

The side-wind loading on a simplified train model at scale 1:25 is investigated by parallel large eddy simulation (LES) with incompressible solvers from the OpenFOAM package and a novel dynamically adaptive, parallel LES-type lattice Boltzmann method (LBM) implemented in our own AMROC framework. It is found that the new LBM code provides more accurate time-averaged force predictions, while compute times are reduced.