

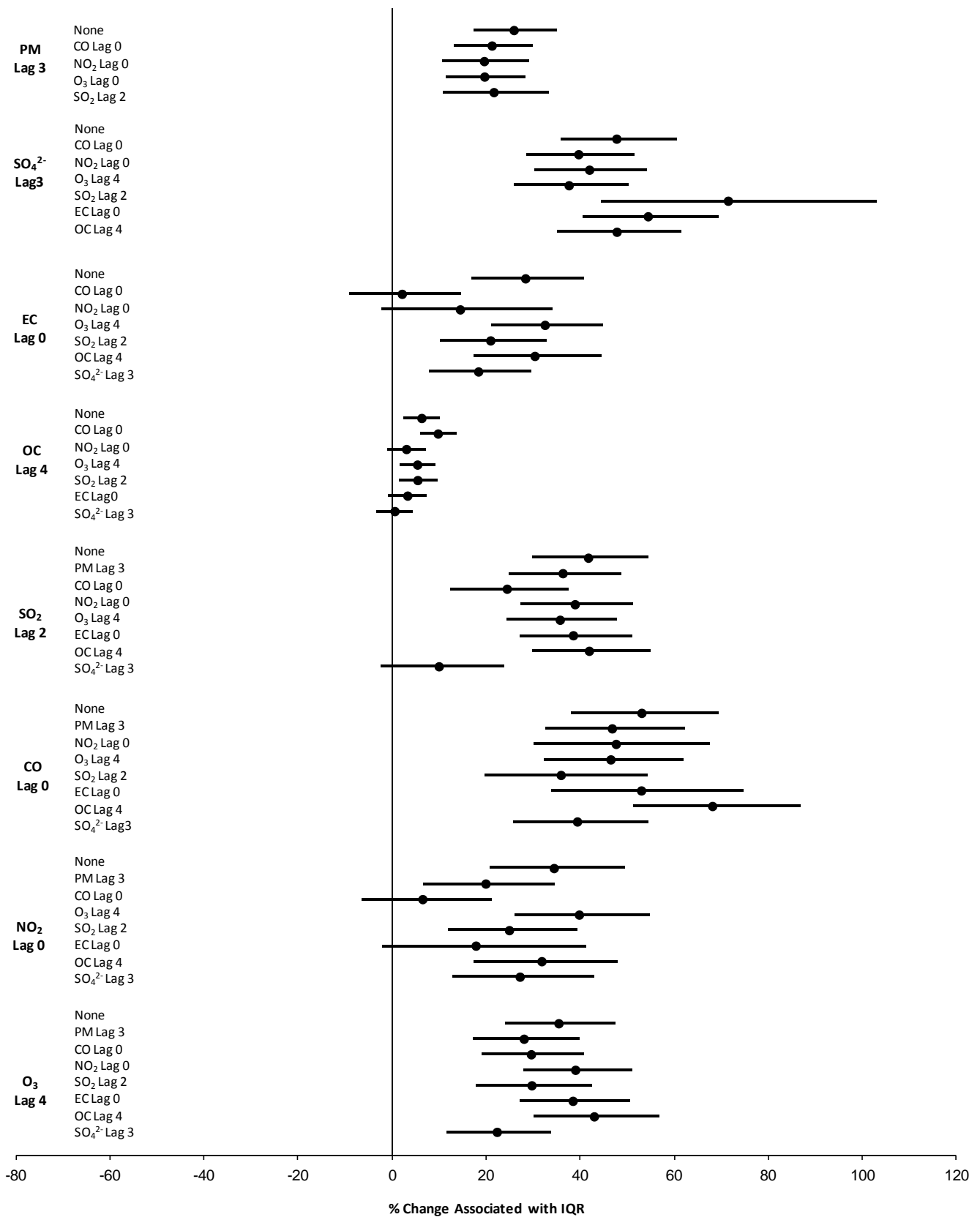
Inflammatory and Oxidative Stress Responses of Healthy Young Adults to Changes in Air Quality during the Beijing Olympics

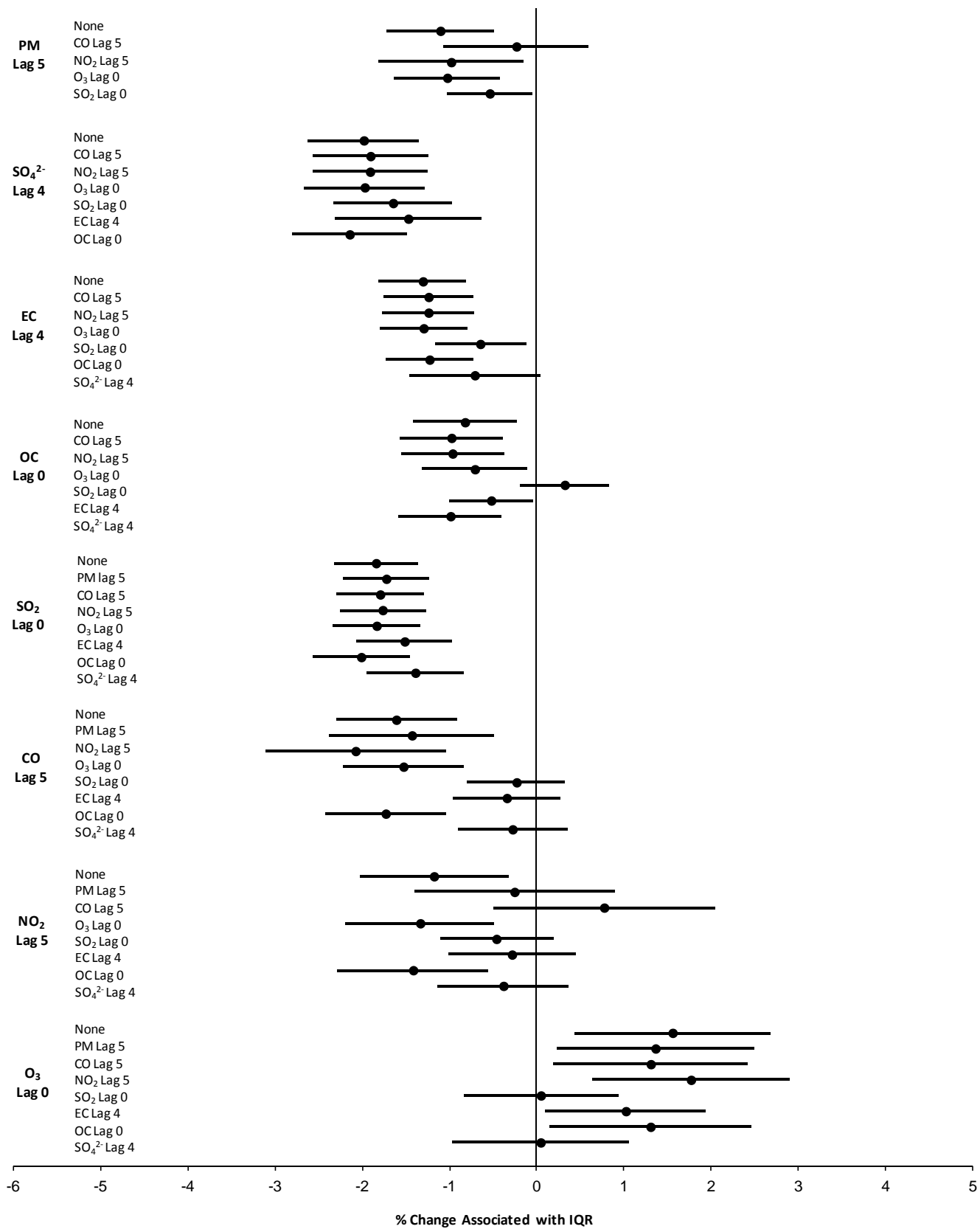
Wei Huang, ScD, Guangfa Wang, MD., Shou-En Lu, PhD., Howard Kipen, MD., MPH, Yuedan Wang, PhD, Min Hu, PhD., Weiwei Lin, PhD., David Rich, ScD., Pamela Ohman-Strickland, PhD., Scott R. Diehl, PhD., Ping Zhu, MD., Jian Tong, MS., Jicheng Gong, PhD., Tong Zhu, PhD. and Junfeng Zhang, PhD.

