

Table S1. Average field blank concentration by carbon fraction at the 181 sites in the IMPROVE network from 1/1/2005 to 12/31/2006.

Site ID	Site Name	State	Sampling Period		No. of Field Blanks	Carbon Concentrations ($\mu\text{g}/\text{cm}^3$)									
			From	To		TC	OC	EC	OC1	OC2	OC3	OC4	EC1	EC2	EC3
ACAD1	Acadia NP	ME	1/13/2005	1/5/2006	3	2.49 ± 0.64	2.44 ± 0.57	0.06 ± 0.1	0.56 ± 0.1	0.81 ± 0.21	0.92 ± 0.27	0.15 ± 0.07	0.06 ± 0.1	0 ± 0	0 ± 0
ADPI1	Addison Pinnacle	NY	1/13/2005	5/11/2006	6	2.09 ± 0.29	2.09 ± 0.29	0 ± 0	0.52 ± 0.11	0.76 ± 0.16	0.72 ± 0.13	0.07 ± 0.06	0.01 ± 0.03	0 ± 0	0 ± 0
AGTI1	Agua Tibia	CA	5/19/2005	11/16/2006	7	3.13 ± 0.77	3.1 ± 0.77	0.03 ± 0.03	0.91 ± 0.32	1.04 ± 0.21	1 ± 0.34	0.14 ± 0.06	0.02 ± 0.04	0.01 ± 0.02	0 ± 0
AREN1	Arendtsville	PA	1/13/2005	3/30/2006	5	2.03 ± 0.89	1.99 ± 0.85	0.04 ± 0.06	0.58 ± 0.28	0.66 ± 0.37	0.62 ± 0.25	0.13 ± 0.11	0 ± 0	0.04 ± 0.06	0 ± 0
ATLA1	Atlanta	GA	1/13/2005	11/19/2006	8	2.31 ± 0.54	2.28 ± 0.55	0.02 ± 0.04	0.59 ± 0.21	0.84 ± 0.21	0.73 ± 0.16	0.13 ± 0.07	0.01 ± 0.02	0.01 ± 0.02	0 ± 0
BADL1	Badlands NP	SD	1/13/2005	12/7/2006	7	3.17 ± 1.04	3.11 ± 0.97	0.05 ± 0.09	1.07 ± 0.75	0.9 ± 0.24	0.97 ± 0.32	0.17 ± 0.11	0.01 ± 0.02	0.04 ± 0.06	0.01 ± 0.02
BALD1	Mount Baldy	AZ	3/17/2005	6/1/2006	5	2.19 ± 0.83	2.18 ± 0.82	0.01 ± 0.02	0.75 ± 0.33	0.62 ± 0.24	0.72 ± 0.23	0.09 ± 0.08	0.01 ± 0.02	0.01 ± 0.01	0 ± 0
BALT1	Baltimore	MD	1/13/2005	12/15/2005	4	2.21 ± 0.43	2.19 ± 0.4	0.02 ± 0.03	0.63 ± 0.19	0.76 ± 0.14	0.71 ± 0.13	0.09 ± 0.06	0 ± 0	0.02 ± 0.03	0 ± 0
BAND1	Bandelier NM	NM	3/17/2005	12/28/2006	9	2.82 ± 0.83	2.79 ± 0.8	0.02 ± 0.05	0.91 ± 0.23	0.88 ± 0.33	0.87 ± 0.28	0.13 ± 0.08	0.01 ± 0.02	0.02 ± 0.03	0 ± 0
BIBE1	Big Bend NP	TX	3/17/2005	8/24/2006	7	2.4 ± 0.68	2.3 ± 0.46	0.11 ± 0.28	0.62 ± 0.13	0.77 ± 0.2	0.79 ± 0.13	0.11 ± 0.06	0.01 ± 0.03	0.02 ± 0.06	0.07 ± 0.19
BIRM1	Birmingham	AL	1/13/2005	8/24/2006	5	2.25 ± 0.41	2.25 ± 0.41	0 ± 0	0.67 ± 0.16	0.8 ± 0.18	0.7 ± 0.19	0.08 ± 0.06	0 ± 0	0 ± 0	0 ± 0
BLIS1	Bliss SP (TRPA)	CA	3/17/2005	10/26/2006	10	2.68 ± 0.64	2.62 ± 0.59	0.06 ± 0.08	0.64 ± 0.31	0.78 ± 0.15	1.02 ± 0.43	0.19 ± 0.1	0.04 ± 0.06	0.03 ± 0.04	0 ± 0
BLMO1	Blue Mounds	MN	1/13/2005	1/5/2006	4	1.53 ± 0.23	1.53 ± 0.23	0 ± 0	0.42 ± 0.13	0.47 ± 0.11	0.61 ± 0.21	0.05 ± 0.02	0 ± 0.01	0 ± 0.01	0 ± 0.01
BOAP1	Bosque del Apache	NM	1/13/2005	12/7/2006	8	3.12 ± 1.36	3 ± 1.2	0.13 ± 0.18	0.65 ± 0.24	0.98 ± 0.39	1.09 ± 0.51	0.28 ± 0.24	0.04 ± 0.06	0.08 ± 0.13	0 ± 0
BOND1	Bondville	IL	3/17/2005	11/16/2006	5	1.89 ± 0.93	1.85 ± 0.9	0.04 ± 0.03	0.41 ± 0.23	0.61 ± 0.28	0.7 ± 0.35	0.13 ± 0.08	0.02 ± 0.03	0.02 ± 0.03	0 ± 0
BOWA1	Boundary Waters Canoe Area	MN	3/30/2006	9/14/2006	3	2.01 ± 0.72	1.94 ± 0.62	0.07 ± 0.11	0.42 ± 0.09	0.71 ± 0.21	0.68 ± 0.21	0.14 ± 0.14	0.03 ± 0.06	0.03 ± 0.06	0 ± 0
BRCA1	Bryce Canyon NP	UT	7/21/2005	11/16/2006	5	3.1 ± 1.05	3 ± 0.91	0.1 ± 0.17	0.94 ± 0.43	0.96 ± 0.25	0.9 ± 0.16	0.19 ± 0.1	0.02 ± 0.03	0.06 ± 0.09	0.03 ± 0.06
BRET1	Breton	LA	2/3/2005	2/3/2005	1	2.32 ± 0	2.32 ± 0	0 ± 0	0.6 ± 0	0.78 ± 0	0.88 ± 0	0.07 ± 0	0 ± 0	0 ± 0	0 ± 0
BRID1	Bridger Wilderness	WY	5/19/2005	12/7/2006	2	2.45 ± 0.51	2.39 ± 0.39	0.07 ± 0.1	0.56 ± 0.22	0.88 ± 0.09	0.83 ± 0.18	0.13 ± 0.06	0.06 ± 0.05	0.03 ± 0.02	0.01 ± 0.01
BRID9	Bridger Wilderness	WY	1/13/2005	1/13/2005	1	2.62 ± 0	2.47 ± 0	0.15 ± 0	0.62 ± 0	0.87 ± 0	0.77 ± 0	0.21 ± 0	0.06 ± 0	0.06 ± 0	0.03 ± 0
BRIG1	Brigantine NWR	NJ	2/3/2005	5/11/2006	6	2.1 ± 0.81	2.09 ± 0.8	0.01 ± 0.02	0.57 ± 0.29	0.76 ± 0.37	0.7 ± 0.22	0.06 ± 0.06	0 ± 0	0.01 ± 0.02	0 ± 0
BRMA1	Bridgton	ME	1/13/2005	10/26/2006	6	2.19 ± 0.87	2.16 ± 0.8	0.03 ± 0.08	0.47 ± 0.23	0.71 ± 0.15	0.82 ± 0.37	0.15 ± 0.16	0.03 ± 0.08	0.01 ± 0.02	0 ± 0
CABA1	Casco Bay	ME	5/19/2005	12/28/2006	6	2.53 ± 0.68	2.52 ± 0.67	0.01 ± 0.02	0.74 ± 0.22	0.9 ± 0.2	0.76 ± 0.24	0.11 ± 0.07	0 ± 0.01	0.01 ± 0.02	0 ± 0
CABI1	Cabinet Mountains	MT	5/19/2005	2/16/2006	3	2.08 ± 0.66	2.05 ± 0.63	0.03 ± 0.04	0.67 ± 0.17	0.57 ± 0.28	0.7 ± 0.13	0.11 ± 0.07	0 ± 0	0.02 ± 0.04	0 ± 0
CACO1	Cape Cod	MA	10/13/2005	12/28/2006	2	1.93 ± 0.49	1.9 ± 0.46	0.03 ± 0.02	0.61 ± 0.04	0.68 ± 0.3	0.55 ± 0.16	0.06 ± 0.05	0 ± 0	0.03 ± 0.03	0 ± 0.01
CACR1	Caney Creek	AR	1/13/2005	9/14/2006	7	2.58 ± 0.72	2.42 ± 0.57	0.16 ± 0.25	0.48 ± 0.17	0.78 ± 0.29	0.99 ± 0.29	0.17 ± 0.07	0.11 ± 0.26	0.05 ± 0.07	0.01 ± 0.02
CADI1	Cadiz	KY	5/19/2005	11/16/2006	7	2.17 ± 0.53	2.14 ± 0.5	0.03 ± 0.04	0.56 ± 0.17	0.76 ± 0.23	0.72 ± 0.2	0.1 ± 0.09	0.01 ± 0.01	0.02 ± 0.03	0 ± 0
CANY1	Canyonlands NP	UT	7/21/2005	10/5/2006	9	2.63 ± 1.14	2.53 ± 1.02	0.1 ± 0.21	0.76 ± 0.39	0.79 ± 0.31	0.83 ± 0.27	0.15 ± 0.13	0.04 ± 0.07	0.05 ± 0.11	0.01 ± 0.03
CAPI1	Capitol Reef NP	UT	3/17/2005	12/7/2006	6	2.75 ± 0.84	2.72 ± 0.84	0.03 ± 0.05	0.82 ± 0.42	0.87 ± 0.25	0.87 ± 0.26	0.16 ± 0.1	0.01 ± 0.03	0.02 ± 0.02	0 ± 0.01
CEBL1	Cedar Bluff	KS	1/13/2005	10/26/2006	10	2.02 ± 0.69	2.01 ± 0.68	0.01 ± 0.01	0.57 ± 0.19	0.64 ± 0.27	0.72 ± 0.21	0.09 ± 0.08	0 ± 0.01	0 ± 0	0 ± 0
CHAS1	Chassahowitzka NWR	FL	6/9/2005	10/5/2006	8	2 ± 0.54	1.96 ± 0.5	0.04 ± 0.06	0.44 ± 0.16	0.67 ± 0.17	0.77 ± 0.22	0.09 ± 0.06	0.01 ± 0.04	0.03 ± 0.05	0 ± 0
CHER1	Cherokee Nation	OK	10/13/2005	9/14/2006	3	2.1 ± 0.35	2.1 ± 0.35	0 ± 0	0.53 ± 0.16	0.76 ± 0.21	0.72 ± 0.1	0.08 ± 0.05	0 ± 0	0 ± 0	0 ± 0

Table S1. Continued.

Site ID	Site Name	State	Sampling Period		No. of Field Blanks	Carbon Concentrations (µg/cm ²)									
			From	To		TC	OC	EC	OC1	OC2	OC3	OC4	EC1	EC2	EC3
CHIC1	Chicago	IL	1/13/2005	3/17/2005	2	2.28 ± 0.41	2.28 ± 0.41	0 ± 0	0.71 ± 0.03	0.74 ± 0.01	0.74 ± 0.38	0.09 ± 0.05	0 ± 0	0 ± 0	0 ± 0
CHIR1	Chiricahua NM	AZ	1/13/2005	8/24/2006	5	2.23 ± 0.94	2.23 ± 0.94	0.01 ± 0.01	0.71 ± 0.47	0.74 ± 0.24	0.69 ± 0.21	0.09 ± 0.06	0 ± 0	0 ± 0.01	0 ± 0.01
CLPE1	Cloud Peak	WY	3/17/2005	4/20/2006	3	1.87 ± 0.57	1.86 ± 0.56	0.01 ± 0.01	0.56 ± 0.28	0.63 ± 0.14	0.62 ± 0.16	0.05 ± 0.04	0 ± 0	0 ± 0	0 ± 0.01
COGO1	Columbia Gorge #1	WA	3/17/2005	10/5/2006	6	2.41 ± 0.48	2.38 ± 0.46	0.03 ± 0.06	0.68 ± 0.22	0.84 ± 0.18	0.73 ± 0.11	0.13 ± 0.06	0.02 ± 0.03	0.02 ± 0.03	0 ± 0
COHI1	Connecticut Hill	NY	7/21/2005	12/15/2005	3	2.98 ± 0.87	2.94 ± 0.81	0.04 ± 0.07	0.99 ± 0.2	0.95 ± 0.3	0.87 ± 0.3	0.14 ± 0.06	0 ± 0	0.04 ± 0.07	0 ± 0
COHU1	Cohutta	GA	3/17/2005	3/17/2005	1	4.45 ± 0	4.24 ± 0	0.21 ± 0	1.77 ± 0	1.13 ± 0	1.15 ± 0	0.19 ± 0	0.14 ± 0	0.07 ± 0	0 ± 0
COR11	Columbia River Gorge	WA	3/17/2005	12/7/2006	5	2.25 ± 0.91	2.21 ± 0.85	0.05 ± 0.06	0.58 ± 0.32	0.8 ± 0.33	0.72 ± 0.25	0.11 ± 0.08	0.02 ± 0.02	0.03 ± 0.04	0 ± 0
CRES1	Crescent Lake	NE	3/17/2005	6/1/2006	6	2.14 ± 0.35	2.14 ± 0.34	0 ± 0.01	0.69 ± 0.17	0.73 ± 0.1	0.66 ± 0.11	0.06 ± 0.04	0 ± 0	0 ± 0.01	0 ± 0
CRLA1	Crater Lake NP	OR	5/19/2005	12/7/2006	7	2.23 ± 1.14	2.22 ± 1.13	0.01 ± 0.02	0.77 ± 0.45	0.7 ± 0.35	0.68 ± 0.3	0.08 ± 0.09	0 ± 0	0.01 ± 0.02	0 ± 0
CRMO1	Craters of the Moon NM	ID	3/17/2005	5/11/2006	4	2.13 ± 0.75	2.12 ± 0.75	0 ± 0	0.64 ± 0.19	0.71 ± 0.24	0.71 ± 0.29	0.06 ± 0.06	0 ± 0	0 ± 0	0 ± 0
DENA1	Denali NP	AK	5/19/2005	12/28/2006	7	2.9 ± 0.46	2.89 ± 0.46	0.01 ± 0.01	0.89 ± 0.27	0.96 ± 0.13	0.9 ± 0.14	0.14 ± 0.04	0 ± 0	0.01 ± 0.01	0 ± 0
DETR1	Detroit	MI	4/7/2005	12/31/2006	8	2.16 ± 1.04	2.09 ± 0.87	0.08 ± 0.18	0.44 ± 0.1	0.66 ± 0.3	0.8 ± 0.36	0.18 ± 0.2	0.05 ± 0.12	0.03 ± 0.06	0 ± 0
DEVA1	Death Valley NP	CA	3/17/2005	10/5/2006	4	2.43 ± 1.23	2.17 ± 0.75	0.26 ± 0.49	0.45 ± 0.09	0.7 ± 0.23	0.84 ± 0.25	0.19 ± 0.22	0.09 ± 0.17	0.08 ± 0.16	0.08 ± 0.16
DOME1	Dome Lands Wilderness	CA	12/15/2005	12/28/2006	4	2.93 ± 1.73	2.89 ± 1.64	0.05 ± 0.09	0.74 ± 0.33	0.91 ± 0.32	1.07 ± 0.76	0.18 ± 0.24	0.02 ± 0.03	0.03 ± 0.06	0 ± 0
DOSO1	Dolly Sods Wilderness	WV	3/17/2005	9/14/2006	9	2.78 ± 0.96	2.67 ± 0.78	0.11 ± 0.24	0.77 ± 0.26	0.8 ± 0.31	0.91 ± 0.28	0.19 ± 0.11	0.03 ± 0.07	0.04 ± 0.07	0.04 ± 0.12
DOUG1	Douglas	AZ	1/13/2005	12/28/2006	6	2.91 ± 1.2	2.88 ± 1.12	0.04 ± 0.08	0.92 ± 0.53	0.9 ± 0.25	0.89 ± 0.31	0.17 ± 0.12	0.02 ± 0.04	0.02 ± 0.04	0 ± 0.01
EGBE1	N/A		9/1/2005	10/5/2006	5	2.4 ± 0.6	2.37 ± 0.55	0.04 ± 0.05	0.55 ± 0.22	0.87 ± 0.19	0.82 ± 0.16	0.13 ± 0.05	0.01 ± 0.01	0.03 ± 0.04	0 ± 0
ELDO1	El Dorado Springs	MO	7/21/2005	7/13/2006	6	2.19 ± 0.75	2.16 ± 0.72	0.03 ± 0.04	0.58 ± 0.29	0.7 ± 0.26	0.76 ± 0.21	0.12 ± 0.07	0 ± 0	0.03 ± 0.04	0 ± 0
ELLI1	Ellis	OK	3/17/2005	5/11/2006	7	2.79 ± 0.36	2.76 ± 0.36	0.03 ± 0.03	0.74 ± 0.22	0.85 ± 0.16	0.92 ± 0.14	0.21 ± 0.19	0.05 ± 0.07	0.02 ± 0.02	0 ± 0
EVER1	Everglades NP	FL	1/13/2005	9/14/2006	6	2.7 ± 0.5	2.68 ± 0.49	0.02 ± 0.04	0.68 ± 0.28	1.2 ± 0.36	0.69 ± 0.18	0.1 ± 0.07	0 ± 0.01	0.02 ± 0.03	0 ± 0
FLAT1	Flathead	MT	1/13/2005	10/5/2006	8	2.5 ± 0.81	2.49 ± 0.81	0.01 ± 0.02	0.73 ± 0.28	0.84 ± 0.26	0.79 ± 0.26	0.12 ± 0.11	0 ± 0.01	0.01 ± 0.02	0 ± 0
FOPE1	Fort Peck	MT	3/17/2005	11/16/2006	6	2.86 ± 0.66	2.83 ± 0.66	0.03 ± 0.04	0.84 ± 0.41	0.99 ± 0.29	0.87 ± 0.1	0.13 ± 0.03	0.02 ± 0.04	0.01 ± 0.03	0 ± 0
FRES1	Fresno	CA	5/19/2005	11/16/2006	7	2.58 ± 0.5	2.55 ± 0.44	0.03 ± 0.07	0.68 ± 0.14	0.86 ± 0.2	0.85 ± 0.17	0.16 ± 0.09	0.02 ± 0.04	0.02 ± 0.03	0 ± 0
FRRE1	Frostburg	MD	5/19/2005	8/3/2006	4	2.81 ± 1.01	2.78 ± 0.98	0.04 ± 0.05	0.84 ± 0.3	0.85 ± 0.33	0.92 ± 0.28	0.17 ± 0.13	0 ± 0	0.04 ± 0.05	0 ± 0
GAMO1	Gates of the Mountains	MT	5/19/2005	10/13/2005	2	2.48 ± 0.36	2.48 ± 0.36	0 ± 0	0.77 ± 0.16	0.82 ± 0.05	0.8 ± 0.12	0.09 ± 0.03	0 ± 0	0 ± 0	0 ± 0
GICL1	Gila Wilderness	NM	4/7/2005	7/13/2006	4	2.26 ± 0.95	2.26 ± 0.95	0 ± 0	0.72 ± 0.32	0.7 ± 0.3	0.76 ± 0.29	0.07 ± 0.09	0 ± 0	0 ± 0	0 ± 0
GLAC1	Glacier NP	MT	1/13/2005	11/16/2006	5	2.46 ± 0.55	2.45 ± 0.54	0.01 ± 0.02	0.72 ± 0.18	0.89 ± 0.17	0.75 ± 0.18	0.1 ± 0.09	0 ± 0.01	0.01 ± 0.01	0 ± 0
GRBA1	Great Basin NP	NV	1/13/2005	12/28/2006	10	2.48 ± 0.43	2.46 ± 0.41	0.01 ± 0.03	0.74 ± 0.23	0.9 ± 0.19	0.73 ± 0.13	0.1 ± 0.05	0 ± 0.01	0.01 ± 0.02	0 ± 0
GRGU1	Great Gulf Wilderness	NH	1/13/2005	3/9/2006	5	2.84 ± 0.47	2.76 ± 0.51	0.08 ± 0.06	0.82 ± 0.17	0.94 ± 0.27	0.83 ± 0.28	0.16 ± 0.05	0.03 ± 0.02	0.05 ± 0.05	0.01 ± 0.02
GRR11	Great River Bluffs	MN	5/19/2005	12/15/2005	3	2.4 ± 0.99	2.35 ± 0.9	0.05 ± 0.08	0.65 ± 0.35	0.78 ± 0.31	0.78 ± 0.25	0.15 ± 0.06	0.01 ± 0.02	0.04 ± 0.07	0 ± 0
GRSA1	Great Sand Dunes NM	CO	10/13/2005	10/5/2006	3	3.31 ± 0.59	3.25 ± 0.54	0.06 ± 0.07	1.05 ± 0.24	0.95 ± 0.14	1.08 ± 0.15	0.17 ± 0.03	0.04 ± 0.07	0.02 ± 0.02	0 ± 0
GRSM1	Great Smoky Mountains NP	TN	1/13/2005	10/26/2006	6	2.18 ± 0.97	2.16 ± 0.96	0.02 ± 0.03	0.5 ± 0.26	0.68 ± 0.28	0.83 ± 0.36	0.15 ± 0.1	0.02 ± 0.03	0 ± 0	0 ± 0

Table S1. Continued.

