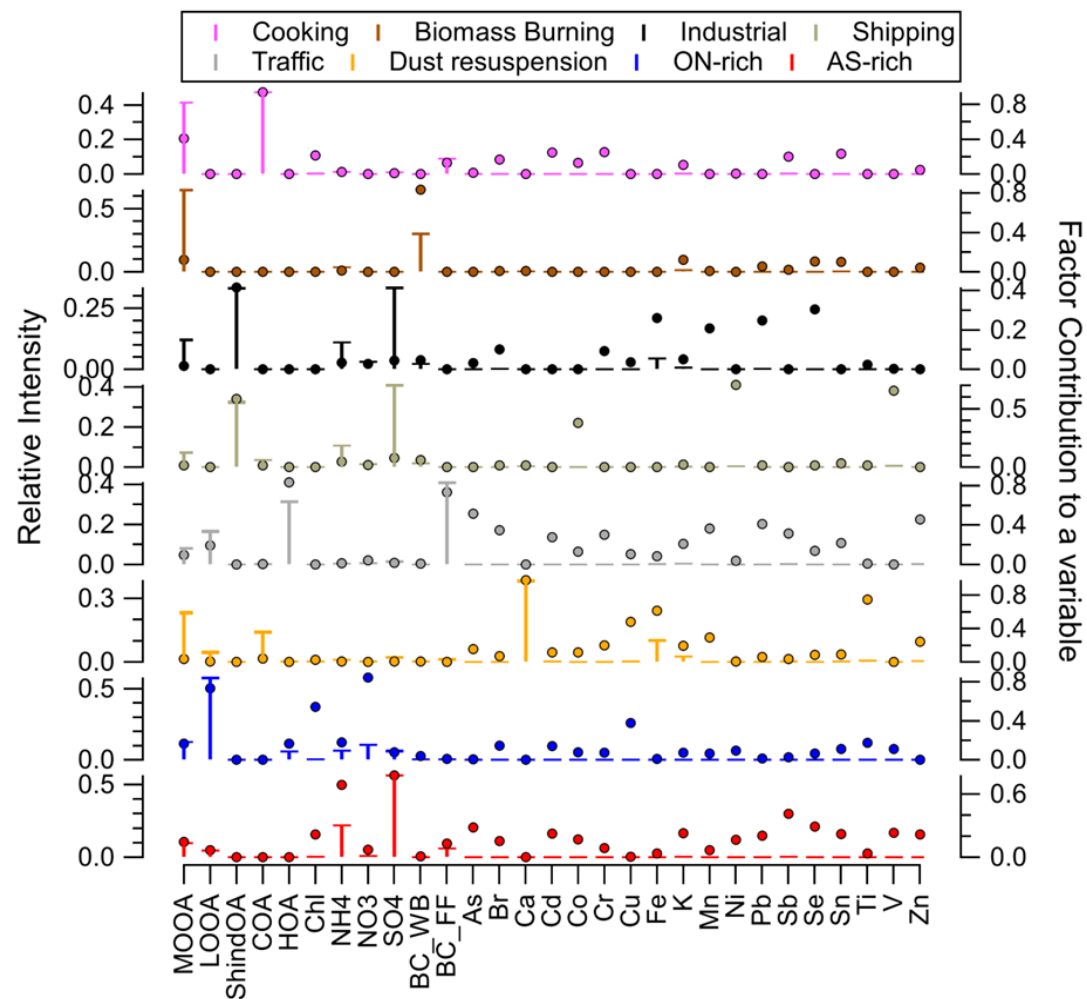


Figure A1- Average factor profiles from the PMF<sub>metals</sub> solution with Br excluded.



**Figure A2-** Average factor profiles for the PMF<sub>PM1</sub> solution using OA factors, ACSM inorganic species, BC and metals as inputs. The sticks represent the normalized contribution of the variable to the factor (left axis) and markers show the normalized factor contribution to each variable (right axis).

