

Organic matter enrichment and preservation during Ocean Anoxic Event 2 in the Cretaceous Western Interior Sea

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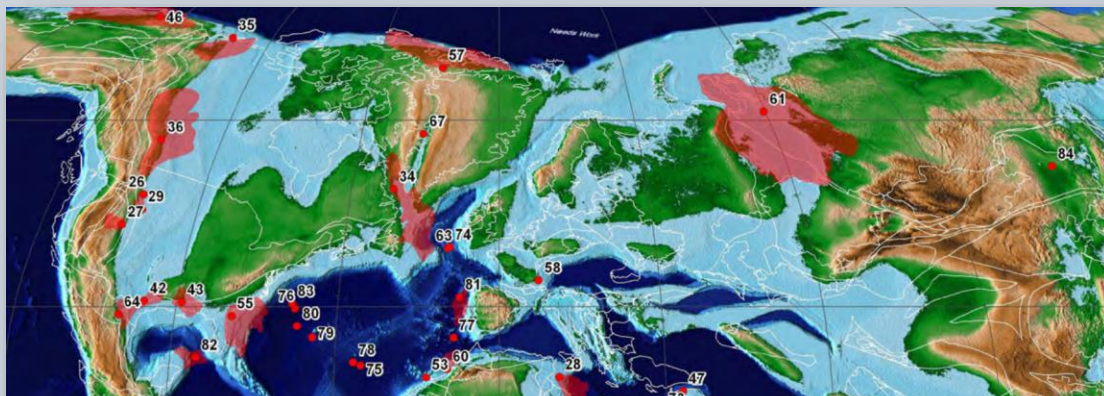
Brief conclusions

- Transgressions enrich organic matter
 - Water depth correlates to anoxia and stratification
 - Organic enrichment and quality increases away from fluvial sources
 - Sediment starvation helps concentrate organic matter
- Water mass circulation produced different controls on enrichment between northern and southern WIS
- Greenhorn more intensely stratified than Graneros
- Greenhorn organic enrichment and quality are higher despite transient oxygenation
 - Facies level controls, orbital sediment stacking patterns, and diagenesis

Late Cretaceous paleogeography

Cenomanian-Turonian Boundary
~93.9 ± 0.15 Ma

Paleogeography



Ocean Restriction

