


Executive Summary of the 13th Scientific Technology Panel e-meeting July 18 – Aug 19, 2011


The Scientific Technology Panel (STP) meeting was held electronically on the IODP-MI server with a full agenda from July 18 to August 19, 2011. The meeting was hosted by IODP-MI. The meeting resulted in 16 Consensus Statements and 8 Action Items.





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13th IODP STP e-Meeting

 by [admin](#) — last modified Aug 15, 2011 02:45 PM

Draft Agenda v1.0

13th IODP STP e-Meeting

Week 1: (July 18–22)

1. Introduction and reports
 - 1-1. Introduction and meeting guidance
[File](#) | [Discuss](#) : **CLOSED**
 - 1-2. Approval of meeting agenda
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 - 1-3. Approve Minutes from STP Meeting #12
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 - 1-4. Discussion of next meeting locations and dates
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 - 1-5. Review status of previous meeting consensus statements and action items
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 - 1-6. IODP program updates: IWG+, SASEC
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 - 1-7. SAS Report
 - 1-7-1. SPC Report
[File](#) | [Discuss](#) : **CLOSED**
 - 1-7-2. Rapid Response Detailed Planning Group Report
[File](#) | [Discuss](#) : **CLOSED** | [Vote](#) : **OPEN**
2. IO Reports
 - 2-1. ESO Report

STP Consensus Statement 1107E-01: Approval of Standard Procedure of Handling Cuttings Samples from Riser Drilling

The STP thanks CDEX/KCC for their submission of the draft document for Standard Procedure of handling cuttings samples onboard *Chikyu*. STP recognizes that CDEX/KCC adopted STP recommendations stated in STP Consensus Statements 1003-11 and 1008-14, including collection of up to 2,000 cm³ total volume of cuttings every 5 m and retention of both washed and unwashed cuttings as archive and working portions to be stored at 4°C in KCC. STP approves this standard procedure and recommends that a Cuttings Flow Plan be included in the Measurements Plan for each expedition where cuttings are expected to be recovered.

Vote: 14 Yes, 0 No, 0 Abstentions, 3 absents (Hyun, Stoner, Tominaga)

Priority: Medium

STP suggests this be forwarded to IODP-MI, SPC, and IOs

Background to STP Consensus Statement 1108E-01: Cuttings policy was originally set according to recommendation by the SciMP in 2003 and finalized during SciMP meeting in 2004 as Recommendation 0406-02. KCC asked STP to revisit the cuttings policy in light of the experience by Expedition 319. The co-chief scientists of Expedition 319 recommended that both washed and unwashed cuttings be archived due to information loss from washed cuttings. STP accepted that recommendation in STP Consensus Statement 0908-02. Subsequently, STP recommended additional modification to a standard cuttings procedure, including sampling frequency, volume, and handling (Consensus Statements 1003-11 and 1008-14). STP reviewed a revised version of the Standard Procedure of handling cuttings samples onboard Chikyu at #13 STP e-meeting.

STP Consensus Statement 1108E-02: Nomination of external reviewers for a full proposal of Rapid Response Drilling Following the Tohoku Earthquake

The STP nominates one STP member, Dr. Takehiro Hirose, a structural geologist/rock mechanics specialist, as one of the external reviewers for a full proposal of Rapid Response Drilling Following the Tohoku Earthquake. STP also nominates Prof. Mark Zoback (Stanford Univ.) and Prof. Georg Dresen (GFZ Potsdam), both fault drilling specialists, as outside reviewers external to the SAS. If this drilling proposal is accepted, STP expects that the IO will provide the measurement/instrumentation plans for STP review as soon as possible.

Vote: 13 Yes, 0 No, 0 Abstentions, 4 absents (Hirose, Hyun, Stoner, Tominaga)

Priority: High

STP suggests this be forwarded to IODP-MI and SPC

Background to STP Consensus Statement 1108E-02: *The proponents of the Rapid Response Drilling Following Tohoku Earthquake will possibly be submitting a proposal, as recommended by SASEC and SPC, on August 1. IODP-MI asked STP to nominate a member to be available to review the proposal, with an eye on the instrumentation and measurements objectives as well as science. In addition, IODP-MI asked STP to nominate outside reviewers who can assess the technical aspects of the proposed work plan.*

STP Consensus Statement 1108E-03: Evaluation of experimental e-meeting

The STP recognizes that IODP-MI recommended an e-meeting for the final meeting of STP in the current SAS and that this format was selected in part due to scheduling conflicts for a physical meeting. The STP would like to thank IODP-MI, Kevin Johnson and particularly Jamus Collier for their hard work to support the e-meeting and implement suggested changes to the website during the course of the meeting. Based on STP member feedback, STP recommends that future e-meetings be utilized only for a limited number of agenda items or for issues that arise between meetings, with physical meetings scheduled for a full agenda.

