

## Concentrations and fate of decamethylcyclopentasiloxane (D5) in the atmosphere

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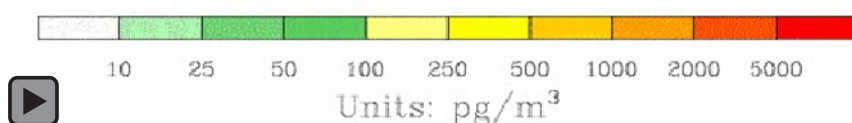
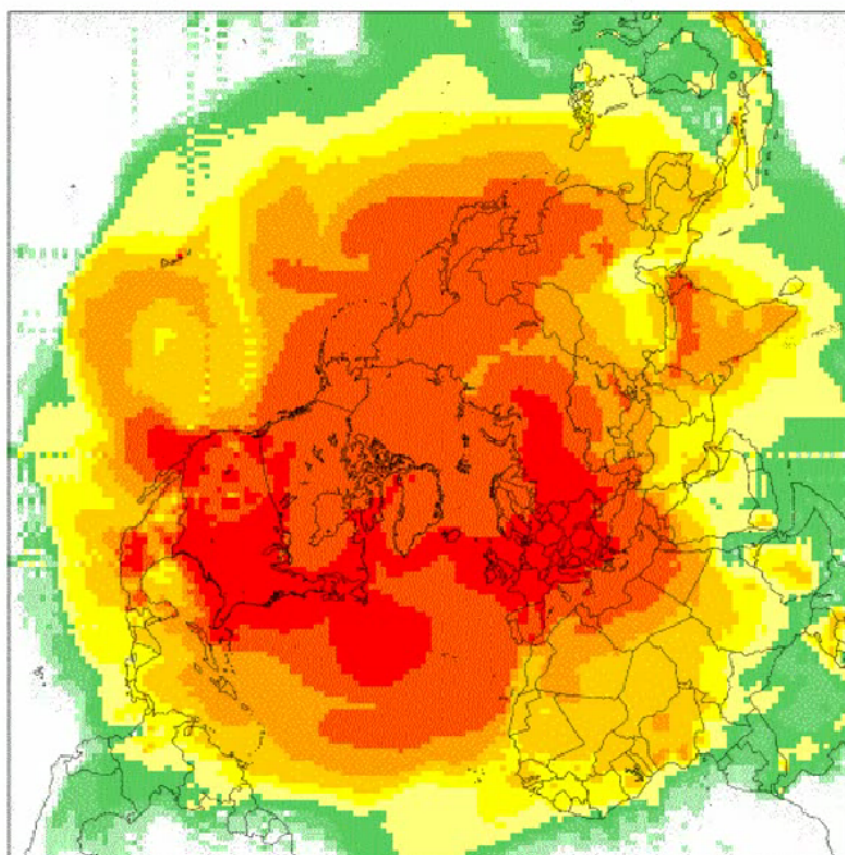
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### Supporting Information

3 hourly mean D5 concentration. 03 GMT, 1 Jan, 2009



Multimedia S1: Model simulation of decamethylcyclopentasiloxane (D5) concentrations in the Northern Hemisphere during January – June 2009

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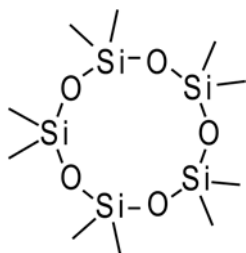


Figure S1: Molecular structure of decamethylcyclopentasiloxane (D5)



