

# JOIDES SITE SURVEY PANEL MEETING

July 23 - 25 2001

Lamont-Doherty Earth Observatory

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**Members:** Diebold, John (*LDEO, NY, USA*) -- Chair  
Caress, David (*MBARI, USA*)<sup>\*</sup>  
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Mallinson, David (*USF, USA*)  
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Sheirer, Daniel [*Brown, USA*]  
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Acton, Gary (*ODP/TAMU*)  
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Eguchi, Nobuhisa (*iSAS, Japan*)  
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Claypool, George (*PPSP*)

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Rob Sohn (*WHOI, USA*)  
Kyoko Okino (*iSSP, Japan*)  
Shinichi Kuramoto (*iSSP, Japan*)

## **SSP Advice to SCICOM re: readiness to drill August 2001**

### **1 Presently viable for FY 2003 drilling.**

**1A.** All required data are in the Data Bank.

**1B.** A few required items are missing from the Data Bank, but data are believed to exist and to be readily available.

### **2 Possibly viable for FY 2003 drilling; likely for FY 2004 or later.**

**2A.** Substantial items of required data are not in the Data Bank but are believed to exist and are likely to be available in time for consideration for FY 2003 drilling schedule.

**2B.** Substantial items of required data are not in the Data Bank, not believed to exist, but could be available in time for consideration for FY 2003 drilling if a **scheduled** site survey proceeds as planned.

**2C.** Substantial items of required data are not in the Data Bank, not believed to exist, but could be available in time for consideration for FY 2003 drilling if a **proposed** site survey proceeds as planned.

### **3 Unlikely for FY 2003; possible for FY 2004 or later.**

**3A.** Required data are not in the Data Bank, not believed to exist, but are likely to be available in time for consideration for FY 2004 or later drilling if a **scheduled** site survey proceeds as planned.

**3B.** Required data are not in the Data Bank, not believed to exist, but could be available in time for consideration for FY 2004 or later drilling if a **proposed** site survey proceeds as planned.

**4. Impossible for FY 2003:** Required data are not in the Data Bank, not believed to exist. Data could be available after FY 2003 if a **proposed** site survey proceeds as planned.

**5. Impossible for FY 2003:** Required data are not in the Data Bank, not believed to exist. A site survey needs to be conducted but is not proposed at this time.

**6. Not considered** because data in the Data Bank do not match present proposal; awaiting new proposal [or data.]

**7. Not classifiable** because no data have been submitted to the Data Bank.

## **1. Preliminary Matters** (Diebold, Quoidbach)

- 1.1 Introduction of members, liaison, guests and meeting logistics.
- 1.2 Charge and procedures for the meeting.
- 1.3 Greet new members.
- 1.4 Watchdog assignments and feedback to proponents.

## **2. Reports**

- 2.1 JOIDES (Janik)
- 2.2 PPSP (Claypool)
- 2.3 ODPDB (Quoidbach)
- 2.4 TAMU (Acton)
- 2.5 SCICOM/OPCOM (Brown)
- 2.6 ISSEP/ESSEP Lewis, Droxler
- 2.7 iSAS (Eguchi)

## **3. Site Survey Status Of Upcoming Scheduled Legs For 01, 02**

### **Leg 198 - 534: Paleogene/Cretaceous Shatsky Rise**

**SSP Watchdog: Mallinson**

**SSP Proponents: None**

**Target type(s): all Sites A**

**SSP Review:** No new data has arrived at the data bank since July 1999. Readiness status remains the same.

**Site Survey Readiness Classification:** All Sites 1A except for SHAT-13 and 14, which are 1B.

**SSP Consensus:** No new data have arrived at the data bank. There are minor amounts of missing data which exist and could be provided to the data bank in short order if the proposed drilling were scheduled.

Please provide a site description form for Site 14.

### **Leg 199 – 486: A Paleogene Equatorial APC Transect**

**SSP Watchdog: Yao, Bochu**

**Target Type: A**

**SSP Review:** The proposal is suggesting 10 well sites in Equatorial Pacific area for researching the Cenozoic climate change events. The site survey cruise ( swathmap bathymetry, 4-channel seismic reflection survey, 3.5 kHz profiling, piston coring) continuously collected data along two transects of the northern Pacific. The site survey data are completed and good qualities in the data bank.

**Site Survey Readiness Classification:** the classification of this proposal is 1A.

**Leg 200 – 500: H2O Observatory - Drilling Fast Spread Pacific Crust at the H2O Long Term Seafloor Observatory**

**SSP Watchdog: David Caress**

**SSP Proponent(s): None**

**Target Type: E**

**SSP Review:** This scheduled drilling leg 200 will drill a reentry hole at the Hawaii-2 Observatory (H2O) site in the eastern Pacific; a broadband seismometer will be installed within the hole as part of the worldwide ION program. As of the July, 2000 review, the proponents had designated drilling sites and provided a package of figures satisfying the site survey requirements, including site locations and annotated SCS and 3.5 kHz records.

**SSP Consensus:** All required data are in the Data Bank.

**Site Survey Readiness Classification: 1A**

**Leg 201 – 571 Controls on Microbial Communities in Deeply Buried Sediments**

**SSP Watchdog: Stephen Lewis**

**SSP Proponent(s): None**

**Target Type: A**

**SSP Review:** The proponents propose to drill a series of sites along the Peru Margin and eastern equatorial Pacific to address a number of objectives concerning the controls on microbial communities in deeply buried sediments. The sites range from 426 to 5070 m water depth with penetrations ranging from 124 to 400 mbsf. The following objectives will be addressed by the proposed drilling:

1. Are different sedimentary geochemical regimes characterized by different microbial communities or only reflect different distributions of similar communities?
2. How does the flow of electron acceptors through deep sediments affect microbial communities and sediment chemistry?
3. What is the impact of previous oceanographic conditions on microbial communities now buried in deep-sea sediments (i.e., are microbial communities tape recorders of past environmental conditions)?

In order to build on previous site surveys and to remove the need for additional detailed site surveys, the proponents propose to drill in the immediate vicinity of existing DSDP (320, 321) and ODP (680, 681, 684, 685, 846, and 851).

All open questions and requirements from last SSP-meeting were cleared before preparing the PPSP dataset at the end of 2000.

**SSP Consensus:** All required data are present in the data bank, but a significant effort will be required from the proponents, working with Data Bank staff, to compile the existing data into a package for use aboard the drill ship.

**Site Survey Readiness Classification: 1A**

**Leg 202 - 465: SE Pacific Paleoceanography**

**SSP Watchdog: Mallinson**

**SSP Proponents: None**

**Target type(s): all Sites A**

**SSP Review:** The site description form for SEPAC-13B clarifies previous inconsistencies in the location. All lines are classified as 1A (all required data are in the Data Bank), except SEPAC-13B which is 1B (minor items missing).

Please submit a seismic line illustrating the location and depth of penetration of SEPAC-13B.

**SSP Consensus:** Except for some minor items that need to be checked and confirmed, all sites are ready for drilling.

**Leg 203 – 544: Costa Rica Subduction Zone**

**SSP Watchdog: Dan Lizarralde**

**SSP Proponent(s): None**

**Target Type: C, D**

**SSP Review:** Sites 1039-S and 1039-T, previously not on a seismic line, have been moved eastward to lie on seismic line CR-30. Now all Sites lie along existing seismic lines. Although no cross lines exist through the 1039X Sites, Lines CR-20 and 30 are only ~1.5 km apart and exhibit very little lateral variability. All Sites are now considered 1A in site survey readiness.

