

## ACTIVITIES OF INTERNATIONAL YUKIGATA RESEARCH GROUP

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**ABSTRACT:** *Yukigata* is a Japanese which means the shapes created by snow patches surrounded by bare ground (positive *yukigata*) or by open ground surrounded by snow (negative *yukigata*). They have names likened to men, animals, tools, etc. and have been used mainly as a kind of calendar of agriculture in Japan. There are more than 300 *yukigatas* in Japan. The *yukigatas* are distributed not only in many regions but also in Japan. In this paper we will introduce the distribution of newly found international *yukigatas* and the activity of the international *yukigata* research group.

**KEYWORDS:** Yukigata, Mountain Snow, Topography, Education

### 1. INTRODUCTION

When a seasonal snowcover disappears on a plain and a snow line of seasonal snowcover retreats on a mountain in spring, a complex pattern of white domains covered with remaining snow and dark domains of the ground surface appears on a mountainside. Some of the white domains of remaining snow and dark domains of ground surface are likened to men, animals, tools, etc., and are called *yukigata* in Japan. There are more than 300 *yukigatas* in Japan (Tabuchi, 1981).

The *yukigatas* have been used mainly as a kind of calendar for agriculture in most of snowy regions in Japan for many years. Recently, however, the *yukigatas* are being forgotten because the primitive ways for agriculture are disappearing with the progress of agricultural technology. In this sense the *yukigatas* can be considered as a kind of cultural inheritance.

Nohguchi et. al. (1997) and Yamada (1997) introduced present-day significance of *yukigatas*. Because their formation is governed by snow accumulation, topography and snowmelt, *yukigatas* contain information on mountain snow distribution, climate change and topographical change. Moreover, it is possible to use them as sightseeing resources or for nature education.

In this paper we will introduce the distribution of newly found international *yukigatas* and the activity of the international *yukigata* research group.

### 2. DISTRIBUTION OF INTERNATIONAL YUKIGATA

The International *Yukigata* Society (IYS) seemed to be established about 4 years ago for this *yukigata* research group to be internationally active. This is a very fussy and loose group. The name might soon change to the World Association of *Yukigata* (WAY).

Fig. 1 is the international distribution map of *yukigata* made from the information which IYS have obtained by 1998. *Yukigatas* exist and can be observed in many regions all over the world. On the other hand, there are also many blanks in the world.

In Norway the *yukigata* seems to be known as well as in Japan. The positive *yukigata* named the Olympic Torch runner (Fig. 2) was artificially made as a monument at the 1994 Lillehammer winter Olympic games. Hakuba-village, where the ski jump games of the 1998 Nagano winter Olympics were held, is one of the most famous places for *yukigata* in Japan. The name of Hakuba, which means a white horse, is from the name of the *yukigata*, though the *yukigata* is a black horse. There are some new positive *yukigatas*, a butterfly and a dragon (Figs. 3,4), also near the Salt Lake City where the next winter Olympic games will be held. In this sense the recent winter Olympic games can be considered as the *Yukigata* Olympics.

The *yukigatas* of Mt. Kailas in Tibet, swastika and inverse swastika (Fig. 5), are related to something religious. The *yukigata* shaped a rabbit in Karakoram

