J-CORES Test – Part 2
and
Data Management Meeting

Center for Advanced Marine Core Research
Kochi, Japan

January 30-February 5, 2006

Participants list and Agenda

Hosts and Test Planners

Matsuda, Shigemi	(CDEX)	matsudas@jamstec.go.jp
Takahashi, Kyoma	(CDEX)	kyoma@jamstec.go.jp

Test and Meeting Chair

Miville, Bernard	(IODP-MI)	bmiville@iodp-mi-sapporo.org

J-CORES Test : January 30-February 1

Blum, Peter	(TAMU /USIO)	blum@iodp.tamu.edu
Gaillot, Philippe	(CDEX)	gaillotp@jamstec.go.jp
Graham, Colin	(BGS / ESO)	ccg@bgs.ac.uk
Iijima, Koichi	(IFREE/JAMSTEC)	kiijima@jamstec.go.jp
Iwai, Masao	(Kochi Univ.)	iwaim@cc.kochi-u.ac.jp
Moortgat, Erik	(JOI)	emoortgat@joiscience.org
Naruse, Hajime	(Kyoto Univ.)	naruse@kueps.kyoto-u.ac.jp
Nunoura, Takuro	(DEEPSTAR/JAMSTEC)	takuron@jamstec.go.jp
Sakamoto, Tatsuhiko	(IFREE,JAMSTEC)	tats-ron@jamstec.go.jp
Sato, Hiroshi	(Senshu Univ.)	satohiro@isc.senshu-u.ac.jp
Soeding, Emanuel	(IODP-MI)	esoeding@iodp-mi-sapporo.org

Data Management Meeting: February 2-5

Blum, Peter	(TAMU/USIO)	blum@iodp.tamu.edu
Foster, Paul	(TAMU/USIO)	foster@iodp.tamu.edu
Gaillot, Philippe	(CDEX)	gaillotp@jamstec.go.jp
Graham, Colin	(BGS / ESO)	ccg@bgs.ac.uk
Moortgat, Erik	(JOI)	emoortgat@joiscience.org
Quoidbach, Daniel	(LDEO)	daniel@ldeo.columbia.edu
Sakamoto, Tatsuhiko	(IFREE,JAMSTEC)	satohiro@isc.senshu-u.ac.jp
Soeding, Emanuel	(IODP-MI)	esoeding@iodp-mi-sapporo.org
Wallrabe-Adams, Hans-Joachim	(U. Bremen/ESO)	hwallrabe@uni-bremen.de

Goals

This is the second test of the J-CORES suite of tools following the footpath of the first test that took place onboard the JOIDES Resolution in August-September 2005. The test and meeting will be at the Center for Advanced Marine Core Research (CAMCR) in Kochi from January 30 to February 5, 2006. The goal of second test is to perform a trial of the updated J-CORES version before their upcoming drilling operation. J-CORES has been updated twice since the test on the JR, mainly to fix bugs and to add new applications such as the MicroBio tool and XRD uploading.

A secondary goal is to give other potential users (scientists and technicians) the opportunity to become familiar with and aware of existing data tools that have been created by actually using them. This also aims at highlighting the potential to develop common data tools across the IOs in the future.

IODP-MI also wants to take this opportunity to discuss other issues related to Data Management within IODP. This includes currently joined projects such as the IODP Curation Management System (ICMS), the IODP metadata profile, stratigraphy and lithology standards.

Main Agenda Items

I- January 30-February 1: J-CORES Second Test

The updated version of J-CORES will undergo a second test. CDEX will demonstrate J-CORES functionalities using data collected during CK05-04 Leg 2, and conduct a user training session. Participants will be able to actively test the software using real core material.

- Participants preparation

Please have a look at the documentation before the test in order to prepare yourself:

- http://sio7.jamstec.go.jp/j-cores/

If possible, bring your own laptops; Windows would be an advantage. Before the test, get and install J2SE JRE (Java Runtime Environment) 1.4.2 from the Java website:

- http://java.sun.com/j2se/1.4.2/download.html

- Schedule

- First day
  - AM: Operation/Curation/Sample/User
  - PM: Uploader and CompositeLogViewer
- Second day
  - VCD and CompositeLogViewer
- Third day
  - AM: Stratigraphy
  - PM: µBio

User training session will be held at the first 30 to 60 minutes of each test. At the end of each test, meetings will be held in order to summarize user comments for 30 to 60 minutes.

- Database

Two database instances will be prepared; CK05-04 Leg 2 final and a copy just for the test. Demonstration will be done by the first one, and participants can explore the possibilities using the training copy.

- Test data

Data collected during CK05-04 Leg 2 will be provided to test the Uploader application. At the end of the second day, a part of CK05-04 Leg 2 data will be re-produced on the test database instance.

- Evaluation

Participants may submit comments through an evaluation form which will be prepared by CDEX before the test.

II- February 2-5: Data Management meeting

1. ICMS

ICMS specifications and the role of each IO need to be discussed by e-mails before the meeting as requested by IODP-MI. However, the opportunity should be taken to discuss any adjustments and formal agreements that might be needed to move this project forward including funding issues and long term hosting, RFP, etc.

The following decisions need to be made and answers to some questions:

- Should the IGSN be used to uniquely identify IODP samples?

    o   http://www.geosamples.org/

- Should DOI-Scientific and Technical Data (DOI-STD) be used in combination or alone to uniquely identify and resolve IODP samples? From conversations with the registrars, it appears that thses DOI can also be used for physical material, not just data.

    o   http://www.std-doi.de/

- Is there any need to adjust the current ICSM requirements?

- What is the status of the specification document (USIO and CDEX)?

- What is the next step for the specification document? What is the deadline?

- Defining the role of each IO in the development of the ICMS.

- Fix timeline for the project

- Hosting of the system, future maintenance, hardware

- Funding source. Will there be a need for a RFP for parts of the development?

2. IODP Metadata Profile and SEDIS

The IODP Metadata profile and schema has been distributed for comments and will be ready for discussion at the meeting. We will need to discuss the IO's implementation of the proposed XML format for drilling hole data and timeline for inclusion in the future Scientific Earth Drilling Information Service (SEDIS). We will also need to discuss the inclusion of logging metadata.

The initial goal regarding SEDIS is to create a discovery level metadata portal as stated in previous meetings. This is the main reason for the creation of the IODP metadata profile. Basically it is a catalog of data available from IODP (and will possibly include legacy metadata). The future phases of SEDIS will include search tools for publication-related material and manuals, reports, meeting minutes and citations and possibly metadata for post expedition research.

The final phase will take some time to develop and will involve collaboration with other existing projects and organizations. This might require a special meeting about advanced data tools for ocean drilling involving organizations that have already developed their own tools. SEDIS final phase will ultimately provide advanced tools such as:

- Advanced search for drilling and logging data (data mining and possibly integration with other type of data)

- Advanced data visualization, manipulation and mapping tools

    o   Some current data tools that are available could be used:

- PSICat:
  - http://portal.chronos.org/gridsphere/gridsphere?cid=tools_psicat
- J-CORES:
  - http://sio7.jamstec.go.jp/j-cores/
- GeoMapApp;
  - http://www.geomapapp.org/
- CoreWall:
  - http://www.evl.uic.edu/cavern/corewall/
- POSC Well Log Viewer:
  - http://www.posc.org/ebiz/xmlLive/WellLogViewer/
- And many more….
  - o Or develop new open source tools

As advanced tools need to access data from all IODP databases, there is a need to define how queries can be directed to individual databases and if a common XML data format for each type of data should be developed.

