

Report on Student Training Cruise to East Breaks, Northern Gulf of Mexico to Test Portable Multichannel Acquisition System Aboard the R/V *Gyre*

September 11-17, 1995

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Field Area: East Breaks—indentation of the shelf break on the face of a low-stand delta. This is the apparent source for two down slope sediment transport lobes involving different depositional processes (debris flows and turbidity currents), the cause of the difference being unknown and the objective of a master's thesis. The study area centers at about 27°40'N, 95°40'W.

Student Activities: Maintaining deck, navigation, seismic data acquisition, and core acquisition logs; piston coring operations; core lab analyses; 3.5kHz reflection profiling equipment operation; navigation equipment operation (usually); navigation plotting and course maintenance; preliminary multichannel data processing.

Accomplished: Twenty-two survey lines were designed for the cruise; 20 of these were shot along with numerous (~20) others designed to 'home in' on areas of greatest interest. Eight(~) lines were shot with multichannel seismics. Ten cores were planned, 14 were taken. The numbers reflect the acquisitional super-success of the cruise.

Student activities went as planned with similar over-achievement. Students saw a significant variety of types of field work as well as two types of strategy, following a predesigned research plan and adaptation of the plan to advantageously take additional, critical data. As usual, by the end of the cruise we had a well coordinated crew ready to accomplish much more acquisition with minimal supervision, if we had had the time.