Site ID	Site Name	State	Sampling Period		No. of Field Blanks	Carbon Concentrations ($\mu\text{g}/\text{cm}^2$)									
			From	To		TC	OC	EC	OC1	OC2	OC3	OC4	EC1	EC2	EC3
GRSM9	Great Smoky Mountains NP	TN	1/13/2005	1/13/2005	1	4.56 ± 0	4.37 ± 0	0.19 ± 0	0.74 ± 0	1.28 ± 0	1.88 ± 0	0.46 ± 0	0.11 ± 0	0.09 ± 0	0 ± 0
GUM01	Guadalupe Mountains NP	TX	7/21/2005	12/28/2006	5	3.55 ± 0.79	3.44 ± 0.74	0.11 ± 0.09	1.16 ± 0.23	1 ± 0.32	1.06 ± 0.19	0.22 ± 0.11	0.03 ± 0.05	0.07 ± 0.03	0 ± 0
HALE1	Haleakala NP	HI	3/17/2005	12/28/2006	8	2.09 ± 0.45	2.07 ± 0.44	0.02 ± 0.02	0.4 ± 0.19	0.78 ± 0.15	0.79 ± 0.16	0.1 ± 0.06	0.01 ± 0.02	0.01 ± 0.02	0 ± 0
HANC1	Hance Camp at Grand Canyon NP	AZ	1/13/2005	4/20/2006	3	2.15 ± 0.68	2.13 ± 0.66	0.02 ± 0.04	0.61 ± 0.41	0.61 ± 0.24	0.82 ± 0.22	0.09 ± 0.08	0 ± 0.01	0.02 ± 0.04	0 ± 0
HAVO1	Hawaii Volcanoes NP	HI	1/13/2005	12/28/2006	8	1.88 ± 0.61	1.87 ± 0.61	0 ± 0.01	0.48 ± 0.21	0.67 ± 0.24	0.65 ± 0.18	0.07 ± 0.05	0 ± 0.01	0 ± 0.01	0 ± 0
HECA1	Hells Canyon	OR	1/13/2005	11/16/2006	7	2.03 ± 0.86	1.98 ± 0.83	0.05 ± 0.09	0.39 ± 0.12	0.62 ± 0.13	0.87 ± 0.56	0.1 ± 0.1	0.04 ± 0.09	0 ± 0	0 ± 0
HEGL1	Hercules-Glades	MO	1/13/2005	11/16/2006	7	2.13 ± 0.79	2.09 ± 0.75	0.04 ± 0.05	0.65 ± 0.18	0.62 ± 0.29	0.71 ± 0.25	0.1 ± 0.09	0 ± 0.01	0.04 ± 0.05	0 ± 0
HOOV1	Hoover	CA	1/13/2005	9/14/2006	8	2.38 ± 0.6	2.35 ± 0.57	0.02 ± 0.06	0.72 ± 0.26	0.73 ± 0.17	0.8 ± 0.17	0.1 ± 0.06	0.02 ± 0.06	0 ± 0	0 ± 0
HOUS1	Houston	TX	5/19/2005	7/21/2005	2	3.44 ± 0.87	3.26 ± 0.62	0.18 ± 0.26	0.69 ± 0.11	1.1 ± 0.25	1.15 ± 0.25	0.32 ± 0.22	0.07 ± 0.1	0.11 ± 0.16	0 ± 0
IKBA1	Ike's Backbone	AZ	12/15/2005	12/15/2005	1	1.75 ± 0	1.73 ± 0	0.01 ± 0	0.72 ± 0	0.36 ± 0	0.58 ± 0	0.07 ± 0	0 ± 0	0.01 ± 0	0 ± 0
INGA1	Indian Gardens	AZ	2/3/2005	9/14/2006	6	3.77 ± 1.09	3.68 ± 1.03	0.09 ± 0.09	1.19 ± 0.39	1.21 ± 0.41	1.07 ± 0.29	0.21 ± 0.15	0.05 ± 0.05	0.04 ± 0.05	0 ± 0
ISLE1	Isle Royale NP	MI	1/13/2005	11/16/2006	6	1.54 ± 0.65	1.53 ± 0.64	0 ± 0.01	0.36 ± 0.14	0.54 ± 0.27	0.58 ± 0.22	0.06 ± 0.06	0 ± 0.01	0 ± 0	0 ± 0
JARI1	James River Face Wilderness	VA	1/13/2005	6/1/2006	5	2.42 ± 0.94	2.4 ± 0.92	0.02 ± 0.02	0.71 ± 0.4	0.86 ± 0.31	0.73 ± 0.21	0.11 ± 0.07	0.01 ± 0.02	0.01 ± 0.01	0 ± 0
JOSH1	Joshua Tree NP	CA	1/13/2005	7/13/2006	6	2.6 ± 0.28	2.59 ± 0.27	0.02 ± 0.03	0.75 ± 0.2	0.81 ± 0.28	0.92 ± 0.1	0.11 ± 0.07	0 ± 0.01	0.01 ± 0.02	0 ± 0
KAIS1	Kaiser	CA	1/13/2005	1/5/2006	5	2.92 ± 0.7	2.89 ± 0.67	0.03 ± 0.04	0.82 ± 0.25	0.99 ± 0.25	0.93 ± 0.22	0.15 ± 0.07	0.02 ± 0.04	0.01 ± 0.02	0 ± 0
KALM1	Kalmiopsis	OR	1/13/2005	11/16/2006	4	2.26 ± 0.22	2.24 ± 0.19	0.03 ± 0.04	0.54 ± 0.13	0.73 ± 0.08	0.84 ± 0.21	0.12 ± 0.09	0.02 ± 0.04	0.01 ± 0.02	0 ± 0
LABE1	Lava Beds NM	CA	1/13/2005	5/11/2006	7	1.91 ± 0.48	1.88 ± 0.44	0.03 ± 0.04	0.56 ± 0.17	0.61 ± 0.12	0.64 ± 0.15	0.08 ± 0.07	0 ± 0.01	0.02 ± 0.03	0 ± 0.01
LASU2	Lake Sugema	IA	1/13/2005	12/15/2005	3	2.22 ± 0.85	2.21 ± 0.84	0 ± 0	0.62 ± 0.13	0.78 ± 0.39	0.75 ± 0.33	0.07 ± 0.06	0 ± 0	0 ± 0	0 ± 0
LAVO1	Lassen Volcanic NP	CA	1/13/2005	1/5/2006	3	1.74 ± 0.59	1.71 ± 0.53	0.03 ± 0.05	0.39 ± 0.18	0.51 ± 0.16	0.76 ± 0.58	0.06 ± 0.1	0.03 ± 0.05	0 ± 0	0 ± 0
LIGO1	Linville Gorge	NC	3/17/2005	4/20/2006	5	2.24 ± 0.45	2.22 ± 0.41	0.03 ± 0.04	0.67 ± 0.16	0.63 ± 0.15	0.76 ± 0.15	0.15 ± 0.09	0 ± 0	0.03 ± 0.04	0 ± 0
LIVO1	Livonia	IN	1/13/2005	5/19/2005	2	3.42 ± 1.73	3.15 ± 1.34	0.28 ± 0.39	0.43 ± 0.16	0.79 ± 0.04	1.54 ± 1.01	0.38 ± 0.45	0.24 ± 0.34	0.02 ± 0.03	0.01 ± 0.02
LOST1	Lostwood	ND	5/19/2005	11/16/2006	5	2.24 ± 1.15	2.22 ± 1.12	0.02 ± 0.04	0.72 ± 0.47	0.71 ± 0.35	0.68 ± 0.24	0.1 ± 0.08	0.01 ± 0.01	0.01 ± 0.03	0 ± 0
LYBR1	Lye Brook Wilderness	VT	1/13/2005	12/7/2006	6	1.98 ± 0.61	1.97 ± 0.6	0.01 ± 0.02	0.54 ± 0.19	0.72 ± 0.19	0.64 ± 0.2	0.07 ± 0.09	0 ± 0	0.01 ± 0.02	0 ± 0
MACA1	Mammoth Cave NP	KY	5/19/2005	12/7/2006	5	2.25 ± 0.5	2.25 ± 0.5	0 ± 0	0.72 ± 0.22	0.67 ± 0.1	0.74 ± 0.15	0.11 ± 0.06	0 ± 0	0 ± 0	0 ± 0
MAVI1	Martha's Vineyard	MA	5/19/2005	7/13/2006	5	1.94 ± 0.7	1.9 ± 0.62	0.04 ± 0.08	0.49 ± 0.13	0.56 ± 0.16	0.76 ± 0.37	0.1 ± 0.11	0.03 ± 0.07	0.01 ± 0.02	0 ± 0
MEAD1	Meadview	AZ	5/19/2005	5/19/2005	1	2.51 ± 0	2.51 ± 0	0 ± 0	0.78 ± 0	0.87 ± 0	0.78 ± 0	0.09 ± 0	0 ± 0	0 ± 0	0 ± 0
MELA1	Medicine Lake	MT	3/17/2005	8/24/2006	3	2.16 ± 0.47	2.12 ± 0.41	0.04 ± 0.06	0.51 ± 0.09	0.68 ± 0.03	0.83 ± 0.37	0.1 ± 0.11	0.04 ± 0.06	0 ± 0	0 ± 0
MEVE1	Mesa Verde NP	CO	1/13/2005	12/28/2006	9	2.72 ± 0.89	2.7 ± 0.88	0.02 ± 0.04	0.86 ± 0.3	0.91 ± 0.29	0.81 ± 0.27	0.12 ± 0.1	0 ± 0.01	0.01 ± 0.03	0 ± 0
MING1	Mingo	MO	5/19/2005	9/14/2006	4	1.98 ± 0.3	1.97 ± 0.3	0.01 ± 0.01	0.54 ± 0.16	0.62 ± 0.14	0.71 ± 0.17	0.11 ± 0.03	0 ± 0	0.01 ± 0.01	0 ± 0
MKGO1	M.K. Goddard	PA	3/17/2005	8/24/2006	7	2.3 ± 0.66	2.21 ± 0.52	0.09 ± 0.16	0.61 ± 0.2	0.82 ± 0.18	0.68 ± 0.12	0.09 ± 0.07	0.02 ± 0.04	0.07 ± 0.14	0 ± 0
MOHO1	Mount Hood	OR	1/13/2005	8/24/2006	7	2.02 ± 0.64	2.01 ± 0.63	0.01 ± 0.03	0.5 ± 0.18	0.73 ± 0.19	0.7 ± 0.24	0.08 ± 0.09	0.01 ± 0.02	0 ± 0.01	0 ± 0
MOMO1	Mohawk Mt.	CT	3/17/2005	12/7/2006	4	1.63 ± 0.35	1.61 ± 0.33	0.02 ± 0.02	0.51 ± 0.2	0.53 ± 0.12	0.53 ± 0.07	0.04 ± 0.04	0 ± 0	0.02 ± 0.02	0 ± 0
MONT1	Monture	MT	1/13/2005	11/16/2006	7	2.48 ± 0.91	2.43 ± 0.85	0.06 ± 0.1	0.66 ± 0.3	0.78 ± 0.27	0.8 ± 0.29	0.15 ± 0.14	0.05 ± 0.11	0.06 ± 0.11	0 ± 0

Table S1. Continued.

Site ID	Site Name	State	Sampling Period		No. of Field Blanks	Carbon Concentrations ($\mu\text{g}/\text{cm}^2$)									
			From	To		TC	OC	EC	OC1	OC2	OC3	OC4	EC1	EC2	EC3
MOOS1	Moosehorn NWR	ME	1/13/2005	12/7/2006	7	2.41 ± 0.41	2.39 ± 0.41	0.02 ± 0.04	0.75 ± 0.25	0.71 ± 0.22	0.8 ± 0.15	0.12 ± 0.06	0.02 ± 0.03	0 ± 0.01	0 ± 0
MORA1	Mount Rainier NP	WA	1/13/2005	11/16/2006	5	1.79 ± 0.62	1.77 ± 0.62	0.02 ± 0.05	0.57 ± 0.34	0.52 ± 0.21	0.63 ± 0.28	0.05 ± 0.05	0.02 ± 0.05	0 ± 0	0 ± 0
MORA9	Mount Rainier NP	WA	1/13/2005	1/13/2005	1	1.42 ± 0	1.42 ± 0	0 ± 0	0.37 ± 0	0.41 ± 0	0.64 ± 0	0 ± 0	0 ± 0	0 ± 0	0 ± 0
MOZII	Mount Zirkel Wilderness	CO	3/17/2005	11/16/2006	8	2.8 ± 0.38	2.79 ± 0.38	0.01 ± 0.02	0.82 ± 0.19	0.96 ± 0.16	0.86 ± 0.13	0.15 ± 0.04	0.01 ± 0.02	0 ± 0	0 ± 0
NEBR1	Nebraska NF	NE	1/13/2005	6/22/2006	5	3.15 ± 1.1	3.07 ± 1.05	0.08 ± 0.08	0.95 ± 0.53	0.96 ± 0.2	0.94 ± 0.27	0.22 ± 0.15	0.03 ± 0.03	0.05 ± 0.06	0 ± 0
NEYO1	New York City	NY	5/19/2005	12/15/2005	3	2.44 ± 0.48	2.41 ± 0.42	0.03 ± 0.06	0.76 ± 0.25	0.85 ± 0.2	0.69 ± 0.07	0.1 ± 0.07	0 ± 0	0.03 ± 0.06	0 ± 0
NOAB1	North Absaroka	WY	3/30/2006	10/5/2006	3	2.5 ± 1.08	2.42 ± 0.95	0.07 ± 0.12	0.6 ± 0.15	0.73 ± 0.11	0.97 ± 0.56	0.13 ± 0.13	0.07 ± 0.12	0 ± 0	0 ± 0
NOCA1	North Cascades	WA	3/17/2005	12/28/2006	7	2.62 ± 0.71	2.53 ± 0.68	0.09 ± 0.08	0.7 ± 0.29	0.81 ± 0.2	0.89 ± 0.23	0.13 ± 0.09	0.06 ± 0.08	0.03 ± 0.04	0 ± 0
NOCH1	Northern Cheyenne	MT	9/1/2005	10/5/2006	3	2.21 ± 0.34	2.21 ± 0.34	0 ± 0	0.63 ± 0.16	0.71 ± 0.16	0.75 ± 0.07	0.12 ± 0.05	0 ± 0	0 ± 0	0 ± 0
OKEF1	Okefenokee NWR	GA	6/1/2006	6/1/2006	1	2.99 ± 0	2.99 ± 0	0 ± 0	1.03 ± 0	0.86 ± 0	0.9 ± 0	0.2 ± 0	0 ± 0	0 ± 0	0 ± 0
OLTO1	Old Town	ME	5/19/2005	4/20/2006	4	1.93 ± 0.32	1.92 ± 0.31	0 ± 0.01	0.59 ± 0.02	0.62 ± 0.27	0.65 ± 0.04	0.06 ± 0.06	0 ± 0	0 ± 0.01	0 ± 0
OLYM1	Olympic	WA	2/3/2005	2/16/2006	2	1.7 ± 0.88	1.63 ± 0.81	0.06 ± 0.07	0.4 ± 0.26	0.46 ± 0.06	0.65 ± 0.33	0.12 ± 0.17	0.01 ± 0.01	0.06 ± 0.08	0 ± 0
OMAH1	Omaha	NE	3/17/2005	10/5/2006	4	2.3 ± 0.32	2.3 ± 0.32	0 ± 0	0.6 ± 0.25	0.88 ± 0.09	0.75 ± 0.1	0.08 ± 0.06	0 ± 0	0 ± 0	0 ± 0
ORPI1	Organ Pipe	AZ	3/17/2005	11/16/2006	5	2.02 ± 0.39	2 ± 0.36	0.02 ± 0.04	0.51 ± 0.08	0.71 ± 0.15	0.72 ± 0.16	0.06 ± 0.05	0.02 ± 0.04	0 ± 0	0 ± 0
PASA1	Pasayten	WA	5/19/2005	10/5/2006	6	2.29 ± 0.47	2.24 ± 0.49	0.04 ± 0.06	0.59 ± 0.16	0.7 ± 0.17	0.83 ± 0.25	0.12 ± 0.08	0.01 ± 0.02	0.03 ± 0.05	0.01 ± 0.01
PEFO1	Petrified Forest NP	AZ	3/17/2005	12/7/2006	6	2.15 ± 0.65	2.12 ± 0.61	0.03 ± 0.06	0.56 ± 0.23	0.59 ± 0.19	0.82 ± 0.28	0.14 ± 0.15	0.02 ± 0.06	0 ± 0.01	0 ± 0
PENO1	N/A		3/30/2006	8/24/2006	2	2.68 ± 0.2	2.68 ± 0.2	0 ± 0	0.72 ± 0.19	0.83 ± 0.07	0.98 ± 0.03	0.15 ± 0.03	0 ± 0	0 ± 0	0 ± 0
PETE1	Petersburg	AK	4/7/2005	9/14/2006	8	1.86 ± 0.61	1.84 ± 0.59	0.02 ± 0.03	0.56 ± 0.18	0.61 ± 0.23	0.61 ± 0.17	0.07 ± 0.07	0 ± 0	0.02 ± 0.03	0 ± 0
PHOE1	Phoenix	AZ	1/13/2005	5/11/2006	6	2.82 ± 1.02	2.73 ± 0.93	0.09 ± 0.13	0.75 ± 0.31	0.92 ± 0.26	0.88 ± 0.26	0.16 ± 0.16	0.04 ± 0.06	0.07 ± 0.1	0 ± 0
PHOE5	Phoenix	AZ	1/13/2005	5/11/2006	5	2.43 ± 0.27	2.42 ± 0.27	0.01 ± 0.01	0.74 ± 0.23	0.77 ± 0.11	0.78 ± 0.15	0.12 ± 0.03	0 ± 0	0 ± 0.01	0 ± 0
PINN1	Pinnacles NM	CA	3/9/2006	5/11/2006	2	1.93 ± 0.05	1.93 ± 0.05	0 ± 0	0.5 ± 0.1	0.67 ± 0.01	0.71 ± 0.12	0.05 ± 0.06	0 ± 0	0 ± 0	0 ± 0
PITT1	Pittsburgh	PA	1/13/2005	12/10/2006	8	2.46 ± 0.86	2.38 ± 0.73	0.08 ± 0.15	0.69 ± 0.29	0.7 ± 0.13	0.82 ± 0.25	0.17 ± 0.19	0.05 ± 0.09	0.03 ± 0.06	0 ± 0
PMRF1	Proctor Maple R. F.	VT	3/17/2005	7/13/2006	4	2.56 ± 0.41	2.56 ± 0.41	0 ± 0	0.76 ± 0.22	0.9 ± 0.19	0.79 ± 0.08	0.1 ± 0.03	0 ± 0	0 ± 0	0 ± 0
PORE1	Point Reyes National Seashore	CA	7/21/2005	11/16/2006	4	2.2 ± 0.91	2.18 ± 0.87	0.02 ± 0.04	0.64 ± 0.38	0.71 ± 0.29	0.72 ± 0.18	0.1 ± 0.08	0.02 ± 0.03	0.02 ± 0.04	0 ± 0
PRIS1	Presque Isle	ME	2/3/2005	4/20/2006	3	2.43 ± 0.28	2.43 ± 0.28	0.01 ± 0.01	0.79 ± 0.14	0.85 ± 0.16	0.7 ± 0.1	0.09 ± 0.08	0 ± 0	0.01 ± 0.01	0 ± 0
PUSO1	Puget Sound	WA	3/17/2005	1/5/2006	2	2.47 ± 0.78	2.42 ± 0.71	0.05 ± 0.08	0.58 ± 0.08	0.88 ± 0.3	0.78 ± 0.19	0.18 ± 0.14	0.02 ± 0.03	0.03 ± 0.05	0 ± 0
QUCI1	Quaker City	OH	10/5/2006	10/5/2006	1	2.98 ± 0	2.91 ± 0	0.07 ± 0	0.66 ± 0	0.99 ± 0	1.1 ± 0	0.16 ± 0	0.01 ± 0	0.06 ± 0	0 ± 0
QURE1	Quabbin Summit	MA	1/13/2005	2/16/2006	4	2.34 ± 0.87	2.34 ± 0.87	0 ± 0	0.44 ± 0.34	0.77 ± 0.29	1.08 ± 0.67	0.05 ± 0.03	0 ± 0	0 ± 0	0 ± 0
QUVA1	Queen Valley	AZ	3/17/2005	11/16/2006	3	2.63 ± 0.91	2.62 ± 0.9	0.01 ± 0.01	0.73 ± 0.42	0.92 ± 0.33	0.88 ± 0.2	0.09 ± 0.04	0 ± 0	0.01 ± 0.01	0 ± 0
RAFA1	San Rafael	CA	1/13/2005	12/7/2006	7	2.81 ± 0.68	2.78 ± 0.67	0.02 ± 0.02	0.91 ± 0.19	0.93 ± 0.23	0.81 ± 0.21	0.13 ± 0.09	0.01 ± 0.02	0.01 ± 0.02	0 ± 0
REDW1	Redwood NP	CA	1/13/2005	12/7/2006	6	2.27 ± 0.39	2.25 ± 0.37	0.02 ± 0.04	0.61 ± 0.17	0.82 ± 0.11	0.73 ± 0.15	0.1 ± 0.07	0 ± 0	0.02 ± 0.04	0 ± 0
ROMA1	Cape Romain NWR	SC	1/13/2005	7/13/2006	5	2.31 ± 1.15	2.15 ± 0.89	0.17 ± 0.33	0.5 ± 0.34	0.72 ± 0.35	0.76 ± 0.16	0.17 ± 0.15	0.06 ± 0.13	0.07 ± 0.12	0.03 ± 0.08
ROMO2	Rocky Mountain NP	CO	1/13/2005	1/13/2005	1	3.03 ± 0	3 ± 0	0.03 ± 0	0.66 ± 0	1.05 ± 0	1.11 ± 0	0.19 ± 0	0.03 ± 0	0 ± 0	0 ± 0

Table S1. Continued.

