Author's response to Editor's comments

Please add the version information of CAIRDIO (v 1.0) in a title.

The version number (v 2.0) is now included in the title.

CAIRDIO deals with atmospheric dispersion and I wonder how this model deals with rapid multi-phase chemical reactions in street canyons and its implications on the simulation results.

CAIRDIO is a physical dispersion model without air chemistry. For this reason, chemistry and in particular multi-phase chemistry inside street canyons could not be tested with the model. We stress, however, that for chemically inert species or comparatively slow reactions, like the formation of secondary PM, dispersion without air chemistry is a good approximation at the street-level scale. Also please note that the model MUSCAT, which was used for the precursor simulations at the mesoscale, includes such complex air chemistry.