

Table S-1. Description of the Quartz and EUSAAR2 thermal protocols for the Sunset analyzer

Step	Carbon peak	QUARTZ	EUSAAR2
		Temperature (° C), Time (s)	Temperature (° C), Time (s)
He 1	OC1	310, 80	200, 120
He 2	OC2	475, 60	300, 150
He 3	OC3	615, 60	450, 180
He 4	OC4	870, 90	650, 180
He 5		0, 45	0, 33
He/O ₂ 1	EC1	550, 45	500, 120
He/O ₂ 2	EC2	625, 45	550, 120
He/O ₂ 3	EC3	700, 45	700, 70
He/O ₂ 4	EC4	850, 60	850, 80
He/O ₂ 5	EC5	870, 90	

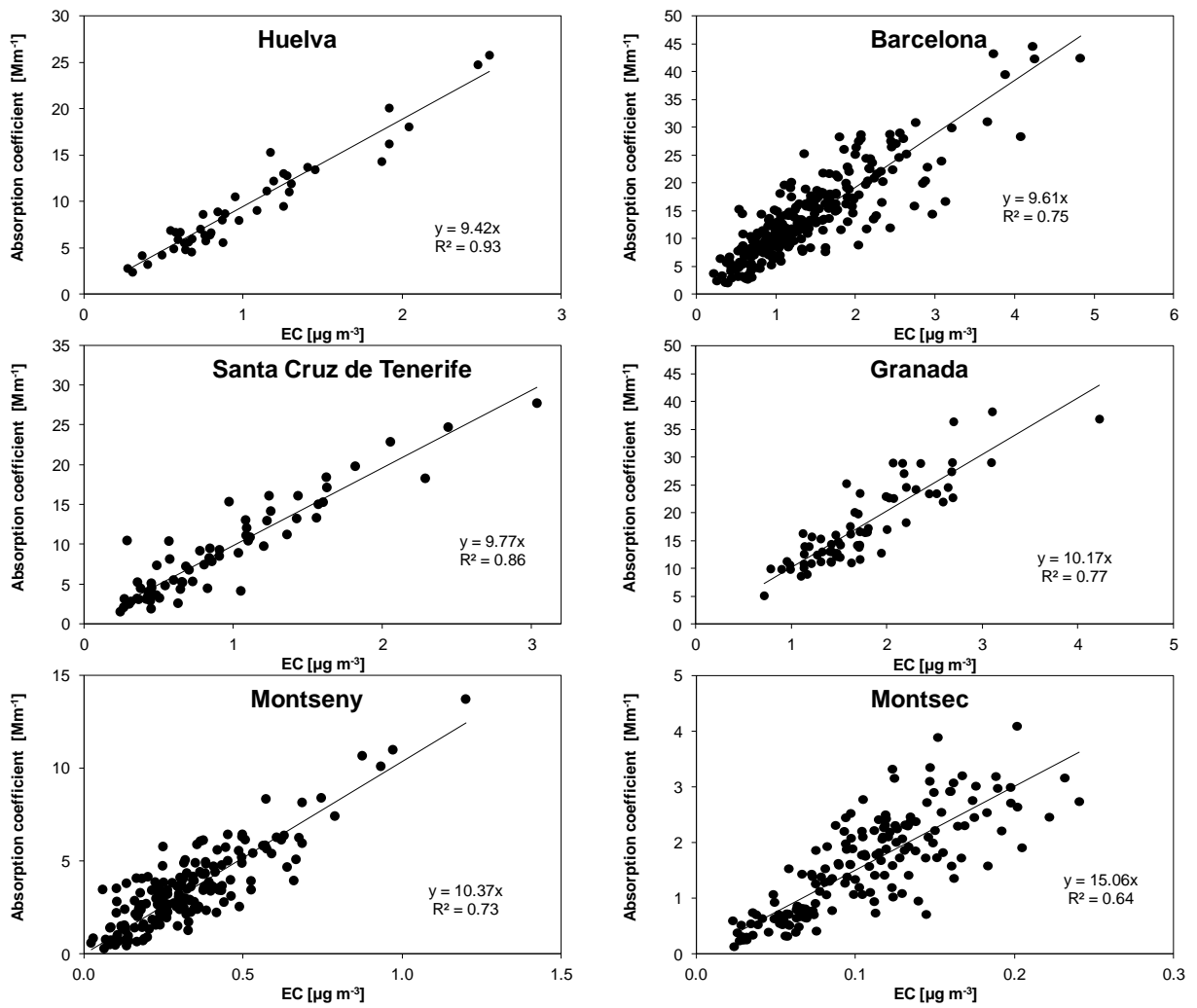
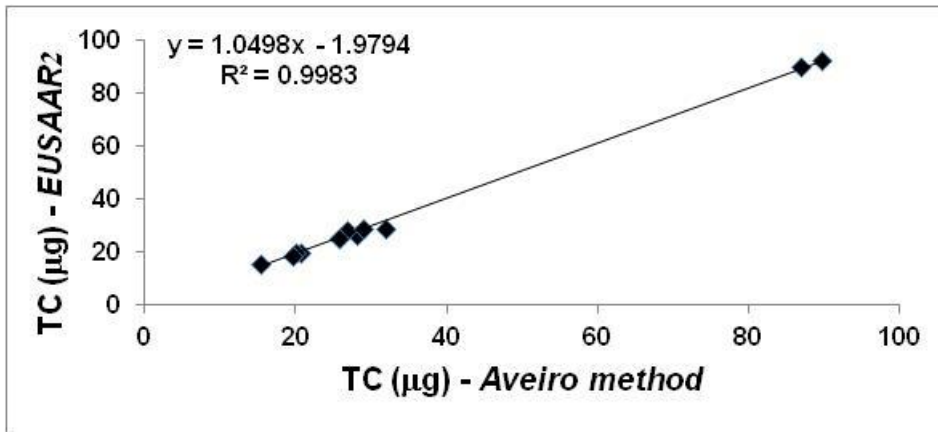
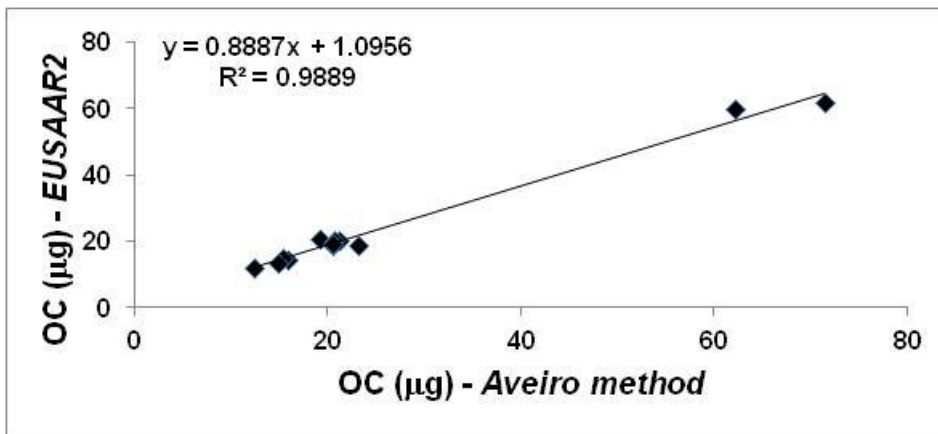


