FINAL
(November 3, 1993)

JOIDES SITE SURVEY PANEL MINUTES

July 28-30, 1993
Lamont-Doherty Earth Observatory
Palisades, NY, U.S.A.

Members: Kastens, Kim (L-DEO, Palisades, NY, USA) Chair
Camerlenghi, Angelo (OGS, Trieste, Italy)
Farre, John (EXXON, Houston, TX, USA)
Hinz, Karl (Bundesanstalt fur Geowiss u. Rohstoffe, Germany)
Mountain, Greg (L-DEO, Palisades, NY, USA)
Nobuhiro Isezaki (alternate for N. Hirata)
Scrutton, Roger (U. of Edinburgh, Edinburgh, UK)
Sibuet, Jean-Claude (IFREMER, Brest, France)
Srivastava, Shiri (Atlantic Geoscience Center, Dartmouth, NS, Canada)
Toomey, Doug (Univ. of Oregon)
Trehu, Ann (OSU, Corvallis, USA)
von Herzen, Dick (WHOI, Woods Hole, USA)

Liaisons: Ball, Mahlon (PPSP)
Clift, Peter (TAMU)
Collins, Bill (JOIDES Office)
Dick, Henry (PCOM)

Guest: Charles Paull (U. North Carolina)

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SSP Meeting
July 28-30, 1993
Lamont-Doherty Earth Observatory

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Executive Summary

SSP Meeting: July 28 -30, 1993

The ODP Site Survey Panel met at Lamont-Doherty Earth Observatory on July 28-30, 1993. The primary charge for this meeting was to provide advice to PCOM on the site survey readiness of programs which are candidates for potential drilling in FY '95. These include all programs considered at the April SSP meeting (i.e all programs ranking in the top seven ranks of Spring '93 Thematic Panel Global Rankings), minus those programs outside of the geographic area of FY'93 operations as defined at the April PCOM meeting.

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Consensus items resulting from the meeting were as follows:

SSP Consensus #1: The data package for ***leg 152 (NARM-V I: East Greenland)*** is essentially complete. Recently acquired high-resolution MCS data through the proposed sites are of excellent quality and satisfy the need for regional imaging to address the tectonic objectives and drilling safety. However, the SSP urges the proponents to arrange for acquisition of complementary 3.5 kHz data in the region if at all possible in order to address secondary paleo-oceanographic objectives.

SSP Consensus #2: The data package for the primary targets at ***MARK leg 153*** is nearly complete. We still await 1) adequate visual characterization of the seafloor near site MK-1, 2) well processed data from the MPL/SIO Deep Tow cruise in the MK-2 region, and 3) annotated reprints of papers discussing refraction data. In addition, we urge the proponents to consider possible backup options and to provide data for those sites (i.e. additional video tapes from dives parallel to the dives on which the proposed sites are located).

SSP Consensus #3: The data package for the ***Ceara Rise (Leg 154)*** is complete.

SSP Consensus #4: All vital data types for the *North Barbados Ridge program (Leg 156)* are in the Data Bank. Proponents need to submit outstanding "desirable" data types (velocity, 3-D processing results) in time for Safety package to be assembled.

SSP Consensus #5: SSP is pleased to note that funding, shiptime and equipment have been made available to collect visual data aboard the Ewing in August 1993 on the crest of the ***Vema Fracture Zone*** southern transverse ridge, on the sites proposed for testing of the DCS system on ***Leg 157***. The 600m vs 1500m water depth issue for the DCS test remains unresolved. SSP reiterates our concern that potential 1500m water depth sites are inadequately characterized by site-specific data, and probably lack the limestone cap that is an essential scientific and engineering target.

SSP Consensus #6: All "vital" data types for the proposed sites at the ***TAG Hydrothermal System (361-rev2)*** are in the Data Bank. Newly collected heatflow data should be submitted in time for Safety review. SSP requests that an addendum be submitted that describes alternative plans, with specific backup sites, in the event of technical failures at the primary sites. Two viable alternatives that have been suggested are an APC program that targets the active TAG hydrothermal mound, and/or attempting to drill into relict mounds within the TAG hydrothermal system. Relevant data for the backup sites needs to be submitted to the Data Bank.

SSP Consensus #7: The ***Alboran Basin*** sites ALB3 and ALB4 in the revised proposal 323-rev3 are ready to schedule. Additional seismic data from the existing dense grid needs to be submitted to the Data Bank in support of revised sites ALB1 and ALB2. The reentry site ALB1 needs a core, which is believed to have been collected in April/May 1993.

Safety consideration of all sites would benefit from submission of heatflow data, believed to have been recently collected.

SSP Consensus #8: SSP notes that the survey data for site IAP-1 on the ***Iberia margin*** (TECP's highest priority for ***NARM-NV-II***) is entirely adequate and ready for drilling. SSP reminds the proponents that any sites other than the six approved for Leg 149, even if located on data already in the data Bank, will have to be reviewed by SSP and PPSP.

SSP consensus #9: All of the data needed to support passive margin drilling on the ***Eastern Equatorial Atlantic Transform Margin*** is believed to exist. However some data types have not yet been submitted to the Data Bank (refraction results, 3.5 kHz missing profiles and some documentation of results from the EQUANAUTE Nautile submersible cruise).

SSP Consensus #10: A significant amount of data in support of drilling the Mediterranean Ridge was recently deposited in the Data Bank, but the package remains incomplete. Out of 14 proposed sites, 3 have complete data packages, while the remaining sites require data that have been recently collected or are scheduled to be collected by the end of September, 1993. Based on SSP's understanding of these site surveys, it is possible/likely that a complete data package for one leg of drilling will be submitted by November 1, 1993.

SSP Consensus #11: The existing ***Costa Rica Accretionary Wedge*** (400/400-rev) data set is satisfactory for the structural objectives. However, a revised proposal adding fluid objectives has been submitted, and thus a detailed heat flow survey is now needed. Heat flow data collection is scheduled for an ALVIN/Atlantis II cruise in March 1994.

SSP Consensus #12: Some existing vital data (core logs, 3.5 kHz records) remains to be submitted for the ***Gas Hydrate*** proposal, and some SCS profiles need to be redisplayed. A side-looking sonar survey of Cape Fear Diapir, scheduled for October 1993, will be valuable for defining the areal extent of the diapir.

SSP Consensus #13: The ***Mediterranean Sapropel*** proponents have greatly improved their data package and their proposal since last year. One site in the proposed east-west transect (MedSap 3 on the Calabrian Ridge) is dependent on data scheduled to be collected in September 1993, and two sites depend on newly-collected data that did not arrive in time for evaluation by SSP. The other sites are adequately supported by data that is already in the Data Bank. The program could be viable for FY'95 scheduling.

SSP Consensus #14: Since April '93, high quality data from METEOR 24 cruise has started to come into the Data Bank in support of ***VICAP/MAP***. Unfortunately, these new data do not cross any of the proposed sites in the currently-active proposal. SSP needs to know the objectives, drilling targets, and penetration depths of possible new VICAP drillsites before assessing their site survey readiness.

SSP Consensus #15: SSP supports the proponents' plans for collection of deep-towed sidescan sonar, magnetometer and ROV data before drilling a transect of shallow sites east and west of site ***735B (Atlantis II FZ)***. SSP also feels that a near bottom seismic refraction experiment would be valuable before deepening 735B (or one of the other sites in the shallow transect.)

SSP consensus #16: SSP considered two possible scenarios for a ***NARM-V-II*** drilling leg. The first scenario was a return to EG63 to complete the transect, followed by drilling of the EG66 sites. All required site survey data seem to exist for the EG63 sites, although the data for possible additional EG63 sites discussed in NARM-Add2 have not yet been deposited. No data for the EG66 site have yet been submitted, but data acquisition could be complete by October, 1993. The second scenario was a return to the Voring margin. For the second scenario, most of the required data are presently in the data bank file for leg

104. Several critical items, however, are lacking, and we do not know of any plans to fulfill all requirements in the near future.

SSP Consensus #17: It is possible that an adequate data package for proposed sites RS-1a, RS-1b, and RS-1c in the ***Red Sea*** could be assembled from existing older data. But with no known plans to collect new data, it is difficult to see how proposed sites RS-2 and RS-3 could be supported by site-survey data in the near future.

SSP Consensus #18: Most necessary sites survey data for ***Sedimented Ridges II*** remains in the Data Bank in the package prepared for Leg 139. Submersible, ROV, side-looking sonar, swath bathymetry and 4.5 kHz subbottom profiling data scheduled for acquisition in 1993 will strengthen the data package.

SSP Consensus #19: Recognizing that far more than one leg's worth of sites were prepared for NAAG I (Leg 151), and that a large amount of data exists in the general area of NAAG interest, SSP anticipates that it would be possible to assemble a full leg of adequately-documented ***NAAG II*** sites from existing data.

SSP Consensus #20: A significant volume of data was recently deposited in the Data Bank in support of ***Benguela Current*** (354-rev -add -add2), but the package remains incomplete. Adequate 3.5 kHz (or Parasound) profiles and core data are missing for the northern 3 transects, as are all data to support the southern drilling sites. The proponents plan to submit a revised proposal based on newly collected data. The existing proposal as ranked by the spring thematic panels and the existing data package are not sufficiently well matched for SSP to evaluate.

SSP Consensus #21: SSP acknowledges the effort put forward by the proponents of two ***California Margin*** drilling proposals (386/422) into merging the programs and in the submission of a substantial data package. Although major items of data are still missing from the package, it seems possible that in this data-rich field area, the gaps could be filled from existing data.

SSP Consensus #22: The proponents for ***NW Atlantic Sediment Drifts*** (Bermuda Rise/Blake-Bahama Outer Ridge) drilling are strongly encouraged to continue their search for good-quality SCS and 3.5 kHz data in the Bermuda Rise area; these are vital data types for paleoceanographic drilling targets. These data and the proposed drill site must be located on a track chart at a working scale. A transect of piston cores and digitally recorded 3.5kHz data will be collected along Blake Ridge in Nov. 1993, which will be helpful for sites BBOR-1 through -8.

SSP Consensus #23: An incomplete data package was recently submitted to the Data Bank for the ***South Florida margin*** (proposal 427). The proponents recognize the need to collect additional data and plan to submit a data acquisition proposal to NSF in November '93. It is unlikely that a complete data package will be available by YE'94. As 14 of the 17 proposed sites lie in water depths shallower than 200 meters, the data package will have to satisfy guidelines for shallow-water drilling being developed by PPSP.

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Action items resulting from the meeting were as follows:

SSP Action Item #1: Mountain/Quoidbach to seek advice from PPSP Chairman and from JOI about possible changes in distribution list for Co-Chief's data packages: (a) reduce number of copies going to the drillship from three to two, and/or (b) send a copy to the Chair of PPSP.

Action Item #2: JOIDES Office liaison Bill Collins to incorporate language into the proposal submission guidelines cautioning proponents to take into account potential man-made seafloor hazards in selecting their drillsite locations. Collins to add a new question to the Site Summary form (next to the questions about weather, ice, surface currents, foreign clearance, etc.) regarding man-made seafloor hazards.

Action Item #3: SSP watchdogs for proposals on continental margins near populated areas to include a caution about man-made seafloor hazards in their watchdog letters.

Action Item #4: ODP/TAMU liaison Clift to convey SSP's endorsement of the Leg 150 Co-Chiefs recommendation that a real time navigation display be installed on the bridge of the drillship, and that ship's officers be thoroughly trained in its use.

Action Item #5: In view of the increasing importance of visual imagery in documenting barerock and offset drilling sites, the ODP Site Survey data bank shall acquire a video cassette player capable of showing and duplicating both European and U.S. format videotapes.

Action Item #6: SSP/PCOM liaison Dick to query PCOM on the policy concerning mid-cruise changes of plan for barerock/offset drilling sites. May the co-chiefs move at will to a new site (a new positioning beacon) at a location not considered by the advisory panels? May the co-chiefs move at will to multiple holes within the range of a single positioning beacon at a previously approved site?

Action Item #7: SSP members to circulate draft guidelines to knowledgeable people in their institutions or countries for comment. Comments to be forwarded to PPSP Chair

Action Item #8: JOIDES Office liaison Bill Collins to notify SSP members by email of which programs were put in the FY'95 Prospectus at the August PCOM meeting.

Action Item #9: Each watchdog will write a letter to the lead proponent of each proposal discussed at the July SSP meeting, enclosing the relevant section of the SSP minutes, plus copies of the completed SSP matrices (if applicable). A copy of these letters will be sent to the ODP Data Bank.

Action Item #10: Kastens to discuss membership needs with PCOM chair Brian Lewis, and try to fill one of two underrepresented disciplines with an incoming non-US member.

Action Item #11: Kastens to poll absent SSP members, select a mid-November date, and request permission to have a meeting.

Action Item #12: Data Bank managers Mountain/Quoidbach to attempt to obtain copies of underway data collected aboard the Resolution for the Data Bank.

SSP Meeting
July 28-30, 1993
Lamont-Doherty Earth Observatory
Minutes

1. PRELIMINARY MATTERS

Please note that these minutes are organized into logical chapters for ease of reading. They do not reflect the exact order of discussion at the meeting: some items were shifted around to accommodate travel schedules. The name in parentheses indicates the panel member who led each portion of the discussion and drafted each section of the minutes; for drilling proposals, this is normally the SSP watchdog.

1.1 Introductions (Kastens)

Kastens introduced new member Doug Toomey, and new PCOM liaison Henry Dick.

1.2 Logistics (Mountain)

Acting ODP Site Survey Data Bank Manager Greg Mountain, host of this meeting, outlined arrangements for meals, travel changes, etc.

1.3 April 1993 Trieste meeting (Kastens)

Changes to the minutes: there were no changes to the minutes beyond those that had been sent to Kastens by fax or email and incorporated into the final minutes.

Action items: Kastens conveyed the sense of SSP's discussion of shallow water hazards to PPSP chair Mahlon Ball for incorporation into the guidelines (action item 1). PPSP completed a draft set of guidelines, which SSP discussed at this meeting (section 9.1 below). Kastens alerted PPSP chair Ball about the possible need for safety pre-review of Eastern Equatorial Atlantic Transforms, Costa Rica Accretionary Wedge, and Gas Hydrates (action items 2, 3 and 4). Kastens and Ball invited Gas Hydrates proponent Charles Paull to attend the July SSP meeting to get some early feedback on safety issues; Paull accepted. PCOM liaison Kidd and SSP Chair Kastens reported the sense of SSP's discussion on the Durbaum report to PCOM (action item 5), and in general PCOM seemed sympathetic SSP's points of disagreement with Durbaum et al. Every watchdog except one wrote a letter to the lead proponent of each proposal discussed in Trieste, and sent a copy of these letters to the ODP Site Survey Data Bank (action item 6). Kastens reiterated the importance of prompt, accurate, informative feedback to proponents via watchdog letters. Kastens contacted three candidate members to see if they would be willing to join SSP (action item 7). All agreed to have their names put forward at PCOM; Kastens forwarded all three names to PCOM; PCOM selected Doug Toomey; Toomey joined SSP effective this meeting. Kastens requested permission for SSP meeting at Lamont in July (action item 8), and here we are.

1.4 Charge for this meeting (Kastens)

The primary charge for this meeting was to provide advice to PCOM on the site survey readiness of programs which are candidates for potential drilling in FY '95. These include all programs considered in our April meeting (i.e all programs ranking in the top seven ranks of Spring '93 Thematic Panel Global Rankings), minus those programs outside of the geographic area of FY'93 operations as defined at the April PCOM meeting.

At their August meeting, PCOM will use this SSP input, together with logistical, financial, thematic and other input, to build a FY'95 drilling prospectus. The prospectus could contain as many as twice as many programs as can be drilled in a year. The

proponents of proposals in the prospectus will then have one last chance to finalize their data sets before November 1, 1993.

After discussion, the following classification scheme was adopted:

1. Presently Viable Candidates for FY 95 drilling.

1a- All required data are in data bank.

1b- Minor items are not in the data bank, but are believed to exist.

2. Require major efforts from proponents, but could be made viable for FY95 drilling.

2a- Major items are not in the data bank, but are thought to exist.

2b- Major items are not in the Data Bank, and are thought ***not*** to exist. Surveys to fill these deficiencies are scheduled to be completed by November 1, 1993.

3. Site survey data package in DB is insufficient, and unlikely to be ready in time for FY95 scheduling.

3a- Major items are not in the Data Bank, and are though ***not*** to exist. Surveys to fill these deficiencies could be completed by the end of 1994.

3b- Major items are not in the Data Bank and are thought ***not*** to exist. Surveys to fill these deficiencies are not expected to be completed by the end of 1994.

3c- Not considered, because no data at all has been submitted to the Data Bank.

3d- New data does not match present proposal; awaiting new proposal.

Proposals for drilling on the Bahamas Transect (412-add), Caribbean K/T boundary (415-rev), and sub-Antarctic southeast Atlantic Transect (sub-SAT; 430---) were placed into category 3c, because they had no data at all in the Data Bank. Proposals for the Red Sea (086-rev2) and return to Site 735B (Atlantis II Fracture Zone; 300-rev) also had no data submitted explicitly for those proposals; however they were retained on the agenda for further discussion because the Data Bank had some data in hand from a previous leg (735B; leg 118) or a previous near-leg (Red Sea).

As the meeting progressed, each of the potential future drilling programs was placed into one of these categories. A table summarizing these designations can be found as Appendix A.

1.5 New Watchdog assignments (Kastens)

In place of former SSP member Greg Moore, who has joined TECP, the watchdog role for TAG Hydrothermal System (leg 158) has been taken over by Doug Toomey, and Costa Rica Accretionary Wedge (400-rev) has been taken over by Angelo Camerlenghi. In place of former SSP member Rob Kidd, who has joined PCOM, the watchdog role for Ceara Rise (388-add) has been taken over by Srivastava, California margin (386-rev/422-rev) has been taken over by Camerlenghi, and Mediterranean Sapropels (391-rev) has been taken over by Kastens. In place of Naoshi Hirata, who has been unable to attend the last several SSP meetings, the watchdog role for Vema Fracture Zone DCS Engineering Test (376-rev2) has been taken over by Toomey, and the watchdog role for MARK (leg 153) has been taken over by Trehu. To spread the watchdogging burden more evenly, Camerlenghi has assumed the watchdog role for Gas Hydrates (423-rev), and Scrutton has taken over as watchdog for VICAP-MAP (380-rev3).

A summary of past and present SSP watchdog assignments is included as Appendix B.

2. REPORTS

2.1 PCOM (Dick)

The Spring PCOM meeting at Lamont defined the geographic area of operations for 1995 thematically, rather than strictly geographically in an attempt to move away from the essentially ad hoc geographic focus that has been given to ship operations by the fact that the ship is now in the Atlantic. In effect, however, the area of operations is defined as the Atlantic and adjacent seas including the Caribbean, the Gulf of Mexico, the Mediterranean Norwegian, Labrador and Red Seas, the SW Indian Ocean and the Eastern Pacific, as that is where the highly thematically ranked proposals are situated.

The meeting was dominated by budget considerations, most of which consisted of bad news. It seems likely that there will be at least a $1 M shortfall due to the problems with Canadian renewal, and a possibility of a $4 M shortfall if the French do not renew. In the advent of a $1 M shortfall, PCOM saw no alternative but to delay DCS development and engineering Leg 157 into FY 1995. If there is a $4 M shortfall, the program would be unable to continue in its present form.

Due to budgetary considerations, despite its importance to future drilling, PCOM could not recommend funding any of the responses to the Deep Drilling RFQ, though it does recommend that TEDCOM attempt to pursue this initiative on its own. Budgetary considerations and the poor chance of success, preclude issuing a RFP for evaluation of the feasibility of sampling pore fluids. In addition, TAMU was requested to look hard at how to economize in its publication department, particularly with respect to controlling the increasing size and cost of the *Scientific Results and Initial Results volumes.*

PCOM found long range planning to 1998 and beyond difficult in the face of the present budgetary ambiguities. It will proceed to do this, however, based on revising the thematic panel white papers, and by separately considering what the technical requirements post 1998 for the program would be. PCOM endorsed the concept of revising the thematic panel white papers for long-range planning based on the Lithosphere Panel scenario. (USSAC subsequently, however, has refused to fund the proposed Lithosphere Panel workshop to do this.)

The scientific results of Leg 147 were presented by Co-chief Catherine Mevel. While scientifically the leg was a considerable success, validating the offset drilling strategy, drilling was considerably more difficult than hoped for, and individual holes considerably shallower than desired. PCOM awaits a full evaluation of this leg from the Site Survey Panel at its next meeting with particular attention to what additional data might enhance future offset drilling efforts.

Shallow water drilling was discussed at some length, with considerable attention drawn to the need for independent review of hazard survey data. TAMU specifically requested a review process independent of the drilling proponents. PCOM agreed that having an independent third-party evaluate the data was appropriate. Options for implementation of this policy, however, are still under consideration.

In response to the report of the Advisory Structure Review Committee (Durbaum Report), PCOM stated that although there were many valuable suggestions in the report, that PCOM would like to review other suggestions in greater detail after the report is formally received by EXCOM. A subcommittee was established to coordinate PCOM response. Former SSP member Rob Kidd is a member of this subcommittee.

2.2 JOIDES (Collins)

On July 1, the JOIDES office had received 25 new proposals, including revisions or addendums to many of the proposals under consideration by SSP at this meeting.

The JOIDES office is preparing an update of the guidelines for proposal submission. The update will include the SSP guidelines as modified at the April '93 (Trieste) meeting.

2.3 Data Bank (Mountain)

Carl Brenner's health has prevented his return as full-time data bank manager. In May '93 L-DEO advertised for applicants for this position. As of July 15, 8 applications were received. Four candidates were interviewed. On July 30, Dan Quoidbach accepted a job offer. Dan has a B.S. in Geology from Oregon State University, and a M.S. in Geological Oceanography from TAMU. He is familiar with ODP procedures and ODP scientists through experience as a Curatorial Scientist at the East Coast Repository and as a Graduate Assistant Researcher at ODP/TAMU. He will begin as full-time Data Bank Manager on August 23. To facilitate a smooth transfer, Greg Mountain has agreed to remain as advisor to the Data Bank for one year.

The month of July was especially busy for data bank personnel for two reasons: 1) proponents adhering to the July 1 deadline sent in a substantial volume of data (see appendix C) that needed to be logged and archived; and 2) the Co-Chiefs' package for Leg 151 was assembled and sent to both Co-Chief Scientists, the ODP Staff Scientist, and TAMU Science Operations. Each of these four packages weighed 40 lbs. SSP discussed the need to continue sending a package to each of these four. It was generally agreed that 3 copies to the drill ship (both co-chiefs and the staff sci) are unnecessary and redundant; 2 is adequate, and could be split 1 each to the co-chiefs, or 1 to a co-chief and the other to the staff scientist. SSP also considered whether one copy of the Co-Chiefs package (perhaps a subset of the larger co-chiefs' packages) should be sent to the PPSP chairman to be available for consultation in the event of a mid-cruise request for site-relocation in a safety sensitive field area. The disposition of the four data packages is mandated in the Data Bank contract from JOI to L-DEO, so any departure from the current procedure will require permission from JOI.

