USGS St. Petersburg Coastal and Marine Science Center

"Core Repository" and Data Preservation

Studebaker Building – Resides on the Univ. of South Florida campus

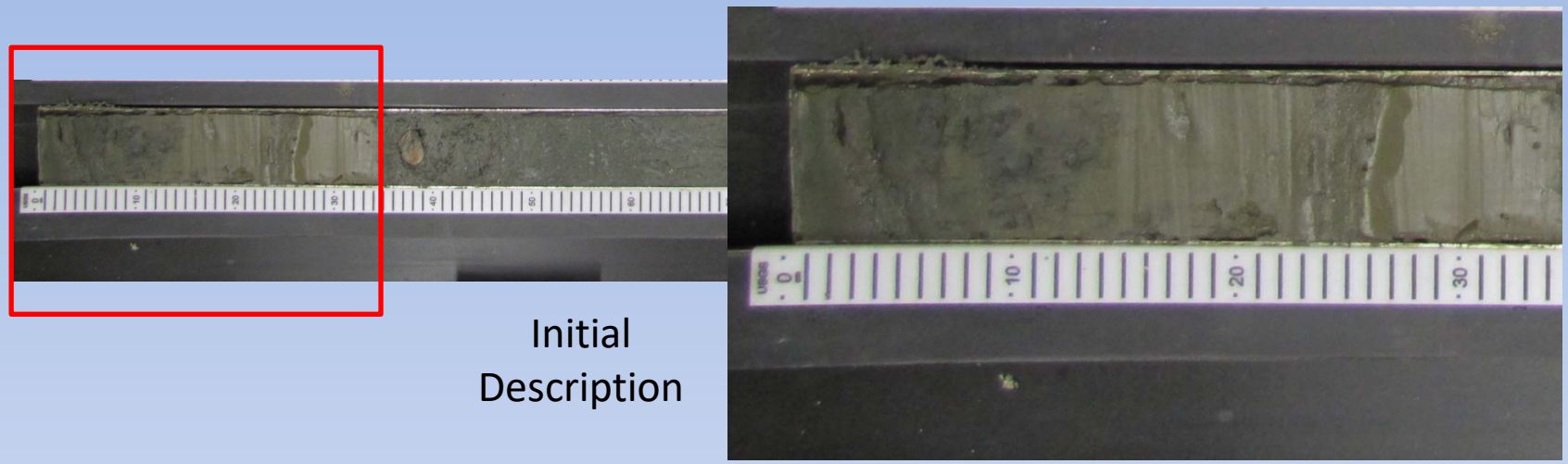
* Space is a commodity

* What you see is what we have to work with for core storage

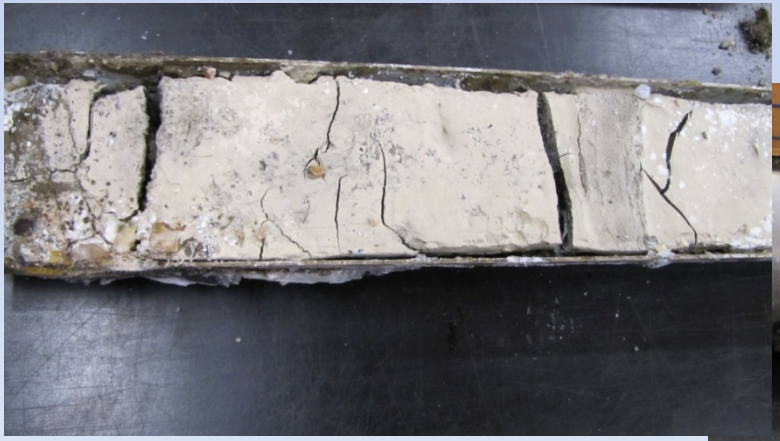
Cold storage container, similar to the one at our office


BOOM!!

