Supplementary Information - Performance evaluation of MOMA - a remote network calibration technique for $PM_{2.5}$ and PM_{10} sensors

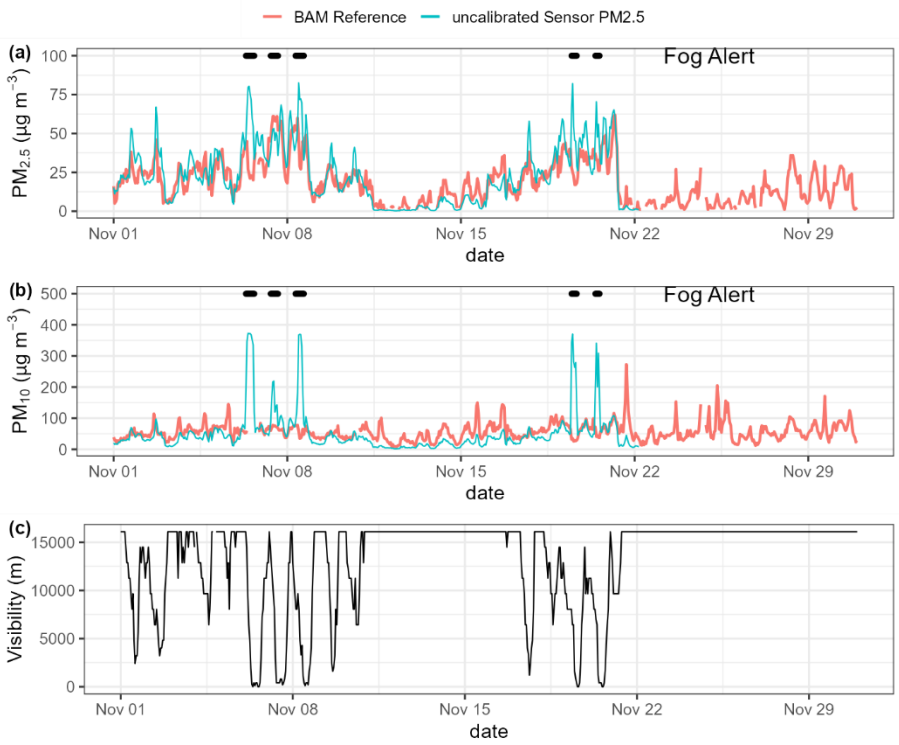

Figure S1. Timeseries for November 2021 – showing the uncalibrated and BAM reference $PM_{2.5}$ (a) and PM_{10} (b) as well as the visibility measured by the NOAA weather station located at Riverside Airport (c) to illustrate the impact of fog.

