

Minutes of the GENUS project meeting

Hamburg, 05. Nov. 2009

Attendees:

University of Hamburg, IfBM: K. Emeis, N. Lahajnar, A. Neumann

University of Hamburg, IHF: R. Koppelman, B. Martin

MPI Meteorology: S. Pfeifer

GKSS Geesthacht: B. Nagel

IO Warnemünde: W. Fennel, A. Eggert, M. Schmidt, V. Mohrholz, N. Wasmund

ZMT Bremen: W. Ekau, T. Rixen, A. Flohr

University of Bremen, MarZoo: H. Auel, A. Schukat

AWI Bremerhaven: F. Buchholz, T. Werner

Agenda:

1. Expeditions
 - Africana 2009
 - Discovery 2010
 - M.S. Merian 2011
2. Databases and data management
3. Reports from GENUS sub-projects
 - Results from already available data sources
 - Milestones
 - Scholarships 2009
4. Workshops 2010
5. Scholarships for 2010
6. Final Workshop / Presentation for GENUS Part 1 (2011/2012)
7. Miscellaneous

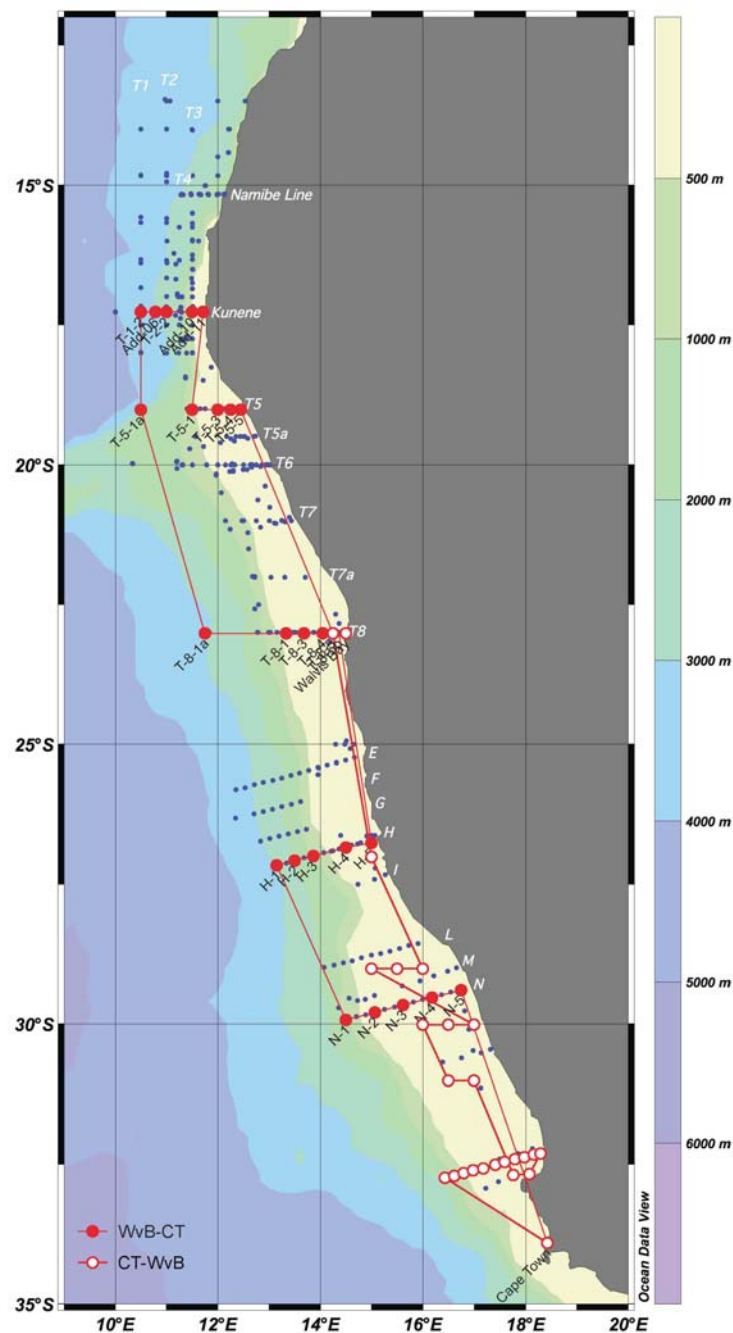
Start 11:00

K. Emeis welcomed all attendees at the University of Hamburg, Center for Marine and Atmospheric Sciences and gave a brief overview about the current status of the GENUS project.