Vote: 14 Yes, 0 No, 0 Abstentions, 3 absents (Hyun, Stoner, Tominaga)

Priority: Medium

STP suggests this be forwarded to IODP-MI, SASEC, and SPC

Background to STP Consensus Statement 1108E-03: *IODP-MI recommended an e-meeting during the SAS transition period. Furthermore, the new ToR for STP recommends one meeting per year, with additional subcommittee or e-meetings held as appropriate. Despite these recommendations, the chair and vice chair proposed a physical meeting for the 13th STP meeting; however, no dates suitable to more than two-thirds of the panel members could be found. As a result, the 13th STP meeting was prepared as an e-meeting and IODP-MI asked STP members to provide feedback on the e-meeting format.*

The main issues that members have with the e-meeting format are:

- *Difficulty engaging fully in the e-meeting (e.g., reading background information, participating in discussions) when still in the office continuing with daily work.*
- *Keeping all members engaged/participating in the meeting is difficult.*
- *Non-native English speakers find it more difficult to type out comments and may be less likely to respond/post comments than to speak up in a physical meeting.*
- *Keeping up with many discussions open simultaneously is very difficult, especially because of the vast time differences between different members, which results in large delays in response time. We often find ourselves having to read and re-read posts to remember what has been said previously. This can be quite time-consuming, especially when there have been a large number of posts.*

- *Finding previously-read discussions can be difficult and the site does not do a good job of keeping track of new posts since a previous log-in. Jamus Collier added a search function during the e-meeting, which significantly improved our ability to find specific posts.*
- *Standard PowerPoint presentations are not sufficient for e-meetings, since no one gives an actual presentation that includes additional information not related on the slides.*

There are also some positives to the e-meeting format:

- *Cost savings for the program and the PMOs.*
- *Plenty of time for discussion and opportunities for everyone to comment since discussions are open for long periods of time.*
- *Since most people are participating from their offices, it is easy for additional information to be collected and posted when questions arise.*
- *Drafting action items/recommendations/consensus statements is easier, as everyone gets the opportunity to edit the text through the message board during the discussion. A similar process would be very useful during physical meetings.*

Suggestions for future e-meetings:

- *Limit the number of agenda items that will be discussed. Consider discussing one agenda item at a time and finalizing before moving onto the next to avoid the difficulties most members have with keeping up with many different discussions at once.*
- *For particularly important discussions, scheduling of a skype session or video conference would be particularly useful, even if the timing may be at odd hours for some panel members.*
- *Possible changes to the e-meeting website (some may have already been implemented by IODP-MI): a “download all” option for retrieving the many files; improved tracking of new posts since previous log-in; the ability to mark a thread/message for follow-up; a way to more easily edit consensus statements/ action items in a thread (for instance, being able to add letters/words in a different color) OR when uploading a file with changes tracked, those changes are still visible when downloaded by another member.*
- *If PowerPoint files are used, they should be accompanied by more detail in a written report (or included in the “notes” area for each slide) or a movie file of the presentation.*

<p>STP Consensus Statement 1108E-04: Taxonomic Name Lists and other Paleontology Coordination Group activities</p>

<p>The STP reviewed an update on the status of the TNLs and other PCG concerns provided by David Lazarus, PCG chair, during the 13th STP e-meeting. The STP strongly supports continued work to complete the TNL project, including establishment of a central database editing system to maintain the TNLs. The STP thanks IODP-MI for their</p>
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continued support of the PCG and TNL project and encourages them to fund a PCG meeting to be held as soon as feasible, because the meeting is necessary for effective development of the database and maintenance system. The STP encourages all IOs to integrate the TNLs into each IO's shipboard data-entry system (e.g., DESClogik).

Vote: 14 Yes, 0 No, 0 Abstentions, 3 absents (Hyun, Stoner, Tominaga)

Priority: High

STP suggests this be forwarded to IODP-MI, IOs, and PCG

***Background to STP Consensus Statement 1108E-04:** The STP received a PCG update from David Lazarus (PCG chair) for review during the 13th STP e-meeting. The report outlined the status of the TNLs, which are complete with the exception of the diatom TNL (expected to be finished within approximately one month). Work to quality check and format the lists is on-going. During this process it became clear that a spreadsheet would not provide sufficient data filtering or cross-referencing capabilities; thus, development of a database to maintain the TNLs is a top priority. To develop the specifications necessary for the database and a system to maintain it, Lazarus strongly recommends a PCG meeting together with IODP IT personnel prior to November 2011.*

Jamus Collier (IODP-MI) provided an update on the status of IODP-MI funding for continued work on the TNLs and database. He noted that FY11 funding to complete the TNLs and merge them into a database for maintenance from a central source has been secured. IODP-MI is currently reviewing FY11 funding (or potential in-house development if funds are not available) for the "front-end" maintenance/search interface, which they are committed to developing as soon as possible. Collier further noted that IODP-MI will collaborate with the IOs to integrate the TNLs into the shipboard data-entry systems (an IO responsibility), with an early FY12 target for completion. He added that IODP-MI is reviewing funding for the requested PCG meeting, which would be held in College Station to allow the PCG members to review DESClogik.

As noted in the numerous prior recommendations, consensus statements and action items (see SciMP CS 03-12-01, SciMP AI 04-06-07, SciMP Rec 04-06-05, SciMP AI 0502-02, SciMP Rec 0502-04, STP Rec 0507-08, STP CS 0612-06, STP CS 0708-21, STP CS 0802-11, STP AI 0908-27, and STP AI 1008-29), development of the TNLs is a very high priority. Their integration into the shipboard data-entry systems is essential for effective data entry, management and archiving. The STP will continue to strongly support these efforts to ensure timely completion of the project.

STP Consensus Statement 1108E-05: New Terms of Reference

The STP has reviewed and revised the new Terms of Reference (ToR) for this panel in the new SAS. The STP approves the revised ToR (shown below in the Background Information) and notes the following important revisions to that received from IODP-MI:

- 1) Electronic meetings should be for urgent issues only, so agenda items are limited to

- a small number;
- 2) STP will review the feasibility of proposals that contain non-standard measurements as part of the science rationale; and
- 3) Chair and Vice-Chair positions are defined so the Vice-Chair can have 2 years to learn what is required to be chair before becoming chair for a further two years. This also preserves vital corporate memory on the panel.

