



Figure S1. Map of East Gondwana at ~113 Ma in the region of Australia and Antarctica. Reconstruction using GPlates (Müller, Gurnis & Torsvik, 2012; Seton et al., 2012) and geological features based on Willcox & Stagg (1990); Dettmann et al. (1992); Bryan et al. (1997); Gaina et al. (1998); Bryan et al. (2000); Hill & Moore (2001); Norvick & Smith (2001); Bradshaw et al. (2003);

Wandres & Bradshaw (2005); Bryan (2007); Norvick et al. (2008); Matthews et al. (2015); Mortimer et al. (2017). Abbreviations: BaB, Bass Basin; BiB, Bight Basin; CaB, Carpentaria Basin; CgB, Canning Basin; CnB, Carnarvon Basin; EB, Eromanga Basin; EuB, Eucla Basin; FB, Fairway Basin; GB, Gippsland Basin; NAARS, northern region of the Australian-Antarctic rift system; NR, Norfolk Ridge; NZEP, New Zealand Eastern Province; NZWP, New Zealand Western Province; OfB, Officer Basin; OB, Otway Basin; PB, Perth Basin; PBo, Extensional plate boundary; QP, Queensland Plateau; SAARS, southern region of the Australian-Antarctic rift system; SB, Surat Basin; STR, South Tasman Rise; TC, Tutoko Complex; WARS, Western Antarctic Rift System; and WSLIP, Whitsunday Silicic Large Igneous Province.

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