Divination" named them *Sui-hsing* or *Tao-hsing*." (*Sung-shu*, 26) (DC62, KE85)

38. 460 Mar/Apr
[China] Ta-ming reign-period, 4th year, 2nd month. "A red vapour, more than 1 *ch'ih* in length, was at the north of Venus and *Ti-tso*." (*Sung-shu*, 26) (DC63, KE86)

39. 460 Dec / 461 Jan
[China] Ta-ming reign-period, 4th year, 12th month. "All over the sky there were clouds. They appeared together in eight places with lengths of 4 *ch'ih*. Now appearing and now disappearing, soon they were all dispersed." (*Sung-shu*, 26) (DC64, KE88)

40. 463 Feb/Mar
[China] Ta-ming reign-period, 7th year, 1st month. "At night, there were thin clouds all over the sky. In all directions, there appeared a total of 8 vapours, pale white in colour. They were 2 or 3 *chang* in length, now appearing, now disappearing. They were named *Tao-hsing* ('sword star')." (*Sung-shu*, 26) (DC65, KE94)

41. 466 Jan 18
[China] T'ai-shih reign-period, 1st year. 12th month, day *i-hai* (12). "A white vapour entered *Tzu-kung*." (*Sung-shu*, 26) (KE97)

42. 466 Feb 28
[China] T'ai-shih reign-period, 2nd year, 1st month, day *ping-ch'en* (53). "A dark vapour penetrated the *hsiu* ('lunar lodges')." (*Sung-shu*, 26) (KE98)

43. 466 Jul 21
[China] T'ai-shih reign-period, 2nd year, 6th month, day *chi-mao* (16). "After sunset there were yellow-white and red-white vapours. They extended across the sky from E to W. They shone brilliantly and were lustrous (*jun-chai*); they lasted for a long time." (*Sung-shu*, 29) (DC66)

44. 467 Feb 6
[China] T'ai-shih reign-period, 3rd year, 1st month, 17th day. "A white vapour was seen in the SW. It extended from E to W across half of the sky. It was named *chang-keng*." (*Nan-ch'i-shu*, 12) (KE101)

45. 470 Nov 6
[China] T'ai-shih reign-period, 6th year, 9th month, 27th day. "A white vapour was again seen in the SE. It was 2 *chang* in length with a form long and large. It was more fierce than a comet." (*Nan-ch'i-shu*, 12) (KE102)

46. 478 Mar/Apr
[Korea] King Chabi Maripkan, 21st year, 2nd month spring. "At night, there was a red light like a piece of unspun silk. From Earth it reached the sky." (*Samguk Sagi*, 3) (DC67, KE105)

47. 478 Dec 13
[China] T'ai-ho reign-period, 2nd year, 11th month, day *ting-wei* (44). "At night, three white vapours emerged from Earth. A moment later, they turned yellow-red and shone brilliantly onto the ground." (*Wei-shu*, 112) (DC68, KE106)

48. 486 Jan 29
[China] Yung-ming reign-period, 4th year, 1st month, day *hsin-wei* (8). "A yellow-white vapour, about one and a half *chang* in length, entered *T'ai-wei*." (*Nan-ch'i-shu*, 13) (DC69, KE111)

49. 489 Nov 9
[China] Yung-ming reign-period, 7th year, 10th month, day *hsin-wei* (8). "A stalk-shaped cloud (*keng-yun*) with a green-black colour, was pointing with one head to the ENE and the other to the W. It was 3 *ch'ih* in width and penetrating *Tzu-kung*. It disappeared slowly after a long time." (*Nan-ch'i-shu*, 13) (KE112)

50. 490 Aug 1
[China] Yung-ming reign-period, 8th year, 6th month, day *ping-shen* (33). "A yellow light extended across the sky and shone on the ground like gold." (*Nan-shih*, 4) (DC70)

51. 492 Oct 10
[China] T'ai-ho reign-period, 16th year, 9th month, day *ting-szu* (54). "At dusk a red vapour was seen at the NW. It was 20 *chang* in length and 8 or 9 *ch'ih* in width. After the duration of a dinner, only then it was extinguished." (*Wei-shu*, 112) (DC71, KE114)

52. 511 Oct 10
[China] T'ien-chien reign-period, 10th year, 9th month, day *ping-shen* (33). "In the north-western sky there was a loud roaring sound and a red vapour descending to the ground." (*Liang-shu*, 2 and *Sui-shu*, 21) (KE120)

53. 512 Apr 7
[China] Yen-ch'ang reign-period, 1st year, 3rd month, day *ping-shen* (33). "A red vapour was seen in the sky. It extended from the E to the WNW." (*Wei-shu*, 112) (DC72, KE121)

54. 520 Nov 26
[China] Cheng-kuang reign-period, 1st year, 11th month, day *hsin-wei* (8). "At the NW there was a red vapour extending across the horizon. It was like a fire vapour. It was not seen at the capital but reported from Liang-chow (in Kansu Province)." (*Wei-shu*, 112) (DC73, KE123)

55. 522 Oct 20
[China] Cheng-kuang reign-period, 3rd year, 9th month, day *chia-ch'en* (41). "At night, in the NW there was a red vapour like flames. From E to W it measured more than 1 *p'i* (= 4 *chang*)." (*Wei-shu*, 112) (DC74, KE124)

56. 536 Apr 4?
[China] T'ien-p'ing reign-period, 3rd year, 1st month (error in date; possibly read 2nd month), day *chi-hai* (36). "At the hour of *hsu* (19-21 hr), in the E direction, there was a red vapour. It was more than 3 *chang* in length. It lasted for 3 meal times." (*Wei-shu*, 112) (DC77, KE131)

57. 549 Feb 4
[China] T'ai-ch'ing reign-period, 2nd year, 12th month, day *wu-shen* (45). "The NW sky split apart at the middle. There was a light like a fire." (*Liang-shu*, 3 and *Nan-shih*, 7) (DC78, KE132)

58. 564 Jul 14
[China] T'ien-chia reign-period, 5th year, 6th month, day *ting-wei* (44). "At night, there were two bands of white vapour. They appeared to the SE of *Pei-tou* and linked the Earth." (*Ch'en-shu*, 3) (KE133)

59. 567 May 31
[China] T'ien-t'ung reign-period, 3rd year, 5th month, day *wu-yin* (15). "Early in the night, in the NW there was a red vapour extending across the sky. At midnight then it was extinguished." (*Sui-shu*, 21) (DC79, KE134)

60. 567 Nov 25?
[China] T'ien-t'ung reign-period, 3rd year, 10th month, day *ping-wu* (43) (error in date; possibly read *ping-tzu*). "In the NW sky there was frequently a red vapour." (*Sui-shu*, 21) (DC80, KE135)

61. 571 Mar 22
[China] T'ien-ho reign-period, 6th year, 2nd month, day *chi-ch'ou* (26). "At night, there was a green cloud more than 3 *chang* in width. It extended across the sky from *hsu* (WNW) to *ch'en* (ESE)." (*Sui-shu*, 21 and *Chou-shu*, 5) (KE137)

62. 573 Apr 6
[China] T'ai-chien reign-period, 5th year, 2nd month, day *i-mao* (52). "At night, there

was a white vapour like a rainbow. From the north it penetrated *Pei-tou* and *Tzu-kung*." (*Ch'en-shu*, 5) (KE139)

63. 580 Jul 17
[China] Ta-hsiang reign-period, 2nd year, 6th month, day *chia-hsu* (11). "A red vapour rose in the W direction. Gradually it moved E and spread all over the sky." (*Chou-shu*, 8) (DC82, KE146)

64. 581
[China] Ta-ting reign-period, 1st year. "A red vapour rose in the W direction. It moved E and spread all over the sky." (*T'ai-ping Yu-lan*, 877) (DC83)

65. 584 Jan 11
[China] Chih-te reign-period, 1st year, 12th month, day *wu-wu* (55). "At night, the sky opened from NW to SE. Within it there was a blue-yellow colour. There was a sound like thunder." (*Ch'en-shu*, 6) (KE147)

66. 599
[China] K'ai-huang reign-period, 19th year. "At night, a red rainbow was seen. Its light shone over several hundred *li*." (*Sui-shu*, 51) (DC84)

67. 601
[China] Jen-shou reign-period, 1st year. "A report from Cheng, 'When I ascended the city tower last night, I saw red vapours in the N with a length of more than a hundred *li*. They were like two feet hanging down'." (*Sui-shu*, 51) (DC85)

68. 602
[China] Jen-shou reign-period, 2nd year. "A red light extended across the sky. The people in the palace were quite alarmed. At the same time the cattle and horses all cried out." (*Hai-shan-chi*) (DC86)

69. 620 Dec 30
[Japan] Empress Suiko, 28th year, 12th month, day *keng-yin* (27), 1st day of the month. "In the sky there was a red vapour. It was more than 1 *chang* in length and shaped like a pheasant's tail." (*Nihon-shoki*, 22) (DC88, KE152)

70. 644 Jul 29
[China] Cheng-kuan reign-period, 18th year, 6th month, day *jen-hsu* (59). "A blue-black vapour, 6 *ch'ih* in width, extended across the sky from ESE to WNW." (*Hsin-t'ang-shu*, 34) (DC90)

71. 707 Oct 18-20
[China] Ching-lung reign-period, 1st year, 9th month, 18th day. "A red vapour stretched across the sky with its light illuminating the ground. It lasted for 3 days and then it ceased." (*Chiu-t'ang-shu*, 36) (DC93-95, KE162)

72. 708 Jul 24-26
[China] Ching-lung reign-period, 2nd year, 7th month, day *kuei-szu* (30). "A red vapour was on the horizon with its light illuminating the Earth. After 3 days it then ceased." (*Hsin-t'ang-shu*, 34 and *Chiu-t'ang-shu*, 7) (DC96-98, KE164)

73. 757 Feb 20
[China] Chih-te reign-period, 2nd year, 1st month, day *ping-tzu* (13). "At Nan-yang, at night, there were four white rainbows. They stretched upwards for more than 100 *chang*." (*Hsin-t'ang-shu*, 36) (KE170)

74. 760 Jul/Aug
[China] Ch'ien-yuan reign-period, 3rd year, 6th month. "At dusk, there were three blue vapours in the NW." (*Hsin-t'ang-shu*, 36) (DC99)

75. 762 May 1
[China] Pao-ying reign-period, 2nd year, 4th month, day *jen-tzu* (49). "At night, a red light like flames was seen in the NW. Its blazing flames stretched across the sky and penetrated *Tzu-wei*. It gradually floated towards the E and spread to the N. It shone brilliantly for several tens of *li*. After a long time then it was dispersed." (*Chiu-t'ang-shu*, 36) (DC100, KE174)

76. 762 May 20
[China] Pao-ying reign-period, 2nd year, 4th month, day *hsin-wei* (8). "At night, at Chiang-ling (in Hu-pei Province) a red light was seen. It penetrated *Pei-tou*." (*Chiu-t'ang-shu*, 36) (DC101, KE175)

77. 762 Sep 16
[China] Pao-ying reign-period, 2nd year, 8th month, day *keng-wu* (7). "At night, there was a red light stretching across the sky and penetrating *Tzu-wei*. It gradually moved towards the NE and permeated half of the sky." (*Hsin-t'ang-shu*, 34 and *Chiu-t'ang-shu*, 11) (DC103, KE176)

78. 767 Oct 8
[China] Ta-li reign-period, 2nd year, 9th month, day *wu-wu* (55). "At night, a white mist rose from the NW of *Wei*. It spread all over the sky." (*Chiu-t'ang-shu*, 36) (KE182)

79. 770 Jun 20
[China] Ta-li reign-period, 5th year, 5th month, day *chia-shen* (21). "In the NW, a white vapour extended across the sky." (*Chiu-t'ang-shu*, 11) (KE183)

80. 770 Jul 20
[China] Ta-li reign-period, 5th year, 6th month, day *chia-yin* (51). "A white vapour appeared in the NW direction. It extended across the sky." (*Chiu-t'ang-shu*, 36) (KE184)

81. 796 Oct 20
[China] Cheng-yuan reign-period, 12th year, 9th month, day *kuei-mao* (40). "At night, there was a red vapour like fire. It was seen in the N direction with its upper part reaching *Pei-tou*." (*Hsin-t'ang-shu*, 34) (DC106, KE189)

82. 826 Jan 22
(i) [China] Pao-li reign-period, 1st year, 12th month, day *i-yu* (22) (should read day *chi-yu*, see following entry). "At night, a mist rose in the NW direction. A moment later, it spread all over the sky. Above the mist there was a red vapour. Its colour fluctuated

between dark and light red. After a long while it was then dispersed." (*Chiu-t'ang-shu*, 36) (DC108, KE199)

(ii) [China] Pao-li reign-period, 1st year, 12th month, day *chi-yu* (46). "At night, in the NW there was a mist. After the mist had gone, there was a red vapour either in dark or light colours. After a long while then it was dispersed." (*Hsin-t'ang-shu*, 34) (DC108, KE199)

83. 827 May 18
[China] Ta-ho reign-period, 1st year, 4th month, day *keng-hsu* (47). "In the N direction, there was a red vapour. Within, there were several white vapours." (*Hsin-t'ang-shu*, 34) (DC109, KE200)

84. 827 Jul 22
[China] Ta-ho reign-period, 1st year, 6th month, day *i-mao* (52). "At night, in the NW there was a red vapour." (*Hsin-t'ang-shu*, 34) (DC110, KE201)

85. 827 Sep 8
[China] Ta-ho reign-period, 1st year, 8th month, day *kuei-mao* (40). "In the capital, there was seen a red vapour filling the whole sky." (*Hsin-t'ang-shu*, 34) (DC111, KE202)

86. 828 May 17
[China] Ta-ho reign-period, 2nd year, intercalary 3rd month, day *i-mao* (52). "In the N direction, there was a red vapour like blood." (*Hsin-t'ang-shu*, 34) (DC112, KE203)

87. 839 Aug 10
[Japan] Showa reign-period, 6th year, 6th month, day *ting-ch'ou* (14). "Tonight there was a red vapour of (area) 40 *chang* square. It began in the SW direction and reached above the Shishinden (palace). It was more than 20 *chang* above the ground with a light like a torch. A moment later it vanished." (*Shyoku-nihon-koki*, 8) (DC113, KE206)

88. 858 Jul 16
[Japan] Tennan reign-period, 2nd year, 6th month, day *jen-ch'en* (29). "Tonight, ... there were seen to the N of Kitano, above the Inari-Jinjya shrine, two cocks fighting each other in the sky. Their colour appeared to be red. While they were fighting their feathers scattered and fell. Although they were far away, they appeared as if they were in front of one's eyes. After a long while then they ceased." (*Montoku-jitsuroku*, 10) (KE209)

89. 859 Nov 13
[Japan] Jogan reign-period, 1st year, 10th month, 15th day, *ting-yu* (34). "In the SE sky there was a strange cloud. Within it there was a red colour like a lightning flash." (*Nihon Temmon Shiryo*, 8) (DC114)

90. 870 Jul 12
[Japan] Jogan reign-period, 12th year, 6th month, 10th day, *hsin-mao* (28). "Tonight, a white rainbow was seen in the NW. Its head and tail touched the ground." (*Sandai-jitsuroku*, 18) (KE212)

91. 875 Jun 22
[Japan] Jogan reign-period, 17th year, 5th month, 16th day, *ting-yu* (34). "At night, a

cloudy vapour extended across the sky like a flag. Its head hung on the western mountains and its tail on the eastern mountains." (*Sandai-jitsuroku*, 27) (KE215)

92. 882 Jul 24
[China] Chung-ho reign-period, 2nd year, 7th month, day *ping-wu* (43). "At night, in the NW direction, there was a red vapour like a piece of red silk. It extended across the sky." (*Chiu-t'ang-shu*, 19 and *Hsin-t'ang-shu*, 34) (DC116, KE217)

93. 886 Nov/Dec
[China] Kuang-ch'i reign-period, 2nd year, 10th month, day *jen-ch'en* (29) (error in date). "At night, a white rainbow was seen in the W direction." (*Chiu-t'ang-shu*, 19 and *Hsin-t'ang-shu*, 36) (KE220)

94. 899 Spring
[China] Kuang-hua reign-period, 2nd year. "In the spring, a white vapour extended across the sky like a piece of silk. It spread from the SW to NE and back again." (*Chiu-t'ang-shu*, 20) (KE224)

95. 904 Apr/May
[China] T'ien-yu reign-period, 1st year, 4th month. "A star shaped like a man, with a red head and a dark body, was below *Pei-tou* within *Tzu-wei* (Enclosure)." (*Hsin-t'ang-shu*, 32) (DC118, KE229)

96. 905 Apr 13
[China] T'ien-yu reign-period, 2nd year, 3rd month, day *i-ch'ou* (2). "During the night, ... (a meteor shower).... Later, there was a green-white vapour like a bamboo thicket soaring to the sky; and the colour within it was obscure." (*Hsin-t'ang-shu*, 32) (KE231)

97. 908 Oct 14
[China] K'ai-p'ing reign-period, 2nd year, 9th month, day *i-yu* (22). "In the morning, in the W direction, there was a vapour like a crowd of people lying stretched out on the ground. A while later it was then dispersed." (*Chiu Wu-tai-shih*, 139) (DC119)

98. 921
[China] T'ien-yu reign-period,, 18th year. "This year, there was a red ominous vapour like blood in the NW sky." (*Chiu Wu-tai-shih, Pen-chi*)

99. 924 Nov 16
[Japan] Encho reign-period, 2nd year, 10th month. 17th day. "At the hour of *hsu* (7–9 p.m.), a white rainbow stretched across the W sky." (*Fuso-ryakki*) (KE237)

100. 928 Jan 10
[China] T'ien-ch'eng reign-period, 2nd year, 12th month, day *jen-ch'en* (29). "In the SW there was a red vapour like a blazing fire. Its flames extended about 2000 *li*." (*Chiu Wu-tai-shih*, 139) (DC120, KE239)

101. 937 Feb 14
(i) [China] T'ien-fu reign-period, 2nd year, 1st month, day *i-mao* (52). "Tonight, there was a red-white vapour in alternated layers like a cultivated bamboo grove, extending from NW to NE. It rose from the horizon and passed the zenith. It was flickering and wavering.

It spread all over the 28 lunar lodges and dispersed at dawn." (*Hsin Wu-tai-shih*, 76) (DC121-122,KE245)

(ii) [China] T'ien-fu reign-period, 2nd year, 1st month, 2nd day (of the month). "Early in the night, in the N direction, there was a red vapour. To the W it reached a place near the NW and to the E it reached a place near the NE. It was 3 *chang* in width from N to S and had a form like flames. From within the red vapour the stars of *Tzu-wei-kung* and *Pei-tou* were visible. At the 3rd watch, within it there were several bands of white vapour. They moved together towards the W until midnight when they dispersed." (*Wu-tai Hui-yao*, 11) (DC121-122,KE245)

102. 939 Jun/Jul
(i) [Japan] Tengyo reign-period, 2nd year, 6th month. "A red vapour extended across the sky." (*Zoku-honcho-tsugan*) (DC123, KE246)

(ii) [Japan] Tengyo reign-period, 2nd year. "There was a red vapour." (*Azumakagami*) (DC123, KE246)

103. 951 Dec 7
[China] Kuang-shun reign-period, 1st year, 11th month, day *chia-tzu* (1). "At night, in the SE, a white rainbow stretched across the sky." (*Chiu Wu-tai-shih*, 112 and *Chou-shu*, 3) (KE247)

104. 965 Aug 10
[China] Ch'ien-te reign-period, 3rd year, 7th month, day *chi-mao* (16). "At night, in the W direction, rose a green-white vapour of 50 *chang* in length. It linked *T'ien-chuan* and *Wu-che*, and extended to the *(Tung-)Ching* Lunar Lodge." (*Sung-shih*, 60, 66) (DC125, KE249)

105. 967 Oct 14
[Japan] Koho reign-period, 9th month, 9th day. "At the hour of *yu* (5–7 p.m.), a dark cloud like a piece of cloth stretched from S to N; it was seen in the W direction. At the hour of *hsu* (7–9 p.m.), a green rainbow halo was seen." (*Nihon-kiryaku* and *Yasutomiki*) (KE250)

106. 968 Nov 2
[China] Ch'ien-te reign-period, 6th year, 10th month, day *chi-wei* (56). "At dawn, three bands of green-white vapour rose in the NW. They were 20 *chang* in length. They moved E and dispersed." (*Sung-shih*, 60, 66) (DC126, KE251)

107. 979 May 9 or 19
(i) [China] T'ai-p'ing-hsing-kuo reign-period, 4th year, 4th month, day *chi-wei* (56) - May 9. "At night, in the NW there was a white vapour oppressing *Pei-tou*." (*Sung-shih*, 66) (KE253)

(ii) [China] T'ai-p'ing-hsing-kuo reign-period, 4th year, 4th month, day *chi-szu* (6) - May 19. "At night, in the NW there was a white vapour oppressing *Pei-tou*." (*Sung-shih*, 60) (KE253)

108. 986 Feb 22
[China] Yung-hsi reign-period, 3rd year, 1st month, day *keng-ch'en* (17). "At night, at the 1st *k'e* of the clepsydra (about 7.15 p.m.), in the N there was a red vapour like a city. It lasted until dawn without dispersing." (*Sung-shih*, 5, 60) (DC127, KE254)

N.B. *Sung-shih*, 60 gives the date as *chi-wei* (56), see entry 109. Possibly two separate events could be referred to.

109. 986 Mar 9
[China] Yung-hsi reign-period, 3rd year, 1st month, day *chi-wei* (56), (should be day *i-wei* (32)). "At night, there was a red vapour like a city." (*Sung-shih*, 60) (DC128)

110. 988 Dec 16?
[China] Tuan-kung reign-period, 1st year, 11th month, day *wu-wu* (55), (error in date; possibly read *wu-tzu* (25)). "At night, in the NW direction, there was a red vapour like the rays of the Sun. It was 2 *chang* in height." (*Sung-shih*, 60, 64) (DC129, KE257)

111. 992 Dec / 993 Jan
[Korea] King Songjong 11th year, 12th month. "At night, the gate of Heaven was opened." (*Koryo-sa*, 47) (DC130)

112. 996 Feb 26
[China] Chih-tao reign-period, 2nd year, 2nd month, day *ping-tzu* (13). "At night, in the W direction, there were eight bands of green-white vapour of various lengths like the broom tails of comets. Their ends passed through the Milky Way and entangled like intertwined snakes." (*Sung-shih*, 60, 66) (DC131, KE258)

113. 1003 Jul 14
[China] Hsien-p'ing reign-period, 6th year, 6th month, day *hsin-wei* (8). "A red vapour appeared at *Lou* and penetrated *T'ien-yu*." (*Sung-shih*, 64) (DC132, KE264)

114. 1004 Apr/May
[China] Ching-te reign-period, 1st year, 3rd month. "A white vapour penetrated *Hsien-yuan* and more than ten green-white vapours like pieces of cloth extended across the sky." (*Sung-shih*, 60) (DC133, KE269)

115. 1004 Aug 17
(i) [China] Ching-te reign-period, 1st year, 7th month, day *hsin-hai* (48). "A yellow vapour appeared at *Pi* Lunar Lodge; it was more than 5 *chang* in length." (*Sung-shih*, 60) (DC134, KE271)

(ii) [China] Ching-te reign-period, 1st year, 7th month, day *hsin-hai* (48). "A yellow vapour appeared at *Pi* Lunar Lodge; it was more than 5 *ch'ih* in length." (*Sung-shih*, 67) (DC134, KE271)

116. 1006 Apr 14
[China] Ching-te reign-period, 3rd year, 3rd month, day *ping-ch'en* (53). "In the N direction, a red vapour extended across the sky." (*Sung-shih*, 60, 64) (DC136, KE274)

117. 1007 Dec 18
[China] Ching-te reign-period, 4th year, 11th month, day *chi-szu* (6). "At the zenith, there was a red vapour like a broom; it was 7 *ch'ih* in length and was situated S of *Yu-kuei*." (*Sung-shih*, 60) (DC137, KE278)

118. 1009 Sep 27
[China] Ta-chung Hsiang-fu reign-period, 2nd year, 9th month, day *wu-wu* (55). "A yellow vapour like a column rose in the SE. It was about 5 *chang* in length." (*Sung-shih*, 60, 67) (DC139)

119. 1010 Jan 25
[China] Ta-chung Hsiang-fu reign-period, 3rd year, 12th month, day *kuei-hai* (60). "A blue-red vapour penetrated *T'ai-wei*." (*Sung-shih*, 60, 64) (DC140, KE282)

120. 1012 Jun 12
[Korea] King Hyonjong, 3rd year, 5th month, day *ting-hai* (24). "A red vapour like fire was seen in the S direction." (*Koryo-sa*, 53) (DC141)

121. 1014 Apr 6
[Korea] King Hyonjong, 5th year, 3rd month, day *keng-yin* (27). "At night, in all directions, there were red ominous vapours." (*Koryo-sa*, 54) (DC143)

122. 1014 Jun
[China] Ta-chung Hsiang-fu reign-period, 7th year, 5th month. "A vapour appeared in *Tzu-wei* like a palace gate. Its light illuminated the ground." (*Sung-shih*, 60) (DC144, KE284)

123. 1017 Jan 27
[Korea] King Hyonjong, 7th year, 12th month, day *ting-yu* (34). "In all directions, there were red ominous vapours." (*Koryo-sa*, 53) (DC146)

124. 1017 Mar 4
[Korea] King Hyonjong, 8th year, 2nd month, day *kuei-yu* (10). "A red ominous vapour like a fire filled the sky." (*Koryo-sa*, 53) (DC147)

125. 1017 Dec 15
[Korea] King Hyonjong, 8th year, 11th month, day *chi-wei* (56). "At night, a white vapour like a piece of sackcloth stretched across the sky. Very soon, it changed into a red vapour." (*Koryo-sa*, 54) (DC148)

126. 1019 Mar 6
[Korea] King Hyonjong, 10th year, 1st month, day *i-yu* (22). "A red vapour stretched across the sky." (*Koryo-sa*, 53) (DC149)

127. 1024 Dec / 1025 Jan
[Korea] King Hyonjong, 15th year, 11th month. "The gate of Heaven opened." (*Koryo-sa*, 47) (DC152)

