

Archeomagnetic Study on the Kilns in San-in and Kyushu, Japan II

by

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Archeomagnetic study on the kilns, 22 in number, distributed in Tottori, Shimane and Yamaguchi Prefectures of San-in district and Fukuoka, Saga, Nagasaki, Kumamoto and Kagoshima Prefectures of Kyushu district was carried out by the present author, continued from the preceding papers.¹⁾²⁾ The sampling sites are shown in Fig. 1.

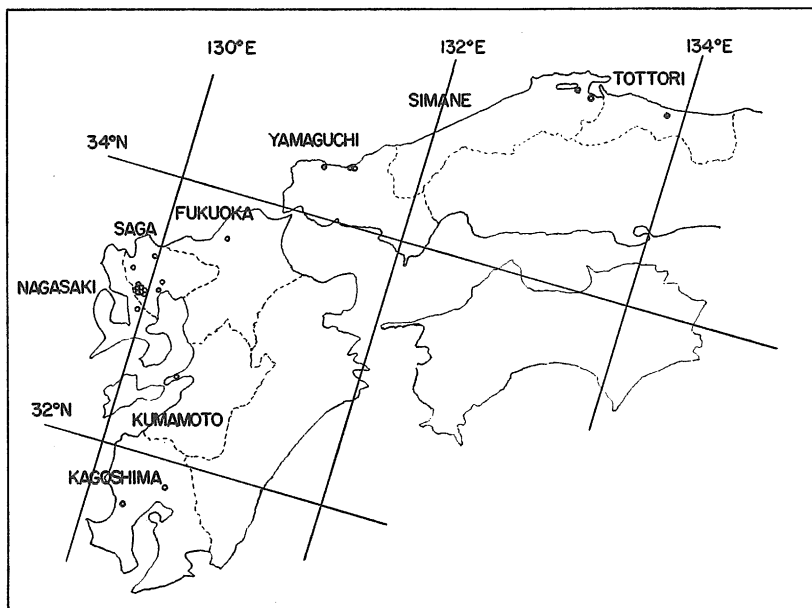


Fig. 1. Map of sampling sites.

The ages of the kilns in this district are estimated from historical record or archeological cultural analysis. The directions of the stable natural remanent magnetization of baked clay specimens collected from the floor of these kilns were measured by an astatic magnetometer.

The results are summarized in Table 1 and plotted in Fig. 2 and Fig. 3 together

Table 1.

Site Name	Locality	Age	D	I	θ_{95}	K
Ryumonji	Kajiki-Cho Kagoshima	1955 AD	-8°25' 43°03' (-8°17' 46°35')		2.5°	561
Naeshirogawa	Izyuin-Cho Kagoshima	1950±15	-14°52' 43°24' (-14°45' 46°27')		5.8°	206
Shiigamine	Nishiarita-Cho Saga	1880	-8°18' 49°21' (-8°04' 50°59')		8.0°	49
Moudasarayama	Udo-Cho Kumamoto	1800±15	-15°41' 47°56' (-16°17' 49°01')		2.5°	351
Mukaenohara	Nishiarita-Cho Saga	1650±15	2°25' 39°58' (3°16' 42°38')		6.5°	53
Kakenotani	Arita-Cho Saga	1640±15	4°45' 30°16' (6°05' 33°39')		5.5°	82
Yoshinomoto	Arita-Cho Saga	1620±15	8°24' 50°04' (8°46' 52°36')		6.5°	58
Hatanohara	Hasami-Cho Nagasaki	1600±15	-1°44' 34°57' (-0°36' 35°42')		5.5°	79
Sabitani	Takeo-Shi Saga	1600±15	-5°48' 47°46' (-5°34' 49°32')		8.0°	40
Handogame	Kitahara-Mura Saga	1585±15	10°33' 44°39' (12°57' 47°03')		3.4°	60
Tengudani	Arita-Cho Saga	1656	-0°47' 37°32' (0°34' 40°02')		1.2°	212
Oyama	Taku-Shi Saga	1870	0°36' 47°29' (1°08' 49°52')		1.2°	400
Shinzoin	Kamiyoshida-Cho Shimane	725±25	0°48' 51°50' (0°56' 51°19')		1.5°	61
Nakanotani	Togo-Cho Tottori	550±20	-11°48' 44°54' (-11°23' 43°52')		3.4°	94
Haraake A, B	Nishiarita-Cho Saga	1610	3°31' 36°51' (5°01' 39°57')		2.9°	94
Fukawasounose	Nagato-Shi Yamaguchi	1890	-5°49' 47°52' (-5°19' 48°14')		14.5°	29
Sarayama	Sue-Cho Fukuoka	1890	-9°16' 53°07' (-9°19' 53°49')		6.5°	73
Daikouzan Hayakawa	Hagi-Shi Yamaguchi	1868	-4°24' 50°23' (-4°07' 50°41')		7.0°	75
Jukiusan Kunimoto	Hagi-Shi Yamaguchi	1893	2°25' 56°06' (2°13' 56°46')		4.9°	125
Haraake C, D	Nishiarita-Cho Saga	1600	2°11' 36°58' (3°36' 39°54')		4.4°	47
Hiradokoro	Matsue-Shi Shimane	600±50	-14°36' 67°25' (-15°16' 66°32')		17.0°	21
Nabeshima	Imari-Cho Saga	1850	1°30' 49°24' (1°54' 51°24')		5.7°	47

D, I: Declination and Inclination.