Figure S2: Picture of the sampling site

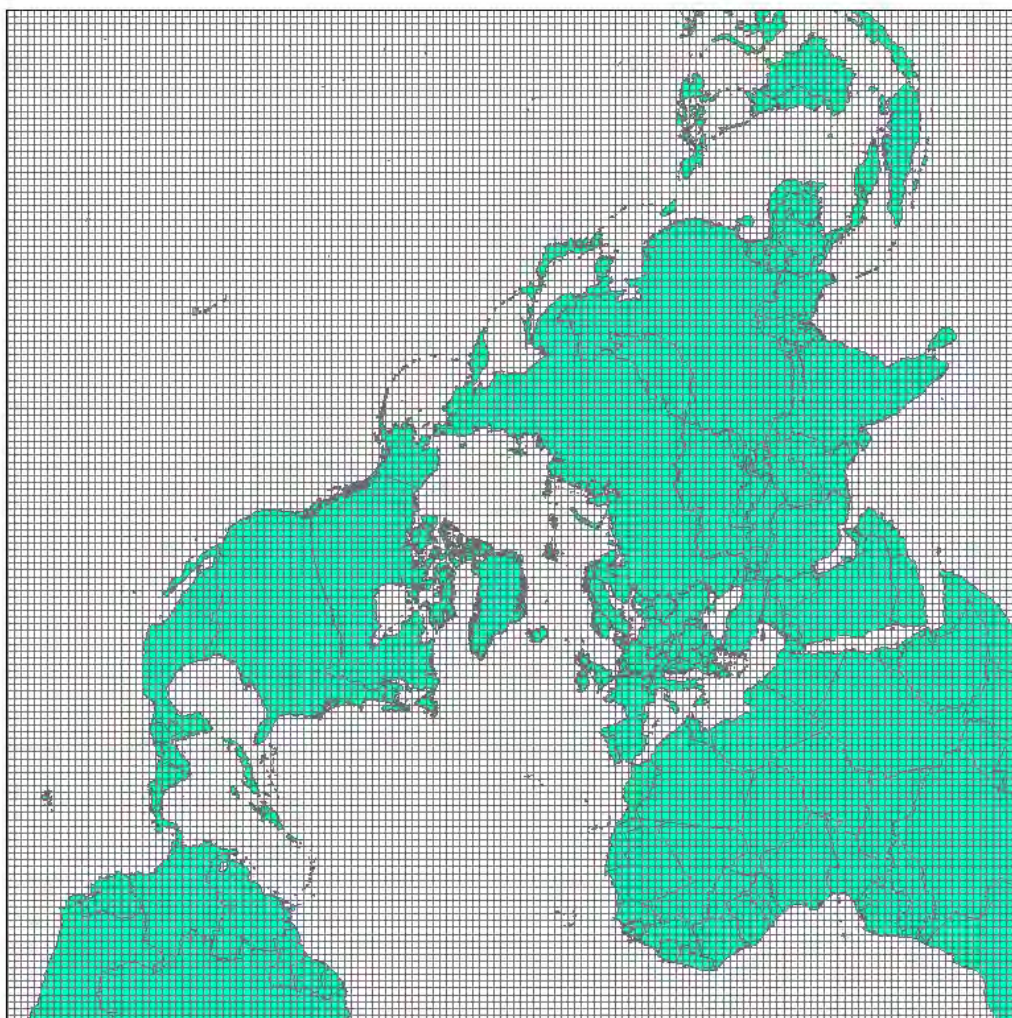


Figure S3: Domain of the DEHM model

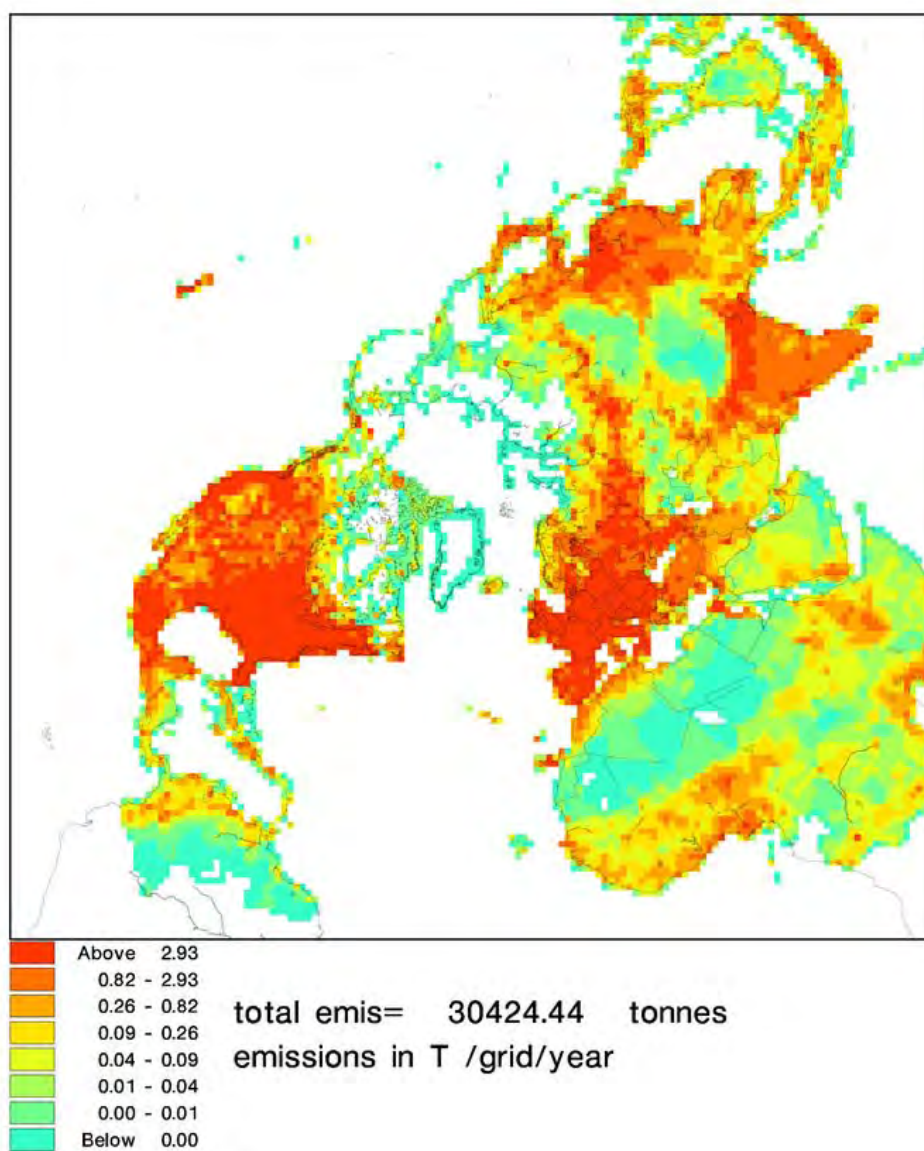


Figure S4: Map showing the emissions estimates for each grid cell in the model domain

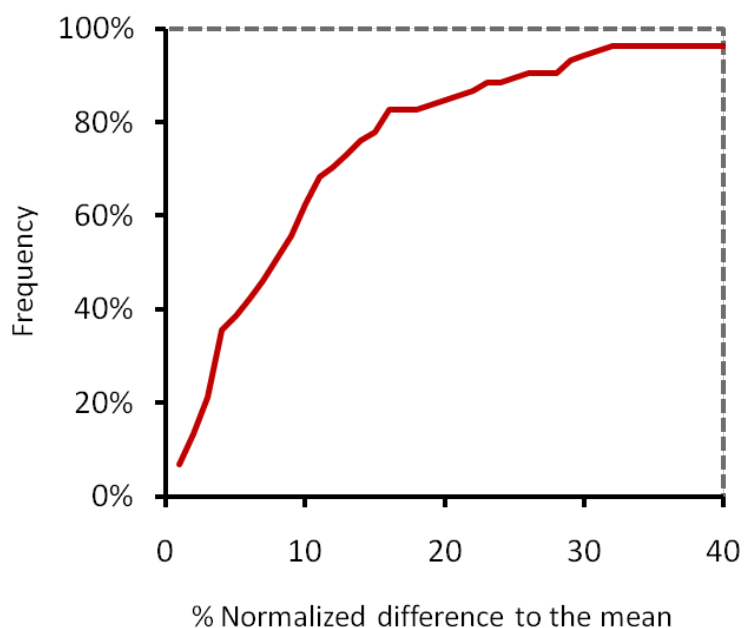


Figure S5: Repeatability of the measurement of the D5 concentration in air illustrated with a cumulative distribution function of the % difference between the D<sub>5</sub> concentrations in parallel samples (normalized to the mean of the two concentrations).

