Instituto Nacional de Investigação Pesqueira
Centro de Investigação Pesqueira do Namibe
Ministério das Pescas
República de Angola

National Institute of Fisheries Research (INIP) Luanda

C r u i s e R e p o r t

(by Quilanda Fidel, co-chief scientist)

R/V *Alexander von Humboldt*

Cruise- No. 44 / 04 / 09

This report is based on preliminary data

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1. **Cruise No.:** 44 / 04 / 09

2. **Dates of the cruise:** 20 May 2004 to 01 June 2004

3. **Particulars of the research vessel:**
   Name: Alexander von Humboldt
   Nationality: Germany
   Operating Authority: Baltic Sea Research Institute (IOW) Warnemünde

4. **Geographical area in which ship operated during Leg 9:**
   Southern and northern Angolan waters

5. **Dates and names of ports of call**

   19-20 May 2004 Namibe (departure)

   01 June 2004 Luanda (arrival)

6. **Purpose of the cruise**
   Monitoring Lines in Angolan Coastal Waters and Training

7. **Crew:**
   Name of master: Capt. Herzig
   Number of crew: 15

8. **Research staff:**
   Co-chief scientists: Bodo v. Bodungen (IOW) and Quilanda Fidel (INIP, Namibe)

   Scientists: Stefan Forster (IOW)
   Lia Neto (INIP, Luanda)
   Marek Ostrowski (IMR)
   Siegfried Kruger (IOW)
   António da Silva (INIP, Luanda; now BENEFIT)
   George Wiafe (GCLME, Ghana)
   Gboyega Ajao (GCLME, Nigeria)
   Technicians/Students: Juliana Muai (INIP, Luanda)
   Silvana Faria (INIP, Luanda)
   Jose Kongo (UAN)

9. **Co-operating institutions:** Guinea Current Large Marine Ecosystem (GCLME)
   Institute of Marine Research, Bergen, Norway (IMR)
   University Agostinho Neto, Luanda, Angola (UAN)
   Instituto Nacional de Investigação Pesqueira (INIP; ex IIM), Luanda, Angola
   Baltic Sea Research Institute, Warnemünde, Germany (IOW)
   Benguela Environment Fisheries Interaction and Training programme (BENEFIT)

10. **Scientific equipment** CTD, Rosette water sampler, Multicorer, pumped CTD with LADCP, Multinet, van Veen grab, Hyball ROV, Dredge

GENERAL REMARKS AND PRELIMINARY RESULTS

INTRODUCTION

Leg AHAB 9 aimed at delivering a systematic insight into environmental properties in inshore waters. This included abiotic variables and information about the distribution of marine organisms. It was intended to perform detailed process studies at several carefully selected hotspot locations along Angola's coast. These locations were selected according to the following criteria: (1) locations characterizing environmental conditions and fish habitats representative of large sections of Angola's shelf (2) characterizing boundaries of the main hydrographic domains and marine ecosystems of Angola. The selections were made based on documented knowledge and analyses of hydrographic data collected by *R/V Fridjtof Nansen* from 1994-2003. The regions selected for the process studies are listed in **Table 1.**

SURVEY GRID, STATIONS AND ACTIVITIES

The survey grid is shown in **Figure 1**. Listed in the **Appendix** are the figures showing preliminary results, tables, maps and details of the stations.

20 - 22 May 2004: Cabo Santa Marta area between 13°57'S and 13°44'S

Some crew members and the scientific team embarked on board of *A.v.Humboldt* on 19th May 2004. *A.v.Humboldt* left Namibe in the morning of 20th May steaming towards the Cabo Santa Marta area, north of Namibe. Cabo Santa Marta is located approximately at latitude 13º50'S. The offshore bathymetry is characterized by a deep incision, exceeding depths of 1000 m within the first 5 n miles from the coast. This trench separates two broad shelf offsets, which are known to be productive areas for local fisheries. The bathymetry off Cabo Santa Marta, based on the 6-year acoustic data record of *R/V Fridjtof Nansen* is included in **Figure 2**. The ship proceeded to the first station BN002 in the afternoon. (**See Figure 3.1**).

The global datasets on SST and wind stress indicate that the Cabo Santa Marta region is located in a gradient zone separating the wind-driven, upwelling affected sub-tropical domain to the south from the eastern Atlantic tropical shelf to the north.

The hydrographic lines selected off Cabo Santa Marta are illustrated in **Figures 3.1**, **3.2**, **3.3** and **3.4**. The actual coverage changed somewhat from this design during the cruise (see **Figure 1** and **Table 2**). The vertical temperature, salinity and oxygen sections for stations S960-S971 (**Figure 3.3**) are shown in **Figures 4.1, 4.2** and **4.3** respectively. These figures clearly reveal the pattern of a shallow dome extending across the trench and centered above the deepest stations.

At each of the stations a CTD cast was deployed. Some stations were selected in order to collect phytoplankton, zooplankton, ichthyoplankton, benthos, chlorophyll, oxygen and nutrients. At station BN001 benthos, a multicore and benthos grab was collected. At station 959 a multinet was used from 200 m depth for collection of zoo- and ichthyoplankton. At station S971 the bongo net was used from 100 m to collect zooplankton. At station 979 samples were taken for oxygen, chlorophyll, nutrients and phytoplankton. Some of theses samples were used to calibrate the sensors on the CTD system.

22 - 24 May 2004: Benguela area between 12° 35'S and 12° 00S
Shelf off Lobito, transect NW of Pta Egito.

The aim of the investigation at this location was to document the vertical and horizontal stratification on the shelf as well as to study low-energy motions of the thermocline. From the *R/V Fridjtof Nansen* studies, it is known that the vertical stratification in this area varies strongly seasonally; from a very strong thermocline and a uniform, saturated oxygen upper layer profile during summer to a less pronounced and shallower thermocline and two-layer oxygen stratification in winter.

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The CTD was deployed at stations BF1-BF8; 44-56 and X_0061-0064 **(Fig. 3.5)**. At selected stations, different instruments were used to collect additional samples (see **Table 2**).

The distribution of temperature and oxygen off Pta Egito is depicted in **Figures 5.1 and 5.2**. The distributions exhibit a winter type of vertical stratification. The thermocline and oxycline are very shallow, at a depth 20-25 m. Underlying the thermocline is the low-oxygen water mass that has T-S properties of the intermediate South Atlantic Central Water (SACW). The upper layer on the offshore side of the temperature section exhibits a warm stable layer of the oceanic Tropical Surface Water (TSW). At station 50, the TSW layers form a cross-shelf front separating it from the well-mixed inshore water.

A 6-hour experiment of continuous profiling with a CTD probe was conducted in order to investigate the intensity of internal waves in the area. Repeated CTD casts were preformed from the anchored vessel, positioned offshore of the cross-shelf front at a depth of 70 m. This was performed at ship's station 59 – missing from Table 2. The results of the investigation for salinity are shown in **Figure 6**. The undulations of the halocline, which were weak initially, intensified after 09:30 am, when the TSW front, retreating offshore, passed the ship's location. The front had retreated seawards from the shallow water position it occupied when the experiment started. Towards the end of the experiment, the halocline became gradually shallower. The cast repetition rate was low - 25 minutes per cast; too long to resolve the short period fluctuations. For this reason, a second CTD probe was deployed to continuously monitor the fluctuations at a 4 m depth with the time resolution of 1 second. The result from that investigation is depicted in **Figure 7**. The first two hours of the recording before the passage of the front exhibited little fluctuations. After the passage, at 09:30 (second 7000 into the experiment) the fluctuations became non-stationary, displaying rising amplitudes towards the end of the experiment.

25 May 2004: Off Cuanza River area between 09°20'S and 09°30'S.

After finishing work in the Benguela area, the ship steamed to the north close to the Cuanza River mouth. A triangular-type section was performed with a total of 9 stations in order to examine the offshore extent of the Cuanza River plume.

The CTD was deployed at stations CL1 – CL8 (**Fig. 3.7**). At selected stations, different instruments were used to collect additional samples (see **Table 2**):

26 May 2004: North of Luanda area: ~ 07° 06'S. Shelf area off Ambriz.

The aim was to study horizontal stratification of the northern Angolan shelf during winter and how this was influenced by fresh water input from the Congo River. The CTD was deployed at stations ADS1 – ADS3 (**Fig. 3.8**). Four stations were performed offshore in a small area, the additional station conducted near an oilfield, is labelled "X_0076" in Table 2. During the work additional instruments were used – see **Table 2**.

27 May 2004: Work off the mouth of the Congo River.

The aim was to examine the Congo River outflow. From past surveys with *R/V Fridjtof Nansen*, it has not been clear in which direction the Congo River discharged its main plume. The CTD was deployed at three selected stations LIA – LIA4 (**Fig. 3.9**). Additional instruments used are listed in **Table 2**.

The underway thermosalinograph data were recorded. These data clearly indicate the northward deflection of the plume. The results of the surface temperature and salinity collected on the transect, overlaid on the bottom profile across the survey track are shown in **Figure 8**. The fresh-water plume forms a sharp front above the southern flank of the canyon, so that the core of the low-salinity plume is deflected to the north. The sea surface temperature, in general, reversing the salinity pattern; however, shows less pronounced gradients and more variations.

28 May 2004: Ambriz transect during southward part of Leg 9 ~07° 14'S

One cross shore transect was performed off Ambriz, with a total of 10 of stations AT1 – AT9 (**Figure 3.10**). The routine work on this line consisted of a CTD cast at all stations; additional instruments used are indicated in Table 2. A secchi disk was used at AT9, 8,6, 1 and a multinet at AT7. Benthos and bongo sampling at station AT1.

29 May 2004: Work in the area north of Luanda between latitude 08º 00'S and 7º 51'S

Routine stations were performed two or three times in a cross-shelf transect of 12 stations **AM1 – AM14.** Stations AM1 and AM2 were selected for comparison of salinity at 480m, additional instruments used are listed in **Table 2**.

30 – 31 May 2004: Work in the area south of Luanda between latitude ~ 09º00'S - 08º43'S

The area was selected to perform the Pta Palmeirinhas transect **786 – 778** (**Fig. 3.11**) and to study the Cuanza River's plume (**Fig. 9**). In total 11 stations on the Pta Palmeirinhas transect and 27 stations across the Cuanza River area were covered: **CUA1 – CUA25**.

For the Pta Palmeirinhas transect the routine work on this line consists of a CTD cast at all stations, multinet and additional instruments used are listed in **Table 2**. The Cuanza River plume was mapped with the thermosalinograph, and samples were collected for analysis of polyfluoronated organics.

Results shown in **Figure 9** suggest a northward propagation to the point where the coastline deflects to the NE at Pta Palmeirinhas. Beyond that point, the plume appears to detach from the coast and to change the flow direction to the NW. This result appears to reflect the general flow pattern in this area. From many of years of hydrographic sections done by *R/V Fridjtof Nansen* at Pta Palmeirinhas, it is known that the fresher surface water layer tends to occur in the mid-shelf and offshore, rather than inshore.

Data observed at stations described above have been combined to produce a montage of horizontal plots of temperature, salinity and oxygen (**Fig. 3.13**). This work was done by Jose Kongo who participated as student / technician on Leg 9 and is shortly to present his interpretation of hydrological data collected during this cruise in preparation of his thesis to be defended at UAN, Luanda shortly.

Other highlights

1. Despite the short duration of leg 9, both the Angolan team and others onboard gained good knowledge on coastal processes off Santa Marta, Baia Farta and Ambrizete. The time that was

spent around these areas doing transects with CTD casts and sampling as well as time series measurements allowed us to speculate on some phenomena which may occur seasonally

2. Thermosalinograph recordings off the mouths of both the Congo and Cuanza Rivers gave us a good indication of the "real" direction of the rivers' outflow offshore
3. This cruise allowed participants to learn from Marek Ostrowski that some coastal processes that occur along the Angolan coast probably play a big role in determining both fish behavior and abundance in Angolan waters
4. Thanks to Bodo von Bodungen and Stephan Forster , participants were able to learn about biochemical processes which play an important role in determining fish productivity in the nearshore ecosystem.
5. This survey was unique in terms of the oceanographic survey and preliminary results. The Angolan counterparts would like the agreement achieved at the Windhoek meeting during the preparation of this expedition to be implemented. Points 8 and 9.1 listed below refers:.

8. Post Cruise Training

- Valuable Cruise report, data documentation
- Joint papers
- Data processing in Germany
- Measurement of the hydrocarbon samples

9.1 Angolan scientists involved in writing papers (people may be changed!)

- Quilanda Fidel (hydrography)
- Lia Neto (benthos)
- Bomba Bazika (chemistry)
- Domingos da Silva (phytoplankton)
- Isabel Rangel (phytoplankton)
- Catarina Ruby (zooplankton)
- Pedro Tchipalanga (hydrography)
- N'kosi Luyeye (hydrocarbons)
- Antonio da Silva (zooplankton)

6. The working environment was good. Each participant respected the duties of his shift in the respective established groups.

Angolan participants from the different fields (hydrography, benthos, chemistry, phytoplankton, zooplankton, hydrocarbons) would like to learn more on Angolan coastal processes and useful software techniques to handle data. It is recommended for the hydrography field that Marek Ostrowski be involved in both post cruise training and the writing of papers. This recommendation is extended to Bodo von Bodungen, Siggi Kruger and Stefan Forster in their respective fields as well.

ACTIVITY REPORTS OF DIFFERENT WORKING GROUPS

Physical and chemical oceanography (Q. Fidel - INIP, M. Ostrowski - IMR, S. Kruger –IOW, J. Kongo– UAN, G. Ajao - GCLME).

CTD dips were made routinely to the bottom at each station see Tables 2 and 3. A total of 120 dips were made during AHAB 9. At some selected stations, water samples for oxygen, nutrients and chlorophyll analysis were collected at different depths. Oxygen and chlorophyll samples were collected in order to calibrate the SBE and IOW oxygen sensors, and *in situ* water column fluorescence profiles and to ground truth ocean color satellite imagery. Winkler titrations were conducted to measure the oxygen concentration. Chl-*a* concentration was measured fluorometrically using a Turner

Designs Model 10-AU fluorometer. Water samples were concentrated onto Whatman GF/F filters, which were extracted in 90% acetone for 24 h at -20^{o}C in the dark.

An additional data set of temperature and salinity was collected using the thermosalinograph to study the Cuanza River plume and the Congo River outflow.

The objective of Leg 9 was to study and describe the many environmental features in a tropical-subtropical boundary at the coast, vertical and horizontal stratification, seasonality, dynamics of the pycnocline on the central Angola shelf, the main direction of the Congo River plume, horizontal stratification and seasonality of the northern Angola shelf, the northward range of the Cuanza River plume and dynamics of internal waves.

Zooplankton studies (A. da Silva – INIP, G.Wiafe – GLME, B. von Bodungen- IOW)

The zooplankton samples were collected 20 times with vertical hauls by Multinet in 3 different depth levels from 200 m to the sea surface (200 - 75, 75 – 25 and 25 – 0 m) and 8 times with oblique hauls (Bongo net) from 70 m (sometimes from 20 m) to 0 m. Near the coast the Multinet was used to collect samples of zooplankton from 75 m to the surface and once, one haul was used from 45 m to the surface. The down/up winch speed on the Multinet was about 0,5 m/s, on the Bongo net 0,4 m/s with a ship velocity of 2 n miles/hr. Twelve stations were investigated during the daylight and 8 at night. The zooplankton samples were preserved in 4% formalin. The samples will be used for determining zooplankton biomass in the upper 200 m of the water column, counting and determination of taxonomic composition, calculation of zooplankton production and to follow the daily vertical migration. Additionally, zooplankton studies should be successively accompanied by a set of other measurements, starting with hydrographical observations.

Phytoplankton studies (J. Muai – INIP, B. von Bodungen - IOW)

The objective of the phytoplankton research was the determination of horizontal and vertical phytoplankton distributions and their relation to environmental parameters. Samples were collected from the surface and thermocline.

Benthos and sediments (L. Neto – INIP, S. Forster – IOW, S. Faria -INIP)

The objective was to collect and analyse samples of benthos and sediments in an area of the Angolan shelf. Benthos samples were collected at 29 stations using 870 cm^2 and 825 cm^2 van Veen grabs., dredge or multiple corer. At 19 locations two replicate samples were taken with the grab and sieved through 1 mm mesh. Multiple corer samples were obtained at soft bottom stations. From these cores, surface sediment samples were obtained as well as depth profiles at well defined depth intervals for analysis for foraminifera, dinoflagellate cysts, POPs (Persistent Organic Pollutants), and single samples for the analyses of water content, loss on ignition and grain size distribution. At some locations sampling for the above parameters was also done using the benthos grab, in which case surface material from the upper 2 cm was removed. Finally a dredge (200 x 40 cm opening) was used several times at sandy stations for qualitative bottom fauna sampling. All benthos samples were preserved in 4% formaldehyde solution with occasional photographic documentation of individual species or structures. Foraminifera samples were fixed with alcohol, dinoflagellate cysts were not preserved and only cooled, as were the POP samples.

A first impression of the sedimentary environment was also provided by images recorded during deployment of the ROV ‘Hyball’. Sand was observed at 11 out of 29 stations in water depths ranging from 20 m to 57 m water depths. The sands mainly consist of biogenic carbonate particles. Ripple structures covered the beds at two stations indicating that swell moves sand grains at 40 m water depth.

Where there is land runoff, silt was found at shallower depths (24 m at Ambriz) or the marine sediment was found to be covered by a 6 cm thick, very fine-grained and light brown layer of material derived from the Congo River. A few echinoderms and bivalves, and generally small fauna with the available equipment were found.

In a separate analytical program, surface water samples were collected for determination of Polyfluorinated Organics (PFOs) from Niskin bottles on the CTD. Sampling locations were distributed throughout the cruise area, including oil drilling sites, major river run-off and pristine areas.

ACKNOWLEGEMENTS

The Angolan, German and GCLME staff participants on board this leg of the cruise are thanked for their efforts. Captain Herzig, the officers, crew and catering staff of the *R/V A.v.Humboldt* are thanked most sincerely for providing a safe, efficient and happy environment for the scientific staff to undertake their work. The administrative and financial assistance of the BCLME Co-ordinating Unit (Dr Mick O'Toole and Ms Catherine Kuske) as well as that of the BENEFIT Secretariat (the CEO Dr Neville Sweijd, Mr. Vianda Filipe, Mrs Petro Rabe, and Ms Leesa Jephthah) is noted with appreciation.

It was particularly useful to have the expertise of Bodo von Bodungen, Siggie Kruger, Marek Ostrowski and Stefan Forster on board. Each of them, to some extent, transferred his knowledge to the Angolan and GCLME participants. People helped each other and there was transfer of knowledge from the experts in all sections. Marek Ostrowski provided useful knowledge on oceanographic conditions along the Angolan coast acquired by participating regularly on resource surveys on board *R/V Fridjtof Nansen*. This knowledge contributed towards selection of the "hotspot" areas. He has contributed numerous figures from the selected transects in these areas in this report. Jose Kongo has worked diligently towards writing up the hydrological data collected on this leg towards his thesis at UAN. He kindly allowed use of some of his figures in this cruise report.

Geoff Bailey assisted Quilanda Fidel with the final preparation of this cruise report.

APPENDIX : List of Figures and Tables

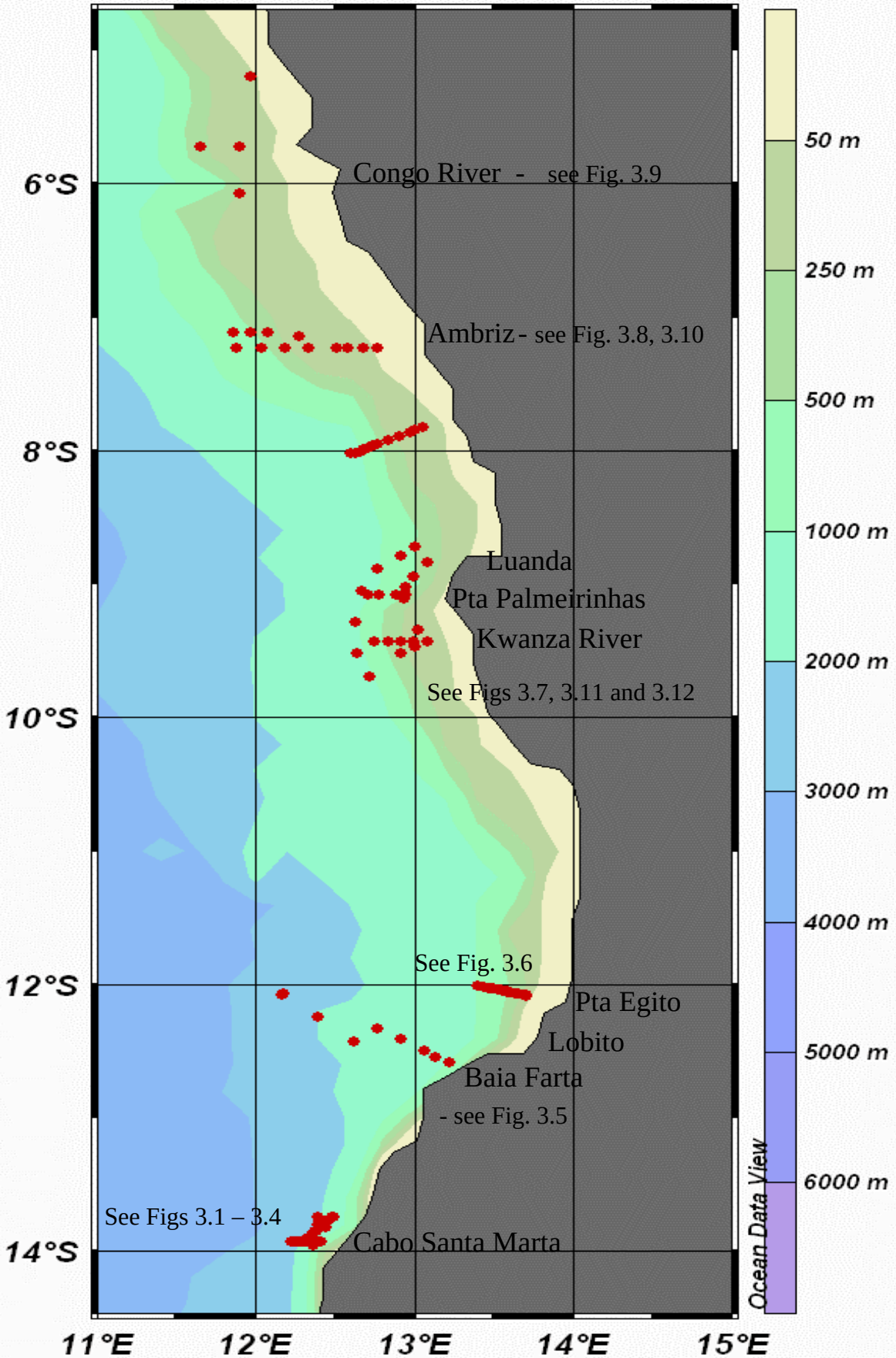

Fig. 1 : *A. v. Humboldt* survey grid and references to expanded views

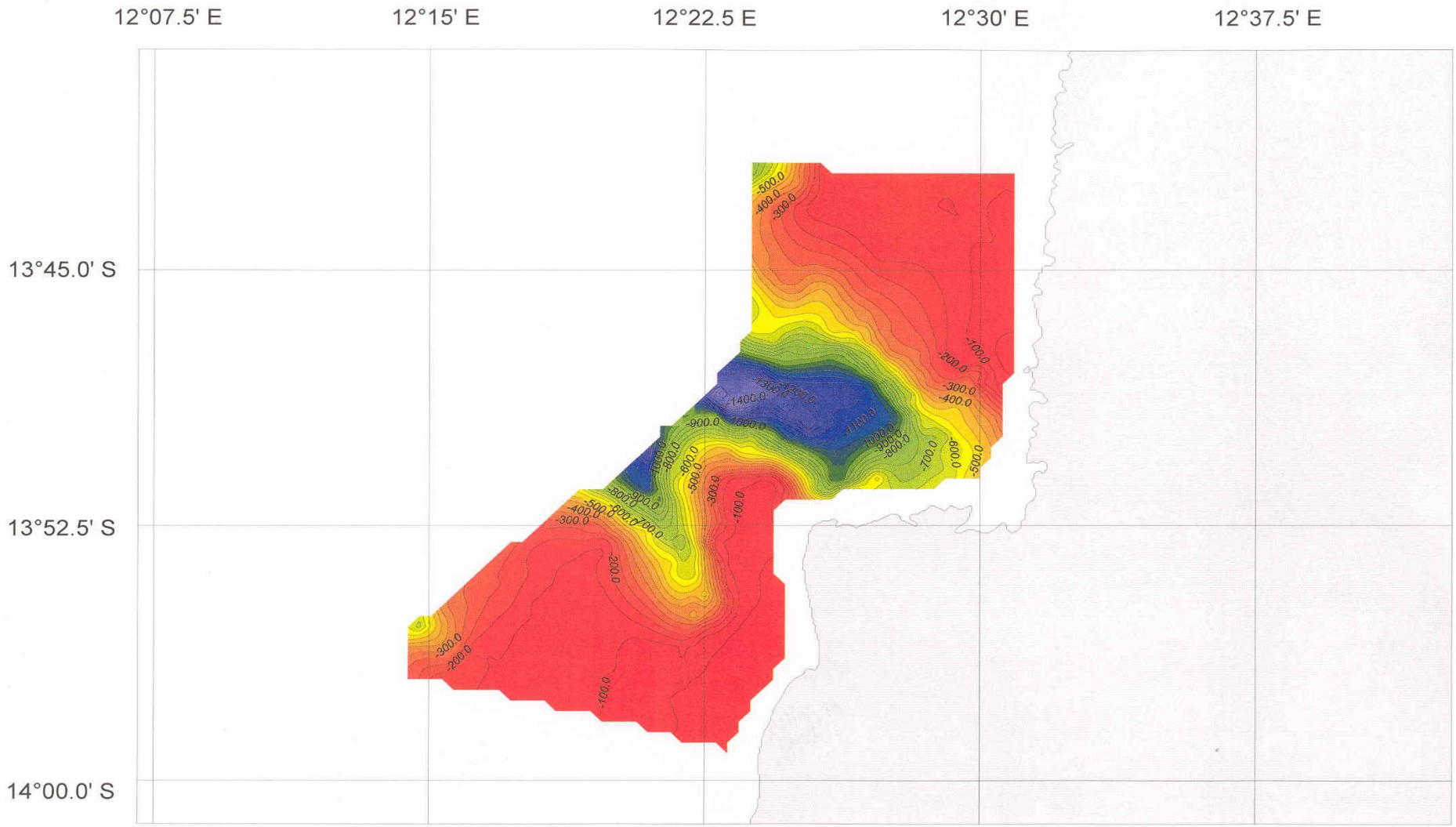

Figure 2: Bathymetry off Cape Santa Marta based on *R.V. Dr. F. Nansen* surveys 1996 – 2003. (M. Ostrowski).

