

Supplemental material

Impact of biomass burning on air quality in Temuco city, Chile

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Comparison of meteorological parameters between the campaigns conducted in PLC and LE Winter

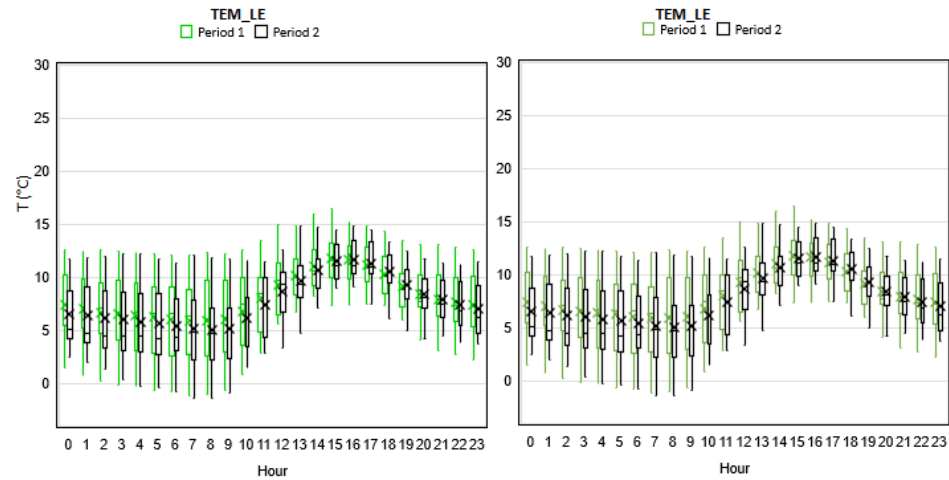


Figure S1. Average diurnal variation in temperature in wintertime campaigns for both measurement periods.

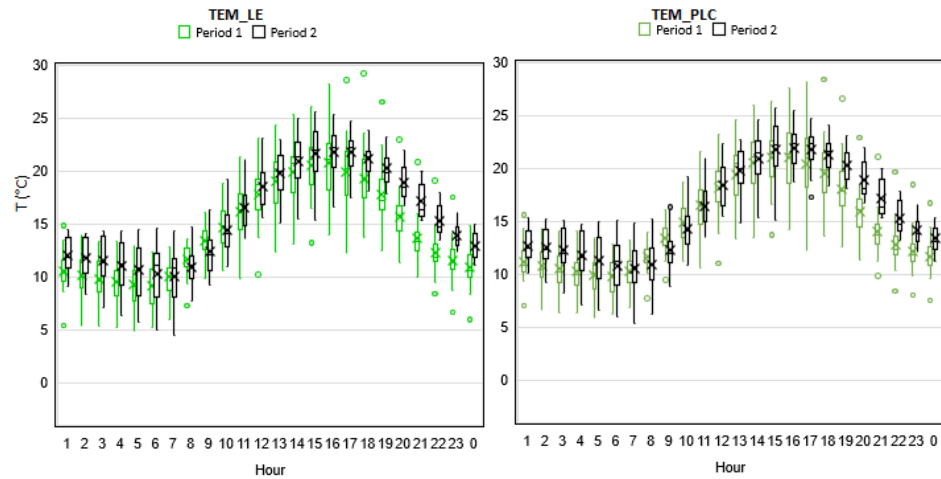


Figure S2. Average diurnal variation in temperature in springtime campaigns for both measurement periods.

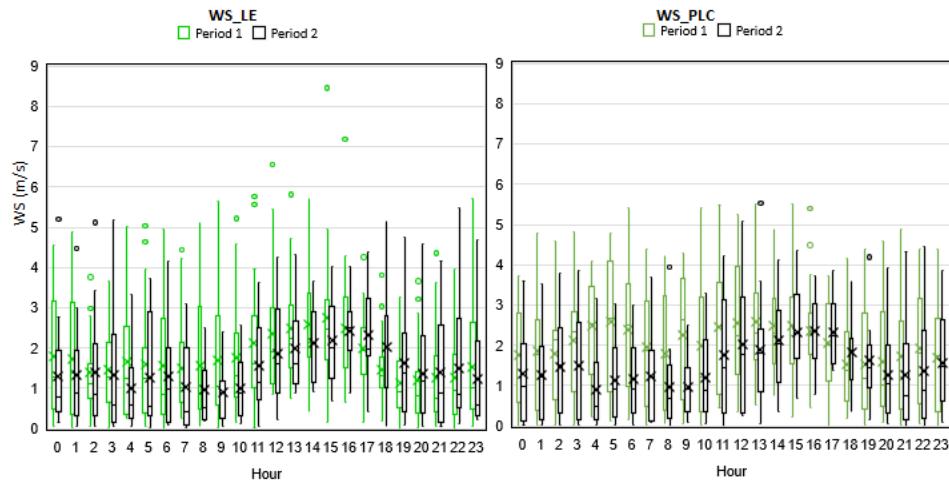


Figure S3. Average diurnal variation in wind speed (WS) in wintertime campaigns for both measurement periods.