With these revisions, the STP supports the revised ToR as it will be able to be a fully functional panel in the new SAS, able to make timely and knowledgeable decisions on all things it is mandated to consider.

Vote: 14 Yes, 0 No, 0 Abstentions, 3 absents (Hyun, Stoner, Tominaga)

Priority: High

STP suggests this be forwarded to IODP-MI, SASEC, and SPC

***Background to STP Consensus Statement 1108E-05:** The STP discussed during its electronic meeting the draft Terms of Reference for this panel in the new SAS and made some minor yet significant revisions. These revisions are highlighted below in the revised ToR and explained here:*

- 1) It has been demonstrated that electronic meetings are highly inefficient when a large number of agenda items need to be considered.*
- 2) Having STP review all proposals is inefficient (this falls under the mandate of PEP). Reviewing proposals that require non-standard measurements would be a better use of STP's time and expertise.*
- 3) Corporate memory is important to preserve on the panel so that issues aren't continually revisited.*

Scientific Technology Panel (STP) – Revised Terms of Reference

1. General Purpose. *The Scientific Technology Panel (STP) reports to the CMO and advises PEP. The STP may communicate directly with IOs and other panels and with SIPCom in matters directly involving data and publications policies or other policy issues. The panel shall contribute information and advice with regard to handling of IODP data and information, methods and techniques of all IODP measurements, sample handling, curation, laboratory design, downhole measurements and experiments, and observatories. The STP shall also advise PEP on the technological feasibility of selected proposals.*

2. Mandate. *STP recommendations shall be sent to the CMO and IO's as deemed appropriate. The STP shall provide advice on scientific measurements made onboard IODP platforms, within and around boreholes, and on samples collected by the IODP and associated programs. The STP shall develop guidelines concerning said measurements and shall furnish advice about scientific measurements, equipment, and on certain policies and procedures in the IODP. Specific responsibilities for the panel shall be to advise on databases, sample handling, curation, shipboard equipment usage and needs, as*

well as borehole and observatory measurements, equipment, usage, and needs. In addition, STP will conduct QA/QC reviews of data collected on IODP platforms to ensure consistent high quality data across the program. The panel will also advise on publications policies and procedures and provide feedback to the IOs with respect to publications questions. The STP shall also advise PEP on the feasibility of the measurements and technological plans for full proposals submitted for external review that require data that cannot be obtained through IODP minimum and standard measurements.

3. Decisions. *Decisions shall be made either by consensus or voting, as decided on a case-by-case basis. Votes shall be decided by a majority of all members present and eligible to vote. A quorum shall consist of at least two-thirds of the voting members. Voting records shall be kept and reported in the meeting minutes.*

4. Meetings. *The panel shall convene at least once annually, and additional subcommittee or electronic meetings may be held as appropriate for urgent issues. Robert's Rules of Order shall govern its meetings. Conflicts of interest shall be declared at each meeting, and treatment thereof shall be recorded in the meeting minutes.*

5. Membership. *STP members shall normally serve for terms of three years and shall have expertise in areas required to adequately cover the panel mandate. With CMO approval, the panel may augment the expertise required to address its mandate by setting up ad hoc advisory committees.*

6. Chair and Vice-Chair. *The STP chair and vice-chair shall be nominated by the STP membership and approved by the SIPCom. Chair and vice-chair terms shall be two years with the vice-chair becoming chair at the end of the initial 2-year term. The STP chair shall be responsible for providing the IODP-MI with draft meeting minutes within one month of each meeting.*

7. Liaisons. *The STP chair or alternate shall be liaison to the PEP. Representatives from the IOs shall attend the STP meetings.*

STP Consensus Statement 1108E-06: Measurement Plans for Exp. 336/339

STP approves Measurement Plans for Expeditions 336/339 including non-standard measurements such as the oxygen microsensors and the resistivity tool. STP appreciates the update on the progress of benchtop tests conducted with the DEBI-t tool. STP provides a preliminary endorsement of the DEBI-t deployment during Expedition 336. STP recognizes the DEBI-t tool tests are still ongoing and that the tool requires final endorsement before Expedition 336. STP will approve the tool deployment electronically prior to the next scheduled STP meeting. STP would like to receive a post expedition report on how the instruments performed in producing these non-standard IODP measurements before the next STP meeting. STP recommends the use of a standardized template formatted for non-standard measurement (STP Consensus Statement 1008-10: Template for presenting measurement plans for nonstandard measurements).

Vote: 14 Yes, 0 No, 0 Abstentions, 3 absents (Hyun, Stoner, Tominaga)

Priority: High

STP suggests this be forwarded to IODP-MI, SPC, and IOs

***Background to STP Consensus Statement 1107E-06:** STP received the Measurement Plans for Expeditions 336/339, including updates on the DEBI-t tool scheduled for deployment during Expedition 336. The DEBI-t tool will be bench tested in August and STP will electronically approve tool deployment prior to Expedition 336. STP would like confirmation from the USIO that the isotope studies (C, Fe, S) proposed for Expedition 336 will be done post-cruise on shore. If isotope analyses are performed on board, isotopic contamination in the laboratory should be considered. STP recommends the use of a standardized template for non-standard measurements proposed in future expeditions.*

STP Consensus Statement 1108E-07: Routine Microbiology Samples (RMS, including cores stored under frozen condition) curation and its information availability

The STP thanks KCC/CDEX for their report about the promotion of RMS samples at Japanese conferences. The STP also appreciates that the IOs have made the information about the RMS (including cores stored under frozen condition) available on the web. The STP recognizes that it is very important to disseminate information regarding sample availability to the broad scientific community in order to enhance the use of RMS samples in the future. STP looks for further action by IODP-MI and the IOs to advertise that RMS core samples are available for research by scientists with broad interests.

