

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	691	695	-4
S101004	Abbotsford	608	537	71
S103202	Golden	425	251	174
S30113	Halifax	161	177	-16
S40801	Canterbury	415	346	69
S50104	Montréal	622	554	68
S54401	Saint-Anicet	692	664	28
S60211	Windsor	373	267	106
S60427	Toronto	796	565	231
S62601	Simcoe	461	311	150
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)

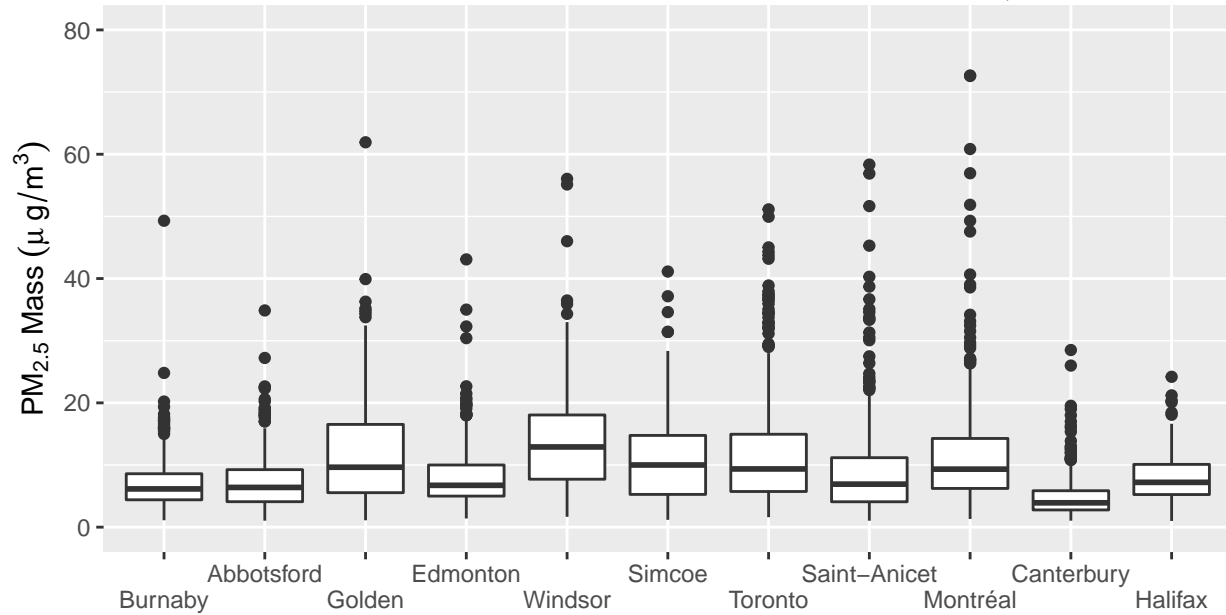


Figure 3: Monthly mean $PM_{2.5}$ mass by site

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

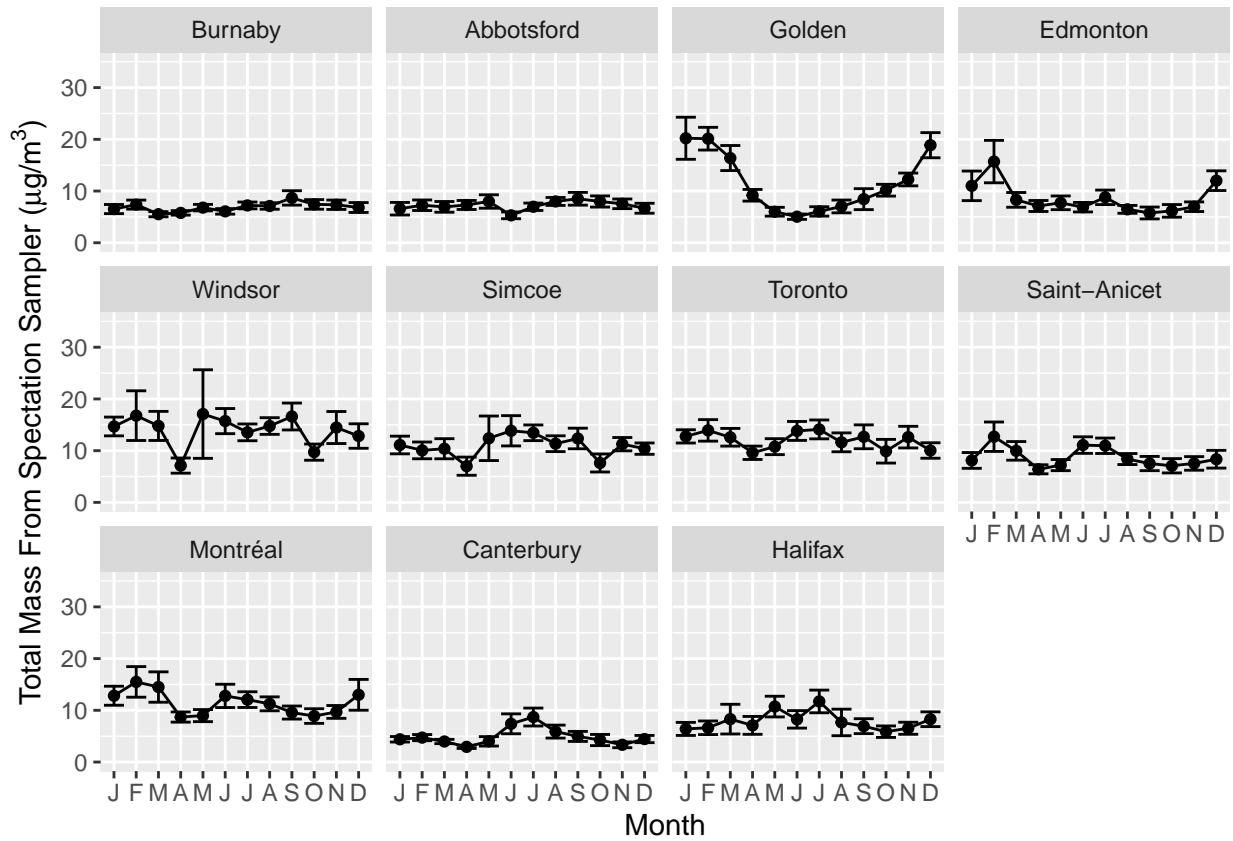


