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Millennial scale sea surface temperature variation over the last 145kyr from the central equatorial Indian Ocean

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Based on the elemental (Mg/Ca) analysis of planktonic foraminifera *Globigerinoides ruber* we infer millennial scale temperature variation from the central equatorial Indian Ocean. The Mg/Ca based paleotemperature reconstruction shows that the central equatorial Indian Ocean was ~2.1°C colder during the Last Glacial Maxima as compared to present. This Mg/Ca based glacial-interglacial temperature difference estimate is higher than the CLIMAP sea surface temperature reconstruction and similar to the SSTs estimated by alkenone and artificial neural network (ANN) modeling of planktonic foraminiferal time-series distribution from the northern Indian Ocean. The analysis further demonstrates that the surface equatorial Indian Ocean was comparatively much warmer (~30.4°C as compared to present day ~28.6°C) during the isotopic stage 5e than the peak present interglacial warming. During the last interglacial period the equatorial SST was lowest (~26.0°C) at ~68kyr coinciding with the stage 5/4 transition and Younger Toba ash super eruption.