Mae-Kyucho along the coast of Tango Peninsula
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From recent mooring observations carried out along the coast of the Tango Peninsula, we found that stormy current, Kyucho, rarely occurred before passage of a typhoon or midlatitude cyclone and damaged set-nets around the peninsula. We examined the characteristics and generation mechanism of Kyucho associated with Typhoon 0514. Mooring current and temperature data obtained at the eastern part of the peninsula showed that the strong northward current (approximately 0.8 ms⁻¹) accompanied with a temperature decrease developed before passage of the typhoon. The currents distributed with the coast on the left-hand side were extracted as the first EOF mode, and the time variation was found to be closely correlated with the westward wind at Mt. Taiko (at the center of the peninsula). From a numerical experiment using a 3D level model with uniform stratification condition, the strong northward current and temperature decrease in the eastern part of the peninsula were effectively reproduced by the force of the wind which were blowing more than two days before the passage of Typhoon 0514. We concluded that Kyucho occurred in the eastern part of the peninsula before passage of the typhoon was due mainly to the coastal jet generated by a continuously blowing strong westward wind.