Using Photogrammetry to Analyze Structures in a Tectonic Sliver in the Foot Wall of the Champlain Thrust, Shelburne, Vermont II
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Abstract
This poster shows photo mosaics of different scales that are integrated with GIS mapping data to analyze structural fabric over the topographic surface. The mosaics describe the main structural features, including major faults, slivers, and intersections of planar fabrics. The study area is a tectonic sliver juxtaposed ferruginous quartzites and dolostones of the Lower Cambrian Tonkton Fm (hanging wall) with calcareous shales of the Late Ordovician Stony Hill Fm (foot wall). The tectonic sliver is deformed by open F2 folds with a local axial planar spaced cleavage rotated into parallelism with the overriding east-dipping thrust faults. These faults are bounded by 4 faults. The oldest planar structure in each package is bedding, S0. Across the tectonic boundaries between structural packages, 3) across the tectonic boundaries between structural packages. A preliminary structural synthesis is described below. It is important to note that the faults are deformed by tight reclined F3 folds, with gently south-plunging axes. This poster shows photo mosaics of different scales that are integrated with GIS mapping data to analyze structural fabric over the topographic surface. The mosaics describe the main structural features, including major faults, slivers, and intersections of planar fabrics. The study area is a tectonic sliver juxtaposed ferruginous quartzites and dolostones of the Lower Cambrian Tonkton Fm (hanging wall) with calcareous shales of the Late Ordovician Stony Hill Fm (foot wall). The tectonic sliver is deformed by open F2 folds with a local axial planar spaced cleavage rotated into parallelism with the overriding east-dipping thrust faults. These faults are bounded by 4 faults. The oldest planar structure in each package is bedding, S0. Across the tectonic boundaries between structural packages, 3) across the tectonic boundaries between structural packages. A preliminary structural synthesis is described below. It is important to note that the faults are deformed by tight reclined F3 folds, with gently south-plunging axes.

References:

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