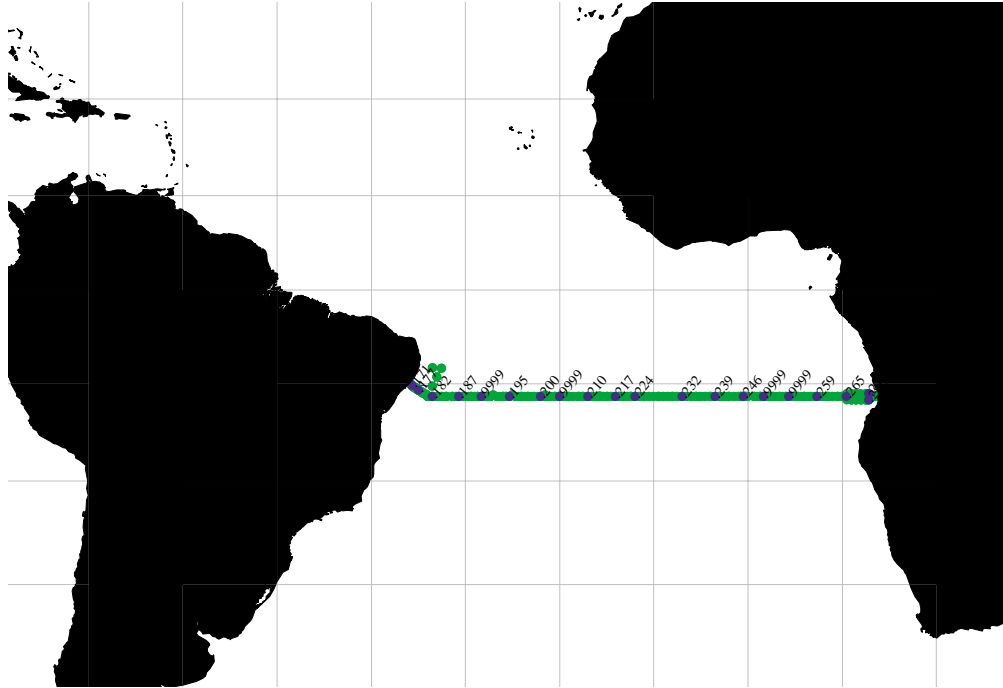


A. Cruise Narrative: A08 and AR15



A.1. Highlights

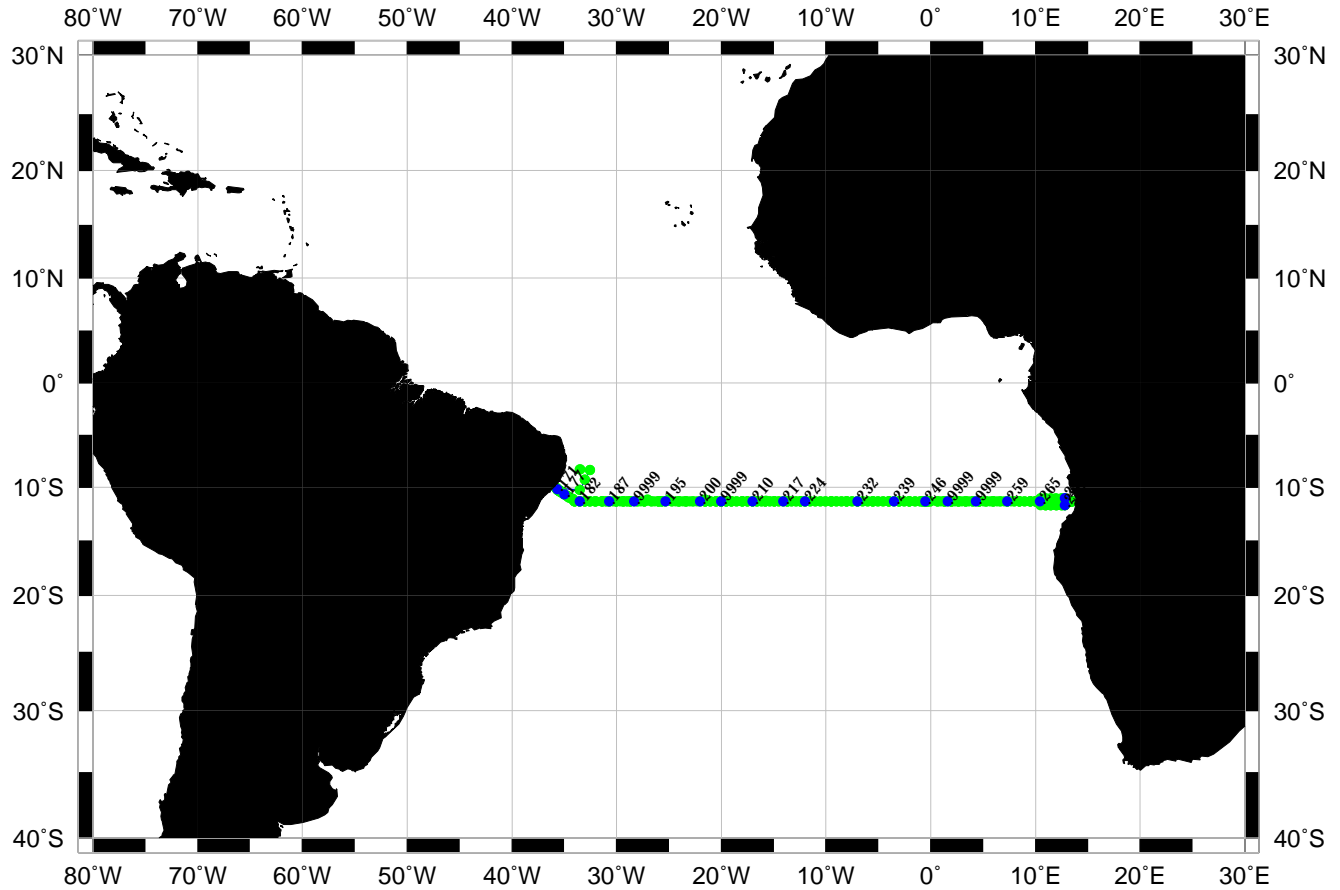
WHP Cruise Summary Information

WOCE section designation	A08	AR15
Expedition designation	06MT28_1	06MT28_2
Chief Scientists/affiliation	Thomas Müller/IfMK	Walter Zenk/IfMK
Dates	1994.MAR.29 - 1994.MAY.12	1994.MAY.15 - 1994.JUN.14
Ship	<i>RV METEOR</i>	
Ports of call	Recife/Brazil - Walvis Bay/South Africa	Walvis Bay/South Africa - Buenos Aires/Argentina
Number of stations	110	44
Geographic boundaries	08°16.31"S 05°45.08"W 13°32.42"E 11°40.50"S	21°00.06"S 48°38.97"W 10°34.44"W 39°54.19"S
Floats and drifters deployed	8 drifters	20 drifters; 29 Floats
Moorings deployed or recovered	none	7 recovered, 2 deployed

Contributing Authors (in order of appearance)

