

# Documentation

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## Ships Tracks

- [2007](#)
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Overview map (2007-2013)

## Security Information

Basic safety instruction was provided during the mandatory lecture. In cases of emergency, please ring 0421-2003161. This is my (Vikram Unnithan) office telephone number which is forwarded to my mobile. Please note that we might be out of mobile phone range. The call sign of the Heincke is DBCK. Contact the Bremerhaven or Helgoland coast guard in case of emergency.

This information will be updated as soon as possible.

## LaTeX final report template

Please read and follow the following instructions:

- Download the template and supplementary files from below (or here - [zipped file](#))
- Have a look at the [2010 Excursion report](#)
- Rename the template to Heincke-report-xyz.tex where xyz is your name
- Edit the above renamed file with your text and contribution to the report
- Once you have finished with the report, upload it to the file share (samba, smb) on server Challenger ([challenger.gislab.jacobs-university.de/data/Heincke2013/report](http://challenger.gislab.jacobs-university.de/data/Heincke2013/report))
- Give the images and figures a logical name eg. Heincke-report-xyz-figure1; where xyz is your name
- Upload the images and figures to [challenger.gislab.jacobs-university.de/data/Heincke2011/report/images](http://challenger.gislab.jacobs-university.de/data/Heincke2011/report/images)
- **Inclusion of tables** (templates below, Under "Procedures") in LaTeX report: different options are available:
  - a) Just repeat data entry in LaTeX;
  - b) Export tables (properly reformatted) as images and include them as .eps
  - c) Use tools such as (good luck...):
    - <http://cobweb.ecn.purdue.edu/~zhang97/xls2latex/>
    - <http://www.ctan.org/tex-archive/support/excel2latex/>
    - [LaTable](#)



The LaTeX template package is available as a [zipped file](#)  
For additional help with LaTeX and the template, please read the [attached instruction and LaTeX quick guide](#)  
An example of a typical cruise report is [attached and can be found here](#)


## Background literature

- [http://www.hzg.de/imperia/md/content/gkss/institut\\_fuer\\_kuestenforschung/kok/icon/marcopoli\\_r\\_s\\_33.pdf](http://www.hzg.de/imperia/md/content/gkss/institut_fuer_kuestenforschung/kok/icon/marcopoli_r_s_33.pdf)
- Steingrund 1955 or [fulltext-steingrund1955.pdf](#)
- [Surveying Methodology and Techniques](#)
- [Multibeam](#)
- [Pre-cruise instructions - example](#)
- [160843ab Sound in water introduction.pdf](#)
- Visual Core descriptions
  - [Overview](#)
  - [Visual Core Descriptions](#)
  - [Example of Visual Core description](#)
- [aggregates](#)
- [origin of tides](#)
- [Island terminus evolution.pdf](#)
- [intertidal surface mapping.pdf](#)
- [Sampling procedures](#)
- [Sediments](#)
- CTD (DOI) Data links from previous cruises
  - 2009: HE-301 <http://doi.pangaea.de/10.1594/PANGAEA.745051>
  - 2010: HE-324 <http://doi.pangaea.de/10.1594/PANGAEA.745053>
  - 2011: HE-349 <http://doi.pangaea.de/10.1594/PANGAEA.760021>

## Procedures

- Station Lists (used for CTD, SVP, multinet, plankton net, box core, push core etc) ([Template pdf](#), [.xls](#))
- Sample Templates ([Template pdf](#), [.doc](#))
- Line Lists (used for multibeam, echosounders, ADCP, sidescan, magnetometer etc)
  - MB ([Template pdf](#), [.xls](#))
  - SES ([Template pdf](#), [.xls](#))
  - Generic Line ([Template pdf](#), [.xls](#))
- [Processing multibeam data using MB-System](#)
- [Foraminifera Identification Guide](#)
- [Sampling How To](#)

## Equipment, instruments and software

- ADCP
- CTD
- Fisheries Echosounder
- SVP
- Multibeam
  - EM710 specifications see attached [164939ad\\_em710\\_product\\_specification.pdf](#)
  - [Movie functioning MB](#)
- Parametric Echosounder
- Magnetometer
- Sidescan Sonar
- Plankton Net
- Box Core
- Push Core
- ROV 

### Software available on board

- SES acquisition and processing software
- EM710 multibeam acquisition and processing software
- ADCP
- CTD
- SVP
- Fledermaus - [link to IVS pages](#)
- MB-System - [Link to mbsystem webpages](#)
- GMT
- OFOP
- ArcGIS
- Magnetometer software
  - acquisition software
  - [Magnetic modelling software](#)
- Sidescan acquisition software

## Equipment Checklist

- [The link to the checklist for 2011 is here](#)

- [PACKING LIST 2](#)
- [PACKING LIST 5](#)

## Procedures on Board

### **Narration**

### **Navigation**

Datamine. Info on: [https://teamwork.jacobs-university.de:8443/confluence/display/geoheinke/heincke\\_sysadmin](https://teamwork.jacobs-university.de:8443/confluence/display/geoheinke/heincke_sysadmin)

the scripts running on datamine are copied and testable/viewable here:

[cgi-bin.tar.gz](#)

[scripts.tar.gz](#)

Modified and updated the perl script "nmea2xyzt.pl" such that it takes any nmea data file and spits out long, lat, unix time UTC, time utc. [Modified file is here](#)

### **CTD/SVP**

### **ADCP**

### **SES**

\*trigger\* IMPORTANT WHILE MB WORKS !!!!

<https://teamwork.jacobs-university.de:8443/confluence/display/geosnippet/2011/03/04/Heincke+parametric+echosounder+SES+setup+notes>

### **MULTIBEAM - CARIS**

<https://teamwork.jacobs-university.de:8443/confluence/label/geosnippet/multibeam>

<https://teamwork.jacobs-university.de:8443/confluence/label/geosnippet/mbsystem>

<https://teamwork.jacobs-university.de:8443/confluence/label/geosnippet/heincke>

### **Magnetics**

[Explorer - Operation Manual.pdf](#)

[Magnetometer\\_Jaccobs\\_Universität\\_October\\_2011\\_english.pdf](#)

[SeaLINK Software.iso](#)

## **System administration**

Link to the [SYSTEM ADMINISTRATION PAGE](#) (to be restricted)!!!!