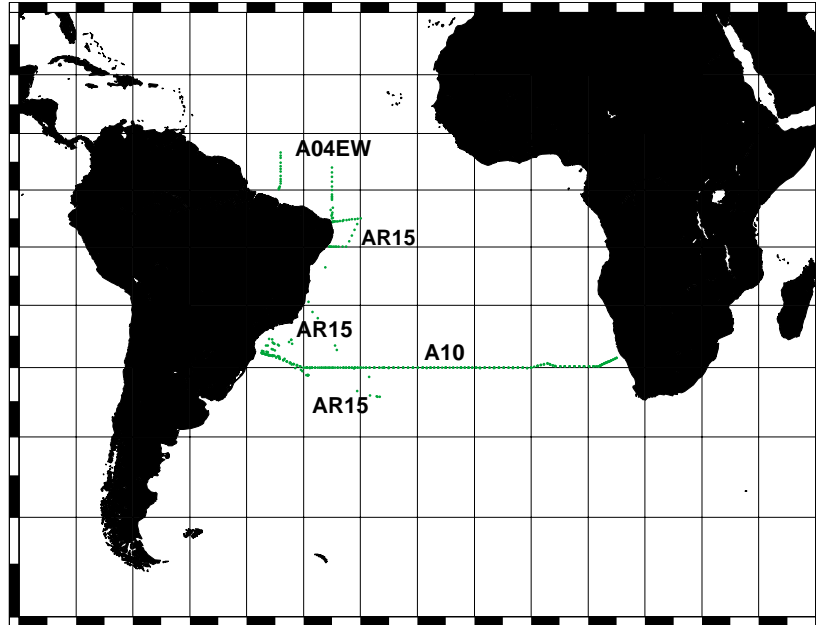


A. Cruise Narrative: A10, AR04EW, AR15

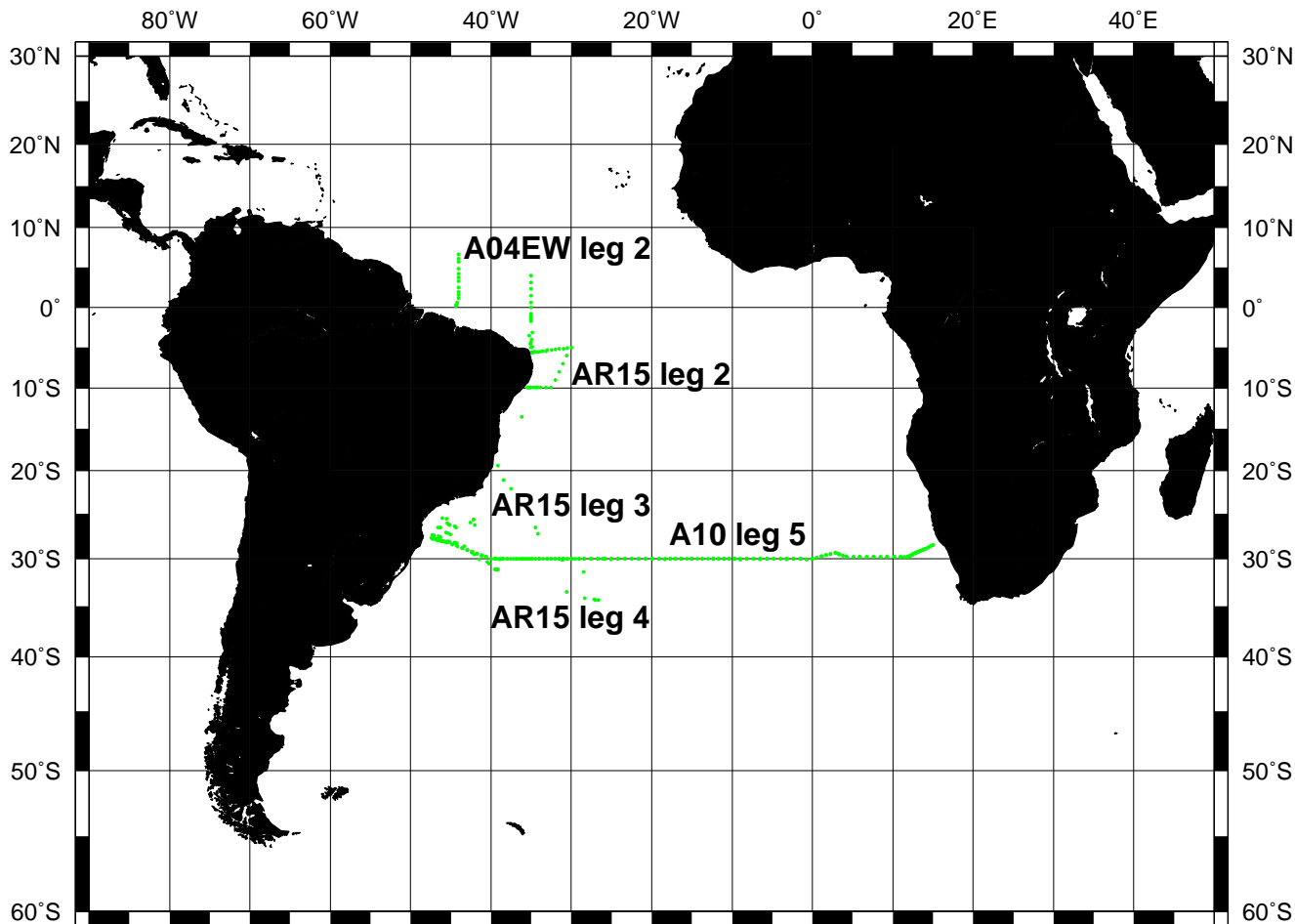


A.1. Highlights

WHP Cruise Summary Information

WOCE section	A10	AR15	AR15	AR04EW
Expedition (EXPOCODE)	06MT22_5	06MT22_4	06MT22_3	06MT22_2
Chief Scientists	Onken / IfMK	Zenk / IfMK	Müller / IfMK	Rhein / IfMK
Dates	1992.12.27 - 1993.01.31	1992.12.02 - 1992.12.22	1992.11.18 - 1992.11.30	1992.10.23 - 1992.11.15
Number of CTDstations	113	0	0	65
Ship	R/V METEOR			
Ports of call: Leg 5	Rio de Janeiro (Brazil) to Cape Town, Africa			
Leg 4	Santos (Brazil) to Rio de Janeiro			
Leg 3	Recife (Brazil) to Santos			
Leg 2	Recife (Brazil) to Recife			
Station geographic boundaries	A10 - Leg 5 23°38.10'S 47°29.90'W 15°0.12'E 30°2.30'S		AR15 - Leg 3 13°57.4'S 47°30.02'W 36°16.6'W 28°50.15'S	
