Rocks at Cape Hinomisaki

The geology of Cape Hinomisaki is characterized by jointed vertical cliffs. The rocks here consist mainly of dome-shaped rhyolite, an igneous rock that formed as magma cooled within the earth's crust about 16 million years ago. The cross sections of these rocks show irregular pentagonal or hexagonal shaped columns that were formed by the gradual contraction of lava as it cooled. These geologic structures, known as columnar jointing, form perpendicular to the surface of the cooling lava. The rock breaks away more easily along these joints, and over the centuries the pounding waves have sculpted the columns into geometric shapes.