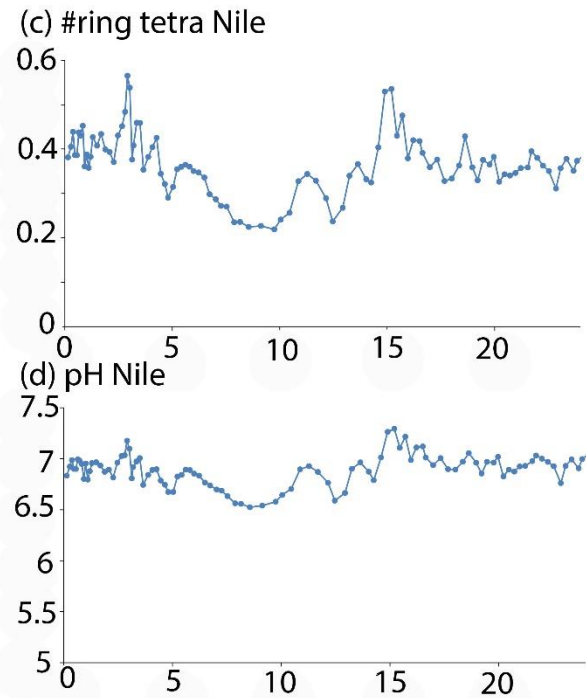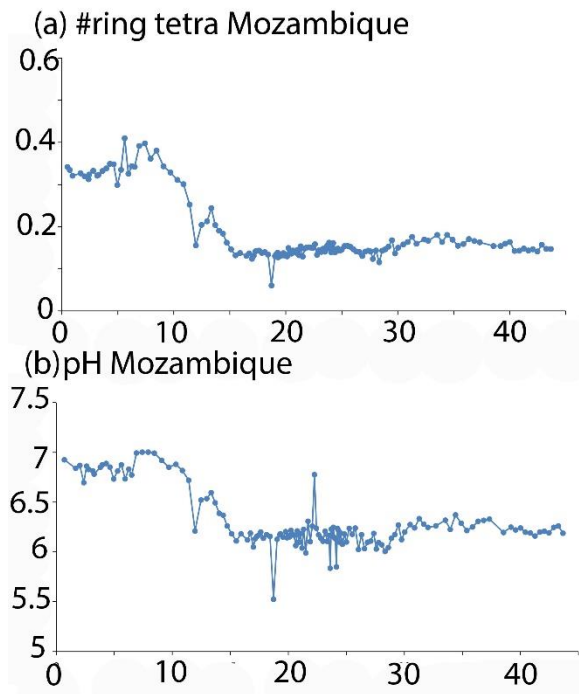Climate
of the Past

Supplement of

The C$_{32}$ alkane-1,15-diol as a proxy of late Quaternary riverine input in coastal margins

Julie Lattaud et al.

Correspondence to: Julie Lattaud (julie.lattaud@nioz.nl)