	AR15 - Leg 4 26°53.20' S 26°59.39'W 44°27.47'W 34°36.33'S		AR04 - Leg 2 6°39.26'N 44°23.1'W 29°59.05'W 10°0.06'S	
Floats and drifters deployed:	AR15 - Legs 3 – 4 22 RAFOS Floats 3 MAFOS Monitors 1 ARGOS Drifter		A10 - Leg 5 1 RAFOS Float 6 ARGOS Drifters	
Moorings deployed or recovered: Legs 3 - 4	4 Sound Source Moorings Deployed 6 Current Meter Moorings Deployed 11 Current Meter Moorings Recovered			

Stations for A10 (Onken) • AR04EW (Rhein) • AR15 (Müller & Zenk) • 1992



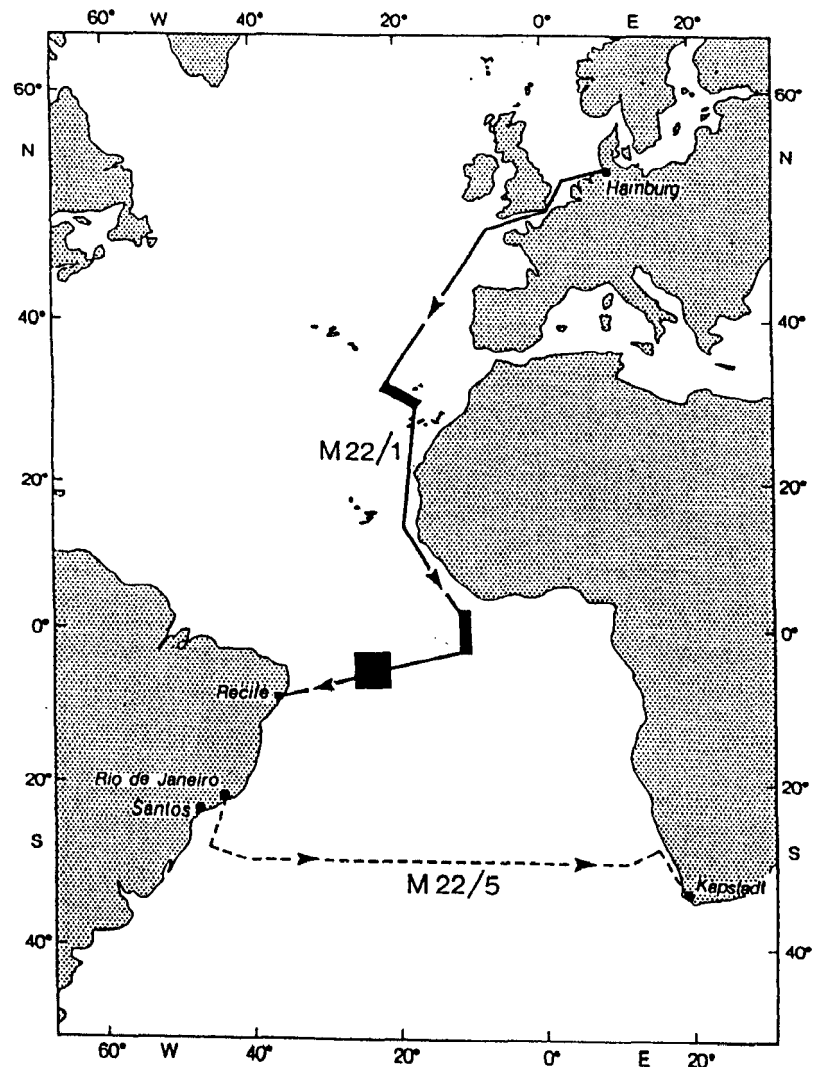


Figure 1a: Track and working areas of METEOR cruise no. 22, leg 5 (WOCE A05) and leg 1 (non-WOCE)

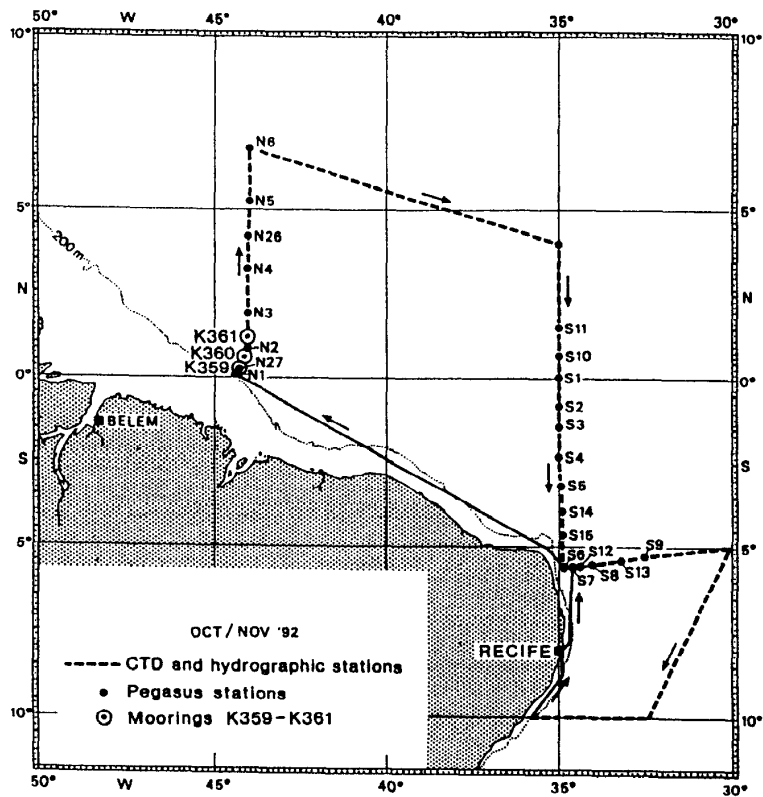


Figure 1b: Cruise track and oceanographic stations, leg 2 (WOCE AR04EW)

