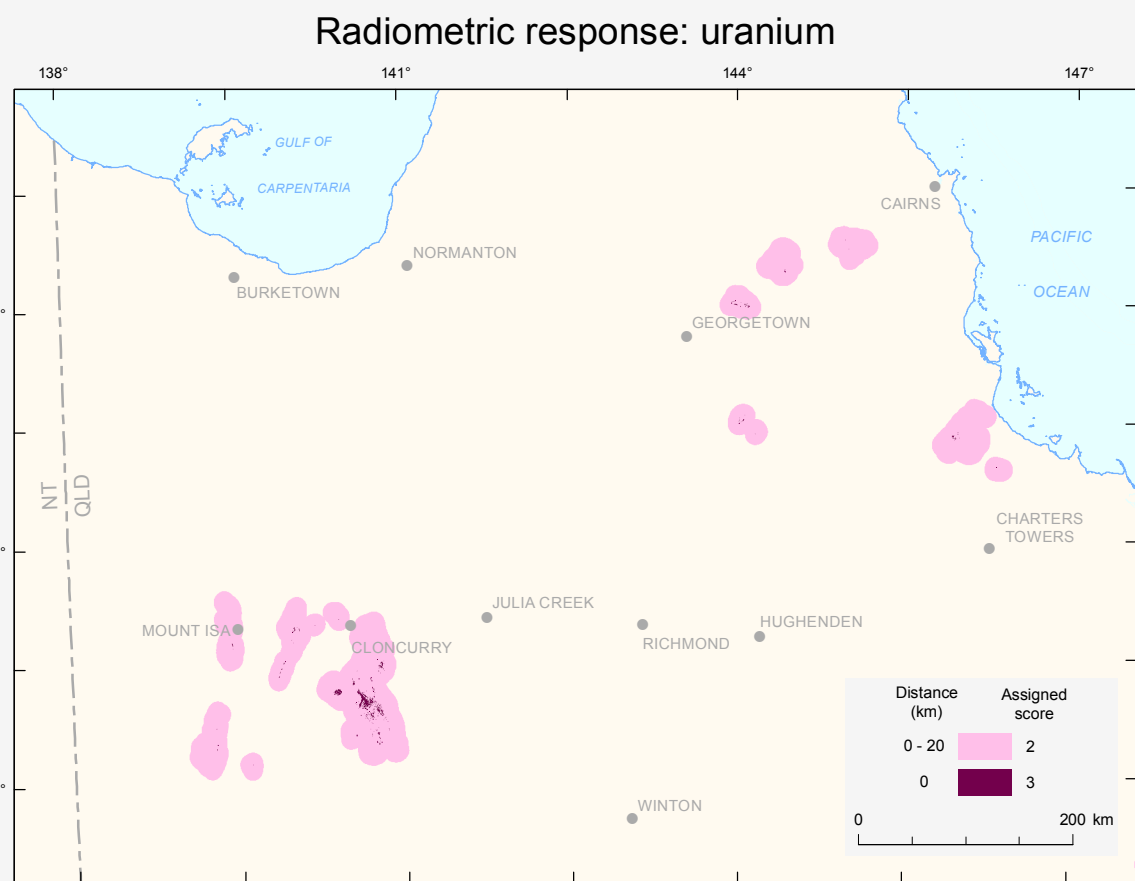
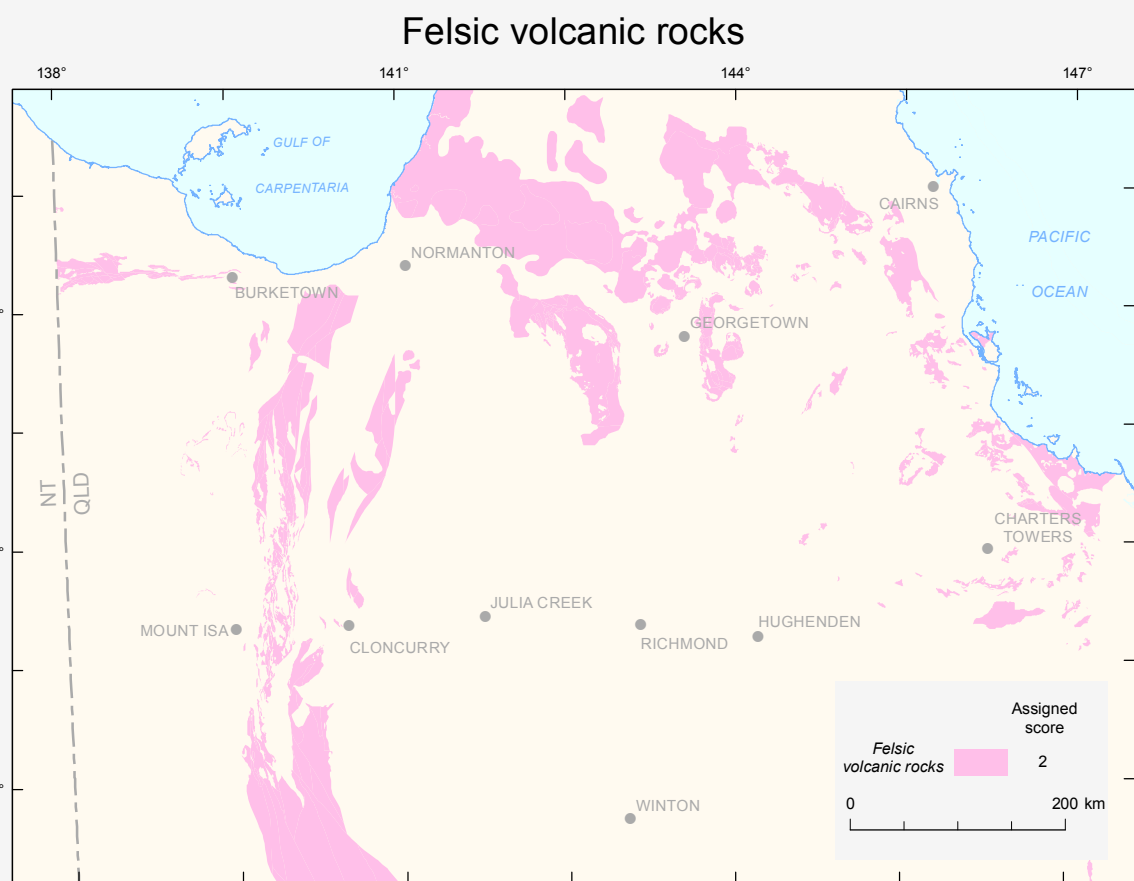
