

Accepted Manuscript

Rhyolites in the Emeishan Large Igneous Province (SW China) with implications for plume-related felsic magmatism

Hui-Xin Hei, Shang-Guo Su, Yu Wang, Xuan-Xue Mo, Zhao-Hua Luo, Wen-Gang Liu

PII: S1367-9120(18)30209-8

DOI: <https://doi.org/10.1016/j.jseaes.2018.05.032>

Reference: JAES 3525

To appear in: *Journal of Asian Earth Sciences*

Received Date: 7 February 2018

Revised Date: 29 May 2018

Accepted Date: 30 May 2018

Please cite this article as: Hei, H-X., Su, S-G., Wang, Y., Mo, X-X., Luo, Z-H., Liu, W-G., Rhyolites in the Emeishan Large Igneous Province (SW China) with implications for plume-related felsic magmatism, *Journal of Asian Earth Sciences* (2018), doi: <https://doi.org/10.1016/j.jseaes.2018.05.032>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.



Rhyolites in the Emeishan Large Igneous Province (SW China) with implications
for plume-related felsic magmatism

Hui-Xin Hei^{a*}, Shang-Guo Su^a, Yu Wang^a, Xuan-Xue Mo^a, Zhao-Hua Luo^a, Wen-Gang Liu^b

a School of Earth Sciences and Resource, China University of Geosciences (Beijing), Beijing100083,
China

b Tianjin Institute of Geology and Mineral Resource, China Geological Survey, Tianjin300170, China

Corresponding author: Hui-Xin Hei

Email: heihuixing@gmail.com, Phone number: 8610-13426208569

Highlights:

- Nb-Ta-poor and Nb-Ta-rich rhyolites are identified in different stratigraphic positions of the Emeishan flood basalt sequence.
- Nb-Ta-poor rhyolites at the base of the stratigraphic section were formed through partial melting of middle or upper crustal materials of the Yangtze Block.
- Nb-Ta-rich rhyolites have an age of 261.0 ± 1.7 Ma, coeval with the Emeishan magmatism.
- Nb-Ta-rich rhyolites are best interpreted as hybrid products of crystal fractionation of high-Ti basaltic magma, coupled with 6%-14% crustal assimilation.

Abstract

In the Emeishan Large Igneous Province (ELIP), western Yangtze Block, SW China, minor amounts of silicic volcanic rocks (~5 %) are spatially and temporally associated with flood basalts. The

Download English Version:

<https://daneshyari.com/en/article/8913823>

Download Persian Version:

<https://daneshyari.com/article/8913823>

[Daneshyari.com](https://daneshyari.com)