Figure 4: Mean organic carbon (OC) by site

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

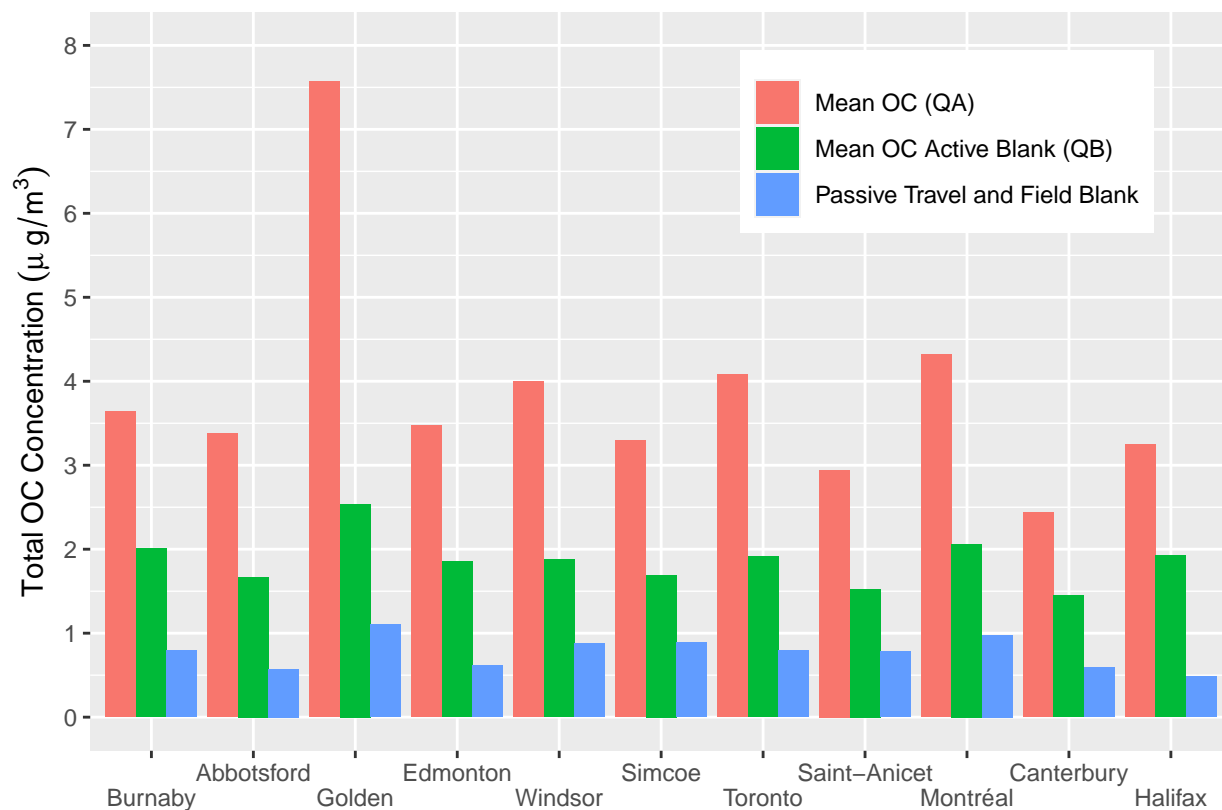


Figure 5: Reconstructed $PM_{2.5}$ mass by major component and site

Large differences from the paper - PBW, ASO4, OM

