

ITASE Group	Site	Lat. (dec.)	Long. (dec.)	Altitude (m asl)	Time Period	Sampling Date	Na (ppb)	Mg (ppb)	Ca (ppb)	K (ppb)	Cl (ppb)	NO <sub>3</sub> (ppb)	SO <sub>4</sub> (ppb)	MS (ppb)	Cl/Na	References
Australia	Law Dome (DSS)	-66.7772	112.8114	1370	1/1/92-10/11/97		80.6	11.0	4.5	3.2	148.2		42.1	7.0	1.84	
Australia	Mount Brown	-68.9000	87.2000	2034	1/1/92-21/12/97		21.9	3.4			60.8		31.8	2.6	2.78	
	King_George_I															
Brazil	sland	-62.1297	-58.6272	698	1989-1993								1.3			
Brazil	Livingston	-62.6000	-60.8333	600									0.9			
Brazil	Deception	-62.9436	-60.5631	400	2001								1.3			
Brazil	James_Ross	-64.2167	-57.6333	1660	1964-1978								0.1			
China	LGB65	-70.8353	77.0747	1850	1991-1996	1996	89.0	0.36	122.0	0.52	100.0	89.0	140.0		1.03	
China	ITAE_1	-65.0833	-59.6500	0	7/27/89	winter	271.0	32.7	14.5		441.0	3.7	54.0		1.63	Qin et al., 1992, Qin et al., 1999
China	ITAE_5	-65.5833	-61.1667	50	8/1/89	winter	457.0	55.1	32.2		799.0	5.6	132.0		1.75	Qin et al., 1992, Qin et al., 1999
China	ITAE_7	-65.8333	-61.9500	90	8/3/89	winter	324.0	39.0	24.5		578.0	10.1	100.0		1.78	Qin et al., 1992, Qin et al., 1999
							1054.				1872.					
China	ITAE_8	-66.3333	-62.6000	70	8/10/89	winter	0	127.0	48.5		0	10.1	210.0		1.78	Qin et al., 1992, Qin et al., 1999
China	ITAE_9	-66.9000	-63.3333	50	8/13/89	winter	499.0	60.1	23.0		784.0	5.0	112.0		1.57	Qin et al., 1992, Qin et al., 1999
China	ITAE_10	-67.3333	-64.1167	50	8/15/89	winter	43.0	5.2	2.5		61.0	15.1	17.0		1.42	Qin et al., 1992, Qin et al., 1999
China	ITAE_11	-67.7833	-64.7000	80	8/18/89	winter	21.0	2.5	2.0		32.0	8.4	12.0		1.52	Qin et al., 1992, Qin et al., 1999
China	ITAE_12	-68.4167	-65.2500	20	8/23/89	winter	76.0	9.2	4.5		107.0	14.7	29.0		1.41	Qin et al., 1992, Qin et al., 1999
China	ITAE_13	-68.7167	-65.4333	1200	8/27/89	winter	60.0	7.2	4.0		115.0	18.6	31.0		1.92	Qin et al., 1992, Qin et al., 1999
China	ITAE_17	-69.1667	-65.3000	1700	8/31/89	winter	21.0	2.5	1.5		42.0	17.7	26.0		2.00	Qin et al., 1992, Qin et al., 1999
	Weyerhaeuser															
China	Gl.	-69.6833	-65.2167	1600	9/5/89	winter	12.0	1.5	1.0		23.0	3.7	29.0		1.92	Qin et al., 1992, Qin et al., 1999
China	ITAE_19	-70.4167	-64.7333	1950	9/9/89	winter	25.0	3.0	2.0		73.0	16.2	47.0		2.92	Qin et al., 1992, Qin et al., 1999
China	ITAE_20	-70.9667	-64.6833	2000	9/14/89	winter	7.0	0.8	1.0		17.0	11.4	20.0		2.43	Qin et al., 1992, Qin et al., 1999
China	ITAE_21	-71.2833	-64.7167	1650	9/15/89	winter	85.0	10.2	3.5		137.0	20.7	29.0		1.61	Qin et al., 1992, Qin et al., 1999
China	ITAE_22	-71.9333	-65.3000	1250	9/17/89	winter	31.0	3.7	3.5		64.0	10.8	22.0		2.06	Qin et al., 1992, Qin et al., 1999
China	ITAE_23	-72.2333	-65.4833	1250	9/18/89	winter	47.0	5.7	3.0		86.0	11.7	18.0		1.83	Qin et al., 1992, Qin et al., 1999
China	ITAE_24	-72.5500	-65.9167	1000	9/19/89	winter	17.0	2.1	1.5		34.0	7.8	11.0		2.00	Qin et al., 1992, Qin et al., 1999
China	ITAE_25	-72.2333	-66.8000	1200	9/23/89	winter	54.0	6.5	2.5		98.0	12.5	18.0		1.81	Qin et al., 1992, Qin et al., 1999
China	ITAE_27	-74.0833	-69.9500	1450	10/6/89	winter	26.0	3.1	2.5		50.0	6.7	10.0		1.92	Qin et al., 1992, Qin et al., 1999
China	ITAE_28	-74.7667	-72.7667	1520	10/9/89	winter	87.0	10.5	5.0		164.0	7.1	29.0		1.89	Qin et al., 1992, Qin et al., 1999
China	ITAE_29	-74.8500	-75.7500	700	10/11/89	winter	51.0	6.1	2.5		89.0	10.6	30.0		1.75	Qin et al., 1992, Qin et al., 1999
China	Eights	-75.4333	-78.4833	450	10/15/89	winter	60.0	7.2	3.0		10.0	10.1	29.0		0.17	Qin et al., 1992, Qin et al., 1999
China	ITAE_31	-75.7833	-81.6667	750	10/18/89	winter	66.0	8.0	4.0		111.0	8.4	28.0		1.68	Qin et al., 1992, Qin et al., 1999
China	ITAE_32	-76.4167	-85.1667	1050	10/24/89	winter	44.0	5.3	4.0		80.0	7.3	29.0		1.82	Qin et al., 1992, Qin et al., 1999
China	ITAE_33	-76.9333	-86.2500	1100	10/26/89	winter	31.0	3.7	2.5		68.0	10.4	18.0		2.19	Qin et al., 1992, Qin et al., 1999
China	ITAE_34	-77.6500	-87.1167	1500	10/28/89	winter	38.0	4.6	4.0		78.0	10.4	18.0		2.05	Qin et al., 1992, Qin et al., 1999
China	ITAE_35	-78.2000	-87.6500	1650	10/30/89	winter	33.0	4.0	3.5		77.0	14.7	23.0		2.33	Qin et al., 1992, Qin et al., 1999
China	ITAE_36	-78.8167	-87.2333	2050	11/1/89	winter	165.0	20.0	7.0		264.0	7.8	30.0		1.60	Qin et al., 1992, Qin et al., 1999
China	ITAE_37	-79.1667	-86.8500	1800	11/2/89	winter	66.0	8.0	6.5		139.0	16.4	29.0		2.11	Qin et al., 1992, Qin et al., 1999
China	ITAE_38	-79.7500	-86.3000	1680	11/4/89	winter	32.0	3.8	3.0		73.0	12.5	31.0		2.28	Qin et al., 1992, Qin et al., 1999
China	Patriot Hills	-80.3000	-81.3500	700	11/9/89	winter	109.0	13.1	75.5		97.0	16.2	94.0		0.89	Qin et al., 1992, Qin et al., 1999