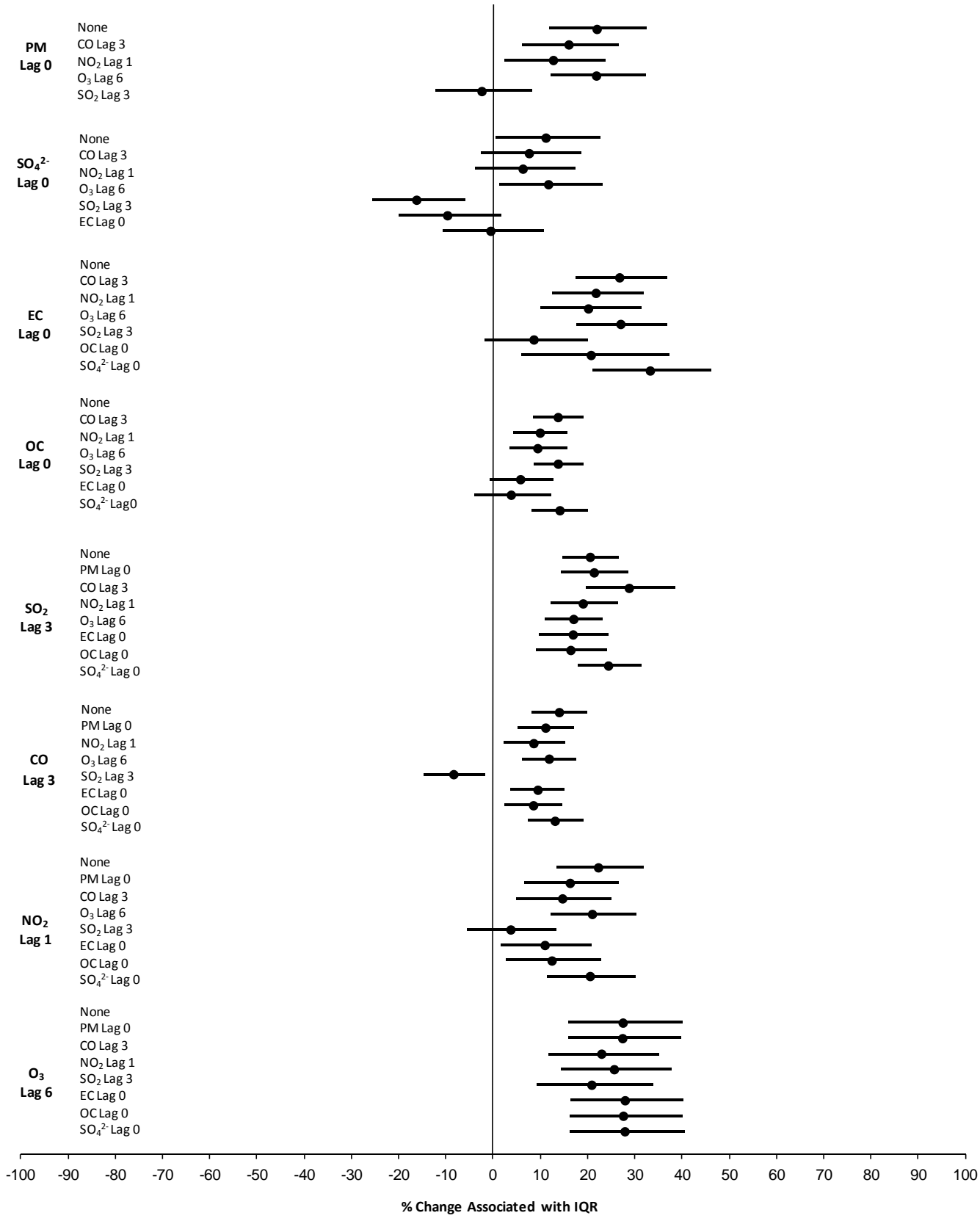
ONLINE DATA SUPPLEMENT

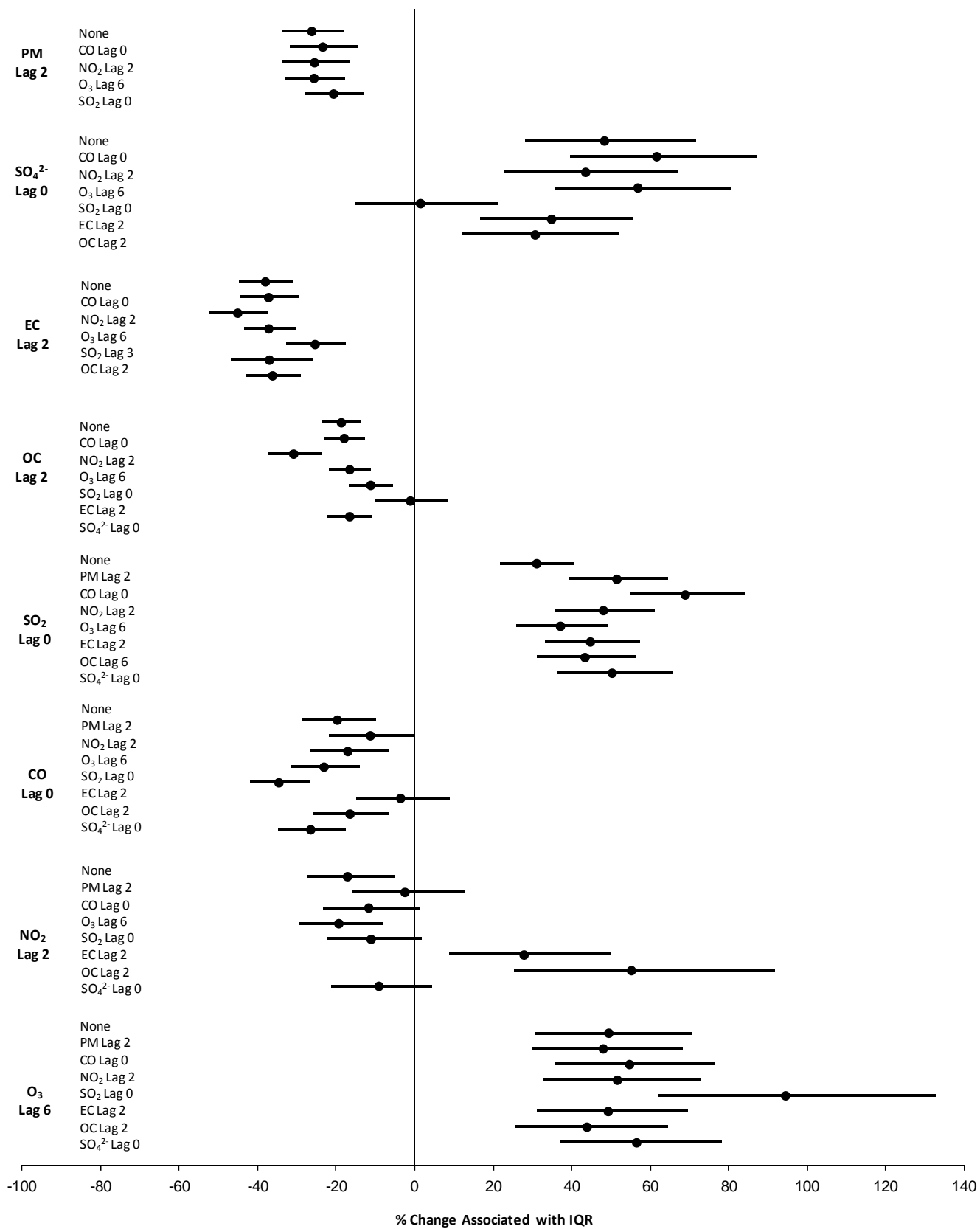
