

Let us Enjoy Geo-Tetsu - the Fifth Geo-tour through Train Windows, JR Furano Line in Hokkaido

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1. Aims of Geo-Tetsu activities

Geo-Tetsu is the name of the activity that shows everyone ways to enjoy and learn about geology and related sciences, using railways (Kato et al. 2009). The word "Geo" comes from geoscience, and the word "Tetsu" is an abbreviation of railway in Japanese, and common name for railway fans. Following three year's Geo-Tetsu (Kato et al.,2009; Fujita et al.,2010, 2011), promotion activities of Geo-Tetsu tours are continued by geological engineers who love railways, organized with the corporation of the Fukada Geological Institute. Geo-Tetsu offers the chance to get acquainted with geological features, not only through train windows but also along paths accessible from the stopovers alongside the railway routes. We selected enjoyable Geo-Tetsu courses and Geo-points, which means important geological sites visible, through the train windows from stops alongside the route. In Geo-Tetsu, geological features of the landscape are explained scientifically in a guide-book provided by a group of specialists. As much information is obtainable and can be gathered from various perspectives; the railway itself, geology, geography, cultural heritage and sight-seeing as well. We hope that the general public will enjoy a new style of railway traveling provided by the Geo-Tetsu. The JR Furano Line is presented in this fifth route of Geo-tetsu.

2. JR Furano Line, the fifth Geo-Tetsu project

(1) Abstract of the Furano Line

The Furano Line runs along the Daisetsu-Tokachi mountain range, from Asahikawa station in Asahikawa city in northern area of Hokkaido to Furano Station in Furano City in the center of Hokkaido. It is 54.8km in total distance and its symbolic color is lavender purple. It was opened as a part of the main line designated to connect Sapporo to cities in eastern Hokkaido, in August 1900. After another more direct line was opened in November 1913, it was no longer a part of the main line but redesignated as a local line named Furano Line. Especially during lavender season, many travelers ride this line for sight-seeing, aboard the Norokko train, which is suitable for Geo-Tetsu tour with its wide-view coaches pulled by a diesel locomotive. This train is popular with not only domestic travelers but also travelers from overseas. Furthermore there are many museums of natural science and geology along this line, so we recommend this line to enjoy the Geo-Tetsu.

(2) The rich geological and sight-seeing resources of the Furano Line

The Furano Line runs from north to south, in the geological boundary area of Hidaka belt and Sorachi-Ezo belt in the center of Hokkaido. Pyroclastic plateaus lay along the middle of the line between Biei station and Kamifurano station via Bibaushi station, where the railway goes up and down steeply with many curves. These plateaus are well known for their beautiful hills and consist of material erupted and deposited 1~2 million years ago from Tokachidake volcano (2077m). The material is welded tuff, called Biei-Nanseki by locals, which is used for the stone walls of Biei station. On 24 May 1926, Tokachidake volcano erupted volcanic material, and melted snow to cause a snowmelt type mudflow along the valley toward Kamifurano town. It was a big disaster and many people suffered. Ayako Miura composed two novels of this disaster. Tokachidake volcano is still active, but it provides many natural resources such as Sirogane and Tokachidake spa., Shirohigenotaki waterfall and formerly mining of sulfur. When the train runs from Kamihurano to Nakafurano station, the beautiful hills and Tokachidake mountain range behind the hills are seen on the left, and lavender fields are visible on the right. At the end of the Geo-Tetsu tour of the Furano Line, we can see mount Namako that appears as a low and long hill heaved up by active faults. The last station of this line is Furano station, where we can transfer to the Nemuro line, which runs westward and southward along the Furano basin.

Keywords: Geo-Tetsu, Geo -point, Furano Line, Tokachidake volcano, Pyroclastic prateau, Snowmelt type mudflow