Technical Summary of USGS OBS Operations
R/V JOIDES Resolution,
ODP Leg 179

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Robert W. Busby and Hartley Hoskins
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Table of Contents

TABLE OF CONTENTS	2
EXPERIMENT SUMMARY:	4
DATA QUALITY SUMMARY:	4
TABLE 1.....	4
DEPLOY0:.....	4
DEPLOY1:.....	5
DEPLOY2,3:.....	5
DATA NOTES:	5
INTRODUCTION TO USGS OBS DATA VOLUMES;	5
DEPLOY0;.....	5
DEPLOY1;.....	5
DEPLOY2;.....	6
DEPLOY3;.....	6
DEPLOYMENT TABLES:	7
ODP LEG 179 DEPLOY0 (DOCKSIDE TEST)	7
ODP LEG 179 DEPLOY1 (HAMMER DRILL TEST 1, HOLE 1104E).....	7
ODP LEG 179 DEPLOY2 (ROTARY DRILLING, HOLE 1105A).....	7
ODP LEG 179 PREAMP (DIAGNOSTIC TEST OF RECORDING SYSTEM)	7
ODP LEG 179 SINESYNC (DIAGNOSTIC TEST OF OBS AND PILOT RECORDING SYSTEMS).....	7
ODP LEG 179 DEPLOY3 (SEISMICS WHILE DRILLING AT NERO, HOLE 1107A)	8
DEPLOYMENT NOTES	8
PREDEPLOYMENT NOTES:.....	8
DEPLOYMENT 0, DOCK TEST.....	8
RECOVERY OF DEPLOYMENT 0:	8
DEPLOYMENT 1, HAMMER DRILLING NEAR HOLE 735B AT HOLE 1104E:	9
RECOVERY OF DEPLOYMENT 1:	9
DEPLOYMENT 2, SEISMICS WHILE DRILLING NEAR HOLE 735B AT HOLE 1105A:.....	9
RECOVERY OF DEPLOYMENT 2:	9
PREAMP TEST.....	9
DEPLOYMENT 3, SEISMICS WHILE DRILLING AT NERO, HOLE 1107A:.....	10
RECOVERY OF DEPLOYMENT 3:	10
SOME INFORMATION ABOUT DESCENT RATES AND BOTTOM LOCATIONS:.....	10
OBS REPAIRS NEEDED:	12
PARTS USED:.....	12
MISCELLANEOUS ITEMS:.....	12
ITEMS REQUESTED FOR FUTURE EXPERIMENTS:	12
SOFTWARE BUGS DISCOVERED:.....	13
NEW SOFTWARE SUGGESTIONS:.....	13
TAPE LOG	14
TAPE LOG:	14
DEPLOY 0, DOCKSIDE TESTS.....	14

DEPLOY 1, HAMMER DRILLING.....	15
DEPLOY 2 SEISMICS WHILE DRILLING--HOLE 1105A.....	16
DEPLOY 3 SEISMICS WHILE DRILLING -HOLE 1107A - NERO.....	16
APPENDIX A:	18
DIRECTORY LISTING FROM PC.....	18
<i>Directory of D:\dock</i>	18
Directory of D:\dock\segyfiles.....	18
<i>Directory of D:\deploy1</i>	19
Directory of D:\deploy1\segyfile	20
<i>Directory of D:\deploy2</i>	20
Directory of D:\deploy2\segyfile	21
<i>Directory of D:\deploy3</i>	21
Directory of D:\deploy3\segyfile	22
UNIX DIRECTORY LISTING:	24
<i>deploy0:</i>	24
deploy0/pilotfiles:	24
../deploy0/pilotfiles/cape1:.....	24
../deploy0/pilotfiles/cape2:.....	24
../deploy0/pilotfiles/cape3:.....	25
deploy0/segyfiles:	25
DEPLOY1:.....	26
deploy1/pilotdata:	26
deploy1/segyfiles:	26
<i>UNIX directory listing for deploy 3</i>	26
DESCRIPTIONS OF PILOT DATA FROM LAMONT BOREHOLE EMAIL:	29
DEPLOY0.....	29
DEPLOY1	29
ACKNOWLEDGEMENTS	30

Experiment Summary:

The experiment was to determine if a technique known as "Seismics While Drilling" was a viable means of gathering seismic images of near hole structure without consuming any rig time. The idea is to use a correlation technique between the drill bit vibrations and seismometers installed at the seafloor much like an inverted Vertical Seismic Profile (VSP). LDEO Borehole Group constructed and operated the pilot sensor consisting of a three axis accelerometer and mounted on the drill string. USGS OBS were deployed on the ocean floor within a few hundred meters of the drill hole.

At the first site, (deploy1 Hole 1104E) a hammer drill bit was recorded as a sort of warmup drop and out of curiosity as to how this might compare to the other drilling which used a roller cone coring bit and a regular tri-cone bit. This was a short session lasting less than 24 hours. The next deployment, deploy2 Hole 1105A, was during a coring operation that lasted seven days with core to depth of 154m with no sediments. During this period the pilot sensor operated for 2.5 days. The final deployment, deploy3 Hole 1107A, was during the drilling of 370m of sediment and 114m of basement below the sediment. The pilot sensor operated during 36 hours of the drilling, through the sediments and 45 meters into basement.

In addition to the drilling recordings, a few tests were performed to assist the processing phase. First a dockside test with all three sensors located side by side on the dock in Cape Town was recorded, deploy 0 called dock or dockside. This data was shipped back before sailing to prime the data format conversion process. Two OBS diagnostic tests were recorded aboard the ship to test noise levels of amplifier electronics, Preamp1 and Preamp2. Finally, a sine wave generator was connected to an OBS and the pilot sensor recorder at the same time in order to ensure time labelling consistency and provide an easy signal to compare against for data conversion methods, called sinesync.

A few lines of refraction shooting by the F/S Sonne were also recorded during deploy3 at Hole 1107A. These were part of the SINUS project which was supposed to include recording of a borehole seismometer at the bottom of the hole. The JOIDES Resolution ran out of time and was unable to complete this portion of the experiment.

LDEO Borehole announced at the outset of the cruise they would withhold all pilot sensor data and deliver it after the cruise. Thus no shipboard correlation was possible. It is unlikely operations could have been altered much in any case.

Data Quality Summary:

Channel quality is indicated in the table below with a single character grade for each channel for each deployment.

Table 1.

Quality of each OBS channel in each deployment. Channels are listed in the order; 1=vertical, 2=horizontal_1, 3=horizontal_2, 4=hydrophone and the quality is indicated by; A=excellent, B=good, C=noisy, D=corrupted signal and F=failed to be recorded. # indicates the channel has not been reviewed for quality.

OBS Sphere	Deploy_0 Dockside	Deploy_1 Hammer	Deploy_2 SWD_1	Deploy_3 NOSE_1
A4	CBBB	CBBD	CB_B	CBBB
A8	BBDB	BBDD	BB_B	ABB_

Description of Bad Channels:

Deploy0:

A4 vertical shows lack of signal below 18 Hertz.. The preamp was tested and found to deliver a flat response from 4-60 Hertz. Perhaps the geophone is damaged? The A8 horizontals H1 and H2 seem relatively insensitive to blows to the dock as compared with A4 horizontals. The background spectra of the pairs A4 H1 : A8 H2 and A4 H2 : A8 H1 appear quite similar suggesting perhaps these channels are along the same axis. An attempt was made to align the horizontals with respect to the dock. It is not clear how

the background noise can be similar but strong signals not appear unless the background is simply electronic noise. The ambient seismic noise was very high.

Deploy1:

Both OBS hydrophones exhibit a strange clipping, truncated at positive values of ~650 counts and extend negative to tens of thousands of counts. A4 was deployed only 90 meters from the hammer bit. The seismometer shows large signals that correlate roughly with the drillers log sheet. Particularly notable are the frequencies at which the energy is concentrated seems to be 42, 63 and, with less amplitude, at 21 Hz. and these correlate well with pilot sensor and mud pump pressure measurements. A8 vertical exhibits weak signals at the same frequencies. The A8 horizontals again seem oblivious to real seismic input.

Deploy2,3:

OBS A4 Vertical shows lack of signal below 18 Hertz. Can't figure out why. A8 H2 seems to have been cured of 1 second hiccups by an amplifier change. A8 Hydro was not recorded for deploy3 in preparation for offset VSP.

Data Notes:

Introduction to USGS OBS data Volumes;

The data from this experiment are archived as SEG-Y format files, in this case the files are segments of continuous data broken into 40 second trace length and a new trace starting every 40 seconds. The sample rate is 200 samples/second and the data type is 4 byte IBM floats. No reduction velocity was applied. There are two sets of data files; a complete continuous record broken into SEG-Y files lasting an entire day (or portion of the day that was recorded), and a continuous record during times the SWD Pilot sensor was operating. The second set of data is entirely contained within the first set but is provided to readily access the portions of most interest to SWD investigations.

Deployment 3 also contains a few traditional refraction line files shot by the F/S Sonne. These files begin with SO and are 20 second traces with a reduction velocity of 8 km/sec.

Deploy0;

Dockside test of A4, A8 and the pilot sensor. The three instruments were lined up on the dock in Cape Town at 1 meter interval and the horizontal components pointing along and transverse to the pier. The instruments were only 5 meters from the Resolution and another large fishing vessel. At times traffic was very heavy, in fact a loaded truck passed within 15 inches of the equipment right off the bat.

OBS started acquisition while on deck at 14:30. They were swung onto the dock at 98/4/16 16:40 and repositioned at 17:00 GMT. The pilot sensor joined the deployment at 98/4/17 08:50 and began recording around 09:50 without a GPS clock. The GPS was added mid-day and two more sessions were recorded later that afternoon and evening.

Deploy1;

The bottom was hard rock with patches of sediment ponds. We do not know whether either OBS landed on rock or sediment. The hammer drill managed about 1.5 hours of operation, corresponding to line HD1. During this period the pilot sensor was operating on deck within the downhole measurement lab, not on the drill string. The hole penetration was 1.5 meters.

Deploy2;

Horizontal channels H2 were not recorded on both OBS in order to extend recording time from 5.8 to 7.8 days. The length of the drilling operation was uncertain at deployment time because it was scheduled to terminate upon arrival of a resupply boat, which ranged from May 7-10. We could not redeploy during a pipe trip due to lack of supplies, and we felt one channel could be sacrificed in order to get data from as deep as possible (150 meters it turned out).

OBS A4 was deployed 100 meters north of Hole 1105A, A8 was deployed 300 meters north of the hole in 702 meters of water. By ranging from four points 200 m north, east, west and south of the hole and from the hole itself we determined the OBS bottom positions to be; A4 60.0m 60° and A8 229.8m 357°. The offsets as recorded in the segy data are only approximate and the calculated values above should be used instead.

Deploy3;

Data recording began while instruments were still on deck, at 5/23/98 00:00 hours. OBS were launched at 5/23 13:19 and 13:32. A8 was dropped 100 m east of NERO, A4 was dropped 300m east of NERO in 1657 meters of water. Using five ranging positions (200 m east north, west, and south of hole plus the hole itself) we determined the bottom positions to be; A8 81m 165° and A4 210m 116°. A4 recorded all four channels while A8 recorded only the seismometer channels. The hydrophone channel of A8 was removed in preparation for recording of the offset VSP experiment.