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China	ITAE_40	-80.7500	-81.2500	900		11/11/89	winter	204.0	24.6	7.0	342.0	10.8	38.0		1.68	Qin et al., 1992, Qin et al., 1999
China	ITAE_41	-81.2000	-82.0000	900		11/14/89	winter	304.0	36.6	8.5	444.0	5.2	42.0		1.46	Qin et al., 1992, Qin et al., 1999
China	ITAE_42	-81.8000	-82.8333	1050		11/16/89	winter	271.0	32.7	9.5	409.0	8.8	62.0		1.51	Qin et al., 1992, Qin et al., 1999
China	ITAE_43	-81.9167	-83.3333	1150		11/17/89	winter	65.0	7.8	4.0	98.0	9.5	29.0		1.51	Qin et al., 1992, Qin et al., 1999
China	ITAE_44	-82.6833	-84.0000	1250		11/19/89	winter	156.0	18.8	6.5	235.0	16.6	41.0		1.51	Qin et al., 1992, Qin et al., 1999
China	ITAE_45	-83.0833	-84.7500	1320		11/20/89	winter	70.0	8.4	7.5	170.0	15.5	35.0		2.43	Qin et al., 1992, Qin et al., 1999
China	ITAE_46	-83.7833	-87.4167	1480		11/22/89	winter	44.0	5.3	3.0	84.0	16.2	22.0		1.91	Qin et al., 1992, Qin et al., 1999
China	ITAE_47	-84.2000	-88.0833	1550		11/23/89	winter	27.0	3.3	2.5	68.0	15.3	19.0		2.52	Qin et al., 1992, Qin et al., 1999
China	ITAE_48	-84.5833	-88.9167	1650		11/24/89	winter	33.0	4.0	4.0	82.0	23.5	38.0		2.48	Qin et al., 1992, Qin et al., 1999
China	ITAE_49	-85.1833	-88.9667	1730		11/26/89	winter	66.0	7.9	3.0	130.0	15.3	26.0		1.97	Qin et al., 1992, Qin et al., 1999
China	Thiel Mountains	-85.8833	-88.1667	1850		11/29/89	winter	15.0	1.8	2.5	48.0	14.7	25.0		3.20	Qin et al., 1992, Qin et al., 1999
China	ITAE_51	-86.2000	-88.4167	2000		11/30/89	multi-y	14.0	1.7	2.0	44.0	18.6	24.0		3.14	Qin et al., 1992, Qin et al., 1999
China	ITAE_52	-86.5667	-88.9500	2050		12/2/89	multi-y	17.0	2.0	3.5	66.0	19.6	29.0		3.88	Qin et al., 1992, Qin et al., 1999
China	ITAE_53	-86.9000	-90.3167	2200		12/3/89	multi-y	17.0	2.0	1.5	49.0	25.0	72.0		2.88	Qin et al., 1992, Qin et al., 1999
China	ITAE_54	-87.6000	-91.1000	2380		12/5/89	multi-y	4.0	0.5	1.5	23.0	22.2	39.0		5.75	Qin et al., 1992, Qin et al., 1999
China	ITAE_55	-87.9500	-91.9167	2550		12/6/89	multi-y	16.0	1.9	2.5	61.0	49.3	39.0		3.81	Qin et al., 1992, Qin et al., 1999
China	ITAE_56	-88.6333	-92.4333	2650		12/8/89	multi-y	13.0	1.6	3.0	50.0	55.5	43.0		3.85	Qin et al., 1992, Qin et al., 1999
China	ITAE_57	-89.0000	-92.9667	2750		12/9/89	multi-y	12.0	1.5	2.5	52.0	29.8	47.0		4.33	Qin et al., 1992, Qin et al., 1999
China	ITAE_58	-89.3667	-91.6500	2850		12/10/89	multi-y	14.0	1.7	1.5	41.0	32.6	31.0		2.93	Qin et al., 1992, Qin et al., 1999
China	South Pole	-90.0000	0.0000	2880		12/13/89	multi-y	8.0	1.0	1.5	30.0	17.1	39.0		3.75	Qin et al., 1992, Qin et al., 1999
China	ITAE_60	-89.8833	114.3667	2880		12/16/89	multi-y	13.0	1.6	2.0	53.0	36.3	42.0		4.08	Qin et al., 1992, Qin et al., 1999
China	ITAE_61	-89.5333	108.3000	2900		12/17/89	multi-y	17.0	2.1	2.0	59.0	46.9	45.0		3.47	Qin et al., 1992, Qin et al., 1999
China	ITAE_62	-89.1833	105.5833	2950		12/18/89	multi-y	14.0	1.7	1.5	52.0	41.0	48.0		3.71	Qin et al., 1992, Qin et al., 1999
China	ITAE_63	-88.4333	104.4500	3050		12/20/89	multi-y	18.0	2.2	2.0	68.0	53.3	54.0		3.78	Qin et al., 1992, Qin et al., 1999
China	ITAE_64	-88.0500	104.5833	3070		12/21/89	multi-y	16.0	1.9	2.0	63.0	36.9	55.0		3.94	Qin et al., 1992, Qin et al., 1999
China	ITAE_65	-87.7000	104.6500	3130		12/22/89	multi-y	13.0	1.6	1.5	57.0	48.4	61.0		4.38	Qin et al., 1992, Qin et al., 1999
China	ITAE_66	-87.3333	104.4167	3150		12/23/89	multi-y	19.0	2.3	2.5	79.0	49.0	56.0		4.16	Qin et al., 1992, Qin et al., 1999
China	ITAE_67	-86.6000	104.9500	3150		12/25/89	multi-y	16.0	1.9	2.0	72.0	56.2	53.0		4.50	Qin et al., 1992, Qin et al., 1999
China	ITAE_68	-85.5500	105.6667	3160		12/29/89	multi-y	16.0	1.9	2.0	61.0	38.9	83.0		3.81	Qin et al., 1992, Qin et al., 1999
China	ITAE_69	-85.2167	105.8167	3180		12/30/89	multi-y	26.0	3.1	1.5	72.0	18.4	85.0		2.77	Qin et al., 1992, Qin et al., 1999
China	ITAE_70	-84.4667	106.1667	3210		1/1/90	multi-y	20.0	2.4	3.0	72.0	35.4	68.0		3.60	Qin et al., 1992, Qin et al., 1999
China	ITAE_71	-84.1167	106.2833	3230		1/2/90	multi-y	17.0	2.0	3.0	99.0	32.6	79.0		5.82	Qin et al., 1992, Qin et al., 1999
China	ITAE_72	-83.7333	106.4000	3230		1/3/90	multi-y	21.0	2.5	2.0	85.0	39.3	108.0		4.05	Qin et al., 1992, Qin et al., 1999
China	ITAE_73	-83.0000	106.2000	3260		1/5/90	multi-y	36.0	4.3	2.0	73.0	28.7	93.0		2.03	Qin et al., 1992, Qin et al., 1999
China	ITAE_74	-82.6667	106.3167	3280		1/6/90	multi-y	17.0	2.0	3.0	116.0	24.0	77.0		6.82	Qin et al., 1992, Qin et al., 1999
China	ITAE_75	-81.8333	106.4667	3310		1/9/90	multi-y	21.0	2.5	2.5	77.0	32.2	85.0		3.67	Qin et al., 1992, Qin et al., 1999
China	ITAE_76	-81.0833	106.4333	3410		1/11/90	multi-y					50.1	119.0			Qin et al., 1992, Qin et al., 1999
China	ITAE_77	-81.7000	106.2000	3400		1/12/90	multi-y	28.0	3.4	3.5	131.0	36.1	87.0		4.68	Qin et al., 1992, Qin et al., 1999
China	ITAE_78	-80.2833	106.0667	3420		1/13/90	multi-y	29.0	3.5	4.0	92.0	27.0	83.0		3.17	Qin et al., 1992, Qin et al., 1999
China	ITAE_79	-79.7000	106.0667	3430		1/14/90	multi-y	28.0	3.4	4.5	119.0	21.4	137.0		4.25	Qin et al., 1992, Qin et al., 1999
China	ITAE_80	-79.1333	106.1333	3430		1/16/90	multi-y	22.0	2.6	1.5	92.0	22.2	126.0		4.18	Qin et al., 1992, Qin et al., 1999

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China	Vostok Station	-78.7667	106.6833	3480		1/17/90 multi-y	24.0	2.9	2.5		116.0	25.6	110.0		4.83	Qin et al., 1992, Qin et al., 1999
China	ITAE_82	-78.1167	105.7833	3500		1/22/90 multi-y	20.0	2.4	2.5		109.0	34.8	76.0		5.45	Qin et al., 1992, Qin et al., 1999
China	ITAE_83	-77.7167	104.7833	3510		1/23/90 multi-y	30.0	3.6	2.0		119.0	46.4	109.0		3.97	Qin et al., 1992, Qin et al., 1999
China	ITAE_84	-77.0000	102.9167	3550		1/25/90 multi-y	17.0	2.1	1.0		88.0	45.1	93.0		5.18	Qin et al., 1992, Qin et al., 1999
China	ITAE_85	-76.6000	102.0000	3550		1/26/90 multi-y	18.0	2.2	3.0		73.0	29.6	72.0		4.06	Qin et al., 1992, Qin et al., 1999
China	ITAE_86	-75.9000	100.5167	3560		1/28/90 multi-y	16.0	1.9	3.0		59.0	26.6	75.0		3.69	Qin et al., 1992, Qin et al., 1999
China	ITAE_87	-75.5500	100.2167	3550		1/29/90 multi-y	12.0	1.4	2.5		59.0	35.0	49.0		4.92	Qin et al., 1992, Qin et al., 1999
China	ITAE_88	-74.7333	98.6833	3550		1/31/90 multi-y	14.0	1.7	1.5		44.0	26.1	60.0		3.14	Qin et al., 1992, Qin et al., 1999
China	Komsomolskay a	-74.3500	98.0000	3500		2/1/90 multi-y	19.0	2.3	4.0		60.0	32.8	53.0		3.16	Qin et al., 1992, Qin et al., 1999
China	ITAE_90	-73.6833	97.4333	3490		2/4/90 multi-y	8.0	1.0	4.0		52.0	38.2	58.0		6.50	Qin et al., 1992, Qin et al., 1999
China	ITAE_91	-73.3000	97.1500	3430		2/5/90 multi-y	8.0	1.0	1.0		32.0	22.5	43.0		4.00	Qin et al., 1992, Qin et al., 1999
China	ITAE_92	-72.8500	96.9833	3380		2/6/90 multi-y	4.0	0.5	3.0		37.0	40.2	25.0		9.25	Qin et al., 1992, Qin et al., 1999
China	Vostok_I	-72.4667	96.7500	3320		2/7/90 multi-y	6.0	0.7	3.5		29.0	13.8	23.0		4.83	Qin et al., 1992, Qin et al., 1999
China	ITAE_94	-71.7000	96.2833	3180		2/9/90 summer	5.0	0.6	2.0		30.0	21.6	31.0		6.00	Qin et al., 1992, Qin et al., 1999
China	ITAE_95	-71.3333	96.0167	3093		2/10/90 summer	12.0	1.4	4.5		46.0	13.7	41.0		3.83	Qin et al., 1992, Qin et al., 1999
China	ITAE_96	-70.9500	95.9000	2980		2/11/90 summer	8.0	1.0	2.5		24.0	15.8	30.0		3.00	Qin et al., 1992, Qin et al., 1999
China	ITAE_97	-70.5500	95.7167	2870		2/12/90 summer	9.0	1.1	5.5		41.0	14.5	31.0		4.56	Qin et al., 1992, Qin et al., 1999
China	ITAE_98	-70.1833	95.5833	2820		2/14/90 summer	4.0	0.5	2.5		29.0	16.0	24.0		7.25	Qin et al., 1992, Qin et al., 1999
China	ITAE_100	-69.4333	95.1167	2650		2/18/90 summer	14.0	1.7	4.0		38.0	17.9	60.0		2.71	Qin et al., 1992, Qin et al., 1999
China	ITAE_101	-68.8500	94.6167	2400		2/21/90 summer	4.0	0.5	2.0		28.0	13.8	35.0		7.00	Qin et al., 1992, Qin et al., 1999
China	ITAE_102	-68.0833	93.8333	2080		2/23/90 summer	5.0	0.6	3.0		22.0	10.6	52.0		4.40	Qin et al., 1992, Qin et al., 1999
China	ITAE_103	-67.7000	93.6500	1850		2/24/90 summer	7.0	0.8	4.5		35.0	17.5	52.0		5.00	Qin et al., 1992, Qin et al., 1999
China	ITAE_104	-67.3500	93.4333	1480		2/25/90 summer	7.0	0.8	2.3		31.0	8.4	45.0		4.43	Qin et al., 1992, Qin et al., 1999
Finland	Finland_1	-72.5330	-16.5670	40	surface samples	5cm	497.8	54.1	16.9	17.6	810.0	39.2	335.0		1.63	
Finland	Finland_2	-72.6100	-16.3100	250	surface samples	5cm	355.8	43.9	23.6	30.1	580.8	95.9	426.9		1.63	
Finland	Finland_3b	-72.7500	-16.0020	60	surface samples	5cm	428.5	57.1	24.0	24.6	799.4	90.0	210.2		1.87	
Finland	Finland_5	-72.9650	-13.5780	270	surface samples	5cm	200.2	27.0	14.4	11.4	373.0	52.3	92.7		1.86	
Finland	Finland_9	-73.0680	-13.4700	235	surface samples	5cm	329.4	37.2	21.9	15.7	611.9	207.4	268.8		1.86	
Finland	Findland_10	-73.2080	-13.2170	375	surface samples	5cm	320.2	30.1	16.6	17.0	616.1	182.3	173.3		1.92	
Finland	Finland_11	-73.4380	-14.4450	990	surface samples	5cm	132.1	15.3	11.6	6.9	227.3	95.9	194.7		1.72	
Finland	Finland_12	-73.4570	-12.5550	905	surface samples	5cm	69.2	7.9	2.7	5.9	193.7	157.9	84.4		2.80	
Finland	Finland_14	-74.0130	-12.0180	980	surface samples	5cm	39.0	4.4	3.2	3.7	89.6	119.3	79.7		2.30	
Finland	Finland_16	-74.4780	-11.5520	1100	surface samples	5cm	30.3	1.8	7.8	6.0	87.6	104.9	47.7		2.89	
Finland	Findland_17	-74.9980	-10.0080	2550	surface samples	5cm	37.8	4.5	12.4	10.8	69.8	40.6	31.6		1.85	
Germany	Berkner_Island	-79.6133	-45.7233	890	means full core					11.7	441.4	34.9	91.6	14.1		
Germany	DML18	-75.2503	-6.0000	2630	<b>91/92 to 96/97</b>						<b>59.5</b>	<b>65.1</b>	<b>107.9</b>	<b>13.8</b>		Göktas et al., 2002
Germany	SS9803-															
Germany	DML07	-75.5815	-3.4303	2669	<b>91/92 to 96/97</b>						<b>84.3</b>	<b>66.2</b>	<b>85.2</b>	<b>17.3</b>		Göktas et al., 2002
Germany	SS9805-															
Germany	DML05	-75.0023	0.0070	2882	<b>91/92 to 96/97</b>						<b>51.7</b>	<b>69.2</b>	<b>82.5</b>	<b>15.2</b>		Göktas et al., 2002

