Precursor [ug/m3] - 1 0.036-0.290.0650.0260.0860.0390.030.0570.0860.0890.16 0.220.0350.11 -0.3-0.0840.03500026.42 -0.12-0.15-0.19-0.36-0.16-0.16-0.19-0.35-0.16-0.16-0.160.076.0070.0540.27-0.01 Temperature [K] -0.036 1 0.0240.140.0880.0010.11 0.1 -0.120.0540.21 0.32 0.26 0.46 0.38 0.71 0.0490.18 -0.5 -0.44 0.21 0.230.0710.15 0.130.0190.0930.46-0.46 -0.6 -0.36-0.33-0.31-0.250.003 OH [molec/cm3] -0.29 0.024 1 0.0010500707e-10.33 0.21 0.2 0.21 0.18 0.170.014-0.10.0730.0730.0160.49 0.0760.11 0.24 0.23 0.28 0.42 0.21 0.21 0.22 0.2 0.190.0730.079-0.050.0260.0630.028 O3 [molec/cm3] -0.0650.140.001 1 0.19.6e-140.130.0260.11 0.19 -0.2 -0.14 0.11 0.180.0550.0550.29 -0.11 0.39 0.3 -0.0770.0520.0810.22-0.0830.0350.11 0.34 0.160.0660.110.0650.120.036.002 NOx [molec/cm3] -0.026.086.00770.19 1 .00040.21-0.16-0.160.0380.23-0.21-0.14 0.440.0560.16 0.19 -0.11 0.16 0.16 -0.11-0.12-0.150.0510.15-0.14-0.17 0.31 -0.110.039.0098.026.0190.018.002 SZA [degree] -0.0860.001.7e-2L5e-000004 1 0.0720.0560.050.0540.0690.0170.0940.0480.0440.0360.0520.0520.0520.0520.002300010006500220027.0030.0170.0260.0220.0220.0170.010.0086002893e-3 Gas [ug/m3] Bin01: $lg(C^*) = -6.5 - 0.0390.11$ 0.33 -0.13-0.210.072 1 0.89 0.86 0.79 0.94 0.72 0.72 0.42 0.77 0.074 0.59 0.24 0.39 0.19 0.51 0.51 0.51 0.51 0.44 0.49 0.35 0.42 0.0540.069 -0.3 -0.15-0.13-0.140.0970.29 Gas [ug/m3] Bin02: $lg(C^*) = -5.5 - 0.03 \ 0.1 \ 0.210.026 - 0.160.05 \ 0.89 \ 1 \ 0.95 \ 0.91 \ 0.9 \ 0.56 \ 0.89 \ 0.61 \ 0.87 \ 0.19 \ 0.71 \ 0.14 \ 0.56 \ 0.41 \ 0.39 \ 0.44 \ 0.46 \ 0.49 \ 0.37 \ 0.24 \ 0.42 \ 0.210.083 - 0.29 - 0.15 - 0.12 - 0.120.0690.28$ Gas [ug/m3] Bin03: $lg(C^*) = -4.5 - 0.0570.12$ 0.2 0.11 -0.16-0.05 0.86 0.95 1 0.96 0.81 0.44 0.77 0.49 0.74 0.064 0.7 0.15 0.69 0.5 0.28 0.32 0.41 0.45 0.3 0.2 0.4 0.34 0.13 -0.25-0.13-0.11-0.11-0.110.0350.25 Gas [ug/m3] Bin04: $lg(C^*) = -3.5 - 0.08 \oplus 0.0540.21 \ 0.19 \ 0.03 \oplus 0.0540.21 \ 0.19 \ 0.03 \oplus 