Supplementary Materials

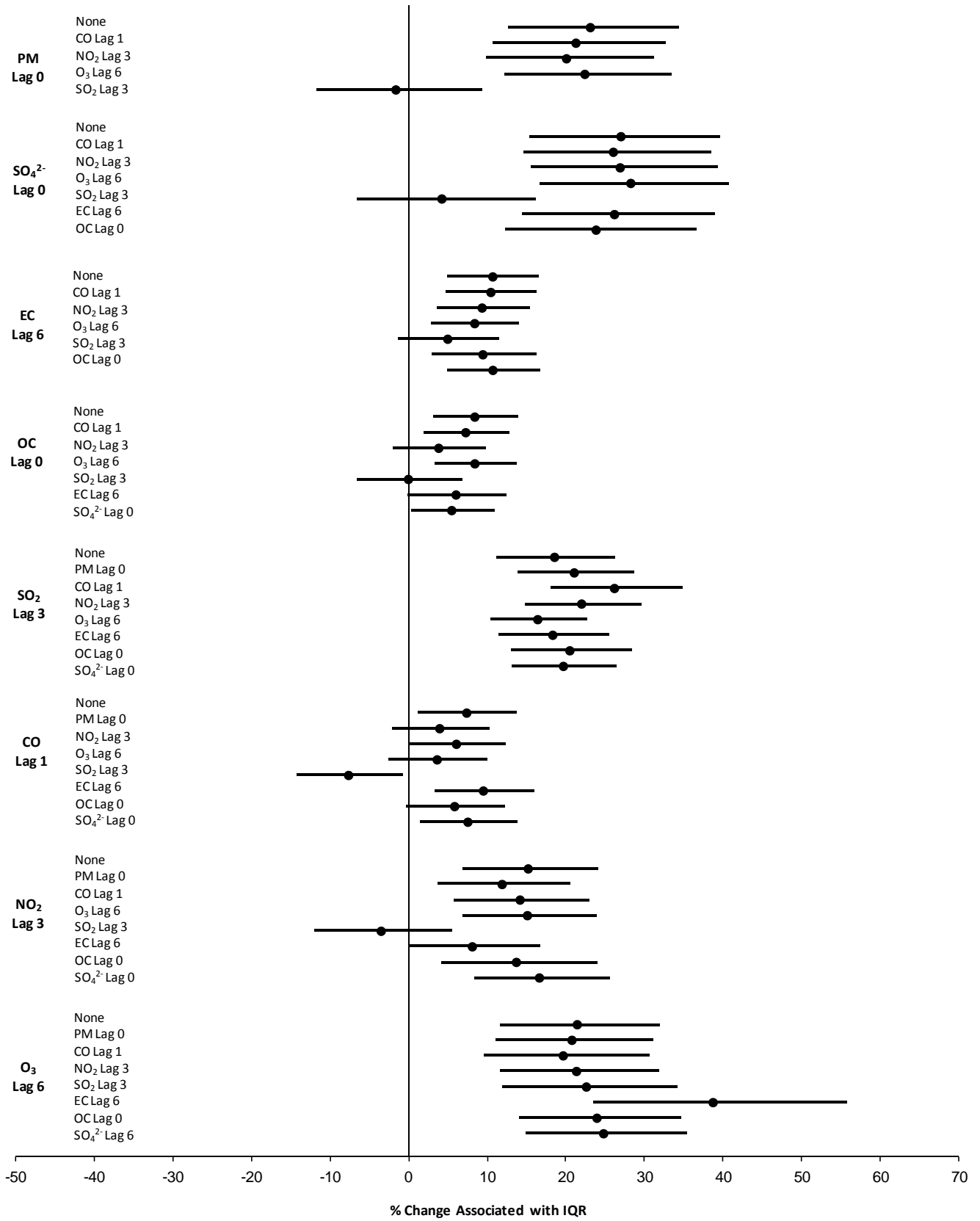
SM 1 – Results from two-pollutant models