128. 1028 Sep 25
[Korea] King Hyonjong, 19th year, 9th month, day *ping-shen* (33). "At night, a red vapour stretched across the sky." (*Koryo-sa*, 53) (DC153)

129. 1032 Nov 7
[China] Ming-tao reign-period, 1st year, 10th month, day *keng-tzu* (37). "At night, five yellow-white vapours penetrated the wall of *Tzu-wei*." (*Sung-shih*, 60, 67) (DC154, KE287)

130. 1033 Jan 28
[China] Ming-tao reign-period, 1st year, 12th month, day *jen-hsu* (59). "In the NW, there was a green-white vapour extending across the sky." (*Sung-shih*, 60, 66) (DC155, KE288)

131. 1052 Jul 18
[Korea] King Munjong, 6th year, 6th month, day *kuei-szu* (30). "A white vapour stretched across the sky in the form of a turtle. And a blue-violet vapour penetrated somewhere inside it. After a long while then they dispersed." (*Koryo-sa*, 54) (DC157)

132. 1067 Dec 10
[China] Chih-p'ing reign-period, 4th year, 11th month, day *ping-tzu* (13). "At night, a dark green vapour rose in the S direction. It was 3 *chang* in length and 2 *ch'ih* in width. To the east it reached *Ku-lou*, to the N it reached *Nan-ho*, and at the same time it penetrated across *I*." (*Sung-shih*, 60) (DC175)

133. 1069 Nov/Dec
[China] Hsi-ning reign-period, 2nd year, 11th month. "On every evening, a red vapour like fire was seen in the NW direction. It lasted until *jen-ting* (9–11 p.m.), when it was extinguished." (*Sung-shih*, 60, 64) (DC176, KE301)

134. 1071 Mar 8
[Japan] Enkyu reign-period, 3rd year, 2nd month, 4th day, *keng-shen* (57). "At night, there was an unusual occurrence in the sky. A strange 'star' appeared with a body similar to a cloud but it was luminous." (*Nihon Temmon Shiryo*, 7) (DC177)

135. 1071 Apr 19
[Japan] Enkyu reign-period, 3rd year, 3rd month, 17th day, *jen-yin* (39). "At the hour of *hsu* (7–9 p.m.), a great light extended from E to W like a nearly full moon." (*Nihon Temmon Shiryo*, 7) (DC178)

136. 1073 Jan 12
[Korea] King Munjong, 26th year, 12th month, day *ping-tzu* (13). "A white vapour from the NW reached the SE and linked the SW; then it turned into a red vapour." (*Koryo-sa*, 54) (DC179)

137. 1073 Oct 13
[Korea] King Munjong, 27th year, 9th month, day *keng-hsu* (47). "At night, at the south of the stars of *Tien-yuan* the sky had a fissure. It was about 5 or 6 *ts'un* in width. Within it there was a red colour." (*Koryo-sa*, 47) (DC180)

138. 1073 Dec 28
[Korea] King Munjong, 27th year, 11th month, day *ping-yin* (3). "At night, to the west of *Wen-chuan* the sky split apart. It was 15 *ch'ih* in length and 3 *ch'ih* in width. Its colour was bluish-red." (*Koryo-sa*, 47) (DC181)

139. 1077 Oct 2
[China] Hsi-ning reign-period, 10th year, 9th month, day *keng-shen* (57). "At night, a dark green vapour rose in the N direction. From the handle of *Pei-tou* it penetrated the wall of *Tzu-wei* and reached *T'ien-p'ou*." (*Wen-hsien-t'ung-k'ao*, 294) (DC182)

140. 1088 Aug 12
[China] Yuan-yu reign-period, 3rd year, 7th month, day *ting-mao* (4). "At night, the NE direction was as bright as daytime and very soon there appeared a red vapour. Within it was a white vapour. It covered the whole sky." (*Sung-shih*, 64) (DC183, KE303)

141. 1088 Aug 13
[China] Yuan-yu reign-period, 3rd year, 7th month, day *wu-ch'en* (5). "At night, close to the NE horizon, the sky was so bright that it illuminated the Earth like a rising moon. Near the NW, a white vapour covered the sky." (*Sung-shih*, 60) (DC184)

142. 1088 Sep 4
[Korea] King Sonjong, 5th year, 7th month, day *chi-szu* (6). "There was a red vapour like fire." (*Koryo-sa*, 53) (DC185)

143. 1088 Sep 23
[China] Yuan-yu reign-period, 3rd year, 9th month, day *chi-yu* (46). "At night, a red vapour rose in the N. Gradually, it produced several bands of white vapour." (*Sung-shih*, 60) (DC186, KE304)

144. 1090 Feb 25
[Korea] King Sonjong, 7th year, 1st month, day *i-ch'ou* (2). "A violet vapour scattered like flames of a fire. It lasted until dawn; then it was extinguished." (*Koryo-sa*, 53) (DC187)

145. 1090
[China] Yuan-yu reign-period, 5th year. "At midnight, a red fog stretched across the sky." (*Jen-shou Hsien-chih* and *Ching-yen Hsien-chih*) (DC188)

146. 1095 Feb 9
[China] Shao-sheng reign-period, 2nd year, 1st month, day *chi-hai* (36). "At night, within the clouds in the NW, there was a flame of fire. It was over 2 *chang* in length and several *ch'ih* in width. It was frequently seen by people." (*Sung-shih*, 67) (DC189)

147. 1098 Mar 23
[Japan] Jotoku reign-period, 2nd year, 2nd month, 18th day, *ting-yu* (34). "At about the hour of *yu* (5–7 p.m.), in the N there was a light in the sky. Its length stretched from E to W. It was very strange." (*Nihon Temmon Shiryo*, 8) (DC190, KE306)

148. 1099 Oct 15
[China] Yuan-fu reign-period, 2nd year, 9th month, day *wu-ch'en* (5). "At night, a red vapour rose in the N at *Tzu-wei* and the south-east of *Pei-tou*. Also 10 bands of white vapour appeared, each of about 5 *ch'ih* in length." (*Sung-shih*, 60) (DC191, KE308)

149. 1101 Jan 31
(i) [China] Chien-chung Ching-kuo reign-period, 1st year, 1st month, 1st day. "In the evening, a red vapour rose in the NE. It extended across and filled the western sky. Some

time later, two white vapours appeared within it. When the red vapour was about to disperse, two black vapours appeared on its side." (*Sung-shih*, 64) (DC192, KE310)

(ii) [N China] Shou-ch'ang reign-period, 7th year, 1st month spring, day *jen-hsu* (59) (1st day of the month). "Tonight, a white vapour like silk descended from the sky. Dark clouds rose in the NW, they flew very fast with a sound. In the N, there were blue-red and dark-white vapours entangling themselves and falling down." (*Liao-shih*, 26) (DC192, KE310)

(iii) [Korea] King Sukjong, 6th year, 1st month, day *jen-hsu* (59) (1st day of the month). "At night, a red vapour pointed from the N towards the W like a silk cloth covering the sky. At times, a white vapour also appeared. It lasted a long time then it dispersed." (*Koryo-sa*, 53) (DC192, KE310).

N.B. These three observations, although relating to the same event, are independent of one another.

150. 1103 Jun 16
[China] Ch'ung-ning reign-period, 2nd year, 5th month, day *wu-tzu* (25). "At night, a green-white vapour rose in the SE with a length of 3 *chang*. It penetrated (the lunar lodges) *Wei*, *Ch'i* and *Tou*." (*Sung-shih*, 60, 66) (DC193)

151. 1104 Feb 7
[Korea] King Sukjong, 9th year, 1st month, day *chia-shen* (21). "At night, a red vapour was seen in the SE. It was over 10 *chang* in length." (*Koryo-sa*, 53) (DC194)

152. 1105 Jan 19
[Korea] King Sukjong, 10th year, 1st month, day *hsin-wei* (8). "At night, a red-white vapour was seen in the SE, it lasted until dawn." (*Koryo-sa*, 53) (DC195)

153. 1105 Feb 15
[Japan] Choji reign-period, 2nd year, 1st month, 29th day. "Tonight, at about the hour of *hai* (9–11 p.m.), there was a brilliant light in the sky. Everyone had seen it and was greatly alarmed." (*Nihon Temmon Shiryo*, 7) (DC196)

154. 1105 Feb 17
[Korea] King Sukjong, 10th year, 2nd month, day *keng-tzu* (37) (1st day of the month). "At night, there was a light appearing somewhere between the NW and SE as if the moon had just risen." (*Koryo-sa*, 53) (DC197)

155. 1105 Feb 24
[Korea] King Sukjong, 10th year, 2nd month, day *ting-wei* (44). "A yellow-red vapour appeared at *Tung-hsien* and penetrated the south of *Ti-tso*. It was about 3 *chang* in length." (*Koryo-sa*, 55) (DC198)

156. 1109 May 13
[Korea] King Yejong, 4th year, 4th month, day *ping-hsu* (23). "Above a monastery .... a red vapour was soaring into the sky. Some time later, it turned yellow-black. It moved towards the E and was extinguished." (*Koryo-sa*, 53) (DC200)

157. 1111 Dec 17
[China] Cheng-ho reign-period, 1st year, 11th month, day *chia-hsu* (11). "At night, a green-white vapour rose from the wall of *Tzu-wei* and penetrated *Ssu-fu*." (*Sung-shih*, 60) (DC201, KE315)

158. 1112 Nov 30
[Japan] Ten-ei reign-period, 3rd year, 11th month, 10th day. "Recently, a brilliant light was seen every night." (*Nihon Temmon Shiryo*, 7) (DC202)

159. 1114 Apr 2
[Korea] King Yejong, 9th year, 2nd month, day *hsin-wei* (8). "At night, a red vapour like flames radiated in the directions of NW, NE and S. At dawn it was extinguished." (*Koryo-sa*, 53) (DC203)

160. 1115 Mar 21
[Korea] King Yejong, 10th year, 2nd month, day *chia-tzu* (1). "There was a red vapour like fire in the NE." (*Koryo-sa*, 53) (DC204)

161. 1116 Oct 10
[Korea] King Yejong, 11th year, 9th month, day *kuei-szu* (30). "At night, a red vapour was seen at the NW." (*Koryo-sa*, 53) (DC205)

162. 1116 Oct 17
[Korea] King Yejong, 11th year, 9th month, day *keng-tzu* (37). "At night, in the WSW direction, there was a red vapour." (*Koryo-sa*, 53) (DC206)

163. 1117 Jun 29
[China] Cheng-ho reign-period, 7th year, 5th month, day *i-mao* (52). "At night, a red cloud and a white vapour rose in the NE direction." (*Sung-shih*, 60) (DC207, KE319)

164. 1117 Dec 16
[Korea] King Yejong, 12th year, 11th month, day *i-szu* (42). "At night, in the N direction, there was a red vapour produced in *Tzu-wei*. It pointed towards NW and NE like a piece of cloth dispersing in the sky. Also, a red vapour rose in the NE." (*Koryo-sa*, 53) (DC208)

165. 1118 Jan/Feb
[N China] T'ien-ch'ing reign-period, 8th year, 1st month, spring. "This evening, a red vapour like flames rose from the E. It was wavering to and fro. After the lapse of a short time it dispersed." (*Ch'i-tan Kuo-chih*, 10) (DC209)

166. 1119 Spring
[China] T'ien-ch'ing reign-period, 9th year, spring. "There was a red colour (vapour) 3 to 4 arm-holds in circumference and 2 to 3 *chang* in length. It was wavering like a tree. In the W direction, there were five lumps of fire. They travelled down for over 10 *chang* and were extinguished without touching the ground." (*Ch'i-tan Kuo-chih*, 11) (DC211)

167. 1119 May 11
[China] Hsuan-ho reign-period, 1st year, 4th month, day *ping-tzu* (13). "At night, in the NW, there were several tens of bands of red vapour stretching across the sky. They invaded *Tzu-kung* and *Pei-tou*. When anyone looked up, all the stars appeared to have

been separated by a layer of deep-red coloured gauze. There was a breaking and tearing sound. Among the red vapours there were also two black and white vapours. From the NW suddenly they entered the NE and extended to the SE. At dawn they ceased." (*Sung-shih*, 64) (DC212, KE321)

168. 1119 Jun/Jul
[China] Hsuan-ho reign-period, 1st year, 5th month. "This month, in the NW, there was a red vapour stretching across the sky." (*Sung-shih*, 22) (DC213)

169. 1119
[Japan] Gen-ei reign-period, 2nd year. "There was a red vapour." (*Nihon Temmon Shiryo*, 8) (DC214)

170. 1119 Jul 15
[China] Hsuan-ho reign-period, 1st year, 6th month, day *hsin-szu* (18). "At night, a red vapour rose in the N; half of the sky seemed to be on fire." (*Sung-shih*, 60) (DC215, KE322)

171. 1119 Aug 21
[China] Hsuan-ho reign-period, 1st year, 7th month, day *wu-wu* (55). "At night, a red cloud rose in the NE and was linking more than 30 bands of white vapour." (*Sung-shih*, 60) (DC216, KE324)

172. 1120 Jan 31
[Japan] Gen-ei reign-period, 2nd year, 12th month, 29th day. "Tonight, there was a large bright light in the sky." (*Nihon Temmon Shiryo*, 7) (DC217)

173. 1120 Mar 28
[China] Hsuan-ho reign-period, 2nd year, 2nd month, day *wu-hsu* (35). "At night, a red cloud rose in the NE. Gradually it moved towards the NW and entered *Tzu-wei-yuan*." (*Wen-hsien T'ung-k'ao*, 294) (DC218, KE326)

174. 1121 Feb 23
[Korea] King Yejong, 16th year, 2nd month, day *keng-wu* (7). "At night, a red vapour (extended) from the NW to the SE with a length of about 3 *ch'ih*. A white vapour (extended) from *Fang-hsing* to *Ch'ui* with a length of about 7 *ch'ih*." (*Koryo-sa*, 53) (DC219)

175. 1121 Apr 14
[Korea] King Yejong, 16th year, 3rd month, day *keng-shen* (57). "A red vapour rose between the lunar lodges *Chang* and *I*." (*Koryo-sa*, 53) (DC220)

176. 1122 May 15
[Korea] King Yejong, 17th year, 4th month, day *ping-shen* (33). "In the S direction, there was a strange vapour with bright variegated colours. It lasted for a long time then it dispersed." (*Koryo-sa*, 53) (DC221)

177. 1122 May 21
[Korea] King Yejong, 17th year, 4th month, day *jen-shen* (9) (possibly read *jen-yin*). "During the evening, there was a dark vapour emanating from the NW. Also sometimes

a blue vapour appeared among the clouds, and sometimes a red vapour pressed against its sides. They joined together and moved towards the SE. They lasted until the early watches and were extinguished." (*Koryo-sa*, 53) (DC222)

178. 1123 Mar 21
[Korea] King Injong, 1st year, 2nd month, day *ping-wu* (43). "At night, in the W direction, there was a white vapour. Within it there was a red vapour." (*Koryo-sa*, 54) (DC223)

179. 1125 May 15
[China] Hsuan-ho reign-period, 7th year, 4th month, day *jen-tzu* (49) (possibly read day *jen-wu* (19)). "At night, there were red clouds entering the *Tzu-wei-yuan*." (*Sung-shih*, 60) (DC224, KE328)

180. 1126 Feb 4
[China] Ch'ing-k'ang reign-period, 1st year, 1st month, day *ting-ch'ou* (14). "At night, a red-white vapour rose in the W direction." (*Sung-shih*, 60) (DC225, KE329)

181. 1126 Dec 21
[China] Ch'ing-k'ang reign-period, 1st year, intercalary 11th month, day *ting-yu* (34). "A red vapour stretched across the sky." (*Sung-shih*, 60) (DC226, KE332)

182. 1127 Feb 13
[China] Chien-yen reign-period, 1st year, 1st month, day *hsin-mao* (28). "At night, in the NW there was a flame amongst the snow." (*Sung-shih*, 64) (DC227)

183. 1127 Feb 21
[China] Ch'ing-k'ang reign-period, 2nd year, 1st month, day *chi-hai* (36). "At night, in the NW, there was a flame amongst the dark clouds. It was more than 2 *chang* in length and several *ch'ih* in width. It was seen throughout the night." (*Sung-shih*, 60, 67) (DC228, KE334)

184. 1127 Apr 5
[China] Ch'ing-k'ang reign-period, 2nd year, 2nd month, day *jen-wu* (19). "At night, a white vapour like a rainbow stretched from S to N. A moment later, it moved to the SW and reached the NE. It vanished at dawn." (*Sung-shih*, 60) (KE335)

185. 1127 Sep 20
[China] Chien-yen reign-period, 1st year, 8th month, day *keng-wu* (7). "In the NE direction, there was a red vapour." (*Sung-shih*, 64) (DC229, KE337)

186. 1127 Autumn
[China] Chien-yen reign-period, 1st year, autumn. "There was a violet vapour between the lunar lodges *Tou* and *Niu*." (*Chia-hsing Hsien-chih*, 1) (DC230)

187. 1127 Sep 22
[China] Chien-yen reign-period, 1st year, 8th month, day *jen-shen* (9). "In the NE, there was a red vapour." (*Sung-shih*, 60) (DC231)

188. 1127 Oct 17 to 20
[Korea] King Injong, 5th year, 9th month, day *ting-yu* (34). "At night, a red vapour

appeared in the SE. On day *keng-tzu* (37) – Oct 20 – it was finally extinguished." (*Koryo-sa*, 53) (DC232-235)

189. 1128 Feb 28
[Korea] King Injong, 6th year, 1st month, day *hsin-hai* (48). "At night, in the N direction, there was a red-white vapour entering *Tzu-wei-kung*." (*Koryo-sa*, 53) (DC236)

190. 1128 Oct 20
[Korea] King Injong, 6th year, 9th month, day *ping-wu* (43). "A red vapour from the NW passed *Tzu-wei* and entered the NE. Also, dark vapours were running into it from the S and N." (*Chungbo Munhon Pigo*, 8) (DC237)

191. 1128 Dec 13
[Korea] King Injong, 6th year, 11th month, day *keng-tzu* (37). "From the NW to SW, a red vapour soared and filled the sky." (*Koryo-sa*, 53) (DC238)

192. 1129 Jan 10
[Korea] King Injong, 6th year, 12th month, day *wu-ch'en* (5). "At night, a red vapour rose from the NE direction. It passed through *Tou-shao* (handle of the Dipper) and entered *Tzu-wei-kung*." ((*Koryo-sa*, 47, 53) (DC239)

193. 1129 Oct 25
[Korea] King Injong, 7th year, 9th month, day *ping-ch'en* (53). "Red vapours were emitted from the NW and NE directions in turn and soared towards *Tzu-wei-kung*." (*Koryo-sa*, 47, 53) (DC240)

194. 1129 Dec 27
[Korea] King Injong, 7th year, 11th month, day *chi-wei* (56). "A red vapour from between the NE and NW directions entered the *Tzu-wei-kung*." (*Koryo-sa*, 53) (DC241)

195. 1130 Mar 31
[Korea] King Injong, 8th year, 2nd month, day *kuei-szu* (30). "At night, a red vapour like a piece of cloth extended from E to N." (*Koryo-sa*, 53) (DC242)

196. 1130 Jun/Jul
(i) [China] Chien-yen reign-period, 4th year, 5th month. "At night, at Lake Tung-ting, a red light like fire was seen to extend across the NE sky. Suddenly, it turned towards the SE." (*Sung-shih*, 64) (DC243)

(ii) [China] "A red light was seen at Lake Tung-ting at night. It extended across the NE sky like a fire illuminating the lake. From top to bottom it was the same colour. Suddenly, it turned to the SE." (*Wen-hsien T'ung-k'ao*, 298) (DC243)

197. 1130 Jun 18
(i) [China] Chien-yen reign-period, 4th year, 5th month, day *jen-tzu* (49). "A red cloud stretched across the sky. Within it there were more than 10 bands of white vapour penetrating it like unspun silk. It rose from *Tzu-wei* and invaded *Pei-tou* and *Wen-ch'ang*. It dispersed from the SE." (*Sung-shih*, 60) (DC244, KE338)

(ii) [China] "At night, in the NW direction, there was a red vapour spreading all over the sky. Also there were more than 10 bands of white vapour like unspun silk penetrating it. It invaded *Pei-tou*, *Wen-ch'ang* and *Tzu-wei* and dispersed from the SE." (*Sung-shih*, 64) (DC244, KE338)

198. 1130 Jun 19
[Korea] King Injong, 8th year, 5th month, day *kuei-ch'ou* (50). "A dark vapour was seen in the NE direction with a circumference of about 20 *ch'ih*. It entangled into knots which did not loosen until suddenly it emitted dazzling lights like birds flapping their wings. It then dispersed." (*Koryo-sa*, 53) (DC245)

199. 1130 Sep 29
[Korea] King Injong, 8th year, 8th month, day *i-wei* (32). "At the 1st watch, a red vapour like shadows of fire was emitted from the N direction. It then entered the head of *Pei-tou*. It was flickering constantly. At the 3rd watch it was extinguished." (*Koryo-sa*, 53) (DC246)

200. 1134 Dec 16
[China] Shao-hsing reign-period, 4th year, 11th month, day *chia-hsu* (11). "A red cloud was seen at night. A white vapour was also seen." (*Sung-shih*, 64) (DC247)

201. 1137 Jan 31
[China] Shao-hsing reign-period, 7th year, 1st month, day *hsin-wei* (8). "At night, in the NE there was a red vapour like fire appearing from the *Tzu-wei-kung*." (*Sung-shih*, 60) (DC248)

202. 1137 Feb 14
[China] Shao-hsing reign-period, 7th year, 1st month, day *i-yu* (22). "At night, in the N direction, there was a red vapour lasting until dawn." (*Sung-shih*, 64) (DC249)

203. 1137 Feb 20
[China] Shao-hsing reign-period, 7th year, 1st month, day *hsin-mao* (28). "At night, between (the lunar lodges) *Tou* and *Niu* there was a red vapour like fire." (*Sung-shih*, 64) (DC250)

204. 1137 Mar 4
[China] Shao-hsing reign-period, 7th year, 2nd month, day *kuei-mao* (40). "It was again like this (following the entry of 1137 Jan 31)." (*Sung-shih*, 60) (DC251)

205. 1137 Dec 29
[China] Shao-hsing reign-period, 7th year, 11th month, day *kuei-mao* (40). "In the S direction, there was a red vapour and in the NE red clouds were everywhere. They lasted from sunset to the 1st watch of the night." (*Sung-shih*, 64) (DC252)

206. 1138 Jun 10
[Japan] Hoen reign-period, 4th year, 5th month, 2nd day. "At the hour of *hsu* (7–9 p.m.), a bright light appeared in the sky." (*Nihon Temmon Shiryo*, 7) (DC253)

207. 1138 Aug 28
[Korea] King Injong, 16th year, 7th month, day *i-szu* (42). "At night, in the NW direction, there was a red vapour like fire." (*Koryo-sa*, 53) (DC254)

208. 1138 Sep 3
[Korea] King Injong, 16th year, 7th month, day *hsin-hai* (48). "At night, it was again like this (following the entry of 1138 Aug 28)." (*Koryo-sa*, 53) (DC255)

209. 1138 Oct 6
(i) [Korea] King Injong, 16th year, 9th month, day *chia-shen* (21). "At night, there was a vapour emitted from the NE direction." (*Koryo-sa*, 53) (DC256)

(ii) [China] Shao-hsing reign-period, 8th year, 9th month, day *chia-shen* (21), the 1st day of the month. "At night, there was a red vapour like fire. It appeared within the wall of *Tzu-wei*." (*Sung-shih*, 60) (DC256)

(iii) [China] "A red vapour appeared at the wall of *Tzu-wei*." (*Sung-shih*, 64) (DC256)

(iv) [China] "At the true N there was a red vapour like the shadow of fire." (*Wen-hsien T'ung-k'ao*, 294) (DC256)

210. 1141 Aug 23
[Korea] King Injong, 19th year, 7th month, day *ping-ch'en* (53). "At night, a red vapour was emitted from *Pei-tou*." (*Koryo-sa*, 53) (DC257)

211. 1141 Nov 22
[Korea] King Injong, 19th year, 10th month, day *ting-hai* (24). "At night, a red vapour soared into the sky. It reached *Kou-chen* and *Tzu-wei*. Also there were more than 10 bands of white vapour interlocking each other, rising and pausing at the same time. Further, there was a dark vapour about 4 *chang* in length, soaring to and penetrating *Pei-tou* from E to W." (*Koryo-sa*, 53) (DC258)

212. 1141 Dec 23
[Korea] King Injong, 19th year, 11th month, day *wu-wu* (55). "At night, a red vapour was emitted from the N. Also there appeared two bands of white vapour. They penetrated the celestial north pole and *Kou-chen*. They reappeared after they had been extinguished." (*Koryo-sa*, 53) (DC259)

213. 1148 Aug 17
[China] Shao-hsing reign-period, 18th year, 8th month, day *ting-hai* (24). "In the NW direction, there was a red vapour like fire." (*Sung-shih*, 60, 64) (DC260)

214. 1148 Nov 12
[China] Shao-hsing reign-period, 18th year, 9th month, day *chia-yin* (51). "At night, there was a red vapour like fire." (*Sung-shih*, 64) (DC261)

215. 1150 Aug 12
[Japan] Kyuan reign-period, 6th year, 7th month, 18th day, *jen-ch'en* (29). "Tonight, in the N direction, there was a red vapour. In a moment it reached the NE direction." (*Nihon Temmon Shiryo*, 8) (DC262)

216. 1150 Oct 8
[Japan] Kyuan reign-period, 6th year, 9th month, 16th day, *chi-ch'ou* (26). "Today at the hour *yin* (3–5 a.m.) in the N sky and in the W direction, there was a red vapour like a forest fire." (*Nihon Temmon Shiryo*, 8) (DC263)

217. 1152 Jul 10
[Japan] Nimpei reign-period, 2nd year, 6th month, 7th day, *keng-wu* (7). "At the hour *hsu* (7–9 p.m.), in the N direction, there was a yellow vapour." (*Nihon Temmon Shiryo*, 8) (DC264)

218. 1157 Apr 30
[China] Shao-hsing reign-period, 27th year, 3rd month, day *i-yu* (22). "A red vapour appeared at the wall of *Tzu-wei*." (*Sung-shih*, 60, 64) (DC265)

N.B. Recorded as 2nd month in *Sung-shih*, 60.