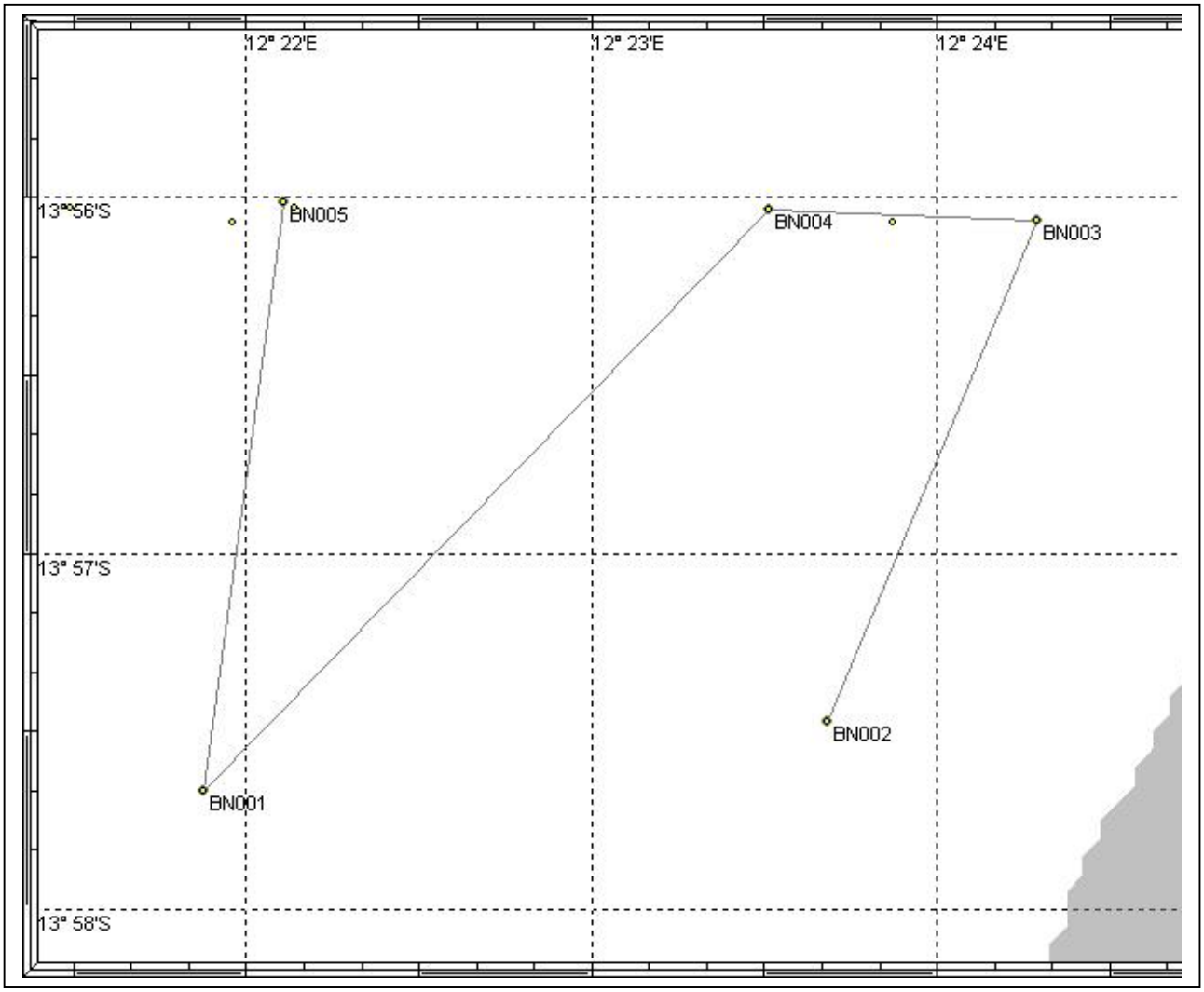

Figure 3.1 : Stations BN 001 – BN 005 off Cabo Santa Marta (M. Ostrowski)

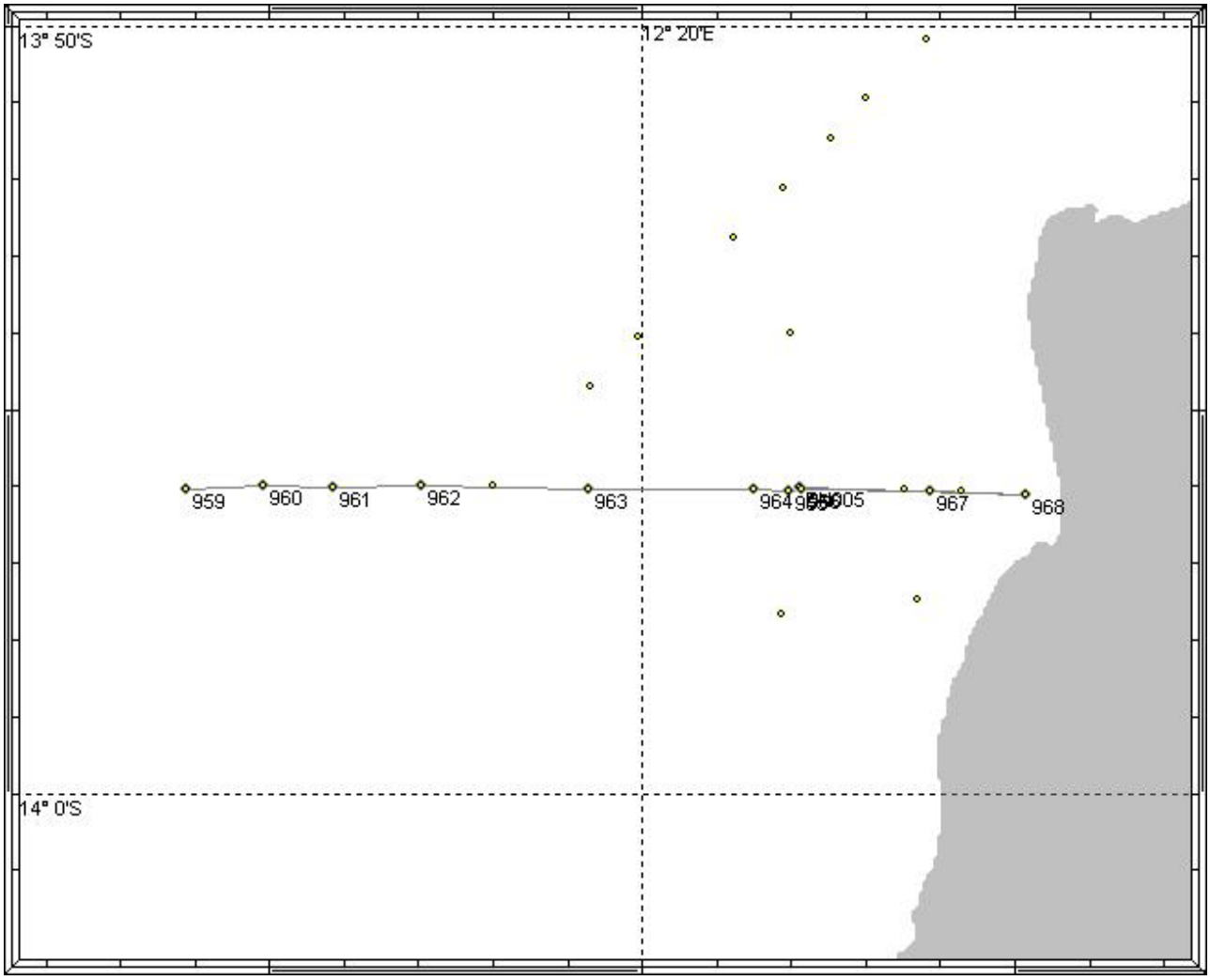

Figure 3.2: Stations 959 – 968 on a transect west of Cabo Santa Marta along 13^{o}56’S.

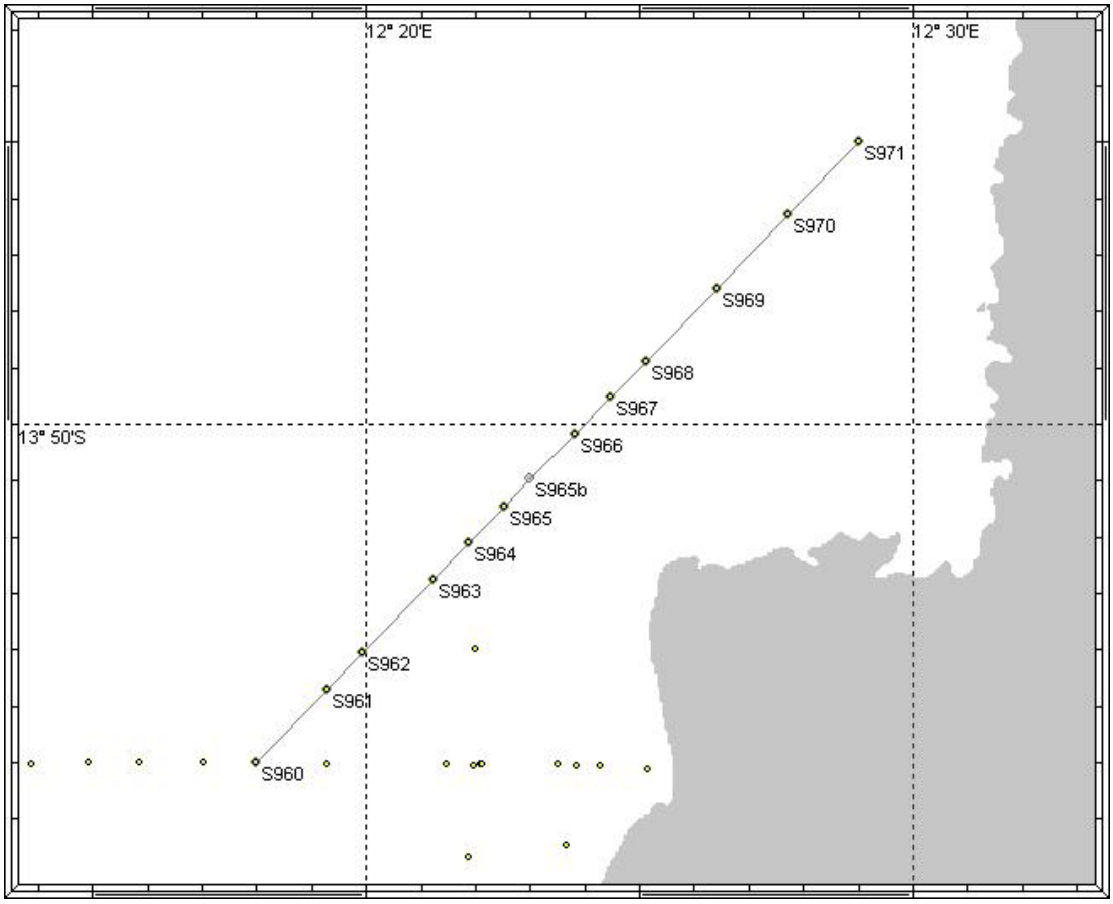

Figure 3.3: Stations S960 – S971 along a SW-NE transect off Cabo Santa Marta.

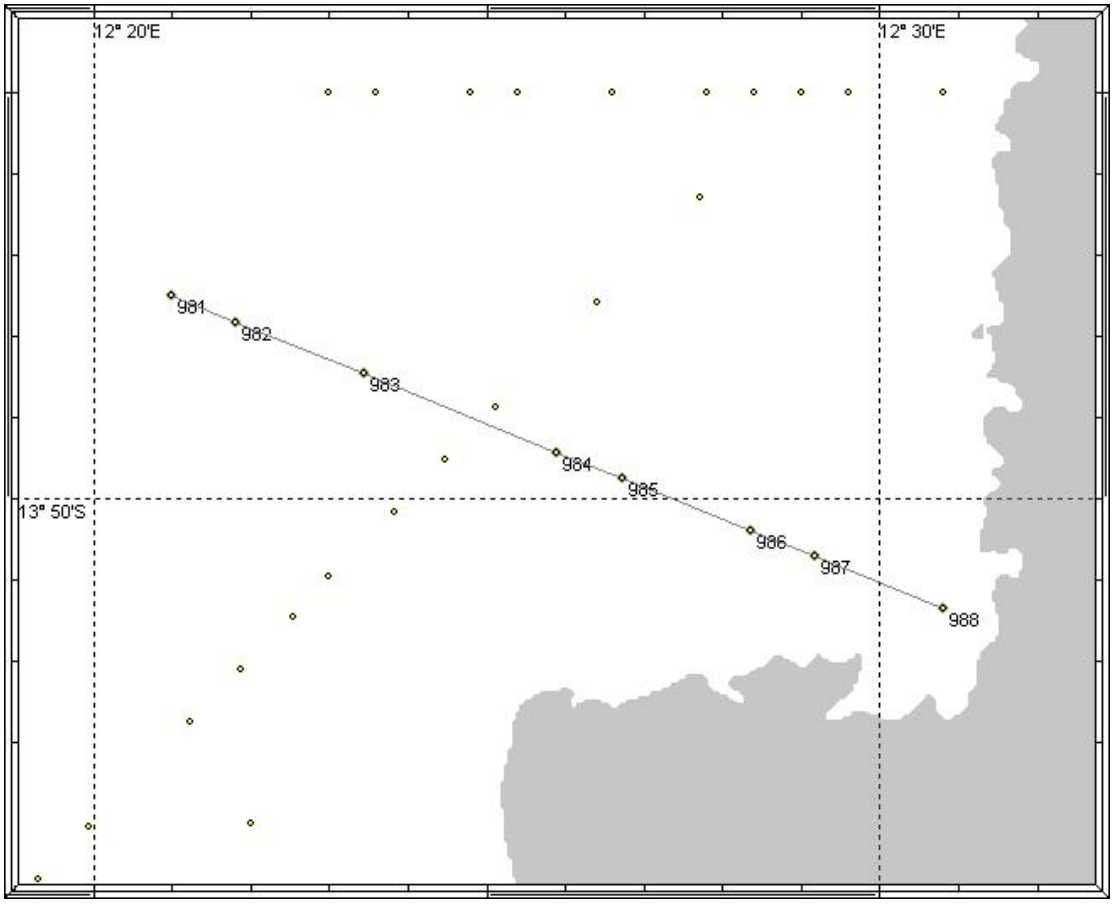

Figure 3.4: Stations 981 – 988 along an oblique NW-SE transect off Cabo Santa Marta.

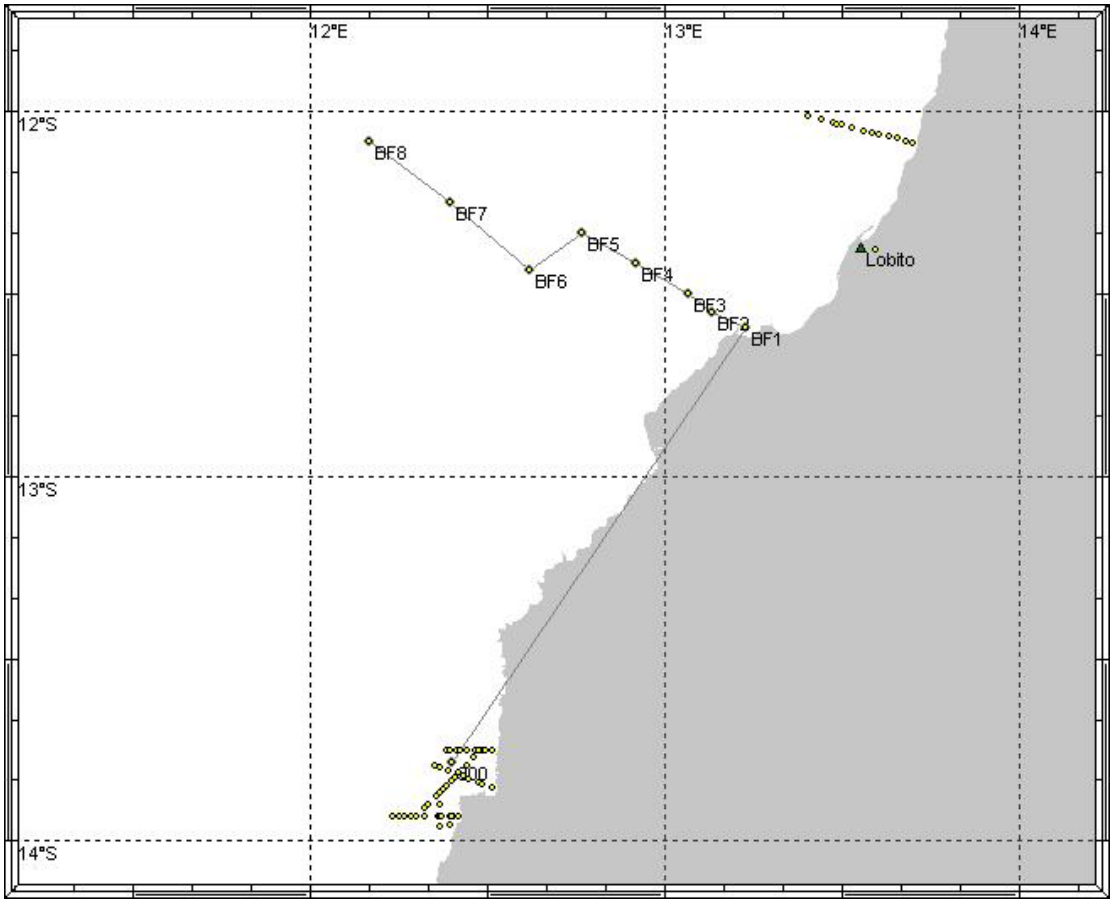

Figure 3.5: Baia Farta transect (BF1 – BF8).

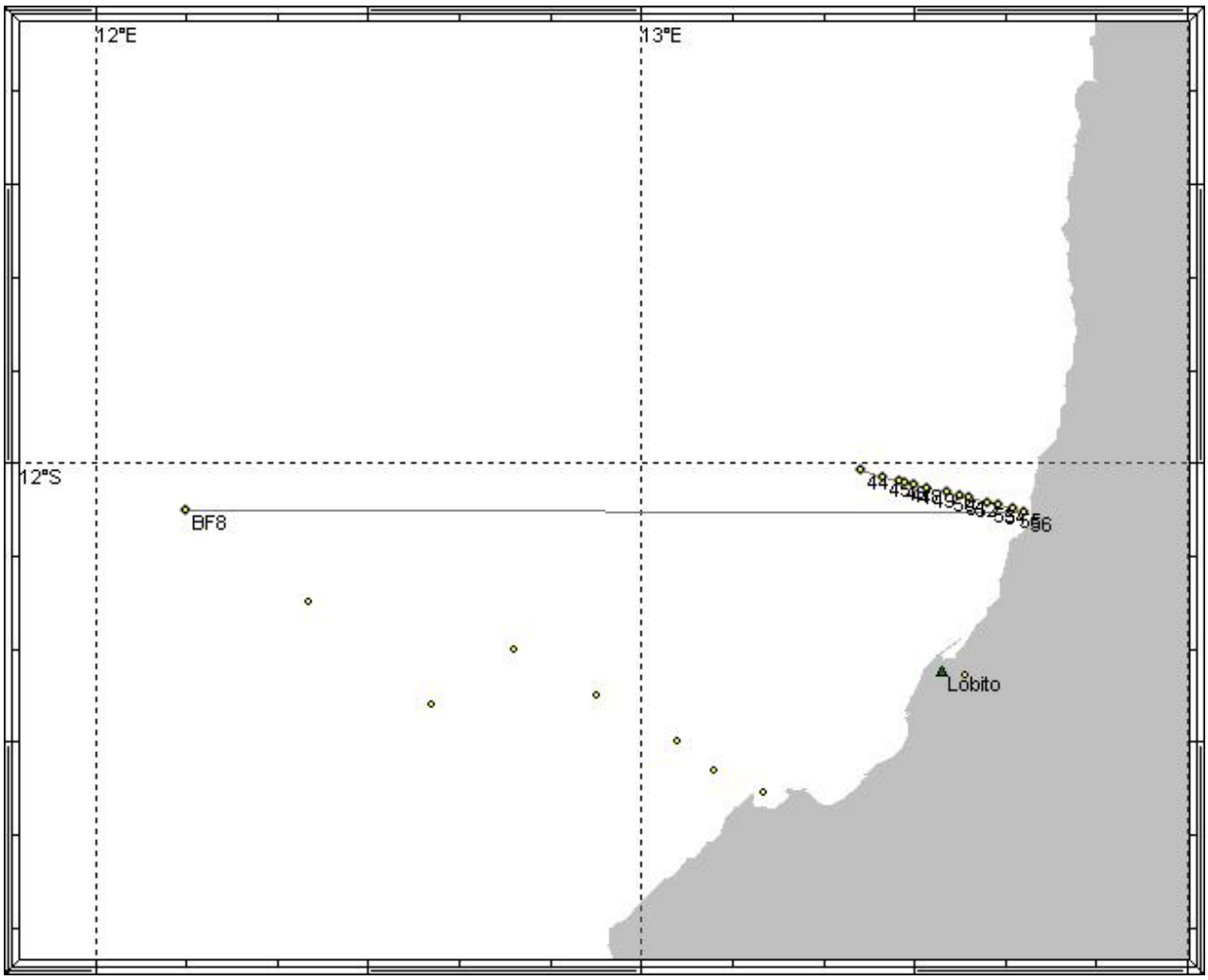

Figure 3.6: Transect off Pta Egito (44 – 56).

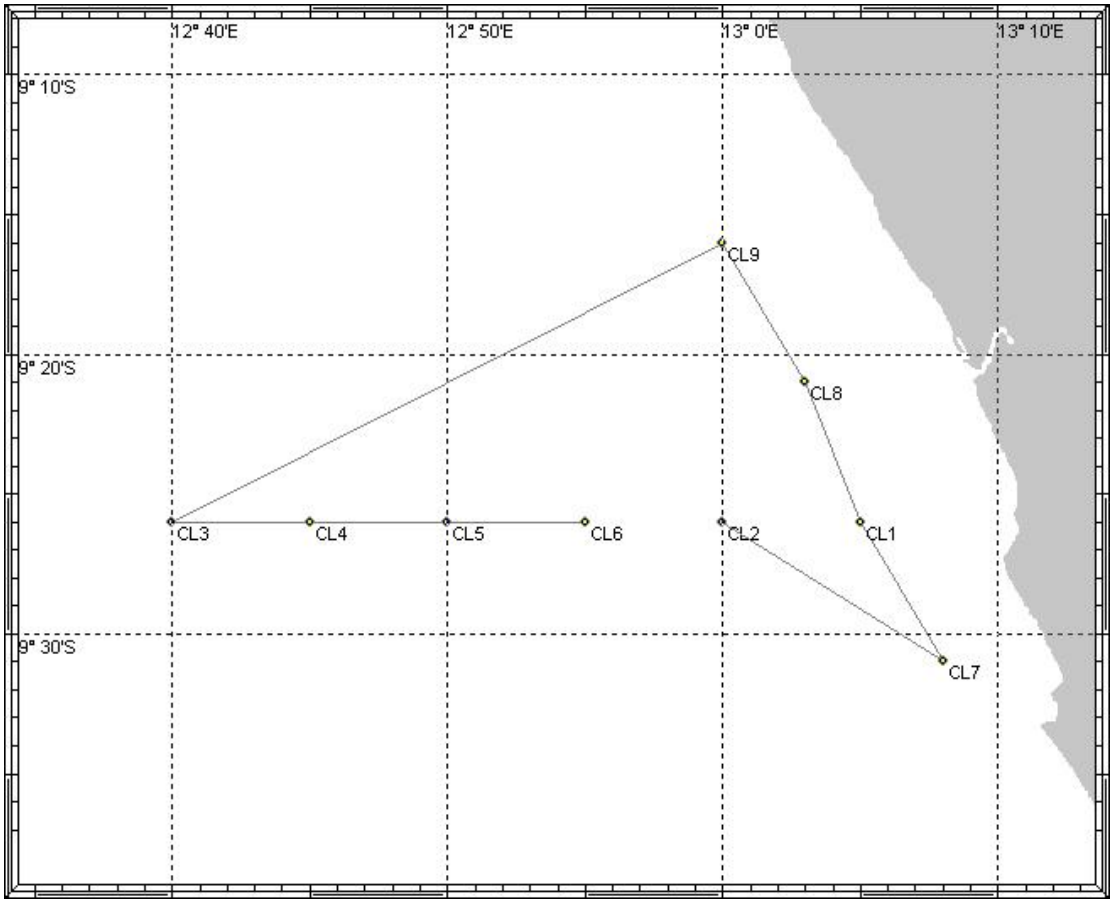

Figure 3.7: Transect off Kwanza River (CL1 - CL9).

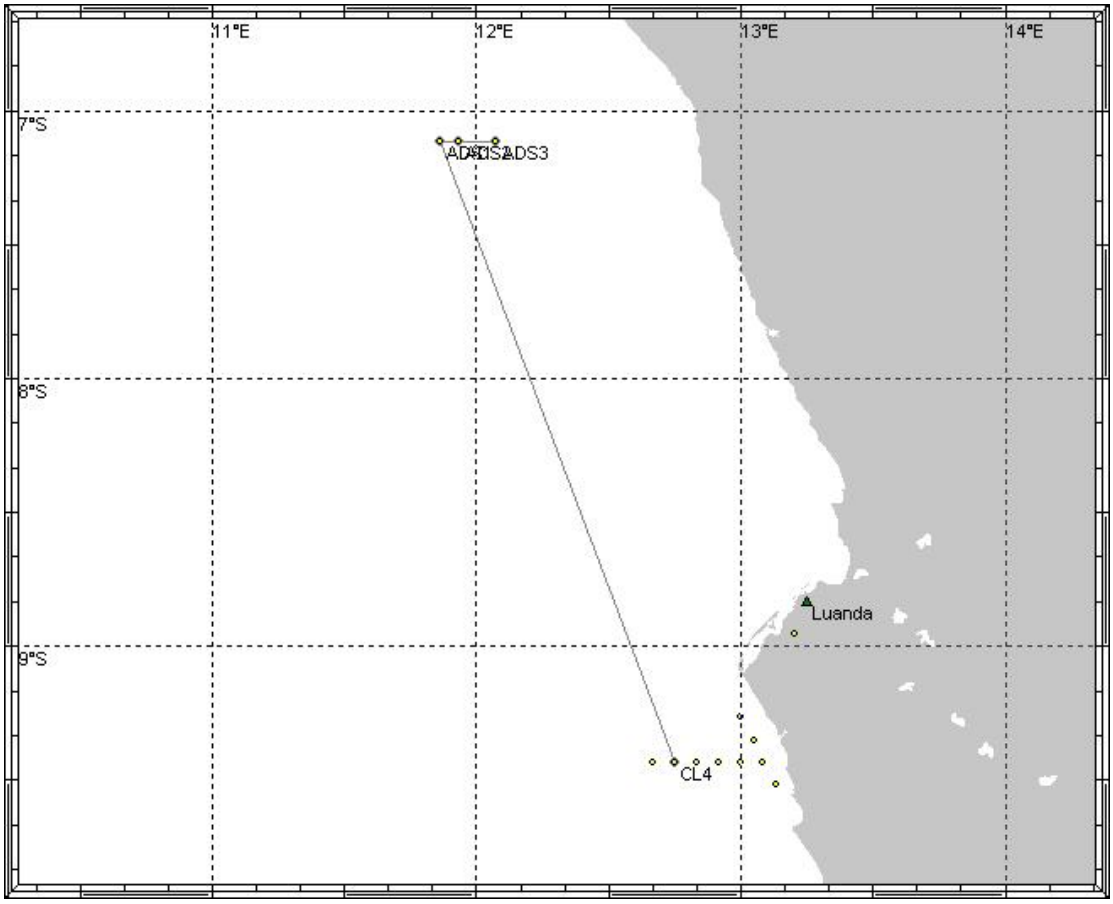

Figure 3.8: Transect off Ambriz: ADS 1 – ADS 3.

