Supporting Material

Mid- to Late Holocene Environmental and Climatic Changes in New Caledonia, Southwest Tropical Pacific, Inferred from the Littoral Plain Gouaro-Déva

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Relative abundance (% of the assemblage) of the main foraminiferal species in core G4 (''0" indicates percentages between 0 and 1).

This table provides the total information on foraminiferal assemblages. Even if it is mostly void because it includes rare species and samples where foraminifera are scarce, it contains information that may be useful, even for the non specialist. Relative abundances (%) are given for all species in all sediments. Indication of assemblage density (number of tests in 50 cm^3 of sediment) allows the calculation of the absolute abundance of each species if necessary. Species richness (number of species) is also provided.

The foraminiferal assemblages of core G4 are typical of coastal bays subject to alternating variable inputs of freshwater and seawater. At the base of core G4, *Ammonia tepida* and *Brizalina striatula*, the dominant species, characterize coastal environments subject to the influence of continental waters. The lack of foraminifera between 185-165 cm together with the absence of thecamoebians suggests a drying out of the water body. Between 160-90 cm, the noticeable proportion of *Quinqueloculina* spp. and *Elphidium* spp. indicates an obvious marine influence in an open bay. The lack of foraminifera around 85-80 cm in association with the presence of gypsum in the sediment suggest a drying out of the water body. In the section 80-35 cm, the rare fragments dominated by *Ammonia tepida* and *Quinqueloculina* spp. may be reworked from underlying sediments, or represent a eutrophic brackish pond. Among this section, between 70-65 cm, the abnormally rich assemblage comprising marine species indicates a landward transport of sediments presumably due to an extreme event, such as a cyclone or a tsunami.

Supplemental Material (Online Only)

Core G4 level (cm)	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-75	75-80	80-85	85-90	90-95	95-100	100-105	105-110	110-115	120-121	130-131	140-141	150-151	160-161	165-166	170-171	175-176	180-181	185-186	190-191	195-196	200-201	205-206	210-211	215-216	220-221	230-231	235-240	255-260
Number of tests/50cm^3 sediment	*1*	*0*	*2*	*3*	*2*	*6*	*120*	*6*	*4*	*1*	*6*	*500*	*250*	*700*	*1000*	*1000*	*1000*	*1500*	*600*	*350*	*400*	*20*	*10*	*1*	*2*	*2*	*200*	*350*	*250*	*400*	*1000*	*300*	*300*	*250*	*300*	*1500*
Number of species	*1*	*0*	*2*	*3*	*2*	*3*	*26*	*4*	*2*	*1*	*3*	*14*	*18*	*16*	*23*	*29*	*21*	*25*	*23*	*15*	*15*	*7*	*4*	*1*	*2*	*2*	*10*	*13*	*14*	*12*	*11*	*15*	*14*	*11*	*10*	*16*
Abditodendrix rhomboidalis							1					1				5	1	2		1	2		13				5	7	9	3	5	6	3	7	4	1
Ammonia convexa					50		2						3	5	2	5																				
Ammonia parkinsoniana												12	1																							
Ammonia tepida	0	0	0	0	50	50	10	17	0	0	50	37	26	17	12	2	36	19	20	19	36	12	25	0	50	50	34	32	20	31	33	28	33	35	35	30
***Ammonia* spp.**			50				1					8	1				2		1																	
Angulogerina angulosa																																1	1			
Anomalinulla glabrata																1																				
Bolivina pseudoplicata																												1					2			
***Bolivina* spp.**																		2	5		3						3	2	1	3	7		1			
Brizalina striatula	0	0	0	0	0	0	2	0	0	0	0	1	1	4	1	9	3	19	15	6	4	12	0	0		0	8	15	10	15	8	10	7	14	9	15
Brizalina vadescens																1																			1	
Bulimina marginata																													1			1				
***Bulimina* sp.**																											3	3	3			2	1	2	5	
Chrysalidinella dimorpha															1																					
Cycloforina philippinensis													1	1																						
Cymbaloporetta bradyi															1			1																		1
Cymbaloporetta squammosa							4						4	8	6	2	3		3	2	3															2
Discorinopsis aguayoi													1	1	2	2	1	1	1		1															1
Elphidium advenum				33			16					20		28	32	8															1					
Elphidium advenum dispar																		11	4	20	8						2			3			5		1	27
Elphidium crispum							3																													
Elphidium excavatum							8	17				1	29																							
Elphidium limbatum												2																								
Elphidium macellum																								100												
Elphidium* cf. *lene	100																																			
Elphidium reticulosum							2	17				3	4	1	1	4																				
Elphidium simplex							7		25				5	1	2	5																				
***Elphidium* spp.**							1				17						13	10	15	5	10	24	50				17	15	15	17	8	8	19	11	16	
Epistomaroides polystomelloides							1																													
Eponides repandus			50																																	
Fijiella simplex																		1			2											1	1			1
Fissurina* cf. *lucida												2	1		1	8																1				
Glabratella patelliformis																	1																			
Hauerina earlandi																				1																
Haynesina depressula	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	2	4	2	8	6	0	0	0	0	0	5	2	8	12	6	1	12	2	1
Helenina anderseni												9																								
Lagena laevis													1																							
Lobatula lobatula																		1									2	2	2	2	1		1	1		
Loxostomina* cf. *limbata																			1										1							
***Melonis* sp.**																1																				
Miliolinella subrotunda							1								2																					1
Nonion* cf. *fabum																														1						
Nonionoides grateloupi																1																				
***Pararotalia* sp.**																1																		15		
Parrellina hispidula																	2		1															2		
Peneroplis pertusus																1	2		1																	
Peneroplis planatus																		2																		
Pseudomassilina macilenta																	1																			
Pyrgo striolata															1																					
Pyrgo* sp. cf. *lucernula																	1	1	1	5	2		13													1
***Pyrgo* sp.**																1																				
Quinqueloculina carinata striata							1									1		1	1	1													1			1
Quinqueloculina crassicarinata																	1		1																	
Quinqueloculina eburnea							1						3	4	2	5																				
Quinqueloculina elongata														3	2				2																	
Quinqueloculina lamarckiana							2						1	3	6	4	6	3		3	3	12														2
Quinqueloculina oblonga				33			1				17		1			1																				
Quinqueloculina seminula				33		17	8							4	5	6																				
***Quinqueloculina* spp.**	0	0	0	0	0	17	16	17			0	0	12	16	15	18	14	17	15	22	13	24	0	0	0		0	0	3	0	0	2	2	0	0	6
Rectobolivina raphana																																1				
Reussella spinulosa							1																													
***Rosalina* sp.**							1									1												1								
Schackoinella globosa	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	4	1	3	8	4	12	0	0	0	0	25	18	27	14	20	30	24	0	26	10
Sigmavirgulina tortuosa																	1	1	4		2							1	6	1	3	2	2		2	
Sigmoilinopsis tenuis																		1																		
Siphouvigerina porrecta												2			1	2		1	1								1	1	1	3	2					
Sphaerogypsina globula															2																					
Spirolina arietina																0																				
Spiroloculina antillarum																		2	1																	
***Spiroloculina* sp.**																1																				
Triloculina lucernuloides							2																													
Triloculina tricarinata							1					1			1		3	2	1	3																1
Triloculina trigonula							1						4	3	4	1	1	1		3															
Triloculina striatotrigonula															1																					
***Triloculina* sp.**														1																						
Varidentella neostriatula							2										1	1	1																	
Vertebralina striata																		1														1				
Indetermined						17		33																												