Current State of our Sediment Cores Without Refrigerated Storage



Initial Description

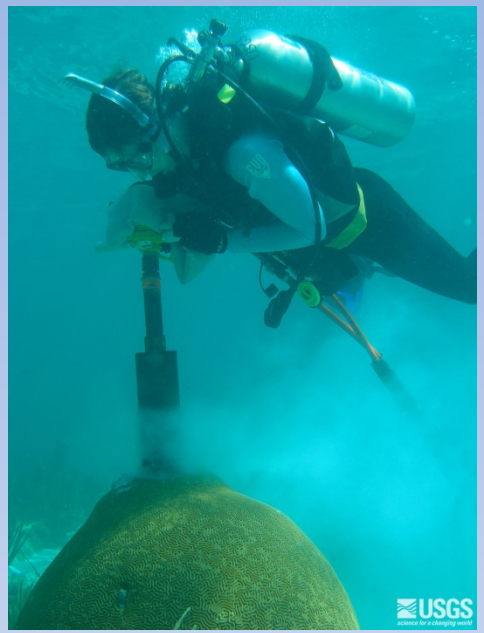


One Year Later

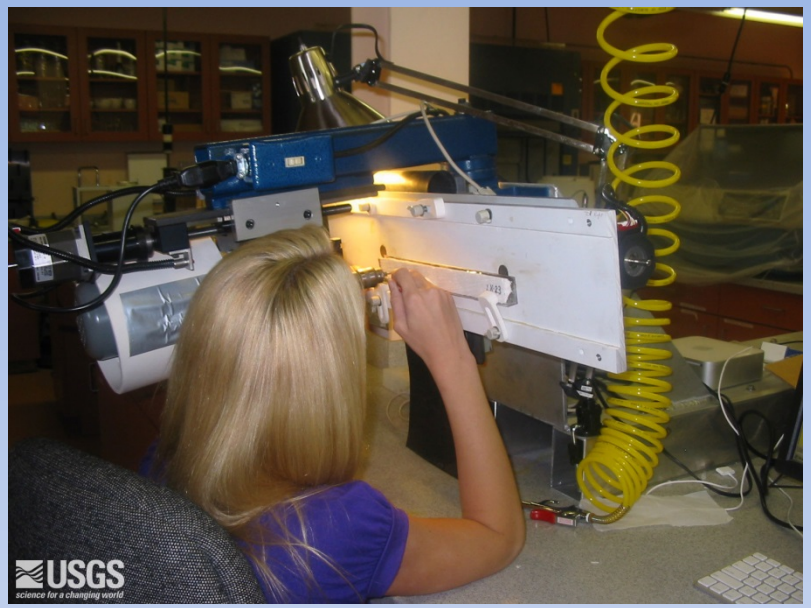
The R/V G.K. Gilbert

* Not an actual photo of the Gilbert

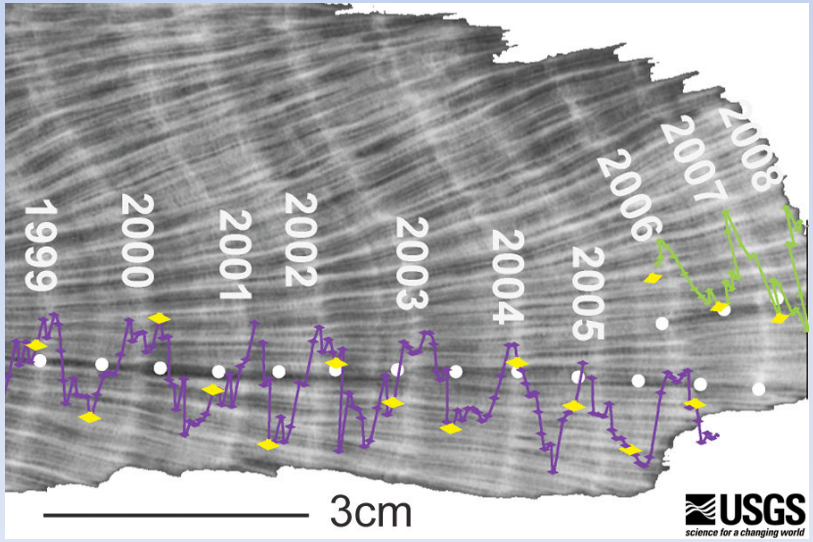
Coral Repository



USGS scientist taking a core sample from a large Scleractinia coral