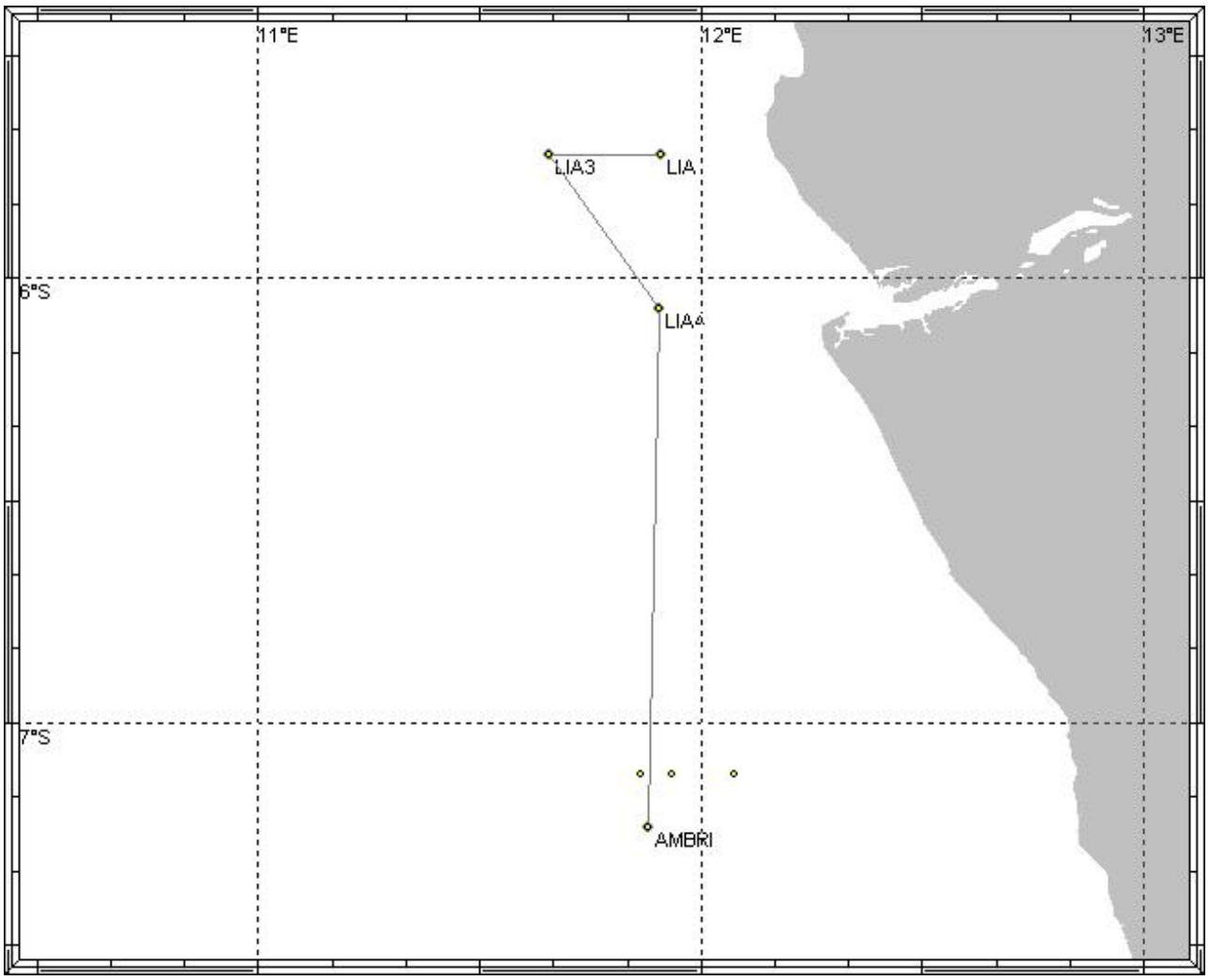

Figure 3.9: Stations off Congo River Mouth : LIA 1 – LIA 3 and transect off Ambriz.

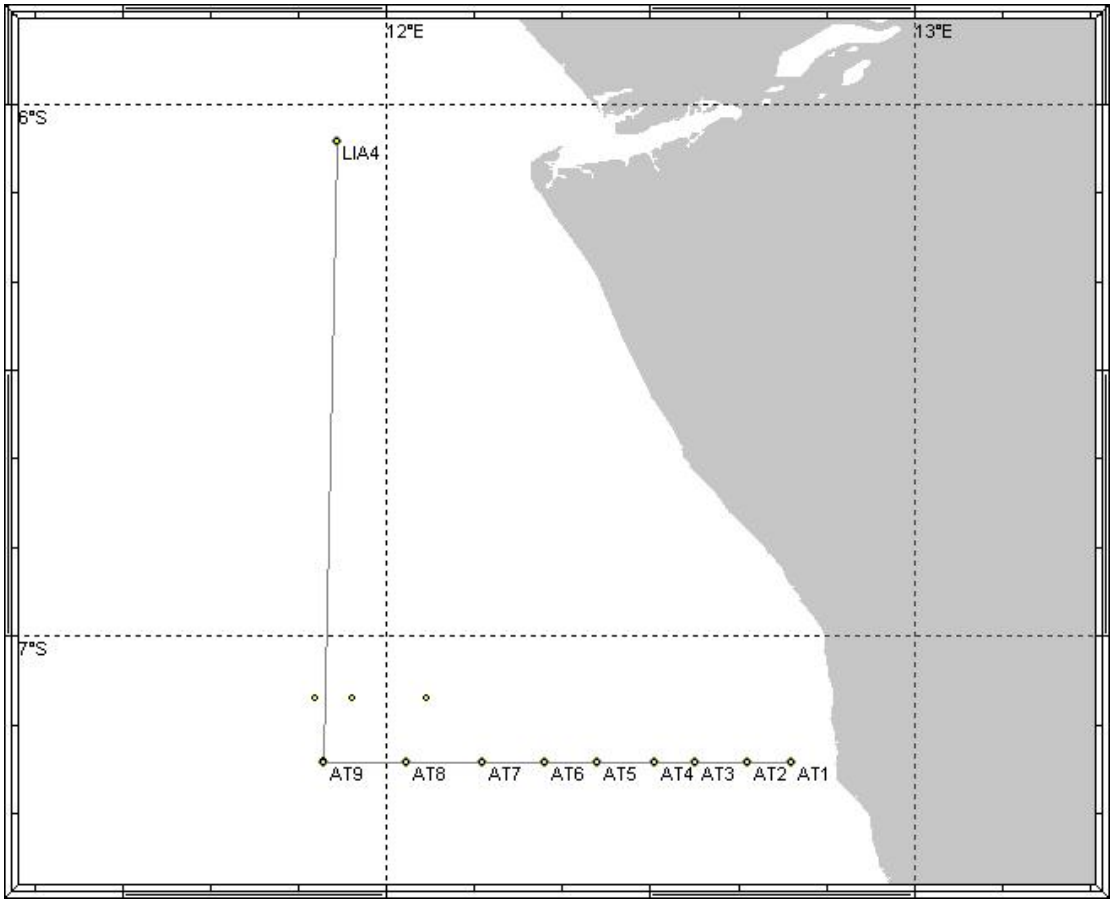

Figure 3.10: Transect off Ambriz during S-ward part of Leg 9: stations AT1 – AT 9.

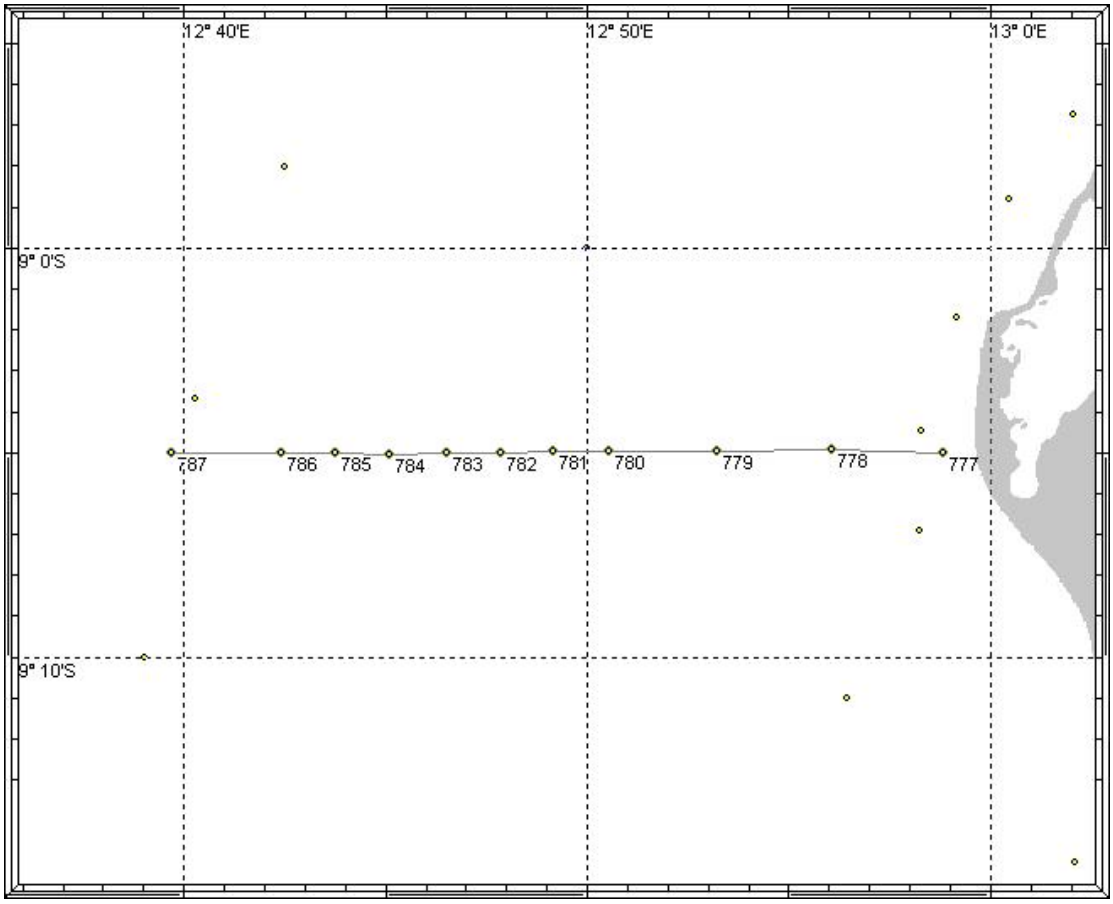

Figure 3.11: Transect off Pta Palmeirinhas : stations 777 – 787.

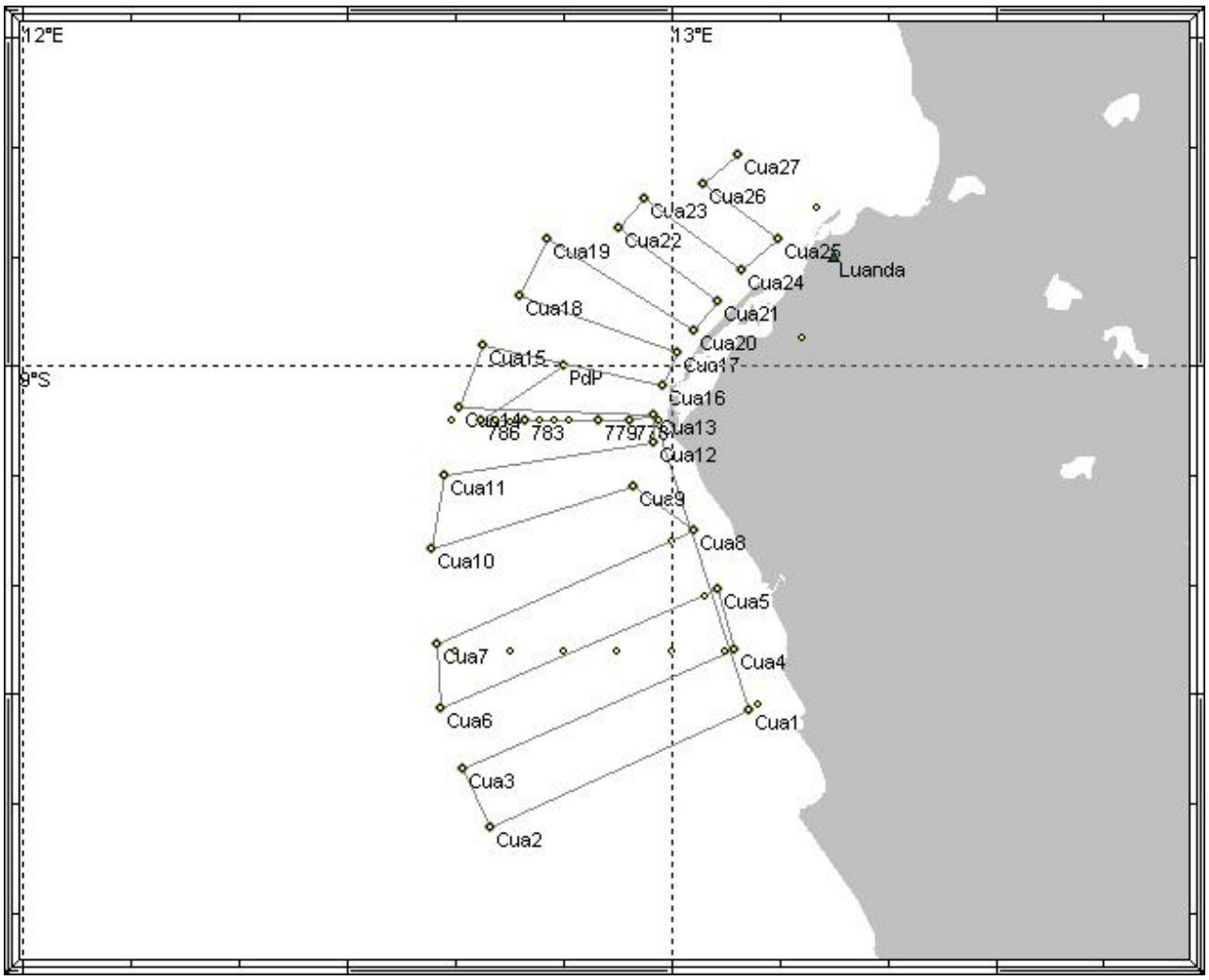

Figure 3.12 : Transects offshore of Mouth of Kwanza River.

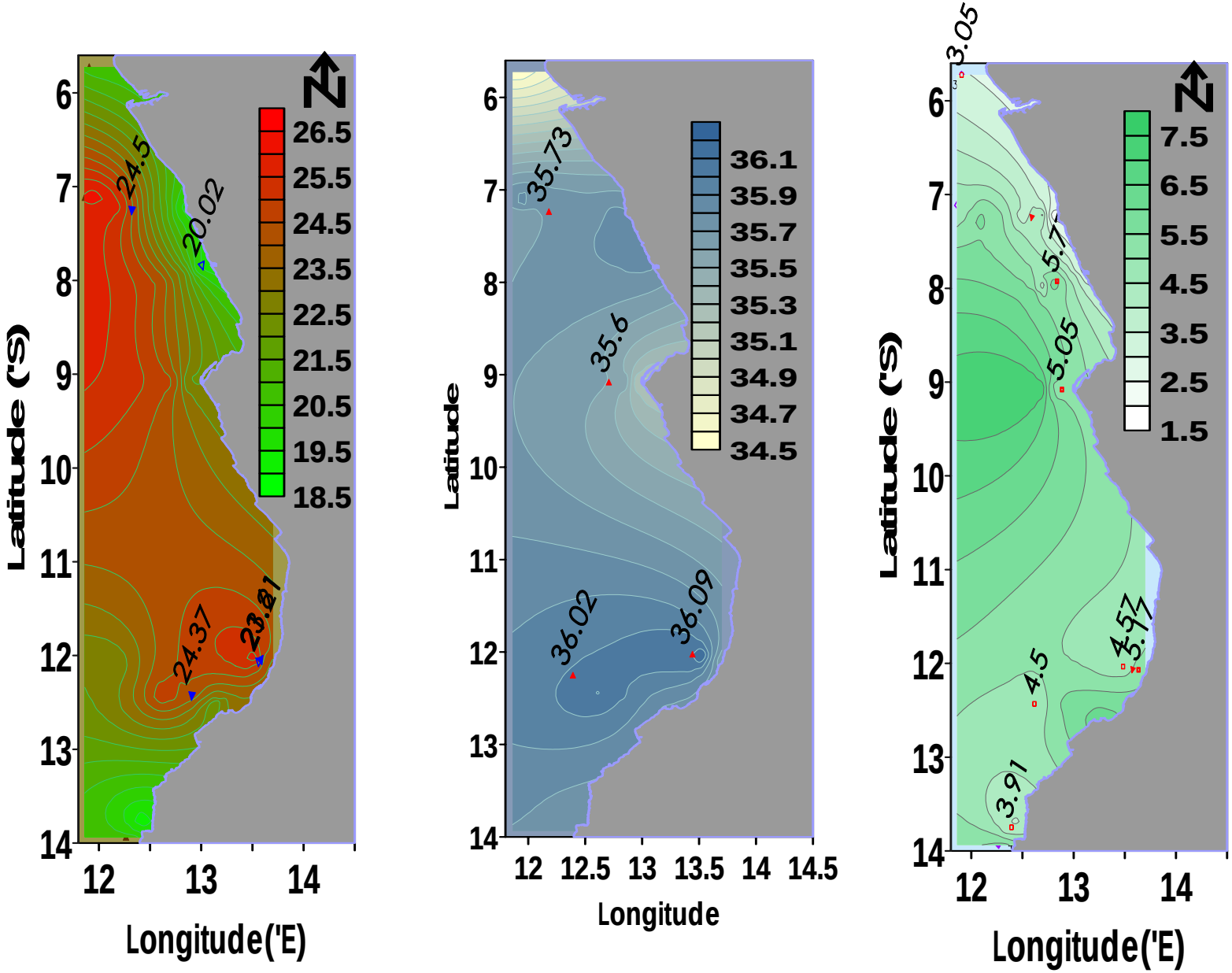

Figure 3. 13: Montage of surface temperature, salinity and oxygen distribution (J. Kongo)

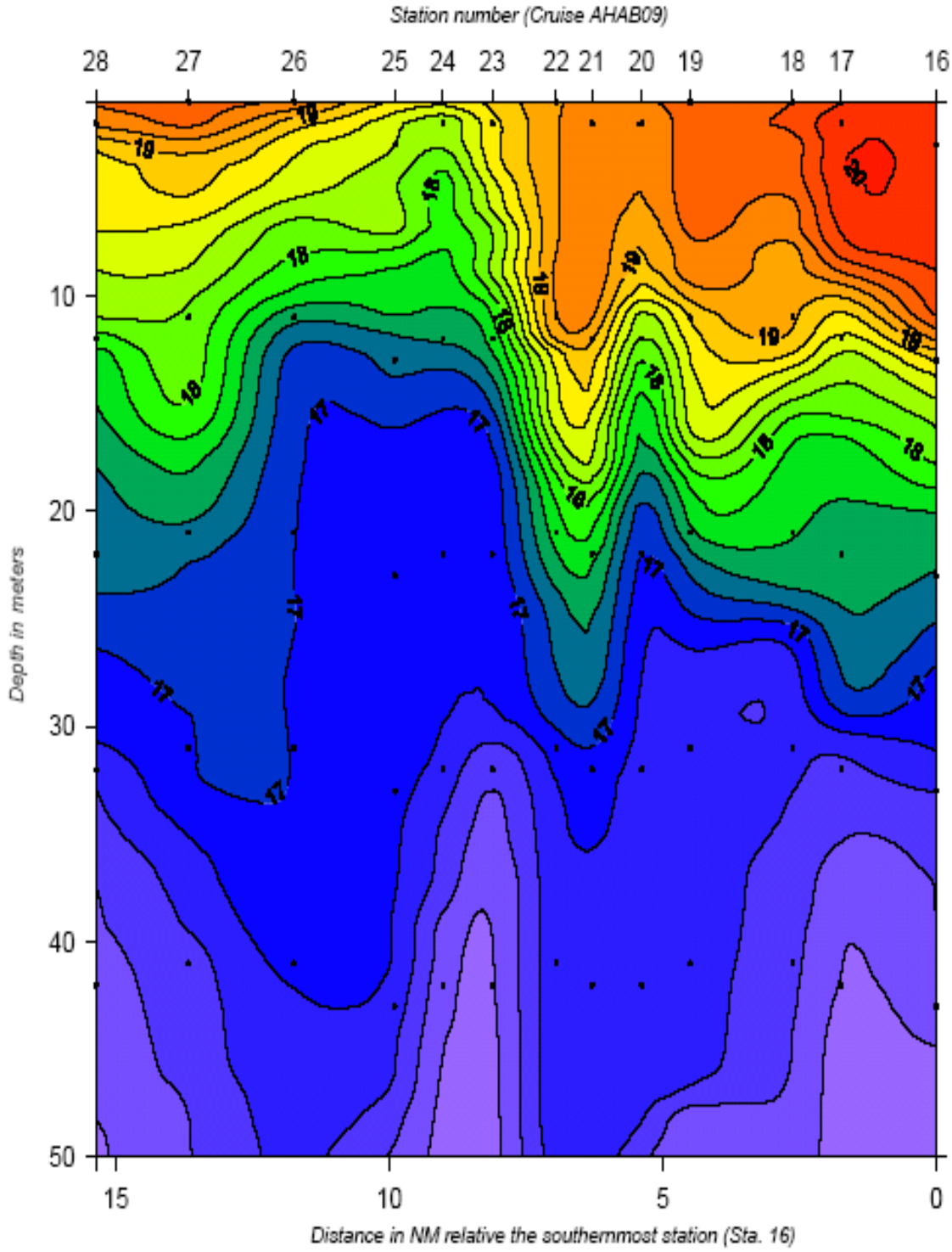

Figure 4.1 : Vertical temperature section off Cabo Santa Marta, 21 May 2004, Transect 16 – 28 = S960-S971 (see Fig. 3.3). To convert consecutive station numbers to grid station numbers use Table 2.

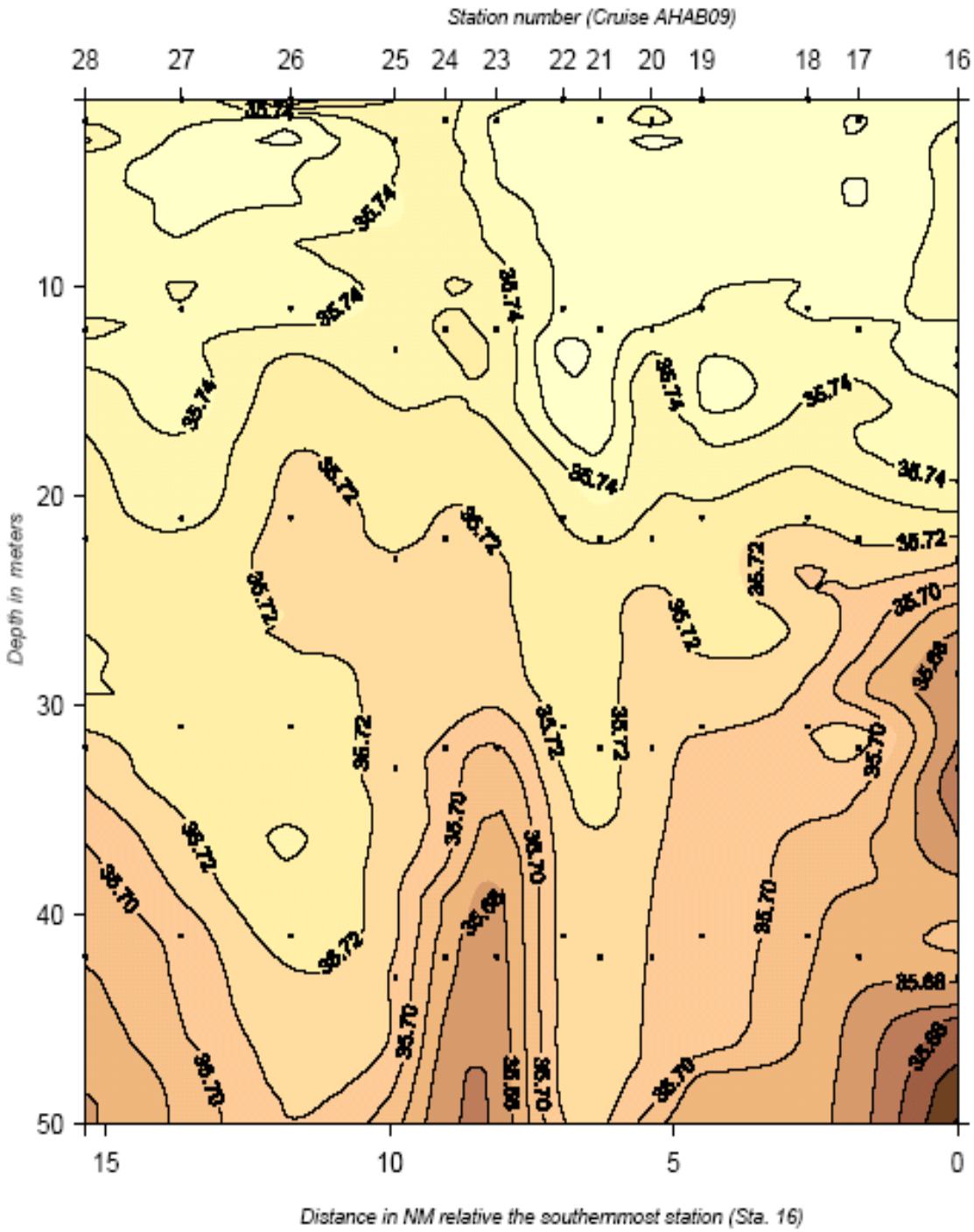

Figure 4.2 : Vertical salinity section off Cabo Santa Marta, 21 May 2004, Transect 16 – 28 = S960-S971 (see Fig. 3.3). To convert consecutive station numbers to grid station numbers use Table 2.