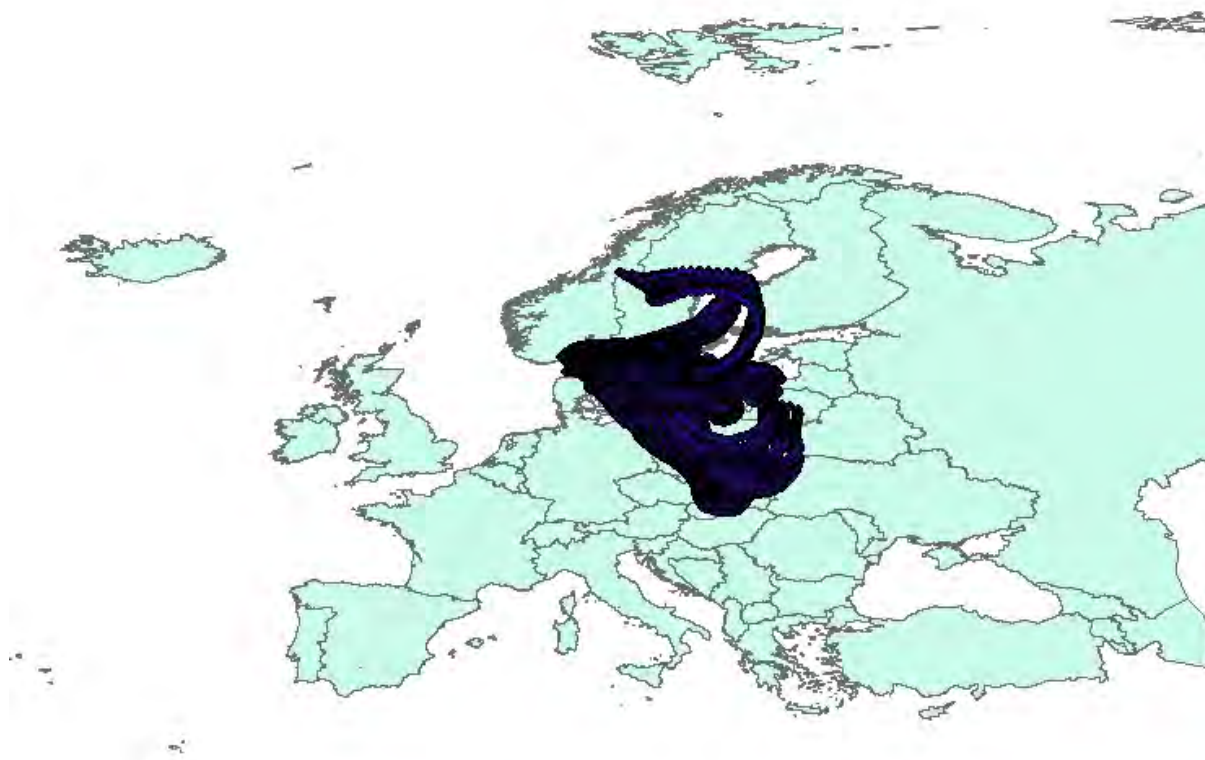


Figure S6: Three day air mass back trajectories during the period 22-30 April. The trajectories were calculated on an hourly basis using the Eta model.

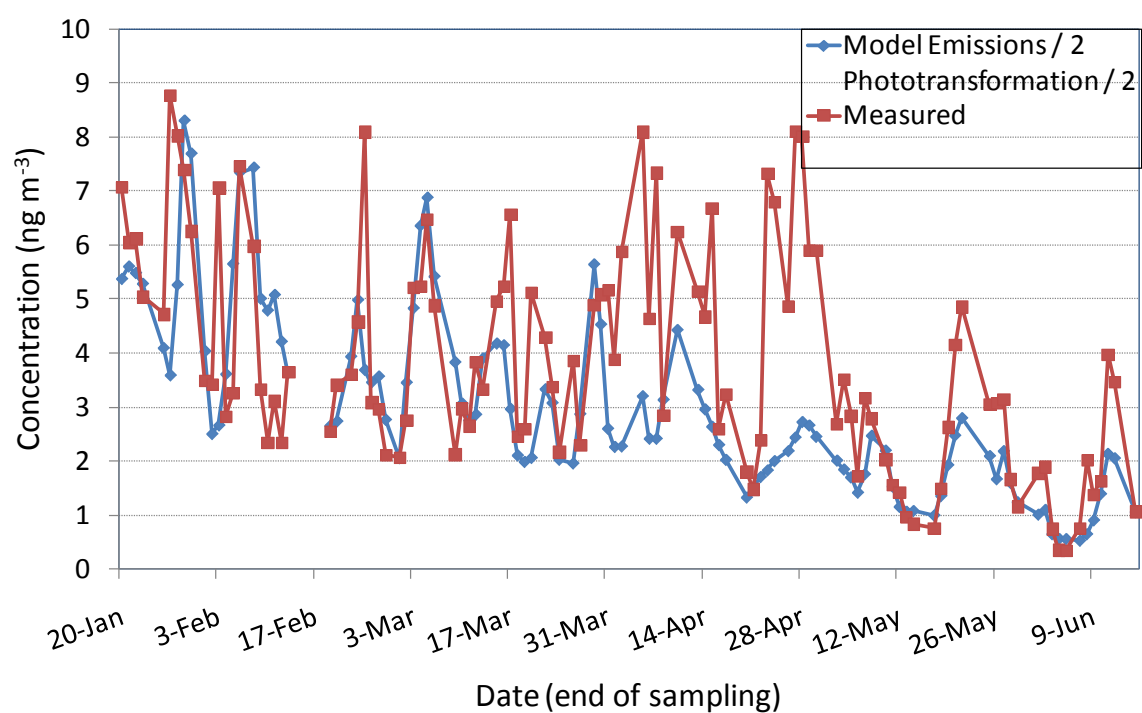


Figure S7: Comparison of modeled and measured concentrations of D5 in air when the emissions and the phototransformation rate constant are both reduced by 50% compared to the base scenario.

### Average D5 concentration January-June 2009

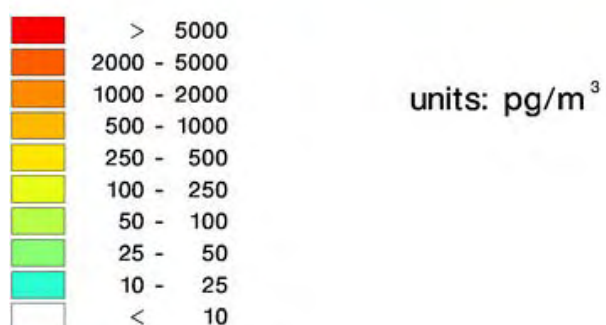
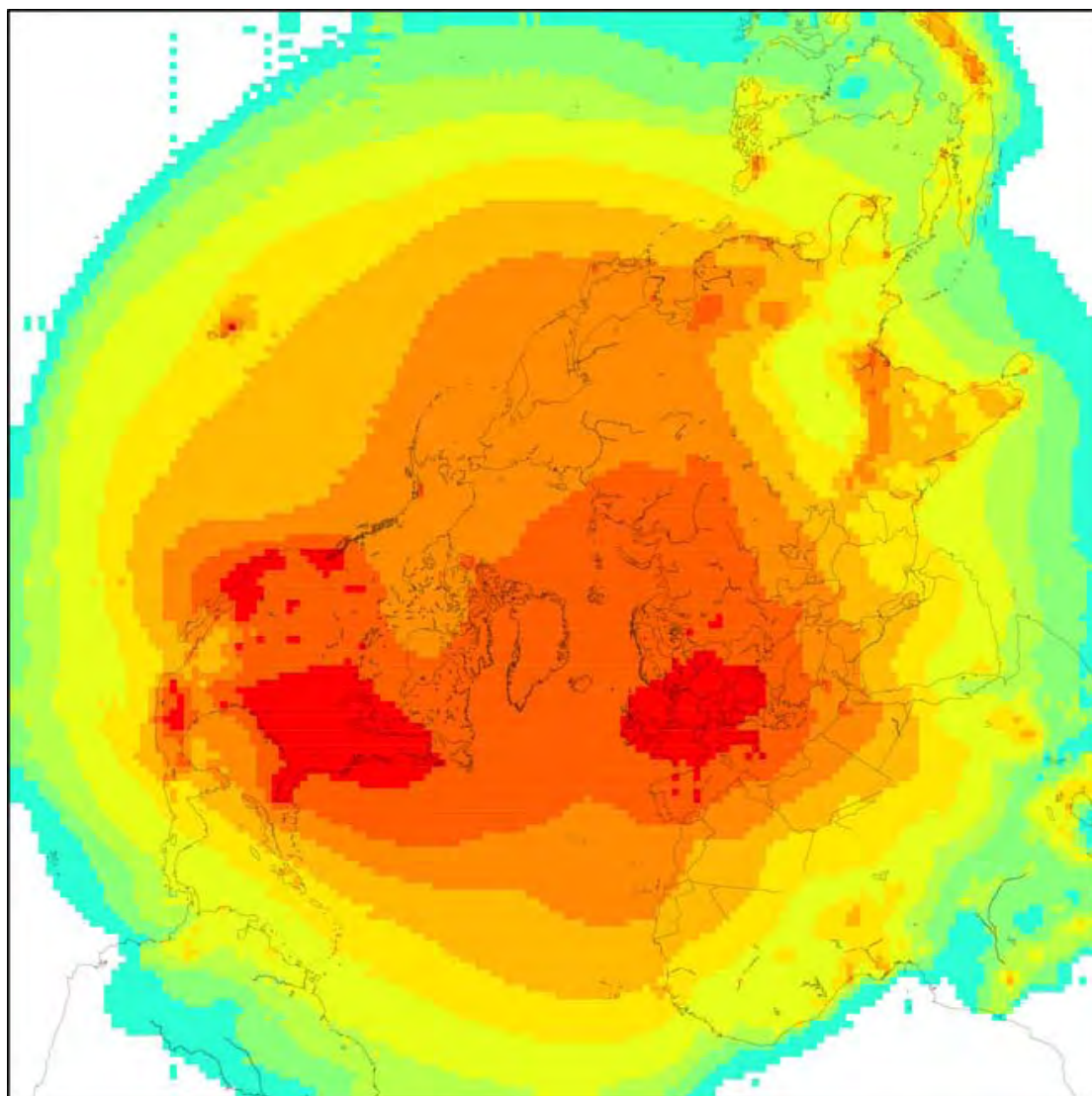