> **SSP Action Item #1: Mountain/Quoidbach to seek advice from PPSP Chairman and from JOI about possible changes in distribution list for Co-Chief's data packages: (a) reduce number of copies going to the drillship from three to two, and/or (b) send a copy to the Chair of PPSP.**

3. SITE SURVEY IMPLICATIONS OF RECENTLY DRILLED LEGS

3.1 Leg 147 Hess Deep (von Herzen)

[SSP liaison Dick was a proponent and participant on Leg 147]

R. von Herzen summarized the drilling results of Leg 147 compared to the pre-drilling objectives, noting the relatively small overall core recovery (~25%). H. Dick, PCOM member and Leg 147 participant, provided further details of the drilling accomplishments. We note that the tectonics of the Hess Deep are still only broadly understood, and the detailed tectonics of the sites actually drilled (894, 895) are not yet entirely clear.

Some of the important site survey data were made available only at the last moment before Leg 147. These data were apparently not incorporated into the cruise planning, and in some cases are still not yet fully interpreted. This includes the Scripps seismic refraction

experiments, bottom gravity measurements, and both the Scripps and FRG multibeam echo sounding data. Also, the FRG seismic (MCS and higher frequency) data have not yet been reduced and interpreted. SSP reiterates the importance of acquiring and submitting site survey data well in advance of the drilling leg. In view of the uncertainty that still surrounds the detailed tectonics of the sites drilled, the community cannot afford to ignore or underutilize data sets that might shed light on the structure and tectonic history of Hess Deep and surrounding oceanic crust.

Discussion ensued regarding additional survey instrumentation that may be useful for this type of seafloor environment. The site-survey challenges include (a) finding relatively unfractured pockets of more-drillable, more-recoverable rock (e.g. gabbros like those at site 735B, rather than those at 894B); (b) increasing the efficiency of the search for outcrops or subcrops suitable for guidebase emplacement; and (c) elucidating the tectonic setting and geological history of the region.

With respect to finding more drillable pockets of rock, near-bottom source and receiver seismic experiments will most likely be useful in characterizing the velocity structure in the uppermost several hundred mbsf. The seismic velocity distribution in volcanic rocks is most sensitive to porosity, including the voids resulting from fractures; thus this parameter may be an important indicator of the drillability of bare rock sites. Similarly, near-bottom towed active source electromagnetic experiments that determine electrical conductivity structures may provide analogous information. It was also suggested that near-bottom magnetic intensity data could be a useful indicator of both rock types and their alteration, particularly when the serpentinization of peridotites may be associated with formation of magnetite, as is inferred for the deep water basement outcrops off the Iberian margin.

With respect to finding localities suitable for hardrock guidebases, SSP noted that near-bottom towed side-looking sonar data could help determine the location of basement outcrops. The distribution of subcropping rock types may be determined by the use of a simple gravity corer to obtain rock fragments beneath a thin (~1m) sediment cover, rather than using the more expensive drill ship for this purpose.

With respect to understanding the tectonic setting and geologic history of the region, the first step would be to process and interpret the existing underutilized data sets. Additional insights about the detailed tectonic setting of the specific sites drilled could be gained through acquisition of near-bottom towed side-looking sonar data and/or additional submersible observations (with collection of oriented samples) on the ridge between the two Leg 147 sites.

3.2 Leg 149: NARM-NV I: Iberia Abyssal Plain (Clift/Mountain)

[SSP members Srivastava and Hinz were proponents for NARM]

The site survey data for the Iberian margin, Leg 149, was considered by the cruise party to have been of high quality. Seismic profiles crossing the area were quite adequate for the drilling in hand. A problem arose in the schedule after the loss of drill string placed the basement target at proposed Site 899 out of reach of the ship. This situation was happily resolved thanks to extra site survey collected by the onboard geophysics lab, which was able to locate the same stratigraphic target at a higher level in the tilted fault block. The scientific party was particularly pleased with the accuracy of depth/time conversions from ocean bottom seismometer data, which enabled the depth of the basement to be predicted to within 30m in 700 m-thick sections. The science party expressed some disappointment that GLORIA side looking sonar data were not available for the drilling area.

Harsh weather and poor hole conditions conspired to challenge operations during Leg 149. Sedco, TAMU and the shipboard party are to be commended for succeeding as well as they did under such circumstances. The ensuing need during Leg 149 to drill

multiple holes and to re-locate sites underscores the importance of putting to sea with a firm understanding of the region surrounding each proposed drill site. On-the-spot decisions frequently have to be made regarding site re-location. SSP reiterates the value of having as complete a pre-site survey package as possible available both on the ship and at TAMU.

3.3 Leg 150: New Jersey margin (Mountain)

[SSP member Mountain was a proponent and Co-Chief on Leg 150.]

After leaving port and enroute to the first drill site on Leg 150, it was learned that 3 of 8 proposed drillsites were close to potential seabed hazards that needed special precautions for drilling. The Captain of the Sedco/BP471 showed the Co-Chiefs British Admiralty charts used by the bridge that locate dump sites on the upper rise off New Jersey. MAT-17 was within an explosives dump site; MAT-14 was a few kilometers west of the same area, but equally close to a chemical waste dump site, and several more kilometers south of a third area used to scuttle old ships. Furthermore, TAMU notified the Operations Superintendent that MAT-14 and -13 were within a few kilometers of two AT&T trans-Atlantic cables. The cables were indeed on "pilot charts" the Leg 150 Co-Chiefs had consulted before selecting their proposed sites, and it was thought that the several kilometers distance did not pose a problem; similarly, the distances between the chemical dump and sites MAT-14 and -17 on the rise were thought to be acceptable. However, neither TAMU nor the Co-Chiefs were aware of the other two dump sites. With this new information, TAMU imposed three precautions: 1) permission to drill MAT-17 (the alternate to -14) was withdrawn; 2) a video/sonar survey had to precede spud-in at MAT-14, and any man-made objects that were located were to be reported to TAMU before proceeding with drilling; and 3) no cores were to be recovered in the first 20 m below the mudline at MAT-14.

SSP discussed where the responsibility for seafloor hazards assessment should lie in future cases like this one. It is obvious that blindly drilling into seabed hazards must be prevented; but is it up to the proponents, the Co-Chiefs, the Operator, SSP, or PPSP to ensure there are no man-made objects at a proposed drill site? SSP clearly can play a role, but the panel urged that the matter be further discussed by both ODP/TAMU and PCOM.

> **Action Item #2: JOIDES Office liaison Bill Collins to incorporate language into the proposal submission guidelines cautioning proponents to take into account potential man-made seafloor hazards in selecting their drillsite locations. Collins to add a new question to the Site Summary form (next to the questions about weather, ice, surface currents, foreign clearance, etc.) regarding man-made seafloor hazards.**
>
> **Action Item #3: SSP watchdogs for proposals on continental margins near populated areas to include a caution about man-made seafloor hazards in their watchdog letters.**

Despite excellent pre-cruise survey data, seismic profiles and 3.5 kHz echograms had to be collected during Leg 150 to ensure that each site was located properly with respect to key geological features. This was not unique to Leg 150; it was simply more critical than it is in many ocean basin sites because targets on the continental slope are especially narrow and demand the most accurate possible location. All survey equipment aboard the Sedco/BP471 performed very well. The weakest element, however, was the lack of real-time navigation on the bridge. A software package from the Atlantic Geoscience Center in Bedford, Nova Scotia was used on a trial basis. It displayed the ship's position relative to pre-determined waypoints based on the 4200 GPS receiver in the aft Underway Geophysics Lab; unfortunately, it was not feeding information to the bridge. The Leg 150 Co-Chiefs, and the Site Survey Panel, strongly encourage the installation of

a real-time navigation display on the bridge, and follow-up instruction to the officers who must become comfortable with using it to navigate from the bridge.

Action Item #4: ODP/TAMU liaison Clift to convey SSP's endorsement of the Leg 150 Co-Chiefs recommendation that a real time navigation display be installed on the bridge of the drillship, and that ship's officers be thoroughly trained in its use.

Leg 150 had to abandon site MAT14 because of hydrocarbon abundance. Careful reexamination of the seismic lines across this site did not reveal any structure or feature that might, in retrospect, have provided a clue to the occurrence of elevated levels of hydrocarbons at this site.

Although Leg 150 was targeted at Miocene questions, the cores recovered an unexpectedly interesting Pleistocene section as well. The 3.5kHz data across and between the drillsites are turning out to be unexpectedly important for making sense of this Pleistocene record. SSP reiterates that 3.5kHz data are a "vital" data type for all target types except barerock drilling sites.

4. SITE SURVEY STATUS OF SCHEDULED LEGS

4.1 Leg 152: East Greenland Margin: NARM-V I (Trehu)

[SSP members Srivastava and Hinz are proponents for NARM]

The data set for this leg is essentially complete. The high-resolution MCS cruise that was a critical element of the data package was successfully completed in September, 1992, and the data are of excellent quality. Those profiles that cross the proposed drill sites have been submitted to the Data Bank. The regional grid of these data will be invaluable for interpreting the drilling results. Descriptions of shallow cores near site EG63-1 allay technical concerns about the character of the surface sediments. The one remaining deficiency in the data set is 3.5 kHz data. The deep crustal seismic cruise that was to supply those data has not occurred. Although 3.5 kHz data are not critical to addressing the safety issues or to siting the drill holes to achieve the major tectonic objectives of the proposal, they could be essential for addressing the paleo-oceanographic objectives discussed on page 60 of the original NARM detailed planning group report. A report on the recent leg 150 on the New Jersey margin (these minutes) emphasized the value of 3.5 kHz data for deciphering recent sedimentation processes. We urge the proponents to try to acquire 3.5 kHz data in the vicinity of the drill sites during other cruises scheduled or proposed in the region.

SSP Consensus #1: The data package for leg 152 (NARM-V I: East Greenland) is essentially complete. Recently acquired high-resolution MCS data through the proposed sites are of excellent quality and satisfy the need for regional imaging to address the tectonic objectives and drilling safety. However, the SSP urges the proponents to arrange for acquisition of complementary 3.5 kHz data in the region if at all possible in order to address secondary paleo-oceanographic objectives.

4.2 Leg 153: MARK (Trehu)

[no SSP members are proponents for MARK]

The MARK data set is nearly complete, but no new items have been submitted to the data bank since the April SSP meeting. Revised matrices detailing SSP assessment of each site are included in the appendix. Outstanding items include: 1) Adequate visual characterization of the seafloor in the vicinity of proposed site MK-1. At present, only a few Alvin photographs and slides are available. Either a more comprehensive and more

precisely located set of Alvin photos or video tapes of Nautile dives should be submitted (note: it was not clear to us whether the planned September, 1993, Nautile dives would cover this site.) 2) Clear images from recent MPL/SIO deep-tow side-looking sonar cruise over the MK-2 site. Those data should be submitted as soon as possible.

At the last SSP meeting, it was determined that 3.5 kHz data and existing seismic refraction data should be submitted. The proponents have argued that 3.5 kHz data would be useless because of the lack of detectable sediment throughout the region. The primary reason to request 3.5 kHz data in this situation is to permit selection of a backup drill site in a sediment pond if drilling on bare rock were unsuccessful. Because we consider that it is very important to have adequate data in the data bank to cover not only the proposed sites but also contingency sites, we urge the proponents to consider backup options and deposit appropriate data (i.e. video tapes) in support of the proposed backup sites. Concerning the seismic refraction data, SSP concluded that reprints of papers discussing the refraction data, annotated to highlight those data most relevant to the proposed sites, would be suitable.

SSP Consensus #2: The data package for the primary targets at MARK leg 153 is nearly complete. We still await 1) adequate visual characterization of the seafloor near site MK-1, 2) well processed data from the MPL/SIO Deep Tow cruise in the MK-2 region, and 3) annotated reprints of papers discussing refraction data. In addition, we urge the proponents to consider possible backup options and to provide data for those sites (i.e. additional video tapes from dives parallel to the dives on which the proposed sites are located).

The discussion of the MARK data package lead into a discussion of the general issue of backup plans and contingency sites for barerock drilling legs and offset drilling legs. SSP noted that all other kinds of drilling legs are required to designate alternative sites and design backup plans well in advance of going to sea. All other legs are required to deposit data pertaining to these potential backup sites in the data bank for evaluation by SSP, for inclusion in the Co-Chief's package, and for consultation by the ODP community after the drilling leg. Sediment drilling legs typically are only allowed to move sites in mid-cruise to alternative positions that are well documented in the copy of the Co-Chiefs' Data Package sent from the ODP Data Bank to ODP/TAMU. One point of view is that because there is typically no hydrocarbon danger on barerock and offset drilling legs, the Co-Chiefs of such legs should be able to move the ship at will, regardless of whether or not the relevant data is at TAMU/ODP. In this manner they could design a contingency plan on the fly in the case of technical problems at their primary sites. There have also been some complaints among barerock drilling proponents about the expense of duplicating large quantities of seafloor photographs. SSP felt this problem could be solved in many cases by the submission of dive videos, which are much less expensive to duplicate per hour of data than are still photographs. However, the Data Bank needs to improve its capability to cope with videotape if this is to be a viable option. In the end, the general sense among SSP was that barerock and offset drilling legs should be held to the same standard of contingency planning and data completeness as ODP legs in sedimented regions. Unless we are otherwise instructed by PCOM, we will continue to expect data-documented backup/alternate sites from all legs.

Action Item #5: In view of the increasing importance of visual imagery in documenting barerock and offset drilling sites, the ODP Site Survey data bank shall acquire a video cassette player capable of showing and duplicating both European and U.S. format videotapes.

Action Item #6: SSP/PCOM liaison Dick to query PCOM on the policy concerning mid-cruise changes of plan for barerock/offset

drilling sites. May the co-chiefs move at will to a new site (a new positioning beacon) at a location not considered by the advisory panels? May the co-chiefs move at will to multiple holes within the range of a single positioning beacon at a previously approved site?

4.3 Leg 154: Ceara Rise (Srivastava)

[SSP member Mountain is a proponent for Ceara Rise]

At the April '93 SSP meeting, the Ceara Rise data package was judged complete except for core log descriptions for as-then unsplit cores taken at 4 of the 7 proposed sites. These core logs have since been submitted.

SSP Consensus #3: The data package for the Ceara Rise (Leg 154) is complete.

4.4 Leg 156: North Barbados Ridge (Camerlenghi)

[no SSP members are proponents for North Barbados Ridge]

No data were submitted to the Data Bank since the last SSP meeting (Trieste, April 1993), at which time SSP reported at all "vital" data types were in the Data Bank, but that several existing "desirable" data types had not yet been deposited.

The missing data comprise: (1) Velocity information (from previous stacking sections, 3-D survey, OBS recordings, and from the recently performed Shear Wave Experiment); (2) Results of 3-D processing of seismic experiment.

SSP Consensus #4: All vital data types for the North Barbados Ridge program (Leg 156) are in the Data Bank. Proponents need to submit outstanding "desirable" data types (velocity, 3-D processing results) in time for Safety package to be assembled.

4.5 Leg 157: DCS test at Vema Fracture Zone (Kastens/Toomey)

[no SSP members are proponents for Vema; however SSP member Kastens is involved with site survey work in this area.]

The April 1993 minutes document previous concerns of whether or not the 600 m water depth at the VE-3 site is adequate for testing of the DCS and, in particular, the secondary heave compensator. If 600 m depth is not adequate for a proper test, PCOM suggested that the VE-3 site be moved to a water depth of 1500 m. However, as discussed at greater length in the April 1993 SSP minutes, a site at 1500 m depth may not prove scientifically useful due to a lack of a carbonate cap. As a result of the uncertainty surrounding the depth required by the heave compensator, on-land tests are being conducted this summer to determine if 600 m depth is adequate. If these tests prove successful then the VE-3 site will remain at a water depth of 600 m. If the tests are unsuccessful, the fate of VE-3 is unknown.

Since our April meeting, existing 3.5 kHz data has been analyzed to assess the thickness of sediments at the sites proposed for testing of the diamond coring system, both site VE-3 on the crest of the southern transverse ridge limestone cap and a hypothetical site at ~1500m water depth east of VE-3. The appropriate 3.5kHz data have been deposited in the Data Bank. Inspection of these data showed no detectable sediment drape, supporting the premise that a hardrock site can be found for placement of the barerock-drilling guidebase.

SSP noted at our April'93 meeting that no photo or video data was available for the VE-3 site; such data would aid in selecting a site for emplacement of the guidebase. At the request of PCOM, efforts were put forth to acquire the resources necessary to collect visual imagery data during the upcoming August 1993 Ewing cruise. Kastens and Bonatti have

been successful in finding a towed still camera and the funding to support two days of ship time that will be devoted to obtaining visual imagery data around the VE-3 site and the hypothetical site at 1500m water depth east of VE-3. This data will also be collected during the August 1993 Ewing cruise and SSP requests that it be deposited in the Data Bank.

The status of sites VE-1 and VE-2, the lower crust/upper mantle targets, has not changed since they were declared unready for drilling at our August '92 meeting. Deep-towed SLS scheduled to be collected on the Ewing this summer should complete these data packages.

SSP Consensus #5: SSP is pleased to note that funding, shiptime and equipment have been made available to collect visual data aboard the Ewing in August 1993 on the crest of the Vema Fracture Zone southern transverse ridge, on the sites proposed for testing of the DCS system on Leg 157. The 600m vs 1500m water depth issue for the DCS test remains unresolved. SSP reiterates our concern that potential 1500m water depth sites are inadequately characterized by site-specific data, and probably lack the limestone cap that is an essential scientific and engineering target.

4.6 Leg 158: TAG Hydrothermal System (Toomey)

[SSP member von Herzen is a proponent for TAG]

No new data has been submitted to the Data Bank since April. However, a recent cruise (April-May 1993) to the TAG site collected extensive heat flow profiles (von Herzen), rock samples, and active source EM data (N. Edwards). The heatflow data should be deposited in the Data Bank in time to be included in the Safety review package, and the other data should be submitted in time to be included in the data Packages sent to the Co-Chiefs and to TAMU for the drilling leg.

All "vital" data types for the proposed sites are in the Data Bank. Matrices evaluating the TAG sites against the SSP guidelines for barerock drilling (Target Type "F") are included in the Appendix. There was some correspondence preceding the SSP meeting, and some discussion at the meeting, about whether this is the correct target type for these sites. TAG was classified as target type "F" for SSP purposes because the sites lie within the MAR median valley, on effectively zero-aged crust. However, the hydrothermal mound material may be soft enough to spud into directly. Realizing that TAG doesn't fit perfectly into any of the available SSP target types, we decided to continue to treat it as a target type "F," but to keep in close and detailed communication with the proponents on a datatype-by-datatype basis.

SSP previously requested that bare rock legs go to sea with alternative sites in sediment ponds, in case of technical failure with bare rock procedures. The proponents (S. Humphris) submitted a letter dated 22 July 93 that argues that a backup site in a sediment pond would greatly compromise the scientific objectives of the TAG proposal. Humphris suggests two other alternatives in the event of technical problems. The first is to APC the TAG mound. While this approach would not address the objectives of drilling a deep hole into the TAG site, it would provide data consistent with the scientific objectives. Recent experience with heatflow measurements at TAG indicate that the upper meter is very soft, presumably due to oxidation of the outer layer. Because the heat flow probe is a meter in length, the stiffness of the material at greater depths is not known. As a second alternative, Humphris suggests drilling a large relict mound within the TAG hydrothermal field. Considerable data exists for the relict mounds, but it is not in the Data Bank. This second alternative is less desirable since it would compromise the thematic objectives of drilling at TAG.

SSP thought the backup alternatives outlined in the Humphris letter were creative and viable options that were consistent with the thematic objectives of the TAG proposal. SSP requests that the co-chiefs (Humphris and Herzig) submit an addendum that explains further the two alternative plans, identifying specific backup sites. In view of this, the 3.5 kHz data for backup sites in sediment ponds are no longer needed by SSP. However, relevant data for the newly-proposed backup sites does need to be submitted to the Data Bank.

SSP Consensus #6: All "vital" data types for the proposed sites at the TAG Hydrothermal System (361-rev2) are in the Data Bank. Newly collected heatflow data should be submitted in time for Safety review. SSP requests that an addendum be submitted that describes alternative plans, with specific backup sites, in the event of technical failures at the primary sites. Two viable alternatives that have been suggested are an APC program that targets the active TAG hydrothermal mound, and/or attempting to drill into relict mounds within the TAG hydrothermal system. Relevant data for the backup sites needs to be submitted to the Data Bank.

5. POTENTIAL FUTURE DRILLING: TECP

5.1 Alboran Basin (323-rev3) (Kastens)

[SSP liaison Kidd is a proponent for Alboran]

The Alboran proponents have submitted a revised proposal to take into account feedback from the safety prereview, and the necessity to confine their program to one realistic leg of drilling time. The revised proposal retains four sites which are analogous to the four sites in 323-rev2, but their exact positions and depth of penetration have been modified.

Site ALB1(revised) is updip from the old site ALB1 and shifted slightly along strike from the old position. Seismic units V and VI, which were problematic from a safety perspective, are not present at this location. Site ALB2 has been moved to a position directly updip from the new ALB1. In the present drilling plan, ALB2 will only be drilled if basement objectives are not achieved at ALB1. The revised sites ALB1 and ALB2 are within the same dense grid of excellent -quality MCS lines that were used to site the old ALB1 and ALB2. In each case, one line across the new sites is in the Data Bank with the materials submitted in support of the old sites; a fax from proponent M. Comas says the additional needed seismic lines are in the mail to the Data Bank.

The old sites 3 and 4 were judged ready to schedule from an SSP perspective at the April '93 SSP meeting. Sites 3 and 4 in the revised proposal have only been shifted slightly up or down dip to positions favored by the Safety Panel, and SSP's evaluation remains unchanged.

Because sites ALB1 is a reentry site, SSP has previously advised the proponents that a core will be required in the vicinity of the proposed site. We had been told that a core would be taken on a cruise in April/May of 1993. This same cruise was planned to take heat flow data, which is of importance to Safety Panel in this safety-sensitive field area. The Data Bank has received no data or other information about this cruise. SSP matrices detailing the data status of the sites in the revised proposal are contained in the Appendix.

SSP Consensus #7: The Alboran Basin sites ALB3 and ALB4 in the revised proposal 323-rev3 are ready to schedule. Additional seismic data from the existing dense grid needs to be submitted to the Data Bank in support of revised sites ALB1 and ALB2. The reentry site

ALB1 needs a core, which is believed to have been collected in April/May 1993. Safety consideration of all sites would benefit from submission of heatflow data, believed to have been recently collected.

5.2 NARM nonvolcanic-II: return to Iberia (NARM) (Mountain)

[SSP members Srivastava and Hinz are proponents for NARM]

At the April '93 Trieste meeting, SSP approved the data packages for sites IAP-1, -2, -3, -3b, -4 and -5. Sites IAP-2, IAP-4 and IAP-5 were drilled on Leg 149.