Site ID	Site Name	State	Sampling Period		No. of Field Blanks	Carbon Concentrations ($\mu\text{g}/\text{cm}^2$)									
			From	To		TC	OC	EC	OC1	OC2	OC3	OC4	EC1	EC2	EC3
RUBI1	Rubidoux	CA	3/17/2005	7/21/2005	3	2.93 ± 0.61	2.88 ± 0.55	0.04 ± 0.07	0.73 ± 0.23	1 ± 0.12	1 ± 0.13	0.15 ± 0.1	0.01 ± 0.01	0.03 ± 0.06	0 ± 0
SACR1	Salt Creek	NM	1/13/2005	8/3/2006	5	2.26 ± 0.79	2.25 ± 0.77	0.01 ± 0.02	0.59 ± 0.24	0.85 ± 0.24	0.73 ± 0.24	0.08 ± 0.08	0 ± 0	0.01 ± 0.02	0 ± 0
SAFO1	Sac and Fox	KS	1/13/2005	2/16/2006	4	2.37 ± 0.75	2.31 ± 0.69	0.05 ± 0.07	0.53 ± 0.13	0.73 ± 0.34	0.93 ± 0.3	0.12 ± 0.07	0.04 ± 0.07	0.01 ± 0.03	0 ± 0
SAGA1	San Gabriel	CA	1/13/2005	10/5/2006	4	2.79 ± 0.38	2.77 ± 0.37	0.02 ± 0.03	0.88 ± 0.23	0.94 ± 0.11	0.8 ± 0.11	0.14 ± 0.06	0.02 ± 0.02	0.01 ± 0.02	0 ± 0
SAGO1	San Gorgonio Wilderness	CA	3/17/2005	9/14/2006	4	2.49 ± 0.07	2.47 ± 0.05	0.02 ± 0.03	0.6 ± 0.11	0.97 ± 0.09	0.78 ± 0.1	0.12 ± 0.02	0 ± 0	0.02 ± 0.03	0 ± 0
SAGU1	Saguaro NM	AZ	1/13/2005	11/16/2006	2	2.76 ± 0.66	2.76 ± 0.66	0 ± 0	0.58 ± 0.33	0.8 ± 0.07	1.13 ± 0.65	0.18 ± 0.16	0.07 ± 0.1	0 ± 0	0 ± 0
SAMA1	St. Marks	FL	5/19/2005	11/16/2006	7	2.71 ± 1.24	2.67 ± 1.19	0.04 ± 0.08	0.72 ± 0.44	0.88 ± 0.37	0.91 ± 0.34	0.16 ± 0.13	0.01 ± 0.03	0.03 ± 0.06	0 ± 0
SAPE1	San Pedro Parks	NM	3/17/2005	2/16/2006	3	2.09 ± 0.56	2.05 ± 0.52	0.04 ± 0.03	0.49 ± 0.15	0.61 ± 0.16	0.88 ± 0.34	0.07 ± 0.06	0.04 ± 0.03	0 ± 0	0 ± 0
SAWE1	Saguaro West	AZ	1/13/2005	6/1/2006	7	2.6 ± 0.66	2.59 ± 0.64	0.01 ± 0.02	0.74 ± 0.37	0.87 ± 0.18	0.85 ± 0.19	0.13 ± 0.08	0.01 ± 0.01	0.01 ± 0.01	0 ± 0.01
SAWT1	Sawtooth NF	ID	1/13/2005	11/16/2006	4	2.21 ± 0.61	2.21 ± 0.61	0 ± 0.01	0.66 ± 0.18	0.75 ± 0.2	0.7 ± 0.19	0.09 ± 0.07	0 ± 0	0 ± 0	0 ± 0
SENE1	Seney	MI	3/17/2005	11/16/2006	3	2.19 ± 0.72	2.13 ± 0.67	0.06 ± 0.05	0.45 ± 0.09	0.73 ± 0.23	0.81 ± 0.3	0.14 ± 0.12	0.04 ± 0.05	0.02 ± 0.04	0 ± 0
SEQU1	Sequoia NP	CA	12/15/2005	11/16/2006	4	2.13 ± 0.31	2.12 ± 0.32	0.01 ± 0.01	0.52 ± 0.08	0.75 ± 0.1	0.74 ± 0.08	0.11 ± 0.07	0 ± 0	0 ± 0.01	0 ± 0.01
SEQU9	Sequoia NP	CA	1/13/2005	1/13/2005	1	2.23 ± 0	2.19 ± 0	0.04 ± 0	0.76 ± 0	0.68 ± 0	0.65 ± 0	0.1 ± 0	0 ± 0	0.04 ± 0	0 ± 0
SHEN1	Shenandoah NP	VA	1/13/2005	1/5/2006	9	2.36 ± 0.88	2.33 ± 0.83	0.04 ± 0.08	0.52 ± 0.23	0.82 ± 0.28	0.84 ± 0.37	0.16 ± 0.13	0.02 ± 0.02	0.03 ± 0.05	0 ± 0.01
SHMI1	Shamrock Mine	CO	5/19/2005	5/11/2006	2	2.56 ± 0.11	2.55 ± 0.07	0.02 ± 0.03	0.81 ± 0.21	0.83 ± 0.13	0.82 ± 0.1	0.12 ± 0.06	0.01 ± 0.01	0.03 ± 0.02	0.01 ± 0.01
SHRO1	Shining Rock Wilderness	NC	3/17/2005	5/11/2006	6	2.91 ± 0.33	2.83 ± 0.27	0.08 ± 0.07	0.87 ± 0.17	0.93 ± 0.1	0.87 ± 0.13	0.16 ± 0.05	0.05 ± 0.05	0.03 ± 0.04	0 ± 0
SIAN1	Sierra Ancha	AZ	7/21/2005	10/5/2006	4	2.87 ± 0.6	2.81 ± 0.56	0.06 ± 0.04	0.74 ± 0.23	0.85 ± 0.18	1.05 ± 0.35	0.16 ± 0.07	0.02 ± 0.02	0.04 ± 0.04	0 ± 0.01
SIKE1	Sikes	LA	1/13/2005	8/3/2006	6	2.56 ± 0.65	2.49 ± 0.61	0.07 ± 0.1	0.62 ± 0.08	0.82 ± 0.26	0.9 ± 0.29	0.16 ± 0.06	0.02 ± 0.05	0.04 ± 0.05	0 ± 0.01
SIME1	Simeonof	AK	1/13/2005	10/5/2006	7	1.81 ± 0.6	1.81 ± 0.6	0 ± 0.01	0.45 ± 0.26	0.65 ± 0.17	0.65 ± 0.18	0.06 ± 0.05	0 ± 0.01	0 ± 0.01	0.01 ± 0.02
SIPS1	Sipsy Wilderness	AL	5/19/2005	12/7/2006	3	2.25 ± 0.79	2.21 ± 0.74	0.04 ± 0.05	0.8 ± 0.28	0.67 ± 0.32	0.62 ± 0.23	0.11 ± 0.05	0.01 ± 0.02	0.03 ± 0.06	0 ± 0
SNPA1	Snoqualmie Pass	WA	7/21/2005	12/28/2006	7	2.32 ± 0.9	2.31 ± 0.89	0.01 ± 0.02	0.71 ± 0.38	0.77 ± 0.27	0.72 ± 0.23	0.12 ± 0.07	0.01 ± 0.01	0 ± 0.01	0 ± 0
SPOK1	Spokane Res.	WA	5/19/2005	6/9/2005	2	1.74 ± 1.45	1.71 ± 1.39	0.04 ± 0.05	0.48 ± 0.35	0.57 ± 0.5	0.56 ± 0.37	0.12 ± 0.14	0.01 ± 0.01	0.04 ± 0.03	0.01 ± 0.01
STAR1	Starkey	OR	2/3/2005	12/7/2006	4	2.37 ± 1.3	2.28 ± 1.13	0.09 ± 0.18	0.7 ± 0.34	0.66 ± 0.28	0.79 ± 0.43	0.13 ± 0.11	0.04 ± 0.07	0.02 ± 0.03	0.04 ± 0.07
SULA1	Sula Peak	MT	5/19/2005	11/16/2006	3	2.06 ± 0.46	2.06 ± 0.46	0 ± 0	0.56 ± 0.21	0.76 ± 0.15	0.65 ± 0.1	0.09 ± 0.01	0 ± 0	0 ± 0	0 ± 0
SWAN1	Swanquarter	NC	3/17/2005	3/9/2006	5	2.18 ± 0.43	2.16 ± 0.4	0.02 ± 0.03	0.56 ± 0.14	0.8 ± 0.18	0.71 ± 0.13	0.1 ± 0.09	0.01 ± 0.01	0.02 ± 0.02	0 ± 0.01
SYCA1	Sycamore Canyon	AZ	1/13/2005	9/14/2006	6	1.91 ± 0.54	1.88 ± 0.49	0.03 ± 0.05	0.44 ± 0.17	0.55 ± 0.16	0.78 ± 0.22	0.1 ± 0.09	0.01 ± 0.03	0.02 ± 0.02	0 ± 0
TALL1	Tallgrass	KS	1/13/2005	11/16/2006	5	2.22 ± 0.7	2.21 ± 0.71	0.01 ± 0.02	0.57 ± 0.17	0.75 ± 0.3	0.78 ± 0.29	0.1 ± 0.08	0.01 ± 0.02	0.01 ± 0.02	0 ± 0
THBA1	Thunder Basin	WY	5/19/2005	11/16/2006	8	2.28 ± 0.6	2.26 ± 0.59	0.02 ± 0.02	0.67 ± 0.21	0.77 ± 0.21	0.71 ± 0.19	0.11 ± 0.05	0.01 ± 0.01	0.01 ± 0.02	0 ± 0
THRO1	Theodore Roosevelt	ND	5/19/2005	5/19/2005	1	2.13 ± 0	2.15 ± 0	0 ± 0	0.6 ± 0	0.81 ± 0	0.7 ± 0	0.08 ± 0	0.02 ± 0	0.02 ± 0	0.02 ± 0
THSI1	Three Sisters Wilderness	OR	1/13/2005	12/28/2006	5	1.94 ± 0.67	1.91 ± 0.6	0.03 ± 0.07	0.52 ± 0.11	0.66 ± 0.21	0.66 ± 0.22	0.07 ± 0.14	0.02 ± 0.03	0.02 ± 0.03	0 ± 0
TONT1	Tonto NM	AZ	12/15/2005	12/28/2006	5	1.97 ± 0.24	1.96 ± 0.24	0.02 ± 0.02	0.48 ± 0.15	0.58 ± 0.08	0.78 ± 0.17	0.12 ± 0.07	0 ± 0	0.01 ± 0.02	0 ± 0
TRCR1	Trapper Creek	AK	3/17/2005	9/14/2006	4	1.62 ± 0.37	1.62 ± 0.38	0 ± 0	0.41 ± 0.12	0.59 ± 0.17	0.6 ± 0.11	0.03 ± 0.03	0.01 ± 0.01	0 ± 0.01	0.01 ± 0.01
TRIN1	Trinity	CA	1/13/2005	7/21/2005	4	1.89 ± 0.55	1.87 ± 0.57	0.02 ± 0.03	0.52 ± 0.3	0.63 ± 0.23	0.66 ± 0.1	0.06 ± 0.05	0.02 ± 0.03	0 ± 0	0 ± 0

Table S1. Continued.

Site ID	Site Name	State	Sampling Period		No. of Field Blanks	Carbon Concentrations ($\mu\text{g}/\text{cm}^2$)									
			From	To		TC	OC	EC	OC1	OC2	OC3	OC4	EC1	EC2	EC3
TUXE1	Tuxedni	AK	6/9/2005	11/16/2006	7	2.05 ± 0.76	2.04 ± 0.74	0.01 ± 0.02	0.52 ± 0.36	0.71 ± 0.21	0.74 ± 0.16	0.08 ± 0.06	0 ± 0.01	0.01 ± 0.02	0 ± 0
ULBE1	UL Bend	MT	1/13/2005	12/7/2006	7	2.23 ± 0.49	2.18 ± 0.49	0.05 ± 0.05	0.62 ± 0.21	0.7 ± 0.2	0.72 ± 0.15	0.14 ± 0.08	0.02 ± 0.02	0.01 ± 0.02	0.01 ± 0.03
UPBU1	Upper Buffalo Wilderness	AR	3/17/2005	9/14/2006	5	3.42 ± 0.55	3.31 ± 0.49	0.1 ± 0.11	0.93 ± 0.33	1.01 ± 0.18	1.15 ± 0.21	0.22 ± 0.08	0.07 ± 0.07	0.04 ± 0.06	0 ± 0
VIIIS1	Virgin Islands NP	VI	3/17/2005	11/16/2006	8	1.74 ± 0.76	1.69 ± 0.69	0.06 ± 0.09	0.24 ± 0.18	0.7 ± 0.21	0.66 ± 0.29	0.08 ± 0.12	0.01 ± 0.02	0.03 ± 0.05	0.01 ± 0.03
VILA1	Viking Lake	IA	1/13/2005	7/13/2006	4	2.33 ± 0.47	2.29 ± 0.47	0.04 ± 0.03	0.79 ± 0.09	0.66 ± 0.21	0.73 ± 0.14	0.12 ± 0.04	0.01 ± 0.02	0.02 ± 0.03	0 ± 0
VOYA1	Voyageurs NP #1	MN	1/13/2005	7/13/2006	5	2.32 ± 0.7	2.3 ± 0.68	0.02 ± 0.03	0.65 ± 0.19	0.77 ± 0.22	0.77 ± 0.31	0.1 ± 0.08	0.02 ± 0.03	0.01 ± 0.01	0 ± 0
WAR11	Walker River Paiute Tribe	NV	5/19/2005	10/13/2005	4	2.64 ± 0.28	2.61 ± 0.26	0.03 ± 0.05	0.77 ± 0.07	0.94 ± 0.13	0.79 ± 0.08	0.11 ± 0.03	0 ± 0.01	0.02 ± 0.05	0 ± 0
WASH1	Washington D.C.	DC	12/7/2006	12/7/2006	1	3.53 ± 0	3.33 ± 0	0.2 ± 0	1.13 ± 0	1.06 ± 0	0.83 ± 0	0.3 ± 0	0.08 ± 0	0.12 ± 0	0 ± 0
WEM11	Weminuche Wilderness	CO	1/13/2005	2/16/2006	4	2.43 ± 0.54	2.43 ± 0.53	0 ± 0	0.74 ± 0.11	0.84 ± 0.3	0.78 ± 0.19	0.07 ± 0.03	0 ± 0	0 ± 0	0 ± 0
WHIT1	White Mountain	NM	5/19/2005	11/16/2006	4	2.82 ± 0.97	2.77 ± 0.92	0.05 ± 0.06	0.75 ± 0.29	0.9 ± 0.21	0.99 ± 0.4	0.13 ± 0.09	0 ± 0.01	0.01 ± 0.03	0.03 ± 0.06
WHPA1	White Pass	WA	3/17/2005	7/13/2006	7	2.59 ± 0.79	2.58 ± 0.8	0.01 ± 0.02	0.8 ± 0.35	0.85 ± 0.25	0.82 ± 0.21	0.1 ± 0.08	0.01 ± 0.01	0.01 ± 0.02	0 ± 0
WHPE1	Wheeler Peak	NM	4/16/2005	4/8/2006	3	2.2 ± 0.5	2.2 ± 0.49	0 ± 0	0.67 ± 0.25	0.75 ± 0.25	0.75 ± 0.09	0.05 ± 0.04	0.01 ± 0.01	0.01 ± 0.01	0.01 ± 0.01
WHRI1	White River NF	CO	3/17/2005	12/7/2006	4	2.76 ± 0.31	2.68 ± 0.27	0.08 ± 0.08	0.58 ± 0.23	0.84 ± 0.13	0.95 ± 0.07	0.21 ± 0.1	0.12 ± 0.2	0.06 ± 0.07	0 ± 0
WICA1	Wind Cave	SD	1/13/2005	12/7/2006	4	1.71 ± 0.74	1.69 ± 0.72	0.02 ± 0.03	0.56 ± 0.29	0.46 ± 0.14	0.62 ± 0.31	0.05 ± 0.05	0.02 ± 0.03	0.01 ± 0.01	0 ± 0
WIMO1	Wichita Mountains	OK	7/21/2005	11/16/2006	6	2.63 ± 0.45	2.63 ± 0.45	0 ± 0.01	0.73 ± 0.21	0.94 ± 0.15	0.84 ± 0.12	0.11 ± 0.05	0 ± 0.01	0 ± 0	0 ± 0
YELL1	Yellowstone NP 1	WY	1/13/2005	9/14/2006	6	2.62 ± 0.51	2.56 ± 0.44	0.06 ± 0.07	0.76 ± 0.18	0.86 ± 0.12	0.83 ± 0.17	0.12 ± 0.06	0.04 ± 0.06	0.02 ± 0.02	0 ± 0
YOSE1	Yosemite NP	CA	3/17/2005	8/24/2006	4	1.81 ± 0.68	1.8 ± 0.68	0.01 ± 0.02	0.53 ± 0.41	0.62 ± 0.13	0.61 ± 0.15	0.05 ± 0.04	0 ± 0	0.01 ± 0.02	0 ± 0
ZICA1	Zion Canyon	UT	2/3/2005	12/7/2006	5	2.13 ± 0.6	2.13 ± 0.59	0.01 ± 0.01	0.63 ± 0.26	0.75 ± 0.16	0.69 ± 0.2	0.06 ± 0.06	0 ± 0	0.01 ± 0.01	0 ± 0
All 181 Sites					886	2.41 ± 0.48	2.37 ± 0.45	0.04 ± 0.05	0.66 ± 0.18	0.78 ± 0.15	0.81 ± 0.16	0.12 ± 0.06	0.02 ± 0.03	0.02 ± 0.02	0 ± 0.01

Table S2. Average field blank concentrations by thermal carbon fractions at the 239 sites in STN/CSN for the period from 1/1/2005 through 12/31/2006.

