

Executive Summary of the 9th Scientific Technology Panel meeting Jeju, South Korea, August 17-19 2009



The Scientific Technology Panel met at the Hyatt Regency, Jeju, South Korea with a full agenda (see attachments) from 17-19 August, 2009. The meeting was expertly organized by Dr. Youn-Soo Lee, the Korean IODP representative of STP. The meeting resulted in 19 Consensus Statements, 1 Recommendation, and 11 Action Items.

STP Consensus Statement 0908-01: EDP Report and White Paper and STP input

STP thanks Dr. Asanuma for his presentation of the draft EDP white paper for the INVEST meeting. STP will comment on the document and send it back to the EDP by 21st August. STP is willing to collaborate with EDP to make poster presentations at the INVEST meeting. See STP Action Item 0908-26.

Voting Record: 15 Yes, 0 No, 0 Abstentions, 1 absent (Paul Johnson)

Priority: High

STP suggests this be forwarded to [EDP](#).

Background to STP Consensus Statement 0908-01: The EDP liaison, Dr. Asanuma gave his presentation regarding the draft EDP white paper for the INVEST meeting. EDP requested STP comments on the white paper. STP members review it in the perspective of EDP-STP synergy.

STP Consensus Statement 0908-02: Preservation of Cuttings from Riser Sites

The STP recommends that both washed and unwashed cuttings from riser sites be curated to ensure that a record of material is preserved. Washed and unwashed cuttings should both contain archive and working portions. Based upon the experiences of Expedition 319, cuttings should be sampled at an interval of 5 meters or less.

Voting Record: 13 Yes, 0 No, 2 Abstentions (Lin, Saito), 1 absent (Johnson)

Priority: High

STP suggests this be forwarded to CDEX, KCC, Expedition 319 co-chiefs, and IODP-MI.

Background to STP Consensus Statement 0903-02: Expedition 319 has demonstrated that while washing cuttings can allow easier identification of certain lithologies, for those rich in clay minerals some information is lost during the washing process. The total volume of material per sampling interval has been shown to be approximately 1.5-2 liters. If this consensus statement becomes policy, this volume may need to be increased. Finally, complicated sequences may require more frequent sampling than every 5 meters.

STP Consensus Statement 0908-03: Magnetic Susceptibility Sonde (MSS).

The STP thanks Trevor Williams for the update on the Magnetic Susceptibility Sonde performance during Expedition 320. While the loss of this instrument down hole was a significant setback, the data obtained prior to the loss demonstrated the importance of including MSS in the IODP logging tool suite and STP fully supports efforts to replace this valuable instrument.

Voting Record: 15 Yes, 0 No, 0 Abstentions, 1 absent (Paul Johnson)

Priority: High

STP suggests this be forwarded to EDP, IODP-MI, and the USIO-LDEO.

Background to STP Consensus Statement 0903-03: the deployment of the MSS during Expedition 320 (see STP Consensus Statement 0903-01) showed the

excellent potential of this instrument for making down hole magnetic susceptibility measurements. The unfortunate loss of this developmental instrument has left a gap in the capabilities of the IODP downhole tool suite, which requires the rapid replacement of the MSS.

STP Consensus Statement 0908-04: Expedition QA/QC Reporting.

This consensus statement is a follow-up on consensus statements 0903-14 and 0807-04. STP recommends that expedition QA/QC reports to STP contain at least the following details:

- Problematic measurements where QA/QC parameters could not be achieved;
- Third party tool calibration data;
- Measurements where standardization was difficult and/or reference material analyses was not possible; and
- A list of reference materials used for the measurements.

STP requests that these reports be completed by the Science party before the end of all expeditions.

Voting Record: 15 Yes, 0 No, 0 Abstentions, 1 absent (Paul Johnson)

Priority: High

STP suggests this be forwarded to IODP-MI and the IOs.

Background to STP Consensus Statement 0903-04: This consensus statement is a follow up to 0903-14 Expedition QA/QC Report and 0807-04 QA/QC Implementation and Reporting. The impetus for this is that specific guidelines for reporting QA/QC issues were requested by the IOs.

STP Consensus Statement 0908-05: Approval of Expedition Measurement Plans.

