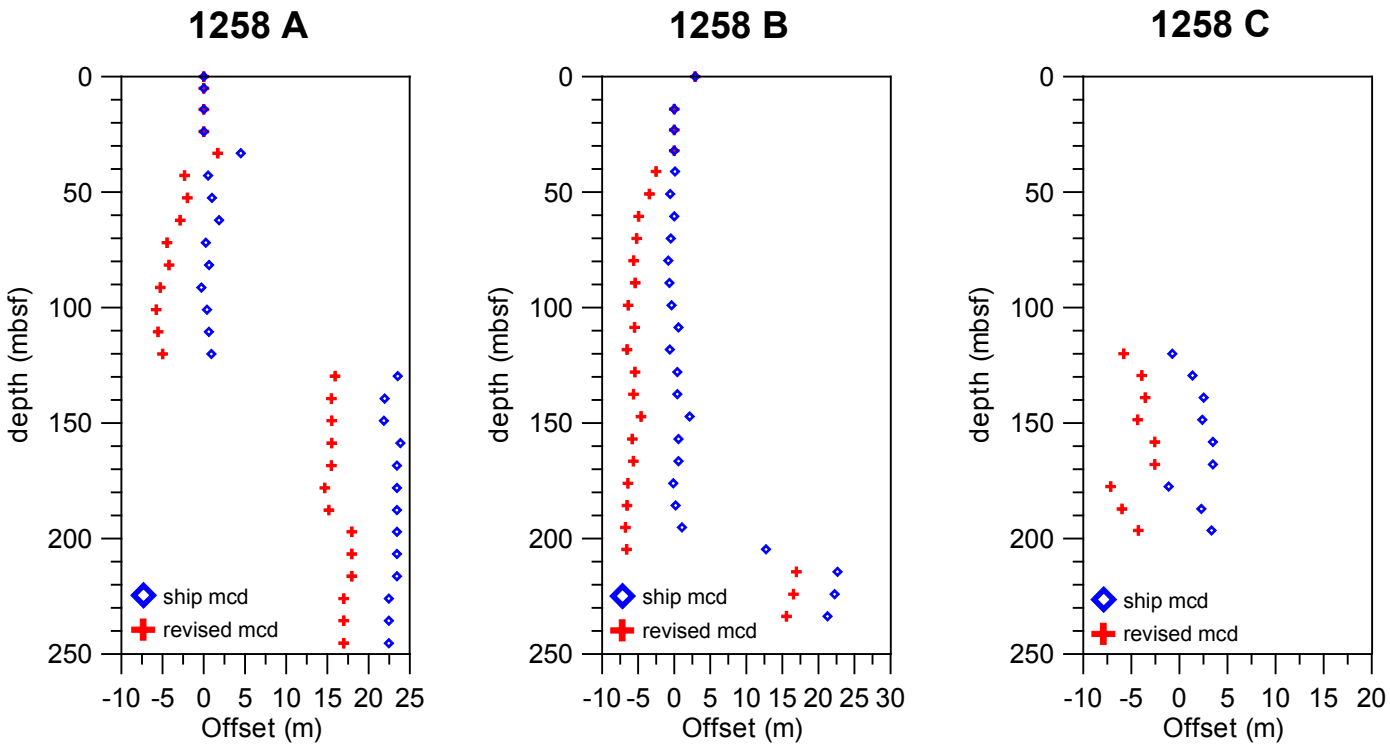

Figure S1. Core offsets between mbsf and ship composite depth (mcd) as well as revised composite depth (rmcd) applied to Holes 1258A, 1258B, and 1258C plotted against meters below seafloor (mbsf). The diamonds mark the applied shipboard offsets and the crosses mark the applied revised offset.

