

# Recreating NAPS PM 2.5 Plots 2003-2008

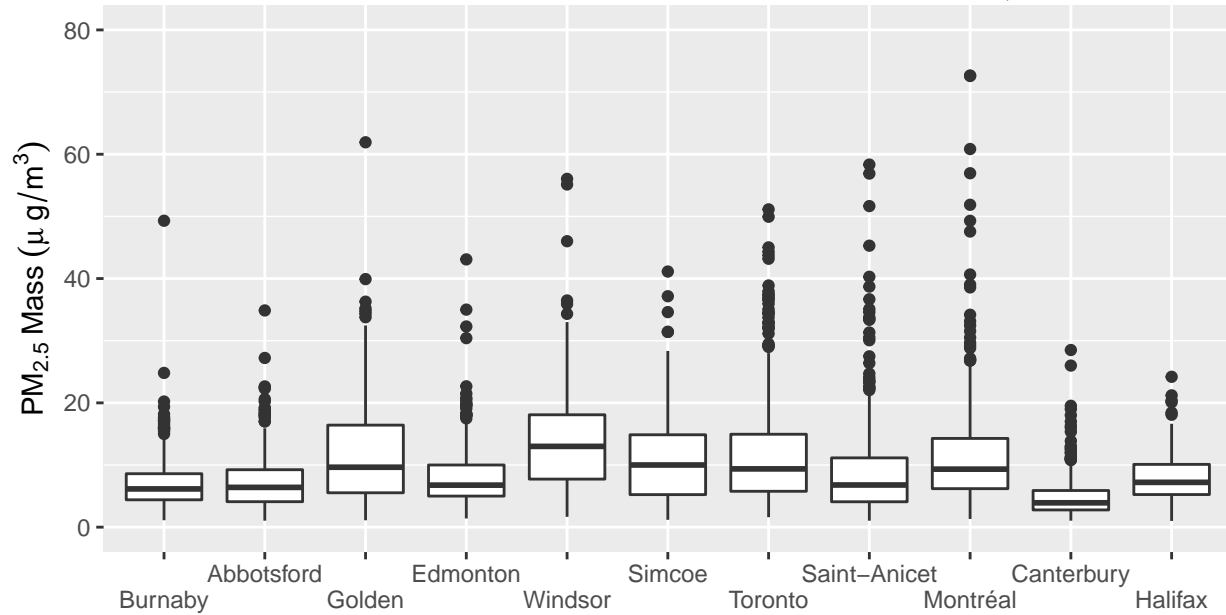
**Table 2: Number of samples by site**

There are differences in the number of observations for all cities. Still need to investigate why.

station	city	number of samples	n_paper	diff
S100119	Burnaby	689	695	-6
S101004	Abbotsford	607	537	70
S103202	Golden	389	251	138
S30113	Halifax	161	177	-16
S40801	Canterbury	414	346	68
S50104	Montréal	613	554	59
S54401	Saint-Anicet	680	664	16
S60211	Windsor	368	267	101
S60427	Toronto	610	565	45
S62601	Simcoe	458	311	147
S90132	Edmonton	317	333	-16