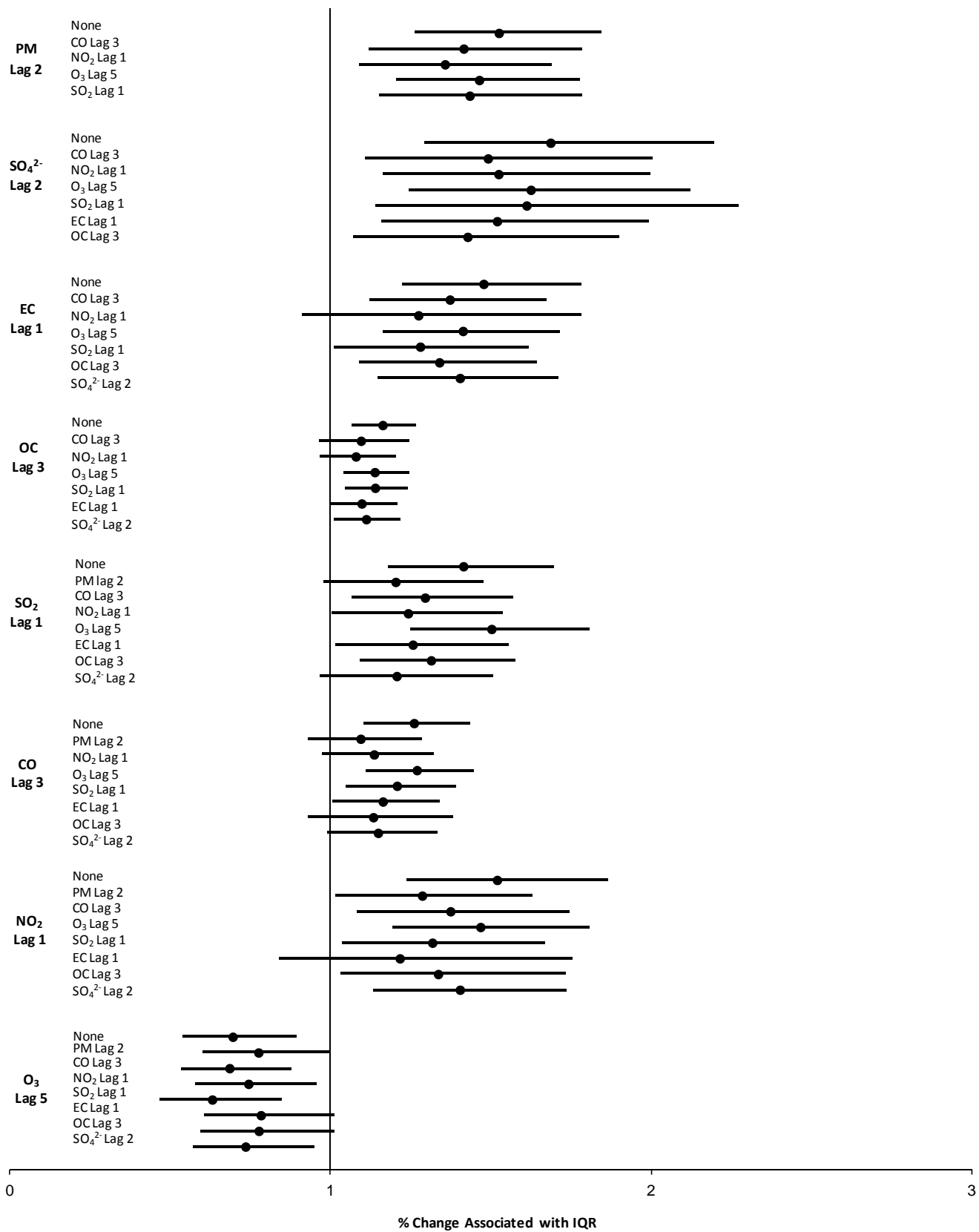












SM 2 - Summary of the degrees of freedom and p values

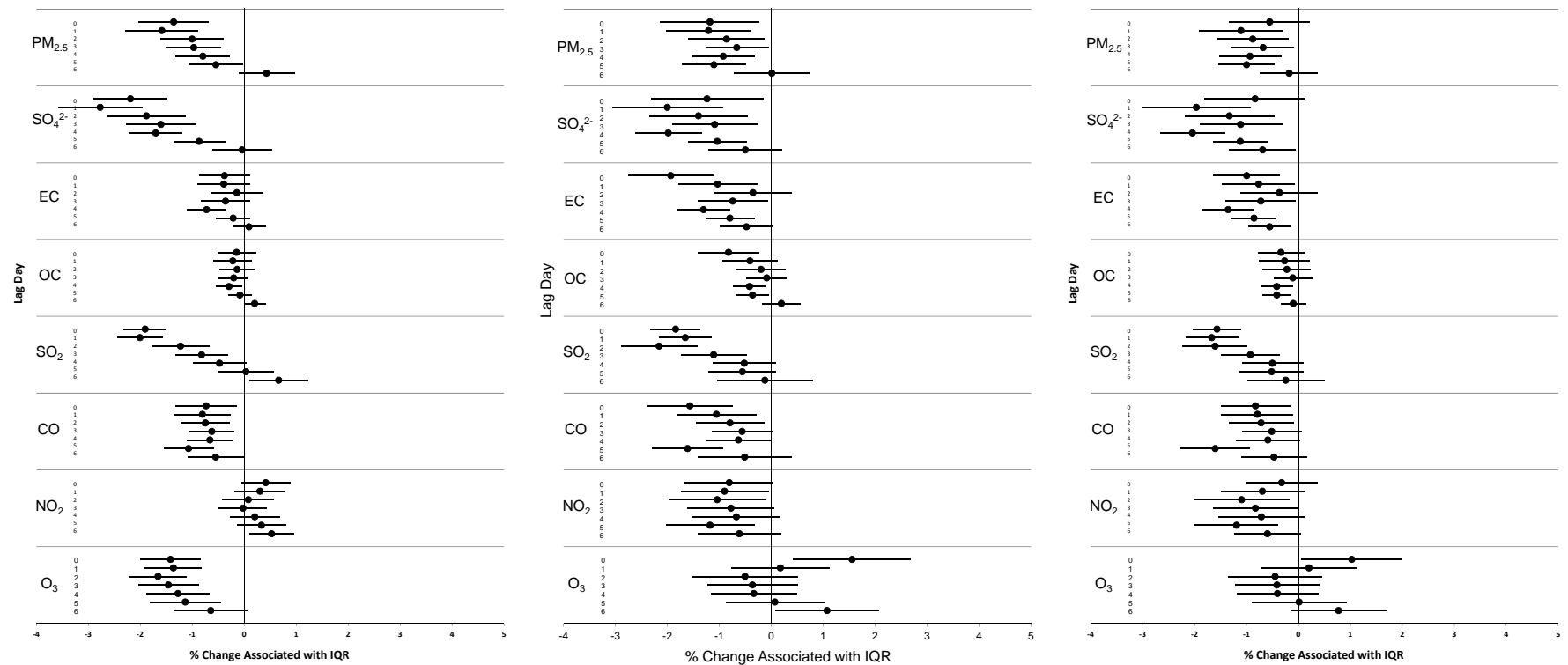
Biomarker	Temperature		Relative Humidity		Temperature Moving Average		Relative Humidity Moving average	
	D.F.	P-value	D.F.	P-value	D.F.	P-value	D.F.	P-value
FeNO	2	0.0021	3	<.0001	TEMPma7=2	<.0001	RHma7=3	0.0001
Nitrite	2	0.0004	1	<.0001	TEMPma7=3	<.0001	RHma3=3	<.0001
Nitrate	2	<.0001	1	<.0001	TEMPma7=3	<.0001	RHma7=3	<.0001
Nitrite+Nitrate	1	<.0001	3	<.0001	TEMPma7=3	<.0001	RHma5=3	<.0001
pH	1	0.45	1	0.38	TEMPma6=3	<.0001	RHma3=1	0.0010
8-Isoprostane	1		1		TEMPma7=2		RHma2=1	
8-OHdG	1	0.37	1	0.11	TEMPma7=1	0.72	RHma2=3	0.19

Degree of freedoms for temperature (T), relative humidity (RH), temperature moving average, and RH moving average table for each outcome. Within the moving average columns, the number of days included in the moving average as well as the degrees of freedom chosen for the natural splines are listed in the D.F. column. If the AIC was not minimized by adding a moving average to the model, then this term was not added, and those cells will be blank. The corresponding p-values are listed as 'NA.'