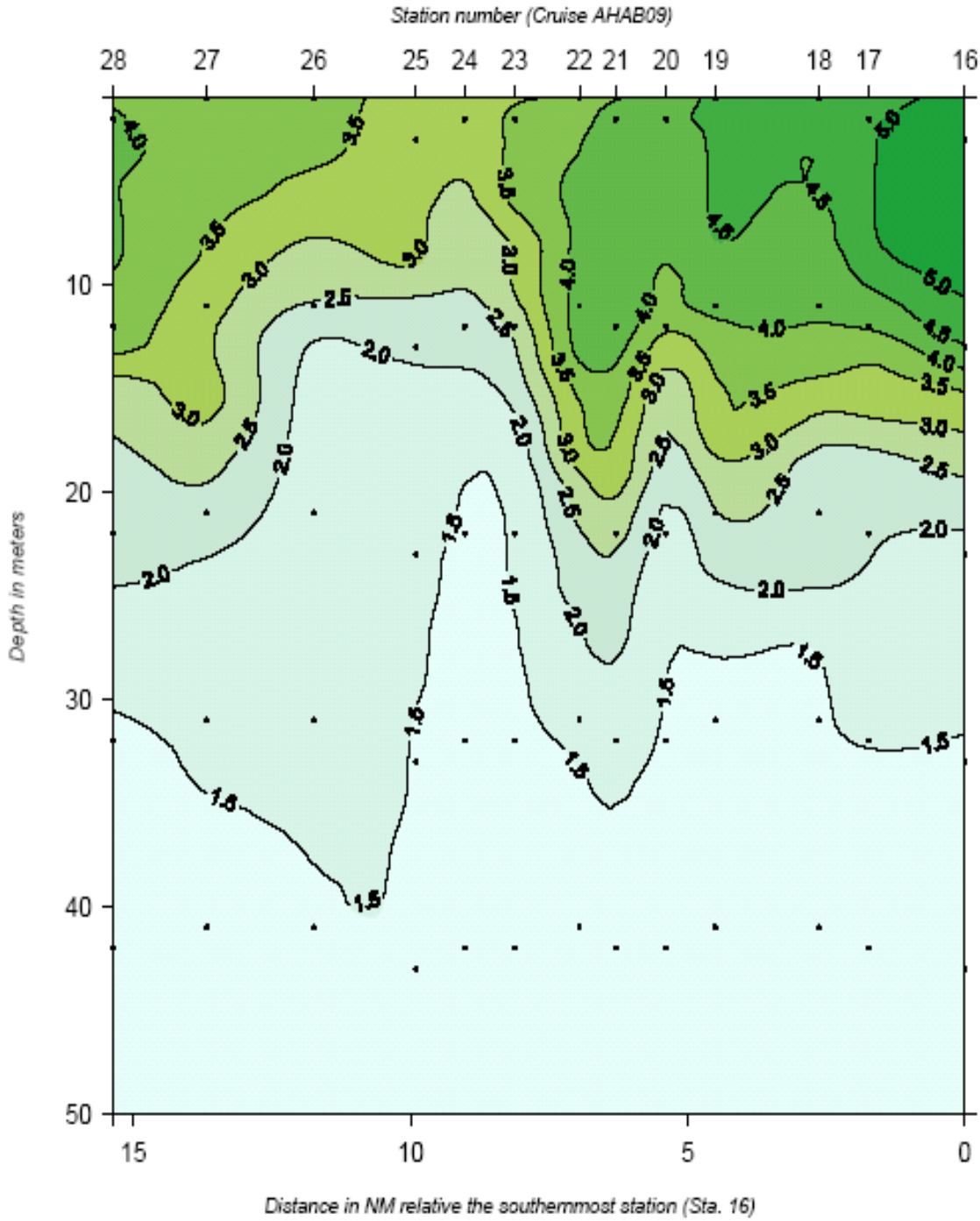

Figure 4.3 : Vertical oxygen section off Cabo Santa Marta, 21 May 2004, Transect 16 – 28 = S960-S971 (see Fig. 3.3). To convert consecutive station Numbers to grid station numbers use Table 2.

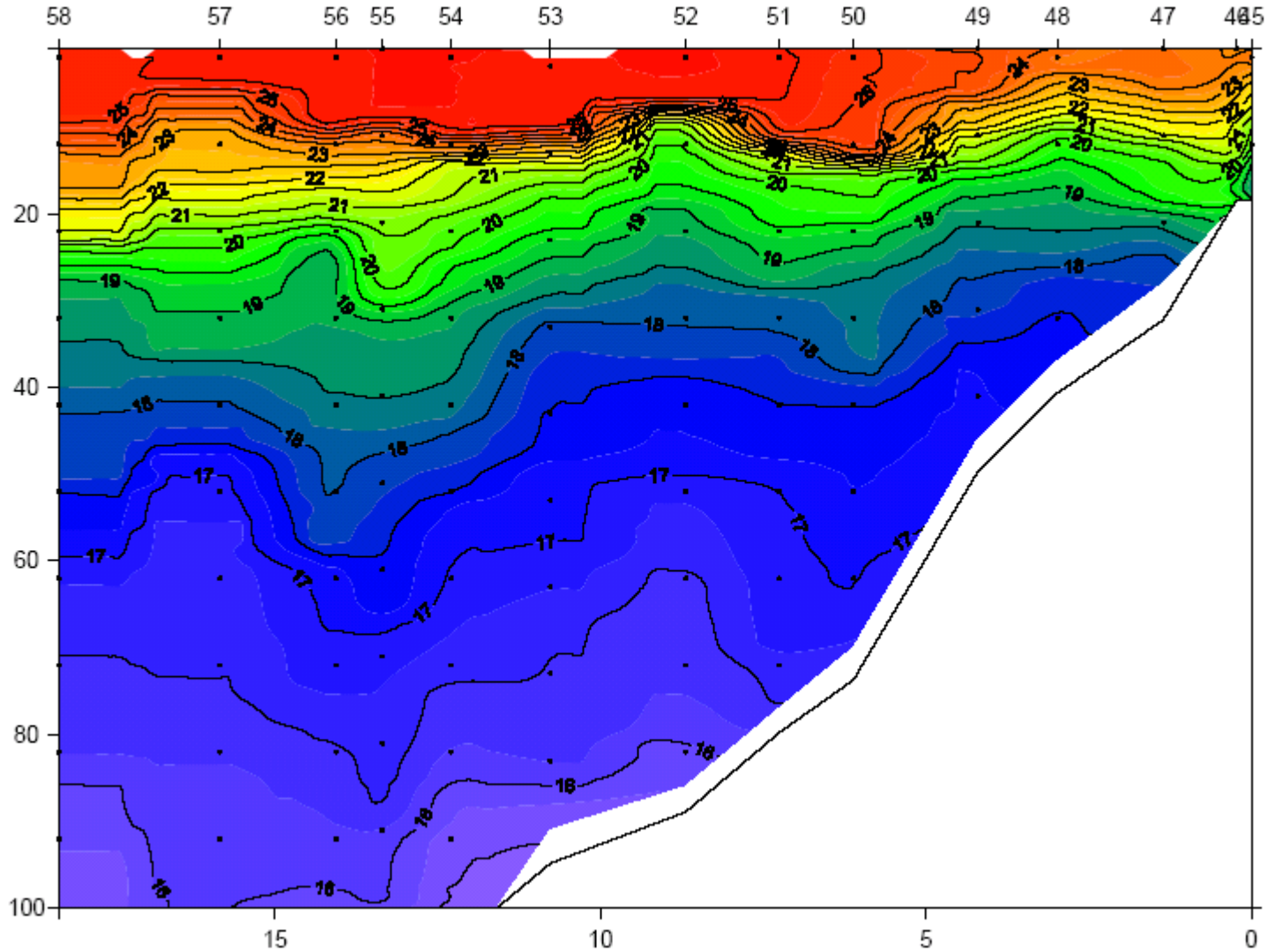

Figure 5.1: Vertical temperature section off Pta Egito, 23 May 2004.
Stations 45 – 58 = Transect 56-44 (see Fig. 3.6 and Table 2)

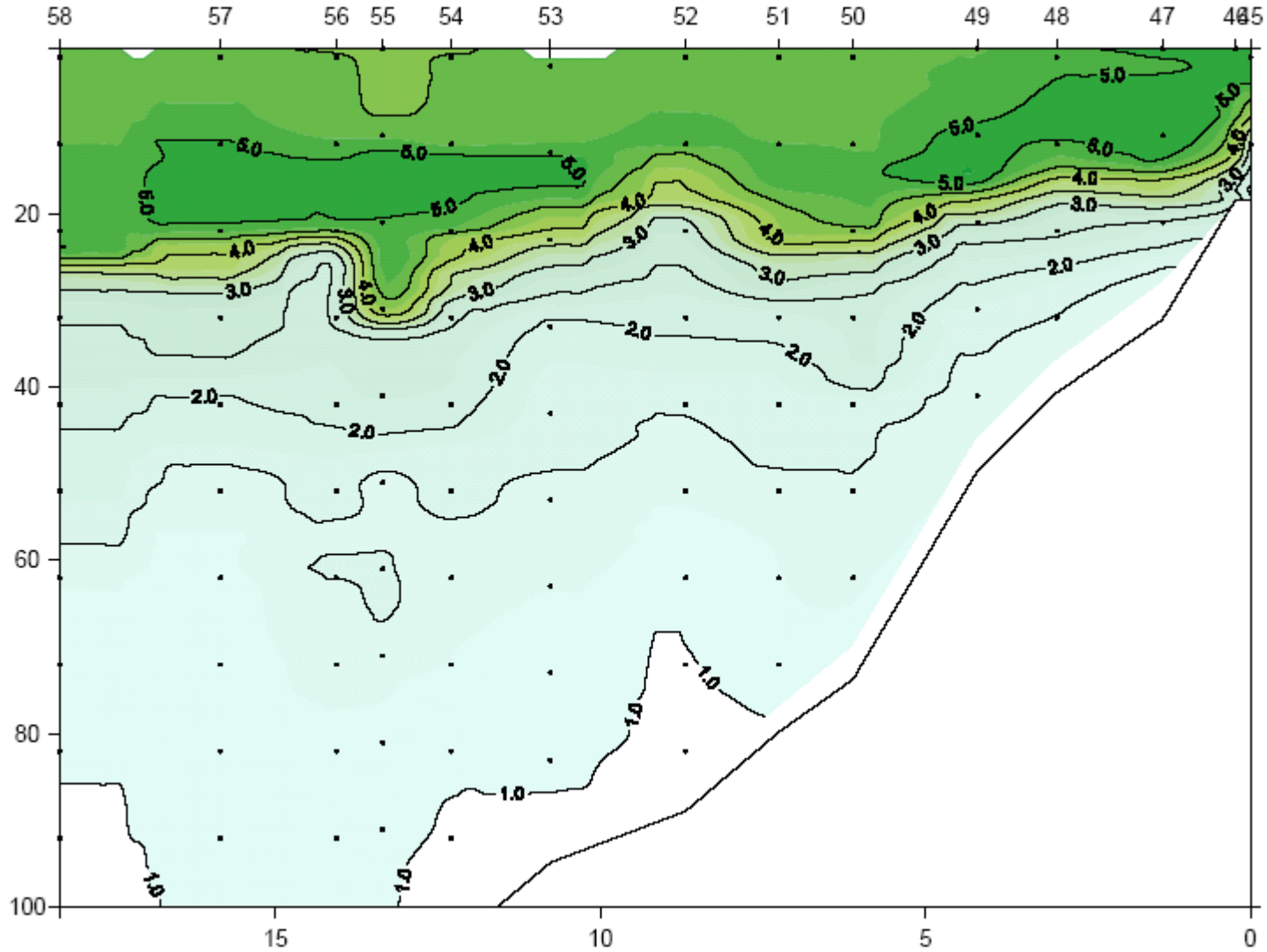

Figure 5.2: Vertical oxygen section off Pta Egito, 23 May 2004.
Stations 45 – 58 = transect 56-44 (see Fig. 3.6 and Table 2)

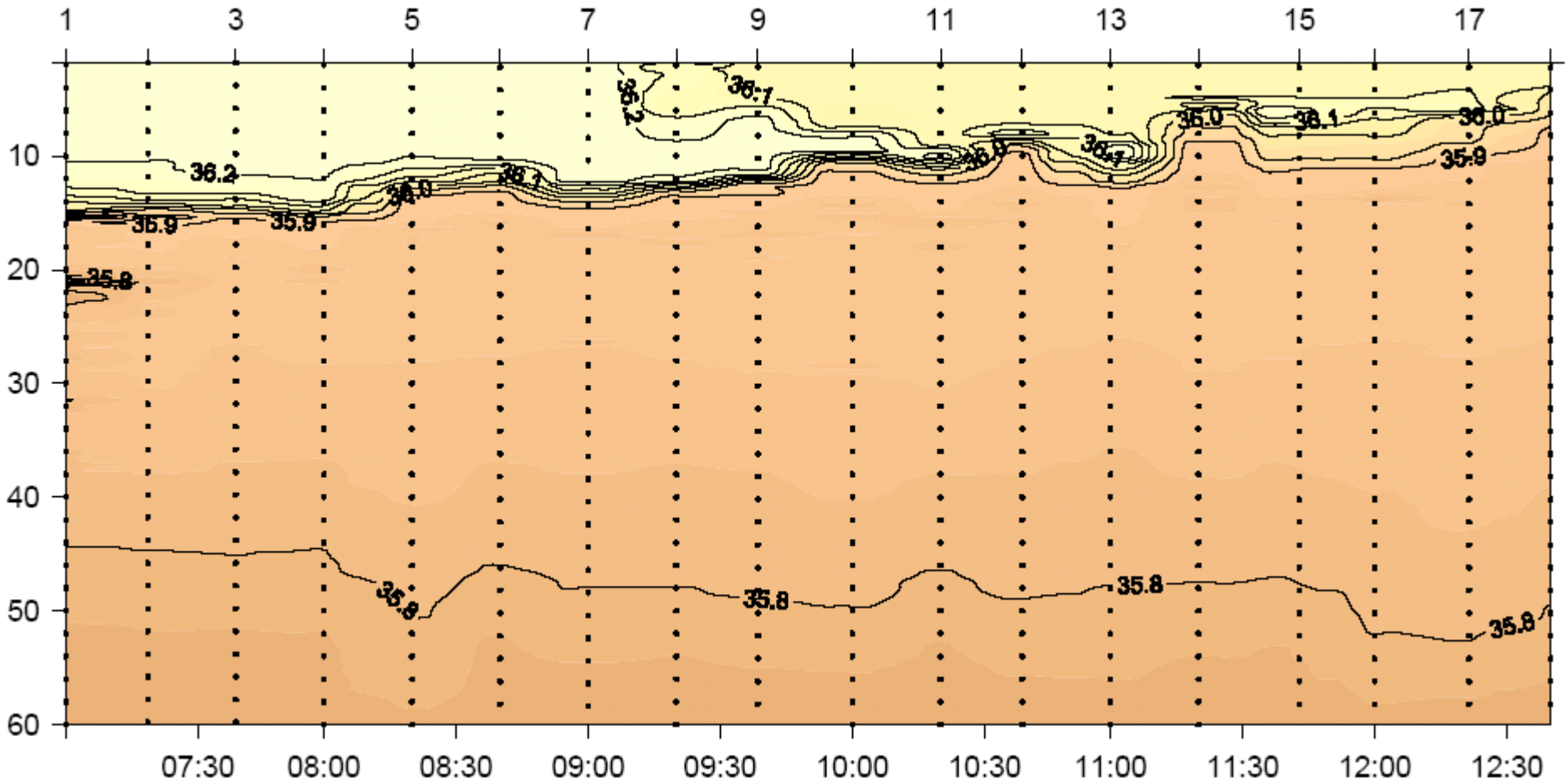

Figure 6: Salinity time series showing changes due to passage of cross-shelf front between 9 and 10am. Data from CTD casts repeated at 20 minute intervals on 24 May 2004 at consecutive ship station number 59.

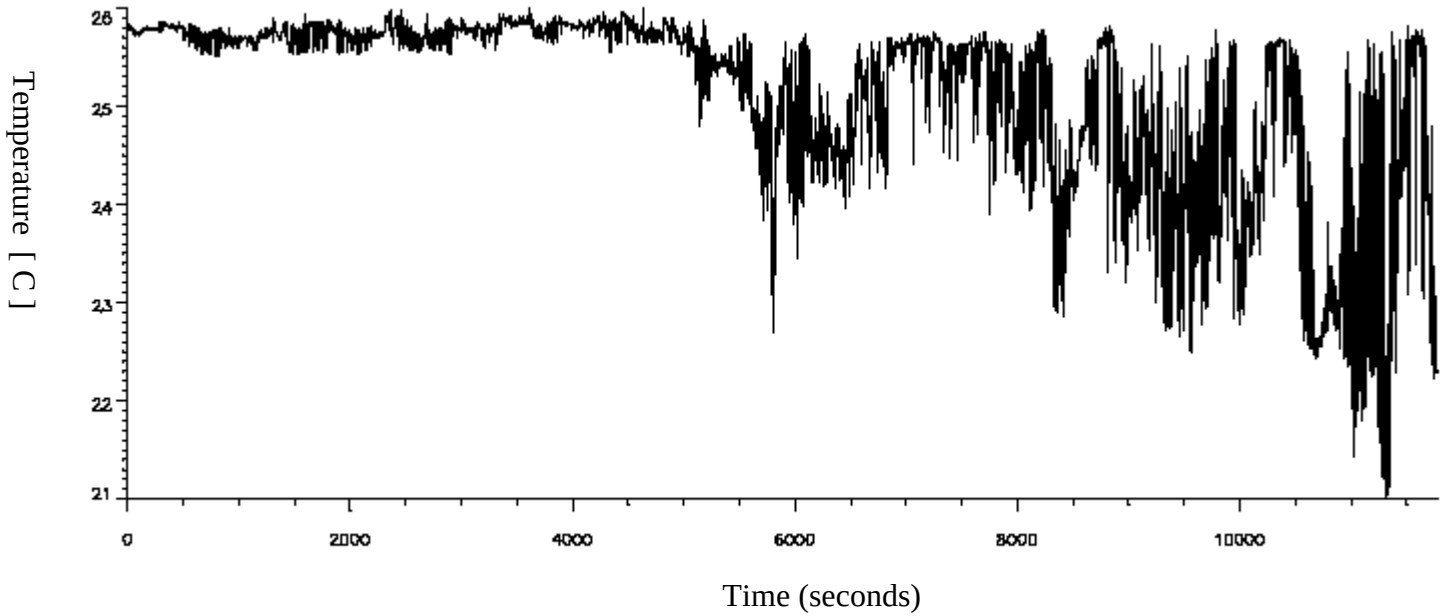

Figure 7: Temperature record observed from a second CTD deployed at 4m at ship's station 60 during passage of the cross-shelf front. (M. Ostrowski)

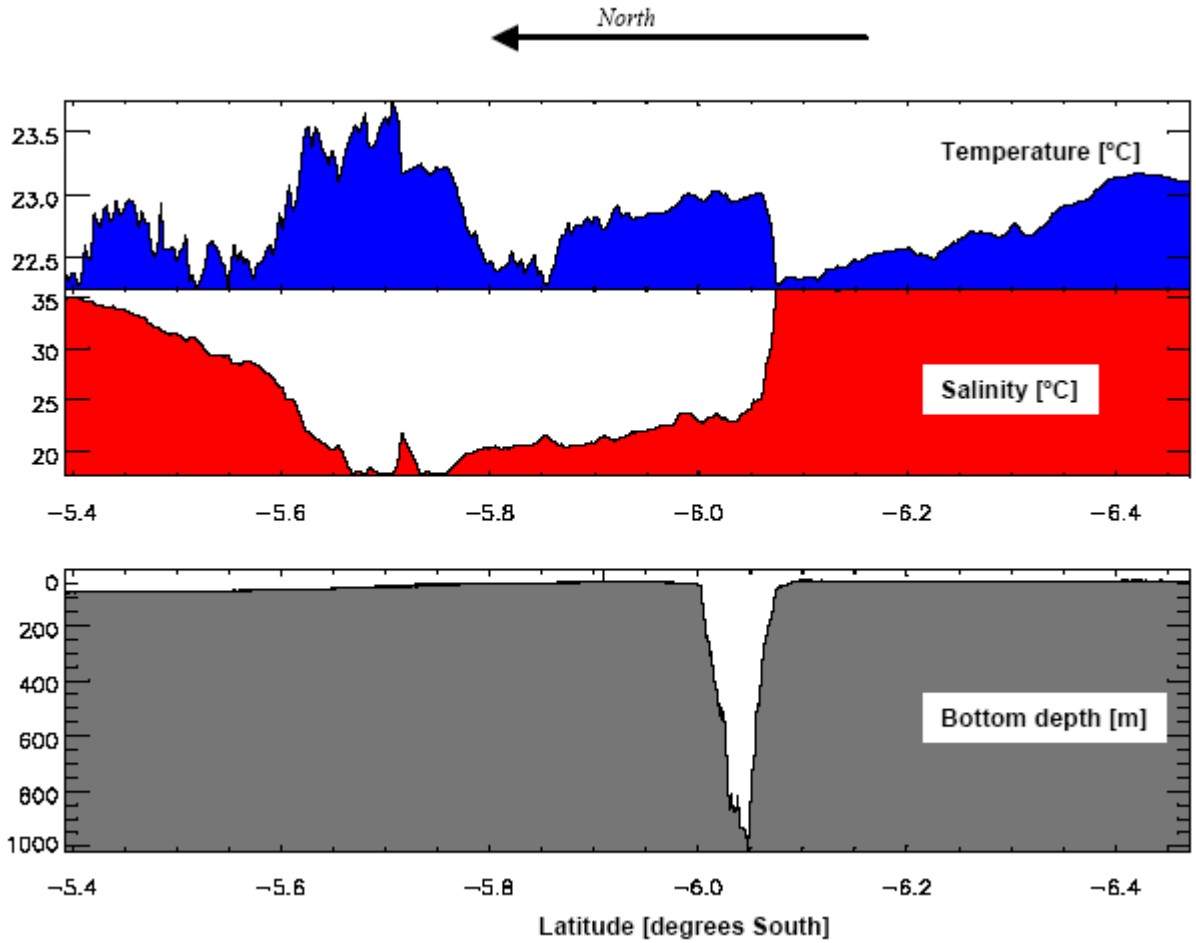

Figure 8: Distribution of temperature and salinity in the upper 20m of the water column along a N-S transect across the Congo river canyon. T, S data observed from *R/V Alexander v. Humboldt* on 27 May 2004. The bottom panel represents the bottom topography recorded along nearly the same transect by *R/V Dr. F. Nansen* during 1995. (M. Ostrowski)

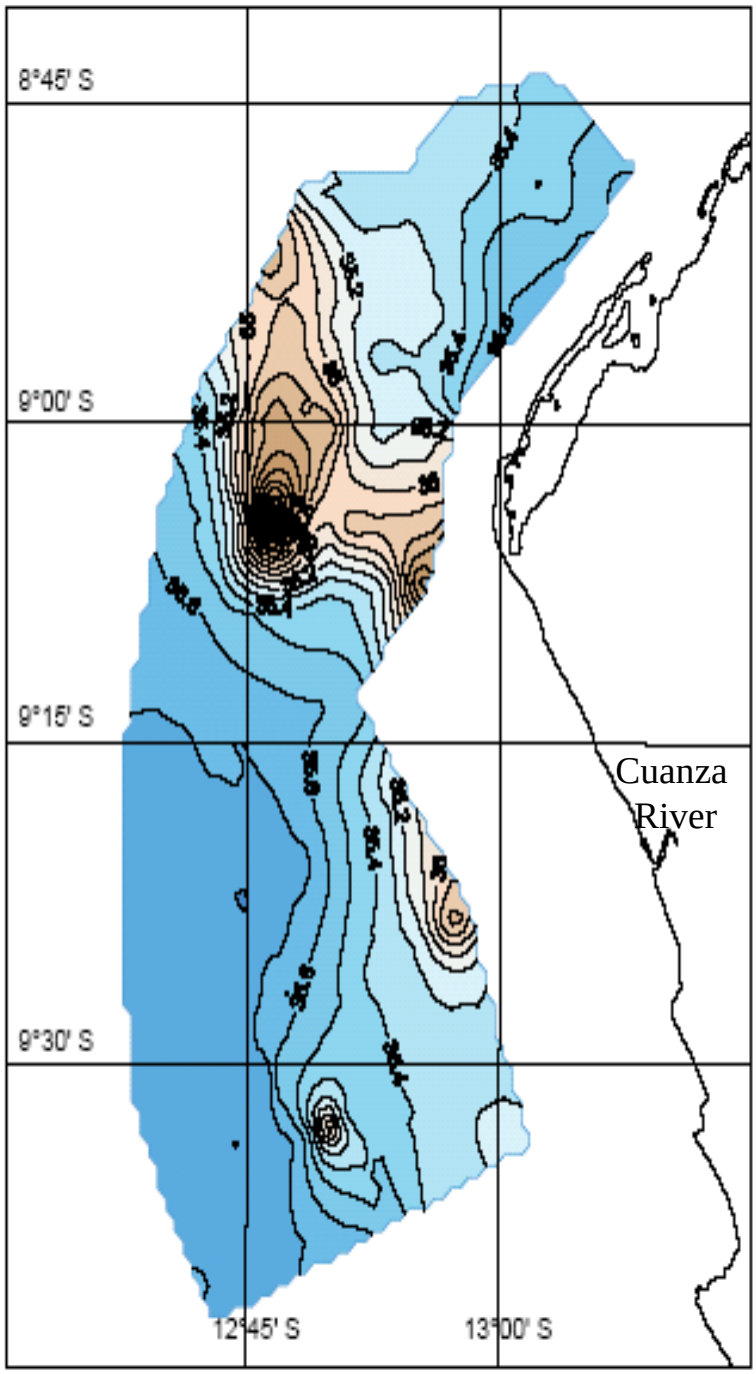

Figure 9: Low surface salinity tongue marking distribution
Of the northern plume of the Cuanza River,
30 – 31 May 2004.

Table 1. List of the hot-spot regions selected for the special studies during Leg 9.

Region name	Goals	Documents	Description
Cabo Santa Marta	Tropical-subtropical boundary at the coast	Figure2.pdf Figs.3.1-3.4.doc Figs. 4.1 – 4.3.pdf	Located at the coastal boundary between the tropical and sub-tropical domains in a deep incision of shelf topography
Shelf off Lobito	Vertical and horizontal stratification, seasonality, dynamics of pycnocline on the central Angola shelf.	Figs. 3.5 – 3.6.doc Figure5.1.pdf Figure5.2.pdf Figure6.pdf Figure7.pdf	A location typical of the coastal processes between Luanda in the north and Benguela in the south. Tropical warm waters reaching the coast during summer and a shallow thermocline underplayed with nutrient-rich oceanic water below a 30 meters in winter.
The Congo River outflow	Main direction of the Congo River Plume	Figure3.9.doc Figure8.pdf	The River Congo through its canyon discharges about 4 million m^3 fresh water a day, through a plume cutting the shelf between Angola proper and Cabinda.
Shelf off Ambriz	horizontal stratification, seasonality for the northern Angola shelf.	Figs. 3.8 – 3.10.doc	Representative of the shelf located to the north of Luanda, extending to the border with the Republic of the Congo. Summer-winter variability in the tropical ocean modified by seasonal fresh water intrusions.
The Cuanza River	Northward range of the Kwanza River plume. Dynamics of internal waves.	Figs. 3.7, 3.11-3.12.doc Figure9.pdf	The largest river of Central Angola; affects the surface layer of the coastal ocean, impacting the fish distribution between Luanda in the north and Pta do Morro in the south.