219. 1157 Nov 13
[China] Shao-hsing reign-period, 27th year, 10th month, day *jen-yin* (39). "There was a red vapour like fire." (*Sung-shih*, 64) (DC266)

220. 1160 Apr 1
(i) [China] Shao-hsing reign-period, 30th year, 1st month, day *jen-shen* (9) (error in date, read 2nd month) "In the NE direction, there was a belt of red vapour. In five places there were shadows of fire." (*Sung-shih*, 60) (DC267)

(ii) [China] Shao-hsing reign-period, 30th year, 2nd month, day *jen-shen* (9). "There was a red vapour like fire." (*Sung-shih*, 64) (DC267)

(iii) [China] Shao-hsing reign-period, 30th year, 2nd month, day *jen-shen* (9). "Along the NW, N and NE directions, in about five places, there were red vapours like the shadows of fire." (*Wen-hsien T'ung-k'ao*, 294) (DC267)

221. 1165 Sep 12
[China] Ch'ien-tao reign-period, 1st year, 8th month, day *jen-wu* (19). "There was a red vapour at the zenith. It lasted from sunset until the first watch of the night." (*Sung-shih*, 64) (DC268)

222. 1165 Nov 18
[China] Ch'ien-tao reign-period, 1st year, 10th month, day *chi-ch'ou* (26). "At night, a green-white vapour was seen in the S direction. It entered the lunar lodge *I*." (*Sung-shih*, 66) (DC269)

223. 1170 Dec 6
[Japan] Kao reign-period, 2nd year, 10th month, 27th day. "In the W direction, there was a red vapour." (*Nihon Temmon Shiryo*, 8) (DC270)

224. 1171 Feb 28
[Japan] Shoan reign-period, 1st year, 1st month, 22nd day. "In the S direction, there was a red vapour. It was shaped like a wheel." (*Nihon Temmon Shiryo*, 7) (DC271)

225. 1175 Sep 18
[Japan] Angen reign-period, 1st year, 9th month, 2nd day, *keng-ch'en* (17). "Tonight, in the sky there was a fire-vapour." (*Nihon Temmon Shiryo*, 8) (DC273)

226. 1175 Nov 13
[Korea] King Myongjong, 5th year, intercalary 9th month, day *ping-tzu* (13). "A red vapour like fire was seen in the SE direction. It turned dark and then extinguished." (*Koryo-sa*, 53) (DC274)

227. 1176 Mar 13
[Korea] King Myongjong, 6th year, 2nd month, day *ting-ch'ou* (14). "At night, a red vapour of bad omen was seen at the NW direction. It was like blazing smoke. In the S direction it was also like this." (*Koryo-sa*, 53) (DC275)

228. 1176 Mar 19
[Korea] King Myongjong, 6th year, 2nd month, day *kuei-wei* (20). "At night, a red vapour was again seen in the W direction. Its form was like a shield with a length of about 15 *ch'ih*." (*Koryo-sa*, 53) (DC276)

229. 1176 Dec 5
[Japan] Angen reign-period, 2nd year, 11th month, 3rd day, *chia-ch'en* (41). "Lately, there have been red vapours in the sky. Among these, the red vapour of this morning was the most extraordinary. The sky was like sunrise with a colourful light shining on the ground." (*Nihon Temmon Shiryo*, 8) (DC277)

230. 1177 Feb 19
[Korea] King Myongjong, 7th year, 1st month, day *keng-shen* (57). "A red vapour like fire was seen in the E direction. It was also seen in the SW and NW directions." (*Koryo-sa*, 53) (DC278)

231. 1177 May 31
[Japan] Jisho reign-period, 1st year, 5th month, 2nd day, *hsin-ch'ou* (38). "At the hour *hsu* (9–11 p.m.), suddenly, the NE sky shone brilliantly; the people were afraid." (*Nihon Temmon Shiryo*, 8) (DC279)

232. 1178 Apr 7
[Korea] King Myongjong, 8th year, 3rd month, day *jen-tzu* (49). "In all directions, there were red vapours like fire." (*Koryo-sa*, 53) (DC280)

233. 1178 Nov 12
[Korea] King Myongjong, 8th year, 10th month, day *hsin-mao* (28). "At midnight, it was very cloudy and dark. In the NW direction, an obscure brightness illuminated the ground. There were shadows of men. They lasted through the night." (*Koryo-sa*, 53) (DC281)

234. 1178 Nov 15
[Korea] King Myongjong, 8th year, 10th month, day *chia-wu* (31). "In the N direction, there was a vapour like the Sun." (*Koryo-sa*, 53) (DC282)

235. 1178 Dec 11
[Korea] King Myongjong, 8th year, 11th month, day *keng-shen* (57), 1st day of the month.

"In the S direction, the sky was bright, there was a vapour like fire." (*Koryo-sa*, 53) (DC283)

236. 1178 Dec 14
[Korea] King Myongjong, 8th year, 11th month, day *kuei-hai* (60). "At night, it was again seen at the SW (following the entry of 1178 Dec 11)." (*Koryo-sa*, 53) (DC284)

237. 1179 Mar 12
[Korea] King Myongjong, 9th year, 2nd month, day *hsin-mao* (28). "A red vapour like fire was seen in the S direction." (*Koryo-sa*, 53) (DC285)

238. 1180 Mar 28
[Korea] King Myongjong, 10th year, 3rd month, day *kuei-ch'ou* (50). "In the NW direction, there was a red vapour like fire." (*Koryo-sa*, 53) (DC286)

239. 1180 Aug 23
[Korea] King Myongjong, 10th year, 8th month, day *hsin-yu* (58). "In the N direction, there was a red vapour like fire." (*Koryo-sa*, 53) (DC287)

240. 1181 Sep 4
[Korea] King Myongjong, 11th year, 7th month, day *wu-hsu* (35). "There was a red vapour soaring into the sky." (*Koryo-sa*, 53) (DC288)

241. 1185 Mar 26
[Korea] King Myongjong, 15th year, 2nd month, day *ting-ch'ou* (14). "At night, on the E and W horizons, there were red colours like the shadows of fire." (*Koryo-sa*, 53) (DC289)

242. 1188 Sep 29
[China] Shun-hsi reign-period, 15th year, 9th month, day *keng-tzu* (37). "At night, in the S direction, there was a red vapour; it covered the palace." (*Sung-shih*, 35, 67) (DC290)

243. 1188 Oct 29-31
[Korea] King Myongjong, 18th year, 10th month, day *keng-wu* (7). "In the SW direction, there was a red vapour like fire for three days." (*Koryo-sa*, 53) (DC291-293)

244. 1192 Dec 29
[Korea] King Myongjong, 22nd year, 11th month, day *jen-ch'en* (29). "A red vapour like fire was seen in the W direction". (*Koryo-sa*, 53) (DC294)

245. 1193 Jan 22
[N. China] Ming-ch'ang reign-period, 3rd year, 12th month, *ping-ch'en* (53). "In the N direction, there was a small amount of red vapour." (*Kin-shih*, 20) (DC295)

246. 1193 Apr/May
[N. China] Ming-ch'ang reign-period, 4th year, 3rd month. "In the N direction, there was a red vapour. At dawn then it was dispersed." (*Kin-shih*, 23) (DC296)

247. 1193 Dec 5
[China] Shao-hsi reign-period, 4th year, 11th month, day *kuei-yu* (10). "At night, there was a red cloud and a white vapour." (*Sung-shih*, 36) (DC297)

248. 1193 Dec 6
(i) [China] Shao-hsi reign-period, 4th year, 11th month, day *chia-hsu* (11). "At night, a red cloud and a white vapour were seen." (*Sung-shih*, 60) (DC298)

(ii) [China] "A red cloud was seen at night; it was divided by a white vapour." (*Sung-shih*, 64) (DC298)

249. 1194 Oct 23
[China] Shao-hsi reign-period, 5th year, 10th month, day *i-wei* (32). "There was a yellow-red vapour in the sky." (*Sung-shih*, 67) (DC299)

250. 1195 Apr 8
[Korea] King Myongjong, 25th year, 2nd month, day *jen-wu* (19). "At night, a red vapour like fire was seen in the E and W directions." (*Koryo-sa*, 53) (DC300)

251. 1196 Aug 28
[Korea] King Myongjong, 26th year, 8th month, day *wu-shen* (45). "At night, a vapour stretched across the sky; it was red like blood." (*Koryo-sa*, 53) (DC301)

252. 1196 Nov 9
[Korea] King Myongjong, 26th year, 10th month, day *kuei-hai* (60). "A red vapour like fire was seen in the S direction." (*Koryo-sa*, 53) (DC302)

253. 1200 Jan 4
[Korea] King Sinjong, 2nd year, 12th month, day *chia-hsu* (11). "A red vapour like fire (extended) from the NE to NW." (*Koryo-sa*, 53) (DC303)

254. 1200 Nov/Dec
[China] Ch'ing-yuan reign-period, 6th year, 10th month. "At night, a red vapour was emitted across the sky." (*Sung-shih*, 64) (DC304)

Part 2. The Period from AD 1201 to 1500

255. 1202 Dec 19
[Japan] Kennin reign-period, 2nd year, 11th month, 4th day. "At the hour *hsu* (7–9 p.m.), there was a red vapour." (*Nihon Temmon Shiryo*, 8) (DC305)

256. 1203 Nov 14
[N. China] T'ai-ho reign-period, 3rd year, 10th month, day *chia-ch'en* (41). "The colour of the sky was red; was it the night returning to dawn?" (*Kin-shih*, 20)

257. 1204 Feb 21-22
(i) [Japan] Genkyu reign-period, 1st year, 1st month, 19th day. "After dusk, in the N and NE directions, there were red vapours. Their roots were like the Moon rising in the E. They were bright and white in colour. Their branches were flickering like the light from a funeral pyre at a distance. In four or five places they were white in colour and three or four of the stems were red. They were not clouds; if they were clouds stars would not be seen. In the brighter part, it seemed as if the white and red lights were interchanging. They were very strange indeed and terrifying." (*Nihon Temmon Shiryo*, 8) (DC306-307)

(ii) [Japan] 19th day. "At the hour *hsu* (7–9 p.m.), a red vapour and a white cloud were interchanging. They were seen from the NW to NNE. On the 20th day (i.e. the next day), it was the same." (*Nihon Temmon Shiryo*, 8) (DC306-307)

258. 1204 Feb 23
[Japan] Genkyu reign-period, 1st year, 1st month, 21st day. "After dark, in the N to NE direction, there was again a red vapour. It was like funeral pyres burning in the distant mountains. It was most terrifying." (*Nihon Temmon Shiryo*, 8) (DC308)

259. 1204 Mar 29
(i) [China] Chia-t'ai reign-period, 4th year, 2nd month, day *keng-shen* (57). "At night, a red vapour extended across the sky." (*Sung-shih*, 38) (DC309)

(ii) [China] Chia-t'ai reign-period, 4th year, 2nd month, day *keng-ch'en* (17) (should read *keng-shen* as in preceding entry) "At night, a red vapour mixed with a white vapour was stretching across the N sky." (*Sung-shih*, 64) (DC309)

260. 1204 Apr/May
[N. China] T'ai-ho reign-period, 4th year, 3rd month. "At the zenith towards the N, there was a dark red colour like that of blood." (*Ta-kin Kuo-chih*, 20) (DC310)

261. 1205 Oct 18
[N. China] T'ai-ho reign-period, 5th year, 9th month, day *wu-tzu* (25). "At the hour *hsu* (7–9 p.m.), in the NW direction, there was a dark cloud partitioned by red vapours like fire. Also, the SW, S and SE directions were reddened, with white vapours, now

visible now hidden, penetrating through them. It started to rain, followed by wind. At the beginning of the 2nd watch, those red vapours among the dark clouds rose again in the NW, and also in the W, E and NE. They kept floating to and fro. Within them, several bands of white vapour appeared at times. Thereafter, a red vapour again filled the sky at the zenith. At about the 4th watch, they were all dispersed." (*Kin-shih*, 20) (DC311)

262. 1206 Oct 10
[N. China] T'ai-ho reign-period, 6th year, 9th month, day *i-yu* (22). "At night, near dawn, in the N direction, there were several bands of red-white vapour oppressing *Wang-liang* from below. Gradually, they moved to the E of *Pei-tou* and then they dispersed." (*Kin-shih*, 20) (DC312)

263. 1207 Jan 25
[N. China] T'ai-ho reign-period, 6th year, 12th month, day *jen-shen* (9). "At night, at Hsing-Chow, the sky was red like blood; it illuminated the ground like daytime." (*Ta-kin Kuo-chih*, 21) (DC313)

264. 1209 May 14
[N. China] Ta-an reign-period, 1st year, 4th month, day *jen-shen* (9). "In the N direction, there was a dark vapour like a wide road extending across the sky from N to E. It lasted until the 5th watch and then it dispersed." (*Kin-shih*, 20)

265. 1213 Dec 2
[China] Chia-ting reign-period, 6th year, 10th month, day *i-mao* (52). "There was a red vapour like sunrise." (*Wen-hsien T'ung-k'ao*, 294) (DC314)

266. 1222 Dec 7
[N. China] Yuan-kuang reign-period, 1st year, 11th month, day *ting-wei* (44). "In the NE, there was a red cloud like fire." (*Kin-shih*, 20) (DC317)

267. 1224 Oct 15
[Korea] King Kojong, 11th year, 9th month, day *i-ch'ou* (2). "A red cloud (extended) from the SW to N. It was like the shadows of fire." (*Koryo-sa*, 53) (DC318)

268. 1226 Apr 13
[N China] Cheng-ta reign-period, 3rd year, 3rd month, *keng-wu* (7). "Before daybreak, there was a slightly yellow vapour. From the NE, it stretched to the SW. Its form was like a rainbow. Within it there were more than 10 white objects flying to and fro. Also, a light similar to two stars was suddenly seen. After the lapse of a short time it was then extinguished." (*Kin-shih*, 20) (DC320)

269. 1226 Autumn
[Korea] King Kojong, 13th year, autumn. "In the W, there was a yellow-red vapour; it was extraordinarily luminous." (*Chungbo Munhon Pigo*, 8) (DC321)

270. 1227 Jul 20
[Korea] King Kojong, 14th year, 6th month, day *kuei-ch'ou* (50). "A red rainbow soared into the sky. Its head and tail touched the Earth." (*Koryo-sa*, 53) (DC322)

271. 1227 Sep 1
[Japan] Antei reign-period, 1st year, 7th month, 19th day, *ping-shen* (33). "After a fairly severe thunderstorm, at the hour *hai* (9–11 p.m.), the sky was somewhat clearer. From the western mountains, a red vapour was standing up almost reaching the sky. It was red-white in colour. Its west end was hidden in the dark clouds and its east end was shining like the bright Moon, now appearing and now disappearing. After a short while, it was dispersed. Near dawn, there was heavy rain again." (*Nihon Temmon Shiryo*, 8) (DC323)

272. 1229 Sep 9
[Korea] King Kojong, 16th year, 8th month, day *chi-mao* (16). "From the NE to the SE there was a red vapour like fire." (*Koryo-sa*, 53) (DC324)

273. 1239 May 27
[Japan] En-o reign-period, 1st year, 4th month, 23rd day, *jen-hsu* (59). "The sky was clear. At the hour *hsu* (7–9 p.m.), there was a baleful vapour with its rays pointing towards the SE. It was 8 *ch'ih* in length and 1 *ch'ih* in width. It was white-red in colour. Although without a star body, its brightness illuminated the sky like a forest fire. Everyone in the palace had seen it and was curious about it. It continued for about two hours and then it dispersed." (*Nihon Temmon Shiryo*, 6) (DC325)

274. 1240 Mar 17
[Japan] Ninji reign-period, 1st year, 2nd month, 22nd day, *ting-szu* (54). "Tonight, the weather was fine. At about the hour *hai* (9–11 p.m.), the western sky was again luminous. Its cause was not known." (*Nihon Temmon Shiryo*, 7) (DC326)

275. 1241 Mar 17
[Japan] Ninji reign-period, 2nd year, 2nd month, 4th day, *jen-hsu* (59). "At the hour *hsu* (7–9 p.m.), three bands of white-red vapour appeared. Gradually, they dispersed. The red vapour on its eastern side reappeared with a length of 7 *ch'ih*. The original vapour was becoming smaller. On its western side, a band of red vapour appeared with a length of 4 *ch'ih*. The onlookers were bewildered." (*Nihon Temmon Shiryo*, 8) (DC327)

276. 1247 Aug 10
(i) [Japan] Hoji reign-period, 1st year, 7th month, 8th day, *chi-wei* (56) "The night was bright and there was a red vapour in the N direction." (*Nihon Temmon Shiryo*, 8) (DC328)

(ii) [Japan] "At the hour *hai* (9–11 p.m.), a red vapour was seen in the N direction like a forest fire. Within it there were several patches of white vapour, intertwining one another and obscuring *Pei-tou*. They dispersed after a while." (*Nihon Temmon Shiryo*, 8) (DC328)

277. 1252 Jan 2
[Korea] King Kojong, 38th year, 11th month, day *i-szu* (42). "In the NE direction, there was a red vapour like blood." (*Koryo-sa*, 53) (DC329)

278. 1253 Aug 29
[Korea] King Kojong, 40th year, 8th month, day *keng-hsu* (47). "In the W, there was a yellow-red vapour. It was extremely bright." (*Koryo-sa*, 53) (DC330)

279. 1257 Mar 14
[Korea] King Kojong, 44th year, 2nd month, day *kuei-wei* (20). "At night, a red vapour stretched across the sky. It was as bright as day." (*Koryo-sa*, 53) (DC331)

280. 1257 Jun 26
[Korea] King Kojong, 44th year, 5th month, day *ting-mao* (4). "In the SE direction, there was a red vapour; it soared into the sky." (*Koryo-sa*, 53) (DC332)

281. 1257 Aug 2
[Korea] King Kojong, 44th year, 6th month, day *chia-hsu* (11). "Yellow-red clouds were all over the sky. It was as bright as day." (*Koryo-sa*, 55) (DC333)

282. 1259 Jan 14
[Korea] King Kojong, 45th year, 12th month, day *chia-wu* (31). "In the E, there was a yellow-red vapour soaring into the sky." (*Koryo-sa*, 53) (DC334)

283. 1259 Jan 26
[Korea] King Kojong, 46th year, 1st month, day *ping-wu* (43). "A red vapour soared into the sky like flames." (*Koryo-sa*, 53) (DC335)

284. 1260 Oct 30
[Korea] King Wonjong, 1st year, 9th month, day *chi-ch'ou* (26). "In the N direction, a red vapour like fire stretched across the sky." (*Koryo-sa*, 53) (DC336)

285. 1260 Dec 4
[Korea] King Wonjong, 1st year, 11th month, day *chi-wei* (56). "At the 2nd watch, in both the NW and SE directions red vapours stretched across the sky. At the 3rd watch, they soared into the sky in the NW direction." (*Koryo-sa*, 53) (DC337)

286. 1260 Dec 26
[Korea] King Wonjong, 1st year, 11th month, day *ping-hsu* (23). "In the NE direction, a red vapour like fire soared vertically into the sky." (*Koryo-sa*, 53) (DC338)

287. 1262 Feb 9
[China] Chung-t'ung reign-period, 2nd year, 1st month spring, day *hsin-wei* (8). "At night, in the NE a red vapour shone on people. It was as large as a mat." (*Yuan-shih*, 4) (DC339)

288. 1263 Feb 26-27
(i) [Japan] Kocho reign-period, 3rd year, 1st month, 17th day, *wu-hsu* (35). "At the hour *hsu* (7–9 p.m.), the NW and SE directions were as if in flames. When the light in one corner was bright, the light in another was dim and vice versa. The onlookers were bewildered." (*Nihon Temmon Shiryo*, 8) (DC340-DC341)

(ii) [Japan] 18th day, *chi-hai* (36). "It was dull. In the NW and SE, the brightness was similar to that of the previous night." (*Nihon Temmon Shiryo*, 8) (DC340-DC341)

289. 1277 Sep 11
[China] Ching-yen reign-period, 2nd year, 8th month, day *chi-szu* (6). "At night, the sky was red in colour." (*Hsu Wen-hsien T'ung-k'ao*, 212) (DC343)

290. 1278 Mar 26
[Korea] King Ch'ungnyol Wang, 4th year, 3rd month, day *i-yu* (22). "A red vapour was seen in the S direction. The night was as bright as day." (*Koryo-sa*, 53) (DC344)

291. 1279 Oct 25
[Korea] King Ch'ungnyol Wang, 5th year, 9th month, day *kuei-hai* (60). "A violet vapour was seen in the W direction. It was more than 10 *ch'ih* in length. Its light was similar to that of lightning." (*Koryo-sa*, 53) (DC345)

292. 1288 Nov 13
[Korea] King Ch'ungnyol Wang, 14th year, 10th month, *keng-wu* (7). "A red vapour was seen in the E direction. Sometimes it was like a piece of silk cloth; sometimes it was like a blazing fire." (*Koryo-sa*, 53) (DC346)

293. 1296 Feb 29
[Korea] King Ch'ungnyol Wang, 22nd year, 1st month, day *chia-wu* (31). "A red-white vapour soared into the sky." (*Koryo-sa*, 53) (DC347)

294. 1316 Mar 24
[Korea] King Ch'ungsuk Wang, 3rd year, 3rd month, *kuei-mao* (40), the last day of the month. "Red vapours were seen in the SE. Three of these were like torches." (*Koryo-sa*, 53) (DC348)

295. 1320 Feb 1
[Korea] King Ch'ungsuk Wang, 6th year, 12th month, *jen-shen* (9). "At night, there was a red vapour." (*Koryo-sa*, 53) (DC349)

296. 1323 Aug 19
[Korea] King Ch'ungsuk Wang, 10th year, 7th month, day *ting-wei* (44). "A violet vapour like a rainbow was seen in the NW. Suddenly, it turned yellow and spread all over the sky." (*Koryo-sa*, 53) (DC350)

297. 1347 Aug 12
[Korea] King Ch'ungmok Wang, 3rd year, 7th month autumn, day *ping-wu* (43). "At night, a rainbow rose in the E and fell on Nan-shan mountains. Suddenly, it rose again but divided into two. They moved separately to the N and S." (*Koryo-sa*, 53) (DC351)

298. 1347 Aug 29
[China] Chih-yuan reign-period, 7th year, 7th month, 23rd day, *jen-ch'en* (29). "At the early watch, suddenly, an auspicious light illuminated the sky with variegated colours. It extended over 100 *li*. People were struggling with one another to catch a glimpse. It continued until midnight when it dispersed." (*Hai-ning Hsien-chih*) (DC352)

299. 1349 Jul 18
[Japan] Shohei reign-period, 4th year, intercalary 6th month, 3rd day. "At the hour

hsu (7–9 p.m.), the SE and NW directions were brilliantly lit like in a battle." (*Nihon Temmon Shiryo*, 8) (DC353)

300. 1354 Dec 18
[China] Chih-cheng reign-period, 14th year, 12th month, day *hsin-mao* (28). "In Chiang-Chow, there was a red vapour. It rose in the N direction and covered almost half of the sky. After the lapse of a short time it was then dispersed." (*Yuan-shih*, 51) (DC354)

301. 1354
[China] Chih-cheng reign-period, 14th year. "In Wei-hui-lu Province, there was a sky brightness seen in the W direction." (*Yuan-shih*, 51) (DC355)

302. 1358 Feb 28
[Korea] King Kongmin Wang, 7th year, 1st month, day *chi-wei* (56). "At night, a violet vapour soared (into the sky) from the NW." (*Koryo-sa*, 53) (DC356)

303. 1358 Apr 11
[Korea] King Kongmin Wang, 7th year, 3rd month, day *hsin-ch'ou* (38). "At night, a red vapour was seen in the NE direction." (*Koryo-sa*, 53) (DC357)

304. 1359
[China] Chih-cheng reign-period, 19th year. "At midnight, a red vapour stretched across the horizon from NW to NE." (*T'ien-tsin Fu-chih* and *Yen-shan Hsien-chih*) (DC358)

305. 1359 Feb 20
[Korea] King Kongmin Wang, 8th year, 1st month, day *ping-ch'en* (53). "At night, a violet vapour soared (into the sky) from the NW." (*Koryo-sa*, 53) (DC359)

306. 1359 Oct 21
[China] Chih-cheng reign-period, year *chi-hai* (36), 9th month, last day of the month. "I reached Chia-ho at dawn, at the time when the morning star was still on the tree tops. Suddenly, the sky at the SW split open several tens of hundreds of *chang*. It had flames similar to a fierce fire which thoroughly illuminated the wilderness. At once, the village dogs all started to bark and the roosting birds cried and flew. When I looked carefully at the place where the sky had been split I saw wriggling motion. Within it, it was again very bright as if gold was being melted by a foundry worker. The opening closed after a little while. The boatman said to me, 'This is the sky opening its eye.' " (*Chia-hsing Hsien-chih* and *Lo-chiao Szu-yu*) (DC360)

307. 1361 Aug 21
[China] Chih-cheng reign-period, 21st year, 7th month, day *chi-szu* (6). "At the NW of Hsin-chou in Chi-ning-lu, there was a red vapour covering the sky like blood. It continued for a long while then it dispersed." (*Yuan-shih*, 51) (DC361)

308. 1361 Sep 3
[China] Chih-cheng reign-period, 21st year, 8th month, day *jen-wu* (19). "At midnight in Ti-Chow, a red vapour stretched across the sky. It rose in the NW and reached the NE." (*Yuan-shih*, 51; *Hui-min Hsien-chih*, 17; *Wu-ting Fu-chih*, 14) (DC362)

309. 1361 Sep 4
[China] Chih-cheng reign-period, 21st year, 8th month, day *kuei-wei* (20). "At the NW of Chang-te, at night, a red vapour stretched across the sky. It lasted until dawn then it ceased." (*Yuan-shih*, 51) (DC363)

310. 1361 Sep 6
[China] Chih-cheng reign-period, 21st year, 8th month, day *i-yu* (22). "At the N of Ta-tung-lu, at night, a red vapour covered the sky. It stood vertically and passed through the heavens. It extended from E to W. After the lapse of a short time it was then dispersed. There were three such vapours." (*Yuan-shih*, 51) (DC364)