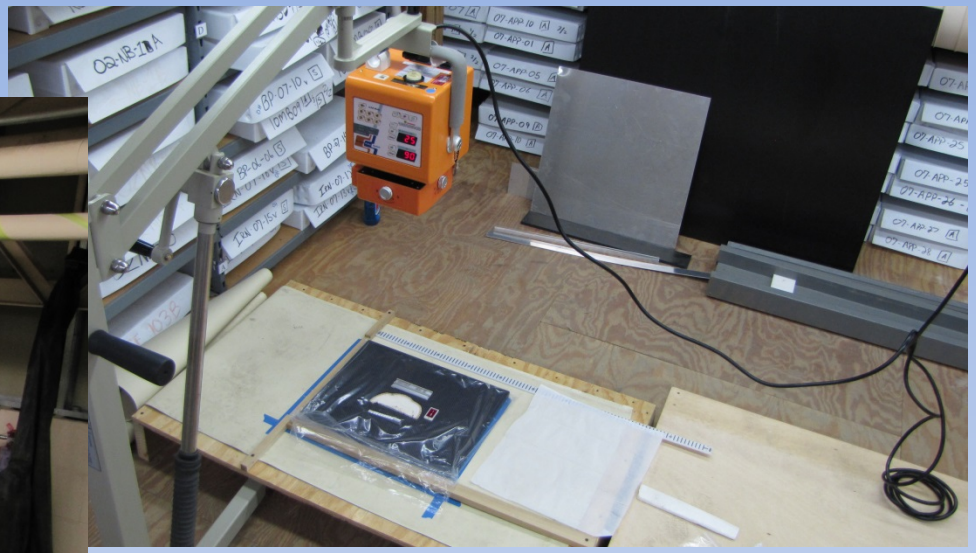


Computer driven triaxial micro-milling machine



(Strontium/Calcium) and isotopic ($d^{18}O$) analyses


iCR3600+



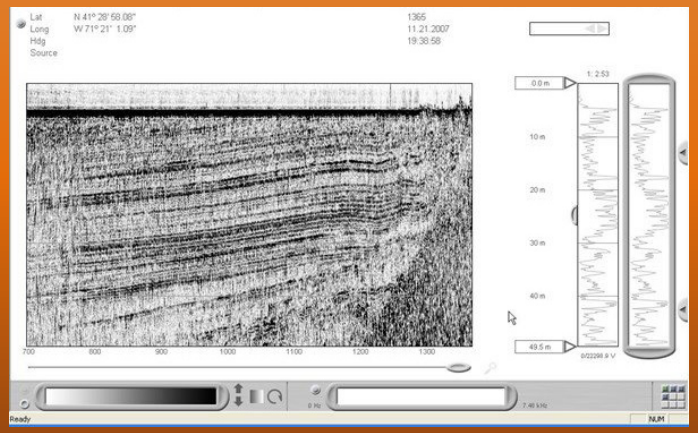
What we need…

- A Dedicated Cold Storage Core Repository
- Modern Analytical Core Processing Equipment (Whole Core Logger)
- Cooperation with Local Universities to Conduct Marine Coring Operations

