# Using tool of NDL digital archive for lecture of history of astronomy

### Motivation: from abstract

In a lecture on the history of astronomy as part of general education at university, we tried to have students actually use the tools provided by NDL (Narional Diel Library) to search for materials. By actually searching, seeing and reading the materials of the time, it helped the students to think about how they were trying to understand the cutting-edge knowledge at the time when there was no fixed translation yet.



Website of NDL Lab https://lab.ndl.go.jp/index.html

### National Diet Library (NDL) Lab

(From website)The NDL Lab is a website for conducting field trials of fundamental technologies that contribute to the development of next-generation library systems.

NDL next library: Fulltext search of digitalized materials of books including old and rare Japanese books (about 350,000 items) with expired copyright protection available on the internet in The NDL Digital Collection is available.

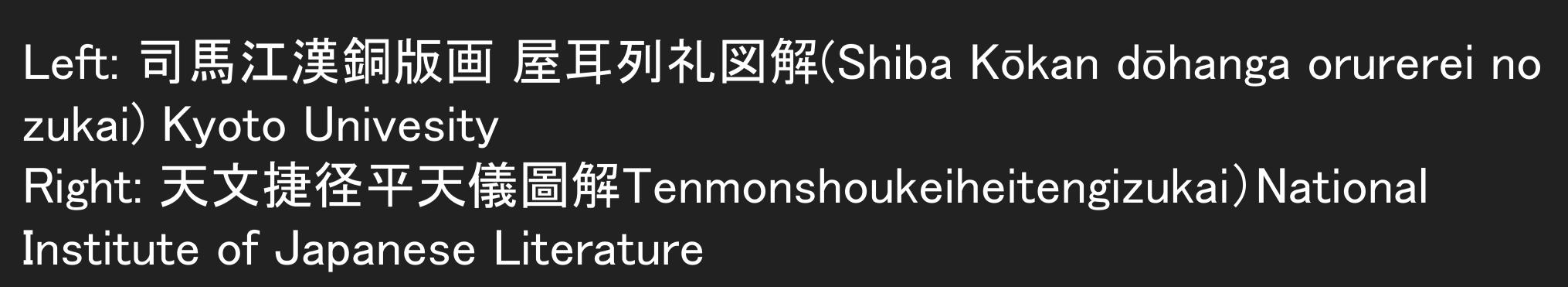
Testcase of lecture in University Comparision of figures to explain solar system in textbooks in Japan in 1800s

Students will search historical documents about astronomy that were circulating in the Edo period, have them look at diagrams of the solar system, and consider what kind of standpoint the diagrams were based on.

student's realization

•The understanding of the latest astronomy at that time is not uniform even among intellectuals.

There are multiple channels for the influx of knowledge into Japan.



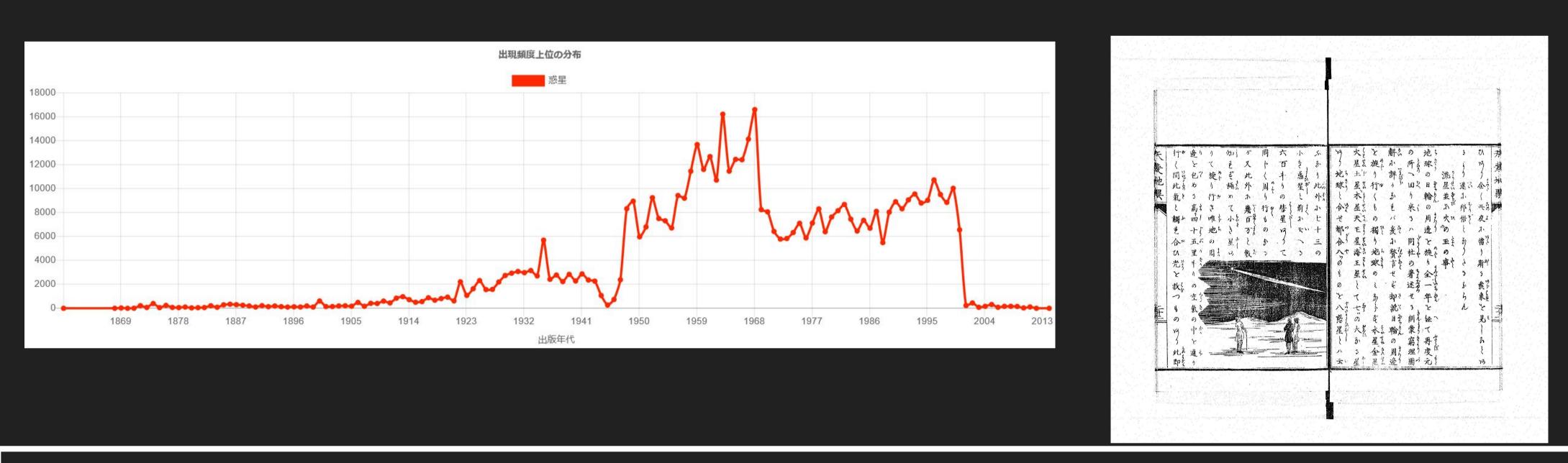


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## 2 Investigating the historical use of astronomical terminology in Japan

Using the NDL Ngram viewer, investigate how long scientific terms, including astronomy, have been used in Japanese literature, and have them confirm the sentences converted to digital text.

student's realization

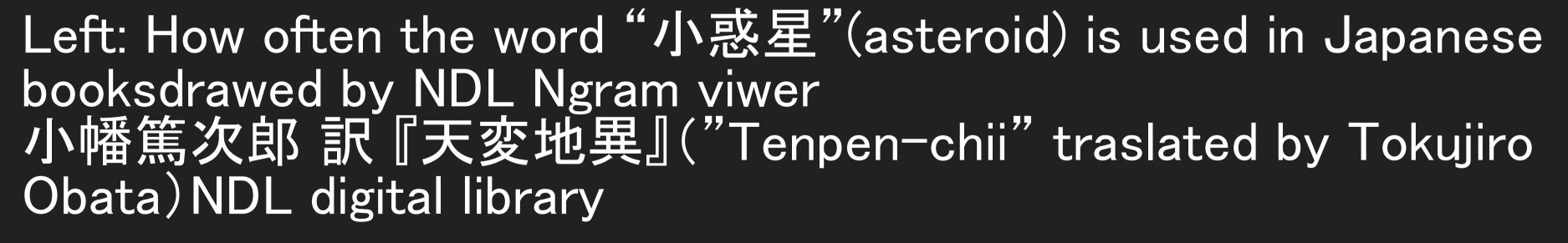


Obata) NDL digital library

- Awareness of trying to access information sources
- Awareness of trying to figure out reliable search tools

Effective as information ethics education

•Sometimes it is used in a different sense than it is now • Different words may have been used in the past.



After pandemic: The class format will return from on-demand to

- face-to-face, but the use of digital archives will continue
- Advantages of using digital archives in class