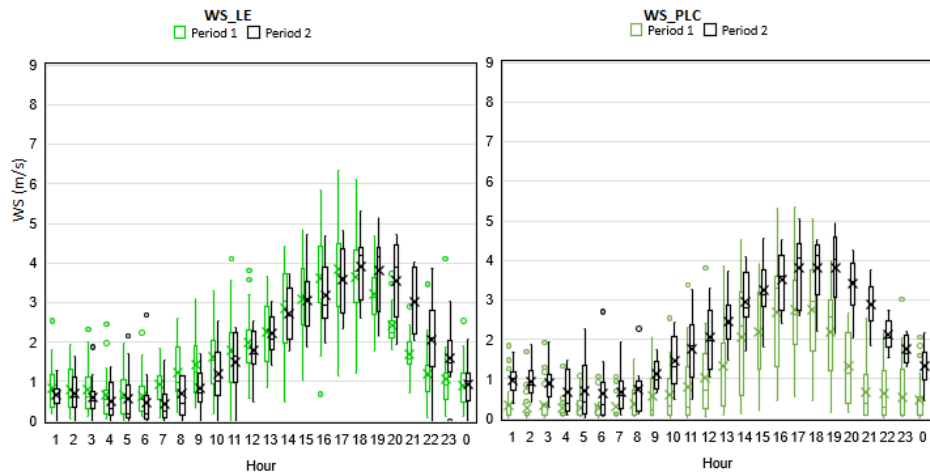


Figure S4. Average diurnal variation in wind speed (WS) in springtime campaigns for both measurement periods.

Only precipitations were different from both periods (Winter campaign): In Period 1 around 20% of the time was with rainy, lower than period 2 which was 15% of the time.

Table S1. The precipitation (% of time) for both winter and spring campaign.

Period	PLC Winter	LE Winter	PLC Spring	LE Spring
<i>Period 1</i>	19.6%	19.6%	3.3%	0%
<i>Period 2</i>	15.0%	15.2%	4.8%	0%

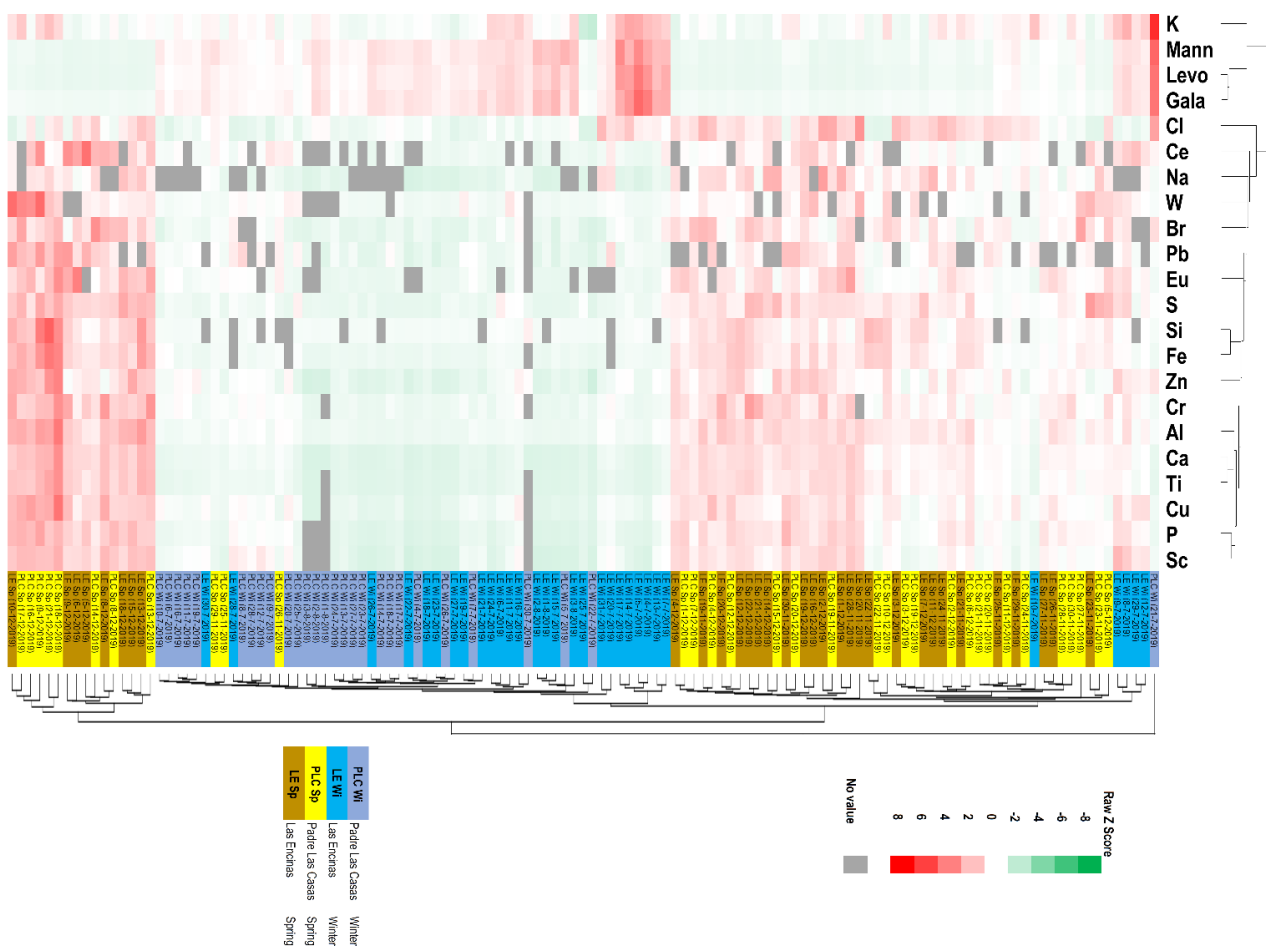


Fig. S5. Cluster Heatmap analysis. Variability in the daily contribution of each element or compound to $PM_{2.5}$ was calculated as the number of standard deviations over (red) or below (green) the median for each element or compound for both sites during winter and spring campaigns (Raw Z score). Average linkage clustering method and Euclidean distances were employed to develop hierarchical clustering for elements and compounds (x axis); and sites and days (y axis). Mann: Mannosan, Levo: Levoglucosan, Gala: Galactosan.