* P values were not available from the modeling software for the overall effects of temperature and RH.

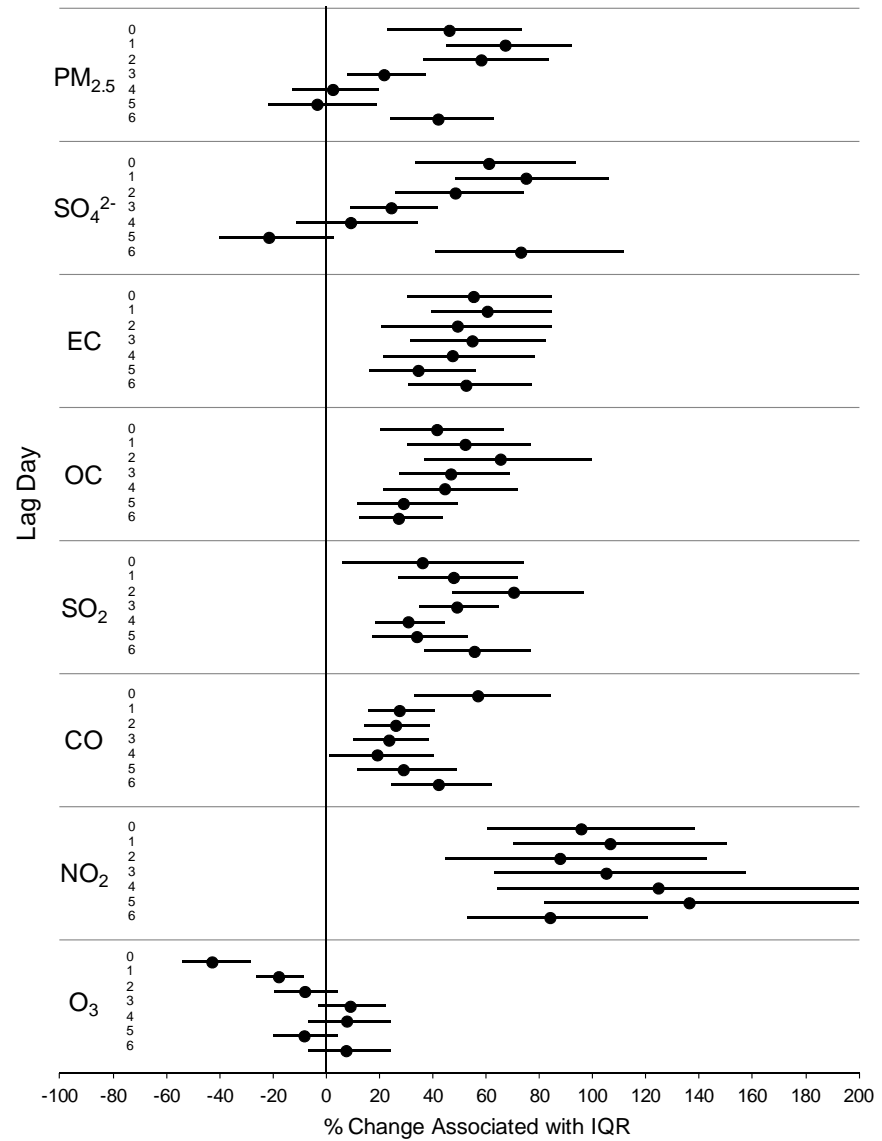
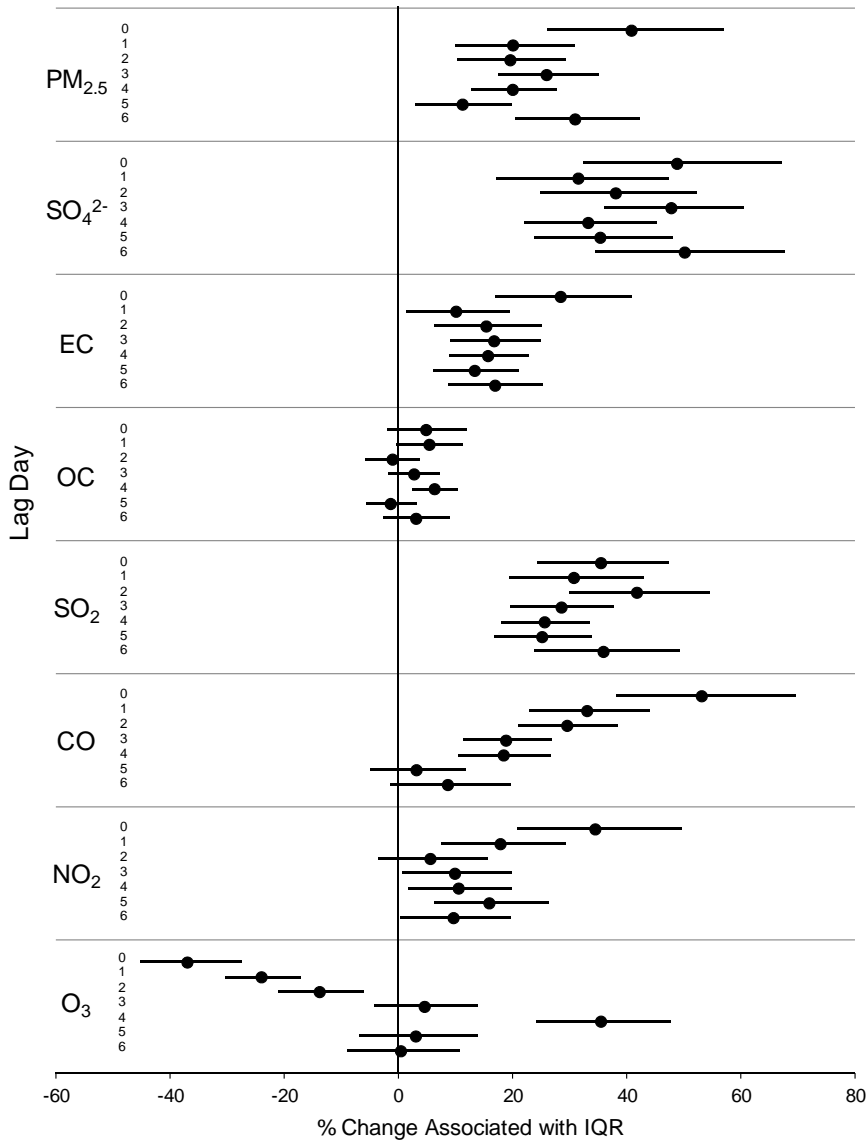
SM 3 – Percent change in EBC pH associated with one interquartile range (IQR) increase in pollutant concentration. The left figure is for results without any adjustment for T or RH, the middle figure is for results with full adjustments and the right figure is for results with adjustment for significant T and RH.