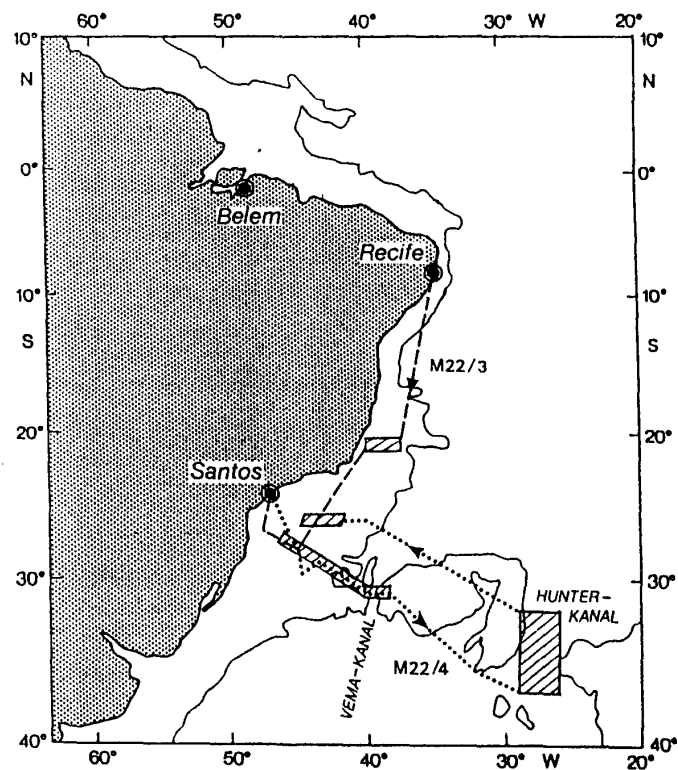


Figure 1c: Cruise track and working areas, legs 3 and 4 (WOCE AR15)

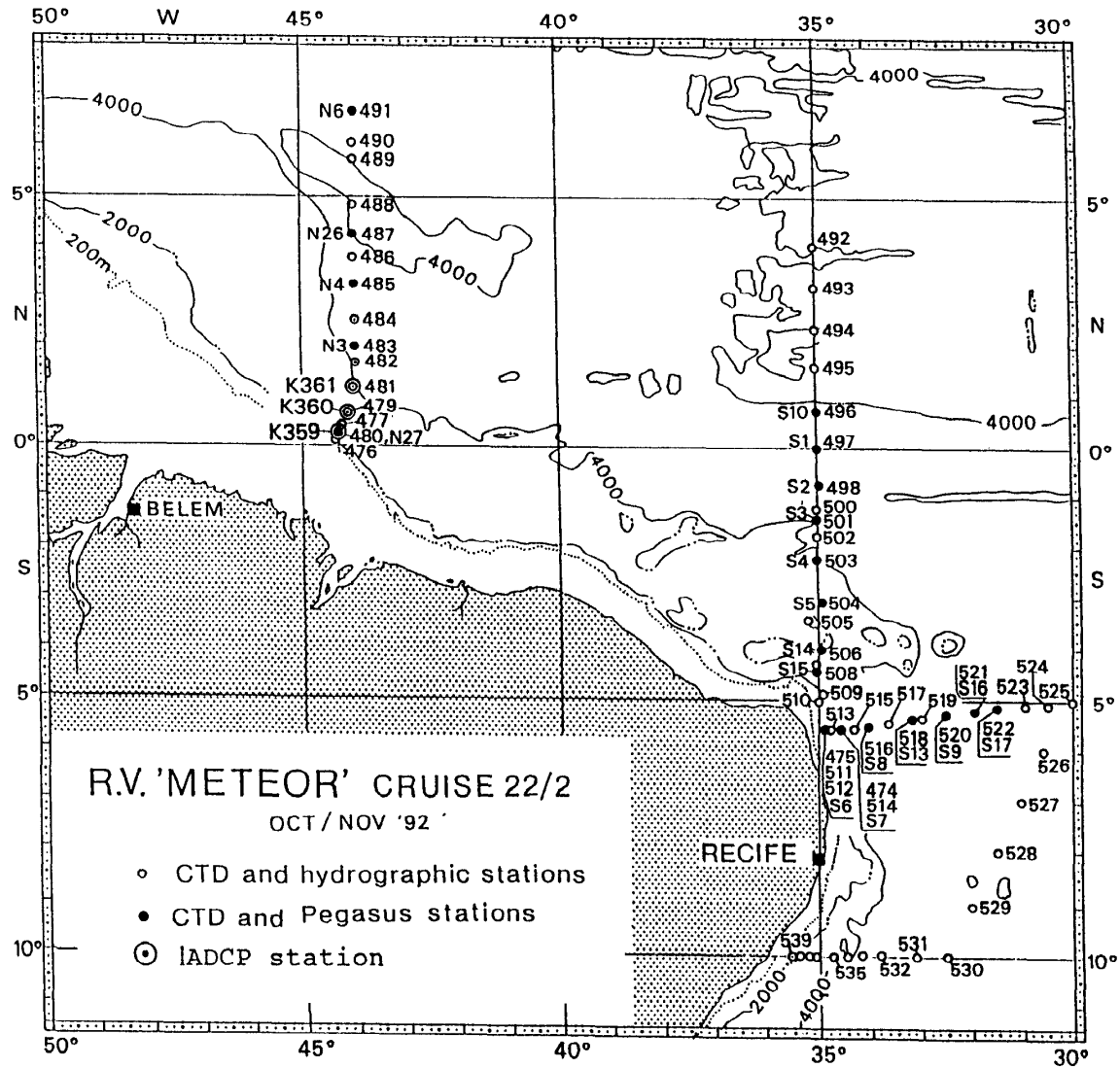


Fig. 1d: Cruise track METEOR 22/2
 CTD/IADCP and Pegasus stations, the positions of the moorings are included