	A	B	C	D	E	F	G	H	I	J
1		Consecutive		Grid						
2		Stn Nr	StatDB	Stn Nr	UTC	Date	Latitude [deg]	Longitude [deg]	Sounding	Remarks
3	Stn Beg	'0002	AHAB9_4	'BN003	15:58:47	20-May-04	13 56.1130S	012 24.1130E	0022.53	
4	Stn End	'0002	AHAB9_4	'BN003	16:00:34	20-May-04	13 56.0810S	012 23.8950E	0026.61	
5	Stn Beg	'0003	AHAB9_4	'BN004	16:07:03	20-May-04	13 56.0860S	012 23.5250E	0038.90	
6	Stn End	'0003	AHAB9_4	'BN004	16:20:07	20-May-04	13 56.4110S	012 23.3810E	0034.34	
7	Stn Beg	'0004	AHAB9_4	'BN001	16:34:54	20-May-04	13 57.6970S	012 21.8800E	0054.06	Benthos to 16:44; Multicorer 16:44 to 16:55
8	Stn End	'0004	AHAB9_4	'BN001	17:04:25	20-May-04	13 57.8890S	012 21.7230E	0059.91	Benthos Grab from 16:57
9	Stn Beg	'0005	AHAB9_4	'BN005	17:45:39	20-May-04	13 56.0300S	012 22.2450E	0105.86	
10	Stn Beg	'0006	AHAB9_6	'968	18:44:20	20-May-04	13 56.0850S	012 24.7130E	0018.32	
11	Stn End	'0006	AHAB9_6	'968	18:54:32	20-May-04	13 56.1420S	012 24.7760E	0018.20	
12	Stn Beg	'0007	AHAB9_6	'967	19:10:32	20-May-04	13 56.0800S	012 23.8660E	0026.43	
13	Stn End	'0007	AHAB9_6	'967	19:22:08	20-May-04	13 56.0450S	012 23.8260E	0027.56	
14	Stn Beg	'0008	AHAB9_6	'966	19:40:43	20-May-04	13 56.0640S	012 22.1500E	0114.43	
15	Stn End	'0008	AHAB9_6	'966	19:56:22	20-May-04	13 56.0360S	012 22.1910E	0108.91	
16	Stn Beg	'0009	AHAB9_6	'965	20:12:11	20-May-04	13 56.0990S	012 21.9920E	0067.55	
17	Stn End	'0009	AHAB9_6	'965	20:30:02	20-May-04	13 56.0670S	012 21.5560E	0077.08	
18	Stn Beg	'0010	AHAB9_6	'964	20:31:54	20-May-04	13 56.0730S	012 21.5170E	0077.07	
19	Stn End	'0010	AHAB9_6	'964	20:47:07	20-May-04	13 56.0200S	012 21.4870E	0077.17	
20	Stn Beg	'0011	AHAB9_6	'963	21:12:50	20-May-04	13 56.1260S	012 19.2750E	0116.14	
21	Stn End	'0011	AHAB9_6	'963	21:30:04	20-May-04	13 56.1530S	012 19.2990E	0116.12	
22	Stn Beg	'0012	AHAB9_6	'962	21:51:45	20-May-04	13 56.0050S	012 17.0480E	0150.91	
23	Stn End	'0012	AHAB9_6	'962	22:14:51	20-May-04	13 55.9310S	012 16.8990E	0153.03	
24	Stn Beg	'0013	AHAB9_6	'961	22:29:12	20-May-04	13 56.0790S	012 15.8490E	0306.03	
25	Stn End	'0013	AHAB9_6	'961	23:00:54	20-May-04	13 56.0790S	012 15.9780E	0275.92	
26	Stn Beg	'0014	AHAB9_6	'960	23:21:30	20-May-04	13 56.0060S	012 14.8850E	0362.55	
27	Stn End	'0014	AHAB9_6	'960	00:09:48	21-May-04	13 55.5640S	012 14.7860E	0560.50	
28	Stn Beg	'0015	AHAB9_6	'959	00:28:29	21-May-04	13 56.0420S	012 13.8900E	0471.00	
29	Stn End	'0015	AHAB9_6	'959	01:49:35	21-May-04	13 56.2800S	012 14.4910E	0316.56	Multinets 200-0 m, collecting zoo- and phytoplankton
30	Stn Beg	'0016	AHAB9_7	'S960	02:25:00	21-May-04	13 55.9570S	012 18.0450E	0133.74	
31	Stn End	'0016	AHAB9_7	'S960	02:46:34	21-May-04	13 56.0250S	012 18.0830E	0131.60	
32	Stn Beg	'0017	AHAB9_7	'S961	03:11:23	21-May-04	13 54.6850S	012 19.2810E	0128.71	
33	Stn End	'0017	AHAB9_7	'S961	03:28:10	21-May-04	13 54.6170S	012 19.2440E	0130.71	
34	Stn Beg	'0018	AHAB9_7	'S962	03:40:27	21-May-04	13 54.0500S	012 19.9390E	0126.73	
35	Stn End	'0018	AHAB9_7	'S962	03:57:31	21-May-04	13 54.0680S	012 19.9360E	0126.68	
36	Stn Beg	'0019	AHAB9_7	'S963	04:17:37	21-May-04	13 52.7630S	012 21.2680E	0631.80	
37	Stn End	'0019	AHAB9_7	'S963	05:00:40	21-May-04	13 52.7040S	012 21.4490E	0696.90	

	A	B	C	D	E	F	G	H	I	J
38	Stn Beg	'0020	AHAB9_7	'S964	05:18:11	21-May-04	13 52.1250S	012 21.9280E	0150.81	
39	Stn End	'0020	AHAB9_7	'S964	05:54:33	21-May-04	13 52.1090S	012 22.0760E	0200.00	
40	Stn Beg	'0021	AHAB9_7	'S965	06:10:38	21-May-04	13 51.4530S	012 22.5380E	0397.50	
41	Stn End	'0021	AHAB9_7	'S965	06:36:51	21-May-04	13 51.3630S	012 22.5500E	0404.90	
42	Stn Beg	'0022	AHAB9_7	'S965b	06:55:49	21-May-04	13 50.9390S	012 22.9890E	0275.80	
43	Stn End	'0022	AHAB9_7	'S965b	07:22:47	21-May-04	13 50.8970S	012 23.0140E	0273.50	
44	Stn Beg	'0023	AHAB9_7	'S966	07:41:20	21-May-04	13 50.1620S	012 23.8760E	0507.40	
45	Stn End	'0023	AHAB9_7	'S966	08:16:14	21-May-04	13 50.0200S	012 23.8230E	0576.40	
46	Stn Beg	'0024	AHAB9_7	'S967	08:39:49	21-May-04	13 49.4950S	012 24.5110E	0891.90	
47	Stn End	'0024	AHAB9_7	'S967	09:26:22	21-May-04	13 49.3870S	012 24.6790E	0976.00	
48	Stn Beg	'0025	AHAB9_7	'S968	09:46:44	21-May-04	13 48.8770S	012 25.1340E	1239.70	
49	Stn End	'0025	AHAB9_7	'S968	10:46:04	21-May-04	13 48.6130S	012 25.4430E	1197.20	
50	Stn Beg	'0026	AHAB9_7	'S969	11:03:17	21-May-04	13 47.5540S	012 26.3870E	0987.60	
51	Stn End	'0026	AHAB9_7	'S969	11:49:46	21-May-04	13 47.3140S	012 26.6390E	0829.30	
52	Stn Beg	'0027	AHAB9_7	'S970	12:11:51	21-May-04	13 46.2190S	012 27.7280E	0000.00	
53	Stn End	'0027	AHAB9_7	'S970	12:36:40	21-May-04	13 45.9960S	012 28.0320E	0233.00	
54	Stn Beg	'0028	AHAB9_7	'S971	13:01:03	21-May-04	13 44.9440S	012 29.0300E	0116.20	
55	Stn End	'0028	AHAB9_7	'S971	14:15:56	21-May-04	13 45.7920S	012 28.0030E	0214.80	Bongo from100m to collect zooplankton
56	Stn Beg	'0029	AHAB9_7	'979	16:26:55	21-May-04	13 44.9370S	012 29.6300E	0107.30	oxygen,chl, nutrients, phytoplankton
57	Stn End	'0029	AHAB9_7	'979	16:41:15	21-May-04	13 44.7750S	012 29.6840E	0106.10	oxygen,chl, nutrients, phytoplankton
58	Stn Beg	'0030	AHAB9_7	'985	18:49:13	21-May-04	13 49.7320S	012 26.7590E	0801.40	
59	Stn End	'0030	AHAB9_7	'985	19:21:16	21-May-04	13 49.5000S	012 27.0440E	0846.20	
60	Stn Beg	'0031	AHAB9_7	'965	21:47:01	21-May-04	13 56.1310S	012 21.9810E	0067.30	
61	Stn End	'0031	AHAB9_7	'965	22:02:18	21-May-04	13 56.0680S	012 22.0420E	0075.10	
62	Stn Beg	'0032	AHAB9_7	'961	23:01:36	21-May-04	13 56.0900S	012 15.9010E	0291.70	
63	Stn End	'0032	AHAB9_7	'961	23:34:59	21-May-04	13 55.9140S	012 15.9620E	0295.50	
64	Stn Beg	'0033	AHAB9_7	'983	00:41:44	22-May-04	13 48.4540S	012 23.4380E	0000.00	
65	Stn End	'0033	AHAB9_7	'983	01:19:56	22-May-04	13 47.9210S	012 23.5760E	1022.90	
66	Stn Beg	'0034	AHAB9_7	'973	02:03:08	22-May-04	13 44.9620S	012 23.6090E	0616.10	
67	Stn End	'0034	AHAB9_7	'973	02:36:07	22-May-04	13 44.6090S	012 23.7040E	0493.10	
68	Stn Beg	'0035	AHAB9_8	'900	03:13:37	22-May-04	13 46.9160S	012 24.0860E	0609.20	
69	Stn End	'0035	AHAB9_8	'900	03:46:11	22-May-04	13 46.6020S	012 24.2510E	0571.50	
70	Stn Beg	'0036	AHAB9_8	'BF1	13:30:31	22-May-04	12 35.5190S	013 13.5050E	0050.40	
71	Stn End	'0036	AHAB9_8	'BF1	14:09:51	22-May-04	12 35.4050S	013 13.5350E	0060.00	Multinets 13:50
72	Stn Beg	'0037	AHAB9_8	'BF2	14:53:08	22-May-04	12 32.9650S	013 08.0310E	0683.40	
73	Stn End	'0037	AHAB9_8	'BF2	15:42:13	22-May-04	12 32.4290S	013 08.4530E	0773.30	Secchi, multinets
74	Stn Beg	'0038	AHAB9_8	'BF3	16:25:16	22-May-04	12 29.9720S	013 04.0440E	0962.30	

	A	B	C	D	E	F	G	H	I	J
75	Stn End	'0038	AHAB9_8	'BF3	17:05:14	22-May-04	12 29.3030S	013 04.1790E	1017.00	Secchi, multinets
76	Stn Beg	'0039	AHAB9_8	'BF4	18:12:55	22-May-04	12 24.9800S	012 55.0450E	1353.90	
77	EinsBeg	'0039	AHAB9_8	'BF4	19:03:36	22-May-04	12 24.4200S	012 55.0360E	1356.50	
78	Stn Beg	'0039	AHAB9_8	'BF4	19:03:40	22-May-04	12 24.4190S	012 55.0360E	1356.10	
79	Stn End	'0039	AHAB9_8	'BF4	19:48:18	22-May-04	12 24.4860S	012 54.3840E	1376.40	Multinet, vertical ; Bongo
80	Stn Beg	'0040	AHAB9_8	'BF5	20:50:12	22-May-04	12 20.0330S	012 46.0350E	1529.80	
81	Stn End	'0040	AHAB9_8	'BF5	21:20:26	22-May-04	12 19.8480S	012 46.1240E	1527.00	
82	Stn Beg	'0041	AHAB9_8	'BF6	22:31:16	22-May-04	12 25.9630S	012 37.0160E	1650.50	
83	Stn End	'0041	AHAB9_8	'BF6	23:12:17	22-May-04	12 25.8410S	012 36.9480E	1651.70	
84	Stn Beg	'0042	AHAB9_8	'BF7	00:58:24	23-May-04	12 15.0080S	012 23.5140E	1985.10	
85	Stn End	'0042	AHAB9_8	'BF7	01:34:36	23-May-04	12 14.8500S	012 23.5060E	1987.90	
86	Stn Beg	'0043	AHAB9_8	'BF8	03:21:34	23-May-04	12 05.0040S	012 10.0410E	2100.70	
87	Stn End	'0043	AHAB9_8	'BF8	04:29:23	23-May-04	12 04.5590S	012 10.5170E	2099.80	Multinets, 2 X CTD for low-nutrient surface water
88	Stn Beg	'0044	AHAB9_8	'BF8	04:29:34	23-May-04	12 04.5580S	012 10.5180E	2099.70	
89	Stn End	'0044	AHAB9_8	'BF8	04:58:45	23-May-04	12 04.3570S	012 10.7160E	2100.00	
90	Stn Beg	'0045	AHAB9_9	'56	13:01:42	23-May-04	12 05.2290S	013 42.0640E	0000.00	
91	Stn End	'0045	AHAB9_9	'56	16:11:01	23-May-04	12 05.6640S	013 41.7160E	0022.54	Grab, Hyball, MUC, dredge
92	Stn Beg	'0046	AHAB9_9	'56	16:58:51	23-May-04	12 05.1450S	013 42.0160E	0020.09	
93	Stn End	'0046	AHAB9_9	'56	17:14:21	23-May-04	12 05.0170S	013 42.0780E	0019.03	
94	Stn Beg	'0047	AHAB9_9	'55	17:34:22	23-May-04	12 04.8570S	013 40.8530E	0030.64	
95	Stn End	'0047	AHAB9_9	'55	17:51:52	23-May-04	12 04.7300S	013 40.9900E	0030.20	
96	Stn Beg	'0048	AHAB9_9	'54	18:28:15	23-May-04	12 04.2680S	013 39.2840E	0040.75	
97	Stn End	'0048	AHAB9_9	'54	18:28:20	23-May-04	12 04.2660S	013 39.2840E	0040.97	
98	Stn Beg	'0049	AHAB9_9	'53	18:46:17	23-May-04	12 04.1980S	013 38.0270E	0049.19	
99	Stn End	'0049	AHAB9_9	'53	18:58:48	23-May-04	12 04.0910S	013 38.1310E	0049.15	
100	Stn Beg	'0050	AHAB9_9	'52	19:29:22	23-May-04	12 03.8160S	013 36.0760E	0074.67	
101	Stn End	'0050	AHAB9_9	'52	19:46:52	23-May-04	12 03.8230S	013 36.1900E	0072.73	
102	Stn Beg	'0051	AHAB9_9	'51	20:40:34	23-May-04	12 03.3220S	013 35.0840E	0079.81	multinet, vertical
103	Stn End	'0051	AHAB9_9	'51	20:40:58	23-May-04	12 03.3160S	013 35.0820E	0079.92	multinet, vertical
104	Stn Beg	'0052	AHAB9_9	'50	21:04:23	23-May-04	12 03.1680S	013 33.5680E	0089.25	
105	Stn End	'0052	AHAB9_9	'50	21:25:17	23-May-04	12 03.2240S	013 33.5960E	0088.65	
106	Stn Beg	'0053	AHAB9_9	'49	21:49:29	23-May-04	12 02.6580S	013 31.5080E	0095.05	
107	Stn End	'0053	AHAB9_9	'49	22:11:21	23-May-04	12 02.5960S	013 31.6090E	0094.18	
108	Stn Beg	'0054	AHAB9_9	'48	22:29:41	23-May-04	12 02.2800S	013 29.9890E	0104.58	
109	Stn End	'0054	AHAB9_9	'48	22:51:21	23-May-04	12 02.2950S	013 30.0550E	0104.15	
110	Stn Beg	'0055	AHAB9_9	'47	23:12:54	23-May-04	12 02.0250S	013 28.9390E	0191.77	
111	Stn End	'0055	AHAB9_9	'47	23:38:00	23-May-04	12 01.9550S	013 29.0380E	0180.99	

	A	B	C	D	E	F	G	H	I	J
112	Stn Beg	'0056	AHAB9_9	'46	23:57:01	23-May-04	12 01.9070S	013 28.2650E	0304.80	
113	Stn End	'0056	AHAB9_9	'46	00:25:07	24-May-04	12 01.9200S	013 28.3720E	0287.93	
114	Stn Beg	'0057	AHAB9_9	'45	01:16:54	24-May-04	12 01.4880S	013 26.5300E	0396.90	
115	Stn End	'0057	AHAB9_9	'45	01:50:27	24-May-04	12 01.3480S	013 26.5660E	0394.70	
116	Stn Beg	'0058	AHAB9_9	'44	02:24:38	24-May-04	12 00.7750S	013 24.0680E	0494.30	
117	Stn End	'0058	AHAB9_9	'44	03:27:25	24-May-04	12 00.5420S	013 24.1710E	0487.30	Multinets
118	Stn Beg	'0060	AHAB9_9	'51	07:37:55	24-May-04	12 03.4850S	013 35.0540E	0080.18	60_1 continuous CTD at 4 m
119	Stn End	'0060	AHAB9_9	'51	13:23:01	24-May-04	12 03.5300S	013 35.0150E	0080.02	60_1 continuous CTD at 4 m
120	Stn Beg	'0061		'X_0061	14:08:07	24-May-04	12 02.8760S	013 32.5970E	0090.58	front1
121	Stn End	'0061		'X_0061	14:22:21	24-May-04	12 02.9330S	013 32.7210E	0090.09	front1
122	Stn Beg	'0062		'X_0062	14:39:52	24-May-04	12 03.1060S	013 33.5620E	0089.44	front2
123	Stn End	'0062		'X_0062	14:53:23	24-May-04	12 03.0740S	013 33.6430E	0089.02	front2
124	Stn Beg	'0063		'X_0063	15:05:52	24-May-04	12 03.3120S	013 34.3060E	0084.08	front3
125	Stn End	'0063		'X_0063	15:18:33	24-May-04	12 03.3050S	013 34.3760E	0083.64	front3
126	Stn Beg	'0064		'X_0064	15:37:25	24-May-04	12 03.6350S	013 35.5220E	0077.49	Front4
127	Stn End	'0064		'X_0064	16:48:52	24-May-04	12 03.3780S	013 35.6200E	0077.44	Front4; Pumped CTD
128	Stn Beg	'0065	AHAB9_10	'	07:53:39	25-May-04	09 25.9250S	012 59.9700E	0044.81	
129	StatBeg	'0065	AHAB9_10	'	07:55:19	25-May-04	09 25.9060S	012 59.9720E	0045.04	
130	Stn Beg	'0065	AHAB9_10	'CL2	08:00:18	25-May-04	09 25.8670S	013 00.0070E	0044.38	
131	Stn End	'0065	AHAB9_10	'CL2	08:33:54	25-May-04	09 25.9920S	012 59.9230E	0045.74	Grab
132	Stn Beg	'0066	AHAB9_10	'	08:35:06	25-May-04	09 25.9970S	012 59.9030E	0045.81	
133	Stn End	'0066	AHAB9_10	'CL7	10:41:34	25-May-04	09 28.1450S	013 05.4220E	0023.58	3 X Grab, MUC
134	Stn Beg	'0067	AHAB9_10	'CL1	11:08:34	25-May-04	09 25.9320S	013 04.9850E	0021.23	CTD, grab, MC, Hyball, Dredge
135	Stn End	'0067	AHAB9_10	'CL1	13:19:56	25-May-04	09 26.5580S	013 04.2790E	0024.80	CTD, grab, MC, Hyball, Dredge
136	Stn Beg	'0068	AHAB9_10	'CL8	14:02:33	25-May-04	09 20.9700S	013 01.4330E	0023.44	
137	Stn End	'0068	AHAB9_10	'CL8	14:31:47	25-May-04	09 21.3120S	013 01.4190E	0024.24	
138	Stn Beg	'0069	AHAB9_10	'CL2	15:06:23	25-May-04	09 25.9750S	012 59.9810E	0044.97	
139	Stn End	'0069	AHAB9_10	'CL2	15:21:49	25-May-04	09 26.0440S	012 59.7100E	0046.07	
140	Stn Beg	'0070	AHAB9_10	'CL6	16:00:26	25-May-04	09 26.0220S	012 54.9680E	0073.60	
141	Stn End	'0070	AHAB9_10	'CL6	17:55:12	25-May-04	09 26.0340S	012 54.3380E	0079.71	
142	Stn Beg	'0071	AHAB9_10	'CL5	18:22:39	25-May-04	09 26.0750S	012 50.0520E	0102.32	
143	Stn End	'0071	AHAB9_10	'CL5	19:16:39	25-May-04	09 26.2080S	012 49.9720E	0103.21	
144	Stn Beg	'0072	AHAB9_10	'CL4	19:49:13	25-May-04	09 26.1330S	012 45.0230E	0143.29	
145	Stn End	'0072	AHAB9_10	'CL4	20:37:57	25-May-04	09 26.5460S	012 44.6760E	0144.99	
146	Stn Beg	'0073	AHAB9_11	'ADS1	09:39:44	26-May-04	07 06.9160S	011 51.8340E	0491.80	
147	Stn End	'0073	AHAB9_11	'ADS1	11:10:40	26-May-04	07 05.8330S	011 50.8220E	0506.30	
148	Stn Beg	'0074	AHAB9_11	'ADS2	12:11:41	26-May-04	07 06.8840S	011 58.3270E	0237.00	

	A	B	C	D	E	F	G	H	I	J
149	Stn End	'0074	AHAB9_11	'ADS2	13:42:38	26-May-04	07 06.7860S	012 00.7710E	0175.70	multinet,bongo
150	Stn Beg	'0075	AHAB9_11	'ADS3	14:13:06	26-May-04	07 06.9130S	012 04.4530E	0126.30	
151	Stn End	'0075	AHAB9_11	'ADS3	15:03:12	26-May-04	07 06.1360S	012 04.1880E	0125.90	CTD, Multinet
152	Stn Beg	'0076		'X_0076	16:24:36	26-May-04	07 09.1090S	012 16.5210E	0114.20	ADS_4; near Oilfield
153	Stn End	'0076		'X_0076	18:07:03	26-May-04	07 08.3940S	012 15.5180E	0115.20	ADS_4; near Oilfield, CTD, Bongo, multinet
154	Stn Beg	'0077	AHAB9_10	'LIA	07:03:40	27-May-04	05 43.4990S	011 54.3810E	0051.80	
155	Stn End	'0077	AHAB9_10	'LIA	09:49:48	27-May-04	05 43.5780S	011 54.0610E	0052.80	2 CTD casts, MUC, Bongo
156	Stn Beg	'0078	AHAB9_11	'LIA2	13:05:56	27-May-04	05 12.0120S	011 57.9820E	0031.68	
157	Stn End	'0078	AHAB9_11	'LIA2	15:10:02	27-May-04	05 12.1540S	011 57.8200E	0031.86	2xCTD, 2xBongo, MC.
158	Stn Beg	'0079	AHAB9_11	'LIA3	19:29:01	27-May-04	05 43.4630S	011 39.4270E	0123.11	
159	Stn End	'0079	AHAB9_11	'LIA3	19:46:33	27-May-04	05 43.3960S	011 39.1200E	0126.52	
160	Stn Beg	'0080	AHAB9_11	'LIA4	22:38:25	27-May-04	06 04.3780S	011 54.3650E	0099.03	
161	Stn End	'0080	AHAB9_11	'LIA4	22:53:16	27-May-04	06 04.3700S	011 54.3080E	0094.96	no samples
162	Stn Beg	'0081	AHAB9_10	'AT9	05:23:44	28-May-04	07 14.1860S	011 52.7900E	0690.10	
163	Stn End	'0081	AHAB9_10	'AT9	05:53:23	28-May-04	07 14.0450S	011 52.6650E	0691.30	secchi 16m
164	Stn Beg	'0082	AHAB9_10	'AT8	06:58:25	28-May-04	07 14.1210S	012 02.2110E	0350.60	
165	Stn End	'0082	AHAB9_10	'AT8	08:05:00	28-May-04	07 14.1990S	012 01.2270E	0378.80	Secchi 15m, Multinet
166	Stn Beg	'0083	AHAB9_10	'AT7	09:06:46	28-May-04	07 14.1930S	012 10.9360E	0185.89	
167	Stn End	'0083	AHAB9_10	'AT7	09:52:37	28-May-04	07 13.8480S	012 10.6000E	0185.00	Multinet
168	Stn Beg	'0084	AHAB9_10	'AT6	10:49:35	28-May-04	07 14.2380S	012 19.9890E	0120.63	
169	Stn End	'0084	AHAB9_10	'AT6	12:05:00	28-May-04	07 14.7210S	012 18.7390E	0128.09	secchi depth 11m
170	Stn Beg	'0085	AHAB9_10	'AT4	13:20:28	28-May-04	07 14.2010S	012 30.4670E	0072.80	
171	Stn End	'0085	AHAB9_10	'AT4	13:43:32	28-May-04	07 14.2100S	012 30.4250E	0072.32	
172	Stn Beg	'0086	AHAB9_10	'AT3	14:16:01	28-May-04	07 14.1880S	012 35.1180E	0053.37	
173	Stn End	'0086	AHAB9_10	'AT3	14:52:46	28-May-04	07 13.8500S	012 35.2320E	0050.22	
174	Stn Beg	'0087	AHAB9_10	'AT1	16:04:44	28-May-04	07 14.1870S	012 46.0260E	0025.43	secchi 5.5m
175	Stn End	'0087	AHAB9_10	'AT1	18:43:17	28-May-04	07 14.6250S	012 44.6890E	0029.53	secchi 5.5m, benthos, Hyball
176	Stn Beg	'0088	AHAB9_10	'AT2	19:14:18	28-May-04	07 14.0920S	012 41.0250E	0038.96	benthos, bongo,
177	Stn End	'0088	AHAB9_10	'AT2	21:02:12	28-May-04	07 15.0150S	012 39.8270E	0043.31	benthos, bongo,
178	Stn Beg	'0089	AHAB9_10	'AM1	01:15:47	29-May-04	08 01.5650S	012 35.8810E	0696.50	no sampling, only CTD
179	Stn Beg	'0089	AHAB9_10	'AM1	01:21:34	29-May-04	08 01.8400S	012 35.8660E	0699.80	
180	Stn End	'0089	AHAB9_10	'AM1	02:00:40	29-May-04	08 01.7200S	012 35.9800E	0689.80	
181	Stn Beg	'0090	AHAB9_10	'AM2	02:23:49	29-May-04	08 01.1840S	012 37.8150E	0528.30	Multinet
182	Stn End	'0090	AHAB9_10	'AM2	03:33:27	29-May-04	08 00.8290S	012 37.9440E	0517.20	Multinet
183	Stn Beg	'0091	AHAB9_10	'AM3	03:52:21	29-May-04	08 00.5980S	012 39.3860E	0428.30	
184	Stn End	'0091	AHAB9_10	'AM3	04:20:45	29-May-04	08 00.4370S	012 39.5010E	0421.30	
185	Stn Beg	'0092	AHAB9_10	'AM4	04:39:12	29-May-04	07 59.7780S	012 41.0170E	0338.20	