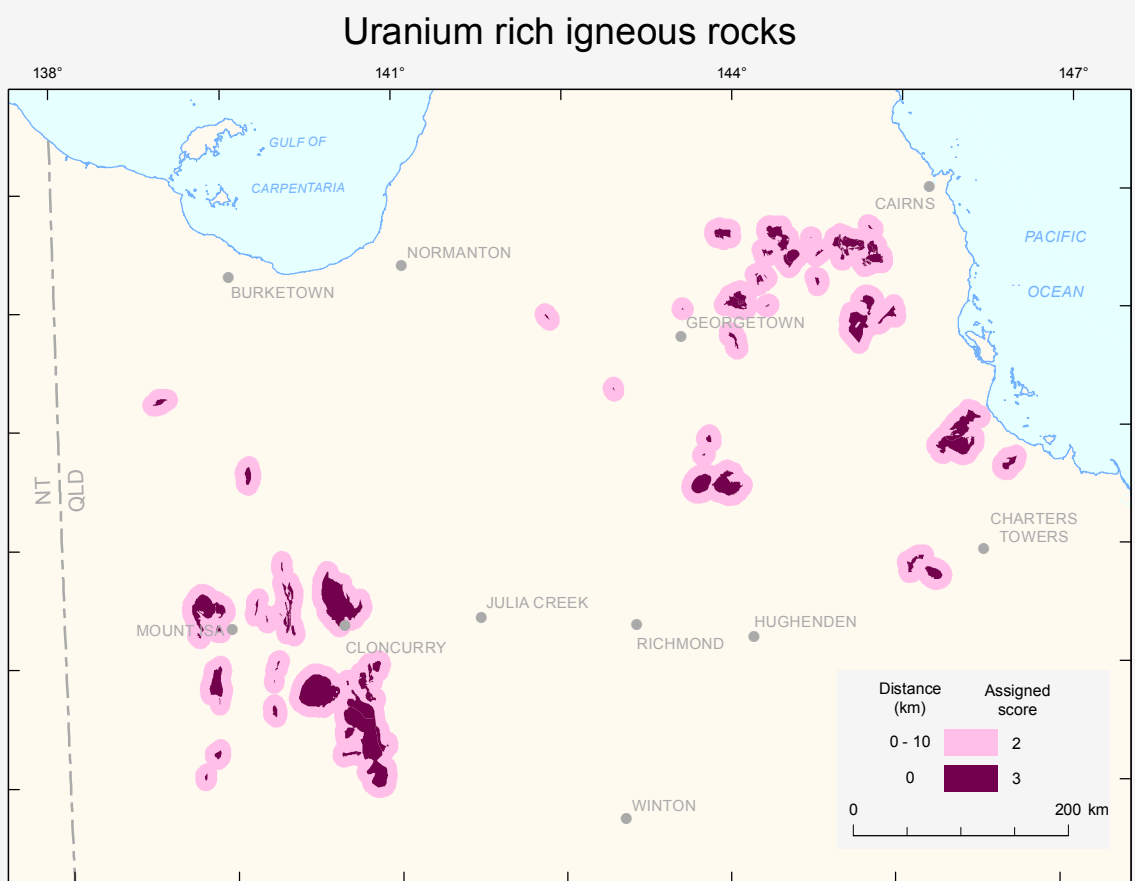
