

8 APPENDICES

8.1 APPENDIX 1: WESTERN REGIONAL ASSESSMENT SOIL DATA CARD

SURVEY TITLE: _____

SITE LOCATION: _____

Profile No.	Same as Site	Paired with	Map Sheet No.	Eastings	Northings	Described By	Profile Date	Photo Taken	No. of Layers
1								profile	1
2								site	2
3								both profile & site	3
4								Nature(s) of Exposure	4
5								auger	5
6								pit	6
7								batter	7
8								gully	8
9								core sample	9
10								other	10

Location on 1:100 000 Map 1:250,000 <input type="checkbox"/> 1:100,000 <input type="checkbox"/> 1:50,000 <input type="checkbox"/> 1:25,000 <input type="checkbox"/> GPS <input type="checkbox"/> Survey <input type="checkbox"/>	Landform Pattern alluvial fan <input type="checkbox"/> alluvial plain <input type="checkbox"/> anastomotic plain <input type="checkbox"/> badlands <input type="checkbox"/> bar plain <input type="checkbox"/> beach ridge plain <input type="checkbox"/> caldera <input type="checkbox"/> chenier plain <input type="checkbox"/> coral reef <input type="checkbox"/> covered plain <input type="checkbox"/> delta <input type="checkbox"/> dune field <input type="checkbox"/> escarpment <input type="checkbox"/> floodplain <input type="checkbox"/> hills <input type="checkbox"/> karst <input type="checkbox"/> lava plain <input type="checkbox"/> low hills <input type="checkbox"/> made land <input type="checkbox"/> meander plain <input type="checkbox"/> meteor crater <input type="checkbox"/> mountains <input type="checkbox"/> pediment <input type="checkbox"/> pediplain <input type="checkbox"/> peneplain <input type="checkbox"/> plain <input type="checkbox"/> plateau <input type="checkbox"/> playa plain <input type="checkbox"/> rises <input type="checkbox"/> sand plain <input type="checkbox"/> sheet-flood fan <input type="checkbox"/> stagnant <input type="checkbox"/> alluvial plain <input type="checkbox"/> terrace <input type="checkbox"/> tidal flat <input type="checkbox"/> volcano <input type="checkbox"/>	Site Morphology flat <input type="checkbox"/> crest <input type="checkbox"/> hillock <input type="checkbox"/> ridge <input type="checkbox"/> upper slope <input type="checkbox"/> midslope <input type="checkbox"/> simple slope <input type="checkbox"/> lower slope <input type="checkbox"/> open depression <input type="checkbox"/> closed depression <input type="checkbox"/> delta <input type="checkbox"/> dune field <input type="checkbox"/> escarpment <input type="checkbox"/> floodplain <input type="checkbox"/> hills <input type="checkbox"/> karst <input type="checkbox"/> lava plain <input type="checkbox"/> low hills <input type="checkbox"/> made land <input type="checkbox"/> meander plain <input type="checkbox"/> meteor crater <input type="checkbox"/> mountains <input type="checkbox"/> pediment <input type="checkbox"/> pediplain <input type="checkbox"/> peneplain <input type="checkbox"/> plain <input type="checkbox"/> plateau <input type="checkbox"/> playa plain <input type="checkbox"/> rises <input type="checkbox"/> sand plain <input type="checkbox"/> sheet-flood fan <input type="checkbox"/> stagnant <input type="checkbox"/> alluvial plain <input type="checkbox"/> terrace <input type="checkbox"/> tidal flat <input type="checkbox"/> volcano <input type="checkbox"/>	Current Condition(s) Wet <input type="checkbox"/> Dry <input type="checkbox"/> gravelly <input type="checkbox"/> cracked <input type="checkbox"/> self-mulched <input type="checkbox"/> loose <input type="checkbox"/> soft <input type="checkbox"/> firm <input type="checkbox"/> hardset <input type="checkbox"/> surface crust <input type="checkbox"/> trampled <input type="checkbox"/> poached <input type="checkbox"/> recently cultivated <input type="checkbox"/> water repellent <input type="checkbox"/> other disturbance <input type="checkbox"/>	Site Disturbance(s) natural disturbance <input type="checkbox"/> no effect, disturbance <input type="checkbox"/> limited clearing <input type="checkbox"/> extensive clearing <input type="checkbox"/> cleared, no cultivation <input type="checkbox"/> occasional cultivation <input type="checkbox"/> rainfed cultivation <input type="checkbox"/> irrigated cultivation <input type="checkbox"/> highly disturbed <input type="checkbox"/>	Map Type GDA <input type="checkbox"/> AMG <input type="checkbox"/>	NSW SOIL AND LAND INFORMATION SYSTEM Western Regional Assessment Soil Data Card
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LITHOLOGY – Choose up to 3 for each

Solum P.M.	Substrate	Solum P.M.	Substrate	Solum P.M.	Substrate
not identified	unconsolidated	limestone	coarse-basic		
gravel	sand	tuff	fine-acidic		
silt	clay	breccia	fine-intermediate		
organic material	alluvium	greywacke	fine-basic		
alluvium	colluvium	arkose	serpentine		
lacustrine	aeolian	dolomite	gabbro		
calcareous sand	marine	calcrete	dolerite		
fill	calcareous sand	aeolinite	diorite		
mud	fill	chert	syenite		
till	mud	jasper	granodiorite		
sedimentary	shale	metamorphic	adamellite		
siltstone/mudstone	sandstone-quartz	gneiss	granite		
sandstone-lithic	conglomerate	schist/phylite	aplite		
		slate	quartz porphyry		
		hornfels	basalt		
		quartzite	andesite		
		greenstone	trachyte		
		amphibolite	rhyolite		
		marble	obsidian		
		igneous	scoria		
		coarse-acidic	ash		
		coarse-intermediate	agglomerate		
			other		

EROSION

Type	1	2	3	4	5	6	7	8	9	10
1 None										
2 Wind										
3 Sheet										
4 Rill										
5 Gully										
6 Scald										
7 Tunnel										
8 Stream bank										
9 Wave										
10 Mass Movement										

EROSION SEVERITY

Severity	1	2	3	4	5	6	7	8	9	10
1 none										
2 not evident										
3 evident										
4 minor										
5 moderate										
6 severe										
7 very severe										

Present Condition

Condition	1	2	3	4	5	6	7	8	9	10
1 stable										
2 partly stabilised										
3 active										

Gully Depth

Depth	1	2	3
1 <1.5 m			
2 1.5-3.0 m			
3 >3.0 m			

SITE FIELD NOTES

TYPE OF PROFILE ASSESSMENT – 1 only

random ☐ bulked ☐ map checking ☐ opportunistic ☐ curiosity/unusual soil ☐ boundary checking ☐ preplanned ☐ transect/catena ☐ grid ☐ Type Profile ☐

ERD

02843

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71 Soil Landscape Reconnaissance Project - Brigalow Belt South Interim Bioregion (WRA)

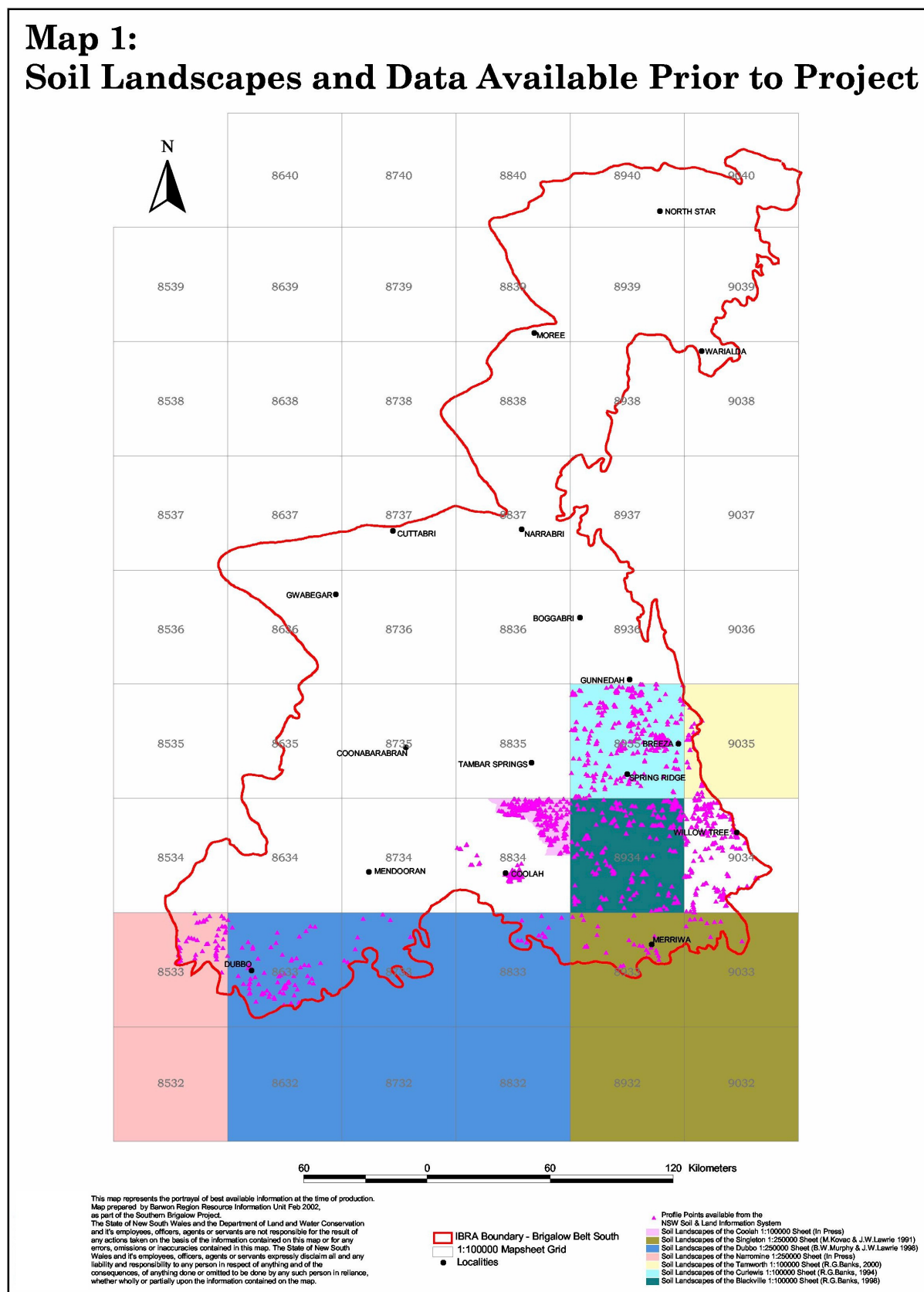
8.2 APPENDIX 2: REFERENCES

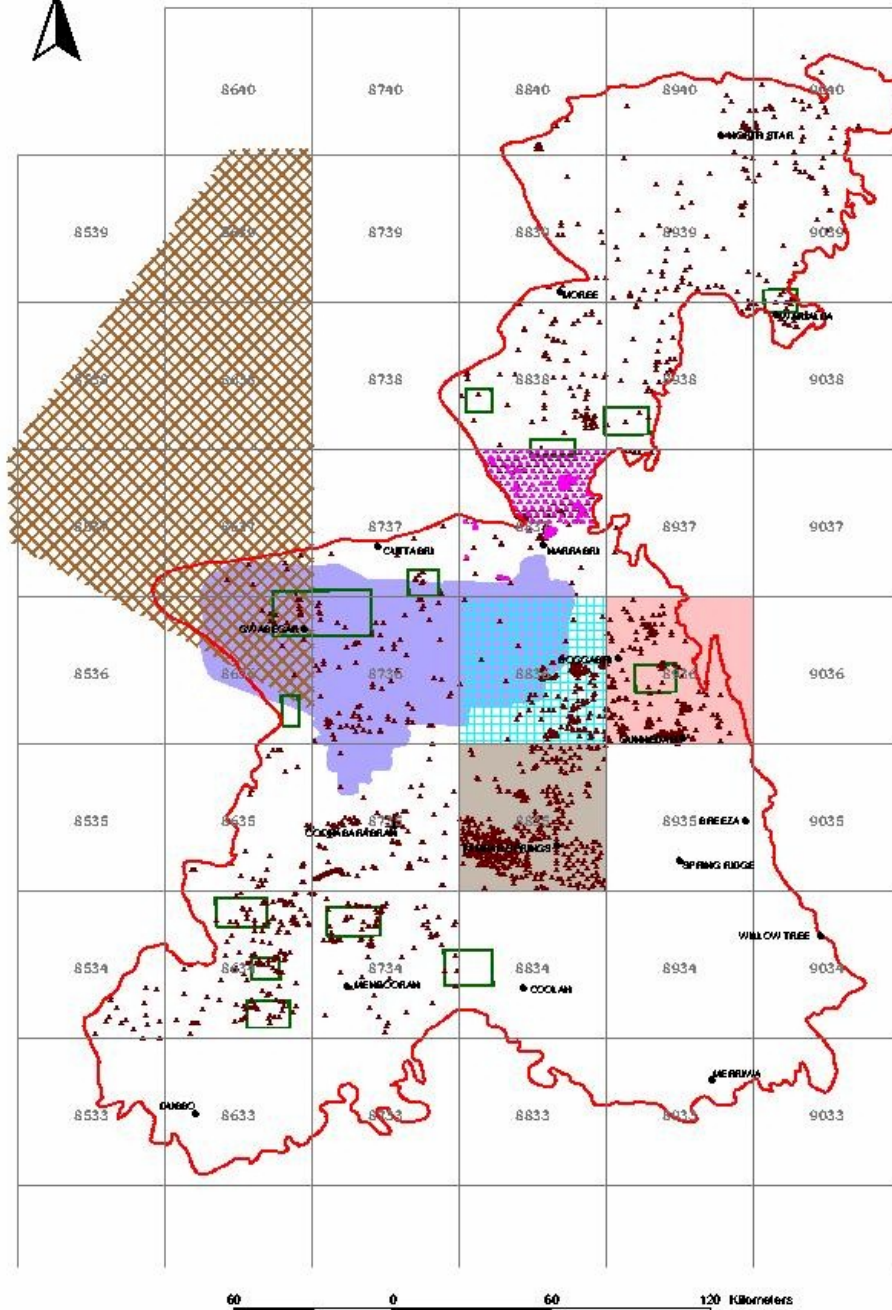
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Map 1:
Soil Landscapes and Data Available Prior to Project





