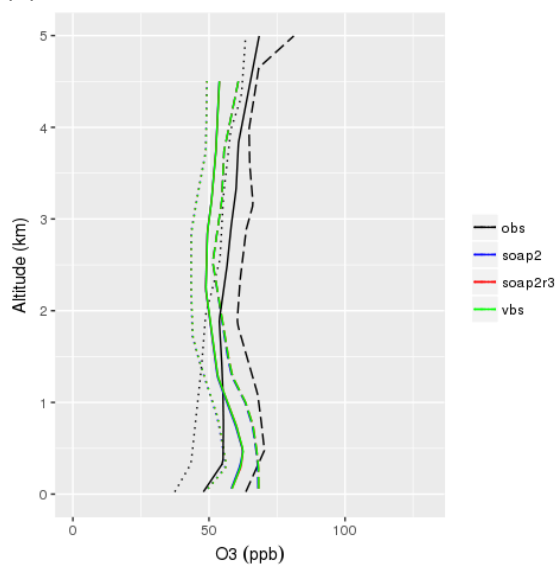


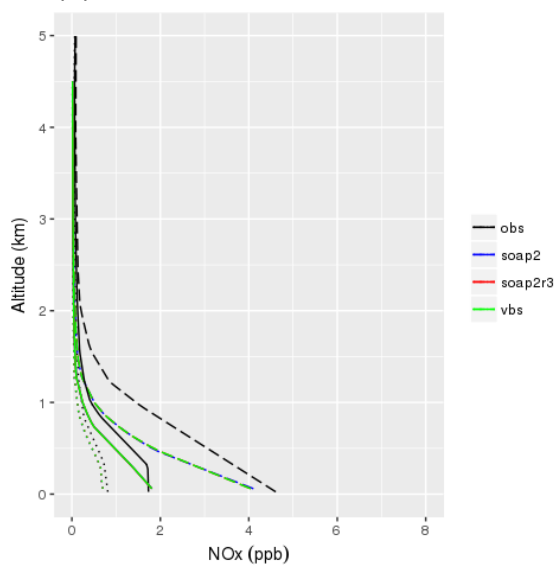
Appendix C

Comparisons between CAMx Predictions with the SOAP2r3 (base case), SOAP2, and
1.5-D VBS Schemes with Observed Vertical Profiles of Trace Gases

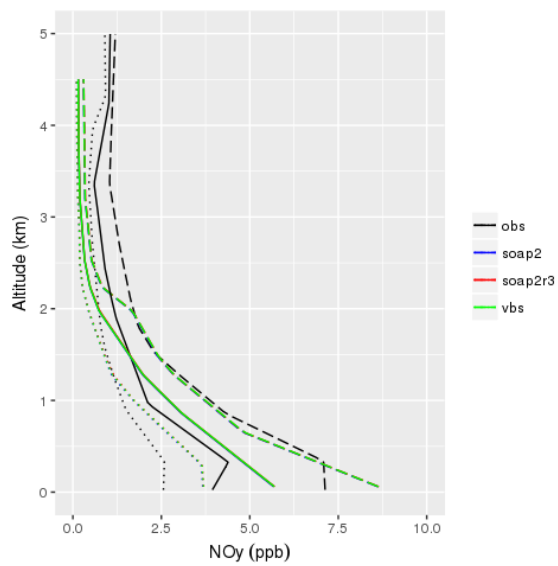
(a)



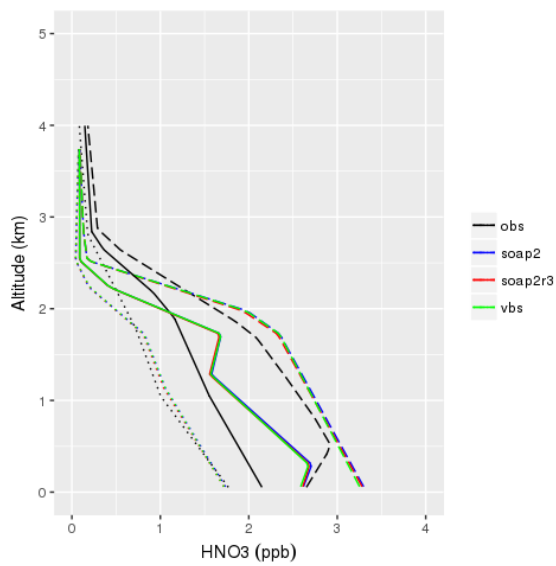
(b)



(c)