- Existing data formats, standards and projects could be used:
  - o Log ASCII Standard (LAS):
    - http://cwls.org/las_info.php
  - o Wellsite Information Transfer Standard Markup Language
    - http://www.witsml.org/
  - o XMML - the eXploration and Mining Markup Language
    - http://opengis.net/xmml/
  - o GeoScience Markup Laguage (GeoSciML):
    - https://www.seegrid.csiro.au/twiki/bin/view/CGIModel/GeoSciML
  - o POSC WellLogML, WellPlotML and other XML projects:
    - http://www.posc.org/ebiz/xmlLive/WellLogViewer/
  - o Commission for the Management and Application of Geoscience Information
    - http://www.cgi-iugs.org/
  - o North American Geologic Map Data Model (NADM)
    - http://www.nadm-geo.org/
  - o And many more…

A RFP for the development of the first phase of SEDIS will be announced in mid-2006. There will be a need for an external advisory group of experts in order to make proper decision on the RFP and help choose the winning development team.

3. VCD requirements and Lithology

During the first J-CORES test there were concerns that the J-CORES VCD tool is not a real Core Description tool but more a tool to create graphic summary of the core. It was suggested to get together and create IODP wide requirements for a future common VCD tool:

- Is a common tool possible?

- Can a common import/export VCD data format (XML) be developed and implemented instead ?

This activity needs to be started before our meeting in Kochi so we have a starting point for the discussion. So please come prepared and use the DMCG mailing to discuss your requirements and ideas.

This is closely related to a common lithology for describing cores. CDEX proposed one version and e-mail discussions about this topic need to take place before the meeting in Kochi. A common lithology is a request from STP (SciMP) and it needs to be addressed.

IODP-MI initiated a request to the IOs to start an e-mail discussion about the VCD requirements and the proposed CDEX lithology. Please come prepared with your ideas lithology schemas and use the DMCG mailing list to share them.

At the end of this meeting a decision is to be made about:

- Common VCD tool or common VCD XML data format?

- How to handle a common lithology?

- Create an initial IODP lithology, based on the CDEX proposal or an industry standard:

  o CDEX Proposal:

    ▪ http://turonian.cris.hokudai.ac.jp/dmctf/2006_Kochi/Lithology_CDEX.pdf

      • Username: dmgroup   Password: metadata1

  o Shell '95 Standard Legend:

    ▪ http://www.posc.org/technical/STANDLEG.PDF

- Depending on the answer to the first point a proposal to STP will be submitted (will continue after the meeting by e-mail until we are satisfied before sending to STP). A deadline to finish this task will be fixed.

4. *Taxa dictionary*

During the first J-CORES test, there were differences on how the IO's handle taxa using their respective stratigraphy tools. The USIO enforce and catalog all taxa in a control dictionary, while CDEX allows complete freedom to the scientists.

There will need to be one vision on how to handle stratigraphy within IODP.

IODP-MI sent a request to the IOs to provide a clear statement of their choices on how to handle a taxa catalog and dictionary. This discussion needs start before we meet in Kochi so we can have a starting point and move forward with this important topic.

If there will ever be a common taxa dictionary, there we will be a need to discuss who will maintain and host it and how will the users can access it.

Please come prepared with your ideas and use the DMCG mailing list to share them.

At this meeting we will have:

- Presentations from each IO about their current approach to stratigraphy and why

- A decision about the need for IODP to have a common and archived taxa dictionary

- The need to involve other projects and groups:

  o Micropaleontological Reference Centers:

    ▪ http://iodp.tamu.edu/curation/mrc.html

  o International Commission on Stratigraphy:

    ▪ http://stratigraphy.org/

  o TaxaConcept:

- ▪ http://taxonconcept.stratigraphy.net/
  - o CHRONOS:
    - ▪ http://www.chronos.org/
- The MRC group actually proposed a solution (see section 2 in document):
  - o http://turonian.cris.hokudai.ac.jp/dmctf/2006_Kochi/MRC_STP_report.pdf
    - ▪ Username: dmgroup   Password: metadata1
    - ▪ Please have a look at the MRC proposed solution

5. Other topics

- Presentation about the future plan for J-CORES and CDEX (CDEX)
- Presentation about the SODV plan (USIO)
- Presentation about ESO plans
- Core redistribution impact and status
- NanTroSEIZE
  - o http://www.ees.nmt.edu/NanTroSEIZE/homepage.html
- Others

Meeting logistics

I- Hotels

Hotel reservations information was distributed and handled by Matsuda-san. If you have any problems with your reservation or want to make a change, please contact him directly:

matsudas@chikyu.jamstec.go.jp and matsudas@jamstec.go.jp

(send request to both e-mail)

II- Meals

Breakfast: included in your hotel rate. Start at 7h00 am.

Lunch: Box lunch service is available at CAMCR with prices ranging from 700-800 JPY. It is also possible to walk to the airport (15 minutes) to eat at a restaurant but that would mean we will need to extend the time allow for lunch.

Vending machine for drink is available at CAMCR.

Breaks: Coffee, tea, soft drinks and snacks will be provided

III- Transport from the hotel to meeting and back

During both the J-CORES test and Data Management meeting we will have our own bus. Bus will leave the hotel at 7h45 am and return after the meeting. It takes about 45 minutes from the hotel to CAMCR (if we want to start at 8h30 am).

You will need to find your own transportation from the airport to the hotel and back. See the logistics document that was sent separately.

IV- Banquet

A banquet for both J-CORES and STP participants will be held on Monday, 30 January. Detailed information will be released at the meeting venue**.**

V- Optional Sukumo field trip and Chikyu visit

For the participants going to the field trip and visit, we will travel to the port of Sukumo on January 28 from CAMCR by bus taking about 4 hours. So please assemble at CAMCR before noon on January 28 (use your own transport to reach CAMCR). We will leave CAMCR around noon on January 28 and come back from Sukumo in the evening on Jan 29.

January 28 before 12:00 (noon): Assemble at the CAMCR and travel to Sukumo by bus. (Stay at Hotel Matsuya, Sukumo)

*January 29 the morning & afternoon***:** Tour of Chikyu (coming back from Sukumo in the evening and stay at Palace hotel, Kochi)

Agenda schedule – J-CORES Second Test

Monday, January 30, 2006

Time	Topic
8h30	Welcome, logistics, Test agenda
9h00	Training Operation/Curation/Sample/User tools
10h00	Test start
10h30	**Break**
11h00	Test continue
12h30	**Lunch**
13h00	Training Uploader and CompositeLogViewer
13h30	Test start
15h00	**Break**
15h30	Test continue
16h30	Wrap up meeting, comments, evaluation
17h00	**End**

Agenda schedule – J-CORES Second Test

Tuesday, January 31, 2006

Time	Topic
8h30	Plan for the day, logistics
9h00	Training VCD and CompositeLogViewer
10h00	Test start
10h30	**Break**
11h00	Test continue
12h30	**Lunch**
13h00	Test continue
15h00	**Break**
15h30	Test continue
16h30	Wrap up meeting, comments, evaluation
17h00	**End**

Agenda schedule – J-CORES Second Test

Wednesday, February 1, 2006

Time	Topic
8h30	Plan for the day, logistics
9h00	Training Stratigraphy
9h30	Test start
10h30	**Break**
11h00	Test continue
12h30	**Lunch**
13h00	Training µBio
13h30	Test start
15h00	**Break**
15h30	Test continue
16h30	Wrap up meeting, comments, evaluation
17h00	**End**

Agenda schedule – Data Management

Thursday, February 2, 2006

Time	Topic	Presenter
8h30	Welcome, logistics, meeting agenda	BM
9h00	Background about ICMS	BM
9h30	Requirements and Specifications status	PF/SM
10h30	**Break**	
11h00	IGSN/DOI-STD	BM/Group
12h30	**Lunch**	
13h00	Next step, who does what	Group
15h00	**Break**	
15h30	Timeline, Hosting, Funding	BM/Group
17h00	**End**	

