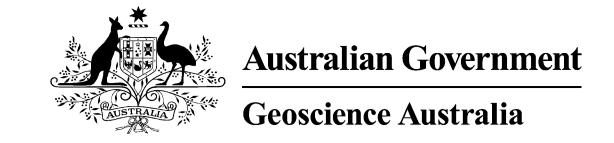
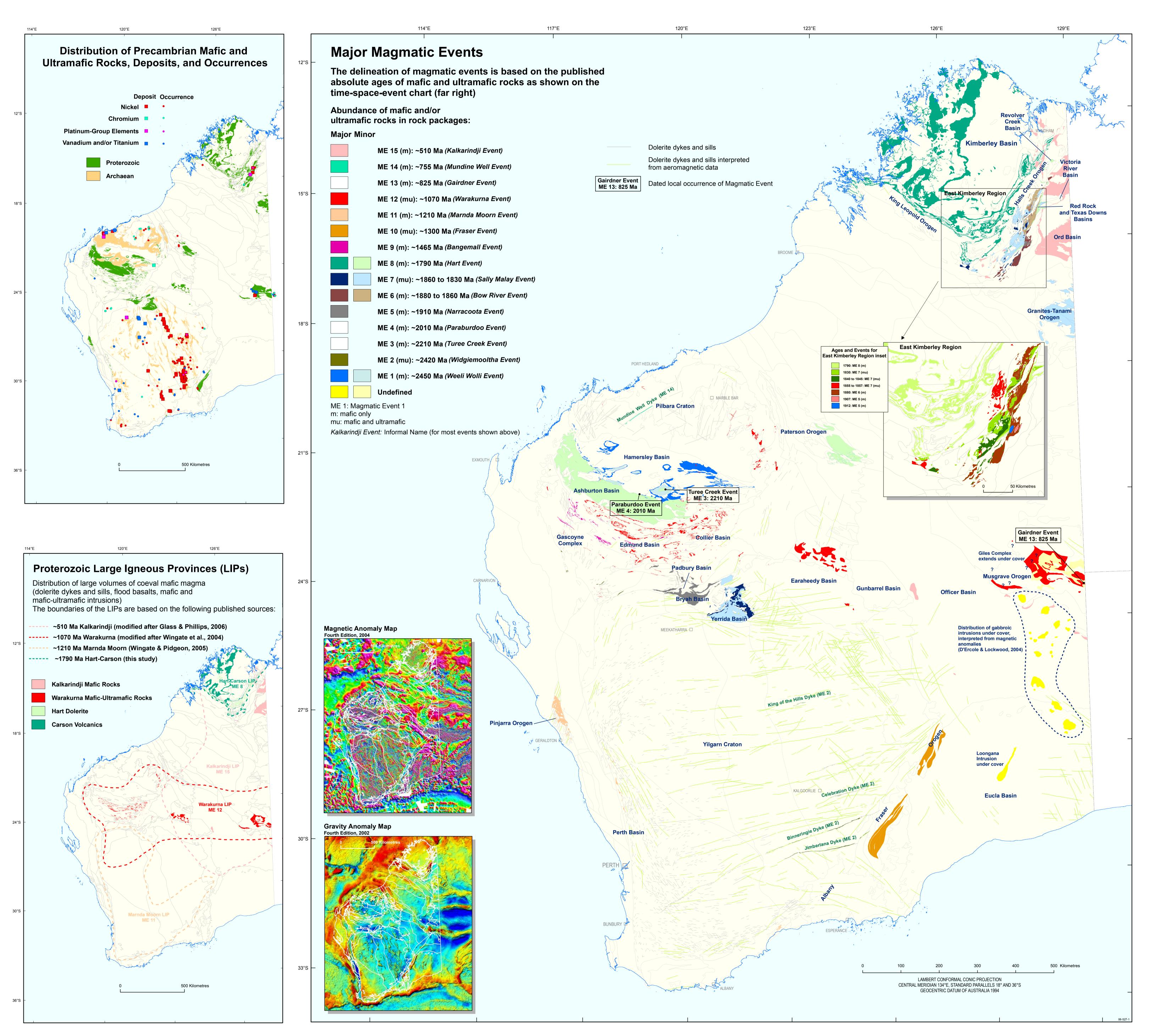
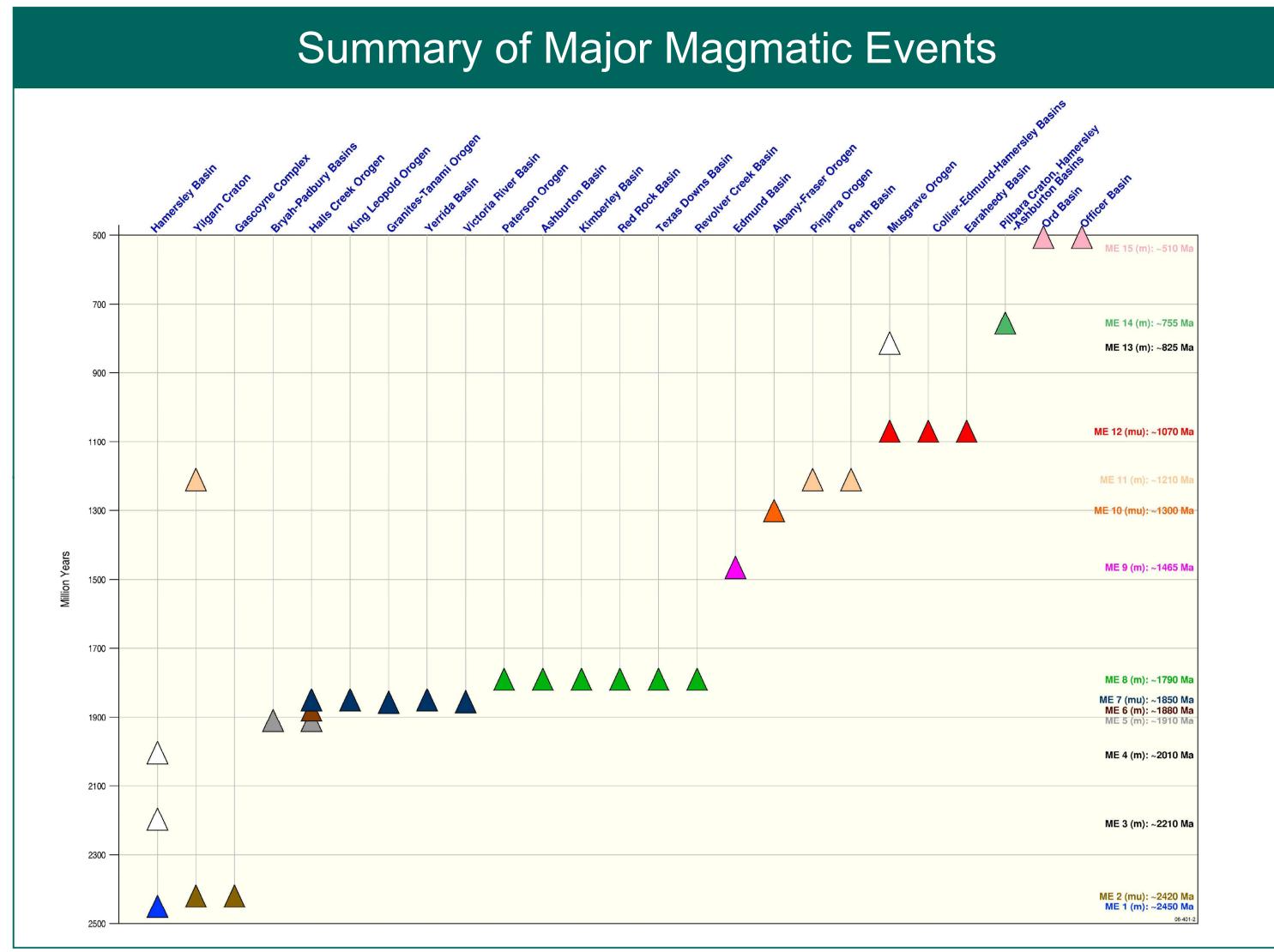