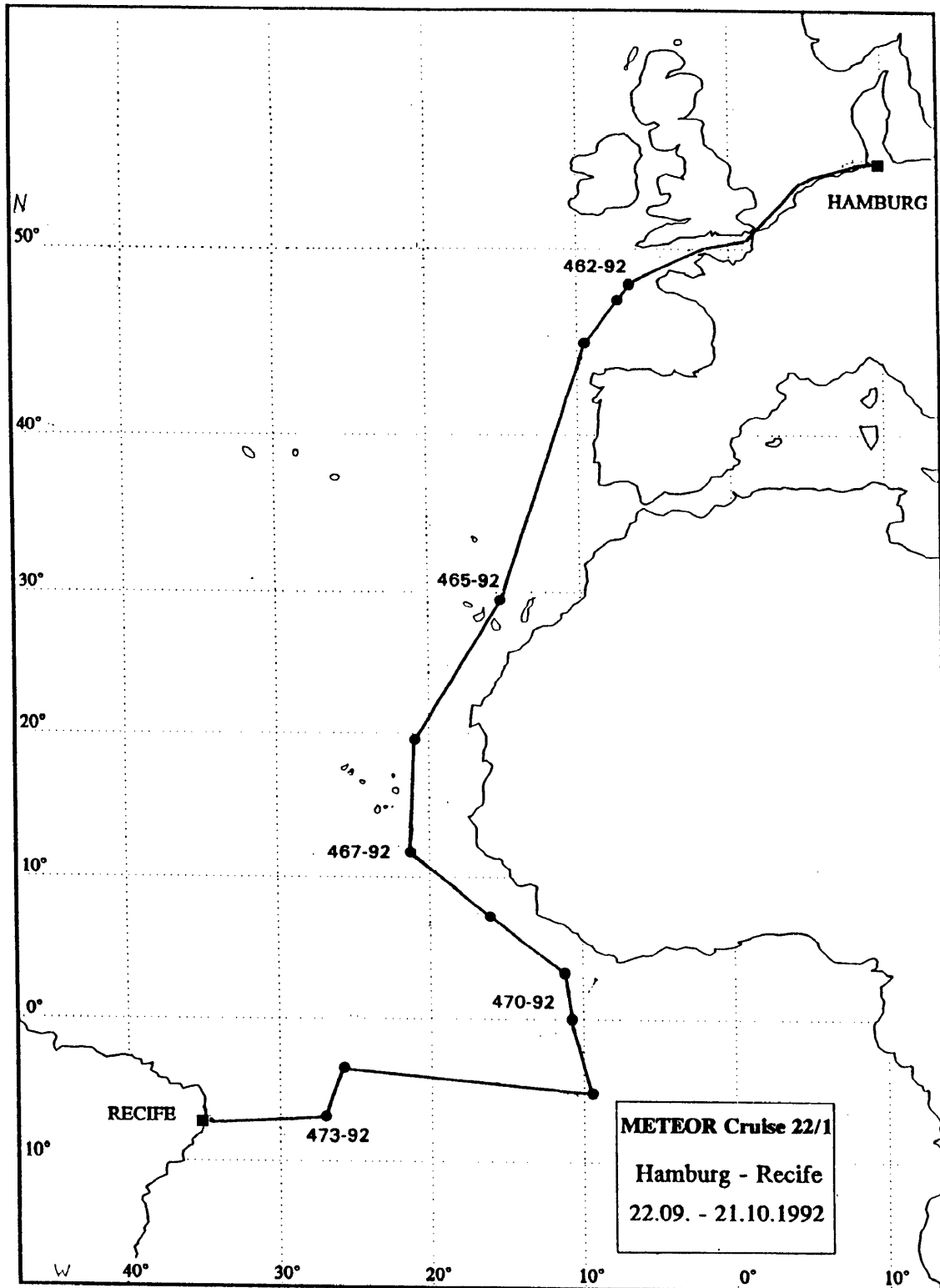


Fig. 2: Cruise track of METEOR cruise no. 22, leg 1

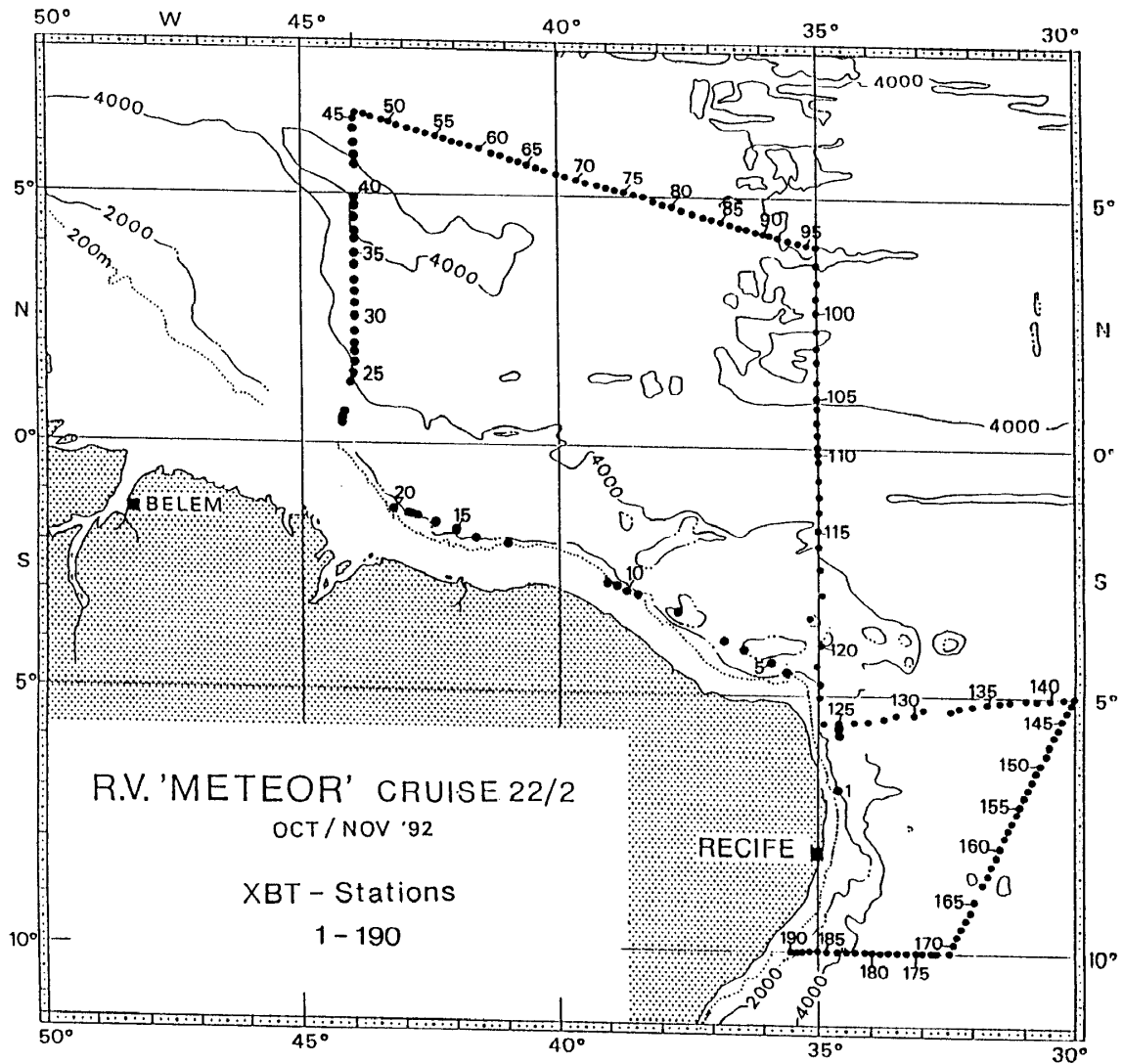


Fig. 3: Cruise track M 22/2. XBT drops during M 22/2

