Geophysical Research Abstracts Vol. 18, EGU2016-2444-1, 2016 EGU General Assembly 2016 © Author(s) 2016. CC Attribution 3.0 License.



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

Toru Sugiyama (1), Yuta Soga (2), Koji Goto (3), Satoru Sadohara (2), and Keiko Takahashi (1) (1) Center for Earth Information Science and Technology (CEIST), Japan Agency for Marine-Earth Science and Technology (JAMSTEC), Japan, (2) Yokohama National University, Yokohama, Japan, (3) NEC Corporation, Minoto-ku, Japan

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.