

CLIMATIC, BIOTIC, AND TECTONIC, POLE-TO-POLE CORING TRANSECT OF TRIASSIC-JURASSIC PANGAEA

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Extension leading to the breakup of Pangea resulted in the largest known rift province, and a spectacular sedimentary and igneous record of early Mesozoic events and processes. The US NSF- and ICDP-funded, "International Workshop for a Climatic, Biotic, and Tectonic, Pole-to Pole Coring Transect of Triassic-Jurassic Pangea" was held on June 5-9, 1999 at Acadia University, Wolfville, Nova Scotia, Canada. Fifty-six scientists from thirteen countries met to define to plan this global scientific coring program. Nearly the entire record of one of these basins, the Newark rift of the northeastern USA, has already been recovered in 6700 m of core by the US NSF-funded Newark Basin Coring Project, producing the longest continuous record of astronomical climate forcing and an astronomically tuned geomagnetic polarity time scale for the Triassic and Jurassic spanning roughly 31 my. It is within this new context that the workshop focused on three basic themes: 1) climate, astronomical forcing, and planetary chaos; 2) Pangean break-up and the giant CAMP flood basalt event; and 3) biotic change in a Hot-House world and the Triassic-Jurassic mass extinction. Possible coring areas addressing these themes are: 1) A low latitude conjugate transect (seaward dipping reflectors, SE USA and Africa); 2) A mid-latitude conjugate transect (Fundy rift of Canada and Moroccan basins); 3) A high latitude transect (East Greenland and Germanic basins); 4) the Colorado Plateau; 5) marine strata of Sicily; and 6) the polar coal basins of Siberia.