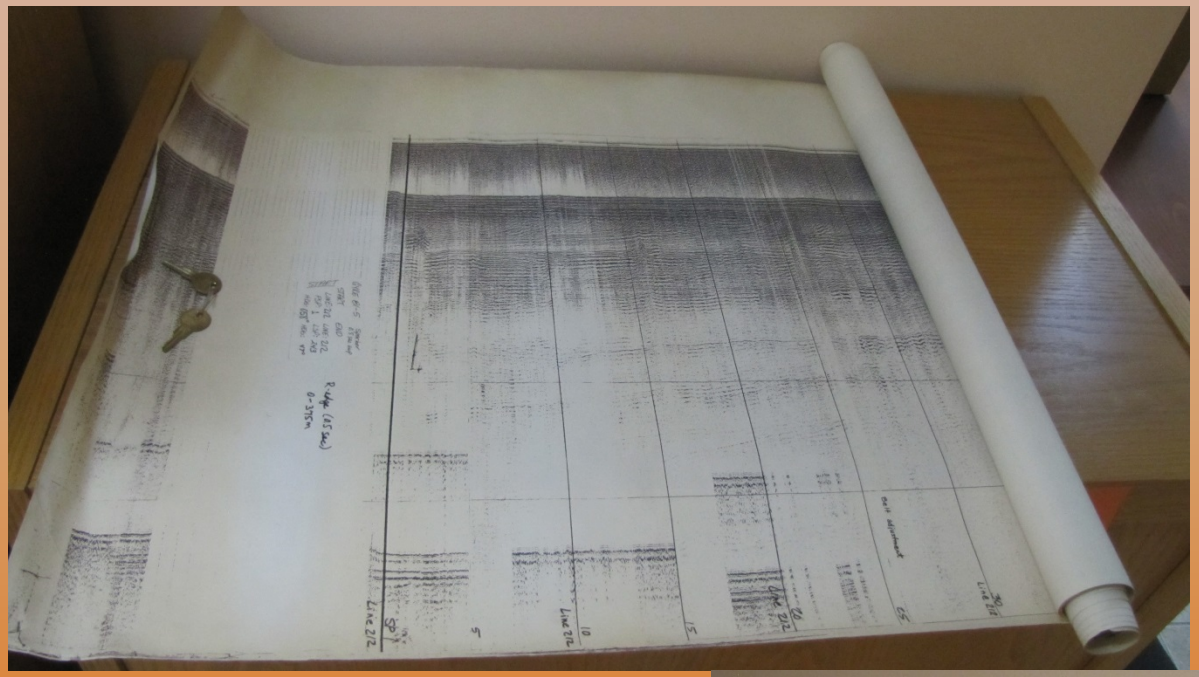
Data Recovery and Preservation

Conversion of antiquated analog geophysical data to usable digital data.

Funding for this phase of data recovery was provided from a grant issued by the NGGDP.