At its Spring '93 meeting, TECP prioritized future NARM drilling as follows: (1) complete the Iberian margin program by drilling the deep syn-rift site IAP-1; (2) begin drilling in Newfoundland basin at NB-4A or equivalent; and (3) complete the E Greenland margin drilling at 63°N

SSP Consensus #8: SSP notes that the survey data for site IAP-1 on the Iberia margin (TECP's highest priority for NARM-NV-II) is entirely adequate and ready for drilling. SSP reminds the proponents that any sites other than the six approved for Leg 149, even if located on data already in the data Bank, will have to be reviewed by SSP and PPSP.

5.3 Eastern Equatorial Atlantic Transforms (346-rev4) (Sibuet)

[SSP member Scrutton is a proponent for Eastern Equatorial Atlantic Transforms]

In a revised proposal submitted for the July 1 deadline, the positions of proposed sites have been changed with respect to the ones in proposal 346-rev3: (a) IG1n and IG1nbis replace old IG4, (b) IG2n replaces old IG5, (c) IG3n replaces old IG6bis, and (d) IG2nbis is a new site. All MCS and single channel lines are as good quality foldouts in the latest proposal revision, but not all lines have been submitted directly to the Data Bank. The Data Bank will need full scale unbound copies of all seismic lines, preferably on vellum, for the PPSP package and the Co-Chiefs package.

No new data have been received since the April '93 SSP meeting. Numerous "desirable" data types still remain to be deposited in the Data Bank: (1) OBS refraction velocity results should be provided to the Data Bank. (2) Videotapes or some pertinent photographs from the submersible cruise EQUANAUTE should be provided to the Data Base along with their locations on a map. (3) A magnetic anomaly map of the area should be provided to the Data Bank. (4) Heatflow data may be wanted by PPSP (5) Core logs should be provided to the Data Bank for the existing cores around each site. Matrices detailing the site survey status of all sites are included in the appendix.

SSP consensus #9: All of the data needed to support passive margin drilling on the Eastern Equatorial Atlantic Transform Margin is believed to exist. However some data types have not yet been submitted to the Data Bank (refraction results, 3.5 kHz missing profiles and some documentation of results from the EQUANAUTE Nautile submersible cruise).

5.4 Mediterranean Ridges, shallow (330-rev) (Farre)

[SSP members Camerlenghi and Kastens and SSP liaison R. Kidd are proponents for Mediterranean Ridge (MR).]

This proposal addresses the first of a two-phase strategy to study fundamental processes associated with incipient continental collision on a salt-bearing accretionary prism. Four transects across the deformation front are proposed (3-4 sites each), with one

additional site on the Napoli mud volcano. The Herodotus transect (former sites MR 10-12) has been dropped from the program.

Additional data were submitted to the Data Bank since the SSP meeting in Trieste (April '93), but the data package remains insufficient to meet SSP requirements for paleoenvironmental sites (Target A). The MR program involves drilling of both smooth abyssal plain and highly-complex areas above the deformation front. In addition to the data types normally considered vital for paleoenvironmental sites, SSP will require sites above the deformation front to include crossing high-resolution SCS profiles and swath bathymetry in order to finalize site location and allow drilling results to be placed in context.

SSP matrices evaluating the status of the MR sites against the guidelines for "Target A: Paleoenvironment" sites are included in the Appendix. For sites MR 1-3 (Ionian transect), 3.5 kHz and core data are missing from the Data Bank. For sites MR 2-3, swath bathymetry is also missing. For sites MR 4-5 (Sirte Transect), all required data is in the Data Bank. At MR-6, the site of a proposed fluid flow experiment, only a heat flow transect remains to be collected and deposited. Sites MR 7-9 require crossing high-resolution SCS profiles to complete their data package. Site MV-1 on the Napoli mud volcano has a complete data package in the Data Bank.

Sites ESM 1-4 have the least complete data package; however an email message from Rob Kidd indicates that additional data in support of these sites was collected in May/June 1993 from the R/V Gelendzhik (TREDMAR program) and has been mailed to the Data Bank. Crossing high-resolution SCS profiles, 3.5 kHz profiles, and core data are needed to complete the package. Information on current velocities for the shallowest site (ESM-1 @~750m) should also be provided.

Based on SSP's understanding of site surveys recently completed and planned through September 1993, it is possible/likely that a complete data package will be submitted by November 1, 1993.

SSP Consensus #10: A significant amount of data in support of drilling the Mediterranean Ridge was recently deposited in the Data Bank, but the package remains incomplete. Out of 14 proposed sites, 3 have complete data packages, while the remaining sites require data that have been recently collected or are scheduled to be collected by the end of September, 1993. Based on SSP's understanding of these site surveys, it is possible/likely that a complete data package for one leg of drilling will be submitted by November 1, 1993.

5.5 Costa Rica Accretionary Wedge (400, 400rev) (Camerlenghi)

[no SSP members are proponents for Costa Rica Accretionary Wedge]

No data were submitted to the Data Bank before the July 1st deadline. The panel reiterates the previous statement that a nearly complete data package for drilling of structural objectives (including 3-D seismic data and swath bathymetry) is present in the Data Bank. Data from existing cores at proposed re-entry sites should be deposited in the Data Bank. However, a revised proposal adding fluid objectives has been submitted, and a detailed heat flow survey will be required in support of these new objectives.

Proponents have communicated to the panel that an ALVIN cruise will take place in March 1994, during which heat flow measurements, cores and bottom observations will be collected. In addition, funding has been raised for re-processing of the 3-D data set. Processing is underway.

SSP Consensus #11: The existing Costa Rica Accretionary Wedge (400/400-rev) data set is satisfactory for the structural objectives. However, a revised proposal adding fluid objectives has been submitted, and thus a detailed heat flow survey is now needed. Heat flow data collection is scheduled for an ALVIN/Atlantis II cruise in March 1994.

6. POTENTIAL FUTURE DRILLING: SGPP

6.1 Gas Hydrate, Blake Ridge & Carolina Rise (423-rev) (Camerlenghi)

[SSP member R. von Herzen is a proponent for Gas Hydrates. Gas hydrates lead proponent Charles Paull attended the SSP discussion of the Gas Hydrate proposal as a guest.]

In their July 1 addendum, following a suggestion by SGPP, the proponents have extended the penetration of sites to reach the BSR. The location of some sites has been slightly modified without affecting the status of the site survey data package.

A data package, following the SSP guidelines, has been submitted to the Data Bank before the July 1st deadline. The package includes extensive good quality deep penetration single channel digital seismic lines, multichannel seismic lines, one 3.5 kHz profile, heat flow data, and core location maps.

Matrices evaluating the gas hydrate sites against the SSP guidelines for target type "A: paleoenvironment" are included in the Appendix. All the sites are located on SCS lines, most of which are on crossing lines. Those that are not located on crossing lines (Cape Fear Diapir transect and site CRH-1) are located in areas of dense seismic coverage (lines to be provided by proponents) that should allow the identification of the 3-D geological structure around the site. Some plots of the seismic sections provided by the proponents contain mistakes in scaling and in signal amplitude representations. These mistakes can be easily corrected through new plots. 3.5 kHz data exist for all the sites, but is not in the Data Base for the Blake Ridge and Caroline Rise transects. Heat flow coverage of all sites is complete. Velocity control through OBH is available for the Blake and Carolina Rise transects. SSP does not require this type of data for the transect of shallow holes across the Cape Fear diapir. Cores are present on or in the vicinity of all sites. Core logs and biostratigraphic ages must be submitted.

A side scan sonar survey of the Cape Fear transect will be performed in October 1993. The data will help in understanding the areal extent of the diapir to be drilled, and is thus regarded as an important site survey information.

SSP Consensus #12: Some existing vital data (core logs, 3.5 kHz records) remains to be submitted for the Gas Hydrate proposal, and some SCS profiles need to be redisplayed. A side-looking sonar survey of Cape Fear Diapir, scheduled for October 1993, will be valuable for defining the areal extent of the diapir.

6.2 Mediterranean Sapropels (391-rev2) (Kastens)

[no SSP members are proponents for 391-rev2. Camerlenghi was a proponent on 391-rev. SSP liaison is a proponent.]

The Mediterranean sapropel proponent group has made a serious effort to respond to feedback from the ODP Advisory structure: gathering and submitting data, organizing data collection cruises, sending a representative to the April SSP meeting, preparing a revised proposal. The July 1 proposal revision retains the strategy of an east-west transect from the far western to the far eastern Mediterranean; however, the scientific rationale has been strengthened, and some of the sites have been shifted to positions with stronger data sets.

For Target Type "A" (paleoceanographic) sites, vital data types according to the SSP guidelines are a high resolution single channel seismic crossing, 3.5kHz or equivalent crossing, and a piston/gravity core. For sites within areas of complex microtopography (e.g. the Mediterranean Ridge), SSP has previously advised the proponents that additional data will be required to understand the three-dimensional depositional setting (e.g. a grid of seismic data, a grid of 3.5kHz data, and/or swath bathymetry). By these criteria, sites MedSap 2C, 4A, 4C, 5, 6A are ready for scheduling. Sites MedSap 1C and 2B are dependent on data that was collected in June 1993; this data has been sent to the Data Bank but did not arrive in time for evaluation by SSP. Site MedSap 3 is dependent on SCS data to be collected in Sept/Oct 1993.

Site 7B is a reoccupation of DSDP site 121 in the Alboran Sea (far western Mediterranean). SSP would approve this reoccupation if no better alternative in the Alboran Sea can be found; however, both the seismic data and the Site 121 drilling results show a major unconformity in the lower Pliocene and upper Miocene, suggesting that this is not the best possible location to acquire the complete Miocene-Holocene pelagic record needed to fullfill the scientific objectives described in the proposal. The MedSap proponents sent an "Appendix" to their data package including partial documentation of two potential alternative sites in the Alboran Sea (these sites were not in the July 1 proposal revision). SSP encourages the proponents to develop these two into full-fledged alternative sites, in hopes that one of them might yield a more complete stratigraphy. The proponents should be attuned to safety issues in developing their Alboran site(s).

Matrices describing site by site data deficiencies are included in the Appendix. Proponents are urged to submit the outstanding data by November 1 to permit evaluation by SSP before PCOM's end of the year scheduling meeting.

SSP Consensus #13: The Mediterranean Sapropel proponents have greatly improved their data package and their proposal since last year. One site in the proposed east-west transect (MedSap 3 on the Calabrian Ridge) is dependent on data scheduled to be collected in September 1993, and two sites depend on newly-collected data that did not arrive in time for evaluation by SSP. The other sites are adequately supported by data that is already in the Data Bank. The program could be viable for FY'95 scheduling.

6.3 VICAP/MAP (380-rev3) (Scrutton)

[SSP liaison Kidd is a proponent for MAP]

Only VICAP was discussed in detail because MAP site survey data package was considered as complete and in the Data Bank at the April '93 meeting. The MAP and VICAP portions of the VICAP-MAP program were classified separately in the summary table of site survey readiness (Appendix A).

For VICAP, new seismic data from METEOR 24 cruise have arrived in the Data Bank. These high-resolution MCS lines were collected along with Hydrosweep, Parasound, gravity and magnetic data, heat flow and coring stations. This is an excellent data base with which to address the proposal objectives of volcanic island growth and mass wasting. Unfortunately, the new survey tracks do not cross any of VICAP sites 1 to 5 in the currently-active proposal. A track chart accompanying the data package had nine possible new VICAP sites on it, not near the old sites, which SSP assumes will be incorporated into a revision of the proposal. Most of the new sites had the crossing MCS profiles specifically requested by SSP at its April '93 meeting. But without knowing the scientific objectives of the new sites, it was not possible for SSP to determine whether the regional and site-specific data are adequate to support those objectives. In addition, the target depth of penetration needs to be specified. Proposal 380-rev3 calls for penetrations

of 1500-2000m. The new seismic data reveal little or no information at that depth subbottom. SSP and PPSP have rarely endorsed drilling deeper than the deepest clearly resolved reflector in the best available seismic data, and thus applying the old penetration depths to the new sites would probably result in an unacceptable drilling strategy. SSP guesses that the proponents might have in mind drilling a larger number of shallower holes, but until this is specified we can't fully evaluate this program.

SSP Consensus #14: Since April '93, high quality data from METEOR 24 cruise has started to come into the Data Bank in support of VICAP/MAP. Unfortunately, these new data do not cross any of the proposed sites in the currently-active proposal. SSP needs to know the objectives, drilling targets, and penetration depths of possible new VICAP drillsites before assessing their site survey readiness.

7. POTENTIAL FUTURE DRILLING: LITHP

7.1 Return to 735B, Atlantis II FZ (300-rev) (Srivastava)

[SSP member von Herzen and SSP liaison Dick are proponents of this proposal]

This proposal proposes deepening the existing hole 735B on the Atlantis II Fracture Zone, and also drilling a transect of shallow holes east and west of the existing hole.

At our April 1993 meeting we were concerned about the lack of regional geological and geophysical information which exists in the vicinity of the proposed drill sites to ensure that the scientific objectives of this proposal can be successfully accomplished. SSP has now learnt from the proponents that a submission has been made to NSF for funding for a cruise to be undertaken in 1994 where a deep-towed sidescan sonar, magnetometer and ROV (remotely operated vehicle) survey over the region together with some dredging is to be carried out. Such a program would indeed supply the much needed information for locating the shallow sites C,D,E,F in this region.

SSP realizes that a case can be made for deepening the existing 735B hole without additional site survey work. However, considering the problems which have been encountered to date in deepening basement holes on other ODP legs, SSP would not favor bringing the ship to this remote area until the data are in hand to document shallow sites C,D,E and F as alternates. In addition, SSP notes that a near bottom seismic refraction experiment before deepening 735B could provide valuable information about vertical variability in the rock types, about the depth to Moho, and about the extent and dip of the postulated shear zones.

No data package has been submitted explicitly for proposal 300, and the data package left over from Leg 118 is incomplete. SSP urges proponents to deposit all existing data with the data bank as soon as possible. Matrices detailing the site survey status of this proposal are included in the appendix.

SSP Consensus #15: SSP supports the proponents' plans for collection of deep-towed sidescan sonar, magnetometer and ROV data before drilling a transect of shallow sites east and west of site 735B. SSP also feels that a near bottom seismic refraction experiment would be valuable before deepening 735B (or one of the other sites in the shallow transect.)

7.2 NARM volcanic II (NARM) (Trehu)

[SSP members Srivastava and Hinz are proponents for NARM]

Based on LITHP discussions at their March, 1993, meeting, we considered two alternate scenarios for a second NARM volcanic margins drilling leg. Scenario I consisted of completing the EG63 transect (on the assumption that it was not completed during leg 152) followed by drilling of the proposed EG66 holes. Scenario II consisted of the three proposed Voring margin sites. The two scenarios have been classified separately in the summary table of Appendix A.

Scenario I: The data packages for the EG63 sites discussed in the Detailed Planning Group report are complete, with the caveat that we urge the proponents to acquire 3.5 kHz data over the proposed sites in order to better address the paleoceanographic objectives (see discussion of leg 152). Data for the two additional EG63 sites proposed in the July, 1993, addendum (NARM-Add2) appear to exist, but have not yet been submitted to the data bank. For the EG66 sites, the only data presently in the data bank are the regional magnetic data. We urge the proponents to assemble the rest of the required data as soon as possible, including existing multichannel lines and high resolution multichannel and 3.5 kHz data that are to be collected during September, 1993. Short cores to characterize the seafloor at EG66-1, similar to those provided for EG63-1, would also be advisable.

Scenario II: Much of the data for the Voring margin holes is currently in the Data Bank file for leg 104. No new data have been submitted for this proposal, except for a reprint from the ODP results volume on leg 104. Proposed site VM-3 is coincident with a previously proposed site, and the data file for leg 104 is complete, including crossing seismic profiles. VM-6 is located along NH-1, which is in the data bank file for leg 104. VM-5 is a new site, and the MCS profile along which it is located (C167) is not in the data bank (although it is probably somewhere at Lamont and should be easily provided). In addition, there are no crossing lines for either site VM-5 or VM-6, and track line maps in the leg 104 data file do not indicate any suitable crossing lines. SSP is not aware of any plans to collect additional seismic data in the region. Crossing seismic lines, or a grid of seismic lines, are generally required in this type of complicated structural environment for reasons related both to safety considerations and to the tectonic objectives of the drilling. In the absence of crossing seismic lines or a grid of seismic lines, SSP will consider arguments that off-line structure in the vicinity of a proposed site can be adequately inferred from other types of available data. The proponents have not presented such a case for VM-5 or VM-6. Based on the data available, we are especially concerned about site VM-6 because it is located on an unmigrated seismic profile on which basement is poorly resolved, and reaching basement is a major objective of drilling.

SSP consensus #16: SSP considered two possible scenarios for a NARM-V-II drilling leg. The first scenario was a return to EG63 to complete the transect, followed by drilling of the EG66 sites. All required site survey data seem to exist for the EG63 sites, although the data for possible additional EG63 sites discussed in NARM-Add2 have not yet been deposited. No data for the EG66 site have yet been submitted, but data acquisition could be complete by October, 1993. The second scenario was a return to the Voring margin. For the second scenario, most of the required data are presently in the data bank file for leg 104. Several critical items, however, are lacking, and we do not know of any plans to fulfill all requirements in the near future.

7.3 Red Sea (086-rev2) (Scrutton)

[no SSP members are proponents for Red Sea drilling]

There is no change to the site survey readiness of the Red Sea proposal since the April meeting. The data availability in the Data Bank appears to be essentially the data assembled for the abortive 1986 Red Sea drilling leg. Sites 1a, 1b, 1c in the oceanic parts of the southern Red Sea have a good deal of older data existing or in the Data Bank that could be assembled into site survey packages. Sites 2 and 3, located off axis in the central Red Sea with the objective of sampling rifted continental crust and upper mantle, appear to have very little supporting data. It is our understanding that a potentially-valuable site survey cruise, mentioned in the proposal and originally scheduled for 1993, will not take place. It is therefore difficult to see how a complete site survey data package can be assembled, although a combination of existing older data may be sufficient for oceanic crustal sites.

SSP Consensus #17: It is possible that an adequate data package for proposed sites RS-1a, RS-1b, and RS-1c in the Red Sea could be assembled from existing older data. But with no known plans to collect new data, it is difficult to see how proposed sites RS-2 and RS-3 could be supported by site-survey data in the near future.

7.4 Sedimented Ridges II (SR-DPG) (Hinz)

[no SSP members are proponents for Sed Ridges II]

Proposal SR-rev2 presents a revised drilling strategy for a second leg of drilling on the Middle Valley area of the northern Juan de Fuca Ridge and the Escabana Trough on the southern Gorda Ridge, based on results of Leg 139. Three sites have been defined in the revised drilling strategy: four holes will be drilled through and adjacent to the Bent Hill massive sulfide deposit, including temperature measurements and fluid sampling at Site 857D; three short holes are in the area of the Dead Dog vent field; and four holes will be drilled in the NESCA area of the Escanaba Trough at on axis intrusive/extrusive volcanic edifices.

Most of the vital site survey data for Sedimented Ridges II remains in the Data Bank in the package prepared for Leg 139. Additional cruises with ROV and ALVIN are planned for Middle Valley in 1993. A USGS cruise in the proposed NESCA drilling area is planned for 1993 to acquire detailed side-looking sonar data, swath bathymetry, and 4.5kHz subbottom profiles. These cruises will strengthen the data package; data in the vicinity of the proposed drillsites collected on these new cruises should be submitted to the Data Bank as it becomes available.

Some SSP members were dismayed at how poorly constrained the size and in particular the thickness (>100; <600m) of the massive sulfide deposit is, especially in light of the possibility that drilling in a thick sulfide section might have to terminate prematurely if the column of cuttings becomes too heavy to clear with the Resolution's limited mud circulation. SSP recognizes the difficulty of measuring the thickness of the sulfide body with conventional technologies, but encourages the proponents to explore alternative strategies, including EM measurements and near-bottom magnetometer measurements/modeling, to constrain the thickness of this body prior to drilling.

SSP Consensus #18: Most necessary sites survey data for Sedimented Ridges II remains in the Data Bank in the package prepared for Leg 139. Submersible, ROV, side-looking sonar, swath bathymetry and 4.5 kHz subbottom profiling data scheduled for acquisition in 1993 will strengthen the data package.

8. POTENTIAL FUTURE DRILLING: OHP

8.1 North Atlantic Arctic Gateways II (Hinz)

[no SSP members are proponents for NAAG]

Seismic data sets for sites ICEP-2, -3, and -4, and for sites SIFR and NIFR, were requested by SSP following our April meeting; these have been submitted to the Data Bank. This completes the data package for NAAG-I (Leg 151).

Recognizing that far more than one leg's worth of sites were prepared for NAAG I (Leg 151), and that a large amount of data exists in the general area of NAAG interest, we sense that it would be possible to assemble a second leg's worth of adequately-documented NAAG sites from existing data. However, we cannot do a site by site evaluation until after the results of Leg 151 have been digested by the community and incorporated into a detailed NAAG II drilling plan. The Ocean History Panel is intending to hold a planning session on 4 Oct 1993 in Bremen to prioritize a drilling plan for NAAGII, taking into consideration the results of Leg 151, the NAAG-DPG report, and potential sites from other proposals. The proponents are reminded that if the October planning meeting supports sites for NAAG II drilling that were not prepared for Leg 151, data in support of those sites will need to be submitted to the Data Bank by November 1, to allow evaluation by SSP prior to PCOM's end of the year scheduling meeting.

SSP Consensus #19: Recognizing that far more than one leg's worth of sites were prepared for NAAG I (Leg 151), and that a large amount of data exists in the general area of NAAG interest, SSP anticipates that it would be possible to assemble a full leg of adequately-documented NAAG II sites from existing data.

8.2 Benguela Current (354rev, 354add, 354add2) (Farre)

[no SSP members are proponents for Benguela Current]

Neogene history of the Benguela Current and coastal upwelling off Angola-Namibia west Africa are the subjects of this proposal. Eleven sites in 6 transects, with an average penetration of 500m are proposed. All sites are being judged as paleoenvironmental (Target A) by SSP.

The data package remains incomplete. In addition to the usual Target A datasets, SSP is requiring crossing high-resolution seismic and 3.5 kHz (or Parasound) profiles to identify sites unaffected by Neogene mass wasting. Since the SSP meeting in Trieste (April '93), proponents have submitted a partial data set of high-quality data to the Data Bank. High-resolution seismic data for the 3 northern transects were deposited, as were samples of Parasound profiles. The proponents note that further processing of the recently-collected seismic data will be completed over the next 3-4 months. None of the required core data nor any data to support the southernmost drilling sites have been deposited.

