

**Determination of trace elements in antarctic snow by inductively coupled plasma sector field mass spectrometry**

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We present the record of trace elements determined in the snow from Dome A (80°22'S, 77°21'E, 4093 m a.s.l.) by inductively coupled plasma-sector field mass spectrometry (ICP-SFMS) equipped with an Apex high efficiency sample introduction system. Snow samples were collected from the wall of a 2.0 m-depth snowpit at 0.05 m intervals, dating from the late 1960s AD to 2004 AD. Sample preparations and analytical operations were carried out under ultraclean conditions, class 10 clean benches in class 1000 clean room at Korea Polar Research Institute, due to their extremely low concentrations of element in Antarctic snow.