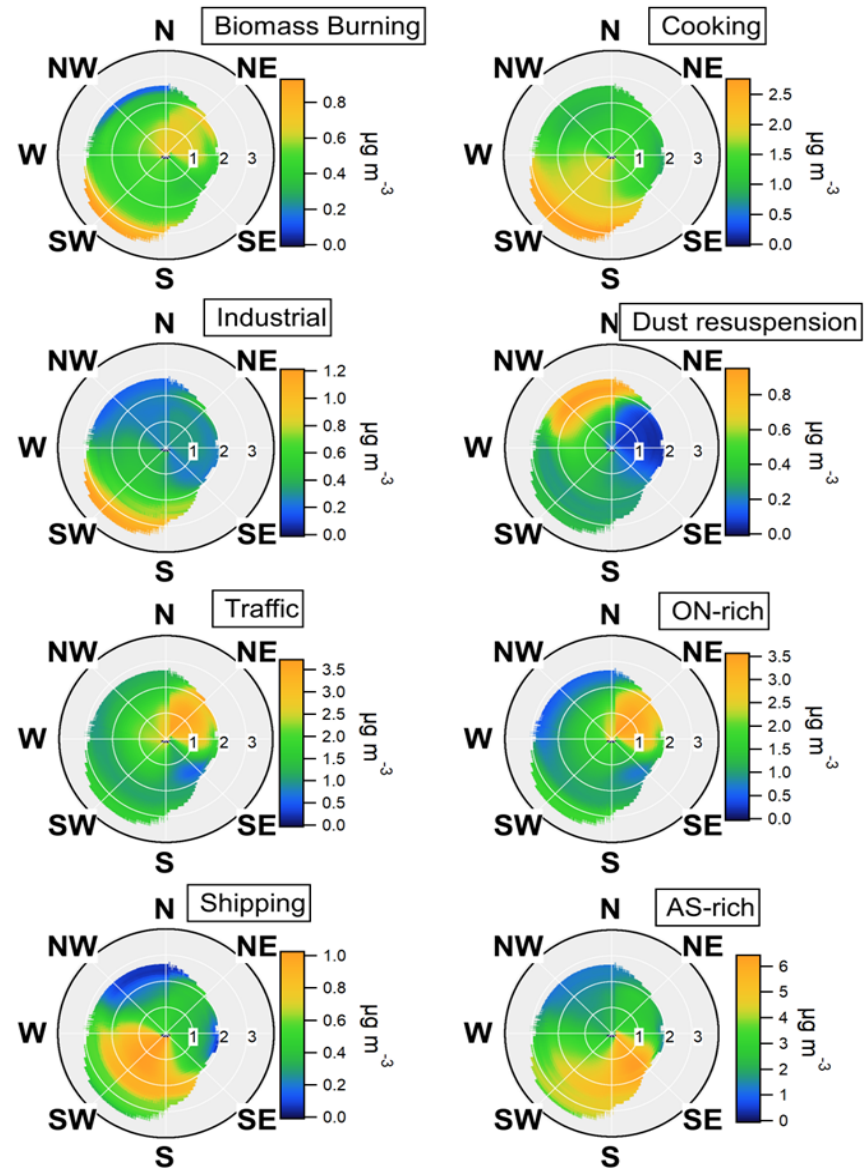


Figure A3- NWR plots for each factor of the PMF<sub>PM1</sub> analysis.

	R <sup>2</sup> with PMF <sup>2</sup> factors	Slope with PMF <sup>2</sup> factors	Relative contribution (%)
Cooking	0.97	1.18	17.4
Biomass Burning	0.93	0.65	3.3
Industrial	0.95	0.95	2.5
Shipping	0.81	0.52	3.6
Traffic	0.96	1.02	21.5
Dust resuspension	0.99	1.07	2.6
ON-rich	1	1.15	23.1
AS-rich	0.99	0.98	26

**Table A1-** R<sup>2</sup> and slope values for the comparison of the PMF<sub>PM1</sub> (OA factors + metals + ions + BC) factors with PMF<sup>2</sup> factors. The relative contributions are also represented (in %).