S1: (a) #ring tetra of core 64PE304-80, (b) reconstructed pH of core 64PE304-80, (c) #ring tetra of core Geob7702-3 and (d) reconstructed pH of core GeoB7702-3.
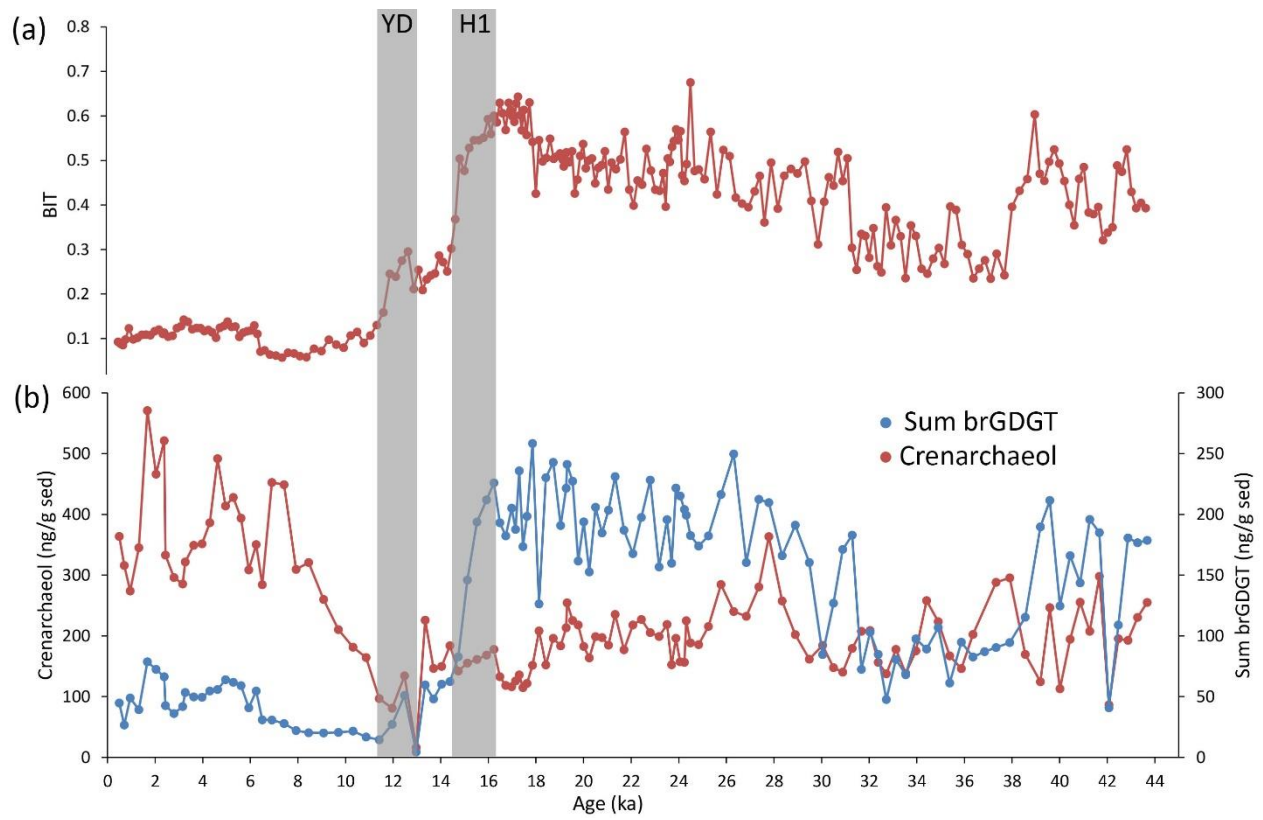
S2: (a) BIT index of core 64PE304-60 (from Kasper et al., 2015) and (b) Crenarchaeol and brGDGT concentration in core 64PE304-60.
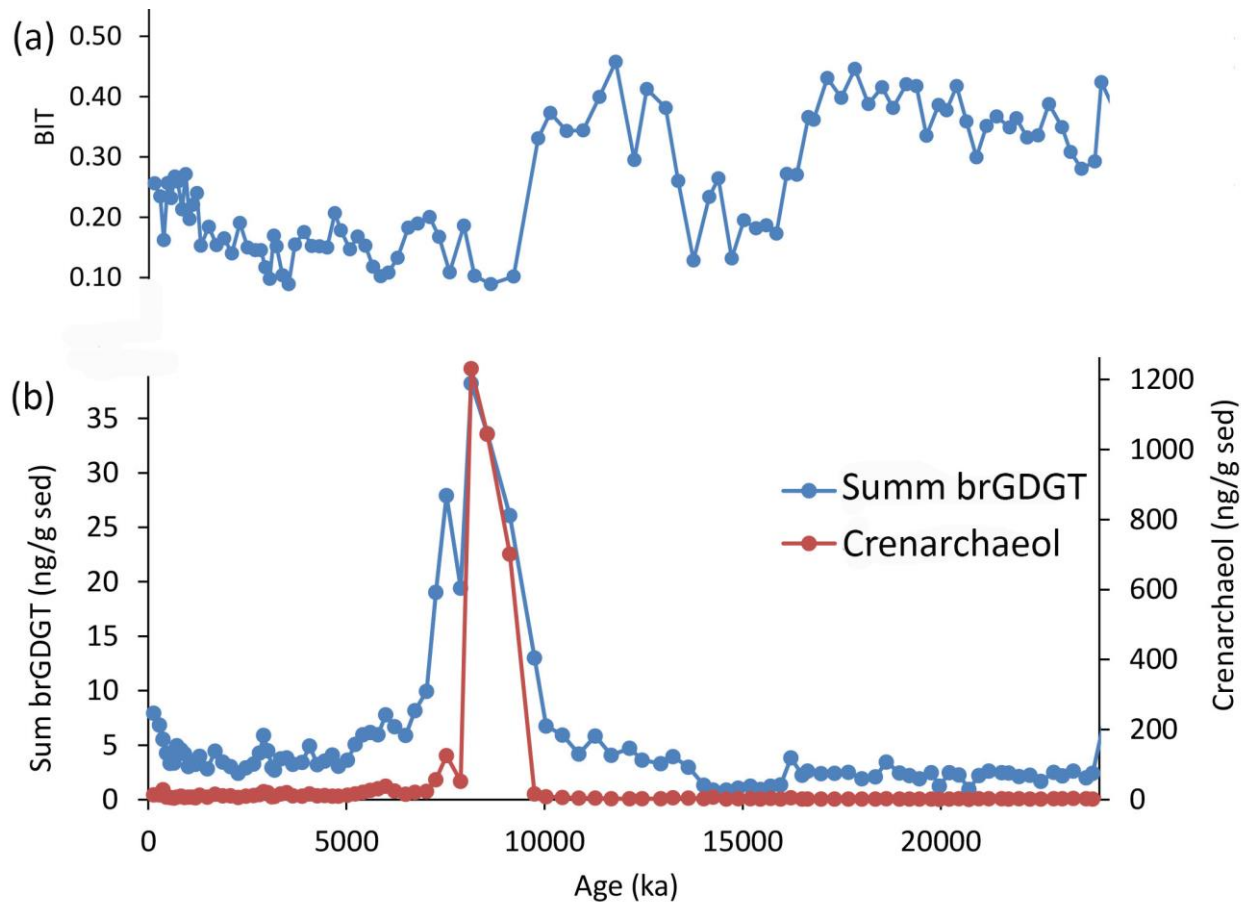
S3: (a) BIT index if core GeoB7702-3 (from Castañeda et al., 2010) and (b) Crenarchaeol and brGDGT concentration in core GeoB7702-3.