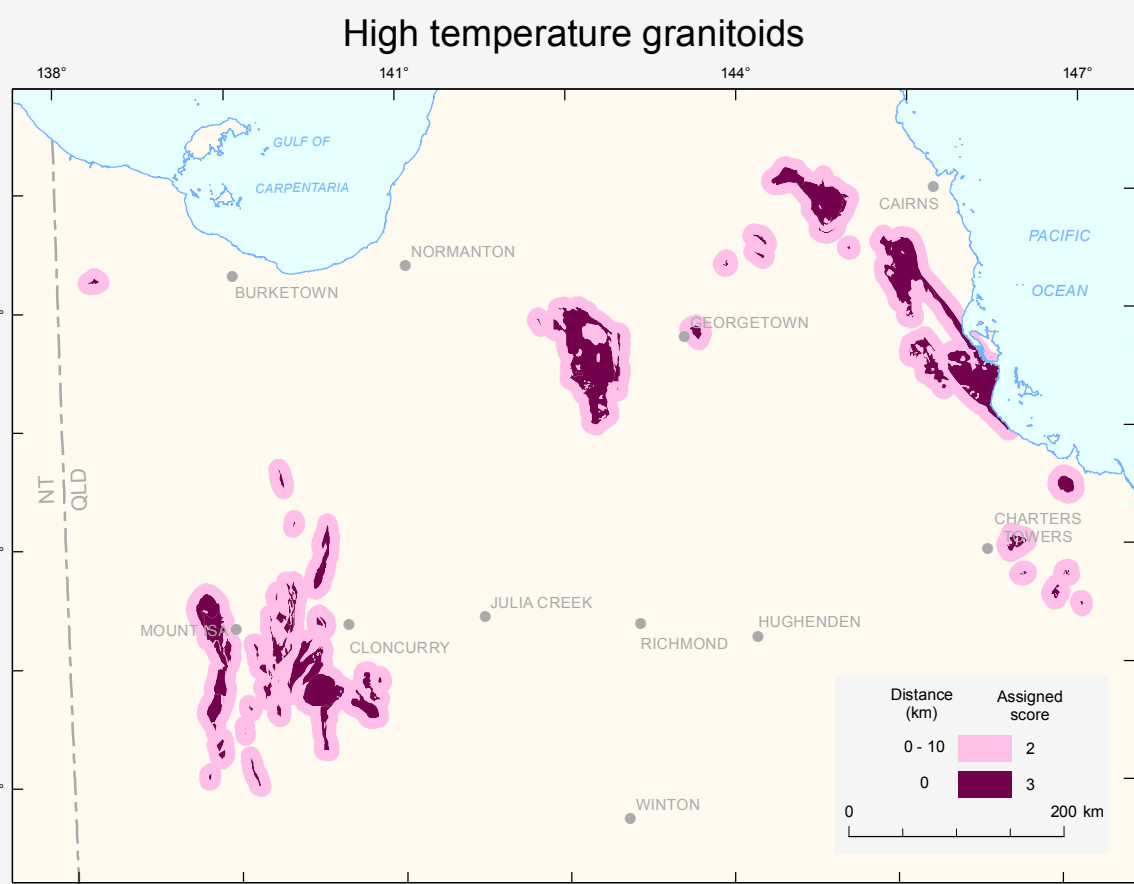
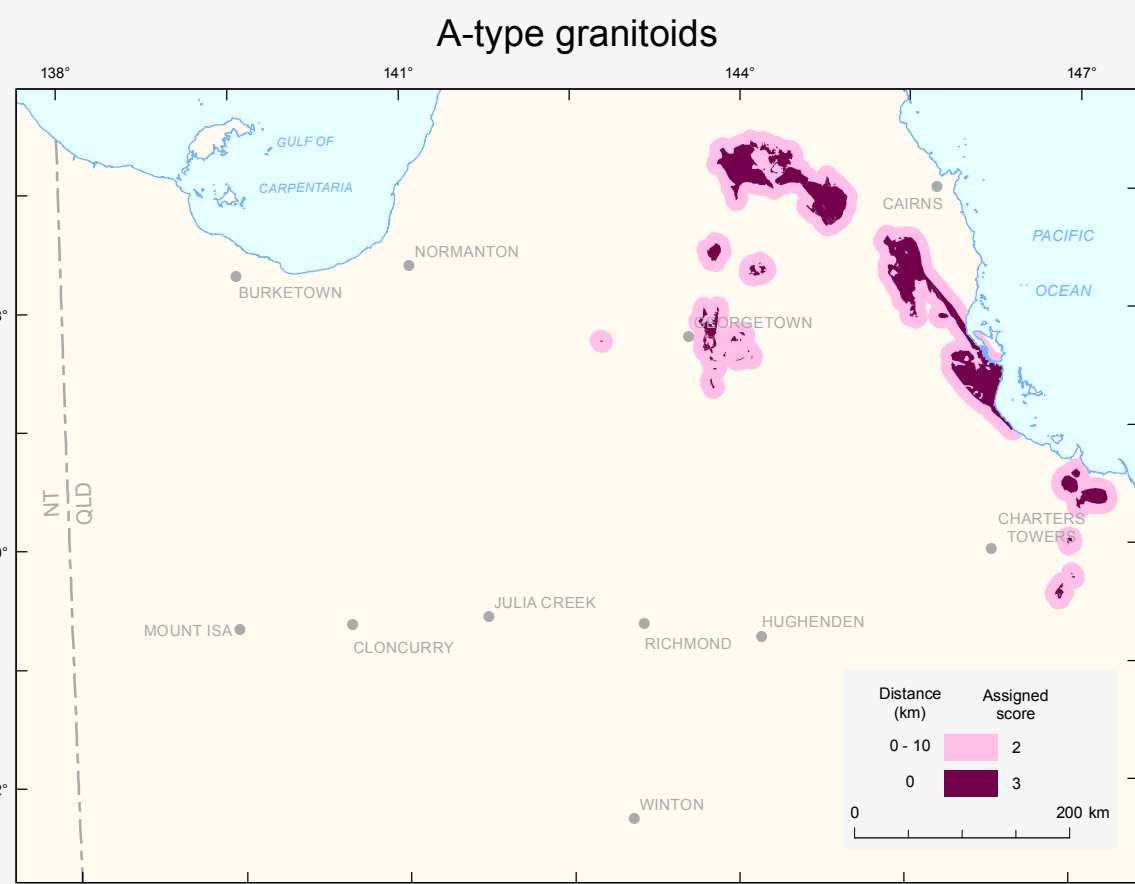