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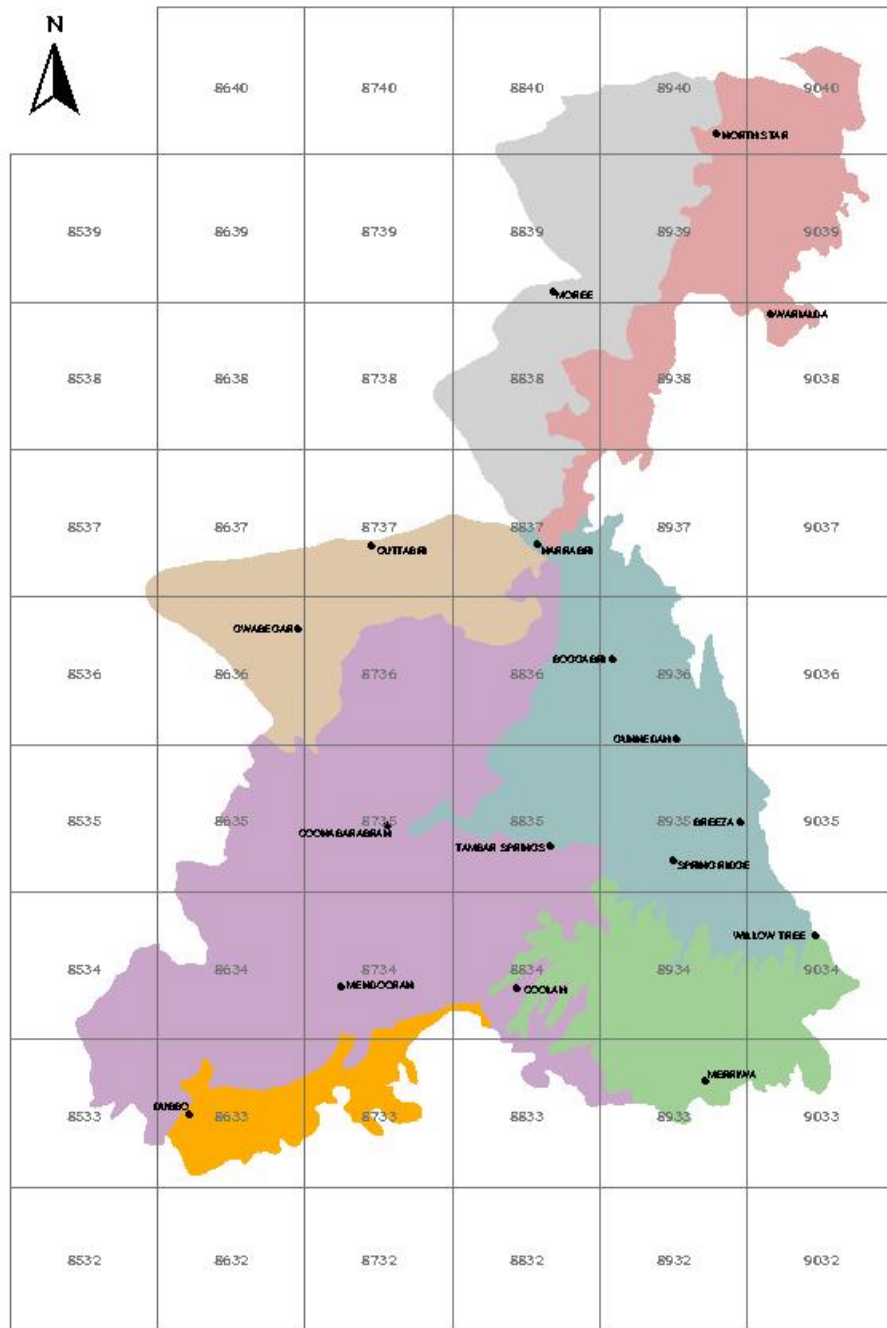
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- IBRA Region - Brigalow Belt South Boundary
 1:100000 Mapsheet Grid
 Localities

- * Edge of Profile Point Locations
- * Soil Profile Point Data
- Training Area
- Field Guide to the Soils of the Western Basins Region Floodplains, Keady, L.C. and Benitz, R.G. (1996)
- Soil Landscapes of the Basin Area 1: 100000 Sheet
- Soil Landscapes of the Egghead 1: 100000 Sheet
- Soil Landscapes of the Tumbler Sprague 1: 100000 Sheet
- Geomorphology of the Pilgrimage Forest, Edgemoor Ball South Biosphere

Map 3: Original Brigalow Belt South Provinces

After Morgan G. & Terry H. (1992) *Nature Conservation of Western NSW*,
National Parks Association of NSW



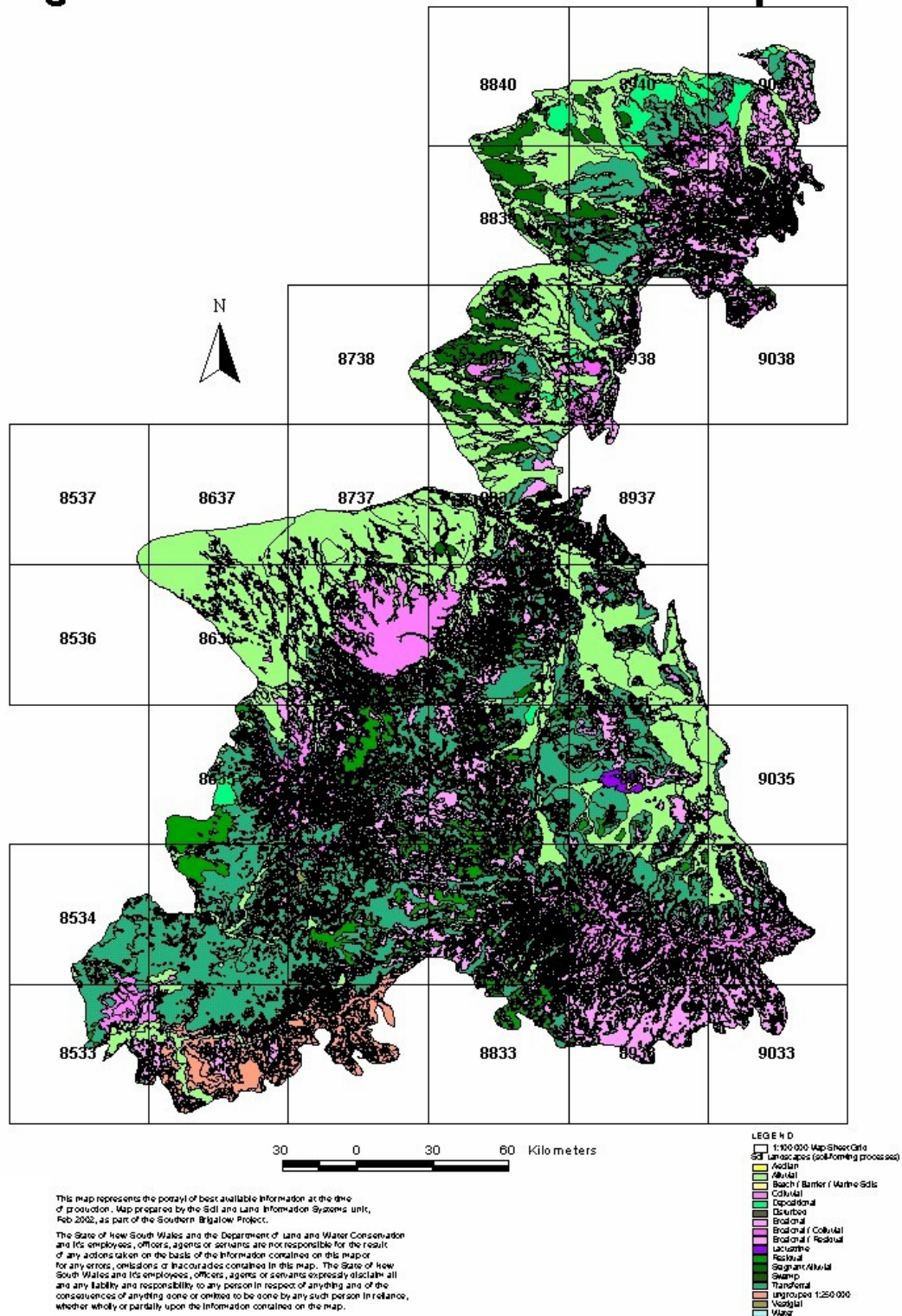
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1:100000 Mapsheet Grid
● Localities

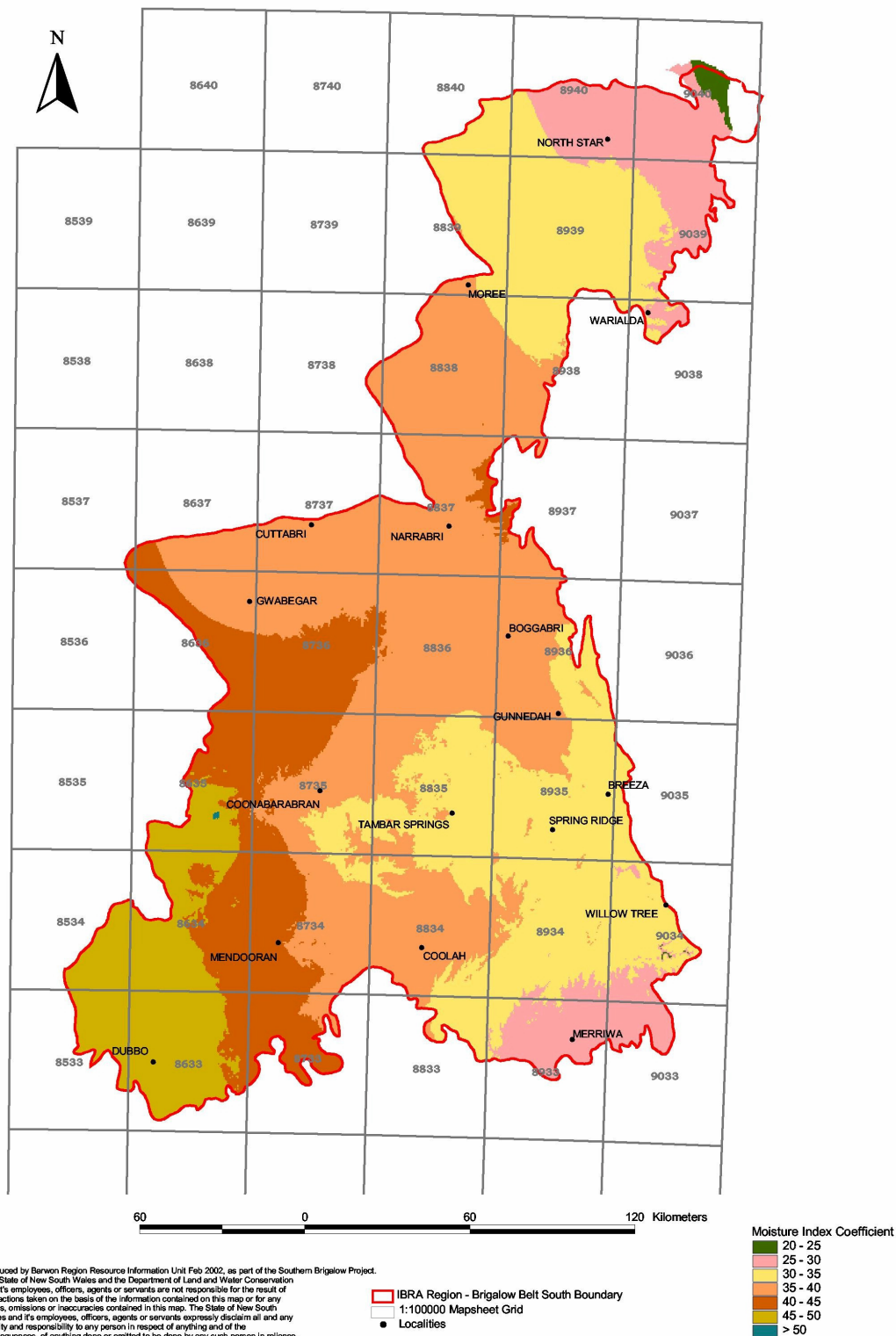
Brigalow Belt South - Provinces
 Northern Outwash
 Liverpool Plains
 Pilliga Outwash
 Liverpool Range
 Northern Basalts
 Pilliga
 Talbragar Valley