The proponents state that they plan to submit a revised proposal for consideration by the Ocean History panel in October '93. Their June '93 addendum (354-add2) is a description of recently acquired data in the northern three transects, with lat/long of newly proposed site locations. Drill depths, priorities, and site objectives are not provided in the June '93 addendum. No mention is made of the southern transects. The proposal as ranked by the spring thematic panels and the existing data package are not well matched. SSP requires the revised proposal and the additional data to properly evaluate this proposal.

In addition to the need for crossing seismic and Parasound profiles, and core data, SSP urges the Proponents to supply seismic data up to near the shelf-break, in order to place the drilling locations in regional context and identify up-dip areas affected by mass wasting (especially needed in the 17°S area).

SSP Consensus #20: A significant volume of data was recently deposited in the Data Bank in support of Benguela Current (354-rev - add -add2), but the package remains incomplete. Adequate 3.5 kHz (or Parasound) profiles and core data are missing for the northern 3 transects, as are all data to support the southern drilling sites. The proponents plan to submit a revised proposal based on newly collected data. The existing proposal as ranked by the spring thematic panels and the existing data package are not sufficiently well matched for SSP to evaluate.

8.3 California Margin (386-Rev2/422-Rev) (Camerlenghi)

[no SSP members are proponents for California margin]

Proponents of former proposals 386/rev2 and 422/rev2 have combined the two drilling programs into a one leg program. The result is a 20 site drilling proposal. A substantial site survey data package has been submitted before the July 1 data deadline.

According to the SSP guidelines for submission of data under the target type "A: paleoenvironment," the following data will be considered vital for drilling: a high resolution single channel seismic line, 3.5kHz profile, and core log. Crossing seismic lines will be necessary if there is reason to anticipate three-dimensional variations in structure or depositional pattern. Four sites located at waterdepth shallower than 1000m could provide concerns for presence of shallow gas. For these sites, additional 3.5kHz profiles, high quality high resolution seismics, and side looking sonar data could be valuable.

The data package as it stands is not ready for scheduling . Datatype-by-datatype evaluations of each site are shown on the SSP matrices in the Appendix. There is a consistent lack of 3.5kHz and coring data in the present package. In addition, some of the seismic lines submitted are of poor quality. However, SSP notes that this is a very data-rich field area, and suspects that the proponents have not yet exhausted all available data sources. Thus we conclude that it might be possible for the proponents to complete their data package from existing data prior to November 1, 1993.

In this field area close inshore to a densely populated region, the proponents should be attentive to the need to avoid submarine cables, pipelines, dump sites, and shipping lanes.

SSP Consensus #21: SSP acknowledges the effort put forward by the proponents of two California Margin drilling proposals (386/422) into merging the programs and in the submission of a substantial data package. Although major items of data are still missing from the package, it seems possible that in this data-rich field area, the gaps could be filled from existing data.

8.4 NW Atlantic Sediment Drifts: Bermuda Rise/Blake Bahama Outer Ridge (404) (Mountain)

[no SSP members are proponents for NW Atlantic Sediment Drifts]

Proponent Keigwin deposited background data in June, 1993, containing page-size ship tracks across the Blake Ridge and the northern Bermuda Rise, plus photographs of SCS and 3.5 kHz data from the latter region. Regarding the Bermuda Rise site: the seismic data is sparse and of marginal quality, and located thus far by page-size reproductions of hand-drawn bridge plots; the proponents have not yet plotted proposed site BR-1 on a map and discussed it in context with the available data. SSP encourages them to do so and awaits a complete data package. Reference was made in a letter from

Keigwin that additional data may be available from a 1989 cruise of the R/V Hudson; SSP urges that these data be located and incorporated in the data bank deposit.

Regarding the Blake-Bahama Outer Ridge sites: a survey cruise to the Blake Ridge is scheduled on the Knorr for Nov. '93. Large-diameter piston cores will be collected at about every 100 m increase in water depth along a depth transect from 2000 m to 4500 m. The proponents plan no SCS acquisition; however they will acquire digital 3.5kHz data. These 3.5kHz data will be crucial both to interpreting the piston core data and to locating optimal ODP sites. The proponents are asked to submit a cruise report with accompanying ship track and representative data to the Data Bank at their earliest convenience.

SSP Consensus #22: The proponents for NW Atlantic Sediment Drifts (Bermuda Rise/Blake-Bahama Outer Ridge) drilling are strongly encouraged to continue their search for good-quality SCS and 3.5 kHz data in the Bermuda Rise area; these are vital data types for paleoceanographic drilling targets. These data and the proposed drill site must be located on a track chart at a working scale. A transect of piston cores and digitally recorded 3.5kHz data will be collected along Blake Ridge in Nov. 1993, which will be helpful for sites BBOR-1 through -8.

8.5 South Florida Margin (427) (Farre)

[no SSP members are proponents for South Florida margin]

The purpose of the South Florida Margin program is to test the concept and application of seismic sequence stratigraphy, determine the magnitude and rates of late Quaternary sea level fluctuation, understand the growth pattern of a carbonate margin, and determine the influence and importance of currents on the stratigraphic record.

All sites are being judged as paleoenvironmental (Target A) by SSP. In addition to the normal requirements, SSP is requiring crossing high-resolution seismic and 3.5 kHz profiles in order to adequately place the drilling results in 3-D context. A data package was submitted to the Data Bank since the April SSP meeting. The seismic lines are of exceptionally high quality, but the data package is not complete. The proponents recognize the need to collect additional data and are planning to submit a proposal to NSF in November '93 for collection of additional geophysical and core data. Similarly, they plan to submit a fully-revised proposal to ODP by Spring 1994, at the earliest.

As 14 of the 17 proposed sites lie in water depths shallower than 200 meters, this proposal will have to satisfy new guidelines for shallow-water drilling being developed by PPSP (expected to be finalized and distributed in October '93). Proponents need to continue their effort identifying current intensity and variability for the shallow sites. The Diamond Coring System is desired for the shallowest 9 sites.

SSP Consensus #23: An incomplete data package was recently submitted to the Data Bank for the South Florida margin (proposal 427). The proponents recognize the need to collect additional data and plan to submit a data acquisition proposal to NSF in November '93. It is unlikely that a complete data package will be available by YE'94. As 14 of the 17 proposed sites lie in water depths shallower than 200 meters, the data package will have to satisfy guidelines for shallow-water drilling being developed by PPSP.

9. OTHER BUSINESS

9.1 Draft site survey guidelines for shallow water sites (Ball)

PPSP Chair Mahlon Ball circulated a draft set of guidelines for shallow water (<200m) drilling. In general, there was little objection to the details of the plan, which is modelled on the hazards surveys done by oil companies. This document can be circulated for comment to interested members of the ODP community.

Much of the discussion that followed had to do with the timing and funding mechanisms for the required high resolution MCS work. SSP members from all countries indicated that their science funding structure would have trouble funding a cruise to gather data for strictly operational (safety) rather than scientific goals. There was some sense therefore that these operational data acquisition cruises should be funded out of operational funds (comingled funds) rather than a member country's science money (however, everyone recognized the precarious state of ODP finances at the moment).

SSP anticipates that a kind of "provisional scheduling" may be needed to cope with the timing of these new surveys. In this scheme, when a proposal is highly ranked thematically, and has satisfied all of the science data requirements, it would be offered a provisional slot on the schedule two years hence (rather than the usual one year advance planning), contingent upon the collection and favorable analysis of the shallow water hazards data set. Without that level of commitment from ODP, it is hard to see how the money could be found for the special-purpose hazard survey. But on the other hand, the leg cannot be conclusively scheduled until the hazards data are in hand.

Action Item #7: SSP members to circulate draft guidelines to knowledgeable people in their institutions or countries for comment. Comments to be forwarded to PPSP Chair

9.2 Feedback to proponents (Kastens)

For scheduled legs where new data was received, or data is still missing, or new sites have been discussed, the watchdog should write to the lead proponent and inform him/her of the sense of the SSP discussion. For scheduled legs where there was no change in data status and no missing data and no substantive issues raised, it is not necessary to contact proponents.

For all highly-ranked but unscheduled proposals, watchdogs should inform the proponents about the outcome of the SSP meeting. Feedback from the watchdogs to the proponents should include: (a) the name and contact information of the watchdog, (b) a copy of the section of the minutes dealing with the proposal, and (c) copies of the SSP worksheet matrices (if the proposal was sufficiently mature to enable the watchdog to fill out matrices.) Proponents of proposals that made it into the FY'95 drilling prospectus should be told of the November 1 deadline for data to arrive at the Data Bank in order to be evaluated by SSP before PCOM's end-of-the-year scheduling meeting. Proponents of proposals that were not included in the FY'95 drilling prospectus should be urged to keep in close contact with the Chair of the relevant thematic panel, because it is still possible for a Thematic Panel to rank a non-prospectus proposal highly in their fall rankings.

Following our discussion of Leg 150, proponents of all programs (scheduled or proposed) offshore of densely-populated regions should be warned to investigate man-made seafloor hazards (dump sites, submarine cables) before finalizing their site locations.

Copies of all watchdog letters should also be forwarded to the ODP Data Bank.

Action Item #8: JOIDES Office liaison Bill Collins to notify SSP members by email of which programs were put in the FY'95 Prospectus at the August PCOM meeting.

Action Item #9: Each watchdog will write a letter to the lead proponent of each proposal discussed at the July SSP meeting, enclosing the relevant section of the SSP minutes, plus copies of the completed SSP matrices (if applicable). A copy of these letters will be sent to the ODP Data Bank.

9.3 Panel membership (Kastens)

Dick von Herzen is rotating off the SSP after this meeting, and, in addition, there may be a change in one non-U.S. panel member in the near future. SSP discussed the need for two sorts of expertise. The first would be a hard-rock petrologist with seagoing survey experience to provide expertise on barerock drilling field areas, including offset drilling sites. The second would be an expert on seafloor sediment transport processes, or on the interaction between tectonics and sedimentation processes. Since we don't really need to have a new member until the April 1994 meeting (no new watchdogs will be needed until then), we decided to try to fill one expertise-gap with the non-U.S. member, and then propose U.S. names to fill the other expertise-gap at the November SSP meeting.

Action Item #10: Kastens to discuss membership needs with PCOM chair Brian Lewis, and try to fill one of two underrepresented disciplines with an incoming non-US member.

9.4 Next meeting (Kastens)

The next meeting needs to be well after the November 1 data deadline for prospectus proposals, and well before the PCOM annual meeting (beginning November 30). The charge for that meeting will be to advise PCOM on the site survey readiness of programs that are in the FY'95 prospectus, plus any programs that were very highly ranked by a thematic panel in their fall '93 meetings. We will also, as usual, review the site survey implications of scheduled legs and recently completed legs.

Action Item #11: Kastens to poll absent SSP members, select a mid-November date, and request permission to have a meeting.

9.5 Other business (Kastens)

Acting Data Bank manager Greg Mountain pointed out that the seismic and3.5kHz data collected by the Resolution are not part of the Data Bank's collection. SSP thought they should be, especially in light of the increasing number of legs that return to a previous drill site .

Action Item #12: Data Bank managers Mountain/Quoidbach to attempt to obtain copies of underway data collected aboard the Resolution for the Data Bank.

FINAL
(November 3, 1993)

JOIDES SITE SURVEY PANEL

APPENDICES & MATRICES

JULY 28-30, 1993
Lamont-Doherty Earth Observatory
Palisades, NY, U.S.A.

Appendix A

STATUS OF SITE SURVEY DATA FOR HIGHLY RANKED PROPOSALS

SITE SURVEY PANEL JULY 1993

Presently Viable for FY 95		Require Major Efforts, But Could Be Viable for FY 95		Site Survey Data Package in Databank is Insufficient and Unlikely to be Ready in Time for FY95 Scheduling			
1A	1B	2A	2B	3A	3B	3C	3D
all required data are in data bank	minor items are not in the data bank, but are believed to exist	major items are not in the data bank, but are thought to exist	major items are not in the data bank and are thought not exist; surveys expected to be completed by Nov 1993	major items are not in the data bank and are thought not exist; surveys could be completed by the end of 1994	major items are not in the data bank and are thought not exist; surveys not expected to be completed by the end of 1994	Proposals not considered because no data at all has been received at the Databank	New Data does not match present proposal; awaiting updated proposal
**NARM-DPG IAP II	SRII Sed. Ridges II	*NAAG-DPG NAAG II	391-Rev. Med. Sapropels	300-Rev Rtn. 735B	086-Rev2 Red Sea	412-Add Bahamas Trans.	380-Rev3 VICAP portion
380-Rev3 MAP portion	323-Rev3 Alboran Sea	386/422 California Curr.	330-Rev Med. Ridges	404---- NW Atl. Seds.	NARM-DPG Vør.	430---- Sub-Sat	354-Add Bengula Current
	346-Rev3 Equ. Atl. trans	423---- Gas Hydrate	***NARM-DPG EG63 and EG66	****400-Rev Costa Rica AW	427---- S Florida Marg.	415-Rev Caribbean KT	

* Refers to program as outlined in original DPG Report

** Refers to program as ranked by Tectonics Panel March 1993

*** Refers to program as ranked by Lithosphere Panel March 1993

**** Refers to latest update with enhanced fluid objectives

Appendix B
SSP Watchdog Assignments
Scheduled Legs

Leg		Prop.	October 1991 (ORI, Tokyo)	April 1992 (LDGO)	August 1992 (LDGO)	April 1993 (Trieste)	July 1993 (Lamont)
145	North Pacific transect		Larsen	Larsen	not discussed		not needed
146	Cascadia Margin		Louden	Louden	not discussed	Camerlenghi	not needed
147	Hess Deep		Firth	Brenner	Kastens /Brenner	defer discussion until July	von Herzen
148	Hole 504B		Firth	not discussed	not discussed	not discussed	----
149	Iberia Abyssal Plain Deep Hole	NARM-NV I	all NARM discussed by Lewis	Mountain	Mountain	Mountain	Mountain
150	New Jersey Margin sea level		Kastens	Kastens	Kastens	Kastens	Kastens /Mountain
151	North Atlantic Arctic Gateway	NAAG-I	Larsen	Larsen	Larsen	Hinz	----
152	East Greenland Margin	NARM-V I	all NARM discussed by Lewis	Mountain	Trehu	Mountain	Trehu
153	MARK Lithosphere	369-Rev2	Hirata	Hirata	Trehu	Shirohara	Trehu
154	Ceara Rise	388 Add	Meyer	Hinz	Kidd	Kidd	Srivastava
155	Amazon Fan	405-Rev	not submitted	Kidd	Kidd	Kidd	data set complete
156	N. Barbados Ridge	414-Rev	not submitted	Trehu	Trehu	Camerlenghi	Camerlenghi
157	DCS Engineering (Vema FZ: VE3)	376-Rev2	Hirata	Hirata	Kastens	Kastens	Kastens /Toomey
158	TAG Hydrothermal System	361-Rev2	Louden	Louden	Moore	Moore	Toomey

Appendix B (cont)

SSP Watchdogs
Highly-ranked Unscheduled Proposals

GR 1993	*Title*	*Prop.*	*October 1991 (ORI, Tokyo)*	*April 1992 (LDGO)*	*August 1992 (LDGO)*	*April 1993 (Trieste)*	*July 1993 (Lamont)*
L-4	Red Sea	086-rev	not highly ranked	not highly ranked	not highly ranked	Scrutton	Scrutton
L-2	Return to 735B (Atlantis II FZ)	300-rev	---	---	---	Srivastava	Srivastava
T-1	Alboran Basin	323-Rev2	Kastens	Kastens	Kastens	Kastens	Kastens
T-4	Mediterranean Ridge	330-Rev	Farre	Farre	Farre	Farre	Farre
T-5	N. Australian margin	340-rev	not yet submitted	not yet submitted	not yet submitted	Scrutton	not discussed: out of geo-graphic area
T-2 (tie)	Equatorial Atlantic Transform	346-Rev3	Pautot	Pautot	Camerlenghi	Camerlenghi & Sibuet	Sibuet
O-3	Benguela Current	354-Rev, 354-Add	not discussed	Farre	Farre	Farre	Farre
S-5	VICAP-MAP	380-Rev3	von Herzen	Farre discussed MAP only	Farre	Farre	Scrutton
O-5	California Margin	386-Rev, 422-Rev	not highly ranked	Kidd	Kidd	Kidd	Camerlenghi
S-4 O-8	Mediterranean sapropels	391-Rev	Kidd	Kidd	Kidd	Kidd	Kastens
T-6, S-6	Costa Rica acc. wedge	400, 400-Rev	not yet submitted	Moore	Moore	Moore	Camerlenghi
L-12, O-4	K-T boundary, Gulf of Mex, Caribbean	403-R2, 415-Rev	not yet submitted	Mountain	Mountain	Mountain	not discussed: no data package
O-6	NW Atlantic drifts (Bermuda/Blake Bahama)	404	not yet submitted	Mountain	Mountain	Mountain	Mountain
O-13	North Atlantic Climatic variability	406	proposal not yet submitted	Larsen	Kidd	not discussed: ranked too low	not discussed: ranked too low
S-3	Bahamas Transect (sea level & fluid)	412-Add	proposal not yet submitted	proposal not yet submitted	proposal not yet submitted	Sibuet	not discussed: no data package
L-1	Evolution of oceanic crust	420	proposal not yet submitted	proposal not yet submitted	proposal not yet submitted	Srivastava	not discussed: out of geo-graphic area
S-1	Gas Hydrate, Blake Ridge & Carolina Rise	423-rev	proposal not yet submitted	proposal not yet submitted	proposal not yet submitted	Mountain	Camerlenghi
O-7	South Florida Margin sealevel	427	proposal not yet submitted	proposal not yet submitted	proposal not yet submitted	Farre	Farre
O-2	Sub-Antactic SE Atlantic transect	430	proposal not yet submitted	proposal not yet submitted	proposal not yet submitted	Camerlenghi	not discussed: no data package

Appendix B (cont)

-----	Hess Deep II	generic	proposal not yet submitted	Hess I discussed by Kastens	Kastens	not ranked, do not discuss	not discussed: ranked too low
O-1	North Atlantic Arctic Gateways II	NAAG	Larsen	Larsen	Larsen	Hinz	Hinz
T-11	Non-volcanic margins II (NARM/ Newfoundland)	NARM-NV	all NARM discussed by Lewis	Mountain discussed Newfoundland	Mountain	too low, do not discuss	not discussed: ranked too low
T-2	NARM non-volcanic (Iberian margin II)	NARM-NV	all NARM discussed by Lewis	Mountain discussed all Iberia sites	Iberia I discussed by Mountain	Mountain	Mountain
L-3, T-7	NARM volcanic margin II (East Greenland con't & maybe Voring Plateau)	NARM-V	all NARM discussed by Lewis	Trehu discussed Voring & E. Greenland	Trehu discussed Voring & E. Greenland	Scrutton	Trehu
L-4, S-7	Sedimented Ridges II	SR-DPG	not discussed	Louden	Watkins	Hinz	Hinz
GR 1993	***Title***	***Prop.***	***October 1991 (ORI, Tokyo)***	***April 1992 (LDGO)***	***August 1992 (LDGO)***	***April 1993 (Trieste)***	***July 1993 (Lamont)***

Appendix C
Data received by the Data Bank between April lst, and July 31st, 1993

-From ODP (TAMU): Legs 139, 140, 141 and 142 microfilm, MGD 77 tape and info. report.

-From A. Camerlenghi (Osservatorio Geofisico Sperimentale): two seismic profiles (monitor of MCS), R.V. Explora, for Vema Fracture Zone.

-From ODP Data Bank: two computer plots of Lamont, Challenger and Resolution data for Medsap.

-From T. Watts (Oxford University: reprint on Alboran from Geo-Marine Letters.

-From C.A. Williams (Cambridge U.): Geophysical Data Report of the Eastern Mediterranean Sea. RSS SHACKLETON cruises 3/72, 5/72, 1/74. For Med. Ridge.

-From G. Mountain (LDEO): navigation plot; 3.5 and SCS lines from EWING cruise 9009; EXXON MCS line 77-8; seabeam from ATLANTIS II cruise 120. Positions of oil wells and test wells drilled on the New Jersey Margin area. Also, navigation for East Coast USGS MCS lines 18 through 38. For New Jersey Margin.

-From J. Baldauf (ODP TAMU): Site Summary: 897 Leg 149.

-From K. Hinz (BGR): SONNE SO81/3 cruise report. Hess Deep - 1992. Also, EXPLORA BGR Line 79-201 for New Jersey Margin.

-From H.B. Hirschleber (U. Hamburg): list of latitude/longitude citations for Meteor 16.4 (beginning, ends and crossings only). For VICAP-MAP.

-From USGS, Woods Hole: navigation data for BGR line 201. For New Jersey Margin area.

-From J. Woodside (Free University, Amsterdam): navigation for several SHACKLETON cruises (for seismics in East Mediterrenean bound report).

-D. Kempler (The Hebrew University of Jerusalem): copy of contoured bathymetry map from Udintsev & Krashenninikov for Eratosthenes Seamount in Med. Ridge area.

-From Mitch Lyle (Boise State University): site and line location on NOAA seabeam bathymetry maps; SCS and MCS profiles from Lee cruise L4-90, Farnella cruise F3-84 and others and selected data in support of JOIDES proposals 386/Rev2 and 422/Rev, "Ocean Drilling in the California Margin and Southern California Borderland".

-From W. Hieke (Technische Universitat Munchen): copies of 11 high resolution SCS lines Valdivia cruise no. 120 (MEDRAC) and page-size navigation. Med. Ridge area, proposal 330.

-From M. Cannat (Universite Pierre et Marie Curie): PAL video tape with a selection of NAUTILE dives images from the Faranaut cruise, relevant to the proposed drilling sites 1A and 1B (Mid-Atlantic Ridge area, proposal 425).

-From H. Bougault (IFREMER): three bathymetry maps related to ODP proposal 425 "Drilling the lower crust and upper mantle at 15 N, Mid-Atlantic Ridge".

Appendix C
Data received by the Data Bank between April lst, and July 31st, 1993

-From G. Wefer (Universitat Bremen): a seismic data report on the ODP site survey cruise (RV SONNE SO-86) with attached page-size seismics for proposal 354. Angola/Namibia area.

-From A. Camerlenghi (Osservatorio Geofisico Sperimentale): for ODP proposal 330-Rev (Mediterranean Ridge): position maps of all the site survey data available; 3.5 kHz records of Ban-91 lines 8 to 16, and Ban-89a lines 3 to 7 and 14; core logs and location of BAN-84, BAN-86, MD-69, BAN-88, BAN-89, and BAN-84; navigation map of PRISMED cruise of R/V NADIR that collected MCS lines on the Katia transect area; heat flow data and a paper describing the lithology and significance of the BAN-84 cores.

-From W.B. Curry (WHOI): core data for inclusion in the JOIDES proposal 388 - Leg 154 data sets (Ceara Rise).