0.0540.79 \ 0.91 \ 0.96 \ 1 \ 0.77 \ 0.32 \ 0.74 \ 0.61 \ 0.72 \ 0.24 \ 0.62 \ 0.2 \ 0.65 \ 0.48 \ 0.15 \ 0.19 \ 0.28 \ 0.4 \ 0.140.0350.23 \ 0.26 \ 0.00320.35 -0.18 -0.16 -0.140.0640.35 \ 0.3$ Gas [ug/m3] Bin05: $lg(C^*) = -2.5 - 0.0890.21 \ 0.18 - 0.2 - 0.230.06 \ 0.94 \ 0.9 \ 0.81 \ 0.77 \ 1 \ 0.66 \ 0.83 \ 0.55 \ 0.86 \ 0.18 \ 0.57 \ 0.32 \ 0.32 \ 0.32 \ 0.21 \ 0.48 \ 0.48 \ 0.48 \ 0.43 \ 0.35 \ 0.43 \ 0.29 \ 0.37 \ -0.110.027 -0.3 -0.16 -0.14 -0.150.0980.31$ Gas [ug/m3] Bin06: $lg(C^*) = -1.5 - 0.16 = 0.32 = 0.17 - 0.14 - 0.21 = 0.01 = 0.72 = 0.16 = 0.32 = 0.17 - 0.14 - 0.21 = 0.01 = 0.72 = 0.16 = 0.44 = 0.32 = 0.66 = 0.52 = 0.24 = 0.68 = 0.077 = 0.62 = 0.15 - 0.023 = 0.21 = 0.9 = 0.85 = 0.68 = 0.88 = 0.78 = 0.68 = 0.095 = 0.83 = 0.3 = 0.16 - 0.13 - 0.15 - 0.15 = 0.15$ Gas [ug/m3] Bin07: $lg(C^*) = -0.5 - 0.22 \ 0.260.0140.11 - 0.140.09 \ 0.72 \ 0.89 \ 0.77 \ 0.74 \ 0.83 \ 0.52 \ 1 \ 0.71 \ 0.93 \ 0.17 \ 0.71 \ 0.21 \ 0.46 \ 0.49 \ 0.41 \ 0.46 \ 0.45 \ 0.41 \ 0.38 \ 0.28 \ 0.45 \ 0.0870.066 \ 0.28 - 0.14 - 0.12 - 0.110.0160.19$ Gas [ug/m3] Bin09: $lg(C^*) = 1.5 - 0.11 = 0.380.0730.0550.0560.041 = 0.77 = 0.87 = 0.74 = 0.72 = 0.86 = 0.68 = 0.93 = 0.78 = 1 = 0.3 = 0.79 = 0.22 = 0.35 = 0.31 = 0.59 = 0.62 = 0.58 = 0.55 = 0.54 = 0.42 = 0.51 = 0.0470.001 = 0.41 = 0.21 = 0.180.0890.24 = 0.21 = 0.180.0890.24 = 0.21 = 0.$ Gas [ug/m3] Bin10: $lg(C^*) = 2.5 - 0.3$ 0.71 0.0730.0550.16-0.036.0740.190.0640.24 0.180.0770.17 0.5 0.3 1 0.0450.1 -0.4 -0.430.00150.05-0.0120.28 -0.06-0.15-0.23-0.38-0.52-0.66-0.41-0.36-0.33-0.28-0.25 Gas [ug/m3] Bin11: $lg(C^*) = 3.5 - 0.0840.0490.0160.29$ 0.19 0.0520.59 0.71 0.7 0.62 0.57 0.62 0.71 0.54 0.79 0.045 1 0.067 0.6 0.42 0.63 0.67 0.72 0.66 0.66 0.62 0.75 0.48 0.31 -0.1-0.0680.15-0.13-0.13-0.13 Gas [ug/m3] Bin13: $lg(C^*) = 5.5 - 0002 60.5 - 0.07 60.39$ 0.16-0.0620.39 0.56 0.69 0.65 0.32-0.0230.46 0.37 0.35 -0.4 0.6 0.16 1 0.82 -0.120.0880.0290.0140.0650.0690.25 0.73 0.41 