

Interactive comment on “First magmatism in the New England Orogen, Australia: Forearc and arc-backarc components in the Bakers Creek Suite gabbros” by Seann J. McKibbin et al.

H. Jeon

heejin.jeon@uwa.edu.au

Received and published: 11 September 2016

Dear Sean,

Thanks for giving me a chance to read your interesting paper. I'd like to simply mention two things:

1. I am not fully aware of the relationship between the Bakers Creek Suite and Hillgrove Supersuite. They are spatially associated, but was it demonstrated that they are cognate or related petrogenetically? I know that you compared the whole rock geochemistry of Bakers Creek and Hillgrove in NEO 2010 conference proceeding (I may not remember clearly and cannot find that proceeding paper), which you may be able

C1

to mention in this paper?

2. Glad to see that you made criteria of Th/U to distinguish zircon ages for the granite crystalline from those of inherited. With no O isotopic data, that is probably the best way to exclude "possible" inherited zircon ages. But as the zircon Th/U ratio of 0.3 is not an absolute reference, it is also very useful to check if individual dating spot is on the clear magmatic rim (Jeon et al. [2012, EPSL] observed that all measured inherited cores and texturally discordant cores have thick overgrowth magmatic rim).

Great work,

Heejin Jeon

Interactive comment on Solid Earth Discuss., doi:10.5194/se-2016-123, 2016.

C2