

SO183 processing log Sediment echosounder data (Atlas Parasound)

a) Original data

The original data (PS3-files) was obtained from the AWI mass storage system.

Data volume	: 24.6 GB
Total number of PS3-files	: 6472

The data sets additionally contained already corrected PS3-files tagged with the following problem descriptors:

- "GPS position jumps to 0"	: 111 PS3-files
- "ETC time errors"	: 5 PS3-files

These corrected data sets were merged with the original raw data.

b) Navigation

The file headers of Atlas Parasound PS3-files contain the original navigation of the obtained data. No further processing was performed.



Figure 1: Map showing the positions (red) extracted from headers of PS3 files.



c) Processing

A check of all PS3-files including all headers returned the following results:

Total r	number	of	files checked	:	647	2	
Total r	number	of	headers checked	:	122	8929	
Total r	number	of	files with invalid date/time	:	14	(0.22	percent)
Total r	number	of	invalid date/time headers	:	37	(0.00	percent)
Total r	number	of	files with wrong lat/longs	:	5	(0.08	percent)
Total r	number	of	wrong lat/long headers	:	14	(0.00	percent)

Two PS3-files did not contain any data (0 Kb) and were deleted.

The PS3-files were assigned to track profiles based on a given profile/station log file and sorted to accordant directories. The PS3-files are published as TAR archives of each profile directory.

SEG-Y files were generated from the PS3-files for each track profile.

d) Data visualization with SeNT

The SeNT (Se suite for Windows NT) program (Universität Bremen, Hanno von Lom) was used to create plots of the Atlas Parasound data. The SeNT program executable version is 2.02 of 21/09/2005.

The Atlas Parasound data of each track profile was plotted by distance. These plots were saved as GIF image files. If a track profile is too long the plot will be divided to several GIF files.