Figure S8: Simulated D<sub>5</sub> concentrations in air in the Northern Hemisphere. The average concentrations during the total simulation period (January-June 2009) are shown.

**Table S1:** Information on the samples collected including start time, stop time, volume sampled and the time the cartridges were stored before extraction.

| Start            | Stop             | Sampling time |       | Sample volume  |                | Storage |
|------------------|------------------|---------------|-------|----------------|----------------|---------|
|                  |                  |               |       | Pump A         | Pump B         | time    |
|                  |                  | min.          | hours | m <sup>3</sup> | m <sup>3</sup> | days    |
| 2009-01-19 22:35 | 2009-01-20 22:35 | 1440          | 24    | 3.7            | 3.5            | 5.6     |
| 2009-01-20 22:35 | 2009-01-21 23:30 | 1495          | 25    | 4.0            | 3.8            | 4.5     |
| 2009-01-21 23:30 | 2009-01-22 23:40 | 1450          | 24    | 3.7            | 2.4            | 3.5     |
| 2009-01-22 23:40 | 2009-01-23 20:00 | 1220          | 20    | 3.2            | 2.0            | 2.7     |
| 2009-01-23 20:00 | 2009-01-26 20:00 | 4320          | 72    | 9.6            | 7.2            | 6.7     |
| 2009-01-26 20:00 | 2009-01-27 19:45 | 1425          | 24    | 3.2            | 2.4            | 5.7     |
| 2009-01-27 19:45 | 2009-01-28 21:10 | 1525          | 25    | 3.6            | 2.5            | 4.6     |
| 2009-01-28 21:10 | 2009-01-29 21:23 | 1453          | 24    | 3.6            | 3.5            | 3.6     |
| 2009-01-29 21:23 | 2009-01-30 19:40 | 1337          | 22    | 3.3            | 3.4            | 2.7     |
| 2009-01-30 19:40 | 2009-02-01 23:36 | 3116          | 52    | 7.6            | 7.7            | 7.5     |
| 2009-02-01 23:36 | 2009-02-02 20:53 | 1277          | 21    | 3.3            | 3.1            | 6.6     |
| 2009-02-02 20:53 | 2009-02-03 20:20 | 1407          | 23    | 3.8            | 3.3            | 5.7     |
| 2009-02-03 20:20 | 2009-02-04 23:34 | 1634          | 27    | 4.0            | 3.9            | 4.5     |
| 2009-02-04 23:34 | 2009-02-05 23:20 | 1426          | 24    | 3.6            | 3.7            | 3.5     |
| 2009-02-05 23:20 | 2009-02-06 20:20 | 1260          | 21    | 3.1            | 3.1            | 2.7     |
| 2009-02-06 20:20 | 2009-02-08 20:30 | 2890          | 48    | 5.7            | 4.9            | 7.6     |
| 2009-02-08 20:30 | 2009-02-09 19:43 | 1393          | 23    | 3.4            | 3.5            | 6.7     |
| 2009-02-09 19:43 | 2009-02-10 19:45 | 1442          | 24    | 3.5            | 3.4            | 5.7     |
| 2009-02-10 19:45 | 2009-02-11 20:57 | 1512          | 25    | 3.8            | 4.1            | 4.6     |
| 2009-02-11 20:57 | 2009-02-12 21:13 | 1456          | 24    | 3.7            | 3.8            | 3.6     |
| 2009-02-12 21:13 | 2009-02-13 13:30 | 977           | 16    | 2.4            | 2.3            | 2.4     |
| 2009-02-18 23:35 | 2009-02-19 18:50 | 1155          | 19    | 3.0            | 2.8            | 3.7     |
| 2009-02-19 18:50 | 2009-02-20 17:05 | 1335          | 22    | 2.4            | 3.2            | 2.8     |
| 2009-02-20 17:05 | 2009-02-22 21:25 | 3140          | 52    | 4.7            | 6.5            | 7.6     |
| 2009-02-22 21:25 | 2009-02-23 20:28 | 1383          | 23    | 2.7            | 3.8            | 6.6     |
| 2009-02-23 20:28 | 2009-02-24 18:15 | 1307          | 22    | 3.1            | 3.4            | 5.7     |
| 2009-02-24 18:15 | 2009-02-25 18:42 | 1467          | 24    | 3.3            | 3.4            | 4.7     |
| 2009-02-25 18:42 | 2009-02-26 19:31 | 1489          | 25    | 3.7            | 3.6            | 3.7     |
| 2009-02-26 19:31 | 2009-02-27 17:40 | 1329          | 22    | 3.3            | 3.5            | 2.8     |
| 2009-02-27 17:40 | 2009-03-01 23:46 | 3246          | 54    | 6.6            | 7.0            | 7.5     |
| 2009-03-01 23:46 | 2009-03-02 20:28 | 1242          | 21    | 3.6            | 3.1            | 6.6     |
| 2009-03-02 20:28 | 2009-03-03 18:31 | 1323          | 22    | 3.7            | 3.4            | 5.7     |
| 2009-03-03 18:31 | 2009-03-04 19:37 | 1506          | 25    | 4.1            | 3.7            | 4.7     |
| 2009-03-04 19:37 | 2009-03-05 18:01 | 1344          | 22    | 3.8            | 3.4            | 3.7     |
| 2009-03-05 18:01 | 2009-03-06 17:45 | 1424          | 24    | 4.1            | 3.4            | 2.8     |
| 2009-03-06 17:45 | 2009-03-09 19:50 | 4445          | 74    | 12             | 12             | 6.7     |
| 2009-03-09 19:50 | 2009-03-10 19:50 | 1440          | 24    | 5.1            | 5.5            | 5.7     |
| 2009-03-10 19:50 | 2009-03-11 17:50 | 1320          | 22    | 4.9            | 5.9            | 4.8     |
| 2009-03-11 17:50 | 2009-03-12 17:50 | 1440          | 24    | 5.0            | 5.5            | 3.8     |
| 2009-03-12 17:50 | 2009-03-13 17:47 | 1437          | 24    | 5.2            | 6.0            | 2.8     |
| 2009-03-13 17:47 | 2009-03-15 23:59 | 3252          | 54    | 9.0            | 9.6            | 7.5     |
| 2009-03-15 23:59 | 2009-03-16 18:30 | 1111          | 19    | 4.0            | 4.6            | 6.7     |