Site ID	State	Sampling Period		No. of Field Blanks	Carbon Concentrations ($\mu\text{g}/\text{cm}^3$)							PM _{2.5} Speciation Sampler Type
		From	To		TC	OC	EC	OC1	OC2	OC3	OC4	
020900010	AK	4/13/2005	12/4/2006	18	0.83 ± 0.18	0.83 ± 0.18	0 ± 0	0.26 ± 0.09	0.3 ± 0.08	0.2 ± 0.07	0.07 ± 0.05	Met One SASS
011130001	AL	5/16/2005	11/7/2006	12	1.04 ± 0.27	1.04 ± 0.27	0.01 ± 0.02	0.26 ± 0.09	0.4 ± 0.14	0.29 ± 0.14	0.08 ± 0.07	Met One SASS
010050002	AL	1/28/2005	3/12/2006	7	0.77 ± 0.26	0.77 ± 0.26	0 ± 0	0.25 ± 0.13	0.3 ± 0.13	0.17 ± 0.08	0.04 ± 0.03	Met One SASS
010730023	AL	1/28/2005	12/4/2006	24	0.86 ± 0.33	0.85 ± 0.33	0.01 ± 0.03	0.24 ± 0.14	0.37 ± 0.16	0.19 ± 0.11	0.05 ± 0.03	Met One SASS
010970003	AL	1/28/2005	3/12/2006	7	0.91 ± 0.27	0.9 ± 0.27	0 ± 0	0.28 ± 0.15	0.38 ± 0.15	0.19 ± 0.07	0.05 ± 0.02	Met One SASS
011030011	AL	1/28/2005	9/7/2005	5	0.66 ± 0.24	0.65 ± 0.23	0 ± 0	0.2 ± 0.11	0.28 ± 0.11	0.14 ± 0.11	0.03 ± 0.01	Met One SASS
010890014	AL	1/28/2005	11/7/2006	12	0.83 ± 0.25	0.82 ± 0.24	0.02 ± 0.05	0.27 ± 0.13	0.32 ± 0.13	0.17 ± 0.09	0.06 ± 0.04	Met One SASS
011011002	AL	1/28/2005	11/7/2006	10	0.8 ± 0.19	0.78 ± 0.19	0.01 ± 0.02	0.25 ± 0.08	0.31 ± 0.12	0.17 ± 0.08	0.05 ± 0.03	Met One SASS
010731009	AL	1/28/2005	5/11/2006	9	0.88 ± 0.24	0.87 ± 0.24	0.01 ± 0.02	0.27 ± 0.13	0.34 ± 0.09	0.21 ± 0.07	0.05 ± 0.01	Met One SASS
010732003	AL	1/28/2005	11/7/2006	12	0.89 ± 0.23	0.89 ± 0.23	0 ± 0	0.26 ± 0.1	0.35 ± 0.13	0.22 ± 0.09	0.05 ± 0.03	Met One SASS
051190007	AR	1/28/2005	11/7/2006	12	0.81 ± 0.23	0.8 ± 0.23	0.01 ± 0.03	0.24 ± 0.07	0.31 ± 0.09	0.18 ± 0.1	0.05 ± 0.03	Met One SASS
050030005	AR	1/28/2005	5/16/2005	3	0.77 ± 0.13	0.77 ± 0.13	0 ± 0	0.24 ± 0.13	0.28 ± 0.08	0.19 ± 0.05	0.07 ± 0.03	Met One SASS
051450001	AR	1/28/2005	5/16/2005	3	0.73 ± 0.26	0.73 ± 0.26	0 ± 0	0.24 ± 0.1	0.31 ± 0.14	0.14 ± 0.05	0.04 ± 0.01	Met One SASS
040137003	AZ	3/11/2005	11/7/2006	11	1.09 ± 0.39	1.08 ± 0.39	0.01 ± 0.02	0.3 ± 0.1	0.48 ± 0.21	0.25 ± 0.11	0.06 ± 0.03	Met One SASS
040191028	AZ	1/28/2005	11/7/2006	11	0.78 ± 0.19	0.78 ± 0.19	0 ± 0	0.26 ± 0.08	0.3 ± 0.1	0.17 ± 0.07	0.04 ± 0.03	Met One SASS
040137020	AZ	3/11/2005	11/7/2006	11	1.01 ± 0.18	0.99 ± 0.17	0.01 ± 0.04	0.28 ± 0.09	0.43 ± 0.12	0.22 ± 0.08	0.06 ± 0.04	Met One SASS
040130019	AZ	1/28/2005	11/12/2005	6	0.91 ± 0.34	0.91 ± 0.34	0 ± 0	0.3 ± 0.17	0.31 ± 0.11	0.2 ± 0.13	0.1 ± 0.06	Met One SASS
040139997	AZ	1/28/2005	12/4/2006	24	0.83 ± 0.17	0.82 ± 0.17	0 ± 0.01	0.24 ± 0.08	0.34 ± 0.11	0.19 ± 0.07	0.06 ± 0.04	Met One SASS
040139998	AZ	1/28/2005	11/12/2005	6	0.83 ± 0.2	0.81 ± 0.2	0.02 ± 0.04	0.24 ± 0.05	0.34 ± 0.12	0.17 ± 0.09	0.06 ± 0.06	Met One SASS
060290014	CA	1/28/2005	12/4/2006	41	0.86 ± 0.61	0.85 ± 0.61	0.01 ± 0.04	0.23 ± 0.07	0.35 ± 0.3	0.21 ± 0.23	0.06 ± 0.06	Met One SASS
060670006	CA	1/28/2005	12/4/2006	24	0.78 ± 0.21	0.78 ± 0.21	0 ± 0.01	0.2 ± 0.08	0.34 ± 0.11	0.18 ± 0.08	0.05 ± 0.04	Met One SASS
060190008	CA	1/28/2005	12/4/2006	24	0.75 ± 0.23	0.75 ± 0.23	0 ± 0.01	0.2 ± 0.08	0.32 ± 0.13	0.16 ± 0.06	0.06 ± 0.03	Met One SASS
060371103	CA	1/28/2005	11/7/2006	12	0.9 ± 0.32	0.9 ± 0.32	0.01 ± 0.02	0.22 ± 0.08	0.38 ± 0.16	0.22 ± 0.13	0.07 ± 0.05	Met One SASS
061112002	CA	1/28/2005	11/7/2006	12	0.95 ± 0.25	0.95 ± 0.25	0.01 ± 0.01	0.26 ± 0.13	0.41 ± 0.13	0.22 ± 0.12	0.04 ± 0.03	Met One SASS
060658001	CA	1/28/2005	12/4/2006	34	0.77 ± 0.21	0.77 ± 0.21	0 ± 0.02	0.24 ± 0.06	0.32 ± 0.12	0.16 ± 0.07	0.05 ± 0.03	Met One SASS
060730003	CA	1/28/2005	12/4/2006	24	0.92 ± 0.72	0.92 ± 0.72	0 ± 0.01	0.21 ± 0.1	0.41 ± 0.38	0.22 ± 0.18	0.07 ± 0.12	Met One SASS
060850005	CA	1/28/2005	12/4/2006	24	0.76 ± 0.35	0.75 ± 0.34	0.02 ± 0.04	0.2 ± 0.06	0.31 ± 0.17	0.18 ± 0.14	0.06 ± 0.03	Met One SASS
080410011	CO	1/28/2005	11/7/2006	12	0.77 ± 0.19	0.76 ± 0.19	0.01 ± 0.03	0.23 ± 0.09	0.31 ± 0.12	0.16 ± 0.05	0.06 ± 0.06	Met One SASS
080770017	CO	1/28/2005	11/7/2006	12	0.91 ± 0.18	0.91 ± 0.18	0 ± 0.01	0.27 ± 0.07	0.38 ± 0.11	0.2 ± 0.08	0.05 ± 0.02	Met One SASS

Table S2. Continued.

Site ID	State	Sampling Period		No. of Field Blanks	Carbon Concentrations ($\mu\text{g}/\text{cm}^2$)							PM _{2.5} Speciation Sampler Type
		From	To		TC	OC	EC	OC1	OC2	OC3	OC4	
080010006	CO	1/28/2005	12/4/2006	24	0.76 ± 0.23	0.76 ± 0.23	0 ± 0.01	0.22 ± 0.08	0.31 ± 0.12	0.18 ± 0.1	0.05 ± 0.03	Met One SASS
081230008	CO	1/28/2005	11/7/2006	12	0.85 ± 0.12	0.84 ± 0.12	0 ± 0	0.26 ± 0.07	0.33 ± 0.07	0.19 ± 0.06	0.06 ± 0.04	Met One SASS
090090027	CT	1/28/2005	12/4/2006	22	0.77 ± 0.44	0.76 ± 0.44	0.01 ± 0.02	0.2 ± 0.08	0.32 ± 0.22	0.18 ± 0.18	0.06 ± 0.06	Met One SASS
100032004	DE	1/28/2005	11/7/2006	12	1.01 ± 0.18	1 ± 0.18	0.01 ± 0.03	0.28 ± 0.08	0.42 ± 0.11	0.23 ± 0.11	0.07 ± 0.05	Met One SASS
100010003	DE	1/28/2005	11/7/2006	12	1.02 ± 0.21	1.02 ± 0.21	0 ± 0	0.3 ± 0.12	0.43 ± 0.11	0.22 ± 0.11	0.07 ± 0.04	Met One SASS
120861016	FL	1/28/2005	12/9/2005	12	0.8 ± 0.44	0.8 ± 0.44	0 ± 0	0.18 ± 0.1	0.32 ± 0.15	0.24 ± 0.25	0.06 ± 0.08	Met One SASS
120730012	FL	1/28/2005	11/7/2006	12	0.97 ± 0.45	0.93 ± 0.43	0.04 ± 0.13	0.23 ± 0.06	0.4 ± 0.15	0.21 ± 0.17	0.08 ± 0.16	Met One SASS
121030026	FL	1/28/2005	12/4/2006	24	0.9 ± 0.63	0.89 ± 0.63	0.01 ± 0.02	0.21 ± 0.1	0.36 ± 0.28	0.24 ± 0.27	0.07 ± 0.08	Met One SASS
120330004	FL	1/28/2005	3/12/2006	8	1.08 ± 0.6	1.06 ± 0.6	0.02 ± 0.05	0.27 ± 0.07	0.47 ± 0.33	0.26 ± 0.23	0.06 ± 0.06	Met One SASS
120111002	FL	1/17/2006	12/4/2006	12	1.08 ± 1.34	1.07 ± 1.34	0.01 ± 0.01	0.17 ± 0.06	0.38 ± 0.33	0.42 ± 0.79	0.11 ± 0.2	Met One SASS
120573002	FL	1/28/2005	12/4/2006	24	0.97 ± 0.93	0.96 ± 0.93	0.01 ± 0.03	0.21 ± 0.15	0.41 ± 0.38	0.24 ± 0.28	0.09 ± 0.13	Met One SASS
130690002 ^a	GA	1/17/2006	11/7/2006	6	1.06 ± 0.35	1.06 ± 0.35	0 ± 0	0.27 ± 0.08	0.43 ± 0.21	0.27 ± 0.14	0.09 ± 0.06	Met One SASS
132150011 ^a	GA	1/28/2005	11/12/2005	6	1.05 ± 0.31	1.05 ± 0.31	0 ± 0	0.34 ± 0.21	0.39 ± 0.15	0.23 ± 0.12	0.07 ± 0.04	Andersen RAAS
131150005 ^a	GA	1/17/2006	11/7/2006	6	0.94 ± 0.12	0.94 ± 0.12	0 ± 0	0.28 ± 0.07	0.4 ± 0.07	0.23 ± 0.06	0.03 ± 0.02	Met One SASS
130690002 ^a	GA	1/28/2005	11/12/2005	5	0.73 ± 0.28	0.73 ± 0.28	0 ± 0.01	0.25 ± 0.12	0.27 ± 0.16	0.16 ± 0.12	0.05 ± 0.04	Andersen RAAS
131150005 ^a	GA	1/28/2005	11/12/2005	6	0.72 ± 0.15	0.7 ± 0.15	0.02 ± 0.04	0.23 ± 0.1	0.26 ± 0.04	0.17 ± 0.06	0.05 ± 0.04	Andersen RAAS
130890002 ^a	GA	1/28/2005	12/9/2005	12	0.89 ± 0.37	0.87 ± 0.37	0.02 ± 0.04	0.26 ± 0.09	0.38 ± 0.24	0.19 ± 0.11	0.05 ± 0.04	Andersen RAAS
130590001 ^a	GA	1/28/2005	11/12/2005	7	0.91 ± 0.24	0.9 ± 0.23	0.01 ± 0.01	0.3 ± 0.15	0.32 ± 0.12	0.2 ± 0.06	0.07 ± 0.02	Andersen RAAS
130210007 ^a	GA	1/28/2005	11/12/2005	6	0.91 ± 0.25	0.88 ± 0.24	0.02 ± 0.06	0.3 ± 0.15	0.32 ± 0.09	0.2 ± 0.09	0.05 ± 0.04	Andersen RAAS
130890002 ^a	GA	1/17/2006	12/4/2006	13	0.95 ± 0.19	0.95 ± 0.19	0 ± 0.01	0.24 ± 0.11	0.41 ± 0.09	0.24 ± 0.07	0.05 ± 0.04	Met One SASS
132450091 ^a	GA	1/28/2005	11/12/2005	6	1.03 ± 0.37	1.01 ± 0.36	0.02 ± 0.04	0.32 ± 0.13	0.44 ± 0.17	0.19 ± 0.06	0.04 ± 0.05	Andersen RAAS
130210007 ^a	GA	1/17/2006	11/7/2006	6	1.17 ± 0.24	1.15 ± 0.23	0.02 ± 0.03	0.29 ± 0.06	0.53 ± 0.1	0.28 ± 0.13	0.05 ± 0.04	Met One SASS
130590001 ^a	GA	1/17/2006	11/7/2006	6	1.06 ± 0.2	1.06 ± 0.2	0 ± 0	0.35 ± 0.06	0.46 ± 0.11	0.21 ± 0.09	0.04 ± 0.03	Met One SASS
132450091 ^a	GA	5/11/2006	11/7/2006	4	1.18 ± 0.18	1.18 ± 0.18	0 ± 0	0.31 ± 0.11	0.5 ± 0.15	0.3 ± 0.19	0.06 ± 0.07	Met One SASS
132150011 ^a	GA	1/17/2006	11/7/2006	6	1.14 ± 0.32	1.14 ± 0.32	0 ± 0.01	0.29 ± 0.02	0.51 ± 0.18	0.28 ± 0.12	0.05 ± 0.03	Met One SASS
150032004	HI	1/28/2005	11/7/2006	12	1.01 ± 0.37	0.99 ± 0.36	0.02 ± 0.04	0.26 ± 0.05	0.37 ± 0.13	0.26 ± 0.18	0.1 ± 0.12	Met One SASS
191130037	IA	1/28/2005	11/7/2006	12	1.29 ± 0.38	1.25 ± 0.35	0.05 ± 0.15	0.19 ± 0.08	0.42 ± 0.18	0.35 ± 0.16	0.29 ± 0.16	R&P 2300 Sequential Speciation
191630015	IA	1/28/2005	12/4/2006	23	1.18 ± 0.5	1.18 ± 0.5	0 ± 0	0.2 ± 0.09	0.35 ± 0.16	0.32 ± 0.2	0.3 ± 0.19	R&P 2300 Sequential Speciation
191530030	IA	1/28/2005	11/7/2006	12	1.42 ± 0.5	1.37 ± 0.49	0.05 ± 0.11	0.2 ± 0.06	0.45 ± 0.13	0.39 ± 0.2	0.32 ± 0.2	R&P 2300 Sequential Speciation
160270004	ID	1/28/2005	6/7/2006	18	0.65 ± 0.17	0.64 ± 0.17	0 ± 0	0.19 ± 0.09	0.28 ± 0.09	0.13 ± 0.04	0.05 ± 0.04	Met One SASS

Table S2. Continued.

Site ID	State	Sampling Period		No. of Field Blanks	Carbon Concentrations ($\mu\text{g}/\text{cm}^2$)							PM _{2.5} Speciation Sampler Type
		From	To		TC	OC	EC	OC1	OC2	OC3	OC4	
160010010	ID	7/10/2006	12/4/2006	6	0.61 ± 0.12	0.61 ± 0.12	0 ± 0	0.2 ± 0.05	0.24 ± 0.04	0.13 ± 0.08	0.04 ± 0.04	Met One SASS
170310057*	IL	1/17/2006	11/7/2006	6	1.04 ± 0.19	1.03 ± 0.19	0 ± 0.01	0.32 ± 0.13	0.4 ± 0.08	0.26 ± 0.1	0.06 ± 0.07	Met One SASS
170310076*	IL	1/28/2005	12/27/2005	13	0.63 ± 0.45	0.63 ± 0.45	0 ± 0	0.15 ± 0.09	0.27 ± 0.24	0.15 ± 0.12	0.05 ± 0.05	URG MASS450 WINS
170434002	IL	1/28/2005	11/7/2006	12	0.91 ± 0.31	0.9 ± 0.31	0.01 ± 0.02	0.25 ± 0.07	0.36 ± 0.13	0.2 ± 0.12	0.07 ± 0.05	Met One SASS
170310076*	IL	1/17/2006	12/4/2006	12	0.91 ± 0.25	0.9 ± 0.25	0 ± 0.01	0.24 ± 0.07	0.35 ± 0.14	0.25 ± 0.13	0.06 ± 0.04	Met One SASS
171150013	IL	1/28/2005	11/7/2006	12	0.99 ± 0.23	0.98 ± 0.23	0 ± 0	0.28 ± 0.06	0.43 ± 0.16	0.21 ± 0.08	0.06 ± 0.03	Met One SASS
171192009	IL	1/28/2005	11/7/2006	12	0.91 ± 0.25	0.91 ± 0.25	0 ± 0	0.25 ± 0.11	0.37 ± 0.12	0.22 ± 0.11	0.06 ± 0.05	Met One SASS
170310057*	IL	1/28/2005	11/12/2005	6	0.67 ± 0.18	0.67 ± 0.18	0 ± 0	0.24 ± 0.09	0.26 ± 0.11	0.13 ± 0.04	0.04 ± 0.02	Andersen RAAS
170314201	IL	1/28/2005	11/7/2006	12	0.81 ± 0.25	0.8 ± 0.25	0.01 ± 0.01	0.23 ± 0.08	0.34 ± 0.12	0.18 ± 0.06	0.05 ± 0.03	Met One SASS
180390003	IN	1/28/2005	11/7/2006	12	0.82 ± 0.21	0.81 ± 0.21	0.01 ± 0.01	0.26 ± 0.08	0.34 ± 0.11	0.18 ± 0.08	0.04 ± 0.02	Met One SASS
181630012	IN	1/28/2005	11/7/2006	12	0.75 ± 0.17	0.75 ± 0.17	0 ± 0.01	0.22 ± 0.06	0.31 ± 0.09	0.17 ± 0.08	0.05 ± 0.03	Met One SASS
180970078	IN	1/28/2005	12/4/2006	25	0.73 ± 0.23	0.72 ± 0.23	0 ± 0.01	0.22 ± 0.08	0.29 ± 0.13	0.16 ± 0.07	0.06 ± 0.03	Met One SASS
180372001	IN	1/28/2005	11/7/2006	12	0.72 ± 0.14	0.72 ± 0.14	0 ± 0.01	0.25 ± 0.07	0.28 ± 0.1	0.14 ± 0.04	0.05 ± 0.04	Met One SASS
180892004	IN	1/28/2005	11/7/2006	12	0.95 ± 0.42	0.94 ± 0.41	0.01 ± 0.03	0.27 ± 0.08	0.39 ± 0.32	0.21 ± 0.13	0.06 ± 0.05	Met One SASS
180650003	IN	1/28/2005	11/7/2006	12	0.69 ± 0.17	0.69 ± 0.17	0 ± 0	0.22 ± 0.08	0.26 ± 0.1	0.15 ± 0.07	0.05 ± 0.03	Met One SASS
180890022	IN	1/28/2005	11/7/2006	12	0.9 ± 0.14	0.9 ± 0.14	0 ± 0	0.28 ± 0.07	0.35 ± 0.08	0.2 ± 0.09	0.05 ± 0.03	Met One SASS
202090021	KS	1/28/2005	12/4/2006	23	0.77 ± 0.21	0.77 ± 0.21	0 ± 0.01	0.21 ± 0.06	0.32 ± 0.1	0.18 ± 0.08	0.05 ± 0.04	Met One SASS
201730010	KS	1/28/2005	11/7/2006	12	1.43 ± 0.51	1.32 ± 0.43	0.11 ± 0.27	0.22 ± 0.09	0.43 ± 0.12	0.36 ± 0.2	0.3 ± 0.2	R&P 2300 Sequential Speciation
211451004	KY	1/28/2005	1/17/2006	7	0.84 ± 0.36	0.83 ± 0.36	0 ± 0	0.25 ± 0.15	0.34 ± 0.17	0.19 ± 0.09	0.05 ± 0.02	Met One SASS
211110048	KY	1/28/2005	1/17/2006	7	0.92 ± 0.59	0.92 ± 0.59	0 ± 0	0.26 ± 0.1	0.34 ± 0.23	0.25 ± 0.29	0.07 ± 0.07	Met One SASS
210670012	KY	1/28/2005	11/7/2006	11	0.99 ± 0.24	0.98 ± 0.24	0 ± 0.01	0.29 ± 0.07	0.39 ± 0.13	0.24 ± 0.11	0.06 ± 0.05	Met One SASS
210190017	KY	1/28/2005	11/7/2006	12	0.93 ± 0.21	0.93 ± 0.21	0 ± 0	0.29 ± 0.09	0.36 ± 0.09	0.22 ± 0.08	0.06 ± 0.03	Met One SASS
211930003	KY	1/28/2005	11/7/2006	12	0.98 ± 0.19	0.98 ± 0.19	0 ± 0.01	0.31 ± 0.08	0.4 ± 0.12	0.21 ± 0.09	0.05 ± 0.04	Met One SASS
210590005	KY	1/28/2005	1/17/2006	7	0.72 ± 0.24	0.72 ± 0.24	0 ± 0	0.26 ± 0.11	0.28 ± 0.11	0.14 ± 0.07	0.03 ± 0.02	Met One SASS
211250004	KY	1/28/2005	3/12/2006	8	0.95 ± 0.24	0.94 ± 0.24	0.01 ± 0.03	0.28 ± 0.09	0.35 ± 0.1	0.23 ± 0.14	0.07 ± 0.07	Met One SASS
211170007	KY	1/28/2005	11/7/2006	12	0.87 ± 0.17	0.87 ± 0.17	0 ± 0	0.31 ± 0.11	0.32 ± 0.09	0.19 ± 0.05	0.05 ± 0.02	Met One SASS
212270007	KY	1/28/2005	1/17/2006	7	0.8 ± 0.22	0.79 ± 0.21	0.02 ± 0.04	0.23 ± 0.1	0.38 ± 0.14	0.14 ± 0.06	0.02 ± 0.02	Met One SASS
211110043	KY	1/28/2005	11/7/2006	12	0.89 ± 0.23	0.89 ± 0.23	0 ± 0	0.26 ± 0.09	0.36 ± 0.15	0.19 ± 0.08	0.07 ± 0.04	Met One SASS
220330009	LA	2/12/2005	12/4/2006	24	0.8 ± 0.64	0.8 ± 0.64	0.01 ± 0.01	0.18 ± 0.1	0.33 ± 0.33	0.22 ± 0.23	0.06 ± 0.07	URG MASS450 WINS

Table S2. Continued.