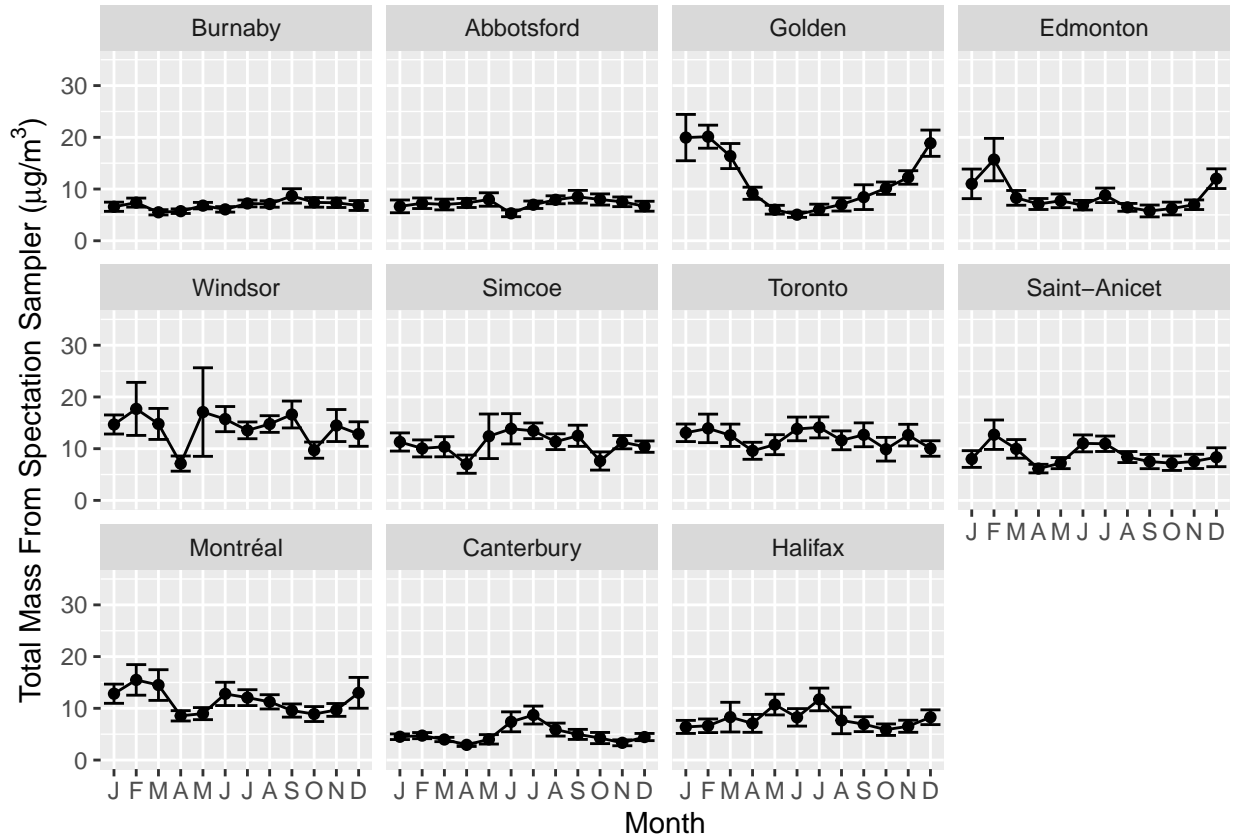
**Figure 2: Total  $PM_{2.5}$  mass by site**

There are differences from the boxplot in the paper - several outliers are missing (Burnaby, Edmonton)



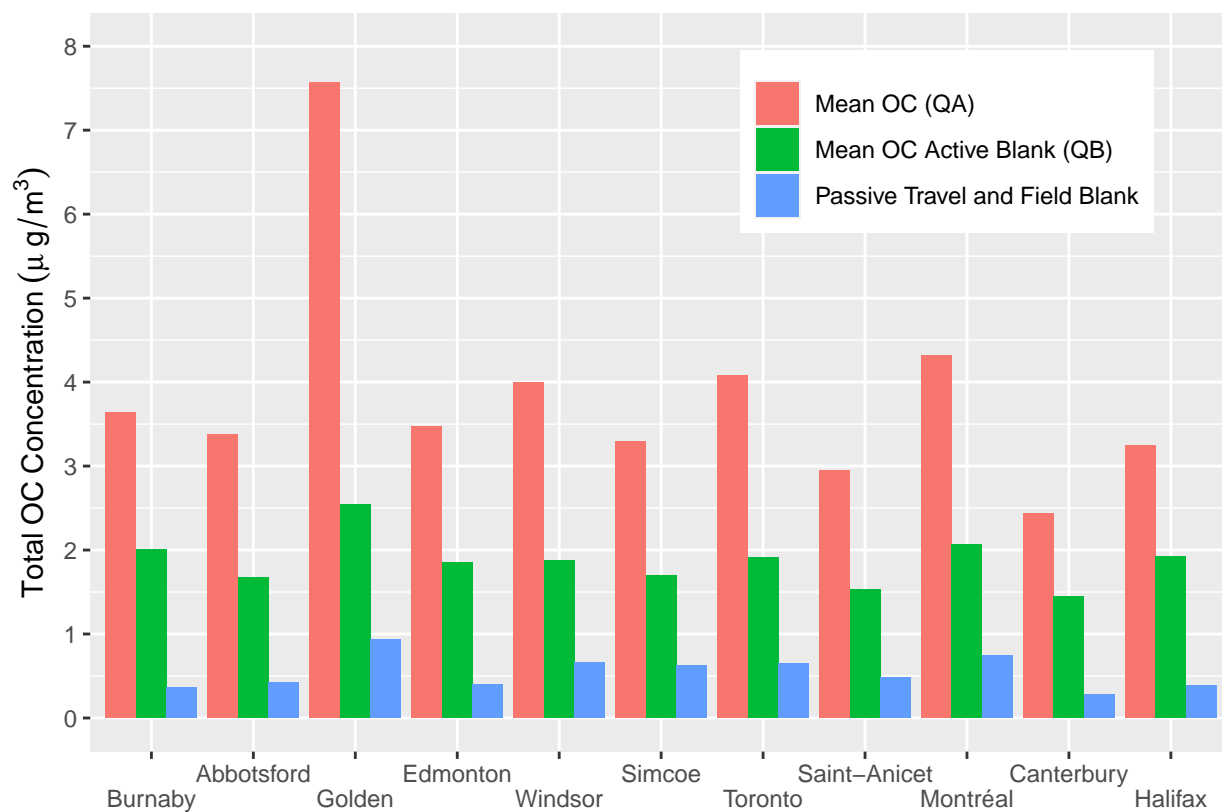
**Figure 3: Monthly mean  $PM_{2.5}$  mass by site**