ITASE Group	Site	Lat. (dec.)	Long. (dec.)	Altitude (m asl)	Time Period	Sampling Date	Na (ppb)	Mg (ppb)	Ca (ppb)	K (ppb)	Cl (ppb)	NO <sub>3</sub> (ppb)	SO <sub>4</sub> (ppb)	MS (ppb)	Cl/Na	References
Germany	SS9806-DML20	-74.7507	0.9932	2860	91/92 to 96/97		7.6				27.0	65.0	63.0	9.8	3.55	Göktas et al., 2002
Germany	SS9807-DML03	-74.4992	1.9605	2843	91/92 to 96/97						37.6	67.4	46.9	10.0		Göktas et al., 2002
Germany	SS9808-DML21	-74.6672	4.0017	2980	91/92 to 96/97		11.4				41.1	76.7	79.7	12.8	3.61	Göktas et al., 2002
Germany	SS9810-DML17	-75.1670	6.4985	3160	91/92 to 96/97						43.6	67.8	106.0	9.1		Göktas et al., 2002
Germany	SS9812-DML16	-75.1673	5.0033	3100	91/92 to 96/97		14.1				41.0	75.3	94.3	11.9	2.91	Göktas et al., 2002
Germany	SS9814-DML15	-75.0837	2.5010	2970	91/92 to 96/97		10.4				32.7	65.7	82.4	13.5	3.14	Göktas et al., 2002
Germany	SS9815-DML14	-74.9492	-1.4945	2840	91/92 to 96/97		14.6				41.1	53.0	94.7	13.5	2.82	Göktas et al., 2002
Germany	SS9817-DML13	-75.0000	-4.4963	2740	91/92 to 96/97		21.8				51.8	62.1	112.4	13.3	2.38	Göktas et al., 2002
Germany	SS9901-DML25	-75.0023	0.0070	2882	91/92 to 96/97		17.2				40.3	60.4	91.8	10.8	2.34	Göktas et al., 2002
Germany	SS9908-DML25	-75.0023	0.0070	2882	91/92 to 96/97		10.2				41.9	63.8	82.4	13.0	4.11	Göktas et al., 2002
Germany	SS9801-DML11	-74.8547	-8.4970	2600	91/92 to 96/97		34.2	3.6	3.1	9.5	67.1	55.9	44.5	10.9	1.96	Göktas et al., 2002
Germany	SS9818-DML12	-75.0007	-6.4983	2680	91/92 to 96/97		22.3				49.0	56.9	94.1	12.2	2.20	Göktas et al., 2002
Germany	SS9804-DML	-75.1673	-0.9950	2840	91/92 to 96/97		17.1	1.6	4.3	4.8	41.7	58.5	84.0	9.0	2.44	Göktas et al., 2002
Italy	GPS2	-74.6448	157.5022	1776	~1984 to 1998		44.3	6.1	4.7	2.2	107.0	59.0	91.5	8.3	2.42	
Italy	31Dpt	-74.0253	155.9600	2065	~1992 to 1998		52.7	4.4	2.8	1.6	100.7	67.9	65.4	17.8	1.91	
Italy	M2	-74.8045	151.2695	2308	~1928 to 1998		16.9	2.4	2.6	1.4	53.9	12.1	97.6	2.5	3.19	
Italy	Mid_Point	-75.5360	145.8572	2454	~1978 to 1998		21.0	3.0	3.6	1.4	71.0	88.5	0.2	9.6	3.38	
Italy	D2	-75.6222	140.6307	2611	~1973 to 1998		20.0	2.6	3.6	2.2	66.7	52.5	83.0	7.8	3.34	
Italy	D4	-75.5980	135.8315	2792	~1968 to 1998		24.7	2.6	1.3	1.5	69.2	21.9	94.5	6.5	2.80	
Italy	D6	-75.4475	129.8088	3024	~1968 to 1998		23.0	4.1	2.1	1.1	64.9	38.9	92.7	9.3	2.83	
Italy	DC	-75.1000	123.3500	3233	1997-92		15.5	1.1	5.7	3.4	102.3	83.0	78.3	11.1	6.60	
Italy	D66	-68.9397	136.9352	2333	2001-1999		24.7	2.9	11.9	5.3	38.0	78.2	34.4	6.1	1.53	
Italy	GV1	-70.8711	141.3833	2244	2001-1998		26.2	2.0	9.3	6.9	44.2	67.5	40.0	4.4	1.69	
Italy	GV2	-71.7117	145.7860	2143	2001-1999		26.2	2.1	6.8	6.5	44.3	67.6	46.6	7.4	1.69	
Italy	GV3	-72.6283	150.1739	2137	2001-1988		17.2	1.9	4.9	4.5	36.3	50.0	51.2	7.6	2.10	
Italy	GV4	-72.3886	154.4842	2126	2001-1999		27.2	2.2	5.7	9.4	41.3	50.0	42.9	12.4	1.52	
Italy	GV5	-71.8870	158.5369	2184	2001-1999		19.3	1.8	5.0	4.8	30.8	41.7	33.4	7.9	1.59	
Italy	GV7	-70.6842	158.8625	1947	2001-00		22.8	1.8	5.7	6.2	36.9	38.4	25.1	10.0	1.62	
Italy	Talos_Dome	-72.7706	159.0758	2316	2001-1998		21.2	2.8	4.6	1.6	44.5	55.9	50.0	8.8	2.10	
Italy	Prietsley_Névé	-73.6383	160.6417	1983	1993-1991		32.4	4.3	6.3	1.7	229.0	172.0	195.0	14.7	7.07	

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Italy	Styx_Glacier	-73.8657	163.6953	1660	1993-1988		111.2	16.9	36.9	10.7	215.0	48.8	105.5	21.0	1.93	
Italy	Mc_Carthy_Ridge	-74.6000	163.0522	850	1993-1989		1103.7	132.7	59.0	47.7	1991.2	58.6	385.5	44.1	1.80	
Italy	Hercules_Névé	-73.1063	165.4631	2960	1993-1986		32.5	4.0	8.5	6.7	73.1	40.3	68.0	16.2	2.25	
Italy	Rennik_Glacier	-73.2473	162.4843	2310	1993-1989		29.7	4.1	10.3	2.5	69.8	48.7	67.3	7.2	2.35	
Italy	Pilot_Glacier	-73.2639	163.5120	2100	1993-1989		61.6	7.4	6.6	3.7	125.9	39.0	79.2	19.5	2.04	
Italy	Bowers_Glacier	-72.7409	168.8483	2260	1993		178.9	28.6	12.8	10.8	1884.7	246.2	603.6	5.5	10.53	
Italy	Prince_Albert	-75.1717	162.1255	800	1993-1992		532.1	71.6	33.9	20.8	919.9	65.1	323.2	19.2	1.73	
Italy	Niggly_Névé	-72.6858	166.9683	2610	1993-1989		26.7	2.8	7.0	2.9	47.4	30.2	58.7	17.1	1.78	
Italy	Evans_Névé	-74.7033	166.9400	2520	1993-1989		52.6	7.4	12.7	11.5	92.8	44.4	63.1	12.2	1.76	
Italy	GPS1	-74.8157	160.6600	1192	1992-1997		<b>507.7</b>	<b>43.7</b>	<b>50.4</b>	<b>22.5</b>	<b>715.4</b>	<b>198.0</b>	<b>47.3</b>	<b>5.1</b>	1.41	
Italy	GPS2A	-74.6448	157.5022	1804	1992-1997		<b>39.0</b>	<b>5.7</b>	<b>11.0</b>	<b>2.8</b>	<b>93.2</b>	<b>67.7</b>	<b>125.4</b>	<b>8.4</b>	2.39	
Italy	GPS2B	-74.6135	157.3800	1804	1992-1997		<b>86.9</b>	<b>10.8</b>	<b>19.1</b>	<b>4.0</b>	<b>185.7</b>	<b>115.8</b>	<b>63.1</b>	<b>22.9</b>	2.14	
Italy	31DPTA	-74.0253	155.9600	2069	1992-1997		<b>32.8</b>	<b>4.3</b>	<b>11.3</b>	<b>2.4</b>	<b>76.3</b>	<b>75.4</b>	<b>76.1</b>	<b>11.5</b>	2.32	
Italy	31DPTB	-74.6135	156.0107	2040	1992-1997		<b>25.2</b>	<b>3.6</b>	<b>7.3</b>	<b>1.4</b>	<b>65.9</b>	<b>78.8</b>	<b>49.0</b>	<b>15.6</b>	2.62	
Italy	M2A	-74.8045	151.2695	2278	1992-1997		<b>33.9</b>	<b>5.8</b>	<b>14.6</b>	<b>6.3</b>	<b>126.0</b>	<b>27.6</b>	<b>157.6</b>	<b>10.0</b>	3.72	
Italy	M2D	-74.8310	151.1522	2265	1992-1997		<b>33.5</b>	<b>2.8</b>	<b>8.6</b>	<b>1.2</b>	<b>83.4</b>	<b>113.6</b>	<b>73.7</b>	<b>11.8</b>	2.49	
Italy	GV5	-71.8870	158.5369	2185	1992-1997		<b>19.4</b>	<b>2.4</b>	<b>9.0</b>	<b>2.4</b>	<b>40.6</b>	<b>41.0</b>	<b>44.3</b>	<b>10.3</b>	2.09	
Italy	GV7	-70.6842	158.8624	1946	1992-1997		<b>21.8</b>	<b>5.3</b>	<b>9.6</b>	<b>5.9</b>	<b>42.1</b>	<b>34.9</b>	<b>25.5</b>	<b>8.6</b>	1.93	
Italy	ST556	-72.3667	158.7500	2246	1991-1996						38.8	44.0	49.7	7.9		
Italy	Talos_Dome	-72.8000	159.1000	2316	1991-1996						50.1	55.5	66.0			
Italy	Hercules_Névé	-73.1000	165.4667	2960	1991-1996						69.7	34.8	96.3			
Italy	Campbell										1652.4					
Italy	Gl.(B)	-74.2500	164.0667	800	1989-1994		876.3	103.6	248.3	174.7	4	80.6	617.6	23.6	1.89	
Italy	Campbell															
Italy	Gl.(C)	-73.7500	163.3333	1580	1989-1994		573.0	48.5	99.8	283.1	898.1	63.4	236.3	24.9	1.57	
Italy	C3	-74.3873	164.3286	670	1992-1997		<b>1182</b>	<b>148.8</b>	<b>61.2</b>	<b>41.5</b>	<b>2009</b>	<b>37.7</b>	<b>351.9</b>	<b>19.0</b>	1.70	
Italy	C9	-73.8104	163.3438	1530	1992-1997		<b>2081</b>	<b>263.1</b>	<b>72.3</b>	<b>191.5</b>	<b>3740</b>	<b>49.4</b>	<b>515.5</b>	<b>8.7</b>	1.80	
Italy	C12	-73.5382	163.0735	2370	1992-1997		<b>601.6</b>	<b>76.0</b>	<b>25.3</b>	<b>22.9</b>	<b>1109</b>	<b>42.6</b>	<b>195.0</b>	<b>7.5</b>	1.84	
Italy	Aviator_Gl.	-73.8565	165.1104	100	1987-1992		937.5	124.1	55.9	68.7	1831	62.2	396.1		1.95	
Italy	Drygalski_Ice															
Italy	T.	-75.5137	165.3154	40	1987-1992		14680	1930	740.5	600.3	27737	310.7	3788		1.89	
Japan	Japan1	-69.0295	40.0520	591	08/1993, ss.		1407				443.6	34.3	61.1		0.32	
Japan	Japan2	-69.0699	40.7467	1049	08/1993, ss.		269.6				208.2	55.9	31.0		0.77	
Japan	Japan3	-69.2812	41.2867	1296	08/1993, ss.		191.0				161.5	47.9	30.8		0.85	
Japan	Japan4	-69.4871	41.7444	1472	08/1993, ss.		135.1				123.0	79.6	33.7		0.91	
Japan	Japan5	-69.7032	42.2689	1636	08/1993, ss.											
Japan	Japan6	-69.9026	42.7666	1797	08/1993, ss.		134.2				118.2	75.5	43.2		0.88	
Japan	Japan7	-70.1083	43.3014	1993	08/1993, ss.		126.5				106.3	70.4	42.7		0.84	
Japan	Japan8	-70.3533	43.7138	2114	08/1993, ss.		108.0				93.8	99.1	46.1		0.87	
Japan	Japan9	-70.5756	44.1076	2188	08/1993, ss.		99.4				86.4	108.1	45.3		0.87	