**SSP Consensus:** Sites 1040R and 1043R lie close enough to previously drilled sites to be considered 1A. Sites 1039R,S and T lie along closely spaced seismic lines within a clear stratigraphic context of Leg 170 Sites 1039, 1040 and 1043. These Sites are now also considered 1A.

**Site Survey Readiness Classification: 1A**

**Leg 204: Gas Hydrates on Hydrate Ridge**

**Proposal #: 546**

**Target Type:**

**SSP Watchdog: Diebold**

**SSP Proponent(s): None**

**SSP Review:** In light of PPSP concerns, data are apparently being redisplayed to reveal structure at target depths. Otherwise, target depths will be modified. None of the processed 3D data have been submitted to the data bank. we still await the processed 3D data set.

**SSP Consensus:** The classification of the data package for this leg remains 2A. Processed high resolution 3D data should be submitted to the Data Bank as soon as available.

**Site Survey Readiness Classification: 2A**

## **Leg 205 - 499 – Rev: Equatorial Pacific ION (Caress)**

This leg has been classified as 1A since 1998. Sites have not been changed, classification remains the same.

### **4. Carried over from FY2002 Prospectus**

#### **Proposal Title: Paleoceanographic and Tectonic Evolution of the Central Arctic Ocean**

**Proposal #: 533-Full2**

**SSP Watchdog: S. Neben**

**Target Type(s): A/G**

**SSP Proponent(s): None**

**SSP Review:** First evaluated in February 2000 this is 4<sup>th</sup> examination of the data package of this proposal. There are no new data in the database, except a sidescan mosaic map from SciCex data.

The SciCex chirp sonar data are still missing which could be used as cross line information of locations LORI-04 & -05.

The velocity used to estimate the target depth for the deep penetrating sites (400-500 m) was >2 km/s which seems to be unrealistic. Therefore better velocities information is needed which could be acquired using sonobouys. All sites penetrating the unconformity need significant information about velocity and better control about the geometry of the sediments beneath the unconformity to determine the potential of hydrocarbon accumulations that must be avoided.

In end of July this year a cruise with the icebreaker ODEN takes place on which reflection seismic cross lines shall be acquired over the most important proposed sites (LORI-1,-3,-8, and -9) and we look forward to seeing this new data when it becomes available.

**SSP Consensus: same as of 02/2001:** Significant data in support of this drilling proposal have been deposited in the data bank. A significant amount of important data are missing but should be collected for several of the sites in July/August 2001 for a subset of the sites. We thank the proponents for their efforts to complete this data package and look forward to reviewing it in the next year.

**Site Survey Readiness Classification: same as of 02/2001:** Classification 2B (substantial items of data missing but should be collected on a scheduled cruise): Sites LORI-01, -03, -08, -09. Classification 2B or 5 (impossible for drilling in FY2003 because significant data are missing and no cruise scheduled to get data): LORI-04, -05. Classification 5: LORI-06, -10, -11, -12.

**Proposal Title: Proposal for Drilling Mantle Peridotite along the Mid-Atlantic Ridge from 14° to 16° N**

**Proposal #: 525-Full**

**Target Type: F**

**SSP Watchdog: Scheirer                      July 2001 SSP meeting**

**SSP Proponent(s):**

**SSP Review:** This proposal is for drilling of mantle peridotites along the Mid-Atlantic Ridge from 14° to 16°N, where igneous crust is locally absent and the structure and composition of the mantle can be determined at sites over 100 km along strike. Focus of study is on 3D vs 2D upwelling below a slow spreading ridge. There are 7 primary and 4 alternate sites, all of which are classified as Target Type F: hard-rock drilling. This target type requires the following data types for drilling: swath bathymetry, photography or video over site, rock samples, and navigation. A substantial amount of data has been deposited into the data bank. Within the past month, a series of maps and Nautile videos were submitted to the data bank in response to recommendations/requirements from the February 2001 SSP report.

The newly submitted, large-format contour maps of the proposed sites show existing rock sample locations and are adequate for locating drill sites. We had difficulties playing the recently-deposited Nautile videos from the dives associated with five proposed site locations; the VHS player at the Lamont ODP/DB recognized that tapes as PAL format, but the monitor's display rapidly flashed the images. We could see seafloor images superimposed by the submersible's data overlay, but no assessment of site suitability could be made. Some experimentation with the monitor and the VCR settings did not improve the viewing. Thus, these 5 sites maintain the site readiness level of 2A that was assigned in prior SSP meetings. The SSP urges the proponents to provide the ODP/DB with NTSC versions of the dive videos to improve the readiness levels to 1A.

The three primary and two alternate sites associated with Shinkai6500 dives have a readiness level of 1A.

Alternate site "Alt-1S" is identified by the proponents as having no dives and dredge samples only on the flanks of the topographic high, not at the summit location of the proposed alternate site. Bare-rock drilling requires video/camera imaging of proposed sites, so this is assigned a readiness level of 5: required data not in data-bank...not believed to exist...needed site survey is not proposed.

SSP recommends:

- 1) the proponents submit excerpted video data of times when the submersibles crossed the proposed drill-sites. It is also essential to have access to the entire footage from the appropriate dives, as has been done successfully for the MODE98 (Shinkai6500) dives and unsuccessfully for the Faranaut (Nautile) dives.
- 2) contribution to the data bank of a cruise report from the Faranaut cruise in 1992
- 3) contribution to the data bank of tabulated times when the appropriate dives crossed the proposed drill sites; the existing rock sample descriptions are not associated with collection times, which could then be correlated with the video imagery.

We encourage the proponents to continue their dialog with ODP/TAMU on the evolving techniques of hard-rock drilling and core orientation.

**SSP Consensus:** Five of the proposed sites have been upgraded to the 1A readiness level. Five of the proposed sites maintain a 2A level because the submersible video was not viewable at the data bank; we urge the proponents to submit NTSC-translated versions of the Nautila video. One proposed site does not have the required survey data, nor does the SSP have evidence that such data will be collected, so it is assigned a readiness level of 5. The SSP recommends a number of additional data items, enumerated above, to be submitted to the data bank.

**Site Survey Readiness Classification:**

1A : Sites 1N, 3S, 4S, Alt-1N, Alt-2S

2A : Sites 2N, 3N, 1S, 2S, Alt-2N

5 : Site Alt-1S

**455 Laurentide Ice Sheets**

**Proposal Title: High Resolution Transects of Laurentide Ice Sheet Outlets**

**Proposal #: 455**

**Target Type: A/B**

**SSP Watchdog: A. Korja (replace Lee)**

**SSP Proponent(s): None**

**SSP Review:** The Data Bank has run an inventory before this panel meeting in July 2001 and no new data was found.

We acknowledge your recent letter to the SCICOM, where you explain the long history of your proposal. You also refer to existing industry data and interest in the area and suggest minor changes to existing drilling plan (LAW4B) and briefly mention a possibility change your proposal into two mini-leg proposals. We recommend that you specify the division and explain how this affects the scientific results, so that SSEP and SCICOM meetings can make a decision.