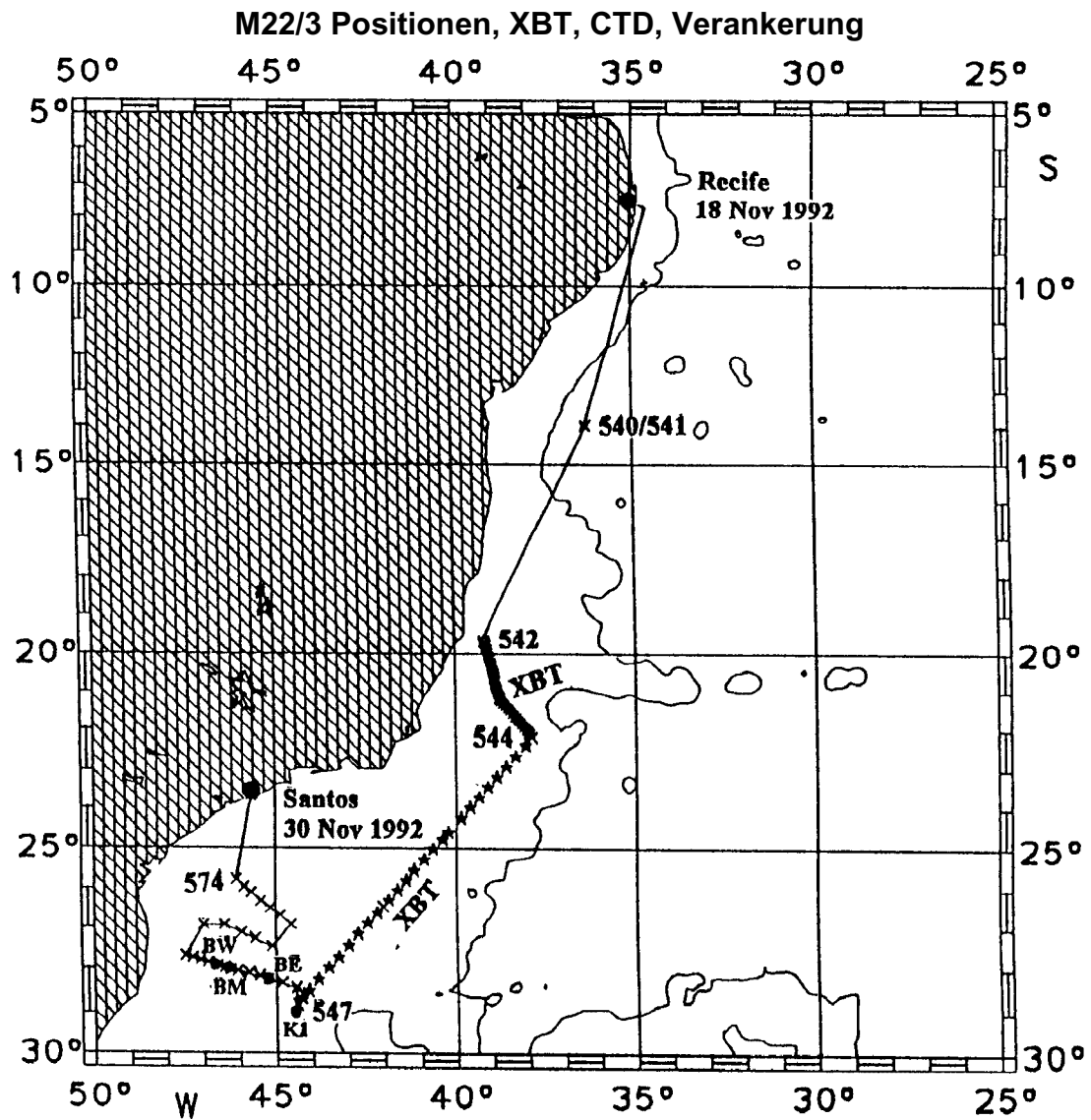


Fig. 4: METEOR M 22/3 cruise track: XBTs (stars), CTD stations (crosses), sound source mooring K1 (deployed) and current meter moorings BE, BM, BW (recovered).