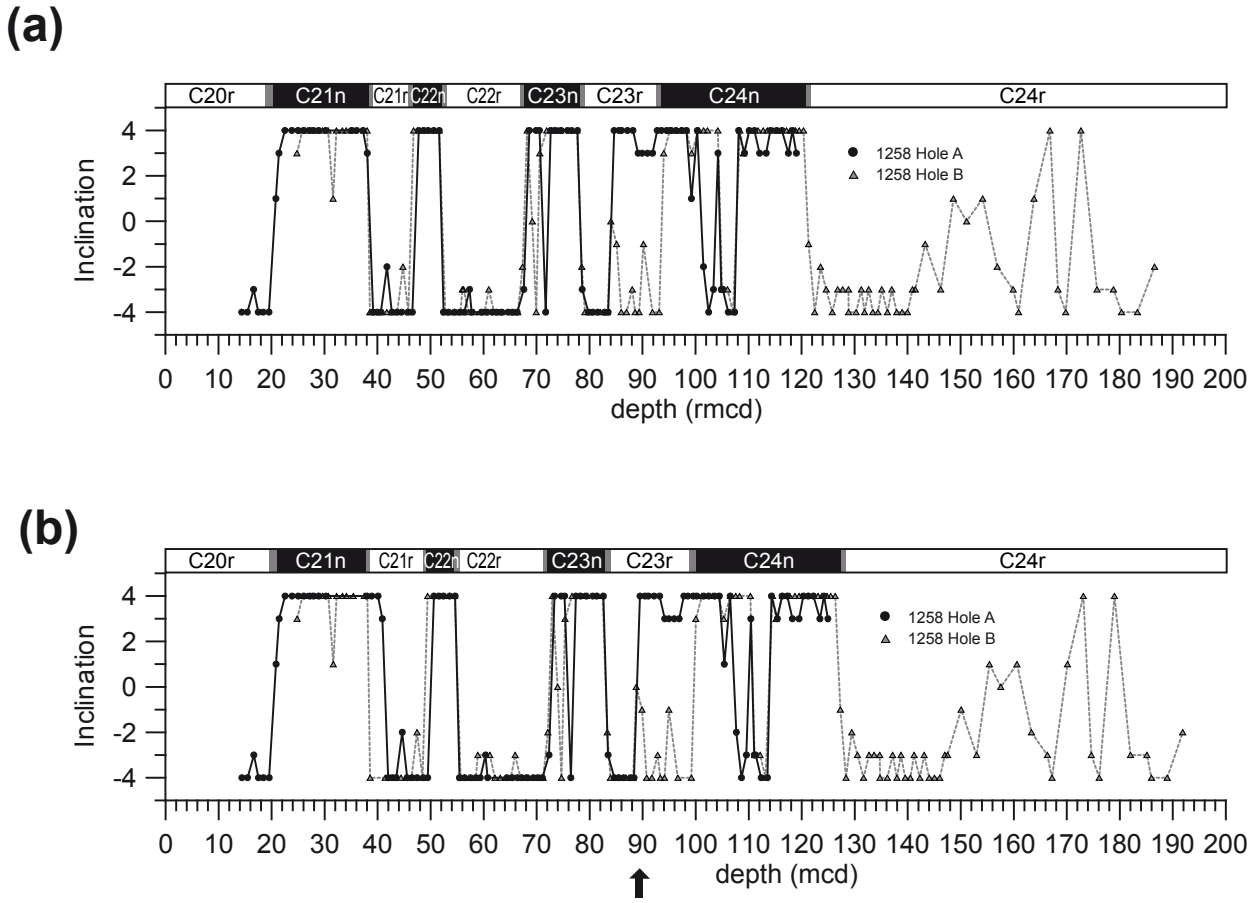

Figure S2. Inclination data from ODP Holes 1258A (triangles) and B (dots) (Suganuma and Ogg, 2006) with the paleomagnetic reversal pattern interpretation plotted against (a) the revised composite depth (rmcd) and (b) the shipboard composite depth (mcd). The magnetostratigraphy of ODP Site 1258 in relation to the revised composite depth (rmcd) is given in Table S1. Please note that a fault in Hole 1258A has removed a significant portion of the Chron C23r–C24n interval. Because this fault is not present in Hole 1258B the composite paleomagnetic record is complete there. For details see Suganuma and Ogg (2006).