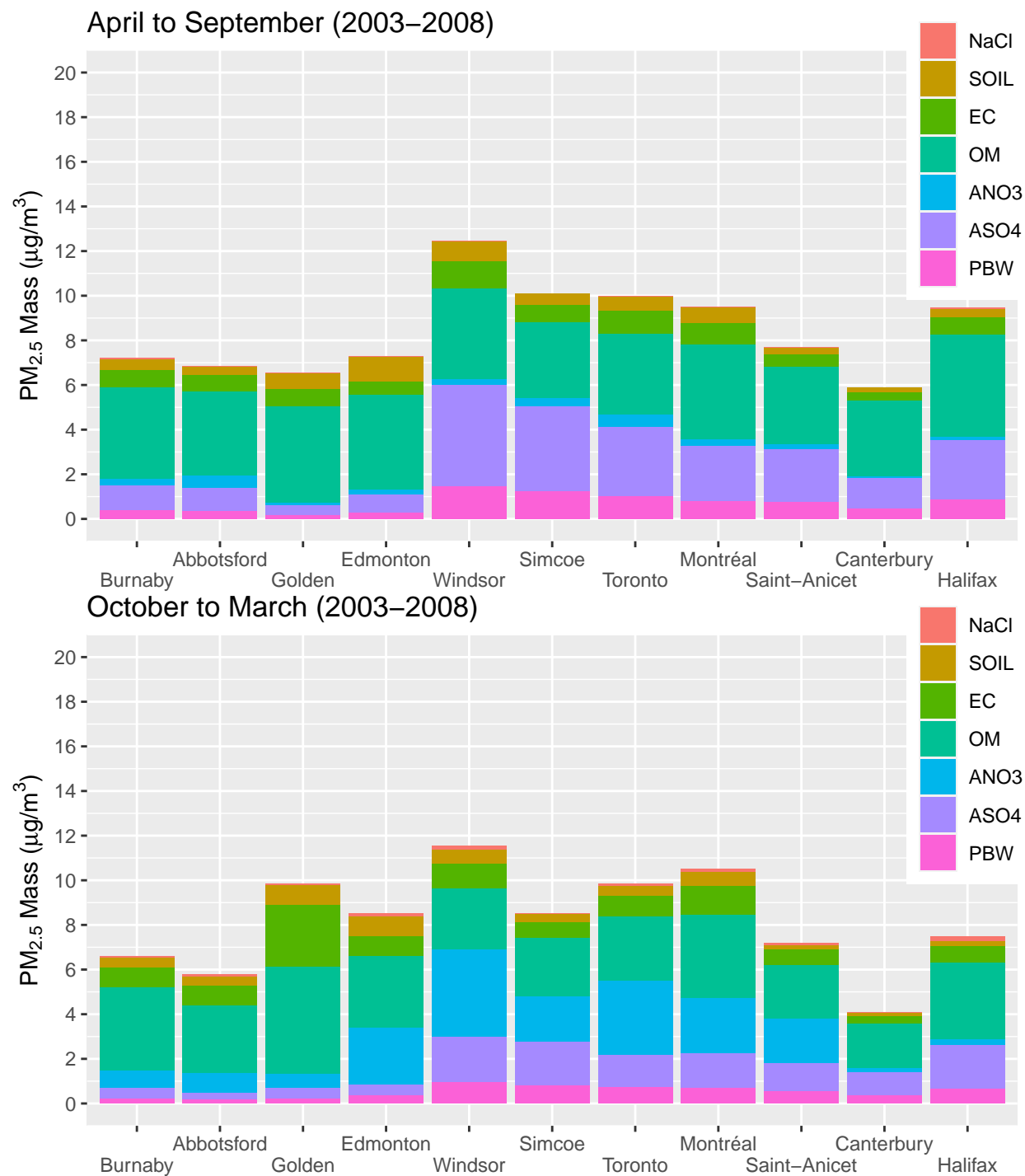


Figure 6: Reconstructed $PM_{2.5}$ mass by 10 highest mass days and site

Large differences from the paper - PBW, ASO4, OM

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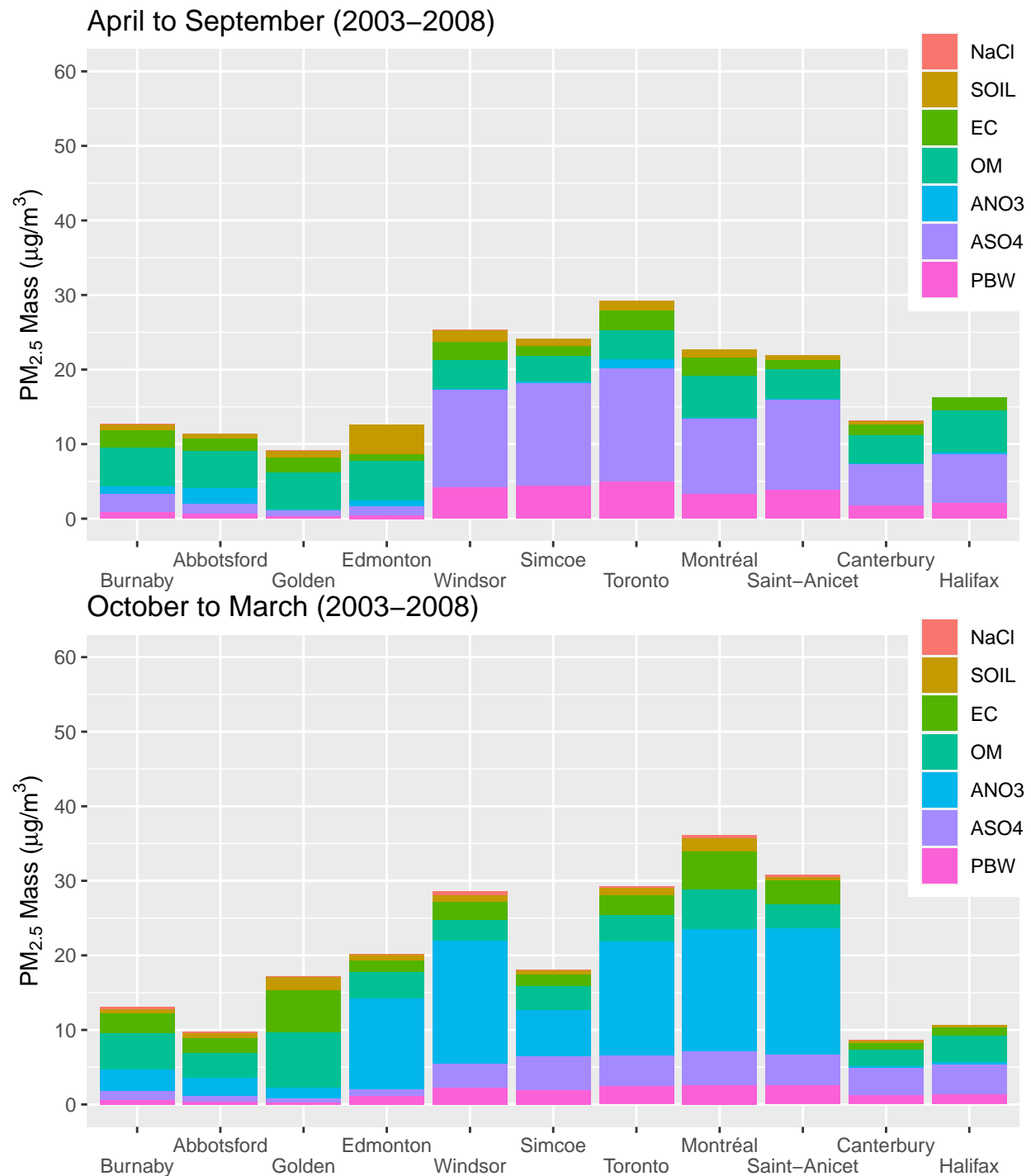


