MESOZOIC ROCKS AND STRUCTURES IN NORTHERN NEW ENGLAND: A DATA COMPILATION

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Regional studies in Vermont, New Hampshire, and Maine indicate several correlations of Mesozoic magmatic activity with faults, fracture sets, and certain mineral deposits. Many Early Cretaceous dikes and stocks are faulted, and both east-west and north-east fracture trends are associated with the intrusions. Several other faults in New Hampshire have post-Paleozoic K-Ar dates on gouge material. Epithermal ores of known or suspected Mesozoic age include uranium, lead, copper, and zinc deposits. Compilations of these features on maps and tables will help to model the related alkalic magmatism, brittle fracturing, and hydrothermal activity in northern New England. Paleostress systems inferred from these data should reflect the extensional tectonics and plate movements of the Atlantic opening events during Mesozoic time.