We did not receive a working OBS2SEG-Y conversion program until the day before OBS were dropped for deploy1 (which lasted only 20 hours it turned out). Conversion of data to a viewable form occurred during deploy2. There very little time between deploy1 and deploy2 to investigate signal quality beyond the usual analog tests. An investigation of preamp and signals occurred between between deploy2 and deploy3.

Deployment Tables:

ODP Leg 179 Deploy0 (Dockside test)

USGS OBS deployment positions and clock drifts THESE POSITIONS FROM DEPLOYMENT

#OBS	TTID	Latitude	Longitude	Depth	Beginning_Time	Bshift	Ending_Time	Eshift	drift(10^-8)
s0	598	00 00.00	-00 0.0	0.0	4/16/98 17:30	9.28	4/17/98 19:18	16.6	+3.66
a4	131	-33 54.202	18 25.387	0.0	4/16/98 13:37	6.84	4/17/98 19:16	10.5	+3.45
a8	132	-33 54.202	18 25.385	0.0	4/16/98 13:46	5.88	4/17/98 19:15	20.4	+13.68

#

start of recording 4/16/98 14:30, 200 sps, channels 1-4, Last track 162

ODP Leg 179 Deploy1 (Hammer Drill test 1, hole 1104E)

USGS OBS deployment positions and clock drifts THESE POSITIONS ESTIMATED from Ranging

#OBS	TTID	Latitude	Longitude	Depth	Beginning_Time	Bshift	Ending_Time	Eshift	drift(10^-8)
s0	598	-32 43.116	57 15.844	725	4/29/98 13:27	13.3	5/2/98 05:43	15.8	+1.1
a4	131	-32 43.300	57 15.844	725	4/29/98 13:33	14.5	5/2/98 05:37	19.2	+2.0
a8	132	-32 43.172	57 15.844	725	4/29/98 13:07	19.2	5/2/98 05:40	32.8	+5.9

#

start of recording 5/1/98 06:00, 200 sps, channels 1-4, Last track 122

positions known to about 50m, relative offset known better than absolute position

ODP Leg 179 Deploy2 (Rotary drilling, hole 1105A)

USGS OBS deployment positions and clock drifts THESE POSITIONS ESTIMATED see range, bearing

#OBS	TTID	Latitude	Longitude	Depth	Beginning_Time	Bshift	Ending_Time	Eshift	drift(10^-8)
s0	598	-32 43.109	57 16.657	703	5/2/98 17:59	16.2	5/10/98 16:05	21.8	+0.8
a4	131	-32 43.025	57 16.731	703	5/2/98 17:40	20.0	5/10/98 16:00	41.2	+3.1
a8	132	-32 42.952	57 16.657	703	5/2/98 17:54	42.8	5/10/98 16:03	117.0	+17.1

#

start of recording 5/3/98 08:00, 200 sps, channels 124, Last track 726 End of data 98/5/10 14:56

Use range and bearing below, not segy offsets.

Range and Bearing of OBS from hole: A4 = 60M 60°, A8 = 230M 357°

ODP Leg 179 Preamp (Diagnostic test of recording system)

USGS OBS deployment positions and clock drifts THESE POSITIONS FAKE

#OBS	TTID	Latitude	Longitude	Depth	Beginning_Time	Bshift	Ending_Time	Eshift	drift(10^-8)
s0	598	-32 43.314	57 15.886	703	5/10/98 16:03	21.8	5/13/98 12:41	20.2	-0.6
a4	131	-32 43.314	57 15.886	703	5/10/98 17:30	1.54	5/13/98 12:44	2.8	+0.5
a8	132	-32 43.314	57 15.886	703	5/10/98 17:27	6.36	5/13/98 12:38	48.0	+17.0

#

start of recording 5/13/98 12:30, 200 sps, channels 1234, Last track 9 End of data 98/5/13 14:16

ODP Leg 179 Sinesync (Diagnostic test of OBS and Pilot recording systems)

USGS OBS deployment positions and clock drifts THESE POSITIONS FAKE

#OBS	TTID	Latitude	Longitude	Depth	Beginning_Time	Bshift	Ending_Time	Eshift
s0	598	-32 43.314	57 15.886	0	5/21/98 21:07	5.72	5/22/98 10:00	5.32
a4	131	-32 43.314	57 15.886	0	5/17/98 21:04	7.12	5/22/98 10:05	6.60

#

S0 2 tracks, A4 10 tracks

ODP Leg 179 Deploy3 (Seismics While Drilling at NERO, Hole 1107A)

USGS OBS deployment positions and clock drifts THESE POSITIONS FROM RANGING

#OF	TTID	Latitude	Longitude	Depth	Beginning_Time	Bshift	Ending_Time	Eshift	drift(10^-8)
a8	598	-17 01.485 88	10.861	1654	5/22/98 10:33	5.28	5/28/98 12:41	3.26	-0.39
a4	131	-17 01.492 88	10.949	1657	5/22/98 10:29	10.6	5/28/98 11:40	31.8	+4.1

#

#start of recording 5/23/98 00:00, 200 sps, ch 1234 on A4 Last track 674, ch 123 on s0 in sphere A8, Last track 500 End of data

98/5/28 20:49. Use range and bearing below, not segy offsets.

Range and Bearing of OBS from hole: A4 = 210M 116°, A8 = 81M 165°

DEPLOYMENT NOTES**Predeployment Notes:**

Initial testing of all spheres and dataloggers occurred while dockside in Cape Town, South Africa 12 April –15 April. All gear was received without apparent damage in shipping, except loose drive bay in industrial computer, see Miscellaneous Items below. For the deck setup, we strapped the OBS spheres to the railing port side, forward of the Datasonics beacons near thrusters 3 and 4. This provides nearly complete cover from rain and excellent protection from seas. The computers and dataloggers were setup up in the aft section of the underway geophysics lab. This is the aft-most part of ship just under the helio deck. The GPS antennae were fed out a hole near the door and up to the posts guarding the edge of helio deck. There is a lot of vibration while underway in the lab, but the boat rarely rolls or pitches. All the sphere and stand shipping cases were left on the helio deck initially but then these were moved to be stored outside the underway geophysics strapped against the intake fans. The helio deck was cleared to allow transfer at sea of missing cargo. A hard hat, safety glasses and steel-toed shoes are required to reach the underway geophysics lab from the science quarters. A second pair of slippers for the underway lab is useful.

Deployment 0, Dock Test

The purpose of the dockside test was to provide a test data set;

- 1) to develop and test data format conversion programs for the two types of recorders and their formats.
- 2) to provide a functional check of the recording systems and sensors.
- 3) to provide a common signal to both sensors so sensor response and correlation technique could be tested.

Recovery of deployment 0:

A8 was found to be released and chirping about 98/4/17 13:00, this was shortly after a small fire broke out in the ship's laundry and during a bunch of activity. It continued to chirp until 16:17. I suspect the release was due to insufficient cocking and the activity tripped it or possibly some noise related to fire whistles.

A4 was found on recovery checkout to have the fuse blown on the -12VDC battery stack. Strongly suspect this happened during the attempt to measure -12VDC during checkout but cannot confirm because of inability to plot data, see next. Note added 5/10/98, traces appear ok.

OBS2SEGY V2.1 was found to produce erroneous sample interval, number of samples, and zero data values for 200 sps recording. Greg Miller provided V2.2 Apr 26. This produced correct sample interval, number of samples, but zero data values, and erroneous total static (clock corrections). Further investigation by Greg discovered a limit in the size of trace files at 32Kbytes for this software. At 200 sps this means a maximum trace length of 40 seconds. We had planned 150 seconds but 40 would work in our case.

All data was reprocessed using OBS2SEGY V2.2. This version does not write the trace start time into the header unless a reduction velocity is specified. We used 1000 km/sec. The version also does not calculate the DELAY header value correctly. It should be shot time – start time, it is now equal to (shot time – (start time – total static)). The shot time and start time are accurate and can be used to create the correct delay, if required.

Deployment 1, Hammer drilling near Hole 735B at Hole 1104E:

Normal deployment sequence. Reprogrammed through sphere to change start of recording.

Recovery of deployment 1:

A8 strobe not working on recovery. Power ok to strobe, replaced with spare.

Deployment 2, Seismics While Drilling near Hole 735B at Hole 1105A:

A8 Hydrophone EO cable seemed to transmit no signal and was perhaps shorted. Replaced with spare. A4 intersphere connector mounting bracket came off the upper sphere half and remained connected to lower sphere. Found held on by only two threads (now stripped). Fashioned a longer bolt and reattached.

Recovery of deployment 2:

Nothing unusual. How about that?

PREAMP TEST

Removed both sensor packs and preamps to investigate source of noise on A8 vertical and 1 sec spikes on A8 H2 channel. A4 has OP22 high gain preamp instead of LT1078 on H2, probably insignificant. Applied small sine wave to geophone inputs of A8 preamp. Seems to work ok on high and low gain. Measured phase and amplitude response of filters. Attached dummy resistors across inputs and recorded inside sphere to check recorder noise floor.

Synopsis of this test called PREAMP: May 12, 1998

	<u>datalogger</u>	<u>recorded</u>	<u>location of datalogger</u>
12:30	A4	no connection to preamp or sensor, open	inside A4 sphere
	A8	connected to preamp, dummy resistors, hydrophone	inside A8 sphere
12:50	SP	open inputs	on bench, underway lab
12:55	A4	connected to preamp, dummy resistors, hydrophone	inside A8 sphere
	A8	connected to preamp and sensors, whoops	inside A4 sphere
13:15	SP	open inputs	on bench, moving to deck
13:20	A4	connected to preamp, dummy resistors, hydrophone	inside A8 sphere
	A8	no connection to preamp or sensor, open	inside A4 sphere
13:40	SP	open inputs	on deck
13:45	A4	no connection to preamp or sensor, open	inside A4 sphere
	A8	open inputs	on bench, underway lab
14:05	SP	connected to preamp, dummy resistors, hydrophone	inside A8 sphere

Results of this test:

- The first session shows dead zero on all four channels of A8, which is believed to the result of the infamous wrong row preamp connection. This shorts the input to the datalogger. If true, this indicates that A8 datalogger is not a source of noise on any of the four high gain channels.
- Whenever A4 or SP is connected to the A8 preamp, 1 second spikes appear on H2.
- A strange long period drift also appears on H1. H1 was not observed to cause any problems before but the level may be quite low as to be easily missed.
- VT preamp does not appear to be noisy during this test. VT noise would appear to come from the geophone. The spectral shape of this noise is also consistent with a broken geophone. It has a broad shape peaking near the natural frequency of the phone.
- General conclusions are that the preamps produce about 1 bit RMS noise on the datalogger. This is quite good. The noise floor of the sensor could not be tested at sea. Disk spinup is seen on all dataloggers with preamps (but not with shorted input) indicating this noise comes from the preamps- not the datalogger nor the sensor. Operating the datalogger on the gel cell, independent of the preamps may discern whether this noise is due to the power circuit or RF radiation. Shielding the preamps (and the geophones) would not be difficult or add much weight.

The amplitude of the preamp is fairly constant from 4.5 to 64 Hertz. The low gain output has a gain of 195 and the high gain has a gain of 6000 or about +45 and +75 dB. The phase is not constant over the passband. At 3.12 Hz. it is 0°, 18.9 Hz it's 90°, at 35.5 Hz. it's 180°, 49.2 Hz. it's 270° and 59.8 Hz. back to 0°.

Changed H2 AMP10, LT1078 and VT LT1078. Inspected circuit for loose grounds, etc. In second preamp test, the A8 preamp as recorded by A4 datalogger and does not show one second ticks.