	A	B	C	D	E	F	G	H	I	J
186	Stn End	'0092	AHAB9_10	'AM4	05:02:08	29-May-04	07 59.5990S	012 41.1040E	0329.90	
187	Stn Beg	'0093	AHAB9_10	'AM5	05:12:54	29-May-04	07 59.4060S	012 41.6320E	0290.10	
188	Stn End	'0093	AHAB9_10	'AM5	06:07:40	29-May-04	07 59.1780S	012 41.6970E	0274.50	Multinet, Secci 7,5m
189	Stn Beg	'0094	AHAB9_10	'AM6	06:27:09	29-May-04	07 58.9360S	012 42.7870E	0187.39	
190	Stn End	'0094	AHAB9_10	'AM6	06:42:21	29-May-04	07 58.8010S	012 42.8390E	0181.64	
191	Stn Beg	'0095	AHAB9_10	'AM7	06:55:03	29-May-04	07 58.5930S	012 43.6930E	0142.63	
192	Stn End	'0095	AHAB9_10	'AM7	07:33:11	29-May-04	07 58.1810S	012 44.6000E	0123.15	
193	Stn Beg	'0096	AHAB9_10	'AM8	07:33:26	29-May-04	07 58.1800S	012 44.6010E	0123.57	
194	Stn End	'0096	AHAB9_10	'AM8	08:05:35	29-May-04	07 57.5000S	012 46.1250E	0118.42	
195	Stn Beg	'0097	AHAB9_10	'AM9	08:07:19	29-May-04	07 57.4830S	012 46.1360E	0117.91	
196	Stn End	'0097	AHAB9_10	'AM9	08:30:57	29-May-04	07 57.2420S	012 46.2140E	0117.73	
197	Stn Beg	'0098	AHAB9_10	'AM10	09:03:29	29-May-04	07 55.5570S	012 50.3280E	0103.88	
198	Stn End	'0098	AHAB9_10	'AM10	09:22:03	29-May-04	07 55.2670S	012 50.3540E	0103.81	
199	Stn Beg	'0099	AHAB9_10	'AM11	09:50:29	29-May-04	07 53.7750S	012 54.3810E	0080.19	multinet
200	Stn End	'0099	AHAB9_10	'AM11	10:23:23	29-May-04	07 53.4570S	012 54.1000E	0081.53	multinet
201	Stn Beg	'0100	AHAB9_10	'AM14	11:25:45	29-May-04	07 49.9560S	013 02.9590E	0025.25	
202	Stn End	'0100	AHAB9_10	'AM14	13:16:42	29-May-04	07 49.9450S	013 02.9940E	0024.71	grab
203	Stn Beg	'0101	AHAB9_10	'AM13	13:56:21	29-May-04	07 51.0240S	013 00.5490E	0046.99	
204	Stn End	'0101	AHAB9_10	'AM13	15:17:22	29-May-04	07 51.0470S	013 00.4590E	0046.85	
205	Stn Beg	'0102	AHAB9_10	'AM12	15:46:01	29-May-04	07 51.9560S	012 58.4570E	0058.08	Benthos
206	Stn End	'0102	AHAB9_10	'AM12	16:48:57	29-May-04	07 51.8730S	012 58.3980E	0057.21	Benthos
207	Stn Beg	'0103	AHAB9_10	'786	04:07:40	30-May-04	09 04.9000S	012 42.4550E	0493.30	
208	Stn End	'0103	AHAB9_10	'786	05:02:50	30-May-04	09 03.8600S	012 42.6160E	0416.20	Multinet
209	Stn Beg	'0104	AHAB9_10	'783	05:38:03	30-May-04	09 04.9700S	012 46.5250E	0424.10	
210	Stn End	'0104	AHAB9_10	'783	06:36:23	30-May-04	09 03.6230S	012 46.6760E	0311.00	Secchi 10,25, Multinet
211	Stn Beg	'0105	AHAB9_10	'779	07:28:52	30-May-04	09 04.9040S	012 53.1620E	0079.38	
212	Stn End	'0105	AHAB9_10	'779	08:18:55	30-May-04	09 04.6670S	012 52.8940E	0083.87	Multinet,Bongo, secchi 8.5m
213	Stn Beg	'0106	AHAB9_10	'778	08:53:05	30-May-04	09 04.8910S	012 56.0720E	0039.26	
214	Stn End	'0106	AHAB9_10	'778	10:46:25	30-May-04	09 04.8990S	012 56.0580E	0040.11	Grab, MUC, Hyball
215	Stn Beg	'0107	AHAB9_10	'Cua13	11:22:51	30-May-04	09 04.8880S	012 56.9680E	0035.91	
216	Stn End	'0107	AHAB9_10	'Cua13	13:29:00	30-May-04	09 05.5140S	012 57.1270E	0029.97	
217	Stn Beg	'0108	AHAB9_10	'Cua2	18:27:27	30-May-04	09 42.0840S	012 43.2060E	0403.00	
218	Stn End	'0108	AHAB9_10	'Cua2	18:40:36	30-May-04	09 42.0050S	012 43.1530E	0402.10	PolyFluorinatedOrganics, PFOs ; Stefan Forster
219	Stn Beg	'0109	AHAB9_10	'Cua4	21:15:02	30-May-04	09 28.2930S	013 00.1460E	0049.93	
220	Stn End	'0109	AHAB9_10	'Cua4	21:22:48	30-May-04	09 28.1940S	013 00.1830E	0049.87	
221	Stn Beg	'0110	AHAB9_10	'Cua6	23:59:49	30-May-04	09 31.1790S	012 38.5270E	0545.50	
222	Stn End	'0110	AHAB9_10	'Cua6	00:05:55	31-May-04	09 31.1430S	012 38.5210E	0546.30	

	A	B	C	D	E	F	G	H	I	J
223	Stn Beg	'0111	AHAB9_10	'Cua8	02:23:44	31-May-04	09 17.5110S	012 54.9620E	0047.56	
224	Stn End	'0111	AHAB9_10	'Cua8	02:41:16	31-May-04	09 17.2590S	012 54.9200E	0047.44	
225	Stn Beg	'0112	AHAB9_10	'Cua10	04:34:26	31-May-04	09 16.7920S	012 37.6930E	0387.00	
226	Stn End	'0112	AHAB9_10	'Cua10	04:57:41	31-May-04	09 14.7150S	012 38.0640E	0395.70	
227	Stn Beg	'0113	AHAB9_10	'Cua12	07:04:41	31-May-04	09 06.9270S	012 56.3550E	0026.04	
228	Stn End	'0113	AHAB9_10	'Cua12	07:19:48	31-May-04	09 06.4420S	012 56.4020E	0029.92	
229	Stn Beg	'0114	AHAB9_10	'Cua14	08:58:24	31-May-04	09 03.5880S	012 40.3060E	0558.30	
230	Stn End	'0114	AHAB9_10	'Cua14	09:14:10	31-May-04	09 03.4850S	012 40.2480E	0554.90	
231	Stn Beg	'0115	AHAB9_10	'Cua16	11:17:26	31-May-04	09 01.7550S	012 56.9760E	0132.14	
232	Stn End	'0115	AHAB9_10	'Cua16	11:26:26	31-May-04	09 01.6970S	012 56.9580E	0135.13	
233	Stn Beg	'0116	AHAB9_10	'Cua18	13:00:07	31-May-04	08 53.4990S	012 45.8630E	0700.80	
234	Stn End	'0116	AHAB9_10	'Cua18	13:18:04	31-May-04	08 52.9640S	012 46.1270E	0684.70	
235	Stn Beg	'0117	AHAB9_10	'	13:31:20	31-May-04	08 50.6650S	012 47.2650E	0616.30	
236	Stn Beg	'0117	AHAB9_10	'Cua20	15:03:26	31-May-04	08 56.7670S	012 59.9560E	0189.21	
237	Stn End	'0117	AHAB9_10	'Cua20	15:16:26	31-May-04	08 56.7630S	012 59.9020E	0190.20	
238	Stn Beg	'0118	AHAB9_10	'Cua21	16:41:51	31-May-04	08 47.3410S	012 55.0410E	0209.01	
239	Stn Beg	'0118	AHAB9_10	'	16:44:15	31-May-04	08 47.3410S	012 55.0300E	0206.32	
240	Stn Beg	'0118	AHAB9_10	'Cua22	16:44:35	31-May-04	08 47.3410S	012 55.0290E	0205.61	
241	Stn End	'0118	AHAB9_10	'Cua22	16:53:52	31-May-04	08 47.3570S	012 55.0230E	0204.54	
242	Stn Beg	'0119	AHAB9_10	'Cua24	18:09:32	31-May-04	08 50.6340S	013 05.2170E	0104.77	
243	Stn End	'0119	AHAB9_10	'Cua24	18:18:13	31-May-04	08 50.6800S	013 05.2480E	0105.03	
244	Stn Beg	'0120	AHAB9_10	'Cua25	19:31:52	31-May-04	08 43.3370S	013 03.0380E	0127.64	
245	Stn End	'0120	AHAB9_10	'Cua25	19:41:04	31-May-04	08 43.3400S	013 03.1980E	0124.14	.

Table 3: Leg 9 IOW. RV "A. v. Humboldt"
CTD - deployment inventory

	A	B	C	D	E	F	G	H	I	J
1		Sequential	Grid							
2		Stn Nr	Stn Nr	UTC	Date	Latitude [deg]	Longitude [deg]	Sounding	Serie	Data file
3	EinsBeg	'0006	'968	18:48:30	20-May-04	13 56.1150S	012 24.7450E	0018.06		
4	SeriBeg	'0006	'968	18:48:46	20-May-04	13 56.1170S	012 24.7470E	0018.29	'01	0006_01.DAT
5	SeriEnd	'0006	'968	18:52:16	20-May-04	13 56.1340S	012 24.7650E	0018.63	'01	0006_01.DAT
6	EinsEnd	'0006	'968	18:54:27	20-May-04	13 56.1430S	012 24.7750E	0017.93		
7	EinsBeg	'0007	'967	19:17:16	20-May-04	13 56.0580S	012 23.8390E	0027.21		
8	SeriBeg	'0007	'967	19:17:22	20-May-04	13 56.0590S	012 23.8380E	0026.93	'01	0007_01.DAT
9	SeriEnd	'0007	'967	19:20:37	20-May-04	13 56.0490S	012 23.8290E	0027.92	'01	0007_01.DAT
10	EinsEnd	'0007	'967	19:20:43	20-May-04	13 56.0480S	012 23.8290E	0027.51		
11	EinsBeg	'0008	'966	19:46:13	20-May-04	13 56.0480S	012 22.1480E	0119.62		
12	SeriBeg	'0008	'966	19:46:43	20-May-04	13 56.0460S	012 22.1490E	0120.94	'01	0008_01.DAT
13	SeriEnd	'0008	'966	19:56:14	20-May-04	13 56.0360S	012 22.1910E	0109.04	'01	0008_01.DAT
14	EinsEnd	'0008	'966	19:56:18	20-May-04	13 56.0360S	012 22.1910E	0109.16		
15	EinsBeg	'0009	'965	20:15:38	20-May-04	13 56.0850S	012 21.9820E	0069.65		
16	SeriBeg	'0009	'965	20:15:40	20-May-04	13 56.0850S	012 21.9820E	0068.98	'01	0009_01.DAT
17	SeriBeg	'0009	'965	20:16:13	20-May-04	13 56.0810S	012 21.9800E	0070.72	'01	0009_01.DAT
18	SeriEnd	'0009	'965	20:21:25	20-May-04	13 56.0580S	012 21.9420E	0071.64	'01	0009_01.DAT
19	EinsEnd	'0009	'965	20:21:29	20-May-04	13 56.0570S	012 21.9410E	0072.53		
20	EinsBeg	'0010	'964	20:38:22	20-May-04	13 56.0730S	012 21.5080E	0076.93		
21	SeriBeg	'0010	'964	20:38:29	20-May-04	13 56.0730S	012 21.5080E	0076.97	'01	0010F01.DAT
22	SeriEnd	'0010	'964	20:45:30	20-May-04	13 56.0300S	012 21.4950E	0077.98	'01	0010F01.DAT
23	EinsEnd	'0010	'964	20:45:33	20-May-04	13 56.0300S	012 21.4950E	0076.61		
24	EinsBeg	'0011	'963	21:18:32	20-May-04	13 56.1330S	012 19.2530E	0116.02		
25	SeriBeg	'0011	'963	21:19:03	20-May-04	13 56.1350S	012 19.2540E	0115.38	'01	0011F01.DAT
26	SeriBeg	'0011	'963	21:20:19	20-May-04	13 56.1410S	012 19.2580E	0115.65	'01	0011F01.DAT
27	SeriEnd	'0011	'963	21:28:23	20-May-04	13 56.1580S	012 19.2950E	0116.61	'01	0011F01.DAT
28	EinsEnd	'0011	'963	21:28:25	20-May-04	13 56.1570S	012 19.2950E	0116.00		
29	EinsBeg	'0012	'962	21:57:27	20-May-04	13 56.0110S	012 17.0460E	0151.60		
30	SeriBeg	'0012	'962	21:57:31	20-May-04	13 56.0100S	012 17.0460E	0150.82	'01	0012F01.DAT
31	SeriEnd	'0012	'962	22:12:24	20-May-04	13 55.9450S	012 16.9230E	0152.10	'01	0012F01.DAT
32	EinsEnd	'0012	'962	22:12:30	20-May-04	13 55.9440S	012 16.9230E	0152.76		
33	EinsBeg	'0013	'961	22:41:03	20-May-04	13 56.0920S	012 15.9060E	0291.45		
34	SeriBeg	'0013	'961	22:41:05	20-May-04	13 56.0920S	012 15.9070E	0292.16	'01	0013_01.DAT
35	SeriEnd	'0013	'961	23:00:17	20-May-04	13 56.0780S	012 15.9760E	0276.32	'01	0013_01.DAT
36	EinsEnd	'0013	'961	23:00:21	20-May-04	13 56.0790S	012 15.9760E	0277.03		
37	EinsBeg	'0014	'960	23:28:24	20-May-04	13 55.9810S	012 14.8410E	0372.41		
38	SeriBeg	'0014	'960	23:28:30	20-May-04	13 55.9800S	012 14.8420E	0372.58	'01	0014_01.DAT
39	SeriEnd	'0014	'960	00:08:29	21-May-04	13 55.5720S	012 14.7740E	0553.10	'01	0014_01.DAT
40	EinsEnd	'0014	'960	00:08:32	21-May-04	13 55.5720S	012 14.7740E	0553.10		
41	EinsBeg	'0015	'959	00:35:00	21-May-04	13 56.0630S	012 13.9510E	0457.90		
42	SeriBeg	'0015	'959	00:35:02	21-May-04	13 56.0630S	012 13.9510E	0458.40	'01	0015_01.DAT
43	SeriEnd	'0015	'959	01:01:56	21-May-04	13 56.0950S	012 14.1210E	0425.10	'01	0015_01.DAT
44	EinsEnd	'0015	'959	01:02:01	21-May-04	13 56.0960S	012 14.1220E	0424.30		
45	EinsBeg	'0016	'S960	02:25:15	21-May-04	13 55.9570S	012 18.0470E	0133.72		
46	SeriBeg	'0016	'S960	02:30:47	21-May-04	13 55.9560S	012 18.0480E	0134.13	'01	0016_01.DAT
47	SeriEnd	'0016	'S960	02:45:11	21-May-04	13 56.0170S	012 18.0810E	0131.34	'01	0016_01.DAT
48	EinsEnd	'0016	'S960	02:45:14	21-May-04	13 56.0170S	012 18.0810E	0131.91		
49	EinsBeg			02:48:56	21-May-04	13 56.0380S	012 18.0880E	0131.30		
50	SeriBeg			02:48:59	21-May-04	13 56.0390S	012 18.0880E	0130.06	'01	0017F01.DAT
51	SeriBeg			03:01:27	21-May-04	13 55.2340S	012 18.7490E	0131.57	'01	0017F01.DAT
52	EinsBeg	'0017	'S961	03:16:51	21-May-04	13 54.6820S	012 19.2650E	0129.18		
53	SeriBeg	'0017	'S961	03:16:57	21-May-04	13 54.6820S	012 19.2650E	0128.34	'01	0017_01.DAT
54	SeriEnd	'0017	'S961	03:27:06	21-May-04	13 54.6220S	012 19.2390E	0130.71	'01	0017_01.DAT
55	EinsEnd	'0017	'S961	03:27:10	21-May-04	13 54.6220S	012 19.2400E	0130.53		
56	EinsBeg	'0018	'S962	03:46:10	21-May-04	13 54.0770S	012 19.9470E	0126.86		
57	SeriBeg	'0018	'S962	03:46:13	21-May-04	13 54.0770S	012 19.9470E	0125.95	'01	0018_01.DAT
58	SeriEnd	'0018	'S962	03:57:22	21-May-04	13 54.0680S	012 19.9370E	0126.78	'01	0018_01.DAT
59	EinsEnd	'0018	'S962	03:57:24	21-May-04	13 54.0680S	012 19.9360E	0126.21		
60	EinsBeg	'0019	'S963	04:24:14	21-May-04	13 52.7480S	012 21.3020E	0657.90		
61	SeriBeg	'0019	'S963	04:24:17	21-May-04	13 52.7490S	012 21.3010E	0000.00	'01	0019_01.DAT
62	SeriEnd	'0019	'S963	05:00:05	21-May-04	13 52.7060S	012 21.4470E	0696.80	'01	0019_01.DAT
63	EinsEnd	'0019	'S963	05:00:09	21-May-04	13 52.7060S	012 21.4480E	0697.10		
64	EinsBeg	'0020	'S964	05:21:38	21-May-04	13 52.1280S	012 21.9500E	0000.00		
65	SeriBeg	'0020	'S964	05:21:39	21-May-04	13 52.1290S	012 21.9500E	0161.94	'01	0020_01.DAT
66	SeriEnd	'0020	'S964	05:54:24	21-May-04	13 52.1090S	012 22.0750E	0000.00	'01	0020_01.DAT
67	EinsEnd	'0020	'S964	05:54:26	21-May-04	13 52.1090S	012 22.0750E	0198.50		
68	EinsBeg	'0021	'S965	06:15:18	21-May-04	13 51.4320S	012 22.5520E	0394.40		
69	SeriBeg	'0021	'S965	06:15:23	21-May-04	13 51.4320S	012 22.5520E	0394.00	'01	0021_01.DAT

	A	B	C	D	E	F	G	H	I	J
70	SeriEnd	'0021	'S965	06:36:40	21-May-04	13 51.3640S	012 22.5500E	0403.70	'01	0021_01.DAT
71	EinsEnd	'0021	'S965	06:36:43	21-May-04	13 51.3640S	012 22.5500E	0402.60		
72	EinsBeg	'0022	'S965b	07:00:07	21-May-04	13 50.9330S	012 22.9920E	0276.00		
73	SeriBeg	'0022	'S965b	07:00:12	21-May-04	13 50.9330S	012 22.9910E	0274.90	'01	0022_01.DAT
74	SeriEnd	'0022	'S965b	07:17:11	21-May-04	13 50.9090S	012 23.0140E	0000.00	'01	0022_01.DAT
75	EinsEnd	'0022	'S965b	07:17:15	21-May-04	13 50.9090S	012 23.0140E	0000.00		
76	EinsBeg	'0023	'S966	07:46:25	21-May-04	13 50.1470S	012 23.8790E	0513.00		
77	SeriBeg	'0023	'S966	07:46:37	21-May-04	13 50.1460S	012 23.8790E	0512.70	'01	0023_01.DAT
78	SeriEnd	'0023	'S966	08:15:23	21-May-04	13 50.0230S	012 23.8240E	0575.90	'01	0023_01.DAT
79	EinsEnd	'0023	'S966	08:15:26	21-May-04	13 50.0220S	012 23.8240E	0577.00		
80	EinsBeg	'0024	'S967	08:40:09	21-May-04	13 49.4940S	012 24.5110E	0893.60		
81	SeriBeg	'0024	'S967	08:43:47	21-May-04	13 49.4910S	012 24.5180E	0893.70	'01	0024_01.DAT
82	SeriEnd	'0024	'S967	09:25:55	21-May-04	13 49.3880S	012 24.6760E	0975.60	'01	0024_01.DAT
83	SeriBeg	'0025	'S968	09:47:20	21-May-04	13 48.8760S	012 25.1360E	1239.00	'02	0024_02.DAT
84	SeriBeg	'0025	'S968	09:52:35	21-May-04	13 48.8630S	012 25.1530E	1245.60	'01	0024_01.DAT
85	SeriEnd	'0025	'S968	10:42:42	21-May-04	13 48.6350S	012 25.4180E	1195.50	'01	0024_01.DAT
86	EinsEnd	'0025	'S968	10:42:48	21-May-04	13 48.6340S	012 25.4190E	1197.40		
87	EinsBeg	'0026	'S969	11:10:35	21-May-04	13 47.5220S	012 26.4520E	0969.60		
88	SeriBeg	'0026	'S969	11:10:38	21-May-04	13 47.5220S	012 26.4530E	0969.40	'01	0026_01.DAT
89	SeriEnd	'0026	'S969	11:48:07	21-May-04	13 47.3230S	012 26.6330E	0835.30	'01	0026_01.DAT
90	EinsEnd	'0026	'S969	11:48:10	21-May-04	13 47.3230S	012 26.6330E	0834.90		
91	EinsBeg	'0027	'S970	12:17:19	21-May-04	13 46.1500S	012 27.8440E	0274.20		
92	SeriBeg	'0027	'S970	12:17:24	21-May-04	13 46.1490S	012 27.8450E	0274.20	'01	0027_01.DAT
93	SeriEnd	'0027	'S970	12:35:22	21-May-04	13 46.0110S	012 28.0240E	0236.60	'01	0027_01.DAT
94	EinsEnd	'0027	'S970	12:35:24	21-May-04	13 46.0100S	012 28.0250E	0235.90		
95	EinsBeg	'0028	'S971	13:03:37	21-May-04	13 44.9330S	012 29.0530E	0115.30		
96	SeriBeg	'0028	'S971	13:03:39	21-May-04	13 44.9330S	012 29.0540E	0115.40	'01	0028_01.DAT
97	SeriEnd	'0028	'S971	13:12:49	21-May-04	13 44.8910S	012 29.1030E	0115.00	'01	0028_01.DAT
98	EinsEnd	'0028	'S971	13:12:52	21-May-04	13 44.8900S	012 29.1040E	0114.80		
99	EinsBeg	'0029	'979	16:28:28	21-May-04	13 44.9230S	012 29.6400E	0107.40		
100	SeriBeg	'0029	'979	16:29:09	21-May-04	13 44.9160S	012 29.6430E	0106.50	'01	0029_01.DAT
101	SeriEnd	'0029	'979	16:40:39	21-May-04	13 44.7830S	012 29.6820E	0105.90	'01	0029_01.DAT
102	EinsEnd	'0029	'979	16:40:54	21-May-04	13 44.7800S	012 29.6840E	0105.50		
103	EinsBeg	'0030	'985	18:52:41	21-May-04	13 49.7080S	012 26.7960E	0790.70		
104	SeriBeg	'0030	'985	18:52:53	21-May-04	13 49.7060S	012 26.7970E	0789.70	'01	0030F01.DAT
105	SeriEnd			19:23:07	21-May-04	13 49.4860S	012 27.0600E	0856.00	'01	0030F01.DAT
106	EinsEnd			19:23:09	21-May-04	13 49.4860S	012 27.0600E	0855.20		
107	EinsBeg	'0031	'965	21:52:30	21-May-04	13 56.1130S	012 21.9980E	0066.60		
108	SeriBeg	'0031	'965	21:52:34	21-May-04	13 56.1130S	012 21.9980E	0066.00	'01	0031F01.DAT
109	SeriEnd	'0031	'965	22:00:51	21-May-04	13 56.0780S	012 22.0360E	0070.30	'01	0031F01.DAT
110	EinsEnd	'0031	'965	22:00:54	21-May-04	13 56.0780S	012 22.0360E	0070.30		
111	EinsBeg	'0032	'961	23:08:50	21-May-04	13 56.0670S	012 15.9230E	0295.50		
112	SeriBeg	'0032	'961	23:08:52	21-May-04	13 56.0670S	012 15.9230E	0295.00	'01	0032F01.DAT
113	SeriEnd	'0032	'961	23:33:22	21-May-04	13 55.9230S	012 15.9610E	0295.20	'01	0032F01.DAT
114	EinsEnd	'0032	'961	23:33:24	21-May-04	13 55.9230S	012 15.9610E	0295.00		
115	EinsBeg	'0033	'983	00:49:18	22-May-04	13 48.3570S	012 23.4570E	0000.00		
116	SeriBeg	'0033	'983	00:49:22	22-May-04	13 48.3570S	012 23.4570E	0027.00	'01	0033F01.DAT
117	SeriEnd	'0033	'983	01:18:26	22-May-04	13 47.9430S	012 23.5690E	1038.20	'01	0033F01.DAT
118	EinsEnd	'0033	'983	01:18:28	22-May-04	13 47.9430S	012 23.5690E	1038.10		
119	EinsBeg	'0034	'973	02:08:54	22-May-04	13 44.8910S	012 23.6180E	0592.50		
120	SeriBeg	'0034	'973	02:09:18	22-May-04	13 44.8860S	012 23.6180E	0590.80	'01	0034_01.DAT
121	SeriEnd	'0034	'973	02:35:05	22-May-04	13 44.6190S	012 23.7010E	0496.00	'01	0034_01.DAT
122	EinsEnd	'0034	'973	02:35:07	22-May-04	13 44.6190S	012 23.7010E	0495.90		
123	EinsBeg	'0035	'900	03:17:59	22-May-04	13 46.8690S	012 24.1170E	0592.90		
124	SeriBeg	'0035	'900	03:18:29	22-May-04	13 46.8640S	012 24.1210E	0592.10	'01	0035_01.DAT
125	SeriEnd	'0035	'900	03:43:31	22-May-04	13 46.6300S	012 24.2420E	0571.40	'01	0035_01.DAT
126	EinsEnd	'0035	'900	03:43:35	22-May-04	13 46.6290S	012 24.2420E	0571.10		
127	EinsBeg	'0036	'BF1	13:37:08	22-May-04	12 35.5600S	013 13.5460E	0049.50		
128	SeriBeg	'0036	'BF1	13:37:32	22-May-04	12 35.5630S	013 13.5490E	0049.60	'01	0036F01.DAT
129	SeriEnd	'0036	'BF1	13:42:26	22-May-04	12 35.5900S	013 13.5910E	0047.50	'01	0036F01.DAT
130	SeriBeg	'0036	'BF1	13:42:30	22-May-04	12 35.5910S	013 13.5920E	0047.40	'02	0036F02.DAT
131	SeriEnd	'0036	'BF1	13:47:37	22-May-04	12 35.6170S	013 13.6370E	0046.80	'02	0036F02.DAT
132	EinsEnd	'0036	'BF1	13:48:00	22-May-04	12 35.6190S	013 13.6400E	0046.80		
133	EinsBeg	'0037	'BF2	14:58:05	22-May-04	12 32.9030S	013 08.0620E	0696.30		
134	SeriBeg	'0037	'BF2	14:58:38	22-May-04	12 32.8980S	013 08.0680E	0697.90	'01	0037F01.DAT
135	SeriEnd	'0037	'BF2	15:31:10	22-May-04	12 32.5390S	013 08.3180E	0782.40	'01	0037F01.DAT
136	EinsEnd	'0037	'BF2	15:31:13	22-May-04	12 32.5380S	013 08.3180E	0782.90		
137	EinsBeg	'0038	'BF3	16:31:11	22-May-04	12 29.8740S	013 04.0670E	0968.40		
138	SeriBeg	'0038	'BF3	16:31:19	22-May-04	12 29.8720S	013 04.0670E	0968.60	'01	0038F01.DAT