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# YUKIGATA DISTRIBUTION MAP

International Yukigata Service

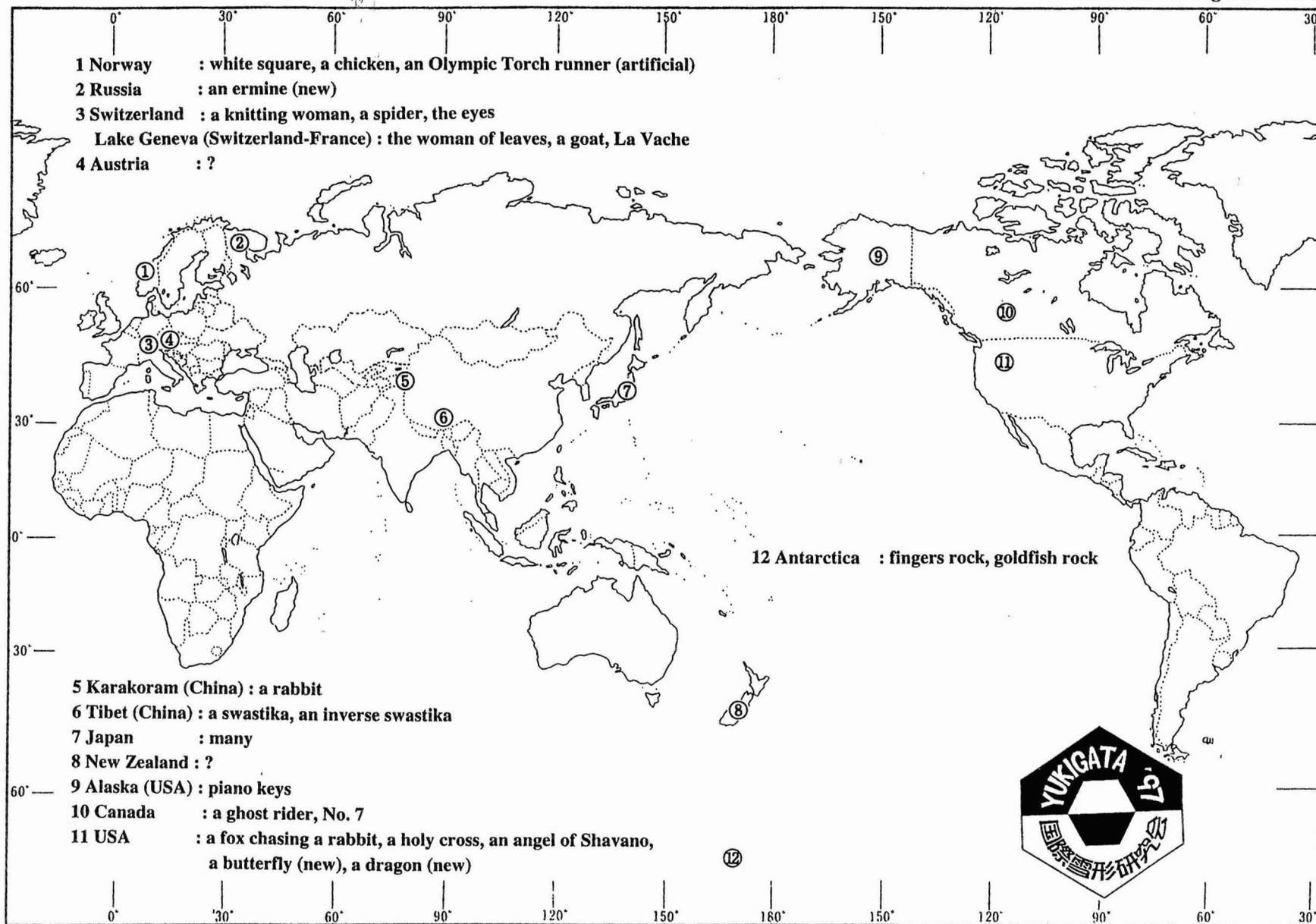


Fig.1 International yukigata distribution map.

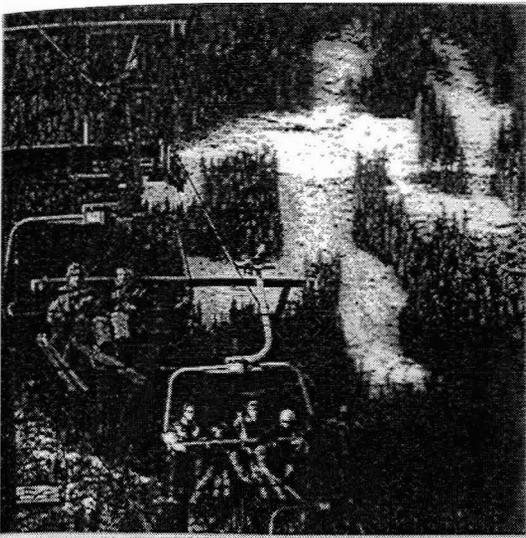


Fig.2 The Olympic Torch runner yukigata in Norway.  
(Photograph: Asahi News Paper)

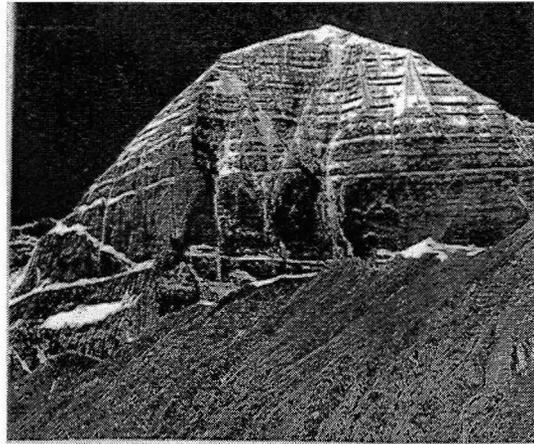


Fig. 5 Religious yukigatas in Tibet. Where is the swastika yukigata and the inverse swastika yukigata?