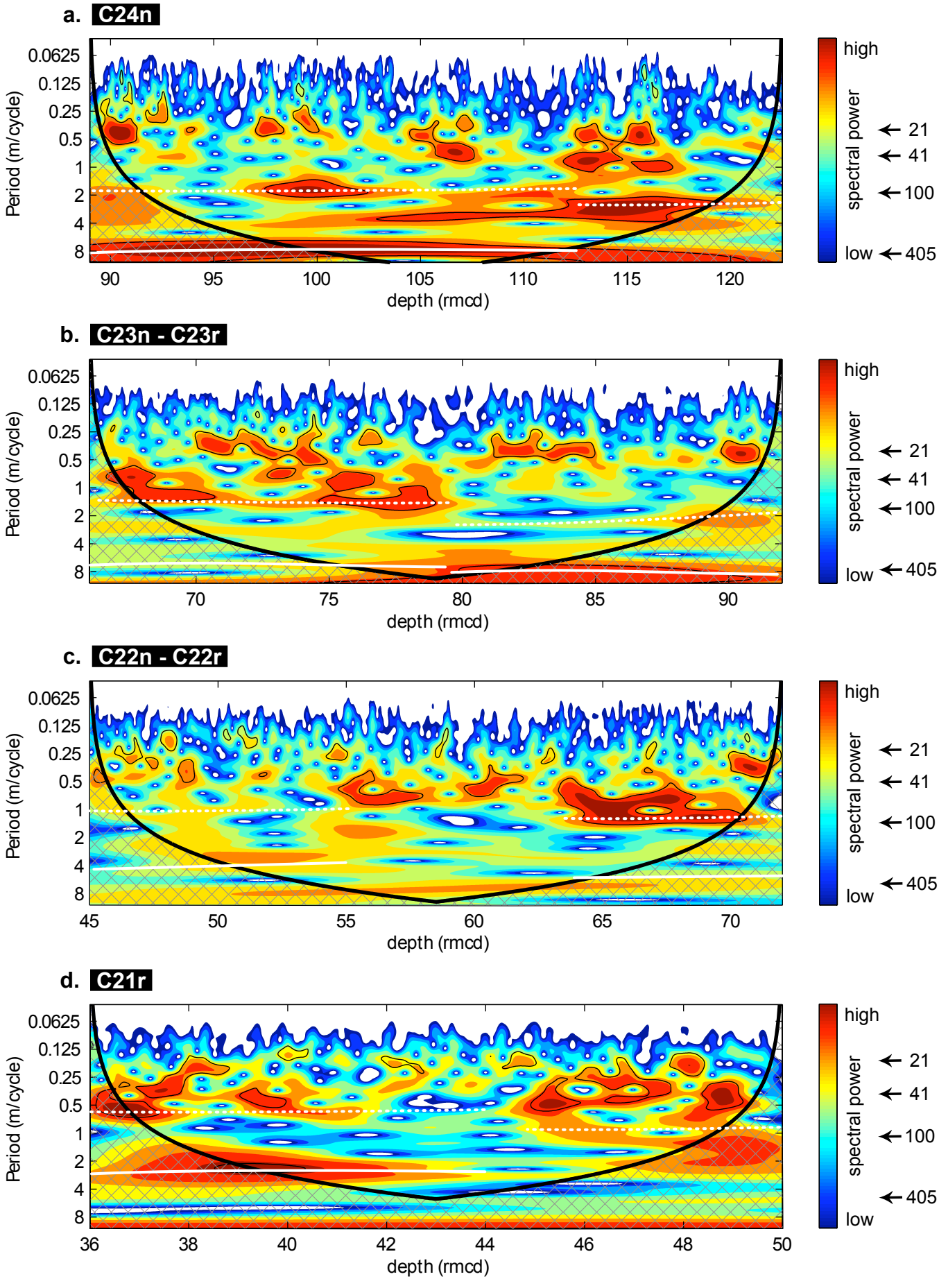

Figure S3. Evolutionary wavelet power spectra and Multi Taper Method (MTM) power spectra of Fe intensity data from ODP Site 1258 for magnetochrons C24n (a), C23 (b), C22 (c) and C21r (d) in the depth domain. The shaded contours in the evolutionary wavelet power spectra are normalized linear variances with blue representing low spectral power, and red representing high spectral power. The black contour lines enclose regions with more than 95% confidence. Cross-hatched regions on either end indicate the cone of influence where edge effects become important. Distinct bands that run across the spectra indicate the dominance of Milankovitch frequencies. Hatched white line is 100-kyr cycle, solid white line is 405-kyr cycle.

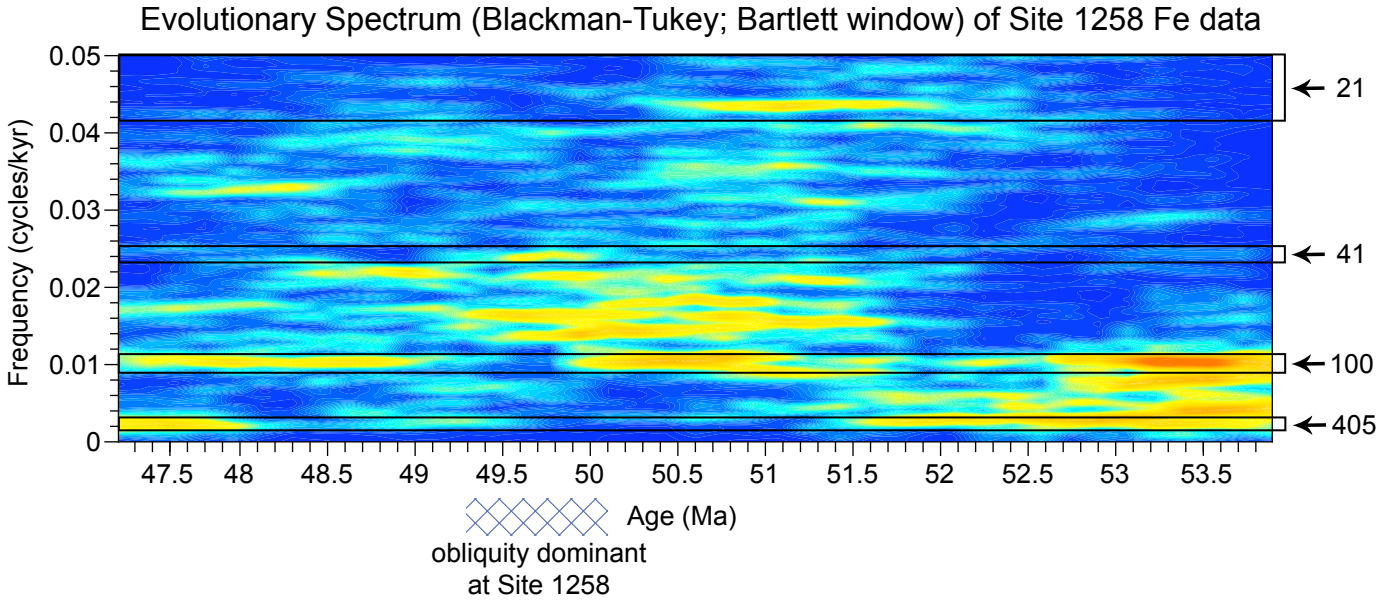

Figure S4. Evolutionary power spectrum (Blackman-Tukey; Bartlett window; length of the running window was 800 kyr, step size 200 kyr) of ODP Site 1258 Fe intensity data. Note the distinct bands that run across the spectra.

Note: only the first page given!

TABLE S1 XRF FE INTENSITIES FROM HOLE 1258A (BREMEN CORE SCANNER XRF1; 20kV; 0.087mA)