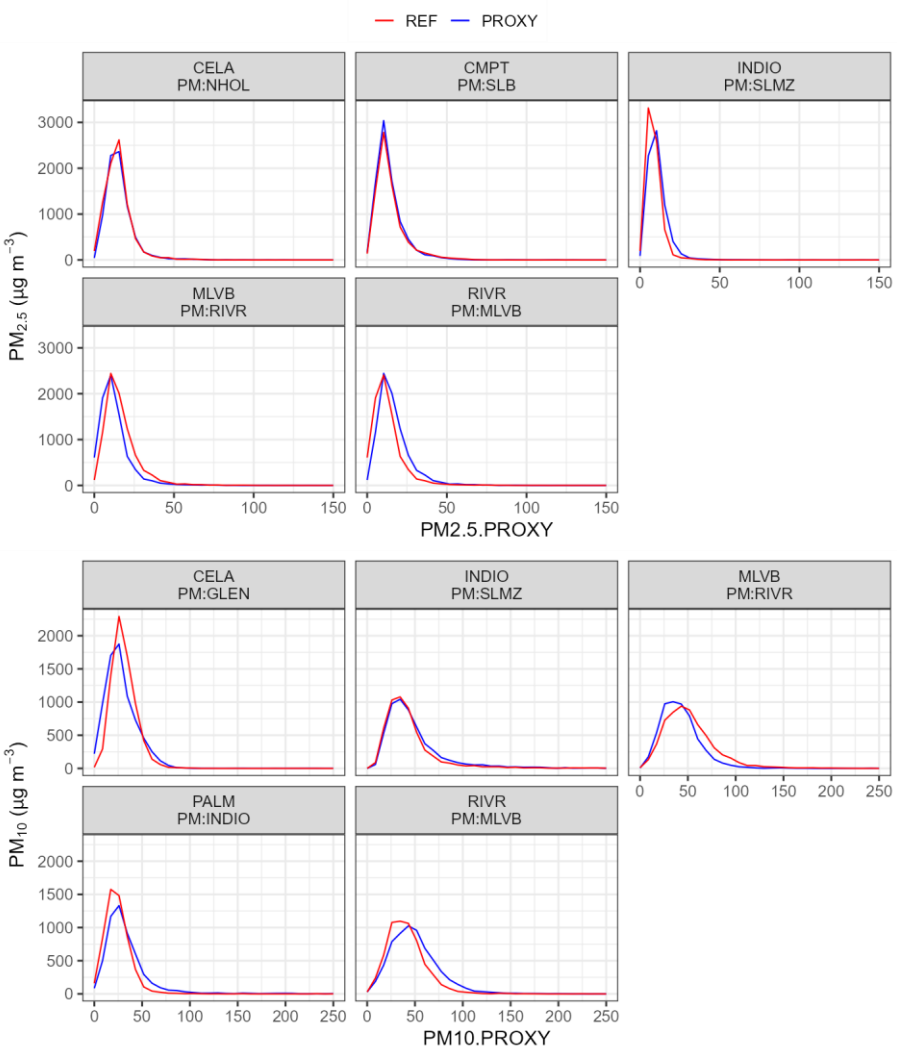

Figure S2. Probability distributions for the Reference $PM_{2.5}$ (a) and PM_{10} (b) versus the nearest Proxy $PM_{2.5}$ and PM_{10}, respectively.

Table S1. AMS information based on South Coast AQMD Monitoring Network Plan

30 http://www.aqmd.gov/home/air-quality/clean-air-plans/monitoring-network-plan.

	$PM_{2.5}$		PM_{10}	
AMS	**Continuous**	**FRM Schedule**	**Continuous**	**FRM Schedule**
RIVR	BAM1020	Daily	BAM1020	1:3 days
MLVB	BAM1020	Daily	BAM1020	1:6 days
SNBO	-	1:3 days	BAM1020	-
CRES	BAM1020	-	-	1:6 days
PALM	-	1:3 days	Thermo 5014i	-
INDIO	BAM1020	1:12 days	Thermo 5014i	1:6 days
GLEN	BAM1020	-	BAM1020	-
ANA	BAM1020	Daily	BAM1020	-
CELA	BAM1020	Daily	BAM1020	1:6 days
CMPT	BAM1020	Daily	-	-
NHOL	BAM1020	-	-	-
SLMZ[1)]	T640	-	T640	-

[1)] The T640 at Saul Martinez (SLMZ) is run by a special monitoring project and is not part of the Ambient Monitoring Network.

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Table S2. Deployment dates for the collocated AQYs used in this study.

Date Deployed	Serial Number
4/03/2020	BD-1129
4/03/2020	BD-1146
6/19/2020	BD-1069
6/19/2020	BD-1075
11/03/2020	BD-1071
11/03/2020	BD-1072
11/03/2020	BD-1081
12/17/2020	BD-1112A
10/16/20	BD-1088
10/16/20	BD-1090
08/14/20	BD-1093A
1/08/2021	BD-1110

Table S3. Parameter code used to do retrieve the speciation data from the RAQSAPI package and the parameter it refers to as well as the group it has been assigned to.

Code	Value represented	Category
88104	Aluminum PM2.5 LC	Crustal Material
88111	Calcium PM2.5 LC	Crustal Material
88126	Iron PM2.5 LC	Crustal Material
88140	Magnesium	Crustal Material
88165	Silicon PM2.5 LC	Crustal Material
88180	Potassium	Crustal Material
88184	Sodium PM2.5 LC	Trace Ions
88203	Chloride	Trace Ions
88301	Ammonium	Secondary Ions
88303	Potassium Ion	Trace Ions
88306	Total Nitrate	Secondary Ions
88381	EC PM2.5 LC TOT	Elemental Carbon
88382	OC PM2.5 LC TOT	Organic Carbon
88403	Sulfate PM2.5 LC	Secondary Ions