Site ID	State	Sampling Period		No. of Field Blanks	Carbon Concentrations ($\mu\text{g}/\text{cm}^2$)							PM _{2.5} Speciation Sampler Type
		From	To		TC	OC	EC	OC1	OC2	OC3	OC4	
220150008	LA	1/28/2005	12/1/2006	13	0.71 ± 0.58	0.7 ± 0.57	0.01 ± 0.02	0.18 ± 0.09	0.3 ± 0.32	0.18 ± 0.19	0.04 ± 0.02	URG MASS450 WINS
250130008	MA	1/28/2005	12/4/2006	20	0.91 ± 0.34	0.9 ± 0.34	0.01 ± 0.03	0.22 ± 0.08	0.39 ± 0.16	0.22 ± 0.14	0.06 ± 0.04	Met One SASS
250250042	MA	1/28/2005	12/4/2006	36	0.84 ± 0.34	0.84 ± 0.34	0.01 ± 0.03	0.21 ± 0.07	0.35 ± 0.19	0.22 ± 0.16	0.05 ± 0.04	Met One SASS
240053001	MD	1/28/2005	12/4/2006	24	0.73 ± 0.37	0.72 ± 0.36	0.01 ± 0.02	0.19 ± 0.06	0.29 ± 0.21	0.18 ± 0.13	0.05 ± 0.03	Met One SASS
240330030	MD	1/28/2005	11/7/2006	12	0.92 ± 0.23	0.92 ± 0.23	0 ± 0.01	0.31 ± 0.12	0.36 ± 0.1	0.19 ± 0.09	0.05 ± 0.04	Andersen RAAS
261130001	MI	1/28/2005	11/7/2006	12	0.81 ± 0.22	0.81 ± 0.22	0 ± 0	0.24 ± 0.06	0.31 ± 0.12	0.18 ± 0.08	0.07 ± 0.05	Met One SASS
260770008	MI	1/28/2005	11/7/2006	12	0.94 ± 0.17	0.94 ± 0.17	0 ± 0.01	0.28 ± 0.07	0.41 ± 0.13	0.19 ± 0.06	0.04 ± 0.03	Met One SASS
261630033	MI	1/28/2005	11/7/2006	12	1.63 ± 1.22	1.49 ± 1.12	0.15 ± 0.48	0.39 ± 0.26	0.62 ± 0.35	0.29 ± 0.24	0.19 ± 0.43	Met One SASS
260330901	MI	1/28/2005	3/12/2006	11	0.8 ± 0.2	0.8 ± 0.2	0 ± 0.01	0.25 ± 0.07	0.34 ± 0.13	0.16 ± 0.07	0.03 ± 0.01	Met One SASS
261630001	MI	1/28/2005	12/4/2006	23	0.79 ± 0.38	0.79 ± 0.38	0 ± 0.01	0.21 ± 0.08	0.33 ± 0.2	0.18 ± 0.11	0.06 ± 0.08	Met One SASS
261610008	MI	1/28/2005	11/7/2006	12	0.88 ± 0.11	0.88 ± 0.11	0 ± 0	0.29 ± 0.08	0.35 ± 0.08	0.19 ± 0.07	0.05 ± 0.03	Met One SASS
261150005	MI	1/28/2005	11/7/2006	11	0.95 ± 0.24	0.95 ± 0.24	0 ± 0	0.23 ± 0.05	0.48 ± 0.14	0.19 ± 0.1	0.04 ± 0.03	Met One SASS
260050003	MI	1/28/2005	3/12/2006	8	0.7 ± 0.18	0.7 ± 0.18	0 ± 0	0.22 ± 0.1	0.29 ± 0.1	0.15 ± 0.07	0.04 ± 0.02	Met One SASS
260810020	MI	1/28/2005	11/7/2006	12	0.81 ± 0.18	0.81 ± 0.18	0 ± 0	0.25 ± 0.08	0.32 ± 0.13	0.18 ± 0.07	0.05 ± 0.03	Met One SASS
270953051	MN	1/28/2005	7/15/2005	7	0.68 ± 0.32	0.67 ± 0.32	0 ± 0	0.19 ± 0.1	0.25 ± 0.13	0.16 ± 0.1	0.06 ± 0.03	Met One SASS
271230871	MN	1/28/2005	3/11/2005	2	0.7 ± 0.25	0.69 ± 0.25	0 ± 0	0.26 ± 0.12	0.32 ± 0.11	0.09 ± 0.03	0.03 ± 0	Met One SASS
271095008	MN	1/28/2005	11/7/2006	11	0.8 ± 0.22	0.79 ± 0.22	0.01 ± 0.02	0.26 ± 0.11	0.32 ± 0.11	0.17 ± 0.08	0.04 ± 0.03	Met One SASS
270530963	MN	1/28/2005	12/4/2006	24	0.92 ± 0.38	0.91 ± 0.37	0.01 ± 0.03	0.23 ± 0.08	0.41 ± 0.21	0.21 ± 0.13	0.05 ± 0.05	Met One SASS
290530001	MO	3/11/2005	5/11/2006	6	1.51 ± 0.33	1.51 ± 0.33	0 ± 0	0.18 ± 0.09	0.42 ± 0.09	0.44 ± 0.15	0.45 ± 0.24	R&P 2300 Sequential Speciation
291860005	MO	1/28/2005	12/4/2006	24	1.51 ± 0.88	1.47 ± 0.88	0.03 ± 0.11	0.22 ± 0.09	0.49 ± 0.3	0.42 ± 0.36	0.32 ± 0.3	R&P 2300 Sequential Speciation
290990012*	MO	1/28/2005	10/5/2006	21	0.78 ± 0.31	0.77 ± 0.31	0.01 ± 0.01	0.2 ± 0.1	0.34 ± 0.17	0.18 ± 0.12	0.05 ± 0.03	Met One SASS
290470005	MO	1/28/2005	12/4/2006	23	1.33 ± 0.59	1.3 ± 0.58	0.03 ± 0.1	0.2 ± 0.13	0.39 ± 0.19	0.35 ± 0.14	0.36 ± 0.26	R&P 2300 Sequential Speciation
295100085	MO	1/28/2005	12/4/2006	23	0.64 ± 0.19	0.64 ± 0.19	0.01 ± 0.02	0.21 ± 0.07	0.25 ± 0.1	0.14 ± 0.06	0.04 ± 0.03	Met One SASS
290990012*	MO	11/7/2006	12/4/2006	2	1.16 ± 0.09	1.16 ± 0.09	0 ± 0	0.2 ± 0.05	0.53 ± 0.05	0.31 ± 0.03	0.12 ± 0.06	R&P 2300 Sequential Speciation
280350004	MS	1/28/2005	11/12/2005	6	0.91 ± 0.25	0.91 ± 0.25	0 ± 0	0.26 ± 0.11	0.33 ± 0.11	0.22 ± 0.13	0.08 ± 0.03	Met One SASS
280430001	MS	1/28/2005	1/17/2006	8	1.07 ± 0.52	1.02 ± 0.51	0.05 ± 0.09	0.27 ± 0.09	0.39 ± 0.17	0.24 ± 0.16	0.11 ± 0.16	Met One SASS
280490018	MS	1/28/2005	5/11/2006	9	1.05 ± 0.31	1.05 ± 0.31	0 ± 0	0.26 ± 0.07	0.47 ± 0.21	0.24 ± 0.12	0.07 ± 0.03	Met One SASS
280470008	MS	1/28/2005	12/4/2006	19	0.92 ± 0.48	0.91 ± 0.48	0 ± 0.02	0.2 ± 0.08	0.34 ± 0.21	0.23 ± 0.16	0.14 ± 0.11	Met One SASS

Table S2. Continued.

Site ID	State	Sampling Period		No. of Field Blanks	Carbon Concentrations ($\mu\text{g}/\text{cm}^2$)							PM _{2.5} Speciation Sampler Type
		From	To		TC	OC	EC	OC1	OC2	OC3	OC4	
280670002	MS	1/28/2005	11/12/2005	6	0.95 ± 0.31	0.93 ± 0.31	0.02 ± 0.03	0.27 ± 0.09	0.35 ± 0.16	0.2 ± 0.09	0.11 ± 0.04	Met One SASS
300530018	MT	1/28/2005	11/7/2006	12	1.02 ± 0.19	1.02 ± 0.19	0.01 ± 0.01	0.27 ± 0.08	0.42 ± 0.11	0.25 ± 0.08	0.08 ± 0.04	Met One SASS
300630031	MT	1/28/2005	12/4/2006	24	0.95 ± 0.89	0.94 ± 0.89	0.01 ± 0.02	0.23 ± 0.08	0.42 ± 0.51	0.23 ± 0.31	0.06 ± 0.05	Met One SASS
371190041	NC	1/28/2005	12/4/2006	24	0.67 ± 0.23	0.66 ± 0.22	0.01 ± 0.02	0.18 ± 0.08	0.28 ± 0.11	0.15 ± 0.07	0.05 ± 0.03	Met One SASS
370670022	NC	1/28/2005	11/7/2006	11	0.92 ± 0.17	0.91 ± 0.16	0.01 ± 0.02	0.25 ± 0.07	0.4 ± 0.12	0.21 ± 0.12	0.05 ± 0.04	Met One SASS
371830014	NC	1/28/2005	12/4/2006	17	0.68 ± 0.22	0.67 ± 0.22	0.01 ± 0.05	0.19 ± 0.07	0.28 ± 0.13	0.16 ± 0.07	0.04 ± 0.03	Met One SASS
371070004	NC	1/28/2005	11/7/2006	12	0.92 ± 0.26	0.91 ± 0.26	0.01 ± 0.02	0.28 ± 0.07	0.38 ± 0.12	0.2 ± 0.13	0.05 ± 0.04	Met One SASS
370810013	NC	1/28/2005	11/7/2006	11	0.89 ± 0.22	0.87 ± 0.22	0.02 ± 0.05	0.27 ± 0.1	0.35 ± 0.12	0.2 ± 0.07	0.05 ± 0.04	Met One SASS
370350004	NC	1/28/2005	11/7/2006	12	0.8 ± 0.16	0.8 ± 0.16	0 ± 0	0.25 ± 0.08	0.31 ± 0.08	0.18 ± 0.07	0.05 ± 0.03	Met One SASS
370570002	NC	1/28/2005	11/7/2006	12	0.99 ± 0.17	0.98 ± 0.17	0.01 ± 0.01	0.25 ± 0.11	0.36 ± 0.13	0.25 ± 0.12	0.1 ± 0.09	Met One SASS
371590021	NC	1/28/2005	11/7/2006	12	0.8 ± 0.26	0.78 ± 0.26	0.02 ± 0.05	0.22 ± 0.08	0.31 ± 0.14	0.19 ± 0.1	0.06 ± 0.05	Met One SASS
370210034	NC	1/28/2005	11/7/2006	12	0.97 ± 0.25	0.97 ± 0.25	0 ± 0.01	0.25 ± 0.07	0.46 ± 0.17	0.21 ± 0.09	0.04 ± 0.02	Met One SASS
380171004	ND	1/28/2005	12/4/2006	23	0.87 ± 0.83	0.87 ± 0.83	0.01 ± 0.02	0.2 ± 0.09	0.4 ± 0.53	0.2 ± 0.22	0.06 ± 0.04	Met One SASS
380150003	ND	1/28/2005	11/7/2006	12	1 ± 0.35	1 ± 0.35	0.01 ± 0.02	0.25 ± 0.07	0.42 ± 0.14	0.23 ± 0.15	0.08 ± 0.04	Met One SASS
380530002	ND	1/28/2005	11/7/2006	13	1.09 ± 0.5	1.08 ± 0.5	0.01 ± 0.03	0.3 ± 0.09	0.48 ± 0.33	0.24 ± 0.15	0.06 ± 0.04	Met One SASS
310550019	NE	1/28/2005	12/4/2006	24	0.83 ± 0.42	0.82 ± 0.42	0.01 ± 0.04	0.22 ± 0.07	0.36 ± 0.26	0.19 ± 0.15	0.04 ± 0.02	Met One SASS
330150014	NH	2/3/2005	12/7/2006	23	0.78 ± 0.28	0.76 ± 0.27	0.02 ± 0.07	0.23 ± 0.07	0.33 ± 0.16	0.16 ± 0.08	0.05 ± 0.04	Andersen RAAS
330110020	NH	1/28/2005	11/12/2005	5	0.95 ± 0.21	0.94 ± 0.21	0.01 ± 0.02	0.37 ± 0.19	0.32 ± 0.09	0.19 ± 0.07	0.06 ± 0.03	Andersen RAAS
340390004	NJ	1/28/2005	12/4/2006	23	0.96 ± 0.68	0.95 ± 0.68	0 ± 0.01	0.21 ± 0.09	0.43 ± 0.37	0.23 ± 0.23	0.07 ± 0.04	Met One SASS
340273001	NJ	1/28/2005	12/4/2006	23	0.79 ± 0.3	0.78 ± 0.3	0.01 ± 0.02	0.23 ± 0.1	0.32 ± 0.14	0.17 ± 0.1	0.05 ± 0.03	Met One SASS
340230006	NJ	1/28/2005	12/4/2006	34	0.8 ± 0.29	0.79 ± 0.29	0 ± 0.01	0.23 ± 0.07	0.32 ± 0.14	0.18 ± 0.11	0.06 ± 0.04	Met One SASS
340070003	NJ	1/28/2005	12/4/2006	23	0.64 ± 0.21	0.64 ± 0.21	0.01 ± 0.01	0.2 ± 0.08	0.27 ± 0.11	0.13 ± 0.08	0.04 ± 0.03	Met One SASS
350010023	NM	1/28/2005	11/7/2006	12	1.42 ± 0.3	1.41 ± 0.3	0.01 ± 0.01	0.25 ± 0.11	0.4 ± 0.12	0.36 ± 0.16	0.39 ± 0.15	R&P 2300 Sequential Speciation
320310016	NV	1/28/2005	12/4/2006	24	0.82 ± 0.27	0.81 ± 0.27	0 ± 0.01	0.21 ± 0.07	0.35 ± 0.12	0.18 ± 0.11	0.05 ± 0.05	Met One SASS
320030561	NV	1/28/2005	11/7/2006	12	0.88 ± 0.21	0.88 ± 0.21	0 ± 0	0.27 ± 0.08	0.33 ± 0.12	0.2 ± 0.08	0.07 ± 0.03	Met One SASS
360810124	NY	1/28/2005	12/4/2006	25	1.28 ± 0.46	1.26 ± 0.46	0.02 ± 0.07	0.2 ± 0.12	0.37 ± 0.14	0.37 ± 0.23	0.32 ± 0.19	R&P 2300 Sequential Speciation
361010003	NY	1/28/2005	12/4/2006	23	1.24 ± 0.32	1.22 ± 0.31	0.02 ± 0.07	0.19 ± 0.08	0.38 ± 0.13	0.36 ± 0.13	0.28 ± 0.16	R&P 2300 Sequential Speciation
360310003	NY	1/28/2005	11/7/2006	18	1.33 ± 0.44	1.28 ± 0.42	0.05 ± 0.15	0.21 ± 0.06	0.43 ± 0.22	0.37 ± 0.17	0.27 ± 0.16	R&P 2300 Sequential Speciation
360610062	NY	1/28/2005	12/4/2006	23	0.94 ± 0.71	0.87 ± 0.65	0.07 ± 0.3	0.21 ± 0.08	0.38 ± 0.43	0.21 ± 0.15	0.07 ± 0.09	Met One SASS

Table S2. Continued.

Site ID	State	Sampling Period		No. of Field Blanks	Carbon Concentrations ($\mu\text{g}/\text{cm}^2$)							PM _{2.5} Speciation Sampler Type
		From	To		TC	OC	EC	OC1	OC2	OC3	OC4	
360050110*	NY	1/28/2005	12/9/2005	8	1.18 ± 0.26	1.17 ± 0.26	0.01 ± 0.01	0.23 ± 0.09	0.36 ± 0.14	0.28 ± 0.12	0.29 ± 0.14	R&P 2300 Sequential Speciation
360551007	NY	1/28/2005	12/4/2006	24	1.23 ± 0.42	1.22 ± 0.42	0.01 ± 0.05	0.19 ± 0.1	0.38 ± 0.21	0.34 ± 0.19	0.3 ± 0.19	R&P 2300 Sequential Speciation
360050110*	NY	1/17/2006	12/4/2006	13	0.83 ± 0.53	0.83 ± 0.53	0.01 ± 0.02	0.2 ± 0.06	0.38 ± 0.34	0.2 ± 0.13	0.05 ± 0.03	Met One SASS
360290005	NY	1/28/2005	11/7/2006	12	1.54 ± 0.68	1.49 ± 0.67	0.06 ± 0.12	0.2 ± 0.07	0.48 ± 0.28	0.44 ± 0.31	0.37 ± 0.19	R&P 2300 Sequential Speciation
360050083	NY	1/28/2005	12/9/2005	12	0.79 ± 0.16	0.79 ± 0.16	0 ± 0.01	0.19 ± 0.06	0.36 ± 0.11	0.17 ± 0.08	0.06 ± 0.03	Met One SASS
390171004	OH	1/28/2005	11/7/2006	12	1.16 ± 0.88	1.15 ± 0.88	0.01 ± 0.03	0.28 ± 0.12	0.53 ± 0.45	0.27 ± 0.33	0.06 ± 0.04	Met One SASS
390933002	OH	1/17/2006	11/7/2006	6	0.78 ± 0.08	0.78 ± 0.08	0 ± 0	0.27 ± 0.05	0.35 ± 0.07	0.13 ± 0.06	0.02 ± 0.01	Met One SASS
390950026	OH	1/28/2005	11/7/2006	12	0.74 ± 0.21	0.73 ± 0.21	0.01 ± 0.03	0.23 ± 0.07	0.31 ± 0.1	0.15 ± 0.08	0.03 ± 0.02	Met One SASS
390810017	OH	1/28/2005	11/7/2006	11	0.96 ± 0.49	0.94 ± 0.49	0.02 ± 0.06	0.23 ± 0.08	0.43 ± 0.35	0.23 ± 0.17	0.05 ± 0.02	Met One SASS
390350060	OH	1/10/2005	12/4/2006	49	0.77 ± 0.29	0.77 ± 0.29	0.01 ± 0.02	0.22 ± 0.13	0.32 ± 0.19	0.17 ± 0.08	0.05 ± 0.03	Met One SASS
390870010	OH	1/28/2005	11/7/2006	11	0.81 ± 0.2	0.81 ± 0.2	0 ± 0	0.26 ± 0.08	0.33 ± 0.09	0.16 ± 0.06	0.05 ± 0.03	Met One SASS
390350038	OH	1/28/2005	11/7/2006	12	0.89 ± 0.2	0.89 ± 0.2	0 ± 0	0.28 ± 0.06	0.37 ± 0.14	0.18 ± 0.07	0.06 ± 0.04	Met One SASS
391130031	OH	3/11/2005	11/7/2006	11	0.86 ± 0.2	0.85 ± 0.2	0.01 ± 0.02	0.27 ± 0.08	0.35 ± 0.1	0.18 ± 0.06	0.05 ± 0.02	Met One SASS
390990014	OH	1/28/2005	11/7/2006	12	1.06 ± 0.21	1.05 ± 0.21	0.01 ± 0.02	0.28 ± 0.08	0.49 ± 0.17	0.23 ± 0.12	0.06 ± 0.02	Met One SASS
390930016	OH	1/28/2005	11/12/2005	6	0.73 ± 0.15	0.73 ± 0.15	0 ± 0	0.22 ± 0.08	0.28 ± 0.1	0.16 ± 0.06	0.06 ± 0.02	Met One SASS
391530023	OH	1/28/2005	11/7/2006	11	0.9 ± 0.2	0.89 ± 0.2	0 ± 0.01	0.29 ± 0.08	0.36 ± 0.09	0.2 ± 0.09	0.05 ± 0.03	Met One SASS
390610040	OH	1/28/2005	11/7/2006	12	0.93 ± 0.24	0.92 ± 0.24	0.01 ± 0.03	0.26 ± 0.06	0.43 ± 0.23	0.18 ± 0.08	0.06 ± 0.04	Met One SASS
391510017	OH	3/11/2005	9/8/2006	10	0.81 ± 0.16	0.8 ± 0.16	0 ± 0.01	0.28 ± 0.1	0.31 ± 0.1	0.17 ± 0.07	0.04 ± 0.02	Met One SASS
390490081	OH	1/28/2005	11/7/2006	12	1 ± 0.18	0.97 ± 0.18	0.03 ± 0.04	0.31 ± 0.12	0.43 ± 0.14	0.19 ± 0.09	0.04 ± 0.03	Met One SASS
401431127	OK	1/28/2005	12/4/2006	23	0.72 ± 0.25	0.71 ± 0.25	0 ± 0.01	0.18 ± 0.06	0.3 ± 0.11	0.18 ± 0.1	0.05 ± 0.04	Met One SASS
401091037	OK	1/28/2005	11/7/2006	12	0.85 ± 0.32	0.83 ± 0.32	0.02 ± 0.03	0.24 ± 0.11	0.35 ± 0.13	0.21 ± 0.14	0.03 ± 0.02	Met One SASS
400450890	OK	1/28/2005	3/12/2006	7	0.78 ± 0.37	0.77 ± 0.37	0.01 ± 0.03	0.22 ± 0.08	0.31 ± 0.17	0.19 ± 0.18	0.04 ± 0.03	Met One SASS
410510246	OR	1/28/2005	12/4/2006	24	0.73 ± 0.23	0.72 ± 0.23	0.01 ± 0.04	0.21 ± 0.1	0.3 ± 0.11	0.16 ± 0.09	0.05 ± 0.04	Met One SASS
420710007	PA	1/28/2005	11/7/2006	12	0.99 ± 0.24	0.99 ± 0.24	0 ± 0.01	0.3 ± 0.1	0.4 ± 0.14	0.2 ± 0.11	0.07 ± 0.04	Met One SASS
420290100	PA	1/28/2005	11/7/2006	11	1.14 ± 0.24	1.14 ± 0.24	0 ± 0	0.3 ± 0.09	0.43 ± 0.12	0.28 ± 0.13	0.14 ± 0.07	Met One SASS
420950025	PA	1/28/2005	11/7/2006	11	1.05 ± 0.16	1.04 ± 0.15	0.01 ± 0.03	0.28 ± 0.07	0.46 ± 0.08	0.23 ± 0.1	0.07 ± 0.07	Met One SASS
421330008	PA	1/28/2005	11/7/2006	12	0.78 ± 0.15	0.78 ± 0.15	0 ± 0	0.22 ± 0.07	0.34 ± 0.1	0.16 ± 0.06	0.04 ± 0.03	Met One SASS
421290008	PA	1/28/2005	11/7/2006	12	0.98 ± 0.22	0.97 ± 0.22	0 ± 0	0.31 ± 0.1	0.4 ± 0.1	0.22 ± 0.11	0.04 ± 0.02	Met One SASS
420270100	PA	1/28/2005	11/7/2006	12	0.91 ± 0.22	0.89 ± 0.21	0.02 ± 0.07	0.24 ± 0.07	0.4 ± 0.15	0.19 ± 0.09	0.05 ± 0.03	Met One SASS
420030064	PA	1/28/2005	11/7/2006	12	0.79 ± 0.28	0.78 ± 0.28	0.01 ± 0.02	0.22 ± 0.07	0.33 ± 0.11	0.19 ± 0.18	0.05 ± 0.03	Met One SASS

Table S2. Continued.