[illegible]

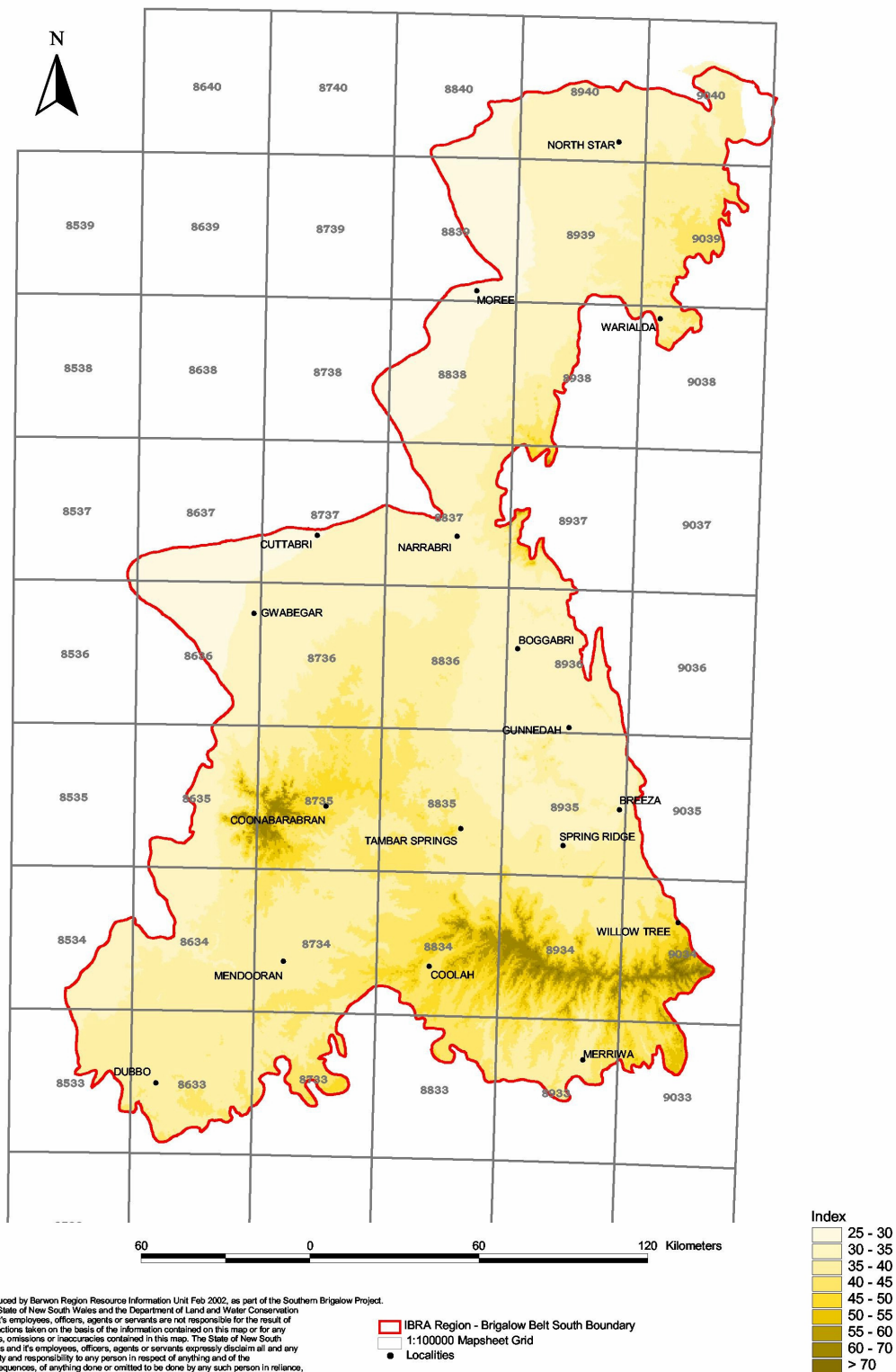
Map 5: Brigalow Belt South Western Regional Assessment - Soil Landscapes



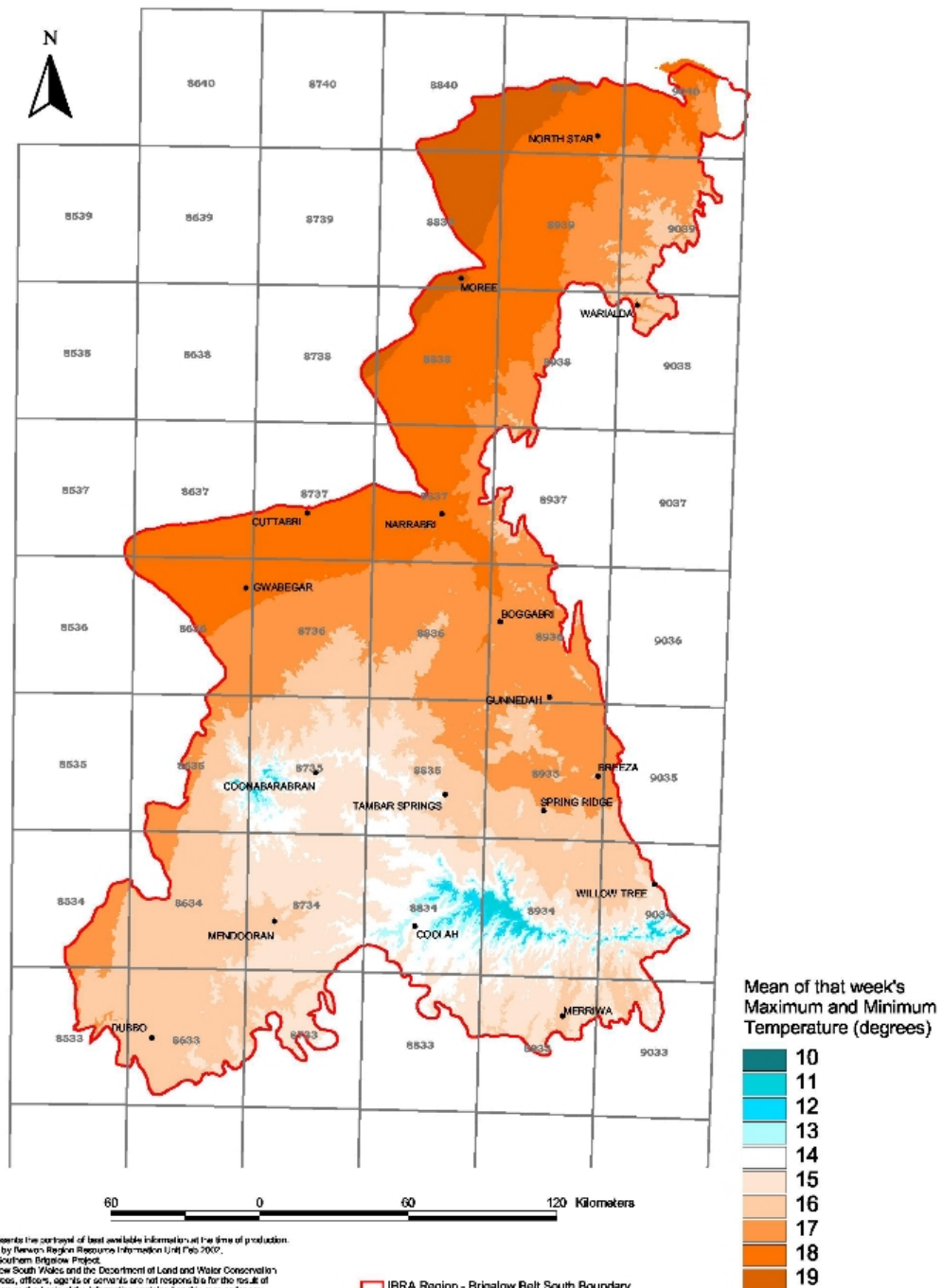
Map 6a: Moisture Index Coefficient of Variation (Seasonality)