0.26 0.21 0.13 0.150.0660.013 Gas [ug/m3] Bin14: $lg(C^*) = 6.5 - 0.42 - 0.44 - 0.11 = 0.3 = 0.16 - 0.0530.19 = 0.41 = 0.5 = 0.48 = 0.21 - 0.21 = 0.49 = 0.37 = 0.31 - 0.43 = 0.42 = 0.054 = 0.82 = 0.22 - 0.190.0710.12 - 0.18 - 0.16 = 0.15 = 0.15 = 0.130.0950.11 = 0.24 - 0.027 = 0.15 = 0.130.0950.11 = 0.24 - 0.027 = 0.130.0950.11 = 0.24 - 0.24 - 0.24$ erosol [ug_m3] Bin01: $lg(C^*) = -6.5 - 0.12 = 0.24 = 0.0770.10.0002 = 0.51 = 0.39 = 0.28 = 0.15 = 0.48 = 0.91 = 0.41 = 0.094 = 0.59 = 0.14 = 0.12 = 0.29 = 0.99 = 0.99 = 0.8 = 0.98 = 0.98 = 0.98 = 0.98 = 0.18 = 0.160.08 = 0.062 = 0.072 =$ erosol [ug_m3] Bin03: $lg(C^*) = -4.5 - 0.190.0710.280.081 - 0.190.0060.51$ 0.46 0.41 0.28 0.43 0.85 0.45 0.1 0.58 0.012 0.72 -0.170.0290.07 0.95 0.96 1 0.9 0.96 0.94 0.86 0.14 0.22 -0.19 -0.1-0.0970.0970.0970.039-0.1 erosol [ug_m3] Bin04: $lg(C^*) = -3.5 - 0.36 = 0.15 = 0.42 = 0.05 = 0.002 = 0.002 = 0.002 = 0.002 = 0.00000 = 0.0000 = 0.0000 = 0.0000 = 0.0000 = 0.0000 = 0.0000 = 0.00000 = 0.0000 = 0.0000 = 0.0000 = 0.0000 = 0.0000 = 0.00000 = 0.00000 = 0.0000 = 0.0000 = 0.0000 = 0.00000 = 0.0000 = 0.0000 = 0.0$ erosol [ug_m3] Bin05: lg(C*) = -2.5 - 0.16 0.13 0.21 0.0830.150.002 0.49 0.37 0.3 0.14 0.43 0.88 0.38 0.041 0.54 0.06 0.66 0.0820.0650.18 0.98 0.98 0.96 0.79 1 0.98 0.87 0.0740.25 0.13 0.0740.25 0.13 0.070.0820.0950.0680.01 erosol [ug_m3] Bin06; $lg(C^*) = -1.5 - 0.160.0190.21 - 0.0350.140.003$ D.35 0.24 0.2 0.0350.29 0.78 0.28 - 0.0690.42 - 0.15 0.62 - 0.160.0690.16 0.93 0.94 0.94 0.76 0.98 1 0.92 0.14 0.38 0.01 <math>D.0590.0470.0290.0520.11erosol [ug_m3] Bin07: $lg(C^*) = -0.5 - 0.190.0930.22 \ 0.11 - 0.170.0170.42 \ 0.42 \ 0.42 \ 0.42 \ 0.42 \ 0.43 \ 0.37 \ 0.68 \ 0.45 \ 0.041 \ 0.51 \ -0.23 \ 0.75 \ -0.13 \ 0.25 \ 0.1 \ 0.8 \ 0.84 \ 0.86 \ 0.72 \ 0.87 \ 0.92 \ 1 \ 0.4 \ 0.62 \ 0.13 \ 0.23 \ 0.014 \ 0.049 \ 0.08 \ 0.22 \ 0.13 \ 0.23 \ 0.049 \ 0.08 \$ erosol [ug_m3] Bin08: $lg(C^*) = 0.5 - 0.35 - 0.46$ 0.2 