Site ID	State	Sampling Period		No. of Field Blanks	Carbon Concentrations ($\mu\text{g}/\text{cm}^2$)							PM _{2.5} Speciation Sampler Type
		From	To		TC	OC	EC	OC1	OC2	OC3	OC4	
421010136	PA	1/28/2005	11/7/2006	12	0.89 ± 0.28	0.88 ± 0.27	0.01 ± 0.05	0.26 ± 0.1	0.4 ± 0.14	0.18 ± 0.1	0.04 ± 0.03	Met One SASS
420692006	PA	1/28/2005	11/7/2006	12	1.14 ± 0.59	1.14 ± 0.59	0 ± 0	0.28 ± 0.05	0.47 ± 0.16	0.31 ± 0.34	0.07 ± 0.09	Met One SASS
420490003	PA	1/28/2005	11/7/2006	12	1.09 ± 0.37	1.07 ± 0.37	0.02 ± 0.04	0.29 ± 0.06	0.49 ± 0.21	0.23 ± 0.14	0.06 ± 0.05	Met One SASS
420030008	PA	2/12/2005	12/4/2006	21	0.72 ± 0.26	0.71 ± 0.26	0.01 ± 0.03	0.21 ± 0.1	0.3 ± 0.15	0.15 ± 0.06	0.05 ± 0.04	Met One SASS
420450002	PA	1/28/2005	11/7/2006	12	1.25 ± 0.5	1.25 ± 0.5	0 ± 0	0.24 ± 0.08	0.53 ± 0.32	0.31 ± 0.15	0.17 ± 0.09	Met One SASS
421255001	PA	1/28/2005	11/7/2006	12	0.87 ± 0.19	0.86 ± 0.19	0 ± 0.01	0.25 ± 0.08	0.38 ± 0.11	0.18 ± 0.08	0.05 ± 0.03	Met One SASS
420110010	PA	7/10/2006	11/7/2006	3	1.38 ± 0.33	1.38 ± 0.33	0 ± 0	0.32 ± 0.03	0.73 ± 0.2	0.24 ± 0.09	0.09 ± 0.05	Met One SASS
420990301	PA	1/28/2005	11/12/2005	6	0.74 ± 0.3	0.74 ± 0.3	0 ± 0	0.17 ± 0.05	0.32 ± 0.13	0.17 ± 0.11	0.06 ± 0.02	Met One SASS
421010004	PA	1/28/2005	12/4/2006	23	0.92 ± 0.77	0.91 ± 0.77	0.01 ± 0.02	0.2 ± 0.14	0.4 ± 0.47	0.25 ± 0.27	0.06 ± 0.04	Met One SASS
420430401	PA	1/28/2005	11/7/2006	12	0.89 ± 0.4	0.88 ± 0.4	0.01 ± 0.03	0.24 ± 0.08	0.38 ± 0.17	0.2 ± 0.16	0.06 ± 0.05	Met One SASS
420110009	PA	3/12/2006	5/11/2006	1	1.26 ± 0	1.26 ± 0	0 ± 0	0.34 ± 0	0.49 ± 0	0.31 ± 0	0.12 ± 0	Met One SASS
420010001	PA	1/28/2005	11/7/2006	12	0.78 ± 0.17	0.78 ± 0.17	0.01 ± 0.02	0.23 ± 0.06	0.35 ± 0.09	0.15 ± 0.08	0.04 ± 0.03	Met One SASS
720610001	PR	1/28/2005	3/12/2006	14	0.81 ± 0.29	0.79 ± 0.29	0.02 ± 0.05	0.2 ± 0.07	0.36 ± 0.17	0.18 ± 0.09	0.05 ± 0.03	Met One SASS
440070022	RI	1/28/2005	12/4/2006	24	0.82 ± 0.33	0.81 ± 0.32	0.01 ± 0.04	0.22 ± 0.06	0.31 ± 0.16	0.19 ± 0.11	0.07 ± 0.08	Andersen RAAS
450450009	SC	1/28/2005	11/7/2006	16	0.81 ± 0.4	0.81 ± 0.4	0.01 ± 0.01	0.2 ± 0.08	0.33 ± 0.16	0.21 ± 0.16	0.06 ± 0.07	Met One SASS
450790019	SC	1/28/2005	11/7/2006	12	0.9 ± 0.23	0.88 ± 0.22	0.02 ± 0.04	0.26 ± 0.1	0.38 ± 0.14	0.19 ± 0.11	0.05 ± 0.03	Met One SASS
450190049	SC	1/28/2005	12/25/2006	25	0.81 ± 0.36	0.8 ± 0.36	0 ± 0.01	0.2 ± 0.08	0.34 ± 0.21	0.21 ± 0.13	0.05 ± 0.04	Met One SASS
450250001	SC	1/28/2005	11/7/2006	12	0.97 ± 0.22	0.96 ± 0.21	0.01 ± 0.03	0.25 ± 0.07	0.42 ± 0.14	0.21 ± 0.13	0.06 ± 0.05	Met One SASS
460990006	SD	1/28/2005	11/7/2006	12	0.94 ± 0.75	0.94 ± 0.75	0 ± 0	0.22 ± 0.08	0.37 ± 0.31	0.22 ± 0.22	0.12 ± 0.19	Met One SASS
471650007	TN	1/28/2005	3/12/2006	8	0.67 ± 0.17	0.67 ± 0.17	0 ± 0	0.24 ± 0.08	0.24 ± 0.1	0.14 ± 0.07	0.05 ± 0.03	Met One SASS
470370023	TN	1/28/2005	11/7/2006	12	1.09 ± 0.51	1.09 ± 0.51	0 ± 0	0.32 ± 0.17	0.4 ± 0.16	0.28 ± 0.24	0.08 ± 0.07	Andersen RAAS
471631007	TN	1/28/2005	11/7/2006	12	0.84 ± 0.18	0.83 ± 0.18	0.01 ± 0.02	0.28 ± 0.09	0.31 ± 0.08	0.19 ± 0.08	0.05 ± 0.02	Met One SASS
470990002	TN	1/28/2005	11/7/2006	12	0.75 ± 0.17	0.74 ± 0.17	0 ± 0.01	0.23 ± 0.07	0.3 ± 0.1	0.16 ± 0.06	0.04 ± 0.02	Met One SASS
471570047	TN	1/28/2005	4/8/2006	17	0.79 ± 0.44	0.79 ± 0.44	0 ± 0.01	0.24 ± 0.07	0.26 ± 0.13	0.18 ± 0.14	0.1 ± 0.15	Andersen RAAS
471570024	TN	6/7/2006	12/4/2006	7	0.82 ± 0.23	0.82 ± 0.23	0 ± 0	0.24 ± 0.08	0.32 ± 0.13	0.2 ± 0.08	0.06 ± 0.05	Met One SASS
470931020	TN	1/28/2005	11/7/2006	12	0.94 ± 0.23	0.93 ± 0.23	0.01 ± 0.02	0.34 ± 0.09	0.39 ± 0.14	0.17 ± 0.06	0.03 ± 0.03	Andersen RAAS
470654002	TN	1/28/2005	11/7/2006	11	0.96 ± 0.54	0.95 ± 0.54	0.01 ± 0.02	0.26 ± 0.08	0.4 ± 0.31	0.23 ± 0.2	0.04 ± 0.02	Met One SASS
481670014	TX	1/5/2005	8/21/2005	12	1.62 ± 0.44	1.52 ± 0.44	0.1 ± 0.07	0.42 ± 0.14	0.8 ± 0.23	0.28 ± 0.12	0.12 ± 0.07	R&P 2025 Sequential SCC
482450021	TX	10/24/2005	12/26/2006	36	1.68 ± 1.2	1.61 ± 1.2	0.07 ± 0.11	0.33 ± 0.18	0.89 ± 0.53	0.31 ± 0.29	0.15 ± 0.34	R&P 2025 Sequential SCC
482730314	TX	1/29/2005	8/21/2005	9	1.49 ± 0.51	1.37 ± 0.51	0.11 ± 0.08	0.37 ± 0.18	0.69 ± 0.17	0.27 ± 0.16	0.15 ± 0.13	R&P 2025 Sequential WINS

Table S2. Continued.

Site ID	State	Sampling Period		No. of Field Blanks	Carbon Concentrations ($\mu\text{g}/\text{cm}^2$)							PM _{2.5} Speciation Sampler Type
		From	To		TC	OC	EC	OC1	OC2	OC3	OC4	
480612004	TX	10/8/2005	12/14/2006	15	1.52 ± 0.45	1.48 ± 0.44	0.04 ± 0.08	0.31 ± 0.17	0.82 ± 0.21	0.28 ± 0.12	0.1 ± 0.11	R&P 2025 Sequential SCC
482430004	TX	1/29/2005	8/1/2005	8	1.43 ± 0.41	1.33 ± 0.38	0.11 ± 0.14	0.32 ± 0.12	0.66 ± 0.21	0.29 ± 0.16	0.15 ± 0.16	R&P 2025 Sequential WINS
482030002	TX	1/17/2005	8/21/2005	19	1.46 ± 1.14	1.39 ± 1.13	0.07 ± 0.13	0.36 ± 0.34	0.7 ± 0.35	0.25 ± 0.23	0.14 ± 0.38	R&P 2025 Sequential WINS
483390078	TX	1/5/2005	8/21/2005	20	2.18 ± 1.09	2.05 ± 1.07	0.13 ± 0.15	0.46 ± 0.24	1.12 ± 0.64	0.37 ± 0.19	0.22 ± 0.21	R&P 2025 Sequential SCC
481130069	TX	1/28/2005	12/4/2006	24	0.8 ± 0.7	0.8 ± 0.7	0 ± 0	0.21 ± 0.12	0.33 ± 0.36	0.19 ± 0.21	0.07 ± 0.09	URG MASS450 WINS
481410044	TX	1/28/2005	12/4/2006	21	0.71 ± 0.44	0.71 ± 0.44	0 ± 0.01	0.19 ± 0.1	0.28 ± 0.19	0.17 ± 0.14	0.06 ± 0.06	URG MASS450 WINS
481410053	TX	1/17/2005	12/14/2006	29	1.7 ± 0.63	1.6 ± 0.62	0.1 ± 0.1	0.44 ± 0.19	0.84 ± 0.32	0.28 ± 0.14	0.13 ± 0.11	R&P 2025 Sequential SCC
482450022	TX	1/5/2005	8/21/2005	19	1.25 ± 0.41	1.19 ± 0.4	0.06 ± 0.07	0.27 ± 0.08	0.65 ± 0.24	0.24 ± 0.11	0.09 ± 0.09	R&P 2025 Sequential SCC
482010024	TX	1/5/2005	12/20/2006	30	1.42 ± 0.48	1.38 ± 0.48	0.04 ± 0.06	0.36 ± 0.22	0.75 ± 0.22	0.25 ± 0.11	0.06 ± 0.07	R&P 2025 Sequential SCC
482010055	TX	1/5/2005	8/21/2005	16	1.65 ± 0.47	1.56 ± 0.47	0.09 ± 0.08	0.41 ± 0.18	0.83 ± 0.27	0.29 ± 0.12	0.12 ± 0.09	R&P 2025 Sequential WINS
483550034*	TX	1/17/2005	4/18/2006	20	1.46 ± 0.44	1.4 ± 0.43	0.06 ± 0.07	0.34 ± 0.14	0.75 ± 0.23	0.27 ± 0.13	0.1 ± 0.09	R&P 2025 Sequential WINS
484530020	TX	10/8/2005	12/14/2006	16	2.17 ± 1.94	2 ± 1.93	0.16 ± 0.23	0.42 ± 0.35	0.93 ± 0.53	0.36 ± 0.32	0.43 ± 0.89	R&P 2025 Sequential SCC
481390015	TX	1/17/2005	8/21/2005	10	1.49 ± 0.62	1.39 ± 0.61	0.1 ± 0.13	0.38 ± 0.14	0.74 ± 0.32	0.22 ± 0.16	0.14 ± 0.17	R&P 2025 Sequential SCC
480430002	TX	1/3/2005	7/5/2005	6	1.68 ± 0.8	1.54 ± 0.78	0.13 ± 0.18	0.43 ± 0.18	0.8 ± 0.44	0.32 ± 0.24	0.13 ± 0.19	R&P 2025 Sequential WINS
482011039	TX	1/28/2005	12/4/2006	41	0.62 ± 0.25	0.62 ± 0.25	0 ± 0.01	0.18 ± 0.1	0.24 ± 0.12	0.14 ± 0.07	0.04 ± 0.04	URG MASS450 WINS
482570005	TX	1/17/2005	8/21/2005	10	1.48 ± 0.65	1.41 ± 0.64	0.07 ± 0.1	0.32 ± 0.12	0.76 ± 0.35	0.28 ± 0.16	0.12 ± 0.18	R&P 2025 Sequential SCC

Table S2. Continued.

Site ID	State	Sampling Period		No. of Field Blanks	Carbon Concentrations ($\mu\text{g}/\text{cm}^2$)							PM _{2.5} Speciation Sampler Type
		From	To		TC	OC	EC	OC1	OC2	OC3	OC4	
482011034	TX	1/17/2005	8/21/2005	10	1.85 ± 1.08	1.66 ± 1.07	0.19 ± 0.19	0.47 ± 0.37	0.72 ± 0.26	0.33 ± 0.26	0.3 ± 0.34	R&P 2025 Sequential SCC
481130050	TX	1/5/2005	12/26/2006	60	1.35 ± 0.43	1.31 ± 0.42	0.04 ± 0.08	0.33 ± 0.16	0.73 ± 0.23	0.21 ± 0.12	0.07 ± 0.1	R&P 2025 Sequential SCC
483550034*	TX	5/12/2006	11/20/2006	8	1.96 ± 0.72	1.87 ± 0.71	0.09 ± 0.13	0.31 ± 0.09	0.95 ± 0.3	0.43 ± 0.2	0.26 ± 0.17	R&P 2025 Sequential SCC
483030001	TX	1/17/2005	6/10/2005	7	1.43 ± 0.53	1.33 ± 0.52	0.1 ± 0.11	0.35 ± 0.1	0.7 ± 0.26	0.26 ± 0.17	0.11 ± 0.14	R&P 2025 Sequential SCC
482010026	TX	1/5/2005	8/21/2005	20	1.71 ± 0.49	1.61 ± 0.48	0.1 ± 0.1	0.49 ± 0.25	0.82 ± 0.22	0.28 ± 0.11	0.12 ± 0.09	R&P 2025 Sequential SCC
480430101*	TX	3/25/2006	12/14/2006	9	1.25 ± 0.36	1.19 ± 0.35	0.06 ± 0.09	0.3 ± 0.13	0.68 ± 0.21	0.19 ± 0.07	0.06 ± 0.1	R&P 2025 Sequential SCC
480430101*	TX	1/17/2005	3/1/2006	17	1.54 ± 0.45	1.44 ± 0.43	0.1 ± 0.12	0.36 ± 0.19	0.77 ± 0.19	0.27 ± 0.15	0.14 ± 0.18	R&P 2025 Sequential WINS
483611100	TX	2/10/2005	8/21/2005	15	1.4 ± 0.24	1.36 ± 0.23	0.05 ± 0.07	0.35 ± 0.11	0.72 ± 0.13	0.25 ± 0.09	0.08 ± 0.08	R&P 2025 Sequential SCC
490353006	UT	1/28/2005	12/4/2006	24	0.8 ± 0.37	0.78 ± 0.37	0.02 ± 0.07	0.23 ± 0.08	0.33 ± 0.16	0.17 ± 0.11	0.05 ± 0.05	Met One SASS
490110004	UT	1/28/2005	11/7/2006	12	0.93 ± 0.24	0.92 ± 0.24	0.01 ± 0.03	0.29 ± 0.08	0.34 ± 0.13	0.21 ± 0.11	0.07 ± 0.06	Met One SASS
490494001	UT	1/28/2005	11/7/2006	12	0.93 ± 0.2	0.93 ± 0.2	0 ± 0	0.29 ± 0.08	0.4 ± 0.1	0.2 ± 0.1	0.04 ± 0.02	Met One SASS
515200006	VA	1/28/2005	9/8/2006	11	0.88 ± 0.25	0.87 ± 0.25	0 ± 0.01	0.24 ± 0.07	0.36 ± 0.14	0.21 ± 0.11	0.05 ± 0.04	Met One SASS
511390004	VA	1/28/2005	9/8/2006	12	0.69 ± 0.2	0.68 ± 0.2	0.01 ± 0.02	0.24 ± 0.1	0.28 ± 0.1	0.13 ± 0.05	0.03 ± 0.02	Met One SASS
510870014	VA	2/12/2005	12/4/2006	25	0.78 ± 0.18	0.77 ± 0.18	0.01 ± 0.02	0.21 ± 0.06	0.35 ± 0.14	0.17 ± 0.06	0.04 ± 0.03	Met One SASS
500070012	VT	1/28/2005	12/4/2006	24	0.79 ± 0.44	0.78 ± 0.44	0.01 ± 0.03	0.19 ± 0.08	0.31 ± 0.14	0.21 ± 0.25	0.06 ± 0.05	Met One SASS
530330080*	WA	1/28/2005	2/7/2006	14	1.13 ± 1.49	1.11 ± 1.49	0.01 ± 0.05	0.2 ± 0.12	0.45 ± 0.63	0.36 ± 0.64	0.11 ± 0.15	URG MASS450 WINS
530330048	WA	1/28/2005	11/7/2006	12	0.95 ± 0.31	0.95 ± 0.31	0 ± 0	0.29 ± 0.06	0.38 ± 0.19	0.21 ± 0.1	0.07 ± 0.08	Andersen RAAS
530330024	WA	1/28/2005	11/12/2005	6	0.97 ± 0.37	0.97 ± 0.37	0 ± 0	0.32 ± 0.15	0.34 ± 0.19	0.24 ± 0.21	0.06 ± 0.04	Andersen RAAS
530330057	WA	1/28/2005	11/7/2006	12	0.98 ± 0.25	0.97 ± 0.25	0 ± 0.01	0.34 ± 0.09	0.38 ± 0.15	0.2 ± 0.07	0.06 ± 0.05	Andersen RAAS
530530029	WA	1/17/2006	11/7/2006	6	1.23 ± 0.81	1.23 ± 0.81	0 ± 0	0.37 ± 0.06	0.46 ± 0.27	0.26 ± 0.23	0.09 ± 0.17	Andersen RAAS
530630016	WA	1/28/2005	11/7/2006	12	1.16 ± 0.19	1.16 ± 0.19	0 ± 0.01	0.36 ± 0.13	0.44 ± 0.1	0.29 ± 0.11	0.06 ± 0.03	Andersen RAAS
530330080*	WA	9/8/2006	12/4/2006	4	1.39 ± 0.13	1.39 ± 0.13	0 ± 0.01	0.31 ± 0.11	0.75 ± 0.24	0.28 ± 0.22	0.05 ± 0.04	Met One SASS
110010042	D.C.	2/12/2005	7/10/2006	18	0.81 ± 0.2	0.8 ± 0.2	0.01 ± 0.02	0.24 ± 0.06	0.3 ± 0.1	0.2 ± 0.11	0.05 ± 0.04	Andersen RAAS
110010043	D.C.	1/28/2005	12/4/2006	24	0.69 ± 0.18	0.69 ± 0.18	0.01 ± 0.01	0.23 ± 0.08	0.25 ± 0.07	0.16 ± 0.09	0.05 ± 0.04	Andersen RAAS

Table S2. Continued.

