

SUPPORTING INFORMATION

Determination of ultra-trace level ^{135}Cs and $^{135}\text{Cs}/^{137}\text{Cs}$ ratio in small volume seawater by chemical separation and thermal ionization mass spectrometry

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Number of pages in Supporting Information Section : 4, including cover.

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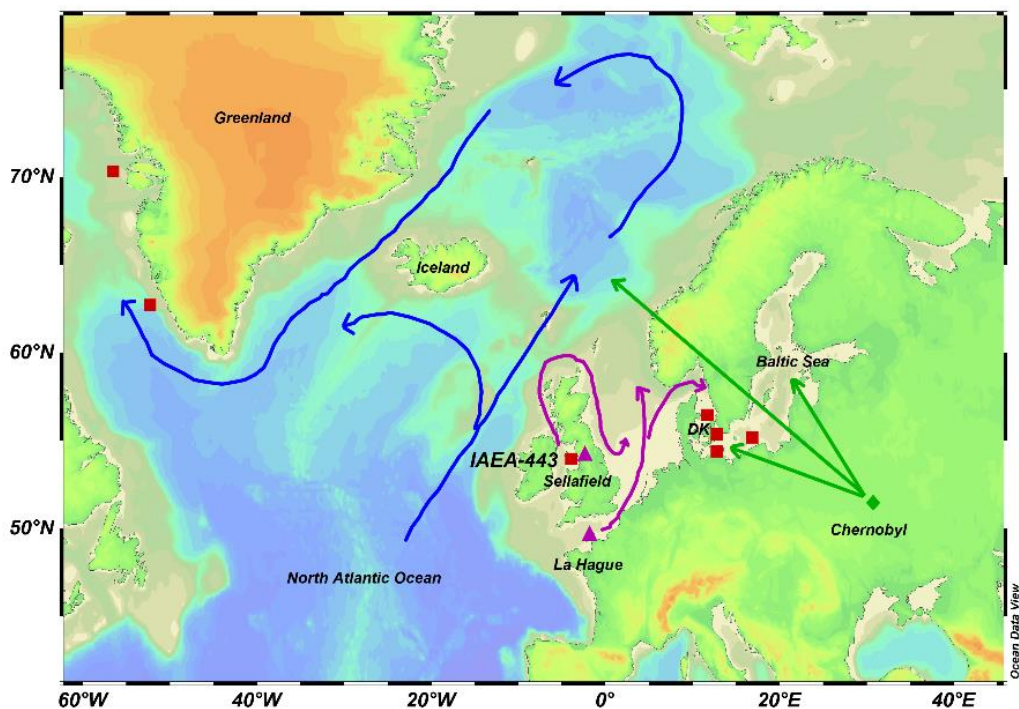


Figure S1. Sampling sites of seawater in Greenland coast, the Baltic Sea and Danish Straits