Following preamp2 test, datalogger A8 was found to be unresponsive. Power cycling would not cause bootup. The datalogger spins the disk constantly. The disk can be read by PC, swapping PR-6 or . connecting a different disk to datalogger gives no improvement. Benched A8.

Hydrophone preamp for A8 was adapted for use with Schlumberger borehole seismometer. A +/- 5 volt power supply and resistor network were added to the board. The signal line from gain stage 1 was clipped.

Deployment 3, Seismics While Drilling at NERO, Hole 1107A:

OBS A8 deployed without hydrophone preamp. Channels 123 selected. A8 RS-232 through sphere connection flaky. Could communicate through exact same cabling but with sphere open and white jumper. Sphere closed did not work in five attempts. Decided to forego communication and not fiddle with intersphere connector. Strobe on A8 takes about 2 minutes to begin flashing for some reason. Strobe on A4 dimly flickers, replaced with original strobe that was changed after deploy1. All three strobes are flakey.

Recovery of deployment 3:

Nighttime recovery, A8 chased _ mile aft. Strong winds and squall caused large surface drift and a couple waves on the hooking party, warm water at least. A4 came up without strobe operating, luckily spotted with light and brought quickly to good hooking position. Would really be nice to get some new strobes as the Resolution would not have spent much (maybe even any) time looking for OBS.

Some information about descent rates and bottom locations:

We measured a descent rate of 0.8 m/s in 20°C surface water to 1660 meters depth. The positioning accuracy of the JOIDES Resolution for dropping and ranging allowed us to determine the bottom location of the instruments with unusual accuracy. The ship position is determined by a Datasonics beacon on the bottom and the 12 thruster pods can maintain this position to a few meters.

The ship took up four positions; 200 meters north, west, east, and south of the hole. We ranged on each OBS obtaining 6 ranges at ten seconds interval (automatic). We did the same at the hole position. The ship's position at each range point was plotted on a maneuvering board (a polar plot with range and bearing scales marked). The average OBS range was computed and reduced to a surface horizontal range, H , by the formula $H = (R^2 - D^2)^{1/2}$, where R is the observed range and D is the water depth of that OBS. The horizontal range from each of the five ranging positions was drawn as an arc on the maneuvering board. The intersection of the arcs indicates the OBS position. At first glance these arcs do not, in fact, appear to converge. However, changing the OBS depth, and thereby the horizontal ranges, the arcs will increase or decrease in radius inversely proportional to the horizontal range. An iterative process of adjusting the depth yields a fairly accurate bottom position.

In deploy2 at hole 1105A (water depth 700m) OBS A4 drifted 107m course 146°, while A8 drifted 85m on a course 177°. That's 15% and 12% of water depth. No bottom current was observed in videos of drilling operations. In deploy3 at hole 1107A (water depth 1659m) A4 drifted 110m course 249°, while A8 drifted 96m on course 232°. That's 6.5% and 5.8% of water depth.

OBS repairs needed:

A4 upper bale has one hole stripped. We removed lock washers for use.

A4 upper sphere half, (blue ribbon) intersphere connector mount attachment to sphere. We grinded some machine 8/32 bolts down to fit inside the counter sunk holes. Would recommend holes be made for more standard bolt than filister-head.

Hydrophone coax inside sphere A8 has apparently been crimped or crushed. The cable has connection but may degrade in the future.

A8 hydrophone preamp reworked in preparation for VSP using Schlumberger tool. Tested with sensor but not actually used under fire.

A8 intersphere connection not good for RS-232. I am wondering if the driver in the cable may be slightly bad and this is what blew up A8 datalogger.

PARTS Used:

3 fuses for battery packs

A8 power wires for datalogger inside sphere spliced to lengthen. Used two crimp contacts.

Strobe replaced on A8, not working on recovery of deploy1. Power to strobe ok, replacement strobe works. Leaks? Reused this strobe on A4 for deploy3.

EO cable connecting A8 hydrophone found to be ok DC but does not pass hydrophone signal, (shorted maybe). Discarded offending cable.

10X Fluke scope probe seems flaky sometimes.

AC power adaptor for Fluke Scopemeter does not putout any volts. This may have been damaged by connecting to Scopemeter with alkaline batteries installed or may be the reason why the rechargeable pack was defective.

Lost long thin bladed screwdriver. Left near OBS deck operations, not there on return. Could have fallen into thruster pod. Sorry about that.

Miscellaneous Items:

A couple more BNC to miniclip cables for testing would be nice. We had one.

A BNC cable with male SMA coaxial connector (like on sensors) and another one with female end would help to monitor output of sensor directly with scope and/or feed test signal into preamp.

The Industrial computer was found on arrival to have the disk drive bay loose inside chassis and this had disconnected fan to processor. Reassembly was straightforward but a more secure system should be developed. Also we added a brace to the rear of the computer, securing it to the shipping rack. This reduces the load on the four front panel screws. You might consider installing rails in the rack so the computer is supported along the sides as well as each end.

Would suggest antistatic plastic bags for dataloggers before they are inserted into shipping case. Keeps foam bits out of assembly as well.

Items requested for future experiments:

A roll of duct tape.

Long thin-bladed screwdriver

Software Bugs discovered:

OBS Nav does not convert the time format yymmdd hhmmss.sss coreectly. The year month hour and minute get turned into zeros. I used the Ewing type jjj hh:mm:ss.sss.

The counter for missed shots in OBS2seggy does not seem to correctly indicate the number of shots for which there is no corresponding OBS data.

OBS2SEGY V2.2 does not calculate delay correctly.

New software suggestions:

OBS2SEGY might check off your progress through the panels of src, raw, pos, ebcdic,seggy. Perhaps simply displaying the selections made can help one to remember which OBS and line they were on. Minor issue.

1. The raw header test generates garbage output after hitting a single bad track. This is not new. Once a bad track is encountered it should exit and indicate the bad track number or it should indicate the bad track and resume (correctly) testing the remaining headers.
2. EB CDIC header should include the reduction velocity in the comment fields within the SEG Y file.

TAPE LOG

Seismic: While Drilling (SWD) and Normal Offset Seismic Experiment (NOSE)

ODP 179

April 11, 1998 to June 8 1998 Cape Town to Darwin

All tapes are Exabyte containing one tar file. Tapes written by unix (Solaris 2.5.3) medium density, /dev/rmt/0m. Tapes written by PC are medium density, and read on unix with /dev/rmt/0m. Paths are relative, in so far as possible with PC tar. On Unix tapes the path is ./odp179/SWD/deployX, on DOS tapes the path is simply deployX.

Tape numbering, is dataset.volume.copy where dataset refers to data corresponding to an OBS deployment sequence, volume refers to part or all of this data (represented in a certain way) and copy means identical copies of this volume delivered to different destinations. Two volumes may contain the same data, written by different machines, or one volume may be entirely contained in another volume. Odd numbered volumes are written by PC and contain only OBS data, even numbered volumes are written by Unix and contain OBS and PILOT data. The complete, most refined, data set is usually the highest even volume.

OBS SEG Y data is IBM 32 bit floats, SEG Y format type 2. The DELAY value in the trace header is incorrect, it should equal the shot time – start time. In this experiment it equals the LagtimeB, except in the SO lines where a reduction velocity delay is used and this term dominates LagtimeB.

Copies delivered to USGS contain only USGS OBS data and are used for quality control of the instruments, testing of the OBS software and to regenerate SEG Y files should archives prove somehow unusable. These data volumes travel with the instruments back to USGS. Channel Z copies are delivered to R. Stephen as performance of services rendered under WHOI P.O.# K101710. Channel Z Seismometry retains no data archive after this delivery. Copies designated as WHOI are delivered to H. Hoskins while aboard the Resolution as an independent transport mechanism to R. Stephen at WHOI. Copies designated ODP are delivered to Jay Miller. Copies designated as GEOMAR are delivered to M. Gerdorf for transport to Germany.

Good Luck to All....

contact: rwbusby@cape.com, or greg@obs.er.usgs.gov with any questions about the data format.

Directory listings of all deployments are appended to this report.

A couple email messages from Lamont Borehole describing the Pilot sensor data files are also appended.

Tape Log:

Deploy 0, Dockside Tests

*0.1.1 Dockside Test in Cape Town OBS RAW and SEG Y files, PC tar on fracture d:\ [tar -cv dock]
To read on Solaris; tar -xvf /dev/rmt/0m dock. Recorded 4/16 14:30 to 4/17/98 19:15, written 4/18/98.
Copy 1 Channel Z Contains erroneous SEG Y file construction.*

*0.1.2 Dockside Test in Cape Town: OBS RAW and SEG Y files, PC tar on fracture d:\ [tar -cv dock]
To read on Solaris; tar -xvf /dev/rmt/0m dock. Recorded 4/16 14:30 to 4/17/98 19:15, written 4/18/98.
Copy 2 USGS Delivered via FedEx 4/26/98 Contains erroneous SEG Y file construction.*

0.1.3 Dockside Test in Cape Town: OBS RAW and SEG Y files, PC tar on fracture d:\ [tar -cv dock]

R/V JOIDES Resolution, ODP Leg 179

To read on Solaris; tar -xvf /dev/rmt/0m dock. Recorded 4/16 14:30 to 4/17/98 19:15, written 4/18/98. Copy 3 WHOI Delivered via FedEx 4/26/98 Contains erroneous SEG Y file construction.

0.2.1 Dockside Test in Cape Town: OBS (RAW and SEG Y files) and PILOT SENSOR (RAW files), Unix tar on lhotse ~odp179/SWD [tar -cvf /dev/rmt/0h ./dockside] To read on Solaris; tar -xvf /dev/rmt/0h . Recorded 4/16 14:30 to 4/17/98 19:15, written 4/18/98. Copy 1 WHOI Delivered via FedEx 4/26/98 Contains erroneous SEG Y file construction.

0.4.1 Dockside Test in Cape Town: OBS (RAW and SEG Y files) and PILOT SENSOR (RAW files), Unix tar on lhotse ~odp179/SWD [tar -cvf /dev/rmt5 ./dockside] To read on Solaris; tar -xvf /dev/rmt/0h . Recorded 4/16 14:30 to 4/17/98 19:15, written 4/18/98. Copy 1 WHOI Delivered via FedEx 4/26/98 Contains erroneous SEG Y file construction.

OK lets get this right finally

0.3.1 Dockside Test in Cape Town: OBS RAW and SEG Y files, PC tar on fracture d:\ [tar -cv dock] To read on Solaris; tar -xvf /dev/rmt/0m dock. Recorded 4/16 14:30 to 4/17/98 19:15, written 4/30/98, rewritten 5/9/98 with revised SEG Y. Copy 1 Channel Z.

0.3.2 Dockside Test in Cape Town: OBS RAW and SEG Y files, PC tar on fracture d:\ [tar -cv dock] To read on Solaris; tar -xvf /dev/rmt/0m dock. Recorded 4/16 14:30 to 4/17/98 19:15, written 4/30/98, rewritten 5/9/98 with revised SEG Y. Copy 2 USGS.

0.6.1 Dockside Test in Cape Town: OBS (RAW and SEG Y files) and PILOT SENSOR (RAW files), Unix tar on lhotse ~odp179/SWD [tar -cvf /dev/rmt/0m ./odp179/SWD/deploy0] To read on Solaris; tar -xvf /dev/rmt/0m . Recorded 4/16 14:30 to 4/17/98 19:15, written 4/30/98, rewritten 5/9/98 with revised SEG Y and uncorrupted PILOT. Copy 1 Channel Z.