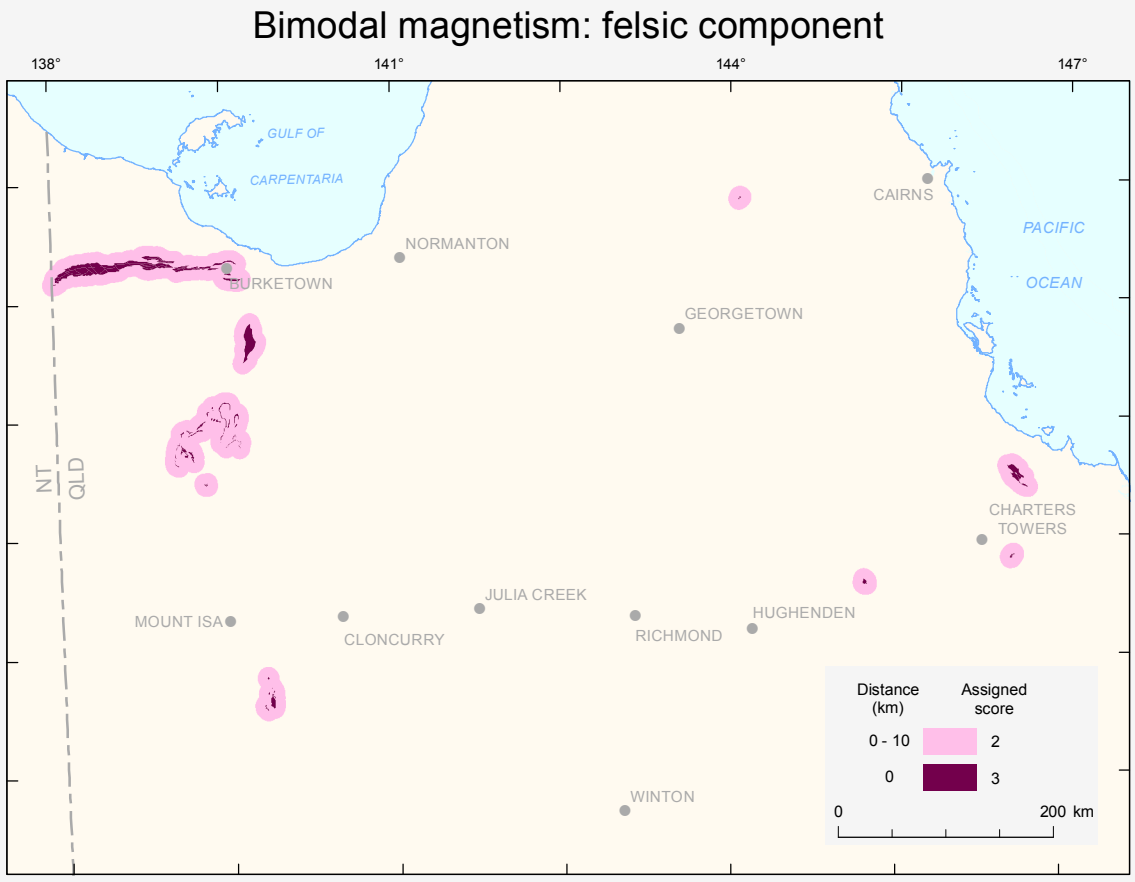
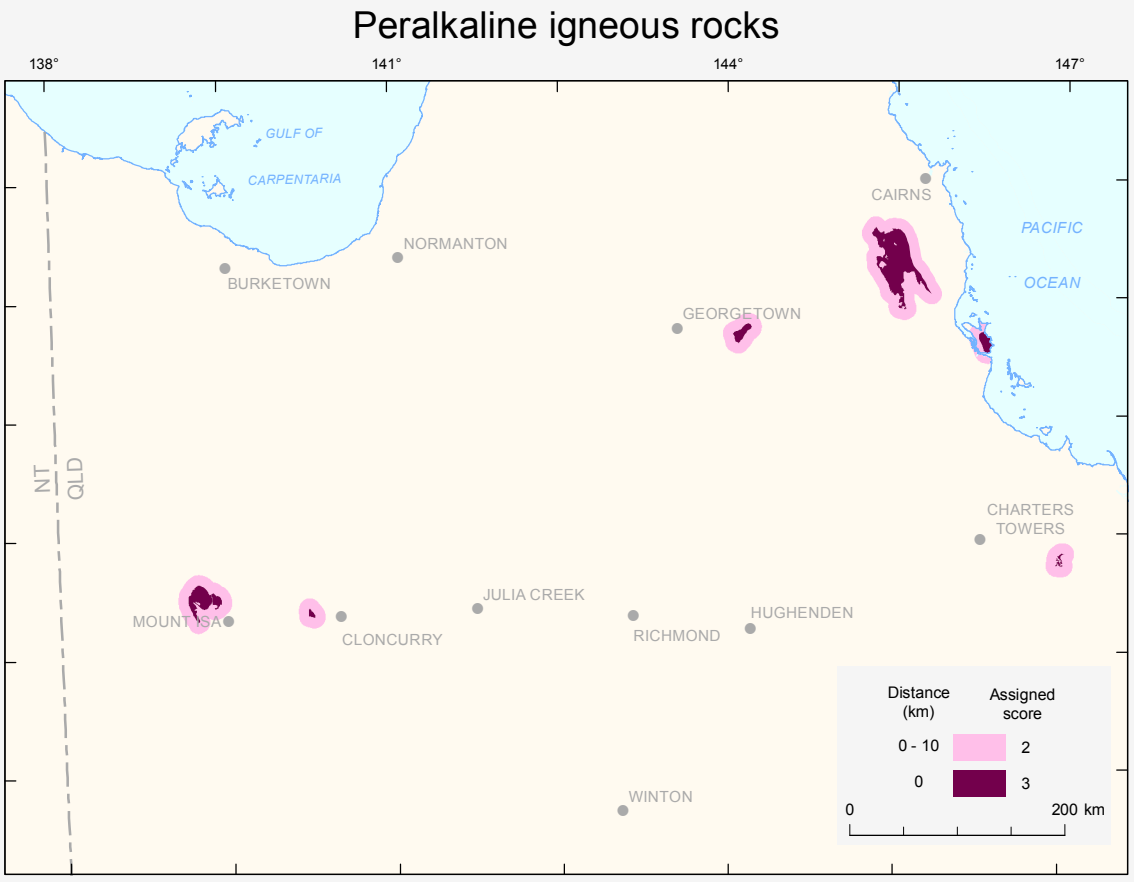