Figure 7: Median ammonium sulphate and ammonium nitrate concentrations by site and month

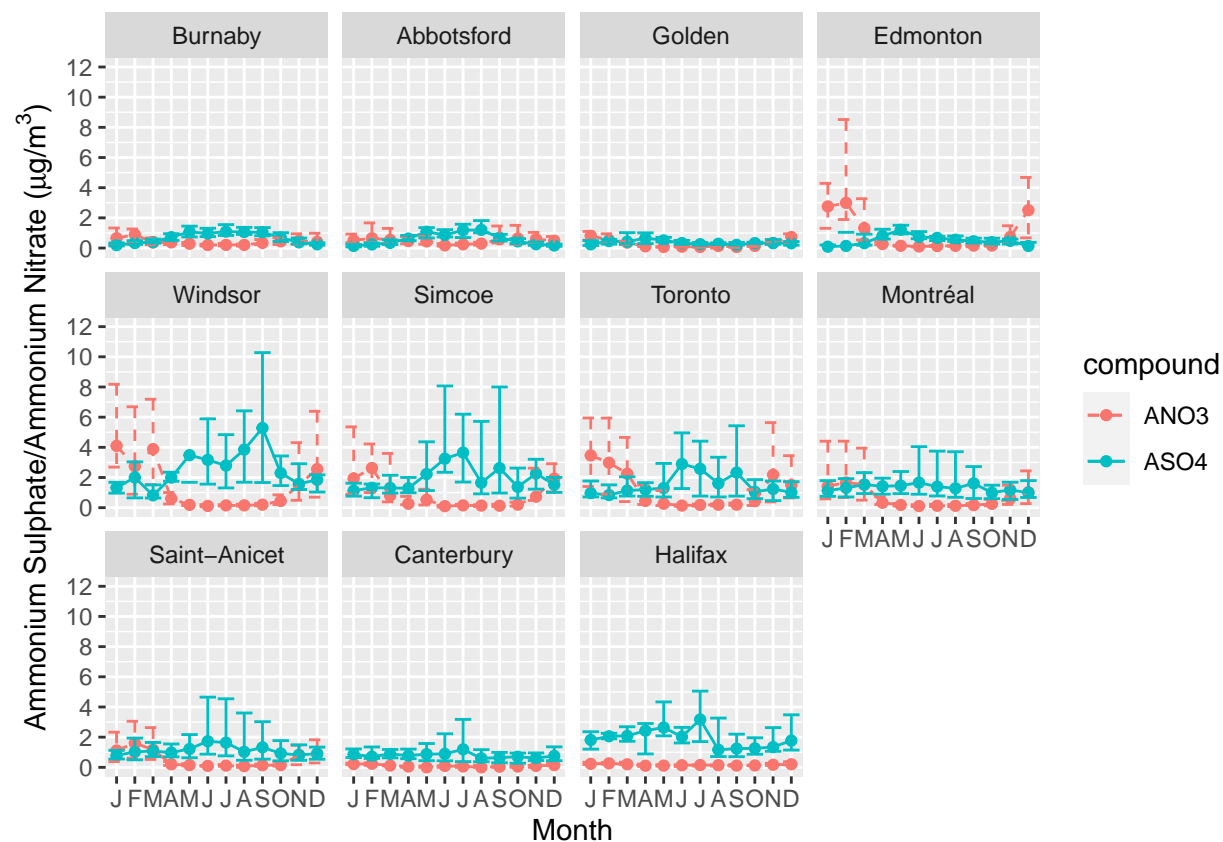


Figure 8: Median elemental carbomn (EC) and organic matter (OM) concentrations by site and month

