

## The history of the geothermal activity of Iwate Volcano after the Meiji era, which using the mountrain climbing reports.

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The history of geothermal activity of Iwate Volcano was examined by scientific paper and reports, and mountain climbing reports.

The geothermal activity after the Meiji era in the summit area of Yakushidake is divided into six stages.

(1) to AD 1898; It is supposed an active period which the generation is more active than that of the present. It was described the weak streaming, and of the degree which avoids that the human approaches in the Mt. Myokodake.

(2) to AD 1933; According to the report, the fumarole activity hardly is confirmed in the summit area in 1898. In multiple mountain climbing record after the this, it is explained that the fumarole activity in the summit is inactive.

(3) AD1934 to '35 (Showa-active stage 1); The active geothermal activity arose, and the fumarole was recognized from foot of mountain. The field observation result guesses that there was in the active period in which the fumarole quantity is clearly more abounding than the present.

(4) to AD 1958; The mountain climbing records described the existence of warm fumarole and geothermal area in the summit crater. It is supposed an equivalent quiet period from observation result of Iwatesan meteorological station.

(5) to AD 1974 (Showa-ctive stage 2); With Suwa (1968), the fumarole activity was activated after the earthquake swarm at AD 1958. According to the observation records by Morioka meteorological station, the fumarolic activity around summit area maintained the strong condition by 1974. Especially, there was fumulore activity of the high temperature ( 300 degrees) from 1960 to '71.

(6) to present; Very slightly streaming and moderate geothermal activity continued.

It is well known that Ojigoku geothermal area is active fumarole region since the ancient. In the field study at AD 1898, only weak activity was confirmed, and there seemed to be in the quiet period. The fumarole activity is activated after 1907, and it came to for the steam explosion at 1919. The fumarole activity is temporarily re-activated in 1935, and there is the lowering of the fumarole activity at 1937.

In the summit of Yakushidake, there was the variation of the geothermal activity by the ten of year scale. In this time scale, it not always synchronizes with geothermal activity of Oojigoku. However, both activity is seen in order to synchronize for the 1934-35 year short-terminable.