0.6.2 Dockside Test in Cape Town: OBS (RAW and SEG Y files) and PILOT SENSOR (RAW files), Unix tar on lhotse ~odp179/SWD [tar -cvf /dev/rmt/0m ./odp179/SWD/deploy0] To read on Solaris; tar -xvf /dev/rmt/0m . Recorded 4/16 14:30 to 4/17/98 19:15, written 4/30/98, rewritten 5/9/98 with revised SEG Y and uncorrupted PILOT. Copy 2 WHOI

Deploy 1, Hammer Drilling

1.1.1 Deploy1 of OBS recording Hammer Drilling at HD1. OBS data; raw, shot, src and SEG Y files for OBS A4 and A8. PC tar on fracture of D:\deploy1 [tar cv deploy1]. To read on Solaris; tar -xvf /dev/rmt/0m deploy1. Data recorded 98/5/1 06:00 to 98/5/2 03:41, written 98/5/4, rewritten 5/9/98 with revised SEG Y. Copy 1 Channel Z

1.1.2 Deploy1 of OBS recording Hammer Drilling at HD1. OBS data; raw, shot, src and SEG Y files for OBS A4 and A8. PC tar on fracture of D:\deploy1 [tar cv deploy1]. To read on Solaris; tar -xvf /dev/rmt/0m deploy1. Data recorded 98/5/1 06:00 to 98/5/2 03:41, written 98/5/4, rewritten 5/9/98 with revised SEG Y. Copy 2 USGS

1.2.1 Deploy1 of OBS recording Hammer Drilling at HD1. OBS data; shot, and SEG Y files for OBS A4 and A8. PILOT raw data for 98/5/1 21:41 to 23:00. Unix tar on lhotse [tar -cvf /dev/rmt/0m ./odp179/SWD/deploy1]. To read on Solaris; tar -xvf /dev/rmt/0m . Data recorded 98/5/1 06:00 to 98/5/2 03:41, written 98/5/4, rewritten 5/9/98 with revised SEG Y. Copy 1 Channel Z

1.2.2 Deploy1 of OBS recording Hammer Drilling at HD1. OBS data; shot, and SEG Y files for OBS A4 and A8. PILOT raw data for 98/5/1 21:41 to 23:00. Unix tar on lhotse [tar -cvf /dev/rmt/0m

./odp179/SWD/deploy1]. To read on Solaris; tar -xvf /dev/rmt/0m . Data recorded 98/5/1 06:00 to 98/5/2 03:41, written 98/5/4, rewritten 5/9/98 with revised SEGYY. Copy 2 WHOI

Deploy 2 Seismics While Drilling--Hole 1105A

Lines sd3, sd4, sd5, etc. ... correspond to continuous data of May 3, May 4, May 5, respectively (sd0 is May 10). Line sdA, sdB sdC and sdD are four periods in which the pilot sensor was also recorded. Pilot sensor is not available during the cruise.

2.1.1 Deploy2 of OBS recording Seismics While Drilling at Hole 1105A. OBS data; raw, shot, src and SEGYY files for OBS A4 and A8. PC tar on fracture of D:\deploy1 [tar cv deploy2]. To read on Solaris; tar -xvf /dev/rmt/0m deploy1. To read on Solaris; tar -xvf /dev/rmt/0m . Data recorded 1998 May 3-10, written 98/5/15. Copy 1 Channel Z

2.1.2 Deploy2 of OBS recording Seismics While Drilling at Hole 1105A. OBS data; raw, shot, src and SEGYY files for OBS A4 and A8. PC tar on fracture of D:\deploy1 [tar cv deploy2]. To read on Solaris; tar -xvf /dev/rmt/0m deploy1. To read on Solaris; tar -xvf /dev/rmt/0m . Data recorded 1998 May 3-10, written 98/5/15. Copy 2 USGS

2.2.1 Deploy2 of OBS recording Seismics While Drilling at Hole 1105A. OBS data; shot, and SEGYY files for OBS A4 and A8. PSGY are passcal format segy. Unix tar on lhotse [tar -cvf /dev/rmt/0m ./odp179/SWD/deploy2]. To read on Solaris; tar -xvf /dev/rmt/0m . Data recorded 1998 May 3-10, written 98/5/15. Copy 1 Channel Z

2.2.2 Deploy2 of OBS recording Seismics While Drilling at Hole 1105A. OBS data; shot, and SEGYY files for OBS A4 and A8. . PSGY are passcal format segy . Unix tar on lhotse [tar -cvf /dev/rmt/0m ./odp179/SWD/deploy2]. To read on Solaris; tar -xvf /dev/rmt/0m . Data recorded 1998 May 3-10, written 98/5/15. Copy 2 WHOI

012.3.1 Deployments 0,1,2 including dockside tests, hammer drilling and SWD at Hole 1105A. OBS raw, src, shot, and SEGYY files for A4 and A8. PC tar on Fracture D:\.]. To read on Solaris; tar -xvf /dev/rmt/0m deployX. Tape written 5/28/98. Copy 1 ODP

Deploy 3 Seismics While Drilling--Hole 1107A - NERO

Lines d23, d24, d25, d26, d27 correspond to continuous data of May 23, May 24, May 25, May 26 May 27 respectively. Line sdE is when the pilot sensor was also recorded. Pilot sensor is not available during the cruise. Lines SO7, SO8, SO9 and SOA correspond to SINUS lines P7, P8, P9, and P10. SO lines are 20 second traces with 8 km/sec reduction velocity.

3.1.1 Deploy3 of OBS recording Seismics While Drilling at Hole 1107A. OBS data; raw, shot, src and SEGYY files for OBS A4 and A8. PC tar on fracture of D:\deploy1 [tar cv deploy3]. To read on Solaris; tar -xvf /dev/rmt/0m deploy1. To read on Solaris; tar -xvf /dev/rmt/0m . Data recorded 1998 May 23-27, written 98/6/1. Copy 1 Channel Z

3.1.2 Deploy3 of OBS recording Seismics While Drilling at Hole 1107A. OBS data; raw, shot, src and SEGYY files for OBS A4 and A8. PC tar on fracture of D:\deploy1 [tar cv deploy3]. To read on Solaris; tar -xvf /dev/rmt/0m deploy1. To read on Solaris; tar -xvf /dev/rmt/0m . Data recorded 1998 May 23-27, written 98/6/1. Copy 2 USGS

R/V JOIDES Resolution, ODP Leg 179

3.1.3 Deploy3 of OBS recording Seismics While Drilling at Hole 1107A. OBS data; raw, shot, src and SEGY files for OBS A4 and A8. PC tar on fracture of D:\deploy1 [tar cv deploy3]. To read on Solaris; tar -xvf /dev/rmt/0m deploy1. To read on Solaris; tar -xvf /dev/rmt/0m . Data recorded 1998 May 23-27, written 98/6/1. Copy 3 ODP

3.1.4 Deploy3 of OBS recording Seismics While Drilling at Hole 1107A. OBS data; raw, shot, src and SEGY files for OBS A4 and A8. PC tar on fracture of D:\deploy1 [tar cv deploy3]. To read on Solaris; tar -xvf /dev/rmt/0m deploy1. To read on Solaris; tar -xvf /dev/rmt/0m . Data recorded 1998 May 23-27, written 98/6/1. Copy 4 GEOMAR

3.2.1 Deploy3 of OBS recording Seismics While Drilling at Hole 1107A. OBS data; shot, and SEGY files for OBS A4 and A8. PSGY are passcal format segy. Unix tar on lhotse [tar -cvf /dev/rmt/0m /odp179/SWD/deploy3]. To read on Solaris; tar -xvf /dev/rmt/0m . Data recorded 1998 May 23-27, written 98/6/1. Copy 1 Channel Z

3.2.2 Deploy3 of OBS recording Seismics While Drilling at Hole 1107A. OBS data; shot, and SEGY files for OBS A4 and A8. . PSGY are passcal format segy . Unix tar on lhotse [tar -cvf /dev/rmt/0m /odp179/SWD/deploy3]. To read on Solaris; tar -xvf /dev/rmt/0m . Data recorded 1998 May 23-27, written 98/6/1. Copy 2 WHOI

Appendix A:

Directory listing from PC

Directory of D:\dock

```

.                <DIR>                04-18-98 10:58a .
..               <DIR>                04-18-98 10:58a ..
CPTA8    RAW    165,576,704 04-18-98 11:05a CPTA8.RAW
CPTA4    RAW    165,576,704 04-18-98 11:11a CPTA4.RAW
CP1SHT   TXT      15,417 04-30-98  5:44p cp1sht.txt
WS_FTP   LOG       1,732 04-30-98  8:29p WS_FTP.LOG
CP2SHT   TXT       9,207 04-30-98  5:44p cp2sht.txt
CP3SHT   TXT      15,417 04-30-98  5:44p cp3sht.txt
CP4SHT   TXT       3,051 04-30-98  5:44p cp4sht.txt
CP1A4    SRC      18,225 04-30-98  5:59p cp1a4.src
DOCKTEST          2,685 04-18-98 10:49p docktest
DEPLOY0   POS       537 04-30-98  5:53p deploy0.pos
CP1A8    SRC      18,225 04-30-98  5:59p cp1a8.src
CP2A4    SRC      10,935 04-30-98  6:00p cp2a4.src
CP2A8    SRC      10,935 04-30-98  6:00p cp2a8.src
CP3A4    SRC      18,225 04-30-98  6:00p cp3a4.src
CP3A8    SRC      18,225 04-30-98  6:00p cp3a8.src
CP4A4    SRC       3,645 04-30-98  6:00p cp4a4.src
CP4A8    SRC       3,645 04-30-98  6:00p cp4a8.src
CP0SHT   TXT      178,443 04-30-98  6:10p cp0sht.txt
CP0A4    SRC      207,765 04-30-98  6:22p cp0a4.src
CP0A8    SRC      207,765 04-30-98  6:22p cp0a8.src
GMDEP0   POS       254 04-18-98  9:55p gmdep0.pos
SEGYFI~1   <DIR>                04-18-98 10:19p segyfiles
21 file(s)    331,897,741 bytes
3 dir(s)      6,011.93 MB free

```

Directory of D:\dock\segfiles

```

.                <DIR>                04-18-98 10:19p .
..               <DIR>                04-18-98 10:19p ..
CP1A4_VT SGY       7,257,600 04-30-98  6:10p cp1a4_vt.sgy
CP1A4_H1 SGY       7,257,600 04-30-98  6:10p cp1a4_h1.sgy
CP1A4_H2 SGY       7,257,600 04-30-98  6:10p cp1a4_h2.sgy
CP1A4_HY SGY       7,257,600 04-30-98  6:10p cp1a4_hy.sgy
CP1A8_VT SGY       7,257,600 04-30-98  6:13p cp1a8_vt.sgy
CP1A8_H1 SGY       7,257,600 04-30-98  6:13p cp1a8_h1.sgy
CP1A8_H2 SGY       7,257,600 04-30-98  6:13p cp1a8_h2.sgy
CP1A8_HY SGY       7,257,600 04-30-98  6:13p cp1a8_hy.sgy
CP2A4_VT SGY       4,356,000 04-30-98  6:14p cp2a4_vt.sgy
CP2A4_H1 SGY       4,356,000 04-30-98  6:14p cp2a4_h1.sgy
CP2A4_H2 SGY       4,356,000 04-30-98  6:14p cp2a4_h2.sgy
CP2A4_HY SGY       4,356,000 04-30-98  6:14p cp2a4_hy.sgy