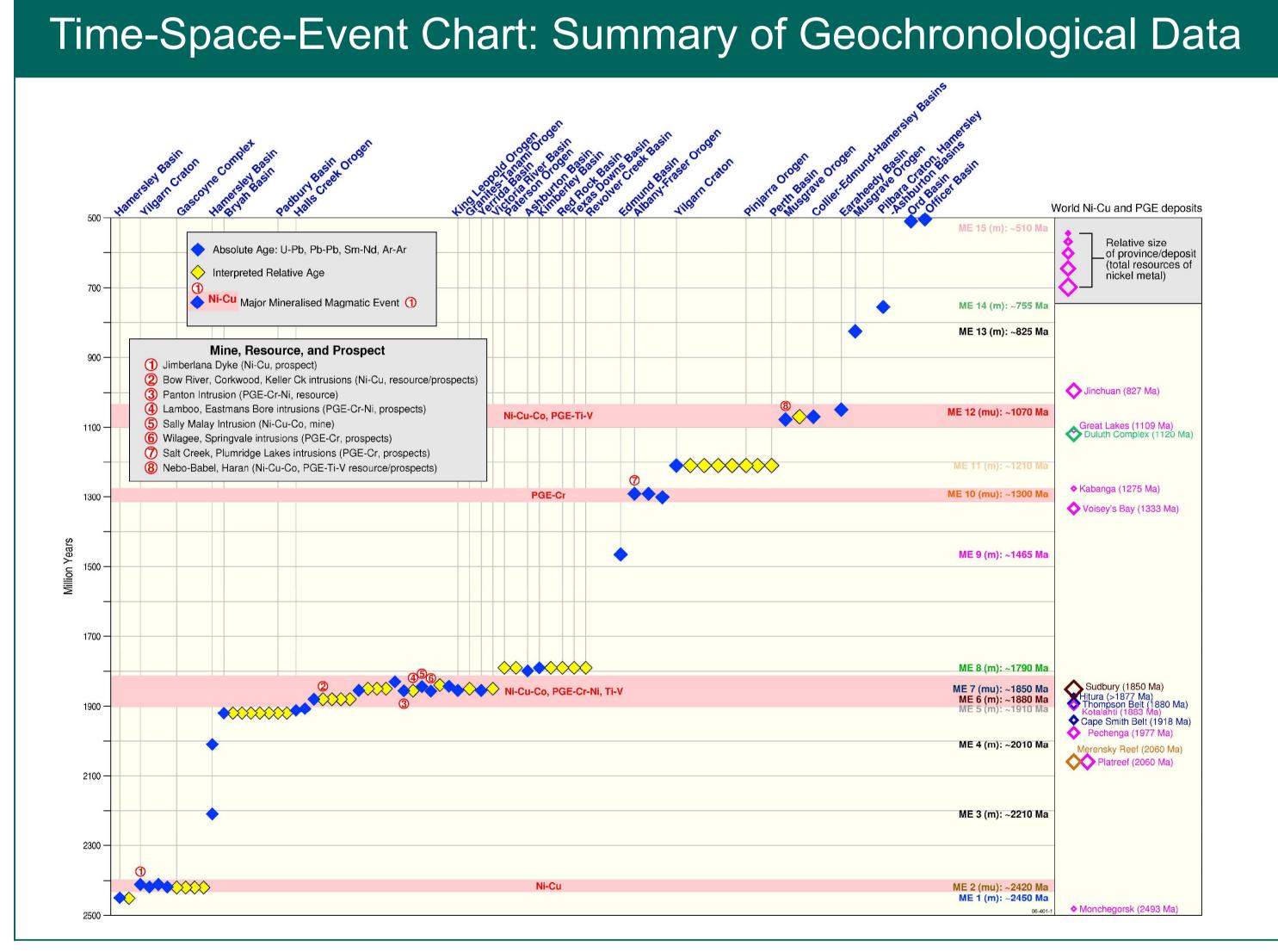
A SYNTHESIS OF AUSTRALIAN PROTEROZOIC MAFIC-ULTRAMAFIC MAGMATIC EVENTS

