SUPPORTING INFORMATION

Supermicron modes of ammonium ions related to fog in rural atmosphere

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Figure S1. Log-normal-function-fitted size distribution of NH₄⁺ mass concentration:

(a) from 10:50 on November 10 to 10:40 on November 11, 2002 at KEJ,

(b) from 9:30 on June 14-9:00 on June 15, 2004 at CHA,

(c) from 9:15 on June 16-9:00 on June 20, 2004 at CHA,

(d) from 11:40 on November 16 to 9:50 on November 17, 2004 at SPR,

(e) from 10:10 on November 17 to 9:00 on November 18, 2004 at SPR,

(f) from 11:40 on November 16 to 9:50 on November 17, 2004 at EGB,

(g) from 11:00 on February 19, 2003-10:30 on February 20, 2003 at ALG,

(h) from 17:50 on November 8 to 10:20 on November 9, 2002 at KEJ,

(i) from 11:10 on November 9 to 10:20 on November 10, 2002 at KEJ,

(j) from 9:10 on December 9 to 14:20 on December 10, 2004 at SPR.

Figure S2. Air mass back trajectories for fog sample periods.

Figure S1a, b, c



Figure S1d, e, f



Figure S1g, h, i



Figure S1j



Figure S2a, b



NOAA HYSPLIT MODEL Backward trajectories ending at 1200 UTC 11 Nov 02 EDAS Meteorological Data



Figure S2c, d, e



NOAA HYSPLIT MODEL Backward trajectories ending at 1300 UTC 17 Nov 04 EDAS Meteorological Data EDAS Meteorological Data 79.49 W (e) 45.42 N 79.49 W (d) Alesv 45.42 N -94 ·92 -92 .90 -90 at at Source 🖈 ★ Source 40 -38 Meters AGL Meters AGL 1500 1000 1000 1000 500 500 500 1
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 Job ID: 373853
 Job Start: Tue Jul 10
 13:06:14 UTC 2012
 Source 11 at::45:424 Ion::-79.486 heights: 500, 1000 m AGL

 Trajectory Direction: Backward
 Duration::48 hrs
 Vertical Motion Calculation Method:
 Model Vertical Velocity

 Vertical Motion Calculation Method:
 Model Vertical Velocity
 Meteorology: 0000Z 16 Nov 2004 - EDAS40

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 This is not a NOAA product. It was produced by a web user. Job ID: 323857
 Job Start: Tue Jul 10 13:07:29 UTC 2012 Source 11 at: 14.54.24 Jon: -79.486 heights: 500, 1000 m AGL Verical Motion Calculation Method: Model Vertical Velocity Vertical Motion Calculation Method: Model Vertical Velocity Meteorology: 0000Z 16 Nov 2004 - EDAS40

NOAA HYSPLIT MODEL Backward trajectories ending at 1200 UTC 18 Nov 04

1500

1000

500

12

Figure S2f, g



NOAA HYSPLIT MODEL Backward trajectories ending at 1700 UTC 06 Mar 02 EDAS Meteorological Data



Figure S2h, i



NOAA HYSPLIT MODEL Backward trajectories ending at 1500 UTC 19 Feb 03





