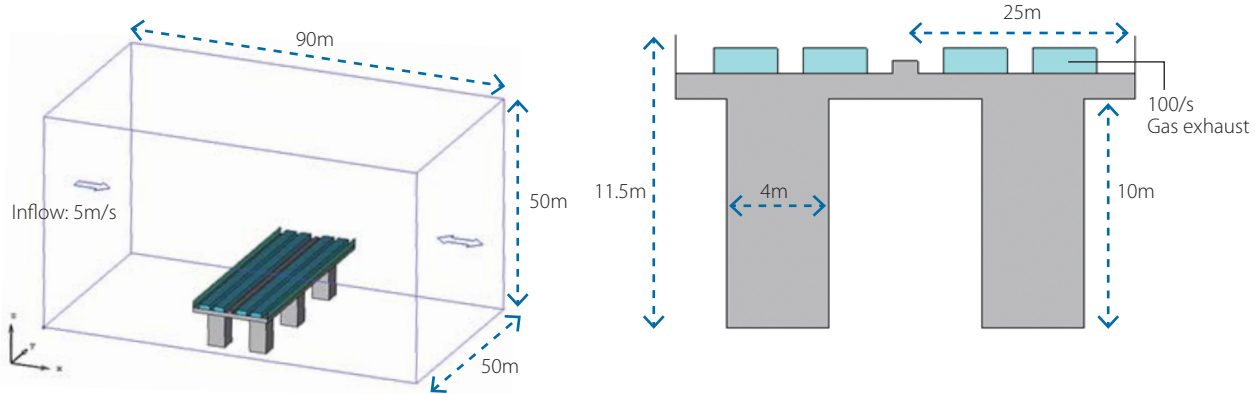


Spread of Exhaust Gas from Highway

scSTREAM is used to simulate a spread of car exhaust from the highway.

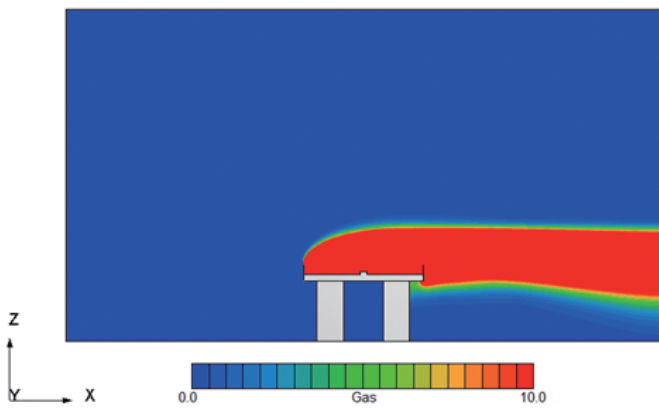
Simulation Model

A segment of highway (50m long):

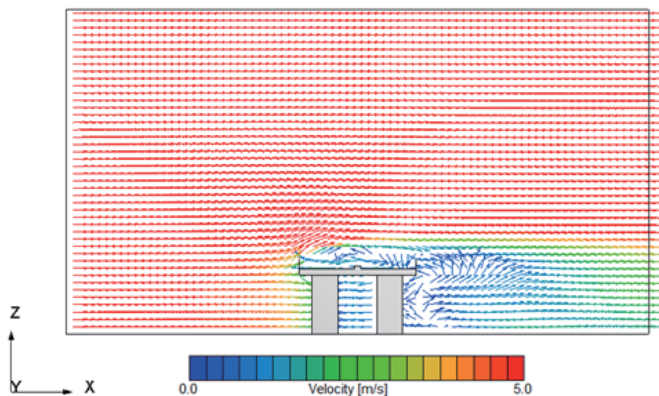


Results

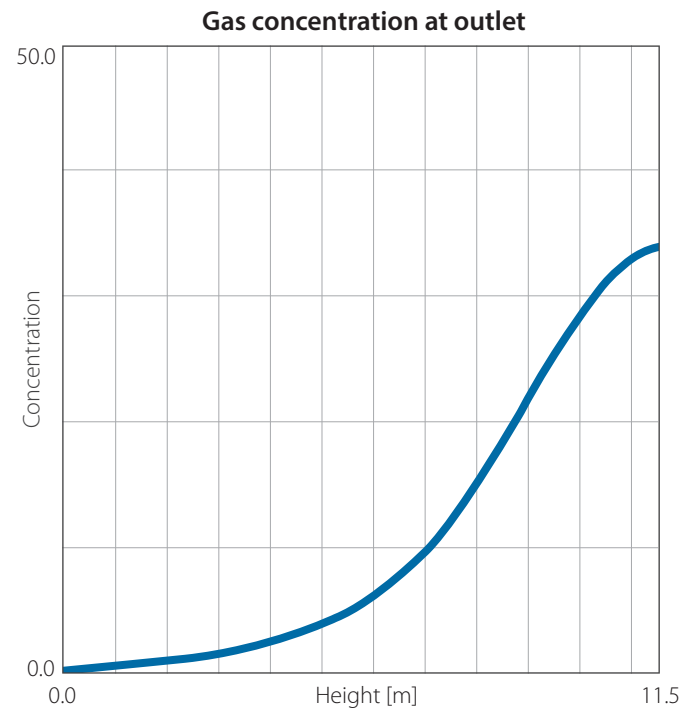
Gas distribution



Velocity vector



Gas distribution at outlet



Discussions

Exhaust gas will flow even below the floor level of the highway under a horizontal wind condition. As shown in the velocity vector plot, the downward drift of the exhaust gas is caused by the circulating flow behind the highway structure.

Notes

scSTREAM is used to simulate the inevitable effects of the highway to the surrounding environment. This simple simulation can be done in aerial or ground-level perspective.