Interactive comment on “Extreme isotopologue disequilibrium in molecular SIMS species during SHRIMP geochronology” by C. W. Magee Jr. et al.

K. Horie (Referee)

ehorie.kenji@nipr.ac.jp

Received and published: 3 September 2016

GENERAL COMMENTS Magee et al. mainly discussed about ionic yield of U and Th as elemental species, monooxide species, and dioxide species for natural minerals (zircon, baddeleyite, and monazite) by using SIMS. The data are important and the topic is attractive for geochronology. In addition, the discussion is essentially useful for SIMS analyses. The data look fine quality and are well discussed. In this manuscript, suitable previous works are referred for discussion. Therefore, the manuscript is worth publishing in GI after minor revision.

Schematic figure of SHRIMP is helpful for reader. Explanation of samples in Method section is boring. Table compiling the samples is helpful for reader. The number of digits in Table 3 about Raman spectroscopic data is too large, especially FWHM. Usually, one or two digits after the decimal point are useful.


Kenji HORIE