

JSEG 火山地域の応用地質学的諸問題に関する研究小委員会巡検行程案 ver.231011

実施日：2023 年 11 月 7 日（火）

行程：

肥後大津駅集合（8 時 30 分発）

Stop 1 高森湧水トンネル公園

Stop 2 中岳火口見学

（昼食@草千里、阿蘇火山博物館）

Stop 3 震災遺構（旧東海大阿蘇校舎 1 号館及び地表地震断層）

Stop 4 高野台大規模地すべり（復興公園）

Stop 5 旧阿蘇大橋および数鹿流崩れ

熊本空港（17 時 00 分着発）

肥後大津駅（17 時 20 分着・解散）

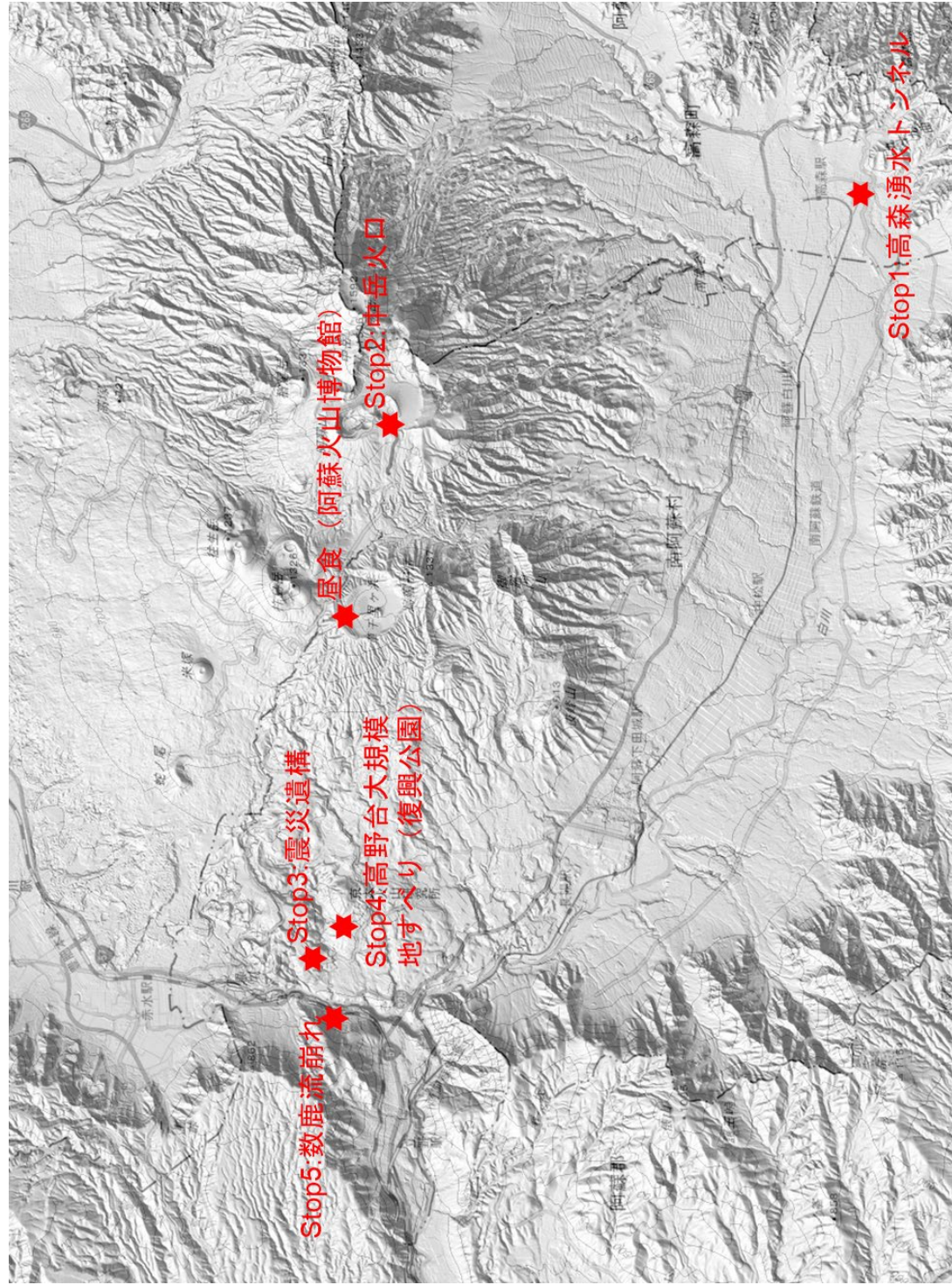


図 巡検 spot 全体位置図

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(詳細時間付き)