Map 6b: Annual Moisture Index



Map 6c:
Mean Weekly Temperatures
of the Southern Brigalow Interim Bioregion

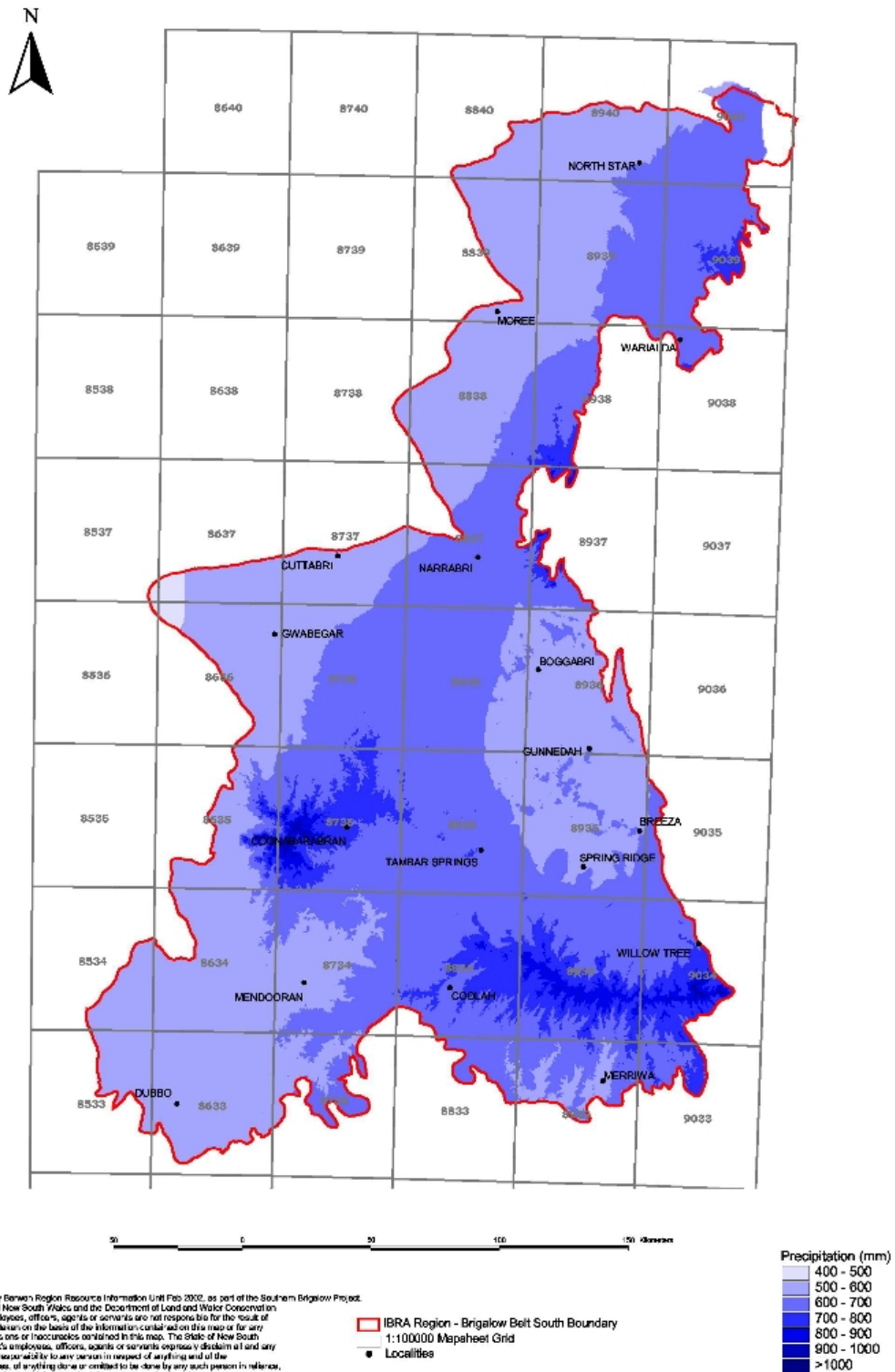


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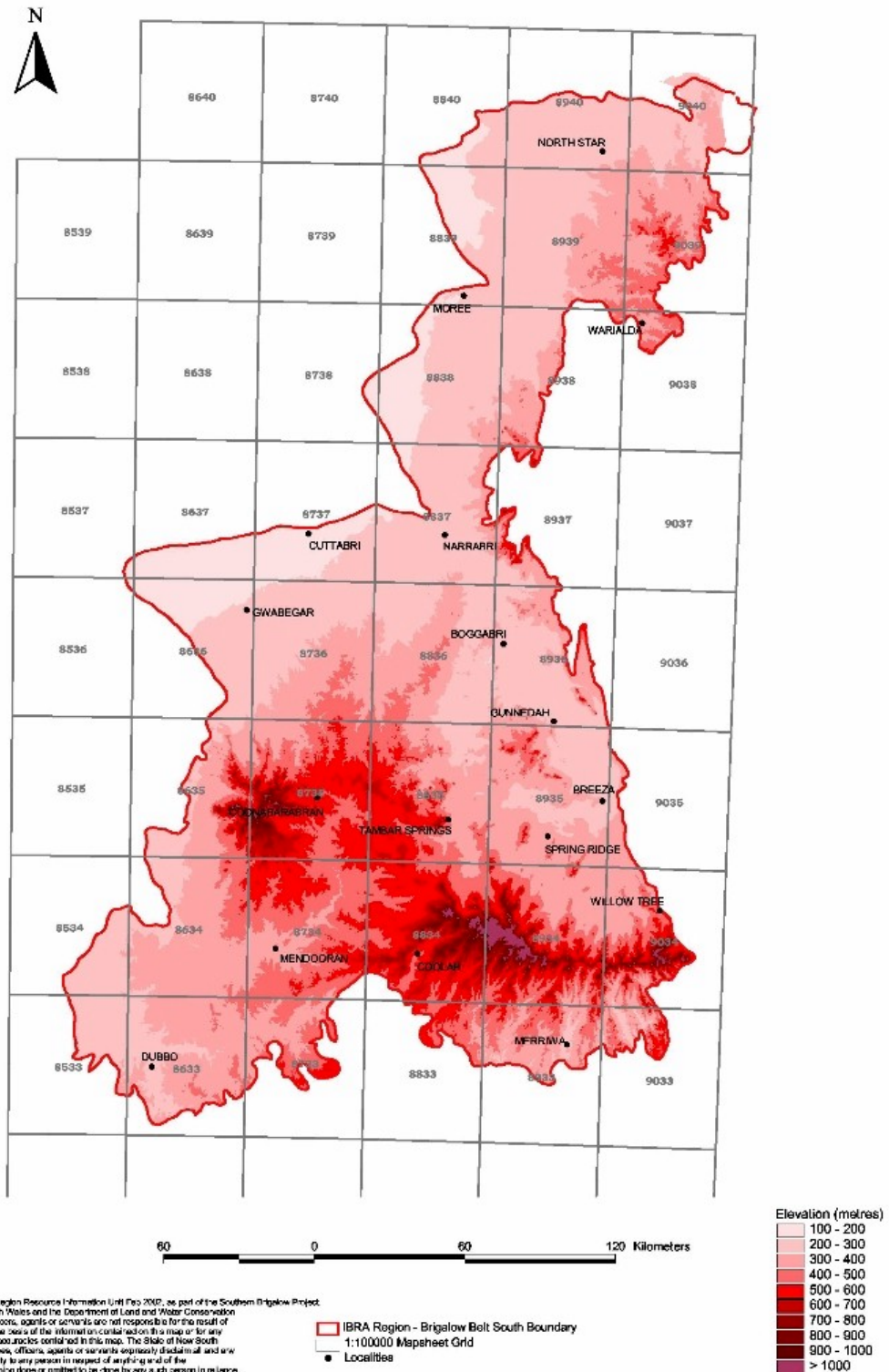
 IBRA Region - Brigalow Belt South Boundary
 1:100000 Mapsheet Grid
 Localities

Data produced by Dr. G. Goddard using outputs from ANUCLIM
 Houlder, D., Hudson, M., Nix, H. & McMahon, J. (1998). ANUCLIM Version 5.0