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Japan	Japan10	-70.7095	44.2783	2244		08/1993, ss.	87.6				72.9	80.6	40.2		0.83	
Japan	Japan11	-70.9684	44.1722	2320		08/1993, ss.	65.2				52.3	69.5	35.8		0.80	
Japan	Japan12	-71.2364	44.0870	2396		08/1993, ss.	49.5				39.6	65.3	37.6		0.80	
Japan	Japan13	-71.5044	43.9967	2469		08/1993, ss.	39.4				32.3	51.3	32.2		0.82	
Japan	Japan14	-71.7738	43.9065	2577		08/1993, ss.	38.1				33.5	59.0	32.3		0.88	
Japan	Japan15	-72.0239	43.8181	2674		08/1993, ss.	40.6				36.6	71.0	36.4		0.90	
Japan	Japan16	-72.2926	43.7194	2772		08/1993, ss.	38.5				31.6	53.9	32.0		0.82	
Japan	Japan17	-72.5607	43.6193	2904		08/1993, ss.	30.5				28.8	56.9	31.3		0.94	
Japan	Japan18	-72.8287	43.5049	2966		08/1993, ss.	29.3				25.4	50.7	33.1		0.87	
Japan	Japan19	-73.0968	43.3879	3092		08/1993, ss.	25.9				24.6	59.9	34.7		0.95	
Japan	Japan20	-73.3647	43.2668	3167		08/1993, ss.	25.7				29.2	152.3	35.0		1.14	
Japan	Japan21	-73.6325	43.1460	3243		08/1993, ss.	40.2				37.8	140.3	44.1		0.94	
Japan	Japan22	-73.9007	43.0359	3308		08/1993, ss.	39.7				40.9	263.4	48.9		1.03	
Japan	Japan23	-74.0077	42.9955	3353		08/1993, ss.	32.0				40.8	434.3	49.3		1.27	
Japan	Japan24	-69.0295	40.0520	591		10-11/1993,ss	289.7				208.6	27.0	34.3		0.72	
Japan	Japan25	-69.0699	40.7467	1049		10-11/1993,ss	22.2				151.5	498.2	29.0		6.82	
Japan	Japan26	-69.2812	41.2867	1296		10-11/1993,ss	88.3				67.9	35.5	29.6		0.77	
Japan	Japan27	-69.4871	41.7444	1472		10-11/1993,ss	53.2				92.0	128.1	30.6		1.73	
Japan	Japan28	-69.7032	42.2689	1636		10-11/1993,ss	16.7				46.2	148.6	38.2		2.77	
Japan	Japan29	-69.9026	42.7666	1797		10-11/1993,ss	47.1				79.8	261.7	51.5		1.69	
Japan	Japan30	-70.1083	43.3014	1993		10-11/1993,ss	56.4				55.5	80.6	43.9		0.98	
Japan	Japan31	-70.3533	43.7138	2114		10-11/1993,ss	46.5				44.4	69.4	35.7		0.95	
Japan	Japan32	-70.5756	44.1076	2188		10-11/1993,ss	81.0				64.0	68.8	45.5		0.79	
Japan	Japan33	-70.7095	44.2783	2244		10-11/1993,ss	2.9				19.4	106.0	21.9		6.70	
Japan	Japan34	-70.9684	44.1722	2320		10-11/1993,ss	3.9				23.8	71.0	27.5		6.13	
Japan	Japan35	-71.2364	44.0870	2396		10-11/1993,ss	8.0				25.8	89.2	31.3		3.23	
Japan	Japan36	-71.5044	43.9967	2469		10-11/1993,ss	7.4				29.8	113.7	31.2		4.03	
Japan	Japan37	-71.7738	43.9065	2577		10-11/1993,ss	4.4				23.3	125.7	37.9		5.29	
Japan	Japan38	-72.0239	43.8181	2674		10-11/1993,ss	4.1									
Japan	Japan39	-72.2926	43.7194	2772		10-11/1993,ss	6.7				33.9	182.9	40.2		5.05	
Japan	Japan40	-72.5607	43.6193	2904		10-11/1993,ss	3.3				15.6	152.6	31.8		4.76	
Japan	Japan41	-72.8287	43.5049	2966		10-11/1993,ss	3.1				18.7	152.4	36.6		6.07	
Japan	Japan42	-73.0968	43.3879	3092		10-11/1993,ss	9.5				44.5	308.2	60.7		4.68	
Japan	Japan43	-73.3647	43.2668	3167		10-11/1993,ss	14.0				43.8	322.6	74.2		3.12	
Japan	Japan44	-73.6325	43.1460	3243		10-11/1993,ss	13.7				50.5	273.2	72.4		3.69	
Japan	Japan45	-73.9007	43.0359	3308		10-11/1993,ss	16.1				59.3	329.6	81.6		3.68	
Japan	Japan46	-74.0077	42.9955	3353		10-11/1993,ss	14.9				57.1	316.8	79.9		3.82	
Japan	Japan47	-74.2589	42.8345	3465		10-11/1993,ss	19.1				68.6	504.0	85.1		3.59	
Japan	Japan48	-74.5300	42.6025	3512		10-11/1993,ss	11.4				51.4	362.6	63.9		4.50	
Japan	Japan49	-74.8034	42.3938	3572		10-11/1993,ss	12.0				45.9	367.2	71.8		3.84	
Japan	Japan50	-75.0718	42.1337	3600		10-11/1993,ss	7.1				42.6	292.3	81.7		5.98	
Japan	Japan51	-75.3396	41.9107	3632		10-11/1993,ss	3.4				46.2	541.0	43.7		13.54	

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Japan	Japan52	-75.6040	41.6192	3652	10-11/1993,ss		4.1				25.5	414.6	47.9		6.16	
Japan	Japan53	-75.8714	41.3210	3693	10-11/1993,ss		4.0				21.0	404.6	45.1		5.24	
Japan	Japan54	-76.1377	41.0060	3715	10-11/1993,ss		4.5				26.0	425.5	39.3		5.74	
Japan	Japan55	-76.4076	40.7112	3737	10-11/1993,ss		15.6				48.3	247.1	74.8		3.09	
Japan	Japan56	-76.6773	40.4160	3752	10-11/1993,ss		3.8				38.9	424.8	67.7		10.15	
Japan	Japan57	-76.9479	40.1028	3783	10-11/1993,ss		3.3				30.8	542.6	48.5		9.44	
Japan	Japan58	-77.2177	39.7945	3806	10-11/1993,ss		17.3				79.5	399.0	89.4		4.61	
Japan	Japan59	-77.3090	39.6965	3810	10-11/1993,ss		64.5				79.7	529.7	107.2		1.24	
Japan	Japan60	-77.3732	39.6145	3807	10-11/1993,ss		75.2				97.2	425.2	116.8		1.29	
Japan	Japan61	-69.0295	40.0520	591	01/1994, ss.		833.6				566.1	67.0	72.6		0.68	
Japan	Japan62	-69.0699	40.7467	1049	01/1994, ss.		220.3				173.6	84.6	58.7		0.79	
Japan	Japan63	-69.2812	41.2867	1296	01/1994, ss.		180.8				145.0	64.1	45.9		0.80	
Japan	Japan64	-69.4871	41.7444	1472	01/1994, ss.		48.9				41.6	76.1	60.2		0.85	
Japan	Japan65	-69.7032	42.2689	1636	01/1994, ss.		111.7				121.6	160.9	87.4		1.09	
Japan	Japan66	-69.9026	42.7666	1797	01/1994, ss.		50.8				43.7	47.5	43.7		0.86	
Japan	Japan67	-70.1083	43.3014	1993	01/1994, ss.		44.2				40.4	73.8	43.0		0.91	
Japan	Japan68	-70.3533	43.7138	2114	01/1994, ss.		164.5				110.0	198.7	163.7		0.67	
Japan	Japan69	-70.5756	44.1076	2188	01/1994, ss.		228.8				162.4	76.7	79.0		0.71	
Japan	Japan70	-70.7095	44.2783	2244	01/1994, ss.		124.1				98.9	245.2	173.3		0.80	
Japan	Japan71	-70.9684	44.1722	2320	01/1994, ss.		36.5				118.3	283.0	138.5		3.24	
Japan	Japan72	-71.2364	44.0870	2396	01/1994, ss.		17.3				49.9	168.5	70.5		2.88	
Japan	Japan73	-71.5044	43.9967	2469	01/1994, ss.		25.6				102.4	321.9	139.8		4.00	
Japan	Japan74	-71.7738	43.9065	2577	01/1994, ss.		19.6				78.7	296.2	107.3		4.02	
Japan	Japan75	-72.0239	43.8181	2674	01/1994, ss.		21.0				86.8	374.3	128.3		4.12	
Japan	Japan76	-72.2926	43.7194	2772	01/1994, ss.		25.5				84.3	220.0	80.8		3.31	
Japan	Japan77	-72.5607	43.6193	2904	01/1994, ss.		9.8				27.0	94.6	83.7		2.75	
Japan	Japan78	-72.8287	43.5049	2966	01/1994, ss.		7.2				36.2	244.6	31.1		5.05	
Japan	Japan79	-73.0968	43.3879	3092	01/1994, ss.		11.2				73.2	441.0	75.6		6.54	
Japan	Japan80	-73.3647	43.2668	3167	01/1994, ss.		8.9				60.9	446.4	81.3		6.86	
Japan	Japan81	-73.6325	43.1460	3243	01/1994, ss.		8.2				84.3	519.7	69.2		10.29	
Japan	Japan82	-73.9007	43.0359	3308	01/1994, ss.		6.8				44.9	406.7	47.2		6.63	
Japan	Japan83	-74.0077	42.9955	3353	01/1994, ss.		4.9				61.5	448.1	61.6		12.49	
Japan	Japan84	-74.2589	42.8345	3465	01/1994, ss.		7.9				37.5	247.3	58.2		4.73	
Japan	Japan85	-74.5300	42.6025	3512	01/1994, ss.		5.5				56.1	384.7	61.1		10.28	
Japan	Japan86	-74.8034	42.3938	3572	01/1994, ss.		4.5				32.9	262.3	55.0		7.31	
Japan	Japan87	-75.0718	42.1337	3600	01/1994, ss.		2.0				34.9	409.6	39.7		17.82	
Japan	Japan88	-75.3396	41.9107	3632	01/1994, ss.						21.8	291.2	33.8			
Japan	Japan89	-75.6040	41.6192	3652	01/1994, ss.		1.8				34.4	797.0	46.9		19.30	
Japan	Japan90	-75.8714	41.3210	3693	01/1994, ss.		3.0				31.9	470.5	53.4		10.74	
Japan	Japan91	-76.1377	41.0060	3715	01/1994, ss.		1.6				20.9	388.4	31.5		13.43	
Japan	Japan92	-76.4076	40.7112	3737	01/1994, ss.		3.5				22.4	205.7	42.5		6.38	
Japan	Japan93	-76.6773	40.4160	3752	01/1994, ss.		2.2				22.8	333.2	37.2		10.45	