(d)



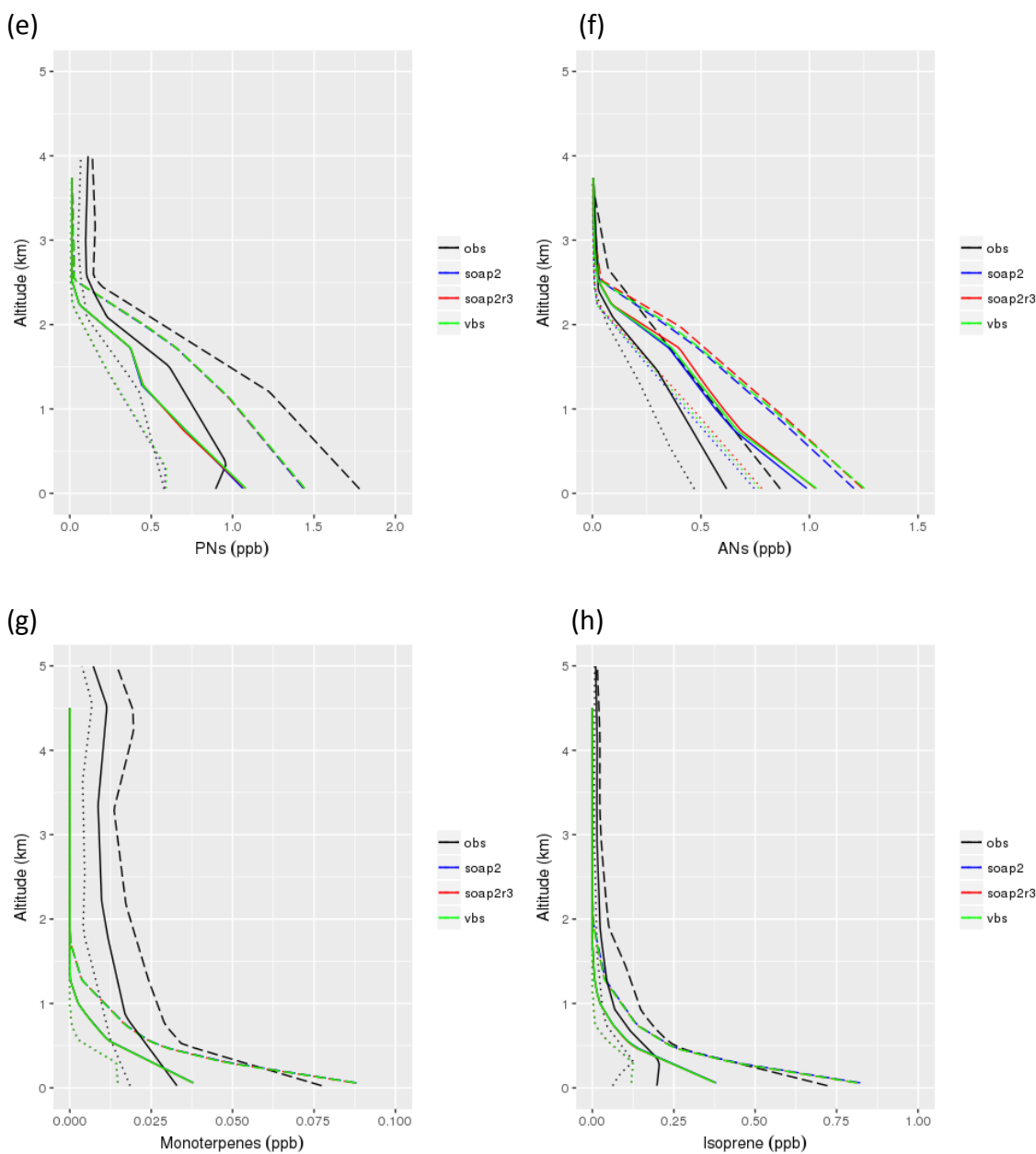
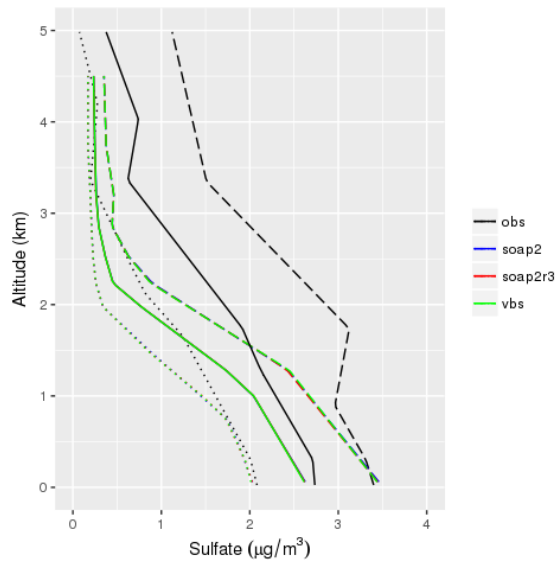
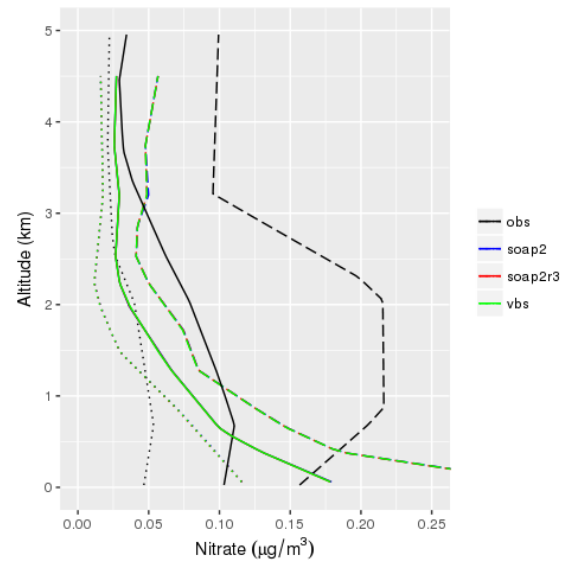