-From L. Keigwin (WHOI): copies of navigation and SCS lines and one section of 3.5 kHz record from R/V KNORR 31 in support of JOIDES proposal #404, "NW Atlantic Sediment Drifts: Bermuda Rise/Blake Bahama Outer Ridge". Also a 3.5 kHz record

-From R. Flood (SUNY): in support of ODP proposal 404: plots showing locations of ship tracks on the Blake/Bahama Outer Ridge where there is GLORIA data; locations of ship tracks where LDEO collected seismic profiles and 3.5 kHz profiles and bathymetric map.

-From S.D. Locker (USF): in support of JOIDES proposal 427, South Florida Margin, navigation and SCS sections. Eleven lines are digital records collected in 1992 aboard the R/V BELLOWS. One blueline copy is an analog graphic recording from the R/V SUNCOASTER in 1990.

-From K. Sloth (Geological Survey of Denmark): twenty six MCS profiles from the Geological Survey of Greenland and the Geological Institute at the University of Aarhus, cruise GGU/EG92. In support of proposal 393, NARM, East Greenland.

-From R. Rihm (GEOMAR): bathymetry, navigation and location maps; list of MCS profiles obtained during METEOR cruise nr. 24; MCS, SCS and Parasound profiles, from METEOR 24. and selected data in support of JOIDES proposal 380-R3, VICAP-MAP.

-From C.K. Paull (The University of North Carolina at Chapel Hill): lists of piston core sites and lengths and heat flow measurements made on the Carolina Continental Rise and Blake Ridge; 26 MCS profiles (various processes) and map of CDP lines in support of ODP proposal 423-Rev entitled "Gas Hydrate Sampling on the Blake Ridge and Carolina Rise: A Proposal to the Ocean Drilling Program"

-From S.B. Marstal (Geological Institute, Aarhus Universitet): seismic sections from cruise METEOR 24; two shotpoint maps, one with all high-resolution reflection seismic profiles from the cruise and one with profiles processed in Aarhus with proposed drilling sites plotted re VICAP-MAP drilling proposal 380-Rev3.

-From K. Kastens and E. Bonatti, (LDEO): Vema Fracture Zone 3.5 kHz data, navigation and bathymetry.

-From K. Kastens (LDEO): 3.5 kHz data for Med. Ridge; proposal 330.

-From E. Weigelt (Alfred-Wegener-Institute fur Polar-und Meeresforschung):

page-size navigation plot and listings and AW1911 lines for Leg 151.

-From R. Zahn (GEOMAR): for Med. Sap. and Med. Ridge: SCS tracks, MCS tracks, bathymetric map of Eratosthenes Seamount; R/V Tyro cruise report, SCS lines SC-1-SC-6 (Sicily Channel/Gela Bank); navigation, 3.5 kHz and airgun profiles along lines MR-1 through MR-6 (Menorca Rise); navigation, 3.5 kHz, sparker and echosounder profiles and location map plus core logs of various Bannock cores. Copy of the Initial Report for Site 116 (Hatton-Rockall Basin); proposals 330, 391-R and 372.

-From A. Myhre (University of Oslo) and C. Marcussen (The Geological Survey of Greenland): navigation plot for EGM site and navigation listings for Leg 151.

-From J. Thiede (GEOMAR): MCS profiles for NAAG, North and South Iceland Faroe Ridge - Leg 151.

-From M. Hansen (The Geological Survey of Greenland): copy of GGU seismic line GGU/80-13 and location map for Leg 151.

-From G. Mountain (LDEO): Core data and 34 SCS profiles of lines from Ewing 9202 cruise (Ceara Rise area); proposal 388-R.

-From C. Marcussen (Geological Survey of Greenland): navigation: Lines BGR 75-14, BGR/NGT 39, 42 and 36 and Lines GGU 80-13, 82-12 and 82-13.

-From A. Droxler (Rice University): various SCS profiles for Northern Nicaragua Rise; proposal 408-R.

-From Geological Survey of Greenland: navigation plot for NGT lines - Leg 151.

-From R. Kidd (University of Wales): navigation, P.D.R. echosounder, OKEAN sidescan, MCS and SCS profiles for various lines from cruise UN93L; 3.5 kHz and SCS sparker for Line BAN 89 for Med. Ridge (Eratosthenes Seamount) and Med. Sap. (MEDSAP 2B site) areas; proposals 330, 391-R.

-From Charles Paull (University of North Carolina, Chapel Hill): navigation, heat flow and core data, MCS and SCS profiles for Blake Ridge/ Carolina Rise/ Gas Hydrates; proposals 423, 404.

-From M. Comas (Instituto Andaluz de Geologia Mediterranea): MCS lines regarding the deep hole at the new proposed Site Alb-1 and alternate Site Alb-1A, as well as basement depth contour maps, bathymetry and navigation for Alboran, proposal 323-R.

-From K. Hinz (BGR): navigation, MCS profile of Line BGR-31 and a report regarding NAAG, Norwegian Greenland Sea, Jan Mayen, proposal 320.

SSP Agenda Item 4.2

ODP Site Survey Worksheet: Barerock Drilling

Proposal name: MARK lithosphere	Proposal #: 369-Rev2
Site: MK-1 (gabbro section)	Proposed total depth (m): 1000
Area: mid-Atlantic Ridge	Proposed sed. penetration (m): 0
Lat/Long: 23° 34'N, 45°02'W	Proposed basement penetration: (m): 1000
Water depth: 2500m	APC/XCB/RCB/re-entry? RCB; re-entry
Who filled out worksheet? original X. Golovchenko. Second revision: A. Trehu	Date of worksheet: original Nov 16, 1992; second revision July 29, 1993

This site has been assessed under the Site Survey guidelines for Target Type "F", defined as "Barerock drilling, e.g. ridge crest" See Joides Journal, vol.18, Feb 1992, p.31-33 for more information.

	DATA TYPE	REQUIREMENT	STATUS OF DATA	OK?
1	Deep penetration SCS		None	OK
2	High resolution SCS	vital	None	
3	MCS &Seismic velocity determination	Desirable, but may be required in some cases	MCS lines and navigation in Data Bank	OK
4	Grid of intersecting seismic lines	Desirable	Grid of MCS lines and navigation in Data Bank	OK
5	Refraction	Desirable, but may be required in some cases	Page-size location map (but no data) in Data Bank Request annotated reprints	
6	3.5 or 12 kHz echosounder	vital	None in Data Bank; some data might be available from WHOI. Not needed. (see comment below)	
7	Swath bathymetry	vital	ODP Legs 106/109 maps	OK
8	Side-looking sonar	Desirable, but may be required in some cases	Sea Marc (Leg 106 data; ~3km away); Scripps deep tow track (but no data) in Data Bank Preliminary digital images of recent survey in Data Bank	OK
9	Photography or Video	vital	Annotated Alvin track chart in Data Bank. "representative" photos from MK-1 are not identified on track; photo depths do not correspond to site depth.	
10	Heat flow	Desirable; how-ever required for high temperature environments	None	OK
11a	Magnetics	Desirable, but may be required in some cases	Tape and page-size map in Data Bank	OK
11b	Gravity	Desirable, but may be required in some cases	Tape in Data Bank; page-size map in Data Bank	OK
12	Cores: paleoenvironment / geotechnical		None	OK
13	Rock Sampling	Vital	In proposal appendix: adequately analyzed for petrology and structure	OK
14	Current meter	Desirable, but may be required in some cases	None	OK

SSP comments: Data package lacks 3.5 kHz, Alvin photos of drill site, and refraction data . SSP concluded that 3.5 kHz not need; instead, additional visual documentation of the seafloor needed to provide option of finding alternative sites if necessary (ie additional videotapes and/or photographs). SSP also concluded that annotated reprints of papers on refraction analysis more useful that original data. Additional visual data (either many precisely located Alvin photos or video of planned (?) Nautile dives needed.

ODP Site Survey Worksheet: Barerock Drilling

Proposal name: MARK lithosphere	Proposal #: 369-Rev2
Site: MK-2 (upper mantle section)	Proposed total depth (m): 1000
Area: mid-Atlantic Ridge	Proposed sed. penetration (m): 0
Lat/Long: 23°21'N, 45°01'W	Proposed basement penetration: (m): 1000
Water depth: 3500m	APC/XCB/RCB/re-entry? RCB; re-entry
Who filled out worksheet? original X. Golovchenko. second revision A. Trehu	Date of worksheet: original Nov 16, 1992. Second revision July 29, 1993

This site has been assessed under the Site Survey guidelines for Target Type "F", defined as "Barerock drilling, e.g. ridge crest" See Joides Journal, vol.18, Feb 1992, p.31-33 for more information.

	DATA TYPE	REQUIREMENT	STATUS OF DATA	OK?
1	Deep penetration SCS		None	OK
2	High resolution SCS	vital	None	
3	MCS &Seismic velocity determination	Desirable, but may be required in some cases	MCS lines and navigation in Data Bank	OK
4	Grid of intersecting seismic lines	Desirable	Grid of MCS lines and navigation in Data Bank	OK
5	Refraction	Desirable, but may be required in some cases	Page-size location map (but no data) in Data Bank Request annotated reprints	
6	3.5 or 12 kHz echosounder	vital	None in Data Bank; some data might be available from WHOI. Not needed (see comment below)	
7	Swath bathymetry	vital	ODP Legs 106/109 maps	OK
8	Side-looking sonar	Desirable, but may be required in some cases	Sea Marc (Leg 106 data; ~1km away); Scripps deep tow track (but no data) in Data Bank. Final processed data not (yet) in data bank.	
9	Photography or Video	vital	Nautile dive videos in Data Bank	OK
10	Heat flow	Desirable; how-ever required for high temperature environments	None	OK
11a	Magnetics	Desirable, but may be required in some cases	Tape and page-size map in Data Bank	OK
11b	Gravity	Desirable, but may be required in some cases	Tape in Data Bank; page-size map in Data Bank	OK
12	Cores: paleoenvironment / geotechnical		None	OK
13	Rock Sampling	Vital	In proposal appendix: adequately analyzed for petrology and structure	OK
14	Current meter	Desirable, but may be required in some cases	None	OK

SSP comments: Data package lacks 3.5 kHz, near bottom SLS, and refraction data . SSP concluded that 3.5 kHz not needed; instead, additional visual documentation of the seafloor is needed to provide option of finding alternative sites if necessary (ie additional videotapes and/or photographs). SSP also concluded that annotated reprints of papers on refraction analysis more useful that original data. Recent near-bottom SLS images should be submitted asap.

SSP Agenda Item 4.6

ODP Site Survey Worksheet: Barerock Drilling

Proposal name: TAG hydrothermal system	Proposal #: 361-Rev2
Site: TAG-1	Proposed total depth (m): 200
Area: mid-Atlantic Ridge	Proposed sed. penetration (m): 60 (massive sulfides)
Lat/Long: 26° 08'N, 44°49'W	Proposed basement penetration: (m): 140
Water depth: 3660m	APC/XCB/RCB/re-entry? RCB; no re-entry
Who filled out worksheet? X. Golovchenko; first revision G. Moore; second revision K. Kastens; third revision D. Toomey	Date of worksheet: Nov. 6, 1992; First rev. April 6, 1993; Second revision Apr. 12, '93; 3rd rev. July 29, 1993

This site has been assessed under the Site Survey guidelines for Target Type "F", defined as "Barerock drilling, e.g. ridge crest" See Joides Journal, vol.18, Feb 1992, p.31-33 for more information.

	DATA TYPE	GUIDELINE	STATUS OF DATA	exists	in DB
1	Deep penetration SCS		None		
2	High resolution SCS	Desirable, but may be required in some cases (4/93)	None		
3	MCS &Seismic velocity determination	Desirable, but may be required in some cases	None		
4	Grid of intersecting seismic lines	Desirable	None		
5	Refraction	Desirable, but may be required in some cases	Kong et al. reprint in Data Bank	X	X
6	3.5 or 12 kHz echosounder	Desirable, but may be required in some cases (4/93)	3.5 kHz record over TAG area poor due to reverberations from lack of sediment cover	X	
7	Swath bathymetry	vital	Sea Beam map in Data Bank	X	X
8	Side-looking sonar	Desirable, but may be required in some cases	TOBI image in vicinity of sites	X	X
9	Photography or Video	vital	Listing of Alvin dives and tracklines in Data Bank Alvin photos in Data Bank	X	X
10	Heat flow	Desirable; however required for high temperature environments	This is a high temperature environment. Some data available in Data Bank von Herzen collected more in 1993; new data not yet in Data Bank	X	X
11a	Magnetics	Desirable, but may be required in some cases	WHOI and NOAA data in Data Bank	X	X
11b	Gravity	Desirable, but may be required in some cases	Done; in Data Bank	X	X
12	Cores: paleoenvironment / geotechnical	Desirable, but may be required in some cases (4/93)	Some done; data not in Data Bank	X	
13	Rock Sampling	Vital	Some done (geochemistry); reprint in Data Bank	X	X
14	Current meter	Desirable, but may be required in some cases	Done; data/reprint not in Data Bank	X	

SSP comments: (1) Resistivity, heat flow, photos, dredge and water samples were collected during an April-May, 1993 cruise. These data should be submitted to Data Bank in time for Safety review. (2) Guidelines for cores, 3.5kHz, and SCS were downgraded from "vital" to "desireable but may be required in some cases" at the April 1993 Trieste SSP meeting. 3) SSP requests (July 93) an addendum that describes backup sites in the event of techinical problems encountered on bare rock. Data relevant to the backup sites should be submitted to the Data Bank.

ODP Site Survey Worksheet: Barerock Drilling

Proposal name: TAG hydrothermal system	Proposal #: 361-Rev2
Site: TAG-2	Proposed total depth (m): 500
Area: mid-Atlantic Ridge	Proposed sed. penetration (m): 60 (massive sulfides)
Lat/Long: 26° 08'N, 44°49'W	Proposed basement penetration: (m): 440
Water depth: 3660m	APC/XCB/RCB/re-entry? re-entry
Who filled out worksheet? X. Golovchenko; first revision G. Moore; second revision K. Kastens; third revision D. Toomey	Date of worksheet: Nov. 6, 1992; First rev. April 6, 1993; Second revision Apr. 12, '93; 3rd rev. July 29, 1993

This site has been assessed under the Site Survey guidelines for Target Type "F", defined as "Barerock drilling, e.g. ridge crest" See Joides Journal, vol.18, Feb 1992, p.31-33 for more information.

	DATA TYPE	GUIDELINE	STATUS OF DATA	exists	in DB
1	Deep penetration SCS		None		
2	High resolution SCS	Desirable, but may be required in some cases (4/93)	None		
3	MCS &Seismic velocity determination	Desirable, but may be required in some cases	None		
4	Grid of intersecting seismic lines	Desirable	None		
5	Refraction	Desirable, but may be required in some cases	Kong et al. reprint in Data Bank	X	X
6	3.5 or 12 kHz echosounder	Desirable, but may be required in some cases (4/93)	3.5 kHz record over TAG area poor due to reverberations from lack of sediment cover	X	
7	Swath bathymetry	vital	Sea Beam map in Data Bank	X	X
8	Side-looking sonar	Desirable, but may be required in some cases	TOBI image in vicinity of sites	X	X
9	Photography or Video	vital	Listing of Alvin dives and tracklines in Data Bank Alvin photos in Data Bank	X	X
10	Heat flow	Desirable; however required for high temperature environments	This is a high temperature environment. Some data available in Data Bank von Herzen collected more in 1993	X	X
11a	Magnetics	Desirable, but may be required in some cases	WHOI and NOAA data in Data Bank	X	X
11b	Gravity	Desirable, but may be required in some cases	Done; in Data Bank	X	X
12	Cores: paleoenvironment / geotechnical	Desirable, but may be required in some cases (4/93)	Some done; data not in Data Bank	X	
13	Rock Sampling	Vital	Some done (geochemistry); reprint in Data Bank	X	X
14	Current meter	Desirable, but may be required in some cases	Done; data/reprint not in Data Bank	X	

SSP comments: (1) Resistivity, heat flow, photos, dredge and water samples were collected during an April-May, 1993 cruise. These data should be submitted to the Data Bank in time for Safety review. (2) Guidelines for cores, 3.5kHz, and SCS were downgraded from "vital" to "desireable but may be required in some cases" at the April 1993 Trieste SSP meeting. 3) SSP requests (July 93) an addendum that describes backup sites in the event of techinical problems at primary sites. Data relevant to the backup sites should be submitted to the Data Bank.

SSP Agenda Item 4.6

ODP Site Survey Worksheet: Barerock Drilling

Proposal name: TAG hydrothermal system	Proposal #: 361-Rev2
Site: TAG-3	Proposed total depth (m): 200
Area: mid-Atlantic Ridge	Proposed sed. penetration (m): 20 (massive sulfides)
Lat/Long: 26°08'N, 44°49'W	Proposed basement penetration: (m): 180
Water depth: 3680m	APC/XCB/RCB/re-entry? RCB; no re-entry
Who filled out worksheet? X. Golovchenko; first revision G. Moore; second revision K. Kastens; third revision D. Toomey	Date of worksheet: Nov. 6, 1992; First rev. April 6, 1993; Second revision Apr. 12, '93; 3rd rev. July 29, 1993

This site has been assessed under the Site Survey guidelines for Target Type "F", defined as "Barerock drilling, e.g. ridge crest" See Joides Journal, vol.18, Feb 1992, p.31-33 for more information.

	DATA TYPE	GUIDELINE	STATUS OF DATA	exists	in DB
1	Deep penetration SCS		None		
2	High resolution SCS	Desirable, but may be required in some cases (4/93)	None		
3	MCS &Seismic velocity determination	Desirable, but may be required in some cases	None		
4	Grid of intersecting seismic lines	Desirable	None		
5	Refraction	Desirable, but may be required in some cases	Kong et al. reprint in Data Bank	X	X
6	3.5 or 12 kHz echosounder	Desirable, but may be required in some cases (4/93)	3.5 kHz record over TAG area poor due to reverberations from lack of sediment cover	X	
7	Swath bathymetry	vital	Sea Beam map in Data Bank	X	X
8	Side-looking sonar	Desirable, but may be required in some cases	TOBI image in vicinity of sites	X	X
9	Photography or Video	vital	Listing of Alvin dives and tracklines in Data Bank Alvin photos in Data Bank	X	X
10	Heat flow	Desirable; however required for high temperature environments	This is a high temperature environment. Some data available in Data Bank von Herzen collected more in 1993	X	X
11a	Magnetics	Desirable, but may be required in some cases	WHOI and NOAA data in Data Bank	X	X
11b	Gravity	Desirable, but may be required in some cases	Done; in Data Bank	X	X
12	Cores: paleoenvironment / geotechnical	Desirable, but may be required in some cases (4/93)	Some done; data not in Data Bank	X	
13	Rock Sampling	Vital	Some done (geochemistry); reprint in Data Bank	X	X
14	Current meter	Desirable, but may be required in some cases	Done; data/reprint not in Data Bank	X	

SSP comments: (1) Resistivity, heat flow, photos, dredge and water samples were collected during an April-May, 1993 cruise. This data should be submitted to the Data Bank in time for Safety review. (2) Guidelines for cores, 3.5kHz, and SCS were downgraded from "vital" to "desireable but may be required in some cases" at the April 1993 Trieste SSP meeting. 3) SSP requests (July 93) an addendum that describes backup sites in the event of techinical problems encountered on bare rock. Data relevant to the backup sites should be submitted to the Data Bank.

SSP Agenda Item 5.1

ODP Site Survey Worksheet: Passive Margin

Proposal name: Alboran Sea	Proposal #: 323-rev3
Site: Alb-1Anew (6.5km from site in proposal 323-rev2)	Proposed total depth (m): 2400m
Area: Alboran Sea	Proposed sed. penetration (m): 2250m
Lat/Long: 36°14', 4°20'W	Proposed basement penetration: (m): 150m
Water depth: 1000m	APC/XCB/RCB/re-entry?
Who filled out worksheet? Kim Kastens	Date of worksheet: Nov 2, 1992; no change April 1993; first revision July 28, 1993

This site has been assessed under the Site Survey guidelines for Target Type "B", defined as "Greater penetration than a few hundred meters on a passive margin." See Joides Journal, vol.18, Feb 1992, p.31-33 for more information.

	DATA TYPE	GUIDELINE	STATUS OF DATA	exists	in DB
1 & 2	SCS	desirable	Charles Darwin line (in processing according to site summary form); also scattered regional lines	yes	yes
3a	MCS	vital	On intersection of MCS lines ALB-18B and ALB-39; ALB18B is in Data Bank large scale. Fax from M. Comas dated July 26 says line ALB-39 has been sent to Data Bank.	yes	
3b	Seismic velocity determination	vital	on line ALB-18B in Data Bank	yes	yes
4	Grid of intersecting seismic lines	vital	4km spacing grid throughout region; on crossing lines	yes	
5	Refraction	desirable, but may be required in some cases	none, not necessary	NN	NN
6	3.5 or 12 kHz echosounder	vital	18kHz BPS data in Data Bank provides comparable information; data for moved sites is not yet in Data Bank	yes	
7	Swath bathymetry	desirable, but may be required in some cases	Simrad bathymetric data from Hesperides cruise exists; fax from M. Comas dated July 26, 1993 says it has been sent to the Data Bank.	yes	
8	Side-looking sonar	desirable, but may be required in some cases	Simrad backscatter data exists, still in processing, not in Data Bank (not required)	yes	
9	Photography or Video		none, not necessary	NN	NN
10	Heat flow	desirable, but may be required in some cases	to be collected April/May 1993, according to a letter from Menchu Comas dated 1 Oct 92.		
11a	Magnetics	desirable	none, not necessary	NN	NN
11b	Gravity	desirable	Proposal includes basinwide gravity anomaly map	ok	ok
12	Cores: paleoenvironment / geotechnical	required for re-entry sites; other-wise desirable	Data Bank has logs from boreholes on Spanish margin. DSDP 121 is 7km away. Two nearby gravity piston cores according to the site summary form; no info in Data Bank	yes?	
13	Rock Sampling		none, not necessary submersible sampling of nearby basement outcrops from Nautile has been proposed (according to proposal 323rev3)	NN	NN
14	Current meter	desirable, but may be required in some cases	none, not necessary	NN	NN

SSP comments: (1) This site has been moved from proposal 323-rev2 to accomodate comments from safety pre-review. (2) Because this is a reentry site, a nearby core is required. DSDP 121 is not considered adequate because the upper 60m were not cored. Menchu Comas says in a letter dated 1 October 1992 that a piston or gravity core can be obtained during a scheduled cruise in April/May 1993. It's not clear whether or not this happened. (3) Heatflow will be of importance to PPSP; was supposed to be collected in April/May 1993, but it's not clear whether or not this happened. No data from April/May 1993 cruise has been submitted.

ODP Site Survey Worksheet: Passive Margin

Proposal name: Alboran Sea	Proposal #: 323rev3
Site: Alb-2new	Proposed total depth (m): 690
Area: Alboran Sea	Proposed sed. penetration (m): 540
Lat/Long: 36°12'N 4°19'W	Proposed basement penetration: (m): 150m
Water depth: 1080m	APC/XCB/RCB/re-entry? RCB re-entry
Who filled out worksheet? Kim Kastens	Date of worksheet: Nov 2, 1992; no change April 1993, first revision July 27, 1993

This site has been assessed under the Site Survey guidelines for Target Type "B", defined as "Greater penetration than a few hundred meters on a passive margin." See Joides Journal, vol.18, Feb 1992, p.31-33 for more information.