TOP 1: Expeditions

Africana 2009:

W. Ekau gave a broad review about the oncoming Africana cruise 258 in Dec. 2009. All participants will arrive in Cape Town on Nov. 29 and can immediately board Africana - no hotel accommodation needed. Tourist visa will be sufficient for immigration with a special permit of the ship's agent (sent to all participants by e-mail). The two containers from Germany will be unloaded at the pier on Nov. 30. Cruise schedule is Cape Town - Cape Town Dec. 1 - Dec 18, with an anchorage at Walvis Bay for crew exchange on Dec. 7. The cruise plan is shown in the map below. All participants agreed that the transect Kunene river in the north should get a higher priority than transect N or H in the south.



N. Lahajnar stressed out that the organization for transport and logistics is very important for a smooth and successful handling of the equipment. The samples from the Africana cruise will be sent home to Germany by Worldcourier GmbH. Dry-ice will be ordered (blocks instead of blocks) with the aid of the ship's agent. Maximum sample volume for dry-ice handling will be 500 liters (= about 16 special dry-ice boxes) and additional 6 boxes as frozen goods (-20°C). All samples will be initially sent from Cape Town to MarZoo Bremen around Dec. 20.

Discovery 2010:

F. Buchholz provided some impressions of the British research vessel RRS Discovery. Additional information can be obtained on

<http://web.pml.ac.uk/solas/dogee/disco/discovery.htm>

The cruise starts at Walvis Bay on Sep 10 and ends in Cape Town Oct 11 2010 with an optional stopover. The list of participants will be compiled in January 2010 after the Africana cruise. Maximum number of participants: 28. Equipment requests for the expedition: CTD with large water samplers (if provided by Discovery, then one additional ship's own technician is required), deep-sea and sediment echosounding system, ADCP, lowered ADCP, sediment traps (IOW, ZMT), MOCNESS (IHF), Multinet (MarZoo), pump-cast CTD (200m, IOW??), IKMT, Tucker, in-situ pumps, bottom-water sampler, multicorer (IfBM), Ferrybox (GKSS).

→ Task: Check SeaCon or SubCon connections!

Four 20'-containers will be sent, three with equipment, one lab-container (ZMT). IHF requested that their equipment has to be sent directly from Cape Town to Las Palmas after the cruise.

→ Task: Check whether the containers have to be sent to UK or to Walvis Bay!

Merian 2011:

K. Emeis and V. Mohrholz presented first information on Merian cruises in 2011. Max. participants: 22. The early cruise is scheduled for Feb./March 2011, the later cruise from Aug. 8 to Sep. 11. Ports of embarkation / disembarkation still open (Libreville/Gabon?).

For a potential second project phase of GENUS, applications for ship-time requests (2012-2014) have to be submitted as soon as possible. A cooperation / comparison with the Humboldt upwelling region off South America could be a fruitful task.

→ Task: Applications to be written soon!

TOP 2: Databases and data management

A. Eggert introduced the idea and structure of the data base located on the IOW-Server in Warnemünde. Basically it is a free structure where all relevant data for GENUS can be stored.

→ Tasks: IOW requested that all relevant data should be announced to A. Eggert. In addition, all sub-projects need to announce one person who is responsible for data upload and management. These persons get full “write access” for the data base.

Furthermore it was discussed if an affiliation with the NANSIS database (Marek Ostrowski) could lead to a synergetic upgrade of GENUS own data. It should be checked if existing and future data packages from GENUS could be used as an “entry-card” for getting full access to the NANSIS data base which contains several 10,000 datasets and goes presumably online at the beginning of 2010. A cooperation would require a legal contract of how the NANSIS data could be used for GENUS relevant publications.

→ Task: Contact Marek Ostrowski / NANSIS to elicit if a cooperation is possible

TOP 3: Reports from GENUS sub-projects

SP-0 (IfBM - Emeis/Lahajnar):

K. Emeis reported about GENUS coordination activities. These are among others: (a) internal coordination including organisation of ship expeditions; (b) coordination of GENUS capacity building activities in cooperation with other institutions; (c) coordination of various field-experiments; and (d) external communication and presentation of the GENUS project. This includes the cooperation with a professional media team from *Multimedia Kontor* Hamburg (affiliated with the University of Hamburg) and should result in a professional podcast series about GENUS activities including ship expeditions.

SP-3 (IfBM/GKSS - Emeis/Nagel):

K. Emeis presented results from cruises Meteor 76-2 and others with the emphasis on nutrient cycling and ¹⁵N variability and transfer off the Namibian shelf.

