

Minutes from the BALTIC GAS fall workshop at the Leibniz Institute for Baltic Sea Research, Warnemünde (IOW), Germany, September 16-17, 2009

Rapporteur: Henrik Fossing

Documents (comprising PowerPoint and pdf-files) are uploaded on MEMBERS AREA (only access with password) at the BALTIC GAS web-page: <http://www.balticgas.net>

Registration

Document

00.BALTIC GAS workshop participants.pdf

BALTIC GAS update – project months 1-8 (Jan. – Aug. 2009)

Updating of action list

Henrik Fossing went through the action list (AL) based on the minutes from the kick-off meeting in Bremen. The AL was updated and supplied with deadlines for 'actions' not met. At the end of the workshop the reviewed AL was further extended based on issues raised and/ or discussed on the workshop (see end of Minutes: Action list)

Updating BALTIC GAS schedule of deliverables

The WP leaders checked the BALTIC GAS work progress (i.e. Gantt Chart in BALTIC GAS Full Research Plan) and deliverables as listed at the web-page 'Project area' (access through the BONUS Extranet login at <http://www.bonusportal.org>)

There was consensus that BALTIC GAS progresses as planned and according to the Gantt Chart. With respect to the deliverables it was noted that,

- deliverable No.1 in WP1 BALTIC GAS web-page (due month 8) is delayed but will be delivered ASAP*
- deliverable No.3 in WP1 BALTIC GAS Workshop and meetings (due month 2) has been delivered to BONUS EEIG by e-mail but awaits submission by the Scientific Reporting Tool.*

It was noted that deliverable WP3/del.2 was fully included in WP3/del.1. Thus these two deliverables will be delivered as one report (due month 36). Also 'the nature' of some of the deliverables in WP2 makes it obvious to combine these deliverables into one report.

Document:

01.Updating BALTIC GAS schedule of deliverables.ppt

Consortium Agreement

Henrik Fossing informed about the importance of having the Consortium Agreement (CA) signed as soon as possible by all partners. Unfortunately, three partners have not signed the CA. This implies that other BALTIC GAS partners have been prevented from receiving the funding from their national funding institution that otherwise has been approved.

An ongoing discussion between Project Management Juelich (i.e. the German funding Agency) and the BONUS Secretariat regarding Annex I to the CA has so far restrained two German institutions from signing the CA.

The Coordinators deeply regret this situation and have in cooperation with the German PSs appealed both to the BONUS Secretariat and the German funding Agency encouraging the two institutions to intensify the dialogue in order solve the Annex I problem as soon as possible.

Work package progress during first 8 project months

The WP-leaders gave an overview of 'what's been done' in the five WPs until now. These presentations strongly supported the conclusion that BALTIC GAS progresses as planned and according to the Gantt Chart (see above: Updating BALTIC GAS schedule of deliverables)

*WP1: Project management, coordination and dissemination
addressed during the above updating*

WP 2: Data mining and GIS-mapping

Jørn Bo Jensen informed that the first contact to Baltic Sea states (not represented in BALTIC GAS) has been made and data mining has been initiated. A seismic Workshop on key area and data mining was successfully performed prior to the BALTIC GAS workshop (see below: Update on meetings prior to the BALTIC GAS workshop).

WP 3: Gas and seismo-acoustic mapping

Gregor Rehder informed that compilation of seismo-acoustic datasets and development of software tools for data processing has been initiated. First meta-data from shallow gas related seismo-acoustic datasets have been extracted and future working areas have been proposed particularly addressing the RV Poseidon cruise (December 2009). Two cruises with focus on seismo-acoustic have been accomplished: RV Oceania and RV Ladoga (see below: Cruises with BALTIC GAS participations).

WP 4: Biogeochemistry

Tim Ferdelman told that BALTIC GAS scientists in biogeochemistry have participated in 4 cruises in the BALTIC SEA area: Aranda x2, Himmerfjärden, and Merian (see below: Cruises with BALTIC GAS participations). Additionally chambers to measure methane emission across the sea-air interface have been tested in the Himmerfjärden fjord. A core analysis coordination meeting was successfully performed prior to the BALTIC GAS workshop (see below: Update on meetings prior to the BALTIC GAS workshop).