Agenda schedule – Data Management

Friday, February 3, 2006

Time	Topic	Presenter
8h30	Plan for the day, logistics	BM
9h00	SEDIS: Requirements	BM
10h00	SEDIS: Metadata implementation and the IOs and Logging data	BM/Group
10h30	**Break**	
11h00	SEDIS: Publications information, post expedition metadata, advanced tools, data format	BM/Group
12h30	**Lunch**	
13h00	SEDIS: Funding, RFP, Timeline	BM
14h00	Lithology and VCD	Bm/Group
15h00	**Break**	
15h30	Lithology and VCD	Bm/Group
17h00	**End**	

Agenda schedule – Data Management

Saturday, February 4, 2006

Time	Topic	Presenter
8h30	Plan for the day, logistics	BM
9h00	Lithology and VCD	Group
10h30	**Break**	
11h00	Taxa Dictionary introduction	BM
11h30	Taxa Dictionary IO positions/presentations	USIO/CDEX/ESO
12h30	**Lunch**	
13h00	Taxa dictionary discussion	Group
15h00	**Break**	
16h00	Taxa dictionary solution	Group
17h00	**End**	

Agenda schedule – Data Management

Sunday, February 5, 2006

Time	Topic	Presenter
8h30	Plan for the day, logistics	BM
9h00	Presentation about the future plan for J-CORES and CDEX	CDEX
10h00	Presentation about SODV Plan	USIO
11h00	**Break**	
11h30	Presentation about ESO Plans	ESO
12h30	**Lunch**	
13h00	Core Redistribution impact	Group
14h00	NanTroSEIZE common data plan	Group
15h00	**Break**	
15h30	Other topics	Group
16h00	Summary of action items, Next meeting	BM/Group
17h00	**End**	

**J-CORES Second Test
and
Data management Meeting**

**Center for Advanced Marine Core Research
Kochi, Japan
January 30-February 5, 2006**

Meeting Report

Table of Content

Participants

J-CORES Second Test

Name	Affiliation	e-mail
Firth, John	USIO	firth@iodp.tamu.edu
Graham, Colin	BGS/ESO	ccg@bgs.ac.uk
Iijima, Koichi	IFREE/JAMSTEC	kiijima@jamstec.go.jp
Iwai, Masao	Kochi Univ.	iwaim@cc.kochi-u.ac.jp
Matsuda, Shigemi	CDEX	matsudas@jamstec.go.jp
Miville, Bernard	IODP-MI	bmiville@iodp-mi-sapporo.org
Moortgat, Erik	JOI	emoortgat@joiscience.org
Naruse, Hajime	Kyoto Univ.	naruse@kueps.kyoto-u.ac.jp
Onda, Mizuki	MWJ	ondam@mwj.co.jp
Rumford, Phil	USIO	rumford@iodp.tamu.edu
Sato, Hiroshi	Senshu Univ.	satohiro@isc.senshu-u.ac.jp
Soeding, Emanuel	IODP-MI	esoeding@iodp-mi-sapproo.org
Takahashi, Kyoma	CDEX	kyoma@jamstec.go.jp

Data management meting

Name	Affiliation	e-mail
Blum, Peter	USIO	blum@iodp.tamu.edu
Firth, John	USIO	firth@iodp.tamu.edu
Foster, Paul	USIO	foster@iodp.tamu.edu
Graham, Colin	BGS/ESO	ccg@bgs.ac.uk
Matsuda, Shigemi	CDEX	matsudas@jamstec.go.jp
Miville, Bernard	IODP-MI	bmiville@iodp-mi-sapporo.org
Moortgat, Erik	JOI	emoortgat@joiscience.org
Quoidbach, Daniel	LDEO	daniel@ldeo.columbia.edu
Rumford, Phil	USIO	rumford@iodp.tamu.edu
Sakamoto, Tatsuhiko	IFREE/JAMSTEC	tats-ron@jamstec.go.jp
Soeding, Emanuel	IODP-MI	esoeding@iodp-mi-sapporo.org
Takahashi, Kyoma	CDEX	kyoma@jamstec.go.jp
Wallrabe-Adams, Hans-Joachim	U. Bremen/ESO	hwallrabe@uni-bremen.de

Executive Summary

J-Cores Second Test

A second test of the J-CORES application was conducted from January 30-February 1, 2006 and followed by a data management coordination group meeting from February 2-5 at the Center for Advanced Marine Core Research in Kochi Japan.

The J-CORES second test was mainly an opportunity for users within the implementation organizations to try and get familiarized with the applications developed by CDEX. Since the first test onboard the *Joides Resolution* in September 2005, CDEX has upgraded all the applications and finalized a new one (micro-biology). The following J-CORES applications were demonstrated and tested by the participants:

- Operation, Curation, Sample
- Uploader
- Stratigraphy
- Visual Core Description (VCD)
- Composite Log Viewer (CLV)
- D-Tunes (Partial test)
- µBio

The test process was similar to the first J-CORES test. First, a demonstration of the tools were done followed by training by Kyoma Takahashi with the help of Shigemi Matsuda. The participants were then asked to test the applications. At the end of each day we discussed our impressions and wrote all our comments in pre-formatted feedback forms.

Most users were very impressed by the tools and more detail is available in the report. One good outcome of the test, is that ESO will be testing the VCD during their sampling party in February-March 2006 and invited Kyoma Takahashi to Bremen.

CDEX is planning one last test in March specifically aimed at the Japanese users community.

It will be very important that proper training for the CDEX tools is provided before any expedition onboard the *Chikyu*. Users can not just arrive on the ship and expect to be able to use the VCD without any training.

Data Management Meeting

The J-CORES test was followed by the data management coordination group meeting. There were several topics of discussion that needed to be addressed in order to move forward in the overall coordination efforts between all the IOs. The main topics discussed were:

- Sample Materials Curation System (SMCS)
- Scientific Earth Drilling Information Service (SEDIS) and metadata
- VCD Process and Lithology
- Taxa dictionary
- QA/QC
- Depth Scale
- NanTroSEIZE

Sample Materials Curation System (SMCS)

The first day was dedicated to the SMCS requirements and actions items that need to be taken to ensure progress in the development of the system. We adjusted the requirements to ensure that the SMCS will not only be able to track available samples but give information about samples that have been requested and removed from the core repositories. The SMCS is not meant to replace the IOs applications to register sample onboard drilling platform or at the core repositories. The SMCS will be a central system that will catalogue all samples not matter where they are located and will allow curators and users to search and request samples from a single entry portal. Several action items came out of the discussion including the content of the sample request forms and the need to have a formal letter of interest and budget from the IOs interested in developing the system.

Action Items

Task	Name	Deadline
1- Plan protocol by IODP-MI user registry	Bernard	End of February
2- Available funding for FY05-06, contract	Bernard	February 20
3- Request, curators, reviewer, admin forms Draft version, user input	John Coordinator	March: 312 Science Party
	Colin	March: 310 post cruise meeting
	Kuroki	Mid March: Domestic Japan and CDEX/JAMSTEC staff
5- Sample plan example	Colin Phil	End of March
6- Refine and finalize requirements and specs.	Paul	After 1 to 5 are done, April
7- USIO provide SMCS budget to IODP-MI and Timeline	USIO	Already has been formally requested based on current requirements.
8- Image Request form specification plus resources needed (Budget)	Matsuda-san	End of March

9- Data Exchange: format, content Keep IO inform	Paul Contacts: Michael D. Matsuda-san	Ongoing End of April
10- Define final timeline	DMCG	After 6-7 is done
11- IGSN/DOI	Bernard	End of April

Scientific Earth Drilling Information Service (SEDIS) and metadata

A more detailed timeline was presented about SEDIS with another request to confirm that all IOs will be able to provide the required metadata. SEDIS Phase I will be a metadata catalogue about core and logging data. It will allow users to discover what type of data is available for each hole drilled by IODP and legacy programs. Further development of SEDIS will include searchable publications and advanced tools for extracting, visualization and mapping data. A data management task force will be created to help in all aspect of SEDIS and an RFP for SEDIS Phase I will be issued in April 2006. SEDIS phase I is expected to be online in spring 2007.

