A number of Lower Cretaceous extensional basins are exposed in western Liaoning Province, NE China. These basins contain fluvio-lacustrine strata assigned to the Early Cretaceous Jiufotang and Fuxin Formations, and are floored by volcanic strata of the Yixian Formation. The extensional basin system is built upon the easternmost segment of the Late Jurassic – Early Cretaceous Yanshan fold-thrust belt.

New structural and sedimentological data constrain the geometry and extent of these basins and their relationship to older structures. The extensional province comprises several southeast-deepening half grabens bounded by northwest-dipping moderate angle normal faults. Many of these basin-bounding faults are spatially associated with older thrusts, and appear to reactivate them.

The close spatial and temporal association of Jura-Cretaceous thrust faults and Early Cretaceous extension suggests a post-orogenic collapse mechanism for the origin of the Liaoning extensional province.