Sea breeze analysis based on LES simulations and the particle trace calculations in MM21 district

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We have performed thermal and wind environment LES simulations in MM21 district in Yokohama. The used simulation model is MSSG (Multi-Scale Simulator for the Geo-environment). The spatial resolution is about 5[m] in horizontal and vertical axis. We have also performed the particle trace calculations in order to investigate the route of the sea-breeze. We have found the cool wind is gradually warmed/heated up as flowing into the district, then it blows up and is diffused. We will also discuss the contributions of the DHC (District Heating & Cooling) system in the area.