Action Items

Task	Name	Deadline
Finish Requirements	Bernard	End of February
Finish Metadata profile and schema	Bernard	Mid March
RFP	Bernard	Early April

VCD Process and Lithology

VCD process and lithology became important issues. VCD will now be done electronically collecting data and storing the information into databases. The IOs will probably have different tools for creating digital VCDs but there is a need to have common basic data elements to be collected and common lithostratigraphic classifications. Dr. Sakamoto presented CDEX proposed lithology and graphic representations in conjunction with the J-CORES VCD application. No consensus could be reached at the meeting but the USIO is planning to propose their own VCD process and ask a worldwide user community for their inputs. IODP-MI requested that the data management coordination group be part of the effort by reviewing first what the USIO is proposing and that the survey results be shared between all IOs. IODP-MI proposed after the meeting to meet again once the survey is over and come to an agreement on both common basic data elements collection and lithology classifications.

Action Items

Task	Name	Deadline
USIO to share their proposed VCD process with all IOs	Peter	Mid-March
Rep. from IOs to provide comments about USIO plan within 10 days	Rep. from IOs	March

USIO will share results of survey	USIO	After survey ended
Decide on common basic data elements as part of the IODP measurements	DMCG	After survey ended
ESO will try to implement proposed CDEX pattern and colors for lithology and report back Try J-CORES VCD in parallel with own system	Colin Kyoma Sakamoto-san	February-March

Taxa dictionary

The taxa dictionary issue was brought up again at the STP meeting also in Kochi. There is a need to have a single IODP taxa control list and eventually to have a taxa dictionary and atlas. The management of the taxa control list would need to be done by a group of expert that can validate any new information that is added to the list. The MRCs were suggested as a possible group that could become the curators of the taxa control list. In the future, the creation of a taxa dictionary or atlas will need to involve other community efforts in that area. IODP-MI suggested to start the process by using the USIO taxa dictionary and to make it an IODP control list that is available to all IOs.

Action Items

Task	Name	Deadline
Talk to MRC and discuss possibilities	IODP-MI	March
Investigate how to have a common taxa control list	IODP-MI	March
Report back with results of discussion	IODP-MI	?

QA/QC

QA/QC is a very important issue that never seems to reach the proper level of attention. The DMCG does not have the expertise to address the issue however it does impact on all aspects of data management. At the meeting we agreed that expert in the field of QA/QC will need to be involved in order to move forward. IODP-MI has been tasked by STP to come up with a plan before their next meeting in June 2006.

Action Items

Task	Name	Deadline
Master list of data type: Units, format, description, comments (e.g. tool used)	All IOs	March 15
IODP-MI to form a group of experts to address QA/QC	IODP-MI	Before June 2006

Depth Scale

Depth scale will need similar coordination as VCD and lithology. At the meeting it was suggested that a workshop involving experts, users and industry come together and come up with a solution that can be implemented. IODP-MI has been tasks to look into the possibility.

Action Items

Task	Name	Deadline
List of people to participate to workshop send to Bernard	IOs	March
Organize and chair meeting	IODP-MI	May to June

NanTroSEIZE

Finally the DMCG had a few concerns about the data management implication of the NanTroSEIZE project and formulated a few questions for the project leaders.

Action Items

Task	Name	Deadline
Send questions to NanTroSEIZE project leaders	IODP-MI	February (Done and answers were shared with the DMCG)

Conclusion

Over all the meeting was really productive and many action items have been identified and listed in this reports.

IODP-MI greatly appreciates all the help of Kyoma Takahashi and Shigemi Matsuda from CDEX for all their help in planning the meeting logistics and preparing a second test of the J-CORES applications.

J-CORES Second Test: January 30-February 1, 2006

Process

The second J-Cores Test was a follow-up on the test done on the JOIDES Resolution in September 2005. The participants however were different, as there only Phil Rumfeldt and John Firth had already been present at the first test.

The test lasted three days, split up in sections for the following tools:

- User Administration tool

- Operation Administration Tool

- Curation Administration tool

- Sample Registration Tool

- Data Uploaders

- Composite Log Viewer

- Visual Core Description Tool (VCD)

- Stratigraphy Tool

- MicroBiology Tool

During the test each tool was explained in depth to the testers, followed by a few application examples. Subsequently everybody was given the opportunity to enter or upload data, and experience the look and feel for the specific tool. During the test the database was filled with dummy data. The following paragraphs summarize the functionality, and a digested version of the most important comments provided by the testers. The full comment sheets are available to the J-CORES developers for consideration and possible implementation.

J-CORES: Basic User-, Operation-, Curation- and Sample Management

These User-, Operations-, Curations- and Sample Management Tools are a set of tools designed to set up parts of the database framework for an upcoming expedition. Data can be modified during the expedition, but the initial setup reflects the plans of the scientific participants, and is supposed to structure the work on the cruise.

The **User tool** allows administration of database users, groups and roles. This is important to define who is allowed to use which part of J-CORES, which tools can be accessed and what data can be modified.

The **Operation tool** provides functions for entering information related to the current expedition, site, hole, survey, and core identification.

The typical user of these tools would be the onboard data manager or the database curator, who grants permissions according to expertise, area of work and training on the system through the user tool, and sets the expedition metadata up through the operation tool.

Both tools are in principal simple but not intuitively usable. It was clear during testing that potential user needs training and expertise to become familiar with the functions and roles that can be assigned. In practice this should not be a problem, as the tools will only be used by few trained people.

The purpose of the **Curation tool** is to edit the core log, the miscellaneous material, the sample code and the sample request, while the **Sample tool** is designed to allow sample identification data. The separation of these tools reflects the different places where they are used. The Curation tool will be used when the core is recovered and cut into sections, while the sample tool will be used when the core is split and physical samples are taken.

Since both tools will be used by sample and repository curators and special trained personnel, the same conclusions apply as for the Operation and User tool. Besides minor non-vital problems, there were no major structural difficulties encountered. It was suggested to offer a data upload function to be able to compile sample data with external programs as well. Some people might still want to use the Excel sheet they have been planning the sampling with.

Together these tools form the framework of the J-CORES sample management system, digging down from operations, into cores, sections and on sample level. The tools hence depend on the higher hierarchy data to be present, before lower levels can be entered. It was also obvious, that in the process of digging down towards sample level, the overall complexity of the tools increased and more experience would have been needed by the testers to evaluate the full potential of the software. In particular the sample toolwas complicated, and it was felt, that the test just scratched the surface due to time constraints. An ultimate assessment of the usefulness and on-site test

can only be performed by the curators and staff scientists on board, as the ones who can judge the functions, and where handling can be improved.

Uploader

The **Uploader** parses data files acquired by instrument measurements and uploads them into the database. The tool is designed to accept data files from instruments present on the *Chikyu*, but can be configured to read file formats from other instruments as well.

This tool will mainly be used by technicians operating certain instruments. These persons can easily be trained to upload instrument data, and provided that the file format is well defined and implemented, few problems are expected to arise. Tweaking the uploader to accept new or different file formats needs in-depth knowledge of the system, which can't be provided by the uploading technician. A J-CORES database specialist will have to implement such changes. This could potentially be done through a network connection from an onshore site.