	DATA TYPE	GUIDELINE	STATUS OF DATA	exists	in DB
1 & 2	SCS	desirable	Scattered regional lines	yes	yes
3a	MCS	vital	on MCS lines ALB-39B,75-230, 75-334; 75-334 is in Data Bank at large scale	yes	
3b	Seismic velocity determination	vital	velocity on line ALB-39 shown in proposal	yes	yes
4	Grid of intersecting seismic lines	vital	at intersection of three lines 4km spacing regional MCS grid	yes	
5	Refraction	desirable, but may be required in some cases	none, not required	NN	NN
6	3.5 or 12 kHz echosounder	vital	18kHz parasound data in Data Bank provides comparable information; Parasound crossing of new sites not yet submitted	yes	
7	Swath bathymetry	desirable, but may be required in some cases	Simrad data from Hesperides cruise exists, still in processing; not in Data Bank (not required)	yes	
8	Side-looking sonar	desirable, but may be required in some cases	Simrad backscatter data exists, still in processing, not in Data Bank (not required)	yes	
9	Photography or Video		none, not required	NN	NN
10	Heat flow	desirable, but may be required in some cases	to be collected April/May 1993, according to a letter from Menchu Comas dated 1 Oct 92.		
11a	Magnetics	desirable	none, not required	NN	NN
11b	Gravity	desirable	Proposal includes basinwide gravity anomaly map	ok	ok
12	Cores: paleoenvironment / geotechnical	required for re-entry sites; other-wise desirable	Data Bank has logs from boreholes on Spanish margin. No nearby piston or gravity cores		
13	Rock Sampling		none, not required	NN	NN
14	Current meter	desirable, but may be required in some cases	none, not required	NN	NN

SSP comments: (1) This site has been moved from proposal 323-rev2 to accomodate comments from safety pre-review and reduce drilling time. It is now a backup site to be drilled if Alb-1new fails to penetrate basement. (2) Because this is a reentry site, a nearby core is required. DSDP 121 is not considered adequate because the upper 60m were not cored. Menchu Comas says in a letter dated 1 October 1992 that a piston or gravity core can be obtained during a scheduled cruise in April/May 1993. It's not clear whether or not this happened. (3) Heatflow will be of importance to PPSP; was supposed to be collected in April/May 1993, but it's not clear whether or not this happened. No data from April/May 1993 cruise has been submitted. .

SSP Agenda Item 5.3

ODP Site Survey Worksheet: Passive Margin

Proposal name: Eastern Equatorial Atlantic	Proposal #: 346-Rev4
Site: IG1n	Proposed total depth (m): 1600
Area: Ivory coast-Ghana margin	Proposed sed. penetration (m): 1600
Lat/Long: 3° 37.6' N; 2° 44.1' W	Proposed basement penetration: (m): 0
Water depth: 2100 m	APC/XCB/RCB/re-entry? XCB
Who filled out worksheet? Sibuet	Date of worksheet: 29 July 1993

This site has been assessed under the Site Survey guidelines for Target Type "B", defined as "Greater penetration than a few hundred meters on a passive margin." See Joides Journal, vol.18, Feb 1992, p.31-33 for more information.

	DATA TYPE	GUIDELINE	STATUS OF DATA	exists	in DB
1 & 2	SCS	desirable		*	*
3a	MCS	vital	MCS exist along 2 crossing lines	*	*
3b	Seismic velocity determination	vital	Stacking velocities exist	*	*
4	Grid of intersecting seismic lines	vital	A grid exists with SCS lines and 2 crossing MCS lines	*	*
5	Refraction	desirable, but may be required in some cases	OBS data have been processed but not in DB	*	
6	3.5 or 12 kHz echosounder	vital	Three 3.5 kHz lines exist in DB	*	*
7	Swath bathymetry	desirable, but may be required in some cases		*	*
8	Side-looking sonar	desirable, but may be required in some cases			
9	Photography or Video		submersible dive EN13 (1992) at about 17 km	*	
10	Heat flow	desirable, but may be required in some cases			
11a	Magnetics	desirable		*	
11b	Gravity	desirable		*	*
12	Cores: paleoenvironment / geotechnical	required for re-entry sites; other-wise desirable	The logs are not shown in the proposal	*	
13	Rock Sampling		Rock sampling during dives	*	
14	Current meter	desirable, but may be required in some cases			

All vital data are in DB.

ODP Site Survey Worksheet: Passive Margin

Proposal name: Eastern Equatorial Atlantic	Proposal #: 346-Rev4
Site: IG1nbis	Proposed total depth (m): 780
Area: Ivory coast-Ghana margin	Proposed sed. penetration (m): 780
Lat/Long: 3° 35.3' N; 2° 43.9' W	Proposed basement penetration: (m): 0
Water depth: 2062 m	APC/XCB/RCB/re-entry? XCB
Who filled out worksheet? Sibuet	Date of worksheet: 29 July 1993

This site has been assessed under the Site Survey guidelines for Target Type "B", defined as "Greater penetration than a few hundred meters on a passive margin." See Joides Journal, vol.18, Feb 1992, p.31-33 for more information.

	DATA TYPE	GUIDELINE	STATUS OF DATA	exists	in DB
1 & 2	SCS	desirable		*	*
3a	MCS	vital	MCS exist along 2 crossing lines	*	*
3b	Seismic velocity determination	vital	Stacking velocities exist	*	*
4	Grid of intersecting seismic lines	vital	A grid exists with SCS lines and 2 crossing MCS lines	*	*
5	Refraction	desirable, but may be required in some cases	OBS data have been processed but not in DB	*	
6	3.5 or 12 kHz echosounder	vital	Three 3.5 kHz lines exist in DB	*	*
7	Swath bathymetry	desirable, but may be required in some cases		*	*
8	Side-looking sonar	desirable, but may be required in some cases			
9	Photography or Video		submersible dive EN13 (1992) at about 17 km	*	
10	Heat flow	desirable, but may be required in some cases			
11a	Magnetics	desirable		*	
11b	Gravity	desirable		*	*
12	Cores: paleoenvironment / geotechnical	required for re-entry sites; other-wise desirable	The logs are not shown in the proposal	*	
13	Rock Sampling		Rock sampling during dives	*	
14	Current meter	desirable, but may be required in some cases			

All vital data are in DB.

ODP Site Survey Worksheet: Passive Margin

Proposal name: Eastern Equatorial Atlantic	Proposal #: 346-Rev4
Site: IG2n	Proposed total depth (m): 780
Area: Ivory coast-Ghana margin	Proposed sed. penetration (m): 780
Lat/Long: 3° 26.5' N; 3° 03.6' W	Proposed basement penetration: (m): 0
Water depth: 3338 m	APC/XCB/RCB/re-entry? XCB
Who filled out worksheet? Sibuet	Date of worksheet: 29 July 1993

This site has been assessed under the Site Survey guidelines for Target Type "B", defined as "Greater penetration than a few hundred meters on a passive margin." See Joides Journal, vol.18, Feb 1992, p.31-33 for more information.

	DATA TYPE	GUIDELINE	STATUS OF DATA	exists	in DB
1 & 2	SCS	desirable	SCS line 24 is a crossing line	*	*
3a	MCS	vital	Three MCS crossing lines exist nearby. Line MTO5 in DB	*	*
3b	Seismic velocity determination	vital	Stacking velocities exist but not in DB	*	
4	Grid of intersecting seismic lines	vital	A grid exists with SCS lines	*	*
5	Refraction	desirable, but may be required in some cases	OBS data have been processed but not in DB	*	
6	3.5 or 12 kHz echosounder	vital	3.5 kHz data exist on 2 parallel lines	*	*
7	Swath bathymetry	desirable, but may be required in some cases		*	*
8	Side-looking sonar	desirable, but may be required in some cases			
9	Photography or Video		submersible dive EN14 (1992) at about 3 km	*	
10	Heat flow	desirable, but may be required in some cases			
11a	Magnetics	desirable		*	
11b	Gravity	desirable		*	*
12	Cores: paleoenvironment / geotechnical	required for re-entry sites; other-wise desirable	The logs are not shown in the proposal	*	
13	Rock Sampling		Rock sampling during dives	*	
14	Current meter	desirable, but may be required in some cases			

All vital data exist. A lot of crossing SCS lines also exist.

ODP Site Survey Worksheet: Passive Margin

Proposal name: Eastern Equatorial Atlantic	Proposal #: 346-Rev4
Site: IG2nbis	Proposed total depth (m): 800
Area: Ivory coast-Ghana margin	Proposed sed. penetration (m): 800
Lat/Long: 3° 18.1' N; 3° 22.9' W	Proposed basement penetration: (m): 0
Water depth: 4500 m	APC/XCB/RCB/re-entry? XCB
Who filled out worksheet? Sibuet	Date of worksheet: 29 July 1993

This site has been assessed under the Site Survey guidelines for Target Type "B", defined as "Greater penetration than a few hundred meters on a passive margin." See Joides Journal, vol.18, Feb 1992, p.31-33 for more information.

	DATA TYPE	GUIDELINE	STATUS OF DATA	exists	in DB
1 & 2	SCS	desirable	SCS line 35 is a crossing line	*	*
3a	MCS	vital	Site on line MTO5 which is in DB	*	*
3b	Seismic velocity determination	vital	Stacking velocities exist but not in DB	*	
4	Grid of intersecting seismic lines	vital	A grid exists with SCS lines	*	*
5	Refraction	desirable, but may be required in some cases	OBS data have been processed but not in DB	*	
6	3.5 or 12 kHz echosounder	vital	3.5 kHz data exist	*	
7	Swath bathymetry	desirable, but may be required in some cases		*	*
8	Side-looking sonar	desirable, but may be required in some cases			
9	Photography or Video				
10	Heat flow	desirable, but may be required in some cases			
11a	Magnetics	desirable		*	
11b	Gravity	desirable		*	*
12	Cores: paleoenvironment / geotechnical	required for re-entry sites; other-wise desirable	The logs are not shown in the proposal	*	
13	Rock Sampling				
14	Current meter	desirable, but may be required in some cases			

All vital data exist. A lot of crossing SCS lines also exist.

ODP Site Survey Worksheet: Passive Margin

Proposal name: Eastern Equatorial Atlantic	Proposal #: 346-Rev4
Site: IG3n	Proposed total depth (m): 550-700
Area: Ivory coast-Ghana margin	Proposed sed. penetration (m): 700
Lat/Long: 3° 15.4' N; 3° 11.1' W	Proposed basement penetration: (m): 0-150
Water depth: 4650 m	APC/XCB/RCB/re-entry? XCB
Who filled out worksheet? Sibuet	Date of worksheet: 29 July 1993

This site has been assessed under the Site Survey guidelines for Target Type "B", defined as "Greater penetration than a few hundred meters on a passive margin." See Joides Journal, vol.18, Feb 1992, p.31-33 for more information.

	DATA TYPE	GUIDELINE	STATUS OF DATA	exists	in DB
1 & 2	SCS	desirable		*	*
3a	MCS	vital	MCS line MT01 exists and in DB	*	*
3b	Seismic velocity determination	vital	Stacking velocities exist	*	*
4	Grid of intersecting seismic lines	vital	A grid exists with SCS lines	*	*
5	Refraction	desirable, but may be required in some cases	OBS data have been processed but not in DB	*	
6	3.5 or 12 kHz echosounder	vital	3.5 kHz data exist on 2 parallel lines and 1 crossing line	*	*
7	Swath bathymetry	desirable, but may be required in some cases		*	*
8	Side-looking sonar	desirable, but may be required in some cases			
9	Photography or Video		submersible dive EN14 (1992) at about 25 km	*	
10	Heat flow	desirable, but may be required in some cases			
11a	Magnetics	desirable		*	
11b	Gravity	desirable		*	*
12	Cores: paleoenvironment / geotechnical	required for re-entry sites; other-wise desirable	The logs are not shown in the proposal	*	
13	Rock Sampling		Rock sampling during dives	*	
14	Current meter	desirable, but may be required in some cases			

All vital data in DB. However, there is no existing MCS crossing line for this site but there is a lot of SCS lines crossing the existing MCS MT01 line. SCS lines provide enough information as the site requires shallow penetration.

SSP Agenda Item 5.4

ODP Site Survey Worksheet: Paleoenvironment or Fan

Proposal name: Mediterranean Ridge	Proposal #: 330-rev
Site: MR-1	Proposed total depth (m): 300m
Area: Ionian Abyssal Plain	Proposed sed. penetration (m): 300m
Lat/Long: 35° 42.1'N 18° 21.22'E	Proposed basement penetration: (m): none
Water depth: 4100m	APC/XCB/RCB? Double APC/XCB
Who filled out worksheet? J. A. Farre	Date of worksheet: July 28, 1993

This site has been assessed under the Site Survey guidelines for Target Type "A", defined as "Paleoenvironment or Fan; generally APC/XCB penetration." See Joides Journal, vol.18, Feb 1992, p.31-33 for more information.

	DATA TYPE	GUIDELINE	STATUS OF DATA	exists	in DB
1	Deep penetration SCS	desirable	none	na	na
2	High resolution SCS	vital	At intersection of Valdivia 1.7 & 1.11	Yes	Yes
3	MCS &Seismic velocity determination	none	On line MS-21 (in DB) Valdivia data exist (in Germany; not in DB)	Yes	Yes
4	Grid of intersecting seismic lines	desirable, but may be required in some cases	At intersection of Valdivia 1.7 & 1.11	Yes	Yes
5	Refraction	none		na	na
6	3.5 or 12 kHz echosounder	required	May exist; may be collected on Meteor cruise in August '93	?	No
7	Swath bathymetry	desirable, but may be required in some cases	None necessary on abyssal plain	na	na
8	Side-looking sonar	desirable, but may be required in some cases	None necessary on abyssal plain	na	na
9	Photography or Video	none		na	na
10	Heat flow	none		na	na
11a	Magnetics	none	na	na	na
11b	Gravity	none		na	na
12	Cores: paleoenvironment / geotechnical	vital	Belcived to exist (Cita, unpublished)	Yes	No
13	Rock Sampling	none		na	na
14	Current meter	desirable, but may be required in some cases	Not required	na	na

SSP comments: Site requires 3.5 kHz and core data. Otherwise, ready to drill.

ODP Site Survey Worksheet: Paleoenvironment or Fan

Proposal name: Mediterranean Ridge	Proposal #: 330-rev
Site: MR-2	Proposed total depth (m): 200m
Area: Ionian Lower Def. Front	Proposed sed. penetration (m): 200m
Lat/Long: 35° 46.8'N 18° 42.8'E	Proposed basement penetration: (m): none
Water depth: 3950m	APC/XCB/RCB? Double APC/XCB
Who filled out worksheet? J. A. Farre	Date of worksheet: July 28, 1993

This site has been assessed under the Site Survey guidelines for Target Type "A", defined as "Paleoenvironment or Fan; generally APC/XCB penetration." See Joides Journal, vol.18, Feb 1992, p.31-33 for more information.

	DATA TYPE	GUIDELINE	STATUS OF DATA	exists	in DB
1	Deep penetration SCS	desirable	none	na	na
2	High resolution SCS	vital	At intersection of Valdivia 1.9 & 1.15	Yes	Yes
3	MCS &Seismic velocity determination	none	Valdivia data exist (in Germany; not in DB)	na	na
4	Grid of intersecting seismic lines	desirable, but may be required in some cases	At intersection of Valdivia 1.9 & 1.15	Yes	Yes
5	Refraction	none		na	na
6	3.5 or 12 kHz echosounder	required	May exist; may be collected on Meteor cruisw in August '93	?	No
7	Swath bathymetry	desirable, but may be required in some cases	To be collected on Meteor cruise in August '93	No	No
8	Side-looking sonar	desirable, but may be required in some cases	To be collected on Meteor cruise in August '93	na	na
9	Photography or Video	none		na	na
10	Heat flow	none		na	na
11a	Magnetics	none	na	na	na
11b	Gravity	none		na	na
12	Cores: paleoenvironment / geotechnical	vital	Beleived to exist (Cita, unpublished)	Yes	No
13	Rock Sampling	none		na	na
14	Current meter	desirable, but may be required in some cases	Not required	na	na

SSP comments: Site requires 3.5 kHz, core data, and swath bathymetry (SLS would be beneficial).

ODP Site Survey Worksheet: Paleoenvironment or Fan

Proposal name: Mediterranean Ridge	Proposal #: 330-rev
Site: MR-3	Proposed total depth (m): 200m
Area: Ionian Upper Def. Front	Proposed sed. penetration (m): 200m
Lat/Long: 35° 46.8'N 18° 56.0'E	Proposed basement penetration: (m): none
Water depth: 37000m	APC/XCB/RCB? Double APC/XCB
Who filled out worksheet? J. A. Farre	Date of worksheet: July 28, 1993

This site has been assessed under the Site Survey guidelines for Target Type "A", defined as "Paleoenvironment or Fan; generally APC/XCB penetration." See Joides Journal, vol.18, Feb 1992, p.31-33 for more information.

	DATA TYPE	GUIDELINE	STATUS OF DATA	exists	in DB
1	Deep penetration SCS	desirable	none	na	na
2	High resolution SCS	vital	At intersection of Valdivia 1.9 & 1.17	Yes	Yes
3	MCS &Seismic velocity determination	none	Valdivia data exist (in Germany; not in DB)	na	na
4	Grid of intersecting seismic lines	desirable, but may be required in some cases	At intersection of Valdivia 1.9 & 1.17	Yes	Yes
5	Refraction	none		na	na
6	3.5 or 12 kHz echosounder	required	May exist; may be collected on Meteor cruise in August '93	?	No
7	Swath bathymetry	desirable, but may be required in some cases	To be collected on Meteor cruise in August '93	No	No
8	Side-looking sonar	desirable, but may be required in some cases	To be collected on Meteor cruise in August '93	na	na
9	Photography or Video	none		na	na
10	Heat flow	none		na	na
11a	Magnetics	none		na	na
11b	Gravity	none		na	na
12	Cores: paleoenvironment / geotechnical	vital	Beleived to exist (~15 miles W?; Cita, unpublished)	?	No
13	Rock Sampling	none		na	na
14	Current meter	desirable, but may be required in some cases	Not required	na	na

SSP comments: Site requires 3.5 kHz, core data, and swath bathymetry (SLS would be beneficial).

ODP Site Survey Worksheet: Paleoenvironment or Fan

Proposal name: Mediterrancan Ridge	Proposal #: 330-rev
Site: MR-4	Proposed total depth (m): 400m
Area: Sirte Abyssal Plain	Proposed scd. penetration (m): 400m
Lat/Long: 34°07.0'N 19°32.4'E	Proposed basement penetration: (m): none
Water depth: 3900m	APC/XCB/RCB/re-entry? APC/XCB
Who filled out worksheet? K. Kastens/ J. Farre	Date of worksheet: 11/17/92, 7/28/93

This site has been assessed under the Site Survey guidelines for Target Type "A", defined as "Paleoenvironment or Fan; generally APC/XCB penetration." See Joides Journal, vol.18, Feb 1992, p.31-33 for more information.

	DATA TYPE	GUIDELINE	STATUS OF DATA	exists	in DB
1	Deep penetration SCS	desirable	none	na	na
2	High resolution SCS	vital	Site is on Bannock line 13 of the Dormed Cruise. Profile is in Data Bank at large scale with adequate navigation.	Yes	Yes
3	MCS &Seismic velocity determination	none	Site is at intersection of line MS33 and line MS27ext. Both lines are in Data Bank at large scale with sites marked; accompanying small-scale navigation map lacks shotpoints. Velocities included. Lines show top of Miocene and one intermediate reflector in the Plio-Quat.	Yes	Yes
4	Grid of intersecting seismic lines	desirable, but may be required in some cases	(abyssal plain; grid not required)	na	na
5	Refraction	none		na	na
6	3.5 or 12 kHz echosounder	required	Bannock Line 15	Yes	Yes
7	Swath bathymetry	desirable, but may be required in some cases	SeaBeam map in the Data Bank	Yes	Yes
8	Side-looking sonar	desirable, but may be required in some cases	SeaMARC I mosaic in the Data Bank	Yes	Yes
9	Photography or Video	none		na	na
10	Heat flow	none		na	na
11a	Magnetics	none		na	na
11b	Gravity	none		na	na
12	Cores: paleoenvironment / geotechnical	vital	Numerous piston/gravity cores in the area. Location map and lithostratigraphic/ biostratigraphic core logs are in the Data Bank. Core BAN84-14P, 3km from site, adequately predicts facies expected at this abyssal plain drill site.	Yes	Yes
13	Rock Sampling		not required	na	na
14	Current meter	desirable, but may be required in some cases	not required	na	na

SSP comments: Site is ready to drill.

ODP Site Survey Worksheet: Paleoenvironment or Fan

Proposal name: Mediterranean Ridge	Proposal #: 330-rev
Site: MR-5	Proposed total depth (m): 290m
Area: Sirte Deformation Front	Proposed sed. penetration (m): 290m
Lat/Long: 34°11.7'N, 19°40.0'E	Proposed basement penetration: (m): none
Water depth: 3550	APC/XCB/RCB/re-entry? APC/XCB
Who filled out worksheet? Kim Kastens	Date of worksheet: Nov. 17, 1992

This site has been assessed under the Site Survey guidelines for Target Type "A", defined as "Paleoenvironment or Fan; generally APC/XCB penetration." See Joides Journal, vol.18, Feb 1992, p.31-33 for more information.

