



SUGGESTED OROGENIC DEVELOPMENT FOR PALAEOZOIC TASMANIA

FIGURE No.

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AGE AND NAME	EVENTS AND EFFECTS
<p>380 to 420 Ma</p> <p>MIDDLE DEVONIAN Tabberabberan Orogeny</p>	<ul style="list-style-type: none"> ● Thrusting of Mathinna terrane over West Tasmania terrane ● Fracturing of Tyennan Massif and limited over-thrusting to west ● Widespread folding and cleavage development (deep burial) ● Reactivation of many faults, some thrusting <p style="text-align: center;">▲</p> <p>Continuous deposition during period of tectonic "meta-stability"</p>
<p>490 to 509 Ma</p> <p>MIDDLE TO LATE CAMBRIAN <i>POST-COLLISIONAL OROGENIC PERIOD</i> Jukesian or Delamerian Orogeny</p>	<ul style="list-style-type: none"> ● Deposition of shallow-water siliciclastic sequences ● Intermittent uplift and erosion of Tyennan Massif ● Local folding and cleavage development; continuous faulting ● Deposition of coarse flysch sequences, partly from erosion of nappe complexes ● Eruption of Mt Read Volcanics along Tyennan margin <p style="text-align: center;">▲</p> <p>Continuous tectonism</p>
<p>? 510 Ma</p> <p>EARLY TO MIDDLE CAMBRIAN <i>MAIN COLLISION EVENT</i> Penguin Orogeny?</p>	<ul style="list-style-type: none"> ● Deformation and metamorphism of Arthur Lineament belt (leading-edge effect?) ● Large-scale thrusting and telescoping of Proterozoic fragments in melange matrix ● Deformation of in-situ Proterozoic rocks and Crimson Creek Formation ● Emplacement of nappes of arc-derived mafic-ultramafic rocks and associated chert-rich "oceanic" lithologies to form complex melanges

Fig.1 Suggested orogenic development for Palaeozoic Tasmania