The Uploader was tested uploading CSV, Line Scanner and MSCL Split Core data. The uploading procedure is simple and repetitive. There were some minor design issues, which prevent untrained people to use the application, as certain actions could result in data loss. The software also crashed a few times while uploading images with a memory error. It wasn't clear if this was due to several people uploading huge amounts of data at the same time, which is unlikely to happen on the ship, or a software bug. Despite these drawbacks, the uploader seemed to work well.

Suggestions for improvements included to store the last used file paths for the next selection. It was also suggested to allow extended keyboard control of application, so some often repeated tasks can be performed without a mouse. For quality control of upload procedures it would be important to have a log-function somewhere, storing time and person uploading data, so QA/QC can look this information up and ensure that all instrument data is actually uploaded, and nothing "fell through the cracks" between shifts.

Composite Log Viewer

The Composite Log Viewer (CLV) allows the visualization of multiple data versus depth (processed or measured) by other applications immediately after the data was entered in the database. The CLV is one of the most important and most widely used developments in J-CORES, as this tool allows dissemination of data and plots during expeditions in real time on the whole ship. Virtually all depth related data is viewable in the CLV i.e. geochemistry, core pictures, logging-data, core, pictures, age, and others.

Overall the tool is quite easy to use, but requires some experience with the concept. The typical user would be everybody on the expedition who wants to view any depth related data. For this reason it is very important to ensure, that this tool is working properly, and has a solid intuitive way of using it.

During the test the software worked as expected. It didn't crash and was reasonably fast. In general it was felt it's easy to use, although some extended functions are hidden behind buttons or icons not obvious to some testers i.e. setting colors to markers, displaying only parts of the window etc. None of these functions was really vital, and once these obstacles were overcome, the software worked very well.

Suggestions included to improve the way of selecting a depth interval, have a few more options to steer the CLV with the keyboard, have some predefined sets of data selections available, or be able to store sets of data types to plot, so one doesn't have to select each data type whenever someone opens the CLV. Mouse roll-overs on bottom tools could display what the item does. Having the option to export plots into a publication quality file would be very beneficial. Currently it is possible to print into a postscript file, but the column titles appeared scrunched and overlapped in cases. For this to be reasonable there should also exist the possibility to accurately scale the axis, which would probably exceed the functionality that can be expected from an onboard data viewing tool. It shows though, that the CLV was recognized as an excellent plotting tool, with a lot of potential and very interesting options.

Visual Core Description (VCD)

The VCD allows sedimentologists, petrologists and structural geologists to enter visual core description by creating a "digital barrel sheet" using a stylus pen device on a tablet PC or a mouse on a regular computer.

The VCD is a very complicated tool, which needs in depth training to explore the many possibilities it offers. Use will be limited to a moderate number of people, which will need an in depth introduction and manual training before the cruise, if the tool shall be used.

For the test dummy data was entered, as well as a data from the description of a real core section using the intended stylus pen and portable tablet PC. A striking observation during this test was that different people approached the task describing the real core section in different ways. Some testers described the layers in the core from the top to the bottom. Each layer was distinct and accurately described. Some testers however described the whole section in general first, adding the special information about particular layers into the column later. This seemed to be an approach which speeded up core descriptions, while still being accurate. The stylus technique and program supported this method very well. However, in particular using the stylus and tablet was not easy for many testers. The very smooth surface of the tablet was slippery with the pen, so it remains uncertain if this tool is accurately usable on a ship, which might be moving or shaking slightly.

In total there were many comments related to the VCD tool, as this was the most complex of the tested J-CORES tools. Comments for improvements included, to allow the storage of lithology descriptions independently of sections, so descriptions could be pulled up and used for later core as well. Currently this is not possible. It would also be good to allow a predefinition of lithologies by composition. In general the tool offered too many options to describe a lithology at the same time. These could be narrowed down to an expedition-related subset. i.e. a paleoceanography expedition would have little use for the options to describe crystalline rocks. Hiding these could make some things easier. The way to describe a sample seemed to be straightforward, offered plenty of options and possibilities. For structural differences about the approach how to describe core please also note the later chapter in these minutes summarizing the discussions within the data management coordination group about VCD requirements and lithology descriptions. The VCD sometimes had a performance problem, in particular on Macintosh computers, and when opening VCD and CLV at the same time. This needs to be solved before it can be released. It was also considered important for the IOs to standardize colors, patterns, symbols, and line types for the core description plots.

It was noted, that this tool can only be successful, if it is widely accepted by the scientific community as a useful improvement over the traditional VCD paper sheets. This will heavily depend on the training, and how computer literate the users are. Given that the average knowledge dealing with

computer software is growing, we are confident that this tool has the potential to be accepted by the community.

Stratigraphy

The Stratigraphy tool allows the shipboard stratigraphers to store chronostratigraphic information to aid the development of age models. It is not an age-modelling tool though, but the data can be used to produce age models in separate applications. Age related data could come from biostratigraphy, magnetostratigraphy or other methods.

The most likely user would be onboard biostratigraphers. For the biostratigraphy a big part of the stratigraphy data could be produced before the cruise, so only fossil occurrences would be recorded, and the range charts could be produced by the software. In fact biostratigraphic catalogues could easily be developed and stored for different geographic areas, so existing data just needs to be revised and improved for each expedition. For biostratigraphy the data that could possibly be entered before expeditions was stratigraphic zones, FO/LO events, magnetostratigraphic zones, other zones.

The usage of this tool obviously needs some training to understand the basic concepts. Since data can be imported through external files, it would also be possible for stratigraphers to use i.e. their own Excel sheets to record data, and import them into the database later. Once familiar with the stratigraphic concepts, it seemed to be a straightforward developed tool, which was easy to use. The data from the stratigraphy tool can be viewed in the CLV, but age modeling capabilities are very limited.

In general it was felt that the tool offered very many options and much freedom to create own stratigraphic schemas. At the same point all this freedom could create a problem, if biostratigraphers were allowed to enter any term or fossil name into the database, resulting in typos, synonymous species names etc. At least a taxon name control list would be desirable (see DMCG Meeting Report below). These control lists could as well grow with the expeditions and the program, and could most likely be prepared before any expedition, so this wouldn't influence the actual work during an expedition. All stratigraphic reference data needs to be properly maintained though, and it is not clear who should take responsibility for this task. It was considered very important for the IOs to standardize colours, symbols, line types for abundance/ preservation/ age models.

D-Tunes

D-Tunes is a tool to edit and store processed depth correlations (e.g. mcd, rmcd, imbsf). The functions in the Composite Log Viewer application rely on the processed depth data entered in D-Tunes.

This application is still in development and only the upload of depth profile was possible at this time. In the final version there will be tools to allow the creation of different depth profiles. During the test it was easy to use. It imports XML data, so a tool would be needed to create data in this format. This would allow data to be converted from i.e. splicer. It will also be important to clearly define the user group of this tool before a cruise to provide adequate training.

Not too many comments and suggestions were given by the testers for this application, as it was in a beta-stage, and therefore of limited use.

μBio

The "μBio" application is an application to record the counting cells and tracer material contamination status of micro-biology samples taken. This is a very specific tool for the microbiologists, who will need an in depth introduction to the system. The data entry was simple and seemed straightforward, although none of the testers had microbiology experience, hence it was very difficult to judge, if the application indeed supports the typical microbiology workflow. The data entered could easily be viewed with the CLV and put into context with all other data gathered during an expedition.

It was noted, that the sample code needs to be standardized across IOs. For microbiology samples J-CORES currently uses BIO while the USIO uses MBIO.

