1.018 THE MUMBA CAMPAIGN: MEASUREMENTS OF URBAN, MARINE AND BIOGENIC AIR.

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Abstract:

The Measurements of Urban, Marine and Biogenic Air (MUMBA) campaign took place in Wollongong, New South Wales (a small city approximately 80 km south of Sydney, Australia), from 21st December 2012 to 15th February 2013. Instruments were deployed during MUMBA to measure the gaseous and aerosol composition of the atmosphere with the aim of providing a detailed characterisation of the complex environment of the ocean/forest/urban interface that could be used to test the skill of atmospheric models. Gases measured included ozone, oxides of nitrogen, carbon monoxide, carbon dioxide, methane and many of the most abundant volatile organic compounds. Aerosol characterisation included total particle counts above 3 nm, total cloud condensation nuclei counts; mass concentration, number concentration size distribution, aerosol chemical analyses and elemental analysis. In this paper an overview of the campaign and its findings for the urban, marine and biogenic influences are presented, along with

comparison to regional scale chemical transport model predictions from CHIMERE [*Menut, et al,* 2013].