|                  |                  |      |    |     |      |     |
|------------------|------------------|------|----|-----|------|-----|
| 2009-03-16 18:30 | 2009-03-17 17:35 | 1385 | 23 | 5.3 | 5.7  | 5.8 |
| 2009-03-17 17:35 | 2009-03-18 18:55 | 1520 | 25 | 5.7 | 6.8  | 4.7 |
| 2009-03-18 18:55 | 2009-03-19 17:50 | 1375 | 23 | 5.3 | 6.0  | 3.8 |
| 2009-03-19 17:50 | 2009-03-20 19:05 | 1515 | 25 | 5.6 | 6.4  | 2.7 |
| 2009-03-20 19:05 | 2009-03-22 23:20 | 3135 | 52 | 7.2 | 7.9  | 7.5 |
| 2009-03-22 23:20 | 2009-03-23 18:57 | 1177 | 20 | 4.4 | 4.6  | 6.7 |
| 2009-03-23 18:57 | 2009-03-24 17:18 | 1341 | 22 | 5.0 | 5.2  | 5.8 |
| 2009-03-24 17:18 | 2009-03-26 19:24 | 3006 | 50 | 11  | 12   | 3.7 |
| 2009-03-26 19:24 | 2009-03-27 17:13 | 1309 | 22 | 4.9 | 5.2  | 2.8 |
| 2009-03-27 17:13 | 2009-03-29 20:35 | 3082 | 51 | 8.4 | 8.3  | 4.6 |
| 2009-03-29 20:35 | 2009-03-30 17:21 | 1246 | 21 | 4.7 | 5.1  | 3.8 |
| 2009-03-30 17:21 | 2009-03-31 18:27 | 1506 | 25 | 5.3 | 5.7  | 2.7 |
| 2009-03-31 18:27 | 2009-04-01 18:56 | 1469 | 24 | 5.0 | 5.6  | 1.7 |
| 2009-04-01 18:56 | 2009-04-02 17:33 | 1357 | 23 | 4.8 | 5.4  | 0.8 |
| 2009-04-02 17:33 | 2009-04-05 20:20 | 4487 | 75 | 11  | 11   | 8.7 |
| 2009-04-05 20:20 | 2009-04-06 19:21 | 1381 | 23 | 4.1 | 4.4  | 7.7 |
| 2009-04-06 19:21 | 2009-04-07 18:54 | 1413 | 24 | 4.1 | 4.8  | 6.7 |
| 2009-04-07 18:54 | 2009-04-08 21:02 | 1568 | 26 | 4.8 | 5.2  | 5.6 |
| 2009-04-08 21:02 | 2009-04-10 07:43 | 2081 | 35 | 6.3 | 6.4  | 4.2 |
| 2009-04-10 07:43 | 2009-04-13 23:16 | 5253 | 88 | 13  | 12   | 9.5 |
| 2009-04-13 23:16 | 2009-04-14 18:26 | 1150 | 19 | 3.1 | 3.5  | 8.7 |
| 2009-04-14 18:26 | 2009-04-15 19:15 | 1489 | 25 | 4.8 | 4.5  | 7.7 |
| 2009-04-15 19:15 | 2009-04-16 19:26 | 1451 | 24 | 4.3 | 5.1  | 6.7 |
| 2009-04-16 19:26 | 2009-04-17 18:45 | 1399 | 23 | 1.4 | 2.9  | 5.7 |
| 2009-04-17 18:45 | 2009-04-20 19:17 | 4352 | 73 | 3.7 | 7.8  | 6.7 |
| 2009-04-20 19:17 | 2009-04-21 20:00 | 1483 | 25 | 1.4 | 3.0  | 5.7 |
| 2009-04-21 20:00 | 2009-04-22 19:42 | 1422 | 24 | 1.4 | 2.7  | 4.7 |
| 2009-04-22 19:42 | 2009-04-23 18:17 | 1355 | 23 | 1.3 | 2.6  | 3.7 |
| 2009-04-23 18:17 | 2009-04-24 18:03 | 1426 | 24 | 1.4 | 2.8  | 2.7 |
| 2009-04-24 18:03 | 2009-04-26 21:51 | 3108 | 52 | 2.8 | 4.9  | 7.6 |
| 2009-04-26 21:51 | 2009-04-27 19:18 | 1287 | 21 | 1.3 | 2.4  | 6.7 |
| 2009-04-27 19:18 | 2009-04-28 19:50 | 1472 | 25 | 3.5 | 2.8  | 5.7 |
| 2009-04-28 19:50 | 2009-04-29 19:52 | 1442 | 24 | 3.1 | 4.5  | 4.7 |
| 2009-04-29 19:52 | 2009-04-30 16:56 | 1264 | 21 | 2.6 | 4.1  | 3.8 |
| 2009-04-30 16:56 | 2009-05-03 23:28 | 4712 | 79 | 7.6 | 10.9 | 7.5 |
| 2009-05-03 23:28 | 2009-05-04 19:58 | 1230 | 20 | 2.6 | 4.0  | 6.7 |
| 2009-05-04 19:58 | 2009-05-05 20:30 | 1472 | 25 | 2.9 | 4.9  | 5.6 |
| 2009-05-05 20:30 | 2009-05-06 19:36 | 1386 | 23 | 2.9 | 4.6  | 4.7 |
| 2009-05-06 19:36 | 2009-05-07 22:43 | 1627 | 27 | 3.1 | 5.3  | 3.6 |
| 2009-05-07 22:43 | 2009-05-08 21:31 | 1368 | 23 | 3.2 | 3.7  | 2.6 |
| 2009-05-08 21:31 | 2009-05-10 23:06 | 2975 | 50 | 6.3 | 6.8  | 7.5 |
| 2009-05-10 23:06 | 2009-05-11 18:02 | 1136 | 19 | 3.3 | 4.1  | 6.7 |
| 2009-05-11 18:02 | 2009-05-12 17:52 | 1430 | 24 | 5.2 | 4.7  | 5.8 |
| 2009-05-12 17:52 | 2009-05-13 17:36 | 1424 | 24 | 4.1 | 4.8  | 4.8 |
| 2009-05-13 17:36 | 2009-05-14 19:37 | 1561 | 26 | 4.5 | 5.6  | 3.7 |
| 2009-05-14 19:37 | 2009-05-17 23:51 | 4574 | 76 | 9.4 | 10.0 | 7.5 |
| 2009-05-17 23:51 | 2009-05-18 19:47 | 1196 | 20 | 3.4 | 4.0  | 6.7 |