ITASE Group	Site	Lat. (dec.)	Long. (dec.)	Altitude (m asl)	Time Period	Sampling Date	Na (ppb)	Mg (ppb)	Ca (ppb)	K (ppb)	Cl (ppb)	NO <sub>3</sub> (ppb)	SO <sub>4</sub> (ppb)	MS (ppb)	Cl/Na	References
Japan	Japan94	-76.9479	40.1028	3783	01/1994, ss.		13.9				53.0	233.1	88.1		3.81	
Japan	Japan95	-77.2177	39.7945	3806	01/1994, ss.		26.8				74.1	156.9	127.6		2.77	
Japan	Japan96	-69.0124	40.1492	642	10/1997,ss.		186.5	9.9	7.2	9.4	342.6	101.2	30.6	5.8	1.84	
Japan	Japan97	-69.0284	40.4053	855	10/1997,ss.		214.1	10.9	7.3	9.8	392.3	58.6	38.4	5.0	1.83	
Japan	Japan98	-69.0450	40.6425	988	10/1997,ss.		95.1	6.4	5.3	8.9	190.5	56.6	22.3	5.1	2.00	
Japan	Japan99	-69.1032	40.8350	1095	10/1997,ss.		72.2	5.7	5.6	7.0	148.2	61.5	24.6	5.0	2.05	
Japan	Japan100	-69.1660	40.9958	1173	10/1997,ss.		233.2	12.4	6.9	10.4	436.0	58.0	35.4	3.7	1.87	
Japan	Japan101	-69.2432	41.1810	1277	10/1997,ss.		154.0	9.7	7.1	8.8	283.2	45.4	37.4	3.7	1.84	
Japan	Japan102	-69.3097	41.3568	1347	10/1997,ss.		35.6	4.3	4.5	5.6	83.4	74.3	20.4	8.5	2.34	
Japan	Japan103	-69.3779	41.5403	1396	10/1997,ss.		33.7	4.3	5.1	6.1	87.1	157.5	36.8	11.4	2.58	
Japan	Japan104	-69.4575	41.6774	1442	10/1997,ss.		72.8	6.0	4.9	6.1	153.9	74.5	29.1	7.2	2.11	
Japan	Japan105	-69.5156	41.8164	1515	10/1997,ss.		18.4	3.8	4.2	5.1	61.9	82.6	18.6	9.5	3.37	
Japan	Japan106	-69.5861	41.9962	1562	10/1997,ss.		26.4	4.0	4.7	5.9	82.7	105.9	17.9	8.3	3.13	
Japan	Japan107	-69.6597	42.1645	1601	10/1997,ss.		62.7	5.7	4.6	6.2	128.5	56.1	29.8	4.6	2.05	
Japan	Japan108	-69.7298	42.3459	1655	10/1997,ss.		53.2	5.0	4.7	6.0	123.8	98.4	21.1	10.7	2.33	
Japan	Japan109	-69.8053	42.5128	1713	10/1997,ss.		14.2	3.6	4.1	5.0	50.2	115.1	21.1	8.1	3.54	
Japan	Japan110	-69.8750	42.6918	1776	10/1997,ss.		105.6	6.8	5.2	7.2	203.7	128.4	34.5	7.7	1.93	
Japan	Japan111	-69.9444	42.8773	1828	10/1997,ss.		117.8	8.0	5.6	6.9	205.9	92.3	50.8	7.3	1.75	
Japan	Japan112	-70.0030	43.0276	1896	10/1997,ss.		8.6	3.5	3.8	4.9	33.1	88.8	15.1	7.6	3.87	
Japan	Japan113	-70.0643	43.2151	1972	10/1997,ss.		67.5	6.3	5.0	6.1	142.5	71.1	36.0	7.5	2.11	
Japan	Japan114	-70.1380	43.3558	1993	10/1997,ss.		66.0	5.9	5.2	7.2	143.4	174.8	34.8	14.3	2.17	
Japan	Japan115	-70.2303	43.5018	2042	10/1997,ss.		86.4	6.7	5.3	6.8	161.9	77.1	33.2	9.3	1.88	
Japan	Japan116	-70.3055	43.6287	2088	10/1997,ss.		15.3	3.7	4.6	6.5	35.5	85.5	19.2	7.3	2.32	
Japan	Japan117	-70.3825	43.7636	2111	10/1997,ss.		11.1	3.6	6.6	5.7	29.9	94.0	15.6	8.8	2.71	
Japan	Japan118	-70.4573	43.8944	2161	10/1997,ss.		26.0	4.1	4.9	5.7	89.2	232.3	40.0	14.1	3.43	
Japan	Japan119	-70.5450	44.0621	2187	10/1997,ss.		49.0	4.9	4.8	5.9	117.1	163.7	31.2	11.0	2.39	
Japan	Japan120	-70.6066	44.1464	2201	10/1997,ss.		10.1	3.5	4.2	5.4	35.4	121.8	23.1	13.5	3.51	
Japan	Japan121	-70.6973	44.2752	2250	10/1997,ss.		10.7	3.5	5.0	5.1	31.6	95.9	19.0	10.5	2.97	
Japan	Japan122	-70.7896	44.2302	2260	10/1997,ss.		45.6	5.2	6.0	6.7	96.5	59.0	33.6	9.0	2.12	
Japan	Japan123	-70.8788	44.2011	2306	10/1997,ss.		30.3	4.5	4.7	5.5	67.6	86.8	52.1	9.7	2.23	
Japan	Japan124	-70.9684	44.1722	2320	10/1997,ss.		9.9	3.5	4.3	5.2	55.3	230.7	21.1	17.5	5.57	
Japan	Japan125	-71.0578	44.1462	2351	10/1997,ss.		41.3	4.3	4.6	6.0	92.7	86.0	20.5	14.5	2.25	
Japan	Japan126	-71.1474	44.1105	2381	10/1997,ss.		21.2	4.1	4.4	5.9	55.2	67.9	24.3	42.1	2.60	
Japan	Japan127	-71.2364	44.0870	2396	10/1997,ss.		33.1	4.8	4.6	5.8	66.1	83.7	34.7	22.5	2.00	
Japan	Japan128	-71.3260	44.0569	2419	10/1997,ss.		35.2	4.7	4.7	5.8	65.8	52.8	26.5	14.6	1.87	
Japan	Japan129	-71.4155	44.0280	2439	10/1997,ss.		17.6	4.0	4.3	5.6	44.2	69.0	23.5	34.4	2.51	
Japan	Japan130	-71.5044	43.9967	2469	10/1997,ss.		35.2	4.8	4.5	5.8	68.3	62.6	26.8	21.4	1.94	
Japan	Japan131	-71.5942	43.9659	2513	10/1997,ss.		29.7	4.9	6.1	6.7	82.8	84.4	101.3	21.8	2.79	
Japan	Japan132	-71.6836	43.9358	2531	10/1997,ss.		32.4	4.7	9.0	9.3	74.0	73.7	67.1	14.4	2.29	
Japan	Japan133	-71.7738	43.9065	2577	10/1997,ss.		11.9	3.8	4.4	5.6	34.2	71.0	22.4	42.7	2.87	
Japan	Japan134	-71.8627	43.8750	2607	10/1997,ss.		32.1	4.2	5.2	54.5	72.8	216.9	23.9	10.9	2.26	
Japan	Japan135	-71.9342	43.8492	2634	10/1997,ss.		18.0	4.1	5.6	7.1	38.8	60.0	62.7	11.1	2.16	