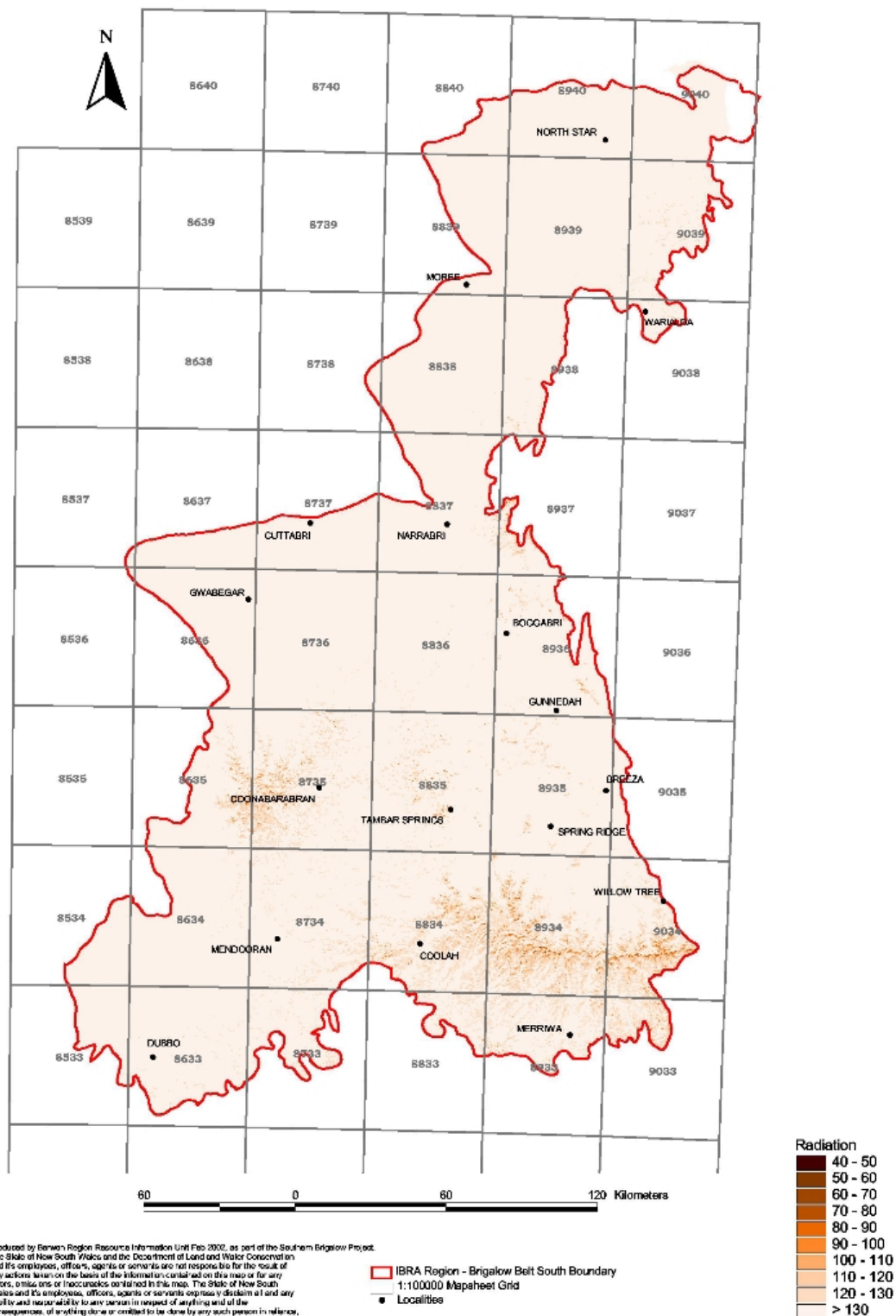
Map 6d: Annual Precipitation Index



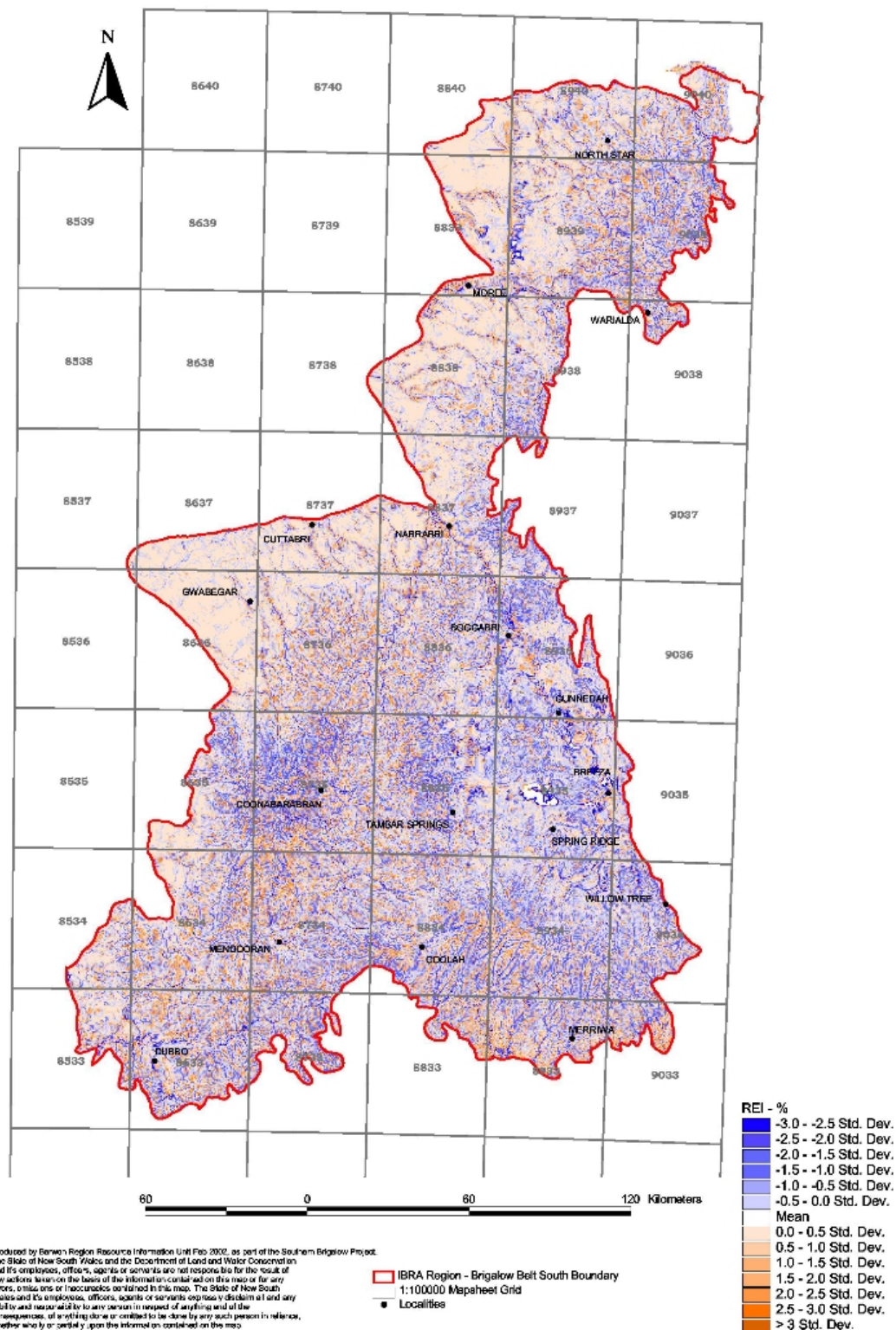
Map 7a: Digital Elevation Model



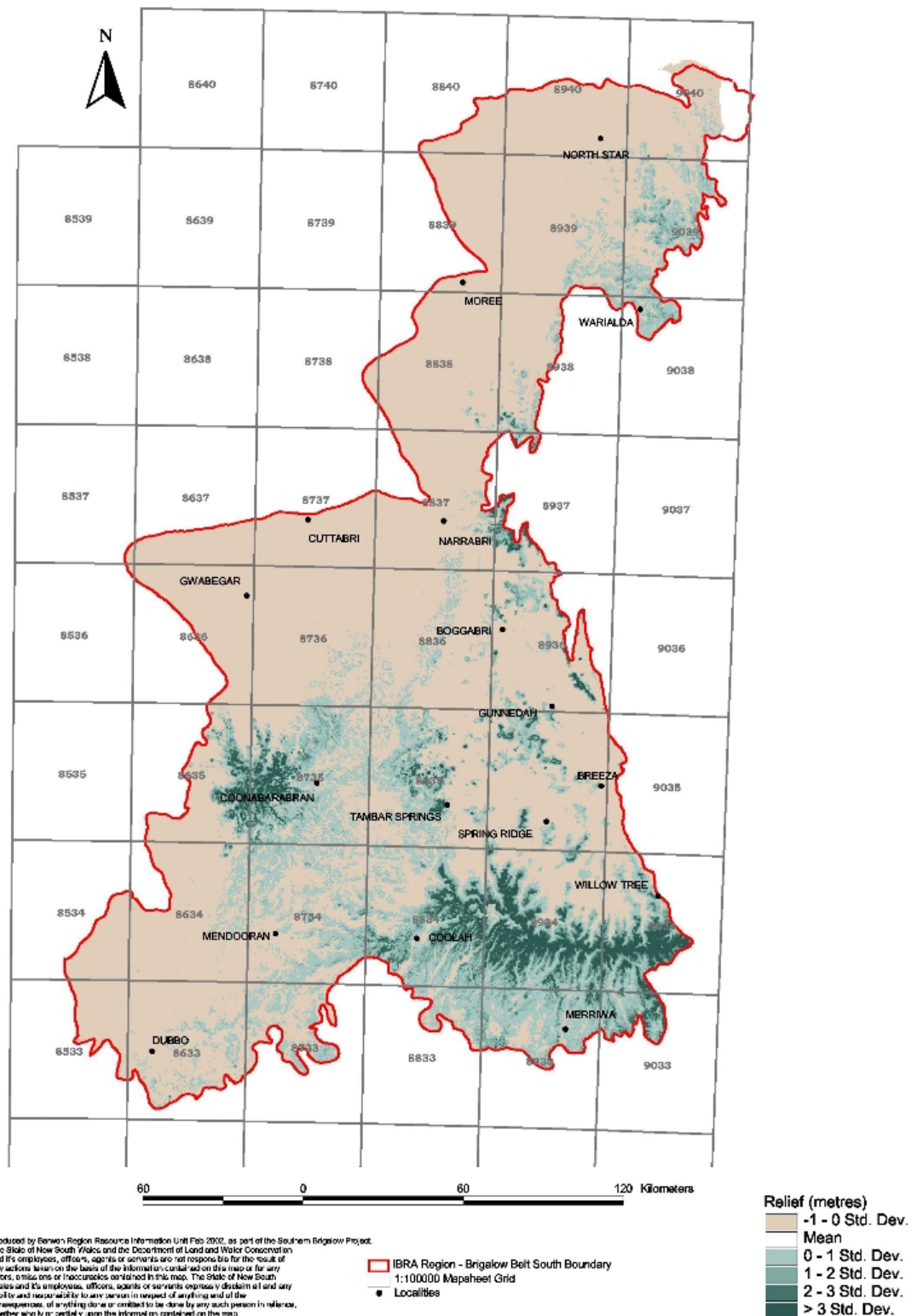
**Map 7b:
Solar Radiation (from DEM)**



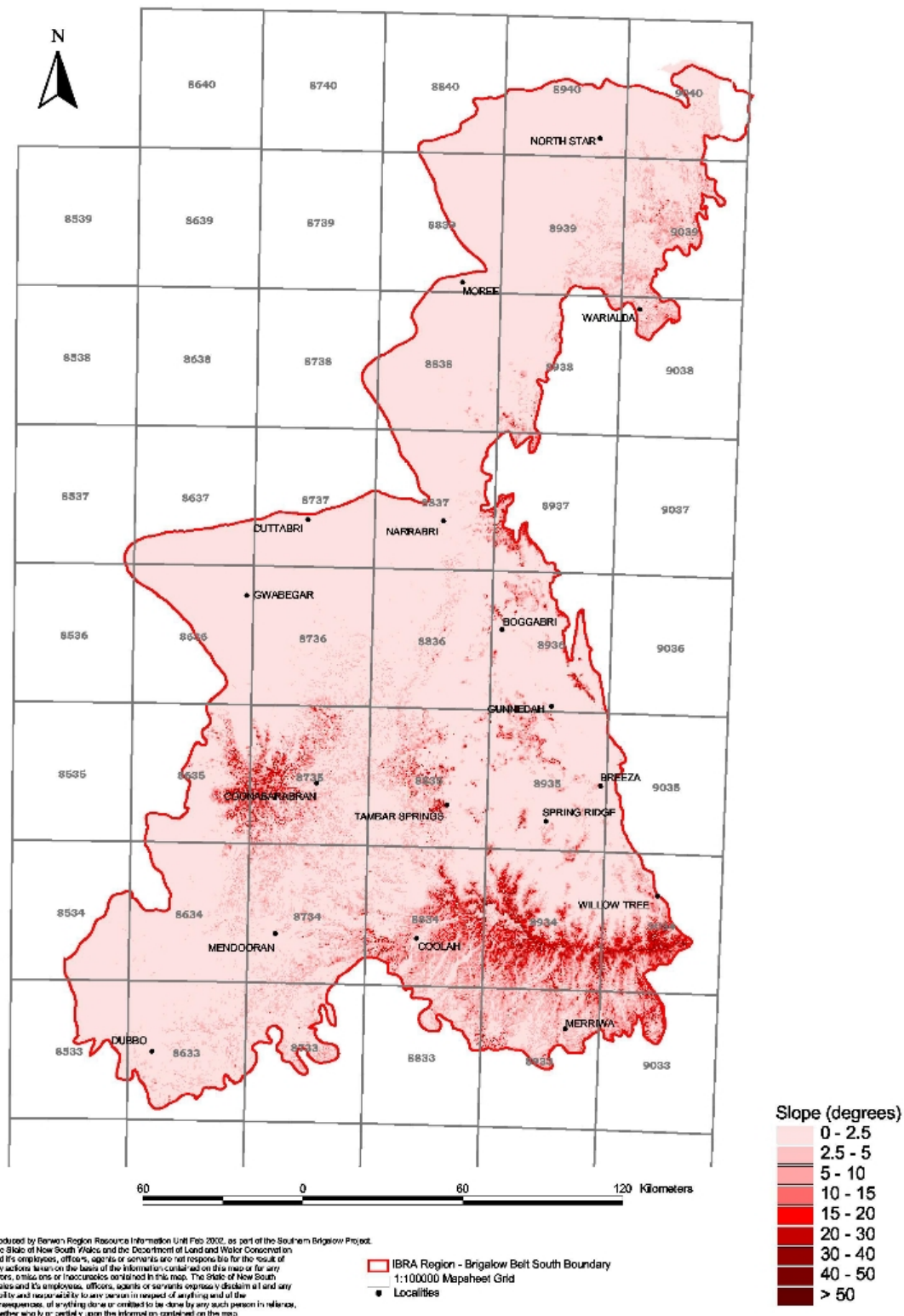
Map 7c: Relative Elevation Index



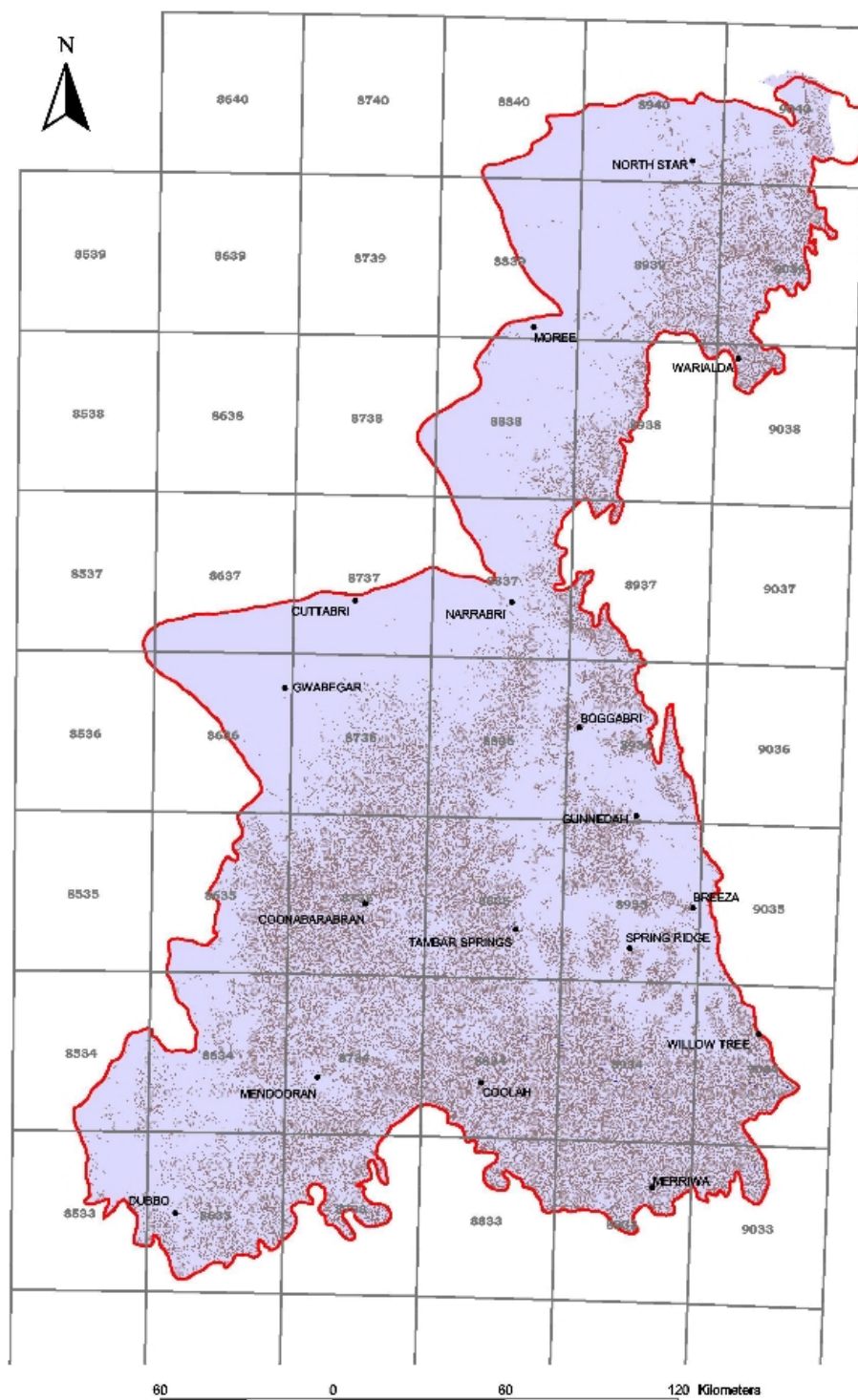
Map 7d: Relief



Map 7e: Slope



Map 7f: Tan (Contour) Curvature



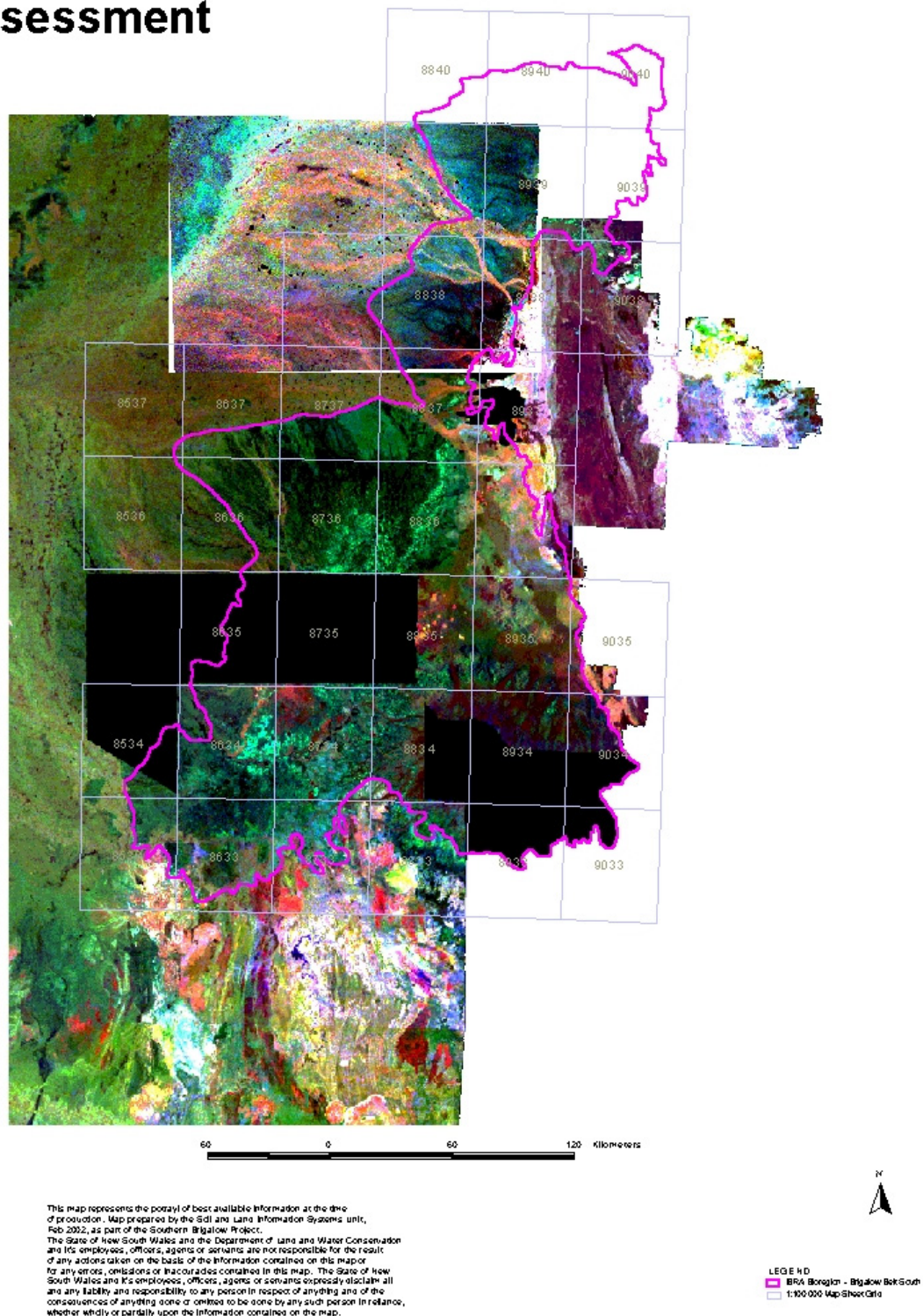
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IBRA Region - Brigalow Belt South Boundary
1:100,000 Mapsheet Grid
Localities

