

Hydrographic observations of estuarine circulation in Suruga Bay, Japan

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Sergestid shrimp (‘Sakura-ebi’ in Japanese), *Sergia lucens*, is an important marine product in Suruga Bay, south coast of Japan. Large-scale commercial catch of *Sergia lucens* is conducted only in Suruga Bay and around Taiwan. Although the reason abundant catch of *Sergia lucens* is limited to these areas has not yet been clarified thoroughly, two factors likely play important roles: One is a steep continental slope adjacent to a deep basin, and the other is large volume of river discharge. Therefore, we made a high-resolution hydrographic observation (shipboard ADCP and CTD) in the innermost region of Suruga Bay, where the mouth of the Fuji River is connected directly to the steep continental slope and an anticyclonic (clockwise) eddy tends to form. The observation suggested that an estuarine baroclinic circulation formed there. It is likely that a counter flow of subsurface water located around a depth of 20 m is entrained into the surface river plume at the river mouth.

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