

## Origin of Nakisuna coast

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Toyoma coast, in Iwaki city, Fukushima prefecture, is Nakisuna coast, but others around it are not Nakisuna coast. Nakisuna is a kind of sand that gives off characteristic sound because of rubbing of quartz in sand. It is inclined to change its sound by environmental factors, so it is called “barometer of environment” .

However, as a result of prior research, we knew roundness of sand and mixture have more influence on Nakisuna than environment. And we determined whether it makes sound or not depending on difference of frequency of Nakisuna by doing physical research about it.

On the other hand, we do not find out how Toyoma coast became Nakisuna coast. To clear its process, we examined the percentage of containing quartz in sand of Toyoma coast and that of Natsui river, which is big and near Toyoma coast. After that, we compared with each other. Also, to find where the sand of Toyoma coast is supplied from, we examined difference of the percentage of containing quartz in sand of Toyoma coast, which was separated at low tide and at high tide.

As a result, it is cleared that the percentage of containing quartz in sand of Natsui river was 71.4%, and that of Toyoma coast had a few differences at low tide and at high tide.

Because the percentage of containing quartz in sand of Natsui river is close to Toyoma coast's one, we can say the sand of Toyoma coast has its origin in Natsui river. In addition, from the percentage of containing quartz in sand of Toyoma coast at high tide was higher than that at low tide, so there is a high possibility that quartz contained in sand of Toyoma coast is supplied from sea.

After this, to find out the origin of Nakisuna in detail, we are going to examine a mechanism of sea current. Natsui river has many sediments, so we are also going to examine how they arrive in sea shore.

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