The STP approves the Expedition Measurement Plans for Shatsky Rise (324), Canterbury Basin (317), Wilkes Land (318), NanTroSEIZE Stage 2 (322), and Great Barrier Reef (325) as presented by the IOs.

Voting Record: 14 Yes, 0 No, 1 Abstentions (Saito), 1 absent (Paul Johnson)

Priority: High

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

Background to STP Consensus Statement 0908-05: During its meeting in Honolulu (March 2009, STP8) STP recommended that the IOs present the measurement plan for each scheduled expedition for each of the different platforms (STP Consensus Statement 0903-05). During its meeting at Jeju, S. Korea (August 17-19, 2009, STP9), STP reviewed the Expedition Measurement Plans for the following upcoming expeditions: Shatsky Rise (324), Canterbury Basin (317), and Wilkes Land (318), presented by the USIO representative, NanTroSEIZE Stage 2 (322) presented by the CDEX representative, and Great Barrier Reef (325) presented by the ESO representative.

STP Consensus Statement 0908-06: Reservation of platform time for non-expedition-specific purposes.

The STP supports SPC's changes to guidelines that suggest 3 platform days per 2-month expedition be automatically set aside for other purposes (e.g., APLs, engineering).

Voting Record: 15 Yes, 0 No, 0 Abstentions, 1 absent (Paul Johnson)

Priority: Medium

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

Background to STP Consensus Statement 0908-06: STP thanks Hiroshi Kawamura for reviewing SPC's recommendation to automatically set aside 3 days of platform time per 2-month expedition for engineering testing or other purposes. In the past, time for engineering testing was normally not included as it was seen as being granted at the cost of the scientific goals. Recognizing that such testing is crucial to continued development and improvement of methods, the new guidelines suggest that some time during each Expedition be allocated specifically for this purpose. Any time not used for testing will return to the scientific party.

STP Consensus Statement 0908-07: Field Testing of the Riserless Mud Recovery System

The STP fully supports the idea of field-testing of the Riserless Mud Recovery System (RMR) if an opportunity is presented for using an IODP vessel. RMR is a very promising technique for advancing deep water, deep hole drilling technology, which is important for achieving numerous IODP scientific objectives. When and if such testing occurs, STP would like to have the opportunity to review the results.

Voting Record: 15 For, 0 Against, 0 Abstentions, 1 Absent (Paul Johnson)

Priority: High

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

Background to STP Consensus Statement 0908-07: EDP Consensus-Statement 0907-07 endorses field testing of the riserless mud recovery system. STP fully supports this idea. Following the successful feasibility study, a field test is the next logical step. STP is excited about this advance in deep water, deep hole drilling technology and the option to use RMR for scientific drilling.

STP Consensus Statement 0908-08: IODP-MI Efforts to Integrate Engineering Activities

The STP endorses the IODP-MI efforts to integrate engineering activities including SOC-, POC-, and non-IODP-funded engineering development projects.

Voting Record: 15 For, 0 Against, 0 Abstentions, 1 Absent (Paul Johnson)

Priority: High

STP suggests this be forwarded to IODP-MI, EDP, Lead-Agencies

Background to STP Consensus Statement 0908-08: EDP endorses IODP-MI's effort to integrate all IODP engineering activities. (EDP Consensus Statement 0907-13).

STP Recommendation 0908-09: STP Recommendations for Routine Microbiological Sampling on IODP Expeditions. The STP recommends the following approach to assist routine microbiological sampling 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. The panel further recommends that a microbiologist sail as part of the science party with each expedition in order to oversee the proper sampling, preservation, and integration of these materials into specific expedition objectives.

To assist the IOs in implementing the collection of routine microbiological samples (RMS) on IODP expeditions, the STP recommends the following:

- **Recommendation 1.** On IODP expeditions, a minimum of one RMS should be collected per IW sample acquired from each site that is sampled^{1*}. The RMS should be collected in close proximity (within a few centimeters) to the IW sample. For reference, see STP Consensus Statement 0807-12. The RMS sampling interval should be included in the scientific prospectus for the expedition. Consideration of the scientific objectives of each cruise is encouraged in order to determine how microbiological analysis of RMS can help to accomplish IODP objectives.

