

Age [kaBP]	Upwelling intensity	Context	Reference
9.9 - 8.4	-	warmer and stratified conditions	Zhao et al. 2017
9.5	+	aragonite:calcite-ratio	Cohen et al. 1992
9.5 - 4.5	-	cold water coral mound	Tamborrino et al. 2019 etc.
8.6	+	dated shells	Cohen and Tyson 1995
8.4 - 3.1	+	cool and nutrient-rich waters	Zhao et al. 2017
8.4 - 5.8	+	cold intervals in the northern 18° Benguela region	Farmer et al. 2005
8.4 - 5.3	+	Iron concentrations, Chilean continental margin	Lamy et al. 2001, Zhao et al. 2016, 2017
8.2 - 5.8	+	SSTs cooler than present by 1°C–2°C	Farmer et al. 2005
> 7.8	-	high relative abundance of Fynbos vegetation	Leduc et al. 2010, Zhao et al. 2016b, Zhao et al. 2017
7.1 - 5.0	-	enhanced dissolved oxygen	Tamborrino et al. 2019
7.0	-	Solen capensis, Gastrana matadoa, Bogenfels	Branch et al. 1994, Compton 2006
7.0	-	warmest temperatures within the Holocene (18.4°C for winter, 23.6°C for summer)	Embley and Morley 2000
6.3	+	dated shells	Cohen and Tyson 1995
5.8	-	sea surface significantly warmer	Cohen and Tyson 1995
5.8 - 4.4	-	enhanced dissolved oxygen concentrations, growth of cold-water reefs	Tamborrino et al. 2019
5.5	-	high SSTs (Holocene Hypsithermal)	Meisel et al. 2011, Shi et al. 2000, Kim et al. 2002, Cohen and Tyson 1995,
5.2	-	shell, Cape Cross	this study, Cape Cross
5.2	-	shell, Cape Cross	this study, Cape Cross
5.1	-	shell, Cape Cross	this study, Cape Cross
5.0	-	shell, Torra Bay	this study, Torra Bay
5.0	-	shell, Torra Bay	this study, Torra Bay
5.0	-	shell, Torra Bay	this study, Torra Bay
4.8	-	shell, Cape Cross	this study, Cape Cross
4.8	-	shell, Cape Cross	this study, Cape Cross
4.8	-	shell, Cape Cross	this study, Cape Cross
4.8 - 3.8	+	anoxic to suboxic waters	Kiessling 2002, Emeis et al. 2009
< 4.8	-	high SST	Emeis et al. 2009
4.5	+	extinction of Lophelia pertusa	Tamborrino et al. 2019
4.3	-	temperatures remained high	Cohen and Tyson 1995
4.2	+	slowdown of NADW-production	Meisel et al. 2011
< 4.0	+	increase in relative abundance of Neogloboquadrina pachyderma	Weldeab et al. 2013, Zhao et al. 2017
3.3 - 0.25	+	dated shells	Cohen and Tyson 1995
3.2	-	slight increase in T ($\delta^{18}\text{O}$)	Meisel et al. 2011
3.19	+	aragonite:calcite-ratio	Cohen et al. 1992
3.1 - 0.64	+	high nutrient supply	Zhao et al. 2017
2.7	+	slight decline in T at 2700 BP along with minimum NADW-production	Meisel et al. 2011
2.7	-	anoxia apparently decreased in frequency of occurrence	Emeis et al. 2009
2.5	+	cold period in the Benguela Upwelling System	Leduc et al. 2010
2.0	-	SST maximum	Leduc et al. 2010
2.0	-	$\delta^{18}\text{O}$ signals of mollusc shells in the southern Benguela region	Cohen et al. 1992
2.0	-	SST-records of different cores	Meisel et al. 2011
< 2.0	+	sharp decline in T $\delta^{18}\text{O}$	Meisel et al. 2011
> 1.9	+	SST had decreased from 18°C to 14.5°C	Emeis et al. 2009
1.9 - 0.5	-	SST stepped up by 1.5°C	Emeis et al. 2009
1.3	-	shell, Sandwich Bay	this study, Sandwich Bay
0.7	-	SST maximum	Leduc et al. 2010
0.65	+	surface waters on the eastern Agulhas Bank were colder	Cohen and Tyson 1995
0.65 - 0.5	+	early stage of Little Ice Age (LIA), intensified upwelling	Meisel et al. 2011
0.64	+	high nutrient supply	Zhao et al. 2017
0.5	+	aragonite:calcite-ratio	Cohen et al. 1992
0.5	-	T $\delta^{18}\text{O}$ increase, rising NADW-formation and elevated Agulhas heat transfer	Emeis et al. 2009
0.45	-	multicore samples	Emeis et al. 2009
0.36	-	shell, Conception Bay	this study, Conception Bay
0.3	-	shell, Conception Bay	this study, Conception Bay
0.3	-	shell, Conception Bay	this study, Conception Bay
0.161	-	shell, Conception Bay	this study, Conception Bay
0.161	-	shell, Conception Bay	this study, Conception Bay
0.16	-	shell, Conception Bay	this study, Conception Bay
0.16	-	shell, Conception Bay	this study, Conception Bay
0.15	-	shell midden, Sandwich Bay	this study, Sandwich Bay