

Comments on a paper by Fujii and Nagamachi entitled "History of Kakioka Magnetic Observatory" (hgss-2022-5)

This paper describes the history of Kakioka Magnetic Observatory (KMO) from its origin to current status in detail. In particular, both its brilliant and difficult times are introduced under various Japanese social situation or governmental policy changes. The history of instrumentation and staff and their relation to KMO's development are also introduced concisely. The difficulties which KMO has been experienced and struggled described in this paper seem to be more or less common for many geomagnetic observatories in the world. This paper is not only valuable as a description of the history of a geomagnetic observatory but also useful for the society of geomagnetism in the world. Therefore, this paper is worth to be published.

Following is some minor points to be corrected or considered.

1. Page 3, lines 7-8:

The field notes by Tadataka Ino describes the direction of the target (mountain etc.) measured by his compass without the knowledge on the existence of declination. We can estimate (recover) the declination at that time from his measurement with current geographical information, and hence, his notes themselves are not the record of geomagnetic field. So, the description should be modified. For example, '.... can be estimated' etc.

2. Page 3, line 9:

Kato (1983) is not listed in References.

3. Page 3, Lines 23-24:

(Hydrographic Bureau, 1983) and (Geological Survey of Japan, 1884, 1885, 1886) are not in References.

4. Page 3, line 34:

The Geographical Bureau (1886) is not in References.

5. Page 4, line 2:

'Kkitanomaru' should read 'Kitanomaru'.

6. Page 10, Figure caption:

(b) Wild-Edelmann theodolite and Wild-Edelmann earth inducer --- Which is theodolite and which is earth inducer?

7. Page 12 and page 14:

If possible, the year when these photos were taken should be given.

8. Page 29, line 17:

Japan Society for the Promotion of Science (1951)

-- Which is correct, 1951 or 1950? In the References, it is 1950.

9. Page 40, Line 34:

'International Magnetosphere Study' should be 'International Magnetospheric Study'.

10. Page 43, line 11:

The URL where we can read 'Gijyutsu Houkoku' or 'Memoir of Kakioka Magnetic Observatory' should be indicated.

11. Page 45, line 7:

Kuwashima, 2012 is not listed in References.

12. Page 45, line 7:

'was determined' should be 'decided'?

13. Page 53, line 14:

The derivation of the Dst index at WDC for Geomagnetism, Kyoto started in 1986 (not 1973).

14. Page 54, line 11:

The former English name of SGEPPS is 'Society of Terrestrial Magnetism and Geoelectricity of Japan'.

15. Page 56, line 9:

(Wakabayashi, 2019) is not in References.

16. Page 59, line 16:

(Okada et al., 2005) is not in References.

17. page 67, line 23-24:

The Geophysical Breau .. is not referred in the text. Or is this 'Geographical Bureau'?

18. Page 68, line 3:

Wadati and Kuwano, 1938 is nor referred in the text.

19 Page 64-69, References:

At the end of many references, ',last accessed 18, April 2022' is written. These should be removed.