Exhaled Breath Condensate pH

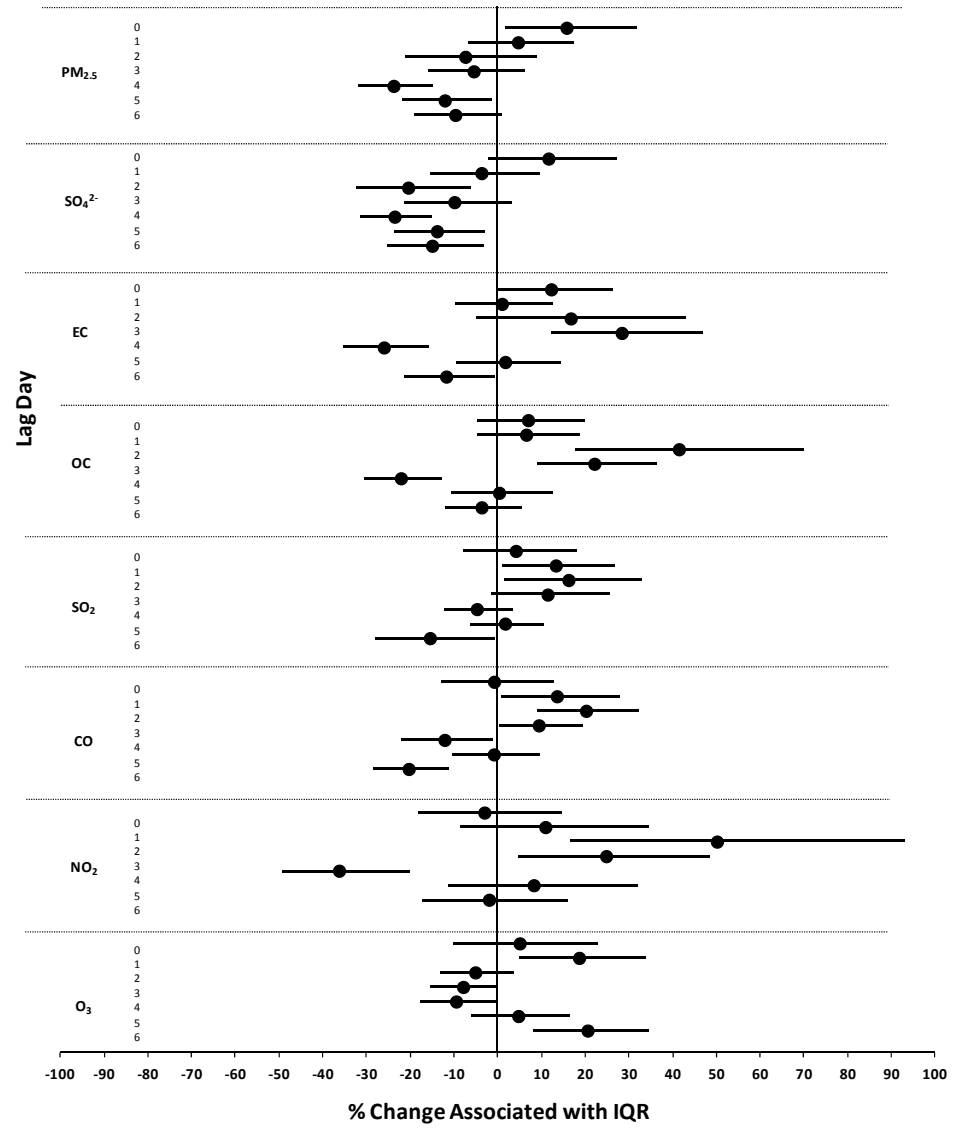
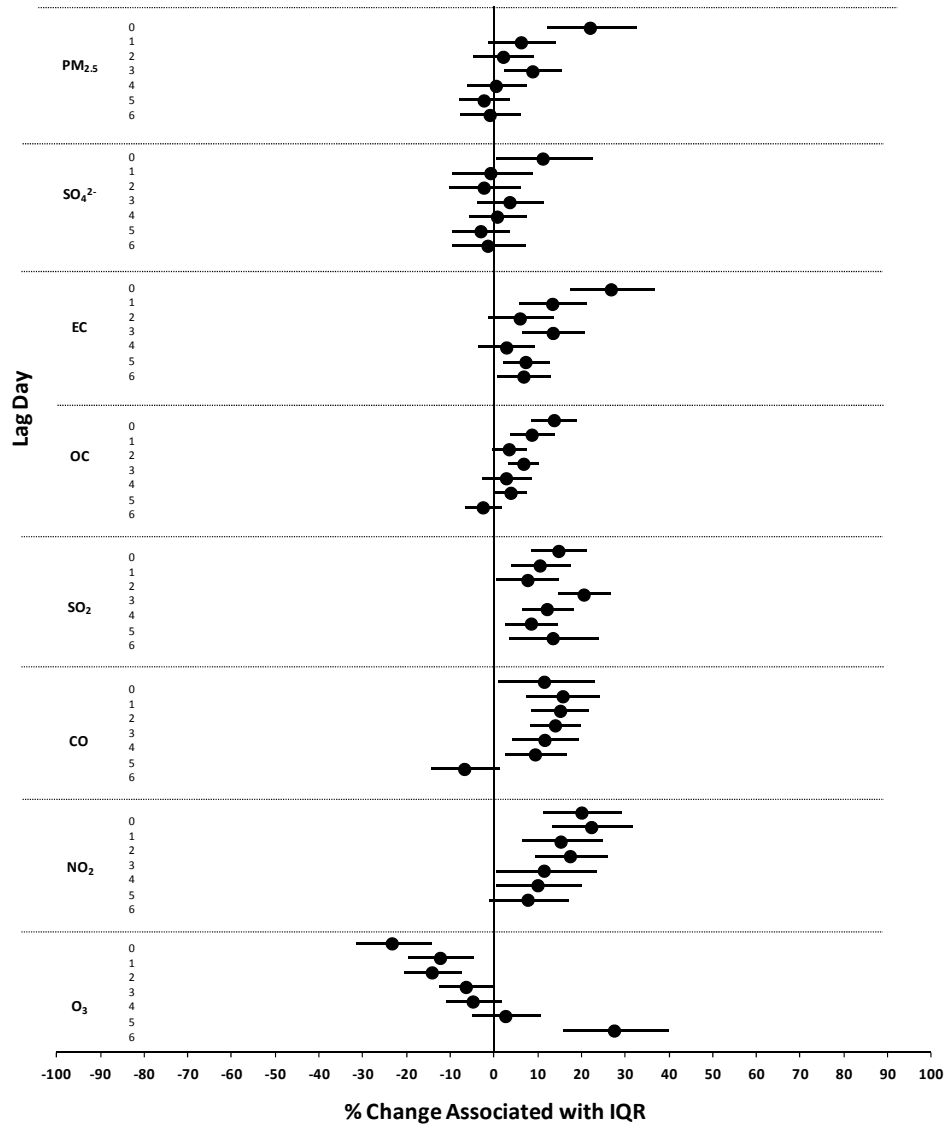


SM 4 – Percent change in biomarkers associated with one interquartile range (IQR) increase in pollutant concentration, controlling for temperature, RH, moving averages of temperature and RH, gender, day of week for biomarker measurements, by excluding the observations in the post-Olympic period. The left figures were results of the entire period, and the right ones were results of the first two periods.

