

# Let us Enjoy Geo-Tetsu - the Seventh Geo-tour through Train Windows, Minami-Rias Line of the SANRIKU RAILWAY

\*Masayo Fujita<sup>1</sup>, Shoji Ueno<sup>1</sup>, Keisuke Imao<sup>1</sup>, Shunji Yokoyama<sup>1</sup>, Hironori Kato<sup>1</sup>, Tadashi Yasuda<sup>1</sup>

1. Geo-Tetsu project committee of the Fukada Geological Institute

## 1. Aims of Geo-Tetsu activities

Geo-Tetsu is the name of the activity that shows people enjoy and learn about geology related sciences, using railways (Kato et al., 2009). Following nine years Geo-Tetsu promote activities are continued by geological engineers who love railways, organized with the corporation of the Fukada geological institute since 2009 (Fujita et al., 2013) and established Geo-Tetsu Project Committee since 2013 (<http://fgi.or.jp/geo-tetsu>). Geo-Tetsu offers the chance to get acquainted with geological features alongside the railway routes. We selected enjoyable Geo-Tetsu courses and Geo-points.; 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 Minami-Rias Line is presented in this as seventh route of Geo-tetsu, based on Sanriku Railway Geo-Tetsu Map, 2017.

## 2. The Minami-Rias Line, the seventh Geo-Tetsu project

### (1) Abstract of the Minami-Rias Line

The Minami-Rias Line runs from Ofunato City to Kamaishi City on the Sanriku Coast on the most easterly region of Iwate Prefecture on Honshu. The railway connects from Sakari Sta. to Kamaishi Sta. at 36.6km. It is single track and the route is non-electrification. The Sanriku Railway's original railcar 36type (the white body with red and blue lines) and the luxurious passenger railcar with unique events are operated throughout the year.

Sanriku Railway was built to resist tsunami because this area has suffered tremendous damage from natural disasters in the past several times. It started to be constructed as a high-standard trunk line by Japanese National Railway (JNR) in the 1960s. Following the decision to close JNR's Sakari, Miyako and Kuji Lines, Sanriku Railway opened in April 1984 as a third-sector railway company in Iwate Prefecture, local governments and private companies to maintain local rail services. In the 11 March 2011, the company suffered serious damage by Great East Japan Earthquake and Tsunami. The service was fully resumed on April 2014. It is continued by Sanriku Railway Company themselves that the plans of Disaster Area Front Line Training and Earthquake disaster learning train as disaster tourism.

### (2) The rich geological and sight-seeing resources of the Minami-Rias Line

The Minami-Rias Line runs eastern region in Kitakami Mountains that consist of the Cretaceous volcanic rocks and granitoids in the North Kitakami Belt, and a partly area (Sakari Sta.- Rikuzen Akasaki Sta.) of the Permian in the South Kitakami Belt. Geographical feature of this line is in the rias coast. Therefore the train necessarily goes to high-standard tunnels through the steep mountains foot of the peninsulas. Seven bays appear in sequence in the train window. The train leaves at Sakari Sta., goes to Sakarigawa bridge and crosses above the Iwate Development Railway line. From Rikuzen-Akasaka Sta. to Ryori Sta, the Jomon culture flourished. The train stops once at Koishihama Sta. (asl 43.6m, the highest in this line), there are a lot of ema pictures depicting scallops with wishes. From Koishihama Sta. to Sanriku Sta., it was repaired as concrete structure embankment. It is still originally rip rap masonry at north side of Sanriku Station. Yoshihama area has been known as Miracle Village because villagers were saved by learning from Tsunami experience and following the teachings of their predecessors. We recommend a visit of the Tsunami Rock of Showa era 1933 at Yoshihama coast. At Toni Sta., there is a monument of a geographical

survey of Ino Tadataka made in the late Edo era, walking through the famous cherry blossoms street of Hongo district. At Heita Sta., it is near the Iron and Steel History Museum and the Kamaishi Daikannon (48.5m high) of symbol of Kamaishi area. Lastly, the train crossing two Owatari-gawa bridges, the train arrives at the Kamaishi Station. There you can touch the origin of modern Japanese iron industry.

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Geo-Tetsu Map