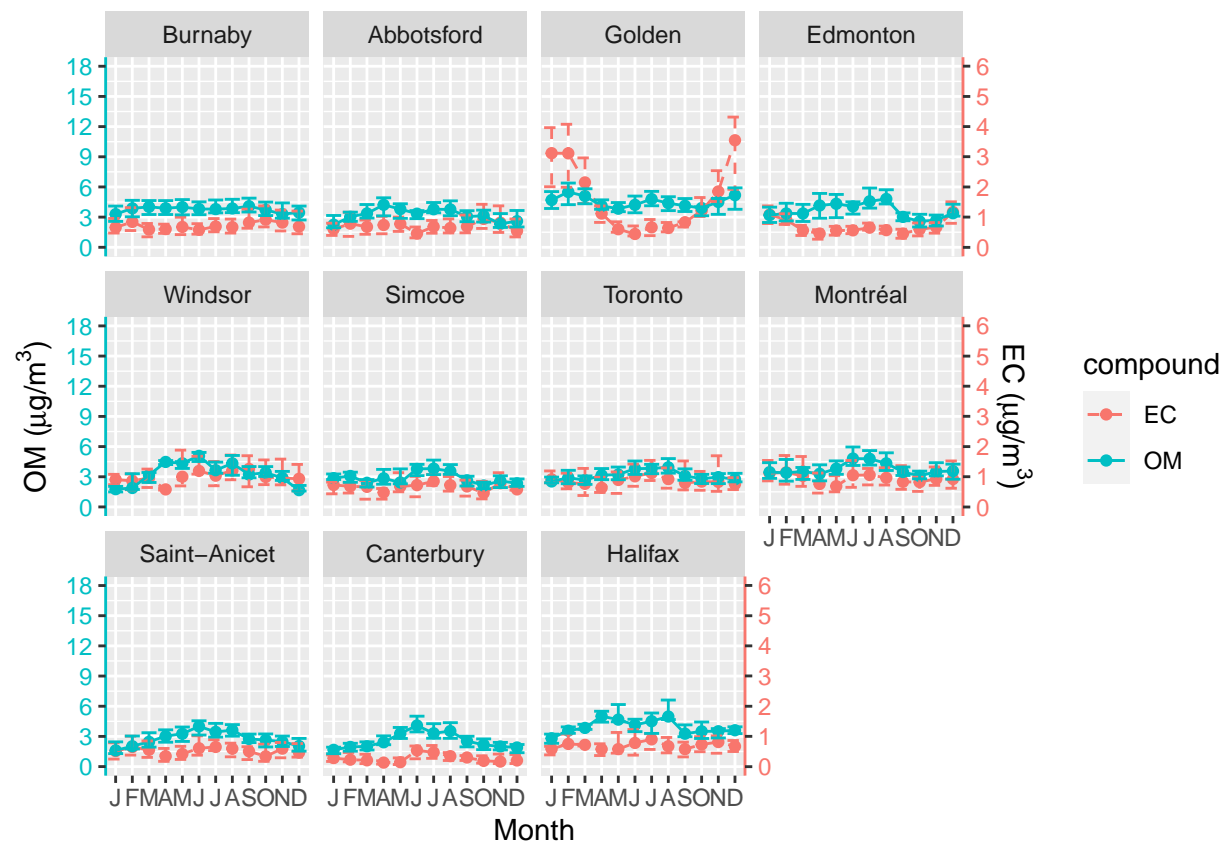


Figure 9: Median soil and sodium chloride concentrations by site and month