Vote: 14 Yes, 0 No, 0 Abstentions, 3 Absents (Hyun, Stoner, Tominaga)

Priority: High

STP suggests this be forwarded to IODP-MI and IOs

***Background to STP Consensus Statement 1108E-07:** This action item follows STP recommendation 0908-09 referencing relevant recommendations generated by the 2003 IODP Microbiology Working Group Report, the IODP Deep Biosphere Workshop held in Vancouver, BC (October 2006), the manuscript resulting from that workshop (D'Hondt et al. Scientific Drilling. No. 5 Sept. 2007), the Sept. 2007 report to IODP-MI from the Subsurface Life Task Force (SLTF), and past STP consensus statements including 0708-14, 0807-12, 0807-17, 0807-18, 0903-06, and 0903-07. Following the SLTF report at the Edmonton 2008 STP Meeting, STP issued a set of recommendations for routine microbiological sampling (RMS) on IODP expeditions (including those for which microbiology is the primary scientific objective) so that samples are adequately and*

consistently preserved for future microbiological analysis (STP recommendation 0908-09). Following endorsement by SPC, IODP-MI began RMS and curation. At this meeting, KCC reported their promotional action at Japanese scientific conferences and their work for putting frozen sample information on the web. During the discussion, the USIO and ESO indicated that they have frozen sample information available on the web as well.

STP Consensus Statement 1108E-08: CHRONOS database

The STP supports the Consortium for Ocean Leadership for their continuous efforts to host and maintain the CHRONOS database because of its importance for the micropaleontological community and Item A2-5 on the Scientific Technology Roadmap. The STP encourages IODP-MI to provide assistance to ensure that a current version of CHRONOS is functional and available on all IODP drilling platforms.

Vote: 14 Yes, 0 No, 0 Abstentions, 3 absents (Hyun, Stoner, Tominaga)

Priority: High

STP suggests this be forwarded to IODP-MI, IOs, and PCG

***Background to STP Recommendation/Consensus Statement 1108E-08:** The STP received an e-mail from Dr. Brian Huber (Smithsonian Institution, member of PCG) regarding long-term and serious problems with the server at Ocean Leadership which presently hosts the CHRONOS database. This database started out with NSF funding, which ended a few years later, at which time CHRONOS was informally "adopted" by Ocean Leadership when the lead CHRONOS programmer was hired there. Apparently, this programmer has not had the resources to keep it up and running. The CHRONOS database is a project nominally independent from the development of TNLs for DESClogik. The IODP-MI TNL database contains standardized names for all common planktonic taxa (foraminifera, nannoplankton, diatoms, radiolarians, dinocysts) through contracts with experts to provide standardized name lists, but it does not contain documentation of taxa (e.g., descriptions, plates). CHRONOS is the source of the TNL lists for planktonic foraminifera through an IODP-MI contract with Brian Huber; this foraminiferal database contains results of the meetings of planktonic foraminiferal working groups, thus the professional consensus on names for this fossil group. There never has been formal IODP-MI funding for CHRONOS, which contains considerable added functionality over the TNLs (e.g., documentation of taxa). IODP-MI does not have resources to re-create CHRONOS functionality for the other groups of taxa. It is important for the paleontological community to ensure that the planktonic foraminiferal TNL is included in the DESClogik database, and some support for CHRONOS (e.g., server resources, time for the CHRONOS programmer) is important for the development of Item A2-5 on the Scientific Technology Roadmap (Unified Ocean Drilling Database with tracking system of literature).*

STP Consensus Statement 1108E-09: QA/QC reports from Expeditions 327, 330 and 334

STP appreciates the QA/QC reports by the science parties from IODP Expeditions 327, 330 and 334. These reports are important and the format and in-depth information provided should be kept in the future. Several reported issues from Exp. 330 and 334 require further clarification and information: 1) SRM measurements require an in-depth record of procedures, measurement plans and problem solving easily accessible to all future expeditions; 2) the ineffectiveness of the handheld XRF spectrometer during Expedition 330; 3) availability of the old thermal conductivity half-spaced needle probes (TeKa Berlin TK-04); 4) poor performance of p-wave measurements; and 5) whether or not the ion chromatography results are comparable with those obtained on the *Chikyu*.

Vote: 13 Yes, 0 No, 0 Abstentions, 4 absents (Hyun, Neal, Stoner, Tominaga)

Priority: High

STP suggests this be forwarded to IODP-MI and IOs

Background to STP Consensus Statement 1108E-09: The expeditions 327, 330 and 334 QA/QC reports highlighted several issues which were discussed during the STP e-meeting. Although several of these were resolved during this meeting the STP requests addressing unresolved issues from Exp. 330 and 334 reports, and makes some suggestions in order to improve QA/QC for future expeditions.

Expedition 330:

1) The ineffectiveness of the handheld (XRF) spectrophotometer. This tool was specifically acquired for this expedition in order to provide an efficient and fast methodology in order to determine whether sufficient lavas were cored. The QA/QC report states that data from this instrument were unusable mainly due to rock heterogeneity. Although the energy dispersive XRF, such as the Thermo Niton GOLDD, is a highly surface dependent technique and heterogeneity can be encountered on the scale of the XRF sensor (8mm diameter), both the USIO and STP were somewhat surprised that this technique provided unreliable results in this case. This heterogeneity related issue, as encountered on the Louisville Seamount volcanic rocks, should have been resolved by increasing the measured area, hence providing a statistically useful result based on the experience during Expedition 335 (Superfast Spreading Rate Crust 4), where the device could be used but results varied slightly from true results. This variation could be limited if the device could be calibrated (rather than using the factory calibration) to internationally recognized reference material (e.g., BCR-2, JG-1), as is standard procedure for the XRF technique. The USIO is continuing to investigate this issue, which is welcome and fully supported by STP.