SP-1 and SP-2 (MPI-Met and IOW - Pfeifer, Fennel/Mohrholz/Schmidt/Wasmund):

M. Schmidt, V. Mohrholz and S. Pfeifer reported on the implementation of the REMO simulation for the Benguela upwelling area. The outcome will be a coupled prognostic model of the Benguela ecosystem. In order to gather additional and sustainable data short and long-term moorings are being deployed at the 23°S transect off Namibia.

SP-5 (IHF - Koppelman):

R. Koppelman gave an overview of already existing data, especially from cruise Merian 07-2b. These data are also being used for bachelor and master theses. So far analyses and evaluation is focussed on biomass-analysis, counting of individuals, Electron-Transport-System (ETS) activity, stable isotopes measurements and gelatinous organisms.

SP-6 (MarZoo - Auel):

H. Auel reported about ongoing master theses dealing with zooplankton distribution off Namibia. The results, e.g. stable isotopes and lipid measurements, will be integrated to the ECOPATH model. MarZoo currently hosts two scholarship holders from Namibia: Chris

Bartholomeae's work is focussed on climate changes in the Benguela region whereas Nadine Moroff works on pelagic fish.

H. Auel strongly suggests that in order to work with calibrated data, an intercomparison study for stable isotope treatment and measurement should be conducted. Potential participants are institutes from Jülich, Bremen, South Africa, IOW, ZMT, IfBM and Berlin.

→ Task: Fact finding if an intercomparison study for ^{15}N is feasible and meaningful

SP-4 (ZMT - Ekau/Rixen):

W. Ekau gave a presentation about changes of fish larvae during the period 1999 and 2008 as result from several cruises conducted in the upwelling area. T. Rixen reported on CO_2 which is a bit oversaturated. Current results indicate and confirm that major water masses originate from the north.

Ph.D student Anita Flohr from ZMT will start a daily measurement campaign on the Namibian shelf for one complete year after the end of the Africana cruise 2009.

SP-7 (AWI - Buchholz):

F. Buchholz reported on results that krill could be used as an indicator for upwelling.

In summary all GENUS sub-projects are well in time regarding their respective deliverables and milestones. Existing data have been extensively analysed so that during the oncoming cruises a precise and target-oriented extension of the dataset is possible.

TOP 4: Workshops 2010

A workshop for the Namibian partners is scheduled for 2010. F. Buchholz, T. Rixen, A. Eggert and others were announced to prepare and organize a workshop for about 3-5 days in Namibia. From former meetings and consultations it had turned out that the Namibian partners are particularly interested in topics such as geostatistics and environmental statistics in order to use already existing as well as future databases. A specific and detailed agenda and a time slot will be discussed with Namibian partners and NANSCLIM representatives at the BCC meeting in November 2009.

→ Tasks: BCC meeting attendees need to find out facts for the workshop 2010 and are asked to provide all necessary information to the planning team

TOP 5: Scholarships for 2010

There is one open scholarship (master program) in GENUS for 2010. Past experience shows that the application procedure should be modified and improved. Instead of issuing a public call for application, a direct search for candidates after consultation with Namibian partners should be preferred to maximize a successful staffing. The BCC meeting in Nov. 2009 is

therefore a good opportunity to find potential candidates or to narrow down the list of applicants.

→ Task: BCC meeting attendees are asked to assess potential candidates

TOP 6: Final Workshop / Presentation for GENUS Part 1 (2011/2012)

GENUS will present the outcome and overall results of the first project phase during an international conference or workshop. Several options were discussed within which scope the manifold achievements and conclusions should be shared with the scientific and environmental-economic community. Potential platforms are

- GENUS own workshop with invitations of related groups
- EGU in Vienna
- ASLO in Portland
- Canaries Workshop repeat
- A conference under IMBER auspices

All members agreed that a dedicated event under the umbrella and with the support of IMBER could be a very favourable and successful platform and opens up the possibility to meet or invite other related groups.

→ Task: Coordination board needs to get in contact with IMBER to find out if this approach is possible

TOP 7: Miscellaneous

- Project extension second phase: So far all sub-projects agreed that an extension is essential and recommended. This means that a submission of the proposal have to be submitted the latest in summer 2010 before the Discovery cruise.

→ Task: Submission deadline for proposals spring/early summer 2010

- GENUS coordination has to check if the requested no-cost-involved extension of SP-0 and SP-3 is automatically valid for all sub-projects or if such requests have to be placed by every individual SP.

→ Task: GENUS coordination has to check on no-cost-involved extension for SPs

- R. Koppelman showed a video sequence of his recently purchased ROV during Meteor M 79/3 in the Atlantic. This ROV will also be used for GENUS activities during one Merian cruise and seemingly can be a very powerful instrument to get a visual impression of a potential study area.

14:45: Meeting adjourned