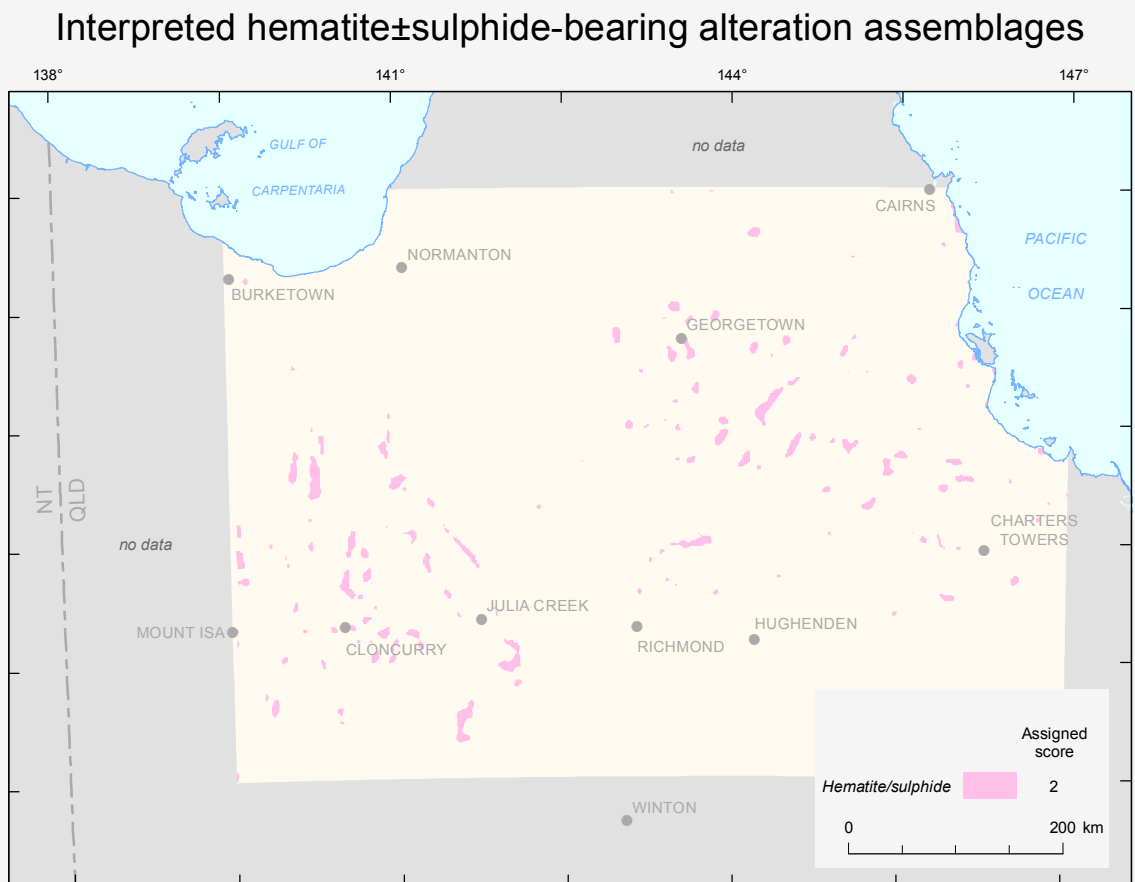
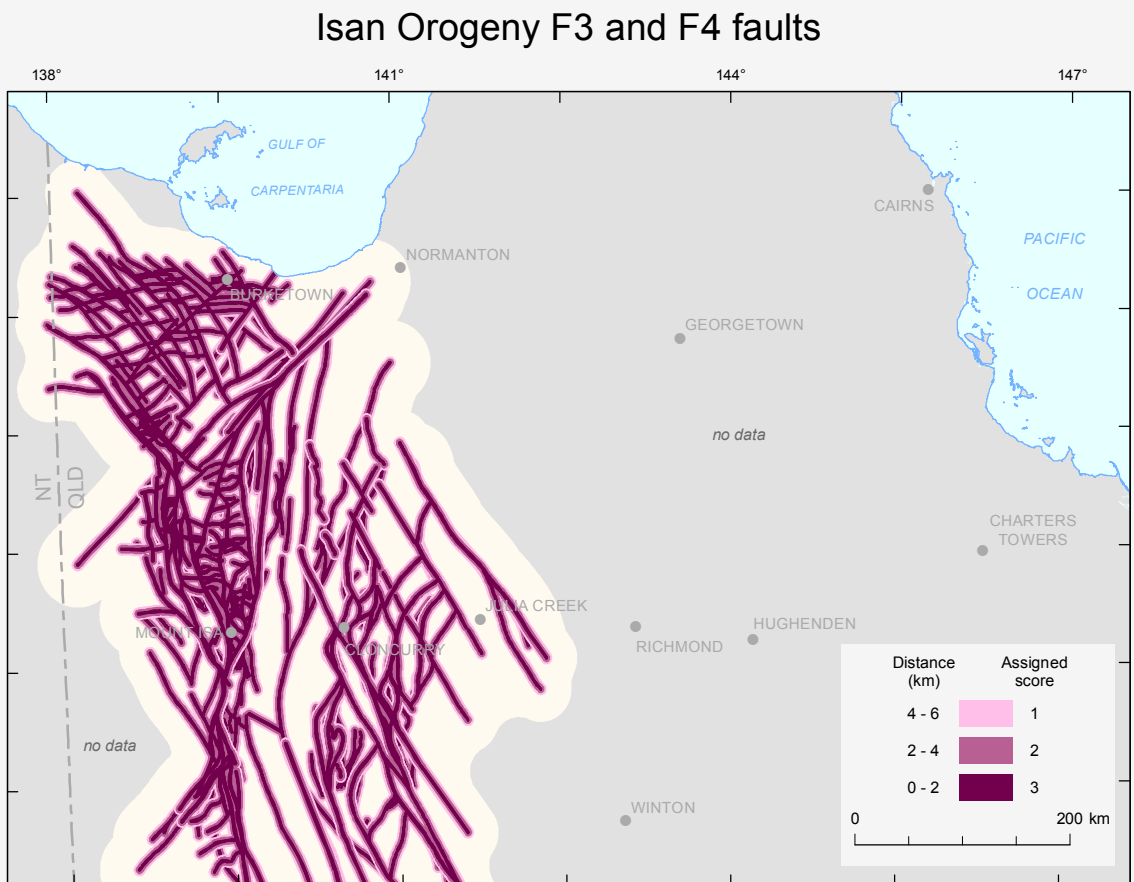