|                  |                  |      |     |     |     |     |
|------------------|------------------|------|-----|-----|-----|-----|
| 2009-05-18 19:47 | 2009-05-19 19:18 | 1411 | 24  | 4.3 | 4.7 | 5.7 |
| 2009-05-19 19:18 | 2009-05-20 19:06 | 1428 | 24  | 4.4 | 4.6 | 4.7 |
| 2009-05-20 19:06 | 2009-05-21 12:50 | 1064 | 18  | 3.4 | 3.6 | 4.0 |
| 2009-05-21 12:50 | 2009-05-25 19:31 | 6161 | 103 | 12  | 12  | 6.7 |
| 2009-05-25 19:31 | 2009-05-26 19:09 | 1418 | 24  | 4.4 | 4.6 | 5.7 |
| 2009-05-26 19:09 | 2009-05-27 17:37 | 1348 | 22  | 4.2 | 4.4 | 4.8 |
| 2009-05-27 17:37 | 2009-05-28 19:13 | 1536 | 26  | 4.4 | 5.0 | 3.7 |
| 2009-05-28 19:13 | 2009-05-29 06:03 | 650  | 11  | 1.8 | 2.0 | 3.2 |
| 2009-05-29 06:03 | 2009-06-01 18:18 | 5055 | 84  | 11  | 11  | 6.7 |
| 2009-06-01 18:18 | 2009-06-02 19:40 | 1522 | 25  | 4.5 | 5.1 | 5.7 |
| 2009-06-02 19:40 | 2009-06-03 20:33 | 1493 | 25  | 4.3 | 4.6 | 4.6 |
| 2009-06-03 20:33 | 2009-06-04 18:56 | 1343 | 22  | 3.9 | 4.2 | 3.7 |
| 2009-06-04 18:56 | 2009-06-05 19:00 | 1444 | 24  | 4.2 | 4.6 | 2.7 |
| 2009-06-05 19:00 | 2009-06-07 23:02 | 3122 | 52  | 6.4 | 7.1 | 8.5 |
| 2009-06-07 23:02 | 2009-06-08 19:52 | 1250 | 21  | 3.7 | 4.0 | 7.7 |
| 2009-06-08 19:52 | 2009-06-09 17:10 | 1278 | 21  | 3.5 | 4.3 | 6.8 |
| 2009-06-09 17:10 | 2009-06-10 19:16 | 1566 | 26  | 4.6 | 4.8 | 5.7 |
| 2009-06-10 19:16 | 2009-06-11 19:59 | 1483 | 25  | 4.1 | 4.5 | 4.7 |
| 2009-06-11 19:59 | 2009-06-12 19:33 | 1414 | 24  | 4.7 | 4.5 | 3.7 |
| 2009-06-12 19:33 | 2009-06-15 18:46 | 4273 | 71  | 9.3 | 8.7 | 4.7 |

**Table S2:** Physical chemical properties of D5 used in the model simulations

| Property                                                              | Value                  | Units                                       | Source                |
|-----------------------------------------------------------------------|------------------------|---------------------------------------------|-----------------------|
| Log air/water partition coefficient (log $K_{AW}$ )                   | 2.96                   | $\text{m}^3 \text{m}^{-3}$                  | Brooke et al. (2009)  |
| Log octanol/water partition coefficient (log $K_{OW}$ ) (25°C)        | 8.03                   | $\text{m}^3 \text{m}^{-3}$                  | Brooke et al. (2009)  |
| Log octanol/air partition coefficient (log $K_{OA}$ ) (25°C)          | 5.07                   | $\text{m}^3 \text{m}^{-3}$                  | Brooke et al. (2009)  |
| Heat of phase change between air and water ( $\Delta U_{AW}$ ) (25°C) | 92.7                   | $\text{kJ mol}^{-1}$                        | Xu (2009)             |
| Heat of phase change between octanol and water ( $\Delta U_{OW}$ )    | 40.0                   | $\text{kJ mol}^{-1}$                        | Xu (2009)             |
| Heat of phase change between octanol and air ( $\Delta U_{OA}$ )      | -47.9                  | $\text{kJ mol}^{-1}$                        | Xu (2009)             |
| Rate constant for phototransformation (24°C)                          | $1.55 \times 10^{-12}$ | $\text{cm}^3 \text{mol}^{-1} \text{s}^{-1}$ | Atkinson (1991)       |
| Activation energy for phototransformation                             | 0.648*                 | $\text{kJ mol}^{-1}$                        | Jiménez et al. (2005) |

\*based on 2-butanone due to the absence of a measured value for D5.

**Table S3:** D5 quantities in the field blanks, back-up cartridges, and samples, as well as the concentrations in the samples.