	A	B	C	D	E	F	G	H	I	J
139	SeriEnd	'0038	'BF3	16:59:30	22-May-04	12 29.4050S	013 04.1530E	1007.40	'01	0038F01.DAT
140	EinsEnd	'0038	'BF3	16:59:32	22-May-04	12 29.4050S	013 04.1540E	1008.00		
141	EinsBeg	'0039	'BF4	18:17:35	22-May-04	12 24.9190S	012 55.0530E	1352.90		
142	SeriBeg	'0039	'BF4	18:17:38	22-May-04	12 24.9180S	012 55.0530E	1353.20	'01	0039F01.DAT
143	SeriEnd	'0039	'BF4	18:49:07	22-May-04	12 24.5210S	012 55.0740E	1355.70	'01	0039F01.DAT
144	EinsEnd	'0039	'BF4	18:49:14	22-May-04	12 24.5200S	012 55.0730E	1355.30		
145	EinsBeg	'0040	'BF5	20:53:58	22-May-04	12 20.0160S	012 46.0450E	1529.20		
146	SeriBeg	'0040	'BF5	20:54:02	22-May-04	12 20.0160S	012 46.0450E	1529.20	'01	0040F01.DAT
147	SeriEnd	'0040	'BF5	21:19:54	22-May-04	12 19.8530S	012 46.1210E	1526.50	'01	0040F01.DAT
148	EinsEnd	'0040	'BF5	21:19:59	22-May-04	12 19.8520S	012 46.1210E	1526.50		
149	EinsBeg	'0041	'BF6	22:41:20	22-May-04	12 25.9250S	012 37.0280E	1650.60		
150	SeriBeg	'0041	'BF6	22:41:24	22-May-04	12 25.9250S	012 37.0280E	1650.20	'01	0041F01.DAT
151	SeriEnd	'0041	'BF6	23:08:46	22-May-04	12 25.8550S	012 36.9630E	1651.70	'01	0041F01.DAT
152	EinsEnd	'0041	'BF6	23:08:49	22-May-04	12 25.8550S	012 36.9620E	1651.30		
153	EinsBeg	'0042	'BF7	01:04:15	23-May-04	12 14.9880S	012 23.5090E	1985.30		
154	SeriBeg	'0042	'BF7	01:04:36	23-May-04	12 14.9850S	012 23.5080E	1985.10	'01	0042F01.DAT
155	SeriEnd	'0042	'BF7	01:32:23	23-May-04	12 14.8650S	012 23.5080E	1987.20	'01	0042F01.DAT
156	EinsEnd	'0042	'BF7	01:32:27	23-May-04	12 14.8650S	012 23.5070E	1987.20		
157	EinsBeg	'0043	'BF8	03:28:08	23-May-04	12 04.9520S	012 10.0730E	2103.90		
158	SeriBeg	'0043	'BF8	03:28:10	23-May-04	12 04.9520S	012 10.0730E	2103.90	'01	0043F01.DAT
159	SeriEnd	'0043	'BF8	03:53:30	23-May-04	12 04.7560S	012 10.2260E	2101.00	'01	0043F01.DAT
160	EinsEnd	'0043	'BF8	03:53:33	23-May-04	12 04.7560S	012 10.2260E	2101.00		
161	EinsBeg	'0044	'BF8	04:29:38	23-May-04	12 04.5570S	012 10.5180E	2100.00		
162	SeriBeg	'0044	'BF8	04:30:00	23-May-04	12 04.5550S	012 10.5210E	2099.60	'01	0044F01.DAT
163	SeriEnd	'0044	'BF8	04:32:22	23-May-04	12 04.5430S	012 10.5370E	2099.60	'01	0044F01.DAT
164	SeriBeg	'0044	'BF8	04:48:41	23-May-04	12 04.4340S	012 10.6570E	2100.00	'02	0044F02.DAT
165	SeriEnd	'0044	'BF8	04:50:04	23-May-04	12 04.4240S	012 10.6680E	2099.80	'02	0044F02.DAT
166	EinsEnd	'0044	'BF8	04:58:38	23-May-04	12 04.3580S	012 10.7160E	2100.10		
167	EinsBeg	'0045	'56	13:13:21	23-May-04	12 05.2810S	013 42.0740E	0018.71		
168	SeriBeg	'0045	'56	13:14:14	23-May-04	12 05.2850S	013 42.0770E	0018.50	'01	0045_01.DAT
169	SeriEnd	'0045	'56	13:20:38	23-May-04	12 05.2990S	013 42.0730E	0019.19	'01	0045_01.DAT
170	EinsEnd			16:12:34	23-May-04	12 05.6810S	013 41.6960E	0022.93		
171	EinsBeg	'0046	'56	16:59:28	23-May-04	12 05.1370S	013 42.0110E	0020.35		
172	SeriBeg	'0046	'56	17:07:34	23-May-04	12 05.0630S	013 42.0240E	0018.40	'01	0046F01.DAT
173	SeriEnd	'0046	'56	17:12:42	23-May-04	12 05.0280S	013 42.0630E	0019.37	'01	0046F01.DAT
174	EinsEnd	'0046	'56	17:12:44	23-May-04	12 05.0280S	013 42.0630E	0019.44		
175	EinsBeg	'0047	'55	17:42:00	23-May-04	12 04.7870S	013 40.9080E	0030.45		
176	SeriBeg	'0047	'55	17:42:06	23-May-04	12 04.7870S	013 40.9090E	0032.22	'01	0047_01.DAT
177	SeriEnd	'0047	'55	17:51:42	23-May-04	12 04.7320S	013 40.9890E	0030.36	'01	0047_01.DAT
178	EinsEnd	'0047	'55	17:51:47	23-May-04	12 04.7310S	013 40.9900E	0030.26		
179	EinsBeg			18:21:13	23-May-04	12 04.3950S	013 39.2940E	0040.50		
180	SeriBeg			18:21:18	23-May-04	12 04.3940S	013 39.2940E	0040.67	'01	0048F01.DAT
181	SeriEnd			18:28:00	23-May-04	12 04.2730S	013 39.2840E	0041.00	'01	0048F01.DAT
182	EinsEnd			18:28:03	23-May-04	12 04.2720S	013 39.2830E	0040.74		
183	EinsBeg	'0049	'53	18:51:48	23-May-04	12 04.1470S	013 38.0670E	0049.25		
184	SeriBeg	'0049	'53	18:52:07	23-May-04	12 04.1440S	013 38.0700E	0049.70	'01	0049F01.DAT
185	SeriEnd	'0049	'53	18:58:30	23-May-04	12 04.0930S	013 38.1280E	0049.43	'01	0049F01.DAT
186	EinsEnd	'0049	'53	18:58:33	23-May-04	12 04.0930S	013 38.1290E	0049.36		
187	EinsBeg	'0050	'52	19:34:39	23-May-04	12 03.8140S	013 36.1430E	0073.57		
188	SeriBeg	'0050	'52	19:34:46	23-May-04	12 03.8130S	013 36.1450E	0073.73	'01	0050F01.DAT
189	SeriEnd			19:46:57	23-May-04	12 03.8230S	013 36.1890E	0072.65	'01	0050F01.DAT
190	EinsEnd			19:46:59	23-May-04	12 03.8220S	013 36.1890E	0072.83		
191	EinsBeg			20:10:44	23-May-04	12 03.4830S	013 35.0280E	0080.20		
192	SeriBeg			20:10:47	23-May-04	12 03.4830S	013 35.0290E	0079.79	'01	0051F01.DAT
193	SeriEnd			20:20:58	23-May-04	12 03.5100S	013 35.0980E	0079.71	'01	0051F01.DAT
194	EinsEnd			20:21:01	23-May-04	12 03.5100S	013 35.0980E	0079.47		
195	EinsBeg	'0052	'50	21:08:49	23-May-04	12 03.1690S	013 33.5960E	0089.06		
196	SeriBeg	'0052	'50	21:09:08	23-May-04	12 03.1690S	013 33.5980E	0088.92	'01	0052F01.DAT
197	SeriEnd	'0052	'50	21:22:43	23-May-04	12 03.2150S	013 33.6220E	0088.69	'01	0052F01.DAT
198	EinsEnd	'0052	'50	21:22:46	23-May-04	12 03.2160S	013 33.6220E	0088.76		
199	EinsBeg	'0053	'49	21:55:51	23-May-04	12 02.6730S	013 31.5350E	0094.78		
200	SeriBeg	'0053	'49	21:55:54	23-May-04	12 02.6730S	013 31.5350E	0094.83	'01	0053F01.DAT
201	SeriEnd	'0053	'49	22:09:17	23-May-04	12 02.6100S	013 31.6050E	0094.32	'01	0053F01.DAT
202	EinsEnd	'0053	'49	22:09:21	23-May-04	12 02.6100S	013 31.6050E	0094.26		
203	EinsBeg	'0054	'48	22:34:14	23-May-04	12 02.2770S	013 30.0260E	0104.17		
204	SeriBeg	'0054	'48	22:34:17	23-May-04	12 02.2770S	013 30.0260E	0104.43	'01	0054F01.DAT
205	SeriEnd	'0054	'48	22:47:38	23-May-04	12 02.3180S	013 30.0700E	0103.98	'01	0054F01.DAT
206	EinsEnd	'0054	'48	22:47:41	23-May-04	12 02.3170S	013 30.0700E	0104.15		
207	EinsBeg			22:53:42	23-May-04	12 02.2720S	013 30.0480E	0104.46		

	A	B	C	D	E	F	G	H	I	J
208	SeriBeg			22:53:44	23-May-04	12 02.2710S	013 30.0490E	0104.11	'01	0055_01.DAT
209	EinsBeg	'0055	'47	23:19:08	23-May-04	12 02.0350S	013 28.9770E	0184.37		
210	SeriBeg	'0055	'47	23:19:10	23-May-04	12 02.0350S	013 28.9770E	0184.01	'01	0055F01.DAT
211	SeriEnd	'0055	'47	23:35:30	23-May-04	12 01.9650S	013 29.0350E	0180.28	'01	0055F01.DAT
212	EinsEnd	'0055	'47	23:35:33	23-May-04	12 01.9650S	013 29.0350E	0180.11		
213	EinsBeg	'0056	'46	00:01:51	24-May-04	12 01.9220S	013 28.2580E	0305.74		
214	SeriBeg	'0056	'46	00:01:56	24-May-04	12 01.9220S	013 28.2580E	0305.06	'01	0056F01.DAT
215	SeriEnd	'0056	'46	00:23:24	24-May-04	12 01.9200S	013 28.3640E	0289.10	'01	0056F01.DAT
216	EinsEnd	'0056	'46	00:23:27	24-May-04	12 01.9200S	013 28.3650E	0288.96		
217	EinsBeg	'0057	'45	01:24:09	24-May-04	12 01.4320S	013 26.5050E	0397.70		
218	SeriBeg	'0057	'45	01:24:21	24-May-04	12 01.4310S	013 26.5050E	0397.70	'01	0057F01.DAT
219	SeriEnd	'0057	'45	01:48:36	24-May-04	12 01.3570S	013 26.5590E	0395.00	'01	0057F01.DAT
220	EinsEnd	'0057	'45	01:48:40	24-May-04	12 01.3570S	013 26.5590E	0395.10		
221	EinsBeg	'0058	'44	02:29:08	24-May-04	12 00.7640S	013 24.0700E	0494.30		
222	SeriBeg	'0058	'44	02:29:16	24-May-04	12 00.7630S	013 24.0700E	0494.40	'01	0058F01.DAT
223	SeriEnd	'0058	'44	02:56:06	24-May-04	12 00.6680S	013 24.1080E	0492.40	'01	0058F01.DAT
224	EinsEnd	'0058	'44	02:56:08	24-May-04	12 00.6680S	013 24.1080E	0492.10		
225	EinsBeg	'0060	'51	07:38:14	24-May-04	12 03.4850S	013 35.0540E	0080.40		
226	Remark	'0060	'51	07:39:09	24-May-04	12 03.4860S	013 35.0570E	0080.11		
227	EinsBeg	'0060	'51	07:39:19	24-May-04	12 03.4870S	013 35.0560E	0080.18		
228	SeriBeg	'0060	'51	07:39:46	24-May-04	12 03.4880S	013 35.0560E	0080.04	'01	0060_01.DAT
229	SeriEnd	'0060	'51	07:51:24	24-May-04	12 03.4870S	013 35.0500E	0080.15	'01	0060_01.DAT
230	SeriBeg	'0060	'51	07:51:58	24-May-04	12 03.4880S	013 35.0500E	0080.32	'02	0060_02.DAT
231	SeriBeg	'0060	'51	08:00:46	24-May-04	12 03.4890S	013 35.0510E	0080.11	'02	0060_02.DAT
232	SeriBeg	'0060	'51	08:07:13	24-May-04	12 03.4890S	013 35.0490E	0080.12	'02	0060_02.DAT
233	SeriEnd	'0060	'51	09:36:39	24-May-04	12 03.4890S	013 35.0570E	0079.91	'02	0060_02.DAT
234	SeriBeg	'0060	'51	09:36:41	24-May-04	12 03.4890S	013 35.0560E	0079.81	'03	0060_03.DAT
235	SeriEnd	'0060	'51	12:54:28	24-May-04	12 03.5040S	013 35.0410E	0080.11	'03	0060_03.DAT
236	EinsEnd	'0060	'51	12:54:32	24-May-04	12 03.5040S	013 35.0410E	0079.80		
237	EinsBeg	'0061	'X_0061	14:13:48	24-May-04	12 02.9110S	013 32.6670E	0090.02		
238	SeriBeg	'0061	'X_0061	14:13:50	24-May-04	12 02.9110S	013 32.6670E	0090.05	'01	0061F01.DAT
239	SeriEnd	'0061	'X_0061	14:21:55	24-May-04	12 02.9320S	013 32.7190E	0090.02	'01	0061F01.DAT
240	EinsEnd	'0061	'X_0061	14:21:58	24-May-04	12 02.9320S	013 32.7190E	0090.02		
241	EinsBeg	'0062	'X_0062	14:44:39	24-May-04	12 03.0740S	013 33.5860E	0089.33		
242	SeriBeg	'0062	'X_0062	14:44:41	24-May-04	12 03.0740S	013 33.5860E	0089.16	'01	0062F01.DAT
243	SeriEnd	'0062	'X_0062	14:52:11	24-May-04	12 03.0730S	013 33.6340E	0088.74	'01	0062F01.DAT
244	EinsEnd	'0062	'X_0062	14:52:14	24-May-04	12 03.0730S	013 33.6340E	0089.02		
245	EinsBeg	'0063	'X_0063	15:11:25	24-May-04	12 03.2990S	013 34.3390E	0083.65		
246	SeriBeg	'0063	'X_0063	15:11:34	24-May-04	12 03.2990S	013 34.3400E	0083.76	'01	0063F01.DAT
247	SeriEnd	'0063	'X_0063	15:18:12	24-May-04	12 03.3040S	013 34.3750E	0083.42	'01	0063F01.DAT
248	EinsEnd	'0063	'X_0063	15:18:14	24-May-04	12 03.3040S	013 34.3740E	0083.37		
249	EinsBeg	'0064	'X_0064	15:41:41	24-May-04	12 03.6280S	013 35.5330E	0077.62		
250	SeriBeg	'0064	'X_0064	15:41:43	24-May-04	12 03.6280S	013 35.5320E	0076.98	'01	0064F01.DAT
251	SeriEnd	'0064	'X_0064	15:47:56	24-May-04	12 03.6180S	013 35.5630E	0076.83	'01	0064F01.DAT
252	EinsEnd	'0064	'X_0064	15:48:00	24-May-04	12 03.6180S	013 35.5630E	0077.68		
253	EinsBeg	'0065	'CL2	08:04:12	25-May-04	09 25.8610S	013 00.0420E	0044.28		
254	SeriBeg	'0065	'CL2	08:04:31	25-May-04	09 25.8620S	013 00.0450E	0044.36	'01	0065_01.DAT
255	SeriEnd	'0065	'CL2	08:08:37	25-May-04	09 25.8740S	013 00.0790E	0044.28	'01	0065_01.DAT
256	EinsEnd	'0065	'CL2	08:08:51	25-May-04	09 25.8760S	013 00.0800E	0044.05		
257	EinsBeg	'0066	'CL7	09:38:04	25-May-04	09 30.9730S	013 06.4570E	0024.88		
258	SeriBeg	'0066	'CL7	09:45:34	25-May-04	09 30.9700S	013 06.3910E	0024.81	'01	0066_01.DAT
259	SeriEnd	'0066	'CL7	09:49:08	25-May-04	09 30.9570S	013 06.3410E	0025.04	'01	0066_01.DAT
260	EinsEnd	'0066	'CL7	09:49:11	25-May-04	09 30.9570S	013 06.3410E	0024.92		
261	EinsBeg	'0067	'CL1	11:19:32	25-May-04	09 25.9130S	013 04.9980E	0019.74		
262	SeriBeg	'0067	'CL1	11:19:35	25-May-04	09 25.9130S	013 04.9980E	0021.42	'01	0067_01.DAT
263	SeriEnd	'0067	'CL1	11:22:50	25-May-04	09 25.9130S	013 05.0000E	0021.36	'01	0067_01.DAT
264	SeriBeg	'0067	'CL1	11:25:07	25-May-04	09 25.9120S	013 04.9990E	0019.93	'02	0067K02.DAT
265	SeriEnd	'0067	'CL1	12:43:16	25-May-04	09 25.9130S	013 05.0020E	0021.14	'02	0067K02.DAT
266	SeriBeg	'0067	'CL1	12:45:30	25-May-04	09 25.9320S	013 05.0030E	0021.35		
267	EinsEnd	'0067	'CL1	13:19:46	25-May-04	09 26.5550S	013 04.2820E	0024.71		
268	EinsBeg	'0068	'CL8	14:09:49	25-May-04	09 20.8990S	013 01.4640E	0022.82		
269	SeriBeg	'0068	'CL8	14:09:52	25-May-04	09 20.8980S	013 01.4640E	0022.90	'01	0068K01.DAT
270	SeriEnd	'0068	'CL8	14:12:18	25-May-04	09 20.8690S	013 01.4740E	0022.88	'01	0068K01.DAT
271	EinsEnd	'0068	'CL8	14:12:20	25-May-04	09 20.8690S	013 01.4740E	0023.24		
272	EinsBeg	'0070	'CL6	16:07:16	25-May-04	09 26.0000S	012 54.9930E	0074.13		
273	SeriBeg	'0070	'CL6	16:07:30	25-May-04	09 26.0000S	012 54.9930E	0074.26	'01	0070_01.DAT
274	SeriEnd	'0070	'CL6	16:15:37	25-May-04	09 26.0070S	012 54.9970E	0073.89	'01	0070_01.DAT
275	EinsEnd	'0070	'CL6	16:15:46	25-May-04	09 26.0070S	012 54.9970E	0073.87		
276	EinsBeg	'0071	'CL5	18:29:35	25-May-04	09 26.1150S	012 50.0550E	0103.27		

	A	B	C	D	E	F	G	H	I	J
277	SeriBeg	'0071	'CL5	18:29:36	25-May-04	09 26.1150S	012 50.0540E	0103.30	'01	0071_01.DAT
278	SeriEnd	'0071	'CL5	18:36:43	25-May-04	09 26.1690S	012 49.9870E	0103.32	'01	0071_01.DAT
279	SeriBeg	'0071	'CL5	18:36:53	25-May-04	09 26.1700S	012 49.9850E	0103.76	'02	0071_02.DAT
280	SeriEnd	'0071	'CL5	18:38:59	25-May-04	09 26.1760S	012 49.9640E	0103.90	'02	0071_02.DAT
281	EinsEnd	'0071	'CL5	18:39:04	25-May-04	09 26.1760S	012 49.9640E	0103.32		
282	EinsBeg	'0072	'CL4	19:55:04	25-May-04	09 26.1780S	012 44.9900E	0142.83		
283	SeriBeg	'0072	'CL4	19:55:08	25-May-04	09 26.1780S	012 44.9890E	0144.10	'01	0072_01.DAT
284	SeriEnd	'0072	'CL4	20:04:41	25-May-04	09 26.2540S	012 44.9370E	0143.77	'01	0072_01.DAT
285	EinsEnd	'0072	'CL4	20:28:55	25-May-04	09 26.4570S	012 44.7650E	0144.77		
286	EinsBeg	'0073	'ADS1	09:46:17	26-May-04	07 06.8040S	011 51.7230E	0494.30		
287	SeriBeg	'0073	'ADS1	09:46:18	26-May-04	07 06.8040S	011 51.7230E	0494.10	'01	0073F01.DAT
288	SeriEnd	'0073	'ADS1	10:14:46	26-May-04	07 06.2390S	011 51.2410E	0498.20	'01	0073F01.DAT
289	EinsEnd	'0073	'ADS1	10:14:49	26-May-04	07 06.2380S	011 51.2400E	0498.20		
290	EinsBeg	'0073	'ADS1	10:56:12	26-May-04	07 06.1020S	011 51.0310E	0505.70		
291	SeriBeg	'0073	'ADS1	11:05:03	26-May-04	07 05.9430S	011 50.8830E	0507.50	'02	0073K02.DAT
292	SeriEnd	'0073	'ADS1	11:07:35	26-May-04	07 05.8930S	011 50.8580E	0506.80	'02	0073K02.DAT
293	SeriBeg	'0073	'ADS1	11:08:46	26-May-04	07 05.8690S	011 50.8460E	0506.80	'03	0073K03.DAT
294	SeriEnd	'0073	'ADS1	11:10:29	26-May-04	07 05.8370S	011 50.8250E	0507.10	'03	0073K03.DAT
295	EinsEnd	'0073	'ADS1	11:10:32	26-May-04	07 05.8360S	011 50.8240E	0507.20		
296	EinsBeg	'0074	'ADS2	12:16:27	26-May-04	07 06.7670S	011 58.2680E	0000.00		
297	SeriBeg	'0074	'ADS2	12:16:29	26-May-04	07 06.7660S	011 58.2670E	0000.00	'01	0074K01.DAT
298	SeriBeg	'0074	'ADS2	12:17:18	26-May-04	07 06.7460S	011 58.2580E	0246.80	'01	0074K01.DAT
299	SeriEnd	'0074	'ADS2	12:35:21	26-May-04	07 06.3040S	011 58.0540E	0241.60	'01	0074K01.DAT
300	EinsEnd	'0074	'ADS2	12:37:00	26-May-04	07 06.2650S	011 58.0340E	0246.70		
301	EinsBeg	'0075	'ADS3	14:17:52	26-May-04	07 06.8140S	012 04.3990E	0126.10		
302	EinsBeg	'0075	'ADS3	14:18:18	26-May-04	07 06.8050S	012 04.3940E	0126.40		
303	SeriBeg	'0075	'ADS3	14:18:20	26-May-04	07 06.8040S	012 04.3940E	0126.10	'01	0075F01.DAT
304	SeriBeg	'0075	'ADS3	14:21:55	26-May-04	07 06.7300S	012 04.3640E	0125.70	'01	0075F01.DAT
305	SeriEnd	'0075	'ADS3	14:32:50	26-May-04	07 06.4710S	012 04.2980E	0125.30	'01	0075F01.DAT
306	EinsEnd	'0075	'ADS3	14:32:54	26-May-04	07 06.4690S	012 04.2970E	0125.30		
307	EinsBeg			15:07:36	26-May-04	07 06.2520S	012 04.2670E	0125.80		
308	SeriBeg			15:07:37	26-May-04	07 06.2520S	012 04.2680E	0125.80	'01	0076F01.DAT
309	EinsBeg	'0076	'X_0076	16:29:24	26-May-04	07 09.0000S	012 16.4990E	0114.10		
310	SeriBeg	'0076	'X_0076	16:29:31	26-May-04	07 08.9970S	012 16.4990E	0114.10	'01	0076_01.DAT
311	SeriEnd	'0076	'X_0076	16:43:30	26-May-04	07 08.6870S	012 16.4870E	0112.70	'01	0076_01.DAT
312	EinsEnd	'0076	'X_0076	16:43:34	26-May-04	07 08.6860S	012 16.4860E	0112.90		
313	EinsBeg	'0077	'LIA	07:12:54	27-May-04	05 43.4910S	011 54.3640E	0052.65		
314	SeriBeg	'0077	'LIA	07:12:57	27-May-04	05 43.4920S	011 54.3640E	0052.30	'01	0077F01.DAT
315	SeriEnd	'0077	'LIA	07:22:48	27-May-04	05 43.5030S	011 54.3620E	0052.27	'01	0077F01.DAT
316	EinsEnd	'0077	'LIA	07:23:02	27-May-04	05 43.5030S	011 54.3620E	0052.43		
317	EinsBeg	'0077	'LIA	09:08:17	27-May-04	05 43.4980S	011 54.3630E	0051.94		
318	SeriBeg	'0077	'LIA	09:08:59	27-May-04	05 43.4980S	011 54.3640E	0051.91	'02	0077F02.DAT
319	SeriBeg	'0077	'LIA	09:14:59	27-May-04	05 43.4970S	011 54.3630E	0051.83	'02	0077F02.DAT
320	SeriEnd	'0077	'LIA	09:21:20	27-May-04	05 43.4970S	011 54.3630E	0052.05	'02	0077F02.DAT
321	EinsEnd	'0077	'LIA	09:25:31	27-May-04	05 43.4970S	011 54.3630E	0052.32		
322	EinsBeg	'0078	'LIA2	13:10:50	27-May-04	05 12.0010S	011 57.9840E	0031.72		
323	SeriBeg	'0078	'LIA2	13:11:26	27-May-04	05 12.0000S	011 57.9840E	0031.64	'01	0078F01.DAT
324	SeriBeg	'0078	'LIA2	13:15:14	27-May-04	05 12.0050S	011 57.9810E	0031.03	'01	0078F01.DAT
325	SeriBeg	'0078	'LIA2	13:20:37	27-May-04	05 12.0090S	011 57.9790E	0031.38	'01	0078F01.DAT
326	SeriEnd	'0078	'LIA2	13:26:10	27-May-04	05 12.0060S	011 57.9780E	0031.25	'01	0078F01.DAT
327	SeriBeg	'0078	'LIA2	13:35:46	27-May-04	05 12.0080S	011 57.9800E	0030.99	'02	0078F02.DAT
328	SeriBeg	'0078	'LIA2	13:36:27	27-May-04	05 12.0080S	011 57.9800E	0031.41	'02	0078K02.DAT
329	SeriEnd	'0078	'LIA2	14:45:19	27-May-04	05 12.0120S	011 57.9880E	0031.41	'02	0078K02.DAT
330	EinsEnd	'0078	'LIA2	14:47:20	27-May-04	05 12.0140S	011 57.9860E	0031.12		
331	EinsBeg	'0079	'LIA3	19:33:56	27-May-04	05 43.4230S	011 39.3400E	0124.13		
332	SeriBeg	'0079	'LIA3	19:34:01	27-May-04	05 43.4220S	011 39.3390E	0123.37	'01	0079K01.DAT
333	SeriEnd	'0079	'LIA3	19:43:24	27-May-04	05 43.3970S	011 39.1790E	0126.49	'01	0079K01.DAT
334	EinsEnd	'0079	'LIA3	19:43:26	27-May-04	05 43.3970S	011 39.1790E	0125.56		
335	EinsBeg	'0080	'LIA4	22:42:44	27-May-04	06 04.3710S	011 54.3510E	0098.30		
336	SeriBeg	'0080	'LIA4	22:42:50	27-May-04	06 04.3710S	011 54.3500E	0098.10	'01	0080_01.DAT
337	SeriEnd	'0080	'LIA4	22:50:40	27-May-04	06 04.3710S	011 54.3180E	0095.02	'01	0080_01.DAT
338	EinsEnd	'0080	'LIA4	22:50:42	27-May-04	06 04.3710S	011 54.3180E	0096.22		
339	EinsBeg			05:18:53	28-May-04	07 14.1510S	011 52.8560E	0687.10		
340	SeriBeg			05:18:54	28-May-04	07 14.1520S	011 52.8560E	0687.50	'01	0081_01.DAT
341	EinsBeg	'0081	'AT9	05:23:59	28-May-04	07 14.1840S	011 52.7910E	0691.00		
342	SeriBeg	'0081	'AT9	05:29:08	28-May-04	07 14.1650S	011 52.7700E	0689.50	'01	0081F01.DAT
343	SeriEnd	'0081	'AT9	05:51:51	28-May-04	07 14.0510S	011 52.6740E	0691.20	'01	0081F01.DAT
344	EinsEnd	'0081	'AT9	05:52:00	28-May-04	07 14.0510S	011 52.6740E	0691.00		
345	EinsBeg	'0082	'AT8	07:03:28	28-May-04	07 14.1060S	012 02.1470E	0350.60		

