

## SUPPLEMENTAL FIGURES

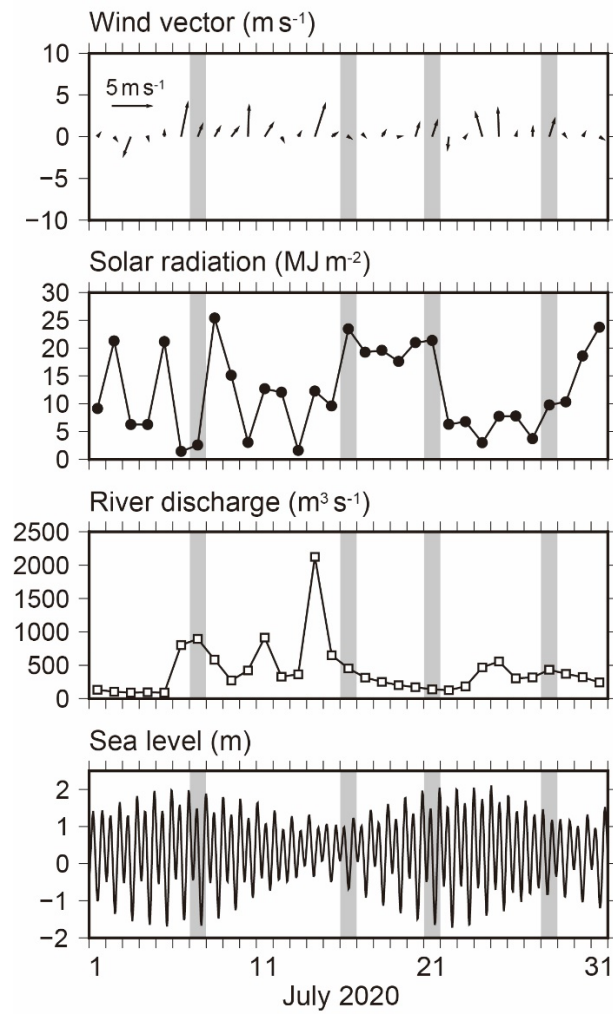


Fig. S1. Temporal changes in wind vector, solar radiation, river discharge, and sea level in July 2020. Shading indicates the date of cross-sectional observations.