| Sampling stop time | Sample cartridge |     | Field blanks |      | D5 concentration  |                   | Mean              |
|--------------------|------------------|-----|--------------|------|-------------------|-------------------|-------------------|
|                    | A                | B   | A            | B    | A                 | B                 | Conc.             |
|                    | ng               | ng  | ng           | ng   | ng/m <sup>3</sup> | ng/m <sup>3</sup> | ng/m <sup>3</sup> |
| 2009-01-20 22:35   | 26               | 25  | 0.74         | 0.16 | 7.2               | 7.2               | 7.2               |
| 2009-01-21 23:30   | 24               |     | 0.18         |      | 6.1               |                   | 6.1               |
| 2009-01-22 23:40   | 19               | 17  | 0.13         | 0.15 | 5.3               | 7.0               | 6.2               |
| 2009-01-23 20:00   | 17               | 9.7 | 0.17         | 0.13 | 5.3               | 4.9               | 5.1               |
| 2009-01-26 20:00   | 36               | 41  | 0.69         | 0.09 | 3.8               | 5.7               | 4.7               |
| 2009-01-27 19:45   | 29               | 21  | 1.0          | 1.6  | 8.8               | 8.7               | 8.8               |
| 2009-01-28 21:10   | 28               | 21  | 4.5          | 2.3  | 7.7               | 8.3               | 8.0               |
| 2009-01-29 21:23   | 27               | 26  | 1.7          | 1.3  | 7.6               | 7.2               | 7.4               |
| 2009-01-30 19:40   | 21               | 20  | 0.36         | 3.0  | 6.5               | 6.0               | 6.3               |
| 2009-02-01 23:36   | 32               | 21  | 3.4          | 2.2  | 4.3               | 2.7               | 3.5               |
| 2009-02-02 20:53   | 11               | 11  | 1.6          | 1.4  | 3.3               | 3.6               | 3.4               |
| 2009-02-03 20:20   | 25               | 25  | 1.3          | 1.5  | 6.6               | 7.6               | 7.1               |
| 2009-02-04 23:34   | 11               | 11  | 1.2          | 2.9  | 2.9               | 2.8               | 2.8               |
| 2009-02-05 23:20   | 13               | 11  | 1.5          | 0.56 | 3.5               | 3.0               | 3.3               |
| 2009-02-06 20:20   | 24               | 21  | 0.51         | 0.99 | 7.9               | 7.0               | 7.5               |
| 2009-02-08 20:30   | 31               | 32  | 0.84         | 2.8  | 5.5               | 6.4               | 5.9               |
| 2009-02-09 19:43   | 13               | 9.7 | 0.59         | 0.83 | 3.8               | 2.8               | 3.3               |
| 2009-02-10 19:45   | 5.7              | 10  | 0.45         | 1.0  | 1.6               | 3.0               | 2.3               |
| 2009-02-11 20:57   | 11               | 13  | 0.61         | 0.62 | 3.0               | 3.2               | 3.1               |
| 2009-02-12 21:13   | 8.5              | 9.0 | 2.8          | 0.74 | 2.3               | 2.4               | 2.3               |
| 2009-02-13 13:30   | 8.3              | 8.7 | 0.62         | 0.47 | 3.5               | 3.8               | 3.6               |
| 2009-02-19 18:50   | 7.8              | 6.9 | 1.1          | 1.8  | 2.6               | 2.4               | 2.5               |
| 2009-02-20 17:05   | 8.1              | 11  | 0.51         | 0.58 | 3.4               | 3.4               | 3.4               |
| 2009-02-22 21:25   | 16               | 24  | 0.09         | 0.09 | 3.5               | 3.7               | 3.6               |
| 2009-02-23 20:28   | 12               | 17  | 0.14         | 0.16 | 4.6               | 4.6               | 4.6               |
| 2009-02-24 18:15   | 25               | 28  | 0.12         | 0.10 | 8.0               | 8.2               | 8.1               |
| 2009-02-25 18:42   | 8.7              | 12  | 0.69         | 0.47 | 2.6               | 3.5               | 3.1               |
| 2009-02-26 19:31   | 10               | 11  | 0.57         | 0.91 | 2.8               | 3.1               | 3.0               |
| 2009-02-27 17:40   | 6.8              | 7.4 | 1.6          | 0.09 | 2.1               | 2.1               | 2.1               |
| 2009-03-01 23:46   | 12               | 16  | 0.12         | 0.12 | 1.8               | 2.3               | 2.1               |
| 2009-03-02 20:28   | 9.3              | 9.0 | 0.16         | 0.19 | 2.6               | 2.9               | 2.7               |
| 2009-03-03 18:31   | 22               | 15  | 0.13         | 0.09 | 6.0               | 4.5               | 5.2               |
| 2009-03-04 19:37   | 23               | 18  | 0.06         | 0.06 | 5.7               | 4.7               | 5.2               |
| 2009-03-05 18:01   | 24               | 22  | 0.05         | 0.05 | 6.4               | 6.6               | 6.5               |
| 2009-03-06 17:45   | 20               | 16  | 0.06         | 0.06 | 4.8               | 4.7               | 4.8               |
| 2009-03-09 19:50   | 25               | 26  | 0.25         | 0.10 | 2.1               | 2.2               | 2.1               |
| 2009-03-10 19:50   |                  | 16  |              | 0.06 |                   | 3.0               | 3.0               |
| 2009-03-11 17:50   |                  | 15  |              | 0.10 |                   | 2.6               | 2.6               |
| 2009-03-12 17:50   |                  | 21  |              | 0.10 |                   | 3.8               | 3.8               |
| 2009-03-13 17:47   |                  | 20  |              | 0.10 |                   | 3.3               | 3.3               |
| 2009-03-15 23:59   | 43               | 50  | 0.18         | 0.17 | 4.8               | 5.2               | 5.0               |

