



Tectonic evidences of the Ediacarian-Cambrian transition from back-arc to rifted margin in the southwest Poland: structural data from the Stronie-Młynowiec Group in the Bystrzyckie Mts. (Bohemian Massif)

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The Stronie formation, belongs to the Stronie-Młynowiec group and metamorphosed during the Variscan orogeny, is mainly composed of metapelitic and metatuffitic rocks and intercalated basic metavolcanics with mesoscale metacarbonate lenses. The approximate zircon age of the Stronie-Młynowiec group is already constrained to the broad range of 560-470 Ma. Field investigations evidenced the Stronie formation sequence near the Gniewoszków village and spatial coexistence of lithological types of the formation. The metasedimentary-metavolcanic complex contains several lithological types: mica schists, quartzites, calc-silicates, metaryolithes and amphibolites with marble lenses. Coeval formation of the all lithological types of protoliths within the Stronie formation was previously suggested. Within the Stronie mica schist, pillow-shaped and locally massive amphibolites are distinguished. Several marble lenses were investigated within the Gniewoszków metabasites, associated with amphiboles and present sedimentary xenolithic affinities. Syn-metamorphic hydrothermal phenomena could cause also recrystallization of carbonate material but rather to a lesser extent.