

## **RESULTS OF SURVEY ON GANNO-ANA CAVE SYSTEM, EXAMPLE OF CO-EXISTENCE OF LAVA CAVES AND TREE MOLDS**

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## Abstract

On the northern flank of Mt.Fuji, located Ganno-ana cave area in the lava flow of Ganno-ana which is beleived empted more than 1000 years ago. In this area, a lot of lava tree molds and lava caves have been found and investigated as pioneer by Ishihara (1925-29) at first, however not with fully systematic way. Recently, Commission on vulcanospeleology of Speleological Society of Japan (Ogawa/Tachihara's group,1996-1998) have surveyed this area systematically for environment protection, and found lots of tree-molds, two crater lake and lava trench in this area, and made a map of distributions of these.

Fig.l shows distribution of tree molds and location of crater lake, gas cavities and lava trench. Arrows indicated near tree molds are directions of lava flow iudged from tree molds structure which are results and registered traces of interaction between tree and lava flow. Tree molds are indicatifs of lavaflow direction, flow speed and lavaflow thickness.

Fig.2 shows the cross section of Ganno-ana cave and adiacent area observed by topological survey. Ganno-ana cave have a continuous structure with other caves and tree molds. These tree molds and lava cave and gas cavities may be resulting from lava flow from these two crater lakes. The detail inner and outer structure of tree molds are measured and the detail investigation on formation mechanism of this cave system is under being performed.



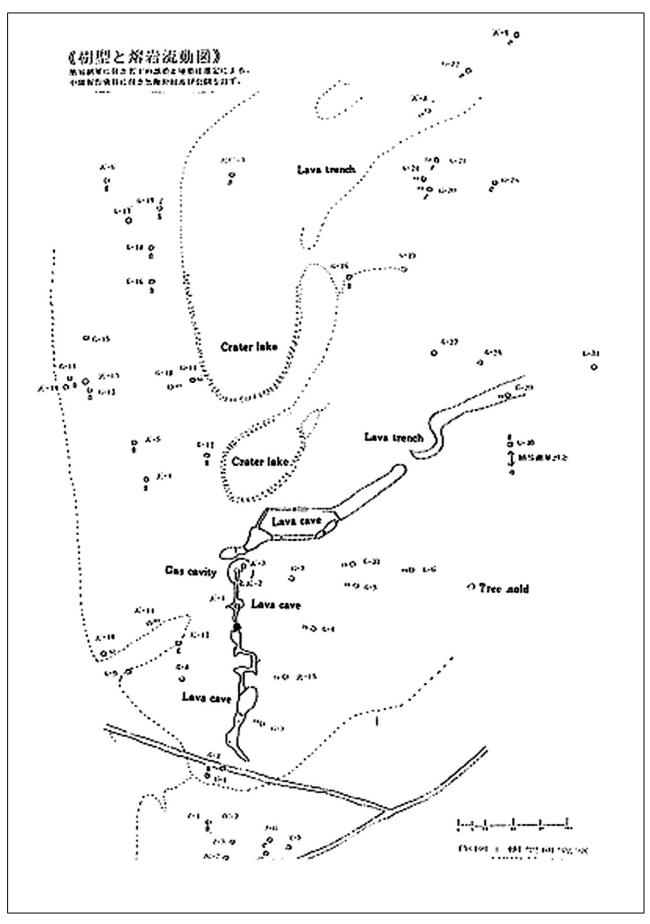


Fig. 1 – Distribution of tree molds and location of crater lakes, gas cavities and lava trench.



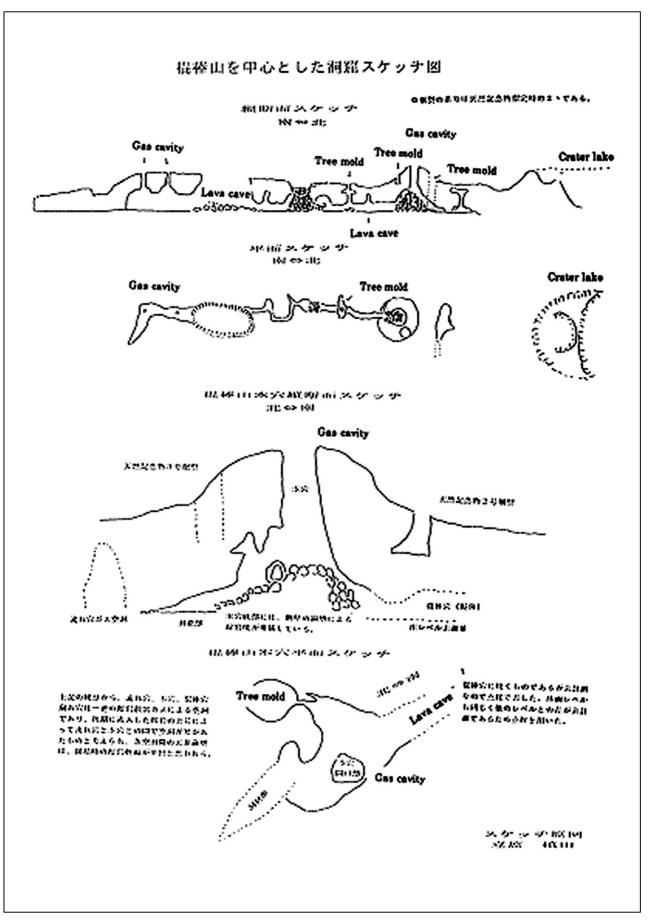


Fig. 2 – The cross section of Ganno-ana cave and adiacent area by topological survey.