

Supplementary data for

Middle Miocene (~14 Ma) and Late Miocene (~6 Ma) Paleogeographic Boundary Conditions

Zhilin He^{1,2}, Zhongshi Zhang^{3,4}, Zhengtang Guo^{1,5,6}, Christopher R. Scotese⁷, Chenglong Deng^{2,6,8}

¹ Key Laboratory of Cenozoic Geology and Environment, Institute of Geology and Geophysics, Chinese Academy of Sciences, Beijing, 100029, China

² Innovation Academy for Earth Science, CAS, Beijing, 100029, China

³ Department of Atmospheric Science, School of Environmental Studies, China University of Geosciences, Wuhan, 430074, China

⁴ Nansen-Zhu International Research Centre, Institute of Atmospheric Physics, Chinese Academy of Sciences, Beijing, 100029, China

⁵ CAS Center for Excellence in Life and Paleoenvironment, Beijing, 100044, China

⁶ University of Chinese Academy of Sciences, Beijing, 100049, China

⁷ Department of Earth and Planetary Sciences, Northwestern University, Evanston, Illinois, USA

⁸ State Key Laboratory of Lithospheric Evolution, Institute of Geology and Geophysics, Chinese Academy of Sciences, Beijing, 100029, China

Contents:

Middle Miocene (~14 Ma) and late Miocene (~6 Ma) topography and bathymetry conditions (resolution: 1°×1°):

Paleodem14ma_1deg_v1.0_He_etal.nc

Paleodem6ma_1deg_v1.0_He_etal.nc

In addition, the data with a resolution of 0.5°×0.5° for reference:

Paleodem14ma_0.5deg_v1.0_He_etal.nc

Paleodem6ma_0.5deg_v1.0_He_etal.nc

Middle Miocene and late Miocene fossil collections from PBDB (<https://paleobiodb.org>):

Fossil collections.xls

14 Ma and 6 Ma oceanic crust paleo-ages from Müller et al. (2016):

EarthByte_AREPS_v1.11_Muller_etal_2016_AgeGrid-14.nc

EarthByte_AREPS_v1.11_Muller_etal_2016_AgeGrid-6.nc

14 Ma and 6 Ma oceanic sediment thicknesses from Dutkiewicz et al. (2017):

sed_thick_0.2d_14.nc

sed_thick_0.2d_6.nc