ITASE Group	Site	Lat. (dec.)	Long. (dec.)	Altitude (m asl)	Time Period	Sampling Date	Na (ppb)	Mg (ppb)	Ca (ppb)	K (ppb)	Cl (ppb)	NO <sub>3</sub> (ppb)	SO <sub>4</sub> (ppb)	MS (ppb)	Cl/Na	References
Japan	Japan136	-72.0239	43.8181	2674	10/1997,ss.		24.0	4.3	5.4	6.2	53.9	71.4	27.2	36.8	2.24	
Japan	Japan137	-72.1134	43.7907	2714	10/1997,ss.		31.6	4.5	6.2	7.8	67.2	71.4	30.3	31.7	2.13	
Japan	Japan138	-72.2030	43.7528	2743	10/1997,ss.		32.7	4.2	5.0	6.5	71.9	117.2	22.3	10.7	2.20	
Japan	Japan139	-72.2926	43.7194	2772	10/1997,ss.		45.7	4.8	6.6	8.8	92.7	98.2	26.3	17.9	2.03	
Japan	Japan140	-72.3816	43.6838	2838	10/1997,ss.		16.6	4.1	4.7	6.0	37.7	26.1	91.1	14.8	2.28	
Japan	Japan141	-72.4718	43.6519	2849	10/1997,ss.		41.3	4.7	5.3	6.8	98.8	105.0	29.4	17.3	2.39	
Japan	Japan142	-72.5607	43.6193	2904	10/1997,ss.		14.7	3.9	4.8	6.3	31.5	55.9	39.1	27.9	2.14	
Japan	Japan143	-72.6502	43.5806	2922	10/1997,ss.		17.0	4.0	4.7	5.9	35.3	67.4	51.4	21.4	2.08	
Japan	Japan144	-72.7396	43.5424	2960	10/1997,ss.		48.9	5.2	5.1	6.7	104.0	145.6	43.6	32.1	2.13	
Japan	Japan145	-72.8287	43.5049	2966	10/1997,ss.		16.0	3.9	4.8	6.2	38.4	57.8	20.9	23.0	2.40	
Japan	Japan146	-72.9181	43.4666	3011	10/1997,ss.		14.7	3.9	4.6	5.7	46.2	168.6	22.0	19.1	3.14	
Japan	Japan147	-73.0075	43.4284	3070	10/1997,ss.		17.2	4.0	4.7	6.3	40.4	70.1	47.8	20.6	2.35	
Japan	Japan148	-73.0968	43.3879	3092	10/1997,ss.		27.1	4.1	4.0	5.6	71.1	148.7	24.4	17.5	2.63	
Japan	Japan149	-73.1860	43.3476	3101	10/1997,ss.		31.5	4.2	4.0	5.8	73.2	135.1	27.9	15.4	2.32	
Japan	Japan150	-73.2756	43.3060	3132	10/1997,ss.		26.7	4.1	4.2	5.8	68.3	129.1	24.7	15.5	2.56	
Japan	Japan151	-73.3647	43.2668	3167	10/1997,ss.		34.5	4.9	4.7	5.9	80.0	135.4	94.3	47.4	2.32	
Japan	Japan152	-73.4540	43.2263	3208	10/1997,ss.		27.1	4.1	4.0	5.7	68.6	140.1	27.8	16.1	2.53	
Japan	Japan153	-73.5430	43.1860	3224	10/1997,ss.		29.7	4.0	4.0	5.7	71.7	141.6	33.7	14.4	2.41	
Japan	Japan154	-73.6325	43.1460	3243	10/1997,ss.		29.1	4.1	4.2	5.7	70.4	143.0	29.3	17.5	2.41	
Japan	Japan155	-73.7214	43.1045	3272	10/1997,ss.		48.6	5.3	5.2	6.6	87.5	133.2	102.8	66.5	1.80	
Japan	Japan156	-73.8110	43.0697	3305	10/1997,ss.		24.8	4.0	4.2	6.4	65.1	165.3	29.7	19.3	2.63	
Japan	Japan157	-73.9007	43.0359	3308	10/1997,ss.		32.3	4.7	5.1	6.1	92.9	196.8	78.2	31.9	2.88	
Japan	Japan158	-73.9903	43.0024	3344	10/1997,ss.		33.0	4.7	7.3	9.9	56.8	167.7	57.0	45.5	1.72	
Japan	Japan159	-74.0799	42.9628	3374	10/1997,ss.		33.2	4.4	5.6	8.6	70.6	145.0	29.0	23.0	2.13	
Japan	Japan160	-74.1690	42.8943	3425	10/1997,ss.		24.1	4.0	4.1	5.6	61.9	147.0	30.4	20.1	2.56	
Japan	Japan161	-74.2589	42.8345	3465	10/1997,ss.		28.2	4.0	4.1		57.3	164.4	48.3	33.9	2.03	
Japan	Japan162	-74.3494	42.7487	3488	10/1997,ss.		22.2	3.7	3.9		59.8	143.3	30.5	23.0	2.69	
Japan	Japan163	-74.4387	42.6750	3501	10/1997,ss.		14.7	3.6	4.0		35.7	116.7	67.9	79.4	2.43	
Japan	Japan164	-74.5300	42.6025	3512	10/1997,ss.		25.6	3.9	4.2	5.9	63.1	178.0	71.3	44.2	2.46	
Japan	Japan165	-74.6200	42.5360	3517	10/1997,ss.		18.6	3.6	4.0		59.1	143.9	27.3	32.7	3.18	
Japan	Japan166	-74.7135	42.4690	3551	10/1997,ss.		22.2	3.7	4.1		65.6	179.8	29.0	34.0	2.95	
Japan	Japan167	-74.8034	42.3938	3572	10/1997,ss.		23.9	3.7	4.2	6.1	63.8	153.1	30.9	27.3	2.66	
Japan	Japan168	-74.8932	42.3180	3568	10/1997,ss.		26.3	3.8	4.0		74.9	202.1	34.9	33.4	2.85	
Japan	Japan169	-74.9826	42.2331	3586	10/1997,ss.		32.5	4.1	4.2	6.0	82.5	190.9	33.8	34.5	2.54	
Japan	Japan170	-75.0718	42.1337	3600	10/1997,ss.		25.2	3.9	4.3		76.8	227.0	35.5	45.9	3.04	
Japan	Japan171	-75.1604	42.0632	3611	10/1997,ss.		23.3	3.7	4.0		71.4	199.4	33.0	35.3	3.06	
Japan	Japan172	-75.2500	41.9952	3623	10/1997,ss.		18.8	3.7	4.2		61.4	187.2	44.6	36.5	3.27	
Japan	Japan173	-75.3396	41.9107	3632	10/1997,ss.		23.6	3.8	4.1	5.9	68.9	194.8	32.8	41.9	2.92	
Japan	Japan174	-75.4268	41.8065	3643	10/1997,ss.		18.5	3.6	4.0		58.0	183.4	39.8	35.4	3.15	
Japan	Japan175	-75.5158	41.7170	3646	10/1997,ss.		24.1	3.8	4.3	6.0	78.0	268.2	41.4	42.5	3.24	
Japan	Japan176	-75.6040	41.6192	3652	10/1997,ss.		28.3	3.6	4.3		56.2	141.3	43.5	31.8	1.98	
Japan	Japan177	-75.6933	41.5177	3666	10/1997,ss.		24.4	3.8	4.3	6.1	64.8	179.4	44.2	25.8	2.65	

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Japan	Japan178	-75.7822	41.4204	3678	10/1997,ss.		30.4	4.0	4.2	6.1	84.9	123.6	70.5	27.1	2.79	
Japan	Japan179	-75.8714	41.3210	3693	10/1997,ss.		22.5	3.7	4.1	6.0	64.5	199.0	33.6	26.7	2.87	
Japan	Japan180	-75.9601	41.2223	3694	10/1997,ss.		22.2	4.0	4.9	5.8	71.0	266.5	38.4	38.1	3.19	
Japan	Japan181	-76.0482	41.1085	3711	10/1997,ss.		22.5	3.7	4.1	6.1	63.8	182.9	39.9	41.1	2.83	
Japan	Japan182	-76.1377	41.0060	3715	10/1997,ss.		24.2	3.9	4.6		76.8	265.4	37.5	46.7	3.17	
Japan	Japan183	-76.2278	40.9129	3709	10/1997,ss.		24.1	3.9	4.3		75.9	265.8	35.2	40.7	3.15	
Japan	Japan184	-76.3175	40.8125	3726	10/1997,ss.		30.4	4.1	4.5	5.9	89.2	328.7	44.3	41.5	2.93	
Japan	Japan185	-76.4076	40.7112	3737	10/1997,ss.		26.9	3.9	4.2	6.0	73.7	207.9	42.8	51.1	2.74	
Japan	Japan186	-76.4982	40.6119	3743	10/1997,ss.		28.2	4.0	4.5	6.0	95.2	378.1	42.6	40.4	3.38	
Japan	Japan187	-76.5871	40.5129	3748	10/1997,ss.		27.8	4.0	4.2		87.1	325.0	41.7	46.5	3.14	
Japan	Japan188	-76.6773	40.4160	3752	10/1997,ss.		23.4	3.8	4.4	5.8	69.4	232.2	34.1	49.7	2.97	
Japan	Japan189	-76.7672	40.3117	3763	10/1997,ss.		28.9	4.1	4.7	6.4	76.0	281.1	43.1	36.5	2.64	
Japan	Japan190	-76.8569	40.2025	3776	10/1997,ss.		29.6	4.1	4.7	6.1	87.7	350.5	44.6	41.3	2.96	
Japan	Japan191	-76.9479	40.1028	3783	10/1997,ss.		29.3	4.1	4.4	6.1	92.3	398.5	46.6	37.7	3.15	
Japan	Japan192	-77.0367	39.9932	3790	10/1997,ss.		9.0	3.4	4.0		54.5	308.6	34.6	15.3	6.04	
Japan	Japan193	-77.1271	39.8990	3799	10/1997,ss.		41.1	4.7	5.5	6.6	107.6	450.2	54.3	40.6	2.62	
Japan	Japan194	-77.2177	39.7945	3806	10/1997,ss.		25.8	4.0	4.5	6.1	81.8	365.4	47.2	33.5	3.17	
Korea	Pit1	-70.8351	-77.0747	1850	1999-2001		72.1	3.6	41.3		81.4	87.5	54.1		1.13	
Korea	Pit2	-69.5205	-76.2925	529	2001		571.1	61.2	15.1		997.3	59.3	204.6		1.75	
Korea	Livingston Is.	-62.6167	-60.2500	450	1997		1.8							0.0		
Korea	K.George Is.	-62.0133	-58.6667	620	2000		3.0	0.2	0.1	0.1			0.9	0.0		
New Zealand	VLG1	-77.3300	162.5319	625	Jan92 to Jan97	2000	515.1	72.4	169.5	38.7	1314	109.3	354.6	34.1	2.55	Bertler and others,2 004
New Zealand	VLG2	-77.3369	162.4922	577	Jun97 to Aug00	2001	763.5	102.4	350.7	100.1			460.5	31.6		
New Zealand	BVG	-77.3167	162.5333	1150	Jan92 to Jan97	2001	187.7	19.2	90.3	7.0			333.1	32.3		Bertler and others, 2004
New Zealand	WPG	-77.2667	162.2500	50	Jan92 to Jan97	2001	2802	331.4	230.8	95.1			1066			Bertler and others, 2004
New Zealand	PP	-77.3500	159.8667	2400	Jan92 to Jan97	2001	39.9	5.0	10.0	13.2	135.5	25.6	122.1		3.39	Bertler and others, 2004
Norway	M	-75.0000	14.9964	3470	2000-1991		32.3	0		10.7	53.7	52.9	99.2	8.0	1.66	
Norway	MA	-74.9887	15.1134	3470	2000-1991		17.1	0		2.6	37.7	53.8	77.0	5.4	2.20	
Norway	MB	-75.0294	15.0435	3471	2000-1991		18.9	0		2.9	47.5	45.1	83.5	11.3	2.52	
Norway	MC	-75.0112	14.8864	3470	2000-1991		22.3	0		3.7	51.1	39.1	72.0	11.6	2.29	
Norway	MD	-74.9706	14.9567	3472	2000-1991		21.9	0		4.6	38.7	56.7	110.4	6.6	1.77	
Norway	S75 E2	-75.0000	2.0000	2900	1998-1992		11.1	1.7	1.0		34.8	65.6	61.2	8.6	3.12	
UK	Beethoven Peninsula 1	-71.8667	-74.5000	580	1988-1992	1992					1288	36.8	220.8			This paper
UK	Beethoven Peninsula 2	-71.6000	-73.0000	607	1988-1992	1992					798.0	26.7	184.8	11.6		Pasteur and Mulvaney, 2000
UK	Dolleman Is.	-70.5833	-60.9167	398	1610-1985	1985	262.0	38.9	65.3	21.9	549.5	36.6	244.3	76.6	2.1	Pasteur and Mulvaney, 2000
UK	Dolleman Is.	-70.5833	-60.9167	398	1948-1993	1993					583.1	39.1	267.4	86.5		Pasteur and Mulvaney, 2000
UK	Gomez Nunatak	-74.0167	-70.6333	1130	1978-1992	1992					84.0	24.1	37.4	7.8		This paper
UK	Berkner Island	-78.3	-46.2833	730	1440-1995	1995	427.8	58.8	30.1	19.1	881.6	83.7	130.6	19.4	2.1	Mulvaney et al. 2002
UK	Berkner Island	-79.6	-45.6167	900	1250-1995	1995	253.0	13.6	10.8	16.4	503.4	96.7	127.2	12.6	2.0	Mulvaney et al. 2002