	DATA TYPE	GUIDELINE	STATUS OF DATA	exists	in DB
1	Deep penetration SCS	desirable	none	na	na
2	High resolution SCS	vital	Site is on Bannock line 16 of the Dorned Cruise. Profile is in Data Bank at large scale with adequate navigation. Profile shows top of Miocene, but no informaton within the Plio-Quaternary.	Yes	Yes
3	MCS &Seismic velocity determination	none	Site is on line MS33, which is in Data Bank at large scale with sites marked; accompanying small-scale navigation map lacks shotpoints. Velocities included. Profile shows top of Miocene, but no information within the Plio-Quat.	Yes	Yes
4	Grid of intersecting seismic lines	desirable, but may be required in some cases	(crossing lines required in this complex setting) Site is at the intersection of NE-SW trending MCS line (MS-33) and a NW-SE trending SCS line (Bannock 16). SCS line is part of a regional grid with ~5km line spacing.	Yes	Yes
5	Refraction	none	not required	na	na
6	3.5 or 12 kHz echosounder	required	Bannock line 16	Yes	Yes
7	Swath bathymetry	desirable, but may be required in some cases	SeaBeam map is in Data Bank	Yes	Yes
8	Side-looking sonar	desirable, but may be required in some cases	SeaMARC I mosaic is in the Data Bank	Yes	Yes
9	Photography or Video	none		na	na
10	Heat flow	none		na	na
11a	Magnetics	none		na	na
11b	Gravity	none		na	na
12	Cores: paleoenvironment / geotechnical	vital	Numerous piston/gravity cores in the area. Location map and lithostratigraphic/ biostratigraphic core logs are in the Data Bank. Nearest core is ~5km away.	Yes	Yes
13	Rock Sampling	none		na	na
14	Current meter	desirable, but may be required in some cases	not required for this site	na	na

SSP comments: (1) The nearest piston/gravity core is ~5km away, which would ordinarily be considered too far away for a paleo site in such a complex structural setting. However, SSP feels that the dense core coverage surrounding the site has adequately elucidated the local facies, depositional processes, and the relation between facies and microtopography; thus we do not require a core exactly on the proposed drill site. (2) The site is on the intersection between an SCS and an MCS line. Neither data type is informative about the Plio-Pleistocene structure or stratigraphy. Because of the rugged microtopography, no standard profiling tool seems likely to provide additional subbottom information, and we will not insist on crossing SCS lines. Nearbottom-towed source-receiver seismic profiles would probably be useful, but because of the developmental nature of such tools, SSP cannot insist on such data. (3) SSP is worried that the existing data may not define the structural and hydrological microenvironment of this site well enough to tackle all the questions posed in the proposal. However the proponents have collected all "vital" data types, plus several extremely valuable "desirable" data types (swath bathymetry and side-looking sonar data), and ODP can't realistically decline to drill this site for lack of data types that haven't yet been invented.

ODP Site Survey Worksheet: Paleoenvironment or Fan

Proposal name: Mediterranean Ridge	Proposal #: 330-rev
Site: MR-6	Proposed total depth (m): 150m
Area: Sirte Deformation Front	Proposed sed. penetration (m): 150m
Lat/Long: 34°15.2'N 19°46.4'E	Proposed basement penetration: (m): none
Water depth: 3350m	APC/XCB/RCB/re-entry? APC/XCB
Who filled out worksheet? Kim Kastens	Date of worksheet: 20 November 1992

This site has been assessed under the Site Survey guidelines for Target Type "A", defined as "Paleoenvironment or Fan; generally APC/XCB penetration." See Joides Journal, vol.18, Feb 1992, p.31-33 for more information.

	DATA TYPE	GUIDELINE	STATUS OF DATA	exists	in DB
1	Deep penetration SCS	desirable	none	na	na
2	High resolution SCS	vital	Since site was moved 2.5km SW, site is at intersection of Bannock line 8 and Valdivia 3.1	Yes	Yes
3	MCS &Seismic velocity determination	none	Site is near line MS33, which is in Data Bank at large scale with sites marked; accompanying small-scale navigation map lacks shotpoints. Velocities included. Profile shows top of Miocene, but no information within the Plio-Quat.	Yes	Yes
4	Grid of intersecting seismic lines	desirable, but may be required in some cases	Since site was moved 2.5km SW, site is at intersection of Bannock line 8 and Valdivia 3.1	Yes	Yes
5	Refraction	none		na	na
6	3.5 or 12 kHz echosounder	required	Bannock line 8	Yes	Yes
7	Swath bathymetry	desirable, but may be required in some cases	SeaBeam map in data bank	Yes	Yes
8	Side-looking sonar	desirable, but may be required in some cases	SeaMarc I mosaic in Data Bank	Yes	Yes
9	Photography or Video	none		na	na
10	Heat flow	none	Transect planned in 9/93 required for proposed fluid flow experiment	No	No
11a	Magnetics	none		na	na
11b	Gravity	none		na	na
12	Cores: paleoenvironment / geotechnical	vital	Numerous piston/gravity cores in the area. Location map and lithostratigraphic/ biostratigraphic core logs are in the Data Bank.	Yes	Yes
13	Rock Sampling	none		na	na
14	Current meter	desirable, but may be required in some cases	Not required	na	na

SSP comments: Package complete except for heat flow transect.

ODP Site Survey Worksheet: Paleoenvironment or Fan

Proposal name: Mediterranean Ridge	Proposal #: 330-rev
Site: MR-7	Proposed total depth (m): 200m
Area: Lower African Cont Margin	Proposed sed. penetration (m): 200m
Lat/Long: 33° 13.2'N 22° 53.3'E	Proposed basement penetration: (m): none
Water depth: 2100m	APC/XCB/RCB? Double APC/XCB
Who filled out worksheet? J. A. Farre	Date of worksheet: July 28, 1993

This site has been assessed under the Site Survey guidelines for Target Type "A", defined as "Paleoenvironment or Fan; generally APC/XCB penetration." See Joides Journal, vol.18, Feb 1992, p.31-33 for more information.

	DATA TYPE	GUIDELINE	STATUS OF DATA	exists	in DB
1	Deep penetration SCS	desirable	none	na	na
2	High resolution SCS	vital	To be collect on Urania in September '93	No	No
3	MCS &Seismic velocity determination	none	Mascle '93 available, not in DB	na	na
4	Grid of intersecting seismic lines	desirable, but may be required in some cases	To be collect on Urania in September '93	No	No
5	Refraction	none		na	na
6	3.5 or 12 kHz echosounder	required	RC2506 data	Yes	Yes
7	Swath bathymetry	desirable, but may be required in some cases	Kastens map in DB	Yes	Yes
8	Side-looking sonar	desirable, but may be required in some cases	To be collected on Meteor in August '93	na	na
9	Photography or Video	none		na	na
10	Heat flow	none		na	na
11a	Magnetics	none		na	na
11b	Gravity	none		na	na
12	Cores: paleoenvironment / geotechnical	vital	Bannock '84 data	Yes	Yes
13	Rock Sampling	none		na	na
14	Current meter	desirable, but may be required in some cases	not necessary	na	na

SSP comments: Site requires crossing SCS lines. SLS survey, although not required will improve data package.

ODP Site Survey Worksheet: Paleoenvironment or Fan

Proposal name: Mediterrancan Ridge	Proposal #: 330-rev
Site: MR-8	Proposed total depth (m): 300m
Area: Lower Katia Def. Front	Proposed sed. penetration (m): 300m
Lat/Long: 33° 18.9'N 22° 58.3'E	Proposed basement penetration: (m): none
Water depth: 2100m	APC/XCB/RCB? Double APC/XCB
Who filled out worksheet? J. A. Farre	Date of worksheet: July 28, 1993

This site has been assessed under the Site Survey guidelines for Target Type "A", defined as "Paleoenvironment or Fan; generally APC/XCB penetration." See Joides Journal, vol.18, Feb 1992, p.31-33 for more information.

	DATA TYPE	GUIDELINE	STATUS OF DATA	exists	in DB
1	Deep penetration SCS	desirable	none	na	na
2	High resolution SCS	vital	To be collect on Urania in September '93	No	No
3	MCS &Seismic velocity determination	none	Mascle '93 available, not in DB	na	na
4	Grid of intersecting seismic lines	desirable, but may be required in some cases	To be collect on Urania in September '93	No	No
5	Refraction	none		na	na
6	3.5 or 12 kHz echosounder	required	RC2506 data	Yes	Yes
7	Swath bathymetry	desirable, but may be required in some cases	Kastens map in DB	Yes	Yes
8	Side-looking sonar	desirable, but may be required in some cases	To be collected on Meteor in August '93	na	na
9	Photography or Video	none		na	na
10	Heat flow	none		na	na
11a	Magnetics	none		na	na
11b	Gravity	none		na	na
12	Cores: paleoenvironment / geotechnical	vital	Bannock '84 data	Yes	Yes
13	Rock Sampling	none		na	na
14	Current meter	desirable, but may be required in some cases	not necessary	na	na

SSP comments: Site requires crossing SCS lines. SLS survey, although not required will improve data package.

ODP Site Survey Worksheet: Paleoenvironment or Fan

Proposal name: Mediterranean Ridge	Proposal #: 330-rev
Site: MR-9	Proposed total depth (m): 200m
Area: Katia Upper Def. Front	Proposed sed. penetration (m): 200m
Lat/Long: 33° 25.9'N 22° 59.3'E	Proposed basement penetration: (m): none
Water depth: 1800m	APC/XCB/RCB? Double APC/XCB
Who filled out worksheet? J. A. Farre	Date of worksheet: July 28, 1993

This site has been assessed under the Site Survey guidelines for Target Type "A", defined as "Paleoenvironment or Fan; generally APC/XCB penetration." See Joides Journal, vol.18, Feb 1992, p.31-33 for more information.

	DATA TYPE	GUIDELINE	STATUS OF DATA	exists	in DB
1	Deep penetration SCS	desirable	none	na	na
2	High resolution SCS	vital	To be collect on Urania in September '93	No	No
3	MCS &Seismic velocity determination	none	Mascle '93 available, not in DB	na	na
4	Grid of intersecting seismic lines	desirable, but may be required in some cases	To be collect on Urania in September '93	No	No
5	Refraction	none		na	na
6	3.5 or 12 kHz echosounder	required	RC2506 data	Yes	Yes
7	Swath bathymetry	desirable, but may be required in some cases	Kastens map in DB	Yes	Yes
8	Side-looking sonar	desirable, but may be required in some cases	To be collected on Meteor in August '93	na	na
9	Photography or Video	none		na	na
10	Heat flow	none		na	na
11a	Magnetics	none		na	na
11b	Gravity	none		na	na
12	Cores: paleoenvironment / geotechnical	vital	Bannock '84 data	Yes	Yes
13	Rock Sampling	none		na	na
14	Current meter	desirable, but may be required in some cases	not necessary	na	na

SSP comments: Site requires crossing SCS lines. SLS survey, although not required will improve data package.

SSP

ODP Site Survey Worksheet: Paleoenvironment or Fan

Proposal name: Mediterranean Ridge	Proposal #: 330-rev
Site: MV-1	Proposed total depth (m): 200m
Area: Olimpi mud volcano	Proposed sed. penetration (m): 200m
Lat/Long: 33°43.7'N, 24°41.8'E	Proposed basement penetration: (m): none
Water depth: 1900m	APC/XCB/RCB/re-entry? XCB
Who filled out worksheet? K. Kastens/J. Farre	Date of worksheet: 11/17/92, 7/29/93

This site has been assessed under the Site Survey guidelines for Target Type "A", defined as "Paleoenvironment or Fan; generally APC/XCB penetration." See Joides Journal, vol.18, Feb 1992, p.31-33 for more information.

	DATA TYPE	GUIDELINE	STATUS OF DATA	exists	in DB
1	Deep penetration SCS	desirable	none	na	na
2	High resolution SCS	vital	Site is on line L14 and ~1km from line L6 of Bannock 1989 cruise. Both profiles are as page size photocopies in the Data Bank. Accompanying track chart lacks time of day or shotpoints. Site is <1km from line 3 and line 3bis of Bannock cruise Dormed-91. Lines are in Data Bank at large scale, with adequate navigation.	Yes	Yes
3	MCS &Seismic velocity determination	none	none, not required	na	na
4	Grid of intersecting seismic lines	desirable, but may be required in some cases	4 SCS lines within one kilometer, one crossing site	Yes	Yes
5	Refraction	none		na	na
6	3.5 or 12 kHz echosounder	required	Bannock 89A, line 14	Yes	Yes
7	Swath bathymetry	desirable, but may be required in some cases	High resolution bathymetric map contoured from numerous well-navigated narrow beam echo-sounder lines is an adequate substitute	Yes	Yes
8	Side-looking sonar	desirable, but may be required in some cases	none, not required	na	na
9	Photography or Video	none	none, not required	na	na
10	Heat flow	none	Multiple heatflow measurements around diapirs	Yes	Yes
11a	Magnetics	none		na	na
11b	Gravity	none		na	na
12	Cores: paleoenvironment / geotechnical	vital	Numerous piston/gravity cores in the area. Location map and lithostratigraphic/ biostratigraphic core logs are in the D. Seven piston/gravity cores are located within 1 mile of the site.		OK
13	Rock Sampling	none	none, not required		OK
14	Current meter	desirable, but may be required in some cases	none, not required		OK

SSP comments: Site is ready to drill.

ODP Site Survey Worksheet: Paleoenvironment or Fan

Proposal name: Mediterranean Ridge		Proposal #: 330-rev
Site: ESM-1	Proposed total depth (m): 250m	
Area: Erastosthenes Seamount	Proposed sed. penetration (m): 250m	
Lat/Long: 33°38'N, 32°40'E	Proposed basement penetration: (m): none	
Water depth: 750m	APC/XCB/RCB/re-entry? APC/XCB	
Who filled out worksheet? K. Kastens/J. Farre	Date of worksheet: 11/17/92, 7/29/93	

This site has been assessed under the Site Survey guidelines for Target Type "A", defined as "Paleoenvironment or Fan; generally APC/XCB penetration." See Joides Journal, vol.18, Feb 1992, p.31-33 for more information.

	DATA TYPE	GUIDELINE	STATUS OF DATA	exists	in DB
1	Deep penetration SCS	desirable		?	?
2	High resolution SCS	vital	Strakhov line 33, which is in the Data Bank, appears to pass nearby. However the site position is not marked on the profile, and the provided track chart lacks time of day annotations and also legible lat/long marks, so I can't deduce the site position relative to the profile.	?	?
3	MCS &Seismic velocity determination	none	Site is on MCS line MS-54 at shotpoint 980..	Yes	Yes
4	Grid of intersecting seismic lines	desirable, but may be required in some cases	(Required in this case because of complex structure) Only one seismic line is known to cross the site, and the proper section is not in the Data Bank.	?	?
5	Refraction	none		na	na
6	3.5 or 12 kHz echosounder	required	none	No	No
7	Swath bathymetry	desirable, but may be required in some cases	?	?	?
8	Side-looking sonar	desirable, but may be required in some cases	none	na	na
9	Photography or Video	none		na	na
10	Heat flow	none		na	na
11a	Magnetics	none		na	na
11b	Gravity	none		na	na
12	Cores: paleoenvironment / geotechnical	vital	The Data Bank contains no documentation of a core at or near the top of Erastosthenes Seamount	?	?
13	Rock Sampling	none		na	na
14	Current meter	desirable, but may be required in some cases	Because of shallow water depth, some information should be provided about current velocities and bottom shear.	?	??

SSP comments: This site lacks 3.5kHz data, nearby cores, and sufficient seismic data. This site is not ready to drill.

ODP Site Survey Worksheet: Paleoenvironment or Fan

Proposal name: Mediterranean Ridge	Proposal #: 330-rev
Site: ESM2	Proposed total depth (m): 150m
Area: Erastosthenes Seamount	Proposed sed. penetration (m): 150m
Lat/Long: 33°52'N, 32°44'E	Proposed basement penetration: (m): none
Water depth: 1500m	APC/XCB/RCB/re-entry?
Who filled out worksheet? K. Kastens/J. Farre	Date of worksheet: 11/17/92, 7/29/93

This site has been assessed under the Site Survey guidelines for Target Type "A", defined as "Paleoenvironment or Fan; generally APC/XCB penetration." See Joides Journal, vol.18, Feb 1992, p.31-33 for more information.

	DATA TYPE	GUIDELINE	STATUS OF DATA	exists	in DB
1	Deep penetration SCS	desirable	none	?	?
2	High resolution SCS	vital	Strakhov line 29, which is in the Data Bank, appears to pass nearby. However the site position is not marked on the profile, and the provided track chart lacks time of day annotations and also legible lat/long marks, so I can't deduce the site position relative to the profile.	No	No
3	MCS &Seismic velocity determination	none	Site is on MCS line MS-54 at shotpoint 640.	Yes	Yes
4	Grid of intersecting seismic lines	desirable, but may be required in some cases	Crossing seismic lines are required in this complex environment.	No	No
5	Refraction	none		na	na
6	3.5 or 12 kHz echosounder	required	none	No	No
7	Swath bathymetry	desirable, but may be required in some cases	none, not required but would strengthen the case that you understand the depositional and structural environment well enough to justify drilling.	na	na
8	Side-looking sonar	desirable, but may be required in some cases	none, not required	na	na
9	Photography or Video	none		na	na
10	Heat flow	none		na	na
11a	Magnetics	none		na	na
11b	Gravity	none		na	na
12	Cores: paleoenvironment / geotechnical	vital	Data Bank has no documentation of a core on or near the top of Erastosthenes Seamount	No	No
13	Rock Sampling	none		na	na
14	Current meter	desirable, but may be required in some cases	not required	na	na

SSP comments: This site needs more seismic, 3.5 and core data. Site is not ready to drill.

ODP Site Survey Worksheet: Paleoenvironment or Fan

Proposal name: Mediterranean Ridge	Proposal #: 330-rev
Site: ESM3	Proposed total depth (m): 250
Area: Eraatosthenes Seamount	Proposed sed. penetration (m):250
Lat/Long: 33°38'N, 32°40'E	Proposed basement penetration: (m): 0
Water depth: 750	APC/XCB/RCB/re-entry? Double APC/XCB
Who filled out worksheet? K. Kastens/J. Farre	11/17/92 , 7/29/93

This site has been assessed under the Site Survey guidelines for Target Type "A", defined as "Paleoenvironment or Fan; generally APC/XCB penetration." See Joides Journal, vol.18, Feb 1992, p.31-33 for more information.

	DATA TYPE	GUIDELINE	STATUS OF DATA	exists	in DB
1	Deep penetration SCS	desirable	none	na	na
2	High resolution SCS	vital	Strakhov line 29, which is in the Data Bank, appears to pass nearby. However the site position is not marked on the profile, and the provided track chart lacks time of day annotations and also legible lat/long marks, so I can't deduce the site position relative to the profile.	No	No
3	MCS &Seismic velocity determination	none	Site is on MCS line MS-54 at shotpoint 400.	Yes	Yes
4	Grid of intersecting seismic lines	desirable, but may be required in some cases	Crossing seismic lines are required in this complex environment.	No	No
5	Refraction	none		na	na
6	3.5 or 12 kHz echosounder	required	none	No	No
7	Swath bathymetry	desirable, but may be required in some cases	None. Not required, but would strengthen the case that you understand the depositional and structural environment well enough to justify drilling.	na	na
8	Side-looking sonar	desirable, but may be required in some cases	none, not required	na	na
9	Photography or Video	none		na	na
10	Heat flow	none		na	na
11a	Magnetics	none		na	na
11b	Gravity	none		na	na
12	Cores: paleoenvironment / geotechnical	vital	Core 6 of cruise Bannock '83 is about 12 n. mi. away. This is a 3.5m core for which Data Bank has lithostratigraphic log, but no age information. In this complex terrain a closer core is required.	No	No
13	Rock Sampling	none		na	na
14	Current meter	desirable, but may be required in some cases	none, not required	na	na

SSP comments: Site needs more seismic, 3.5kHz and core data. Site is not ready to drill.

ODP Site Survey Worksheet: Paleoenvironment or Fan

Proposal name: Mediterranean Ridge	Proposal #: 330-rev
Site: ESM4	Proposed total depth (m): 300m
Area: Erastosthenes Smt.	Proposed sed. penetration (m): 300m
Lat/Long: 34°11'N, 32°46'E	Proposed basement penetration: (m): none
Water depth: 2000m	APC/XCB/RCB/re-entry? APC/XCB
Who filled out worksheet? K. Kastens/J. Farre	Date of worksheet: 11/7/92, 7/29/93

This site has been assessed under the Site Survey guidelines for Target Type "A", defined as "Paleoenvironment or Fan; generally APC/XCB penetration." See Joides Journal, vol.18, Feb 1992, p.31-33 for more information.

	DATA TYPE	GUIDELINE	STATUS OF DATA	exists	in DB
1	Deep penetration SCS	desirable		na	na
2	High resolution SCS	vital	Sparker profile SS-13 of R/V Bannock (March '83) has been submitted in support of this site. However, the enclosed track chart suggests that line SS-13 does not cross the site; line SS-14, which was not submitted, may cross the site. Strakhov line 29, which is in the Data Bank, appears to pass nearby. However the site position is not marked on the profile, and the provided track chart lacks time of day annotations and also legible lat/long marks, so I can't deduce the site position relative to the profile.	No	No
3	MCS &Seismic velocity determination	none	Site is on MCS line MS-54 at shotpoint 400.	Yes	Yes
4	Grid of intersecting seismic lines	desirable, but may be required in some cases	(Complex environment should have crossing lines) Only one seismic line is known to cross the site.	No	No
5	Refraction	none		na	na
6	3.5 or 12 kHz echosounder	required	none	No	No
7	Swath bathymetry	desirable, but may be required in some cases	none, not required, but would strengthen the case that you understand the depositional and structural environment well enough to justify drilling.	na	na
8	Side-looking sonar	desirable, but may be required in some cases	none	na	na
9	Photography or Video	none		na	na
10	Heat flow	none		na	na
11a	Magnetics	none		na	na
11b	Gravity	none		na	na
12	Cores: paleoenvironment/ geotechnical	vital	Core 4 of cruise Bannock '83 is about 8 n. mi. away. This is a 3.5m core for which Data Bank has lithostratigraphic log, but no age information. In this complex terrain a closer core is required.	No	No
13	Rock Sampling	none		na	na
14	Current meter	desirable, but may be required in some cases	none, not required	na	na

SSP comments: Based on recent site survey cruise, it appears that this site will be dropped from the program.

SSP Agenda Item 6.2

ODP Site Survey Worksheet: Paleoenvironment or Fan

Proposal name: Mediterranean Sapropels	Proposal #: 391-Rev2
Site: MedSap 1C (replaces 1A & 1B)	Proposed total depth (m):
Area: Erastosthenes Seamount	Proposed sed. penetration (m):
Lat/Long: 33°40.6'N, 322°42.6'E	Proposed basement penetration: (m):
Water depth: 870m	APC/XCB/RCB? APC
Who filled out worksheet? Kim Kastens	Date of worksheet: July 27, 1993

This site has been assessed under the Site Survey guidelines for Target Type "A", defined as "Paleoenvironment or Fan; generally APC/XCB penetration." See Joides Journal, vol.18, Feb 1992, p.31-33 for more information.