311. 1361 Nov 13
[China] Chih-cheng reign-period, 21st year, 10th month, day *kuei-szu* (30). "Just before daylight, in the N direction of Chian-chow there was a red vapour like fire." (*Yuan-shih*, 51) (DC365)

312. 1362 Dec 19
[Korea] King Kongmin Wang, 11th year, 12th month, day *chia-hsu* (11). "At night, there was a violet vapour seen in the NW direction." (*Koryo-sa*, 53) (DC366)

313. 1363 Apr 6
[China] Chih-cheng reign-period, 23rd year, 3rd month, day *jen-hsu* (59). "At night, in Ta-tung-lu, there was a red vapour stretching across the sky. Its middle part invaded *Pei-tou*." (*Yuan-shih*, 51) (DC367)

314. 1363 Jul 30
(i) [China] Chih-cheng reign-period, 23rd year, 6th month, day *ting-szu* (54). "At dusk in Chian-chow, a red light like fire was seen in the N direction. Within, it was interspersed with dark vapours. Also, there were two white rainbows soaring straight into *Pei-tou*. After a long time then they were dispersed." (*Yuan-shih*, 51) (DC368)

(ii) [Japan] Shohei reign-period, 18th year, 6th month, 19th day, *ting-szu* (54). "During the night, in the NE and N directions there was a light similar to a distant funeral pyre. The cause was not known; some said that this was a sign of a drought." (*Nihon Temmon Shiryo*, 8) (DC368)

(iii) [Japan] "Tonight, there was a red vapour in the N and NE. Was this a sign of a severe drought?" (*Nihon Temmon Shiryo*, 8) (DC368)

315. 1363 Aug 2
[China] Chih-cheng reign-period, 23rd year, 6th month, day *keng-shen* (57). "At dusk, to the N of Chin-ning-lu, the sky was red. Within it there were three white vapours like rainbows. One penetrated *Pei-tou*, one penetrated *Pei-chi* and one penetrated *T'ien-huang*. Not until midnight were they extinguished." (*Yuan-shih*, 51) (DC369)

316. 1363 Sep 27
[China] Chih-cheng reign-period, 23rd year, 8th month, day *ping-ch'en* (53). "At night, to the NE of Hsin-chow, there was a red vapour stretching across the sky. Within it

there was a white vapour like a snake. It gradually moved towards the W. After a long time then it was dispersed." (*Yuan-shih*, 51) (DC370)

317. 1363 Nov 6
[China] Chih-cheng reign-period, 23rd year, 10th month, day *ping-shen* (33), 1st day of the month. "In Ta-ming-lu, towards the directions of Ching and Chi (counties), there was a red vapour shining brilliantly for a thousand *li*." (*Yuan-shih*, 51) (DC371)

318. 1364 Feb 26
[Korea] King Kongmin Wang, 13th year, 1st month, day *wu-tzu* (25). "At night, in the SW there was a red vapour like a dragon." (*Koryo-sa*, 53) (DC372)

319. 1364 Oct 8
(i) [China] Chih-cheng reign-period, 24th year, 9th month, day *kuei-yu* (10). "At the NW of Ping-chin county in Chi-ning-lu, at night, half of the sky was red like a partitioned-wall. A little while later, it dispersed from the E." (*Yuan-shih*, 51) (DC373)

(ii) [China] "At night, in the NW sky there was a red light, it reached E and then it dispersed." (*Hsu Wen-hsien T'ung-k'ao*, 212 and *T'ai-yuan Hsien-chih*, 15) (DC373)

320. 1365 Mar 14
[Korea] King Kongmin Wang, 14th year, 2nd month, day *keng-hsu* (47). "At night, a red vapour was seen in the W direction." (*Koryo-sa*, 53) (DC374)

321. 1365 Mar 17
[Korea] King Kongmin Wang, 14th year, 2nd month, day *kuei-ch'ou* (50). "At night, a red vapour was seen in the E direction." (*Koryo-sa*, 53) (DC375)

322. 1365 Mar 19
[Korea] King Kongmin Wang, 14th year, 2nd month, day *i-mao* (52). "At night, a red vapour was seen in the S and N directions." (*Koryo-sa*, 53) (DC376)

323. 1365 Aug 15
[Korea] King Kongmin Wang, 14th year, 7th month, day *chia-shen* (21). "At night, in the E direction, there was a red cloud." (*Koryo-sa*, 53) (DC377)

324. 1367 Feb 7
[Korea] King Kongmin Wang, 16th year, 1st month, day *i-yu* (22). "There was a red vapour like fire. Most of it was in the W direction." (*Koryo-sa*, 53) (DC378)

325. 1367 Feb 28
(i) [Korea] King Kongmin Wang, 16th year, 1st month, day *ping-wu* (43). "At night, in the W direction it was as bright as daylight." (*Koryo-sa*, 54) (DC379)

(ii) [Korea] "At night, a red vapour was seen in the E direction." (*Koryo-sa*, 53) (DC379)

326. 1367 Mar 1
[Korea] King Kongmin Wang, 16th year, 2nd month, day *ting-wei* (44). "At night, a red vapour was seen in the E and W." (*Koryo-sa*, 53) (DC380)

327. 1367 Mar 2
[Korea] King Kongmin Wang, 16th year, 2nd month, day *wu-shen* (45). "At night, a red vapour was seen in the E." (*Koryo-sa*, 53) (DC381)

328. 1367 Mar 4
[Korea] King Kongmin Wang, 16th year, 2nd month, day *keng-hsu* (47). "At night, red vapours soared into the sky from the E, W and S directions." (*Koryo-sa*, 53) (DC382)

329. 1367 Mar 6
[Korea] King Kongmin Wang, 16th year, 2nd month, day *jen-tzu* (49). "At night, a red vapour soared into the sky." (*Koryo-sa*, 53) (DC383)

330. 1367 Jun 13
[Korea] King Kongmin Wang, 16th year, 5th month, day *hsin-mao* (28). "At night, a red vapour was seen in the NW." (*Koryo-sa*, 53) (DC384)

331. 1367 Jun 14
[Korea] King Kongmin Wang, 16th year, 5th month, day *jen-ch'en* (29). "At night, a red vapour was seen in the NE." (*Koryo-sa*, 53) (DC385)

332. 1368 Feb 21
[Korea] King Kongmin Wang, 17th year, 2nd month, day *chia-ch'en* (41). "At night, there was a red vapour like fire." (*Koryo-sa*, 53) (DC386)

333. 1368 Mar 10 and Mar 12
[Korea] King Kongmin Wang, 17th year, 2nd month, day *jen-hsu* (59). "At night, there was a red vapour. On day *chia-tzu* (1), it was the same." (*Koryo-sa*, 53) (DC387-388)

334. 1368 Mar 19 to 23
[Korea] King Kongmin Wang, 17th year, 3rd month, day *hsin-wei* (8), 1st day of the month. "At night, there was a red vapour like fire. It lasted until day *i-hai* (12)" (*Koryo-sa*, 53) (DC389-393)

335. 1368 Jul 19
(i) [China] Chih-cheng reign-period, 28th year, 7th month, day *kuei-yu* (10). "In the capital, a red vapour filled the sky like a light shining upon people. It lasted from the hour *yin* to (the hour) *ch'en* ($\sim$ 3 to 9 a.m.); both vapour and flame then ceased." (*Yuan-shih*, 51) (DC394)

(ii) [China] Chih-cheng reign-period, 28th year, 7th month, autumn, day *kuei-yu* (10). "In the capital, a red vapour filled the sky like a fire shining upon people." (*Hsu Tzu-chih-T'ung-chien*) (DC394)

336. 1369 Dec 15
[Korea] King Kongmin Wang, 18th year, 11th month, day *ting-wei* (44). "A red vapour like fire was seen in the SW." (*Koryo-sa*, 53) (DC395)

337. 1370 Feb 11
(i) [Korea] King Kongmin Wang, 19th year, 1st month, day *chia-ch'en* (41). "A violet

vapour filled the NW sky. The shadows it cast were all in the S." (*Koryo-sa*, 53) (DC396)

(ii) [Korea] King Kongmin Wang, 19th year, 1st month. "This evening, to the NW of the capital, a violet vapour filled the sky. The shadows it cast were all in the S." (*T'aejo Sillok*) (DC396)

338. 1370 Aug/Sep
[Korea] King Kongmin Wang, 19th year, 8th month. "Tonight, there was a red vapour shooting towards the camp like a blazing fire." (*T'aejo Sillok*) (DC397)

339. 1370 Oct 27
[Japan] Kentoku reign-period, 1st year, 10th month, 8th day. "From the hour of *hsu* (7–9 p.m.) onwards, a red vapour was seen in the northern sky. It lasted until midnight. Its form was like a burning object. Everyone was puzzled. This was also seen last year." (*Nihon Temmon Shiryo*, 8) (DC398)

340. 1370 Nov 24
[Japan] Kentoku reign-period, 1st year, 11th month, 6th day, *hsin-mao* (28). "At night, in the hours of *tzu* (11 p.m.–1 a.m.), *ch'ou* (1–3 a.m.) and *yin* (3–5 a.m.), in the northern sky there appeared a red vapour. Afterwards, its colour gradually became deep red. The people were frightened. There were also different sizes of white and dark coloured ribbons. Towards the S and N there appeared a brightness above the red vapour. It was an extraordinary scene." (*Nihon Temmon Shiryo*, 8) (DC399)

341. 1370 Nov 25
[Japan] Kentoku reign-period, 1st year, 11th month, 7th day, *jen-ch'en* (29). "A red vapour was seen in the N direction. There was also a light of dim and white colours." (*Nihon Temmon Shiryo*, 8) (DC400)

342. 1371 Oct/Nov
[Japan] Kentoku reign-period, 2nd year, 9th month. "A red vapour was seen in the N direction." (*Nihon Temmon Shiryo*, 8) (DC401)

343. 1380 Apr 2
[Korea] King Sin'u, 6th year, 2nd month, day *wu-tzu* (25). "A red vapour was seen in the W direction as bright as a torch." (*Koryo-sa*, 53) (DC402)

344. 1381 Feb 27
[Korea] King Sin'u, 7th year, 2nd month, day *chi-wei* (56). "In the SW and N directions, a red vapour like blood floated in the air." (*Koryo-sa*, 53) (DC403)

345. 1397 Dec 22
[Korea] King T'aejo, 6th year, 12th month, day *hsin-szu* (18). "At night, in the E and W directions, there were red vapours." (*T'aejo Sillok*) (DC405)

346. 1400 Jul 23
[Korea] King Chongjong, 2nd year, 7th month, day *i-ch'ou* (2). "At dawn, in the N direction, there was a red vapour." (*Chongjong Sillok*) (DC406)

347. 1401 Feb 5
[Korea] King T'aejong, 1st year, 1st month, day *jen-wu* (19). "At night, there were red vapours in all directions." (*T'aejong Sillok*) (DC407)

348. 1401 Feb 7
[Korea] King T'aejong, 1st year, 1st month, day *chia-shen* (21). "At night, there was a red vapour in the SE." (*T'aejong Sillok*) (DC408)

349. 1402 Jan 7
[Korea] King T'aejong, 1st year, 12th month, day *wu-wu* (55). "At dusk, in the E there was a red vapour stretching across the sky." (*T'aejong Sillok*) (DC409)

350. 1403 Feb 16
[Korea] King T'aejong, 3rd year, 1st month, day *kuei-mao* (40). "At night, in the NE and SE directions, there were red vapours and in the W direction, there was a white vapour." (*T'aejong Sillok*) (DC410)

351. 1403 Mar 8
[Korea] King T'aejong, 3rd year, 2nd month, day *kuei-hai* (60). "At night, in the E direction, there was a red vapour." (*T'aejong Sillok*) (DC411)

352. 1405 Jan 10
[Korea] King T'aejong, 4th year, 12th month, day *ting-ch'ou* (14). "At night, in the S direction, there was a red vapour." (*T'aejong Sillok*) (DC412)

353. 1405 Jan 21
[Korea] King T'aejong, 4th year, 12th month, day *wu-tzu* (25). "At night, in the ENE and E directions, there were red vapours." (*T'aejong Sillok*) (DC413)

354. 1405 Jan 22 to 23
[Korea] King T'aejong, 4th year, 12th month, day *chi-ch'ou* (26). "At night, in the SE and NW directions, there were red vapours. On day *keng-yin* (27) it was the same." (*T'aejong Sillok*) (DC414-415)

355. 1405 Jan 26
[Korea] King T'aejong, 4th year, 12th month, day *kuei-szu* (30). "At night, in the NE direction, there was a red vapour." (*T'aejong Sillok*) (DC416)

356. 1405 Mar 11
[Korea] King T'aejong, 5th year, 2nd month, day *ting-ch'ou* (14). "At night, in the NE direction, there was a red vapour." (*T'aejong Sillok*) (DC417)

357. 1406 Jan 11
[Korea] King T'aejong, 5th year, 12th month, day *kuei-wei* (20). "At night, in the NE and E directions, there were red vapours." (*T'aejong Sillok*) (DC418)

358. 1406 Jan 16
[Korea] King T'aejong, 5th year, 12th month, day *wu-tzu* (25). "At night, in the NE direction, there was a red vapour." (*T'aejong Sillok*) (DC419)

359. 1409 Aug 15
[Korea] King T'aejong, 9th year, 7th month, day *i-hai* (12). "In the E there were red, black and white vapours shooting into the sky." (*T'aejong Sillok*) (DC420)

360. 1411 Mar 3
[Korea] King T'aejong, 11th year, 2nd month, day *keng-tzu* (37). "At night, in the NW direction, there was a white vapour and also in the NW and SE directions, there were pale red vapours." (*T'aejong Sillok*) (DC421)

361. 1417 Dec 15 and Dec 31
[Korea] "A report from China: 'Yung-lo reign-period, 15th year, 11th month, 8th day. Chen Kuei and others reported that an auspicious light, numerous auspicious clouds and vapours were seen. They shone brightly through the Milky Way. ... On the 18th day, Chen Kuei and others again reported that propitious clouds exhibiting variegated colours, mixed with enshrouding mists, neither smoke nor cloud, also coloured spirals, were floating beautifully in the air. They were transforming, rolling and unrolling, and completely filled the palace. Amidst these propitious clouds appeared an auspicious light, as round as the moon, just above the throne; the light was brightly coloured. It was like flowers from Heaven dazzling with the lustre of gems and shining brilliantly and clearly with a glorious blaze of fire. The stars were clear and the moon was bright, and they floated like candle flames. They continued to float in all directions; twice they covered the palace garden and stayed in the palace for a long time. Everyone including the imperial guards and artisans had seen them.' " (*T'aejong Sillok*) (DC422-423)

362. 1426 Jul 25
[China] Hsuan-te reign-period, 1st year, 6th month, day *kuei-wei* (20). "At night, there was a green-white vapour stretching across the sky from E to W." (*Ming-shih*, 30) (DC426)

363. 1429 Jul 14
[China] Hsuan-te reign-period, 4th year, 6th month, day *wu-tzu* (25). "At night, multi-coloured clouds were seen." (*Ming-shih*, 27) (DC427)

364. 1433 May 13
[Japan] Eikyo reign-period, 5th year, 4th month, 24th day. "Tonight at the hour of *hai* (9-11 p.m.), in the western sky there was a bright object like a vibrating burning pine-splints. Was it a red vapour? It was not clear." (*Nihon Temmon Shiryo*, 8) (DC429)

365. 1433 Oct 10
[China] Hsuan-te reign-period, 8th year, intercalary 8th month, day *ting-ch'ou* (14). "There was a yellowish-red colour seen in the SE direction. It was like a star but not a star, like a cloud but not a cloud; it must be a Kuei-hsieh." (*Ming-shih*, 27) (DC430)

366. 1440 Sep 12
(i) [Japan] Eikyo reign-period, 12th year, 8th month, 16th day. "The whole sky was red like blood; it dispersed after a short while." (*Nihon Temmon Shiryo*, 8) (DC431)

(ii) [Japan] "There was a red vapour extending across the sky." (*Nihon Temmon Shiryo*, 8) (DC431)

367. 1450 Nov 4
[China] Ching-t'ai reign-period, 1st year, 10th month, day *hsin-wei* (8). "There was a dark vapour like smoke and fire extending across the sky from N to S." (*Hsu Wen-hsien T'ung-k'ao*, 216) (DC432)

368. 1455 Aug 14
(i) [Japan] Kosho reign-period, 1st year, 7th month, 2nd day, *i-hai* (12). "... There was a red vapour pointing towards the N. Its shape was like a piece of thin silk, or similar to a red flag. Also it was very much like a rainbow." (*Nihon Temmon Shiryo*, 8) (DC433)

(ii) [Japan] 7th month, 2nd day, *i-hai* (12). "... There was a red vapour shaped like a flag. It pointed and moved towards the N." (*Nihon Temmon Shiryo*, 8) (DC433)

369. 1467 Aug 19 to 21
[Korea] King Sejo, 13th year, 7th month, day *kuei-wei* (20). "In the evening, there was a large star appearing in the E direction with its rays hanging down. Also there was a red light similar in shape, which almost totally eclipsed the large star. At the 3rd watch then it was extinguished. It was like this for three nights." (*Sejo Sillok*) (DC434-436)

370. 1486 Oct 5
[Japan] Bummei reign-period, 18th year, 9th month, 9th day, *hsin-hai* (48). "Today it was heard that late last night at the Eastern River Plain almost everyone had seen several tens of lights over the fields. They were not something created by man; were they elfin fire?" (*Nihon Temmon Shiryo*, 8) (DC437)

371. 1488
[China] Hung-chih reign-period, year *wu-shen* (45). "At Shensi Province, the gate of Heaven was opened, a million calvary troops were seen entering from below." (*Nung-t'ien-yu-hua*, 4) (DC438)

372. 1490 Jan 26
[China] Hung-chih reign-period, 3rd year, 1st month, 6th day. "At midnight, in the N, a red light rose vertically from Earth. It was like rows of trees. From the stars of *Mao* it moved across half of the sky from E to W. Its colour was like a rosy sunset. Through it the constellations were red. Both chickens and dogs cried out." (*Nung-t'ien-yu-hua*) (DC439)

373. 1490 Apr 14
[Japan] Entoku reign-period, 2nd year, 3rd month, 25th day. "On the same night, pillars of fire stood vertically." (*Nihon Temmon Shiryo*, 7) (DC440)

374. 1491 Jan 18
[Japan] Entoku reign-period, 2nd year, 12th month, 6th day. "At night, above this palace there were two pillars of fire; all of the servants had seen them ... they were very extraordinary indeed." (*Nihon Temmon Shiryo*, 7) (DC441)

375. 1491
[China] Hung-chih reign-period, 4th year. "... there was seen a man chasing a red goat in the air from N to S and moving quite fast ..." (*Pao-ting Fu-chih*) (DC442)

376. 1500 Jan
[Japan] Meio reign-period, 8th year, 12th month, winter. "Two bands of red vapour were seen in the SW; they were more than 3 *chang* in length." (*Nihon Temmon Shiryo*, 8) (DC443)

377. 1500 Feb 17
[Japan] Meio reign-period, 9th year, 1st month, 18th day. "At night, an auspicious light was seen." (*Nihon Temmon Shiryo*, 8) (DC444)

Part 3. The Period from AD 1501 to 1600

378. 1506 Jan 24
[China] Cheng-te reign-period, 1st year, 1st month, 1st day. "At the true N the sky split apart with a red light of two *chang* in width and several tens of *chang* in length. A moment later, the light was extinguished; it was like rolling a mat from below and upwards." (*Chien-ning Fu-chih*) (DC445)

379. 1506 Apr 21
[China] Cheng-te reign-period, 1st year, 3rd month, day *wu-shen* (45). "At night, a red light was seen in the air over T'ai-yuan like a bent bow. It was 6 or 7 *ch'ih* in length. Subsequently, it turned yellow and then white. Gradually, it increased its length to more than 20 *chang* with its rays stretching across the sky." (*Ming-shih*, 30) (DC446)

380. 1507 Jan 24
[Korea] King Chungjong, 2nd year, 1st month, day *ping-hsu* (23). "At night, there was a red vapour." (*Chungjong Sillok*) (DC447)

381. 1507 Oct 4
[China] Cheng-te reign-period, 2nd year, 8th month, day *chi-hai* (36). "A red light was seen in Ning-hsia; its length was 5 *chang*." (DC448) (*Ming-shih*, 30)

382. 1508 Apr 5
[Korea] King Chungjong, 3rd year, 3rd month, day *kuei-mao* (40). "At night, from the 1st to the 4th watch, the horizon was faintly lit in all directions; there was a fire-like vapour now seen and now extinguished." (*Chungjong Sillok*) (DC449)

383. 1512 Jan 17
[Korea] King Chungjong, 6th year, 12th month, day *i-szu* (42). "At night, in the SW direction, there was a red vapour. Above it there was a strip of white vapour. The red vapour was shaped like a torch and the white vapour was shaped like a cross approximately 1 *chang* in length." (*Chungjong Sillok*) (DC450)

384. 1512 Mar 21
[Korea] King Chungjong, 7th year, 3rd month, day *chi-yu* (46). "Today in the early evening, in the N direction, there was a red vapour like fire." (*Chungjong Sillok*) (DC451)

385. 1515 Mar 15
[Korea] King Chungjong, 10th year, 3rd month, day *wu-wu* (55). "At night, at the 1st watch, in the N direction, there was a vapour like fire. At the 4th watch, it was also in the E direction." (*Chungjong Sillok*) (DC452)

386. 1515 Mar 18
[Korea] King Chungjong, 10th year, 3rd month, day *hsin-yu* (58). "At night, in the NW and NE directions, there were vapours like fire." (*Chungjong Sillok*) (DC453)

387. 1515 Mar 20
[Korea] King Chungjong, 10th year, 3rd month, day *kuei-hai* (60). "At night, in the SW and N directions, there were vapours like fire." (*Chungjong Sillok*) (DC454)

388. 1515 Mar 21
[Korea] King Chungjong, 10th year, 3rd month, day *chia-tzu* (1). "At night, in the NE and SE directions, there were vapours like fire." (*Chungjong Sillok*) (DC455)

389. 1515 Apr 7
[Korea] King Chungjong, 10th year, 3rd month, day *hsin-szu* (18). "At night, in the NE and SE directions, there were red vapours." (*Chungjong Sillok*) (DC456)

390. 1515 Apr 8
[Korea] King Chungjong, 10th year, 3rd month, day *jen-wu* (19). "At night, in the E direction, there was a vapour like fire." (*Chungjong Sillok*) (DC457)

391. 1515 Apr 13
[Korea] King Chungjong, 10th year, 3rd month, day *ting-hai* (24). "At night, in the S direction, there was a vapour like fire." (*Chungjong Sillok*) (DC458)

392. 1515 Apr 19
[Korea] King Chungjong, 10th year, 4th month, day *kuei-szu* (30). "Tonight, in the E direction, there was a vapour like fire." (*Chungjong Sillok*) (DC459)

393. 1516 Aug 2
[China] Cheng-te reign-period, 11th year, 7th month, 5th day. "SE of Ba-ling the sky split apart with a length of more than 3 *chang*. Its red light dazzled people." (*Hu-nan T'ung-chih*, 244 and *Tun-ting-hu Chih*) (DC460)

394. 1517 Feb 27
[Korea] King Chungjong, 12th year, 2nd month, day *kuei-ch'ou* (50). "At night, in the SE direction, there was a vapour like fire." (*Chungjong Sillok*) (DC461)

395. 1517 Mar 19
[Korea] King Chungjong, 12th year, 2nd month, day *kuei-yu* (10). "At night, in the NW direction, there was a vapour like fire." (*Chungjong Sillok*) (DC462)

396. 1517 Mar 20
[Korea] King Chungjong, 12th year, 2nd month, day *chia-hsu* (11). "At night, in the S direction, there was a vapour like fire." (*Chungjong Sillok*) (DC463)

397. 1518 Jan 17
[China] Cheng-te reign-period, 12th year, intercalary 12th month, day *ting-ch'ou* (14). "At night, there was a red vapour at Hsu-chou. It turned white and was shaped like a carpenter's square. Inside and outside there were two black vapours which inter-changed for a long time." (*Ming-shih*, 28) (DC464)

398. 1518 May 18
[Korea] King Chungjong, 13th year, 4th month, day *kuei-yu* (10). "At night, at the 5th watch, in the SW direction, there was a vapour like fire." (*Chungjong Sillok*) (DC465)

399. 1519 Jul 2
[Korea] King Chungjong, 14th year, 6th month, day *wu-ch'en* (5). "To the west of the Hsing-Chow district, shortly after sunset when the moon was quite bright, in the W direction, there was a misty cloud. Also there was a light like lightning but not lightning, like a fire but not a fire, or was it like shooting arrows filling the sky, or shooting stars passing over, or red snakes prancing, or sparks dispensing, or curving like a bended bow ... . From the W it gradually moved towards the NE. Not until the 2nd watch was it extinguished." (*Chungbo Munhon Pigo*, 8) (DC466)

400. 1520 Apr 10
[Korea] King Chungjong, 15th year, 3rd month, day *hsin-hai* (48). "At night, in the S horizon there was a vapour like fire. On day *jen-tzu* (49), last night at the 4th watch the Day Official came to report that in the S direction, there was a red vapour and it was very strange. We (your ministers) got up and observed it and indeed there was a red vapour floating in the sky like a burning torch. It kept flickering and moving south and east, and back and forth. It was not commonly seen and we were startled. In the morning, the Day Official was again questioned. He said it started in the 1st watch and was still going in the 5th watch." (*Chungjong Sillok*) (DC467)

401. 1520 Apr 12
[Korea] King Chungjong, 15th year, 3rd month, day *kuei-ch'ou* (50). "At night, in the NE direction, there was a vapour like fire." (*Chungjong Sillok*) (DC468)

402. 1522 Mar 25
[Korea] King Chungjong, 17th year, 2nd month, day *i-szu* (42). "At night, in the SW and S directions, there were vapours like fire. On day *ping-wu* (43), the Astronomer-Royal reported: 'Last night there was a vapour seen in the SW like a fire-vapour. It lasted until dawn then it disappeared.' When it was checked against the *Wen-hsien-tung-kao*, it was identified as the vapour of a fierce general. The royal decree said: 'This is not a common disaster. Although it should not be regarded as a certain incident, everybody ought to be fearful'. " (*Chungjong Sillok*) (DC469)