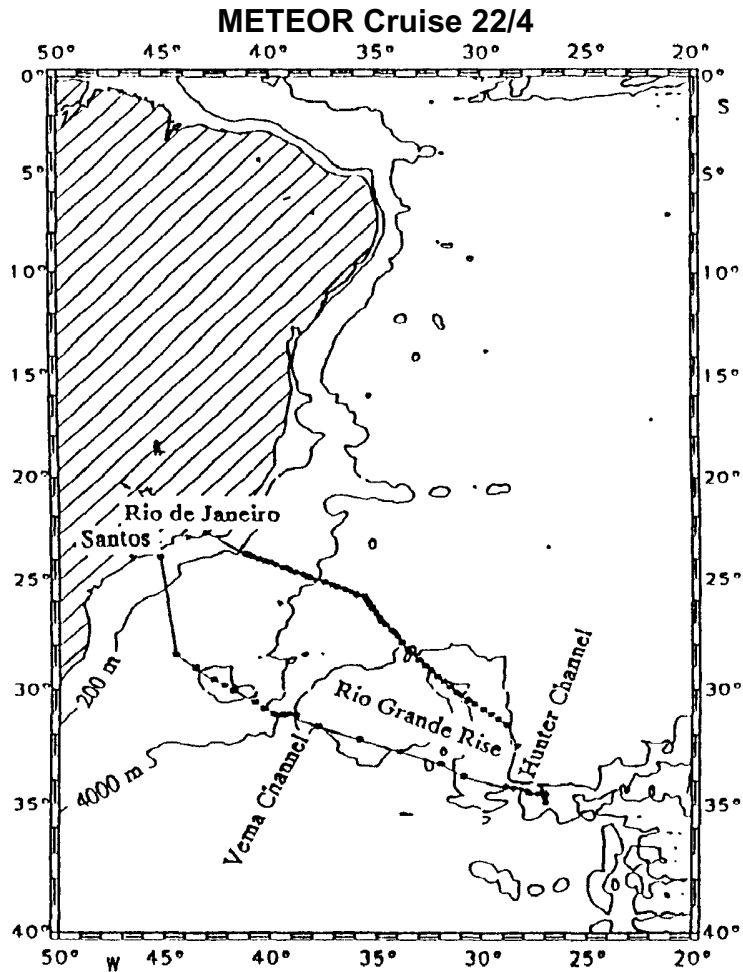


Fig. 5a: Track chart of METEOR cruise 22/4. This leg started in Santos on December 2, 1992 and was terminated in Rio de Janeiro on December 22, 1992.



Fig. 5b: Scientific party of METEOR cruise 22/4. For list of participants see Table 2.

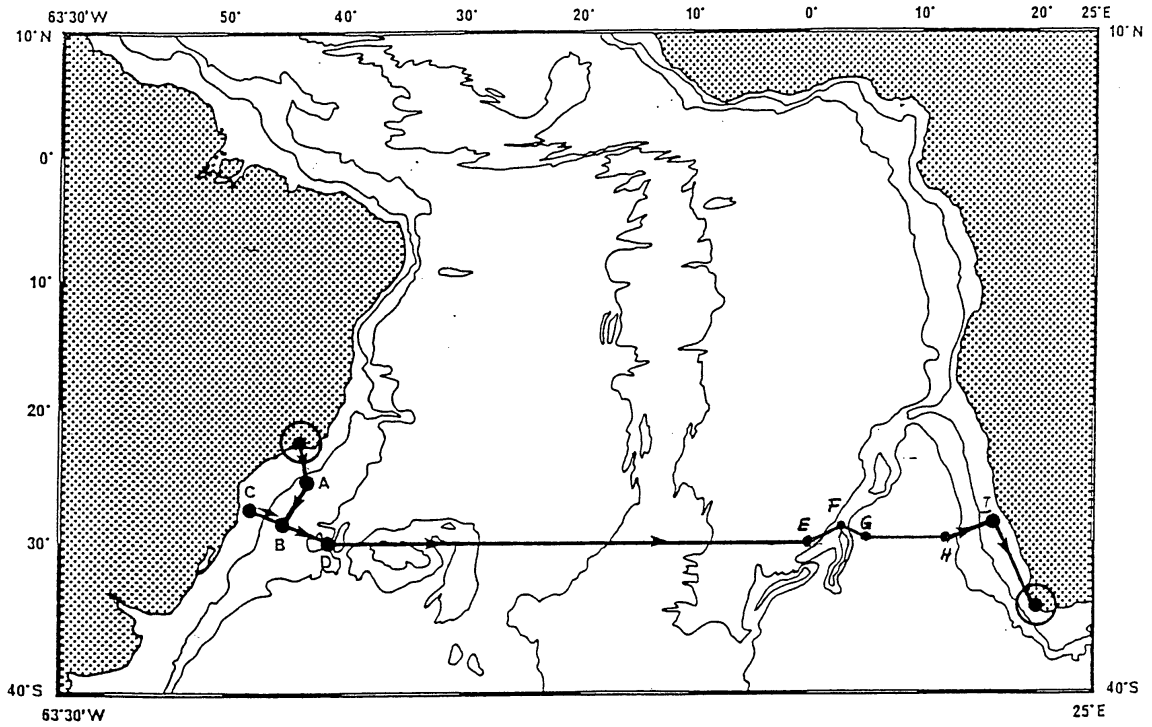


Fig. 6: Cruise track M 22/5. The depth contours represent the 2000 and 4000 m isopleths.