Since the proposal is highly ranked by the SCICOM, we would like to encourage the proponents to submit the missing data and a new drilling strategy before the next SSEP and SCICOM meetings.

Since no new data has been submitted, the site survey readiness remains the same:

1A for sites HUD01A-HUD07A, and LAW02A-LAW05A;

2A for sites HUD08A, LAW01A, and LAW06A.

**Site Survey Readiness Classification: 1A/2A.**

**Proposal Title: Early Cenozoic Climate: The Walvis Ridge Transect.**

**Proposal #: 559**

**Target Type: A**

**SSP Watchdog: Yao, Bochu**

**SSP Review:** The proposal is suggesting eight ODP well sites which uses the multi-channel high resolution seismic profiles on the Southern Atlantic margin and hope to recover fully intact sequences of sediments deposited at water depth between 2500m and 4500m. These data will be used to reconstruct in detail the paleoceanographic variations associated with several prominent

episodes of early Cenozoic extreme climate change including the Latest Paleocene Thermal Maximum(LPTM),the Early Eocene Climate Optimum(EECO), and the Early Oligocene Glacial Maximum(EOGM).This year the author changed the well sites using the R/V Meteor Walvis Ridge Seismic Survey data, six channel seismic profiles. These are very good high resolution multi-channel seismic profiles. From WALV-7 to WALV-11 there have across seismic profiles for every site , but WALV-12 and WALV-13 there only have the seismic profiles along one direction, not across profiles. Furthermore, there haven't v-t function for t-d transform, but can calculate it using the DSDP data and seismic data.

**Site Survey Readiness:** the classification of this proposal is 2A.

### **564-Full New Jersey Shelf**

**Target Type: A and secondary B**

**SSP Watchdog: Michael E. Enachescu**

**SSP Proponent(s): None**

**SSP Review:** This proposal consists of three shallow water (33 to 36 m) holes located on the New Jersey/Mid-Atlantic Sea-Level Transect (MAT) and demanding each for 762m (less than 3000ft) sediment penetration. All sites are located on the New Jersey inner shelf and are beyond Joides Resolution safe operation capabilities. Drill funds are secured from different sources including ODP. The holes must be drilled using an oil industry jack up, a geotechnical drill system or any available alternate platform. Various ways of achieving drilling at these sites are actively investigated by proponents. We are aware that proponents are working on seismic stratigraphic interpretation and site survey report, however, no new data has been deposited with DB and therefore we are repeating here some of the observations that were made during February 2001 meeting.

Numerous multi-channel and high-resolution data sets related to MAT were inspected prior to leg 150 and 174. The various sets exist in the DB but must be repackaged to address the specifics of the new proposal. Swath bathymetry and sonar data is available, but not yet in the DB. More sonar data may be acquired during a scheduled cruise on the New Jersey shelf. We insist that the proponents complete and organize the data and re-write specific site survey descriptions forms after a final selection of the drillsites MAT-1 to MAT-3. The hazard survey was cleared with the Safety Panel and drilling precautions were suggested.

We expect that a detail seismic stratigraphic study and associated maps of the main interpreted sequences that were prepared for the SSEP review and were included in publications will be included with the proposal. They are absolute necessary to support the scientific objective of the MAT transect and allow for regional correlation of markers. All this remaining repackaging and documenting of the new selected sites should be received at the DB prior to the deadline of February 2001 SSP meeting. If a re-write is done by the fall 2001 and at that time all data is deposited with the DB, I suggest that we might consider an ad hoc SSP review, to rapidly advance its SSP classification ranking for FY2003 scheduling.

**SSP Consensus:** An alternate platform rather than Joides Resolution is needed to achieve this proposal. The SSP acknowledges that most of the required data for this type of site is in DB, but must be properly organized. Final sites, once selected and displayed on data, should be analyzed by the watchdog and discussed by the panel. All required missing data, final site locations and

attached stratigraphic study should arrive at DB prior to February 2002 meeting. A detail site survey hazards report should be prepared on behalf of the marine drilling contractor. This site survey report should also be tabled with the SSP.

**Site Survey Readiness Classification: 2 A**

**Proposal Title: The Dynamics of Methane Cycling in a Large Gas Hydrate Deposit on the Blake Ridge**

**Proposal #: 539-Full2**

**Target Type: B**

**SSP Watchdog: André Droxler**

**SSP Proponent(s): S. Holbrook**

**SSP Review:** The 539-Full2 and the latest addendum submitted in March 15, 2002 was reviewed by SSP in July 24 26, 2001 at LDEO. SSP members were very impressed by the excellent quality of the overall data package submitted to the Data Bank for the proposal 539-Full2 and its addendum. The Data Bank has received the seismic data set (3.5 kHz crossings for each site acquired during a cruise on R/V Ewing in Fall 2000) requested by SSP in February 2001. The PI's are currently processing and interpreting the 3-D volume and will map in 3D the gas hydrate BSR amplitude. This data set will be important in refining the final location of the some of the proposed drill sites. The data package available in the Data Bank as of July 2001 allows SSP to upgrade the Site Survey Readiness Classification to 1A, "all required data are in the Data Bank".

**Site Survey Readiness Classification 1A**

**Proposal Title: Quantifying the Processes of Oceanic Core Complex Formation**

**Proposal #:512**

**SSP Watchdog: Kimihiro Mochizuki July 2001**

**Target Type: F plus**

**SSP Proponent(s): None**

**SSP Review:** In order to study the formation of oceanic core complex massifs, the proponents propose to drill a deep hole in the gabbroic and ultramafic rocks exposed in the foot wall of a detachment fault at the Western RTI of the MAR-Atlantis FZ.

Another hole is dedicated to studying the linkage among chemical and biological processes operative within ultramafic-hosted hydrothermal systems. The proponents propose to drill a hole in the vicinity of a newly found peridotite-based hydrothermal system at the foot of the domal massif mentioned above. They also propose to operate long term monitoring using the cork system.

Most of the required items have been submitted to the data bank. However, remaining refraction and deep penetration-reflection seismic data to be submitted are considered most demanded for drill-sites to be chosen. The rating of 1B is because of the lack of those seismic data in the data base.

**SSP Consensus:** The panel commends the proponents on their recent data collection and initial submissions to the data bank. Remaining seismic data need to be finally processed and submitted prior to the 1 February 2001 deadline.

**Site Survey Readiness Classification:** 1B

**Proposal Title: An In Situ Section of Oceanic Crust Spread at Superfast Rate**

**Proposal #:522**

**Target Type: E**

**SSP Watchdog: David Caress**

**SSP Proponent(s): None**

**SSP Review:** The proponents propose to drill a complete upper crustal section including volcanic rocks, sheeted dikes and into gabbros in 15 Ma crust generated at a superfast spreading ridge.

An addendum to the proposal and a data package was submitted prior to the July 2000 SSP meeting. Based on results from MCS and OBH tomography, the proponents changed the primary site, with a new designation of GUATB03B. The SSP requested some additional data items, and classified site GUATB03B as 2A. A second proposal addendum was received prior to the July 2001 data. In response to SSEP requests, the proponents present a one leg drilling plan. No new data have been submitted to the databank prior to the July 2001 SSP meeting, so the SSP ranking and requests for this proposal remain unchanged.