```

R/V JOIDES Resolution, ODP Leg 179

CP2A8_VT	SGY	4,356,000	04-30-98	6:16p	cp2a8_vt.sgy
CP2A8_H1	SGY	4,356,000	04-30-98	6:16p	cp2a8_h1.sgy
CP2A8_H2	SGY	4,356,000	04-30-98	6:16p	cp2a8_h2.sgy
CP2A8_HY	SGY	4,356,000	04-30-98	6:16p	cp2a8_hy.sgy
CP3A4_VT	SGY	7,257,600	04-30-98	6:18p	cp3a4_vt.sgy
CP3A4_H1	SGY	7,257,600	04-30-98	6:18p	cp3a4_h1.sgy
CP3A4_H2	SGY	7,257,600	04-30-98	6:18p	cp3a4_h2.sgy
CP3A4_HY	SGY	7,257,600	04-30-98	6:18p	cp3a4_hy.sgy
CP3A8_VT	SGY	7,257,600	04-30-98	6:19p	cp3a8_vt.sgy
CP3A8_H1	SGY	7,257,600	04-30-98	6:19p	cp3a8_h1.sgy
CP3A8_H2	SGY	7,257,600	04-30-98	6:19p	cp3a8_h2.sgy
CP3A8_HY	SGY	7,257,600	04-30-98	6:19p	cp3a8_hy.sgy
CP4A4_VT	SGY	1,454,400	04-30-98	6:20p	cp4a4_vt.sgy
CP4A4_H1	SGY	1,454,400	04-30-98	6:20p	cp4a4_h1.sgy
CP4A4_H2	SGY	1,454,400	04-30-98	6:20p	cp4a4_h2.sgy
CP4A4_HY	SGY	1,454,400	04-30-98	6:20p	cp4a4_hy.sgy
CP4A8_VT	SGY	1,454,400	04-30-98	6:21p	cp4a8_vt.sgy
CP4A8_H1	SGY	1,454,400	04-30-98	6:21p	cp4a8_h1.sgy
CP4A8_H2	SGY	1,454,400	04-30-98	6:21p	cp4a8_h2.sgy
CP4A8_HY	SGY	1,454,400	04-30-98	6:21p	cp4a8_hy.sgy
CP0A4_VT	SGY	82,699,200	04-30-98	6:33p	cp0a4_vt.sgy
CP0A4_H1	SGY	82,699,200	04-30-98	6:33p	cp0a4_h1.sgy
CP0A4_H2	SGY	82,699,200	04-30-98	6:33p	cp0a4_h2.sgy
CP0A4_HY	SGY	82,699,200	04-30-98	6:33p	cp0a4_hy.sgy
CP0A8_VT	SGY	82,699,200	04-30-98	6:44p	cp0a8_vt.sgy
CP0A8_H1	SGY	82,699,200	04-30-98	6:44p	cp0a8_h1.sgy
CP0A8_H2	SGY	82,699,200	04-30-98	6:44p	cp0a8_h2.sgy
CP0A8_HY	SGY	82,699,200	04-30-98	6:44p	cp0a8_hy.sgy
WS_FTP	LOG	4,800	04-30-98	8:27p	WS_FTP.LOG

41 file(s) 824,203,200 bytes
2 dir(s) 6,011.93 MB free

Directory of D:\deploy1

.	<DIR>		04-29-98	3:47p	.
..	<DIR>		04-29-98	3:47p	..
A8D1	LOG	2,422	04-29-98	3:44p	a8d1.log
DEPLOY1	POS	712	05-02-98	8:48p	deploy1.pos
SPD1	LOG	2,608	04-29-98	3:45p	SPd1.log
D1A8	RAW	124,944,384	05-02-98	8:17a	D1A8.RAW
D1A4	RAW	124,944,384	05-02-98	8:22a	D1A4.RAW
HD0SHT	TXT	133,581	05-02-98	8:45p	hd0sht.txt
WS_FTP	LOG	648	05-02-98	8:45p	WS_FTP.LOG
HD1SHT	TXT	7,984	05-02-98	8:45p	hd1sht.txt
HD1A4	SRC	9,639	05-02-98	8:51p	hd1a4.src
A4D1	LOG	2,471	04-29-98	3:46p	A4d1.log
DEPLOY~2	CSH	173	05-02-98	12:42p	deploy1.shot.csh
HD0A4	SRC	158,112	05-02-98	8:51p	hd0a4.src
HD0A8	SRC	158,112	05-02-98	8:51p	hd0a8.src
SEGYPFILE	<DIR>		05-02-98	12:57p	segypfile
HD1A8	SRC	9,639	05-02-98	8:51p	hd1a8.src

14 file(s) 250,374,869 bytes
3 dir(s) 6,011.93 MB free

Directory of D:\deploy1\segyfile

```

.                <DIR>          05-02-98 12:57p .
..               <DIR>          05-02-98 12:57p ..
HD1A4_VT SGY      3,840,160 05-02-98 8:56p hd1a4_vt.sgy
HD1A4_H1 SGY      3,840,160 05-02-98 8:56p hd1a4_h1.sgy
HD1A4_H2 SGY      3,840,160 05-02-98 8:56p hd1a4_h2.sgy
HD1A4_HY SGY      3,840,160 05-02-98 8:56p hd1a4_hy.sgy
HD1A8_VT SGY      3,840,160 05-02-98 8:57p hd1a8_vt.sgy
HD1A8_H1 SGY      3,840,160 05-02-98 8:57p hd1a8_h1.sgy
HD1A8_H2 SGY      3,840,160 05-02-98 8:57p hd1a8_h2.sgy
HD1A8_HY SGY      3,840,160 05-02-98 8:57p hd1a8_hy.sgy
HD0A4_VT SGY      62,936,080 05-02-98 9:05p hd0a4_vt.sgy
HD0A4_H1 SGY      62,936,080 05-02-98 9:05p hd0a4_h1.sgy
HD0A4_H2 SGY      62,936,080 05-02-98 9:05p hd0a4_h2.sgy
HD0A4_HY SGY      62,936,080 05-02-98 9:05p hd0a4_hy.sgy
WS_FTP LOG        2,824 05-03-98 1:47p WS_FTP.LOG
HD0A8_VT SGY      62,936,080 05-02-98 9:16p hd0a8_vt.sgy
HD0A8_H1 SGY      62,936,080 05-02-98 9:16p hd0a8_h1.sgy
HD0A8_H2 SGY      62,936,080 05-02-98 9:16p hd0a8_h2.sgy
HD0A8_HY SGY      62,936,080 05-02-98 9:16p hd0a8_hy.sgy
17 file(s)       534,212,744 bytes
2 dir(s)         6,011.93 MB free

```

Directory of D:\deploy2

```

.                <DIR>          05-02-98 8:05p .
..               <DIR>          05-02-98 8:05p ..
D2A8 RAW         738,492,416 05-10-98 6:36p D2A8.RAW
D2A4 RAW         738,492,416 05-10-98 6:56p D2A4.RAW
SPD2 LOG          3,267 05-02-98 8:04p spd2.log
A8D2 LOG          2,790 05-02-98 8:03p A8d2.log
A4D2 LOG          3,141 05-02-98 8:02p A4d2.log
DEPLOY2 POS        734 05-27-98 6:46p deploy2.pos
WS_FTP LOG        2,195 05-17-98 5:16p WS_FTP.LOG
SD03SHT TXT        74,493 05-14-98 12:00p sd03sht.txt
SD04SHT TXT       150,093 05-14-98 12:00p sd04sht.txt
SD05SHT TXT       150,093 05-14-98 12:00p sd05sht.txt
SD06SHT TXT       150,093 05-14-98 12:00p sd06sht.txt
SD07SHT TXT       150,093 05-14-98 12:00p sd07sht.txt
SD07A8 SRC        174,960 05-14-98 12:16p sd07a8.src
SD07A4 SRC        174,960 05-14-98 12:16p sd07a4.src
SD08SHT TXT       150,093 05-14-98 2:21p sd08sht.txt
SD03A4 SRC         87,480 05-14-98 12:14p sd03a4.src
SD06A8 SRC        174,960 05-14-98 12:16p sd06a8.src
SD06A4 SRC        174,960 05-14-98 12:16p sd06a4.src
SD03A8 SRC         87,480 05-14-98 12:14p sd03a8.src
SD04A4 SRC        174,960 05-14-98 12:15p sd04a4.src

```

R/V JOIDES Resolution, ODP Leg 179

```

SD05A8   SRC      174,960  05-14-98 12:15p sd05a8.src
SD05A4   SRC      174,960  05-14-98 12:15p sd05a4.src
SD04A8   SRC      174,960  05-14-98 12:15p sd04a8.src
SEGYFILE <DIR>      05-14-98 12:20p segyfile
SD09SHT  TXT      150,093  05-14-98  3:22p sd09sht.txt
SD10SHT  TXT       91,993  05-14-98 10:21p sd10sht.txt
SD08A4   SRC      174,960  05-14-98  3:09p sd08a4.src
SD08A8   SRC      174,960  05-14-98  3:09p sd08a8.src
SD10A4   SRC     107,730  05-14-98 10:22p sd10a4.src
SD10A8   SRC     107,730  05-14-98 10:22p sd10a8.src
SDASHT   TXT       58,372  05-14-98  3:23p sdAsht.txt
SDBSHT   TXT       61,636  05-14-98  3:23p sdBsht.txt
SDCSHT   TXT       36,612  05-14-98  3:23p sdCsht.txt
SDDSHT   TXT       14,240  05-14-98  3:24p sdDsht.txt
SD09A4   SRC      174,960  05-14-98  3:24p sd09a4.src
SD09A8   SRC      174,960  05-14-98  3:24p sd09a8.src
SDAA4    SRC       69,660  05-14-98  3:25p sdAa4.src
SDAA8    SRC       69,660  05-14-98  3:25p sdAa8.src
SDBA4    SRC      73,548  05-14-98  3:25p sdBa4.src
SDBA8    SRC      73,548  05-14-98  3:25p sdBa8.src
SDCA4    SRC      43,740  05-14-98  3:26p sdCa4.src
SDCA8    SRC      43,740  05-14-98  3:26p sdCa8.src
SDDA4    SRC      17,091  05-14-98  3:26p sdDa4.src
SDDA8    SRC      17,091  05-14-98  3:26p sdDa8.src
43 file(s) 1,481,132,881 bytes
 3 dir(s)   376.77 MB free

```

Directory of D:\deploy2\segfile

missed it, sorry

Directory of D:\deploy3

```

.          <DIR>      05-28-98  6:42p .
..         <DIR>      05-28-98  6:42p ..
A4D3      TXT       4,149  05-22-98 12:15p a4d3.TXT
DEPLOY3   POS        769  05-28-98  6:46p deploy3.pos
WS_FTP    LOG      1,820  05-31-98  4:15p WS_FTP.LOG
RB9SHT    TXT       1,691  05-28-98  9:52p rb9sht.txt
SD23SHT   TXT     152,253  05-28-98  9:52p sd23sht.txt
SD24SHT   TXT     152,253  05-28-98  9:52p sd24sht.txt
D3A8      RAW    508,919,808 05-28-98  8:38p D3A8.RAW
D3A4      RAW    685,670,400 05-28-98  8:58p D3A4.RAW
SD25SHT   TXT     152,253  05-28-98  9:52p sd25sht.txt
SD26SHT   TXT     152,253  05-28-98  9:52p sd26sht.txt
SD27SHT   TXT     136,278  05-28-98  9:52p sd27sht.txt
SDESHT    TXT     195,103  05-28-98  9:52p sdEsht.txt
RB9A4     SRC        2,025  05-28-98  9:55p rb9a4.src
SDEA4     SRC     227,043  05-28-98  9:53p sdEa4.src
SO7SHT    TXT      26,462  05-29-98  5:28p so7sht.txt
RB9A8     SRC        2,025  05-28-98  9:55p rb9a8.src
D27A4     SRC     156,735  05-28-98  9:53p d27a4.src
SDEA8     SRC     227,043  05-28-98  9:53p sdEa8.src
D23A8     SRC     174,960  05-28-98  9:55p d23a8.src

