Summertime subsurface water temperature decreasing phenomenon in Suruga Bay

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Nakamura (1982) discovered subsurface water temperature lowering phenomena in summer from detailed analyses of hydrographic data in Suruga Bay observed every month from 1964 to 1974. In Suruga Bay, the surface water temperature begins to rise from April due to sea surface heating and reaches its maximum in August. The subsurface water temperature below about 50 m, on the other hand, clearly decreases in July. This phenomenon cannot be explained by local heat exchange through the sea surface. In this study we aim to clarify the actual state of summertime subsurface water temperature decreasing phenomena in Suruga Bay, using monthly CTD observational data from 2002 to 2021.

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