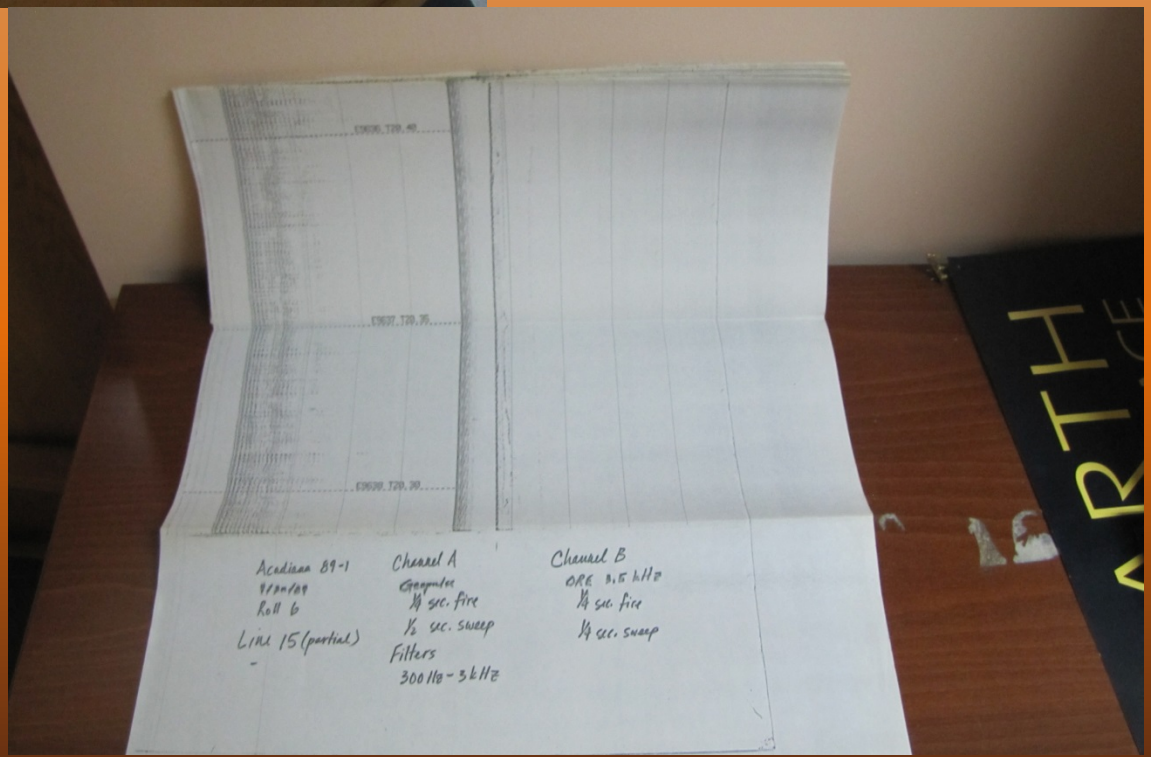


Seismic Archive Room



Seismic Rolls

Seismic Fan folds

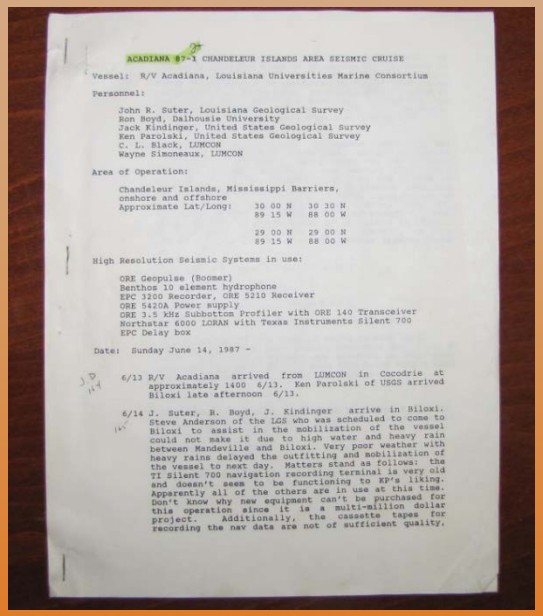


Contex Wide Format Scanner

- Accommodates up to 36” wide media
- Max Resolution of 1200 dpi
- Unlimited Media Length

Affords a rapid conversion from paper to digital format

Supporting Documentation and Metadata



ACADIANA 87-1 CHANDELEUR ISLANDS AREA SEISMIC CRUISE

Vessel: R/V Acadiana, Louisiana Universities Marine Consortium

Personnel:

John R. Suter, Louisiana Geological Survey
Ron Boyd, Dalhousie University
Jack Kindinger, United States Geological Survey
Ken Paroloski, United States Geological Survey
C. L. Black, LUMCON
Wayne Simoneaux, LUMCON

Area of Operation:

Chandeleur Islands, Mississippi Barriers, onshore and offshore
Approximate Lat/Long: 30 00 N 30 30 N
89 15 W 88 00 W

29 00 N 29 00 N
89 15 W 88 00 W

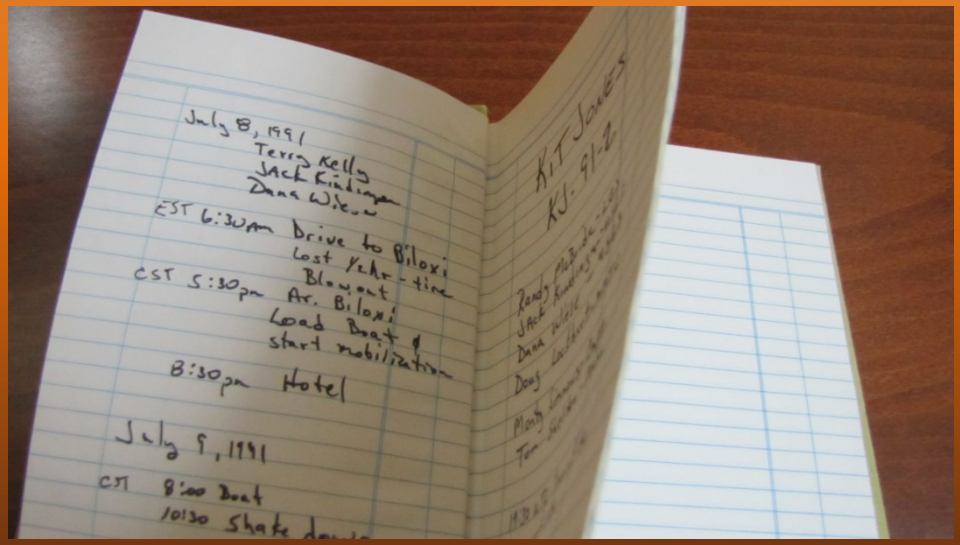
High Resolution Seismic Systems in use:

ORE Geopulse (Boomer)
Benthos 10 element hydrophone
EPC 3200 Recorder, ORE 5210 Receiver
ORE 5420A Power supply
ORE 3.5 kHz Subbottom Profiler with ORE 140 Transceiver
Northstar 6000 LORAN with Texas Instruments Silent 700
EPC Delay box

Date: Sunday June 14, 1987 -

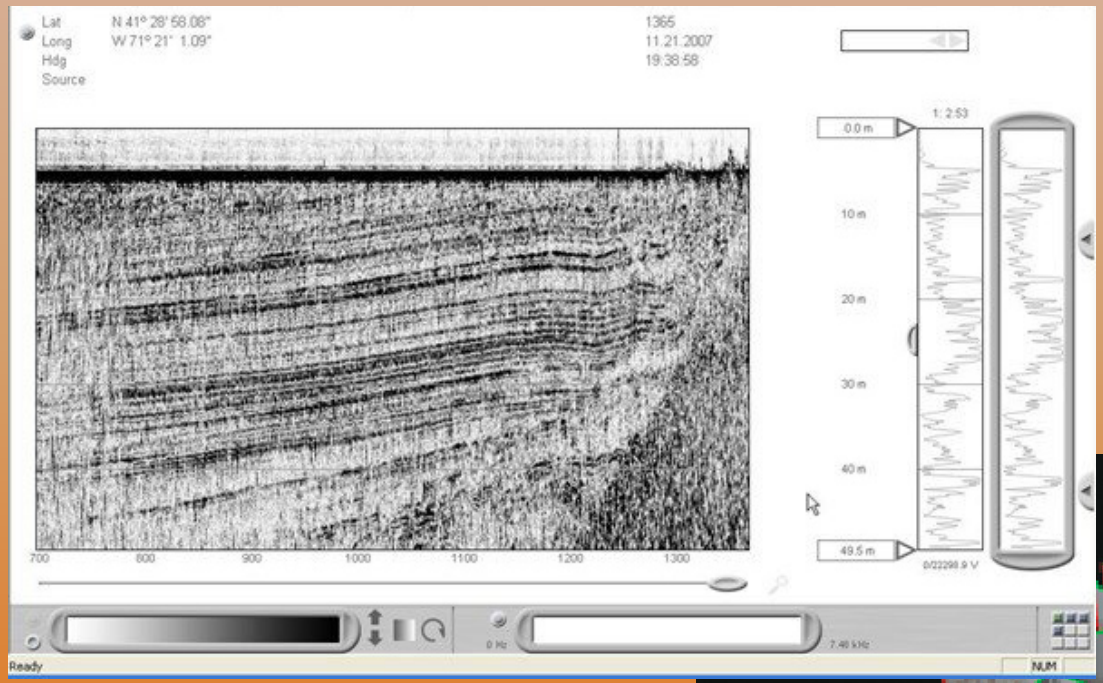
6/13 R/V Acadiana arrived from LUMCON in Cocodrie at approximately 1400 6/13. Ken Paroloski of USGS arrived Biloxi late afternoon 6/13.