Part 1: Western Australia









Preliminary Version October 2006

Department of Industry, Tourism & Resources

Minister for Industry, Tourism & Resources: The Hon. Ian Macfarlane, MP Parliamentary Secretary: The Hon. Bob Baldwin, MP Secretary: Mr Mark Paterson

Geoscience Australia Chief Executive Officer: Dr Neil Williams

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Bibliographic reference: Hoatson, D.M., Jaireth, S., Jaques, A.L., Huleatt, M.B., 2006. A Synthesis of Australian Proterozoic Mafic-ultramafic Magmatic Events:

Part 1: Western Australia. 1:3,500,000 scale map. Geoscience Australia,

Distribution of Precambrian mafic and ultramafic rocks:
 1: 500,000 Interpreted Bedrock Geology Map of Western Australia by the Geological Survey of Western Australia (June 2001).
 Many occurrences of mafic and ultramafic rocks under cover are not shown.

Geological base maps used:

GeoCat 64813

Distribution of dolerite dykes and sills:
Myers, J.S., Hocking, R.M., 1998.
Geological Map of Western Australia, 1: 2,500,000 (13th edition).
Geological Survey of Western Australia.
The ages of the dolerites are dominantly Proterozoic and Archaean.

Province boundaries:
1:2,500,000 Tectonic Units of Western Australia, June 2001.
Geological Survey of Western Australia.

Geoscience Australia has tried to make the information in this product as accurate as possible. However, it does not guarantee that the information is totally accurate or complete. Therefore, you should not solely rely on this information when making a commercial decision.

References:
D'Ercole, C., Lockwood, A.M., 2004. The tectonic history of the Waigen area, western Officer Basin, interpreted from geophysical data. Western Australia Geological Survey, Annual Review 2003-04, Technical Paper, 71–80.

Glass, L.M., Phillips, D., 2006. The Kalkarindji continental flood basalt province: A new Cambrian large igneous province in Australia with possible links to faunal extinctions. Geology 34, 461–464.

Wingate, M.T.D., Pidgeon, R.T., 2005. The Marnda Moorn LIP, a late Mesoproterozoic large igneous province in the Yilgarn craton, Western Australia. Large Igneous Province Commission, International Association of Volcanology and Chemistry of the Earth's Interior www site, 1–5, (http://www.largeigneousprovinces.

Wingate, M.T.D., Pirajno, F., Morris, P.A., 2004. Warakurna large igneous province: A new Mesoproterozoic large igneousprovince in west-central Australia. Geology 32, 105–108.

org/05july.html).

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