The previously submitted data package includes a location map, processed lines 21 and 22, and results from OBH 2D refraction tomography along lines 21 and 27. Site GUATB03B is located on MCS line 22, between crossing lines 26 and 27.

SSP requests additional justification for the placement of site GUATB03B between crossing lines. In particular, the tomography results for lines 22 and 26 should be submitted to the databank. SSP also requests an MCS navigation plot annotated with CDP or shot number, new MCS with CDP/shot number and time annotation, and a location figure showing the location of the gravity core. SSP recommends that the proponents select alternate sites in the GUATB03 seismic grid, and that they indicate whether GUATB03A is considered an alternate site.

**SSP Consensus:** Substantial items of required data are not in the Data Bank but are believed to exist.

**Site Survey Readiness Classification:** 2A

**577 Demerara Rise**

**Proposal Title: Demerara Rise: Equatorial Cretaceous and Paleogene Paleoceanographic Transect, Western Atlantic**

**Proposal #: 577**

**Target Type: B**

**SSP Watchdog: A Korja (replacing Lee)**

**SSP Proponent(s): None**

**SSP Review:** Additional data has been received by the Data Bank in June 2001. Therefore, the site survey readiness has changed to:

1A for sites DR-1b, DR-6 and DR-7b;

1B for sites DR-2, DR-3altb, DR-3alt, DR-4b, DR-5, DR-6alt and DR-8b.

A cross-line survey of excellent high-resolution seismic, sediment echo-sounding (3.5 kHz), swath bathymetry and gravity coring took place in March 2001. The data in the proposals meets the SSP-requirements and it should be sent to the data bank as soon as possible. We encourage the proponents to submit the gravity core descriptions, 3.5 kHz data and a large scale print of the bathymetric map to the data bank. The data bank needs also information on location of the drilling targets in reference to the seismic lines (as SP number or time) and to 3.5 kHz data (in time). Velocity and heat flow data from the old wells should also be sent to the data bank.

Although minor changes of the site locations have been made after the new survey the proposed sites are placed on the old deep penetration seismic lines and 2-5 km off the high resolution seismic lines. As the proposed drilling is planned to take place in passive margin setting the ODP safety panel PPSP will review the data set. Before the review the 3.5 kHz data should be submitted to the data bank.

The proposal is highly ranked by the SCICOM and thus we encourage the proponents to send the existing data to the data bank as soon as possible.

**Site Survey Readiness Classification:**

1A for sites DR-1b, DR-6 and DR-7b;

1B for sites DR-2, DR-3altb, DR-3alt, DR-4b, DR-5, DR-6alt and DR-8b.

**Proposal Title: The Last Deglacial Sea-level Rise in the South Pacific: Offshore Drilling in Tahiti (French Polynesia) and on the Australian Great Barrier Reef**

**Proposal #: 519**

**Target Type: A**

**SSP Watchdog: Scrutton**

**SSP Proponent(s): None**

**SSP Review:**

The quality of the scientific objectives continues to be recognised by the evaluation panels. However, several technical changes have occurred since this proposal was last reviewed in February 2001. Firstly, because the capability of the PROD vehicle has still not been proved in reef lithologies the proponents have asked Fugro-McClelland to provide an initial quote for providing the alternative platform. The MV Mariner was

engaged in the drilling of the Barbados reefs and seems to be suitable vessel. Further work needs to be done to evaluate the actual logistics of drilling and a more realistic costing for the work needs to be obtained. This change of plan has been communicated in an Addendum to the main proposal. The site survey status has also changed. Some reflection and sidescan records have been submitted for the Bowl Reef and Hydrographer Passage areas of the BGR. The quality of the data is not especially good, but more importantly, they do not cover the northern transect presented in the proposal and are not annotated with scales, drill sites and target depths. It is indicated that a revised set of site locations (“Aims”) will be submitted. Some other data are required for type A targets, such as 3.5kHz profiles. The site survey cruise for Tahiti is still scheduled for 2002, on the ship ALIS, when the proponents should collect all the data required for type A sites.

**SSP Consensus:**

This proposal continues to enjoy good reviews. The cost of the alternative platform seems expensive. There is still quite a lot of work to do on site survey data but it is achievable. The proposal could be scheduled from 2002/3 onwards when the site survey work is complete.

**Site Survey Readiness Classification:**

6 for Great Barrier Reef because the site survey data do not match the proposal at the moment.

3A for Tahiti.

**5. Externally Reviewed after 2000 SSEPs**

**Proposal Title: The Caribbean Large Igneous Province (CLIP)**

**Proposal #:561-Full3**

**Target Type: S & VB, D; BR, G**

**SSP Watchdog: Roger Scrutton**

**SSP Proponent(s): J Diebold, S Leroy**

**SSP Review:** The proposal has very good external reviews and the proponents have responded enthusiastically to review comments by SCICOM. The proponents model, based on a considerable amount of existing geological and geophysical data suggests that the CLIP offers the opportunity to study igneous emplacement processes and geochemistry both laterally and vertically through the province. The only negative aspect of an otherwise exciting proposal is that the drilling targets are ambitious.

Four sites are proposed. S6A in the Colombian Basin is a reentry of OD site 999 to deepen 360m through sediments (though it says 300m in the proposal) and then 150m into basement. All the site survey data to satisfy type D target is in the Data Bank. Sites BR3A and 4A are an offset drilling pair on the western, steep slope of the Beata Ridge. These are reentry sites planned to penetrate 500m into basement beneath 100m of sediments. Following a recent submission of seismic reflection data to the DB there is sufficient of this data for drilling. Sufficient velocity data, 3.5kHz, multibeam bathymetry (rather poor) are also in the DB but seabed imagery and sample descriptions, although thought to exist, are not yet submitted, with the exception that the Nautila dive data are in the proposal. There are alternate sites BR1A and BR2A 50km to the south for

which the same data situation pertains, but details of these sites are not in the proposal. These details are needed if these sites are pursued with. Site VB3A is a reentry site planned to penetrate over 800m of sediments and then 800m into basement. For this, only seabed sediment information are not yet in the DB though sufficient data exist and should be easily assembled. The situation is the same for the alternate site VB4A. Although these target type D sites are not on seismic profile crossing points it is noted that they are close and there is sufficient seismic data in their vicinity to be aware of any geological variability in the third dimension.

**SSP Consensus:** SSP believes that all necessary site survey data exist and would encourage the proponents to continue to assemble the database for this exciting proposal. Details of alternate sites BR1A and BR2A are needed if they are pursued.

**Site Survey Readiness Classification:** 1B overall

## **584 – Full: TAG II: Evolution of a Volcanic-Hosted Hydrothermal System on a Slow Spreading Ocean Ridge**

**Target Type: F**

**SSP Watchdog: Lizarralde**

**SSP Proponent(s): None**

**SSP Review:** This proposal seeks to drill at 5 of the identified mounds in the TAG hydrothermal region in order to extend the work of Leg 158 and continue investigations into the evolution of hydrothermal systems and the nature of the deep biosphere.

Site 1 is located in the Leg 158 active mound area, for which there is adequate site survey data, and its readiness was considered 1A at the July 2000 SSP panels.