2) Corporate memory for Superconducting Rock Magnetometer (SRM) related issues. STP suggests that the IOs collect and make available technical reports, diagrams, results and communications about the anhysteretic remanent magnetization (ARM) that the 2G magnetometer can impart on samples for degaussing fields approaching or exceeding 50

mT. The USIO queried the technicians as to whether such a document is already kept, and if not, will request that such a document be issued.

3) Vulnerability of TeKa Berlin TK-04 probes to water penetration. STP raised concern regarding this issue and enquired if it is possible to use probes older than the Thermal Conductivity half-space needle probes. The USIO response to this request is positive but highlighted that the old probes are not compatible with the new system and that the required software would only run on old 486 computers and only in DOS 6.0 or earlier versions. Furthermore, the old probes are discontinued and replacements unavailable. This creates a number of support and logistical problems.

The USIO hopes that TeKa Berlin engineers find a solution to the probe sealant problem but are also investigating alternative systems for the analysis of discrete samples (e.g., on cut cubes or cylinders of rock) as a replacement for the TK-04 on hard rock samples. However, TK-04 probes could continue to be used with the full-space needle probes on sediment. If the STP has experience with alternative thermal conductivity measurement systems, the USIO would appreciate any information it can provide.

Expedition 334:

1) P-wave velocity and poor performance on some cores during this expedition. STP enquired whether a) adjustment of force of the transducer to the sample surface would improve the transducer-rock coupling, b) if and how much the operator can change the gain of the output transducer, and c) if the waveforms are saved to allow for later analysis? The USIO responded positively to the former two and both were tried during the expedition but to no significant avail. Also all data are saved and available for later analysis. These are pressing issues, which require further investigation and problem solving.

2) Ion Chromatography – unreliable eluent generator limited precision of sulfate measurement to ~10%. The eluent generator module uses factory-filled high concentration cartridges and dispenses these with the appropriate dilution to provide a highly consistent eluent composition from run to run. The system is typically able to do this dilution with significantly higher reproducibility than even a highly-experienced technician. During Exp. 334, some fault developed in the module and was corrected by replacing the cartridge.

The cartridge system is not in use onboard the Chikyu and in order to meet requirements of continuous and precise measurements, the used solution is drained and fresh eluent produced when required. The precision usually achieved ranges between 0.4 and 2.4%.

STP Consensus Statement 1108E-10: New publication format

Upon the request of USIO Publication Services, the STP collected views on several questions regarding IODP publications and has the following recommendations:

- 1) The STP sees no positive reasons to retain the production of Expedition Report DVDs.

- 5) PDF is desired as a primary publication format.
- 6) The STP is willing to evaluate/beta test future IODP publication products.

The STP will continue to examine the following issues:

- 2) The STP has divided opinions regarding whether all the online data in the program databases should be replicated in the IODP Proceedings.
- 3) The STP recommends that minimum publication requirements be established to ensure consistency of the publication product across expeditions; however, consideration is needed to define the minimum publication requirements.
- 4) STP will further investigate how to track the impact of Program research.

Vote: 13 Yes, 0 No, 0 Abstentions, 4 absents (Hyun, Neal, Stoner, Tominaga)

Priority: High

STP suggests this be forwarded to IODP-MI, IOs and SPC

***Background to STP Consensus Statement 1108E-10:** This consensus statement is a follow up to STP Action Item 1002-25 (New Publication Format). During the 12th STP e-meeting, Angie Miller, a representative from the USIO Publications group, presented the publication issues regarding the IODP scientific publications, publication formats, publication archive, data presentation, etc. As a follow-up to the discussions, USIO Publication Services provided a short list of questions for STP feedback. During the 13th STP e-meeting, STP members discussed and responded to the six questions below.*

***1. Are the Expedition Reports DVDs being utilized?** STP members very rarely use the Expedition report DVDs and prefer to search the online reports. STP does not see any reason to continue producing the DVDs.*

***2. If data are accessible online from Program databases, should the same data be replicated in the IODP Proceedings (e.g., analytical results and coring summaries typically presented as tables in site chapters, barrel sheets, and smear slide and thin section reports)?** Replicated data in the IODP Proceedings allow a back up to the on line data that are available to the broader community. Scientists will save the relevant PDFs onto computers for quick/easy reference. On the other hand, all the data needs to be available but whether this really needs to be in the proceedings volumes directly or can be essentially ancillary electronic material with the appropriate links may be the question that needs to be answered. One option might be that a lot of the day-to-day material (barrel sheets, etc.) should just be linked unless there is a very specific reason why it needs to be included in the report.*

***3. Should each science party have the flexibility to decide which expedition results should be presented in the IODP Proceedings, or should minimum publication requirements be established to ensure consistency of the publication product across expeditions?** The STP recognizes that minimum publication requirements should be established because of the importance of consistency across the expeditions. Careful*

considerations should be required given to define a guideline for the minimum publication requirements (in relation to the IODP minimum and standard measurements). This issue is significantly related to the previous question if all the data in the database are not replicated in the IODP Proceedings.

4. Do you have suggestions of new ways to track the impact of Program research?

One issue is how IODP reminds participants to submit publication/abstract information after the cruise. Another issue is ensuring contact information (especially e-mail addresses) is kept up-to-date. The other way is using a common web evaluation tool (Web of Science, Scopus, etc.) to check publications co-authored by expedition scientists (e.g., 2-3 years postcruise) and check impact factor of journals.