Trends are similar, 90% CI differs from the paper.



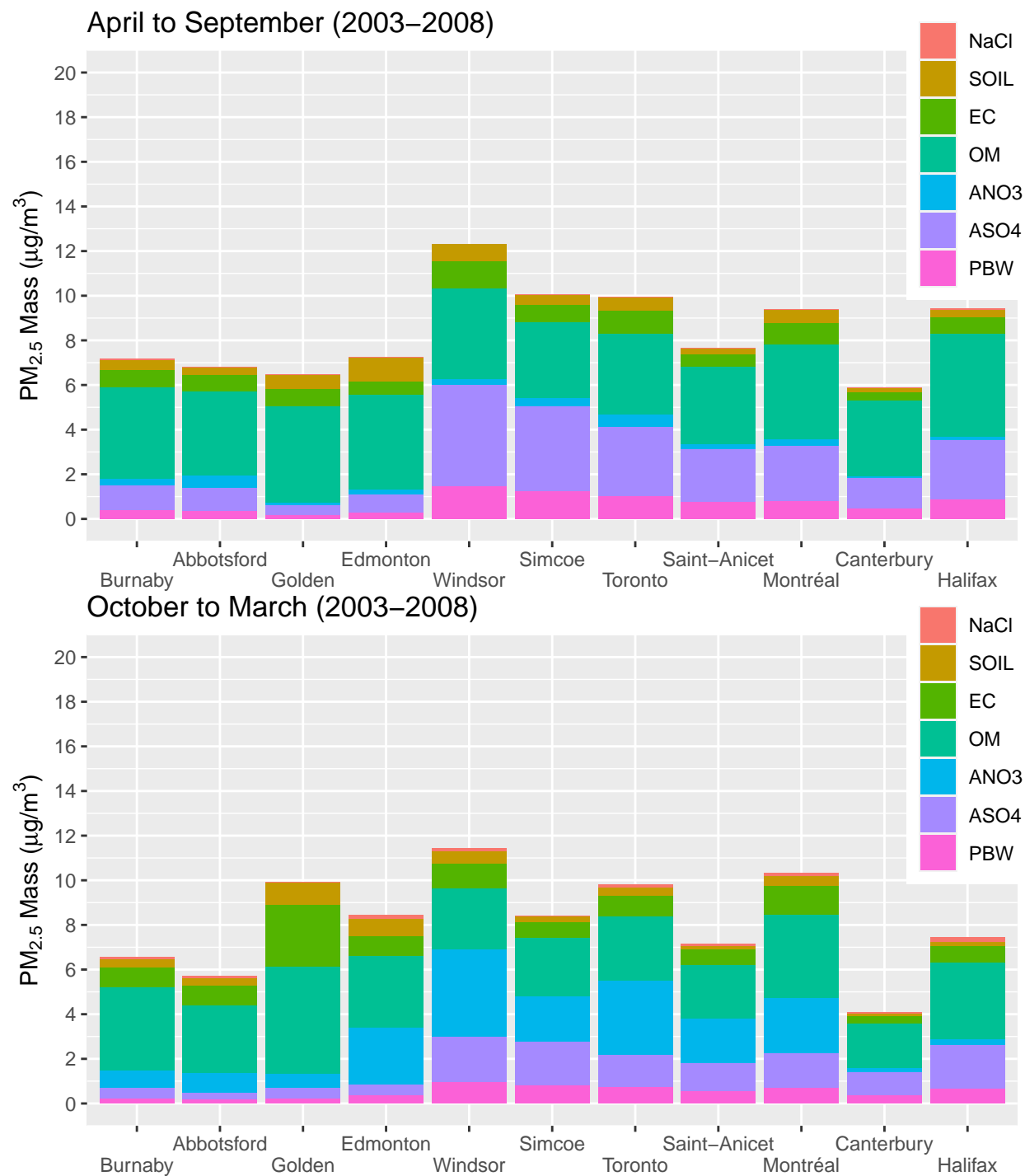
**Figure 4: Mean organic carbon (OC) by site**