Issue with Simcoe data point

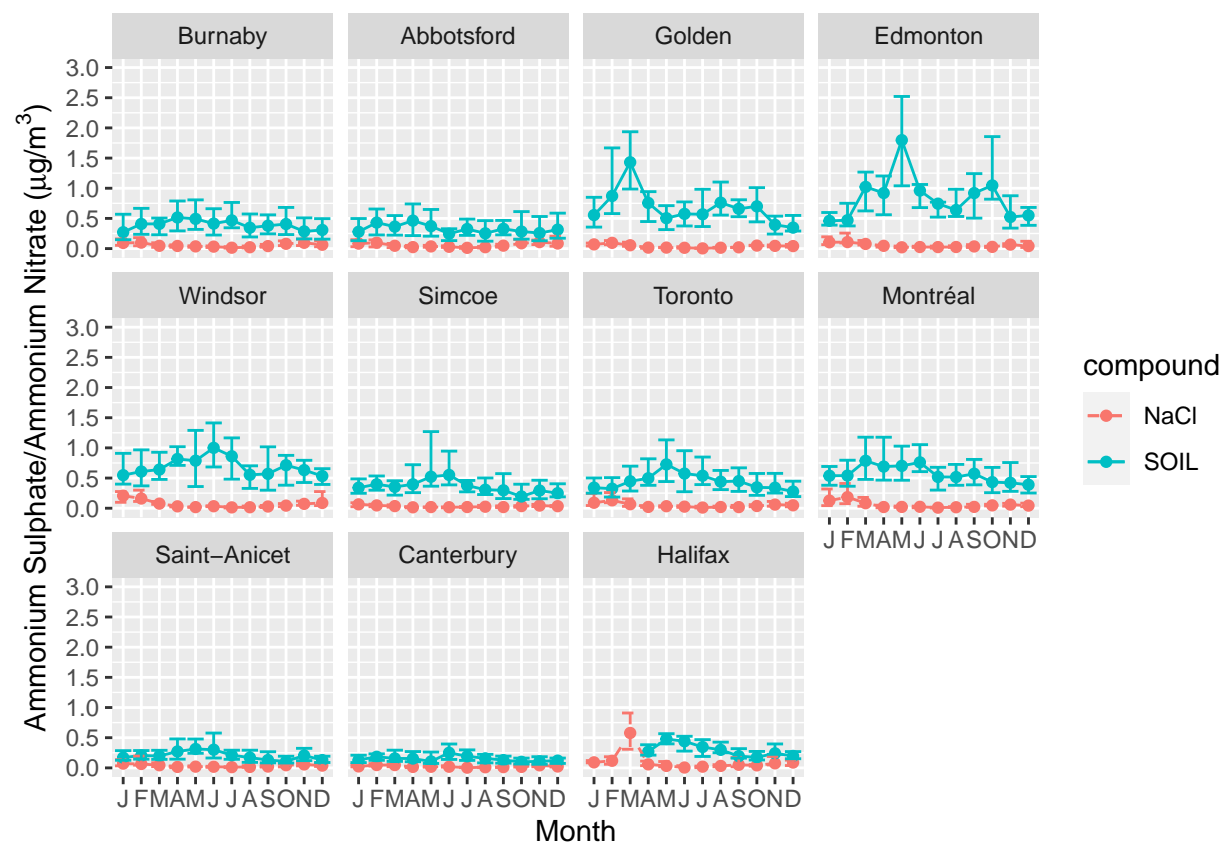


Figure 10: Ammonia mixing ratio by site and month

