

Table. S3 The time hints about the extreme heat in 1743 documented in documents (Sorted by the date)

	Original Records	Source	Messages
1	<i>The emperor said that the weather after the summer solstice this year was much hotter than in previous years</i>	Factual Record of Qing Dynasty – in the 29th day of the 5th lunar month , 8 th year in Qianlong.	It was hotter than previous years after June 22.
2	<i>Since the first solar term in the 6th lunar month¹, I feel very hot. Recently, some passers-by and hoeing farmers have suffered from the heat illness.</i>	Zhili Governor Gao Bin reported the weather condition on the 1st day of 6th lunar month in 8 th year in Qianlong.	After July 8, it was obviously hot, and a few days before July 21, many people suffered heat stroke.
3	<i>Since the half month ago, it had been scorching and the drought is worrying. There were many people suffering from heatstroke on the road, and the people were very afraid of death.</i>	Zhili Governor Shen Qiyuan reported the weather condition and agriculture on the 8th day of 6th lunar month in 8 th year in Qianlong.	From July 14 to July 28, the weather was extremely hot.
4	<i>Due to the extreme heat and drought, many people died of heat stroke from the 24th day in 5th lunar month to 5th in 6th lunar month.</i>	County Annals of Rongcheng, Hebei	From July 15 to July 25, many people died of heat.
5	<i>Largely hot from the 26th day in 5th day lunar month to 5th day in 6th lunar month, and many people died of heat.</i>	County Annals of Pingxiang, Hebei	From July 17 to July 25, many people died of heat.
6	<i>Largely hot from the 26th day in 5th day lunar month to 5th in 6th lunar month, the number of people died of heat was huge.</i>	County Annals of Nanhe, Hebei	From July 17 to July 25, many people died of heat.
7	<i>From the 28th day in 5th lunar month to the 6th day in 6th lunar month, it was sizzling hot and unbearable. The walls in the shade were scorching. Lead and tin melted at noon, and many people died of heat. It was until the 6th day of 6th lunar month, the heat eased because of the afternoon rain.</i>	County Annals of Gaoyi, Hebei	From July 19 to July 25, it was extremely hot, and many people died from heat.
8	<i>Heat disaster occurs in the 6th lunar month. There was a Leap of April, and it didn't rain for three months since summer. In early of the 6th lunar month, the heat and drought were very severe, and the air touched hot as if woods were burning. In the days of the first period of Sanfu², people died immediately after heat stroke. People were jittery because of the heat. The situation was same hundreds of kilometers away. What a rare disaster!</i>	County Annals of Shenze, Hebei	From July 19 to July 28, it was extremely hot, and dozens of people died from heat every day.
9	<i>Heat disaster occurs in the 6th lunar month. There was a Leap of April, and it didn't rain for three months since summer. In early of the 6th lunar month, the heat and drought were very severe, and the air touched hot as if woods were burning. In the early days of Sanfu, people died immediately after heat stroke. People were jittery because of the heat. The situation was same hundreds of kilometers away.</i>	County Annals of Wuji, Hebei	From July 19 to July 28, it was extremely hot, and dozens of people died from heat every day.
10	<i>The weather in the capital had been dry since the end of the 5th lunar month³, and it was scorching hot much more than previous years.</i>	Factual Record of Qing Dynasty – in the 5th day of the 6th lunar month , 8 th year in Qianlong.	From July 20 to July 25, the weather was hot
11	<i>It was largely hot in the end of the end of the 5th lunar month³, and many people died of heat. A strong wind on the night of the 5th day in the 6th lunar month eased the poisonous heat and people were able to recover.</i>	County Annals of Zunhua, Hebei	From July 20 to July 25, the weather was very hot, easing at mid-night on July 25
12	<i>The emperor said it is extremely hot lately in Beijing and he was afraid that there would be many people get heat stroke.</i>	Factual Record of Qing Dynasty – in the 1st day of the 6th lunar month , 8 th year in Qianlong.	The days before July 21 were extremely hot, and many people suffered from heatstroke
13	<i>The emperor said that the weather had been hot recently and that this year would be twice as hot as in previous years</i>	Factual Record of Qing Dynasty – in the 2nd day of the 6th lunar month , 8 th year in Qianlong.	The weather was hot for several days before July 22
14	<i>It was largely hot in the 10th day of the 6th lunar month, and there were people died of heat.</i>	County Annals of Guangzong, Hebei	It was very hot on July 30

¹ Refers to Minor Heat, on around July 8

² According to the calculation of Chinese folk calendar, the first period of Sanfu in 1743 was July 19-28

³ Regarded as the last day of the 5th lunar month