The candidate sampling procedure, based upon the Subseafloor Life Task Force (SLTF) recommendation (STP consensus statement 0807-12), is as follows:

- 1) Bulk sediment should be collected in triplicate (e.g., with 30 cc sterile cut-off syringes; thereafter frozen) and also scrapings from the outside of the core to be placed into a centrifuge tube (for use as an indigenous tracer) where possible, or
- 2) When #1 is not possible (e.g., because of limited staff or indurated nature of the core) then successive whole- or half-round cores should be preserved as deep frozen samples. Depending on shipboard freezer capacity, the frequency of RMS sampling may need to be reduced if whole-rounds or half-rounds are often collected.

¹ * Based on three sites each from ODP Leg 202 & IODP Expedition 307, tying this RMS scheme to the collection of IW samples will entail taking ~20 to 40 samples (range = 19-59, mean = 35) for each category at the average site focused on paleoceanography or sedimentary processes. This will entail removal of sample plugs from the center of, or whole rounds totaling, ~3.5 m of core at each site. Assuming three full-length holes per site (range = 3-5 for 202 and 307) and very conservative 70% coring recovery, sediment will be removed from 3.5 of 504 m of core (~0.7%) per site. Much of the sediment in these 3.5 m will remain after sampling. (These residual sediment samples may not be of optimal use.) A 24 ft³ -80C freezer will hold ~430 packages of triplicate 30cc samples. This is almost four times the capacity required for IODP Leg 307 and about 1.33 times the capacity required for ODP Leg 202.

- 3) If the core quality is judged to be inferior and an IW sample will not be collected, or if the RMS sample will interfere with the objectives of the cruise (e.g., if the sample would be taken near a critical interval), then there is no need to collect an RMS.

For preservation of RMS, the contents of the sterile syringes should be extruded into separate centrifuge tubes followed by storage at -80 C. The whole- or half-rounds should be packaged in alumibags (or similar product) and frozen at -80 C. Freezing of the RMS should occur as soon as possible after subcoreing or collection (D'Hondt et al. 2007).

- **Recommendation 2.** An on-board microbiologist or a technician trained in aseptic sampling techniques should implement these recommendations and the RMS sampling itself. The technician will be responsible for maintaining the equipment required for routine sampling, maintaining a clean microbiology working space, and for maintaining an adequate inventory of needed sampling supplies on board.
- **Recommendation 3.** Regular (e.g., annual) review of the methods adopted for RMS should be performed by the SLTF. As part of the review, if new methods come to light in relation to the collection and preservation of samples, these should be considered for adoption.
- **Recommendation 4.** Questions related to implementation of any of these recommendations should be directed to the SLTF for guidance.
- **Recommendation 5.** Clarification of the final archival disposition of the RMS and the shipping procedure at the conclusion of the expedition needs to be addressed by the IODP Curators.

Voting Record: 13 For, 1 Against (Thomas), 1 Abstention (Young), 1 Absent (Paul Johnson)

Priority: High

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

Background to STP Recommendation 0908-09: This consensus statement follows the report from IODP-MI that considers the issues related to implementing routine sampling for microbiological samples aboard all IODP expeditions. Many of the concerns have been addressed and such sampling is imminent. This consensus statement references relevant recommendations generated by the 2003 IODP Microbiology Working Group Report, the IODP Deep Biosphere Workshop held in Vancouver, BC (October 2006) and 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, and past STP consensus statements including 0708-14, 0807-12, 0807-17, 0807-18, 0903-06, and 0903-07.

STP Consensus Statement 0908-10: EDP Liaison and Microbiology Contamination Issues. Yuki Morono will replace Rick Colwell as the STP (electronic) liaison to the EDP Microbiology Contamination Working Group.

The STP requests that this EDP working group consider strategies for reducing the drilling mud contamination of cores obtained using riser and non-riser drilling and in materials that are difficult to core (e.g., see STP Roadmap items B1-2, B2-2 and B2-5). Considerations include the modification of mud constituents to reduce contamination or the opportunity for microbial growth to occur within the muds.

Voting Record: 15 For, 0 Against, 0 Abstentions, 1 Absent (Paul Johnson)
Priority: High

STP suggests this be forwarded to [EDP](#) and [IODP-MI](#).

