

**Merguerian, Charles, 1996a, Cameron's Line mylonite zone in Connecticut and New York City - evidence for Taconian accretionary tectonics.**

The Cameron's Line mylonite zone, an annealed amphibolite-grade Taconian cryptic suture, is exposed from NYC northward into western Connecticut and onward into western Massachusetts as the Whitcomb Summit thrust. Along this tract, Cameron's Line is identified by the lithologic change in Cambrian- to Ordovician rocks from an eastern facies (the eugeoclinal Hartland-Rowe-Hawley belt) to a coeval western facies (the slope-rise Hoosac-Waromaug-Manhattan belt). In NYC, a structurally lower ductile fault (the St. Nicholas thrust), places the allochthonous Hoosac-Waromaug-Manhattan belt above miogeoclinal basement-cover rocks.

Based on surface- and subsurface mapping in the New York-Connecticut segment, Cameron's Line is a 15m- to 90m wide zone of mylonite exhibiting two culminative episodes of rootless-, isoclinal-, and shear folds ( $F_1+F_2$ ) with transposition of older ( $S_1$ ) fabrics, imbrication and regional truncation of bounding subunits, tectonic mélangé (+/- serpentinite), quartz ribbons, lit-par-lit granitoids, and development of a penetrative regional foliation ( $S_2$ ). Late syntectonic felsic- to ultramafic plutons invade Cameron's Line and have contact metamorphosed the mylonitic fabric in the wallrocks. Radiogenic dates on the felsic plutons indicate that displacement along Cameron's Line is of pre-late medial Ordovician age. Thus, the Taconic orogeny included deep-seated motion along Cameron's Line and related ductile faults, imbrication and accretion of Paleozoic lithofacies, and late syntectonic plutonism.

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