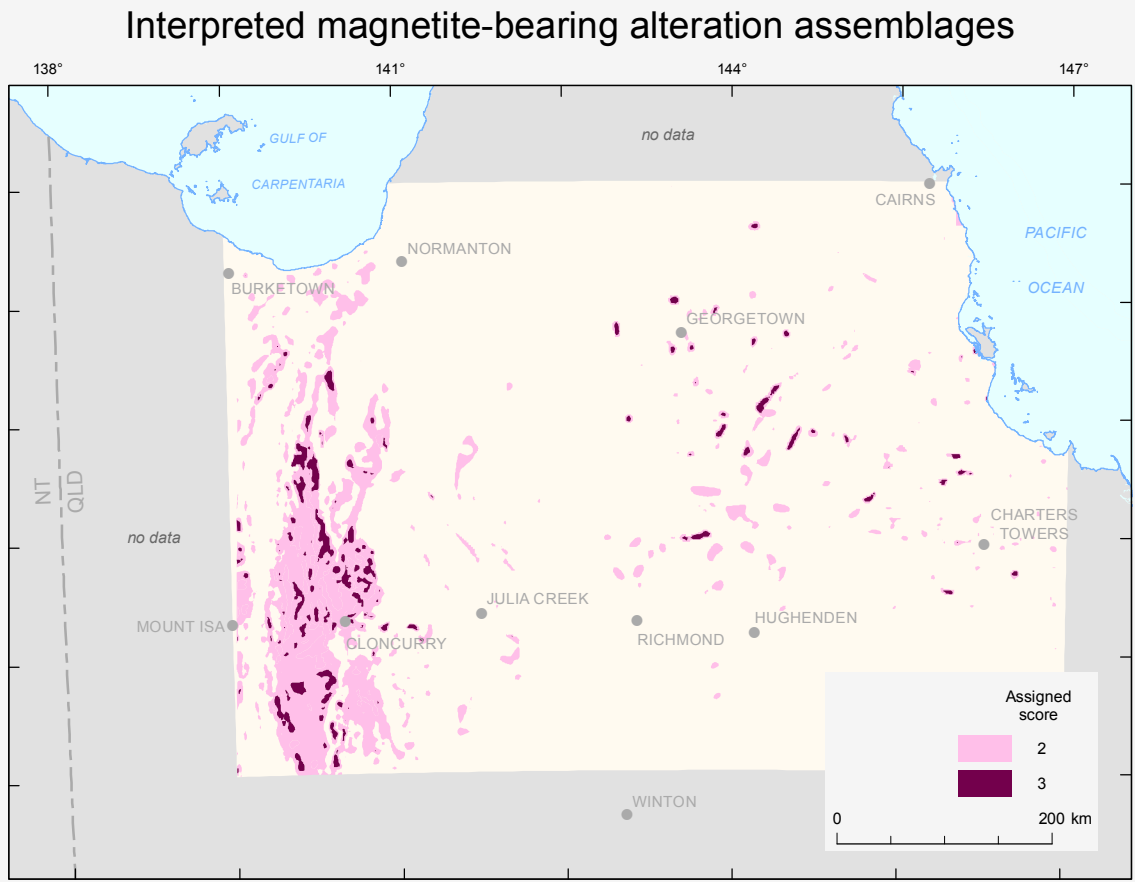