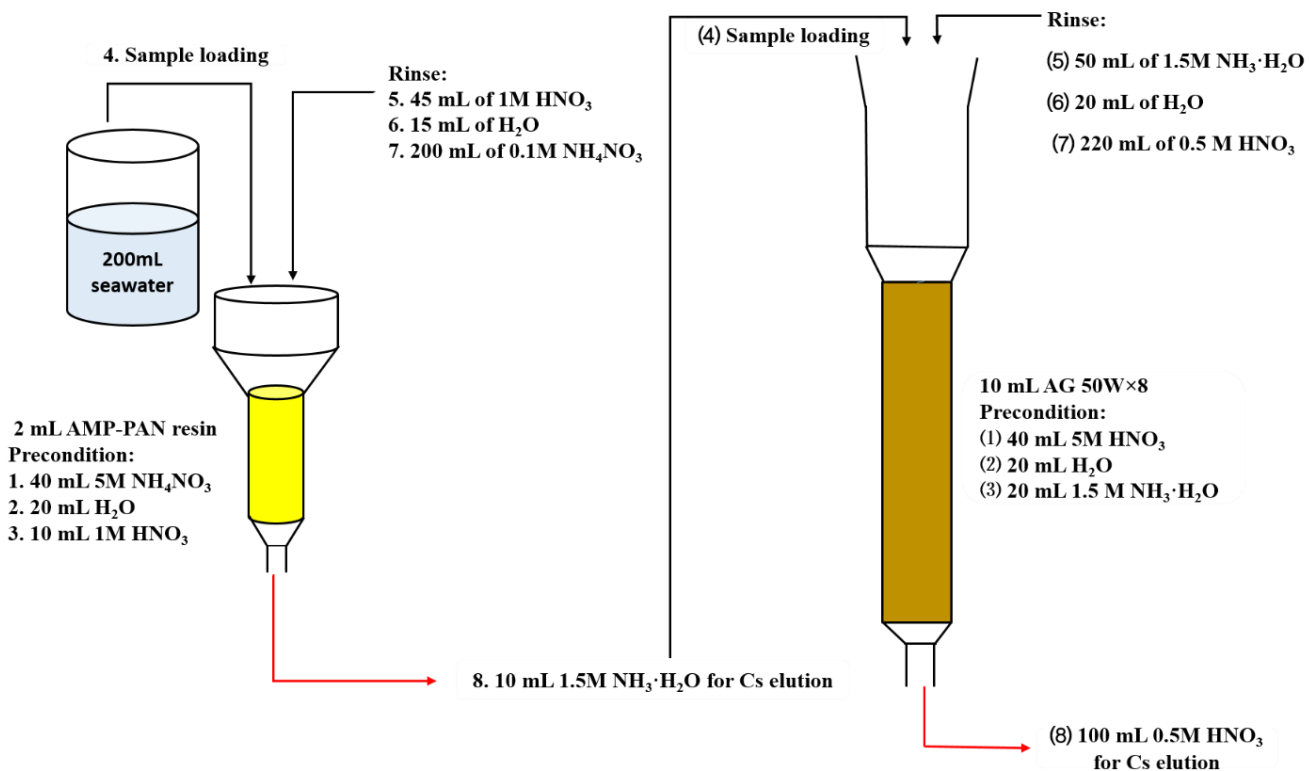


Figure S2. Chemical separation procedure for Cs in low-level seawater samples

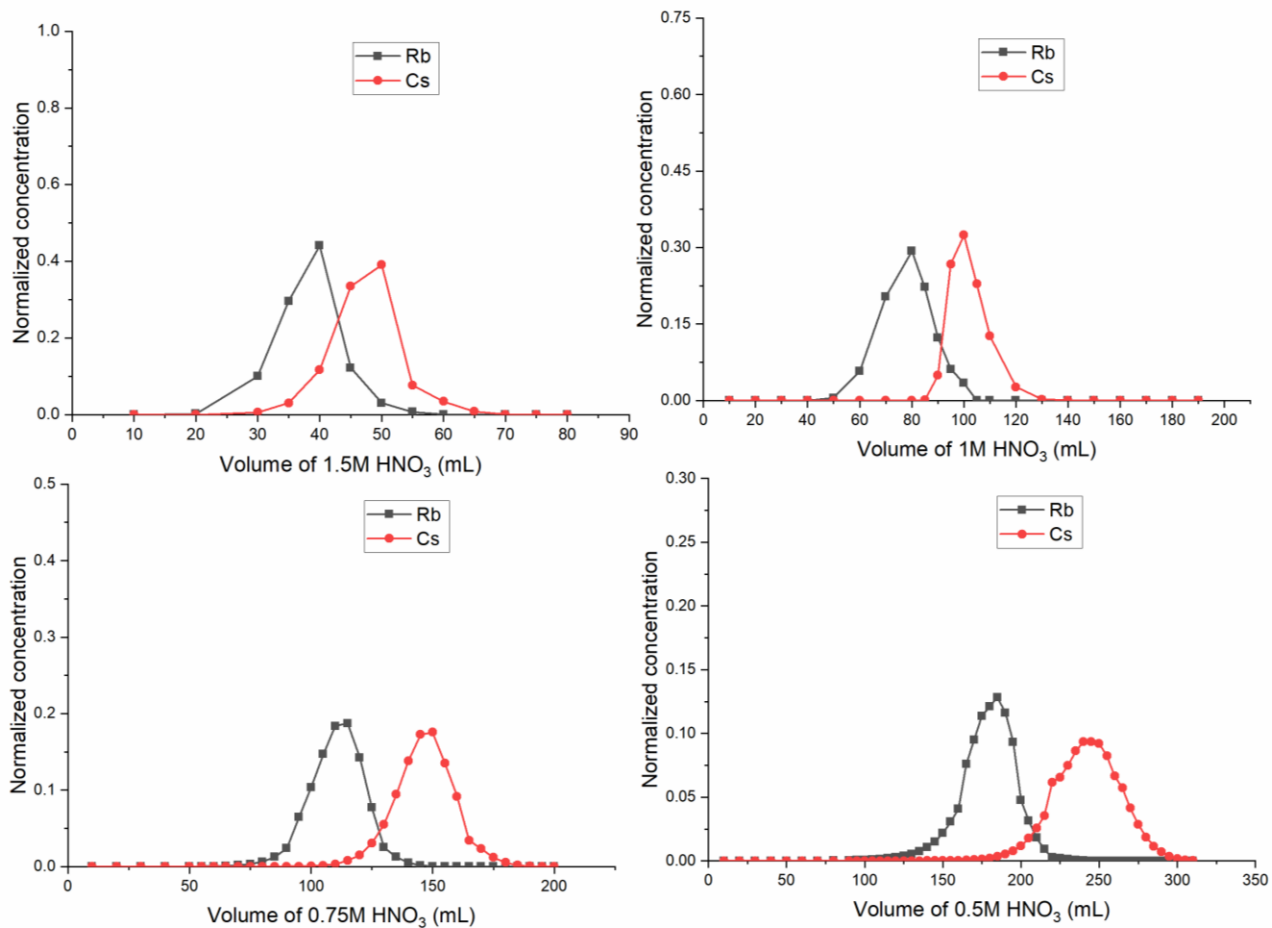


Figure S3. Elution profiles of Cs and Rb from an cation exchange chromatography column (AG 50W- \times 8, H⁺ form, ϕ 1.0 cm \times 20 cm) with different concentration (1.5M, 1M, 0.75M and 0.5M) of HNO₃