Most evident difference from the paper is passive travel and field blank (blue) - still working on identifying the correct variables in the data.



**Figure 5: Reconstructed  $PM_{2.5}$  mass by major component and site**

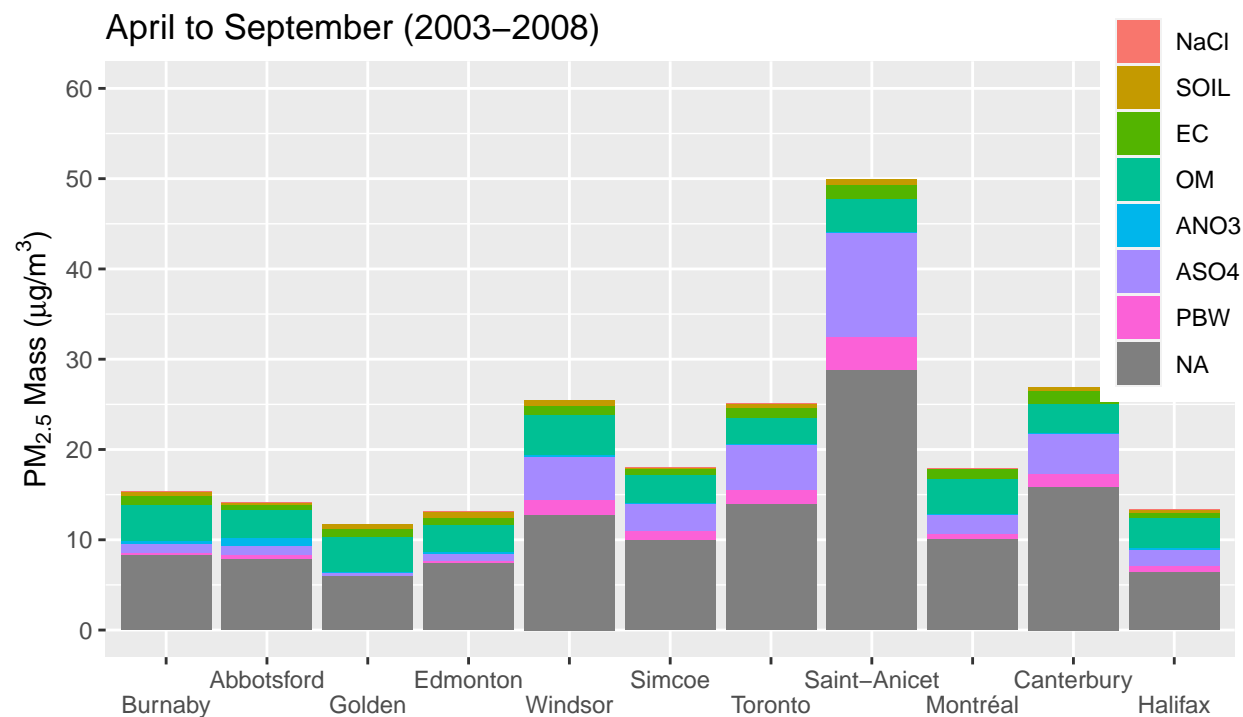
Large differences from the paper - PBW, ASO4, OM