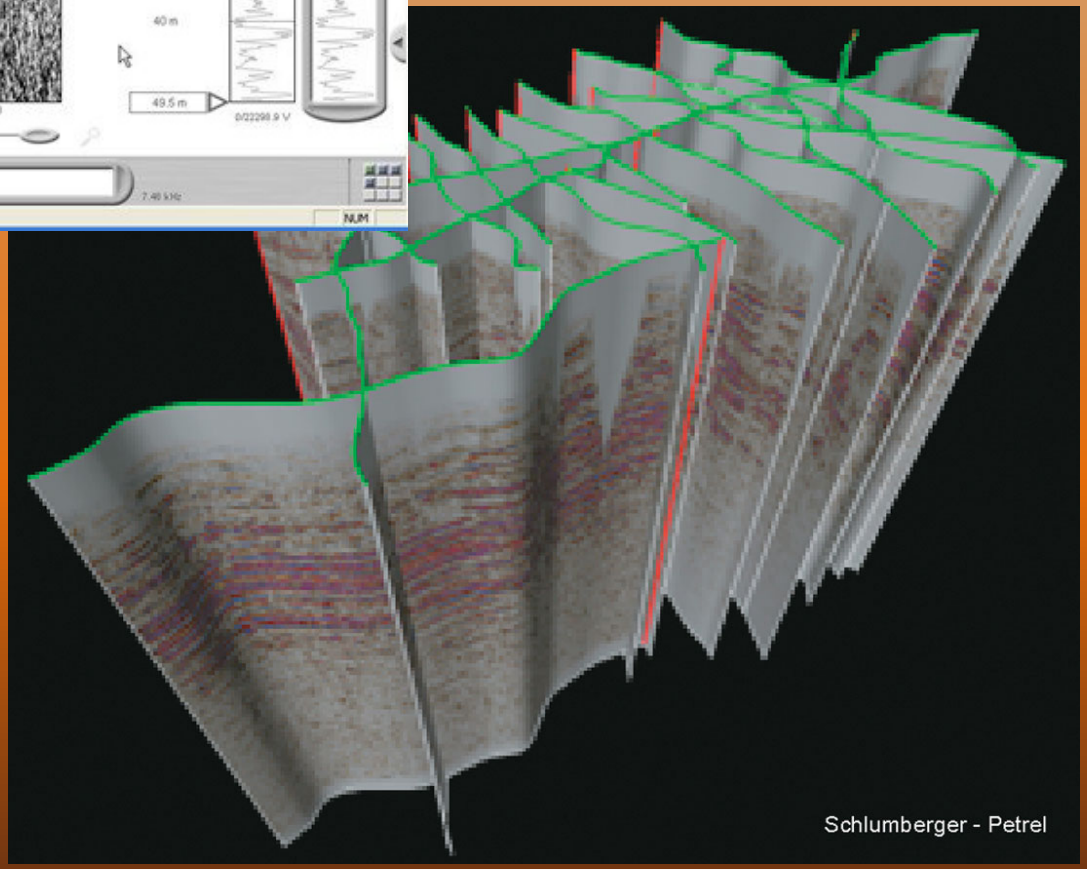
6/14 J. Suter, R. Boyd, J. Kindinger arrive in Biloxi. Steve Anderson of the LGS who was scheduled to come to Biloxi to assist in the mobilization of the vessel could not make it due to high water and heavy rain between Mandeville and Biloxi. Very poor weather with heavy rains delayed the outfitting and mobilization of the vessel to next day. Matters stand as follows: the TI Silent 700 navigation recording terminal is very old and doesn't seem to be functioning to KP's liking. Apparently all of the others are in use at this time. Don't know why new equipment can't be purchased for this operation since it is a multi-million dollar project. Additionally, the cassette tapes for recording the nav data are not of sufficient quality.



