

# Calderas in Japan

Caldera Name	Main Post-Caldera Volcano Name	Most Recent Caldera Eruption Period	Type of Ejecta (Symbol)	Document	ref No.	About Period
Mashu	Kamuinupuri, Kamuishshuto	7.6 ka*	Mashu f (Ma-f)	1, 5	1	Yamamoto, T., et al. (2010) <sup>14</sup> C ages for the ejecta from Kutcharo and Mashu calderas, eastern Hokkaido, Japan. Bull. Geol. Surv. Japan, <b>61</b> , 161-170.
Kutcharo	Atosanupuri, Nakajima	40 ka*	Kutcharo 1 (Kp I)	1, 2	1	Yamamoto, T., et al. (2010) <sup>14</sup> C ages for the ejecta from Kutcharo and Mashu calderas, eastern Hokkaido, Japan. Bull. Geol. Surv. Japan, <b>61</b> , 161-170.
Akan	Meakandake, Oakandake	120←→210 ka	Akan 1 (Ak1)	2	2	Hasegawa, T., et al. (2010) The history of caldera-forming eruptions in eastern Hokkaido, Japan. CHIKYU MONTHLY, <b>33</b> , 726-734.
Shikotsu	Eniwadake, Tarumaesan	40←→45 ka*	Shikotsu No. 1 (Spfl, Spfa-1)	3, 6	3	Hiroshi Machida and Fusao Arai (2003) Atlas of tephra in and around Japan. Univ. of Tokyo Press, 336p.
Kuttara	Hiyoriyama	>43 ka	Kuttara No. 1 (Kt-1)	3, 7	3	Hiroshi Machida and Fusao Arai (2003) Atlas of tephra in and around Japan. Univ. of Tokyo Press, 336p.
Toya	Usuzan, Nakajima	112←→115 ka	Toya (Toya)	3, 8	3	Hiroshi Machida and Fusao Arai (2003) Atlas of tephra in and around Japan. Univ. of Tokyo Press, 337p.
Towada	Ogurayama, Gomonseki, Goshikiwa	15 ka*	Towada Hachinohe (To-H)	3, 9	3	Hiroshi Machida and Fusao Arai (2003) Atlas of tephra in and around Japan. Univ. of Tokyo Press, 338p.
Hakone	Kamiyama, Komagatake, Futagoyama	60←→65 ka	Hakone Tokyo (Hk-T)	3, 10	3	Hiroshi Machida and Fusao Arai (2003) Atlas of tephra in and around Japan. Univ. of Tokyo Press, 339p.
Aso	Naka-dake, Takadake	85←→90 ka	Aso 4 (Aso-4)	3, 11	3	Hiroshi Machida and Fusao Arai (2003) Atlas of tephra in and around Japan. Univ. of Tokyo Press, 340p.
Aira	Sakurajima, Wakamiko	29 ka*	Aira Tn (AT)	4, 12	4	Okuno, M (2002) Chronology of Tephra Layers in Southern Kyushu, SW Japan, for the Last 30,000 Years. The Quaternary Research, <b>41</b> , 225-236.
Ata	Kaimondake, Ikeda, Yamagawa	105←→110 ka	Ata (Ata)	3, 13	3	Hiroshi Machida and Fusao Arai (2003) Atlas of tephra in and around Japan. Univ. of Tokyo Press, 340p.
Kikai	Iodake, Inamuradake, Showa Iojima	7.3 ka*	Kikai-Akahoya (K-Ah)	3, 14	3	Hiroshi Machida and Fusao Arai (2003) Atlas of tephra in and around Japan. Univ. of Tokyo Press, 340p.

ref No. 番号	About Formation
5	Kishimoto, T., et al. (2009) Tephrostratigraphy and Eruption Style of Mashu Volcano, During the Last 14,000 years, Eastern Hokkaido, Japan. Bull. Volcanol. Soc. Japan, <b>54</b> , 15-37.
2	Hasegawa, T., et al. (2010) The history of caldera-forming eruptions in eastern Hokkaido, Japan. CHIKYU MONTHLY, <b>33</b> , 726-734.
2	Hasegawa, T., et al. (2010) The history of caldera-forming eruptions in eastern Hokkaido, Japan. CHIKYU MONTHLY, <b>33</b> , 726-734.
6	Yamagata, K (1994) Tephrochronological Study on the Shikotsu and Kuttara Volcanoes in Southwestern Hokkaido, Japan. Jour. Geol. Soc. Japan, <b>103</b> , 268-285.
7	Moriizumi, M (1998) The Growth History of the Kuttara Volcanic Group, Hokkaido, Japan. Bull. Volcanol. Soc. Japan, <b>43</b> , 95-111.
8	Machida, H., et al. (1987) Toya ash - A widespread late quaternary time-marker in northern Japan. The Quaternary Research, <b>26</b> , 129-145.
9	Hayakawa, Y. (1985) Pyroclastic geology of Towada Volcano. Bull. Earthq. Res. Inst., <b>60</b> , 507-592.
10	Nagai, M. and Takahashi, M. (2008) Geology and Eruptive History of Hakone Volcano, Central Japan. Res. Rep. Kanagawa prefect. Mus. Nat. Hist., <b>13</b> , 25-42.
11	Ono K. et al. (1977): Geology of the Takeda district. With geological sheet map at 1:50,000: Geological Survey of Japan, 187p (in Japanese with English abstract)..
12	Nagaoka, S., et al. (2001) Tephrostratigraphy and eruptive history of the Aira caldera volcano during 100-30 ka, Kyushu, Japan. Japan. Jour. Geol. Soc. Japan, <b>107</b> , 432-450.
13	Nagaoka, S. (1988) Late Quaternary tephra layers from the caldera volcanoes in and around Kagoshima Bay, southern Kyushu, Japan. Geogr. Rep. Tokyo. Metropolitan Univ., <b>23</b> , 49-122.
14	Ono, K., et al. (1982): Geology of Satsuma-Io-jima district. Quadrangle Series, Scale 1:50,000, Geol. Surv. Japan, 80 pp (in Japanese with English abstract).

"ka" within the table indicates "1000 years ago", but radiocarbon dating which has been age calibrated is indicated by "ka\*".

A←→B: Eruption events taking place at some point between year A and year B

>A: Eruption event before year A.

# Location Map of Calderas

