

metamorphosed to sillimanite grade related to late, regional-scale plutonism. This site hosts several prime examples of imbricated, boudinaged, and isoclinally folded beds, D_1 , overprinted by regional F_2 folds. Four distinct marker beds recognizable by “barcodes” of sand and pelite layers, as well as a quartz vein-decorated fault, were mapped utilizing a high precision global positioning system (<0.5 m). Due to the degree of structural overprinting, the nature of the fault system was cryptic; recognition of these marker beds was necessary for the recognition of imbrications. Along the imbricated base of the hanging wall, bedding orientations follow an asymmetrical pattern of alternating subhorizontal, upright limbs and steeply dipping, southeast-topping limbs on subhorizontal, northeast-trending F_2 hinges. In the footwall to the northwest, the orientation of the bedding is similar, but the beds here are much thinner and more sand-rich. Higher in the hanging wall to the southeast, exist several thick beds that dip moderately ($32\text{--}40^\circ$) and top to the southeast. S_2 schistosity dips 80° towards 293° , while S_1 schistosity, present in one of the refolded isoclines, dips 78° towards 330° , showing two distinct cleavages.

It is still unclear whether this deformation was gravity driven or of tectonic origin, and whether the sediment was lithified or not. Imbrications are indicative of shortening, while boudins indicate lengthening; both can be found at the toe of a sediment slump. Mass wasting, triggered by liquefaction of bedding, is implied by the ductile nature of refolded F_1 isoclines. However, the earlier of two distinct cleavage surfaces located within the isoclines is suggestive of at least partially indurated beds during D_1 deformation. Since this terrane displays signs of both slump and tectonic features, it is most likely of mixed origin: a syn-sedimentary fault, resulting either from down-slope movement in the foreland basin or thrusting/slumping at the Acadian deformation front.

**Imbricated Seboomook Group, Bald Mountain,
west-central Maine: Tectonic, slump, or mixed origin?**

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Bald Mountain is composed of pelite-rich turbidites correlated with the Devonian Seboomook Group, which have been