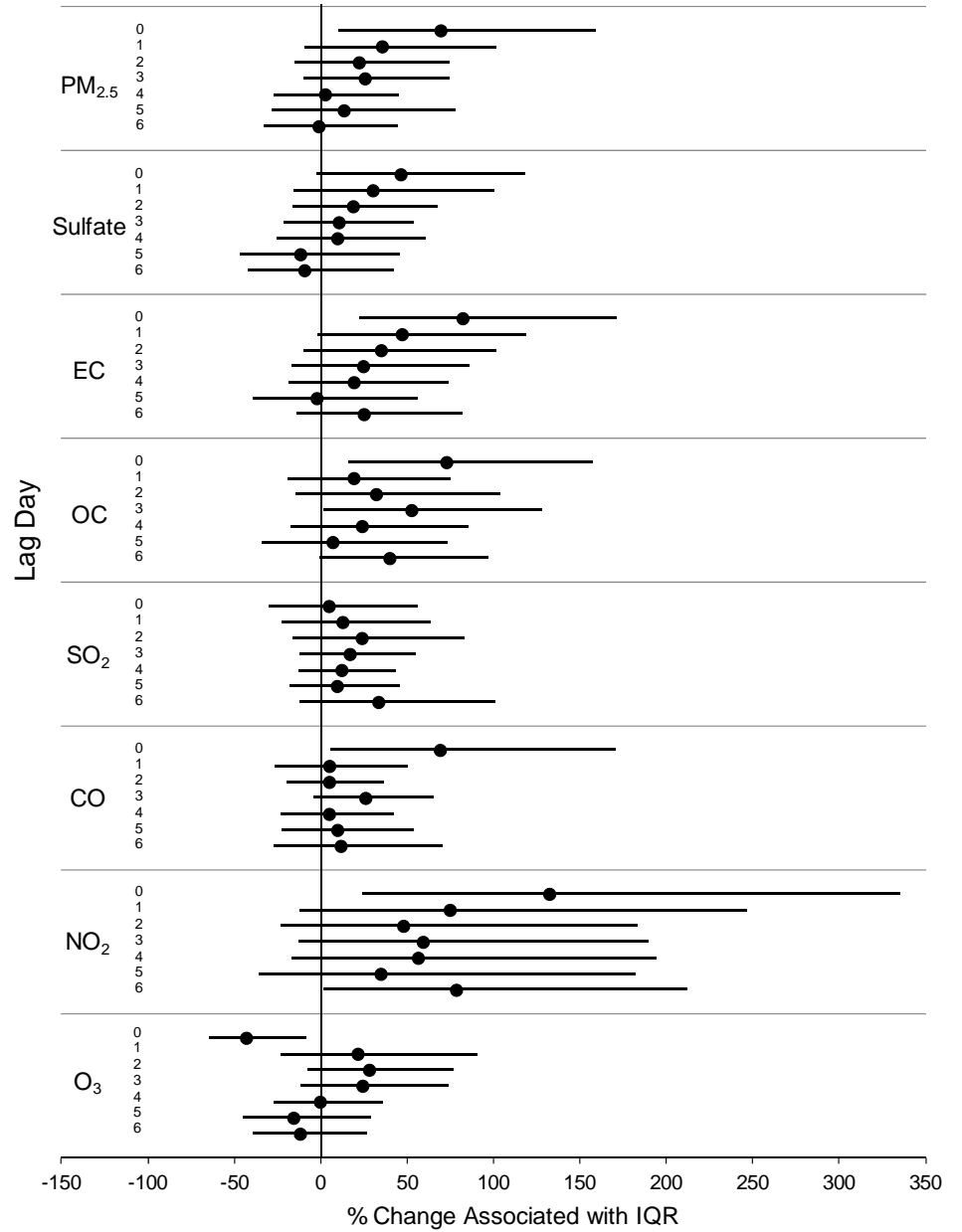
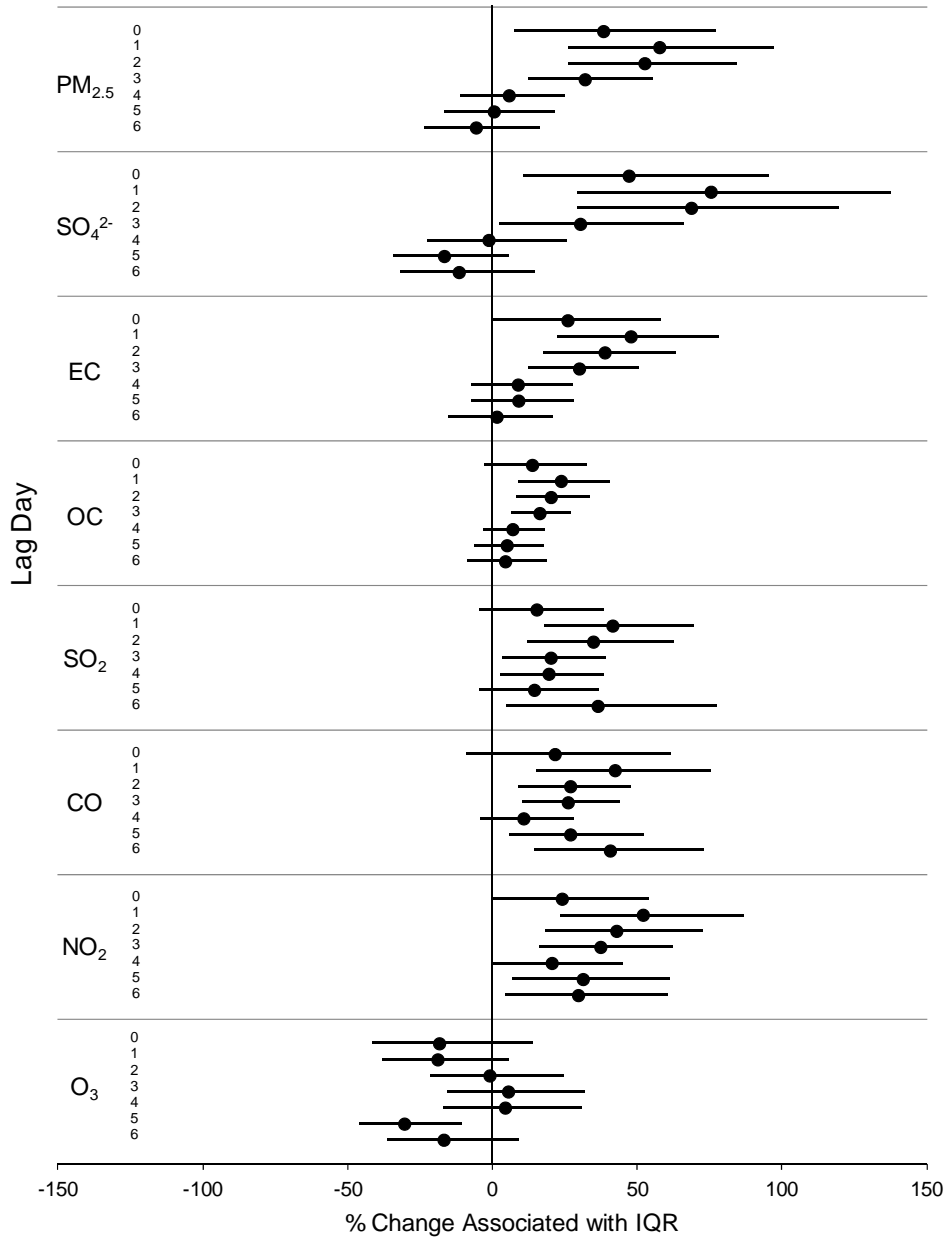
FeNO



