

Terrain, waves and streams of Samejima coast has occurred since 1945 as shown by the emergency landing of Midorijujiki

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1. Introduction

In 1945, a plane called Midorijujiki emergency landed on Samejima coast while carrying a capitulation. Samejima coast is a place that we have researched for many years. We' ve started this research because we thought that we could reveal the changes to Samejima coast by looking at the direction and speed of streams as well as terrain in 1945 caused by this incident.

2. Terrain

In order to know the terrain in 1945, we compared the aerial photographs from 1946 and 2016. As a result, we found that the former coastline was about 100m away from current coastline.

We asked the witnesses of the Midorijujiki landing about the terrain in 1945 so as to learn details of Samejima coast' s terrain,. Though we couldn' t know the details of the terrain, we could know about the buildings there in 1945. They said there used to be "Hamagoya" , "Hamamichi" which was different from the current one and "Za-ra" , a pond which was made when a typhoon came.

3. Direction of stream

In 1945 a fuel tank of Midorijujiki was discovered about 14km east of the point where Midorijujiki had landed. The witnesses of the Midorijujiki landing said Midorijujiki landed on the water' s edge and was driven towards east. From these, we clarified that the direction of the stream in 1945 was from west to east.

We discovered the present direction of the stream by checking which direction a buoy we threw into the Samejima' s sea was carried. Despite a 1.5m/s wind from east, the buoy was carried from west to east. So we concluded the direction of current stream is from west to east.

4. Speed of the stream

First, we looked at how Midorijujiki was carried after the emergency landing on the water' s edge by gathering testimonies from witnesses. We collected the testimonies by asking the witnesses and reading books on the subject.

While gathering the testimonies, we found that a TYPHOON had occurred during the Midorijujiki landing, so we looked up typhoons that occurred in 1945.

As a result, we concluded that Midorijujiki began to be carried by the streams when the Makurazaki typhoon arrived on September 17th, 1945.

In order to calculate the speed of the streams, we made a formula; it explains that when the friction force between the sand and the plane becomes larger than force of the streams, the plane begins to be carried by the stream.

We searched for the correct values. However, we did not know the value of the “coefficient of static friction” , “volume of Midorijujiki” and “square measures to calculate drag and lift” , so we did experiments to calculate these values.

We found that a stream which is faster than 1.5m/s is necessary by required to move the Midorijujiki’ s body which is full of sea water. This speed is equal to the speed of streams during a typhoon, so we can substantiate the testimonies which say the Midorijujiki was carried by the Makurazaki typhoon.

5. Conclusion

The direction of the streams in 1945 was from west to east and was remained the same.

When the Midorijujiki was carried by the stream, the streams speed was more than 1.5m/s which was caused by the “Makurazaki typhoon” .

The coastline in 1945 was about 100m away from where it is now and there were “Hamagoya” , “Hamamichi” and “Za-ra” on the Samejima coast in 1945.

Keywords: Samejima coast, Midorijujiki, 1945, streams



図1 鮫島海岸の位置



図2 緑十字機(プラモデルの写真)

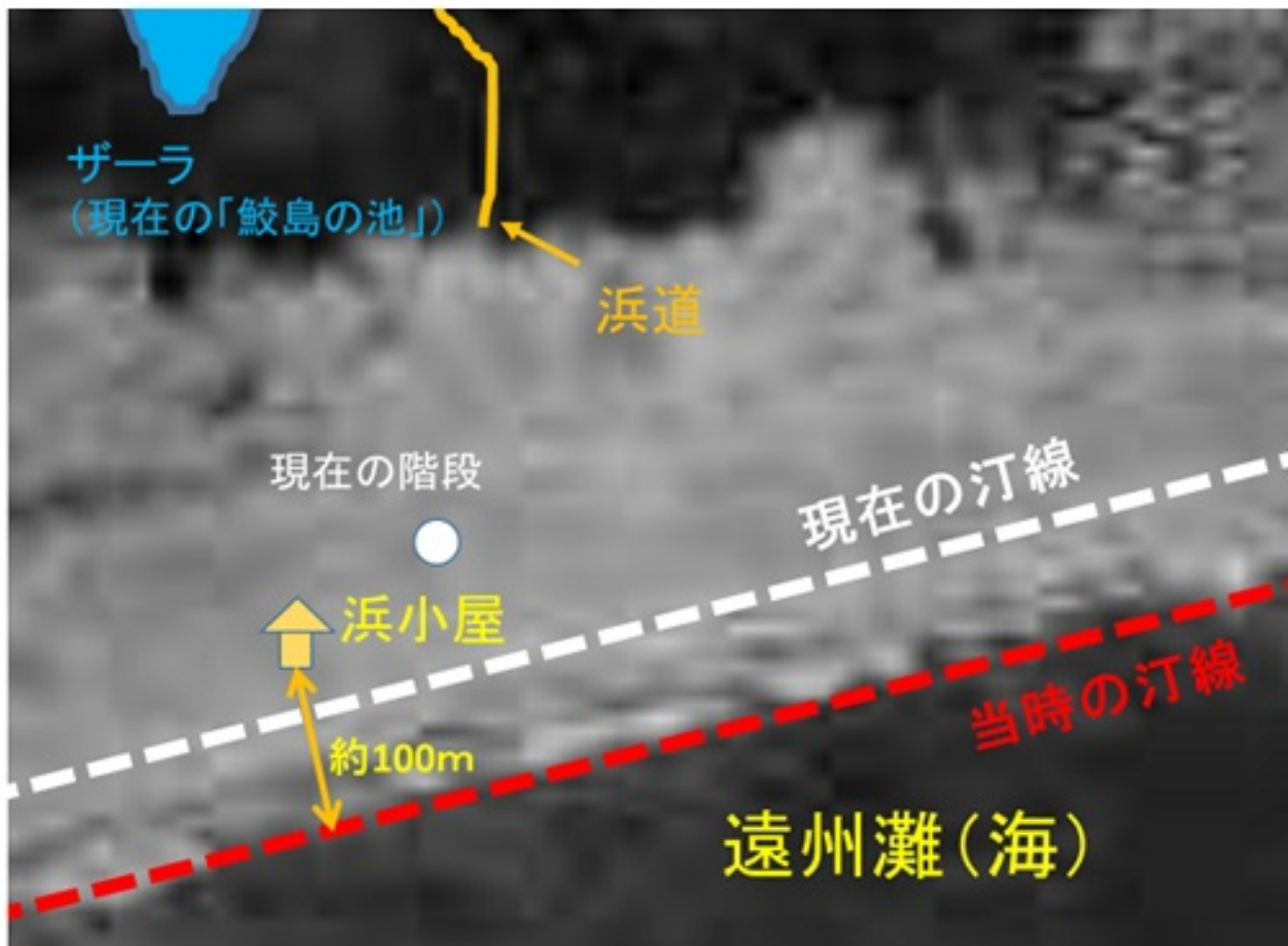


図3 航空写真, 証言から推定した1945年の鮫島海岸の平面図