U. Beckmann	R. Meyer	K. Wills	T. Knutz	J. Funk
P. Beining	S. Müller	D. Hydes	C. Zelck	R. Rieger
C. Dieterich	A. Putzka	G. Siedler	H.-Ch. John	M. Schneider
U. Koy	K. Bulsiewicz	O. Boebel	J. Brinkmann	K. Ballschmiter
P. Meyer	H. Düßmann	C. Schmid	G. Schebeske	K. Flechsenhar
W.H. Pinaya	W. Plep	W. Zenk	W. Emery	W. Roether
D.J. Hydes	J. Sültenfuß	J. Pätzold	M. Suarez	J.C. Jennings
S. Kohrs	K. Johnson	W. Krauß	R. Cordes	L.I. Gordon

Station Locations: A08, Müller, 1994



Produced from .sum file by WHPO-SIO

Tab. 1: Legs and Chief Scientists of METEOR cruise no. 28

Leg M 28/1

29 March - 12 May 1994,
Recife/Brazil - Walvis Bay/South Africa
Chief scientist: Dr. T.J. Müller

Leg M 28/2

15 May - 14 June 1994,
Walvis Bay/South Africa - Buenos Aires/Argentina
Chief scientist: Dr. W. Zenk

Coordination:

Dr. W. Zenk

Master:

Leg M 28/1: Captain H. Andresen
Leg M 28/2: Captain H. Papenhagen

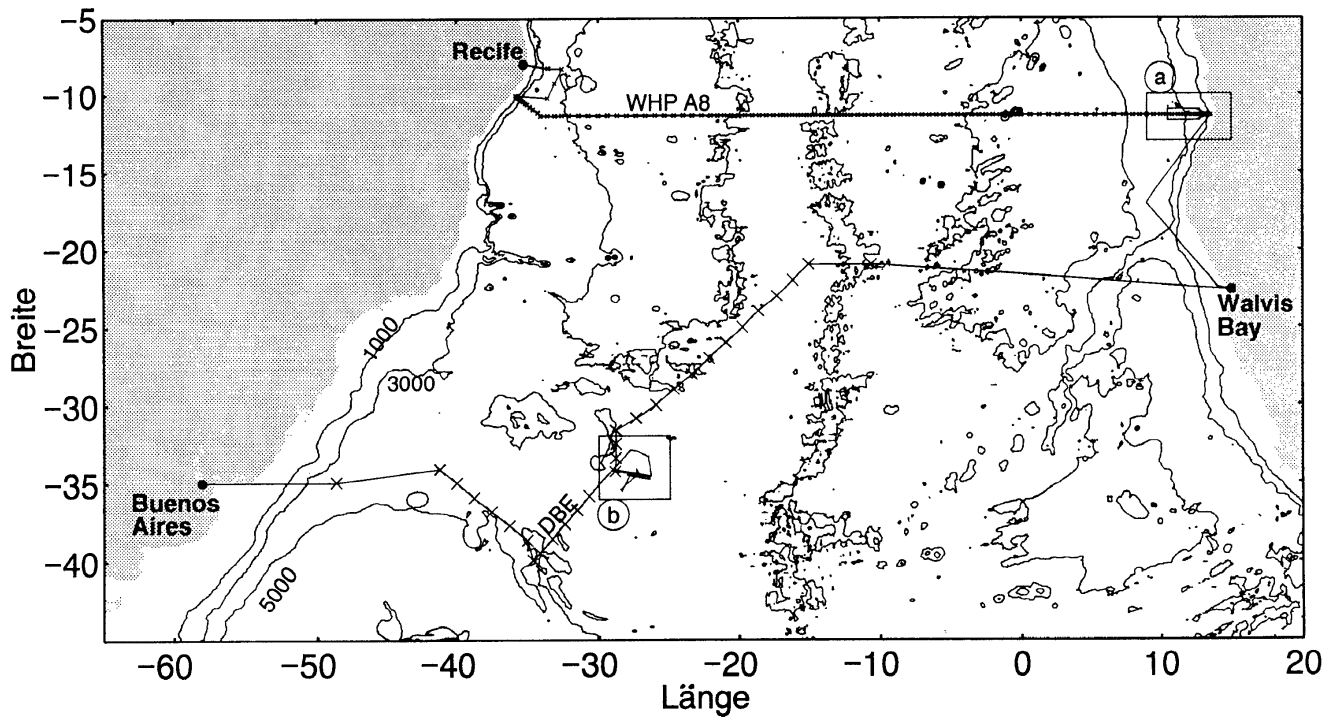


Fig. 1a: Track and working area of METEOR cruise no. 28

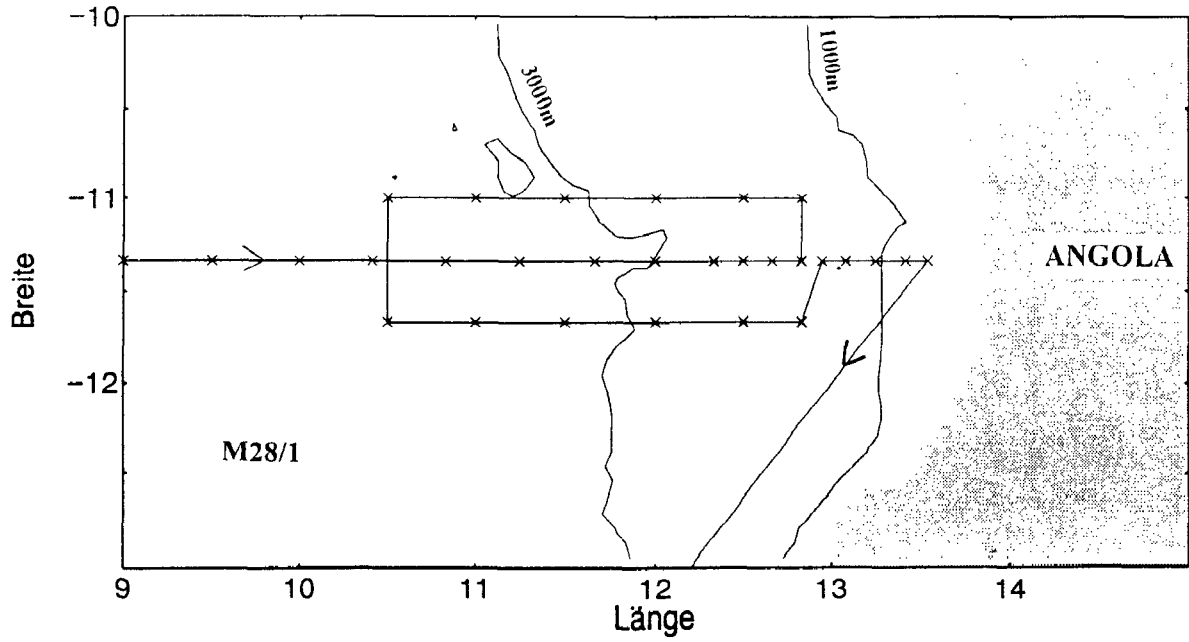


Fig. 1b: Detailed cruise track

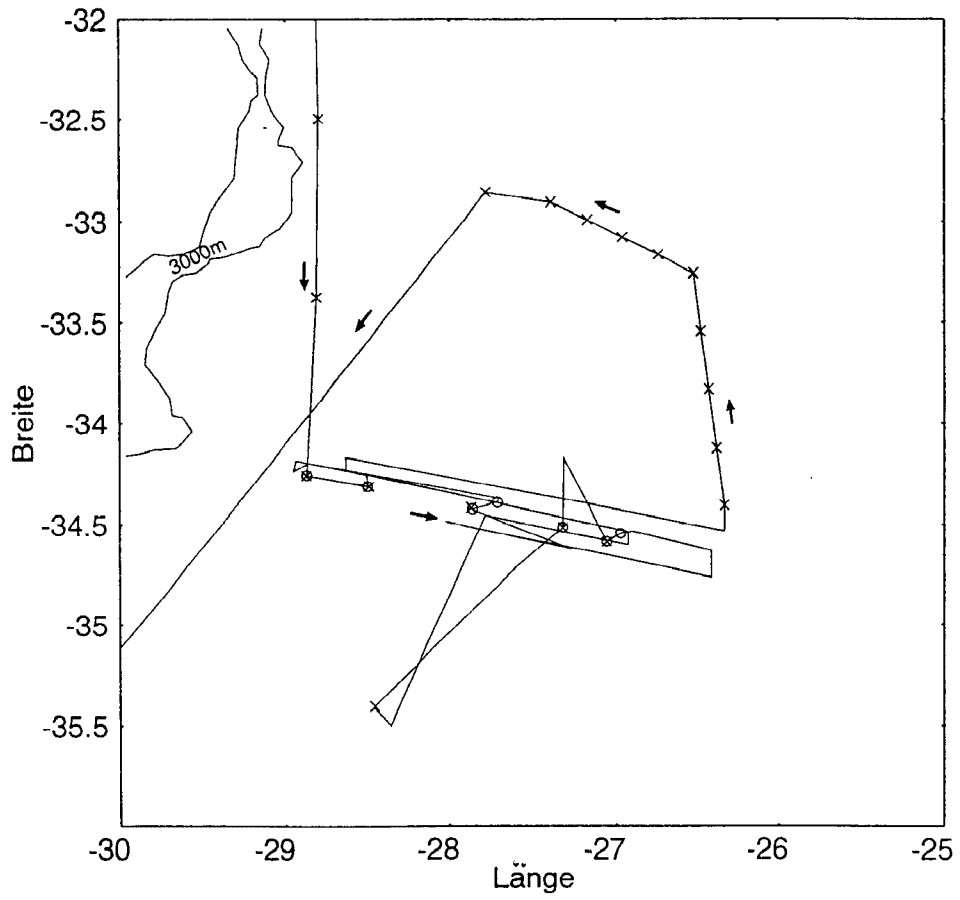


Fig. 1c: Detailed cruise track

can be proved, because most samples are taken using two Tenax glass tubes in a row. The first tube represents the sample while the second will show a possible break through. Moreover blanks of this sampling technique will be checked. Therefore two Tenax tubes were opened on the ship and sealed afterwards without sampling. On M 28/2 twenty one low volume air samples have been taken. Explicit sample characterization (position, date, volumes) is depicted in [chapter 7.2.12](#). Sampling locations are displayed in Fig. 72.

