Accepted Manuscript

Post-cratonization deformation processes and tectonic evolution of the North China Craton

Yu Wang, Liyun Zhou, Shaofeng Liu, Jinyi Li, Tiannan Yang

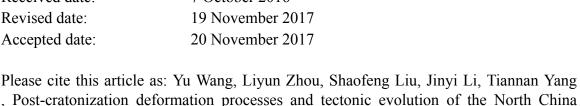
PII: S0012-8252(16)30352-X

DOI: doi:10.1016/j.earscirev.2017.11.017

Reference: **EARTH 2530**

To appear in: Earth-Science Reviews

Received date: 7 October 2016 Revised date: Accepted date:



Craton. The address for the corresponding author was captured as affiliation for all authors. Please check if appropriate. Earth(2017), doi:10.1016/j.earscirev.2017.11.017

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.



Post-cratonization **Deformation Processes**

Evolution of the North China Craton

Yu Wang^a, Liyun Zhou^a, Shaofeng Liu^a, Jinyi Li^b, and Tiannan Yang^b

a. Institute of Earth Sciences, China University of Geosciences, Beijing 100083, China

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

Corresponding author: Yu Wang

Email: wangy@cugb.edu.cn; Phone: 008610-82321028

ABSTRACT

The timing of events during the tectonic evolution of the North China Craton (NCC) and the east China

region is debated. Extension, compression, transpression, and shearing occurred throughout the NCC

since ~320 Ma. These main structural stages and the temporal evolution of the structural framework

and kinematics are summarized. We present here data from multiple structural and magmatic stages

related to temporally varying kinematics and deformation mechanisms during the evolution of the

post-cratonization of the NCC. The timing of each stage is constrained using isotopic dating, along with

the timing of magmatic intrusion, dyke intrusion, and basin formation associated with tectonic

transformation of the NCC. Age data indicate distinct structural and magmatic stages at ~1600–1500,

1300–1100, 445–315, 270–200, 170–155, 130-–110, 75–65, and 25–20 Ma, relating to basin formation

and continental uplift or collapse. These stages define the tectonic evolution and structural

1

Download English Version:

https://daneshyari.com/en/article/8913057

Download Persian Version:

https://daneshyari.com/article/8913057

<u>Daneshyari.com</u>