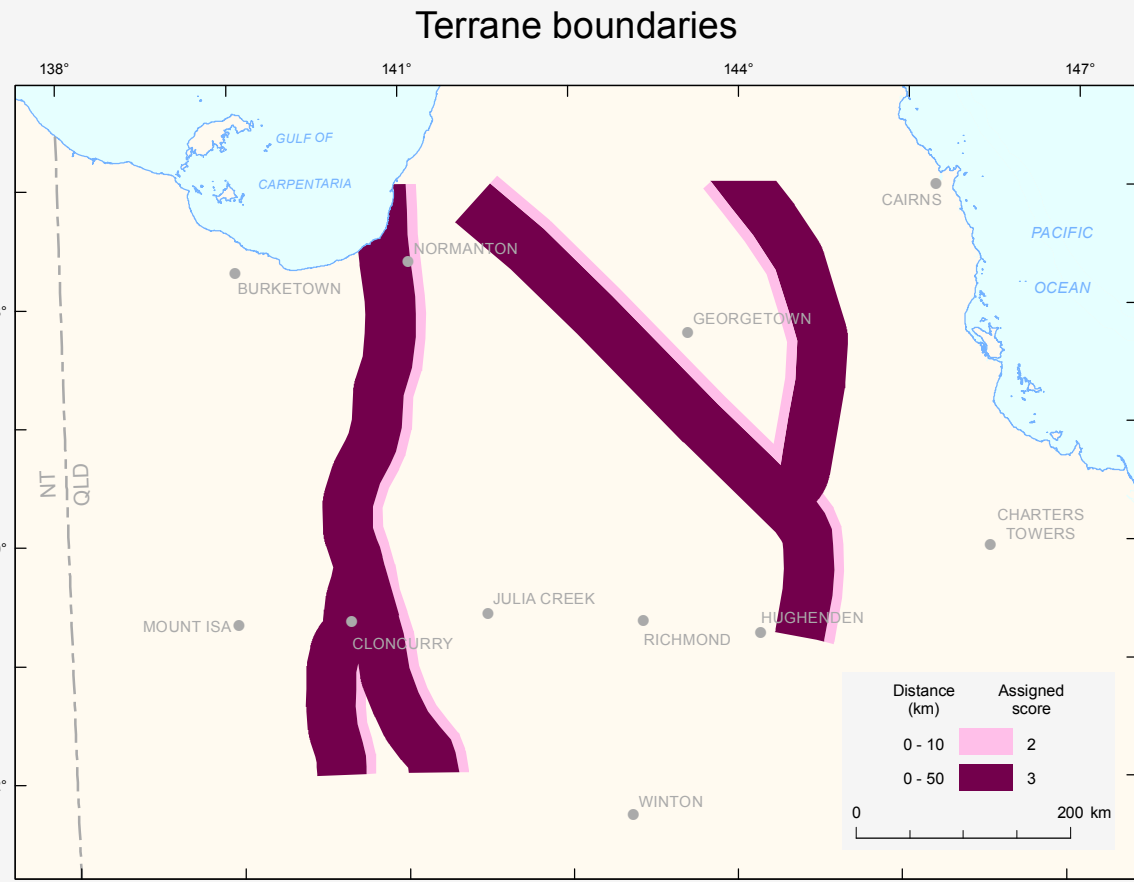
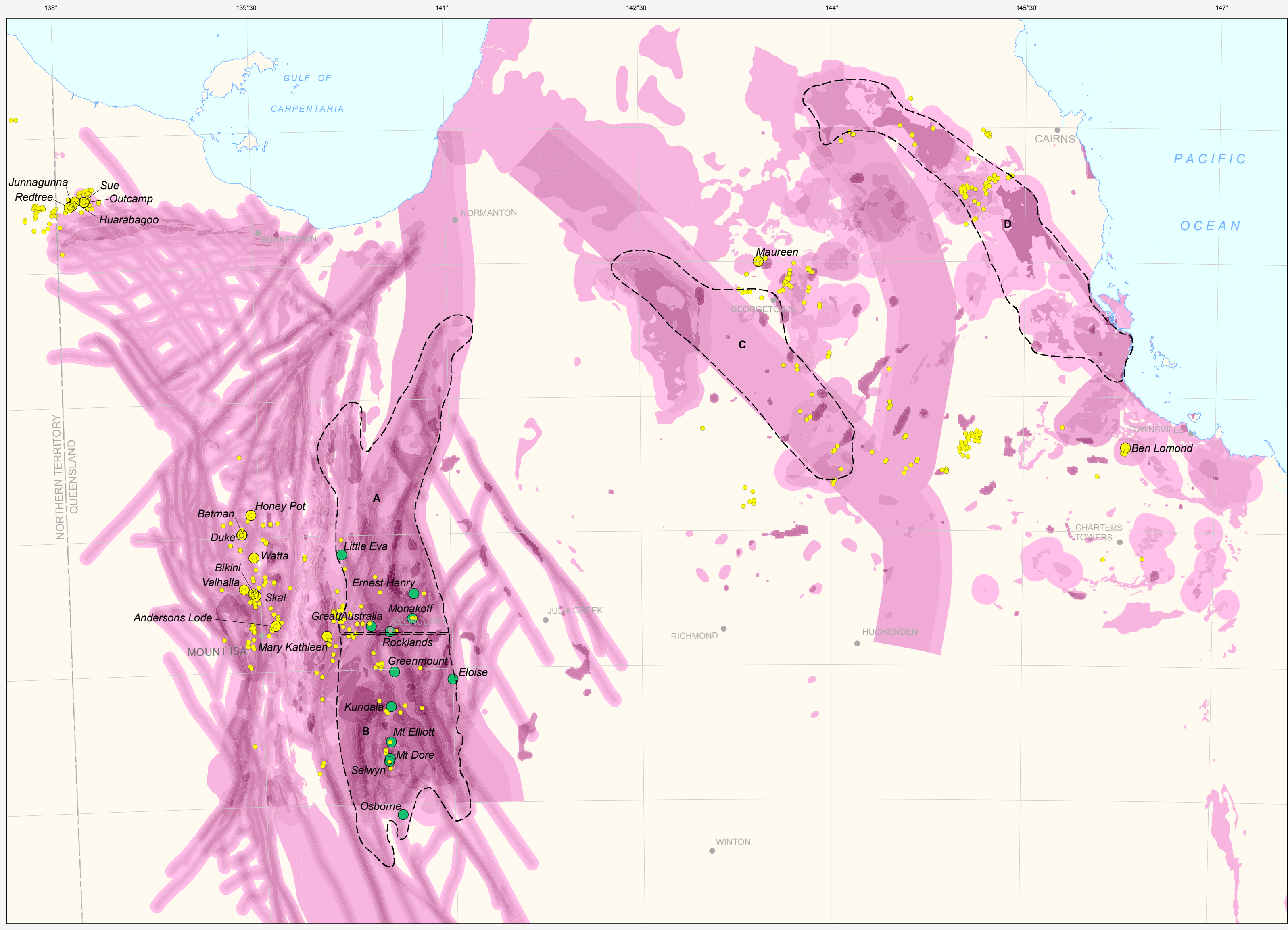