|                  |     |     |      |      |     |     |     |
|------------------|-----|-----|------|------|-----|-----|-----|
| 2009-03-16 18:30 | 22  | 23  | 0.20 | 0.11 | 5.5 | 5.0 | 5.2 |
| 2009-03-17 17:35 | 40  | 32  | 0.19 | 0.14 | 7.6 | 5.5 | 6.6 |
| 2009-03-18 18:55 | 15  | 15  | 0.18 | 0.07 | 2.6 | 2.3 | 2.5 |
| 2009-03-19 17:50 | 14  | 16  | 0.12 | 0.05 | 2.6 | 2.6 | 2.6 |
| 2009-03-20 19:05 | 32  | 30  | 0.11 | 0.22 | 5.6 | 4.7 | 5.1 |
| 2009-03-22 23:20 | 29  | 36  | 0.08 | 0.10 | 4.1 | 4.5 | 4.3 |
| 2009-03-23 18:57 | 13  | 17  | 0.56 | 0.67 | 3.0 | 3.8 | 3.4 |
| 2009-03-24 17:18 | 11  | 10  | 0.12 | 0.41 | 2.3 | 2.0 | 2.2 |
| 2009-03-26 19:24 | 41  | 47  | 0.06 | 0.20 | 3.8 | 3.9 | 3.8 |
| 2009-03-27 17:13 | 11  | 12  | 0.11 | 0.19 | 2.3 | 2.2 | 2.3 |
| 2009-03-29 20:35 | 46  | 35  | 0.19 | 0.35 | 5.5 | 4.3 | 4.9 |
| 2009-03-30 17:21 | 22  | 28  | 0.10 | 0.11 | 4.8 | 5.4 | 5.1 |
| 2009-03-31 18:27 | 29  | 28  | 0.15 | 0.10 | 5.4 | 4.9 | 5.2 |
| 2009-04-01 18:56 | 19  | 22  | 0.21 | 0.07 | 3.8 | 3.9 | 3.9 |
| 2009-04-02 17:33 | 28  | 32  | 0.05 | 0.04 | 5.8 | 5.9 | 5.9 |
| 2009-04-05 20:20 | 88  | 95  | 0.34 | 0.18 | 7.9 | 8.3 | 8.1 |
| 2009-04-06 19:21 | 19  | 20  | 0.23 | 0.28 | 4.6 | 4.7 | 4.6 |
| 2009-04-07 18:54 | 31  | 35  | 0.39 | 0.44 | 7.5 | 7.2 | 7.3 |
| 2009-04-08 21:02 | 13  | 15  | 0.28 | 0.20 | 2.8 | 2.9 | 2.8 |
| 2009-04-10 07:43 | 37  | 42  | 0.47 | 0.35 | 6.0 | 6.5 | 6.3 |
| 2009-04-13 23:16 | 66  | 63  | 0.31 | 0.35 | 4.9 | 5.4 | 5.1 |
| 2009-04-14 18:26 | 15  | 16  | 0.33 | 0.56 | 4.9 | 4.5 | 4.7 |
| 2009-04-15 19:15 | 35  | 28  | 0.46 | 0.21 | 7.2 | 6.2 | 6.7 |
| 2009-04-16 19:26 | 11  | 13  | 0.26 | 1.2  | 2.6 | 2.6 | 2.6 |
| 2009-04-17 18:45 | 4.6 | 9.0 | 0.23 | 0.17 | 3.3 | 3.2 | 3.2 |
| 2009-04-20 19:17 | 6.8 | 14  | 0.20 | 0.27 | 1.8 | 1.8 | 1.8 |
| 2009-04-21 20:00 | 1.9 | 4.8 | 0.32 | 0.47 | 1.4 | 1.6 | 1.5 |
| 2009-04-22 19:42 | 3.4 | 6.2 | 0.47 | 0.49 | 2.4 | 2.3 | 2.4 |
| 2009-04-23 18:17 | 9.1 | 20  | 0.11 | 0.28 | 7.1 | 7.6 | 7.3 |
| 2009-04-24 18:03 | 9.0 | 20  | 0.19 | 0.16 | 6.5 | 7.1 | 6.8 |
| 2009-04-26 21:51 | 13  | 24  | 0.20 | 0.10 | 4.8 | 4.9 | 4.9 |
| 2009-04-27 19:18 | 9.8 | 21  | 0.25 | 0.30 | 7.7 | 8.5 | 8.1 |
| 2009-04-28 19:50 | 28  | 23  | 0.23 | 0.50 | 7.9 | 8.1 | 8.0 |
| 2009-04-29 19:52 | 17  | 28  | 0.46 | 1.05 | 5.5 | 6.2 | 5.9 |
| 2009-04-30 16:56 | 15  | 24  | 0.12 | 0.59 | 5.9 | 5.9 | 5.9 |
| 2009-05-03 23:28 | 20  | 30  | 0.11 | 0.12 | 2.6 | 2.7 | 2.7 |
| 2009-05-04 19:58 | 8.7 | 15  | 0.26 | 0.19 | 3.3 | 3.7 | 3.5 |
| 2009-05-05 20:30 | 7.3 | 15  | 0.20 | 0.39 | 2.5 | 3.2 | 2.8 |
| 2009-05-06 19:36 | 4.9 | 8.1 | 0.43 | 0.22 | 1.7 | 1.7 | 1.7 |
| 2009-05-07 22:43 | 9.1 | 18  | 0.26 | 0.19 | 2.9 | 3.4 | 3.2 |
| 2009-05-08 21:31 | 8.8 | 10  | 0.13 | 0.14 | 2.7 | 2.8 | 2.8 |
| 2009-05-10 23:06 | 11  | 16  | 0.29 | 0.13 | 1.7 | 2.3 | 2.0 |
| 2009-05-11 18:02 | 5.2 | 6.2 | 0.13 | 0.42 | 1.6 | 1.5 | 1.6 |
| 2009-05-12 17:52 | 4.4 | 9.3 | 0.60 | 0.45 | 0.9 | 2.0 | 1.4 |
| 2009-05-13 17:36 | 3.9 | 4.5 | 0.56 | 0.18 | 1.0 | 0.9 | 1.0 |
| 2009-05-14 19:37 | 3.6 | 4.7 | 0.12 | 0.14 | 0.8 | 0.9 | 0.8 |
| 2009-05-17 23:51 | 7.2 | 7.2 | 0.17 | 0.19 | 0.8 | 0.7 | 0.7 |

|                  |     |     |      |      |     |     |     |
|------------------|-----|-----|------|------|-----|-----|-----|
| 2009-05-18 19:47 | 5.4 | 5.4 | 2.1  | 0.65 | 1.6 | 1.4 | 1.5 |
| 2009-05-19 19:18 | 11  | 12  | 0.64 | 0.20 | 2.7 | 2.6 | 2.6 |
| 2009-05-20 19:06 | 18  | 19  | 1.4  | 0.17 | 4.2 | 4.1 | 4.1 |
| 2009-05-21 12:50 | 17  | 17  | 0.61 | 0.17 | 5.0 | 4.7 | 4.9 |
| 2009-05-25 19:31 | 40  | 33  | 0.10 | 0.10 | 3.4 | 2.7 | 3.0 |
| 2009-05-26 19:09 | 14  | 13  | 0.32 | 0.45 | 3.3 | 2.9 | 3.1 |
| 2009-05-27 17:37 | 13  | 14  | 0.16 | 0.25 | 3.2 | 3.1 | 3.1 |
| 2009-05-28 19:13 | 7.1 | 8.5 | 0.19 | 0.25 | 1.6 | 1.7 | 1.7 |
| 2009-05-29 06:03 | 2.1 | 2.3 | 0.28 | 0.26 | 1.2 | 1.1 | 1.1 |
| 2009-06-01 18:18 | 19  | 20  | 0.52 | 0.22 | 1.7 | 1.8 | 1.8 |
| 2009-06-02 19:40 | 8.5 | 9.7 | 0.11 | 0.11 | 1.9 | 1.9 | 1.9 |
| 2009-06-03 20:33 | 3.2 | 3.6 | 0.24 | 0.15 | 0.7 | 0.8 | 0.8 |
| 2009-06-04 18:56 | 1.3 | 1.6 | 0.07 | 0.18 | 0.3 | 0.4 | 0.4 |
| 2009-06-05 19:00 | 1.4 | 1.4 | 0.11 | 0.21 | 0.3 | 0.3 | 0.3 |
| 2009-06-07 23:02 | 4.5 | 5.5 | 0.11 | 0.21 | 0.7 | 0.8 | 0.7 |
| 2009-06-08 19:52 | 7.8 | 7.7 | 0.28 | 0.20 | 2.1 | 1.9 | 2.0 |
| 2009-06-09 17:10 | 4.5 | 6.2 | 1.2  | 1.1  | 1.3 | 1.4 | 1.4 |
| 2009-06-10 19:16 | 6.9 | 8.4 | 0.09 | 1.8  | 1.5 | 1.7 | 1.6 |
| 2009-06-11 19:59 | 17  | 17  | 0.06 | 0.30 | 4.1 | 3.9 | 4.0 |
| 2009-06-12 19:33 | 18  | 14  | 0.05 | 0.60 | 3.9 | 3.1 | 3.5 |
| 2009-06-15 18:46 | 9.9 | 9.1 | 0.07 | 0.22 | 1.1 | 1.0 | 1.1 |

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