5. What publication format or formats are desired (PDF, HTML, other)? *PDF is desired as a primary publication format for convenient saving and printing. Chapters should be available in PDF but the ancillary data would be nicer to have readily available in a better format (e.g., Excel spreadsheets of data tables).*

6. Would you be willing to evaluate/beta test future IODP publication products? *The STP is willing to evaluate/beta test future IODP publication products. It is stated in the new terms of reference for STP that “The panel will also advise on publications policies and procedures and provide feedback to the IOs with respect to publications questions.”*

STP Consensus Statement 1108E-11: Operations Review Task Force (ORTF) report
STP again presses its recommendation that IODP-MI conduct ORTF meetings within 4-6 months post-expedition, submit a full version of the ORTF report before the STP meeting, and routinely report recommendations relevant to STP. STP also recommends that the report be written clearly, with sufficient explanation regarding any problems on a specific expedition.

Vote: 13 Yes, 0 No, 0 Abstentions, 4 absents (Hyun, Neal, Stoner, Tominaga)

Priority: High

STP suggests this be forwarded to IODP-MI and ORTF

Background to STP Consensus Statement 1108E-11: *This Consensus statement is a follow up and revision of STP Consensus Statement 1102-17: Recommendations by the Operations Review Task Force (ORTF). STP appreciates the submission of Expedition 318 ORTF recommendations relevant to STP for the 13th STP e-meeting. However, Expedition 318 ORTF was held one year after the cruise. Additionally, the recommendation ORTF 318-07 is not written clearly and with too limited information to understand and respond to (STP Action Item 1108E-XX). STP would like to recommend that the ORTF should describe the issues with background information clearly so that STP can identify the issues and provide action to solve them.*

STP Consensus Statement 1108E-12: E-meeting hosts

The STP thanks Jamus Collier, Taewoon Kim, and Arya Surya at IODP-MI for their efforts to establish the e-meeting system on the IODP-MI server for the 13th STP web-based meeting. They worked very hard from early July to the end of the meeting to develop and maintain the system. They responded quickly to the requests from the panel to modify and update the system during the meeting. STP believes this experimental meeting is useful for the future planning of e-meetings in the SAS. Feedback from the panel on this e-meeting was summarized in STP Consensus Statement 1008E-03.

Vote: 13 Yes, 0 No, 0 Abstentions, 4 absents (Hyun, Neal, Stoner, Tominaga)

Priority: High

STP Consensus Statement 1107E-13: Kevin Johnson

Kevin Johnson has been an important contributor to the STP during his supposedly one meeting visit as an alternate! He brought a great deal of careful insight to STP's deliberations based on his experience as a sea going scientist and his exposure to the broader realms of science management. In particular, he always seemed able to look at nearly any issue and come up with a balanced and mature suggestion that STP would usually have no problem in adopting. His tenure too coincided with the development of the roadmap, to which he was able to bring new ideas for analysis and material handling. He and his contributions will certainly be difficult to replace, but we are glad to see that he will have an important role in making the new program come to pass and we wish him the best of luck in this.

Vote: 13 Yes, 0 No, 0 Abstentions, 4 absents (Hyun, Neal, Stoner, Tominaga)

Priority: High



In Jeju, 2009



Mystery Man? In Geneva, 2010

STP Consensus Statement 1108E-14: Marc Reichow

The STP thanks Marc Reichow for his dedication to the STP. Marc was able to bring a great deal of clarity to our discussions, and his willingness to comment on issues outside of his own area of expertise often gave just the right added perspective to help STP in its decision making process. His contributions to the development of various aspects of the STP Roadmap came at a crucial time and were highly valued and his willingness to fill in as a liaison was greatly appreciated. His gentle sense of humor and regard for his STP colleagues will be remembered and likely lead to additional requests in the future! While we mostly will remember his contributions to the STP, we note that given his lack of any apparent German accent he could also have an excellent career as a German spy in the UK. We wish Marc the best of luck in his career and with his young family and hope to be able to work with him again.

Vote: 12 Yes, 0 No, 1 Abstention (Reichow), 4 absents (Hyun, Neal, Stoner, Tominaga)

Priority: High



In Geneva, 2010

STP Consensus Statement 1108E-15: Ellen Thomas

The STP pays its special respects to Ellen Thomas for her dedicated effort to the STP and her active participation and activation of the discussion based on her broad-based knowledge and long-term experience in the sea drilling field since the DSDP era. Ellen's unwavering spirit on micropaleontology will not be forgotten and her deep insight and passion for the drilling program was second to none. The STP mourns Ellen's leaving, but thanks for her exceptional contribution to STP and wishes her the very best in her post-STP life.

Vote: 12 Yes, 0 No, 1 Abstention (Thomas), 4 Absents (Hyun, Neal, Stoner, Tominaga)

Priority: High



STP Consensus Statement 1107E-16: Marty Young

The STP wishes to thank Dr. Marty Young for his dedication to the STP, especially his significant contribution to the activities of the core description working group. He is a memorable first STP member from ANZIC. One of his great contributions to the panel was hosting the successful 10th STP meeting in Sydney, March 2011, plus organizing the field trip and delicious seafood banquet. In addition to his knowledge and experience in paleontology and stratigraphy, he has a mature enough mind to stay calm and cool during the meetings, and always helped STP with his gentle attitude from behind. The STP wishes him all the very best in his post-STP life.

