

# Sensitivity of coastal front simulation to the thermal diffusivity in the PBL scheme

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Coastal front is a shallow mesoscale frontal zone characterized by a distinct windshift and enhanced thermal contrast. Coastal front is often formed in Kanto Plain. However, The numerical simulation of the location of the coastal front formed in Kanto Plain is frequently biased northward (inland). In this experiment, we conducted a case study to produce coastal front more realistically by changing thermal diffusivity of PBL (Deardorff) scheme. We found that the location of coastal front has slightly changed by changing thermal diffusivity.