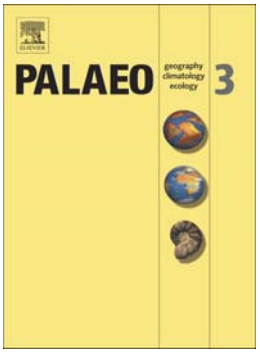

Calibrating the Guadalupian series (middle Permian) of South China

Qiong Wu, Jahandar Ramezani, Hua Zhang, Tian-tian Wang, Dong-xun Yuan, Lin Mu, Yi-chun Zhang, Xian-hua Li, Shu-zhong Shen

PII: S0031-0182(16)30697-6
DOI: doi: 10.1016/j.palaeo.2016.11.011
Reference: PALAEO 8046

To appear in: *Palaeogeography, Palaeoclimatology, Palaeoecology*

Received date: 7 March 2016
Revised date: 31 October 2016
Accepted date: 5 November 2016

Please cite this article as: Wu, Qiong, Ramezani, Jahandar, Zhang, Hua, Wang, Tian-tian, Yuan, Dong-xun, Mu, Lin, Zhang, Yi-chun, Li, Xian-hua, Shen, Shu-zhong, Calibrating the Guadalupian series (middle Permian) of South China, *Palaeogeography, Palaeoclimatology, Palaeoecology* (2016), doi: 10.1016/j.palaeo.2016.11.011

Calibrating the Guadalupian Series (Middle Permian) of South China

Qiong Wu[a], Jahandar Ramezani[b], Hua Zhang[a]*, Tian-tian Wang[c], Dong-xun Yuan[a], Lin Mu[a], Yi-chun Zhang[a], Xian-hua Li[d], Shu-zhong Shen[a]

[a] State Key Laboratory of Palaeobiology and Stratigraphy, Nanjing Institute of Geology and Palaeontology, Chinese Academy of Sciences, 39 East Beijing Road, Nanjing, Jiangsu 210008, China

[b] Department of Earth, Atmospheric and Planetary Sciences, Massachusetts Institute of Technology, Cambridge, MA 02139, USA

[c] State Key Laboratory of Biogeology and Environmental Geology, China University of Geosciences, Beijing 100083, China

[d] State Key Laboratory of Lithospheric Evolution, Institute of Geology and Geophysics, Chinese Academy of Sciences, Beijing 100029, China

*Corresponding author: hzhang@nigpas.ac.cn

Abstract: The Guadalupian Epoch represents one of the most critical intervals during the Earth history which is characterized by a series of global geological and biological events. However, it is poorly constrained by radioisotopic ages in comparison with the high-precision dates from the Lopingian and lowest Triassic in South China and the Cisuralian in southern Urals, Russia. In this study, we report combined CA-ID-TIMS and SIMS U-Pb zircon geochronology for three ash beds from the base and lower part