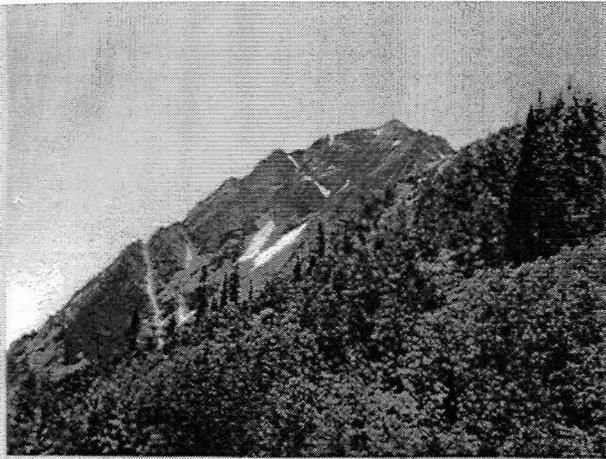


Fig.3 The Butterfly yukigata on Mt. Superior in Utah, USA .  
(Photograph: Mr. David Ream).

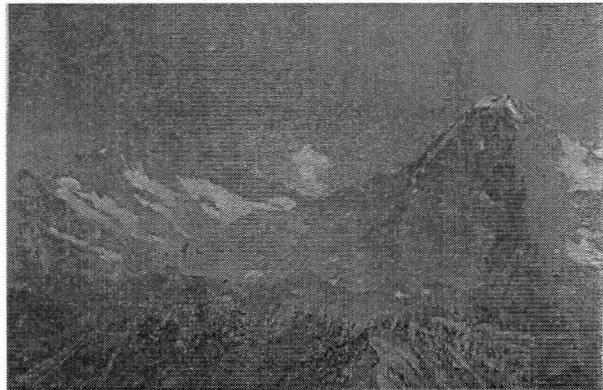


Fig. 6 The Eyes yukigata on Mt. Schrechhorn and the Spider yukigata on the north wall of Mt.Eiger in Switzerland.



Fig. 4 The Dragon yukigata in Cardiac Bowl behind Mt. Superior in Utah, USA. (Photograph: Mr. David Ream)



Fig. 7 The Ermine yukigata in Kirovsk, Russia named by Mr. Pavel Chernouss.

seems to have been used as a primitive sensor for water resource since long time ago.

In New Zealand and Austria, they have *yukigatas* but now we have no information in detail such as name or history.

Antarctica is almost a white continent, so that a dark pattern of rock is important as a land mark as well as mountain. The names sometimes are from the shape of the dark pattern of the rock. So these can be considered as a kind of *yukigatas* in a wide sense.

The *yukigatas* in Switzerland are not well known even by Swiss except the positive *yukigata*, a spider on the north wall at Mt. Eiger (Fig. 6), which is well known by a lot of climbers. The positive *yukigata*, the eyes (Fig. 6), of Mt. Schreckhorn is not very well known. Also the *yukigatas* which appear near the Lake Lemman are known by few Swiss. These *yukigata* appear the mountain in the France side of the lake and can be observed from Switzerland, the opposite side through the lake.

We have not obtained any other information on *yukigatas* from the other countries or regions for the present. Russia is a blank on such *yukigatas* with names and histories. The Russian *yukigata* in the map was newly named by the director of Russian branch of IYS for the popularization of *yukigata* (Fig. 7).

### 3. ACTIVITIES OF JAPANESE BRANCH OF INTERNATIONAL YUKIGATA SOCIETY

Figs. 8-15 show some of Japanese *yukigatas* with oral literature. *Yukigatas* sometimes have their own tales as well as the names. For example, the tale on the positive *yukigata*, two sisters, of Mt. Hitokata is as follows:

“There once were two sisters whose mother was seriously ill. The sisters climbed a mountain to pray to the god Gongen for her recovery. But, on the way down, they were overcome by a snowstorm, and were trapped. From then on, the girls have appeared on the mountain as a *yukigata*, and the mountain is now called Hitokata-yama, which means a mountain with the shape of people.”

