

## Lofty summits engraved with the memories of the seabed.

~ Enveloped in a deep forest, a chain of massive mountains that still continues to rise even now ~

### Mountain summits leaving the traces of the seabed

Minami-Alps is believed to have been created by uplifts of ocean floor sediments which travelled from far offshore around the equator with the plate movements.

Rocks formed by the deposition of planktons and reefs such as "chert" and "limestone" which can be seen on the ridgelines tell a story of its origin.

# Deep valleys engraved in massive tectonic mountains



## Growing mountains

The grand Minami-Alps are non-volcanic tectonic mountains, which have been rapidly growing, caused by compression from an east-west direction, for around 100 million years.

The upheaval of the Minami-Alps is still on the move at a rate of 3-4mm per year, making it the fastest in Japan, and also among the fastest in the world.

View of Mt. Aindake from Mt. Natoridake



V-shaped valley of Mt. Akaishidake



Major collapsed land on Mt. Arakawamedake

## Mountain erosion

When mountains are uplifted precipitously, ridges and hillside slopes are liable to collapse. The humid and pluvial climate, specific to the Minami-Alps area, have resulted in many deep eroded V-valleys and collapsed lands.

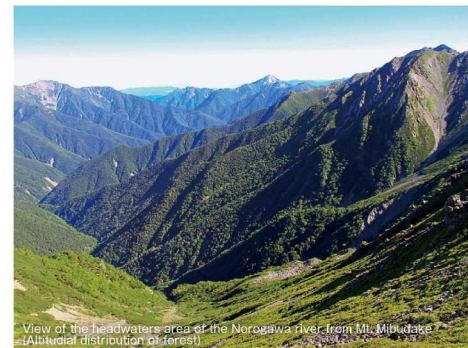
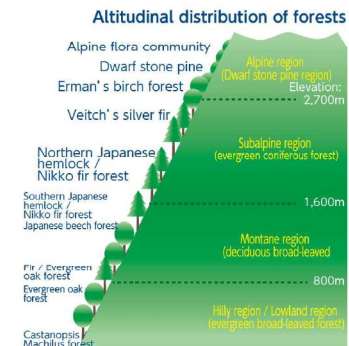


# The beauty of the thickly forested mountains

Mt. Kitadake from Hirogawara in foliage season

## High tree line

The tree line of the Minami-Alps is higher (approx. 2,700m) due to the climate and the geological structure, and the mountains are covered with highly elevated forests. Also, the altitudinal distribution of forests from the hilly zone above 800 meters high to the alpine zone is very distinctive.



View of the headwaters area of the Norogawa river from Mt. Mihudake (Altitudinal distribution of forests)

## Diverse physiognomy of forests and lovely flowers

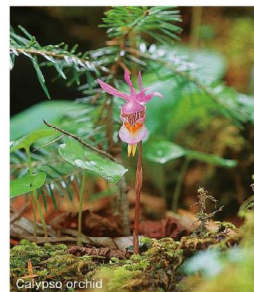


Kitazawa Pass / mossy forest floor

Minami-Alps' forests are full of diverse features. Looking around the forest floor carefully, you can find lovely flowers.



Erman's birch forest in subalpine region



Calypso orchid



Clintonia



Kamome-ran (Galbaris cyclocheila)



Ko-ichiyou-ran (Ephippianthus schmidii)

## Wildlife and plants in the Alpine region



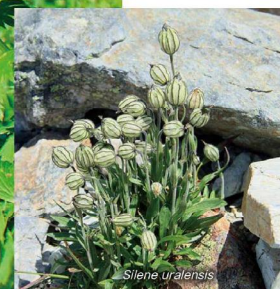
Rock Ptarmigan

### Species remaining from the Ice Age

Rare species from the Ice Age, which had a wide distribution from that era, still remain in the low temperature Alpine region, as the climate changed to temperate.

Some of the animals and plants found in the region are the rock ptarmigan, *Callianthemum hondoense*, *Dryas octopetala*, *Silene uralensis*, and *Saxifraga ceruna*.

Also, there are many regional species native to Minami-Alps and the surrounding areas such as *Parapodisma caelestis*, *Ranunculus kitadakeanus*, and *Comastoma pulmonarium* ssp. *sectum*.



*Silene uralensis*



*Callianthemum hondoense*

Alpine meadow on the southeast slope of Mt. Arakawamaedake and Mt. Akaishidake

# Sacred Mountains of worship



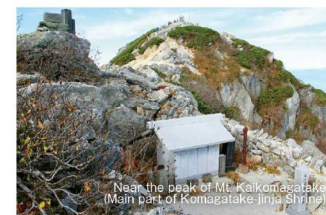
Jizos on Mt. Jizogatake

## Jizo (stone statue) on the mountain

In one of the Hoo Sanzan Mountains, Mt. Jizogatake, there is a legend called, "Kosazuke (impregnation) Jizo". Married couples who visit the mountain to pray for a child, take one enshrined Jizo statue home with them. If their prayers get fulfilled, they return to the mountain with two Jizo statues, to show their appreciation to the mountain.

## Ascetic practices began during the Edo period on the mountain

Mt. Kaikomagatake (Mt. Higashi-komagatake) was opened in 1800's (late Edo period) from the Kuroto ridge, on the current Hokuto City side. The Komagatake-jinja Shrine, located at the foot of the mountain and the Komagatake-Ko (Ko is a pilgrim group that conduct religious ceremonies) became popular. At the Komagatake-jinja shrine, members of Ko wore white clothing to worship, and chanted the Hannya-shingyo Sutra. A practice which has been passed down to present day.



Near the peak of Mt. Kaikomagatake (Main part of Komagatake-jinja Shrine)

## Praying from the Minami-Alps

It is said that long ago, the path for Daijodaira through the Koshibu River from Ooshika Village in Nagano Prefecture was opened to pray to the distant Mt. Ontakesan of Kiso.



Daijodaira



View of Mt. Kaikomagatake from Mt. Kurisawayama