Figure C-1. Comparison of observed (black) and CAMx predicted (red) vertical profiles of (a) ozone, (b) NO_x, (c) NO_y, (d) HNO₃, (e) total peroxy nitrates, (f) alkyl nitrates, (g) monoterpenes, and (h) isoprene concentrations during P3-B flights. Profiles are shown as 25th percentile (small dash), 50th percentile (solid), and 75th percentile (large dash) concentrations. CAMx model predictions are compared with three organic aerosol-gas partitioning and oxidation schemes: 1.5-D VBS, SOAP2, and SOAP2r3. Note that values reported at the lower limit of detection or as negative were not included in the analysis.

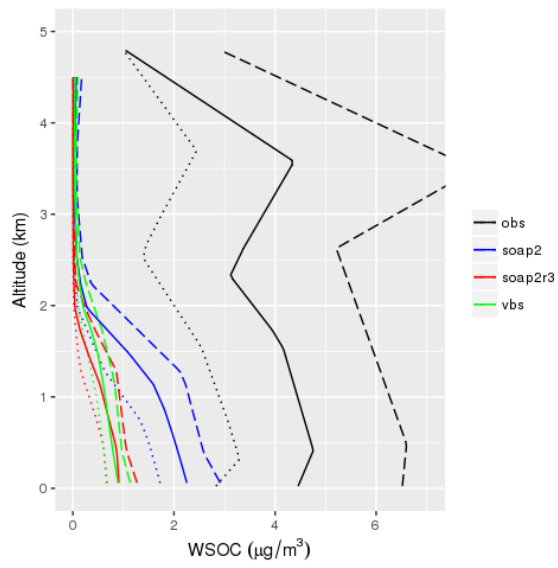
(a)



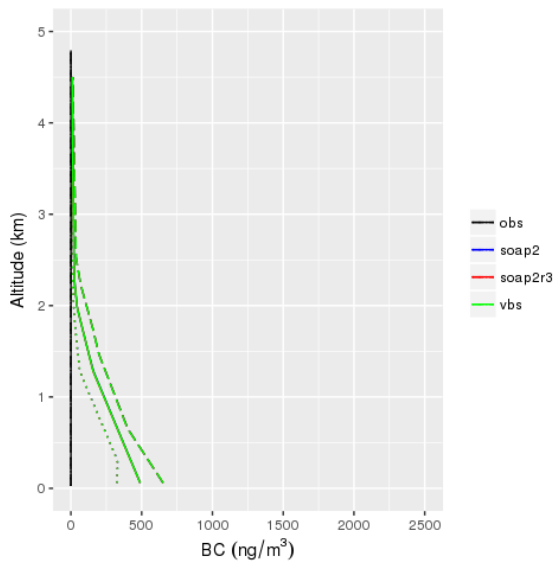
(b)



(c)



(d)



