

# Observation data at JAXA's Bisei Spaceguard Center

May 2023

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The following is a description of observation data using the 25-cm telescope at Bisei Spaceguard Center during the period from June 2000 through September 2002.

## 1. The file name of the data

Each data is given a file name indicating the date and the coordinate value, as follows.

File name: 1\_2222222222\_333333\_4444.fits

- The "1" part originally indicates the tracking method of the telescope. Only "m" is used in this data.
- The "2222222222" part indicates the equatorial coordinates at which the telescope is pointing, in the format HHMMSSnDDMM. HHMMSS indicates hours, minutes, and seconds of the right ascension (S may be the first digit only), and DDMM indicates degrees and minutes of the declination. The "n" between HHMMSS and DDMM indicates the Northern Hemisphere (declination is +) and it will be "s" when the Southern Hemisphere (declination is -).
- The "333333" part indicates the date (UTC) when the data was obtained. For example, "020105" means January 5, 2002.
- The "4444" indicates a number in numerical order of continuous observations of the same coordinate area: "0000" for the first one, "0001" for the second one, and so on. Even if the data is from the same area, when the coordinate value (the "2222222222" part) changes even slightly, the number is renumbered from 0000.

(Example)

The file name of the data observed at the right ascension of 21:09:20 and the declination of +1°51' on August 16, 2002 is:

m\_21092n0151\_020816\_0001.fits

And if the observation has continuous exposures, more data files with the "0001"

part numbered consecutively exist in the same directory.

## **2. The data storage directory**

Since file names are assigned according to the above rules, there is a possibility that files with the same date and the same name will be generated. Therefore, each data is divided into groups (usually groups of data obtained through a series of consecutive exposures) and stored. The directory name is named something like "mpNN" or "mpNN\_{String}". The "NN" part is a number put in numerical order of the day. The data stored in the "mpNN" directory are the normal survey observation data by the sidereal time tracking. The "{String}" part indicates the name of a specific object. Observations of the "mpNN\_{String}" pattern are made while tracking the telescope for the movement of the object. Therefore, the stellar image is trailed (extended).

## **3. Data specifications**

- Observation site: Bisei Spaceguard Center Small Observation Building (50-cm telescope dome)
- Number of CCD pixels, pixel scale  
2048 x 2048 pix, 2.285"/pix (without binning)

The pixel scale depends on the direction of the telescope and its position on the detector.