Leg	Site	Hole	Core	Type	Section	Section depth (cm)	Depth (mbsf)	Depth (rmcd)	Fe (cps) 1258 hole A
207	1258	A	5	R	1	4	33.24	34.94	1366
207	1258	A	5	R	1	6	33.26	34.96	1317
207	1258	A	5	R	1	8	33.28	34.98	1886
207	1258	A	5	R	1	10	33.30	35.00	1943
207	1258	A	5	R	1	12	33.32	35.02	1718
207	1258	A	5	R	1	14	33.34	35.04	1627
207	1258	A	5	R	1	16	33.36	35.06	858
207	1258	A	5	R	1	18	33.38	35.08	878
207	1258	A	5	R	1	20	33.40	35.10	619
207	1258	A	5	R	1	22	33.42	35.12	569
207	1258	A	5	R	1	24	33.44	35.14	854
207	1258	A	5	R	1	26	33.46	35.16	1277
207	1258	A	5	R	1	29	33.49	35.19	1325
207	1258	A	5	R	1	30	33.50	35.20	996
207	1258	A	5	R	1	32	33.52	35.22	2038
207	1258	A	5	R	1	34	33.54	35.24	1705
207	1258	A	5	R	1	36	33.56	35.26	1707
207	1258	A	5	R	1	38	33.58	35.28	1626
207	1258	A	5	R	1	40	33.60	35.30	1817
207	1258	A	5	R	1	42	33.62	35.32	1643
207	1258	A	5	R	1	44	33.64	35.34	1588
207	1258	A	5	R	1	46	33.66	35.36	1464
207	1258	A	5	R	1	48	33.68	35.38	1257
207	1258	A	5	R	1	50	33.70	35.40	1696
207	1258	A	5	R	1	52	33.72	35.42	1411
207	1258	A	5	R	1	54	33.74	35.44	1324
207	1258	A	5	R	1	56	33.76	35.46	1881
207	1258	A	5	R	1	58	33.78	35.48	1933
207	1258	A	5	R	1	59	33.79	35.49	1986
207	1258	A	5	R	1	62	33.82	35.52	2099
207	1258	A	5	R	1	64	33.84	35.54	1988
207	1258	A	5	R	1	66	33.86	35.56	1995
207	1258	A	5	R	1	68	33.88	35.58	1861
207	1258	A	5	R	1	69	33.89	35.59	1685
207	1258	A	5	R	1	75	33.95	35.65	936
207	1258	A	5	R	1	76	33.96	35.66	832
207	1258	A	5	R	1	78	33.98	35.68	898
207	1258	A	5	R	1	80	34.00	35.70	1072
207	1258	A	5	R	1	82	34.02	35.72	1266
207	1258	A	5	R	1	84	34.04	35.74	1538
207	1258	A	5	R	1	86	34.06	35.76	1539
207	1258	A	5	R	1	88	34.08	35.78	1511
207	1258	A	5	R	1	89	34.09	35.79	1498
207	1258	A	5	R	1	91	34.11	35.81	1002
207	1258	A	5	R	1	92	34.12	35.82	1573
207	1258	A	5	R	1	94	34.14	35.84	1663
207	1258	A	5	R	1	96	34.16	35.86	1451
207	1258	A	5	R	1	98	34.18	35.88	1684
207	1258	A	5	R	1	100	34.20	35.90	1329
207	1258	A	5	R	1	102	34.22	35.92	841
207	1258	A	5	R	1	104	34.24	35.94	923
207	1258	A	5	R	1	106	34.26	35.96	956
207	1258	A	5	R	1	108	34.28	35.98	1264
207	1258	A	5	R	1	110	34.30	36.00	1209
207	1258	A	5	R	1	112	34.32	36.02	1143
207	1258	A	5	R	1	114	34.34	36.04	1311
207	1258	A	5	R	1	116	34.36	36.06	1311
207	1258	A	5	R	1	118	34.38	36.08	1170
207	1258	A	5	R	1	120	34.40	36.10	1348
207	1258	A	5	R	1	122	34.42	36.12	1562
207	1258	A	5	R	1	124	34.44	36.14	1471
207	1258	A	5	R	1	126	34.46	36.16	1637
207	1258	A	5	R	1	128	34.48	36.18	1593
207	1258	A	5	R	1	130	34.50	36.20	1710
207	1258	A	5	R	1	132	34.52	36.22	1750
207	1258	A	5	R	1	134	34.54	36.24	1758
207	1258	A	5	R	1	136	34.56	36.26	1568
207	1258	A	5	R	1	138	34.58	36.28	1417
207	1258	A	5	R	1	140	34.60	36.30	1417
207	1258	A	5	R	1	142	34.62	36.32	1052
207	1258	A	5	R	1	144	34.64	36.34	1333
207	1258	A	5	R	1	146	34.66	36.36	1342
207	1258	A	5	R	1	148	34.68	36.38	1063
207	1258	A	5	R	2	2	34.72	36.42	1753
207	1258	A	5	R	2	4	34.74	36.44	1928

Note: only the first page given!

TABLE S2 XRF FE INTENSITIES FROM HOLE 1258B (BREMEN CORE SCANNER XRF1; 20kV; 0.087mA)