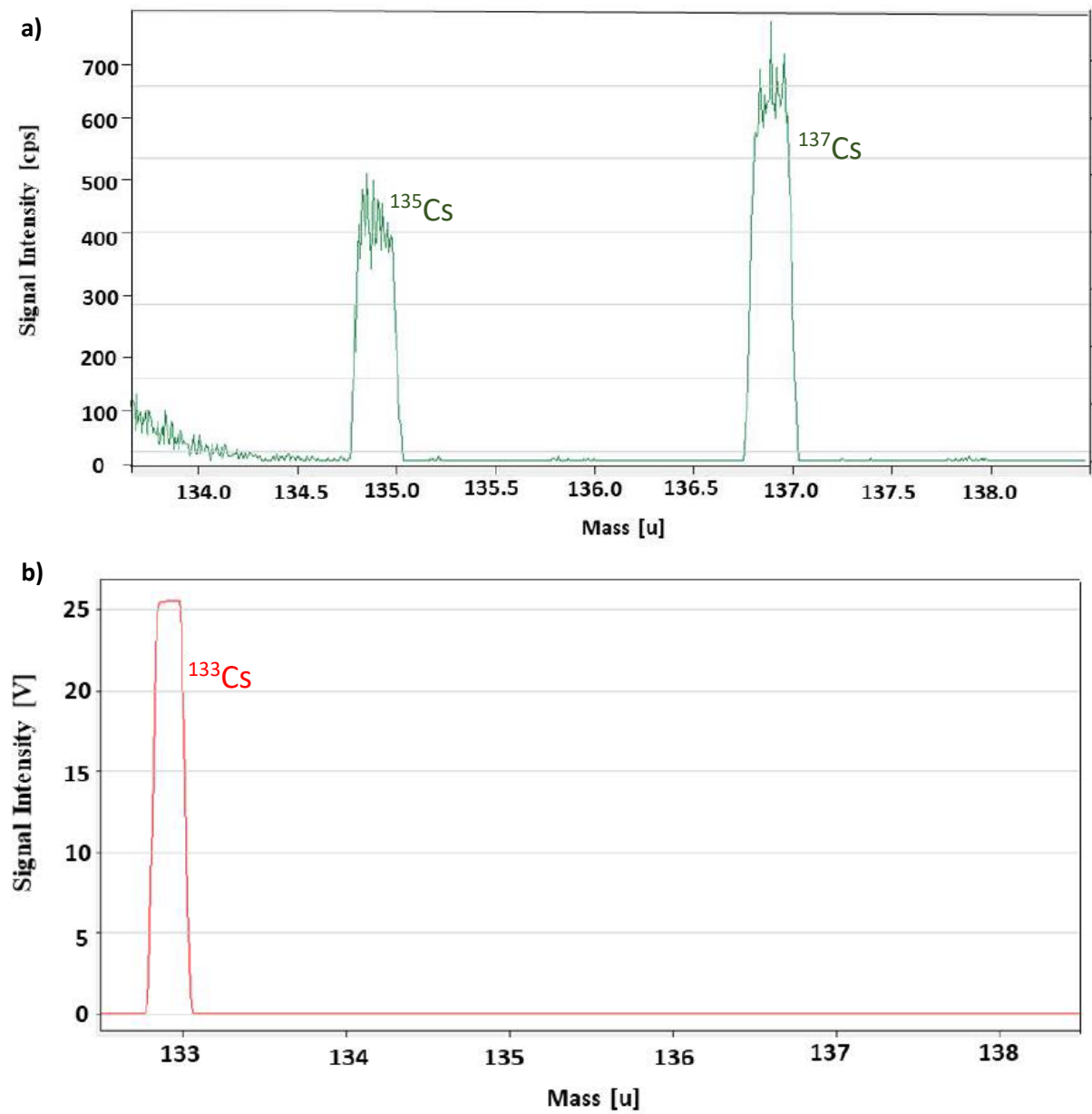


Figure S4. Spectra of mass scan of a real sample (IAEA-375) prepared for TIMS measurement for ^{135}Cs , ^{137}Cs and ^{138}Ba (a) in green measured by ion counter and ^{133}Cs (b) in red measured by Faraday cup. The cesium (^{133}Cs) loaded on the filament was estimated to be about 10 ng, which contained 5.6 fg ^{137}Cs and 2.6 fg ^{135}Cs .