	DATA TYPE	GUIDELINE	STATUS OF DATA	exists	in DB
1	Deep penetration SCS	desirable	none, not needed	NN	NN
2	High resolution SCS	vital	one Sharkov SCS line near site According to email from Rob Kidd, crossing airgun lines were collected on TREDMAR-III cruise (June/July 1993)	yes	
3	MCS &Seismic velocity determination	none	none, not needed	NN	NN
4	Grid of intersecting seismic lines	desirable, but may be required in some cases	According to email from Rob Kidd, crossing airgun lines were collected on TREDMAR-III cruise (June/July 1993)	yes	
5	Refraction	none	none, not needed	NN	NN
6	3.5 or 12 kHz echosounder	required	profiles from MARFLUX	yes	
7	Swath bathymetry	desirable, but may be required in some cases	According to email from Rob Kidd, the Eratosthenes data package for the Med Ridge proposal includes a multi-beam map from Udinsev	yes	
8	Side-looking sonar	desirable, but may be required in some cases	According to email from Rob Kidd, long range SLS and deep-towed SLS were collected on TREDMAR-III cruise (June/July 1993)	yes	
9	Photography or Video	none	none, not needed	NN	NN
10	Heat flow	none	none, not needed	NN	NN
11a	Magnetics	none	none, not needed	NN	NN
11b	Gravity	none	none, not needed	NN	NN
12	Cores: paleoenvironment / geotechnical	vital	MARFLUX core K20B exactly at site MedSap 1C recovered 10 sapropels back to lower middle Pleistocene	yes	
13	Rock Sampling	none	none, not needed	NN	NN
14	Current meter	desirable, but may be required in some cases	none, not needed	NN	NN

SSP comments: (NN= not necessary) (1) There is some ambiguity about the site designation. I believe that this site, called MedSap 1C in proposal 391-rev2 is equivalent to the sites refered to as "MedSap 1 and MedSap 1A from the Eratosthenes Seamount" in Rob Kidd's email. There were sites called 1 and 1A in the previous proposal iterations, but they were not on Erastosthenes Seamount. (2) Newly collected TREDMAR III data package was not received in time to be evaluated by SSP, but if quality and quantity of data are as described by Rob Kidd email, then site could be ready for scheduling at PCOM December meeting.

ODP Site Survey Worksheet: Paleoenvironment or Fan

Proposal name: Mediterranean Sapropels	Proposal #: 391-rev2
Site: Med Sap 2B	Proposed total depth (m): 150m
Area: Mediterranean Ridge	Proposed sed. penetration (m): 150m
Lat/Long: 33°45.1'N, 24°42.3'E (note: this is not the same lat/long as MedSap2B in proposal 391-rev)	Proposed basement penetration: (m): none
Water depth: 1930m	APC/XCB/RCB? APC
Who filled out worksheet? Kim Kastens	Date of worksheet: 27 July 1993

This site has been assessed under the Site Survey guidelines for Target Type "A", defined as "Paleoenvironment or Fan; generally APC/XCB penetration." See Joides Journal, vol.18, Feb 1992, p.31-33 for more information.

	DATA TYPE	GUIDELINE	STATUS OF DATA	exists	in DB
1	Deep penetration SCS	desirable		NN	NN
2	High resolution SCS	vital	Bannock SCS line TREDMAR-III cruise (June-July 1993) collected new airgun data, according to an email from Rob Kidd	yes	
3	MCS &Seismic velocity determination	none	none, not needed	NN	NN
4	Grid of intersecting seismic lines	desirable, but may be required in some cases	TREDMAR-III cruise (June-July 1993) collected new airgun data, according to an email from Rob Kidd	yes	
5	Refraction	none	none, not needed	NN	NN
6	3.5 or 12 kHz echosounder	required	According to email from Rob Kidd, there is a very high quality high-resolution profile from a deep tow vehicle across site	yes	
7	Swath bathymetry	desirable, but may be required in some cases	will not be required if topography is not too complex, or if topography is adequately defined by existing conventional and deep tow bathymetry.		
8	Side-looking sonar	desirable, but may be required in some cases	According to email from Rob Kidd, TREDMAR-III cruise (June-July 1993) collected long range SLS plus deep towed SLS	yes	
9	Photography or Video	none	none, not needed	NN	NN
10	Heat flow	none	none, not needed	NN	NN
11a	Magnetics	none	none, not needed	NN	NN
11b	Gravity	none	none, not needed	NN	NN
12	Cores: paleoenvironment / geotechnical	vital	Bannock core BAN89-10GC retrieved 6 sapropels According to email from Rob Kidd additional cores were recovered on TREDMAR III (June/July 1993)	yes	
13	Rock Sampling	none	none, not needed	NN	NN
14	Current meter	desirable, but may be required in some cases	none, not needed	NN	NN

SSP comments: (NN=not needed) (1) Email from Rob Kidd dated July 23, 1993 implies that site position may be moved based on results from TREDMAR-III surveys. (2) Newly collected TREDMAR III data package was not received in time to be evaluated by SSP, but if quality and quantity of data are as described by Rob Kidd email, then site could be ready for scheduling at PCOM December meeting.

ODP Site Survey Worksheet: Paleoenvironment or Fan

Proposal name: Mediterranean Sapropels	Proposal #: 391rev2
Site: MedSap 2C (replaces 2A) reoccupation of DSDP Site 125	Proposed total depth (m): 150
Area: western Mediterranean Ridge	Proposed sed. penetration (m): 150
Lat/Long: 34°37.5'N, 20°25.8'E	Proposed basement penetration: (m): none
Water depth: 2782m	APC/XCB/RCB? APC
Who filled out worksheet? Kim Kastens	Date of worksheet: July 27, 1993

This site has been assessed under the Site Survey guidelines for Target Type "A", defined as "Paleoenvironment or Fan; generally APC/XCB penetration." See Joides Journal, vol.18, Feb 1992, p.31-33 for more information.

	DATA TYPE	GUIDELINE	STATUS OF DATA	exists	in DB
1	Deep penetration SCS	desirable		NN	NN
2	High resolution SCS	vital	Conrad line Challenger data from Leg 13 BAN89a line 0 TREDMAR III (June-July 1993)	yes	
3	MCS &Seismic velocity determination	none		NN	NN
4	Grid of intersecting seismic lines	desirable, but may be required in some cases	TREDMAR III (June-July 1993)		
5	Refraction	none		NN	NN
6	3.5 or 12 kHz echosounder	required	BAN89A line 0 (33kHz)	yes	
7	Swath bathymetry	desirable, but may be required in some cases		NN	NN
8	Side-looking sonar	desirable, but may be required in some cases		NN	NN
9	Photography or Video	none		NN	NN
10	Heat flow	none		NN	NN
11a	Magnetics	none		NN	NN
11b	Gravity	none		NN	NN
12	Cores: paleoenvironment / geotechnical	vital	DSDP Site 125	yes	yes
13	Rock Sampling	none		NN	NN
14	Current meter	desirable, but may be required in some cases		NN	NN

SSP comments: (NN=Not necessary) Because this is a reoccupation of a continuously-cored DSDP site that recovered the desired lithologies, SSP considers that this site is ready for drilling.

ODP Site Survey Worksheet: Paleoenvironment or Fan

Proposal name: Mediterranean Sapropels	Proposal #: 391-rev2
Site: MedSap 4A aka MedSap 4	Proposed total depth (m): 300m
Area: Gela Bank/ Sicily Channel	Proposed sed. penetration (m): 300m
Lat/Long: 37°01.9'N, 13°10.9'E	Proposed basement penetration: (m): none
Water depth: 470m	APC/XCB/RCB? APC
Who filled out worksheet? Kim Kastens	Date of worksheet: 5 Nov. 1992; revised 27 July 1993

This site has been assessed under the Site Survey guidelines for Target Type "A", defined as "Paleoenvironment or Fan; generally APC/XCB penetration." See Joides Journal, vol.18, Feb 1992, p.31-33 for more information.

	DATA TYPE	GUIDELINE	STATUS OF DATA	exists	in DB
1	Deep penetration SCS	desirable	none, not required	NN	NN
2	High resolution SCS	vital	R/V Tyro line SC4 according to site summary form	yes	
3	MCS &Seismic velocity determination	none	Site is at intersection of MCS lines G82-142 and G82-121C. These two lines are in the Data Bank. Velocities are shown. Site locations are not indicated on profiles, and I cannot figure out the site locations from the navigation provided.	yes	yes
4	Grid of intersecting seismic lines	desirable, but may be required in some cases	Site is at intersection of two MCS lines, and amid a dense grid (7.5km line spacing) of MCS lines. Unfortunately the MCS profiles provided do not show much information in the Plio-Pleistocene part of the sediment column.	yes	yes
5	Refraction	none	none, not required	NN	NN
6	3.5 or 12 kHz echosounder	required	R/V Tyro line SC4 according to site summary form	yes	
7	Swath bathymetry	desirable, but may be required in some cases	none, not required	NN	NN
8	Side-looking sonar	desirable, but may be required in some cases	none, not required	NN	NN
9	Photography or Video	none	none, not required	NN	NN
10	Heat flow	none	none, not required	NN	NN
11a	Magnetics	none	none, not required	NN	NN
11b	Gravity	none	none, not required	NN	NN
12	Cores: paleoenvironment / geotechnical	vital	R/V Tyro core MT7, MT9 according to site summary form	yes	
13	Rock Sampling	none	none, not required	NN	NN
14	Current meter	desirable, but may be required in some cases	none, not required	NN	NN

SSP comments:

ODP Site Survey Worksheet: Paleoenvironment or Fan

Proposal name: Mediterranean Sapropels	Proposal #: 391-rev2
Site: MedSap 4C (note this site is called 4B on site summary form and 4C in text; I use 4C to distinguish from old 4B in prop. 391-rev1	Proposed total depth (m): 450m
Area: Sicily Channel/ Gela Bank	Proposed sed. penetration (m): 450m
Lat/Long: 37°03.9'N, 13°15.3'E	Proposed basement penetration: (m): none
Water depth: 502m	APC/XCB/RCB? APC
Who filled out worksheet? Kim Kastens	Date of worksheet: 27 July 1993

This site has been assessed under the Site Survey guidelines for Target Type "A", defined as "Paleoenvironment or Fan; generally APC/XCB penetration." See Joides Journal, vol.18, Feb 1992, p.31-33 for more information.

	DATA TYPE	GUIDELINE	STATUS OF DATA	exists	in DB
1	Deep penetration SCS	desirable	none, not required	NN	NN
2	High resolution SCS	vital	R/V Tyro line SC7 according to site summary form	yes	
3	MCS &Seismic velocity determination	none	MCS Line G82-122	yes	yes
4	Grid of intersecting seismic lines	desirable, but may be required in some cases			
5	Refraction	none	none, not required	NN	NN
6	3.5 or 12 kHz echosounder	required	R/V Tyro line SC7 according to site summary form	yes	
7	Swath bathymetry	desirable, but may be required in some cases	none, not required	NN	NN
8	Side-looking sonar	desirable, but may be required in some cases	none, not required	NN	NN
9	Photography or Video	none	none, not required	NN	NN
10	Heat flow	none	none, not required	NN	NN
11a	Magnetics	none	none, not required	NN	NN
11b	Gravity	none	none, not required	NN	NN
12	Cores: paleoenvironment / geotechnical	vital	R/V Tyro MT11 according to site summary form	yes	
13	Rock Sampling	none	none, not required	NN	NN
14	Current meter	desirable, but may be required in some cases	none, not required	NN	NN

SSP comments:

ODP Site Survey Worksheet: Paleoenvironment or Fan

Proposal name: Mediterranean Sapropels	Proposal #: 391-rev2
Site: Med Sap 5	Proposed total depth (m): 200m
Area: Tyrrhenian Sea Site 652	Proposed sed. penetration (m): 200m
Lat/Long: 40°21.3'N, 12°08.6'E	Proposed basement penetration: (m): none
Water depth: 3466	APC/XCB/RCB/re-entry? APC
Who filled out worksheet? Kim Kastens	Date of worksheet: 5 Nov 1992, revised 27 July 1993

This site has been assessed under the Site Survey guidelines for Target Type "A", defined as "Paleoenvironment or Fan; generally APC/XCB penetration." See Joides Journal, vol.18, Feb 1992, p.31-33 for more information.

	DATA TYPE	GUIDELINE	STATUS OF DATA	exists	in DB
1	Deep penetration SCS	desirable	none, not required	NN	NN
2	High resolution SCS	vital	There should be SCS data collected on the Resolution during leg 107, but it is not mentioned in proposal or documented in the data package for this site. I looked in the 107 pink book underway geophysical data chapter but sites are not marked on profiles.	yes	
3	MCS &Seismic velocity determination	none	Site is on MCS line ST01 (sp 4250) and near MCS line ST09; both are in the Leg 107 data package.	yes	yes
4	Grid of intersecting seismic lines	desirable, but may be required in some cases	Site is near the crossing of two MCS lines.	yes	yes
5	Refraction	none	none, not required	NN	NN
6	3.5 or 12 kHz echosounder	required	There should be 3.5kHz data collect on the Resolution on leg 107, but it is not mentioned in the proposal or included in the Data package.	yes	
7	Swath bathymetry	desirable, but may be required in some cases	none, not required	NN	NN
8	Side-looking sonar	desirable, but may be required in some cases	none, not required	NN	NN
9	Photography or Video	none	none, not required	NN	NN
10	Heat flow	none	none, not required	NN	NN
11a	Magnetics	none	none, not required	NN	NN
11b	Gravity	none	none, not required	NN	NN
12	Cores: paleoenvironment / geotechnical	vital	Reoccupation of ODP site 652	yes	yes
13	Rock Sampling	none	none, not required	NN	NN
14	Current meter	desirable, but may be required in some cases	none, not required	NN	NN

SSP comments: This site is a reoccupation of 652. Site 652 recovered a Plio-Pleistocene section without major unconformities. Site is OK to drill.

ODP Site Survey Worksheet: Paleoenvironment or Fan

Proposal name: Mediterranean Sapropels	Proposal #: 391-rev2
Site: MedSap 6A	Proposed total depth (m): 350m
Area: Menorca Ridge	Proposed sed. penetration (m): 350m
Lat/Long: 38°53.9'N, 4°30.5'E (slightly moved from MedSap 6A in prop. 391-rev1)	Proposed basement penetration: (m): none
Water depth: 2369m	APC/XCB/RCB/re-entry? APC
Who filled out worksheet? Kim Kastens	Date of worksheet: 5 Nov 1992, revised 27 July 1993

This site has been assessed under the Site Survey guidelines for Target Type "A", defined as "Paleoenvironment or Fan; generally APC/XCB penetration." See Joides Journal, vol.18, Feb 1992, p.31-33 for more information.

	DATA TYPE	GUIDELINE	STATUS OF DATA	exists	in DB
1	Deep penetration SCS	desirable	none, not required	NN	NN
2	High resolution SCS	vital	Site is at intersection of lines BAL 84-15 and BAL 84-9 (R/V Bannock). Both profiles are in Data Bank at adequate scale with adequate navigation. Data is 30Kjoules sparker data according to reprint by Curzi et al (1985). Data reaches M-reflector (aka Y reflector), which is top of Miocene, so penetration is adequate for this program.	yes	yes
3	MCS &Seismic velocity determination	none	none, not required	NN	NN
4	Grid of intersecting seismic lines	desirable, but may be required in some cases	Site is at intersection of lines BAL 84-15 and BAL 84-9 (R/V Bannock). There is a regional grid of additional 30kjoule sparker lines (10-20km line spacing).	yes	yes
5	Refraction	none	none, not required	NN	NN
6	3.5 or 12 kHz echosounder	required	Reprint by Curzi et al (1985) states that 3.5kHz data, were collected along the BAL sparker lines, but this data is not in the data bank. Tyro lines MR1/MR6 according to site summary form.	yes	
7	Swath bathymetry	desirable, but may be required in some cases	none, not required	NN	NN
8	Side-looking sonar	desirable, but may be required in some cases	none, not required	NN	NN
9	Photography or Video	none	none, not required	NN	NN
10	Heat flow	none	none, not required	NN	NN
11a	Magnetics	none	none, not required	NN	NN
11b	Gravity	none	none, not required	NN	NN
12	Cores: paleoenvironment / geotechnical	vital	Tyro cores MT 12, 14, 15 according to site summary form	yes	
13	Rock Sampling	none	none, not required	NN	NN
14	Current meter	desirable, but may be required in some cases	none, not required	NN	NN

SSP comments:

ODP Site Survey Worksheet: Paleoenvironment or Fan

Proposal name: Mediterranean Sapropels	Proposal #: 391-rev2
Site: MedSap 7B (replaces 7A) reoccupation of DSDP 121	Proposed total depth (m): 690m
Area: Alboran Sea	Proposed sed. penetration (m): 690m
Lat/Long: 36°09.7'N, 4°22.4'W	Proposed basement penetration: (m): none
Water depth: 1163m	APC/XCB/RCB? APC
Who filled out worksheet? Kim Kastens	Date of worksheet: 27 July 1993

This site has been assessed under the Site Survey guidelines for Target Type "A", defined as "Paleoenvironment or Fan; generally APC/XCB penetration." See Joides Journal, vol.18, Feb 1992, p.31-33 for more information.

	DATA TYPE	GUIDELINE	STATUS OF DATA	exists	in DB
1	Deep penetration SCS	desirable	none, not required	NN	NN
2	High resolution SCS	vital	Site summary form refers to 121 site survey package, but there were no site survey packages in those olden days. There is a Challenger airgun profile in the Blue book, which is reasonably good quality.	yes	yes
3	MCS &Seismic velocity determination	none	DSDP 121 Init. Repts chapter illustrates a Jean Charcot "Flexotir" profile across the site.	yes	no
4	Grid of intersecting seismic lines	desirable, but may be required in some cases	none, not required	NN	NN
5	Refraction	none	none, not required	NN	NN
6	3.5 or 12 kHz echosounder	required	Site summary form refers to 121 site survey package, but there were no site survey packages in those olden days.		
7	Swath bathymetry	desirable, but may be required in some cases	none, not required	NN	NN
8	Side-looking sonar	desirable, but may be required in some cases	none, not required	NN	NN
9	Photography or Video	none	none, not required	NN	NN
10	Heat flow	none	none, not required	NN	NN
11a	Magnetics	none	none, not required	NN	NN
11b	Gravity	none	none, not required	NN	NN
12	Cores: paleoenvironment / geotechnical	vital	DSDP 121 (was only spot cored; has a big hiatus omiting lower Pliocene; has lots of turbidites in lower Pleistocene and Pliocene section)	yes	yes
13	Rock Sampling	none	none, not required	NN	NN
14	Current meter	desirable, but may be required in some cases	none, not required	NN	NN

SSP comments: (1) SSP grungingly approves this reoccupation site. The data in hand (drilling and seismic) show an angular unconformity in the lower Pliocene, and a section full of turbidites. The data in hand suggest that this is not a very good place to achieve the desired result of recovering a complete record of Plio-Pleistocene paleoceanographic conditions. (2) SSP believes that a more complete section, in a less turbidite-effected spot, can be found in the Alboran, and encourages the proponents to submit an alternate site for consideration at a future SSP meeting.

SSP Agenda Item 7.1

ODP Site Survey Worksheet: Offset Drilling, Tectonic Windows

Proposal name: Return to 735B	Proposal #: 300-Rev
Site: 735B	Proposed total depth (m): 2000 m
Area: SWIR	Proposed sed. penetration (m): 0
Lat/Long: 57°16.0' E; 32°43.4 S	Proposed basement penetration: (m): 1500
Water depth: 700 m	APC/XCB/RCB/re-entry? RCB/Re-Entry
Who filled out worksheet? Shiri Srivastava	Date of worksheet: July 28/93

This site has been assessed under the draft Site Survey guidelines for "Offset drilling into Tectonic Windows. See SSP Minutes, April 1993 more information. These guidelines are under revision. Contact SSP or Data Bank for current information.

	DATA TYPE	GUIDELINE	STATUS OF DATA	exists	in DB
1	Deep penetration SCS		Shallow penetration	X	
2	High resolution SCS	May be required; will be required if sites are in sediment pockets	None		
3	MCS & seismic velocity determination	MCS or OBS refraction recommended to determine the regional crustal structure	None		
4	Grid of intersecting seismic lines	Crossing lines over site not required; regional grid recommended	Some Scs	X	
5a	Refraction (shallow source)	MCS or OBS refraction recommended to determine the regional crustal structure	None		
5b	Refraction (deep source)	Experimental technique; may be useful	None		
6a	3.5 echosounder or equivalent	recommended	None		
6b	12kHz		None		
7	Swath bathymetry	Required	Yes, Seabeam	X	
8a	Side-looking sonar (shallow tow)	Recommended	Planned for , 1994 depends on funding		
8b	SLS (near-bottom tow)	Recommended (may be upgraded to "required")	Planed for 1994, depends on funding		
9	Photography or Video	Required	Some exists, additional planned for 1994	X	
10	Heat flow		None		
11a	Magnetics	Regional magnetic survey recommended	Yes, detailed	X	
11b	Gravity	Recommended	Yes dretailed	X	
12	Cores: paleo-environment/ geotechnical		None		
13	Rock Sampling	Required	From Leg 118, also some dredged samples	X	
14	Current meter	Will be required where swift currents present	None		
15	OBS microseismicity	May be useful where faults are still active	None		

SSP comments: Adiquate bathymetry gravity and magnetic data exist for the area. These were collected proir to Leg 118. Additional data is planned to be collected during 1994 pending on NSF approval .

ODP Site Survey Worksheet: Offset Drilling, Tectonic Windows

Proposal name: Return to 735B	Proposal #: 300-Rev
Site: 735C, D, E, F	Proposed total depth (m): 500m
Area: SWIR	Proposed sed. penetration (m): 0
Lat/Long: 57°16.0' E; 32°43.4 S	Proposed basement penetration: (m): 500
Water depth: 700 m	APC/XCB/RCB/re-entry? RCB
Who filled out worksheet? Shiri Srivastava	Date of worksheet: July 28/93

This site has been assessed under the draft Site Survey guidelines for "Offset drilling into Tectonic Windows. See SSP Minutes, April 1993 more information. These guidelines are under revision. Contact SSP or Data Bank for current information.

	DATA TYPE	GUIDELINE	STATUS OF DATA	exists	in DB
1	Deep penetration SCS		Shallow penetration	X	
2	High resolution SCS	May be required; will be required if sites are in sediment pockets	None		
3	MCS & seismic velocity determination	MCS or OBS refraction recommended to determine the regional crustal structure	None		
4	Grid of intersecting seismic lines	Crossing lines over site not required; regional grid recommended	Some Scs	X	
5a	Refraction (shallow source)	MCS or OBS refraction recommended to determine the regional crustal structure	None		
5b	Refraction (deep source)	Experimental technique; may be useful	None		
6a	3.5 echosounder or equivalent	recommended	None		
6b	12kHz		None		
7	Swath bathymetry	Required	Yes, Seabeam	X	
8a	Side-looking sonar (shallow tow)	Recommended	Planned for , 1994 depends on funding		
8b	SLS (near-bottom tow)	Recommended (may be upgraded to "required")	Planed for 1994, depends on funding		
9	Photography or Video	Required	Some exists, additional planned for 1994	X	
10	Heat flow		None		
11a	Magnetics	Regional magnetic survey recommended	Yes, detailed	X	
11b	Gravity	Recommended	Yes dretailed		
12	Cores: paleo-environment/ geotechnical		None		
13	Rock Sampling	Required	From Leg 118, also some dredged samples	X	
14	Current meter	Will be required where swift currents present	None		
15	OBS microseismicity	May be useful where faults are still active	None		

SSP comments: Adiquate bathymetry gravity and magnetic data exist for the area. These were collected proir to Leg 118. Additional data is planned to be collected during 1994 pending on NSF approval . The sites have located based on a composite cross section compiled from numerous geological information.