Supplementary information:

Age-model of the core 64PE464-3

The chronology was established as described by Kasper et al. (2015) by 14C dating of mixed surface dwelling planktonic foraminifera (Globigerinoidess acculifer, G.trilobus and G. ruber) for 20 sediment intervals. These samples were collected from the washed and sieved > 250 μm sediment fraction by selecting individual foraminifera specimens under a microscope. The age model for the upper 6 m, spanning the last 20 ka, was constrained by 11 14C dates and by stratigraphic correlation with a parallel core (GIK16160-3; Wang et al., 2013b; van der Lubbe et al., 2014). The age model between 20 and 39.5 ka BP was constrained by 9 additional 14C dating points. The 14C age values were converted to calendar age using the MARINE09 calibration curve that applies a standard reservoir correction of ~400 yr (Reimer et al., 2011).

Age-model of the core GeoB7702-3

The chronology of GeoB 7702-3 was made as described by Castaneda et al. (2010), by 14C dating of monospecific (Globigerinoides ruber) and mixed planktonic foraminifers in 15 sediment intervals. For conversion of the 14C dates to calendar ages, the CALIB 5.01 program (Stuiver and Reimer, 1993) and the Marine04 Data Set (Hughen et al., 2004) were used with an average Atlantic reservoir age of ~400 years (Reimer et al., 2011). For 14C ages older than 21,000 years the calibration curve and data set of Fairbanks et al. (2005) were used.