NORTH QUEENSLAND ENERGY SYSTEMS ASSESSMENT

IRON OXIDE COPPER-GOLD-URANIUM POTENTIAL



Iron Oxide Copper-Gold-Uranium Potential

Low High

Potential for Iron Oxide Copper-Gold (IOCG) uranium deposits based on summation of mineral system parameters shown in insets. Using this analysis, the following areas have been identified as having significant potential for IOCG uranium deposits. See text (Huston, 2010) for more information and references.

A Northern undercover extension of Ernest Henry – Cloncurry Mesoproterozoic iron oxide copper-gold belt
B Southern undercover extensions of Ernest Henry – Cloncurry Mesoproterozoic iron oxide copper-gold belt
C Georgetown Paleo- to Mesoproterozoic belt
D Paleozoic magmatic belt southwest of Cairns

Distribution of A-type igneous rocks determined from average whole rock geochemical analyses of igneous suites; igneous suites determined from solid geology of north Queensland. Area of A-types suite assigned 3 points; 10 km buffer assigned 2 points.

Distribution of high-temperature granitoids (850°C, based on average zircon-saturation temperatures) determined from average whole rock geochemical analyses of igneous suites; igneous suites determined from solid geology of north Queensland. Area of high-temperature granites assigned 3 points; 10 km buffer assigned 2 points.

Distribution of uranium-rich (greater than 10 ppm) igneous rocks determined from average whole rock geochemical analyses of igneous suites; igneous suites determined from solid geology of north Queensland. Area of uranium-rich suite assigned 3 points; 10 km buffer assigned 2 points.

Distribution of felsic volcanic rocks interpreted from the solid geology map of north Queensland.

Distribution of peralkaline igneous rocks determined from average whole rock geochemical analyses of igneous suites; igneous suites determined from solid geology of north Queensland. Area of peralkaline suite assigned 3 points; 10 km buffer assigned 2 points.

Distribution of felsic magmatic rocks from bimodal assemblages as determined from solid geology map. Felsic rocks assigned 3 points; 10 km buffer assigned 2 points.

Compiled by R.G. Skirrow Geoscience Australia
Data analysis by R.G. Skirrow and D.P. Connolly
Cartography by D.P. Connolly
Produced by GIS Services Group, Onshore Energy and Minerals Division, Geoscience Australia using ESRI ArcGIS 9.3 software

This map forms part of Geoscience Australia's Onshore Energy Security Program

It is recommended that this map be referred to as:
Skirrow, R.G., Huston D.L., Connolly D.P., 2010. Iron Oxide Copper-Gold-Uranium Potential, Plate 5 of 9 (1:25 000 000 scale map). In: Huston, D.L. (ed.), 2010. North Queensland Energy Assessment. Geoscience Australia, Canberra, GA Record, in prep.

© Commonwealth of Australia (Geoscience Australia) 2010.
This material is released under the Creative Commons Attribution 2.5 Australia Licence

This work is copyright. Apart from any fair dealings for the purpose of study, research, criticism, or review, as permitted under the Copyright Act 1968, no part may be reproduced by any process without written permission. Copyright is the responsibility of the Chief Executive Officer, Geoscience Australia. Requests and enquiries should be directed to the Chief Executive Officer, Geoscience Australia, GPO Box 378 Canberra ACT 2601

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 RELY SOLELY ON THIS INFORMATION WHEN MAKING A COMMERCIAL DECISION

Sales Centre, Geoscience Australia
GPO Box 378
Canberra ACT 2601
Phone (02) 6249 9966, Facsimile (02) 6249 9960
Email: sales@ga.gov.au

Published by Geoscience Australia, Department of Resources, Energy and Tourism, Canberra, Australia. Issued under the authority of the Minister for Resources, Energy and Tourism

Copies of the GA Record containing this map can be downloaded from the Geoscience Australia web site at: <http://www.ga.gov.au> or by contacting:



Australian Government
Geoscience Australia