```

R/V JOIDES Resolution, ODP Leg 179

D26A4	SRC	174,960	05-28-98	9:54p	d26a4.src
D27A8	SRC	156,735	05-28-98	9:53p	d27a8.src
D23A4	SRC	174,960	05-28-98	9:55p	d23a4.src
D25A4	SRC	174,960	05-28-98	9:54p	d25a4.src
D26A8	SRC	174,960	05-28-98	9:54p	d26a8.src
D24A8	SRC	174,960	05-28-98	9:54p	d24a8.src
D24A4	SRC	174,960	05-28-98	9:54p	d24a4.src
D25A8	SRC	174,960	05-28-98	9:54p	d25a8.src
SEGYFILE	<DIR>		05-29-98	8:53a	seggyfile
SOAA4	SRC	27,783	05-31-98	4:26p	soAa4.src
SO7A4	SRC	33,129	05-29-98	5:33p	so7a4.src
SO8SHT	TXT	29,825	05-31-98	4:15p	so8sht.txt
SO7A8	SRC	33,129	05-29-98	5:33p	so7a8.src
SO9SHT	TXT	19,562	05-31-98	4:15p	so9sht.txt
UKO2NAVD		1,806	05-31-98	4:15p	uko2navd
SOAA8	SRC	27,783	05-31-98	4:26p	soAa8.src
SO8A4	SRC	37,017	05-31-98	4:18p	so8a4.src
SOASHT	TXT	22,531	05-31-98	4:15p	soAsht.txt
SO9A4	SRC	24,138	05-31-98	4:21p	so9a4.src
SO8A8	SRC	37,017	05-31-98	4:18p	so8a8.src
SO9A8	SRC	24,138	05-31-98	4:21p	so9a8.src
39 file(s)		1,198,054,636 bytes			
3 dir(s)		376.78 MB free			

Directory of D:\deploy3\seggyfile

.	<DIR>	05-29-98	8:53a	.
..	<DIR>	05-29-98	8:53a	..
D23A4_VT	SGY	69,642,000	05-29-98	9:05a d23a4_vt.sgy
D23A4_H1	SGY	69,642,000	05-29-98	9:05a d23a4_h1.sgy
D23A4_H2	SGY	69,642,000	05-29-98	9:05a d23a4_h2.sgy
D23A4_HY	SGY	69,642,000	05-29-98	9:05a d23a4_hy.sgy
D23A8_VT	SGY	69,642,000	05-29-98	9:27a d23a8_vt.sgy
D23A8_H1	SGY	69,642,000	05-29-98	9:27a d23a8_h1.sgy
D23A8_H2	SGY	69,642,000	05-29-98	9:27a d23a8_h2.sgy
D24A4_VT	SGY	69,642,000	05-29-98	9:37a d24a4_vt.sgy
D24A4_H1	SGY	69,642,000	05-29-98	9:37a d24a4_h1.sgy
D24A4_H2	SGY	69,642,000	05-29-98	9:37a d24a4_h2.sgy
D24A4_HY	SGY	69,642,000	05-29-98	9:37a d24a4_hy.sgy
D24A8_VT	SGY	69,642,000	05-29-98	9:47a d24a8_vt.sgy
D24A8_H1	SGY	69,642,000	05-29-98	9:47a d24a8_h1.sgy
D24A8_H2	SGY	69,642,000	05-29-98	9:47a d24a8_h2.sgy
D25A4_VT	SGY	69,642,000	05-29-98	9:58a d25a4_vt.sgy
D25A4_H1	SGY	69,642,000	05-29-98	9:58a d25a4_h1.sgy
D25A4_H2	SGY	69,642,000	05-29-98	9:58a d25a4_h2.sgy
D25A4_HY	SGY	69,642,000	05-29-98	9:58a d25a4_hy.sgy
D25A8_VT	SGY	69,642,000	05-29-98	10:07a d25a8_vt.sgy
D25A8_H1	SGY	69,642,000	05-29-98	10:07a d25a8_h1.sgy
D25A8_H2	SGY	69,642,000	05-29-98	10:07a d25a8_h2.sgy
D26A4_VT	SGY	69,642,000	05-29-98	10:18a d26a4_vt.sgy
D26A4_H1	SGY	69,642,000	05-29-98	10:18a d26a4_h1.sgy
D26A4_H2	SGY	69,642,000	05-29-98	10:18a d26a4_h2.sgy
D26A4_HY	SGY	69,642,000	05-29-98	10:18a d26a4_hy.sgy
D26A8_VT	SGY	69,642,000	05-29-98	10:27a d26a8_vt.sgy
D26A8_H1	SGY	69,642,000	05-29-98	10:27a d26a8_h1.sgy

R/V JOIDES Resolution, ODP Leg 179

D26A8_H2	SGY	69,642,000	05-29-98	10:27a	d26a8_h2.sgy
D27A4_VT	SGY	62,388,000	05-29-98	10:41a	d27a4_vt.sgy
D27A4_H1	SGY	62,388,000	05-29-98	10:41a	d27a4_h1.sgy
D27A4_H2	SGY	62,388,000	05-29-98	10:41a	d27a4_h2.sgy
D27A4_HY	SGY	62,388,000	05-29-98	10:41a	d27a4_hy.sgy
D27A8_VT	SGY	62,388,000	05-29-98	10:49a	d27a8_vt.sgy
D27A8_H1	SGY	62,388,000	05-29-98	10:49a	d27a8_h1.sgy
D27A8_H2	SGY	62,388,000	05-29-98	10:49a	d27a8_h2.sgy
DEA4_VT	SGY	90,372,320	05-29-98	11:04a	dEa4_vt.sgy
DEA4_H1	SGY	90,372,320	05-29-98	11:04a	dEa4_h1.sgy
DEA4_H2	SGY	90,372,320	05-29-98	11:04a	dEa4_h2.sgy
DEA4_HY	SGY	90,372,320	05-29-98	11:04a	dEa4_hy.sgy
DEA8_VT	SGY	90,372,320	05-29-98	11:15a	dEa8_vt.sgy
DEA8_H1	SGY	90,372,320	05-29-98	11:15a	dEa8_h1.sgy
DEA8_H2	SGY	90,372,320	05-29-98	11:15a	dEa8_h2.sgy
RB9A4_VT	SGY	809,600	05-29-98	11:28a	rb9a4_vt.sgy
RB9A8_H2	SGY	809,600	05-29-98	11:22a	rb9a8_h2.sgy
RB9A8_HY	SGY	809,600	05-29-98	11:20a	rb9a8_hy.sgy
RB9A8_VT	SGY	809,600	05-29-98	11:22a	rb9a8_vt.sgy
RB9A8_H1	SGY	809,600	05-29-98	11:22a	rb9a8_h1.sgy
RB9A4_H1	SGY	809,600	05-29-98	11:28a	rb9a4_h1.sgy
RB9A4_H2	SGY	809,600	05-29-98	11:28a	rb9a4_h2.sgy
RB9A4_HY	SGY	809,600	05-29-98	11:28a	rb9a4_hy.sgy
WS_FTP	LOG	12,324	05-31-98	5:11p	WS_FTP.LOG
SO7A4_VT	SGY	6,645,760	05-29-98	5:40p	so7a4_vt.sgy
SO7A4_H1	SGY	6,645,760	05-29-98	5:40p	so7a4_h1.sgy
SO7A4_H2	SGY	6,645,760	05-29-98	5:40p	so7a4_h2.sgy
SO7A4_HY	SGY	6,645,760	05-29-98	5:40p	so7a4_hy.sgy
SO7A8_VT	SGY	6,645,760	05-29-98	5:42p	so7a8_vt.sgy
SO7A8_H1	SGY	6,645,760	05-29-98	5:42p	so7a8_h1.sgy
SO7A8_H2	SGY	6,645,760	05-29-98	5:42p	so7a8_h2.sgy
SO8A4_VT	SGY	7,425,280	05-31-98	4:34p	so8a4_vt.sgy
SO8A4_H1	SGY	7,425,280	05-31-98	4:34p	so8a4_h1.sgy
SO8A4_H2	SGY	7,425,280	05-31-98	4:34p	so8a4_h2.sgy
SO8A4_HY	SGY	7,425,280	05-31-98	4:34p	so8a4_hy.sgy
SO8A8_VT	SGY	7,425,280	05-31-98	4:37p	so8a8_vt.sgy
SO8A8_H1	SGY	7,425,280	05-31-98	4:37p	so8a8_h1.sgy
SO8A8_H2	SGY	7,425,280	05-31-98	4:37p	so8a8_h2.sgy
SO9A4_VT	SGY	4,843,120	05-31-98	4:39p	so9a4_vt.sgy
SO9A4_H1	SGY	4,843,120	05-31-98	4:39p	so9a4_h1.sgy
SO9A4_H2	SGY	4,843,120	05-31-98	4:39p	so9a4_h2.sgy
SO9A4_HY	SGY	4,843,120	05-31-98	4:39p	so9a4_hy.sgy
SO9A8_VT	SGY	4,843,120	05-31-98	4:40p	so9a8_vt.sgy
SO9A8_H1	SGY	4,843,120	05-31-98	4:40p	so9a8_h1.sgy
SO9A8_H2	SGY	4,843,120	05-31-98	4:40p	so9a8_h2.sgy
SOAA4_VT	SGY	5,573,920	05-31-98	4:42p	soAa4_vt.sgy
SOAA4_H1	SGY	5,573,920	05-31-98	4:42p	soAa4_h1.sgy
SOAA4_H2	SGY	5,573,920	05-31-98	4:42p	soAa4_h2.sgy
SOAA4_HY	SGY	5,573,920	05-31-98	4:42p	soAa4_hy.sgy
SOAA8_VT	SGY	5,573,920	05-31-98	4:46p	soAa8_vt.sgy
SOAA8_H1	SGY	5,573,920	05-31-98	4:46p	soAa8_h1.sgy
SOAA8_H2	SGY	5,573,920	05-31-98	4:46p	soAa8_h2.sgy