403. 1522 Mar 31
[Korea] King Chungjong, 17th year, 3rd month, day *hsin-hai* (48). "At night, in the NE direction, there was a vapour like fire." (*Chungjong Sillok*) (DC470)

404. 1522 Apr 23
[Korea] King Chungjong, 17th year, 3rd month, day *chia-hsu* (11). "At night, in the NE and SE directions, there were vapours like fire." (*Chungjong Sillok*) (DC471)

405. 1522 Sep 16
[Korea] King Chungjong, 17th year, 8th month, day *keng-tzu* (37). "At night, in the SE direction, there was a vapour like fire." (*Chungjong Sillok*) (DC472)

406. 1522 Nov 20
[Korea] King Chungjong, 17th year, 11th month, day *i-szu* (42). "At night, in all directions, there were vapours like fire." (*Chungjong Sillok*) (DC473)

407. 1523 Apr 14
[Korea] King Chungjong, 18th year, 3rd month, day *keng-wu* (7). "At night, in the SW and SE directions, there were vapours like fire." (*Chungjong Sillok*) (DC474)

408. 1523 Nov 9
[Korea] King Chungjong, 18th year, 10th month, day *chi-hai* (36). "At night, in all directions, there were vapours like fire." (*Chungjong Sillok*) (DC475)

409. 1523 Nov 18
[Korea] King Chungjong, 18th year, 10th month, day *wu-shen* (45). "At night, in the E and SW directions, there were vapours like fire." (*Chungjong Sillok*) (DC476)

410. 1524 Feb 1
[Korea] King Chungjong, 18th year, 12th month, day *kuei-hai* (60). "At night, in the SE, S and N directions, there were vapours like fire." (*Chungjong Sillok*) (DC477)

411. 1524 Mar 10
[Korea] King Chungjong, 19th year, 2nd month, day *hsin-ch'ou* (38). "At night, from the S to the SE directions, there were vapours like fire." (*Chungjong Sillok*) (DC478)

412. 1524 Mar 26
[Korea] King Chungjong, 19th year, 2nd month, day *ting-szu* (54). "At night, in the NE and SE directions, there were vapours like fire." (*Chungjong Sillok*) (DC479)

413. 1524 Sep 23
[Korea] King Chungjong, 19th year, 8th month, day *wu-wu* (55). "At night, in the W direction, there was a vapour like fire." (*Chungjong Sillok*) (DC480)

414. 1524 Nov 19
[Korea] King Chungjong, 19th year, 10th month, day *i-mao* (52). "At night, in the S direction, there was a vapour like fire." (*Chungjong Sillok*) (DC481)

415. 1525 Jan 15
[Korea] King Chungjong, 19th year, 12th month, day *jen-tzu* (49). "After sunset, a red vapour covered the sky from the W to SE." (*Chungjong Sillok*) (DC482)

416. 1525 Feb 13
[Korea] King Chungjong, 20th year, 1st month, day *hsin-szu* (18). "At night, in the SE direction, there was a vapour like fire." (*Chungjong Sillok*) (DC483)

417. 1525 Mar 18
[Korea] King Chungjong, 20th year, 2nd month, day *chia-yin* (51). "At night, in the NW, SE and SW directions, there were vapours like fire." (*Chungjong Sillok*) (DC484)

418. 1525 Mar 28
[Korea] King Chungjong, 20th year, 3rd month, day *chia-tzu* (1). "At night, in the SE to ESE directions, there were vapours like fire." (*Chungjong Sillok*) (DC485)

419. 1525 Apr 6
[Korea] King Chungjong, 20th year, 3rd month, day *kuei-yu* (10). "At night, in the S direction, there was a vapour like fire." (*Chungjong Sillok*) (DC486)

420. 1525 Apr 10
[Korea] King Chungjong, 20th year, 3rd month, day *ting-ch'ou* (14). "At night, in the SE and SW directions, there were vapours like fire." (*Chungjong Sillok*) (DC487)

421. 1525 Apr 15?
[Korea] King Chungjong, 20th year, 3rd month, day *jen-tzu* (49) (error in date; possibly read *jen-wu* (19)). "At night, in the S direction, there was a vapour like fire." (*Chungjong Sillok*) (DC488)

422. 1525 Apr 22
[Korea] King Chungjong, 20th year, 3rd month, day *chi-ch'ou* (26). "At night, in the S direction, there was a vapour like fire." (*Chungjong Sillok*) (DC489)

423. 1525 Nov 13
[Korea] King Chungjong, 20th year, 10th month, day *chia-yin* (51). "At night, in the SW direction, there was a vapour like fire." (*Chungjong Sillok*) (DC490)

424. 1526 Mar 21
[Korea] King Chungjong, 21st year, 2nd month, day *jen-hsu* (59). "At night, in the S direction, there was a vapour like fire." (*Chungjong Sillok*) (DC492)

425. 1526 Apr 8
[Korea] King Chungjong, 21st year, 2nd month, day *keng-ch'en* (17). "At night, in the W direction, there was a vapour like fire." (*Chungjong Sillok*) (DC493)

426. 1526 Apr 30
[Korea] King Chungjong, 21st year, 3rd month, day *jen-yin* (39). "At the 3rd watch, in the SE direction, there was a vapour like fire." (*Chungjong Sillok*) (DC494)

427. 1526 May 6?
[Korea] King Chungjong, 21st year, 3rd month, day *wu-ch'en* (5) (error in date; possibly read *wu-shen* (45)). "At night, in the SW direction, there was a vapour like fire." (*Chungjong Sillok*) (DC495)

428. 1526 Jun 20
[Korea] King Chungjong, 21st year, 5th month, day *kuei-szu* (30). "At night, in the S direction, there was a vapour like fire." (*Chungjong Sillok*) (DC496)

429. 1526 Jun 30
[Korea] King Chungjong, 21st year, 5th month, day *kuei-mao* (40). "At night, in the NW direction, there was a vapour like fire." (*Chungjong Sillok*) (DC497)

430. 1526 Jul 18
[Korea] King Chungjong, 21st year, 6th month, day *hsin-yu* (58). "At night, there was a vapour like fire." (*Chungjong Sillok*) (DC498)

431. 1526 Aug 5
[Korea] King Chungjong, 21st year, 6th month, day *i-mao* (52) (read day *chi-mao* (16)). "At night, in the S direction, there was a vapour like fire." (*Chungjong Sillok*) (DC499)

432. 1526 Aug 7
[Korea] King Chungjong, 21st year, 6th month, day *hsin-szu* (18). "At night, in the S direction, there was a vapour like fire." (*Chungjong Sillok*) (DC500)

433. 1526 Sep 24
[Korea] King Chungjong, 21st year, 8th month, day *chi-szu* (6). "At night, in the E direction, there was a vapour like fire." (*Chungjong Sillok*) (DC501)

434. 1526 Dec 7
[Korea] King Chungjong, 21st year, 11th month, day *kuei-wei* (20). "At the 5th watch, in the SE direction, there was a vapour like fire." (*Chungjong Sillok*) (DC502)

435. 1526 Dec 13
[Korea] King Chungjong, 21st year, 11th month, day *chi-ch'ou* (26). "At the 5th watch, in the S direction, there was a vapour like fire." (*Chungjong Sillok*) (DC503)

436. 1527 Mar 1
[Korea] King Chungjong, 22nd year, 1st month, day *ting-wei* (44). "At the 5th watch, in the S direction, there was a vapour like fire." (*Chungjong Sillok*) (DC504)

437. 1528 Mar 17
[Korea] King Chungjong, 23rd year, 2nd month, day *chi-szu* (6). "At night, from the NW, NE to SE directions, there were vapours like fire." (*Chungjong Sillok*) (DC505)

438. 1528 Mar 19
[Korea] King Chungjong, 23rd year, 2nd month, day *hsin-wei* (8). "At night, in the S direction, there was a vapour like fire." (*Chungjong Sillok*) (DC506)

439. 1528 Mar 31
[Korea] King Chungjong, 23rd year, 3rd month, day *kuei-wei* (20). "At night, in the S direction, there was a vapour like fire." (*Chungjong Sillok*) (DC507)

440. 1528 Apr 14
[Korea] King Chungjong, 23rd year, 3rd month, day *ting-yu* (34). "At night, in the S direction, there was a vapour like fire." (*Chungjong Sillok*) (DC508)

441. 1528 Apr 22
[China] Chia-ching reign-period, 7th year, 4th month, 4th day. "At the 5th watch, a strange vapour like flames was seen in Ho-chien. Its shape was like a dragon. It was suspended from the air onto the Earth in the SW direction. It lasted for several *k'o* and then it was extinguished." (*Ho-chian Hsien-chih* and *T'ien-tsin Fu-chih*) (DC509)

442. 1528 Jun 16
[Korea] King Chungjong, 23rd year, 5th month, day *keng-tzu* (37). "At night, in the SW direction, there was a vapour like fire." (*Chungjong Sillok*) (DC510)

443. 1529 Mar 8
[Korea] King Chungjong, 24th year, 1st month, day *i-ch'ou* (2). "At night, in the N direction, there was a vapour like fire." (*Chungjong Sillok*) (DC511)

444. 1530 Feb 21
[Korea] King Chungjong, 25th year, 1st month, day *i-mao* (52). "At the 3rd watch, in the NW direction, there was a vapour like fire." (*Chungjong Sillok*) (DC512)

445. 1530 Feb 22
[Korea] King Chungjong, 25th year, 1st month, day *ping-ch'en* (53). "At the 4th watch, in the NW direction, there was a vapour like fire." (*Chungjong Sillok*) (DC513)

446. 1531 Feb 24
[Korea] King Chungjong, 26th year, 2nd month, day *kuei-hai* (60). "At night, in the SW, S and SE directions, there were vapours like fire." (*Chungjong Sillok*) (DC514)

447. 1531 Apr 13
[Korea] King Chungjong, 26th year, 3rd month, day *hsin-hai* (48). "At night, in the S direction, there was a vapour like fire." (*Chungjong Sillok*) (DC515)

448. 1531 May 23
[Korea] King Chungjong, 26th year, 5th month, day *hsin-mao* (28). "At night, in the E direction, there was a vapour like fire." (*Chungjong Sillok*) (DC516)

449. 1531 Jun 10
[Korea] King Chungjong, 26th year, 5th month, day *chi-yu* (46). "At night, at the 3rd watch, in the SW direction, there was a vapour like fire. It lasted until the 4th watch." (*Chungjong Sillok*) (DC517)

450. 1531 Jul 19
[Korea] King Chungjong, 26th year, intercalary 6th month, day *wu-tzu* (25). "At night, in the SE direction, there was a vapour like fire." (*Chungjong Sillok*) (DC518)

451. 1531 Aug 6
[Korea] King Chungjong, 26th year, intercalary 6th month, day *ping-wu* (43). "Tonight, in the SE direction, there was a vapour like fire." (*Chungjong Sillok*) (DC519)

452. 1532 Mar 12
[Korea] King Chungjong, 27th year, 2nd month, day *i-yu* (22). "At night, in the S, NW and NE directions, there were vapours like fire." (*Chungjong Sillok*) (DC520)

453. 1532 Mar 13
[Korea] King Chungjong, 27th year, 2nd month, day *ping-hsu* (23). "At night, in the SE, S and NW directions, there were vapours like fire." (*Chungjong Sillok*) (DC521)

454. 1532 Apr 3
[Korea] King Chungjong, 27th year, 2nd month, day *ting-wei* (44). "At night, in the SE direction, there was a vapour like fire." (*Chungjong Sillok*) (DC522)

455. 1532 Sep 26
[Korea] King Chungjong, 27th year, 8th month, day *kuei-mao* (40). "At night, in the SW direction, there was a vapour like fire." (*Chungjong Sillok*) (DC523)

456. 1533 Jan 28
[Korea] King Chungjong, 28th year, 1st month, day *ting-wei* (44). "At night, in the NE, SE and SW directions, there were vapours like fire." (*Chungjong Sillok*) (DC524)

457. 1533 Feb 2
[Korea] King Chungjong, 28th year, 1st month, day *jen-tzu* (49). "At night, in the S direction, there was a vapour like fire. In the SW and NE directions, there were white vapours covering the sky." (*Chungjong Sillok*) (DC525)

458. 1533 Feb 19
[Korea] King Chungjong, 28th year, 1st month, day *chi-szu* (6). "At night, in the E direction, there was a vapour like fire." (*Chungjong Sillok*) (DC526)

459. 1533 Feb 21
[Korea] King Chungjong, 28th year, 1st month, day *hsin-wei* (8). "At night, in the E and W directions, there were vapours like fire." (*Chungjong Sillok*) (DC527)

460. 1533 Mar 27
[Korea] King Chungjong, 28th year, 3rd month, day *i-szu* (42). "At night, in the SE direction, there was a vapour like fire." (*Chungjong Sillok*) (DC528)

461. 1533 Apr 29
[Korea] King Chungjong, 28th year, 4th month, day *wu-yin* (15). "At night, in the N direction, there was a vapour like fire." (*Chungjong Sillok*) (DC529)

462. 1533 Apr 30
[Korea] King Chungjong, 28th year, 4th month, day *chi-mao* (16). "At night, in the N and SE directions, there were vapours like fire." (*Chungjong Sillok*) (DC530)

463. 1533 May 1
[Korea] King Chungjong, 28th year, 4th month, day *keng-ch'en* (17). "At night, in the E, N, SE and NE directions, there were vapours like fire." (*Chungjong Sillok*) (DC531)

464. 1533 May 2
[Korea] King Chungjong, 28th year, 4th month, day *hsin-szu* (18). "At night, in the NE, SE and SW directions, there were vapours like fire." (*Chungjong Sillok*) (DC532)

465. 1533 May 23
[Korea] King Chungjong, 28th year, 4th month, day *jen-yin* (39). "Tonight, in the SW direction, there was a vapour like fire." (*Chungjong Sillok*) (DC533)

466. 1533 Jul 25
[Korea] King Chungjong, 28th year, 7th month, day *i-szu* (42). "At night, in the NW, SW and SE directions, there were vapours like fire." (*Chungjong Sillok*) (DC534)

467. 1533 Oct 24
[Korea] King Chungjong, 28th year, 10th month, day *ping-tzu* (13). "At the 3rd watch, a blue yellow-white vapour appeared at the stars of *Wen-chang*. Its tail was pointing to the stars of *Wang-liang*. It was like a piece of cloth and shaped like a dragon. It was extinguished after a long while." (*Chungjong Sillok*) (DC535)

468. 1534 Jan 13
[Korea] King Chungjong, 28th year, 12th month, day *ting-yu* (34). "At night, in the NE direction, there was a red vapour." (*Chungjong Sillok*) (DC536)

469. 1534 Jan 23
[Korea] King Chungjong, 29th year, 1st month, day *ting-wei* (44). "At night, in the SE and NE directions, there were vapours like fire." (*Chungjong Sillok*) (DC537)

470. 1534 Jan/Feb
[China] Chia-ching reign-period, 13th year, 1st month, spring. "At night, thousands of flames lit up the sky like candles. They were extinguished after several *k'e*." (*Kiang-hsi T'ung-chih*) (DC538)

471. 1534 Apr 14
[Korea] King Chungjong, 29th year, 3rd month, day *wu-ch'en* (5). "At night, in the SW direction, there was a vapour like fire." (*Chungjong Sillok*) (DC539)

472. 1534 Apr 16 and 17
[Korea] King Chungjong, 29th year, 3rd month, day *keng-wu* (7) and *hsin-wei* (8). "At night, in the E direction, there was a vapour like fire." (*Chungjong Sillok*) (DC540-541)

473. 1534 Apr 23
[Korea] King Chungjong, 29th year, 3rd month, day *ting-ch'ou* (14). "At night, in the SW direction, there was a vapour like fire." (*Chungjong Sillok*) (DC542)

474. 1534 May 1
[Korea] King Chungjong, 29th year, 3rd month, day *i-yu* (22). "At night, in the N direction, there was a vapour like fire." (*Chungjong Sillok*) (DC543)

475. 1534 May 20
[Korea] King Chungjong, 29th year, 4th month, day *chia-ch'en* (41). "At night, from the 4th to 5th watch, in the S and SE directions, there were vapours like fire." (*Chungjong Sillok*) (DC544)

476. 1534 Jun 12
[Korea] King Chungjong, 29th year, 5th month, day *ting-mao* (4). "At night, in the SW direction, there was a vapour like fire." (*Chungjong Sillok*) (DC545)

477. 1534 Sep 6
[Korea] King Chungjong, 29th year, 7th month, day *kuei-szu* (30). "At night, in the SW direction, there was a vapour like fire." (*Chungjong Sillok*) (DC546)

478. 1535 Jan 4
[Korea] King Chungjong, 29th year, 12th month, 1st day, *kuei-szu* (30). "At night, in the SE and NE directions, there were vapours like fire." (*Chungjong Sillok*) (DC547)

479. 1535 Jan 7
[Korea] King Chungjong, 29th year, 12th month, day *ping-shen* (33). "At night, in the S direction, there was a vapour like fire." (*Chungjong Sillok*) (DC548)

480. 1535 Jan 8
[Korea] King Chungjong, 29th year, 12th month, day *ting-yu* (34). "At night, in the SW direction, there was a vapour like fire." (*Chungjong Sillok*) (DC549)

481. 1535 Mar 3
[Korea] King Chungjong, 30th year, 1st month, day *hsin-mao* (28). "At night, the W horizon was coloured red." (*Chungjong Sillok*) (DC550)

482. 1535 Mar 6
[Korea] King Chungjong, 30th year, 2nd month, day *chia-wu* (31). "At night, in the SE to SW directions, there were vapours like fire." (*Chungjong Sillok*) (DC551)

483. 1535 Mar 31
[Korea] King Chungjong, 30th year, 2nd month, day *chi-wei* (56). "At night, in all directions, there were vapours like fire." (*Chungjong Sillok*) (DC552)

484. 1535 Apr 2
[Korea] King Chungjong, 30th year, 3rd month, 1st day, *hsin-yu* (58). "At night, in the NE, SW and W directions, there were vapours like fire." (*Chungjong Sillok*) (DC553)

485. 1535 Apr 29
[Korea] King Chungjong, 30th year, 3rd month, day *wu-tzu* (25). "At night, in the SE direction, there was a vapour like fire." (*Chungjong Sillok*) (DC554)

486. 1535 Apr 30
[Korea] King Chungjong, 30th year, 3rd month, day *chi-ch'ou* (26). "At night, in the SE direction, there was a vapour like fire." (*Chungjong Sillok*) (DC555)

487. 1535 May 6
[Korea] King Chungjong, 30th year, 4th month, day *i-wei* (32). "At night, in the NW and SE directions, there were vapours like fire." (*Chungjong Sillok*) (DC556)

488. 1535 May 30
[Korea] King Chungjong, 30th year, 4th month, day *chi-wei* (56). "At night, in the SW direction, there was a vapour like fire." (*Chungjong Sillok*) (DC557)

489. 1535 Jun 25
[Korea] King Chungjong, 30th year, 5th month, day *i-yu* (22). "At night, in the E and SW, SE and S directions, there were vapours like fire." (*Chungjong Sillok*) (DC558)

490. 1535 Jun 30 and Jul 1
[Korea] King Chungjong, 30th year, 6th month, day *keng-yin* (27). "At night, in the E, S and W directions, there were vapours like fire." (*Chungjong Sillok*) (DC559-560)

491. 1535 Jul 28
[Korea] King Chungjong, 30th year, 6th month, day *wu-wu* (55). "At night, in the NE direction, there was a vapour like fire." (*Chungjong Sillok*) (DC561)

492. 1535 Nov 14
[Korea] King Chungjong, 30th year, 10th month, day *ting-wei* (44). "At night, in the S direction, there was a vapour like fire." (*Chungjong Sillok*) (DC562)

493. 1535 Dec 22
[Korea] King Chungjong, 30th year, 11th month, day *i-yu* (22). "At night, in the E and SW directions, there were vapours like fire." (*Chungjong Sillok*) (DC563)

494. 1535 Dec 31
[Korea] King Chungjong, 30th year, 12th month, day *chia-wu* (31). "At night, in the NE and SW directions, there were vapours like fire." (*Chungjong Sillok*) (DC564)

495. 1536 Feb 17
[Korea] King Chungjong, 31st year, 1st month, day *jen-wu* (19). "At night, in the S, E and NE directions, there were vapours like fire." (*Chungjong Sillok*) (DC565)

496. 1536 Feb 23
[Korea] King Chungjong, 31st year, 2nd month, day *wu-tzu* (25). "At night, in the E, NE, SE, S, SW and NW directions, there were vapours like fire." (*Chungjong Sillok*) (DC566)

497. 1536 Mar 12
[Korea] King Chungjong, 31st year, 2nd month, day *ping-wu* (43). "At night, in the E, N and W directions, there were vapours like fire." (*Chungjong Sillok*) (DC567)

498. 1536 Mar 13
[Korea] King Chungjong, 31st year, 2nd month, day *ting-wei* (44). "At night, in the SE direction, there was a vapour like fire." (*Chungjong Sillok*) (DC568)

499. 1536 Mar 17
[Korea] King Chungjong, 31st year, 2nd month, day *hsin-hai* (48). "At night, in the N, S, NE and SE directions, there were vapours like fire." (*Chungjong Sillok*) (DC569)

500. 1536 May 17
[Korea] King Chungjong, 31st year, 4th month, day *jen-tzu* (49). "At night, in the NW direction, there was a vapour like fire." (*Chungjong Sillok*) (DC570)

501. 1537 Mar 7
[Korea] King Chungjong, 32nd year, 1st month, day *ping-wu* (43). "At night, in the NE direction, there was a vapour like fire." (*Chungjong Sillok*) (DC571)

502. 1537 Jun 12
[Korea] King Chungjong, 32nd year, 5th month, day *kuei-wei* (20). "In the SW direction, there was a vapour like fire." (*Chungjong Sillok*) (DC572)

503. 1537 Jun 13
[Korea] King Chungjong, 32nd year, 5th month, day *chia-shen* (21). "At night, in the SW direction, there was a vapour like fire." (*Chungjong Sillok*) (DC573)

504. 1537 Dec 5
[Korea] King Chungjong, 32nd year, 11th month, day *chi-mao* (16). "At night, in the SE and SW directions, there were vapours like fire." (*Chungjong Sillok*) (DC574)

505. 1538 Jan 20
[Korea] King Chungjong, 32nd year, 12th month, day *i-ch'ou* (2). "At night, in the S, SE and E directions, there were vapours like fire." (*Chungjong Sillok*) (DC575)

506. 1538 Mar 4
[Korea] King Chungjong, 33rd year, 2nd month, day *wu-shen* (45). "At night, in the E, W and S directions, there were vapours like fire." (*Chungjong Sillok*) (DC576)

507. 1538 Mar 5
[Korea] King Chungjong, 33rd year, 2nd month, day *chi-yu* (46). "At night, in the S direction, there was a vapour like fire." (*Chungjong Sillok*) (DC577)

508. 1538 Jun 1
[Korea] King Chungjong, 33rd year, 5th month, day *ting-ch'ou* (14). "At night, in the W direction, there was a vapour like fire." (*Chungjong Sillok*) (DC578)

509. 1538 Jun 2
[Korea] King Chungjong, 33rd year, 5th month, day *wu-yin* (15). "At night, in the W direction, there was a vapour like fire." (*Chungjong Sillok*) (DC579)

510. 1538 Jun 24
[Korea] King Chungjong, 33rd year, 5th month, day *keng-tzu* (37). "At night, in the SE direction, there was a vapour like fire." (*Chungjong Sillok*) (DC580)

511. 1538 Oct 20
[Korea] King Chungjong, 33rd year, 9th month, day *wu-hsu* (35). "At night, in the NW and E directions, there were vapours like fire." (*Chungjong Sillok*) (DC581)

512. 1538 Oct 21
[Korea] King Chungjong, 33rd year, 9th month, day *chi-hai* (36). "At night, in the S direction, there was a vapour like fire." (*Chungjong Sillok*) (DC582)

513. 1538 Dec 3 and 4
[Korea] King Chungjong, 33rd year, 11th month, day *jen-wu* (19). "At night, in the NE and SE directions, there were vapours like fire." (*Chungjong Sillok*) (DC583-584)

514. 1539 Jan 9
[Korea] King Chungjong, 33rd year, 12th month, day *chi-wei* (56). "At night, in the S, NE ad NW directions, there were red lights like fire-vapours." (*Chungjong Sillok*) (DC585)

515. 1539 Jan 10
[Korea] King Chungjong, 33rd year, 12th month, day *keng-shen* (57). "At night, in the W direction, there was a red light like a fire-vapour. Also a white vapour covered the sky from the E to the SW. At day break, it turned into a dark vapour and was extinguished from the SW direction." (*Chungjong Sillok*) (DC586)

516. 1539 Jan 18
[Korea] King Chungjong, 33rd year, 12th month, day *wu-ch'en* (5). "At night, in the N direction, there was a red light like fire." (*Chungjong Sillok*) (DC587)

517. 1539 Feb 5
[Korea] King Chungjong, 34th year, 1st month, day *ping-hsu* (23). "At night, in the S and SW directions, there were vapours like fire." (*Chungjong Sillok*) (DC588)

518. 1539 Mar 21
[Korea] King Chungjong, 34th year, 3rd month, day *keng-wu* (7). "At night, in the NW, S and SE directions, there were vapours like fire." (*Chungjong Sillok*) (DC589)

519. 1539 Apr 8
[Korea] King Chungjong, 34th year, 3rd month, day *wu-tzu* (25). "At night, in the N and SE directions, there were vapours like fire." (*Chungjong Sillok*) (DC590)

520. 1539 Apr 9
[Korea] King Chungjong, 34th year, 3rd month, day *chi-ch'ou* (26). "At night, in the N and S directions, there were vapours like fire." (*Chungjong Sillok*) (DC591)

521. 1539 May 14
[Korea] King Chungjong, 34th year, 4th month, day *chia-tzu* (1). "In the SE direction, there was a vapour like fire." (*Chungjong Sillok*) (DC592)