ITASE Group	Site	Lat. (dec.)	Long. (dec.)	Altitude (m asl)	Time Period	Sampling Date	Na (ppb)	Mg (ppb)	Ca (ppb)	K (ppb)	Cl (ppb)	NO <sub>3</sub> (ppb)	SO <sub>4</sub> (ppb)	MS (ppb)	Cl/Na	References
UK	DML	-77.0398	-10.5013	2180	800-1994	1998	20.2	3.3	9.4	2.3	47.5	80.0	75.8	5.8	2.3	This paper
USA	ITASE99-1	-80.0333	-122.0500	1350	Jan 94- Jan 99		51.2	6.4	2.4	1.9	93.8	39.7	86.2		1.83	
USA	ITASE00-1	-79.3831	-111.2390	1791	Jan 92-Jan 97		27.2	3.7	9.0	2.9	45.1	40.6	56.8		1.66	
USA	ITASE00-4	-78.0829	-120.0764	1697	Jan 92-Jan 97		26.8	3.5	7.1	7.1	49.9	48.8	52.9		1.86	
USA	ITASE00-5	-77.6830	-123.9950	1828	Jan 92-Jan 97		24.8	2.8	4.9	1.9	41.7	55.8	70.9		1.68	
USA	ITASE01-2	-77.8436	-102.9103	1336	Jan 92-Jan 97		28.0	3.8	6.5	2.9	47.2	35.8	42.0		1.69	
USA	ITASE01-3	-78.1202	-95.6463	1620	Jan 92-Jan 97		17.4	2.4	3.1	1.2	33.1	36.4	36.8		1.90	
USA	ITASE01-5	-77.0593	-89.1376	1239	Jan 92-Jan 97		23.7	3.4	4.9	2.2	44.0	33.4	44.5		1.85	
USA	ITASE01-6	-76.0973	-89.0177	1228	Jan 92-Jan 97		30.6	3.1	6.2	3.7	49.1	27.1	34.1		1.60	
USA	SP95	-90.0000	0.0000	2850	1986-1991		8.6	1.3	0.7	1.1	28.2	112.8	55.8	10.4	3.29	
USA	UPC	-82.4391	-135.9720	525												
USA	CWA_A	-82.3571	-119.2855	950	1988-1993		50.0	7.2	4.1	2.9	104.8	39.4	62.4		2.09	
USA	CWA_D	-81.3723	-107.2750	1930	1988-1993		14.4	2.0	2.2	1.1	30.3	42.5	38.2		2.10	
USA	RIDS-A	-78.7300	-116.3300	1740	1990-1995		17.3	2.3	1.2	1.3	37.5	46.4	44.4		2.16	
USA	RIDS-B	-79.4600	-118.0500	1603	1990-1995		21.1	2.9	1.7	1.4	45.5	47.5	59.5		2.16	
USA	RIDS-C	-80.0100	-119.5600	1530	1990-1995		19.9	2.8	1.7	1.2	43.2	40.5	61.5		2.17	
USA	SDM-94	-81.6500	-148.7900	620	1989-1994		149.6	22.2	8.6	6.8	273.0	37.6	138.8		1.82	
	Commonw.															
USA	GI	-77.5423	163.0226	678	03 (5-15 years)		298.3	37.5	98.2	16.9	546.0	114.9	276.8	29.9	1.83	
USA	Clark_Glacier	-77.4055	162.3663	762	03 (5-15 years)		460.1	66.1	164.2	31.3	799.7	178.1	393.4	30.8	1.74	
USA	Blue_Glacier	-78.0830	163.2932	987	5-15 years		115.7	18.4	380.7	10.6	250.0	111.4	326.8	12.2	2.16	
published	Stenberg_1	-73.4583	-12.5617	800	01/92 to12/93		38.4	5.0	1.8	2.0	81.2	50.2	69.6	19.0	2.11	Stenberg and others, 1994
published	Stenberg_2	-74.9617	-11.8017	2150	01/92 to12/93		18.6	2.4	1.2	1.6	37.8	49.0	91.2	14.3	2.03	Stenberg and others, 1994
published	Stenberg_3	-78.0250	-10.9867	2151	01/92 to12/93		12.4	1.8	1.0	1.2	30.1	58.9	92.6	15.2	2.42	Stenberg and others, 1994
published	Stenberg_4	-75.5533	-9.7650	2400	01/92 to12/93		15.4	2.2	1.2	1.2	38.2	103.5	99.8	8.6	2.48	Stenberg and others, 1994
published	Stenberg_5	-75.4800	-9.0900	2600	01/92 to12/93						42.7	84.3	96.5	12.4		Stenberg and others, 1994
published	Stenberg_7	-75.5033	-4.5867	2750	01/92 to12/93		10.6	2.0			45.9	165.5	132.5	6.7	4.33	Stenberg and others, 1994
published	Stenberg_9	-75.5000	-2.6766	3100	01/92 to12/93		15.0	3.0			37.5	91.1	119.5	10.5	2.51	Stenberg and others, 1994
published	Stenberg_10	-73.9500	-12.0750	1100	01/92 to12/93		40.9	6.4			85.4	57.7	136.8	17.1	2.09	Stenberg and others, 1994
published	Stenberg_11	-74.2600	-11.7583	1350	01/92 to12/93		32.2	4.3			77.0	58.3	94.6	8.6	2.39	Stenberg and others, 1994
published	Stenberg_12	-73.6500	-9.7150	1300	01/92 to12/93		26.2	3.7			50.8	70.1	103.7	14.3	1.94	Stenberg and others, 1994
published	Stenberg_13	-72.0183	-8.7517	850	01/92 to12/93		108.3	14.8			243.3	78.1	132.0	20.9	2.25	Stenberg and others, 1994
published	Dome C	-74.7000	124.0667	3240	0-215m		20.7				14.0	19.2			0.68	Legrand and Delmas, 1988b from Mulvaney & Wolff, 1994
published	South Pole	-90.0000	0.0000	2880	1959-1969		13.8				45.5	86.8			3.30	Legrand and Delmas, 1984 from Mulvaney & Wolff, 1994
published	Vostok	-78.4667	106.8000	3488	Top 325m		27.6				17.5	15.5			0.63	Legrand and others, 1988 from Mulvaney & Wolff, 1994
published	D 10	-66.7000	139.8000	270			437.0						91.7			Delmas and other, 1982 from Mulvaney & Wolff, 1994
published	D 10	-66.7000	139.8000	270	Not necc. 1 year							19.8				Legrand and Delmas, 1985 from Mulvaney & Wolff, 1994

ITASE Group	Site	Lat. (dec.)	Long. (dec.)	Altitude (m asl)	Time Period	Sampling Date	Na (ppb)	Mg (ppb)	Ca (ppb)	K (ppb)	Cl (ppb)	NO <sub>3</sub> (ppb)	SO <sub>4</sub> (ppb)	MS (ppb)	Cl/Na	References
published	D 23	-66.7833	139.6667	580	Not necc.1year		131.1									Boutron and Lorius, 1977
published	D 24	-66.8000	139.6500	500	Not necc.1year		62.1				105.0	40.3			1.69	from Mulvaney & Wolff, 1994
published	D 33	-66.8500	139.5500	730	Not necc.1year		131.1									Boutron and Lorius, 1977
published	D 40	-66.9000	139.4833	600	Not necc.1year		62.1				108.5	9.3			1.75	from Mulvaney & Wolff, 1994
published	D 42	-67.0500	139.2500	100			66.7									Boutron and Lorius, 1977
published	D 46	-67.3333	138.8000	1450			23.0									from Mulvaney & Wolff, 1994
published	D 47	-67.3833	138.7167	1300	Not necc.1year		20.7				42.0	57.7			2.03	Legrand and Delmas, 1985
published	D 50	-67.6167	138.3333	1700	Not necc.1year		23.0				38.5	41.5			1.67	from Mulvaney & Wolff, 1994
published	D 52	-67.7833	138.1167	1800	Not necc.1year		9.2				14.0	19.8			1.52	Legrand and Delmas, 1985
published	D 55	-68.0167	137.7833	2028	Not necc.1year		6.9				14.0				2.03	from Mulvaney & Wolff, 1994
published	D 55	-68.0167	137.7833	2028	1959-69							32.9				Legrand and Delmas, 1986
published	D 57	-68.1833	137.5500	2050	Not necc.1year		23.0				38.5	40.9			1.67	from Mulvaney & Wolff, 1994
published	D 58	-68.2500	137.4500	2100	Not necc.1year		13.8				24.5	31.0			1.78	Legrand and Delmas, 1985
published	D 59	-68.3500	137.3167	2220	Not necc.1year		11.5									from Mulvaney & Wolff, 1994
published	D 61	-68.6500	137.1167	2300	Not necc.1year		16.1				35.0	86.8			2.17	Legrand and Delmas, 1985
published	D 64	-68.6833	136.8000	2300	Not necc.1year		9.2				17.5	26.0			1.90	from Mulvaney & Wolff, 1994
published	D 66	-68.8500	136.5667	2400	Not necc.1year		4.6				14.0	68.2			3.04	Legrand and Delmas, 1985
published	D 70	-69.1500	136.0833	2400	Not necc.1year		13.8				28.0	55.8			2.03	from Mulvaney & Wolff, 1994
published	D 72	-69.3333	135.8000	2360			9.2									Boutron and Lorius, 1977
published	D 73	-69.4000	135.7167	2400	Not necc.1year		13.8				28.0	74.4			2.03	from Mulvaney & Wolff, 1994
published	D 77	-69.7333	135.1667	2400	Not necc.1year		20.7				38.5	43.4			1.86	Legrand and Delmas, 1985
																from Mulvaney & Wolff, 1994