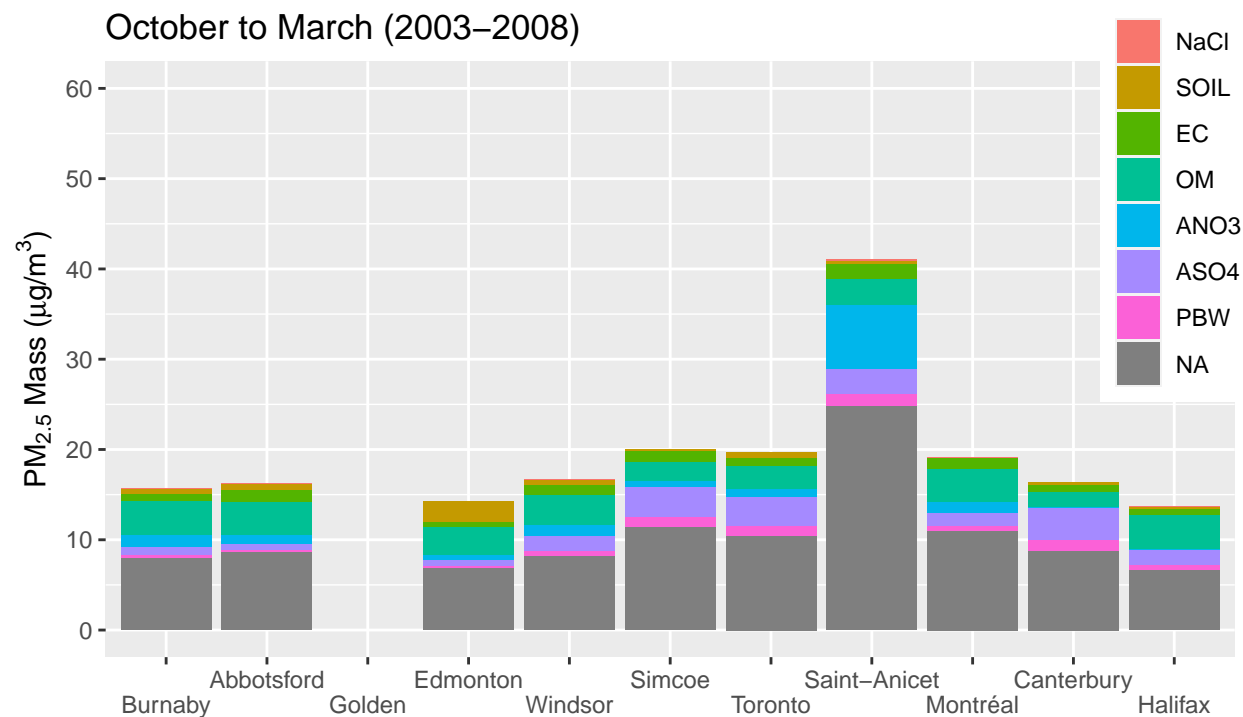
**Figure 6: Reconstructed  $PM_{2.5}$  mass by 10 highest mass days and site**

Large differences from the paper - PBW, ASO4, OM

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**Figure 7: Median ammonium sulphate and ammonium nitrate concentrations by site and month**