EBC nitrite

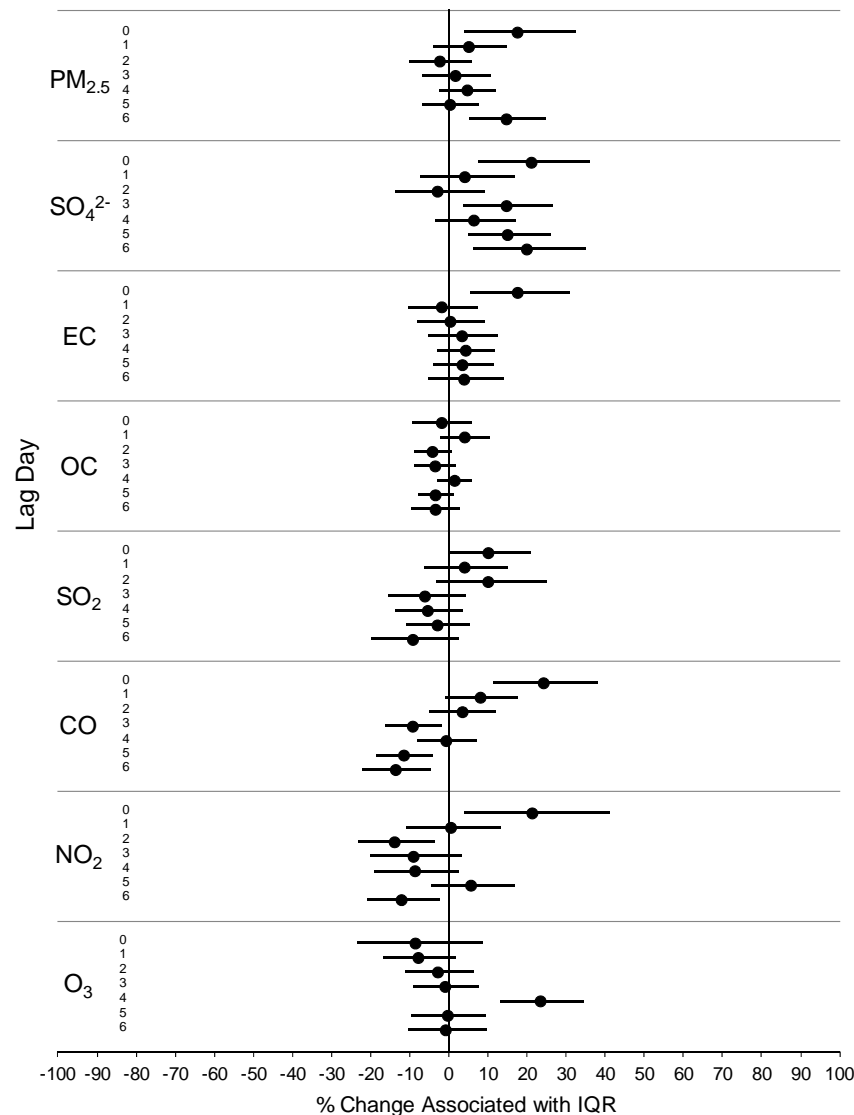
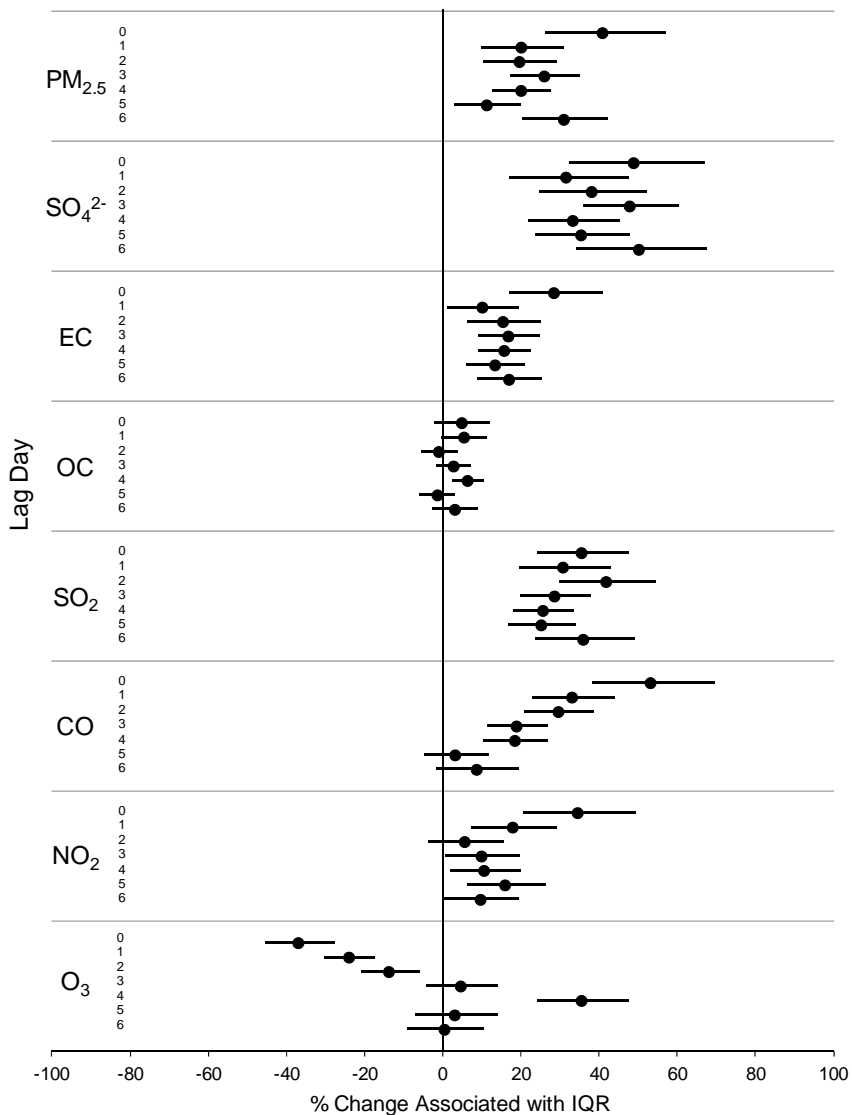


Urinary 8-OHdG



SM 5 – Percent change in biomarkers associated with one interquartile range (IQR) increase in pollutant concentration, controlling for temperature, RH, moving averages of temperature and RH, period, gender, day of week for biomarker measurements. The left figure in each page was from the models in which “period” factor was not adjusted, while the right figure was derived from the models in which “period” factor was adjusted.

FeNO



EBC nitrite plus nitrate