522. 1539 May 29
[Korea] King Chungjong, 34th year, 5th month, day *chi-mao* (16). "At night, in the E direction, there was a vapour like fire." (*Chungjong Sillok*) (DC593)

523. 1542 Feb 17
[Korea] King Chungjong, 37th year, 2nd month, day *chia-yin* (51). "At night, in the NE direction, there was a vapour like flames illuminating the Earth." (*Chungjong Sillok*) (DC594)

524. 1542 Mar 12
[Korea] King Chungjong, 37th year, 2nd month, day *ting-ch'ou* (14). "At night, there was a vapour like fire." (*Chungjong Sillok*) (DC595)

525. 1542 Apr 21
[Korea] King Chungjong, 37th year, 4th month, day *ting-szu* (54). "At night, in the SE direction, there was a vapour like fire." (*Chungjong Sillok*) (DC596)

526. 1542 Jun 8
[Korea] King Chungjong, 37th year, 5th month, day *i-szu* (42). "At night, in the E and S directions, there were vapours like fire." (*Chungjong Sillok*) (DC597)

527. 1542 Jun 13
[Korea] King Chungjong, 37th year, intercalary 5th month, 1st day, *keng-hsu* (47). "At night, in the SE and SW directions, there were vapours like fire." (*Chungjong Sillok*) (DC598)

528. 1542 Jun 21
[Korea] King Chungjong, 37th year, intercalary 5th month, day *wu-wu* (55). "At night, there was a vapour like fire." (*Chungjong Sillok*) (DC599)

529. 1542 Oct 26
[Korea] King Chungjong, 37th year, 9th month, day *i-ch'ou* (2). "At night, in the W direction, there was a vapour like a torch fire." (*Chungjong Sillok*) (DC600)

530. 1543 Feb 5
[Korea] King Chungjong, 38th year, 1st month, day *ting-wei* (44). "At night, in the SE, NE and S directions, there were vapours like fire." (*Chungjong Sillok*) (DC601)

531. 1543 Feb 22
[Korea] King Chungjong, 38th year, 1st month, day *chia-tzu* (1). "At night, in the SW direction, there was a vapour like fire." (*Chungjong Sillok*) (DC602)

532. 1543 Feb 27
[Korea] King Chungjong, 38th year, 1st month, day *chi-szu* (6). "At night, in the SW direction, there was a vapour like fire." (*Chungjong Sillok*) (DC603)

533. 1543 Mar 29
[Korea] King Chungjong, 38th year, 2nd month, day *chi-hai* (36). "At night, in the NW direction, there was a vapour like fire." (*Chungjong Sillok*) (DC604)

534. 1543 Mar 30
[Korea] King Chungjong, 38th year, 2nd month, day *keng-tzu* (37). "At night, in the NW direction, there was a vapour like fire." (*Chungjong Sillok*) (DC605)

535. 1543 May 10
[Korea] King Chungjong, 38th year, 4th month, day *hsin-szu* (18). "At night, in the SW direction, there was a vapour like fire." (*Chungjong Sillok*) (DC606)

536. 1543 May 23
[Korea] King Chungjong, 38th year, 4th month, day *chia-wu* (31). "At night, in the W direction, there was a vapour like fire." (*Chungjong Sillok*) (DC607)

537. 1543 Aug 6
[Korea] King Chungjong, 38th year, 7th month, day *chi-yu* (46). "At night, in the E, W and S directions, there were vapours like fire." (*Chungjong Sillok*) (DC608)

538. 1544 Mar 29
[Korea] King Chungjong, 39th year, 3rd month, day *i-szu* (42). "At night, in the NE direction, there was a vapour like fire." (*Chungjong Sillok*) (DC609)

539. 1544 Apr 29
[China] Chia-ching reign-period, 23rd year, 4th month, day *ping-tzu* (13). "At midnight, there was an unusual happening; the sky was as if it had been split apart." (*Chi-nan Fu-chih*) (DC610)

540. 1544 Jun 25
[Korea] King Chungjong, 39th year, 6th month, day *kuei-yu* (10). "At night, in the SW direction, there was a vapour like fire." (*Chungjong Sillok*) (DC611)

541. 1544 Jul 18
[Korea] King Chungjong, 39th year, 6th month, day *ping-shen* (33). "At night, there

was a vapour with a green-white colour. It rose in the zenith and (stretched) across like a piece of silk. Gradually, it moved towards the S. After a long while then it was extinguished." (*Chungjong Sillok*) (DC612)

542. 1544 Nov 16
[Korea] King Chungjong, 39th year, 11th month, day *ting-yu* (34). "At night, in the S direction, there was a vapour like fire." (*Chungjong Sillok*) (DC613)

543. 1545 Apr 1
[Korea] King Injong, 1st year, 2nd month, day *kuei-ch'ou* (50). "At night, in the SW and NE directions, there were vapours like fire." (*Injong Sillok*) (DC614)

544. 1545 Jun 7
[Korea] King Injong, 1st year, 4th month, day *keng-shen* (57). "At the 1st watch, in the SE direction, there was a vapour like fire." (*Injong Sillok*) (DC615)

545. 1546 Mar 9
[Korea] King Myongjong, 1st year, 2nd month, day *i-wei* (32). "At night, in the NE and SW directions, there were vapours like fire." (*Myongjong Sillok*) (DC616)

546. 1546 May 9
[Korea] King Myongjong, 1st year, 4th month, day *ping-shen* (33). "At night, in the SE, S and SW directions, there were vapours like fire." (*Myongjong Sillok*) (DC617)

547. 1546 Jul 14
[Korea] King Myongjong, 1st year, 6th month, day *jen-yin* (39). "At night, in the early evening, in the NW direction, there was a vapour like a rainbow. It was tortuous and had the length of a piece of cloth. It was blue inside and yellow outside." (*Myongjong Sillok*) (DC618)

548. 1547 Jul 10
[Korea] King Myongjong, 2nd year, 6th month, day *kuei-mao* (40). "At night, in the S, N and NW directions, there were like fire-vapours." (*Myongjong Sillok*) (DC619)

549. 1548 Jan 1
[Korea] King Myongjong, 2nd year, 11th month, day *wu-hsu* (35). "At night, in the NW, SW and SE directions, there were like fire-vapours." (*Myongjong Sillok*) (DC620)

550. 1548 May 10
[Korea] King Myongjong, 3rd year, 4th month, day *wu-shen* (45). "At night, in the SW direction, there was like a fire-vapour." (*Myongjong Sillok*) (DC621)

551. 1548 Jul 3
[Korea] King Myongjong, 3rd year, 5th month, day *jen-yin* (39). "At night, in the S direction, there was like a fire-vapour." (*Myongjong Sillok*) (DC622)

552. 1550 Jul 12
[Korea] King Myongjong, 5th year, 6th month, day *hsin-yu* (58). "At night, in the NW, SW and W directions, there were vapours like fire." (*Myongjong Sillok*) (DC623)

553. 1551 Mar 15
[Korea] King Myongjong, 6th year, 2nd month, day *ting-mao* (4). "At the 5th watch, in the SE direction, there was a vapour like fire." (*Myongjong Sillok*) (DC624)

554. 1551 Apr 1
[Korea] King Myongjong, 6th year, 2nd month, day *chia-shen* (21). "At night, in the E direction, there was a vapour like fire." (*Myongjong Sillok*) (DC625)

555. 1551 Apr 11
[Korea] King Myongjong, 6th year, 3rd month, day *chia-wu* (31). "At night, in the NE direction, there was a like fire-vapour." (*Myongjong Sillok*) (DC626)

556. 1551 May 27
[Korea] King Myongjong, 6th year, 4th month, day *keng-ch'en* (17). "At night, in the S and N directions, there were like fire-vapours." (*Myongjong Sillok*) (DC627)

557. 1551 Jul 1
[Korea] King Myongjong, 6th year, 5th month, day *i-mao* (52). "In the NW, NE and SE sky, a yellow-red colour shone brilliantly; soon it was extinguished." (*Myongjong Sillok*) (DC628)

558. 1551 Nov 27
[Korea] King Myongjong, 6th year, 10th month, day *chia-shen* (21). "At night, in the NE direction, there was like a fire-vapour." (*Myongjong Sillok*) (DC629)

559. 1552 Feb 16
[Korea] King Myongjong, 7th year, 1st month, day *i-szu* (42). "At night, in the SW and SE directions, there were like fire-vapours." (*Myongjong Sillok*) (DC630)

560. 1552 Mar 30
[Korea] King Myongjong 7th year, 3rd month, day *wu-tzu* (25). "At night, in the N direction, there was like a fire-vapour." (*Myongjong Sillok*) (DC631)

561. 1552 Apr 19
[Korea] King Myongjong, 7th year, 3rd month, day *wu-shen* (45). "At night, in the SE and S directions, there were like fire-vapours." (*Myongjong Sillok*) (DC632)

562. 1552 May 1
[Korea] King Myongjong, 7th year, 4th month, day *keng-shen* (57). "At night, in the SE, E and W directions, there were like fire-vapours." (*Myongjong Sillok*) (DC633)

563. 1552 May 28
[Korea] King Myongjong, 7th year, 5th month, day *ting-hai* (24). "At night, in the SE and SW directions, there were like fire-vapours." (*Myongjong Sillok*) (DC634)

564. 1552 Oct 29
[Korea] King Myongjong, 7th year, 10th month, day *hsin-yu* (58). "At night, just before daybreak, a red vapour filled the sky with its light shining on the Earth." (*Myongjong Sillok*) (DC635)

565. 1552 Nov 19
[Korea] King Myongjong, 7th year, 11th month, day *jen-wu* (19). "After sunset, a vapour with a yellow top and violet bottom filled the W and SW horizon. Its light illuminated the ground. Not until the 1st watch was it extinguished." (*Myongjong Sillok*) (DC636)

566. 1553 Jan 15
[Korea] King Myongjong, 8th year, 1st month, day *chi-mao* (16). "At night, a vapour of fire was blazing upwards into the sky and shining brightly with a red light. After a long while, then it was extinguished." (*Myongjong Sillok*) (DC637)

567. 1553 Feb 7
[Korea] King Myongjong, 8th year, 1st month, day *jen-yin* (39). "At night, in the E, S and W directions, there were like fire-vapours." (*Myongjong Sillok*) (DC638)

568. 1553 Feb 8
[Korea] King Myongjong, 8th year, 1st month, day *kuei-mao* (40). "At night, in the SE and S directions, there were like fire-vapours." (*Myongjong Sillok*) (DC639)

569. 1553 Mar 16
[Korea] King Myongjong, 8th year, 3rd month, day *chi-mao* (16). "At night, in the SE and NE directions, there were like fire-vapours." (*Myongjong Sillok*) (DC640)

570. 1553 Mar 18
[Korea] King Myongjong, 8th year, 3rd month, day *hsin-szu* (18). "At night, in the E and S directions, there were like fire-vapours. Also in the SW direction, there was a fire-vapour." (*Myongjong Sillok*) (DC641)

571. 1553 Jul 13
[Korea] King Myongjong, 8th year, 6th month, day *wu-yin* (15). "At night, in the SW direction, there was like a fire-vapour." (*Myongjong Sillok*) (DC642)

572. 1554 Mar 4
[Korea] King Myongjong, 9th year, 2nd month, day *jen-shen* (9). "At night, in the NE, E, SE, S, SW and NW directions, there were like fire-vapours." (*Myongjong Sillok*) (DC643)

573. 1554 Mar 9
[Korea] King Myongjong, 9th year, 2nd month, day *ting-ch'ou* (14). "At night, in the E and W directions, there were like fire-vapours." (*Myongjong Sillok*) (DC644)

574. 1554 Apr 21
[Korea] King Myongjong, 9th year, 3rd month, day *keng-shen* (57). "At night, in all directions , there were like fire-vapours." (*Myongjong Sillok*) (DC645)

575. 1554 May 5
[Korea] King Myongjong, 9th year, 4th month, day *chia-hsu* (11). "At night, in the S direction, there was like a fire-vapour." (*Myongjong Sillok*) (DC646)

576. 1554 Jun 10
[Korea] King Myongjong, 9th year, 5th month, day *keng-hsu* (47). "At night, from

the 4th to 5th watch, in the SW, SE and S directions, there were like fire-vapours." (*Myongjong Sillok*) (DC647)

577. 1554 Jun 29
[Korea] King Myongjong, 9th year, 5th month, day *chi-szu* (6). "At night, in the SW, NE, S, E and W directions, there were like fire-vapours." (*Myongjong Sillok*) (DC648)

578. 1554 Jul 7
[Korea] King Myongjong, 9th year, 6th month, day *ting-ch'ou* (14). "At night, in the NW direction, there was like a fire-vapour." (*Myongjong Sillok*) (DC649)

579. 1554 Jul 8
[Korea] King Myongjong, 9th year, 6th month, day *wu-yin* (15). "At night, in the SW direction, there was like a fire-vapour." (*Myongjong Sillok*) (DC650)

580. 1554 Aug 7
[Korea] King Myongjong, 9th year, 7th month, day *wu-shen* (45). "At night, in the SE direction, there was like a fire-vapour." (*Myongjong Sillok*) (DC651)

581. 1554 Oct 9
[Korea] King Myongjong, 9th year, 9th month, day *hsin-hai* (48). "At night, there was like a fire-vapour." (*Myongjong Sillok*) (DC652)

582. 1554 Dec 16
[Korea] King Myongjong, 9th year, 11th month, day *chi-wei* (56). "At night, in the NE and S directions, there were like fire-vapours." (*Myongjong Sillok*) (DC653)

583. 1555 Jan 18
[Korea] King Myongjong, 9th year, 12th month, day *jen-ch'en* (29). "At night, in the SW direction, there was like a fire-vapour." (*Myongjong Sillok*) (DC654)

584. 1555 Feb 12
[Korea] King Myongjong, 10th year, 1st month, day *ting-szu* (54). "At night, in the E and S directions, there were like fire-vapours." (*Myongjong Sillok*) (DC655)

585. 1555 Feb 22
[Korea] King Myongjong, 10th year, 2nd month, day *ting-mao* (4). "At night, in the SE, S and NE directions, there were like fire-vapours." (*Myongjong Sillok*) (DC656)

586. 1555 Feb 27
[Korea] King Myongjong, 10th year, 2nd month, day *jen-shen* (9). "At night, in the SW and NE directions, there were like fire-vapours." (*Myongjong Sillok*) (DC657)

587. 1555 Mar 14
[Korea] King Myongjong, 10th year, 2nd month, day *ting-hai* (24). "At night, in the SE, NE and E directions, there were like fire-vapours." (*Myongjong Sillok*) (DC658)

588. 1555 Mar 16
[Korea] King Myongjong, 10th year, 2nd month, day *chi-ch'ou* (26). "At night, in all directions, there were like fire-vapours." (*Myongjong Sillok*) (DC659)

589. 1555 Mar 17
[Korea] King Myongjong, 10th year, 2nd month, day *keng-yin* (27). "At night, in the SW and NE directions, there were like fire-vapours." (*Myongjong Sillok*) (DC660)

590. 1555 Mar 22
[Korea] King Myongjong, 10th year, 2nd month, day *i-wei* (32). "At night, in the NE and E directions, there were like fire-vapours." (*Myongjong Sillok*) (DC661)

591. 1555 Mar 28
[Korea] King Myongjong, 10th year, 3rd month, day *hsin-ch'ou* (38). "At night, in the E and SE directions, there were like fire-vapours." (*Myongjong Sillok*) (DC662)

592. 1555 Apr 19
[Korea] King Myongjong, 10th year, 3rd month, day *kuei-hai* (60). "At night, in the NE, S and NW directions, there were like fire-vapours." (*Myongjong Sillok*) (DC663)

593. 1555 Jun 8
[Korea] King Myongjong, 10th year, 5th month, day *kuei-ch'ou* (50). "At night, in the NE, E, S and SW directions, there were like fire-vapours." (*Myongjong Sillok*) (DC664)

594. 1555 Jun 13
[Korea] King Myongjong, 10th year, 5th month, day *wu-wu* (55). "At night, in the SE and E directions, there were like fire-vapours." (*Myongjong Sillok*) (DC665)

595. 1555 Jul 13
[Korea] King Myongjong, 10th year, 6th month, day *wu-tzu* (25). "At night, in the SW direction, there was like a fire-vapour." (*Myongjong Sillok*) (DC666)

596. 1555 Dec 9
[Korea] King Myongjong, 10th year, 11th month, day *ting-szu* (54). "At night, in the SE direction, there was like a fire-vapour." (*Myongjong Sillok*) (DC667)

597. 1555 Dec 12
[Korea] King Myongjong, 10th year, 11th month, day *keng-shen* (57). "At night, in the S direction, there was like a fire-vapour." (*Myongjong Sillok*) (DC668)

598. 1556 Jan 7
[Korea] King Myongjong, 10th year, intercalary 11th month, day *ping-hsu* (23). "At night, in the S direction, there was a like fire-vapour." (*Myongjong Sillok*) (DC669)

599. 1556 Jan 15
[Korea] King Myongjong, 10th year, 12th month, day *chia-wu* (31). "At night, in the NW direction, there was like a fire-vapour." (*Myongjong Sillok*) (DC670)

600. 1556 Mar 2
[Korea] King Myongjong, 11th year, 1st month, day *hsin-szu* (18). "At night, in the NE direction, there was like a fire-vapour." (*Myongjong Sillok*) (DC671)

601. 1556 Mar 5
[Korea] King Myongjong, 11th year, 1st month, day *chia-shen* (21). "At night, in the SW, SE and N directions, there were like fire-vapours." (Myongjong Sillok) (DC672)

602. 1556 Mar 8
[Korea] King Myongjong, 11th year, 1st month, day *ting-hai* (24). "At night, in the SW and S directions, there were like fire-vapours." (*Myongjong Sillok*) (DC673)

603. 1556 Mar 10
[Korea] King Myongjong, 11th year, 1st month, day *chi-ch'ou* (26). "At night, in the N direction, there was like a fire-vapour." (*Myongjong Sillok*) (DC674)

604. 1556 Mar 11
[Korea] King Myongjong, 11th year, 2nd month, day *keng-yin* (27). "At night, in the SE, S and SW directions, there were like fire-vapours." (*Myongjong Sillok*) (DC675)

605. 1556 Apr 5
[Korea] King Myongjong, 11th year, 2nd month, day *i-mao* (52). "At night, in the S, SE and E directions, there were like fire-vapours." (*Myongjong Sillok*) (DC676)

606. 1556 Apr 7
[Korea] King Myongjong, 11th year, 2nd month, day *ting-szu* (54). "At night, in the E and SE directions, there were like fire-vapours." (*Myongjong Sillok*) (DC677)

607. 1556 Apr 8
[Korea] King Myongjong, 11th year, 2nd month, day *wu-wu* (55). "At night, in the E direction, there was like a fire-vapour." (*Myongjong Sillok*) (DC678)

608. 1556 Apr 13
[Korea] King Myongjong, 11th year, 3rd month, day *kuei-hai* (60). "At night, in the SE and NW directions, there were like fire-vapours." (*Myongjong Sillok*) (DC679)

609. 1556 May 3
[Korea] King Myongjong, 11th year, 3rd month, day *kuei-wei* (20). "At night, in the SW and NE directions, there were like fire-vapours." (*Myongjong Sillok*) (DC680)

610. 1556 Jun 4
[Korea] King Myongjong, 11th year, 4th month, day *i-mao* (52). "After sunset, a red vapour stretched across the sky from the NW to NE. When it started to move it was extinguished." (*Myongjong Sillok*) (DC681)

611. 1556 Jun 6
[Korea] King Myongjong, 11th year, 4th month, day *ting-szu* (54). "At night, in the E and S directions, there were like fire-vapours." (*Myongjong Sillok*) (DC682)

612. 1556 Jun 10
[Korea] King Myongjong, 11th year, 5th month, day *hsin-yu* (58). "At night, in all directions, there were like fire-vapours." (*Myongjong Sillok*) (DC683)

613. 1556 Jun 14
[Korea] King Myongjong, 11th year, 5th month, day *i-ch'ou* (2). "At night, in the S direction, there was like a fire-vapour." (*Myongjong Sillok*) (DC684)

614. 1556 Jun 19
[Korea] King Myongjong, 11th year, 5th month, day *keng-wu* (7). "At night, in the SE and S directions, there were like fire-vapours." (*Myongjong Sillok*) (DC685)

615. 1556 Jul 8
[Korea] King Myongjong, 11th year, 6th month, day *chi-ch'ou* (26). "At night, in the E, S and SW directions, there were like fire-vapours." (*Myongjong Sillok*) (DC686)

616. 1556 Aug 11
[Korea] King Myongjong, 11th year, 7th month, day *kuei-hai* (60). "At night, in the E, S and W directions, there were like fire-vapours." (*Myongjong Sillok*) (DC687)

617. 1556 Oct 30
[Korea] King Myongjong, 11th year, 9th month, day *kuei-wei* (20). "At night, in the SW direction, there was like a fire-vapour." (*Myongjong Sillok*) (DC688)

618. 1556 Nov 11
[Korea] King Myongjong, 11th year, 10th month, day *i-wei* (32). "At night, in the SE, S and SW directions, there were like fire-vapours." (*Myongjong Sillok*) (DC689)

619. 1557 Feb 20
[Korea] King Myongjong, 12th year, 1st month, day *ping-tzu* (13). "At night, in the NE, E, SE and S directions, there were like fire-vapours." (*Myongjong Sillok*) (DC690)

620. 1557 Mar 16
[China] Chia-ching reign-period, 36th year, 2nd month, 16th day. "At Sh'in-Chow, the sky split apart several *chang*. Its light candle-lit the Earth. After a long while, it closed." (*Shan-hsi T'ung-chih*) (DC691)

621. 1557 Mar 25
[Korea] King Myongjong, 12th year, 2nd month, day *chi-yu* (46). "At night, in the E, SE, NW and W directions, there were like fire-vapours." (*Myongjong Sillok*) (DC692)

622. 1557 Apr 28
[Korea] King Myongjong, 12th year, 3rd month, day *kuei-wei* (20). "At night, in the W, SW, S, SE and E directions, there were like fire-vapours." (*Myongjong Sillok*) (DC693)

623. 1557 Jun 4
[Korea] King Myongjong, 12th year, 5th month, day *keng-shen* (57). "At night, in the SW and SE directions, there were like fire-vapours." (*Myongjong Sillok*) (DC694)

624. 1557 Dec 12
[Korea] King Myongjong, 12th year, 11th month, day *hsin-wei* (8). "At night, a vapour of fire rose from the E horizon with its flames pointing into the sky. It was about 1 *chang* in length and was extinguished after a while." (*Myongjong Sillok*) (DC695)

625. 1558 Mar 6
[Korea] King Myongjong, 13th year, 2nd month, day *i-wei* (32). "At night, in the SE, E and N directions, there were like fire-vapours." (*Myongjong Sillok*) (DC696)

626. 1558 Mar 16
[Korea] King Myongjong, 13th year, 2nd month, day *i-szu* (42). "At night, in the E and SE directions, there were like fire-vapours." (*Myongjong Sillok*) (DC697)

627. 1558 Mar 17
[Korea] King Myongjong, 13th year, 2nd month, day *ping-wu* (43). "At night, in the SE, SW and E directions, there were like fire-vapours." (*Myongjong Sillok*) (DC698)

628. 1558 Apr 16
[Korea] King Myongjong, 13th year, 3rd month, day *ping-tzu* (13). "At night, in the NW and SE directions, there were like fire-vapours." (*Myongjong Sillok*) (DC699)

629. 1558 Apr 21
[Korea] King Myongjong, 13th year, 4th month, day *hsin-szu* (18). "At night, in the N, NE, SE, S and SW directions, there were like fire-vapours." (*Myongjong Sillok*) (DC700)

630. 1558 May 4
[Korea] King Myongjong, 13th year, 4th month, day *chia-wu* (31). "At night, in the NW, SE and S directions, there were like fire-vapours." (*Myongjong Sillok*) (DC701)

631. 1559 Feb 2
[Korea] King Myongjong, 13th year, 12th month, day *wu-ch'en* (5). "At night, in the W, E and S directions, there were like fire-vapours." (*Myongjong Sillok*) (DC702)

632. 1559 Feb 9
[Korea] King Myongjong, 14th year, 1st month, day *i-hai* (12). "At night, in the E direction, there was like a fire-vapour." (*Myongjong Sillok*) (DC703)

633. 1559 Mar 7
[Korea] King Myongjong, 14th year, 1st month, day *hsin-ch'ou* (38). "At night, in the NW, SW and E directions, there were like fire-vapours." (*Myongjong Sillok*) (DC704)

634. 1559 Apr 4
[Korea] King Myongjong, 14th year, 2nd month, day *chi-szu* (6). "At night, in the NE, SE and S directions, there were like fire-vapours." (*Myongjong Sillok*) (DC705)

635. 1559 May 9
[Korea] King Myongjong, 14th year, 4th month, day *chia-ch'en* (41). "At night, in the NW and SE directions, there were like fire-vapours." (*Myongjong Sillok*) (DC706)

636. 1559 Dec 19
[Korea] King Myongjong, 14th year, 11th month, day *wu-tzu* (25). "At night, in the SE and NW directions, there were like fire-vapours." (*Myongjong Sillok*) (DC707)

637. 1559 Dec 24
[Korea] King Myongjong, 14th year, 11th month, day *kuei-szu* (30). "At night, in the S direction, there was like a fire-vapour." (*Myongjong Sillok*) (DC708)

638. 1560 Jan 2
[Korea] King Myongjong, 14th year, 12th month, day *jen-yin* (39). "At night, in the NE and SE directions, there were like fire-vapours." (*Myongjong Sillok*) (DC709)

639. 1560 Mar 23
[Korea] King Myongjong, 15th year, 2nd month, day *kuei-hai* (60). "At night, in the SE and SW directions, there were like fire-vapours." (*Myongjong Sillok*) (DC710)

640. 1560 Apr 17
[Korea] King Myongjong, 15th year, 3rd month, day *wu-tzu* (25). "At night, in the SE direction, there was like a fire-vapour." (*Myongjong Sillok*) (DC711)

641. 1560 Jun 24
[Korea] King Myongjong, 15th year, 6th month, day *ping-shen* (33). "At night, in the E and SE directions, there were like fire-vapours." (*Myongjong Sillok*) (DC712)