Background to STP Consensus Statement 0908-10: This recommendation is related to EDP Action Item 0807-08: Microbial Contamination of Core and the establishment of a Microbiology Contamination Working Group to investigate technologies and strategies for reducing microbial and drilling fluid contamination of cores. Contamination remains a major issue in the quality of some samples acquired for microbiological analysis. The STP requests that this EDP working group consider strategies for reducing the drilling mud contamination of cores obtained using riser and non-riser drilling and in materials that are difficult to core (e.g., see STP Roadmap items B1-2, B2-2 and B2-5). Considerations include the modification of mud constituents to reduce contamination or the opportunity for microbial growth to occur within the muds.

STP Consensus Statements 0908-11: JOIDES Resolution Microbiology Contamination Issues. The STP appreciates the modifications made to the JR with regard to microbiological equipment and space allocated for microbiology-related activities. This is a great improvement for the program. STP recommends that standard practices for minimizing microbiological contamination on surfaces should be implemented as used for any working microbiological laboratory. This should include routine use of surface disinfectants, UV lamps in critical areas, and a standard check for airborne contaminants in the laminar flow hood.

Voting Record: 15 For, 0 Against, 0 Abstentions, 1 Absent (Paul Johnson)

Priority: High

STP suggests this be forwarded to [USIO](#), [CDEX](#).

Background to STP Consensus Statement 0908-11: During a tour of the microbiology labs in March 2009 STP members noted a possible contamination issue related to the microbiology lab space and equipment. This is in response to the USIO's response to consensus statement from 0903-03 STP Tour of the refurbished JOIDES Resolution. The results from positive and negative QA/QC samples in the microbiology lab should be reported to STP.

STP Consensus Statement 0908-12: Depth Scale Terminology Update

Further to STP Consensus Statement 0903-10 (Depth Scale Implementation) the STP appreciates and values the effort put into producing v 1.1 of the Depth Scale Terminology document and acknowledges its importance to the scientific community. However, the STP recommends that IODP-MI initiate a project with the IOs to complete the Error and Corrections v.1.1 document and to merge it with the Depth Scale Terminology document. STP further recommends introducing diagrams (cartoons) and clearer explanations of the different methods and sub-methods. (Note: Additional brief background information about the motivation for creating the Depth Scale document should be included in the Introduction.) The STP views this as an urgent issue.

Voting Record: 15 Yes, 0 No, 0 Abstentions, 1 absent (Paul Johnson)

Priority: High

STP suggests this be forwarded to [IODP-MI](#), [DMCG](#), and [IOs](#).

Background to STP Consensus Statement 0908-12: Revision of IODP Depth Scale Terminology from v.1 to v.1.1 produced new Depth Scale Names and provided explanatory information on the various depth scales used. However, STP members

feel that diagrams (cartoons) representing the Depth Scale Names would greatly enhance the clarity of the document to the shipboard and wider scientific communities. Also, understanding and quantifying the potential errors and corrections associated with each depth scale is very important to ensure consistent application and correlation of the scales. The Errors and Corrections document, version 1.1 is incomplete and needs to be finalized and incorporated into the main Depth Scale Terminology document.

STP Consensus Statement 0908-13: Support for the SEDIS project.

The STP would like to thank Jamus Collier for his presentation on the update of the SEDIS project. The STP is aware of the importance of preserving all IODP data and therefore supports the continued development of SEDIS through Phase III. The panel also recommends that all efforts be made to initiate the archiving of IODP Phase I data in order to guarantee continuous access to these data in the post-2013 IODP structure.

Voting Record: 15 Yes, 0 No, 0 Abstentions, 1 absent (Paul Johnson)

Priority: High

STP suggests this be forwarded to IODP-MI and the IOs.

Background to STP Consensus Statement 0908-13: Jamus Collier from IODP-MI gave an initial presentation on the Data Management Group's SEDIS (Scientific Earth Drilling Information System) project during the 8th meeting of the STP in Honolulu, Hawaii (6-9 March, 2009). The presentation outlined a 3 Phase approach of implementation for the control portal, with Phase I completed in spring 2008. A second presentation was made by Collier during the 9th STP meeting in Jeju, Korea (16-18 August), providing an update on the recently completed (summer 09) Phase II and outlining Phase III (RFP to be released in FY10).