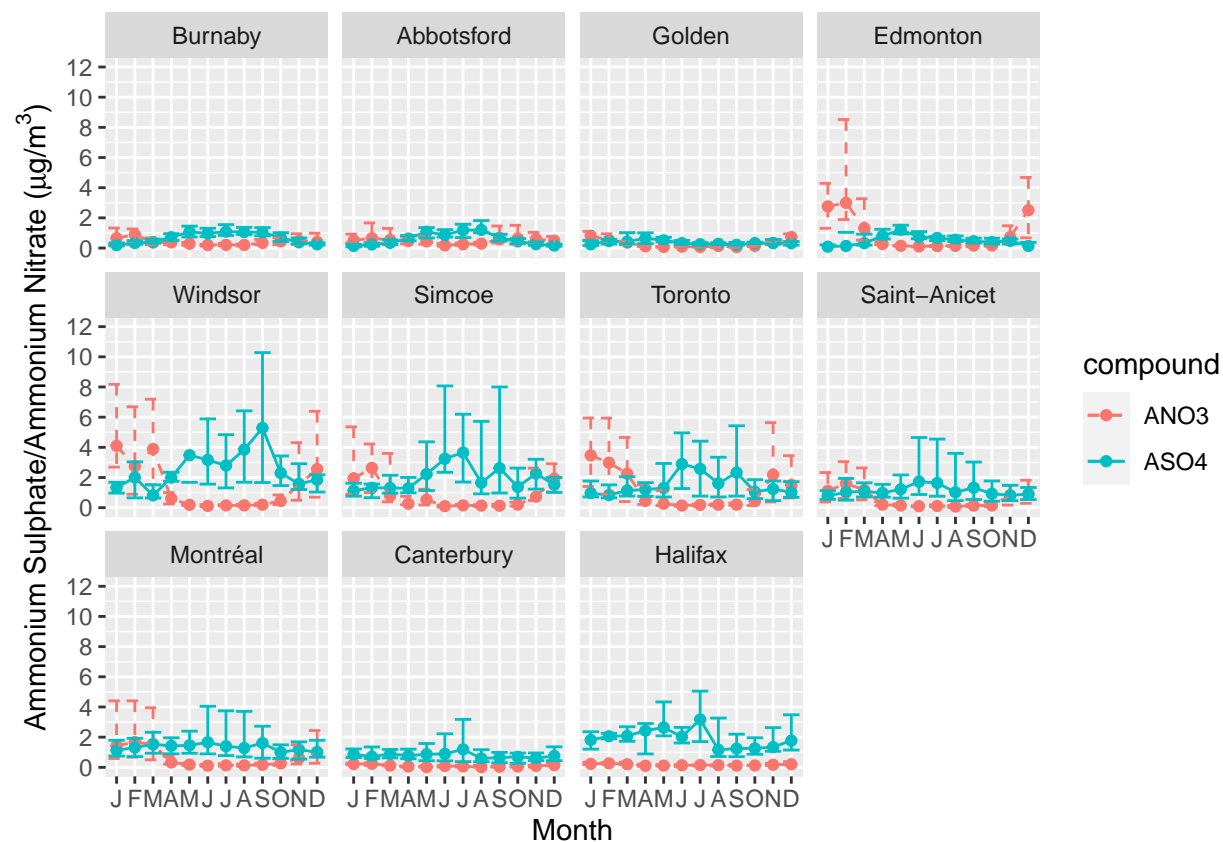
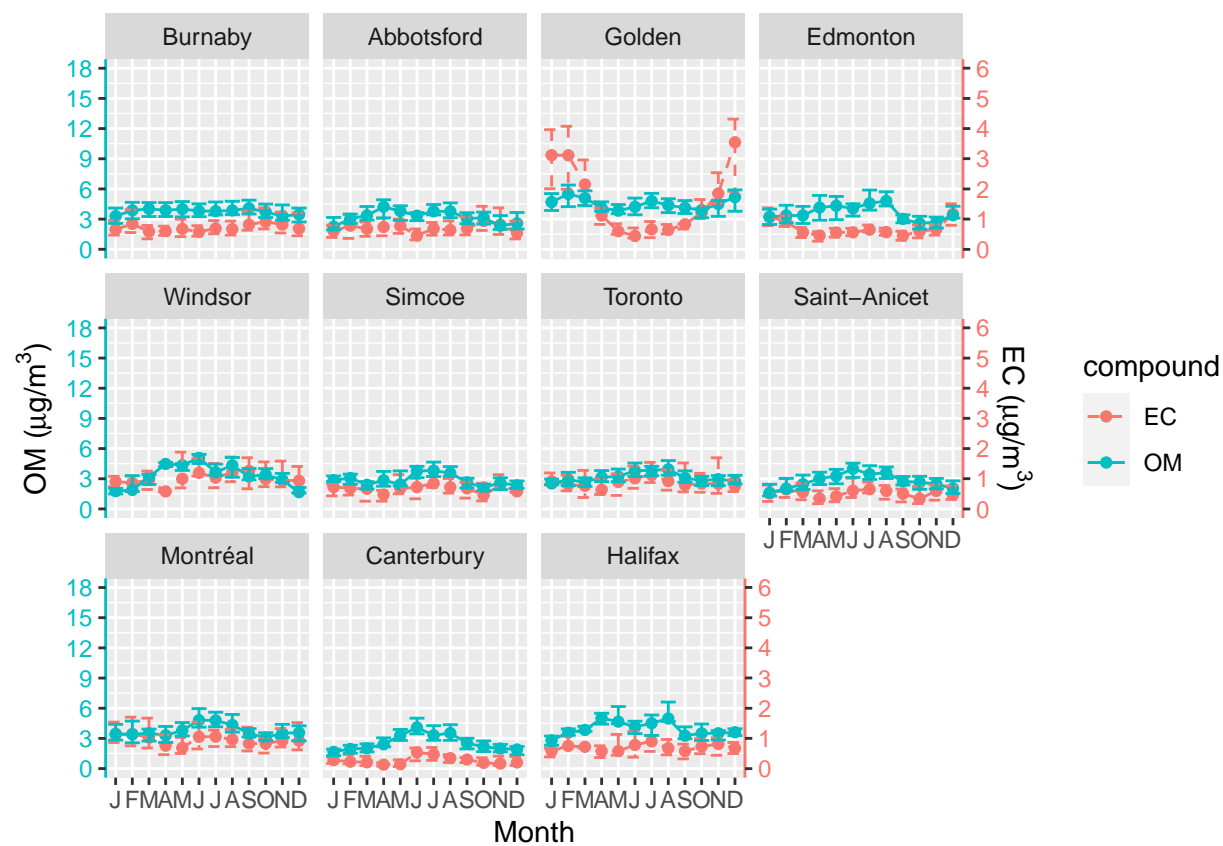