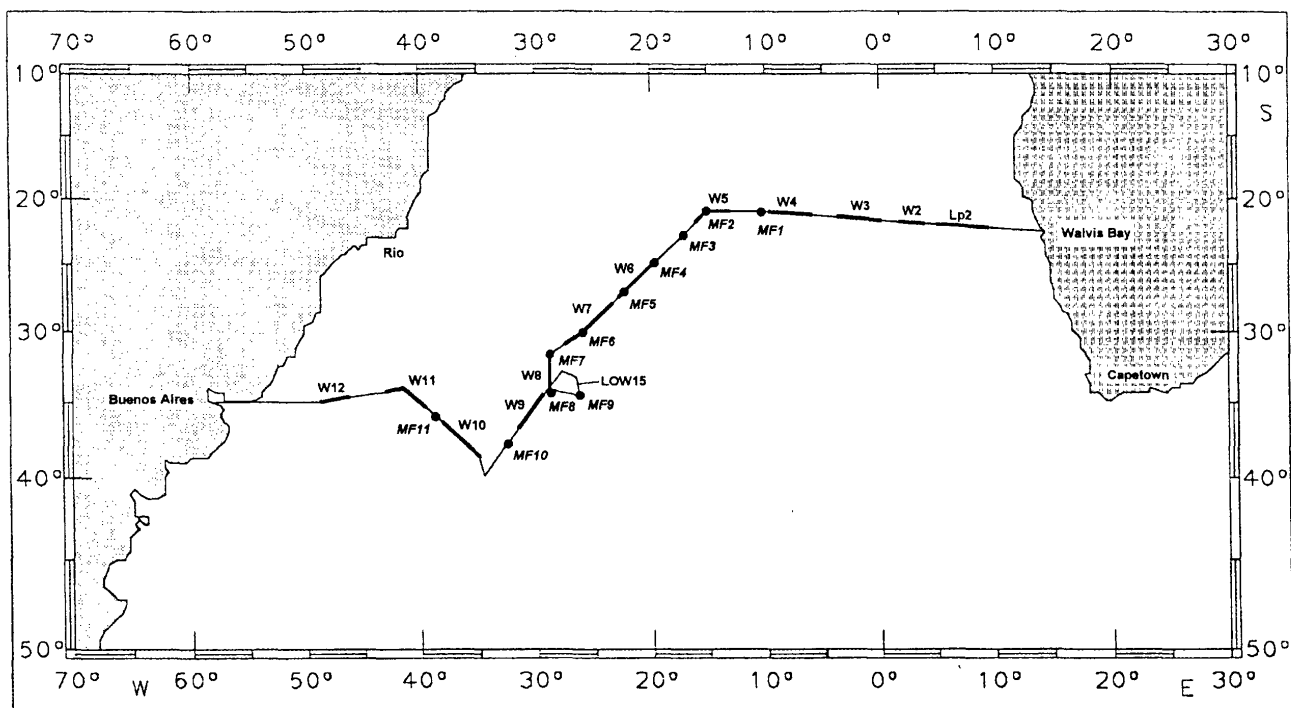


Fig. 72: Locations of environmental chemistry samples

5.9.3 Analytical Methods

All samples were spiked with internal standards, sealed and carried to Germany. Organic trace analysis requires high sensitive instrumentation (e.g. mass spectrometer) and the exclusion of any sample contamination. Several control samples (blanks) document the background level. Thus sample preparation and analysis were not carried out on METEOR but at the University of Ulm under controlled background conditions (clean benches).

In cases of High Volume Air Sampling and Surface Seawater Sampling the adsorbents are eluted by organic solvents, cleaned-up and concentrated to a volume of 100 - 500 μ l prior to analytical measurement. For analysis high resolution gas chromatography with electron capture detection (HRGC-ECD) and mass selective detection (HRGC-MSD) were applied. The sensitive detection of CP in negative chemical ionization mass spectrometry (NCI-MS) opens a classification into short-chain, intermediate and long-chain CP which gives more detailed information about the composition of a particular CP mixture.