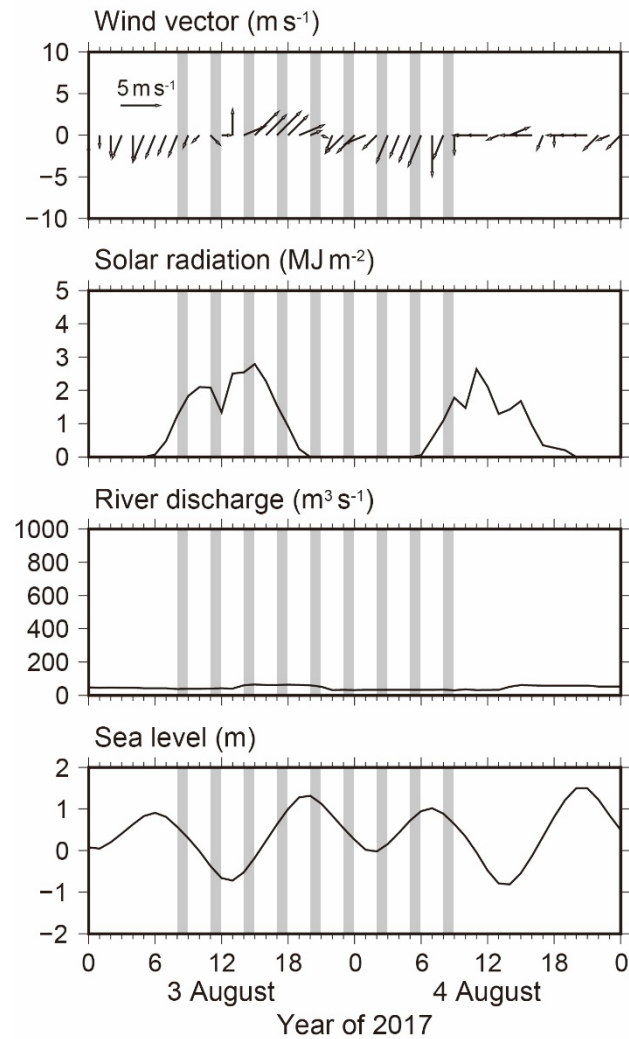


Fig. S2. Temporal changes in wind vector, solar radiation, river discharge, and sea level on 3–4 August 2017. Shading indicates observation times every 3 h.

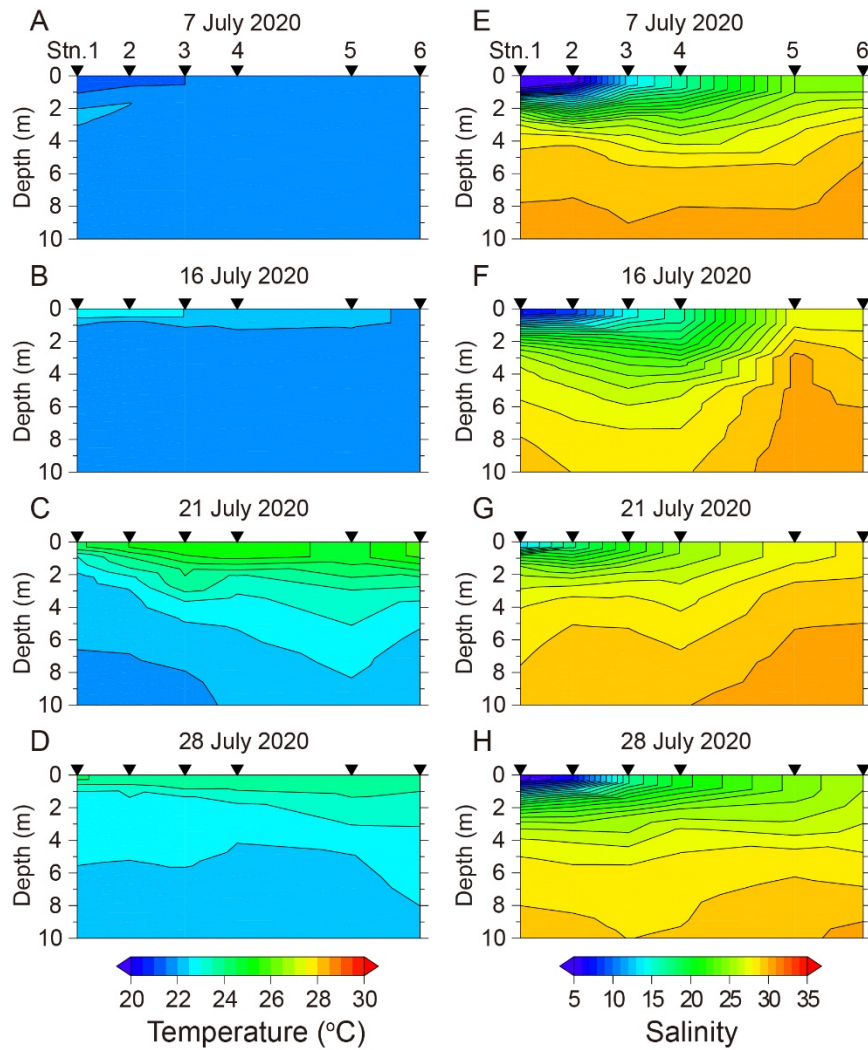


Fig. S3. Simulated vertical distributions of (A–D) water temperature and (E–H) salinity along the line of Stns. 1–6 at 12:00 JST on 7, 16, 21, and 28 July 2020. Contour intervals are  $0.5^{\circ}\text{C}$  and 1, respectively. The simulated salinity was modified using the bias between simulated and observed salinities (See Section 2.7).