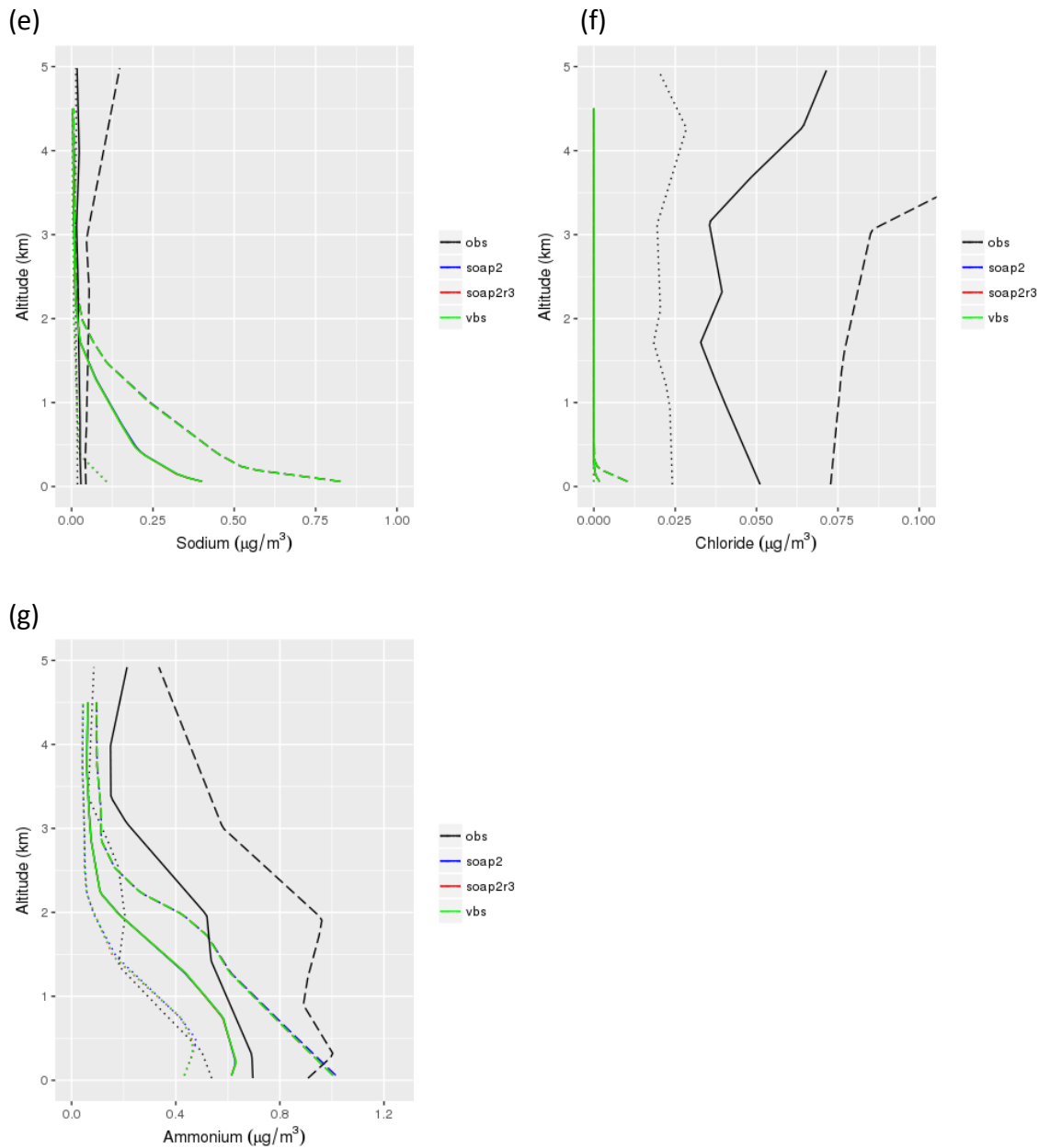


Figure C-2. Comparison of observed (black) and CAMx predicted (red) vertical profiles of (a) sulfate, (b) nitrate, (c) WSOC, (d) BC, (e) sodium, (f) chloride, and (g) ammonium concentrations during P3-B flights. Profiles are shown as 25th percentile (small dash), 50th percentile (solid), and 75th percentile (large dash) concentrations. CAMx model predictions are compared with three organic aerosol-gas partitioning and oxidation schemes: 1.5-D VBS, SOAP2, and SOAP2r3. Note that values reported at the lower limit of detection or as negative were not included in the analysis.