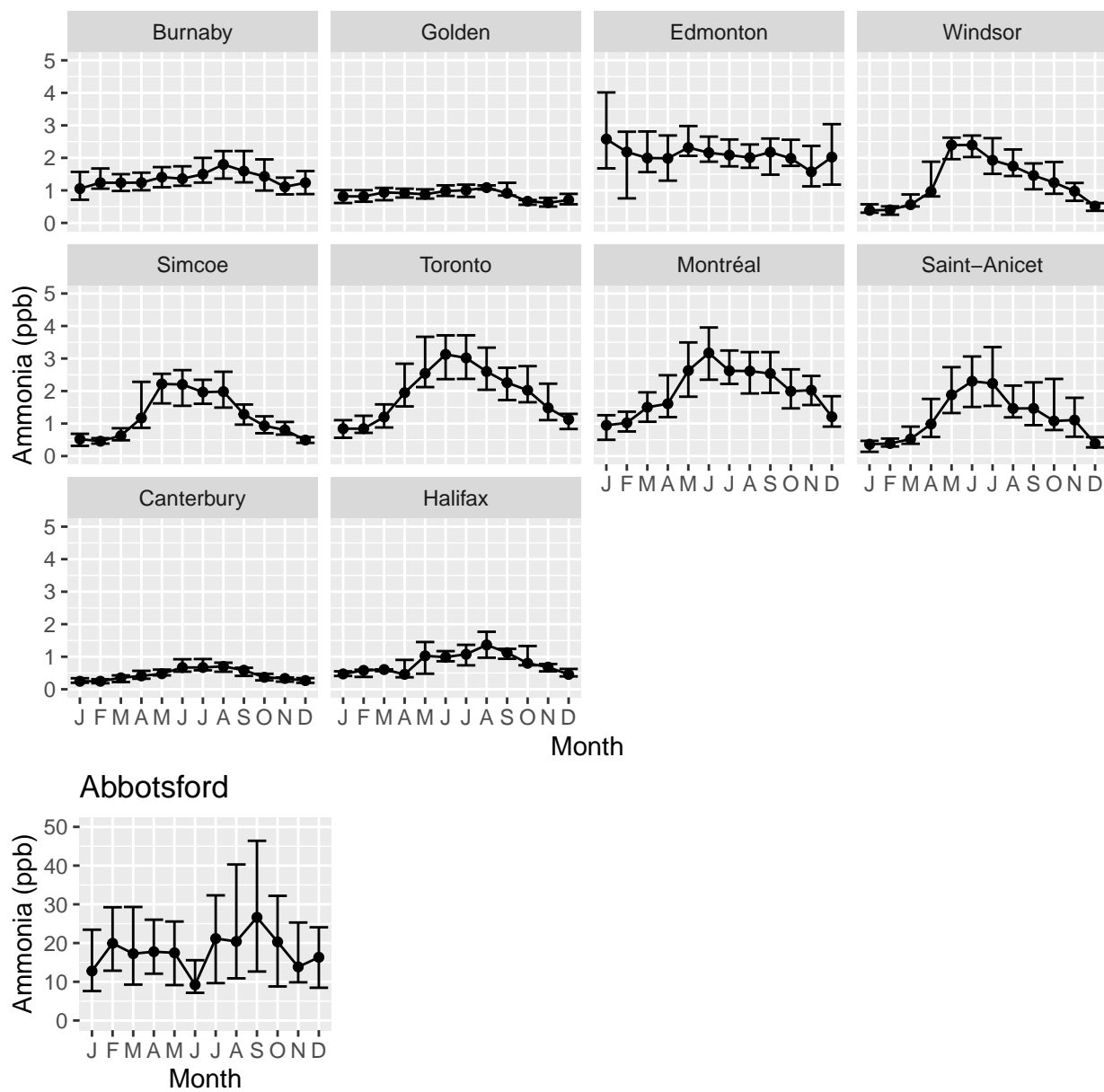


Figure 11: Median sulphur dioxide mixing ratio and nitric acid concentrations by site and month

