

## Geological Survey by Boring a Core from Toyama' s Schoolgrounds

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In the summer of 2018, I went to near Mt.Aso to visit my grandmother. At that time I found an outcrop on the roadside. I haven't decided what kind of theme I'm going to research. So, I just took some soils and bring them to school. After I washed them and found they contained volcanic ash. I observed those, then, from the percentage of minerals contained and their shape I thought that volcanic ash is the ash called AT(Aira-Tanzawa tephra) which has produced from Aira Tanzawa Caldera.

Also, on December 27th in 2018, we surveyed the soil at Toyama High School. The cores were collected from the surface of the earth to a depth of 12 meters underground. The school is at an altitude of about 28 meters and its soil layers are categorized into a topographic surface called the "Musashino surface." Then, I wash the soils the same as Aso' s soil, made samples, and I found volcanic ash from the core. I was interested in those, and I wanted to know where they come from. Because one of it was looks like the ash I found in Mt.Aso called AT.

As studying the refractive index of volcanic glass, However, the ash I took from Mt.Aso was not AT. It was K-Tz(Kikai-Tozurahara tephra). And Toyama boring core's volcanic ash, I found the core contained volcanic ash called AT around 1.3m from the surface.

Furthermore, I conjectured the depth of Hk-TP and On-Pm using the depth of AT. Comparing with the data of the observation result using a microscope, I found that the depth of Hk-TP and On-Pm was a high possibility of correctness.

In the future, I want to research the depth of Hk-TP and On-Pm estimated from the observation and analysis results are truly correct. And I would like to find out the layer containing much gravel and sand was originated from the Ko-Tama River, which was said to have flowed near Toyama High School.

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