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Oligocene climate signals and forcings in Eurasia revealed by plant macrofossil and modelling results

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Abstract

The Oligocene represents a transitional time period from a warm climate to a cooler climate that is more representative of the modern day; yet, a general view of continental climate pattern and forcings are still lacking. Different proxies and models show striking disparities, especially in mid-high latitudes, requiring validation of Oligocene climate reconstruction in order to understand the large-scale processes that drive the observed climate changes. Here, we compiled 149 macrofossil floras in the mid-high latitudes of Eurasia, then quantitatively reconstructed the Oligocene climate using Coexistence Approach (CA) and combined previous published paleoclimate data. During the Oligocene, Eurasian mid-high latitudes were mainly

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