MORE THAN 1? SST COOLING AFTER TOBA ERUPTION AT IS19/20 EVENT IN SOUTH CHINA SEA

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The Toba tephra lay is the first time found in the location to the northeast of the Indonesia Toba caldera in the SW South China Sea (SCS; Lee et al., 1999) where sedimentation rate is 10-30 cm/ky. A century-scale paleoceanography stratigraphy in the South China Sea indicates that D-O cycles are well recorded in the SCS. The Toba eruption (at 1556-1558 cm; 71 Ka) occurred at the end of high temperature IS20 event (71.1-72.8 Ka, 26.8?) before beginning of a gradual cooling of SST (70.69-69.77 Ka; 25.8-26.0?) and increasing of foraminiferal oxygen isotope of the stadial interval right between interstadial IS19 and 20 events in the Stage 4/5 boundary. This is well correlated with high sulfate records in the Greenland ice core (Zielinski et al., 1996). Thus, in the warm pool margin of the SCS the volcanic cloud produced by the Toba eruption at 71 Ka would significantly result in global cooling for 1200 years after the eruption.