Overall J-CORES test summary

In general the test went over very well. It was clear, that three days were not nearly enough to explore all the functions of the tools, and to get sufficiently familiar with the system to make very precise statements. The ultimate tests therefore will have to be carried out in the labs, under real lab conditions, by the technicians and scientists who will have to work with the data. It was still possible to make a lot of suggestions for improvements. Another important aspect of the test was that representatives of all IOs tested the software, and hence gain confidence in the usability of the software. During the test ESO data managers invited Takahashi to the Expedition 310 Tahiti sealevel onshore sampling party in Bremen, for a demonstration and introduction to the J-CORES system.

It also became clear, that in order to be able to introduce such a system on IODP drill ships, an extensive training program needs to be initiated, and data enterers have to be designated for the different labs in order to make sure that the necessary personnel is familiar with the tools, and all data is captured. If this is not done properly, people will not be able to use the tools effectively, and hence go back to the notes and spreadsheets they were used to. The efforts implementing the system would be rewarded with the possibility to retrieve all recorded data almost instantly from anywhere on the ship, and even prepare draft plots of the collected data extremely quickly. This is a huge advantage over the previous systems, where most data visualizations were done on an individual basis, without any controlled central data repository. Still, there are some key functions not implemented yet, which will be necessary very soon. The first and most important is the controlled capture of QA/QC data for all labs and processes. This topic needs to be discussed very soon (see below in the DMCG report), to ensure coordinated actions throughout the different IOs, and implement QA/QC into the data capture workflow.

Overall the J-CORES system was very well received by everyone, and seen as a big step towards the design of an integrated IODP onboard data capturing and management system. We are grateful to Takahashi and Matsuda for the excellent preparations, detailed explanations and the setup of the environment in Kochi, which made the 2nd J-CORES test a success for everyone.

Data management meeting: February 2-5, 2006

The following topics were discussed during the meeting:

- Curation Management System
- Scientific Earth Drilling Information Service
- VCD requirements and Lithology
- Taxa Dictionary
- QA/QC
- Depth scale
- NanTroSEIZE

Curation Management System

Summary

The curation management system will be used to centrally process sample requests and manage samples tracking and registration from both land and ship based databases from all IOs.

The development of the system will be a collaboration effort from all IOs.

The system is not meant to replace the IOs application to first register a sample, but rather as a tool to centrally catalog all samples available and provide a one stop solution for sample requests management.

The following points were discussed:

- Name of the system
- Status of requirements (what the system should do)
- Status of the specification (how the system will implement the requirements)
- Data exchange
- IGSN/DOI
- Budget
- Hosting and long term maintenance
- Timeline
- Action Items

Name of the system

We voted for a final new name for the system:

- Sample Materials Curation System – SMCS

Status of the requirements

We looked at the current status of the requirements and added a few items:

- The SMCS will manage all samples at all stages of their life cycle, including destruction. The SMCS will no only manage samples that are available for sampling, but will also keep track of samples that have been removed and given to scientists. If samples come back, the system will be able to keep track of their status.
- Search results will be in tabular format
- The system will initially have a simple text web form for seaching and requesting samples. A future advanced enhancement will provide graphical tools such as core images and graphic showing what samples were taken out.

Status of the specifications

The specifications are dependant on what the individual IO wants to develop. The USIO has shown interest in developing the main system and wrote some initial specifications. CDEX is interested in developing an image graphic interface for sample request and will provide to the DMCG specification by the middle of March.
The specifications are important to make sure that independent development will be compatible at the end.

During our discussion we also talked about the request forms and their content. We agreed that John Firth will update the current USIO sample request forms and pass them to the other IOs. These forms will then be passed around to other user communities. All community feedback will be returned to John for the creation of a final set of forms required for the SMCS. All IOs will agree on the content of these final forms and they will be part of the specifications.

Sample Plan

Part of the process for sample request during an expedition is to create a sample plan. There is not formal method of creating a sample plan at the moment.

Colin will provide the sample plan of Tahiti by the end of February and it will become the base to start the discussion about a future common sample plan process.

Data Exchange

Several data exchange formats already exist in the commercial drilling world. ESO is using the Wellsite Information Transfer Standard Markup Language (WITSML) for exchanging and transferring drilling information:

http://www.witsml.org/

To decide how data will be formatted and which protocol will be used to exchange data in the SMCS, we assigned one contact person per IO to be responsible for that aspect of the SMCS.

Person	Organization
Michael D.	for ESO
Matsuda-san	CDEX
Paul Foster	USIO

Coordination efforts regarding data format and exchanged protocol will be done by these IO representatives.

IGSN/DOI

The DMCG discussed the impact and advantages of using the International Geosample Serial Number (IGSN) for the IODP and legacy data samples.

This numbering system is fairly new and does present a few advantages for IODP:

- Unique numbers recognized by the Geosciences community
- Part of a more global community (land, lake, geological samples)

However IODP will have unique numbers and it will be managed by the SMCS. The IGSN is very limiting in its size and would not allow the current recognized legacy scheme from ODP to be used. The SMCS will be able to accommodate several numbering schemes on top of its unique IODP numbers. One possible problem is the automated generation of the numbers. If we have to manually enter all IGSN numbers into the database, it will make the task unmanageable. However if there is an automated method to assign and exchange the information between IGSN and SMCS, then it would not be a major problem for IODP to use the IGSN.

SMCS plans to use DOI for every sample in order to make the connection between data and publications. So each publication could have a list of DOIs for the samples used in the publication and a list of DOIs to the datasets. Each dataset (at the hole level) could also have a list of DOIs for both publications and samples related to the dataset. The DOI would be the link between publication, physical materials and data. DOI via a resolver server would point to the appropriate web site providing the information or link to the publication, data or sample location.

DOI for physical materials does not really currently exist. The DOI for scientific and technical data project has provision to include scientific physical materials.

IODP-MI will have a second meeting with Kerstin Lehnert (LDEO, IGSN project) and Jens Klump (DOI-STD) at the upcoming EGU meeting in early April 2006 and will report back on the possibilities of using both IGSN and DOI to make the connection between different IODP products.

Budget

IODP-MI formally requested the IOs that are interested in developing all or part of the SMCS to provide us with a budget and timeline based on the current requirements. IODP-MI expects to be able to free some funds for the fiscal year 2006 and use that to partly support the development effort for this fiscal year. IODP-Mi will provide more details in March 2006.

A formal agreement or contract to develop the SMCS will have to be signed by the interested development team.

Hosting and Maintenance

The hosting of the SMCS will be done via an RFP or contract to an external vendor. The team developing the SMCS will have to collaborate to install the software created.

Long term maintenance of the SMCS will have to be done via an annual contract with the interested development team.

Timeline

A timeline has been defined for the action items related to the SMCS. Once all the actions items completed, it will be possible to define a development timeline and delivery date.

Action Items

Task	Name	Deadline
1- Plan protocol by IODP-MI user registry	Bernard	End of February
2- Available funding for FY05-06, contract	Bernard	February 20
3- Request, curators, reviewer, admin forms Draft version, user input	John Coordinator	March: 312 Science Party
	Colin	March: 310 post cruise meeting
	Kuroki	Mid March: Domestic Japan and CDEX/JAMSTEC staff
5- Sample plan example	Colin Phil	End of March
6- Refine and finalize requirements and specs.	Paul	After 1 to 5 are done, April
7- USIO provide SMCS budget to IODP-MI and Timeline	USIO	Already has been formally requested based on current requirements.
8- Image Request form specification plus resources needed (Budget)	Matsuda-san	End of March
9- Data Exchange: format, content Keep IO inform	Paul Contacts: Michael D. Matsuda-san	Ongoing End of April
10- Define final timeline	DMCG	After 6-7 is done
11- IGSN/DOI	Bernard	End of April

Scientific Earth Drilling Information Service (SEDIS)

Summary

Bernard presented the plan for SEDIS. Basically it can be summarized by these 3 phases:

Phase I: Automated centralized data inventory by using the exchange of metadata from all participating contributors. It will include a search engine on the metadata and GIS capability for displaying hole locations
Phase II: Addition of publications in the inventory and capability to search the content.
Phase III: Advance data search and extraction. Advanced viewing and mapping capability. This will possibly involve other existing data visualization effort in the geosciences community. Invite other data providers to participate (e.g. lake and land scientific drilling).