Leg	Site	Hole	Core	Type	Section	Section depth (cm)	Depth (mbsf)	Depth (rmcd)	Fe (cps) 1258 hole B
207	1258	B	4	R	1	4	32.14	32.14	347
207	1258	B	4	R	1	6	32.16	32.16	396
207	1258	B	4	R	1	8	32.18	32.18	395
207	1258	B	4	R	1	10	32.20	32.20	383
207	1258	B	4	R	1	13	32.23	32.23	328
207	1258	B	4	R	1	14	32.24	32.24	457
207	1258	B	4	R	1	16	32.26	32.26	441
207	1258	B	4	R	1	18	32.28	32.28	535
207	1258	B	4	R	1	20	32.30	32.30	538
207	1258	B	4	R	1	22	32.32	32.32	494
207	1258	B	4	R	1	24	32.34	32.34	549
207	1258	B	4	R	1	26	32.36	32.36	507
207	1258	B	4	R	1	28	32.38	32.38	560
207	1258	B	4	R	1	30	32.40	32.40	489
207	1258	B	4	R	1	32	32.42	32.42	377
207	1258	B	4	R	1	34	32.44	32.44	403
207	1258	B	4	R	1	36	32.46	32.46	495
207	1258	B	4	R	1	38	32.48	32.48	287
207	1258	B	4	R	1	40	32.50	32.50	480
207	1258	B	4	R	1	42	32.52	32.52	580
207	1258	B	4	R	1	44	32.54	32.54	529
207	1258	B	4	R	1	46	32.56	32.56	533
207	1258	B	4	R	1	48	32.58	32.58	590
207	1258	B	4	R	1	50	32.60	32.60	617
207	1258	B	4	R	1	52	32.62	32.62	568
207	1258	B	4	R	1	54	32.64	32.64	574
207	1258	B	4	R	1	56	32.66	32.66	470
207	1258	B	4	R	1	58	32.68	32.68	489
207	1258	B	4	R	1	60	32.70	32.70	450
207	1258	B	4	R	1	62	32.72	32.72	384
207	1258	B	4	R	1	64	32.74	32.74	337
207	1258	B	4	R	1	66	32.76	32.76	374
207	1258	B	4	R	1	68	32.78	32.78	182
207	1258	B	4	R	1	70	32.80	32.80	218
207	1258	B	4	R	1	72	32.82	32.82	300
207	1258	B	4	R	1	74	32.84	32.84	329
207	1258	B	4	R	1	76	32.86	32.86	304
207	1258	B	4	R	1	78	32.88	32.88	344
207	1258	B	4	R	1	80	32.90	32.90	460
207	1258	B	4	R	1	82	32.92	32.92	437
207	1258	B	4	R	1	84	32.94	32.94	570
207	1258	B	4	R	1	86	32.96	32.96	510
207	1258	B	4	R	1	88	32.98	32.98	540
207	1258	B	4	R	1	90	33.00	33.00	569
207	1258	B	4	R	1	92	33.02	33.02	809
207	1258	B	4	R	1	94	33.04	33.04	1147
207	1258	B	4	R	1	96	33.06	33.06	1143
207	1258	B	4	R	1	98	33.08	33.08	1170
207	1258	B	4	R	1	100	33.10	33.10	1137
207	1258	B	4	R	1	102	33.12	33.12	1252
207	1258	B	4	R	1	104	33.14	33.14	1174
207	1258	B	4	R	1	106	33.16	33.16	1032
207	1258	B	4	R	1	108	33.18	33.18	1209
207	1258	B	4	R	1	110	33.20	33.20	748
207	1258	B	4	R	1	112	33.22	33.22	874
207	1258	B	4	R	1	114	33.24	33.24	700
207	1258	B	4	R	1	116	33.26	33.26	954
207	1258	B	4	R	1	118	33.28	33.28	1099
207	1258	B	4	R	1	120	33.30	33.30	1183
207	1258	B	4	R	1	122	33.32	33.32	1359
207	1258	B	4	R	1	124	33.34	33.34	1605
207	1258	B	4	R	1	126	33.36	33.36	1810
207	1258	B	4	R	1	128	33.38	33.38	2060
207	1258	B	4	R	1	130	33.40	33.40	1870
207	1258	B	4	R	1	132	33.42	33.42	1953
207	1258	B	4	R	1	134	33.44	33.44	2349
207	1258	B	4	R	1	136	33.46	33.46	2156
207	1258	B	4	R	1	138	33.48	33.48	2250
207	1258	B	4	R	1	140	33.50	33.50	2113
207	1258	B	4	R	1	142	33.52	33.52	2244
207	1258	B	4	R	1	144	33.54	33.54	2408
207	1258	B	4	R	1	146	33.56	33.56	2383
207	1258	B	4	R	1	148	33.58	33.58	1949
207	1258	B	4	R	2	2	33.62	33.62	1937
207	1258	B	4	R	2	4	33.64	33.64	2172

Note: only the first page given!

TABLE S3 XRF FE INTENSITIES FROM HOLE 1258C (BREMEN CORE SCANNER XRF1; 20kV; 0.087mA)

