SUPPLEMANTARY MATERIAL

Spatial and temporal variations in surface snow chemistry along a traverse from Dome C toward South Pole in the framework of East Antarctic International Ice Sheet Traverse (EAIIST) project.

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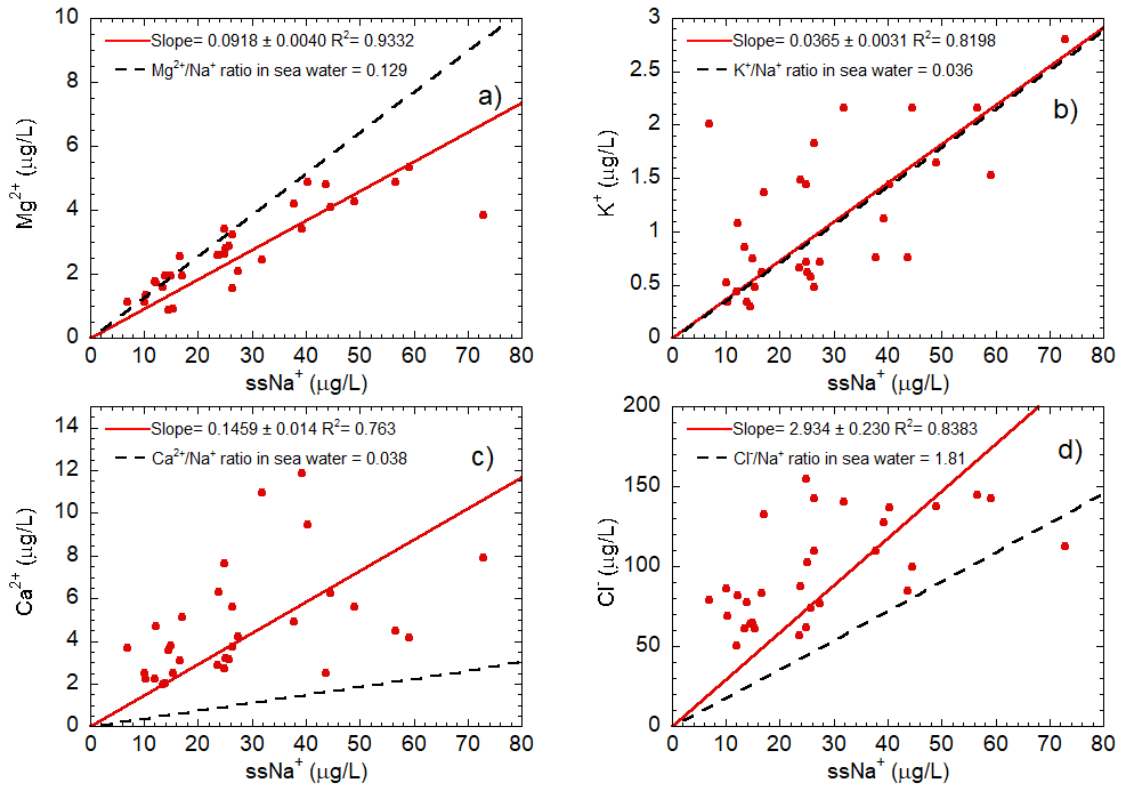
Figure 1S. Scatter plot of Mg^{2+}, K^+, Ca^{2+} and Cl^- vs. $ssNa^+$ in the superficial snow. Red line is the regression line forced to 0;0 point. Slope ± slope error and R^2 are reported in each plot. Black dotted lines represents the mean sea water ratio of each ions respect to Na^+(Bowen 1979).

Table 1S. Geographical characteristic and sampling in each site. SS= superficial snow; SP=snow pit

Site	Distance from DC (km)	Lat South (°)	Long Est (°)	Altitude (m)	Distance from Indian Ocean (km)	Distance from Ross Sea (km)	Type of sampling
Dome C	0	75.099	123.332	3269	930	1082	
1	18	75.262	123.315	3264	948	1074	SS
2	40	75.459	123.288	3254	968	1065	SS
3	92	75.715	123.208	3232	994	1056	SS
4	89	75.903	123.272	3215	1017	1046	SS
5	107	76.065	123.306	3202	1036	1039	SS
6	130	76.272	123.335	3180	1058	1030	SS
7	151	76.459	123.363	3165	1079	1014	SS
8	172	76.642	123.386	3160	1099	1005	SS
9	194	76.841	123.419	3149	1121	994	SS
10	218	77.061	123.451	3131	1146	985	SS
11 (AGO-5)	238	77.238	123.476	3124	1165	978	SS and SP
12	258	77.414	123.647	3115	1187	968	SS
13	279	77.602	123.848	3108	1208	957	SS
14	299	77.780	124.024	3097	1228	947	SS
15	320	77.972	124.232	3083	1250	934	SS
16	341	78.157	124.431	3071	1272	924	SS
17	362	78.348	124.476	3053	1293	919	SS
18	382	78.517	124.822	3034	1310	907	SS
19	402	78.692	125.020	3013	1332	899	SS
20	421	78.861	125.205	2988	1351	892	SS
21	444	79.067	125.449	2963	1374	881	SS
22	468	79.279	125.690	2935	1398	873	SS
23	489	79.464	125.920	2918	1420	865	SS
24 (PALEO)	510	79.646	126.137	2903	1440	859	SS and SP
25	524	79.781	125.711	2904	1452	866	SS
26	539	79.926	125.231	2910	1467	875	SS
27	552	80.050	124.810	2909	1479	882	SS
28	572	80.240	124.166	2923	1499	893	SS
29	594	80.439	123.466	2941	1520	906	SS
30	614	80.620	122.830	2964	1539	917	SS
31 (WCru)	625	80.716	122.171	2981	1549	928	SS and SP
32 (MGD)	610	80.571	121.643	3001	1532	939	SS
MGD-A	610	80.578	121.643	3001	1526	947	SP
MGD-E	610	80.571	121.799	2996	1531	944	SP