

Supplementary Table 1: Marine sediment cores considered in this study^a.

#	Core	Latitude	Longitude	Water- depth (m)	References (for benthic stable isotopic and XRF data)
A	GeoB7920-2	20.75°N	18.58°W	2278	<u>Isotopes</u> : Tjallingii et al. [2008] <u>XRF</u> : Bloemsma et al. [2012]
B	GeoB7925-1	20.29°N	18.26°W	1908	<u>Isotopes, XRF</u> : <i>this study</i>
C	GeoB9506-1	15.61°N	18.35°W	2956	<u>Isotopes</u> : S. Mulitza (MARUM, unpublished) <u>XRF</u> : Itambi et al. [2009]
D	GeoB9516-5	13.67°N	18.42°W	3504	<u>Isotopes, XRF</u> : Itambi et al. [2009]
E	GeoB9528-3	9.17°N	17.66°W	3057	<u>Isotopes</u> : Castañeda et al. [2009] <u>XRF</u> : <i>this study</i>
F	GeoB4901-8	2.68°N	6.72°E	2184	<u>Isotopes</u> : Zabel et al. [2001] <u>XRF</u> : <i>this study</i>
G	GeoB1008-3	6.58°S	10.32°E	3124	<u>Isotopes, XRF</u> : <i>this study</i>
H	GeoB1016-3	11.77°S	11.68°E	3411	<u>Isotopes, XRF</u> : <i>this study</i>
I	GeoB1028-5	20.10°S	9.19°E	2209	<u>Isotopes, XRF</u> : <i>this study</i>

^aLetters (in the first column) refer to labels shown in Figure 2.