

# MODELING DESERT DUST EXPOSURE IN EPIDEMIOLOGIC SHORT-TERM HEALTH EFFECTS STUDIES

Aurelio Tobías (1), Massimo Stafoggia (2)

1. Institute of Environmental Assessment and Water Research (IDAEA), Spanish Council for Scientific Research (CSIC), Barcelona, Spain.
2. Department of Epidemiology, Lazio Regional Health Service/ASL Roma 1, Rome, Italy.

## Supplementary Tables

eTable 1. Descriptive characteristics of Rome, for the study period 2005-2015 .....2

## Supplementary Figures

eFigure 1. Time series distribution of daily mortality (top) and PM<sub>10</sub> concentrations (bottom) during dust and non-dust days in Rome, in 2007 .....3

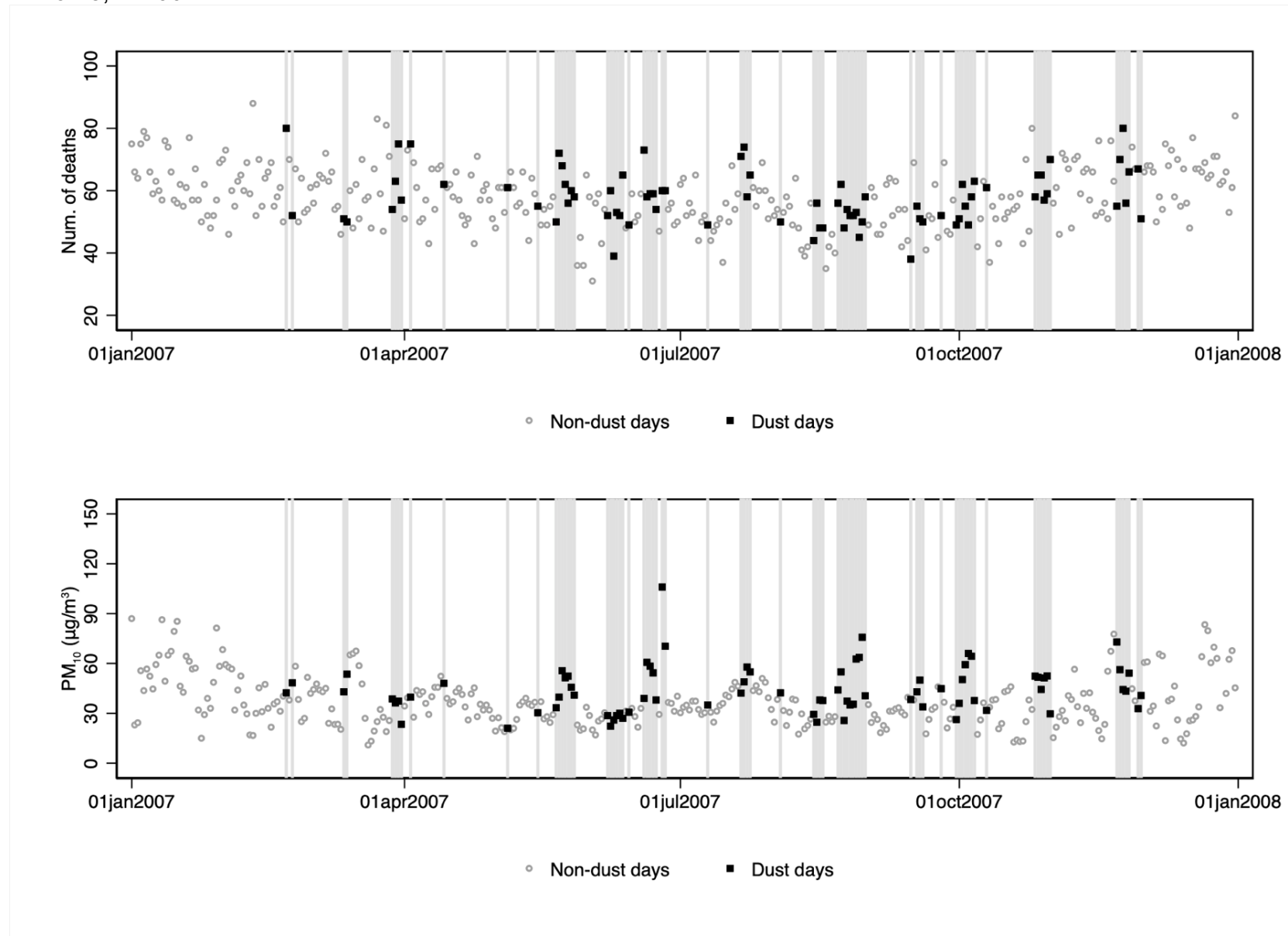
eFigure 2. Time series distribution of desert (top) and non-desert PM<sub>10</sub> loads (bottom) during dust and non-dust days in Rome, in 2007 .....4

eTable 1. Descriptive characteristics of Rome, for the study period 2005-2015.

	Mean	(sd)	Min.	10 <sup>th</sup> pct	90 <sup>th</sup> pct	Max.
<b>All days</b> (n=4017)						
Mortality	58.8	(10.0)	25.0	47.0	72.0	105.0
PM <sub>10</sub> (µg/m <sup>3</sup> )	31.8	(13.9)	4.0	17.0	51.0	160.0
Desert	1.5	(5.7)	0.0	0.0	5.0	129.7
Non-desert	30.3	(13.3)	0.0	16.7	48.3	98.9
Temperature (°C)	15.9	(7.0)	-1.0	6.8	25.7	32.5
<b>Dust days</b> (n=575)						
Mortality	58.2	(9.6)	25.0	46.0	71.0	90.0
PM <sub>10</sub> (µg/m <sup>3</sup> )	36.7	(14.2)	11.0	22.8	53.5	160.0
Desert	10.7	(11.2)	0.0	1.3	22.0	129.7
Non-desert	25.9	(9.1)	0.0	17.0	37.8	80.0
Temperature (°C)	20.2	(5.7)	5.9	12.3	27.4	31.0
<b>Non-dust days</b> (n=3420)						
Mortality	59.0	(10.1)	30.0	47.0	72.0	105.0
PM <sub>10</sub> (µg/m <sup>3</sup> )	31.0	(13.7)	4.0	16.6	50.3	98.9
Desert	0.0	(0.0)	0.0	0.0	0.0	0.0
Non-desert	31.0	(13.7)	4.0	16.6	50.3	98.9
Temperature (°C)	15.1	(6.9)	-1.0	6.3	25.0	32.5

SD indicates standard deviation.

eFigure 1. Time series distribution of daily mortality (top) and PM<sub>10</sub> concentrations (bottom) during dust and non-dust days in Rome, in 2007.



eFigure 2. Time series distribution of desert (top) and non-desert PM<sub>10</sub> loads (bottom) during dust and non-dust days in Rome, in 2007.

