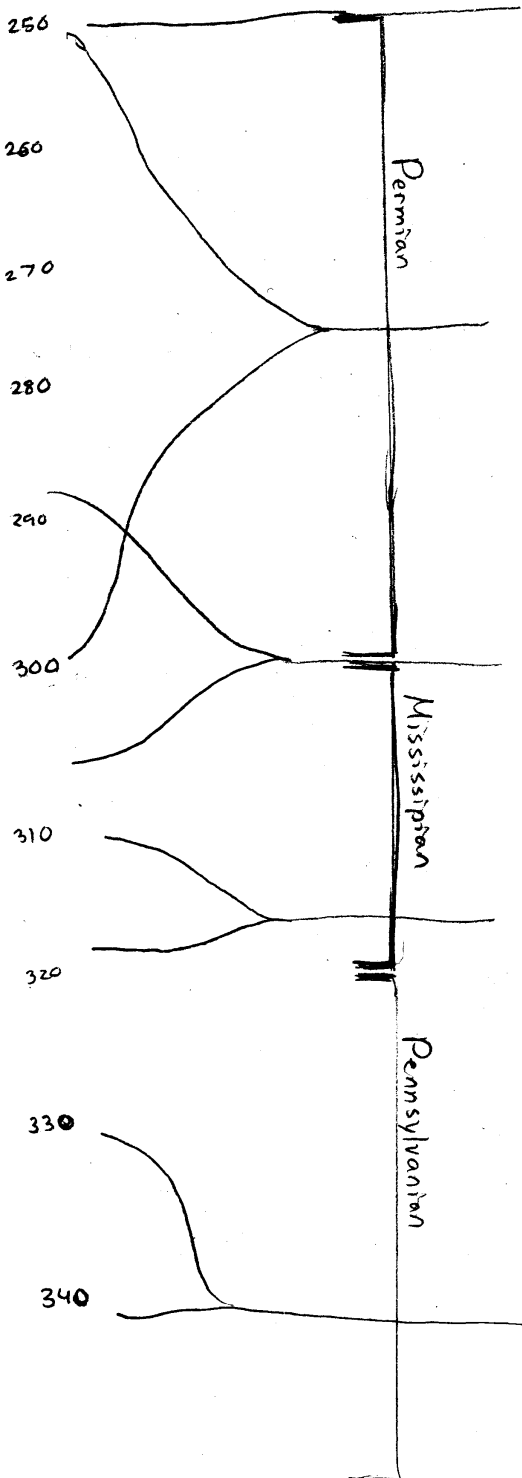


Timeline



Events

Island Arc Accretion
 The island arc is thrust up onto the continental margin, and over the Havallah Basin. Asian fossils were found west of the island arc, in the accretionary wedge. This seems to have happened in the early Permian, late Triassic.

Ancestral Rockies Formed
 Meantime, west of the continental margin the Ancestral Rockies were being thrust upwards (... although some believe this upthrust of pre-Cambrian rock began in the pre-Cambrian...). We see evidence for sediment deposition around the Mississippian, but it isn't well-exposed.

Havallah Basin Overthrust
 Happened late Permian, early Paleozoic. It is interesting to note that although the Havallah Basin was thrust up on top of the continent, it didn't create a foredeep, while the Antler's did.

Antler Mountain Belt Erodes
 By the Pennsylvanian, the Antler mountains had completely eroded. Foredeep was filled with sediment (shallow marine) from continental margin, so when the Antler mountains eroded, they created a scrambled layer of cherts, slates, deep-water marine sediments on top of the shallow-water marine sediments. Antler mountains appeared to have eroded in the span of about 15 million years... relatively quick in terms of the geologic timescale... Happened middle to late Pennsylvanian.

Antler Orogeny / Foredeep

Cross-Sections

