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## Supplement of

## Concentrations, particle-size distributions, and dry deposition fluxes of aerosol trace elements over the Antarctic Peninsula in austral summer

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Table S1. Limits of Detection (LOD), %blank, and recovery of standard reference material 1648a using acid digestion and ICP-MS procedures.

|          | LOD                           | %Blank            | Recov.     | Precision   |
|----------|-------------------------------|-------------------|------------|-------------|
| Elements | (pg m <sup>-3</sup> )<br>n=11 | (%)<br>Median (n) | (%)<br>n=7 | (%)<br>n=11 |
|          |                               |                   |            |             |
| P*       | 20                            | 25 (31)           | -          | 9           |
| Ca       | 500                           | 3.5 (57)          | 93         | 7           |
| Ti       | 10                            | 28 (52)           | 90         | 6           |
| V        | 0.3                           | 11 (55)           | 97         | 8           |
| Cr       | 6                             | ND                | 38         | 6           |
| Mn       | 1                             | 6.1 (57)          | 97         | 7           |
| Co       | 2                             | ND                | 91         | 8           |
| Ni       | 20                            | 22 (17)           | 99         | 17          |
| Cu       | 20                            | 19 (22)           | 93         | 6           |
| Zn       | 30                            | 26 (27)           | 107        | 8           |
| Cd       | 0.5                           | ND                | 100        | 6           |
| Sb       | 3                             | ND                | 85         | 5           |
| Ce       | 0.1                           | 10 (48)           | 86         | 3           |
| Pb       | 0.7                           | 17 (60)           | 82         | 3           |

<sup>\*</sup>Lack of certified concentration in SRM 1648a prevents calculation of recovery.

Precision was determined by the RSD of sample split and duplicate measurement.

ND= not determined in samples because LOD was not exceeded.

The LODs were estimated based on a 200 m<sup>3</sup> representative sampling volume.

 $<sup>\%\,</sup>Blank$  is the median field blank/sample concentration×100%, and n is the number of detectable samples.