Leg	Site	Hole	Core	Type	Section	Section depth (cm)	Depth (mbsf)	Depth (rmcd)	Fe (cps) 1258 hole C
207	1258	C	1	R	1	2	120.02	114.23	3174
207	1258	C	1	R	1	4	120.04	114.25	3530
207	1258	C	1	R	1	6	120.06	114.27	3249
207	1258	C	1	R	1	8	120.08	114.29	3126
207	1258	C	1	R	1	10	120.10	114.31	3038
207	1258	C	1	R	1	12	120.12	114.33	2656
207	1258	C	1	R	1	14	120.14	114.35	2589
207	1258	C	1	R	1	16	120.16	114.37	2693
207	1258	C	1	R	1	18	120.18	114.39	2605
207	1258	C	1	R	1	20	120.20	114.41	2598
207	1258	C	1	R	1	22	120.22	114.43	2394
207	1258	C	1	R	1	24	120.24	114.45	2410
207	1258	C	1	R	1	26	120.26	114.47	2254
207	1258	C	1	R	1	28	120.28	114.49	2124
207	1258	C	1	R	1	30	120.30	114.51	1927
207	1258	C	1	R	1	32	120.32	114.53	1761
207	1258	C	1	R	1	34	120.34	114.55	1699
207	1258	C	1	R	1	36	120.36	114.57	1643
207	1258	C	1	R	1	38	120.38	114.59	1559
207	1258	C	1	R	1	40	120.40	114.61	1796
207	1258	C	1	R	1	42	120.42	114.63	1869
207	1258	C	1	R	1	44	120.44	114.65	1867
207	1258	C	1	R	1	46	120.46	114.67	1817
207	1258	C	1	R	1	48	120.48	114.69	2090
207	1258	C	1	R	1	50	120.50	114.71	2125
207	1258	C	1	R	1	52	120.52	114.73	2207
207	1258	C	1	R	1	54	120.54	114.75	2251
207	1258	C	1	R	1	56	120.56	114.77	2520
207	1258	C	1	R	1	58	120.58	114.79	2493
207	1258	C	1	R	1	60	120.60	114.81	2024
207	1258	C	1	R	1	62	120.62	114.83	2226
207	1258	C	1	R	1	64	120.64	114.85	2418
207	1258	C	1	R	1	66	120.66	114.87	2417
207	1258	C	1	R	1	68	120.68	114.89	2419
207	1258	C	1	R	1	70	120.70	114.91	2334
207	1258	C	1	R	1	72	120.72	114.93	2510
207	1258	C	1	R	1	74	120.74	114.95	2284
207	1258	C	1	R	1	76	120.76	114.97	2284
207	1258	C	1	R	1	78	120.78	114.99	2376
207	1258	C	1	R	1	80	120.80	115.01	2172
207	1258	C	1	R	1	82	120.82	115.03	2109
207	1258	C	1	R	1	84	120.84	115.05	1799
207	1258	C	1	R	1	86	120.86	115.07	2006
207	1258	C	1	R	1	88	120.88	115.09	1906
207	1258	C	1	R	1	90	120.90	115.11	1879
207	1258	C	1	R	1	92	120.92	115.13	1998
207	1258	C	1	R	1	94	120.94	115.15	1955
207	1258	C	1	R	1	96	120.96	115.17	1839
207	1258	C	1	R	1	98	120.98	115.19	1805
207	1258	C	1	R	1	100	121.00	115.21	1353
207	1258	C	1	R	1	102	121.02	115.23	1713
207	1258	C	1	R	1	104	121.04	115.25	2089
207	1258	C	1	R	1	106	121.06	115.27	1833
207	1258	C	1	R	1	108	121.08	115.29	1924
207	1258	C	1	R	1	110	121.10	115.31	2087
207	1258	C	1	R	1	112	121.12	115.33	2123
207	1258	C	1	R	1	114	121.14	115.35	2033
207	1258	C	1	R	1	116	121.16	115.37	2267
207	1258	C	1	R	1	118	121.18	115.39	2273
207	1258	C	1	R	1	119	121.19	115.40	2204
207	1258	C	1	R	1	122	121.22	115.43	2100
207	1258	C	1	R	1	124	121.24	115.45	2693
207	1258	C	1	R	1	126	121.26	115.47	2877
207	1258	C	1	R	1	128	121.28	115.49	2901
207	1258	C	1	R	1	130	121.30	115.51	3103
207	1258	C	1	R	1	132	121.32	115.53	3256
207	1258	C	1	R	1	134	121.34	115.55	2798
207	1258	C	1	R	1	136	121.36	115.57	2534
207	1258	C	1	R	1	138	121.38	115.59	2560
207	1258	C	1	R	1	140	121.40	115.61	2544
207	1258	C	1	R	1	142	121.42	115.63	2430
207	1258	C	1	R	1	144	121.44	115.65	2043
207	1258	C	1	R	1	146	121.46	115.67	2635
207	1258	C	1	R	1	148	121.48	115.69	2478
207	1258	C	1	R	2	3	121.53	115.74	2812