Figure 8: Median elemental carbomn (EC) and organic matter (OM) concentrations by site and month



**Figure 9: Median soil and sodium chloride concentrations by site and month**

Issue with Simcoe data point

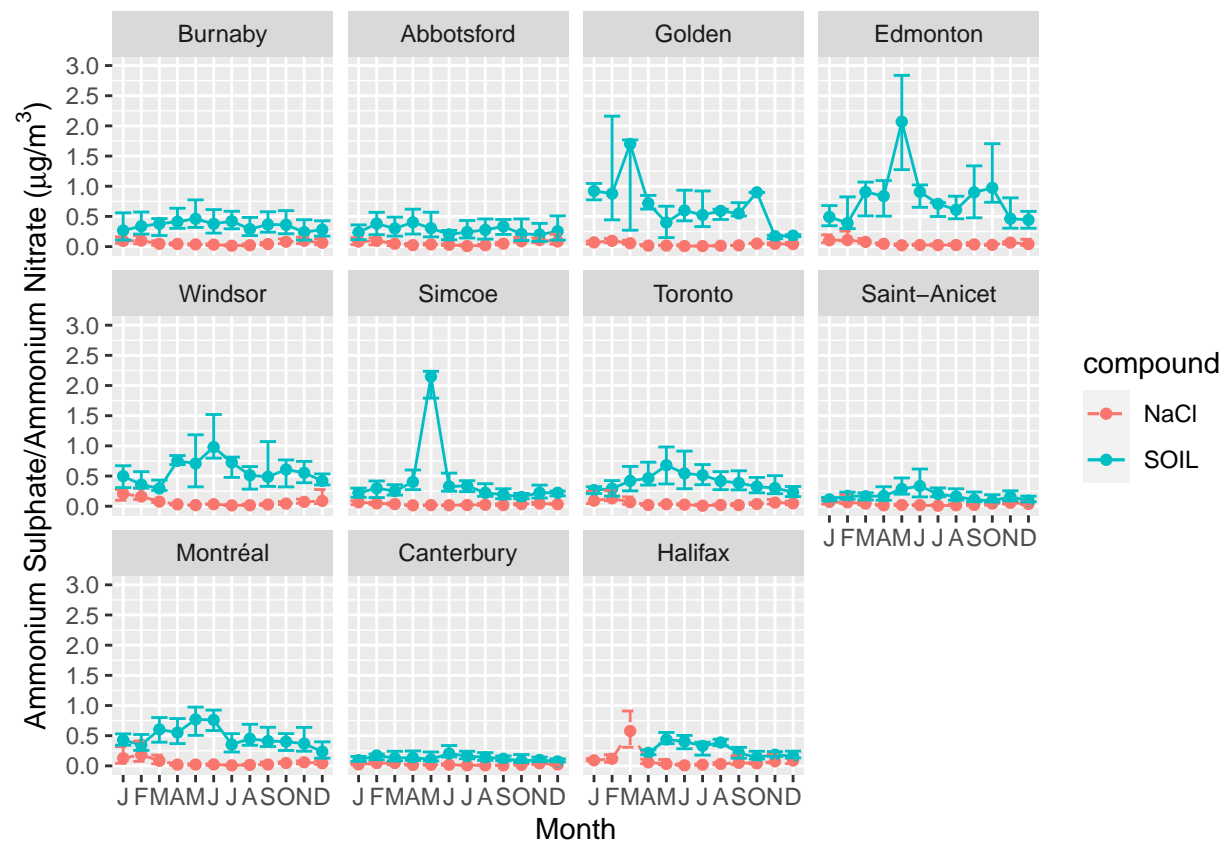




Figure 10: Ammonia mixing ratio by site and month

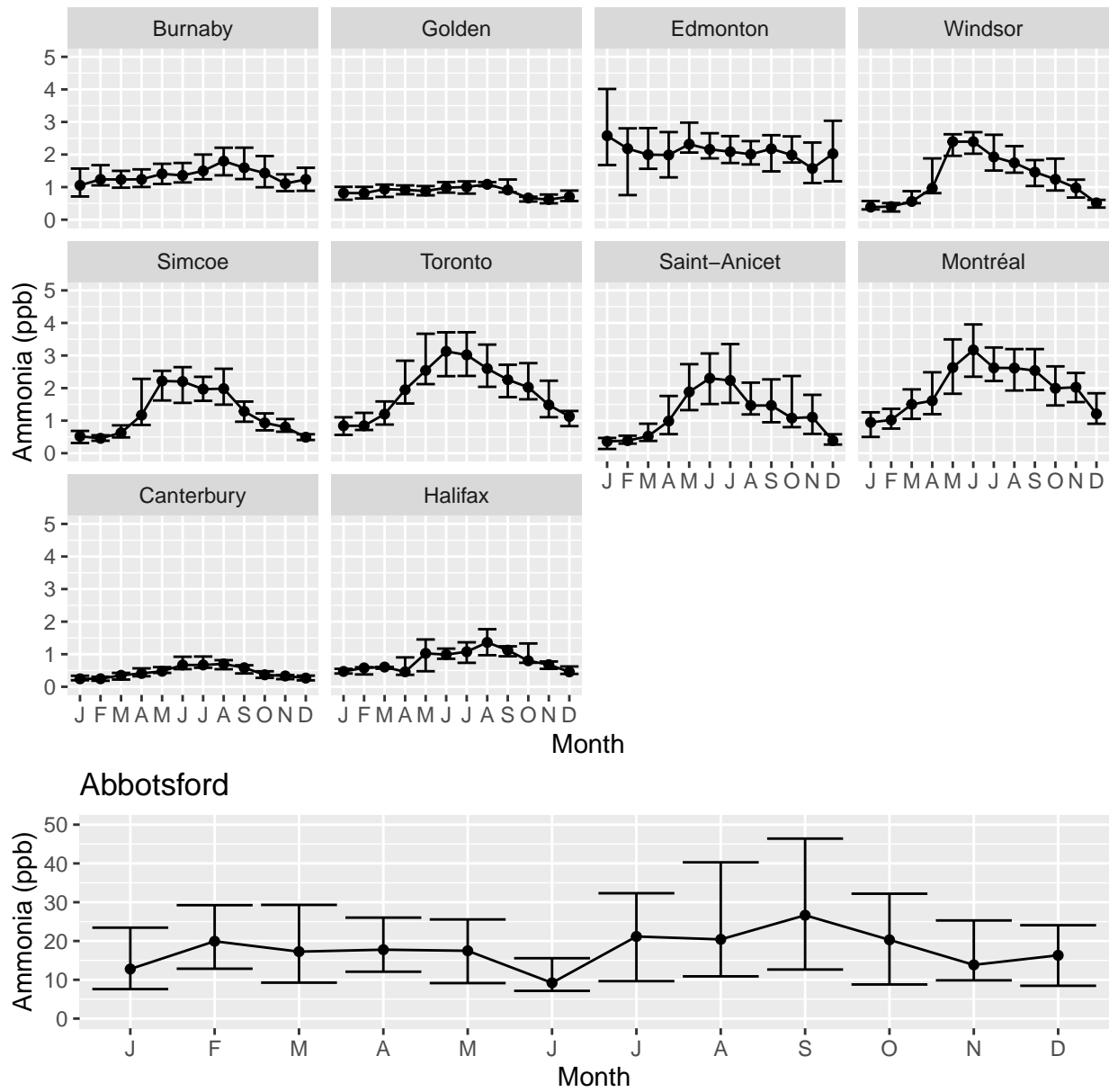


Figure 11: Median sulphur dioxide mixing ratio and nitric acid concentrations by site and month

