Weather in the Edo period of Kyoto and Kagoshima analyzed by the "Myohoin Diary" and the "Moriyatoneri Diary"

Yoshimi Ikeda¹, *Marika Maeda¹, *Saaya Yano¹

1. IkedaGakuen Ikeda Junior & Senior High School

1 Background

We learned about the novelist, Kafu Nagai, who lived from 1879 to 1959, in our Japanese Literature class. We knew that he had kept a record of the weather in his diary.

But we wanted to know about older Japanese weather charts; namely those that recorded the weather before 1883.

Focusing on the fact that the weather on particular dates was described in historical documents, we decided to analyze the weather in the Edo era.

The "Myohoin Diary" is the record that a member of the Myohoin temple in Kyoto wrote. The "Myohoin Diary" was continuously written for approximately 200 years until 1876 from 1672.

The "Moriya Diary" is the diary of Shigetaka Moriya of the Satsuma feudal clan, in which the rule of a village from 1825 through 1871 and its everyday customs are recorded.

The "Nijo Diary" is an old collection of documents written by the Nijo family from 1635 to 1912. Although there are some gaps in the record, the documents record what happened in Kyoto and the weather.

- 2 Purpose of the research
- (1) We analyzed the famine in the Edo period by using the "Myohoin Diary" and the "Moriyatoneri Diary".
- (2)We analyzed the weather of Kyoto and Kagoshima from the Meiji to the Showa era using the records of the Meteorological Agency.
- 3 Research plan
- (1)We classified the weather recorded in the historical diaries to make them closer to the definitions used by the modern Meteorological Agency.

We defined the weather of days which were cloudy more than 90% of the day (more than 21.6 hours) as cloudy, and the weather of those cloudy for less than 90% of the day (under 21.6 hours) as sunny.

(2) We digitalized the record of the meteorological observatory in Kyoto and Kagoshima after the Meiji era and analyzed the data.

Results of the study(Report of progress can also be acceptable)

Data1

We tried out the appearance rate of sunny and rainy days in the "Myohoin Diary" from 1694 to 1794.

The appearance rate of sunny weather fell during the periods of Genroku, Kyoho, and Tenmei famine. This tendency is the same in other ancient documents.

During the famine of Kyoho in 1732, sunny weather was low at 49.3% and rain was high at 30.4%.

Data2

We looked at the incidence of fine weather and rainy days in the "Moriya Diary".

The data shows the incidence of fine weather in 1833 during the famine of the Tenpo era was low, but there was an omission in the historical documents from the next year and it is not clear whether the incidence of fine weather declined.

Data3

We analyzed the appearance rate of the weather in Kyoto after the Meiji period. If you look at the period in groups of thirty years, you find that the lowest incidence rate of fine weather in the present day was

after 1981. We found that appearance of snow is rising year by year.

4 Future study plan

In our previous research, we analyzed the Pacific Ocean side of Japan, but In order to understand the influence of Japan Sea low pressure, we will digitalize and analyze the historical documents of the Edo era of Ishikawa Prefecture by using the "Kakuson Diary".

We will also analyze the weather of Ishikawa Prefecture after the Meiji era.

5 References

- 1. "Nijo Family Diary " Volume 1-5 Keio University
- 2. "Sekiguchi Diary" Volume 1 23 The Yokohama City Board of Education
- 3. "Chronological Scientific Tables" Natl. Astronomical Observatory
- 4. "JAPANESE NATURAL DISASTER" Diet document editing society
- 5. "Myohoin Diary " Volume 1 22 Historical material editing
- 6. "Moriyatoneri Diary " Volume 1 11 Bunken publication
- 7. Meteorological Agency Homepage

Keywords: Myohoin Diary, Moriyatoneri Diary, famine

妙法院日次記と守屋舎人日帳からみた 江戸時代の天気