TABLE S4 OFFSETS APPLIED TO CORES FROM HOLES 1258A, 1258B AND 1258C

Core	Depth (mbsf)	Offset (m)	Depth (rmcd)	Depth shifted
207-1258A-				
1 R	0.00	0.00	0.00	n
2 R	5.10	0.00	5.10	n
3 R	14.20	0.00	14.20	n
4 R	23.80	0.00	23.80	n
5 R	33.20	**1.70**	**34.90**	y
6 R	42.80	**-2.33**	**40.47**	y
7 R	52.50	**-1.99**	**50.51**	y
8 R	62.20	**-2.87**	**59.33**	y
9 R	71.90	**-4.46**	**67.44**	y
10 R	81.60	**-4.22**	**77.38**	y
11 R	91.30	**-5.29**	**86.01**	y
12 R	100.90	**-5.77**	**95.13**	y
13 R	110.50	**-5.55**	**104.95**	y
14 R	120.10	**-5.00**	**115.10**	y
15 R	129.70	**15.93**	**145.63**	y
16 R	139.40	**15.48**	**154.88**	y
17 R	149.00	**15.53**	**164.53**	y
18 R	158.70	**15.53**	**174.23**	y
19 R	168.40	**15.48**	**183.88**	**y**
20 R	178.10	**14.68**	**192.78**	**y**
21 R	187.70	**15.18**	**202.88**	**y**
22 R	197.10	**17.96**	**215.06**	n
23 R	206.70	**17.96**	**224.66**	n
24 R	216.30	**17.96**	**234.26**	n
25 R	226.00	**16.98**	**242.98**	n
26 R	235.60	**16.98**	**252.58**	n
27 R	245.30	**16.98**	**262.28**	n
28 R	254.90	**16.98**	**271.88**	n
29 R	264.60	**16.98**	**281.58**	n
30 R	274.20	**16.90**	**291.10**	y
31 R	283.90	**17.27**	**301.17**	n
32 R	293.50	**17.74**	**311.24**	y
33 R	303.10	**16.64**	**319.74**	y
34 R	312.80	**19.42**	**332.22**	y
35 R	322.40	**17.40**	**339.80**	n
36 R	332.00	**17.40**	**349.40**	n
37 R	341.70	**17.40**	**359.10**	n
38 R	351.30	**17.40**	**368.70**	n
39 R	360.90	**15.27**	**376.17**	y
40 R	370.50	**18.46**	**388.96**	n
41 R	380.20	**18.46**	**398.66**	n
42 R	389.80	**19.48**	**409.28**	y
43 R	399.40	**19.41**	**418.81**	n
44 R	409.10	**19.41**	**428.51**	n
45 R	418.70	**19.41**	**438.11**	n
46 R	423.30	**19.41**	**442.71**	n
47 R	428.30	**22.15**	**450.45**	y
48 R	432.90	**22.45**	**455.35**	y
49 R	437.90	**22.45**	**460.35**	n
50 R	442.50	**31.32**	**473.82**	y
207-1258B-				
1 R	0.00	2.90	2.90	y
2 R	14.10	0.00	14.10	n
3 R	23.10	0.00	23.10	n
4 R	32.10	0.00	32.10	n
5 R	41.10	**-2.52**	**38.58**	y
6 R	50.80	**-3.45**	**47.35**	y
7 R	60.50	**-4.94**	**55.56**	y
8 R	70.10	**-5.21**	**64.89**	y
9 R	79.70	**-5.62**	**74.08**	y
10 R	89.30	**-5.42**	**83.88**	y
11 R	99.00	**-6.39**	**92.61**	y
12 R	108.60	**-5.50**	**103.10**	y
13 R	118.20	**-6.55**	**111.65**	y
14 R	127.90	**-5.45**	**122.45**	y
15 R	137.50	**-5.65**	**131.85**	**y**
16 R	147.20	**-4.60**	**142.60**	y
17 R	156.90	**-5.82**	**151.08**	y
18 R	166.50	**-5.67**	**160.83**	y
19 R	176.10	**-6.42**	**169.68**	y
20 R	185.70	**-5.40**	**180.30**	y
21 R	195.20	**-6.77**	**188.43**	y
22 R	204.70	**-6.60**	**198.10**	y
23 R	214.40	**16.94**	**231.34**	y
24 R	224.10	**16.54**	**240.64**	y
25 R	233.70	**15.56**	**249.26**	y
27 R	252.90	**17.74**	**270.64**	n
28 R	258.60	**13.59**	**272.19**	y
29 R	262.60	**20.79**	**283.39**	y
30 R	272.20	**15.81**	**288.01**	y
31 R	281.90	**17.45**	**299.35**	y
32 R	291.50	**16.72**	**308.22**	y
33 R	301.10	**17.12**	**318.22**	y
34 R	310.80	**14.50**	**325.30**	y
35 R	320.40	**14.70**	**335.10**	y
36 R	330.10	**7.12**	**337.22**	y
38 R	349.30	**12.40**	**361.70**	y
39 R	359.00	**12.06**	**371.06**	y
40 R	368.60	**16.42**	**385.02**	n
42 R	383.80	**16.42**	**400.22**	n
43 R	387.80	**16.42**	**404.22**	n
44 R	393.50	**14.81**	**408.31**	y
45 R	397.50	**15.14**	**412.64**	y
46 R	403.10	**16.37**	**419.47**	y
47 R	407.10	**16.37**	**423.47**	n
48 R	412.70	**16.37**	**429.07**	n
49 R	416.70	**16.37**	**433.07**	n
50 R	422.30	**15.49**	**437.79**	y
51 R	426.30	**18.63**	**444.93**	y
52 R	431.90	**18.63**	**450.53**	n
53 R	435.90	**18.95**	**454.85**	y
54 R	441.50	**18.79**	**460.29**	y
55 R	445.50	**21.17**	**466.67**	y
56 R	451.20	**18.88**	**470.08**	y
57 R	455.20	**18.88**	**474.08**	n
207-1258C-				
1 R	120.00	-5.79	**114.21**	y
2 R	129.40	-3.91	**125.49**	y
3 R	139.00	-3.55	**135.45**	y
4 R	148.60	**-4.34**	**144.26**	y
5 R	158.20	**-2.56**	**155.64**	n
6 R	167.90	**-2.56**	**165.34**	n
7 R	177.50	**-7.15**	**170.35**	y
8 R	187.20	**-5.97**	**181.23**	y
9 R	196.50	**-4.27**	**192.23**	y
12 R	254.90	**11.51**	**266.41**	y
14 R	384.80	**10.97**	**395.77**	n
15 R	389.80	**20.01**	**409.81**	y
16 R	394.40	**23.41**	**417.81**	y
17 R	399.40	**24.47**	**423.87**	y
18 R	404.10	**23.19**	**427.29**	y
19 R	409.10	**23.19**	**432.29**	n
20 R	413.70	**23.19**	**436.89**	n
21 R	418.70	**23.19**	**441.89**	n
22 R	423.30	**23.64**	**446.94**	y
23 R	428.30	**25.04**	**453.34**	y
24 R	432.90	**25.82**	**458.72**	y
25 R	437.90	**27.10**	**465.00**	y
26 R	442.50	**27.51**	**470.01**	n
27 R	447.50	**30.46**	**477.96**	y
28 R	451.80	**31.58**	**483.38**	y
29 R	456.80	**31.58**	**488.38**	n
30 R	461.40	**31.58**	**492.98**	n
31 R	466.40	**31.58**	**497.98**	n
32 R	471.00	**31.58**	**502.58**	n
33 R	476.00	**31.58**	**507.58**	n
34 R	480.70	**31.58**	**512.28**	n

NOTE: Bold numbers indicate changes to ship mcd; n= no; y=yes.

TABLE S5 TIE POINTS TO CREATE THE REVISED COMPOSITE DEPTH SCALE (RMCD) FOR SITE 1258

Hole, core, section, interval (cm)	Depth (mbsf)	Depth (rmcd)		Hole, core, section, interval (cm)	Depth (mbsf)	Depth (rmcd)
207-						
1258B-4R-4, 96	37.56	37.56	tie to	1258A-5R-2, 116	35.86	37.56
1258A-5R-3, 80	37.00	38.70	tie to	1258B-5R-1, 12	41.22	38.70
1258B-5R-6, 62	49.22	46.70	tie to	1258A-6R-5, 23	49.03	46.70
1258A-6R-6, 140	51.70	49.37	tie to	1258B-6R-2, 52	52.82	49.37
1258B-6R-3, 82	54.62	51.17	tie to	1258A-7R-1, 66	53.16	51.17
1258A-7R-5, 40	58.60	56.61	tie to	1258B-7R-1, 105	61.55	56.61
1258B-7R-5, 32	66.82	61.88	tie to	1258A-8R-2, 105	64.75	61.88
1258A-8R-5, 20	68.37	65.50	tie to	1258B-8R-1, 61	70.71	65.50
1258B-8R-3, 42	73.52	68.31	tie to	1258A-9R-1, 87	72.77	68.31
1258A-9R-6, 114	80.54	76.08	tie to	1258B-9R-2, 50	81.70	76.08
1258B-9R-3, 80	83.50	77.88	tie to	1258A-10R-1, 50	82.10	77.88
1258A-10R-5, 140	89.00	84.78	tie to	1258B-10R-1, 90	90.20	84.78
1258B-10R-4, 74	94.54	89.12	tie to	1258A-11R-3, 11	94.41	89.12
1258A-11R-5, 82	98.12	92.83	tie to	1258B-11R-1, 22	99.22	92.83
1258B-11R-5, 74	105.74	99.35	tie to	1258A-12R-3, 122	105.12	99.35
1258A-12R-6, 74	109.14	103.37	tie to	1258B-12R-1, 27	108.87	103.37
1258B-12R-2, 100	111.10	105.60	tie to	1258A-13R-1, 65	111.15	105.60
1258A-13R-6, 72	118.72	113.17	tie to	1258B-13R-2, 2	119.72	113.17
1258B-13R-7, 38	127.58	121.03	tie to	1258C-1R-5, 82	126.82	121.03
1258C-1R-7, 52	129.52	123.73	tie to	1258B-14R-1, 128	129.18	123.73
1258B-14R-6, 60	136.00	130.55	tie to	1258C-2R-4, 56	134.46	130.55
1258C-2R-7, 12	138.52	134.61	tie to	1258B-15R-2, 126	140.26	134.61
1258B-15R-6, 86	145.86	140.21	tie to	1258C-3R-4, 26	143.76	140.21
1258C-3R-6, 72	147.22	143.67	tie to	1258B-16R-1, 107	148.27	143.67
1258B-16R-2, 96	149.66	145.06	tie to	1258C-4R-1, 80	149.40	145.06
1258C-4R-6, 42	156.52	152.18	tie to	1258B-17R-1, 110	158.00	152.18
1258B-17R-6, 14	164.34	158.52	tie to	1258A-16R-3, 64	143.04	158.52
1258A-16R-6, 30	147.20	162.68	tie to	1258B-18R-2, 35	168.35	162.68
1258B-18R-5, 66	173.16	167.49	tie to	1258A-17R-2, 141	151.96	167.49
1258A-17R-5, 137	156.42	171.95	tie to	1258B-19R-2, 77	178.37	171.95
1258B-19R-4, 32	180.92	174.50	tie to	1258A-18R-1, 27	158.97	174.50
1258A-18R-6, 146	167.66	183.19	tie to	1258C-8R-2, 46	189.16	183.19
1258C-8R-3, 38	190.58	184.61	tie to	1258A-19R-1, 73	169.13	184.61
1258A-19R-7, 56	177.12	192.60	tie to	1258C-9R-1, 37	196.87	192.60
1258C-9R-4, 148	202.48	198.21	tie to	1258A-20R-4, 93	183.53	198.21
1258A-20R-CC, 15	185.54	200.22		end of splice		

TABLE S6 MAGNETOSTRATIGRAPHY OF SITE 1258 ACCORDING TO THE REVISED COMPOSITE DEPTH (RMCD)

Chron	Top				Bottom				Mean
	Site, Hole	section, interval (cm)	Depth (mbsf)	Depth (rmcd)	Site, Hole	section, interval (cm)	Depth (mbsf)	Depth (rmcd)	Depth (rmcd)
C21n (y)	1258A	3R-4, 83	19.53	19.53	1258A	3R-5, 122	21.42	21.42	20.48
C21n (o)	1258A	5R-3, 18	36.38	38.08	1258B	4R-5, 47	38.57	38.57	38.33
C22n (y)	1258A	6R-5, 12	48.92	46.59	1258B	5R-6, 73	49.33	46.81	46.70
C22n (o)	1258A	7R-1, 113	53.63	51.64	1258A	7R-2, 74	54.44	52.45	52.05
C23n.1n (y)	1258A	9R-1, 17	72.07	67.61	1258B	8R-3, 33	73.43	68.22	67.92
C23n.1n (o)	1258A	9R-3, 12	75.02	70.56	1258A	9R-3, 129	76.19	71.73	71.15
C23n.2n (y)	1258A	9R-3, 129	76.19	71.73	1258A	9R-4, 74	77.14	72.68	72.21
C23n.2n (o)	1258A	10R-1, 34	81.94	77.72	1258B	9R-3, 144	84.14	78.52	78.12
C24n.1n (y)	1258B	11R-1, 55	99.55	93.16	1258B	11R-1, 139	100.39	94.00	93.58
C24n.1n (o)	1258A	12R-4, 71	106.11	100.34	1258A	12R-5, 37	107.27	101.50	100.92
C24n.2n (y)	1258A	12R-6, 76	109.16	103.39					103.39
C24n.2n (o)					1258A	12R-9, 4	110.64	104.87	104.87
C24n.3n (y)	1258A	13R-2, 92	112.92	107.37	1258A	13R-3, 18	113.68	108.13	107.75
C24n.3n (o)	1258B	13R-6, 121	126.91	120.36	1258B	13R-7, 68	127.88	121.33	120.85

TABLE S7 RELATIVE AGE MODEL

Depth (rmcd)	Eocene 405-k.y. Cycle-number	relative age (Ec_{405}21 = 1000 k.y.)
37.00	Ec_{405} 21	1000
41.25	Ec_{405} 20	1405
42.75	Ec_{405} 19	1810
45.50	Ec_{405} 18	2215
48.25	Ec_{405} 17	2620
52.00	Ec_{405} 16	3025
56.00	Ec_{405} 15	3430
61.00	Ec_{405} 14	3835
64.25	Ec_{405} 13	4240
70.00	Ec_{405} 12	4645
76.00	Ec_{405} 11	5050
83.00	Ec_{405} 10	5455
91.50	Ec_{405} 9	5860
99.00	Ec_{405} 8	6265
107.00	Ec_{405} 7	6670
116.00	Ec_{405} 6	7075
126.00	Ec_{405} 5	7480

References in supplementary

Suganuma, Y., and Ogg, J. G., 2006, Campanian through Eocene magnetostratigraphy of Sites 1257–1261, ODP Leg 207, Demerara Rise (western equatorial Atlantic), in Mosher, D. C., Erbacher, J., and Malone, M. J., eds., Proc. ODP, Sci. Results, 207 [Online]. http://www-odp.tamu.edu/publications/207_SR/102/102.htm.