Data Repository item 2010057 Thibault

Figure captions

Figure DR1: Conjectured paleobiogeographical map of *Micula murus* at 68.5 Ma. The area of grey dotted lines indicates the occupation of *M. murus*. The northern and southern limits are well-constrained in the Atlantic but not in the Pacific due to the lack of data. Note the absence of *M. murus* from the Tethys.

Figure DR2: Conjectured paleobiogeographical map of *Micula murus* at 67.3 Ma. The area of grey dotted lines indicates the occupation of *M. murus*. Note the expansion towards higher latitudes in the Atlantic and Indian Ocean at that time and the occupation of the Tethys.

Table DR1: Top depths and bottom depths for the First Occurrence of *Micula murus* and for the top and base of magnetostratigraphic intervals in all considered sites of this study.

Table DR2: Extended informations and corresponding references on localities considered in this study. Full references are given at the end of this Data Repository item.

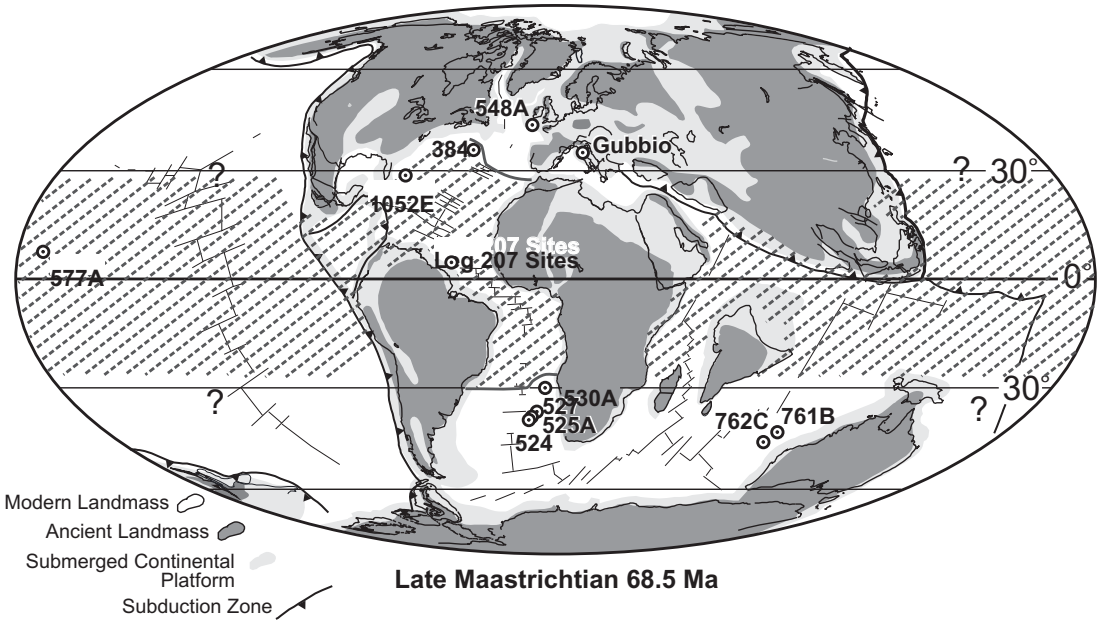

Fig.DR1

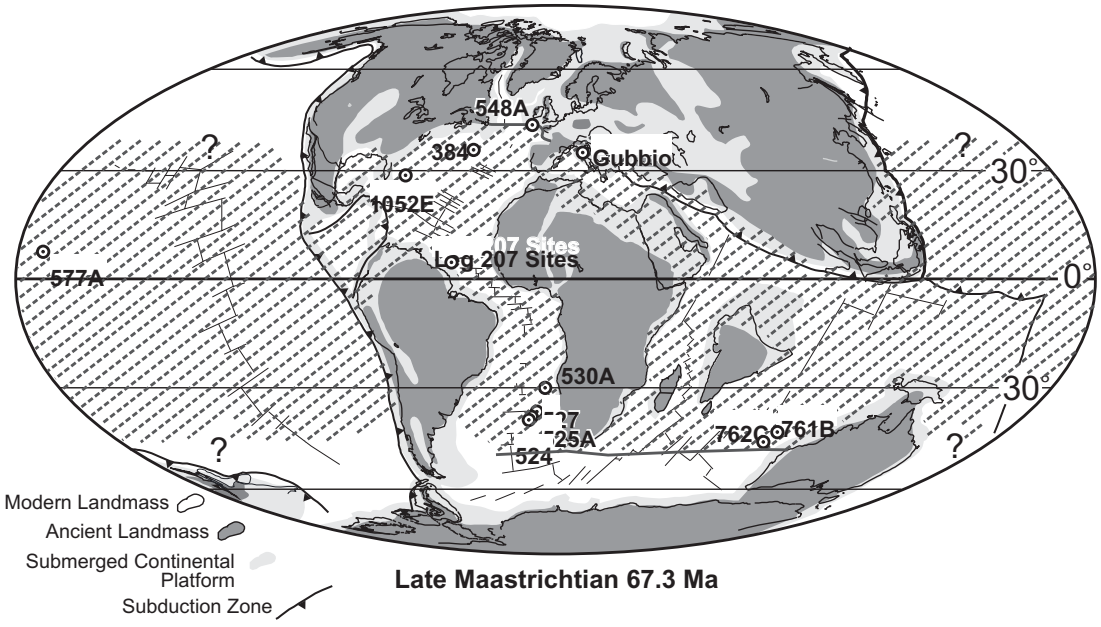

Fig.DR2

	1258A		1259A		1260B		1052E		384		548A		Bottaccione	
	Top depth (m)	Bottom depth (m)	Top depth (m)	Bottom depth (m)	Top depth (m)	Bottom depth (m)	Top depth (m)	Bottom depth (m)	Top depth (m)	Bottom depth (m)	Top depth (m)	Bottom depth (m)	Top depth (m)	Bottom depth (m)
Mag. interval	[C31r] = 2,229Ma		[C30n-C31n] = 2,871Ma		[C30n-C31n] = 2,871Ma		[C31n] = 0,923Ma		[top C31n]/Sed.Rate		[C30n] = 1,835Ma		[C30n] = 1,835Ma	
Top	261,57	262,77	448,85	450,33	261,57	262,77	335,00	349,00	-	-	475,39	476,52	343,80	343,00
Base	293,50	295,80	468,07	469,57	356,18	358,89	387,00	387,20	171,68	171,78	492,90	500,52	336,00	335,76
FO *M. murus*	296,30	297,10	467,65	477,12	344,06	357,80	367,90	377,10	173,60	174,30	486,00	491,20	337,90	337,30

Age of FO *M. murus* (Ma)	Avg.	68,9248	69,3299	68,4972	68,4721	68,0360	66,8256	67,2760
	Min.	68,7621	68,4660	68,2146	68,1432	67,9571	66,5532	67,0250
	Max.	69,0549	69,9860	68,7647	68,5569	-	67,5719	67,3993

	530A		524		525A		527		577A		761B		762C	
	Top depth (m)	Bottom depth (m)	Top depth (m)	Bottom depth (m)	Top depth (m)	Bottom depth (m)	Top depth (m)	Bottom depth (m)	Top depth (m)	Bottom depth (m)	Top depth (m)	Bottom depth (m)	Top depth (m)	Bottom depth (m)
