Paleoceanography

Supporting Information for

Evolution of the North Pacific Subtropical Gyre during the past 190 kyr through the interaction of the Kuroshio Current with the surface and intermediate waters

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Introduction

The supporting information contains two figures (Figure S1 and S2) and one table (Table S1). The two figures correspond to the result of the section 4.1 in the main article: Figure S1 shows the differences among the calibration equations for converting the Mg/Ca values to temperatures, and Figure S2 shows the down-core records of the Mg/Ca values. Table S1 shows the data of age model, corresponding to the material and methods in the in the main article.

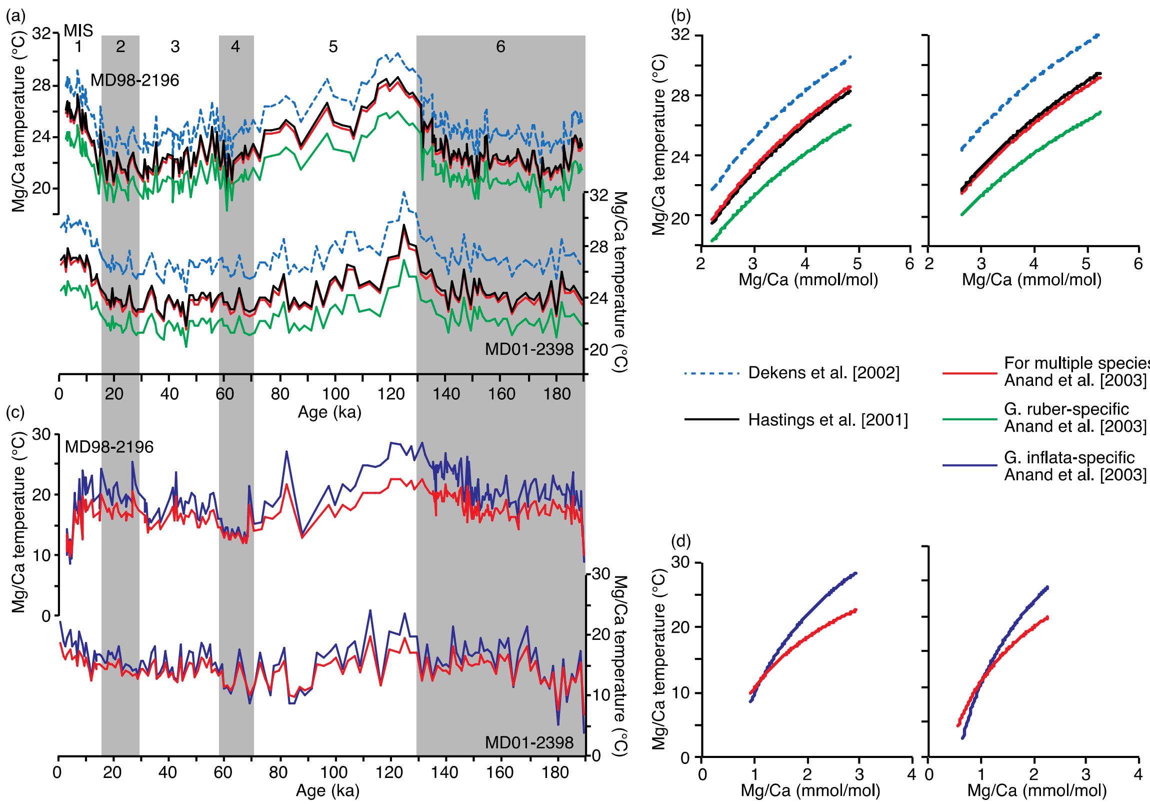

Figure S1. (a) Mg/Ca-SST records, converted using four different equations: blue with dashed line [*Dekkens et al*., 2002]; black solid line [*Hastings et al*., 2001]; red solid line [equation for multiple species of *Anand et al*., 2003]; and green solid line [*G. ruber*-specific equation of *Anand et al*., 2003]. (b) Relationships between Mg/Ca values and temperature calibrated by four equations as same as (a). (c) Mg/Ca-SST records, converted by two different equations: red solid line [equation for multiple species of *Anand et al*., 2003] and blue solid line [*G. inflata*-specific equation of *Anand et al*., 2003]. (d) Relationships between Mg/Ca values and temperature calibrated by two equations as in (d).

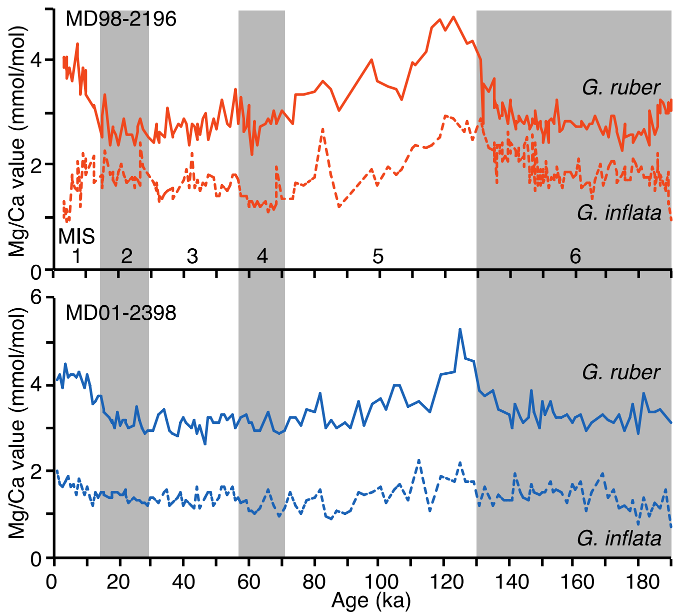

Figure S2. Down-core changes of the Mg/Ca values of *G. ruber* (solid line) and *G. inflata* (dashed line) in cores MD98-2196 (red color) and MD01-2398 (blue color).

Table S1. Age model for cores MD98-2196 and MD01-2398.

Core Name	Depth in core (cm)	^{14}C age ± uncertainty (yr BP)	Cal. age (kyr BP)	Note
MD98-2196	0	3049 ± 34	2.812	AMS ^{14}C age
	92	5520 ± 48	5.905	AMS ^{14}C age
	240		12	$\delta^{18}O_{sac}$
	330		18	$\delta^{18}O_{sac}$
	370		20	$\delta^{18}O_{sac}$
	1305		62	$\delta^{18}O_{sac}$
	1405		69	$\delta^{18}O_{sac}$
	1540		87	$\delta^{18}O_{sac}$
	1785		123	$\delta^{18}O_{sac}$
	1875		135	$\delta^{18}O_{sac}$
	2820		156	$\delta^{18}O_{sac}$
	3430		185	$\delta^{18}O_{sac}$
	3800		191	$\delta^{18}O_{sac}$
MD01-2398	0	1445 ± 25	0.988	AMS ^{14}C age
	100	8915 ± 55	9.570	AMS ^{14}C age
	140	11035 ± 50	12.586	AMS ^{14}C age
	210	13695 ± 60	15.982	AMS ^{14}C age
	320	20090 ± 110	23.713	AMS ^{14}C age
	410	28040 ± 320	31.460	AMS ^{14}C age
	700		62	$\delta^{18}O_{sac}$
	840		87	$\delta^{18}O_{sac}$
	940		109	$\delta^{18}O_{sac}$
	980		123	$\delta^{18}O_{sac}$
	1040		135	$\delta^{18}O_{sac}$
	1070		140	$\delta^{18}O_{sac}$
	1210		156	$\delta^{18}O_{sac}$
	1390		185	$\delta^{18}O_{sac}$