

Accepted Manuscript

Early Cretaceous high-Ti and low-Ti mafic magmatism in Southeastern Tibet: Insights into magmatic evolution of the Comei Large Igneous Province

Yaying Wang, Lingsen Zeng, Paul Asimow, Li-E Gao, Chi Ma, Paula Antoshechkina, Chunli Guo, Kejun Hou, Suohan Tang



PII: S0024-4937(17)30397-3
DOI: doi:[10.1016/j.lithos.2017.11.014](https://doi.org/10.1016/j.lithos.2017.11.014)
Reference: LITHOS 4475

To appear in:

Received date: 5 May 2017
Accepted date: 12 November 2017

Please cite this article as: Yaying Wang, Lingsen Zeng, Paul Asimow, Li-E Gao, Chi Ma, Paula Antoshechkina, Chunli Guo, Kejun Hou, Suohan Tang , Early Cretaceous high-Ti and low-Ti mafic magmatism in Southeastern Tibet: Insights into magmatic evolution of the Comei Large Igneous Province. The address for the corresponding author was captured as affiliation for all authors. Please check if appropriate. Lithos(2017), doi:[10.1016/j.lithos.2017.11.014](https://doi.org/10.1016/j.lithos.2017.11.014)

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.

Early Cretaceous high-Ti and low-Ti mafic magmatism in Southeastern Tibet: Insights into magmatic evolution of the Comei Large Igneous Province

Yaying Wang¹, Lingsen Zeng¹, Paul Asimow², Li-E Gao¹, Chi Ma², Paula Antoshechkina², Chunli Guo³, Kejun Hou³, Suohan Tang¹

1. Institute of Geology, Chinese Academy of Geological Sciences, Beijing 100037, China

2. Division of Geological and Planetary Sciences, California Institute of Technology, Pasadena, California 91125, USA

3. Institute of Mineral Resources, Chinese Academy of Geological Sciences, Beijing 100037, China

ABSTRACT: The Dala diabase intrusion, at the southeastern margin of the Yardoi gneiss dome, is located within the outcrop area of the ~132 Ma Comei Large Igneous Province (LIP), the result of initial activity of the Kerguelen plume. We present new zircon U-Pb geochronology results to show that the Dala diabase was emplaced at ~132 Ma and geochemical data (whole-rock element and Sr-Nd isotope ratios, zircon Hf isotopes and Fe-Ti oxide mineral chemistry) to confirm that the Dala diabase intrusion is part of the Comei LIP. The Dala diabase can be divided into a high-Mg/low-Ti series and a low-Mg/high-Ti series. The high-Mg/low-Ti series represents more primitive mafic magma compositions that we demonstrate are

Download English Version:

<https://daneshyari.com/en/article/8911816>

Download Persian Version:

<https://daneshyari.com/article/8911816>

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