

Interactive comment on “Alkali element background reduction in laser ICP-MS” by C. W. Magee Jr. and C. A. Norris

Anonymous Referee #1

Received and published: 27 January 2015

The paper is a well written description of how to improve the accuracy of laser ablation ICP-MS analyses. The authors describe their methods used in calibration measurements where they replace a traditional alkali glass tuning standard with a new synthetic low-alkali-glass reference material. Using this method they demonstrate how they can diminish the alkali contamination significantly without necessarily requiring changes to the analytical procedures.

The paper is written in a compact but clear manner. The amount of detail provided is probably not sufficient to repeat their work. The main measurement result tables 4a and 4b are hard to interpret. It might have been useful (suggestion) to provide some multivariate analysis of the results which would give a relative comparison of perfor-

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mance for different skimmer cone, sampler cone and glass references. It is possible that this would also point at the reasons for the contamination event described in the last paragraph of section “Discussion”. It would also explain the relatively large occasional variation in Na in table 4b.

Minor corrections: P4, L22, hrz → Hz.

Interactive comment on Geosci. Instrum. Method. Data Syst. Discuss., 4, 609, 2014.