The DMCG did not have any major concerns with the plan and agreed to provide the required metadata.

IODP-MI will finalized and publish an RFP for phase I in early April.

The development is expected to start this summer and be completed in early 2007.

A data management task force is being formed and will be used to help IODP-MI make educated decision throughout the development of SEDIS. Phase II and II will also be done via RFP and the whole system should be completed by the middle of 2008.

Action Items

Task	Name	Deadline
Finish Requirements	Bernard	End of February
Finish Metadata profile and schema	Bernard	Mid March
RFP	Bernard	Early April

VCD requirements and Lithology

Summary

Now that each IO will be storing visual core description (VCD) elements in their own database, we need to come to an agreement on how VCD are done and what elements should be commonly stored in the IO databases. This also brings the issue of using the same lithology or have access to known lithology classifications.

Dr. Sakamoto presented the current CDEX lithology used in their own VCD application. It basically describes all the terms used and their graphical representations. It does not however provide information about which elements are collected and store in the J-CORES database. The J-CORES VCD allows the description of both sediment and hard rock.

For sediments the application allows the user to describe these basic elements:
- consolidation
- fabric
- roundness
- sorting
- components
- texture

While for hard rock the following elements can be entered:
- freshness
- primary lithology
- vesicularity
- crystallinity
- granularity
- occurrence
- genesis
- mineral
- model %
- size
- morphology

The J-CORES VCD is using one method of visually describing core and is collecting specific elements in their databases.

IODP needs to have a common method of visually describing core that would lead to a common collection of basic elements in the databases. That will make future search for information consistent no matter who and what software was used to describe a core.
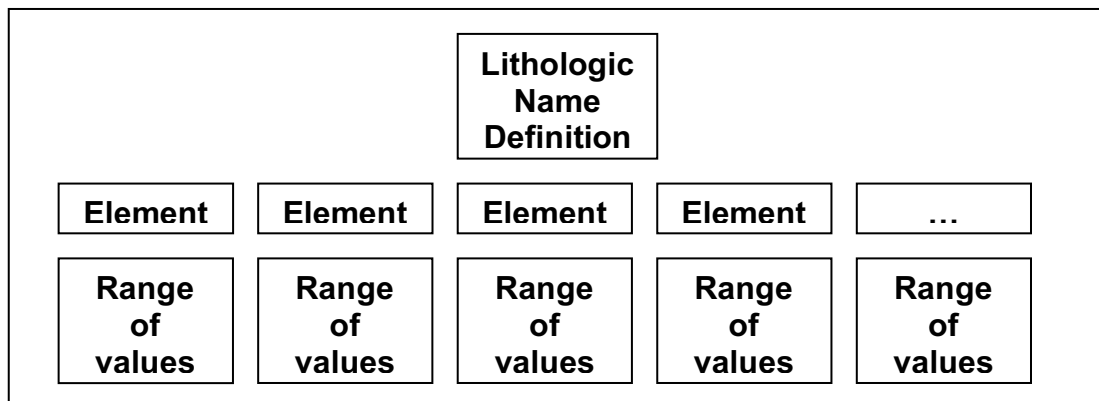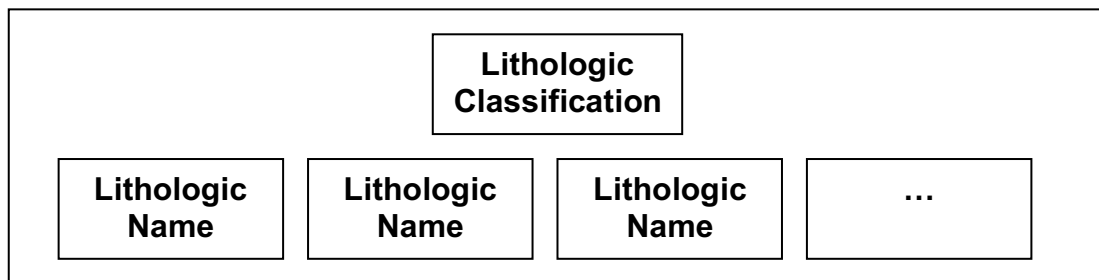
IODP-MI requested that the IOs came prepared to discuss common VCD process and lithology. However after Dr. Sakamoto presentation, the USIO announced that they will write up their own VCD process and ask for feedback from the community.

At the meeting we agreed that the USIO will provide the DMCG with what they propose to present to the community and allow us to provide feedback before the survey is sent. The USIO also agreed to share the results of the survey.

What IODP needs reach the following goals:

- Common basic data elements that are always collected while doing a VCD and store that information into the IOs own database.
- Common lithology terminalogy and graphic representations
- Identify known lithology classifications and make them available in an exchangeable format for any IO to use during an expedition.

A lithologic classification is composed of a list of lithologic names, each names have their own definition that contains values for a list of basic elements (each value for a specific lithologic name has certain range of possible values). Known classifications should be identified and properly formatted once all IOs agree on the basic data elements to be collected.

```
┌──────────────────────────────────────────────────────────────┐
│                    ┌─────────────────┐                        │
│                    │   Lithologic    │                        │
│                    │ Classification  │                        │
│                    └─────────────────┘                        │
│  ┌───────────┐  ┌───────────┐  ┌───────────┐  ┌───────────┐   │
│  │ Lithologic│  │ Lithologic│  │ Lithologic│  │    …      │   │
│  │   Name    │  │   Name    │  │   Name    │  │           │   │
│  └───────────┘  └───────────┘  └───────────┘  └───────────┘   │
└──────────────────────────────────────────────────────────────┘
```

```
┌──────────────────────────────────────────────────────────────┐
│                    ┌─────────────────┐                        │
│                    │   Lithologic    │                        │
│                    │      Name       │                        │
│                    │   Definition    │                        │
│                    └─────────────────┘                        │
│ ┌────────┐ ┌────────┐ ┌────────┐ ┌────────┐ ┌────────┐        │
│ │Element │ │Element │ │Element │ │Element │ │   …    │        │
│ └────────┘ └────────┘ └────────┘ └────────┘ └────────┘        │
│ ┌────────┐ ┌────────┐ ┌────────┐ ┌────────┐ ┌────────┐        │
│ │ Range  │ │ Range  │ │ Range  │ │ Range  │ │ Range  │        │
│ │  of    │ │  of    │ │  of    │ │  of    │ │  of    │        │
│ │ values │ │ values │ │ values │ │ values │ │ values │        │
│ └────────┘ └────────┘ └────────┘ └────────┘ └────────┘        │
└──────────────────────────────────────────────────────────────┘
```

One outcome of the USIO survey will be for the DMCG to start working on the list of basic data elements that are realistic to collect while doing a VCD. This does influence the VCD process and will affect VCD tools that currently exist. The ultimate goal is for IODP to be capable of providing VCD data that is searchable base on knowing what was the basic elements that were collected by all IOs and visually comparable when looking at a graphic representation of a VCD both using applications an d in publications.