The most recent data submission includes (among other items) bottom photography, video, and catalogues of existing data for each of the remaining sites that have been acquired through several submersible dives and deep-tow surveys. As for Site 1 (Active mound), it is clear that sufficient data now exist in the databank to site drill holes at the 4 other mound areas (Alvin, Mir, Shinkai, and Shimmering mounds). All 5 proposed sites are now considered 1A.

**SSP Consensus:** The proponents have submitted individual data packets for each of the five proposed sites. This submission was responsive to all of the site survey needs identified by the SSP. The data packets for each site contain bathymetric and bottom photography data required for hard-rock bottom site survey, and all sites are now considered 1A.

**Site Survey Readiness Classification:** 1A

**Proposal Title: Proposal for Installation of a CORK in Hole 642E to Document and Monitor Bottom Water Temperature Variations Through Time**

**Proposal #: 543 Full2**

**Target Type: B**

**SSP Watchdog: McIntosh                      July 2001 SSP meeting**

**SSP Proponent(s): None**

**SSP Review:** This proposal is to CORK ODP hole 642E (a legacy hole) to determine temperature as a function of depth and infer changes in temperature of bottom water as a function of time. Some key data, previously submitted for Leg 104, have now been tagged to be associated with this proposal (#543). A full dataset submitted to support Leg 104 drilling of Site 642E is available in the databank. The proponents must now work with the ODP Databank to make sure that these data get reassigned to this proposal

**SSP Consensus:** The panel feels that all site survey data exist and are in the data bank under Leg 104. Some key data have been reassigned to Proposal 543; other data must be reassigned to this proposal (from Leg 104) for this proposal to reach full readiness.

**Site Survey Readiness Classification: 2A**

**547-Full3: Oceanic Subsurface Biosphere (OSB): Exploring its Nature and Extent**

**Target Type: E**

**SSP Watchdog: Lewis**

**SSP Proponent(s): None**

**SSP Review:** The Ocean Subsurface Biosphere (OSB) proposal is a new and unique scientific theme for ocean drilling in a relatively mature and well-explored segment of the Juan de Fuca Ridge. Extensive data from previous geophysical, geochemical, and drilling programs are available in the region of this new proposed drilling. Thin sediment cover (<200 m), modest proposed basement penetration (100 m) and proximity to existing ODP drillsites makes leverage of existing site survey data feasible.

**SSP Consensus:** The proponents are urged to work closely with the ODP Data Bank to compile the relevant existing data from Middle Valley into a complete stand-alone data package in support of this drilling proposal. The proponents must make sure that the data required for this drilling environment are available for SSP review at its July 2001 meeting. The July 1, 2001 deadline for the receipt/compilation of data by the ODP Data Bank is an important deadline for this proposal to remain eligible for drilling by the current program. *There still has been no activity by proponents.*

**Site Survey Readiness Classification: 2A**

**Proposal Title: Chucxulub: Drilling the K-T Impact Crater**

**Proposal #:548-Full2**

**Target Type: B**

**SSP Watchdog: Stephen D. Lewis**

**SSP Proponent(s): None**

**SSP Review:** This proposal defines drilling targets in the offshore Yucatan Peninsula on the Chicxulub impact crater, hypothesized to be the impact resulting from the end Cretaceous event. This is a very timely and complex topic of scientific investigation that is amenable to scientific ocean drilling, given that a substantial portion of the Chicxulub structure is offshore. Land seismic reflection data from the northern Yucatan Peninsula are often of poor quality due to karst and cenote structures common to the region. This makes offshore investigations of the impact structure particularly attractive, where marine seismic techniques typically provide much higher data quality than onshore seismic data.

The centerpiece of data reviewed by the SSP at this meeting was seismic Line Chicx-A, a BIRPS reflection profile acquired across the offshore northern flank of the impact structure. Crustal reflection events to Moho are imaged clearly in the data, including the shallow features directly related to the impact: 1) the central crater basin, 2) the annular trough, 3) the peak ring structure, 4) the crater rim, and 5) the outer ring. We support the proponents' efforts to acquire a 3-D seismic data set to augment the existing deep-penetration 2-D profiles.

The SSP recommends to the proponents that:

1. The upper 5 seconds or so of the deep-penetration BIRPS seismic data be reprocessed to optimize the stratigraphic and structural imaging of the Chicxulub structure at a resolution more compatible with drilling observations.
2. Special attention be paid to ODP guidelines for both shallow-water drilling and passive margin drilling during future site-survey data acquisition.
3. The proponents are urged to contact the Pollution Prevention and Safety Panel directly to ascertain the need for high-resolution data specifically for the purpose of detecting shallow gas.

**SSP Consensus:** This drilling proposal addresses a new class of target for ODP, and represents exciting scientific opportunities. The proposed (funded?) 3-D survey is important to meeting the scientific goals of the proposal. Special attention to additional high-resolution data is likely to be important to address safety concerns regarding shallow gas in this carbonate/petroleum province. In addition, careful processing of deep seismic data will be important for imaging deep targets.

**Site Survey Readiness Classification: 3A**

## **554-Full4: Gas Hydrates in a Petroleum Basin**

**Target Type: B and secondary A**

**SSP Watchdog: Enachescu**

**SSP Proponent(s): None**

**SSP Review:** This gas hydrate proposal consists of a series of drill holes at two slope sites in the north central Gulf of Mexico. A total of 19 holes (GC-1 to 9, MC-1 to 5 and AT-1 to 5) are located, combining shallow (100-200m) and deep (200-500m) penetration at water depth between 500 and 1900m. The objective of the proposal include among others: the measurement of mass and phase distribution of gas hydrates and associated gases in shallow marine sediments in a high fluid flow regime and effect of gas hydrates on sediment physical properties, inferring potential for geohazards. Gas hydrates in the GOM is controlled by faulting and occurs as shallow vein-filling deposits, not as traditional BSR features. The proposal has received interest from oil companies active in the area. The proposal is scientifically well documented and after several re-writes the hypothesis to be tested and the measurements program are clearly stated. The multiple-site drilling will provide a 3-D characterization of the biogenic and thermogenic gas hydrate distribution in the areas.

I still find difficult to evaluate the proposal as in the log sheet there are listed 19 sites and in the text the author proposed only two primary transects (named Garden Banks-425 and Atwater Valley- 425) with two alternative transects for backup. The proposal needs re-write to increase its clarity. All sites are surveyed with industry 3-D MCS and closely-spaced 3.5 kHz echosounder profiles, but no high resolution seismic exists. High-reso seismic data is essential for both science and site survey reasons. Multibeam bathymetry exist in the area but only illustrative maps were provided in the text.

We acknowledge the effort of the main proponents to bring this proposal to standards. An Appendix with site locations and associated geophysical survey is now included in the watchdog book. A proposal for funding from NSF for a site survey cruise was initially rejected. Presently, the proponents are re-writing the application for site survey funds from NSF, but it seems that they are first looking for clarification from the Safety Panel on the feasibility of drilling an active hydrocarbon system. (Environmental and safety rules are to be revisited and regulation relaxed if the proposed holes are to be drilled!). Also they are demanding guidance from SCICOM and EXCOM on the acceptance of the industry 3-D set as base for a site survey characterization. Confidentiality problems with this 3D data persists, so I suggest that proponents ask WesternGeco for permission to use and release to the DB only an “upper 1 second” subset of their 3D migrated data cube over the drillsites areas.