79 file(s) 3,197,203,924 bytes

2 dir(s) 376.78 MB free

UNIX directory listing:

deploy0:

total 648680

-rw-r--r--	1	odp179	staff	165576704	Apr 18 15:23	CPTA4.RAW
-rw-r--r--	1	odp179	staff	165576704	Apr 18 15:29	CPTA8.RAW
-rw-r--r--	1	odp179	staff	205200	Apr 30 14:28	cp0a4.src
-rw-r--r--	1	odp179	staff	205200	Apr 30 14:28	cp0a8.src
-rw-r--r--	1	odp179	staff	175878	Apr 30 12:07	cp0sht.txt
-rw-r--r--	1	odp179	staff	18000	Apr 30 14:28	cp1a4.src
-rw-r--r--	1	odp179	staff	18000	Apr 30 14:28	cp1a8.src
-rw-r--r--	1	odp179	staff	15192	Apr 30 11:39	cp1sht.txt
-rw-r--r--	1	odp179	staff	10800	Apr 30 14:28	cp2a4.src
-rw-r--r--	1	odp179	staff	10800	Apr 30 14:28	cp2a8.src
-rw-r--r--	1	odp179	staff	9072	Apr 30 11:40	cp2sht.txt
-rw-r--r--	1	odp179	staff	18000	Apr 30 14:29	cp3a4.src
-rw-r--r--	1	odp179	staff	18000	Apr 30 14:29	cp3a8.src
-rw-r--r--	1	odp179	staff	15192	Apr 30 11:42	cp3sht.txt
-rw-r--r--	1	odp179	staff	3600	Apr 30 14:29	cp4a4.src
-rw-r--r--	1	odp179	staff	3600	Apr 30 14:29	cp4a8.src
-rw-r--r--	1	odp179	staff	3006	Apr 30 11:43	cp4sht.txt
-rw-r--r--	1	odp179	staff	528	Apr 18 14:01	deploy0.pos
-rw-r--r--	1	odp179	staff	2682	Apr 30 14:40	docktest.readme
-rw-r--r--	1	odp179	staff	2593	Apr 30 14:40	docktest.readme%
-rwxr-xr-x	1	odp179	staff	1574	Apr 30 11:13	fakeshotfile.csh*
-rwxr-xr-x	1	odp179	staff	286	Apr 30 11:20	gocape.csh*
drwxr-xr-x	5	odp179	staff	512	Apr 18 17:46	pilotfiles/
drwxr-xr-x	2	odp179	staff	1024	Apr 30 14:26	segfiles/

deploy0/pilotfiles:

total 6

drwxr-xr-x	2	odp179	staff	512	Apr 18 17:44	cape1/
drwxr-xr-x	2	odp179	staff	512	Apr 18 17:45	cape2/
drwxr-xr-x	2	odp179	staff	512	Apr 18 17:47	cape3/

../deploy0/pilotfiles/cape1:

total 36256

-rw-r--r--	1	odp179	staff	4464000	May 7 15:46	swd18000.dat
-rw-r--r--	1	odp179	staff	4464000	May 7 15:46	swd18001.dat
-rw-r--r--	1	odp179	staff	4464000	May 7 15:46	swd18002.dat
-rw-r--r--	1	odp179	staff	4464000	May 7 15:46	swd18003.dat
-rw-r--r--	1	odp179	staff	657200	May 7 15:46	swd18004.dat

../deploy0/pilotfiles/cape2:

total 19024

R/V JOIDES Resolution, ODP Leg 179

```

-rw-r--r-- 1 odp179 staff 4464000 May 7 15:53 swd18000.dat
-rw-r--r-- 1 odp179 staff 4464000 May 7 15:53 swd18001.dat
-rw-r--r-- 1 odp179 staff 786160 May 7 15:53 swd18002.dat

```

../deploy0/pilotfiles/cape3:

total 35028

```

-rw-r--r-- 1 odp179 staff 4464000 May 7 15:54 swd18000.dat
-rw-r--r-- 1 odp179 staff 4464000 May 7 15:54 swd18001.dat
-rw-r--r-- 1 odp179 staff 4464000 May 7 15:54 swd18002.dat
-rw-r--r-- 1 odp179 staff 4464000 May 7 15:54 swd18003.dat
-rw-r--r-- 1 odp179 staff 42160 May 7 15:54 swd18004.dat

```

deploy0/segyfiles:

total 1611264

```

-rw-r--r-- 1 odp179 staff 82699200 Apr 30 14:01 cp0a4_h1.sgy
-rw-r--r-- 1 odp179 staff 82699200 Apr 30 14:03 cp0a4_h2.sgy
-rw-r--r-- 1 odp179 staff 82699200 Apr 30 14:06 cp0a4_hy.sgy
-rw-r--r-- 1 odp179 staff 82699200 Apr 30 14:10 cp0a4_vt.sgy
-rw-r--r-- 1 odp179 staff 82699200 Apr 30 14:13 cp0a8_h1.sgy
-rw-r--r-- 1 odp179 staff 82699200 Apr 30 14:15 cp0a8_h2.sgy
-rw-r--r-- 1 odp179 staff 82699200 Apr 30 14:18 cp0a8_hy.sgy
-rw-r--r-- 1 odp179 staff 82699200 Apr 30 14:21 cp0a8_vt.sgy
-rw-r--r-- 1 odp179 staff 7257600 Apr 30 14:21 cp1a4_h1.sgy
-rw-r--r-- 1 odp179 staff 7257600 Apr 30 14:21 cp1a4_h2.sgy
-rw-r--r-- 1 odp179 staff 7257600 Apr 30 14:22 cp1a4_hy.sgy
-rw-r--r-- 1 odp179 staff 7257600 Apr 30 14:22 cp1a4_vt.sgy
-rw-r--r-- 1 odp179 staff 7257600 Apr 30 14:22 cp1a8_h1.sgy
-rw-r--r-- 1 odp179 staff 7257600 Apr 30 14:22 cp1a8_h2.sgy
-rw-r--r-- 1 odp179 staff 7257600 Apr 30 14:22 cp1a8_hy.sgy
-rw-r--r-- 1 odp179 staff 7257600 Apr 30 14:23 cp1a8_vt.sgy
-rw-r--r-- 1 odp179 staff 4356000 Apr 30 14:23 cp2a4_h1.sgy
-rw-r--r-- 1 odp179 staff 4356000 Apr 30 14:23 cp2a4_h2.sgy
-rw-r--r-- 1 odp179 staff 4356000 Apr 30 14:23 cp2a4_hy.sgy
-rw-r--r-- 1 odp179 staff 4356000 Apr 30 14:23 cp2a4_vt.sgy
-rw-r--r-- 1 odp179 staff 4356000 Apr 30 14:23 cp2a8_h1.sgy
-rw-r--r-- 1 odp179 staff 4356000 Apr 30 14:24 cp2a8_h2.sgy
-rw-r--r-- 1 odp179 staff 4356000 Apr 30 14:24 cp2a8_hy.sgy
-rw-r--r-- 1 odp179 staff 4356000 Apr 30 14:24 cp2a8_vt.sgy
-rw-r--r-- 1 odp179 staff 7257600 Apr 30 14:24 cp3a4_h1.sgy
-rw-r--r-- 1 odp179 staff 7257600 Apr 30 14:24 cp3a4_h2.sgy
-rw-r--r-- 1 odp179 staff 7257600 Apr 30 14:25 cp3a4_hy.sgy
-rw-r--r-- 1 odp179 staff 7257600 Apr 30 14:25 cp3a4_vt.sgy
-rw-r--r-- 1 odp179 staff 7257600 Apr 30 14:25 cp3a8_h1.sgy
-rw-r--r-- 1 odp179 staff 7257600 Apr 30 14:25 cp3a8_h2.sgy
-rw-r--r-- 1 odp179 staff 7257600 Apr 30 14:26 cp3a8_hy.sgy
-rw-r--r-- 1 odp179 staff 7257600 Apr 30 14:26 cp3a8_vt.sgy
-rw-r--r-- 1 odp179 staff 1454400 Apr 30 14:26 cp4a4_h1.sgy
-rw-r--r-- 1 odp179 staff 1454400 Apr 30 14:26 cp4a4_h2.sgy
-rw-r--r-- 1 odp179 staff 1454400 Apr 30 14:26 cp4a4_hy.sgy
-rw-r--r-- 1 odp179 staff 1454400 Apr 30 14:26 cp4a4_vt.sgy
-rw-r--r-- 1 odp179 staff 1454400 Apr 30 14:26 cp4a8_h1.sgy
-rw-r--r-- 1 odp179 staff 1454400 Apr 30 14:26 cp4a8_h2.sgy
-rw-r--r-- 1 odp179 staff 1454400 Apr 30 14:26 cp4a8_hy.sgy
-rw-r--r-- 1 odp179 staff 1454400 Apr 30 14:26 cp4a8_vt.sgy

```

R/V JOIDES Resolution, ODP Leg 179**deploy1:**

total 314

-rwxr-xr-x	1	odp179	staff	113	May	2	14:19	deploy1.sht.csh*
-rwxr-xr-x	1	odp179	staff	1573	May	2	14:22	fakeshotfile*
-rw-r--r--	1	odp179	staff	131629	May	2	14:40	hd0sht.txt
-rw-r--r--	1	odp179	staff	7865	May	2	14:41	hd1sht.txt
drwxr-xr-x	2	odp179	staff	512	May	3	07:28	pilotdata/
drwxr-xr-x	2	odp179	staff	512	May	3	07:46	segfiles/

deploy1/pilotdata:

total 22864

-rw-r--r--	1	odp179	staff	4464000	May	3	07:28	swd01000.dat
-rw-r--r--	1	odp179	staff	4464000	May	3	07:28	swd01001.dat
-rw-r--r--	1	odp179	staff	2747840	May	3	07:28	swd01002.dat

deploy1/segfiles:

total 1044224

-rw-r--r--	1	odp179	staff	62936080	May	3	07:32	hd0a4_h1.sgy
-rw-r--r--	1	odp179	staff	62936080	May	3	07:34	hd0a4_h2.sgy
-rw-r--r--	1	odp179	staff	62936080	May	3	07:36	hd0a4_hy.sgy
-rw-r--r--	1	odp179	staff	62936080	May	3	07:38	hd0a4_vt.sgy
-rw-r--r--	1	odp179	staff	62936080	May	3	07:39	hd0a8_h1.sgy
-rw-r--r--	1	odp179	staff	62936080	May	3	07:41	hd0a8_h2.sgy
-rw-r--r--	1	odp179	staff	62936080	May	3	07:43	hd0a8_hy.sgy
-rw-r--r--	1	odp179	staff	62936080	May	3	07:45	hd0a8_vt.sgy
-rw-r--r--	1	odp179	staff	3840160	May	3	07:45	hd1a4_h1.sgy
-rw-r--r--	1	odp179	staff	3840160	May	3	07:46	hd1a4_h2.sgy
-rw-r--r--	1	odp179	staff	3840160	May	3	07:46	hd1a4_hy.sgy
-rw-r--r--	1	odp179	staff	3840160	May	3	07:46	hd1a4_vt.sgy
-rw-r--r--	1	odp179	staff	3840160	May	3	07:46	hd1a8_h1.sgy
-rw-r--r--	1	odp179	staff	3840160	May	3	07:46	hd1a8_h2.sgy
-rw-r--r--	1	odp179	staff	3840160	May	3	07:46	hd1a8_hy.sgy
-rw-r--r--	1	odp179	staff	3840160	May	3	07:46	hd1a8_vt.sgy

Forgot to make UNIX directory listing for deploy2

UNIX directory listing for deploy 3

total 2456

-rw-r--r--	1	odp179	staff	30122	May	31	09:54	P10.UKO
-rw-r--r--	1	odp179	staff	35402	May	31	09:54	P7.UKO
-rw-r--r--	1	odp179	staff	39242	May	31	09:54	P8.UKO
-rw-r--r--	1	odp179	staff	26522	May	31	09:54	P9.UKO