**STP Consensus Statement 0908-14: Sean Higgins**

STP recognizes the selfless and invaluable contributions of Sean Higgins to the Integrated Ocean Drilling Program that always went above and beyond the call of duty. Sean's willingness to participate in and aid the goals of STP will not be forgotten and his passion for the drilling program was second to none. The STP mourns Sean's leaving IODP, but thanks him for his Herculean efforts to promote and sustain the program. He will be difficult if not impossible to replace....

Voting Record: 15 Yes, 0 No, 0 Abstentions, 1 absent (Paul Johnson)



STP Consensus Statement 0908-15: Tom Janecek

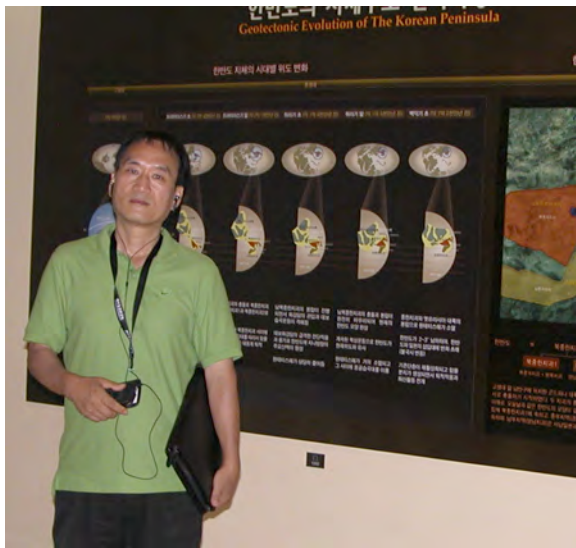
The STP wishes to thank Tom Janecek for the years of selfless service to this panel and to the Integrated Ocean Drilling Program. His departure from the program is a tragic loss and he will be difficult to replace. His encyclopedic knowledge of all things IODP was second to none and he will be sorely missed at STP meetings. We wish him all the very best for his life beyond IODP and would welcome him back at any time.

Voting Record: 15 Yes, 0 No, 0 Abstentions, 1 absent (Paul Johnson)

**STP Consensus Statement 0908-16: Peter Blum**

The STP thanks Peter Blum for his long-term dedicated commitments to this panel as a USIO liaison. His extensive knowledge and deep insights for scientific measurements, analyses, and database issues were extremely helpful for STP deliberations. His presence and input will be missed, but the STP extends its very best wishes for his continued success in the IODP.

Voting Record: 15 Yes, 0 No, 0 Abstentions, 1 absent (Paul Johnson)



STP Consensus Statement 0908-17: Youn-Soo Lee

The STP wishes to thank Youn-Soo Lee as the first STP member from Korea and for hosting the first STP meeting in Korea. Youn-Soo provided first class hospitality and provided the best meeting venue in Jeju, Korea. The Panel is extremely grateful for Youn-Soo and his wife for their generosity and efforts in providing the panel members with the opportunity to experience the Crown-shaped Tuff Cone and the Stone Museum. The financial support by K-IODP for the meeting venue and the critical field trips is also gratefully acknowledged. The STP would like to also thank Youn Soo Lee for his dedicated contribution to the panel over the last three years. His presentations on “Sea-Surface Magnetometer on JR” and “Oriented Cores” and his passion for all things magnetic will be never forgotten.

Thank you Youn-Soo! We wish you good luck for your post-STP future and hope you will continue to play a significant role in IODP in the future.

Voting Record: 14 Yes, 0 No, 1 Abstention (Lee), 1 absent (Paul Johnson)



STP Recommendation/Consensus Statement 0908-18: Rick Colwell

The STP is distraught at the loss of Rick Colwell, his microbiological prowess, and his post-meeting activity stamina from the panel, at the conclusion of the Jeju meeting. Rick's ability to develop consensus and to wax lyrical about the tiniest of subjects was second to none. Rick has also proved that he has the healthiest liver of anyone on STP past or present, an achievement he has worked long and hard to obtain. The STP will struggle on without Rick not because it wants to but out of a sense of duty and it wishes him all the very best in his post-STP life.

Voting Record: 14 Yes, 0 No, 1 Abstention (Colwell), 1 absent (Paul Johnson)



STP Consensus Statement 0908-19: Paul Johnson.

