See an Imprint of Waves on Sand Preserved for Eons

The sedimentary layer of the Earth's crust that formed these islands is a geologic stratum called the Goto Group. It was formed some 16–18 million years ago when the Japanese archipelago broke away from the Asian mainland. Multiple layers of sand, mud, and small rocks accumulated and were compressed, ultimately forming the Goto Group.

Under Water

When the Goto Group was being formed, part of it was under a shallow body of water. Eons of pressure from accumulated layers of mud and sand likely pressed these imprints into this pattern.

The rock face we see here was originally part of a horizontal stratum made up of multiple layers of sand, mud, and gravel that accumulated over time. Deformations of the Earth's crust bent this multilayered stratum downwards. Then, over time, the top layer was stripped off by wind or water erosion, exposing lower layers where we can see traces of ripple patterns.

Enjoy Them While You Can

The Shiraragahama Ripple Marks were declared a Natural Monument by Nagasaki Prefecture in 1959. However, these ripple patterns have been exposed to the elements for decades; the surface has gradually begun to lose its distinct features and the ripple pattern has begun to fade.