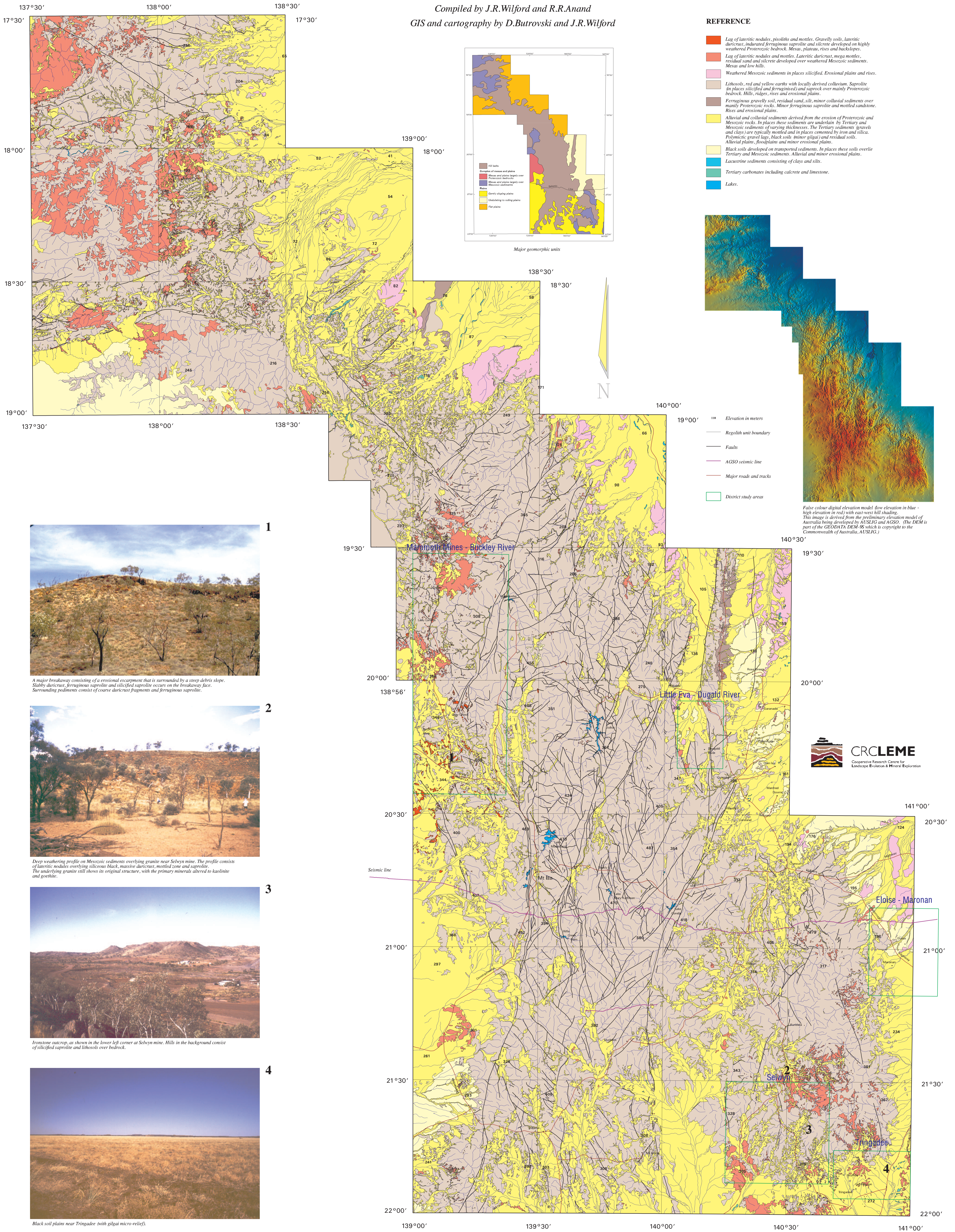


MT ISA REGION REGOLITH-LANDFORMS

1 : 500 000

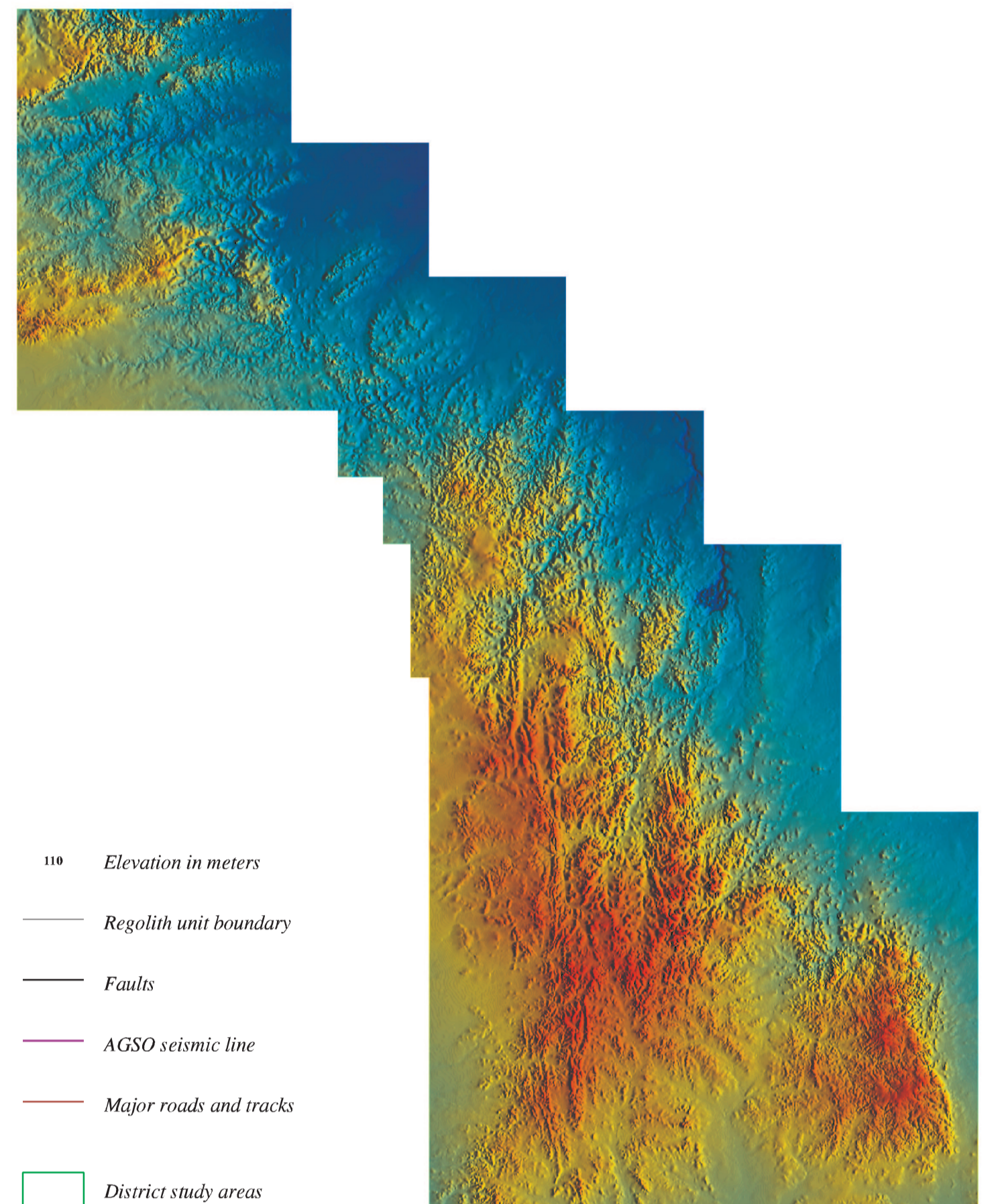
Compiled by J.R.Wilford and R.R.Anand

GIS and cartography by D.Butovski and J.R.Wilford



REFERENCE

- Lag of lateritic nodules, pisoliths and mottles. Gravelly soils, lateritic duricrust, indurated ferruginous saprolite and silcrete developed on highly weathered Proterozoic bedrock. Mesas, plateaus, rises and back slopes.
- Lag of lateritic nodules and mottles. Lateritic duricrust, mega mottles, residual sand and silcrete developed over weathered Mesozoic sediments. Mesas and low hills.
- Weathered Mesozoic sediments in places silicified. Erosional plains and rises.
- Lithosols, red and yellow earths with locally derived colluvium. Saprolite in places silicified and ferruginised and saprock over mainly Proterozoic bedrock. Hills, ridges, rises and erosional plains.
- Ferruginous gravelly soil, residual sand, silt, minor colluvial sediments over mainly Proterozoic rocks. Minor ferruginous saprolite and mottled sandstone. Rises and erosional plains.
- Alluvial and colluvial sediments derived from the erosion of Proterozoic and Mesozoic rocks. In places these sediments are underlain by Tertiary and Mesozoic sediments of varying thicknesses. The Tertiary sediments (gravel and clays) are typically mottled and in places cemented by iron and silica. Polymeric gravel logs, black soils (minor gilgai) and residual soils. Alluvial plains, floodplains and minor erosional plains.