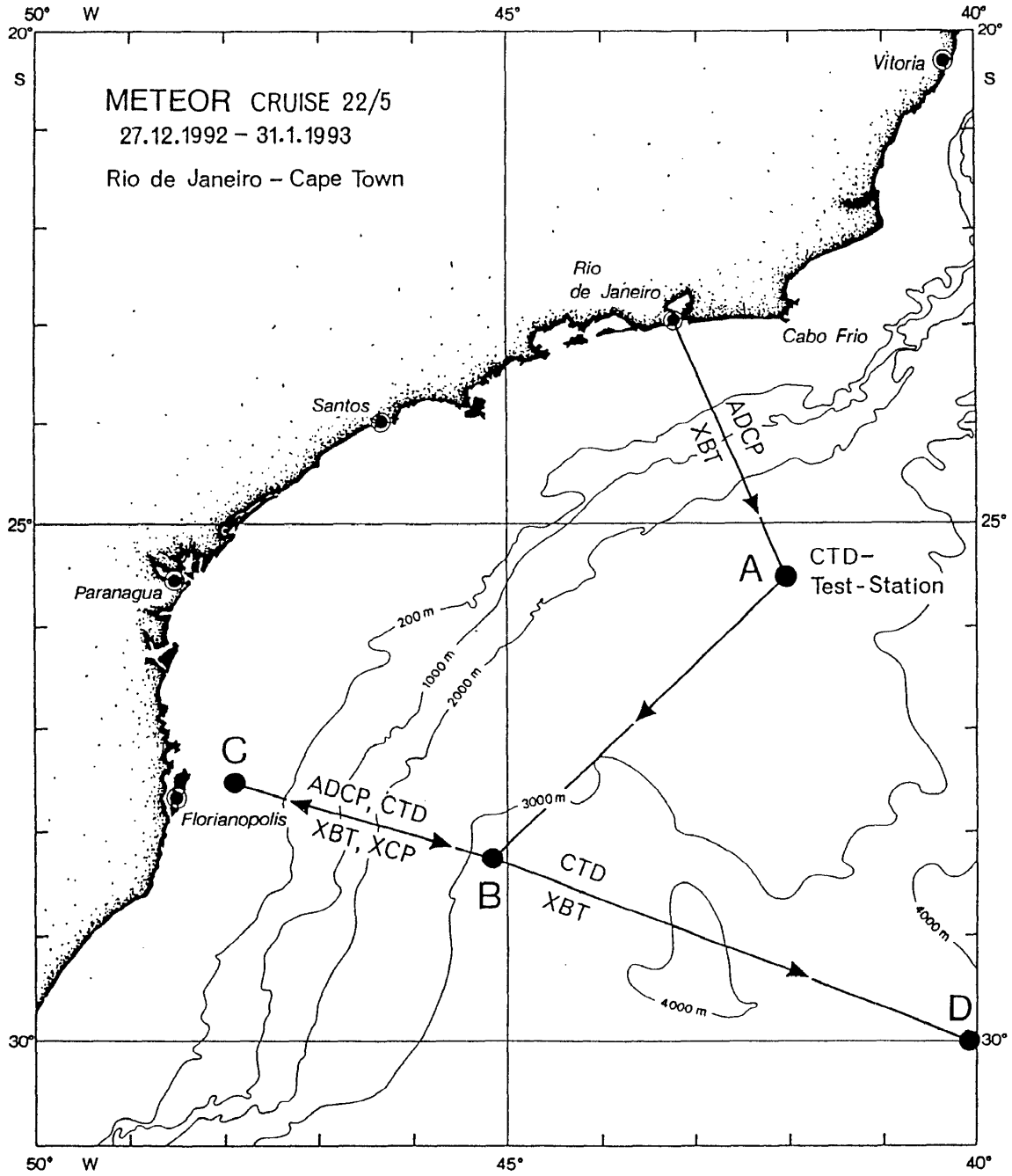


Fig. 7: Cruise track M 22/5 (western part)