WP 5: Modelling and data integration

Pierre Regnier gave an overview and several examples of model initiatives addressing BALTIC GAS topics. The modelling activities at present comprise (1) transient simulations of the Litorina stage (in the Arkona basin) and (2) methane turnover rates in the western Baltic Sea based on the sediment free-gas depth. Pierre stressed that access to more field measurement and (new) data of several parameters are of major importance to improve the models. These parameters comprise

- *¹⁴C ages through the Litorina stage*
- *sulfate concentration profiles*
- *sulfate reduction rates*
- *free gas depths (FGD)*

The WP-leaders and Task Responsible were asked to notice this request and encouraged to coordinate with Pierre.

Documents:

02.WP2 and WP3 progress (GR).ppt

03.WP4 progress (TGF).ppt

04.WP5 progress (PR).ppt

Cruises with BALTIC GAS participations

Six cruises to various geographical areas in the Baltic Sea have been performed over the last 8 months (i.e. since the start of BALTIC GAS). Participants from each cruise gave an overview of the cruise including i.a. research purpose, results and research challenges arising from cruise results.

Oceania (February cruise: Zygmunt Klusek)
Aranda (April cruise: Sabine Flury)
Himmerfjärden (Thang Manh Nguyen)
Ladoga (July cruise: Nikolay Pimenov)
Aranda (June cruise: Thang Manh Nguyen)
Merian (Volker Brüchert)

Each presentation was followed by a short discussion.

An overview of cruises performed is accessible at the BALTIC GAS home-page and cruise reports may be downloaded from the Members Area (password needed).

Documents:

05.Oceania_February 2009 cruise (ZK).ppt
06.Aranda_April cruise 2009 (SF).ppt
07.Himmerfjärden_May 2009 (TMN).ppt
08.Aranda_June cruise 2009 (TMN).ppt
09.Ladoga_July cruise 2009 (NP).ppt
10.Merian_AugSept 2009 cruise (VB).ppt

Update on meetings prior to the BALTIC GAS workshop

Two meetings were organized the day prior to the BALTIC GAS workshop. Gregor Rehder gave an overview of the Seismic Workshop on key area and data mining organized and Daniel Conley informed about the outcome of the Core analysis coordination meeting.

Documents:

11.Seismic workshop notes (GR).pdf
12.Core analysis coordination meeting (DC).ppt

The BALTIC GAS homepage

Bo Barker Jørgensen showed how the BALTIC GAS homepage will be constructed. Mainly due to lag of text the 'launch' of the BALTIC GAS homepage has been delayed. However, Bo was of the opinion that sufficient input was now made available and that the BALTIC GAS homepage will open in the very near future. However, Bo encouraged BALTIC GAS scientists to assist in the continuously elaboration and updating of the homepage and e-mail contributions to Henrik Fossing (hfo@dmu.dk) who will then prepare the input in cooperation with the web-manager: Irene Harder Tarpgaard at Aarhus University.

Document:

13.BALTIC GAS homepage (BBJ).pdf

BALTIC GAS project months 10-17 (October 09 – May 10)

WP activities and deliverables

There was consensus that WP activities and deliverables are expected to follow the BALTIC GAS research plan as scheduled (see Gantt chart in the BALTIC GAS Full Research Plan)

Planned cruises and participation on cruises

RV Oceania (November 5 – 16, 2009)

Zygmunt Klusek (chief scientist) gave an update on cruise plans comprising a seismic-acoustic survey in Bornholm Basin (southern part) using Chirp, 40-60 kHz sediment echosounder, Side scan and multibeam sonar. Also pock mark search will be performed in Gdansk Basin – pock marks that have been discovered earlier but reported only with very approximate positions. Four BALTIC GAS participants have been invited to do biogeochemical research during the cruise: Sabine Flury (CfG), Thang Manh Nguyen (MPI), Micheal Formolo (MPI), and a MPI-technician. On behalf of this party Sabine presented the planned research on the role of the origin of organic carbon and salinity.

14.Oceania_Nov2009_main tasks (ZK).ppt

15.Oceania_Nov2009_biogeochemistry (SF).ppt

RV Poseidon (November 27 – December 17, 2009)

Rudolf Endler (chief scientist) informed about cruise plans including visits to Mecklenburger Bay, Arkona Basin, Bornholm Basin, Stolpe channel fore delta, and Gotland Basin. Main tasks comprise

- mapping of gas charged basin sediments using long core sampling and seismo-acoustic profiling,
- shallow gas related water column investigations using multibeam echo sounding, CTD measurements and water sampling,
- multibeam echo sounder mapping and sampling of pockmark structures in the Stolpe channel fore delta and Gotland Basin

Next to a the group of IOW BALTIC GAS' scientists who organize the cruise, Henrik Fossing (NERI), Jørn Bo Jensen (GEUS), and Tim Ferdelman (MPI) also participates.