Some of new *yukigatas* without histories are shown in Figs.16-18.

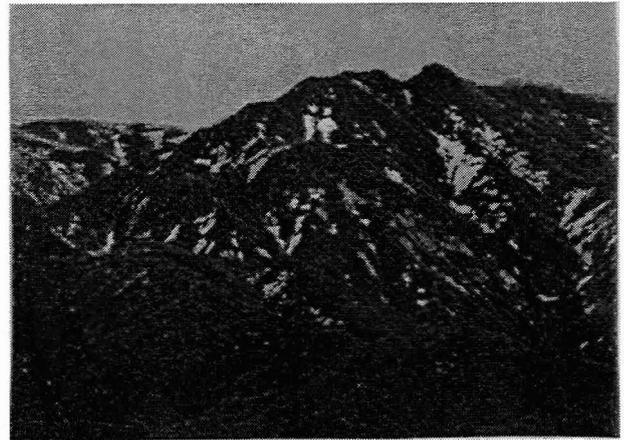


Fig. 8 The Old man and Woman yukigata of Hikura-yama.



Fig. 9 The Monster sowing beans yukigata of Mt. Hakkai.

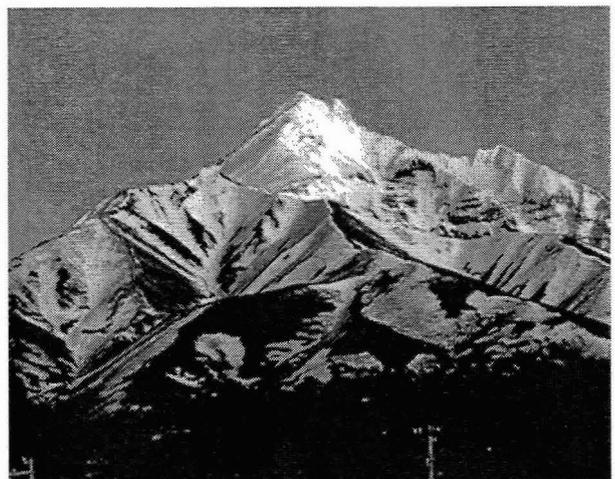


Fig. 10 The Eyes of Cat yukigata of Mt. Rishishiri.

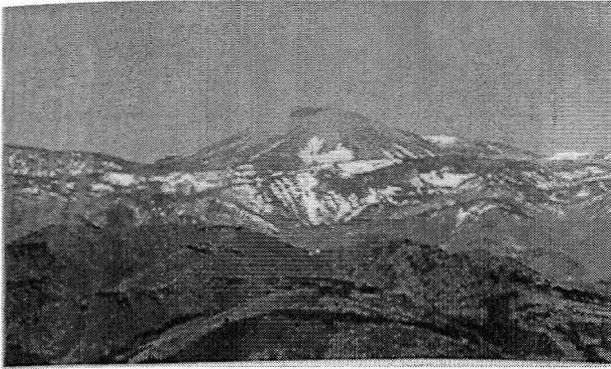


Fig. 11 The Rabbit Yukigata of Mt. Azuma-kofuji.

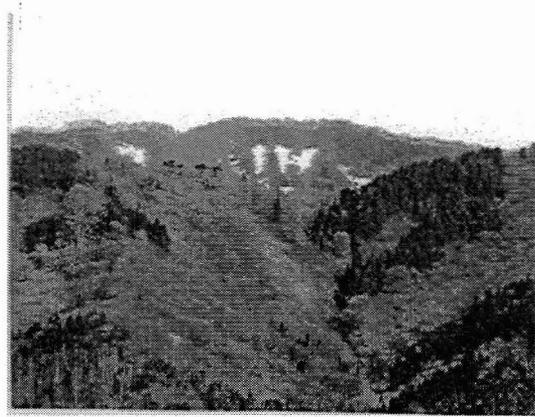


Fig. 14 The River yukigata of Nokogiri-san.