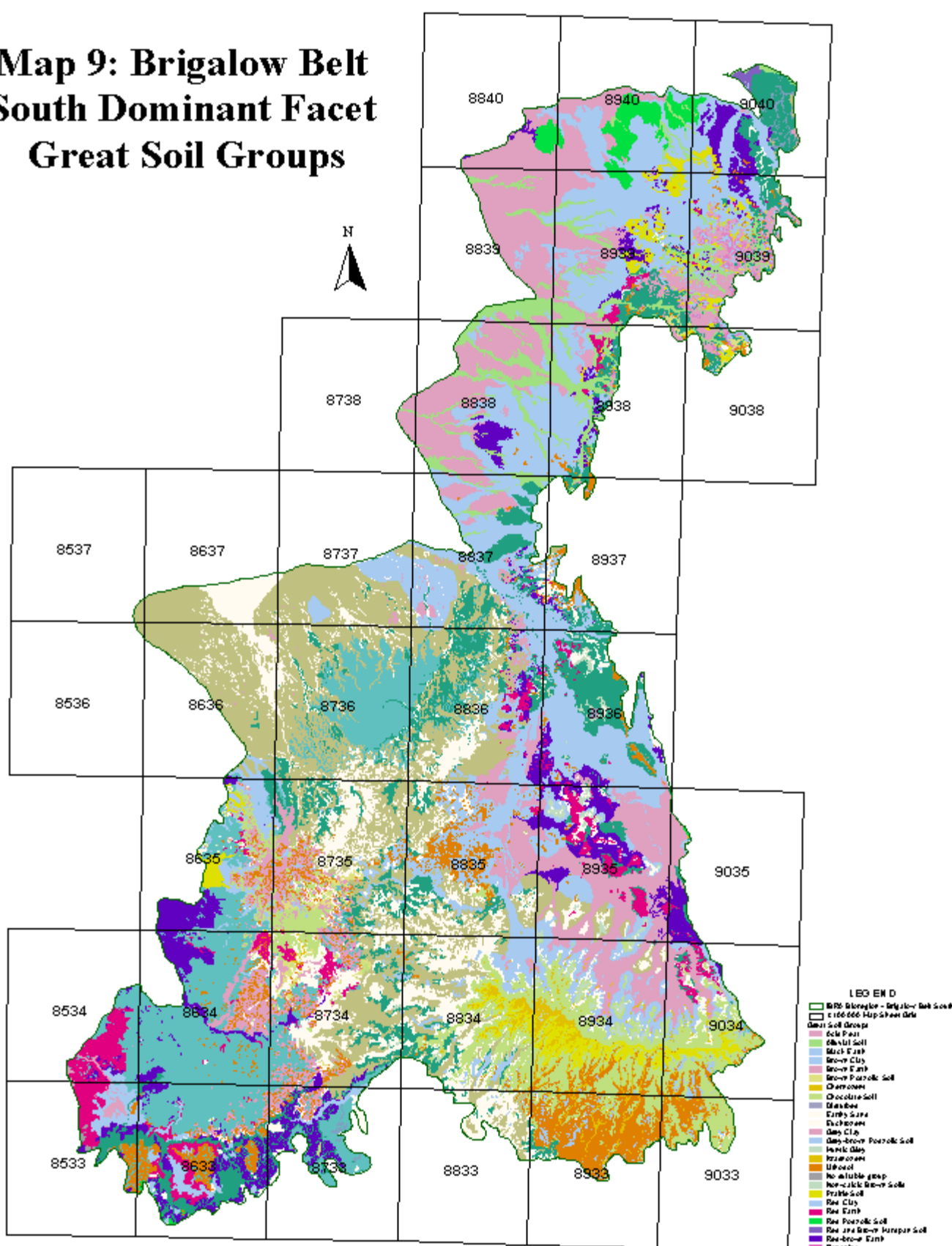
Tab Curvature (units?)



Map 8: Radiometrics coverage used in the Brigalow Belt South Western Regional Assessment

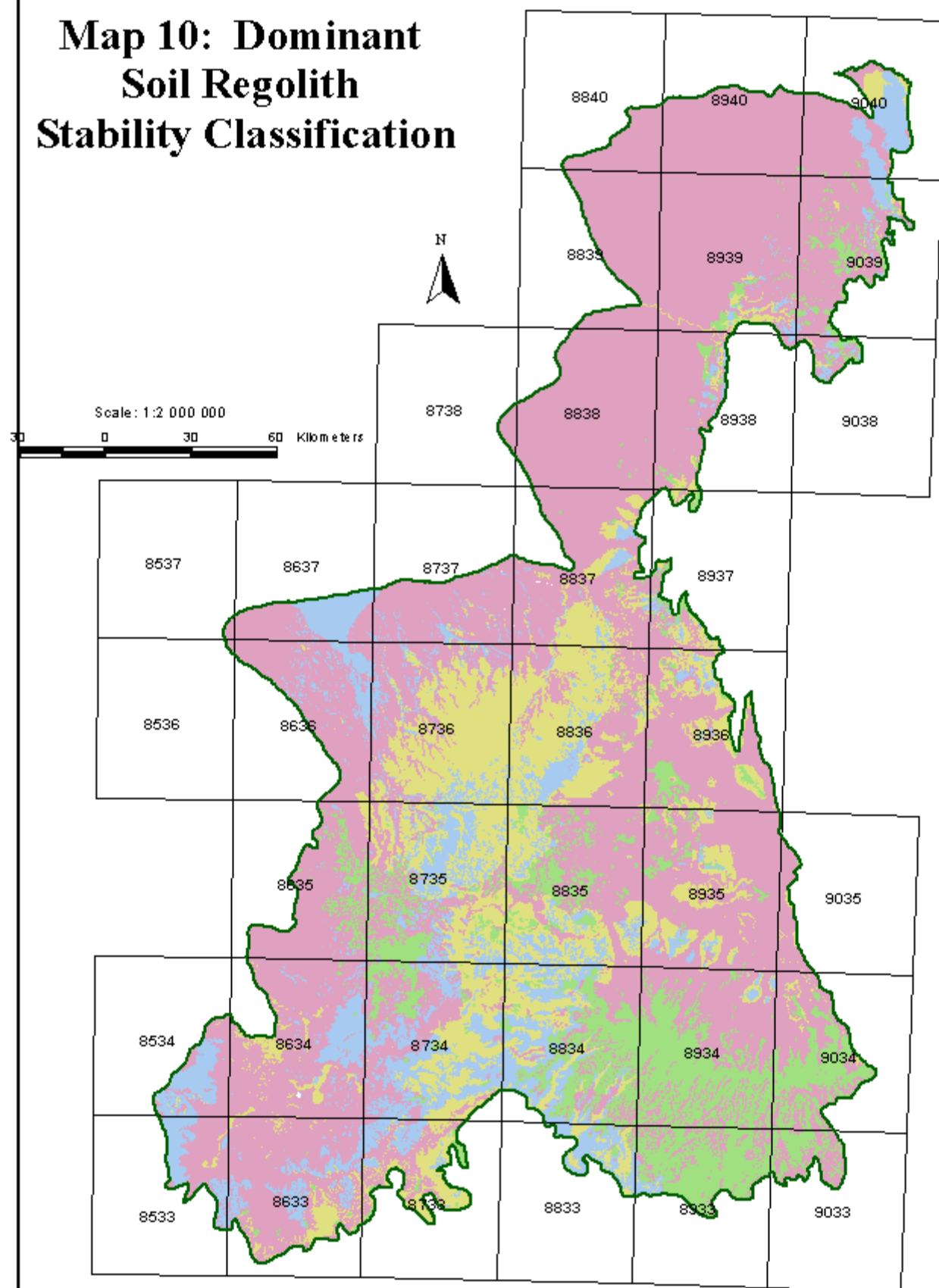


**Map 9: Brigalow Belt
South Dominant Facet
Great Soil Groups**



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Map 10: Dominant Soil Regolith Stability Classification



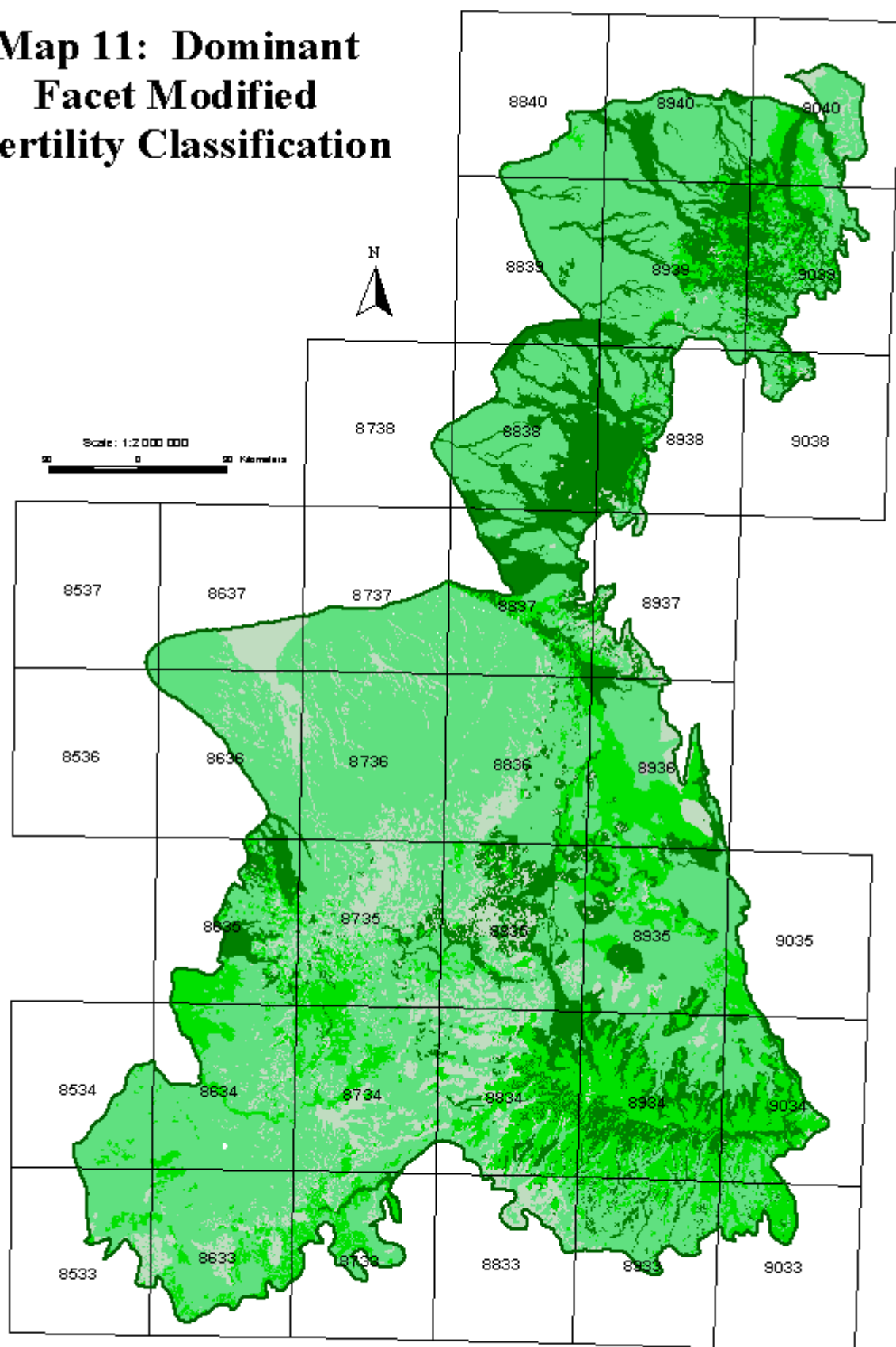
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LEGEND