	A	B	C	D	E	F	G	H	I	J
346	SeriBeg	'0082	'AT8	07:03:37	28-May-04	07 14.1050S	012 02.1450E	0350.50	'01	0082_01.DAT
347	SeriBeg	'0082	'AT8	07:04:02	28-May-04	07 14.1050S	012 02.1400E	0352.90	'01	0082F01.DAT
348	SeriEnd	'0082	'AT8	07:25:08	28-May-04	07 14.0730S	012 01.8920E	0361.50	'01	0082F01.DAT
349	EinsEnd	'0082	'AT8	07:25:13	28-May-04	07 14.0730S	012 01.8920E	0000.00		
350	EinsBeg	'0082	'AT8	07:28:56	28-May-04	07 14.0680S	012 01.8480E	0361.70		
351	SeriBeg	'0082	'AT8	07:28:59	28-May-04	07 14.0670S	012 01.8480E	0362.00	'02	0082F02.DAT
352	EinsEnd	'0082	'AT8	07:36:39	28-May-04	07 14.0530S	012 01.7490E	0363.00		
353	EinsBeg	'0083	'AT7	09:14:58	28-May-04	07 14.0970S	012 10.8720E	0184.93		
354	SeriBeg	'0083	'AT7	09:15:00	28-May-04	07 14.0960S	012 10.8720E	0185.57	'01	0083F01.DAT
355	SeriEnd	'0083	'AT7	09:28:28	28-May-04	07 13.9570S	012 10.8000E	0184.02	'01	0083F01.DAT
356	EinsEnd	'0083	'AT7	09:28:36	28-May-04	07 13.9560S	012 10.8000E	0183.89		
357	EinsBeg	'0084	'AT6	10:55:44	28-May-04	07 14.2150S	012 19.9310E	0120.37		
358	SeriBeg	'0084	'AT6	10:55:50	28-May-04	07 14.2140S	012 19.9310E	0120.99	'01	0084F01.DAT
359	SeriEnd	'0084	'AT6	11:11:20	28-May-04	07 14.0590S	012 19.8540E	0120.60	'01	0084F01.DAT
360	EinsEnd	'0084	'AT6	11:11:23	28-May-04	07 14.0580S	012 19.8530E	0120.48		
361	EinsBeg	'0085	'AT4	13:29:49	28-May-04	07 14.2010S	012 30.4520E	0070.85		
362	SeriBeg	'0085	'AT4	13:29:53	28-May-04	07 14.2020S	012 30.4510E	0071.81	'01	0085F01.DAT
363	SeriEnd	'0085	'AT4	13:42:50	28-May-04	07 14.2090S	012 30.4260E	0071.57	'01	0085F01.DAT
364	EinsEnd	'0085	'AT4	13:42:55	28-May-04	07 14.2100S	012 30.4260E	0071.93		
365	EinsBeg	'0086	'AT3	14:44:36	28-May-04	07 13.9300S	012 35.2000E	0050.98		
366	SeriBeg	'0086	'AT3	14:44:44	28-May-04	07 13.9290S	012 35.2000E	0052.01	'01	0086F01.DAT
367	SeriEnd	'0086	'AT3	14:52:40	28-May-04	07 13.8510S	012 35.2320E	0051.79	'01	0086F01.DAT
368	EinsEnd	'0086	'AT3	14:52:43	28-May-04	07 13.8500S	012 35.2320E	0051.42		
369	EinsBeg	'0087	'AT1	16:09:46	28-May-04	07 14.1870S	012 46.0220E	0025.94		
370	SeriBeg	'0087	'AT1	16:09:57	28-May-04	07 14.1870S	012 46.0220E	0026.22	'01	0087F01.DAT
371	SeriEnd	'0087	'AT1	16:18:06	28-May-04	07 14.1860S	012 46.0230E	0026.08	'01	0087F01.DAT
372	EinsEnd	'0087	'AT1	16:18:09	28-May-04	07 14.1860S	012 46.0230E	0026.43		
373	EinsBeg	'0088	'AT2	19:20:10	28-May-04	07 14.0890S	012 41.0160E	0039.07		
374	SeriBeg	'0088	'AT2	19:20:11	28-May-04	07 14.0890S	012 41.0160E	0039.07	'01	0088F01.DAT
375	SeriEnd	'0088	'AT2	19:26:59	28-May-04	07 14.0920S	012 41.0170E	0038.99	'01	0088F01.DAT
376	EinsEnd	'0088	'AT2	19:27:03	28-May-04	07 14.0920S	012 41.0170E	0039.56		
377	EinsBeg	'0089	'AM1	01:23:34	29-May-04	08 01.8170S	012 35.8610E	0699.80		
378	SeriBeg	'0089	'AM1	01:29:18	29-May-04	08 01.7930S	012 35.8540E	0700.00	'01	0089_01.DAT
379	SeriEnd	'0089	'AM1	01:46:54	29-May-04	08 01.7550S	012 35.9250E	0694.20	'01	0089_01.DAT
380	SeriBeg	'0089	'AM1	01:49:16	29-May-04	08 01.7470S	012 35.9350E	0693.00	'02	0089K02.DAT
381	SeriEnd	'0089	'AM1	01:50:47	29-May-04	08 01.7450S	012 35.9420E	0691.90	'02	0089K02.DAT
382	EinsEnd	'0089	'AM1	02:00:40	29-May-04	08 01.7200S	012 35.9800E	0689.80		
383	EinsBeg	'0090	'AM2	02:29:26	29-May-04	08 01.1570S	012 37.8540E	0524.90		
384	SeriBeg	'0090	'AM2	02:29:33	29-May-04	08 01.1570S	012 37.8550E	0526.10	'01	0090F01.DAT
385	SeriEnd	'0090	'AM2	03:00:06	29-May-04	08 00.9780S	012 37.9850E	0514.70	'01	0090F01.DAT
386	EinsEnd	'0090	'AM2	03:00:08	29-May-04	08 00.9780S	012 37.9850E	0515.00		
387	EinsBeg	'0091	'AM3	03:59:13	29-May-04	08 00.5860S	012 39.4580E	0423.80		
388	SeriBeg	'0091	'AM3	03:59:25	29-May-04	08 00.5860S	012 39.4600E	0424.00	'01	0091_01.DAT
389	SeriEnd	'0091	'AM3	04:20:33	29-May-04	08 00.4380S	012 39.4990E	0421.20	'01	0091_01.DAT
390	EinsEnd	'0091	'AM3	04:20:38	29-May-04	08 00.4380S	012 39.5000E	0420.40		
391	EinsBeg	'0092	'AM4	04:44:56	29-May-04	07 59.7310S	012 41.0320E	0336.30		
392	SeriBeg	'0092	'AM4	04:45:05	29-May-04	07 59.7300S	012 41.0320E	0336.50	'01	0092_01.DAT
393	SeriEnd	'0092	'AM4	05:01:58	29-May-04	07 59.6000S	012 41.1030E	0330.20	'01	0092_01.DAT
394	EinsEnd	'0092	'AM4	05:02:03	29-May-04	07 59.6000S	012 41.1040E	0329.90		
395	EinsBeg	'0093	'AM5	05:17:27	29-May-04	07 59.3710S	012 41.6390E	0289.10		
396	SeriBeg	'0093	'AM5	05:17:31	29-May-04	07 59.3700S	012 41.6390E	0288.90	'01	0093F01.DAT
397	SeriEnd	'0093	'AM5	05:35:09	29-May-04	07 59.2190S	012 41.7080E	0278.10	'01	0093F01.DAT
398	EinsEnd	'0093	'AM5	05:35:12	29-May-04	07 59.2190S	012 41.7080E	0278.50		
399	EinsBeg	'0094	'AM6	06:31:18	29-May-04	07 58.8840S	012 42.8240E	0184.31		
400	SeriBeg	'0094	'AM6	06:31:21	29-May-04	07 58.8830S	012 42.8240E	0183.90	'01	0094_01.DAT
401	SeriEnd	'0094	'AM6	06:42:08	29-May-04	07 58.8030S	012 42.8390E	0181.38	'01	0094_01.DAT
402	EinsEnd	'0094	'AM6	06:42:11	29-May-04	07 58.8030S	012 42.8390E	0181.27		
403	EinsBeg	'0095	'AM7	07:02:35	29-May-04	07 58.5250S	012 43.7160E	0141.48		
404	SeriBeg	'0095	'AM7	07:02:46	29-May-04	07 58.5230S	012 43.7170E	0141.48	'01	0095F01.DAT
405	SeriEnd	'0095	'AM7	07:18:19	29-May-04	07 58.4280S	012 43.7590E	0138.39	'01	0095F01.DAT
406	EinsEnd	'0095	'AM7	07:18:21	29-May-04	07 58.4280S	012 43.7590E	0138.58		
407	EinsBeg	'0096	'AM8	07:37:08	29-May-04	07 58.1490S	012 44.6010E	0122.27		
408	SeriBeg	'0096	'AM8	07:37:09	29-May-04	07 58.1490S	012 44.6010E	0122.44	'01	0096_01.DAT
409	EinsBeg	'0096	'AM8	07:39:35	29-May-04	07 58.1260S	012 44.6100E	0122.75		
410	SeriBeg	'0096	'AM8	07:39:40	29-May-04	07 58.1250S	012 44.6100E	0123.04	'01	0096F01.DAT
411	SeriEnd	'0096	'AM8	07:46:18	29-May-04	07 58.0870S	012 44.6510E	0122.30	'01	0096F01.DAT
412	EinsEnd	'0096	'AM8	07:46:21	29-May-04	07 58.0870S	012 44.6510E	0122.63		
413	EinsBeg	'0097	'AM9	08:19:51	29-May-04	07 57.3190S	012 46.1800E	0118.40		
414	SeriBeg	'0097	'AM9	08:19:57	29-May-04	07 57.3190S	012 46.1810E	0118.04	'01	0097_01.DAT

	A	B	C	D	E	F	G	H	I	J
415	SeriEnd	'0097	'AM9	08:27:36	29-May-04	07 57.2680S	012 46.2110E	0118.02	'01	0097_01.DAT
416	EinsEnd	'0097	'AM9	08:27:38	29-May-04	07 57.2680S	012 46.2110E	0118.16		
417	EinsBeg	'0098	'AM10	09:07:58	29-May-04	07 55.4930S	012 50.3060E	0103.95		
418	SeriBeg	'0098	'AM10	09:08:00	29-May-04	07 55.4920S	012 50.3070E	0103.78	'01	0098F01.DAT
419	SeriEnd	'0098	'AM10	09:19:10	29-May-04	07 55.3100S	012 50.3390E	0103.21	'01	0098F01.DAT
420	EinsEnd	'0098	'AM10	09:19:13	29-May-04	07 55.3100S	012 50.3390E	0103.94		
421	EinsBeg	'0099	'AM11	09:56:05	29-May-04	07 53.7140S	012 54.3340E	0080.90		
422	SeriBeg	'0099	'AM11	09:56:15	29-May-04	07 53.7120S	012 54.3330E	0081.40	'01	0099F01.DAT
423	SeriEnd	'0099	'AM11	10:07:21	29-May-04	07 53.5510S	012 54.2540E	0080.94	'01	0099F01.DAT
424	EinsEnd	'0099	'AM11	10:07:22	29-May-04	07 53.5510S	012 54.2540E	0080.97		
425	EinsBeg	'0100	'AM14	11:34:07	29-May-04	07 49.9490S	013 02.9920E	0024.58		
426	SeriBeg	'0100	'AM14	11:34:27	29-May-04	07 49.9490S	013 02.9920E	0024.55	'01	0100F01.DAT
427	SeriEnd	'0100	'AM14	11:40:11	29-May-04	07 49.9490S	013 02.9890E	0024.81	'01	0100F01.DAT
428	EinsEnd	'0100	'AM14	11:40:14	29-May-04	07 49.9490S	013 02.9890E	0024.77		
429	EinsBeg	'0101	'AM13	14:04:14	29-May-04	07 51.0190S	013 00.5310E	0046.09		
430	SeriBeg	'0101	'AM13	14:04:18	29-May-04	07 51.0200S	013 00.5300E	0047.23	'01	0101F01.DAT
431	SeriEnd	'0101	'AM13	14:12:45	29-May-04	07 51.0240S	013 00.5270E	0046.79	'01	0101F01.DAT
432	EinsEnd	'0101	'AM13	14:13:06	29-May-04	07 51.0230S	013 00.5260E	0046.52		
433	EinsBeg	'0102	'AM12	15:51:30	29-May-04	07 51.9330S	012 58.4520E	0057.80		
434	SeriBeg	'0102	'AM12	15:51:35	29-May-04	07 51.9330S	012 58.4520E	0057.63	'01	0102F01.DAT
435	SeriEnd	'0102	'AM12	15:58:43	29-May-04	07 51.9510S	012 58.4450E	0057.83	'01	0102F01.DAT
436	EinsEnd	'0102	'AM12	15:58:46	29-May-04	07 51.9510S	012 58.4450E	0057.68		
437	EinsBeg	'0103	'786	04:12:47	30-May-04	09 04.7910S	012 42.4740E	0444.90		
438	SeriBeg	'0103	'786	04:12:50	30-May-04	09 04.7900S	012 42.4750E	0444.30	'01	0103_01.DAT
439	SeriEnd	'0103	'786	04:35:22	30-May-04	09 04.3820S	012 42.5360E	0407.00	'01	0103_01.DAT
440	EinsEnd	'0103	'786	04:36:34	30-May-04	09 04.3610S	012 42.5390E	0414.90		
441	EinsBeg	'0104	'783	05:45:26	30-May-04	09 04.7930S	012 46.5660E	0431.50		
442	SeriBeg	'0104	'783	05:45:31	30-May-04	09 04.7920S	012 46.5660E	0430.60	'01	0104F01.DAT
443	SeriEnd	'0104	'783	06:04:31	30-May-04	09 04.3440S	012 46.6390E	0286.40	'01	0104F01.DAT
444	EinsEnd	'0104	'783	06:04:55	30-May-04	09 04.3350S	012 46.6390E	0286.00		
445	EinsBeg	'0105	'779	07:33:20	30-May-04	09 04.8170S	012 53.1580E	0086.28		
446	SeriBeg	'0105	'779	07:33:23	30-May-04	09 04.8160S	012 53.1570E	0086.06	'01	0105F01.DAT
447	SeriEnd	'0105	'779	07:42:41	30-May-04	09 04.6640S	012 53.1290E	0078.23	'01	0105F01.DAT
448	EinsEnd	'0105	'779	07:43:51	30-May-04	09 04.6460S	012 53.1220E	0077.44		
449	EinsBeg	'0106	'778	09:00:51	30-May-04	09 04.8950S	012 56.0630E	0039.48		
450	SeriBeg	'0106	'778	09:00:57	30-May-04	09 04.8950S	012 56.0630E	0039.08	'01	0106F01.DAT
451	SeriEnd	'0106	'778	09:08:56	30-May-04	09 04.8970S	012 56.0630E	0039.50	'01	0106F01.DAT
452	EinsEnd	'0106	'778	09:09:01	30-May-04	09 04.8960S	012 56.0630E	0038.94		
453	EinsBeg	'0107	'Cua13	11:33:36	30-May-04	09 04.8990S	012 56.9670E	0035.58		
454	SeriBeg	'0107	'Cua13	11:33:40	30-May-04	09 04.8990S	012 56.9670E	0035.69	'01	0107F01.DAT
455	SeriEnd	'0107	'Cua13	11:41:08	30-May-04	09 04.8980S	012 56.9640E	0035.04	'01	0107F01.DAT
456	EinsEnd	'0107	'Cua13	11:41:10	30-May-04	09 04.8980S	012 56.9640E	0035.27		
457	EinsBeg	'0108	'Cua2	18:32:52	30-May-04	09 42.0460S	012 43.1740E	0403.00		
458	SeriBeg	'0108	'Cua2	18:32:54	30-May-04	09 42.0460S	012 43.1740E	0402.60	'01	0108F01.DAT
459	SeriEnd	'0108	'Cua2	18:38:01	30-May-04	09 42.0160S	012 43.1590E	0403.20	'01	0108F01.DAT
460	EinsEnd	'0108	'Cua2	18:38:03	30-May-04	09 42.0160S	012 43.1590E	0402.60		
461	EinsBeg	'0109	'Cua4	21:19:18	30-May-04	09 28.2250S	013 00.1580E	0049.18		
462	SeriBeg	'0109	'Cua4	21:19:22	30-May-04	09 28.2250S	013 00.1580E	0050.11	'01	0109_01.DAT
463	SeriEnd	'0109	'Cua4	21:22:29	30-May-04	09 28.1960S	013 00.1820E	0049.27	'01	0109_01.DAT
464	EinsEnd	'0109	'Cua4	21:22:32	30-May-04	09 28.1960S	013 00.1820E	0049.72		
465	EinsBeg	'0110	'Cua6	00:00:04	31-May-04	09 31.1780S	012 38.5260E	0545.90		
466	SeriBeg	'0110	'Cua6	00:00:07	31-May-04	09 31.1780S	012 38.5260E	0546.50	'01	0110_01.DAT
467	SeriEnd	'0110	'Cua6	00:03:31	31-May-04	09 31.1590S	012 38.5210E	0546.70	'01	0110_01.DAT
468	EinsEnd	'0110	'Cua6	00:03:34	31-May-04	09 31.1590S	012 38.5210E	0545.70		
469	EinsBeg	'0111	'Cua8	02:27:18	31-May-04	09 17.4660S	012 54.9400E	0046.93		
470	SeriBeg	'0111	'Cua8	02:27:23	31-May-04	09 17.4660S	012 54.9380E	0047.62	'01	0111_01.DAT
471	SeriEnd	'0111	'Cua8	02:31:03	31-May-04	09 17.4150S	012 54.9170E	0047.56	'01	0111_01.DAT
472	EinsEnd	'0111	'Cua8	02:31:07	31-May-04	09 17.4140S	012 54.9170E	0047.66		
473	EinsBeg	'0111	'Cua8	02:33:53	31-May-04	09 17.3780S	012 54.9060E	0048.19		
474	SeriBeg	'0111	'Cua8	02:35:15	31-May-04	09 17.3620S	012 54.9010E	0047.76	'01	0111_01.DAT
475	SeriEnd	'0111	'Cua8	02:37:39	31-May-04	09 17.3340S	012 54.8930E	0047.86	'01	0111_01.DAT
476	EinsEnd	'0111	'Cua8	02:38:34	31-May-04	09 17.3250S	012 54.8900E	0047.55		
477	EinsBeg	'0112	'Cua10	04:38:31	31-May-04	09 16.7930S	012 37.6660E	0388.40		
478	SeriBeg	'0112	'Cua10	04:38:34	31-May-04	09 16.7920S	012 37.6650E	0388.20	'01	0112_01.DAT
479	SeriEnd	'0112	'Cua10	04:42:23	31-May-04	09 16.7860S	012 37.6420E	0390.40	'01	0112_01.DAT
480	EinsEnd	'0112	'Cua10	04:42:26	31-May-04	09 16.7860S	012 37.6420E	0389.10		
481	EinsBeg	'0113	'Cua12	07:06:59	31-May-04	09 06.8970S	012 56.3460E	0026.72		
482	SeriBeg	'0113	'Cua12	07:11:30	31-May-04	09 06.8180S	012 56.3240E	0027.30	'01	0113F01.DAT
483	SeriEnd	'0113	'Cua12	07:15:28	31-May-04	09 06.7440S	012 56.3150E	0028.13	'01	0113F01.DAT

	A	B	C	D	E	F	G	H	I	J
484	SeriBeg	'0113	'Cua12	07:15:35	31-May-04	09 06.7420S	012 56.3150E	0028.62	'02	0113F02.DAT
485	EinsEnd			07:20:31	31-May-04	09 06.3200S	012 56.4490E	0029.82		
486	EinsBeg	'0114	'Cua14	09:00:04	31-May-04	09 03.5780S	012 40.2970E	0558.00		
487	SeriBeg	'0114	'Cua14	09:09:16	31-May-04	09 03.5200S	012 40.2620E	0555.70	'01	0114_01.DAT
488	SeriEnd	'0114	'Cua14	09:12:31	31-May-04	09 03.4970S	012 40.2540E	0554.50	'01	0114_01.DAT
489	EinsEnd	'0114	'Cua14	09:14:01	31-May-04	09 03.4860S	012 40.2480E	0555.50		
490	EinsBeg	'0115	'Cua16	11:21:25	31-May-04	09 01.7380S	012 56.9710E	0133.43		
491	SeriBeg	'0115	'Cua16	11:21:38	31-May-04	09 01.7360S	012 56.9700E	0132.72	'01	0115_01.DAT
492	SeriEnd	'0115	'Cua16	11:25:15	31-May-04	09 01.7070S	012 56.9640E	0134.32	'01	0115_01.DAT
493	EinsEnd	'0115	'Cua16	11:25:17	31-May-04	09 01.7070S	012 56.9640E	0134.76		
494	EinsBeg	'0116	'Cua18	13:07:02	31-May-04	08 53.4890S	012 45.8370E	0702.00		
495	SeriBeg	'0116	'Cua18	13:07:06	31-May-04	08 53.4890S	012 45.8360E	0702.00	'01	0116F01.DAT
496	SeriEnd	'0116	'Cua18	13:11:03	31-May-04	08 53.4660S	012 45.8220E	0703.60	'01	0116F01.DAT
497	EinsEnd	'0116	'Cua18	13:11:07	31-May-04	08 53.4660S	012 45.8220E	0703.90		
498	EinsBeg	'0117	'Cua20	15:10:52	31-May-04	08 56.7710S	012 59.9290E	0189.78		
499	SeriBeg	'0117	'Cua20	15:11:07	31-May-04	08 56.7710S	012 59.9280E	0189.93	'01	0117_01.DAT
500	SeriEnd	'0117	'Cua20	15:14:20	31-May-04	08 56.7670S	012 59.9120E	0190.31	'01	0117_01.DAT
501	EinsEnd	'0117	'Cua20	15:14:22	31-May-04	08 56.7670S	012 59.9110E	0190.35		
502	EinsBeg	'0118	'Cua22	16:48:24	31-May-04	08 47.3450S	012 55.0200E	0000.00		
503	SeriBeg	'0118	'Cua22	16:48:31	31-May-04	08 47.3460S	012 55.0200E	0205.50	'01	0118_01.DAT
504	SeriEnd	'0118	'Cua22	16:51:47	31-May-04	08 47.3520S	012 55.0170E	0000.00	'01	0118_01.DAT
505	EinsEnd	'0118	'Cua22	16:51:49	31-May-04	08 47.3520S	012 55.0170E	0208.12		
506	EinsBeg	'0119	'Cua24	18:15:49	31-May-04	08 50.6580S	013 05.2430E	0105.90		
507	SeriBeg	'0119	'Cua24	18:15:51	31-May-04	08 50.6580S	013 05.2440E	0105.26	'01	0119_01.DAT
508	SeriEnd	'0119	'Cua24	18:18:00	31-May-04	08 50.6780S	013 05.2480E	0105.15	'01	0119_01.DAT
509	EinsEnd	'0119	'Cua24	18:18:04	31-May-04	08 50.6790S	013 05.2480E	0105.27		
510	EinsBeg	'0120	'Cua25	19:36:56	31-May-04	08 43.3340S	013 03.1220E	0126.61		
511	SeriBeg	'0120	'Cua25	19:36:58	31-May-04	08 43.3340S	013 03.1230E	0126.92	'01	0120_01.DAT
512	SeriEnd	'0120	'Cua25	19:40:49	31-May-04	08 43.3410S	013 03.1930E	0125.01	'01	0120_01.DAT
513	EinsEnd	'0120	'Cua25	19:40:53	31-May-04	08 43.3410S	013 03.1940E	0124.32		