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Astronomical control on Southern and Eastern Asia interglacial climate

Anqi Lyu, Qianqian Su, Qiuzhen Yin, and Andre Berger

Georges Lemaître Centre for Earth and Climate Research, Earth and Life Institute, Université catholique de Louvain, Louvain-la-Neuve, Belgium (anqi.lyu@uclouvain.be)

Many proxy and modelling studies have shown that insolation plays a fundamental role in global and regional climate variations. The relationship between climate and astronomical parameters could be complex. This is especially true over Southern and Eastern Asia due to its complex monsoon system that could be significantly influenced by both low and high latitude processes. Indeed, different proxy records from this region show that the climate response to astronomical parameters varies between regions and between climatic variables. However, the mechanisms remain unclear. Based on a series of snapshot and transient climate simulations performed for the last nine interglacials, we investigate how temperature, precipitation and vegetation respond to obliquity, precession and eccentricity in different sub-regions of Southern and Eastern Asia under warm climate conditions and try to understand the differences between different sub-regions and between different proxy records.