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ANCESTRAL ROCKY MOUNTAIN UPLIFTS AND ACCRETED BLOCKS AT THE SOUTHERN MARGIN OF N. AMERICA (CHIHUAHUA AND W. TEXAS)

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Ancestral Rocky Mountain uplifts in Chihuahua and west Texas (28 to 33° N, 102 to 109° W) include the Florida-Moyotes, Placer de Guadalupe-Carrizalillo, Ojinaga-Tascotal and Hueco blocks, as well as the Diablo and Central Basin Platforms. All are cored with North American Proterozoic crystalline basement rocks and host correlative Paleozoic stratigraphic successions. Pre-Late Paleozoic deformational, thermal and metamorphic histories are also similar. Sierra del Cuervo, with a foundation of North American Precambrain basement rocks, may also be an Ancestral Rocky Mt. uplift, but the sedimentary strata that would confirm or refute that assignment are absent.

On the basis of lithostratigraphic and isotopic data the Aldama Platform, Devils River Uplift, and part of the Cohuila terrane (sensu Coney) are accreted blocks that originated apart from North America. The latter two record thermal histories that are distinct from that of southern North America; notable elements include Silurian and Devonian metamorphic events. Metasedimentary and metaigneous strata of virtually identical compositions, metamorphic grades, and isotopic ages are known from the Acatan-Yucatan-Chiapas complexes; boulders of such rocks are entrained in Carboniferous synorogenic flysch in the Marathon Basin.

About 30 kilometers northwest of the boundary of North America, as defined on the basis of lead isotopic ratios, the southernmost Ancestral Rocky Mt. Uplifts (Placer de Guadalupe- Carrizalillo and Ojinaga-Tascotal blacks, Diablo Platform and Central Basin Platform)are terminated along a line trending N35 to 40 degrees E. That line also marks the southern edge of Sierra del Cuervo, whatever its status as an Ancestral Rocky Mt. Block.

Deformation continued at the end of the Ancestral Rocky Mt. chain and along the southern margin of North America through Permian time.

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