Action Items

Task	Name	Deadline
USIO to share their proposed VCD process with all IOs	Peter	Mid-March
Rep. from IOs to provide comments about USIO plan within 10 days	Rep. from IOs	March
USIO will share results of survey	USIO	After survey ended
Decide on common basic data elements as part of the IODP measurements	DMCG	After survey ended
ESO will try to implement proposed CDEX pattern and colors for lithology and report back Try J-CORES VCD in parallel with own system	Colin Kyoma Sakamoto-san	February-March

Taxa Dictionary

Summary

The taxa dictionary issue is similar to the lithology. We need to be able to use common terminalogy for stratigraphy and micropaleontology.

At the STP meeting this February in Kochi, there was a recommendation that IODP-MI collaborate with the MRC in finding a solution.

For IODP data management we first need to be able to have at least:

- Access to a main control list of taxon names and groups
- Be capable to extract part of the main control list for specific needs
- Be capable to add new names if needed via a curational group who will verify the name and the publication related to it.

As a starting point for an IODP control list we can use the current USIO paleo dictionary:

- http://iodp.tamu.edu/janusweb/paleo/paleo_dict.shtml

To have an IODP taxa control list we need to:

- Decide what should be in the list, which fields are required
- Verified the USIO current list if needed
- Define a format for accessing the list
- Define a location to store the list (SEDIS)
- Define a method for extracting part of the list

A taxa control list would have the advantage to:

- allow scientists to enter their findings in a consistent manner
- eliminate most spelling mistakes
- there would be a control on what is allow
- new additions verified against the published literature before being part of the control list

In the future it would be good for educational and training purposes to have a taxa atlas. There are already other initiatives by numerous external groups trying to create taxa dictionaries and atlases:

- International Commission on Stratigraphy:
  - http://stratigraphy.org/
- TaxaConcept:
  - http://taxonconcept.stratigraphy.net/
- CHRONOS:

- http://www.chronos.org/
- Radiolaria
  - http://www.radiolaria.org/
- Catalog of Foraminifera Type Specimens
  - http://www.ucmp.berkeley.edu/foram/foram.html
- Australia Stratigraphic Units Database
  - http://dbforms.ga.gov.au/www/geodx.strat_units.int
- ODP
  - http://www-odp.tamu.edu/publications/tnotes/tn27/TOC_CEN.HTM
- Paleobiology database
  - http://paleodb.org/
- Alaska fossils
  - http://www.alaskafossil.org/
- PaleoTax (software)
  - http://www.paleotax.de/index.htm
- Catalogue of Orbitolinid Foraminifera
  - http://www.paleotax.de/orbitos/index.htm
- EuroPaleoDB
  - http://paleo.stratigraphy.net/
- Web catalogue of the Hippuritoidea (rudist bivalves)
  - http://www.ruhr-uni-bochum.de/sediment/rudinet/index.htm

IODP should be involved in these initiatives, however this will take time and should be a secondary and future goal. We now need to concentrate on creating a taxa control list for IODP.

Action Items

Task	Name	Deadline
Talk to MRC and discuss possibilities	IODP-MI	March
Investigate how to have a common taxa control list	IODP-MI	March
Report back with results of discussion	IODP-MI	?

QA/QC

Summary

We agreed that the DMCG is not the group who can make decisions on QA/QC, or establish and define program wide QA/QC procedure plan. The task to define the procedure should be passed on to IODP-MI and the IOs, and be coordinated by a group of QA/QC specialists, in cooperation with DMCG.

The steps to get there would be
- IODP-MI forms a group to develop a QA/QC plan. This group should contain:
  - o Prof QA/QC officers
  - o Scientists
  - o IO rep's (lab tech, staff scientists, etc)

In order to advance on that topic we will need to provide to the group looking at QA/QC issues a clear list of data IODP will be collecting, including their format, and units. So all the IOs have been requested to provide such a list as an action items.

Action Items

Task	Name	Deadline
Master list of data type: Units, format, description, comments (e.g. tool used)	All IOs	March 15
IODP-MI to form a group of experts to address QA/QC	IODP-MI	Before June 2006

Depth Scale

Summary

J-CORES as developed a tool called D-Tunes that allows to import all kinds of depth scales, but J-CORES doesn't store information about how to process depth. USIO is developing a similar system, and they are thinking to use the same import method developed for J-CORES. Within IODP we need to agree on a common procedure to process depth scale.

At the meeting we agreed that there is a need to setup a group to define terminology and procedures to convert between depth models. This group should include representatives from the IOs and possibly some from ICDP as Colin recommended.

We recommend a 2-3 day workshop:
- 1 day presentations on depths, how measured etc. Include Industry, ICDP lake drillers.

1-2 days to define common terminology for depth, methods to measure depth, how to store, convert and compare depths, what needst o be captured and how to integrate depth vs. age mapping (If one views Age as a different kind of depth).

Action Items

Task	Name	Deadline
List of people to participate to workshop send to Bernard	IOs	March
Organize and chair meeting	IODP-MI	May to June

NanTroSEIZE

Summary

The DMCG had several concerns about data management related to the NanTroSEIZE project. We formulated some questions that need to be addressed as soon as possible:

- Please specify how/when/where the different data types will be processed, and for which data types there is a need for real time exchange between the ships/repositories. this is important to be able to judge impact on data management.
- Which data needs to be combined within a single database
- Which QA/QC expectations exist for the NantroSeize
- Will the ships drill at the same time?

The questions were sent to the NanTroSEIZE project leaders in February.

Action Items

Task	Name	Deadline
Send questions to NanTroSEIZE project leaders	IODP-MI	February (Done and answers were shared with the DMCG)

Conclusion

The second test of J-CORES allowed users not familiar with the applications to try them and learn about their functionalities. Users were asked to write their comments about each tool in specifically prepared feedback forms that CDEX can later evaluate. CDEX is planning one last test aimed at the Japanese scientific community. The tests were very useful for both the users and CDEX. One tool, VCD, will be tested by ESO at their sampling party for expedition 302. Training will have to be provided to all scientists and technicians planning to use the J-CORES tools onboard the *Chikyu*.

The Sample Materials Curation System (SMCS) was discussed extensively at the meeting. We agreed on several action items, including creating common sample request forms and we confirmed the interest of the USIO to develop the basic main system and CDEX to develop an advance graphical interface for sample request. IODP-MI requested after the meeting for a formal letter of interest from each IO.

SEDIS phase I will consist of a metadata inventory of all available data for each drilled hole. An RFP will be issued in early April. SEDIS phases II and III will include more advance features such as publication search, data extraction, visualization and mapping. Separate RFPs will be issue in 2006 and 2007. A task force is currently being set up to help in the process of creating SEDIS.

VCD process and lithology will need further discussion. Once the USIO VCD process proposal survey is over, the DMCG group should be in a position to make an educated decision on what should be the minimum VCD data.

Stratigraphy is another complicated topic. During ODP, the USIO has been using and maintaining a taxa dictionary. IODP could benefit from that experience and use the USIO taxa dictionary has a initial taxa control list that could be use by any expeditions. In the future, advanced taxa dictionary and/or atlases could be developed by participating in existing projects.

QA/QC is will be addressed by IODP-MI and not directly by the DMCG. This will need to involve expert in QA/QC and the participation of representatives from each IOs. IODP-MI will have to develop a plan before the next STP meeting.

IODP-MI will also be looking in having a depth scale workshop involving users, IOs and industry and coming up with a common approach.

Data management coordination with the NanTroSEIZE project was an issue that was raised at the meeting. Questions were formulated and sent to the project leaders.

The meeting was productive and raised many more issues that need to be addressed. The first two priorities are the curation management system and SEDIS.

A future meeting has not been decided on, however a few focus meeting will probably be scheduled to address the VCD and lithology issue and the depth scale workshop

Once again IODP-MI would like to thank all the participants and a soecial thank you to Kyoma Takahashi and Shigemi Matsuda for all the work in hosting and preparing the J-CORES test and meeting logistics.