As the date of this meeting, no support data was sent to the DB. However, exempt for the site survey and high-reso MC seismic, all other data is presumed to exist. The proposal needs cleaning with text and documentation is to be referred mostly to the final selection of drillsites. Geohazard report should be completed and audited by the Safety Panel.

**SSP Consensus:** Despite significant letter exchanges and contacts between proponents and various ODP committees and panels, from the SSP point of view the proposal cannot be advanced in ranking. No site survey required data for this type of sites is in DB. A site survey cruise was proposed but not funded; authored will re-apply for funds from NSF. Data pertinent to the main site and alternates needs to be properly organized. A high-reso seismic survey is in our opinion a must. Reprocessing and displaying the upper 1 sec of the 3D industry survey will be a “poor man

alternative". Final sites, once selected and displayed on data, should be analyzed and discussed by the panel. The safety panel should give a green light to all of the possible drillsites. (We also note that the PPSP has never approved drilling in this type of environment.). At least a visual-interactive inspection by SSP members of the WesternGeco 3D data around the drillsites will be needed. We stress that all required missing data, final site locations and proper site description forms should arrive at DB prior to February 2002 meeting.

**Site Survey Readiness Classification: 7= unclassifiable; no data in DB**

### **Storegga Slide Gas Hydrate Drilling**

**Proposal #: 557-Full2**

**Target Type: F**

**SSP Watchdog: Dan Lizarralde (July 2001)**

**SSP Proponent(s):**

**SSP Review:** This proposal seeks to drill 7 sites in the region of the Storegga slide, offshore Norway. The goals of this work are to understand the relationship between continental gas hydrate deposits, slope stability, large mass-wasting events, and abrupt release of methane into the atmosphere. Site-survey data have been submitted to the databank electronically. These data consist of MCS profiles through all 7 proposed sites. Some problems exist with submitted 3.5-kHz data, navigation data, and cross-line data. More significantly, a grid of crossing lines are needed for adequate site survey of these sites. These needs can likely be addressed with existing data which have not yet been submitted and with new data to be collected during a scheduled cruise in summer 2002.

The 3.5 kHz data submitted as a SEG-Y format file could not be read or displayed.

MCS line LOS-99-004 does not appear to pass through site ST-06, suggesting some error in the navigation. Seismic line navigation is in the SEG-Y headers as UTM X and Y coordinates, whereas the proposed drill-site location was provided as latitude and longitude. It is possible that a different reference ellipsoid was used in generating the X,Y values for the stacked data than was used by the databank to determine the UTM coordinates for site ST-06 from the given latitude and longitude.

No crossing-line data have been submitted for sites ST-06 and 07. MCS line MB-0400-91 passes through sites ST-04 and ST-05, but cross-line profiles intersect MB-0400-91 more than 10 km south of each site. It is possible that errors in projecting the navigation data have created this discrepancy, but we must assume that no cross-line data exist for sites ST-04 and 05. Site ST-01 has cross-line data (MB-6445-92), but sites ST-02 and ST-03 do not. In any event, sufficient crossing-line data have not been submitted to warrant a 1A classification for any of the sites.

A grid of crossing lines is required for passive margin sites, and is particularly important for gas-hydrate targets. Sites ST 01-05 are thus considered 2B due to lack of sufficient grids of lines near these sites. This status reflects anticipation of a hi-res 3D seismic cruise scheduled for summer of 2002 around sites ST-01, 02 and 03, and which can include grids of 2D lines near sites ST-04 and ST-05. Sites ST-06 and ST-07 require crossing lines, and these could be acquired during a cruise to be proposed in an August 2001 submission to the U.S. NSF. Sites ST-06 and ST-07 are thus considered readiness

class 3B – unlikely for 2003 but could be available for FY2004 if a proposed site survey proceeds as planned. The proponents have suggested that a substantial volume of industry data exist for this region, and it is possible that some of the requirements could be met with these data.

**SSP Consensus:** More substantial grids of seismic lines are needed around sites ST 01-05, and cross-line data are needed through sites ST-06 and ST-07. In addition, issues with navigation data and 3.5 kHz data that have been submitted need to be addressed through consultation with the databank. It is likely that most or all of the required lines could be shot during a scheduled survey in summer 2002. Sites ST 01-05 are considered readiness 2B, as lines through these sites are planned for the 2002 cruise, and sites ST 06-07 are considered 3B, as additional required lines are not known to exist and are not part of the 2002 cruise plan. These lines could be acquired during a survey to be proposed in August 2001 for acquisition in 2003.

**Site Survey Readiness Classification:** ST 01-05, **2B**; ST 06-07, **3B**

**Proposal Title: Ice Sheet-Ocean-Atmosphere Interactions on Millennial Time Scales during the Late Neogene-Quaternary Using a Paleo-intensity-Assisted Chronology (PAC) for the North Atlantic**

**Proposal #: 572-Full2**

**Target Type: A: Paleo environment or Fan (APC/XCB)**

**SSP Watchdog: André W. Droxler July 2001**

**SSP Proponent(s): None**

**SSP Review:** SSP acknowledges receiving a series of new data sets for the proposed leg in the North Atlantic since the last February Meeting. The new data sets are listed in a “report to Site Survey Panel (June 2001) submitted by the proponents J.E.T. Channell et al. The panel members appreciated the main efforts of the proponents to submit the new package to the Data Bank.

According to SSP guidelines, unless it is proposed to re-drill existing DSDP and OPD sites, a minimum of four types of data sets is required to make a proposal viable for drilling:

- (1) High resolution seismic reflection profile(s) passing through the proposed drill site
- (2) 3.5 kHz record across the proposed drill site
- (3) Existing sediment core(s) located in close proximity of the drill site
- (4) Accurate navigation during the acquisition of these different data sets.

**SSP Consensus:** Based upon the studies of these new data sets, the presentation by the watchdog, and the following discussion by the SSP members during the July 2001 SSP meeting, the nine proposed primary sites have received different levels in the “Site Survey Readiness Classification”:

1A = all required data are in the Data Bank

2B = A few required items are missing from the Data Bank, but data are believed to exist and to be readily available

2A = Substantial items of required data are not in the Data Bank but are believed to exist

and are likely to be available in time for consideration from FY 2003 drilling schedule

ORPH1A: 2A (high resolution seismic and “?” 3.5 kHz will be acquired by David Piper during a cruise on the RV Hudson in August 2001)

LAB1A: 1A

LAB2A: 1B (no 3.5 kHz available)

IRM1A: 1A

IRM2A: 1A

GAR1A: 2A (high resolution seismic, Hydrosweep, 3.5 kHz, and “?” piston cores will be acquired by Greg Mountain during a cruise on the RV Knorr in Summer 2002)

GAR2A: 2A (high resolution seismic, hydrosweep, 3.5 kHz, and “?” piston cores will be acquired by Greg Mountain during a cruise on the RV Knorr in Summer 2002)

IRD1A: 1A (re-drilling DSDP Site 609)

IRD2A: 1A (re-drilling DSDP Site 607)

**Site Survey Readiness Classification:** 1A, 1B, and 2A

**Proposal Title: Modern Carbonate Mounds: Porcupine Drilling**

**Proposal #: 573-Full2**

**Target Type: B: Passive Margin**

**SSP Watchdog: André W. Droxler**

**SSP Proponent(s): None**

**SSP Review:** SSP acknowledges receiving a series of new data sets since its last February 2001 meeting for the proposed leg (bathymetric maps, seismic grids, high resolution single channel seismic lines, ...). At their July 2001 meeting, members of the panel were impressed by the overall quality of the submitted high resolution single seismic lines and the seismic images of the different carbonate mud banks proposed to be drilled. The panel members were particularly impressed by the excellent quality of the latest data sets acquired in May 2001 and submitted in the Data Bank in late June 2001.