July 8, 1991
Terry Kelly
Jack Kindinger
Dana Wiese
EST 6:30am Drive to Biloxi
Lost 1 hr - time
Blowout
CST 5:30pm Ar. Biloxi
Load Boat &
start mobilization
8:30pm Hotel
July 9, 1991
CST 8:00 Boat
10:30 Shake down

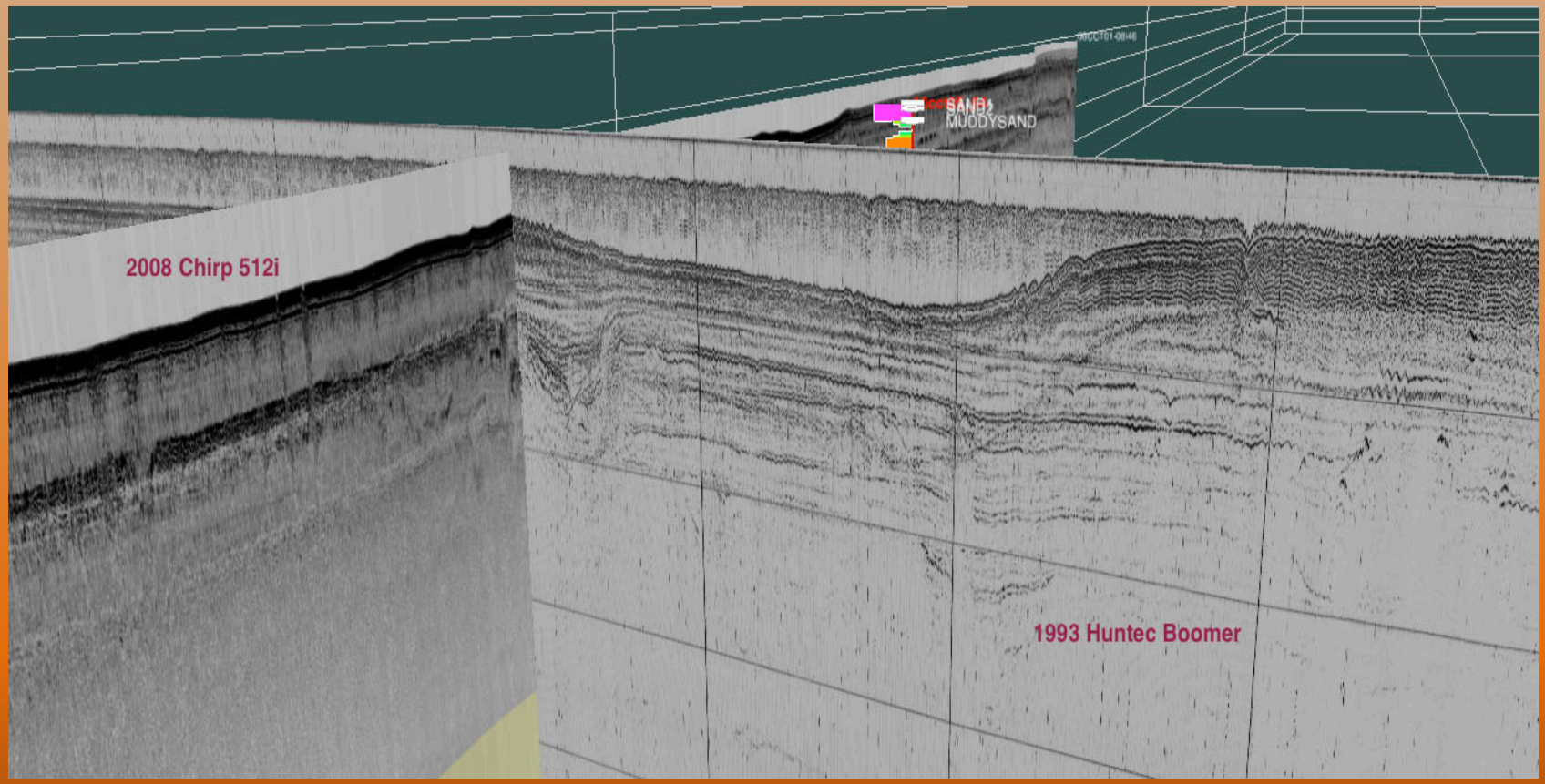
KIT JAMES
KJ-91-2





Conversion from paper to digital format allows us to use modern seismic investigative software

Usable Data!



Comparison of a “recently” collected seismic line, using today’s standards of data collection, to the digitally recovered paper seismic line.

Summary

- Public can now access these data
- Saves time and money, instead of having to rerun the survey
- Data is organized and contains metadata

Questions, Comments?