Site ID	State	Sampling Period		No. of Field Blanks	Carbon Concentrations ($\mu\text{g}/\text{cm}^2$)						PM _{2.5} Speciation Sampler Type	
		From	To		TC	OC	EC	OC1	OC2	OC3		OC4
550270007	WI	1/28/2005	12/4/2006	24	0.67 ± 0.23	0.66 ± 0.23	0 ± 0	0.17 ± 0.05	0.27 ± 0.09	0.16 ± 0.1	0.05 ± 0.06	Met One SASS
551330027	WI	1/28/2005	11/7/2006	12	0.76 ± 0.19	0.75 ± 0.19	0.01 ± 0.01	0.23 ± 0.07	0.31 ± 0.12	0.17 ± 0.09	0.05 ± 0.03	Met One SASS
551198001	WI	1/28/2005	11/7/2006	12	0.76 ± 0.19	0.75 ± 0.19	0 ± 0	0.23 ± 0.08	0.31 ± 0.11	0.16 ± 0.05	0.05 ± 0.02	Met One SASS
550590019	WI	1/28/2005	11/12/2005	6	0.78 ± 0.24	0.78 ± 0.24	0 ± 0	0.2 ± 0.06	0.3 ± 0.09	0.24 ± 0.26	0.03 ± 0.02	Met One SASS
550790026	WI	1/28/2005	12/4/2006	24	0.76 ± 0.26	0.76 ± 0.26	0 ± 0.01	0.19 ± 0.06	0.32 ± 0.11	0.19 ± 0.1	0.06 ± 0.05	Met One SASS
540390011	WV	1/28/2005	12/4/2006	25	0.71 ± 0.18	0.69 ± 0.18	0.01 ± 0.03	0.2 ± 0.06	0.28 ± 0.1	0.15 ± 0.07	0.06 ± 0.04	Met One SASS
540511002	WV	1/28/2005	11/7/2006	12	0.88 ± 0.18	0.88 ± 0.18	0 ± 0.01	0.29 ± 0.11	0.33 ± 0.09	0.2 ± 0.1	0.06 ± 0.05	Met One SASS
540391005	WV	1/28/2005	11/7/2006	12	0.87 ± 0.16	0.87 ± 0.16	0 ± 0.01	0.25 ± 0.08	0.37 ± 0.12	0.21 ± 0.08	0.05 ± 0.03	Met One SASS
All 253 Sites				3628	0.98 ± 0.28	0.96 ± 0.25	0.02 ± 0.03	0.26 ± 0.06	0.4 ± 0.15	0.22 ± 0.06	0.08 ± 0.07	

^a Site count includes 14 sites where the sampler type changed between 1/1/2005 and 12/31/2006, therefore there are 239 STN/CSN sites.

Table S3. Summary of field blanks acquired at the 181 sites in the IMPROVE network from 1/1/2005 to 12/31/2006

SiteID	Name	State	Sampling Period		Total Field Blanks	# of Field Blanks by Season			
			From	To		Spring	Summer	Fall	Winter
ACAD1	Acadia NP	ME	1/13/2005	1/5/2006	3	1	0	0	2
ADPI1	Addison Pinnacle	NY	1/13/2005	5/11/2006	6	3	1	1	1
AGTI1	Agua Tibia	CA	5/19/2005	11/16/2006	7	1	1	5	0
AREN1	Arendtsville	PA	1/13/2005	3/30/2006	5	2	0	0	3
ATLA1	Atlanta	GA	1/13/2005	11/19/2006	8	3	1	2	2
BADL1	Badlands NP	SD	1/13/2005	12/7/2006	7	1	1	1	4
BALD1	Mount Baldy	AZ	3/17/2005	6/1/2006	5	2	1	1	1
BALT1	Baltimore	MD	1/13/2005	12/15/2005	4	1	1	0	2
BAND1	Bandelier NM	NM	3/17/2005	12/28/2006	9	3	2	2	2
BIBE1	Big Bend NP	TX	3/17/2005	8/24/2006	7	3	2	2	0
BIRM1	Birmingham	AL	1/13/2005	8/24/2006	5	1	1	1	2
BLIS1	Bliss SP (TRPA)	CA	3/17/2005	10/26/2006	10	3	1	5	1
BLMO1	Blue Mounds	MN	1/13/2005	1/5/2006	4	2	0	0	2
BOAP1	Bosque del Apache	NM	1/13/2005	12/7/2006	8	0	3	2	3
BOND1	Bondville	IL	3/17/2005	11/16/2006	5	3	0	1	1
BOWA1	Boundary Waters Canoe Area	MN	3/30/2006	9/14/2006	3	2	0	1	0
BRCA1	Bryce Canyon NP	UT	7/21/2005	11/16/2006	5	0	2	3	0
BRET1	Breton	LA	2/3/2005	2/3/2005	1	0	0	0	1
BRID1	Bridger Wilderness	WY	5/19/2005	12/7/2006	2	1	0	0	1
BRID9	Bridger Wilderness	WY	1/13/2005	1/13/2005	1	0	0	0	1
BRIG1	Brigantine NWR	NJ	2/3/2005	5/11/2006	6	3	1	0	2
BRMA1	Bridgton	ME	1/13/2005	10/26/2006	6	2	0	2	2
CABA1	Casco Bay	ME	5/19/2005	12/28/2006	6	2	2	0	2
CABI1	Cabinet Mountains	MT	5/19/2005	2/16/2006	3	1	1	0	1
CACO1	Cape Cod	MA	10/13/2005	12/28/2006	2	0	0	1	1
CACR1	Caney Creek	AR	1/13/2005	9/14/2006	7	3	2	1	1
CADI1	Cadiz	KY	5/19/2005	11/16/2006	7	3	0	3	1
CANY1	Canyonlands NP	UT	7/21/2005	10/5/2006	9	1	3	3	2
CAP11	Capitol Reef NP	UT	3/17/2005	12/7/2006	6	1	2	2	1
CEBL1	Cedar Bluff	KS	1/13/2005	10/26/2006	10	2	3	2	3
CHAS1	Chassahowitzka NWR	FL	6/9/2005	10/5/2006	8	3	2	2	1
CHER1	Cherokee Nation	OK	10/13/2005	9/14/2006	3	1	0	2	0
CHIC1	Chicago	IL	1/13/2005	3/17/2005	2	1	0	0	1
CHIR1	Chiricahua NM	AZ	1/13/2005	8/24/2006	5	2	2	0	1
CLPE1	Cloud Peak	WY	3/17/2005	4/20/2006	3	2	0	1	0
COGO1	Columbia Gorge #1	WA	3/17/2005	10/5/2006	6	3	0	2	1
COHI1	Connecticut Hill	NY	7/21/2005	12/15/2005	3	0	1	1	1
COHU1	Cohutta	GA	3/17/2005	3/17/2005	1	1	0	0	0
CORI1	Columbia River Gorge	WA	3/17/2005	12/7/2006	5	2	1	1	1
CRES1	Crescent Lake	NE	3/17/2005	6/1/2006	6	4	1	1	0
CRLA1	Crater Lake NP	OR	5/19/2005	12/7/2006	7	1	3	1	2
CRMO1	Craters of the Moon NM	ID	3/17/2005	5/11/2006	4	3	0	1	0
DENA1	Denali NP	AK	5/19/2005	12/28/2006	3	1	3	0	3
DETR1	Detroit	MI	4/7/2005	12/31/2006	8	2	2	2	2
DEVA1	Death Valley NP	CA	3/17/2005	10/5/2006	4	1	1	2	0
DOME1	Dome Lands Wilderness	CA	12/15/2005	12/28/2006	4	0	1	0	3
DOSO1	Dolly Sods Wilderness	WV	3/17/2005	9/14/2006	9	3	2	2	2
DOUG1	Douglas	AZ	1/13/2005	12/28/2006	6	1	2	1	2
EGBE1	N/A	N/A	9/1/2005	10/5/2006	5	1	2	2	0
ELDO1	El Dorado Springs	MO	7/21/2005	7/13/2006	6	2	2	1	1

Table S3. Continued.

SiteID	Name	State	Sampling Period		Total Field Blanks	# of Field Blanks by Season			
			From	To		Spring	Summer	Fall	Winter
ELL11	Ellis	OK	3/17/2005	5/11/2006	7	3	1	2	1
EVER1	Everglades NP	FL	1/13/2005	9/14/2006	6	1	1	2	2
FLAT1	Flathead	MT	1/13/2005	10/5/2006	8	1	3	2	2
FOPE1	Fort Peck	MT	3/17/2005	11/16/2006	6	1	2	2	1
FRES1	Fresno	CA	5/19/2005	11/16/2006	7	2	2	3	0
FRRE1	Frostburg	MD	5/19/2005	8/3/2006	4	1	2	0	1
GAMO1	Gates of the Mountains	MT	5/19/2005	10/13/2005	2	1	0	1	0
GICL1	Gila Wilderness	NM	4/7/2005	7/13/2006	4	1	2	0	1
GLAC1	Glacier NP	MT	1/13/2005	11/16/2006	5	2	1	1	1
GRBA1	Great Basin NP	NV	1/13/2005	12/28/2006	10	2	2	2	4
GRGU1	Great Gulf Wilderness	NH	1/13/2005	3/9/2006	5	2	1	0	2
GRR11	Great River Bluffs	MN	5/19/2005	12/15/2005	3	1	1	0	1
GRSA1	Great Sand Dunes NM	CO	10/13/2005	10/5/2006	3	1	0	2	0
GRSM1	Great Smoky Mountains NP	TN	1/13/2005	10/26/2006	6	2	1	1	2
GRSM9	Great Smoky Mountains NP	TN	1/13/2005	1/13/2005	1	0	0	0	1
GUMO1	Guadalupe Mountains NP	TX	7/21/2005	12/28/2006	5	1	3	0	1
HALE1	Haleakala NP	HI	3/17/2005	12/28/2006	8	2	1	1	4
HANC1	Hance Camp at Grand Canyon NP	CO	1/13/2005	4/20/2006	3	1	0	0	2
HAVO1	Hawaii Volcanoes NP	HI	1/13/2005	12/28/2006	8	0	3	3	2
HECA1	Hells Canyon	OR	1/13/2005	11/16/2006	7	3	1	2	1
HEGL1	Hercules-Glades	MO	1/13/2005	11/16/2006	7	2	2	1	2
HOOV1	Hoover	CA	1/13/2005	9/14/2006	8	1	4	1	2
HOUS1	Houston	TX	5/19/2005	7/21/2005	2	1	1	0	0
IKBA1	Ike's Backbone	AZ	12/15/2005	12/15/2005	1	0	0	0	1
INGA1	Indian Gardens	AZ	2/3/2005	9/14/2006	6	0	2	2	2
ISLE1	Isle Royale NP	MI	1/13/2005	11/16/2006	6	2	0	3	1
JARI1	James River Face Wilderness	VA	1/13/2005	6/1/2006	5	1	1	1	2
JOSH1	Joshua Tree NP	CA	1/13/2005	7/13/2006	6	3	1	0	2
KAIS1	Kaiser	CA	1/13/2005	1/5/2006	5	1	1	1	2
KALM1	Kalmiopsis	OR	1/13/2005	11/16/2006	4	0	1	1	2
LABE1	Lava Beds NM	CA	1/13/2005	5/11/2006	7	4	0	2	1
LASU2	Lake Sugema	IA	1/13/2005	12/15/2005	3	0	0	1	2
LAVO1	Lassen Volcanic NP	CA	1/13/2005	1/5/2006	3	0	0	1	2
LIGO1	Linville Gorge	NC	3/17/2005	4/20/2006	5	3	0	1	1
LIVO1	Livonia	IN	1/13/2005	5/19/2005	2	1	0	0	1
LOST1	Lostwood	ND	5/19/2005	11/16/2006	5	2	0	3	0
LYBR1	Lye Brook Wilderness	VT	1/13/2005	12/7/2006	6	1	1	1	3
MACA1	Mammoth Cave NP	KY	5/19/2005	12/7/2006	5	2	1	0	2
MAV11	Martha's Vineyard	MA	5/19/2005	7/13/2006	5	3	1	0	1
MEAD1	Meadview	AZ	5/19/2005	5/19/2005	1	0	0	0	0
MELA1	Medicine Lake	MT	3/17/2005	8/24/2006	3	2	1	0	0
MEVE1	Mesa Verde NP	CO	1/13/2005	12/28/2006	9	1	4	2	2
MING1	Mingo	MO	5/19/2005	9/14/2006	4	1	0	2	1
MKGO1	M.K. Goddard	PA	3/17/2005	8/24/2006	7	4	1	2	0
MOHO1	Mount Hood	OR	1/13/2005	8/24/2006	7	3	1	2	1
MOMO1	Mohawk Mt.	CT	3/17/2005	12/7/2006	4	1	0	0	3
MONT1	Monture	MT	1/13/2005	11/16/2006	7	2	2	2	1
MOOS1	Moosehorn NWR	ME	1/13/2005	12/7/2006	7	2	1	1	3
MORA1	Mount Rainier NP	WA	1/13/2005	11/16/2006	5	2	1	1	1
MORA9	Mount Rainier NP	WA	1/13/2005	1/13/2005	1	0	0	0	1
MOZ11	Mount Zirkel Wilderness	CO	3/17/2005	11/16/2006	8	4	1	3	0
NEBR1	Nebraska NF	NE	1/13/2005	6/22/2006	5	1	2	0	2
NEYO1	New York City	NY	5/19/2005	12/15/2005	3	1	1	0	1

Table S3. Continued.

SiteID	Name	State	Sampling Period		Total Field Blanks	# of Field Blanks by Season			
			From	To		Spring	Summer	Fall	Winter
NOAB1	North Absaroka	WY	3/30/2006	10/5/2006	3	1	1	1	0
NOCA1	North Cascades	WA	3/17/2005	12/28/2006	7	2	2	2	1
NOCH1	Northern Cheyenne	MT	9/1/2005	10/5/2006	3	1	0	2	0
OKEF1	Okefenokee NWR	GA	6/1/2006	6/1/2006	1	0	1	0	0
OLTO1	Old Town	ME	5/19/2005	4/20/2006	4	2	0	1	1
OLYM1	Olympic	WA	2/3/2005	2/16/2006	2	0	0	0	2
OMAH1	Omaha	NE	3/17/2005	10/5/2006	4	1	1	2	0
ORPI1	Organ Pipe	AZ	3/17/2005	11/16/2006	5	2	0	2	1
PASA1	Pasayten	WA	5/19/2005	10/5/2006	6	1	1	3	1
PEFO1	Petrified Forest NP	AZ	3/17/2005	12/7/2006	6	3	1	1	1
PENO1	N/A		3/30/2006	8/24/2006	2	1	1	0	0
PETE1	Petersburg	AK	4/7/2005	9/14/2006	8	3	1	2	2
PHOE1	Phoenix	AZ	1/13/2005	5/11/2006	6	2	0	2	2
PHOE5	Phoenix	AZ	1/13/2005	5/11/2006	5	1	0	1	3
PINN1	Pinnacles NM	CA	3/9/2006	5/11/2006	2	2	0	0	0
PITTI	Pittsburgh	PA	1/13/2005	12/10/2006	8	2	2	2	2
PMRF1	Proctor Maple R. F.	VT	3/17/2005	7/13/2006	4	2	1	1	0
PORE1	Point Reyes National Seashore	CA	7/21/2005	11/16/2006	4	1	1	2	0
PRIS1	Presque Isle	ME	2/3/2005	4/20/2006	3	2	0	0	1
PUSO1	Puget Sound	WA	3/17/2005	1/5/2006	2	1	0	0	1
QUCH1	Quaker City	OH	10/5/2006	10/5/2006	1	0	0	1	0
QURE1	Quabbin Summit	MA	1/13/2005	2/16/2006	4	0	0	2	2
QUVA1	Queen Valley	AZ	3/17/2005	11/16/2006	3	1	0	2	0
RAFA1	San Rafael	CA	1/13/2005	12/7/2006	7	1	1	2	3
REDW1	Redwood NP	CA	1/13/2005	12/7/2006	6	1	1	1	3
ROMA1	Cape Romain NWR	SC	1/13/2005	7/13/2006	5	3	1	0	1
ROMO2	Cape Romain NWR	SC	1/13/2005	1/13/2005	1	0	0	0	1
RUBI1	Rubidoux	CA	3/17/2005	7/21/2005	3	2	1	0	0
SACR1	Salt Creek	NM	1/13/2005	8/3/2006	5	1	1	2	1
SAFO1	Sac and Fox	KS	1/13/2005	2/16/2006	4	0	1	1	2
SAGA1	San Gabriel	CA	1/13/2005	10/5/2006	4	2	0	1	1
SAGO1	San Geronio Wilderness	CA	3/17/2005	9/14/2006	4	3	0	1	0
SAGU1	Saguaro NM	AZ	1/13/2005	11/16/2006	2	0	0	1	1
SAMA1	St. Marks	FL	5/19/2005	11/16/2006	7	2	2	2	1
SAPE1	San Pedro Parks	NM	3/17/2005	2/16/2006	3	2	0	0	1
SAWE1	Saguaro West	AZ	1/13/2005	6/1/2006	7	4	1	1	1
SAWT1	Sawtooth NF	ID	1/13/2005	11/16/2006	4	0	1	2	1
SENE1	Seney	MI	3/17/2005	11/16/2006	3	1	0	2	0
SEQU1	Sequoia NP	CA	12/15/2005	11/16/2006	4	0	0	2	2
SEQU9	Sequoia NP	CA	1/13/2005	1/13/2005	1	0	0	0	1
SHEN1	Shenandoah NP	VA	1/13/2005	1/5/2006	9	6	0	0	3
SHMI1	Shamrock Mine	CO	5/19/2005	5/11/2006	2	2	0	0	0
SHRO1	Shining Rock Wilderness	NC	3/17/2005	5/11/2006	6	4	0	1	1
SIAN1	Sierra Ancha	AZ	7/21/2005	10/5/2006	4	1	1	1	1
SIKE1	Sikes	LA	1/13/2005	8/3/2006	6	0	2	1	3
SIME1	Simeonof	AK	1/13/2005	10/5/2006	7	2	2	2	1
SIPS1	Sipsy Wilderness	AL	5/19/2005	12/7/2006	3	1	0	0	2
SNPA1	Snoqualmie Pass	WA	7/21/2005	12/28/2006	7	0	1	4	2
SPOK1	Spokane Res.	WA	5/19/2005	6/9/2005	2	1	1	0	0
STAR1	Starkey	OR	2/3/2005	12/7/2006	4	1	1	0	2
SULA1	Sula Peak	MT	5/19/2005	11/16/2006	3	1	0	1	1
SWAN1	Swanquarter	NC	3/17/2005	3/9/2006	5	2	2	1	0
SYCA1	Sycamore Canyon	AZ	1/13/2005	9/14/2006	6	1	1	1	3

Table S3. Continued.

SiteID	Name	State	Sampling Period		Total Field Blanks	# of Field Blanks by Season			
			From	To		Spring	Summer	Fall	Winter
TALL1	Tallgrass	KS	1/13/2005	11/16/2006	5	0	1	2	2
THBA1	Thunder Basin	WY	5/19/2005	11/16/2006	8	2	2	2	2
THRO1	Theodore Roosevelt	ND	5/19/2005	5/19/2005	1	1	0	0	0
THSI1	Three Sisters Wilderness	OR	1/13/2005	12/28/2006	5	1	1	0	3
TONT1	Tonto NM	AZ	12/15/2005	12/28/2006	5	1	1	1	2
TRCR1	Trapper Creek	AK	3/17/2005	9/14/2006	4	1	0	2	1
TRIN1	Trinity	CA	1/13/2005	7/21/2005	4	2	1	0	1
TUXE1	Tuxedni	AK	6/9/2005	11/16/2006	7	1	3	2	1
ULBE1	UL Bend	MT	1/13/2005	12/7/2006	7	1	1	1	4
UPBU1	Upper Buffalo Wilderness	AR	3/17/2005	9/14/2006	5	1	3	1	0
VIIIS1	Virgin Islands NP	VI	3/17/2005	11/16/2006	8	1	2	3	2
VILA1	Viking Lake	IA	1/13/2005	7/13/2006	4	0	1	0	3
VOYA1	Voyageurs NP #1	MN	1/13/2005	7/13/2006	5	2	1	0	2
WARI1	Walker River Paiute Tribe	NV	5/19/2005	10/13/2005	4	1	1	2	0
WASH1	Washington D.C.	DC	12/7/2006	12/7/2006	1	0	0	0	1
WEMI1	Weminuche Wilderness	CO	1/13/2005	2/16/2006	4	1	0	1	2
WHIT1	White Mountain	NM	5/19/2005	11/16/2006	4	1	1	2	0
WHPA1	White Pass	WA	3/17/2005	7/13/2006	7	3	1	1	2
WHPE1	Wheeler Peak	NM	4/16/2005	4/8/2006	3	2	1	0	0
WHRI1	White River NF	CO	3/17/2005	12/7/2006	4	1	1	1	1
WICA1	Wind Cave	SD	1/13/2005	12/7/2006	4	2	0	0	2
WIMO1	Wichita Mountains	OK	7/21/2005	11/16/2006	6	1	1	4	0
YELL1	Yellowstone NP 1	WY	1/13/2005	9/14/2006	6	2	0	2	2
YOSE1	Yosemite NP	CA	3/17/2005	8/24/2006	4	1	2	0	1
ZICA1	Zion Canyon	UT	2/3/2005	12/7/2006	5	0	2	1	2
Total					886	268	175	208	235

There are 13 Urban sites in the IMPROVE network: Atlanta, GA (ATLA); Baltimore, MD (BALT); Birmingham, AL (BIRM); Chicago, IL (CHIC); Detroit, MI (DETR); Fresno, CA (FRES); Houston, TX (HOUS); New York, NY (NEYO); Old Town, ME (OLTO); Phoenix, AZ (PHOE); Pittsburgh (PITT); Rubidoux, CA (RUBI); Washington, DC (WASH).

Table S4. Summary of field blanks acquired at the 239 sites in the STN/CSN network from 1/1/2005 to 12/31/2006

Site Code	State	Sampling Period		Total Field Blanks	No. of Field Blanks by Season			
		From	To		Spring	Summer	Fall	Winter
010050002	AL	1/28/2005	1/17/2006	7	2	1	2	2
010730023	AL	1/28/2005	12/4/2006	24	6	6	6	6
010731009	AL	1/28/2005	5/11/2006	9	4	1	2	2
010732003	AL	1/28/2005	11/7/2006	12	4	2	4	2
010890014	AL	1/28/2005	11/7/2006	12	4	2	4	2
010970003	AL	1/28/2005	1/17/2006	7	2	1	2	2
011011002	AL	1/28/2005	11/7/2006	10	4	1	3	2
011030011	AL	1/28/2005	9/7/2005	5	2	1	1	1
011130001	AL	5/16/2005	11/7/2006	12	3	2	5	2
020900010	AK	4/13/2005	12/4/2006	18	5	4	5	4
040130019	AZ	1/28/2005	11/12/2005	6	2	1	2	1
040137003	AZ	3/11/2005	11/7/2006	11	4	2	4	1
040137020	AZ	3/11/2005	11/7/2006	11	4	2	4	1
040139997	AZ	1/28/2005	12/4/2006	24	6	6	6	6
040139998	AZ	1/28/2005	11/12/2005	6	2	1	2	1
040191028	AZ	1/28/2005	9/8/2006	11	4	2	3	2
050030005	AR	1/28/2005	5/16/2005	3	2	0	0	1
051190007	AR	1/28/2005	11/7/2006	12	4	2	4	2
051450001	AR	1/28/2005	5/16/2005	3	2	0	0	1
060190008	CA	1/28/2005	12/4/2006	24	6	6	6	6
060290014	CA	1/28/2005	12/4/2006	41	8	9	12	12
060371103	CA	1/28/2005	11/7/2006	12	4	2	4	2
060658001	CA	1/28/2005	12/4/2006	34	9	7	9	9
060670006	CA	1/28/2005	12/4/2006	24	6	6	6	6
060730003	CA	1/28/2005	12/4/2006	24	6	6	6	6
060850005	CA	1/28/2005	12/4/2006	24	6	6	6	6
061112002	CA	1/28/2005	11/7/2006	12	4	2	4	2
080010006	CO	1/28/2005	12/4/2006	24	6	6	6	6
080410011	CO	1/28/2005	11/7/2006	12	4	2	4	2
080770017	CO	1/28/2005	11/7/2006	12	4	2	4	2
081230008	CO	1/28/2005	11/7/2006	12	4	2	4	2
090090027	CT	1/28/2005	12/4/2006	22	5	6	6	5
100010003	DE	1/28/2005	11/7/2006	12	4	2	4	2
100032004	DE	1/28/2005	11/7/2006	12	4	2	4	2
110010042	D.C.	2/12/2005	7/10/2006	18	6	5	3	4
110010043	D.C.	1/28/2005	12/4/2006	24	6	6	6	6
120111002	FL	1/17/2006	12/4/2006	12	3	3	3	3
120330004	FL	1/28/2005	3/12/2006	8	3	1	2	2
120573002	FL	1/28/2005	12/4/2006	24	6	6	5	7
120730012	FL	1/28/2005	11/7/2006	12	4	2	4	2
120861016	FL	1/28/2005	12/9/2005	12	3	3	3	3
121030026	FL	1/28/2005	12/4/2006	24	6	6	6	6
130210007	GA	1/28/2005	11/12/2005	6	2	1	2	1
130210007	GA	1/17/2006	11/7/2006	6	2	1	2	1

Table S4. Continued.

Site Code	State	Sampling Period		Total Field Blanks	No. of Field Blanks by Season			
		From	To		Spring	Summer	Fall	Winter
130590001	GA	1/28/2005	11/12/2005	7	2	1	3	1
130590001	GA	1/17/2006	11/7/2006	6	2	1	2	1
130690002	GA	1/17/2006	11/7/2006	6	2	1	2	1
130690002	GA	1/28/2005	11/12/2005	5	1	1	2	1
130890002	GA	1/28/2005	12/9/2005	12	3	3	3	3
130890002	GA	1/17/2006	12/4/2006	13	3	3	4	3
131150005	GA	1/28/2005	11/12/2005	6	2	1	2	1
131150005	GA	1/17/2006	11/7/2006	6	2	1	2	1
132150011	GA	1/28/2005	11/12/2005	6	2	1	2	1
132150011	GA	1/17/2006	11/7/2006	6	2	1	2	1
132450091	GA	1/28/2005	11/12/2005	6	2	1	2	1
132450091	GA	5/11/2006	11/7/2006	4	1	1	2	0
150032004	HI	1/28/2005	11/7/2006	12	4	2	4	2
160010010	ID	7/10/2006	12/4/2006	6	0	2	3	1
160270004	ID	1/28/2005	6/7/2006	18	6	4	3	5
170310057	IL	1/17/2006	11/7/2006	6	2	1	2	1
170310057	IL	1/28/2005	11/12/2005	6	2	1	2	1
170310076	IL	1/28/2005	12/27/2005	13	3	3	3	4
170310076	IL	1/17/2006	12/4/2006	12	3	3	3	3
170314201	IL	1/28/2005	11/7/2006	12	4	2	4	2
170434002	IL	1/28/2005	11/7/2006	12	4	2	4	2
171150013	IL	1/28/2005	11/7/2006	12	4	2	4	2
171192009	IL	1/28/2005	11/7/2006	12	4	2	4	2
180372001	IN	1/28/2005	11/7/2006	12	4	2	4	2
180390003	IN	1/28/2005	11/7/2006	12	4	2	4	2
180650003	IN	1/28/2005	11/7/2006	12	4	2	4	2
180890022	IN	1/28/2005	11/7/2006	12	4	2	4	2
180892004	IN	1/28/2005	11/7/2006	12	4	2	4	2
180970078	IN	1/28/2005	12/4/2006	25	6	6	7	6
181630012	IN	1/28/2005	11/7/2006	12	4	2	4	2
191130037	IA	1/28/2005	11/7/2006	12	4	2	4	2
191530030	IA	1/28/2005	11/7/2006	12	4	2	4	2
191630015	IA	1/28/2005	12/4/2006	23	5	6	6	6
201730010	KS	1/28/2005	11/7/2006	12	4	2	4	2
202090021	KS	1/28/2005	12/4/2006	23	6	6	5	6
210190017	KY	1/28/2005	11/7/2006	12	4	2	4	2
210590005	KY	1/28/2005	1/17/2006	7	2	1	2	2
210670012	KY	1/28/2005	9/8/2006	11	4	2	3	2
211110043	KY	1/28/2005	11/7/2006	12	4	2	4	2
211110048	KY	1/28/2005	1/17/2006	7	2	1	2	2
211170007	KY	1/28/2005	11/7/2006	12	4	2	4	2
211250004	KY	1/28/2005	3/12/2006	8	3	1	2	2
211451004	KY	1/28/2005	1/17/2006	7	2	1	2	2
211930003	KY	1/28/2005	11/7/2006	12	4	2	4	2
212270007	KY	1/28/2005	1/17/2006	7	2	1	2	2
220150008	LA	1/28/2005	12/1/2006	13	4	2	3	4

Table S4. Continued.

Site Code	State	Sampling Period		Total Field Blanks	No. of Field Blanks by Season			
		From	To		Spring	Summer	Fall	Winter
220330009	LA	2/12/2005	12/4/2006	24	6	6	7	5
240053001	MD	1/28/2005	12/4/2006	24	6	6	6	6
240330030	MD	1/28/2005	11/7/2006	12	4	2	4	2
250130008	MA	1/28/2005	12/4/2006	20	6	6	4	4
250250042	MA	1/28/2005	12/4/2006	36	10	8	10	8
260050003	MI	1/28/2005	3/12/2006	8	3	1	2	2
260330901	MI	1/28/2005	3/12/2006	11	4	2	2	3
260770008	MI	1/28/2005	11/7/2006	12	4	2	4	2
260810020	MI	1/28/2005	11/7/2006	12	4	2	4	2
261130001	MI	1/28/2005	11/7/2006	12	4	2	4	2
261150005	MI	1/28/2005	11/7/2006	11	3	2	4	2
261610008	MI	1/28/2005	11/7/2006	12	4	2	4	2
261630001	MI	1/28/2005	12/4/2006	23	6	6	6	5
261630033	MI	1/28/2005	11/7/2006	12	4	2	4	2
270530963	MN	1/28/2005	12/4/2006	24	6	6	6	6
270953051	MN	1/28/2005	7/15/2005	7	3	2	0	2
271095008	MN	1/28/2005	11/7/2006	11	4	1	4	2
271230871	MN	1/28/2005	3/11/2005	2	1	0	0	1
280350004	MS	1/28/2005	11/12/2005	6	2	1	2	1
280430001	MS	1/28/2005	1/17/2006	8	2	1	3	2
280470008	MS	1/28/2005	12/4/2006	19	6	6	3	4
280490018	MS	1/28/2005	5/11/2006	9	4	1	2	2
280670002	MS	1/28/2005	11/12/2005	6	2	1	2	1
290470005	MO	1/28/2005	12/4/2006	23	6	6	6	5
290530001	MO	3/11/2005	5/11/2006	6	3	0	2	1
290990012	MO	1/28/2005	10/5/2006	21	6	6	4	5
290990012	MO	11/7/2006	12/4/2006	2	0	0	1	1
291860005	MO	1/28/2005	12/4/2006	24	6	6	6	6
295100085	MO	1/28/2005	12/4/2006	23	6	5	6	6
300530018	MT	1/28/2005	11/7/2006	12	4	2	4	2
300630031	MT	1/28/2005	12/4/2006	24	6	6	6	6
310550019	NE	1/28/2005	12/4/2006	24	7	5	6	6
320030561	NV	1/28/2005	11/7/2006	12	4	2	4	2
320310016	NV	1/28/2005	12/4/2006	24	6	6	6	6
330110020	NH	1/28/2005	11/12/2005	5	1	1	2	1
330150014	NH	2/3/2005	12/7/2006	23	6	5	6	6
340070003	NJ	1/28/2005	12/4/2006	23	6	5	6	6
340230006	NJ	1/28/2005	12/4/2006	34	10	6	10	8
340273001	NJ	1/28/2005	12/4/2006	23	6	5	6	6
340390004	NJ	1/28/2005	12/4/2006	23	6	5	6	6
350010023	NM	1/28/2005	11/7/2006	12	4	2	4	2
360050083	NY	1/28/2005	12/9/2005	12	3	3	3	3
360050110	NY	1/17/2006	12/4/2006	13	4	3	3	3
360050110	NY	2/12/2005	12/9/2005	8	3	0	3	2
360290005	NY	1/28/2005	11/7/2006	12	4	2	4	2
360310003	NY	1/28/2005	11/7/2006	18	5	4	5	4

Table S4. Continued.

Site Code	State	Sampling Period		Total Field Blanks	No. of Field Blanks by Season			
		From	To		Spring	Summer	Fall	Winter
360551007	NY	1/28/2005	12/4/2006	24	6	6	6	6
360610062	NY	1/28/2005	12/4/2006	23	6	6	6	5
360810124	NY	2/12/2005	12/4/2006	25	6	7	6	6
361010003	NY	1/28/2005	12/4/2006	23	6	5	6	6
370210034	NC	1/28/2005	11/7/2006	12	4	2	4	2
370350004	NC	1/28/2005	11/7/2006	12	4	2	4	2
370570002	NC	1/28/2005	11/7/2006	12	4	2	4	2
370670022	NC	1/28/2005	11/7/2006	11	4	1	4	2
370810013	NC	1/28/2005	9/8/2006	11	4	2	3	2
371070004	NC	1/28/2005	11/7/2006	12	4	2	4	2
371190041	NC	1/28/2005	12/4/2006	24	6	6	6	6
371590021	NC	1/28/2005	11/7/2006	12	4	2	4	2
371830014	NC	1/28/2005	11/7/2006	17	6	1	5	5
380150003	ND	1/28/2005	11/7/2006	12	4	2	4	2
380171004	ND	1/28/2005	12/4/2006	23	6	6	6	5
380530002	ND	1/28/2005	11/7/2006	13	4	2	4	3
390171004	OH	1/28/2005	11/7/2006	12	4	2	4	2
390350038	OH	1/28/2005	11/7/2006	12	4	2	4	2
390350060	OH	1/10/2005	12/4/2006	49	13	11	11	14
390490081	OH	1/28/2005	11/7/2006	12	4	2	4	2
390610040	OH	1/28/2005	11/7/2006	12	4	2	4	2
390810017	OH	1/28/2005	11/7/2006	11	3	2	4	2
390870010	OH	1/28/2005	11/7/2006	11	3	2	4	2
390930016	OH	1/28/2005	11/12/2005	6	2	1	2	1
390933002	OH	1/17/2006	11/7/2006	6	2	1	2	1
390950026	OH	1/28/2005	11/7/2006	12	4	2	4	2
390990014	OH	1/28/2005	11/7/2006	12	4	2	4	2
391130031	OH	3/11/2005	11/7/2006	11	4	2	4	1
391510017	OH	3/11/2005	9/8/2006	10	4	2	3	1
391530023	OH	1/28/2005	11/7/2006	11	4	2	3	2
400450890	OK	1/28/2005	3/12/2006	7	3	1	2	1
401091037	OK	1/28/2005	11/7/2006	12	4	2	4	2
401431127	OK	1/28/2005	12/4/2006	23	5	6	6	6
410510246	OR	1/28/2005	12/4/2006	24	6	6	6	6
420010001	PA	1/28/2005	11/7/2006	12	4	2	4	2
420030008	PA	2/12/2005	12/4/2006	21	5	6	6	4
420030064	PA	1/28/2005	11/7/2006	12	4	2	4	2
420110009	PA	3/12/2006	3/12/2006	1	1	0	0	0
420110010	PA	7/10/2006	11/7/2006	3	0	1	2	0
420270100	PA	1/28/2005	11/7/2006	12	4	2	4	2
420290100	PA	3/11/2005	11/7/2006	11	4	2	4	1
420430401	PA	1/28/2005	11/7/2006	12	4	2	4	2
420450002	PA	1/28/2005	11/7/2006	12	4	2	4	2
420490003	PA	1/28/2005	11/7/2006	12	4	2	4	2
420692006	PA	1/28/2005	11/7/2006	12	4	2	4	2
420710007	PA	1/28/2005	11/7/2006	12	4	2	4	2

Table S4. Continued.

Site Code	State	Sampling Period		Total Field Blanks	No. of Field Blanks by Season			
		From	To		Spring	Summer	Fall	Winter
420950025	PA	1/28/2005	11/7/2006	11	3	2	4	2
420990301	PA	1/28/2005	11/12/2005	6	2	1	2	1
421010004	PA	1/28/2005	12/4/2006	23	5	6	6	6
421010136	PA	1/28/2005	11/7/2006	12	4	2	4	2
421255001	PA	1/28/2005	11/7/2006	12	4	2	4	2
421290008	PA	1/28/2005	11/7/2006	12	4	2	4	2
421330008	PA	1/28/2005	11/7/2006	12	4	2	4	2
440070022	RI	1/28/2005	12/4/2006	24	6	6	6	6
450190049	SC	1/28/2005	12/25/2006	25	6	6	6	7
450250001	SC	1/28/2005	11/7/2006	12	4	2	4	2
450450009	SC	1/28/2005	11/7/2006	16	5	2	5	4
450790019	SC	1/28/2005	11/7/2006	12	4	2	4	2
460990006	SD	1/28/2005	11/7/2006	12	4	2	4	2
470370023	TN	1/28/2005	11/7/2006	12	4	2	4	2
470654002	TN	1/28/2005	11/7/2006	11	4	2	3	2
470931020	TN	1/28/2005	11/7/2006	12	4	2	4	2
470990002	TN	1/28/2005	11/7/2006	12	4	2	4	2
471570024	TN	6/7/2006	12/4/2006	7	0	3	3	1
471570047	TN	1/28/2005	4/8/2006	17	5	3	3	6
471631007	TN	1/28/2005	11/7/2006	12	4	2	4	2
471650007	TN	1/28/2005	3/12/2006	8	3	1	2	2
480430002	TX	1/3/2005	7/5/2005	6	1	2	0	3
480430101	TX	3/25/2006	12/14/2006	9	2	3	3	1
480430101	TX	1/17/2005	3/1/2006	17	4	4	3	6
480612004	TX	10/8/2005	12/14/2006	15	2	3	7	3
481130050	TX	1/5/2005	12/26/2006	60	16	15	14	15
481130069	TX	1/28/2005	12/4/2006	24	6	6	6	6
481390015	TX	1/17/2005	8/21/2005	10	3	4	0	3
481410044	TX	1/28/2005	11/7/2006	21	5	5	6	5
481410053	TX	1/17/2005	12/14/2006	29	7	8	8	6
481670014	TX	1/5/2005	8/21/2005	12	2	6	0	4
482010024	TX	1/5/2005	12/20/2006	30	11	8	3	8
482010026	TX	1/5/2005	8/21/2005	20	8	7	0	5
482010055	TX	1/5/2005	8/21/2005	16	5	7	0	4
482011034	TX	1/17/2005	8/21/2005	10	3	4	0	3
482011039	TX	1/28/2005	12/4/2006	41	10	7	13	11
482030002	TX	1/17/2005	8/21/2005	19	8	7	0	4
482430004	TX	1/29/2005	8/1/2005	8	3	3	0	2
482450021	TX	10/24/2005	12/26/2006	36	8	8	10	10
482450022	TX	1/5/2005	8/21/2005	19	8	7	0	4
482570005	TX	1/17/2005	8/21/2005	10	3	4	0	3
482730314	TX	1/29/2005	8/21/2005	9	3	4	0	2
483030001	TX	1/17/2005	6/10/2005	7	3	1	0	3
483390078	TX	1/5/2005	8/21/2005	20	8	7	0	5
483550034	TX	5/12/2006	11/20/2006	8	1	4	3	0
483550034	TX	1/17/2005	4/18/2006	20	6	4	4	6

Table S4. Continued.

Site Code	State	Sampling Period		Total Field Blanks	No. of Field Blanks by Season			
		From	To		Spring	Summer	Fall	Winter
483611100	TX	2/10/2005	8/21/2005	15	7	7	0	1
484530020	TX	10/8/2005	12/14/2006	16	2	4	6	4
490110004	UT	1/28/2005	11/7/2006	12	4	2	4	2
490353006	UT	1/28/2005	12/4/2006	24	6	6	6	6
490494001	UT	1/28/2005	11/7/2006	12	4	2	4	2
500070012	VT	1/28/2005	12/4/2006	24	6	6	6	6
510870014	VA	2/12/2005	12/4/2006	25	7	6	6	6
511390004	VA	1/28/2005	9/8/2006	12	4	2	3	3
515200006	VA	1/28/2005	9/8/2006	11	4	2	3	2
530330024	WA	1/28/2005	11/12/2005	6	2	1	2	1
530330048	WA	1/28/2005	11/7/2006	12	4	2	4	2
530330057	WA	1/28/2005	11/7/2006	12	4	2	4	2
530330080	WA	1/28/2005	2/7/2006	14	3	3	3	5
530330080	WA	9/8/2006	12/4/2006	4	0	0	3	1
530530029	WA	1/17/2006	11/7/2006	6	2	1	2	1
530630016	WA	1/28/2005	11/7/2006	12	4	2	4	2
540390011	WV	1/28/2005	12/4/2006	25	7	6	6	6
540391005	WV	1/28/2005	11/7/2006	12	4	2	4	2
540511002	WV	1/28/2005	11/7/2006	12	4	2	4	2
550270007	WI	1/28/2005	12/4/2006	24	6	6	6	6
550590019	WI	1/28/2005	11/12/2005	6	2	1	2	1
550790026	WI	1/28/2005	12/4/2006	24	6	6	6	6
551198001	WI	1/28/2005	11/7/2006	12	4	2	4	2
551330027	WI	1/28/2005	11/7/2006	12	4	2	4	2
720610001	PR	1/28/2005	3/12/2006	14	4	2	3	5
Total			253 ^a	3628	1065	781	984	798

^a Site count includes 14 sites where sampler type changed between 1/1/2005 and 12/31/2006

Table S5. Summary of field blanks acquired at the eight sites in the SEARCH network from 1/1/2005 to 12/31/2006

Site Code	Site Name	Sampling Period		Number of Blanks	Spring	Summer	Fall	Winter
		From	To					
GLF	Gulfport, MS	1/1/2005	10/2/2006	14	2	4	4	4
OAK	Oak Grove, MS	1/31/2005	12/1/2006	19	4	5	5	5
BHM	Birmingham, AL	1/31/2005	10/31/2006	9	5	2	1	1
CTR	Centreville, AL	1/31/2005	12/1/2006	23	6	6	5	6
JST	Jefferson Street, GA	2/1/2005	11/14/2006	13	3	2	6	2
YRK	Yorkville, GA	1/31/2005	11/30/2006	20	6	4	5	5
PNS	Pensacola, FL	2/1/2005	12/29/2006	24	5	7	6	6
OLF	Outlying Field, FL	2/27/2005	12/31/2006	22	7	6	4	5
Total		8		144	38	36	36	34