The value shown in a bracket has been reduced from each sampling site to Kyoto under the assumption of an axial dipole.

θ_{95} : Fisher's circle of confidence (P=0.05).

K : Precision parameter.

with the reference curve which had been established mainly from the data in Kinki district by Hirooka,³⁾ in order to check the secular variation of the earth's magnetic field during 500 A. D. to the present time.

References

- 1) ASAMI, E., TOKIEDA, K. and KISHI, T.; Archeomagnetic study of kilns in San-in and Kyushu, Japan; Mem. Fac. Lit. Sci. Shimane Univ., Nat. Sci., 5, pp. 18-22, 1972.
- 2) ASAMI, E.; Archeomagnetic study of kilns in Kyushu district; Mem. Fac. Lit. Sci., Shimane Univ., Nat. Sci., 6, pp. 15-17, 1973.
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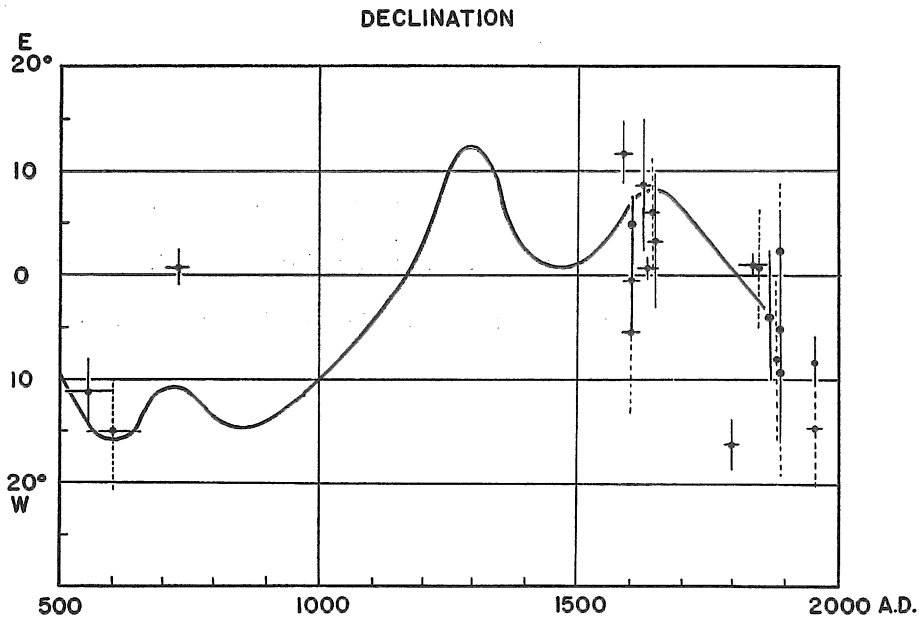


Fig. 2.

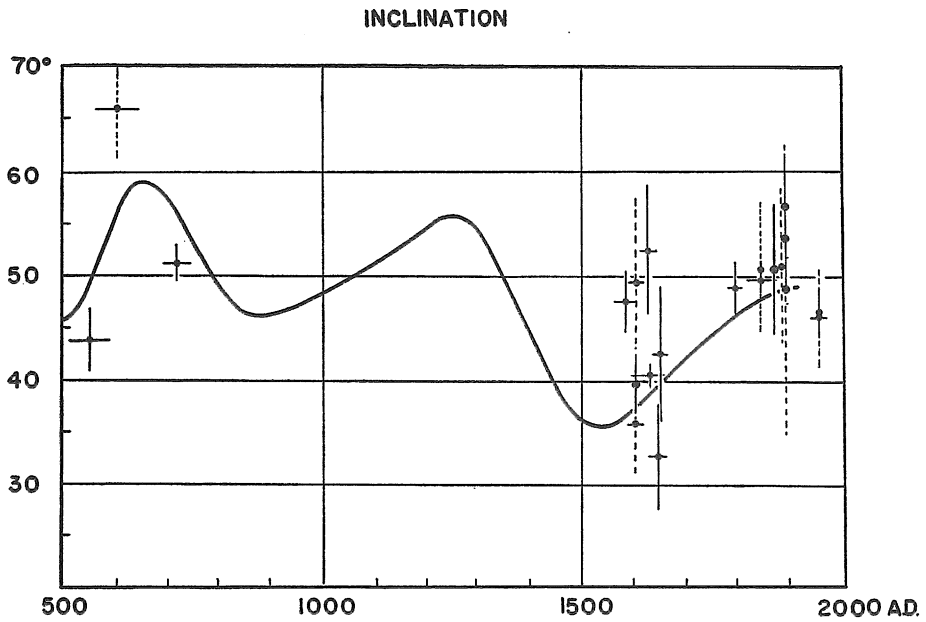


Fig. 3.