Mag. interval	[C30n-C31n] = 2,871Ma		[C30n] = 1,835Ma		[C30n] = 1,835Ma		[C30n] = 1,835Ma		[top C31n]/Sed.Rate		[C30n-C31n] = 2,871Ma		[C30n] = 1,835Ma	
Top	594,00	596,00	213,02	213,72	456,39	457,00	286,33	286,93	-	-	181,46	182,13	556,50	566,02
Base	617,50	619,50	267,31	267,81	474,85	475,45	329,32	329,92	121,55	121,75	194,38	195,71	588,64	592,94
FO *M. murus*	609,50	610,00	262,90	264,83	469,20	470,20	294	298,77	122,94	123,38	190,01	191,1	576,99	577,38

Age of FO *M. murus* (Ma)	Avg.	67,6343	67,5639	67,1313	66,2843	67,9700	67,6934	66,9026
	Min.	67,3809	67,5081	67,0286	66,1586	67,8950	67,4486	66,4134
	Max.	67,8876	67,6129	67,2340	66,4099	-	68,0228	67,1290

Table DR1

Leg	Sites	Paleolatitude (ODSN)	Ocean	Paleodepth	Magnetostratigraphy	Biostratigraphy
DSDP 80	548A	41N	eastern North Atlantic	300-600 (1)	Townsend (1985)	Müller (1985)
-	CHN-803	33N	continental, Western North Atlantic	100-300 (2)	Edwards et al. (1999)	Self-Trail (2002)
ODP 171B	1052E	28N	Western North Atlantic	600-1000 (3)	Ogg and Bardot (2001)	Self-Trail (2002)
DSDP 43	384	33.5N	Central North Atlantic	~3000 (4)	Larson and Opdyke (1979)	Thierstein and Okada (1979)
ODP 207	1258A	4N	West Equatorial Atlantic	500-1200 (5)	Suganuma and Ogg (2006)	Thibault and Gardin (2006)
ODP 207	1260B	4N	West Equatorial Atlantic	500-1200 (5)	Suganuma and Ogg (2006)	Wise in Erbacher et al. (2004)
DSDP 74	530A	30S	Eastern South Atlantic	~2500 (6)	Keating and Herrero-Bervera (1984)	Stradner and Steinmetz (1984)
DSDP 75	525A	39S	Eastern South Atlantic	~1100 (7)	Chave (1984)	Thibault and Gardin (2007)
DSDP 75	527	37.7S	Eastern South Atlantic	~2700 (7)	Chave (1984)	Manivit (1984)
DSDP 73	524	39.5S	Eastern South Atlantic	~3000 (8)	Tauxe et al. (1983)	Percival (1983)
ODP 122	762C	42.5S	Indian ocean	500-1100 (9)	Galbrun (1992) and this study	Thibault and Gardin (this study)
DSDP 86	577A	8N	Eastern Tropical Pacific	~2400 (8)	Bleil (1985)	Thibault and Gardin (this study)
-	Bottacione	32N	Tethys	1500-2500 (10)	Lowrie and Alvarez (1977)	Monechi and Thierstein (1985)

(1) Snyder et al. (1985)
(2) Self-Trail (2002)
(3) Norris et al. (1998)
(4) Tucholke and Vogt (1979)
(5) Erbacher et al. (2004)
(6) McNulty (1984)
(7) Moore et al. (1984)
(8) Zachos and Arthur (1986)
(9) Zepeda (1998)
(10) Premoli-silva and Sliter (1995)

Table DR2

Additional references on DSDP/ODP sites and other sections considered in this study

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