The Influence of the Caledonian Orogeny in Central Arabia

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Abstract: The Paleozoic succession of the Arabian Peninsula is severely affected by two main time-equivalent global tectonic movements of the Caledonian orogeny. The Late Ordovician to Early Devonian deposits in central Arabia were severely affected by these movements. The influence of the movements is well documented in an excellent outcrops widow of the Qusayba depression, north of Al-Qasim region. The two orogenies are represented by two regional unconformities, sub-Tawil unconformity brings the Devonian Tawil on underlying units. The Silurian Sharawra and Qusaiba formations and the Ordovician Sarah Formation are truncated and unconformably overlain by the Tawil Sandstone. In the Qusayba depression the Tawil rests on the Sarah Formation.