8 時 30 分 肥後大津駅発  
9 時 15 分 高森湧水トンネル公園 (Stop 1) 着  
10 時 30 分 高森湧水トンネル公園発  
11 時 00 分 中岳火口 (Stop 2) 見学 (山頂～阿蘇山上ターミナルまで徒歩)  
12 時 20 分 阿蘇山上発  
12 時 30 分 草千里着 (昼食)  
13 時 30 分 草千里発  
14 時 00 分 震災遺構 (旧東海大阿蘇校舎 1 号館及び地表地震断層) (Stop 3) 着  
14 時 40 分 震災遺構 (旧東海大学阿蘇校舎 1 号館及び地表地震断層) 発  
14 時 55 分 高野台大規模地すべり (復興公園) (Stop 4) 着  
15 時 35 分 高野台大規模地すべり (復興公園) 発  
15 時 50 分 旧阿蘇大橋および数鹿流崩れ (Stop 5) 着  
16 時 30 分 旧阿蘇大橋および数鹿流崩れ発  
17 時 00 分 熊本空港着・発  
17 時 20 分 肥後大津駅着・解散

当日, 博多駅 6:45 発の新幹線で, 肥後大津 8:23 着です. 帰りは肥後大津 18:08 発, 博多 19:42 着で帰れますので, 福岡に連泊可能です. ただし, 熊本または肥後大津周辺での前泊, 当日, 大阪や東京まで戻れることを想定しています.

➤ Technical Tour Schedule

- Date: November 7, 2023
- Meeting place and departure time: 8:30 at JR Higo-Ozu Station
- Stop 1: Takamori Tunnel
- Stop 2: Nakadake Crater at Aso Volcano
- Lunch
- Stop 3: Former Tokai University Aso Campus (Surface Earthquake Fault, Building No. 1)
- Stop 4: Takanodai and Aso Volcanological Laboratory, Kyoto University (Large-scale landslide)
- Stop 5: Former Aso Bridge (remaining bridge girders) and the Sugaru-Kuzure (large-scale hillside collapse)
- First arrival location and time: 17:00 at Kumamoto Airport
- Last arrival location and time: 17:30 at JR Higo-Ozu Station

➤ What participants should prepare (**Attention!!**)

At the Takamori Tunnel in Stop 1, participants will need to wear a helmet, rainwear, rain boots and flashlight or headlight as they will be entering a tunnel where underground water gushes out. Please note that the organizers do not provide these items.

➤ Outline of Visiting Stops

Stop 1: Takamori Tunnel

Located in the southeastern part of the Aso Caldera Wall, the Takamori Tunnel was planned as a railway tunnel for the Takachiho Line connecting Kumamoto City and Nobeoka City, and excavation of this tunnel was suspended in 1975 due to a large amount of spring water (about 64t/min). Today, the spring water from this tunnel is a water resource for Takamori Town and continues to drain about 32 t/min.



Stop 2: Nakadake Crater at Aso Volcano

Nakadake is one of the post-caldera volcanoes of the Aso caldera, and the only active volcano with a record of eruption in the historical period. The summit crater can be reached directly by bus, and proximal facies of volcanic ejecta such as agglutinate can be seen along the trail. The crater emits volcanic gases including  $\text{SO}_2$ , and people with respiratory problems should be careful. Entry to this area may be restricted depending on the status of volcanic activity.





### Stop 3: Former Tokai University Aso Campus (Surface Earthquake Fault, Building No. 1)

This location is close to the eastern end of the Futagawa Fault, which caused the 2016 Kumamoto earthquake. A surface earthquake fault runs underneath the Building No. 1 built in 1973. The building was damaged by an intensity 6 upper earthquake (JMA) shaking and fault displacement. This building could avoid collapse because it had been reinforced against earthquakes beforehand, but was further reinforced after the earthquake in order to preserve it. The surface earthquake faults on the outside of the building have also been preserved and can be observed.



### Stop 4: Takanodai and Aso Volcanological Laboratory, Kyoto University (Large-scale landslide)

Five people in Takanodai area were killed in a landslide caused by the main shock of the Kumamoto earthquake on the morning of April 16, 2016. This hill consists of the Takano-obane lava dome (about 50,000 years ago), and the alternation of tephra and soil that covered it were slide down by the earthquake motion. Tephra layers from Aso volcano such as the Kusenrigahama tephra, Aira Tn (AT) and Kikai-Akahoya (K-Ah), which are widespread tephra originating from southern Kyushu, can also be observed in the **scarp**. The disaster prevention park in Takanodai is equipped with a variety of disaster prevention facilities and equipment, including a water storage tank, a storage warehouse for blankets, and benches with built-in kamado.



**Stop 5: Former Aso Bridge (remaining bridge girders) and the Sugaru-Kuzure (large-scale hillside collapse)**

The slope collapse occurred on a steep slope consisting of the Pre-Aso volcanic rocks, and caused serious earthquake damage, including the destruction of critical infrastructure such as National Road 57 and JR Hoho Line. Currently, part of the collapsed bridge remains trapped in the gorge.