The STP thanks Paul Johnson for his dedicated contribution to insure that geophysical measurements in IODP expeditions were properly evaluated. He will be missed for his accurate statements in the panel. He has been particularly sensitive to the achievements of Chinese geophysics during the STP meeting in Beijing, more specifically when it got down to culinary specialties. STP would like to thank him for his constructive involvement in all the geophysical subtleties that were handled by the panel.

Voting Record: 15 Yes, 0 No, 0 Abstentions, 1 absent (Paul Johnson)



STP Consensus Statement 0908-20: Minoru Ikehara

The STP thanks Minoru Ikehara for his dedicated effort to ensure the quality of IODP geochemical analyses, though his words were few. His calm attitude and unspoken hints lead discussion tacitly to the correct conclusion, which is called *nirvana* in Buddhism. It is very regrettable that he could not participate in his last STP meeting due to his participation in Expedition 323 (to the Bering Sea), but we know he is still quietly watching over the quality of geochemical analyses for the Bering Sea expedition and we wish him well in his post-STP life.

Voting Record: 15 Yes, 0 No, 0 Abstentions, 1 absent (Paul Johnson)

STP Action Item 0908-21: Smear Slide Reference Materials. The STP requests IODP-MI to investigate the feasibility of providing minimum sets of physical reference materials of smear slides as well as digital references.

Priority: High

Lead: Naruse, IODP-MI

Action by: Next Meeting

Background Information to Action Item 0908-20: This will close out STP Action Item 0903 Digital Resources on IODP Platforms. Currently, both physical and digital reference materials of smear slides are not available onboard, although the main microscopic means of core description are via smear slides and thin sections. There are adequate tools, including the tutorial, for thin-section description of

consolidated sedimentary rocks. However, much of the work done on ship is via smear slides that are generally more complex. Shipboard sedimentologists often have no experiences on smear slides, so that tutorial material is necessary onboard. Thus, providing minimum reference set of smear slides must be quite helpful for IODP shipboard activity.

Minimum reference set of smear slides, which will be less than 20 per set, should contains common minerals (quartz, feldspar, clay minerals, volcanic glass, zeolite, mica, pyrite, etc.), microfossils (radiolaria, foraminifers, nannofossils, diatoms, sponge spicule, fish teeth, etc.) and major lithologies (calcareous and silicious ooze, mudstone, sandstone, etc). To maintain the physical references, it is recommended to produce spare sets at the same time. IODP-MI should request IOs to report condition (lost, broken, etc.) of reference sets at the end of each expedition, and renew the reference sets if necessary.

It should be emphasized that purposes of physical and digital references are different. Physical references are significant for training onboard, and digital materials can be “encyclopedia” of smear slides. Therefore, they are complementary, and cannot completely replace each other.

STP Action Item 0908-22: Portable version of DescLogik for STP testing. STP members requested the USIO to test the Desclogik system via a portable version run from a lap top to enable more informed input to be given to the USIO.

Priority: High

Lead: USIO

Action by: October 1, 2009

Background to Action Item 0908-21: Questions were raised about DescLogik during the STP meeting that could be best addressed by a demonstration of the program. David Houpt from the USIO indicated that he would look into the possibility of a portable version of this program to bring to subsequent meetings.

STP Action Item 0908-23: Test data from the Impedance Analyzer and Laser Ablation ICP-MS. CDEX is requested to present test data from the Impedance Analyzer (for Formation Factor analysis) and Laser Ablation ICP-MS.

Priority: Medium

Lead: CDEX

Action by: Next meeting

Background to Action Item 0908-22: At the STP meeting in Jeju, CDEX stated that tests of the Impedance Analyzer (for Formation Factor determination) and the LA-ICP-MS were still ongoing and not complete.

STP Action Item 0908-24: Formation Factor measurement on MSPs. ESO will determine how Formation Factor is determined on MSP expeditions and report back to the STP.

Priority: Medium

Lead: ESO

Action by: December 1, 2009

Background to Action Item 0908-23: ESO is requested to report back before the next meeting on what is available for Formation Factor measurement on MSPs.

STP Action Item 0908-25: Required Metadata for Digital Images. The STP notes that each IO is saving images with variable metadata. IODP-MI is requested to establish a uniform set of metadata so the interface with SEDIS is seamless.