Figure S1. Correlation plots of EC concentrations measured with the thermo-optical method and simultaneously measured absorption coefficients with MAAP instruments at 6 study sites.

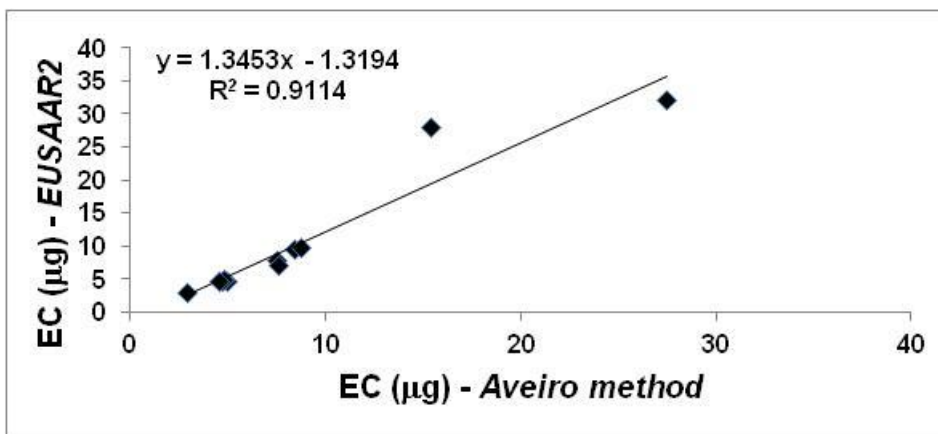
Figure S2. Intercomparison results for PM2.5 urban aerosol samples for TC (a), OC (b) and EC (c) of the Aveiro University method and the EUSAAR2 thermal protocol



(a)



(b)



(c)