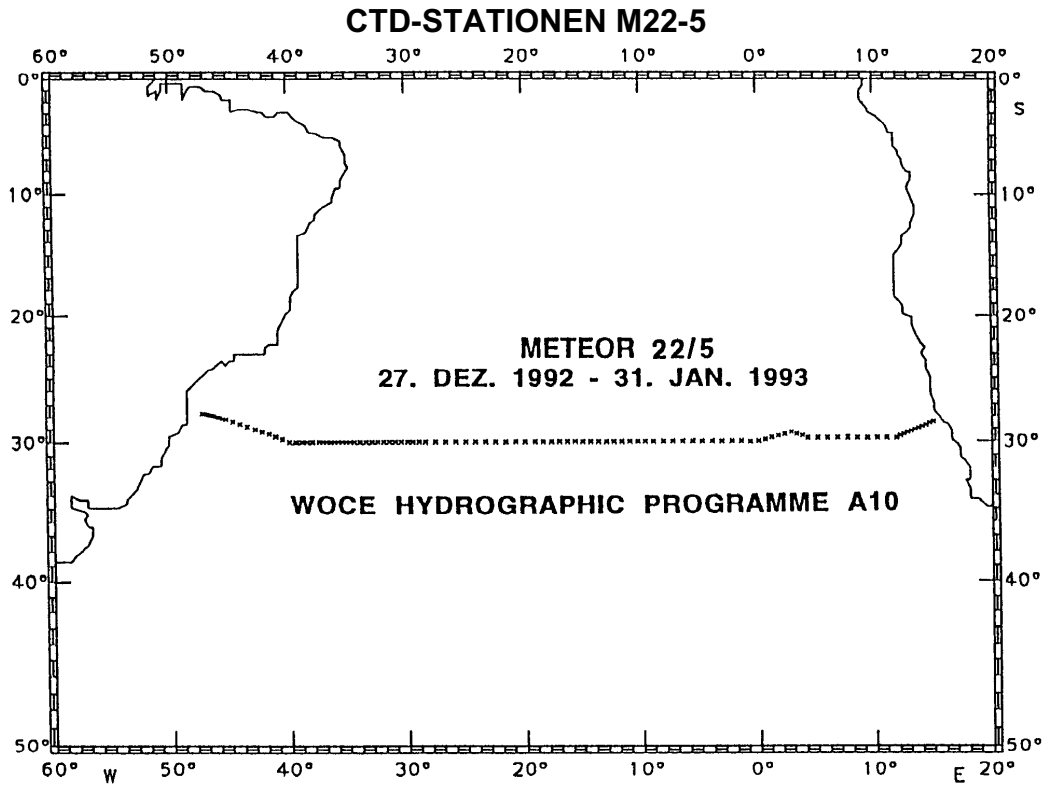


Fig. 8: Stations along WHP section A10, 30° 8 S

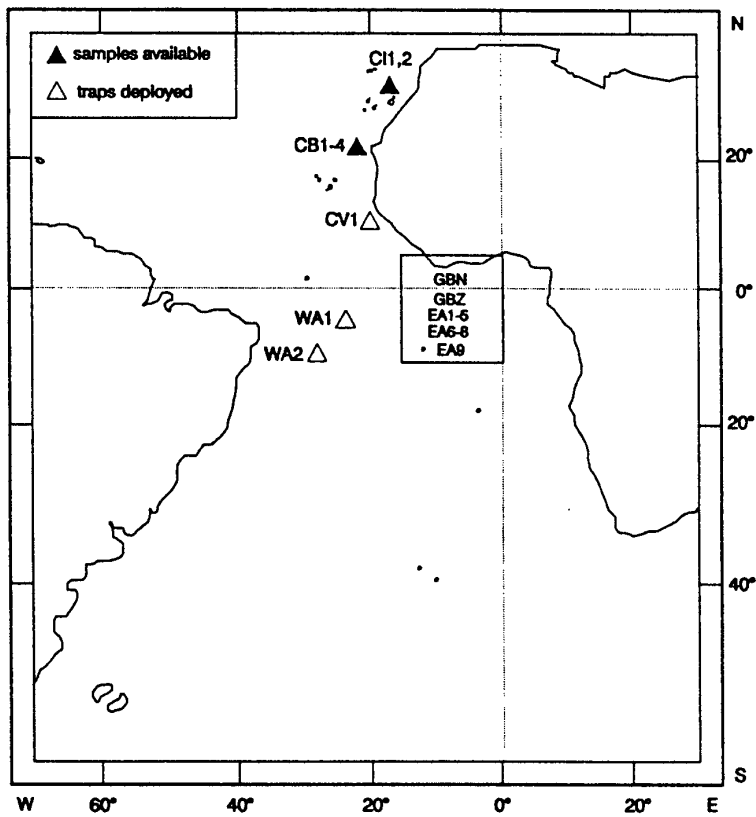


Fig. 9a

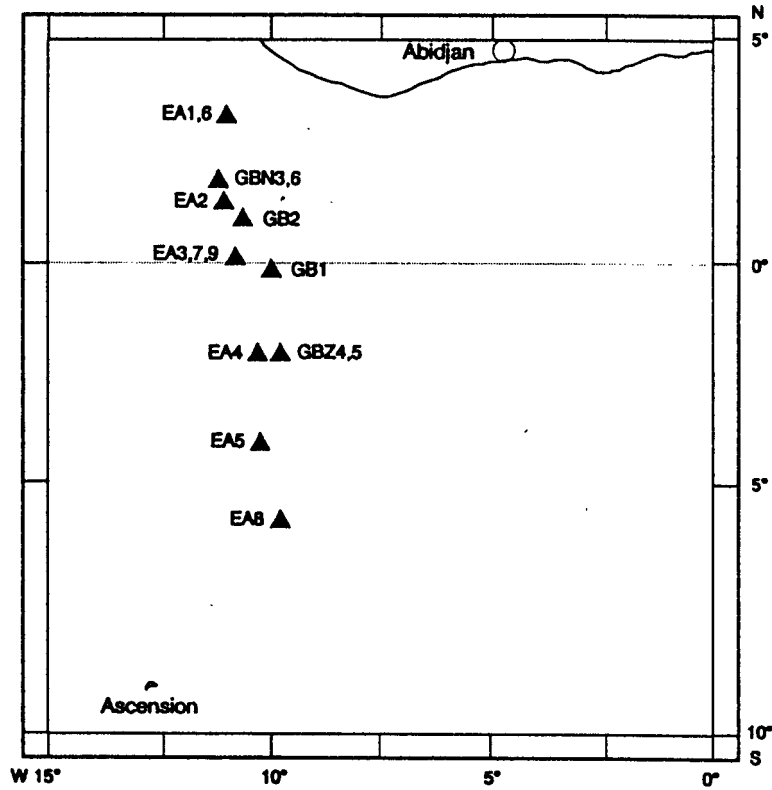


Fig. 9b

Fig. 9a,b: Map of stations where moorings with sediment traps were deployed off NW-Africa and in the equatorial Atlantic. The maps also contain moorings deployed at the same positions during previous cruises.

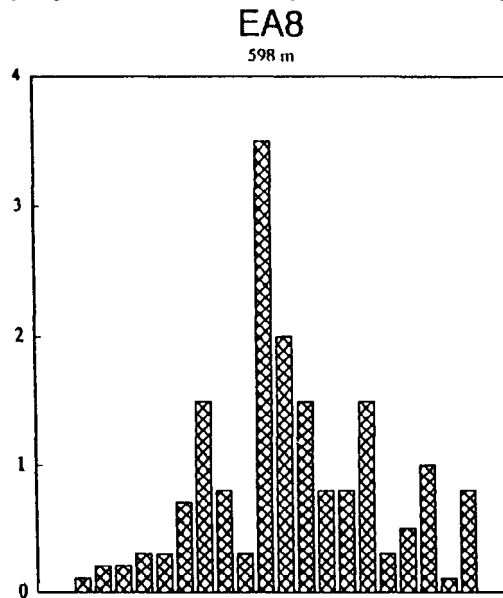


Fig. 10a