Vote: 12 Yes, 0 No, 1 Abstention (Young), 4 absents (Hyun, Neal, Stoner, Tominaga)

Priority: High



STP Action Item 1107E-17: Drill head failure during Expedition 335

The STP will review the detailed report on Expedition 335, especially regarding the failure to significantly deepen Hole 1256D within the allotted expedition timeframe at its next meeting. STP asks the USIO to provide reports on this issue, including the USIO report to the Exp. 335 ORTF and updates from the USIO internal engineering/operations meeting.

Priority: High

Leads: USIO, STP members

Deadline: Next STP meeting

Background to STP Action Item 1107E-17: The STP reviewed the USIO report on Expedition 335 Superfast Spreading Rate Crust 4. The report mentions that "Deepening the hole completely destroyed a bit." Myers explained that many factors are likely to have been at work to cause the bit to fail. The hardness of the rock and condition of the borehole certainly played a leading role. The STP is concerned that this issue will be technologically critical for future deep crustal drilling. The USIO is preparing a report that will be part of the USIO ORTF report to be released in a few months. The USIO is also convening an internal engineering/operations meeting in August and deep crustal drilling is one of the key agenda items. They will present an update at the next STP meeting.

STP Action Item 1107E-18: Proposed testing of the MDHDS (Motion Decoupled Hydraulic Delivery System) and SCIMPI (Simple Cabled Instrument for Measuring Parameters In-situ)

STP will review the results of the final land field test of the MDHDS at their next meeting and will approve the Sea Test to be conducted during Exp. 342 Newfoundland Paleogene and Cretaceous Sediment Drifts, FY12. STP also requests IODP-MI to present an update of the status of the development of SCIMPI by the next STP meeting.

Priority: High

Leads: IODP-MI, STP members

Deadline: Next STP meeting

Background to STP Action Item 1107E-18: This action item is a follow-up of STP Consensus Statements 1102-03 and 1102-04. Yoshi Kawamura (IODP-MI) reported that the USIO included the MDHDS Sea Test in the FY12 operations plan (during Exp. 342 Newfoundland Paleogene and Cretaceous Sediment Drifts) and that the final land field test will be conducted in Sugarland, TX on 2-3 Sep. 2011. Kawamura also reported that the USIO has been considering a SCIMPI Sea Test in the FY13 operation plan, although

the schedule for finalizing development of the tool after the first deployment test was completed has not been released yet.

STP Action Item 1108E-19: Correspondence to Recommendation 318-07 of ORTF report

STP suggests that IODP-MI and the IOs contact the co-chiefs and organic geochemist of Expedition 317/318 to get their specific needs on organic geochemistry and paleontology. If their requirements are associated with minimum and standard measurements, they must be reported as a QA/QC issue. If they require future improvement of the on board facilities, equipment, and consumables, STP needs a concrete list of the requirements. Then STP will discuss the necessity and update the STP roadmap if necessary.

Priority: High

Leads: IODP-MI, USIO, and Yamanaka

Deadline: Next STP meeting

Background to STP Action Item 1108E-19: Recommendation 318-07 of the ORTF report was forwarded to STP; however, the details of specific needs on organic geochemistry and paleontology are not clear. STP suggests IODP-MI and the IOs contact the co-chief scientists to get further information associated with the recommendation. In addition, during the 13th STP e-meeting STP received comments on issues related to onboard measurement of organic geochemistry from Simon George, a shipboard scientist on Expedition 317.

STP Action Item 1108E-20: Third Party Tool documentation and sample/data from observatories

The STP will review the IODP third party tool policy at its next meeting, with the goal to revise and update the document. IODP-MI and STP will investigate how to deal with fluid samples and data from observatories not covered under present policies.

Priority: High

Leads: IODP-MI and STP members

Deadline: Next STP meeting

Background to STP Action Item 1108E-20: This action item is a follow up of STP Consensus Statement 1102-10 (The IODP Third Party Tool documentation), and a response to documents submitted to STP by IODP-MI. The documents are well crafted, but the procedures and timing have not been meeting the current/real expedition implementation timelines, especially as to laboratory equipment. The STP asked IODP-MI to revise the assignment flow of third party laboratory measurement tools in the

Guidelines. Considering the new guidelines for proposal submission, the document needs to be modified. Another issue to be discussed is how to deal with the data from observatory tools. In addition, the STP raised an issue related to fluid samples recovered from the borehole after the cruise. There is no protocol or policy on post-cruise samples from legacy boreholes using third-party sampling tools as well as data from borehole observatories. This issue is to be discussed at the next STP meeting. STP needs input from IODP-MI and/or the IOs before the next meeting.

STP Action Item 1108E-21: Continuous development of Scientific Technology Roadmap

The STP chair and vice-chair will develop an integrated executive summary of the Technology Roadmaps of the EDP and STP in order to publish the major recommendations of the roadmaps. STP continues to update the roadmap considering linkage to the new science plan.

Priority: High

Leads: STP Chair and Vice-chair

Deadline: September 30, 2011

***Background to STP Action Item 1108E-21:** This action item is a follow up of STP Consensus Statement 1102-16 (Joint activities on Technology Roadmaps of the EDP and STP towards program completion). Based on the discussions since the 12th STP meeting, STP has developed the Scientific Technology Roadmap version 1.1 for on-line release. Enhancement of database and software [A2] and Automated sample preparation/analyses [A1-1, A1-8, A1-9, A2-2] are newly added to the Top 10 list of the Scientific Technology Roadmap.*

STP Action Item 1108E-22: IODP Depth Scale Implementation

STP requests the IOs to report on the implementation of IODP depth scales and training of shipboard scientists in their use on the FY11/FY12 expeditions, and requests IODP-MI to report on consistency in the use of depth scales and on ways to ensure that the depth scales are being used properly.