- IBRA Bioregion - Brigalow Belt South
- 1:100 000 Map Sheet Grid
- Dominant Soil Regolith Class
- R1
- R2
- R3
- R4
- Disturbed terrain
- Not classified

Map 11: Dominant Facet Modified Fertility Classification



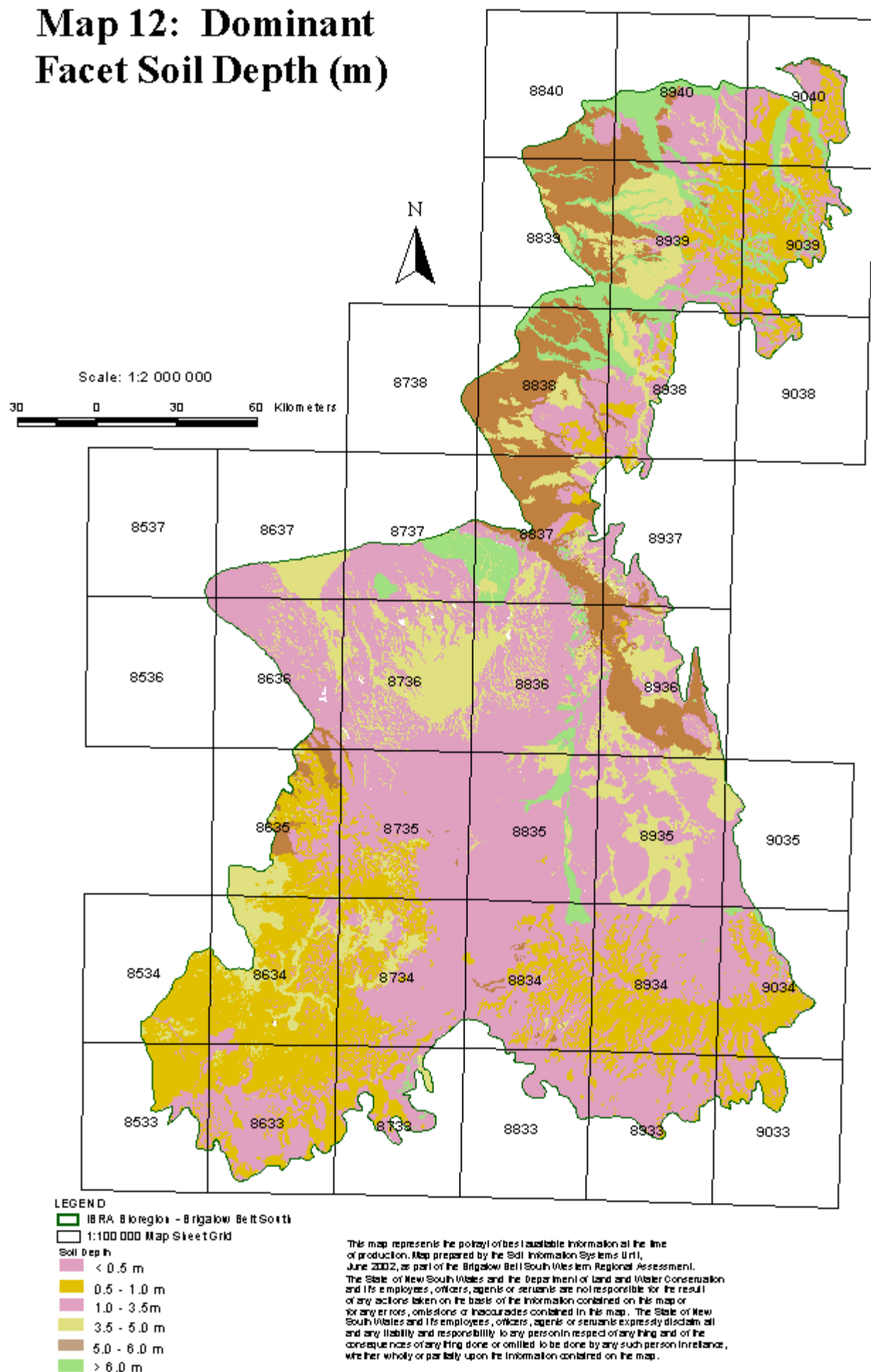
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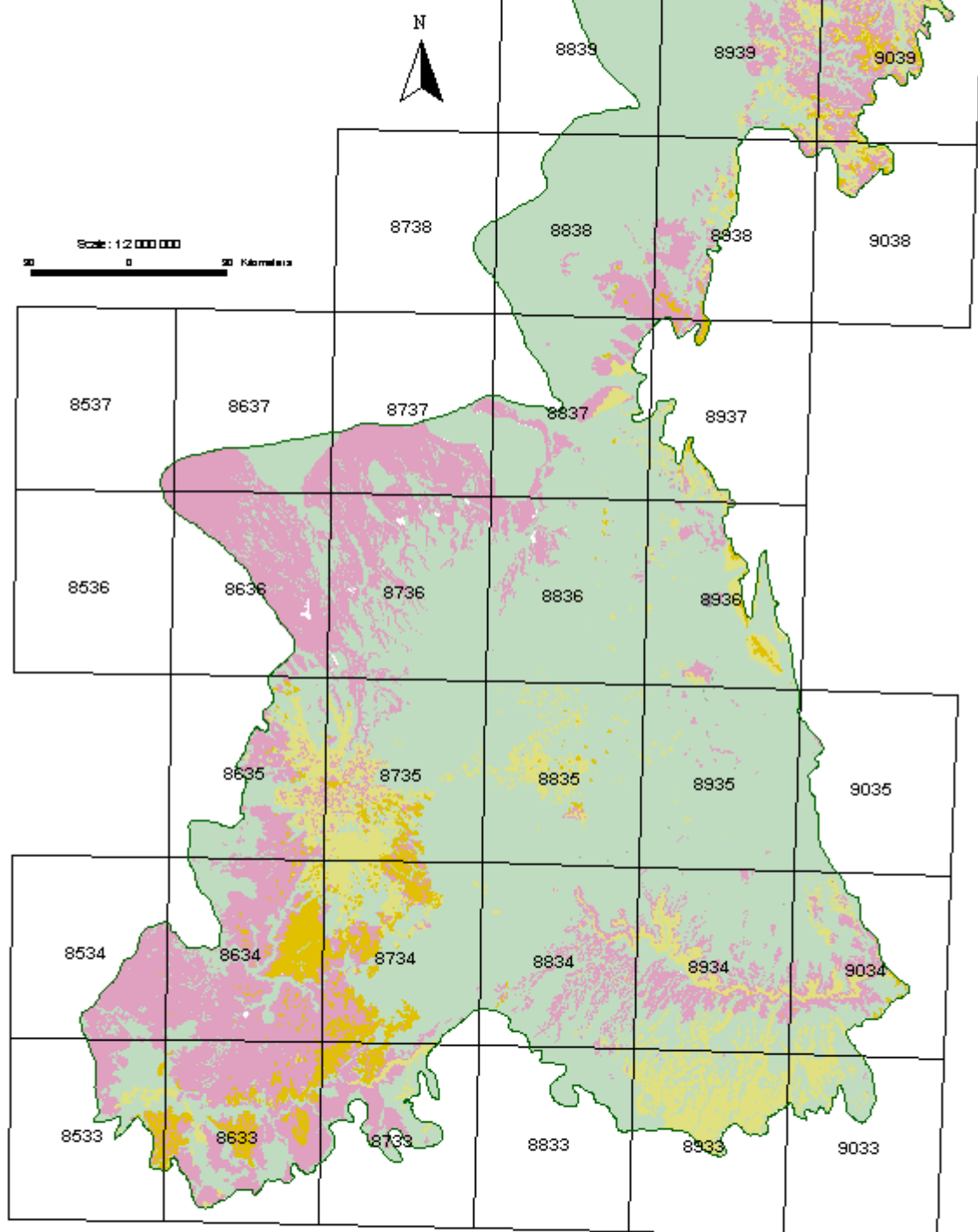
LEGEND

- IBRA Bioregion - Brigalow Belt South
- 1:100 000 Map Sheet Grid
- Modified Fertility Classes**
 - Very low
 - Low
 - Moderate
 - High
 - Very high
 - Disturbed

Map 12: Dominant Facet Soil Depth (m)



Map 13: Dominant Facet Estimated Rooting Depth (m)



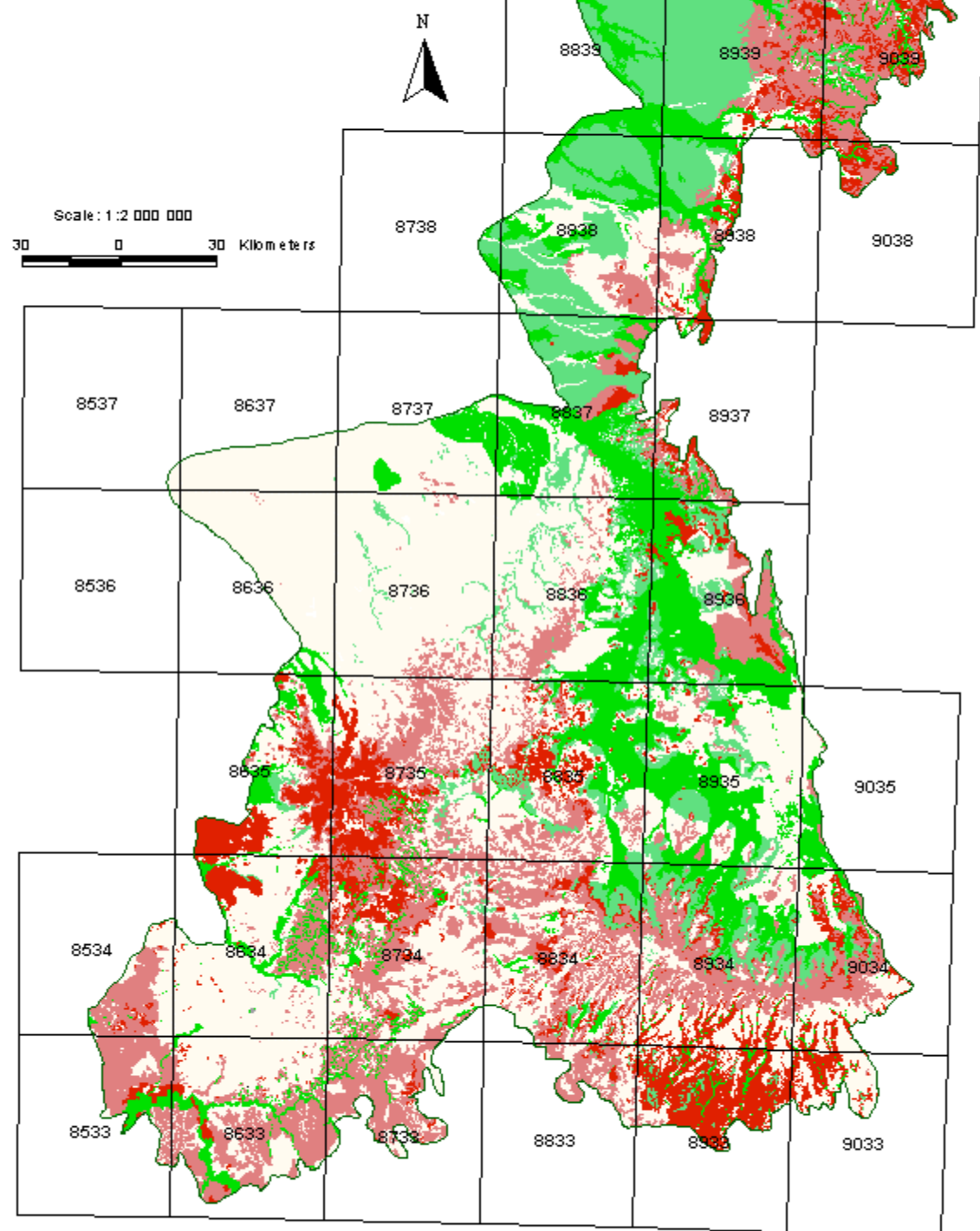
LEGEND

- Towns
- IBRA Bioregion - Brigalow Belt South
- △ Road Network
- 1:100 000 Map Sheet Grid
- ERD (m)
 - < 25 cm
 - < 50 cm
 - < 100 cm
 - < 150 cm
 - > 150 cm
 - Distributed