- Black soils developed on transported sediments. In places these soils overlie Tertiary and Mesozoic sediments. Alluvial and minor erosional plains.
- Lacustrine sediments consisting of clays and silts.
- Tertiary carbonates including calccrete and limestone.
- Lakes.



False colour digital elevation model (low elevation in blue - high elevation in red) with east-west hill shading. This image is derived from the preliminary elevation model of Australia being developed by AUSJIG and AGSO. (The DEM is part of the GEODATA DEM-95 which is copyright to the Commonwealth of Australia, AUSJIG.)



1 A major breakaway consisting of an erosional escarpment that is surrounded by a steep debris slope. Slabby duricrust, ferruginous saprolite and silicified saprolite occurs on the breakaway face. Surrounding pediments consist of coarse duricrust fragments and ferruginous saprolite.



2 Deep weathering profile on Mesozoic sediments overlying granite near Selwyn mine. The profile consists of lateritic nodules overlying siliceous black, massive duricrust, mottled zone and saprolite. The underlying granite still shows its original structure, with the primary minerals altered to kaolinite and goethite.



3 Ironstone outcrop, as shown in the lower left corner at Selwyn mine. Hills in the background consist of silicified saprolite and lithosols over bedrock.



4 Black soil plains near Tringadee (with gilgai micro-relief).



SCALE 1:500 000

(Polygons based on AGSO 1:1 000 000 Digital Dataset)