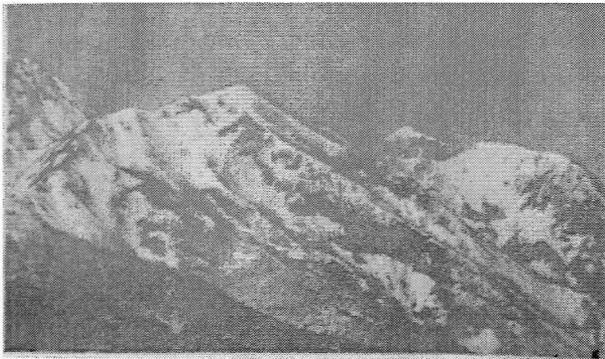


Fig. 12 The Jumping Horse yukigata of Kanna-san.



Fig. 15 The Two Sisters yukigata of Hitokata-yama.



Fig. 13 The Old Woman Sowing Millet yukigata of Awaga-take.

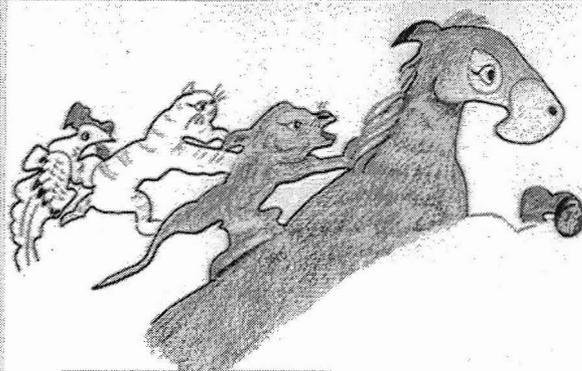
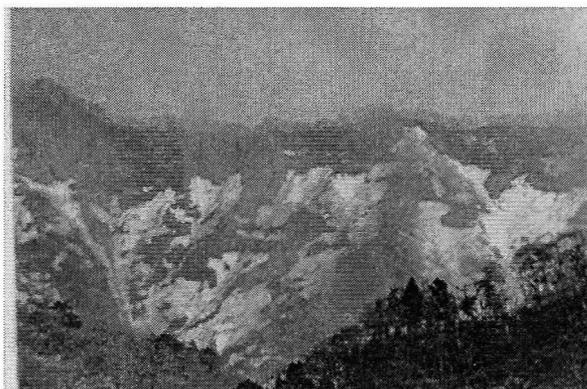


Fig. 16 The new yukigata, Musicians of Bremen. This yukigata is selected Yukigata of the Year '96 by IYS.

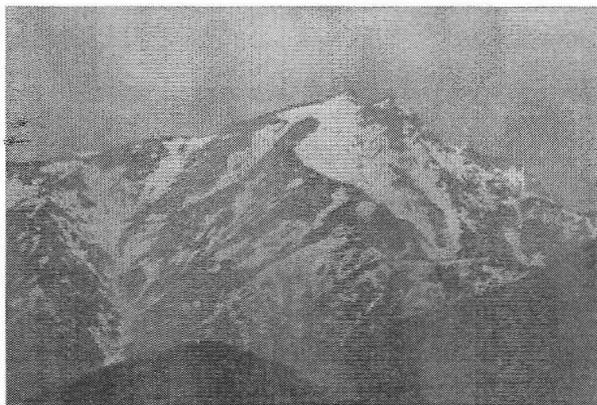


Fig. 17 The new yukigata, "Oohakucho" (a big swan) of Mt. Tanigawa. This yukigata is selected Yukigata of the Year '97 by IYS. (Photograph: Mr. K. Yamanoi)



Fig. 18 The new Yukigata named Princess Diana. This yukigata is a slope of Nagaoka ski field in Japan.

Recently *yukigata* watching, which is a tour to observe *yukigatas* like bird watching, is held every spring in Japan. This is a good chance for nature education. The most popular *yukigata* at the watching is sometimes used as a design for the *yukigata* T-shirt, which is made every year. In the *yukigata* T-shirt '98 the two sisters *yukigata* is designed.

If you have any questions or information on *yukigata*, please contact with [nhg@ess.bosai.go.jp](mailto:nhg@ess.bosai.go.jp).

The address of *yukigata* home page of WAY and IYS are

<http://www.geocities.com/Tokyo/Fuji/4567/yukigata.html>  
and

<http://nieve8.lowtem.hokudai.ac.jp/~takatugu/yukigata.html>.

We are waiting for the information on *yukigata* from you.

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