Based upon the review of some figures included in the 573-Full2 proposal, the SSP liaison suggested at the May 2001 ESSEP meeting that the seismic data set available at that time was not adequate to image some of the deepest proposed drilling targets. The comment of the SSP liaison was only based upon the reviews of those figures and not the seismic lines available at the Data Bank and reviewed at the SSP February meeting. Based upon the studies of those available seismic lines, the SSP members had already concluded, at their 2001 February meeting, that the proposed drilling targets, including the deepest ones, were sufficiently imaged in the available seismic lines. Since the SSP February 2001 meeting, the proponents have submitted in late June 2001 some excellent quality seismic lines that were acquired in May 2001. The deepest proposed drilling targets are even better imaged in this latest vintage of seismic lines. All required data sets, therefore, are currently at the ODP Data Bank for the proposed thirteen sites in 573-Full2 to be drilled.

**SSP Consensus:** SSP has classified ODP proposal 573-Full2 as 1A = all required data are in the Data Bank.

**Site Survey Readiness Classification:** 1A

**Proposal Title: Gulf of Aden Drilling: Testing African Climate-Human Evolution Hypotheses**

**Proposal #:575-Full3**

**Target Type: B, D, E**

**SSP Watchdog: David Mallinson**

**SSP Proponent(s): None**

**SSP Review:** The proponents propose to drill eight sites within the Gulf of Aden and on the Somalia Margin in order to link terrestrial records of climate and hominid evolution to the marine record of climate change in East Africa. The sites range from 650 to 2490 m water depth with penetrations ranging from 250 to 800 mbsf. The following objectives will be addressed by the proposed drilling:

1. Determine the late Neogene history of East African climate and vegetation changes;
2. Quantify late Neogene variations in atmospheric and oceanic signatures of variations in the Indian monsoon;
3. Develop a comprehensive record of East African explosive volcanism and volcanic ash deposition;
4. Use the paleoclimatic, paleoceanographic, and tephra correlation data to place the fossil record of African hominin evolution within the context of regional and global paleoclimatic change.

Proponents indicate the existence of a substantial data base. Single channel seismic data are presented within the proposal and a follow-up site survey report within the Data Bank. Multi-channel seismic and navigation are also in the Data Bank. These seismic data were deemed sufficient for the purposes of this proposal at sites GOA-1, 2, 3, 4, 5, and 6. Seismic data at sites GOA-7 and 8 are insufficient as these sites will require crossing lines and greater penetration. Velocity requirements for sites can be met with LDEO sonobuoy data. 3.5 kHz data are indicated to exist but have not been submitted. Sites GOA-2alt is indicated on seismic data, but no site description form has been submitted.

**SSP Consensus:** 3.5 kHz data are indicated to exist, but have not been submitted to the Data Bank.

Please submit a site description form for GOA-2alt as soon as possible.

Please submit velocity data (available at LDEO).

**Site Survey Readiness Classification:**

Sites GOA-1, 2, 3, 4, 5, 6, 6alt      1B

Sites GOA-7, 8      5

**Proposal Title: Latest Pleistocene Drowned Coralgal Banks and Mounds along the Edge of the South Texas and Mississippi-Alabama Continental Shelves**

**Proposal #:581-Full**

**Target Type: A**

**SSP Watchdog: David Mallinson**

**SSP Proponent(s): Andre Droxler**

**SSP Review:** This is an alternate platform proposal. The proponents propose to use the drill-ship R/V Seaprobe 1 owned by Fugro-McClelland to drill a series of sites within late Pleistocene relict reefs along the Texas and Mississippi-Alabama continental shelf. The sites are at 60 to 98 meters water depth with penetrations ranging from 80 to 100 mbsf. The following objectives will be addressed by the proposed drilling:

1. To shed light on findings that coralgal banks flourished in the Gulf of Mexico during the first part of the last deglaciation;
2. To improve the resolution of the last deglacial sea-level and climate history from late Glacial to the Younger Dryas;
3. To better understand the processes involved with the origin, growth, and demise of carbonate reef tracts along siliciclastic shelves;
4. To use these banks as recent analogs for reefal reservoirs in siliciclastic shelves.

As an alternate platform, shallow-water, shallow-penetration site, many of the requirements for passive margin drilling were deemed unnecessary. Proponents have provided multichannel seismic data for the first five proposed sites on Southern Bank. Data have not been submitted for Baker Bank sites or Mississippi-Alabama sites.

**SSP Consensus:** The seismic data submitted to the data bank are sufficient for drilling on Southern Bank. 3.5 kHz and velocity measurements are unnecessary at these shallow penetration depths.

Please submit better navigation for the Baker Bank seismic lines.

**Site Survey Readiness Classification:**

Sites SB-1, 2, 3, 4, 5           1A

Sites BB-1, 2                   2A

Sites MS-1, 2                   5

**Proposal Title: Overpressure and Fluid Flow processes in the Deepwater**

**Proposal #:589-Full2**

**Target Type: B**

**SSP Watchdog: Leroy**

**SSP Proponent(s):None**

**SSP Review:** The sites have been chosen on the basis of industry data, which is complete, and the data have been released in the DB. The proponents will provide the seismic velocities log to the DB before 1<sup>st</sup> Feb 2002 as well as 3.5 KHz data over the sites, and wells data in the area of the sites.

**SSP Consensus:** Submit velocities data and wells data then proposal will be rated 1A

**Site Survey Readiness Classification: 1B**

**594-Full: Newfoundland margin****Target Type: B****SSP Watchdog: Enachescu****SSP Proponent(s): S. Holbrook (absent at the meeting)**

**SSP Review:** This proposal received in September 2000 is a sound revision of the previously analyzed proposal 504. It consists of a principal site and series of alternate and follow-up drill holes at several deep water sites in the Newfoundland Basin. A total of 8 holes are located, illustrated with MCS seismic lines and fully documented in the site description forms. One site is in 3580 m water depth while all other sites are in water depth surpassing 4500 m.

The objective of the proposal include among others: drilling a non-volcanic rifted margin, correlation with Iberia margin, mechanisms of asymmetric rifts formation, composition and history of basement, dating and tectonic significance of major unconformities. The proposal has received interest from a large group of researchers from both sides of the Atlantic and also from the oil industry. The proposal is scientifically well documented and the various hypotheses to be tested and the measurements program are clearly stated. The authors suggest that one principal deep hole (2300 m) NNB01A in the central Newfoundland Basin will help test most of the objectives of the proposal and will take a full ODP leg time.

