The connection between earth sciences and society by Geoparks -
Results and issues in the past decade-
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Sun. May 20, 2018 5:15 PM - 6:30 PM Poster Hall (International Exhibition Hall 7, Makuhari Messe)
10 years have passed since the Geoparks started in Japan and it has grown as a channel for linking earth
science and society. In this session, we would like to look back on our activities and discussions of the past
decade, and discuss the feature of Japanese Geoparks.

Re-examination of the 1857 eruption of Tokachi-dake based on Mr. Takeshiro Matsuura’s documents

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Keywords: Tokachi-dake, Takeshiro Matsuura, Local history, Eruption, Tokachidake Geopark Plan

Tokachi-dake is an active volcano located in central Hokkaido, Japan. In the 20th century, it experienced
magmatic eruptions in 1926, 1962, and 1988-89. In particular, the 1926 eruption caused a snowmelt type
lahar and killed 144 people in the towns of Kamifurano and Biei. Mr. Takeshiro Matsuura recorded the
following in Ishikari Diary (published 1861): On the flank halfway up the mountain fire and high rising black
smoke were visible. From the context of his report, this passage must be a description of the 1857 eruption
of Tokachi-dake, which is the first eruption of this volcano on historical records. However, ejected materials
corresponding to the 1857 eruption have not been identified. It is important to reveal the eruption history for
considering the future eruptions, we therefore re-examine the 1857 eruption by reviewing Mr. Takeshiro
Matsuura’s documents.

We extracted descriptions of Tokachi-dake from field notes, reports and maps written by Mr. Takeshiro
Matsuura. There is no description of the eruption of Tokachi-dake in his field notes. The 1857 eruption was
only described in Ishikari Diary, which was known to be embellished. According to geological and historical
records, it is likely that the 1857 eruption of Tokachi-dake does not happen.