

1 Supplemental

2 Table S1. Concentrations (in μM) of ions in the nine synthetic dews

<i>Dew</i>	Na^+	NH_4^+	K^+	Ca^{2+}	Cl^-	NO_3^-	SO_4^{2-}	Ac^-	Form^-	$^*\text{HCO}_3^-$	<i>pH</i>
A	214	232	44	78	166	44	90	18	23	100	6.87
B	177	319	0	96	214	260	98	51	46	6	5.64
C	408	283	51	100	200	52	100	22	20	123	6.96
D	252	283	51	100	347	52	100	22	20	37	6.44
E	234	353	0	104	202	268	100	46	48	36	6.42
F	296	394	0	113	219	267	100	48	48	76	6.75
G	417	381	0	119	214	262	97	47	46	162	7.08
H	607	361	0	101	184	223	85	41	39	224	7.22
I	740	369	0	112	218	265	99	49	43	302	7.35

3 *Calculated using carbonate equilibria, pH and assuming $\text{P}_{\text{CO}_2} = 500$ ppm

1 Table S2. Concentration (in μM) of ionic species in rain samples

<i>Date</i>	Na^+	NH_4^+	K^+	Mg^{2+}	Ca^{2+}	Ac^-	Form^-	Cl^-	NO_2^-	NO_3^-	SO_4^{2-}	HPO_4^{2-}	Ox^{2-}
06/15	5.8	67.2	3.2	1.8	9.4	0	5.9	6.5	0.2	23.6	4.5	0.9	0.9
06/16	2.8	29.6	1.0	1.4	9.5	0	5.5	3.3	0	19.0	5.1	0	0
06/28	8.5	72.2	4.1	6.1	23.9	0	30.3	7.3	0	45.0	14.3	1.7	3.1
07/01	8.7	55.6	2.8	8.6	41.0	0	9.0	14.0	0	49.9	11.8	1.6	0
<i>Avg</i>	6.5	56.2	2.8	4.5	21.0	0	12.7	7.8	0.1	34.4	8.9	1.1	1.0

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- 1 Table S3. Total Organic Carbon (TOC), Total Nitrogen (TN), Inorganic Carbon (IC), pH, and
- 2 $\text{Frac}(\text{NH}_3)$ for rain samples

<i>Date</i>	<i>TOC</i> <i>(mg C L⁻¹)</i>	<i>IC</i> <i>(mg C L⁻¹)</i>	<i>TN</i> <i>(mg N L⁻¹)</i>	<i>pH</i>	<i>Frac(NH₃)</i>
06/15	4.63	0.30	1.53	5.61	0.61
06/16	2.86	0.18	0.71	4.64	0.59
06/28	14.45	0.37	1.53	4.17	0.45
07/01	7.06	0.31	1.42	4.63	1.0
<i>Avg</i>	<i>7.25</i>	<i>0.29</i>	<i>1.30</i>	<i>4.54</i>	<i>0.66</i>

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