642. 1560 Jun 26
[Korea] King Myongjong, 15th year, 6th month, day *wu-hsu* (35). "At night, in the NW and W directions, there were like fire-vapours." (*Myongjong Sillok*) (DC713)

643. 1560 Jun 29
[Korea] King Myongjong, 15th year, 6th month, day *hsin-ch'ou* (38). "At night, in the E, S and W directions, there were like fire-vapours." (*Myongjong Sillok*) (DC714)

644. 1561 Nov 8
[Korea] King Myongjong, 16th year, 10th month, day *wu-wu* (55). "At night, in the SW direction, there was like a fire-vapour." (*Myongjong Sillok*) (DC715)

645. 1562 May 7
[Korea] King Myongjong, 17th year, 4th month, day *wu-wu* (55). "At night, in the SW direction, there was like a fire-vapour." (*Myongjong Sillok*) (DC716)

646. 1562 Jun 7
[Korea] King Myongjong, 17th year, 5th month, day *chi-ch'ou* (26). "At night, in the S direction, there was like a fire-vapour." (*Myongjong Sillok*) (DC717)

647. 1563 Mar 16
[Korea] King Myongjong, 18th year, 2nd month, day *hsin-wei* (8). "At night, in the SE direction, there was like a fire-vapour." (*Myongjong Sillok*) (DC718)

648. 1563 Apr 18
[Korea] King Myongjong, 18th year, 3rd month, day *chia-ch'en* (41). "At night, in the SE direction, there was like a fire-vapour." (*Myongjong Sillok*) (DC719)

649. 1563 Apr 22
[Korea] King Myongjong, 18th year, 4th month, day *wu-shen* (45). "At night, in the SE and SW directions, there were like fire-vapours." (*Myongjong Sillok*) (DC720)

650. 1563 Apr 26
[Korea] King Myongjong, 18th year, 4th month, day *jen-tzu* (49). "At night, in the E, SE and S directions, there were like fire-vapours." (*Myongjong Sillok*) (DC721)

651. 1563 Jun 17
[Korea] King Myongjong, 18th year, 5th month, day *chia-ch'en* (41). "At night, in the SE and S directions, there were like fire-vapours." (*Myongjong Sillok*) (DC722)

652. 1563 Jun 26
[Korea] King Myongjong, 18th year, 6th month, day *kuei-ch'ou* (50). "At night, a band of yellow-white vapour rose from the SE and reached the N. It was like a piece of silk covering the sky. After a short while, it was extinguished." (*Myongjong Sillok*) (DC723)

653. 1563 Jul 24
[Korea] King Myongjong, 18th year, 7th month, day *hsin-szu* (18). "Early in the evening, from the E to the NW, there was a vapour with a blue-black colour. After a short while, it was extinguished." (*Myongjong Sillok*) (DC724)

654. 1564 Feb 8
[Korea] King Myongjong, 19th year, 1st month, day *keng-tzu* (37). "At night, in the SE direction, there was like a fire-vapour." (*Myongjong Sillok*) (DC725)

655. 1564 Feb 12
[Korea] King Myongjong, 19th year, 2nd month, day *chia-ch'en* (41). "At night, in the SW and NE directions, there were like fire-vapours." (*Myongjong Sillok*) (DC726)

656. 1564 Mar 11
[Korea] King Myongjong, 19th year, 2nd month, day *jen-shen* (9). "At night, in the SE and N directions, there were like fire-vapours." (*Myongjong Sillok*) (DC727)

657. 1564 Apr 15
[Korea] King Myongjong, 19th year, 3rd month, day *ting-wei* (44). "At night, in the SE direction, there was like a fire-vapour." (*Myongjong Sillok*) (DC728)

658. 1566 Feb 23
[Korea] King Myongjong, 21st year, 2nd month, day *ping-yin* (3). "At night, in the SW, SE and E directions, there were like fire-vapours." (*Myongjong Sillok*) (DC729)

659. 1566 Mar 26
[Korea] King Myongjong, 21st year, 3rd month, day *ting-yu* (34). "At night, in the S direction, there was a red vapour. Amid the blazing flames there was a vapour like a flared-up torch; it was standing erect with a length of about 2 *ch'ih* and it kept on flickering. After a long while, it ceased." (*Chungbo Munhon Pigo*, 8) (DC730)

660. 1566 Aug 10
[Korea] King Myongjong, 21st year, 7th month, day *chia-shen* (21). "At night, in the SE direction, there was like a fire-vapour." (*Myongjong Sillok*) (DC731)

661. 1566 Nov 3
[Korea] King Myongjong, 21st year, 10th month, day *i-mao* (52) (read *chi-mao* (16)). "At night, in the SE and S directions, there were like fire-vapours." (*Myongjong Sillok*) (DC732)

662. 1567 May 7
[Korea] King Myongjong, 22nd year, 3rd month, day *chia-shen* (21). "At night, in

the SE, S, SW and NW directions, there were like fire-vapours." (*Myongjong Sillok*) (DC733)

663. 1567 May 11
[Korea] King Myongjong, 22nd year, 4th month, day *wu-tzu* (25). "At night, in the SE and SW directions, there were like fire-vapours." (*Myongjong Sillok*) (DC734)

664. 1568 Aug 25
[China] Lung-ch'ing reign-period, 2nd year, 8th month, day *chia-ch'en* (41). "The sky split apart at the NW of Chian-chow. It lasted from the hour *ch'ou* to the hour *yin* (1 to 5 a.m.); then it was closed." (*Ming-shih*, 27) (DC735)

665. 1573
[China] Wan-li reign-period, 1st year. "At Chian-chow, the sky split apart." (*Shan-hsi T'ung-chih*) (DC736)

666. 1582 Mar 8
(i) [Japan] Tensho reign-period, 10th year, 2nd month, 14th day. "Tonight, there was a red cloudy vapour in the sky." (*Nihon Temmon Shiryo*, 8) (DC738)

(ii) [Japan] Tensho reign-period, 10th year, 2nd month, 14th day, *kuei-mao* (40). "At night, there was a red vapour filling the N sky." (*Nihon Temmon Shiryo*, 8) (DC738)

667. 1583 Feb 14
(i) [Japan] Tensho reign-period, 11th year, 1st month, 22nd day, *ping-tzu* (13). "A light was seen in the NE direction." (*Nihon Temmon Shiryo*, 7) (DC739)

(ii) [Japan] "On the Jui Mountain, fire columns were burning and lasted quite a while. The time was during the night." (*Nihon Temmon Shiryo*, 7) (DC739)

668. 1587 Mar 4
[Japan] Tensho reign-period, 15th year, 1st month, 25th day. "At night, there was a red vapour filling the N sky." (*Nihon Temmon Shiryo*, 8) (DC740)

669. 1588 Apr 5
[Japan] Tensho reign-period, 16th year, 3rd month, 10th day. "In the hours around midnight, it could be seen from the woods of the temple that in the near N direction, to the N of the Ch'un-jih Mountain and near the barren temple, there rose columns of fire which were taller than even the Yu Mountain." (*Nihon Temmon Shiryo*, 7) (DC741)

670. 1591 Aug/Sep
[Korea] King Sonjo, 24th year, 7th month. "A red vapour rose in the E direction. It divided into three branches; one branch extended towards the N across the whole sky; one branch extended towards the W across half of the sky; one branch extended towards the S again across half of the sky. Their lights gave a candle-glow on the Earth." (*Sonjo Sillok*) (DC743)

671. 1593 Nov 27
[Korea] King Sonjo, 26th year, 11th month, day *i-mao* (52). "At the 1st watch, in the E direction, there was like a fire-vapour." (*Sonjo Sillok*) (DC744)

672. 1594 Jan 5
[Korea] King Sonjo, 26th year, intercalary 11th month, day *chia-wu* (31). "At the 1st watch, in the W direction, there was a red vapour." (*Sonjo Sillok*) (DC745)

673. 1594 Jan 13
[Korea] King Sonjo, 26th year, intercalary 11th month, day *jen-yin* (39). "At the 1st watch, in the W direction, there was a red vapour." (*Sonjo Sillok*) (DC746)

674. 1594 Feb 11
[Korea] King Sonjo, 26th year, 12th month, day *hsin-wei* (8). "At night, in all directions, there were ominous red vapours." (*Sonjo Sillok*) (DC747)

675. 1594 Mar 20
[Korea] King Sonjo, 27th year, 1st month, day *wu-shen* (45). "At night, at the 1st watch, in the E and NW directions, there were like fire-vapours." (*Sonjo Sillok*) (DC748)

676. 1595 Mar 20
[Korea] King Sonjo, 28th year, 2nd month, day *kuei-ch'ou* (50). "At night, at the 1st and 2nd watch, in the SE and SW directions, there were like fire-vapours." (*Sonjo Sillok*) (DC749)

677. 1595 Apr 30
[Korea] King Sonjo, 28th year, 3rd month, day *chia-wu* (31). "At night, at the 1st watch, in the NE direction, amongst the clouds, there was like a fire-vapour." (*Sonjo Sillok*) (DC750)

678. 1596 Oct 31
[Korea] King Sonjo, 29th year, 9th month, day *chia-ch'en* (41). "Just before daybreak, a blue-red vapour rose in the NW horizon and pointed towards the sky. Its width was just visible and its body length was about 5 to 6 *chang*. It lasted a long while, then it was extinguished." (*Sonjo Sillok*) (DC752)

679. 1596 Dec 26
[Korea] King Sonjo, 29th year, 11th month, day *keng-tzu* (37). "At night, at the 1st watch, in the SE direction, there was a vapour like fire. When it started to move, it was extinguished." (*Sonjo Sillok*) (DC753)

680. 1597 Feb 5
[Korea] King Sonjo 29th year, 12th month, day *kuei-wei* (20). "A report: 'On the 19th day of this month, at the 2nd watch of the night, in all directions, there were vapours of fire. Their tails were like brooms and resembled pieces of silk. They were shining with a white light and all were pointing into the sky. What had been seen was frightfully strange.' " (*Sonjo Sillok*) (DC754)

681. 1597 Feb 17
[Korea] King Sonjo, 30th year, 1st month, day *kuei-szu* (30). "At night, from the 1st to the 2nd watch, in the SE direction, there was a red vapour with a width of more than 2 *ch'ih* and a length of more than 10 *chang*. It rose from the horizon and pointed into

the sky. Its light was shining onto the ground. In the S and SW directions, they were also like this." (*Sonjo Sillok*) (DC755)

682. 1597 Feb 18
[Korea] King Sonjo, 30th year, 1st month, day *chia-wu* (31). "At night, at the 1st and 2nd watch, there was a red vapour." (*Sonjo Sillok*) (DC756)

683. 1597 Feb 20
[Korea] King Sonjo, 30th year, 1st month, day *ping-shen* (33). "At night, at the 1st watch, in the E and S directions, there were red vapours." (*Sonjo Sillok*) (DC757)

684. 1597 Feb 22
[Korea] King Sonjo, 30th year, 1st month, day *wu-hsu* (35). "At night, at the 1st and 2nd watch, in the S and SW directions, there were red vapours." (*Sonjo Sillok*) (DC758)

685. 1599 Mar 23
[Korea] King Sonjo, 32nd year, 2nd month, day *ting-ch'ou* (14). "At night, there were violet vapours like arrows and spears, four in the SE direction and one in the W direction. They were advancing to and fro with one and another. When they started to move, then they were extinguished." (*Sonjo Sillok*) (DC759)

686. 1599 Mar 27
[Korea] King Sonjo, 32nd year, 3rd month, day *hsin-szu* (18). "At night, at the 2nd watch, in three directions E, W and S, there were flame-like red vapours." (*Sonjo Sillok*) (DC760)

Part 4. The Period from AD 1601 to 1770

687. 1601 Jan 28
[Korea] King Sonjo, 33rd year, 12th month, day *chia-tzu* (1). "... a red vapour first rose in the SE direction and then in the NW direction. It started to move and covered the sky. It shone brilliantly in all directions, such that shadows of people could be seen. It lasted a long while then it dispersed." (*Sonjo Sillok*) (DC761)

688. 1601 Mar 31
[Korea] King Sonjo, 34th year, 2nd month, day *ping-shen* (33). "At night, at the 1st watch, in the SW direction, there was a vapour like fire. Its length was about 7 or 8 *ch'ih* and width was more than 1 *ch'ih*. It lasted a long while then it extinguished." (*Sonjo Sillok*) (DC762)

689. 1601 Apr 4
[Korea] King Sonjo, 34th year, 3rd month, day *keng-tzu* (37). "At the 1st watch, in the NE and SW directions, there were like fire-vapours. At the 5th watch, in the NE, SW and SE directions, there were like fire-vapours." (*Sonjo Sillok*) (DC763)

690. 1602 Dec 27
[Korea] King Sonjo, 35th year, 11th month, day *jen-shen* (9). "At night, from the 1st to 3rd watch, in the NE direction, there was a vapour like fire." (*Sonjo Sillok*) (DC764)

691. 1603 Feb 1
[Korea] King Sonjo, 35th year, 12th month, day *wu-shen* (45). "At night, at the 1st watch, in the SE direction, amongst the dense clouds there was a vapour like fire. Its length was more than 1 *chang* and width was about several *ch'ih*." (*Sonjo Sillok*) (DC765)

692. 1603 Feb 5
[Korea] King Sonjo, 35th year, 5th month, day *jen-tzu* (49). "At night, at the 1st watch, in the NE direction, there was a red vapour. It lasted for a long while, then it was extinguished." (*Sonjo Sillok*) (DC766)

693. 1603 Jul 3
[Korea] King Sonjo, 35th year, 5th month, day *keng-ch'en* (17). "At night, at the 1st and 2nd watch, in the S direction, there was like a fire-vapour." (*Sonjo Sillok*) (DC767)

694. 1604 Feb 27
[Korea] King Sonjo, 37th year, 1st month, day *chi-mao* (16). "At night, at the 1st watch, in the E and SE directions, there were like fire-vapours." (*Sonjo Sillok*) (DC768)

695. 1604 Dec 15
[Korea] King Sonjo, 37th year, 10th month, day *hsin-wei* (8). "At night, at the 1st watch, in the E direction, there was a vapour like fire." (*Sonjo Sillok*) (DC769)

696. 1605 Jan 17
[Korea] King Sonjo, 37th year, 11th month, day *chia-ch'en* (41). "In the early evening, in every direcion amongst the dark clouds there was a red vapour blazing like flames. It first rose in the SE direction. Amidst the blaze there was another band of vapour like the burning fire of a torch. It was standing upright with a length of about 2 to 3 *chang*. Then red vapours also rose in the S, SW, W , NW, N and E directions, in that order. Their shapes and sizes were more or less the same and were constantly flickering. At the 4th watch, the clouds were dense and snow was falling, and they were not seen." (*Sonjo Sillok*) (DC771)

697. 1605 Feb 10
[Korea] King Sonjo, 37th year, 12th month, day *wu-ch'en* (5). "At night, at the 1st watch, in the NE, E and S directions, there were vapours like fire. They were constantly flickering." (*Sonjo Sillok*) (DC772)

698. 1605 Mar 8
[Korea] King Sonjo, 38th year, 1st month, day *chia-wu* (31). "At night, at the 1st and 2nd watch, in all directions, there were red vapours like the colour of fire." (*Sonjo Sillok*) (DC773)

699. 1605 Mar 11
[Korea] King Sonjo, 38th year, 1st month, day *ting-yu* (34). "At night, at the 1st watch, in the S direction, there was a red vapour blazing like flames. Within it there was a band of vapour like a torch fire standing in an upright position. It was about 2 *ch'ih* in length and constantly wavering. After a long while, it ceased. At the 2nd watch, there was a band of white vapour shaped like a standing broom. It penetrated the 3rd star of *Kou-chen*. Its length was about 1 *ch'ih*. At the end of the 2nd watch, it was extinguished." (*Sonjo Sillok*) (DC774)

700. 1605 Mar 21
[Korea] King Sonjo, 38th year, 2nd month, day *ting-wei* (44). "At night, at the 1st watch, in the NW, E and S directions, there were red vapours like flames." (*Sonjo Sillok*) (DC775)

701. 1606 Jan 30
[Korea] King Sonjo, 38th year, 12th month, day *chi-szu* (6). "A report: 'On the 22nd day of this month, at the 1st watch, there was a band of red vapour in the sky above the S horizon. Its light was like a flame. It had a shape like a piece of silk cloth. Sometimes it stretched across the whole sky, sometimes half of the sky. Moments later, another band rose to follow; its shape was as before. At the 3rd watch, they were extinguished. Those places which had been lit by the flames were bright as the colour of a faint Moon. These strange happenings were extraordinary events.' " (*Sonjo Sillok*) (DC776)

702. 1606 Apr 7
[Korea] King Sonjo, 39th year, 3rd month, day *chi-szu* (6). "At night, from the the 1st to the 2nd watch, there was a red vapour." (*Sonjo Sillok*) (DC777)

703. 1611 Mar 10
[Korea] King Kwanghae-gun, 3rd year, 1st month, day *ting-mao* (4). "At night, at the 1st

watch, in three directions, E, W and N there were red vapours. Five of them were shaped like torches. After a long while then they were extinguished." (*Kwanghae-gun Sillok*) (DC779)

704. 1613 Apr 16
[Korea] King Kwanghae-gun, 5th year, 2nd month, day *i-mao* (52). "At night, at the 1st watch, there were red vapours as large as one to two arm-stretches and 3 to 4 *chang* in length. They were shaped like torches. Three of these lined up below *Pei-tou*, two in the S direction, and one each in the E and SE directions. After a long while, then they were extinguished." (*Kwanghae-gun Sillok*) (DC780)

705. 1618 May 17
(i) [China] T'ien-ming reign-period, 3rd year, 4th month, day *jen-tzu* (49). "There were two bands of blue-black vapour stretching across the sky from W to E." (*Ch'ing-shih-kao*, 39) (DC782)

(ii) [China] (T'ien-ming reign-period, 3rd year, 4th month, day *jen-tzu* (49)). "This evening, there were two bands of blue-black vapour stretching across the sky from W to E." (*Ch'ing-shih-lu*, 5) (DC782)

706. 1618 Jul 19
[China] T'ien-ming reign-period, 3rd year, 5th month, day *i-mao* (52). "There were three vapours of red, green and white hanging down from the sky. They wavered left and right; the top was circular like a door." (*Ch'ing-shih-kao*, 31) (DC783)

707. 1618 Nov 17
[Korea] King Kwanghae-gun, 10th year, 10th month, day *ping-ch'en* (53). "At night, at the 1st watch, in the NW and NE directions, there were vapours like flames." (*Kwanghae-gun Sillok*) (DC784)

708. 1618 Dec 14
[Korea] King Kwanghae-gun, 10th year, 10th month, day *kuei-wei* (20). "At night, in the E direction, there was a vapour like a flame." (*Kwanghae-gun Sillok*) (DC785)

709. 1619 Jan 4
[Korea] King Kwanghae-gun, 10th year, 11th month, day *chia-ch'en* (41). "At night, a band of green-white vapour rose from the NW and pointed straight towards the E. Its length extended across the whole sky and its width was about 2 to 3 *ch'ih*." (*Kwanghae-gun Sillok*) (DC786)

710. 1619 Jan 5
[Korea] King Kwanghae-gun, 10th year, 11th month, day *i-szu* (42). "At night, in the S direction, there was a vapour like a flame. Also there was a red vapour standing upright with a length of 3 to 4 *ch'ih* and width of more than 1 ch'ih. After a long while then they were extinguished." (*Kwanghae-gun Sillok*) (DC787)

711. 1619 Jan 7
[Korea] King Kwanghae-gun, 10th year, 11th month, day *ting-wei* (44). "At night, in the E direction, there was a vapour like a flame." (*Kwanghae-gun Sillok*) (DC788)

712. 1620 Oct 19
[China] Wan-li reign-period, 48th year, 9th month, 24th day. "A red vapour stretched across the sky." (*Chang-shan Hsien-chih*) (DC789)

713. 1623 Mar 28
[Korea] King Kwanghae-gun, 15th year, 2nd month, day *wu-tzu* (25). "At night, green-red vapours rose from the SW towards the sky as they fought among themselves. At the 4th watch, the SE was the same." (*Kwanghae-gun Sillok*) (DC790)

714. 1624 Feb 21 and Feb 25
[Korea] King Injo, 2nd year, 1st month, day *jen-hsu* (59). "The 3rd day of this month, at the 1st watch, in the W direction, there was a red vapour with an extraordinary shape. The common people who saw it were frightened. The officials on duty were reluctant to go up the observatory to observe, hence the director of the observatory requested their punishment. At night, at the 1st watch, in the E, SE and W directions, there were vapours like flames. At the 4th watch, in the S direction, there was a vapour like a flame." (*Injo Sillok*) (DC791-792)

715. 1624 Feb 26
[Korea] King Injo, 2nd year, 1st month, day *kuei-hai* (60). "At night, at the 3rd watch, in the SE direction, there was a flame-like vapour. At the 4th and 5th watch, in the NE, SE and SW directions, there were vapours like flames." (*Injo Sillok*) (DC793)

716. 1624 Mar 21
[Korea] King Injo, 2nd year, 2nd month, day *ting-hai* (24). "At the 1st watch, in the SE direction, there was a vapour like a flame." (*Injo Sillok*) (DC794)

717. 1624 Apr/May
[China] T'ien-ch'i reign-period, 4th year, 3rd month. "Every village near Hang-chow and Chia-hsing reported that flames were seen in the sky at midnight like galloping calvary horses, and obscure clinking noises of spears or lances were heard." (*Chia-hsing Hsien-chih* and *Chia-hsing Fu-chih*) (DC795)

718. 1624 Apr 18
[Korea] King Injo, 2nd year, 3rd month, day *i-mao* (52), 1st day of the month. "Just before daybreak, in the SE there was a vapour like a flame. At night, in the S, NE, SE and SW directions, there were vapours like flames." (*Injo Sillok*) (DC796)

719. 1624 Apr 19
[Korea] King Injo, 2nd year, 3rd month, day *ping-ch'en* (53). "In the early evening, in the E direction, there was a vapour like a flame." (*Injo Sillok*) (DC797)

720. 1624 Apr 21
[Korea] King Injo, 2nd year, 3rd month, day *wu-wu* (55). "Just before daybreak, in the E direction, there was a vapour like a flame. At night, in the E direction, a red vapour shone brilliantly on the horizon. In the N and SW directions, there were vapours like flames." (*Injo Sillok*) (DC798)

721. 1624 Jun 9
[Korea] King Injo, 2nd year, 4th month, day *ting-wei* (44). "At night, a blue-red vapour from the W direction, pointed towards the NE direction. In the S direction, there was a vapour like moon-light." (*Injo Sillok*) (DC799)

722. 1624 Jul 12
[Korea] King Injo, 2nd year, 5th month, day *chi-mao* (16). "At night, in the SW direction, there was a red vapour like fire." (*Injo Sillok*) (DC800)

723. 1624 Jul 13
[Korea] King Injo, 2nd year, 5th month, day *keng-ch'en* (17). "At night, in all directions, there was a vapour like fire." (*Injo Sillok*) (DC801)

724. 1624 Dec 31
[Korea] King Injo, 2nd year, 11th month, day *jen-shen* (9). "At night, in the SW direction, there was a vapour like a flame." (*Injo Sillok*) (DC802)

725. 1625 Feb 6
[Korea] King Injo, 2nd year, 12th month, day *chi-yu* (46). "At night, in the SW direction, there was a vapour like a flame." (*Injo Sillok*) (DC803)

726. 1625 Feb 9
[Korea] King Injo, 3rd year, 1st month, day *jen-tzu* (49). "At night, in the NW direction, there was a vapour like a flame." (*Injo Sillok*) (DC804)

727. 1625 Mar 2
[Korea] King Injo, 3rd year, 1st month, day *kuei-yu* (10). "At night, there was a vapour like a flame." (*Injo Sillok*) (DC805)

728. 1625 Mar 6
[Korea] King Injo, 3rd year, 1st month, day *ting-ch'ou* (14). "At night, in the E and W directions, there were vapours like flames." (*Injo Sillok*) (DC806)

729. 1625 Mar 11
[Korea] King Injo, 3rd year, 2nd month, day *jen-wu* (19). "At night, in the NE and SW directions, there were vapours like flames." (*Injo Sillok*) (DC807)

730. 1625 Mar 31
[Korea] King Injo, 3rd year, 2nd month, day *jen-yin* (39). "At night, in the SE and NE directions, there were vapours like flames." (*Injo Sillok*) (DC808)

731. 1625 Apr 2
[Korea] King Injo, 3rd year, 2nd month, day *chia-ch'en* (41). "In all directions, there were vapours like flames." (*Injo Sillok*) (DC809)

732. 1625 Apr 7
[Korea] King Injo, 3rd year, 3rd month, day *chi-yu* (46), 1st day of the month. "At night, in the N and SE directions, there were vapours like flames." (*Injo Sillok*) (DC810)

733. 1625 Apr 8
[Korea] King Injo, 3rd year, 3rd month, day *keng-hsu* (47). "At night, in the E and SE directions, there were vapours like flames." (*Injo Sillok*) (DC811)

734. 1625 Apr 11
[Korea] King Injo, 3rd year, 3rd month, day *kuei-ch'ou* (50). "At night, in the NE, SE and SW directions, there were vapours like flames." (*Injo Sillok*) (DC812)

735. 1625 Aug 4
[Korea] King Injo, 3rd year, 7th month, day *wu-shen* (45). "At night, in the NE direction, there was a vapour like fire." (*Injo Sillok*) (DC813)

736. 1625 Aug 13
[Korea] King Injo, 3rd year, 7th month, day *ting-szu* (54). "At night, a band of green-white vapour rose from the NE horizon. It pointed vertically into the sky with a length of more than 10 *chang*." (*Injo Sillok*) (DC814)

737. 1625 Aug 28
[Korea] King Injo, 3rd year, 7th month, day *jen-shen* (9). "At night, in the NW and SW directions, there were vapours like flames." (*Injo Sillok*) (DC815)

738. 1625 Sep 16
[Korea] King Injo, 3rd year, 8th month, day *hsin-mao* (28). "In the early evening, in the NE and NW directions, there were vapours like flames." (*Injo Sillok*) (DC816)

