



**Figure 10.** Top row: barplots of OM mass fractions from quantified FGs. Middle row: barplots of OM/OC ratio and associated non-carbon atoms. Bottom row: O/C. In the left panel, OM, OM/OC and O/C ratios use OC estimated by FG calibrations (FG OC). In the right panel, the OM, OM/OC and O/C ratios use OC measured by TOR. PLSr and PLSbc refer to partial least square using raw and baseline corrected spectra respectively. PFo and PFr refers to peak-fitting using the original the recalibrated absorption coefficients. PLSbc\* is the same as PLSbc except that the number of LVs for aCH has been selected heuristically (Section 3.2).