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**Comparative Sequence Stratigraphy of the Lower Silurian Along the Eastern Flank of the Findlay-Algonquin Arch:
Evidence for a Migrating Forebulge**

Sequence, bio-, and event (including K-bentonite) stratigraphic study of outcrops of Lower Silurian (upper Llandovery to Wenlock) strata along the eastern flank of the Findlay Arch (Ohio-Indiana-northern Kentucky) has revealed striking similarities in depositional sequences to those previously documented (designated S-1 to S-6) near the better known Algonquin Arch (Ontario, New York). Sequence boundaries recognized in the Appalachian basin can be extended into the Midwestern platform. However, shifting positions of maximum erosion have impeded previous recognition of these patterns. In south central Ohio, a thin, glauconitic carbonate (Dayton Limestone; mid Telychian?) oversteps a regionally angular unconformity (base of S-4) that bevels older Silurian (Llandovery) strata westward onto the Findlay Arch. Similarly, the sharply erosional base of the Lilly Formation (mid-upper Wenlock) representing the (S-5-6) boundary, truncates Rochester-equivalent shale to the southeast in Ohio and adjacent Kentucky, onto an unnamed high well to the south of the Findlay. The corresponding sequence boundary at the base of the Lockport Group truncates the Rochester Shale along the Algonquin Arch near Hamilton, Ontario. These patterns suggest that during this early part of the Silurian the loci of greatest erosion, a probable forebulge, migrated southeastward and lay well to the east of the present position of the Cincinnati Arch. This evidence is in line with migration of the Algonquin Arch recognized in New York and Ontario. Overall, these patterns suggest that tectonically driven flexure associated with early phases of the Salinic Orogeny are superimposed on allocyclic eustatic sea-level fluctuations.