739. 1625 Sep 20
[Korea] King Injo, 3rd year, 8th month, day *i-wei* (32). "At night, in the NE and SW directions, there were vapours like flames." (*Injo Sillok*) (DC817)

740. 1625 Nov 2
[Korea] King Injo, 3rd year, 10th month, day *wu-yin* (15). "At night, in the SW direction, there was a vapour like a flame." (*Injo Sillok*) (DC818)

741. 1625 Nov 24
[Korea] King Injo, 3rd year, 10th month, day *keng-tzu* (37). "At night, in the S direction, there was a vapour like a flame." (*Injo Sillok*) (DC819)

742. 1625 Nov 30
[Korea] King Injo, 3rd year, 11th month, day *ping-wu* (43), 1st day of the month. "At night, in the SW direction, there was a vapour like a flame." (*Injo Sillok*) (DC820)

743. 1625 Dec 15
[Korea] King Injo, 3rd year, 11th month, day *hsin-yu* (58). "At night, in the SW and NE directions, there were vapours like flames." (*Injo Sillok*) (DC821)

744. 1625 Dec 28
[Korea] King Injo, 3rd year, 11th month, day *chia-hsu* (11). "At night, there was a vapour like a flame." (*Injo Sillok*) (DC822)

745. 1626 Jan 3
[Korea] King Injo, 3rd year, 12th month, day *keng-ch'en* (17). "At night, in the E direction, there was a vapour like a flame." (*Injo Sillok*) (DC823)

746. 1626 Jan 25
[Korea] King Injo, 3rd year, 12th month, day *jen-yin* (39). "At night, in the W direction, there was a vapour like a flame." (*Injo Sillok*) (DC824)

747. 1626 Jan 26 to 27
[Korea] King Injo, 3rd year, 12th month, day *kuei-mao* (40). "At night, in the SW direction, there was a vapour like a flame." (*Injo Sillok*) (DC825-826)

748. 1626 Mar 6
[Korea] King Injo, 4th year, 2nd month, day *jen-wu* (19). "At the 5th watch, in the E and SE directions, there were vapours like flames." (*Injo Sillok*) (DC827)

749. 1626 Mar 18
[Korea] King Injo, 4th year, 2nd month, day *chia-wu* (31). "At night, at the 1st and 2nd watch, in the S direction, there was a vapour like a flame." (*Injo Sillok*) (DC828)

750. 1626 Mar 19
[Korea] King Injo, 4th year, 2nd month, day *i-wei* (32). "At night, in the S direction, there was a vapour like a flame." (*Injo Sillok*) (DC829)

751. 1626 Mar 20 to 21
[Korea] King Injo, 4th year, 2nd month, day *ping-shen* (33) and *ting-yu* (34). "At night, in E and SE directions, there were vapours like flames." (*Injo Sillok*) (DC830-831)

752. 1626 Mar 22
[Korea] King Injo, 4th year, 2nd month, day *wu-hsu* (35). "At night, in the NW, SE and S directions, there were vapours like flames." (*Injo Sillok*) (DC832)

753. 1626 Mar 23
[Korea] King Injo, 4th year, 2nd month, day *chi-hai* (36). "At night, in the SE direction, there was a vapour like a flame." (*Injo Sillok*) (DC833)

754. 1626 Mar 25
[Korea] King Injo, 4th year, 2nd month, day *hsin-ch'ou* (38). "At night, in the E direction, there was a vapour like a flame." (*Injo Sillok*) (DC834)

755. 1626 Mar 29
[Korea] King Injo, 4th year, 3rd month, day *i-szu* (42). "At night, in the S direction, there was a vapour like a flame shining down on the Earth." (*Injo Sillok*) (DC835)

756. 1626 Mar 31
[Korea] King Injo, 4th year, 3rd month, day *ting-wei* (44). "At night, in the S direction, there was a vapour like a flame." (*Injo Sillok*) (DC836)

757. 1626 Apr 2
[Korea] King Injo, 4th year, 3rd month, day *chi-yu* (46). "At night, in the NE and E directions, there were vapours like flames." (*Injo Sillok*) (DC837)

758. 1626 Apr 3
[Korea] King Injo, 4th year, 3rd month, day *keng-hsu* (47). "At night, in the S direction, there was a vapour like a flame." (*Injo Sillok*) (DC838)

759. 1626 Apr 18
[Korea] King Injo, 4th year, 3rd month, day *i-ch'ou* (2). "At night, in the NE, SE and S directions, there were vapours like flames." (*Injo Sillok*) (DC839)

760. 1626 Apr 20
[Korea] King Injo, 4th year, 3rd month, day *ting-mao* (4). "At night, in the E and NE directions, there were vapours like flames." (*Injo Sillok*) (DC840)

761. 1626 Apr 22
[Korea] King Injo, 4th year, 3rd month, day *chi-szu* (6). "At night, in the NE, E, SE and S directions, there were vapours like flames." (*Injo Sillok*) (DC841)

762. 1626 Apr 28
[Korea] King Injo, 4th year, 4th month, day *i-hai* (12). "At night, at the 1st watch, in the S direction, there was a vapour like a flame." (*Injo Sillok*) (DC842)

763. 1626 Jun 7
[Korea] King Injo, 4th year, 5th month, day *i-mao* (52). "At night, at the 1st watch, a band of green-white vapour rose in the SW direction and pointed upwards into the sky. Its length was 3 to 4 *chang* and width was about 1 *ch'ih*. After a long while, it was extinguished." (*Injo Sillok*) (DC843)

764. 1626 Jun 16
[Korea] King Injo, 4th year, 5th month, day *chia-tzu* (1). "At night, in the SW and E directions, there were vapours like flames." (*Injo Sillok*) (DC844)

765. 1626 Jun 24
[Korea] King Injo, 4th year, 6th month, day *jen-shen* (9), 1st day of the month. "At night, in the W, E and NE directions, there were vapours like flames." (*Injo Sillok*) (DC845)

766. 1626 Dec 7
[Korea] King Injo, 4th year, 10th month, day *wu-wu* (55). "At night, at the 1st watch, in the W direction, there was a vapour like a flame." (*Injo Sillok*) (DC846)

767. 1626 Dec 11
[Korea] King Injo, 4th year, 10th month, day *jen-hsu* (59). "At night, on the E horizon, there was a vapour like a flame." (*Injo Sillok*) (DC847)

768. 1626 Dec 16
[Korea] King Injo, 4th year, 10th month, day *ting-mao* (4). "At night, in the NW direction, there was a vapour like a flame." (*Injo Sillok*) (DC848)

769. 1626 Dec 18
[Korea] King Injo, 4th year, 10th month, day *chi-szu* (6). "At night, in the E direction, there was a vapour like a flame." (*Injo Sillok*) (DC849)

770. 1626 Dec 19
[Korea] King Injo, 4th year, 11th month, day *keng-wu* (7), 1st day of the month. "At night, at the 1st watch, in the S direction, there was a vapour like a flame. From the 2nd to 4th watch, in the E and SW directions, there were vapours like flames." (*Injo Sillok*) (DC850)

771. 1626 Dec 26
[Korea] King Injo, 4th year, 11th month, day *ting-ch'ou* (14). "At night, at the 3rd watch, in the SW direction, there was a vapour like a flame." (*Injo Sillok*) (DC851)

772. 1627 Jan 16
[Korea] King Injo, 4th year, 11th month, day *wu-hsu* (35). "At night, in the S and SE directions, there were vapours like flames." (*Injo Sillok*) (DC852)

773. 1627 Jan 24
[Korea] King Injo, 4th year, 12th month, day *ping-wu* (43). "At night, at the 1st and 2nd watch, a band of green-white vapour rose in the NE direction and pointed straight towards the NW. Its length was 3 to 4 *chang*." (*Injo Sillok*) (DC853)

774. 1627 Feb 4
[Korea] King Injo, 4th year, 12th month, day *ting-szu* (54). "At night, in the SW, E and SE directions, there were vapours like flames." (*Injo Sillok*) (DC854)

775. 1627 Feb 9
[Korea] King Injo, 4th year, 12th month, day *jen-hsu* (59). "At night, in the S and NE directions, there were vapours like flames." (*Injo Sillok*) (DC855)

776. 1628 Apr 4
[Korea] King Injo, 6th year, 3rd month, day *jen-hsu* (59). "At night, at the 2nd watch, in all directions, there were vapours like flames." (*Injo Sillok*) (DC856)

777. 1629 Sep 4
[Korea] King Injo, 7th year, 7th month, day *keng-tzu* (37). "Just before daybreak, a blue-red vapour of fire, neither an illusion nor a halo, was standing at the SW direction and pointing into the sky. Its width was several tens of *ch'ih*." (*Injo Sillok*) (DC858)

778. 1631 Sep 21
[China] T'ien-ts'ung reign-period, 5th year, 8th month, day *ting-mao* (4). "... a thick fog, such that people could not be seen. Suddenly, a blue-green vapour from the sky rushed into the enemy camp; and very suddenly, its middle part opened like a door. Our soldiers hence won." (*Ch'ing-shih-kao*, 39) (DC859)

779. 1633 Feb 9
[Korea] King Injo, 11th year, 1st month, day *chia-wu* (31). "A red vapour formed a pillar to the sky." (*Injo Sillok*) (DC860)

780. 1634 Jan/Feb
[China] Ch'ung-cheng reign-period, 7th year, 1st month. "A multi-coloured vapour like rings of different sizes was everywhere in the sky. After a long time, it was extinguished." (*Yen-shan Hsien-chih* and *T'ien-tsin Fu-chih*) (DC861)

781. 1634 Mar 16
[Korea] King Injo, 12th year, 2nd month, day *chia-hsu* (11). "Just after moonrise, there was a red vapour shaped like a torch-fire." (*Injo Sillok*) (DC862)

782. 1635 Dec 15
[Korea] King Injo, 13th year, 10th month, day *wu-shen* (45). "In the E direction, there was a vapour like a flame." (*Injo Sillok*) (DC864)

783. 1638 Dec 23
[China] Ch'ung-cheng reign-period, 11th year, 11th month, 19th day. "In the NE, there were several tens of bands of red vapour like swords and lances arranged in a line." (*Tung-cheng Hsu-hsiu Hsien-chih*) (DC865)

784. 1639 Apr 8
[Korea] King Injo, 17th year, 3rd month, day *kuei-hai* (60). "In the SE direction, a red vapour lit the sky like candle-glow." (*Injo Sillok*) (DC866)

785. 1639 Apr/May
[China] Ch'ung-cheng reign-period, 12th year, 3rd month. "In Chen-chow, at night, a five-coloured rainbow descended to the ground for several *k'o* (about an hour)." (*Chi-chou Chih*) (DC867)

786. 1640 Dec 24
[China] Ch'ung-cheng reign-period, 13th year, 11th month, 12th day. "A short time after the 1st watch, a red vapour filled the sky." (*Ching-Chiang Hsien-chih*) (DC868)

787. 1643 Sep 26
[China] Ch'ung-cheng reign-period, 16th year, 8th month, 14th day. "At night, in the county of Li-cheng, the stars and Moon were clear and bright, and there was not a single cloud or thunder. A dragon ascended with a wriggling motion and glittered with a golden light. All windows and doors reflected the yellow light." (*Lu-an Fu-chih*) (DC870)

788. 1644 Feb 8
[China] Ch'ung-cheng reign-period, 17th year, 1st month, 1st day. "In the hours of *yin* (3–5 a.m.), a red vapour stretched across the sky." (*Chen-ting Hsien-chih*) (DC871)

789. 1646 Mar 1
[China] Shun-chih reign-period, 3rd year, 1st month, day *jen-hsu* (59). "At night, in the N direction, amongst the clouds, there was a red light similar to a shadow of fire." (*Ch'ing-shih-kao*, 39) (DC872)

790. 1648 Jan 24
[China] Shun-chih reign-period, 5th year, 12th month, 30th day. "At the 1st watch, there were hanging white clothes similar to coarse sackcloth. Four pieces of the cloth spread out vertically into approximately several tens of bands. The cold light reflected down made one's heart and eyes palpitate." (*Ch'ing-shih-kao*)

791. 1648 Summer
[China] Shun-chih reign-period, 5th year, summer. "In the county of Chia-Ting, a red vapour was seen stretching across the E." (*Ch'ing-shih-kao*, 41) (DC874)

792. 1648 Nov 16
[Korea] King Injo, 26th year, 10th month, day *kuei-szu* (30). "At night, in the E direction, there was a red vapour like a dragon or snake." (*Injo Sillok*) (DC875)

793. 1650 Feb 27
[China] Shun-chih reign-period, 7th year, 1st month, 27th day. "At night, to the west of the River Wang, there was a blue vapour stretching across the sky." (*Ch'ing-shih-kao*, 42) (DC876)

794. 1651 Feb 19
[China] Shun-chih reign-period, 7th year, 12th month, 30th day. "In the Hsiao district, several tens of white vapours like coarse sackcloth were seen. The reflected cold light dazzled people." (*Ch'ing-shih-kao*)

795. 1655 Jul 20
[China] Shun-chih reign-period, 12th year, 6th month, day *keng-wu* (7). "In the N direction, there was a blue-black cloudy vapour changing shape like a dragon." (*Ch'ing-shih-kao*, 39) (DC878)

796. 1659 Jan 16
[China] Shun-chih reign-period, 15th year, 12th month, 24th day. "At night, in Lungyang county there were 3 bands of red light. They shone vertically into the city like a torch. They began to disappear at dawn." (*Hu-nan T'ung-chih*, 2) (DC879)

797. 1660 Jan 13
[Korea] King Hyonjong, 1st year, 12th month, day *wu-tzu* (25). "At night, at the 1st watch, there was a vapour like a flame." (*Hyonjong Sillok*) (DC880)

798. 1660 Jan 15
[Korea] King Hyonjong, 1st year, 12th month, day *keng-yin* (27). "At night, there was a vapour like a flame." (*Hyonjong Sillok*) (DC881)

799. 1660 Jan 24
[Korea] King Hyonjong, 1st year, 12th month, day *chi-hai* (36). "At night, in the SE and SW directions, there were vapours like flames." (*Hyonjong Sillok*) (DC882)

800. 1660 Jan 31
[Korea] King Hyonjong, 1st year, 12th month, day *ping-wu* (43). "In the SE direction, there was a vapour like a flame." (*Hyonjong Sillok*) (DC883)

801. 1666 Mar 14
[China] K'ang-hsi reign-period, 5th year, 2nd month, day *keng-shen* (57). "In the hours of *hai* (9–11 p.m.), at the zenith, there were 4 or 5 bands of green-white vapour." (*Ch'ing-shih-kao*, 39) (DC884)

802. 1667 Feb 12
[China] K'ang-hsi reign-period, 6th year, 1st month, 20th day. "In the evening hours, in the NE, there were flames blazing like a burning fire. It gradually spread out to fill the NW. When one looked out from a high point of the city wall, one could see a red vapour

stretching across the sky. After a long time, then it was extinguished." (*San-kang-shih-lueh* and *Shanghai Hsien-chih*) (DC885)

803. 1673 Feb 25
[China] K'ang-hsi reign-period, 12th year, 1st month, day *keng-ch'en* (17). "In the NW and NE, a green-white vapour extended across the sky like a piece of cloth." (*Ch'ing-shih-kao*, 39) (DC886)

804. 1673 Early Summer
[China] K'ang-hsi reign-period, 12th year, early summer. "In the NW direction, a broad sword was seen. It was more than a *chang* in length and coloured red. After a long while then it disappeared." (*Hu-nan T'ung-chih*, 244) (DC887)

805. 1675 Jan 31
[Korea] King Sukjong, 1st year, 1st month, day *i-ch'ou* (2). "At night, there was a green-red vapour like a rainbow." (*Chungbo Munhon Pigo*, 8) (DC888)

806. 1678 Jul 30 to Aug 1
[China] K'ang-hsi reign-period, 17th year, 6th month, day *hsin-szu* (18). "On day *hsin-szu* (18), there was a band of blue vapour with a width of more than 5 *ch'ih*. On day *jen-wu* (19), there was a band of green-white vapour and 3 bands of blue vapour with widths of more than a *ch'ih*. On day *kuei-wei* (20), there was a band of blue vapour with a width of more than 6 *ch'ih*. They were all from the NW to NE." (*Ch'ing-shih-kao*, 39) (DC889-891)

807. 1679 Nov 20
[Korea] King Sukjong, 5th year, 10th month, day *chi-mao* (16). "At night, in the E direction, there was a vapour like a flame." (*Sukjong Sillok*) (DC892)

808. 1679 Dec 2
[Korea] King Sukjong, 5th year, 10th month, day *hsin-mao* (28). "At night, in the E direction, there was a vapour like a flame." (*Sukjong Sillok*) (DC893)

809. 1681 Jul 24
[China] K'ang-hsi reign-period, 20th year, 6th month, day *hsin-mao* (28). "In the NE there were 6 bands of blue vapour." (*Ch'ing-shih-kao*, 39) (DC894)

810. 1681 Dec 19
[Korea] King Sukjong, 7th year, 11th month, day *chi-wei* (56). "At night, in the W direction, there was a vapour like a flame." (*Sukjong Sillok*) (DC895)

811. 1682 Mar 12
[Korea] King Sukjong, 8th year, 2nd month, day *jen-wu* (19). "At night, in the SE direction, there was a vapour like a flame." (*Sukjong Sillok*) (DC896)

812. 1682 Mar 25
[Korea] King Sukjong, 8th year, 2nd month, day *i-wei* (32). "At night, in the S direction, there was a vapour like a flame." (*Sukjong Sillok*) (DC897)

813. 1682 Apr 1
[Korea] King Sukjong, 8th year, 2nd month, day *jen-yin* (39). "At night, there was a vapour like a flame." (*Sukjong Sillok*) (DC898)

814. 1682 Apr 3
[Korea] King Sukjong, 8th year, 2nd month, day *chia-ch'en* (41). "At night, in the S, N and NW, there were vapours like flames." (*Sukjong Sillok*) (DC899)

815. 1687 Jun 24
[China] K'ang-hsi reign-period, 26th year, 5th month, last day of the month. "In the NW of Chiung-chou county, a blue vapour extended across the sky." (*Ch'iung-chou Fu-chih*) (DC900)

816. 1693 Apr 30
[Korea] King Sukjong, 19th year, 3rd month, day *chi-szu* (6). "At night, there was a vapour like a flame." (*Sukjong Sillok*) (DC901)

817. 1703 Nov 5
[Korea] King Sukjong, 29th year, 9th month, day *chi-szu* (6). "At night, in the SE and SW directions, there were vapours like flames." (*Sukjong Sillok*) (DC902)

818. 1703 Nov 16
[Korea] King Sukjong, 29th year, 10th month, day *keng-ch'en* (17). "In the N direction, there was a vapour like a flame." (*Sukjong Sillok*) (DC903)

819. 1712 Sep 4
[Korea] King Sukjong. 38th year, 8th month, day *i-mao* (52). "In the early evening, in the W direction, there was a red vapour like a flame. It lasted for a long while, then it was extinguished." (*Sukjong Sillok*) (DC904)

820. 1713 Nov 19
[Korea] King Sukjong, 39th year, 10th month, day *ping-tzu* (13). "In the W direction, there was a vapour like a flame." (*Sukjong Sillok*) (DC905)

821. 1717 Mar 17
[Korea] King Sukjong, 43rd year, 2nd month, day *keng-yin* (27). "At night, in the NE and SW directions, there were vapours like flames." (*Sukjong Sillok*) (DC906)

822. 1717 Apr 30
[Korea] King Sukjong, 43rd year, 3rd month, day *chia-hsu* (11). "In the SW direction, there was a vapour like a flame." (*Sukjong Sillok*) (DC907)

823. 1720 Dec 22
[Korea] King Kyongjong, accession year, 11th month, day *ping-hsu* (23). "At night, from the 1st to the 3rd watch, in the SE direction, there was a vapour like a flame." (*Kyongjong Sillok*) (DC908)

824. 1721 Mar 29
[Korea] King Kyongjong, 1st year, 3rd month, day *kuei-hai* (60). "At night, from the 1st to the 5th watch, in the NW, SW and SE directions, there were vapours like flames." (*Kyongjong Sillok*) (DC909)

825. 1721 Apr 17
[Korea] King Kyongjong, 1st year, 3rd month, day *jen-wu* (19). "At night, from the 1st

to the 4th watch, in the NE, SE and SW directions, there were vapours like flames." (*Kyongjong Sillok*) (DC910)

826. 1721 Apr 18
[Korea] King Kyongjong, 1st year, 3rd month, day *kuei-wei* (20). "At night, from the 1st to the 5th watch, in the NE, SE and SW directions, there were vapours like flames." (*Kyongjong Sillok*) (DC911)

827. 1721 Apr 20
[Korea] King Kyongjong, 1st year, 3rd month, day *i-yu* (22). "At night, from the 1st to 2nd watch, in the SE direction, there was a vapour like a flame." (*Kyongjong Sillok*) (DC912)

828. 1721 Jul 21
[Korea] King Kyongjong, 1st year, 6th month, day *ting-szu* (54). "At night, from the 2nd to the 5th watch, in the SE, S and SW directions, there were vapours like flames." (*Kyongjong Sillok*) (DC913)

829. 1721 Jul 22
[Korea] King Kyongjong, 1st year, 6th month, day *wu-wu* (55). "At night, from the 1st to 5th watch, in the S and SE directions, there were vapours like flames." (*Kyongjong Sillok*) (DC914)

830. 1722 Jul 17
[Korea] King Kyongjong, 2nd year, 6th month, day *wu-wu* (55). "At night, from the 3rd to the 4th watch, in the NW and SW directions, there were vapours like flames." (*Kyongjong Sillok*) (DC915)

831. 1722 Nov 9
[Korea] King Kyongjong, 2nd year, 10th month, day *kuei-ch'ou* (50), 1st day of the month. "At night, in the S and SW directions, there were vapours like flames." (*Kyongjong Sillok*) (DC916)

832. 1723 Jul 8
[Korea] King Kyongjong, 3rd year, 6th month, day *chia-yin* (51). "At night, from the 1st to the 5th watch, in the SW, SE and NE directions, there were vapours like flames." (*Kyongjong Sillok*) (DC917)

833. 1726 May 22
[Korea] King Yongjo, 2nd year, 4th month, day *kuei-wei* (20). "At night, at the 2nd watch, in the NW direction, there was a vapour like a flame." (*Yongjo Sillok*) (DC918)

834. 1726 Jul 1
[Korea] King Yongjo, 2nd year, 6th month, day *kuei-hai* (60). "At night, at the 3rd watch, in the E, S and W directions, there were vapours like flames." (*Yongjo Sillok*) (DC919)

835. 1726 Jul 6
[Korea] King Yongjo, 2nd year, 6th month, day *wu-ch'en* (5). "At night, at the 4th and 5th watch, in the SW direction, there was a vapour like a flame." (*Yongjo Sillok*) (DC920)

836. 1727 Apr 12
[Korea] King Yongjo, 3rd year, 3rd month, day *wu-shen* (45). "There was a vapour like a flame." (*Yongjo Sillok*) (DC921)

837. 1727 Apr 19
[Korea] King Yongjo, 3rd year, 3rd month, day *i-mao* (52). "At night, there was a vapour like a flame." (*Yongjo Sillok*) (DC922)

838. 1728 Apr 16
[Korea] King Yongjo, 4th year, 3rd month, day *wu-wu* (55). "At night, at the 3rd and 4th watch, in the E direction, there was a vapour like a flame." (*Yongjo Sillok*) (DC923)

839. 1730 Feb 15
(i) [China] Yung-cheng reign-period, 7th year, 12th month, 28th day. "At night, there was a violet coloured auspicious light stretching across the NE of the Ba-erh-fu-erh army camp. It lasted for eight hours, with a brilliant display of splendid light." (*Ch'ing-shih-lu*) (DC924)

(ii) [China] Yung-cheng reign-period, 7th year, 12th month, 28th day. "During the night, a red light was seen all over the wilderness of Fuk-shan." (*Ch'ing-shih-kao*, 41) (DC924)

840. 1730 Mar 18
[Korea] King Yongjo, 6th year, 1st month, day *chi-hai* (36). "At night, in the SW and S directions, there were vapours like flames." (*Yongjo Sillok*) (DC925)

841. 1730 May 21
[Korea] King Yongjo, 6th year, 4th month, day *kuei-mao* (40). "At night, in the SW direction, there was a vapour like a flame." (*Yongjo Sillok*) (DC926)

842. 1731 Jul 13
[Korea] King Yongjo, 7th year, 6th month, day *hsin-ch'ou* (38). "At night, there was a vapour like a flame in the SW direction." (*Yongjo Sillok*) (DC927)

843. 1737 Dec 16
[China] Ch'ien-lung reign-period, 2nd year, 10th month, 25th day. "At night, at the hour of *tzu* (11 p.m.–1 a.m.), according to the report from soldiers on patrol of the city wall, a red light was observed to the N. Following a careful watch, the light was seen to rise first in the NE and gradually move to the W. It extended across the whole of the N; the colour of the sky was like fire, with a height equalling that of the Nan mountain. Within it there was a black vapour and also there were four erect bands of white vapour. After the 3rd watch, the four bands of white vapour changed into several tens of bands and the black vapour gradually receded. After the 4th watch most of them vanished without a trace; only the red light lasted until after the 5th watch when its colour gradually faded away. At sunrise everything had dispersed and could not be seen." (*Ch'ing-shih-lu*) (DC928)

844. 1747 Apr 10
[Korea] King Yongjo, 23rd year, 3rd month, day *hsin-mao* (28). "At night, in all directions, there were vapours like flames." (*Chungbo Munhon Pigo*, 8) (DC929)

845. 1770 Sep 17
[China] Ch'ien-lung reign-period, 35th year, 7th month, 28th day. "A red light rose in the N direction; at midnight, it gradually receded. To the NW of the Ch'ang-shan Mountain a red vapour was seen filling the sky. Within it there was a white vapour like separated silken threads. After the fourth watch, then they dispersed." (*Ch'ing-shih-kao*)

846. 1770 Sep 18
[China] Ch'ien-lung reign-period, 35th year, 7th month, 29th day. "At night, there was a vapour like fire extending across and covering the NW. It stretched several tens of *chang* and contained a red light. It rose in ranks like a forest of swords and spears pointing upwards." (*Ch'ing-shih-kao*)