Priority: High

Lead: IODP-MI, Collier

Action by: December 1, 2009

Background to Action Item 0908-25: IODP-MI should provide to the IOs the metadata that need to be included for digital images for easy integration of these into SEDIS.

STP Action Item 0908-26: EDP White Paper input. The STP members have been asked to review and given input to the EDP white paper and send their comments to the STP chair for synthesis.

Priority: High

Lead: STP, Neal

Action by: August 21, 2009

Background to Action Item 0908-26: Panel input to the EDP whitepaper for the INVEST meeting is needed urgently. Input should be sent to the STP chair via e-mail.

STP Action Item 0908-27: Taxonomic Name Lists. The STP asks IODP-MI to give an update on the preparation of Taxon Name Lists (TNLs) and their incorporation in the database during their next meeting (STP #10).

Priority: High

Lead: IODP-MI

Action by: Next meeting

Background to STP Action Item 0908-27: The contents of the Taxonomic Name Lists (TNL's) for the most commonly used microfossil groups (planktic and benthic foraminifera, calcareous nannofossils, diatoms, radiolarians, dinocysts and other palynomorphs) are of prime importance for the efficient functioning of the input of micropaleontological data in the IODP database. Historically, it has been difficult to provide Taxonomic Name Lists that are widely accepted by the scientific community as well as convenient for shipboard use. Several groups of microfossil workers have received funding by IODP-MI to prepare updated lists with community input. At least some of these lists (foraminifera and calcareous nannofossils) are expected to be ready for incorporation within the next few months. STP wants to be updated on the progress of the incorporation of the community-provided TNLs in the database.

STP Action Item 0908-28: Core recovery and quality report to EDP

Upon the request from the EDP, STP will submit formal report on Core Recovery and Core Quality before the 10th EDP meeting in January 2010.

Priority: High

Leads: Saito and Neal; All STP members

Deadline: before the 10th EDP meeting in January 2010

Background to STP Action Item 0908-28: This is an update of the STP Action Item 0903-19.

STP Action Item 0908-29: Use of cores after freezing using the “magnetic technique”. STP members have been asked to explore uses of frozen cores, in addition to microbiological applications, and give input to the STP chair.

Priority: High

Lead: STP

Action by: October 1, 2009

Background to Action Item 0908-29: The new freezing technique of cores for microbiological preservation can also preserve core structures. The STP members are asked to give specific input via the chair on how cores frozen using this new technique could be used in addition to microbiological investigations.

STP Action Item 0908-30: Measurements of Formation Factor or sediment resistivity in Exp 323 and 322.

The STP thanks David Houpt and Toru Fujiki for their presentations on the measurement plans of formation factor determination during Exp 323 and sediment resistivity by using the newly installed impedance analyzer in Exp 322, respectively. STP asks that the Co-chiefs, APL leads, and the science party of the two expeditions provide the preliminary results including the measurement method and the QA/QC process to STP for review.

Priority: High

Leads: Neal, Lin,

STP suggests this be forwarded to IODP-MI, Expedition Co-Chiefs, APL leads, and the IOs.

Action by: September 1, 2009.

Background to STP Action Item 0908-30: IODP-MI has requested advice from STP with regard to the best way to determine Formation Factor and how to conduct QA/QC on its determination. Exp 323 by JR and Exp322 by CHIKYU will provide STP the necessary experience for discuss the formation factor determination protocol and QA/QC plan.

STP Action Item 0908-31: Discussion on Formation Factor Determination

STP thanks Shinichi Takakura, Xinglin Lei, J. Carlos Santamarina and Weiren Lin for their input and Weiren Lin for his presentation related to measuring formation factor in sediments. STP also thanks Steve D'Hondt for his rapid reply to our questions sent to him during the STP meeting in Jeju. STP recognizes the need to determine the best way to measure formation factor, to conduct QA/QC on this measurement, to collect and summarize past ODP/IODP experiences in this regard, and to continue discussions related to formation factor with SLTF members, and STP as needed.

Priority: High

Lead: Lin

Action by: Next meeting.

Background to STP Consensus Statement 0908-31: Exp 323 by JR and Exp322 by CHIKYU will provide us good practical experiences. STP is looking forward to seeing the preliminary results and then to provide a protocol for formation factor determination and QA/QC plan.