## **Tides in the Naruto Strait**

The tidal whirlpools of the Naruto Strait are generated by a phenomenon found nowhere else in Japan. Famed both for being among the world's largest whirlpools and for their captivating variety of forms, they are powered by local geological formations and tides. The capes that jut out from the coast of Shikoku on one side and Awaji Island on the other form the funnellike Naruto Strait, about 1.3 kilometers across at its narrowest point and 80 meters deep. Currents from the Pacific Ocean entering the Kii Channel, which runs between Shikoku and Wakayama Prefecture on mainland Honshu, split in two directions. One current flows to the south side of Naruto Strait, causing a high tide. The other heads northeast up into Osaka Bay and then loops in a counterclockwise direction, passing through the Akashi Strait (where it again rises to a high tide), around Awaji Island, and then south through the Seto Inland Sea to the Naruto Strait, where it meets the first current. This journey takes around six hours. By the time the current comes around, the waters in the south part of the Naruto Strait have fallen to a level considerably lower than that of the returning tide to the north. The disparity in tidal level, which can be as great as 1.5 meters, triggers currents moving as fast as 20 kilometers per hour. When they come together at the narrowest part of the strait, they create the dramatic Naruto whirlpools.