Jens Schneider von Deimling presented planned water column studies. Jørn Bo Jensen showed results of seismo-acoustic profiling performed in Mecklenburger Bay, Arkona Basin and Bornholm Basin to be used for the selection of transects to be studied. Tim Ferdelman explained about the biogeochemical studies and proposed gravity coring along three transects in Mecklenburger Bay, Bornholm Basin and Gotland Basin, respectively. These gradients will be finally decided on in agreement with Jørn Bo Jensen and Rudolf Ednler prior to or during the cruise.

Documents:

16.Poseidon_NovDec2009_main tasks (RE).ppt

17.Poseidon_NovDec2009_ Water column studies (JSvD).ppt

18.Seismo-acoustic mapping as survey area (JBJ).ppt

19.Poseidon_NovDec2009_biogeochemistry (TGF).ppt

RV Merian (July/August 2010)

Gregor Rehder informed about proposal GEBGAS, GEophysical and Biogeochemical assessment of shallow GAS and methane fluxes in the Baltic Sea to obtain ship time on RV Marian S. Merian during 2010. This proposal was evaluated positive after the BALTIC GAS workshop and will take place July 26 – August 18 2010 accommodating a scientific party of 23. Gregor Rehder is chief scientist and will organize the cruise in close cooperation with the Bo Barker Jørgensen and Henrik Fossing. Key areas for the cruise are Bornholm Basin, Central Baltic, Bothnian Sea and Bothnian Bay. The cruise will be further discussed at the BALTIC GAS Askö workshop (early summer 2010).

Other cruises

Volker Brüchert told that another cruise to Himmerfjärden will be planned during 2010, however, with a relatively short notice but anyhow announced to the BALTIC GAS scientists.

Bo Barker Jørgensen plans several cruises to Aarhus Bay for biogeochemical measurements in a methane rich area. Cruises are not scheduled but will be announced to BALTIC GAS scientist as soon as the dates are known.

BALTIC GAS administration and day to day coordination

Metadata information of all the data produced within the BONUS programme

Henrik Fossing explained that it has been decided by BONUS that metadata information concerning all data produced within the BONUS programme is going to be collected to the SeaDataNet. However, (based on information obtained after the workshop) metadata are 'constructed' based on data in the database and consequently BALTIC GAS data should be submitted to the National Oceanographic Data Center of each institution by the PS. This might create implication for BALTIC GAS data as it was decided that these data should be submitted (only) to PANGAEA which unfortunately is not coupled to SeaDataNet.

BALTIC GAS scientists consider PANGAEA as the most an outstanding data base for bio-geochemical sediment data and thus argued for a continuous use of this database for BALTIC GAS data. Thus, at the coordinators will inquire by PANGAEA and SeaDataNet if a coupling of the two databases will be possible. If not the coordinators inquires by BONUS about permission to submit data to PANGAEA instead of SeaDataNet. There was consensus that (1) data should be submitted to only one database and (2) submission should await decision on which database to use.

Document

20.Metadata information (HF).ppt

The BONUS+ Scientific reporting guideline and the first annual report

Henrik Fossing gave an overview of how prepare the first annual report and demonstrated the Electronic Proposal Submission System. No later than 30 days after ending of the reporting periods, the annual report must be submitted to the BONUS EEIG i.e. deadline of January 31. Thus, the work package leaders must receive input to the annual report from the task responsible no later than December 20, 2009 and in return submit their reports January 15, 2010 (at the latest) to the project coordinator for approval.

Announcement of next BALTIC GAS work-shop

A two days work-shop will be hosted by Volker Brüchert (Stockholm University, Sweden) at Askö, Sweden, June, Tuesday 8 – Wednesday 9, 2010. Transfer by boat to Askö will be organized in the evening of Monday, June 7 (further information will follow).

Action list (Henrik Fossing)

The action list was updated based on the minutes from the BALTIC GAS workshop.

Document:

21.BALTIC GAS action list (as of Sept.17 2009).pdf