ITASE Group	Site	Lat. (dec.)	Long. (dec.)	Altitude (m asl)	Time Period	Sampling Date	Na (ppb)	Mg (ppb)	Ca (ppb)	K (ppb)	Cl (ppb)	NO <sub>3</sub> (ppb)	SO <sub>4</sub> (ppb)	MS (ppb)	Cl/Na	References
published	D 80	-70.0167	134.7167	2430	1959-1969		10.1				24.5	55.2			2.42	Legrand and Delmas, 1986 Boutron and Lorius, 1977 from Mulvaney & Wolff, 1994
published	D100	-71.5667	139.9833	2810			4.6									Boutron and Lorius, 1977 from Mulvaney & Wolff, 1994
published	D110	-72.3167	130.4000	2960			10.4									Boutron and Lorius, 1977 from Mulvaney & Wolff, 1994
published	D120	-73.0667	128.7333	3010			9.2									Lorius and others, 1969 from Mulvaney & Wolff, 1994
published	A-3	-66.6833	139.9333	220	Top 1.75m		943.0				770.0				0.82	Lorius and others, 1969 from Mulvaney & Wolff, 1994
published	A-5	-66.6833	139.9167	230	Top 10m		460.0				483.0				1.05	from Mulvaney & Wolff, 1994
published	Cap Prudhoe G1	-66.6833	139.9500		0-40m		598.0				770.0				1.29	Lorius and others, 1969 from Mulvaney & Wolff, 1994
published	GAP St 25	-70.8833	-64.9500	1835	1970-1976		41.4				59.5				1.44	Mumford and Peel, 1982 from Mulvaney & Wolff, 1994
published	James Ross Is. Dome Dalingier	-64.2167	-57.6333	1660	1975-1978		172.5					24.8				Aristarain and others, 1982 from Mulvaney & Wolff, 1994
published	Siple	-75.9167	-84.2500	1054	1966-1985						87.5	27.9	37.0			Mosley-Thompson et al. 1991 from Mulvaney & Wolff, 1994
published	Mizuho	-70.7000	44.3333	2230	Top 900m		15.0				38.5	55.8	48.0		2.58	Osada and Higuchi, 1990 from Mulvaney & Wolff, 1994
published	Queen Maud Land	-75.0000	2.0000	2900	1865-1990		13.5				35.1	54.4	61.6	7.3	2.60	Pers comms E. Isaksson from Mulvaney & Wolff, 1994
published	Queen Maud Land	-71.8000	4.0000				98.9				129.5				1.31	Gjessing, 1989 from Mulvaney & Wolff, 1994
published	Queen Maud Land	-71.9667	4.0000				66.7				73.5				1.10	Gjessing, 1989 from Mulvaney & Wolff, 1994
published	Queen Maud Land	-70.0667	4.0000				2852.0				4900.0				1.72	Gjessing, 1989 from Mulvaney & Wolff, 1994
published	Queen Maud Land	-70.0000	4.0000				8280.0				14700				1.78	Gjessing, 1989 from Mulvaney & Wolff, 1994
published	S-122	-70.0167	43.1167		Not necc. 1year		52.9									Murozumi and Nakamura, 1974 from Mulvaney & Wolff, 1994
published	Y-135	-71.4500	47.3667		Not necc. 1year		11.5									Murozumi and Nakamura, 1974 from Mulvaney & Wolff, 1994
published	Y-200	-71.7667	48.9333		Not necc. 1year		13.8									Murozumi and Nakamura, 1974 from Mulvaney & Wolff, 1994
published	Y-300	-70.9167	49.8833		Not necc. 1year		11.5									Murozumi and Nakamura, 1974 from Mulvaney & Wolff, 1994

ITASE Group	Site	Lat. (dec.)	Long. (dec.)	Altitude (m asl)	Time Period	Sampling Date	Na (ppb)	Mg (ppb)	Ca (ppb)	K (ppb)	Cl (ppb)	NO <sub>3</sub> (ppb)	SO <sub>4</sub> (ppb)	MS (ppb)	Cl/Na	References
published	BAS5	-81.4667	-60.6000		1964-1989						179.7	48.6		4.4		Minikin and others, 1994 from Mulvaney & Wolff, 1994
published	BAS6	-81.6000	-58.1667								190.6	71.1		4.8		Minikin and others, 1994 from Mulvaney & Wolff, 1994
published	BC90	-76.9833	-52.4667		1966-1989						945.0	48.4		19.0		Graf and others, 1991 from Mulvaney & Wolff, 1994
published	D131	-76.9667	-54.7000		1966-1989						786.8	37.8		17.1		Minikin and others, 1994 from Mulvaney & Wolff, 1994
published	D136	-77.2000	-53.1333		1962-1989						781.9	29.8		15.2		Minikin and others, 1994 from Mulvaney & Wolff, 1994
published	D230	-77.3667	-56.1000	49	1967-1989						477.8	36.6		14.3		Minikin and others, 1994 from Mulvaney & Wolff, 1994
published	D231	-77.6833	-57.3333	54	1965-1987						405.0	37.8		14.3		Minikin and others, 1994 from Mulvaney & Wolff, 1994
published	D235	-77.5167	-54.5500		1968-1987						654.5	44.0		14.3		Minikin and others, 1994 from Mulvaney & Wolff, 1994
published	D236	-77.9333	-55.9833		1965-1989						502.6	45.3		16.2		Minikin and others, 1994 from Mulvaney & Wolff, 1994
published	D240	-77.8667	-52.8000	54	1975-1982						639.8	40.9		18.1		Minikin and others, 1994 from Mulvaney & Wolff, 1994
published	D330	-78.0333	-56.9833	50							380.1	36.0		9.5		Minikin and others, 1994 from Mulvaney & Wolff, 1994
published	D335	-78.3000	-56.9833	51	1966-1987						388.2	57.7		15.2		Minikin and others, 1994 from Mulvaney & Wolff, 1994
published	D336	-78.7167	-57.8500		1964-1989						395.9	50.8		11.4		Minikin and others, 1994 from Mulvaney & Wolff, 1994
published	D340	-78.6000	-55.4333	56	1968-1982						352.5	49.0		12.4		Minikin and others, 1994 from Mulvaney & Wolff, 1994
published	D341	-78.9500	-56.8333	60	1956-1982						312.9	52.1		7.6		Minikin and others, 1994 from Mulvaney & Wolff, 1994
published	Filchner Ice Shelf	-79.0000	-57.0000		1955-1980							31.0				Moser and others, 1990 from Mulvaney & Wolff, 1994
published	G. v. Neumayer	-70.0000	-8.0000		1979-1986							18.6				Moser and others, 1990 from Mulvaney & Wolff, 1994
published	Base Camp	-82.4667	-166.0000				98.9									Warburton & Linkletter, 1977 from Mulvaney & Wolff, 1994
published	C-16	-81.1833	170.4833	70	1971-1977						154.0	37.2				Herron, 1982 from Mulvaney & Wolff, 1994
published	C-7	-78.9667	-176.0000	0			195.5									Warburton & Linkletter, 1977 from Mulvaney & Wolff, 1994
published	C-7-1	-78.5000	-177.0000		1976 down		598.0									Herron and Langway, 1979 from Mulvaney & Wolff, 1994

ITASE Group	Site	Lat. (dec.)	Long. (dec.)	Altitude (m asl)	Time Period	Sampling Date	Na (ppb)	Mg (ppb)	Ca (ppb)	K (ppb)	Cl (ppb)	NO <sub>3</sub> (ppb)	SO <sub>4</sub> (ppb)	MS (ppb)	Cl/Na	References
published	E-8	-84.6167	-169.7000				11.5									Warburton & Linkletter, 1977
published	F-8	-84.3000	-172.2000				34.5									from Mulvaney & Wolff, 1994
published	G-8	-83.5000	-171.0000				32.2									Warburton & Linkletter, 1977
published	H-9	-83.1833	-168.8000				24.2									from Mulvaney & Wolff, 1994
published	I-8	-82.5000	-165.2000				44.9									Warburton & Linkletter, 1977
published	J-8	-82.0833	-165.4000				32.2									from Mulvaney & Wolff, 1994
published	J-9	-82.3667	-168.6667	55		1976 down	98.9									Herron and Langway, 1979
published	L-7	-81.4167	-165.0000				48.3									from Mulvaney & Wolff, 1994
published	Little America V	-78.1667	-162.2167			Near surface	437.0									Langway and others, 1974
published	M-7	-80.9333	-164.1000				94.3									from Mulvaney & Wolff, 1994
published	Q-13	-78.9500	179.9167	50								43.4				Herron, 1982
published	RIC	-80.1833	-161.8000				87.4									from Mulvaney & Wolff, 1994
published	Roosevelt Island	-79.3667	-161.6667				131.1									Warburton & Linkletter, 1977
published	Windless Bight	-77.7500	167.0000			1982-1988					420.0	62.0				from Mulvaney & Wolff, 1994
published	Dominion Range	-85.2500	166.1667	2780								99.2				Lyons and others, 1990
published	N Victoria L.	-72.0000	165.0000	1400		Medians not means	82.8				147.0	37.2				from Mulvaney & Wolff, 1994
published	E10 N Victoria L.	-72.0000	162.0000	2305		Medians not means	87.4				161.0	50.8				Allen and others, 1985
published	M1 South Victoria L.	-77.5333	160.5833									68.2				from Mulvaney & Wolff, 1994
published	Byrd	-79.9833	-120.0167	1530							59.5	40.3				Herron, 1982
published	Dyer_Plateau	-70.6500	-65.0167	1943		1938-1988	27.4				51.5	31.0	48.5		1.88	from Mulvaney & Wolff, 1994
published	Puppis_Pikes	-71.2330	-66.1430	1356		Short core mean					133.7	16.7	68.2			Mulvaney & Wolff, 1994
published	Rowley Corridor	-71.5110	-67.2890	500		Short core mean					264.3	24.2	103.2			Mulvaney & Wolff, 1994

ITASE Group	Site	Lat. (dec.)	Long. (dec.)	Altitude (m asl)	Time Period	Sampling Date	Na (ppb)	Mg (ppb)	Ca (ppb)	K (ppb)	Cl (ppb)	NO <sub>3</sub> (ppb)	SO <sub>4</sub> (ppb)	MS (ppb)	Cl/Na	References
published	Stephenson Nunatak	-72.0000	-69.1210	300	Short core mean						164.9	31.6	90.7			Mulvaney & Wolff, 1994
published	Temnikov Nunatak	-70.5670	-64.2443	1606	Short core mean						51.8	11.8	85.9			Mulvaney & Wolff, 1994
published	Coats Land	-77.5667	-25.3667	1420	1910-1987		43.5				91.5	44.0	61.7		2.1	Mulvaney & Wolff, 1993,
published	Rutford	-78.5500	-82.9667	160							172.6	53.3	54.2			Mulvaney & Wolff, 1994
published	Ski Hi Depot	-74.9667	-70.7667	1372							75.6	58.3	42.2			Mulvaney & Wolff, 1994
published	Dolleman Is. Gomez	-70.5833	-60.9167	398							411.6	32.2				Mulvaney & Wolff, 1994
published	Nunatak Gomez	-74.0167	-70.6333	1130	1940-1980						82.3					Mulvaney & Wolff, 1994
published	Nunatak Gomez	-74.0167	-70.6333	1130	1962-1980							19.2				Mulvaney & Wolff, 1994
published	Berkner Is.	-79.6000	-45.6167	900							562.8	34.0				Mulvaney & Wolff, 1994, Wagenbach and others 1995
published	Berkner Is.	-78.3000	-46.2833	730							1037	32.0				Mulvaney & Wolff, 1994, Wagenbach and others 1995