## The expansion of fumarole area after the 2001 Hakone earthquakes swarm activity

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The expansion of fumarole area was confirmed in a north side slope of Owakudani(between Owakudani and Kamiyuba) after the Hakone earthquakes swarm that occurred in June, 2001. The discovered range of fumarole area at 2001 were very narrow, around 10m\*10m, but at 2005, they spread around 500m\*50m.

Investigating of this new fumarole area, we found that fumarole of A - F is distributed within 500m\*50m area, and that it was high temperatures more than 50 degrees Celsius at each fumarole.