Priority: High

Leads: IOs and IODP-MI

Deadline: Next STP meeting

***Background to STP Action Item 1108E-22:** During the 12th STP meeting, the STP endorsed the release of the IODP Depth Scales Terminology v.2 but recommended that several modifications be made (STP Consensus Statement 1102-09: IODP Depth Scale*

documents). During the 13th STP e-meeting, STP reviewed the latest version of the document revised by IODP-MI with advice from the USIO Publication staff. Changes to the document after the 12th STP meeting were as follows:

- 1) *The Guide to Usage document was combined with the Depth Scale Terminology document resulting in a single document with a section on using the depth scales in IODP publications.*
- 2) *Figures illustrating the use of depth scales in publications were added.*
- 3) *Acronyms for the depth scales were spelled out before using the acronyms in the figure captions.*
- 4) *Links from the depth scale acronyms in Table 1 to the descriptions of the depth scale were added.*

STP recognizes that it is important for the IOs to implement proper training of staff scientists and co-chiefs who will be responsible for ensuring that the science party understands the depth scales. During the 12th STP meeting, STP members suggested a "Best Practices" section be added to each depth scale description. During the 13th STP e-meeting, IODP-MI noted that they did not get sufficient feedback on best practices for the depth scales (e.g., WSSF vs. WMSF) and do not have the necessary expertise to add "best practice" sections to most of the depth scales. However, the section on usage of depth scales in IODP publications does include a strong recommendation to users to give thorough consideration to the selection of a default depth scale for database entry because of the potential effects on use in depth scale conversions, publications, etc.

STP Action Item 1108E-23: Stratigraphic correlator/splicer software

STP urges the IODP-MI and USIO to address the issues described in STP Action Item 1102-24 as soon as possible. STP also requests that IODP-MI and USIO provide updates at the next STP meeting about how the software worked for the stratigraphic correlator on Expedition 339.

Priority: Urgent

Leads: Thomas, IODP-MI, USIO, Expedition 339 Co-chief scientists, staff scientist, and stratigraphic correlator

Deadline: Before Exp. 339 (Mediterranean Outflow), 20 Nov. 2011 - 20 Jan. 2012

Background to STP Action Item 1108E-23: *This action item is a follow up of STP Action Item 1102-24 (shown below). STP received reports on the present situation from IODP-MI and USIO at the 13th STP e-meeting. As the functioning of correlator/splicer is clearly of key importance to the science of each high-resolution stratigraphic expedition, the STP believes that such necessary software must be supported by the science operator.*

STP Action Item 1102-24: Stratigraphic correlator/splicer software

The STP urges the USIO to end the third-party status of this software and integrate it into IODP-supported software as soon as possible. Chief scientists of paleoceanographic expeditions and scientists sailing as stratigraphic correlators must be made aware of the status of this software before sailing, so that optimal training before the expedition can be provided, with Expedition 339 the first expected to use this software.

Priority: High

Leads: Thomas, IODP-MI, USIO, Expedition 339 Co-chief scientists, staff scientist

Deadline: Pre-cruise meeting Exp. 339 (Mediterranean Outflow), 20 Nov. 2011 - 20 Jan. 2012

Background to STP Action Item 1102-24: Shipboard stratigraphic correlators sailing on paleoceanographic expeditions have complained about problems with stratigraphic correlator/splicer software, as reported by the ORTF of Expedition 323, the last high recovery paleoceanographic expedition. This software is of prime importance in determining drilling stratigraphy during paleoceanographic expeditions where full recovery in overlapping holes must be established (e.g., Recommendation 323-06, ORTF 323). Most problems probably arise from the fact that this software is a third-party development with limited support from USIO personnel and with the developer no longer providing support. There are several versions of the software on shipboard computers, with insufficient documentation of differences between versions, part of a more general problem with version tracking and documentation (External Assessment, June 2010). STP recommends that third-party status of this software be ended, so that the USIO will be able to fully support it and its integration into the database, and provide training to technicians to ensure continuity between successive expeditions. Therefore STP appreciates that Correlator Integration is on the 'Top 10 List' of USIO Project Prioritization. Stratigraphic correlators must be made aware of the status of the software before sailing as long as the software has not been fully integrated, especially because paleoceanographic expeditions in general recover large numbers of cores so that little time is available for on-the-job training.

STP Action Item 1108E-24: Enhancement of DESClogik

The STP requests that the USIO provide updates on the DESClogik enhancement project at the next STP meeting. In particular, the STP would like to review the status of pre-cruise training using a demo version of DESClogik software and the developmental plan for the paleontological and sedimentological applications.

Priority: High

Leads: Kulhanek, USIO and IODP-MI

Deadline: Next STP meeting

Background to STP Action Item 1108E-24: This action item is a follow up of the discussion during the 13th STP e-meeting based on the ORTF report from Expedition 318,

the PCG report, and USIO feedback to the JR assessment by the STP in February 2011. Several ORTFs, PCG, the JOIDES Review Team (June 2010, Victoria BC) and STP recommended providing a demo version of DESClogik software for effective pre-cruise training. Thomas and Kulhanek pointed out the lack of reporting functions for paleontologists such as age-depth plot, range chart plot, data entry/capture tools, etc. Miller (USIO) reported that the DESClogik enhancement project is on-going, but these paleontological improvements were not on the highest priority list. STP will review the updates on the project at the next STP meeting, including the proposed improvements for sediment description and barrel sheet preparation, and clarify what are high-priority items to be addressed and practical ways to enhance the software.