R/V JOIDES Resolution, ODP Leg 179

-rwxr-xr-x	1	odp179	staff	761	May 28 11:05	deploy2.sht.csh*
-rw-r--r--	1	odp179	staff	759	May 28 11:56	deploy3.pos
-rwxr-xr-x	1	odp179	staff	411	May 28 11:05	deploy3.sht.csh*
-rwxr-xr-x	1	odp179	staff	1572	May 28 10:57	fakeshotfile*
drwxr-xr-x	2	odp179	staff	6656	May 29 09:27	psgy/
-rw-r--r--	1	odp179	staff	1666	May 28 15:47	rb9sht.txt
-rw-r--r--	1	odp179	staff	150093	May 28 15:47	sd23sht.txt
-rw-r--r--	1	odp179	staff	150093	May 28 15:47	sd24sht.txt
-rw-r--r--	1	odp179	staff	150093	May 28 15:47	sd25sht.txt
-rw-r--r--	1	odp179	staff	150093	May 28 15:47	sd26sht.txt
-rw-r--r--	1	odp179	staff	134343	May 28 15:47	sd27sht.txt
-rw-r--r--	1	odp179	staff	192300	May 28 15:47	sdEsht.txt
drwxr-xr-x	2	odp179	staff	2048	May 31 10:51	seggyfiles/
-rw-r--r--	1	odp179	staff	22188	May 31 10:09	so10sht.txt
-rw-r--r--	1	odp179	staff	26053	May 31 10:09	so7sht.txt
-rw-r--r--	1	odp179	staff	29368	May 31 10:09	so8sht.txt
-rw-r--r--	1	odp179	staff	19264	May 31 10:09	so9sht.txt
-rwxr-xr-x	1	odp179	staff	1753	May 29 10:41	uko2navd*
total 6249856						
-rw-r--r--	1	odp179	staff	69642000	May 29 05:35	d23a4_h1.sgy
-rw-r--r--	1	odp179	staff	69642000	May 29 05:38	d23a4_h2.sgy
-rw-r--r--	1	odp179	staff	69642000	May 29 05:42	d23a4_hy.sgy
-rw-r--r--	1	odp179	staff	69642000	May 29 05:45	d23a4_vt.sgy
-rw-r--r--	1	odp179	staff	69642000	May 29 05:48	d23a8_h1.sgy
-rw-r--r--	1	odp179	staff	69642000	May 29 05:51	d23a8_h2.sgy
-rw-r--r--	1	odp179	staff	69642000	May 29 05:54	d23a8_vt.sgy
-rw-r--r--	1	odp179	staff	69642000	May 29 05:58	d24a4_h1.sgy
-rw-r--r--	1	odp179	staff	69642000	May 29 06:01	d24a4_h2.sgy
-rw-r--r--	1	odp179	staff	69642000	May 29 06:04	d24a4_hy.sgy
-rw-r--r--	1	odp179	staff	69642000	May 29 06:07	d24a4_vt.sgy
-rw-r--r--	1	odp179	staff	69642000	May 29 06:10	d24a8_h1.sgy
-rw-r--r--	1	odp179	staff	69642000	May 29 06:14	d24a8_h2.sgy
-rw-r--r--	1	odp179	staff	69642000	May 29 06:17	d24a8_vt.sgy
-rw-r--r--	1	odp179	staff	69642000	May 29 06:21	d25a4_h1.sgy
-rw-r--r--	1	odp179	staff	69642000	May 29 06:24	d25a4_h2.sgy
-rw-r--r--	1	odp179	staff	69642000	May 29 06:27	d25a4_hy.sgy
-rw-r--r--	1	odp179	staff	69642000	May 29 06:31	d25a4_vt.sgy
-rw-r--r--	1	odp179	staff	69642000	May 29 06:34	d25a8_h1.sgy
-rw-r--r--	1	odp179	staff	69642000	May 29 06:37	d25a8_h2.sgy
-rw-r--r--	1	odp179	staff	69642000	May 29 06:40	d25a8_vt.sgy
-rw-r--r--	1	odp179	staff	69642000	May 29 06:43	d26a4_h1.sgy
-rw-r--r--	1	odp179	staff	69642000	May 29 06:46	d26a4_h2.sgy
-rw-r--r--	1	odp179	staff	69642000	May 29 06:50	d26a4_hy.sgy
-rw-r--r--	1	odp179	staff	69642000	May 29 06:53	d26a4_vt.sgy
-rw-r--r--	1	odp179	staff	69642000	May 29 06:56	d26a8_h1.sgy
-rw-r--r--	1	odp179	staff	69642000	May 29 06:59	d26a8_h2.sgy
-rw-r--r--	1	odp179	staff	69642000	May 29 07:03	d26a8_vt.sgy
-rw-r--r--	1	odp179	staff	62388000	May 29 07:05	d27a4_h1.sgy
-rw-r--r--	1	odp179	staff	62388000	May 29 07:08	d27a4_h2.sgy
-rw-r--r--	1	odp179	staff	62388000	May 29 07:11	d27a4_hy.sgy
-rw-r--r--	1	odp179	staff	62388000	May 29 07:14	d27a4_vt.sgy
-rw-r--r--	1	odp179	staff	62388000	May 29 07:17	d27a8_h1.sgy
-rw-r--r--	1	odp179	staff	62388000	May 29 07:20	d27a8_h2.sgy
-rw-r--r--	1	odp179	staff	62388000	May 29 07:23	d27a8_vt.sgy
-rw-r--r--	1	odp179	staff	90372320	May 29 07:27	dEa4_h1.sgy
-rw-r--r--	1	odp179	staff	90372320	May 29 07:31	dEa4_h2.sgy
-rw-r--r--	1	odp179	staff	90372320	May 29 07:35	dEa4_hy.sgy

R/V JOIDES Resolution, ODP Leg 179

-rw-r--r--	1	odp179	staff	90372320	May 29 07:39	dEa4_vt.sgy
-rw-r--r--	1	odp179	staff	90372320	May 29 07:44	dEa8_h1.sgy
-rw-r--r--	1	odp179	staff	90372320	May 29 07:48	dEa8_h2.sgy
-rw-r--r--	1	odp179	staff	90372320	May 29 07:52	dEa8_vt.sgy
-rw-r--r--	1	odp179	staff	809600	May 29 07:52	rb9a4_h1.sgy
-rw-r--r--	1	odp179	staff	809600	May 29 07:52	rb9a4_h2.sgy
-rw-r--r--	1	odp179	staff	809600	May 29 07:52	rb9a4_hy.sgy
-rw-r--r--	1	odp179	staff	809600	May 29 07:52	rb9a4_vt.sgy
-rw-r--r--	1	odp179	staff	809600	May 29 07:52	rb9a8_h1.sgy
-rw-r--r--	1	odp179	staff	809600	May 29 07:52	rb9a8_h2.sgy
-rw-r--r--	1	odp179	staff	809600	May 29 07:52	rb9a8_hy.sgy
-rw-r--r--	1	odp179	staff	809600	May 29 07:52	rb9a8_vt.sgy
-rw-r--r--	1	odp179	staff	6645760	May 29 11:42	so7a4_h1.sgy
-rw-r--r--	1	odp179	staff	6645760	May 29 11:43	so7a4_h2.sgy
-rw-r--r--	1	odp179	staff	6645760	May 29 11:43	so7a4_hy.sgy
-rw-r--r--	1	odp179	staff	6645760	May 29 11:43	so7a4_vt.sgy
-rw-r--r--	1	odp179	staff	6645760	May 29 11:44	so7a8_h1.sgy
-rw-r--r--	1	odp179	staff	6645760	May 29 11:44	so7a8_h2.sgy
-rw-r--r--	1	odp179	staff	6645760	May 29 11:44	so7a8_vt.sgy
-rw-r--r--	1	odp179	staff	7425280	May 31 10:46	so8a4_h1.sgy
-rw-r--r--	1	odp179	staff	7425280	May 31 10:47	so8a4_h2.sgy
-rw-r--r--	1	odp179	staff	7425280	May 31 10:47	so8a4_hy.sgy
-rw-r--r--	1	odp179	staff	7425280	May 31 10:47	so8a4_vt.sgy
-rw-r--r--	1	odp179	staff	7425280	May 31 10:48	so8a8_h1.sgy
-rw-r--r--	1	odp179	staff	7425280	May 31 10:48	so8a8_h2.sgy
-rw-r--r--	1	odp179	staff	7425280	May 31 10:48	so8a8_vt.sgy
-rw-r--r--	1	odp179	staff	4843120	May 31 10:48	so9a4_h1.sgy
-rw-r--r--	1	odp179	staff	4843120	May 31 10:49	so9a4_h2.sgy
-rw-r--r--	1	odp179	staff	4843120	May 31 10:49	so9a4_hy.sgy
-rw-r--r--	1	odp179	staff	4843120	May 31 10:49	so9a4_vt.sgy
-rw-r--r--	1	odp179	staff	4843120	May 31 10:49	so9a8_h1.sgy
-rw-r--r--	1	odp179	staff	4843120	May 31 10:50	so9a8_h2.sgy
-rw-r--r--	1	odp179	staff	4843120	May 31 10:50	so9a8_vt.sgy
-rw-r--r--	1	odp179	staff	5573920	May 31 10:50	soAa4_h1.sgy
-rw-r--r--	1	odp179	staff	5573920	May 31 10:50	soAa4_h2.sgy
-rw-r--r--	1	odp179	staff	5573920	May 31 10:51	soAa4_hy.sgy
-rw-r--r--	1	odp179	staff	5573920	May 31 10:51	soAa4_vt.sgy
-rw-r--r--	1	odp179	staff	5573920	May 31 10:51	soAa8_h1.sgy
-rw-r--r--	1	odp179	staff	5573920	May 31 10:51	soAa8_h2.sgy
-rw-r--r--	1	odp179	staff	5573920	May 31 10:52	soAa8_vt.sgy

Descriptions of PILOT data from Lamont Borehole email:

deploy0

Hi Bob,

Here are the start times for the files. Each complete file is 30 minutes long therefore the end time is very close to the begin time of the next file. Please note that the last file in each sequence did not run for the full 30 minutes. There is no way for me to extract the end time for these files without replaying each one. I can do this if you wish.

Here they are:

Capel - no gps

swd18000.dat - 8:30:19
swd18001.dat - 9:00:19
swd18002.dat - 9:30:19
swd18003.dat - 10:00:19
swd18004.dat - 10:30:19

Cape2 - with gps

swd18000.dat - 14:10:41
swd18001.dat - 14:40:41
swd18002.dat - 15:10:41

Cape3- with gps

swd18000.dat - 16:12:11
swd18001.dat - 16:42:11
swd18002.dat - 17:12:11
swd18003.dat - 17:42:11
swd18004.dat - 18:12:11 (this file contains simulated 20Hz data not dockside data)

Let me know if you have any questions,
Greg

deploy1

Hey Bob,

I put the files for last nights drilling in: uservol/hoskins/hds1-1104d
There are three files:

1. SWD01000.dat	began ~1:41:30 ended ~2:11:30 local time
2. SWD01001.dat	began ~2:11:30 ended ~2:41:30
3. SWD01002.dat	began ~2:41:30 ended ~3:00:00

Acquisition notes

R/V JOIDES Resolution, ODP Leg 179

Between 2:07 - 2:15 moved pilot sensor to new location in DHML. Was not satisfied

with output from vertical axis channel (channel 1). It appeared to be overwhelmed by substantial ambient noise in lab generated by fume hood fans

ontop of lab. After move, signal appeared to be improved.

Noticed two distinct peaks in spectra during drilling 22Hz and 44hz. Let me know if you have any questions,

Greg

Acknowledgements

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Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation.