THE "MARKER - BED" OF THE MEDITERRANEAN RIDGE DIAPIRIC BELT

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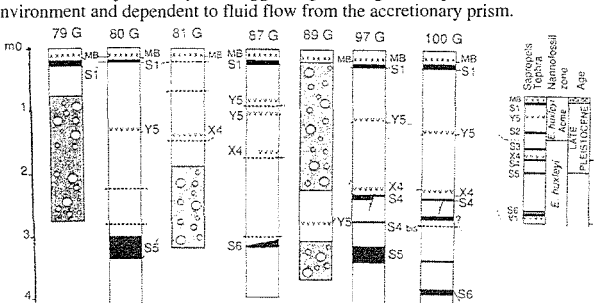
A prominent marker-bed, jet black in colour, with a sharp basal contact centimetric thickness, is ubiquitous in the Mediterranean Ridge crestal area, w collision between the European plate and the African plate occurs, and diapirism is a common phenomenon (CITA *et al.*, 1989; CITA CAMERLENGHi, 1992; CAMERLENGHI *et al.*, 1992).

The marker-bed is consistently recorded in the upper part of the sediment c within the Holocene pteropod-foraminiferal oozes, above sapropel S-1, w documents the last, youngest, postglacial stagnant episode recorded in the ea Mediterranean.

The marker-bed consists of numberless Mn micronodules of bacterial o (CITA *et al.*, 1989) and presents an abnormal concentration of metals, with reaching up to 22% in weight (CITA and DE CAPITANI, 1994). The s technique was used for the present investigation, analyzing three samples per one taken a few cm below the marker-bed, one within it, the third one above.

Of the 25 cores, recovered during the Gelendzhik 1993 Cruise TTR 3-Leg2 contained the marker-bed, but 13 did not. The large majority of the latters consisted of extruded mud breccia up to the core top and one consisted of Holocene sediment. Eight cores of the 12 containing the marker-bed had a pe make up, the remaining ones contained the diapiric mud-breccia of deep proven (see Fig.1). Seven cores were investigated geochemically in their eleme composition. The results are presentad in Table 1. The new results confirm support the previous ones, and record percentages of Mn within the marker ranging from 2.98 to 16.12%, values that exceed by at least one order of magn those of the adjacent layers, suggesting an origin independent from the l environment and dependent to fluid flow from the accretionary prism.



samples	Mn wt %	Fe wt %	Cu ppm	Ni ppm	Co p
79G -11	0.34	1.88	46	82	8
79G -15 MB	16.12	1.75	176	76	29
79G - 18	0.34	2.62	48	126	16
80G - 10/11	0.25	1.98	40	76	8
80G - 12/14 MB	8.79	2.08	103	49	23
80G - 14/16	0.21	2.98	44	117	19
81G - 7/8	0.12	1.95	36	68	8
81G - 12/13 MB	3.36	2.46	60	55	17
81G - 17/18	0.22	3.59	56	109	17
87G - 6/7	0.10	1.91	40	72	8
87G - 9/10 MB	4.71	1.86	80	59	18
87G - 11/12	0.19	2.18	44	106	13
89G - 1 above	0.49	2.04	42	82	9
89G - MB	4.14	2.30	313	164	14
89G - 1 below	0.17	2.60	44	100	18
97G - 9/11	0.09	2.05	46	83	10
97G - 14/16 MB	2.98	2.18	75	70	13
97G - 18/20	0.34	2.85	44	158	20
100G - 11/12	0.07	1.92	34	66	7
100G - 15/17 MB	3.17	2.11	104	99	16
100G - 20/21	0.30	3.02	50	130	17

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