Various vintages of MCS migrated and unmigrated, single channel reflection and OBS data, magnetic and gravity, heat flow, bathymetry, side-sonar, water current, navigation exist in the area and was deposited with the data bank (Farnella, Conrad, Agnich, Huston, Euwing cruises). The multichannel and wide-angle data recently acquired by R/V Euwing during 2000 season and submitted to the DB is of excellent quality. A cruise report containing detailed description of data acquisition is annexed with the proposal.

The initial focus of the proposal is to drill the NNB01A hole 2200m through sediments and 100 m into the basement. The site is located slightly off the crest of a basement block, landward of the anomaly M3, in 4559 m water depth. Preliminary depth conversion for this and all other sites was obtained both from MCS reflection and OBS/H data (they differ by about 10%). Alternate sites with shallower depth to basement are fully documented and ready to drill, if the NNB01A is considered not feasible. After assimilating the scientific results, the initial central basin hole may be followed by several holes on the Newfoundland-Iberia transects that are all included and well documented in this proposal.

Supplementary 3.5 kHz data along the OBS profiles was recently received at DB. A final velocity conversion obtained from both OBS and MC data was constructed and used to calculate drilling depths. New logging schedules and time estimates were accordingly computed for the main and alternate sites. No geohazards are visible on the seismic lines. All the pertinent data necessary to support drilling of the main site and alternatives was sent to the DB and site survey detail forms were properly filled in and attached to the proposal.

**SSP Consensus:** The SSP acknowledges that all of the required data for this type of site is in DB. Intersecting MCS lines support all the proposed sites. Data pertinent to the main site and alternates is well organized. A final depth conversion function and minor fine-tuning of logging program and drilling time schedule were recently submitted. We suggest that if any other modification of interpretation of site survey data or changes in the site locations are to be made by the authors, these must arrive at DB prior to July 2002 meeting.

**Site Survey Readiness: 1A**

## **6. Ancillary Program Letters**

**Proposal Title: Gulf of Aden Drilling: Afar mantle plume**

**Proposal #: APL 15**

**Target Type: D, E**

**SSP Watchdog: Sylvie Leroy**

**SSP Proponent(s): N/A**

**SSP Review:** The proponents propose to drill 50-m basement of the six sites within the Gulf of Aden of the 575-Full3 proposal.

Proponents indicate the existence of a substantial data base. Single channel seismic data are presented within the proposal and a follow-up site survey report within the Data Bank. Multi-channel seismic and navigation are also in the Data Bank. These seismic data were deemed sufficient for the purposes of this proposal at sites GOA-1, 2, 3, 4, 5, and 6. Velocity requirements for sites can be met with LDEO sonobuoy data. 3.5 kHz data are indicated to exist but have not been submitted. Sites GOA-2alt is indicated on seismic data, but no site description form has been submitted.

**SSP Consensus:** 3.5 kHz data are indicated to exist, but have not been submitted to the Data Bank. Please submit 3.5 kHz data and a site description form for GOA-2alt as soon as possible.

**Site Survey Readiness Classification: 1B**

**Proposal Title: Scotian Margin Cenozoic Section**

**Proposal #: APL-17**

**Target Type(s): B/A**

**SSP Watchdog: S. Neben**

**SSP Proponent(s): None**

**SSP Review:** This is the first time the proposal was evaluated by the SSP. The APL was reviewed by ESSEP and ISSEP and the SSP liason in November 2000. Because of the complex targets and the strong joint academic/industry cooperation the SSEPs encouraged the proponents to prepare a proposal for IODP instead of an small APL. The SSP liason was concerned about the depth to the Paleocene (a good velocity model is needed), but this and some other scientific questions by the SSEPs were answered by a letter of the proponents to SCICOM. Here a seismic section is presented showing a nearby industry well and the correlated stratigraphy based on synthetic seismograms using sonic & density logs and VPS.

There are no data in the database. But the proponents indicate that there are a lot of industry 3D seismic reflection data and two industry well data available. we look forward to seeing this data.

**SSP Consensus:** No data in support of this drilling proposal have been deposited in the data bank. A significant amount of important data is available and should be submitted to the data bank.

**Site Survey Readiness Classification:** Classification 2A (substantial (all) items of data missing but should be collected on a scheduled cruise) or even 7 (no data in the data bank).

**Proposal Title: Determining the Age and Depositional History of the Giant Nu'uuanu Landslide, Hawai'i**

**Proposal #: APL-19**

**Target Type: G**

**SSP Watchdog: Kimihiro Mochizuki July 2001**

**SSP Proponent(s): NA**

**SSP Review:**

In order to establish the age of the turbidites and their sources, and determine the depositional history for the Nu'uuanu landslide, the proponents propose to drill an approximately 100 m deep hole at the crest of the Hawaiian arch during already scheduled Leg 200 (alternatively at the end of Leg 199).

None of the required items has been submitted to the data bank. However, most of them are believed to exist, and ready to be submitted. Because the Leg 200 cruise is scheduled in December 2001, this current SSP meeting was the last chance to observe the existing data, in which none was presented. Therefore, the proposal is ranked as 2B/7.

**SSP Consensus:**

The panel strongly requests proponents to deposit required data to the data bank before the cruise begins.

**Site Survey Readiness Classification: 2B/7**

**Proposal Title: Ancillary Prog. Letter to ODP Leg 203; Costa Rica Mud Volcanoes**

**Proposal #: APL-20**

**Target Type(s): C**

**SSP Watchdog: K. McIntosh**

**SSP Proponent(s): None**

**SSP Review:** This is the first time the proposal was evaluated by the SSP.

The APL was reviewed by ESSEP and ISSEP and the SSP liaison in May 2001. The SSEPs found that the proponents had identified an important problem but they had concerns about the science plan.

As of the SSP meeting in July 2001, there are no data in the database to support this APL. Much of the required data are believed to exist, so it may be possible to meet the SSP requirements in time for Leg 203 drilling. A possible problem is the apparent lack of a dip seismic profile through the drill site. This would seem necessary to evaluate possible fluid sources related to the mud volcano the proponents are interested in drilling.

**SSP Consensus:** No data in support of this drilling proposal have been deposited in the data bank. A significant amount of important data is believed to be available. Watchdog will instruct proponents to immediately submit data to the databank and also advise proponents about the need for a dip line to support the proposed site. An alternate possibility is to move the site to another mud volcano within the 3D dataset area closer to Leg 203.

**Site Survey Readiness Classification: same as of 02/2001: 2A/7**

Classification of this APL is not clear. Because no data have been submitted to the databank, this proposal could be considered a classification 7. However, potentially it could be ranked as high as 2A (substantial items of data missing but could possibly be available in time for 2003 drilling schedule).

**7. Other Business**

**Thanks and applause for departing members:** Holbrook, Yao

**Feb 2002 meeting:** 25 - 27, Feb.2002

?Torogo Gorge, E.Taiwan

?Beijing, China Academy - Geophysical and Geological Institutes

**July 2002 meeting:** 22 - 24 July at Lamont-Doherty Earth Observatory

**November 2001 SSEP Liaisons:** Droxler, Enachescu, alternates Mallinson, Lewis.

**IESX endorsement:** SSP strongly supports continued funding for the use of IESX during cruise preparation and drilling.

**SSP recommends** that iSSP take advantage of its mandate to establish firm requirements for quality and content of data submissions for post-2003 drilling.