Analyzing the Early 19th Century's Geomagnetic Declination in Japan from Tadataka Inoh's Santou-houi-ki.the Second Report. Kyushu Island and Shikoku Island Etc,in Particular.

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The first analysis of geomagnetic declination in Japan in early 19th century was made by Prof Ryokichi Ohtani in 1917, based on Santou-Houi-Ki. Santou-Houi-Ki is a gigantic survey data book of whole mainland of Japan, from 1800 to 1816 written by Japanese cartographer Tadataka Inoh. Prof Ohtani analyzed the average of declination only at Inoh's house Fukagawa in Edo (Tokyo) during 1800-1803 to be 0°19′E by the calculation of remainder of the magnetic azimuth from the real azimuth. In analysis of the declination at 68 points in Japan 1800-1813, based on Santou-Houi-Ki, the isogonic line of 0°00′EW in northern Japan was started from the southwestern end of Hokkaido Island, and down to south along western foot of Ouu mountain range to mid Honshu Island. It was variation west in the west side of the isogonic line 0°00′EW, and variation east in the east side. In western Honshu Island declination changed to variation west. The foundational structure of isogonic line in northern Japan was similar to Gauss Weber's Atlas des Erdmagnetismus in 1830. But in Tsushima Island near to Korea peninsula, the average value of declination 2°30′W at 5 points in 1813 analyzed from Santou-Houi-Ki contradict to the isogonic line of 2°00′W in Gauss Weber's Atlas in 1830. It is clear in maritime history since 18th century the secular variation of magnetic azimuth in Japan shows the movement from variation east to variation west. We cooperated with analyze the geomagnetic declination in Kyushu Island and Shikoku Island where nearer place from Tsushima Island, in order to know the contradiction is peculiar to Tsushima Island or not, and the realities in western Japan in those days. Total of analyzed points exceeded 100.
Keywords: Keyword1; Tadataka Inoh keyword2; Santou-Houi-Ki
Keyword3; Gauss-Weber's Atlas des Erdmagnetismus (Isogonic line Atlas in 1830)

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