

丹後半島沿岸の前急潮

熊木 豊, 北出裕二郎, 戸嶋 孝

海の研究, 21(6): 201-217 (2012)

Mae-Kyucho along the coast of Tango Peninsula

Yutaka Kumaki, Yujiro Kitade and Takashi Tojima

From recent mooring observations carried out along the coast of Tango Peninsula, we found that stormy current, *Kyucho*, rarely occurred before passage of typhoon or midlatitude cyclone and damaged set-net around the peninsula. We examined the characteristics and generation mechanism of the *Kyucho* associated with the case of Typhoon0514. Mooring current and temperature data obtained at the eastern part of the peninsula showed that the northward strong current (approximately 0.8 ms^{-1}) accompanied with temperature decrease have developed before passage of the typhoon. The currents distributed with the coast on the left hand were extracted as the first EOF mode and its time variation was found to be crossly correlated with the westward wind at Mt. Taiko (at the center of the peninsula). From a numerical experiment using 3D level model with uniform stratification condition, the northward strong current and temperature decrease at the eastern part of the peninsula was well reproduced by forcing of the wind which was blowing more than two days before passage of Typhoon 0514. We concluded that the *Kyucho* occurred at eastern part of the peninsula before passage of Typhoon was due mainly to the coastal jet excited by continuously blowing strong westward wind.

(京都府農林水産技術センター海洋センター業績 No.167)