0.34 0.31-0.026.0540.21 0.34 0.26-0.110.095.0870.0870.047-0.38 0.48-0.19 0.73 0.54 0.025.0190.14 0.2 0.0740.14 0.4 1 0.53 0.44 0.240.0520.11-0.0550.32 erosol [ug_m3] Bin09: $lg(C^*) = 1.5 - 0.16 - 0.46 = 0.19 = 0.16 - 0.11 = 0.02 = 0.069 = 0.083 = 0.13 = 0.083 = 0.02 = 0.019$ erosol [ug_m3] Bin10: $lg(C^*) = 2.5 - 0.16 - 0.6 \cdot 0.073 \cdot 0.060 \cdot 0.039 \cdot 0.022 - 0.3 - 0.29 - 0.25 - 0.3 - 0.3 - 0.3 - 0.28 - 0.44 - 0.41 - 0.66 - 0.1 - 0.23 \ 0.26 \ 0.15 - 0.16 - 0.18 - 0.19 - 0.3 - 0.130 \cdot 0.120 \cdot 13 \ 0.44 \ 0.63 \ 1 \ 0.59 \ 0.46 \ 0.48 \ 0.13 \ 0.48 \ 0.13 \ 0.48 \ 0.13 \ 0.48 \ 0.13 \ 0.40 \ 0.13 \ 0.44 \ 0.63 \ 0.13 \ 0.44 \ 0.65 \ 0.1$ erosol [ug_m3] Bin12: $lg(C^*) = 4.5 \cdot 0.007 \pm 0.33 \cdot 0.050.0650.0260.0110.13 \cdot 0.12 \cdot 0.11 \cdot 0.16 \cdot 0.14 \cdot 0.13 \cdot 0.12 \cdot 0.19 \cdot 0.19 \cdot 0.15 \cdot 0.12 \cdot 0.15 \cdot 0.12 \cdot 0.130.0950.0620.0780.0970.190.0880.0470.0140.0520.18 0.46 0.62 1 0.97 0.86 0.30$ erosol [ug_m3] Bin13: $lg(C^*) = 5.5 - 0.0540.310.0260.120.01-0.0860.14 - 0.12 - 0.11 - 0.14 - 0.15 - 0.15 - 0.11 - 0.16 - 0.18 - 0.33 - 0.13 - 0.17 - 0.15 - 0.11 - 0.07 - 0.08 - 0.09$ erosol [ug_m3] Bin14: $lg(C^*) = 6.5 - 0.27 - 0.250.0630.0350.013.00290.0970.0690.0350.0640.0980.150.0160.110.0890.28 - 0.13 - 0.130.0660.24 - 0.0530.0570.0390.130.0680.0520.080.0550.14 0.13 0.28 0.86 0.77 1$ pre-existing aerosols (ug/m3) -0.012.0030.020.0027.00273e-1-0.29-0.28-0.25-0.35-0.31-0.23-0.19-0.27-0.24-0.25-0.120.09±0.01±0.02±0.048-0.1 -0.170.0140.11 0.22 0.32 0.28 0.4 0.31 0.36 0.36 0.33 NOx [molec/cm3] OH [molec/cm3] lg(C*) lg(C*) lg(C*) lg(C*) Bin03: Bin01: Gas [ug/m3] Bin12: Gas [ug/m3] Bin06: Gas [ug/m3] Bin08: Gas [ug/m3] Bin09: Gas [ug/m3] Bin10: Gas [ug/m3] Bin07: Gas [ug/m3] Bin11: Gas [ug/m3] Bin13: Aerosol [ug_m3] Aerosol [ug_m3] Aerosol [ug_m3] Aerosol [ug_m3] Aerosol [ug_m3]

- 0.8 - 0.6 - 0.4 - 0.2 - 0.0 - -0.2 - -0.4

- -0.6

- 1.0