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Map 14: Dominant Facet Estimated Plant Available Water Capacity



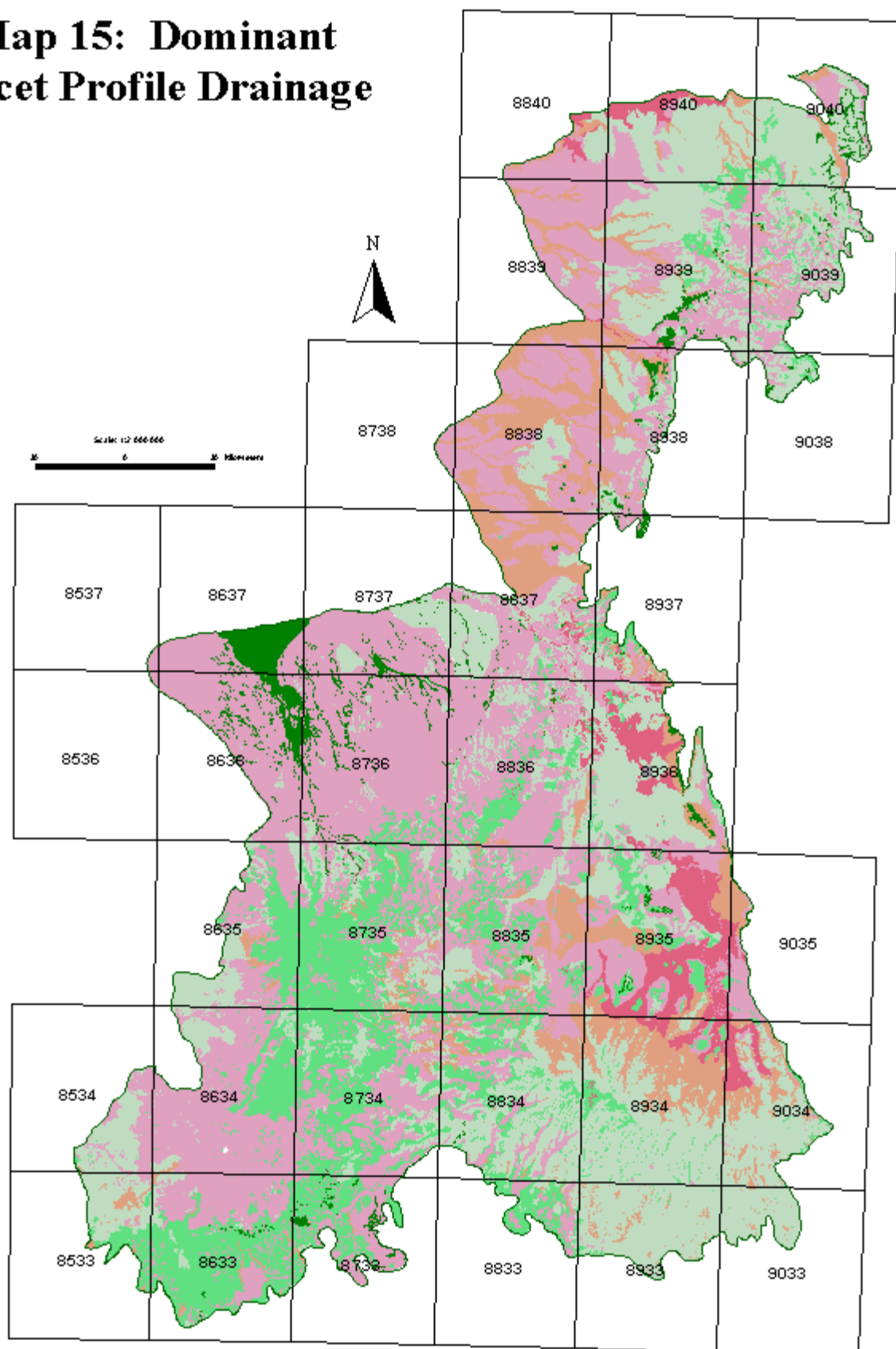
LEGEND:

- IBRA Bioregion - Brigalow Belt South
- 1:100 000 Map Sheet Grid
- EPA/NVIC
- Very low
- Low
- Moderate
- High
- Very high
- Disturbed

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Map 15: Dominant Facet Profile Drainage



LEGEND

- IB RA Bioregion - Brigalow Belt South
- 1:100 000 Map Sheet Grid

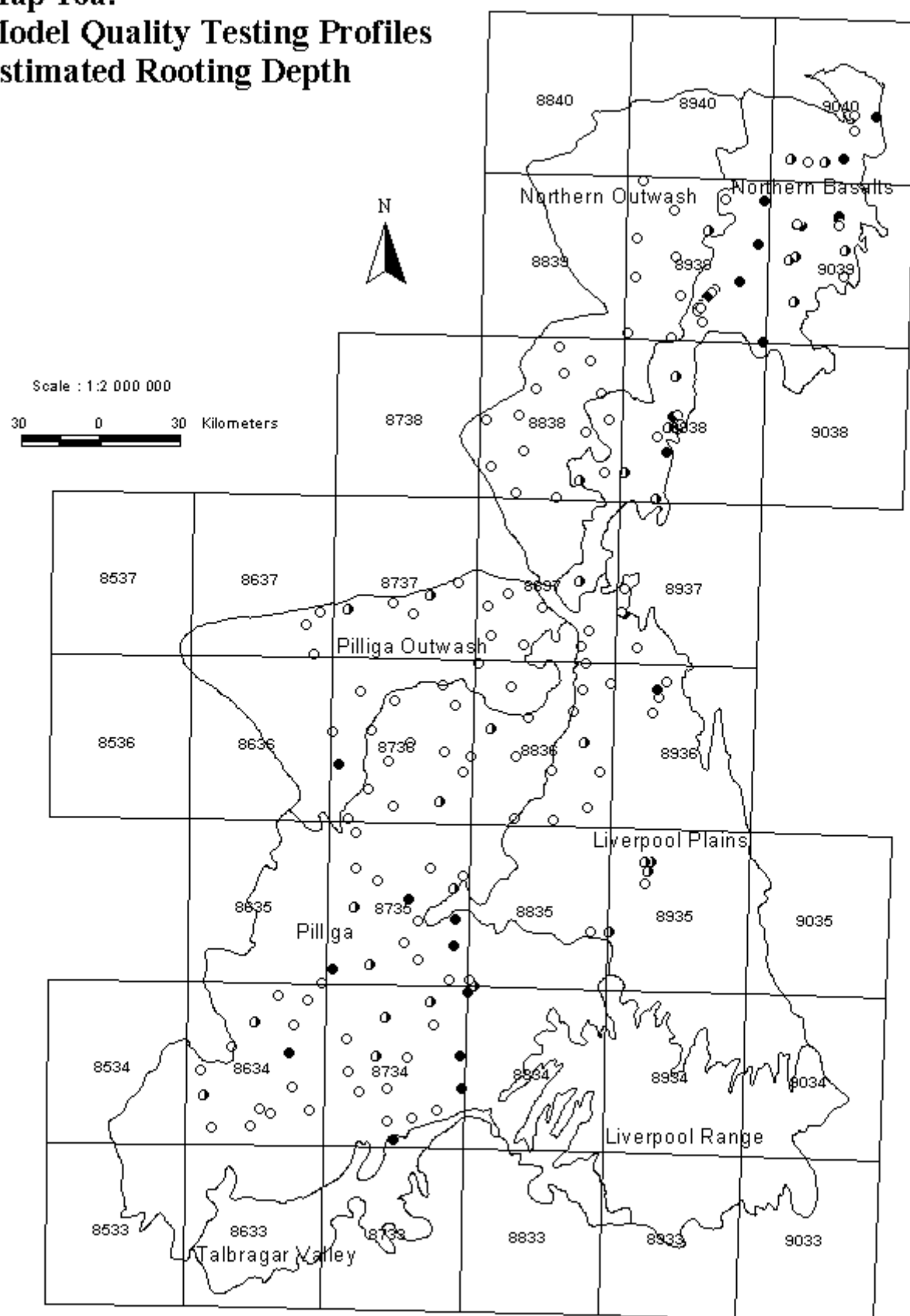
Profile Drainage Classes

- Poorly drained
- Very poorly drained
- Imperfectly drained
- Moderately well drained
- Well drained
- Rapidly drained
- Disturbed

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Map 16a: **Model Quality Testing Profiles** **Estimated Rooting Depth**



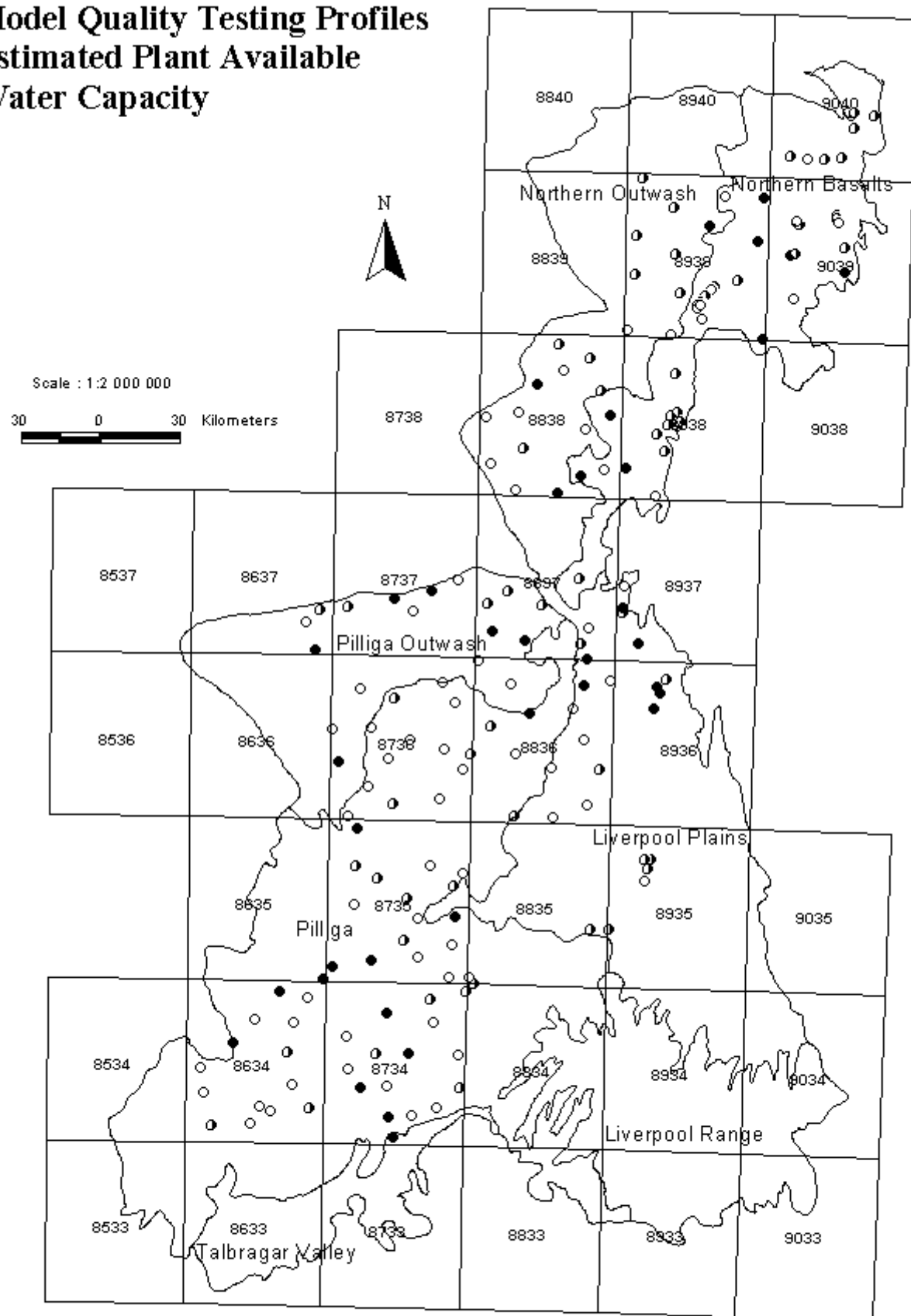
LEGEND

- Brigalow Belt South - Provinces
- 1:100 000 Map Sheet Grid
- ERD**
- No Match
- Partial Match
- Match

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Map 16b: **Model Quality Testing Profiles** **Estimated Plant Available** **Water Capacity**



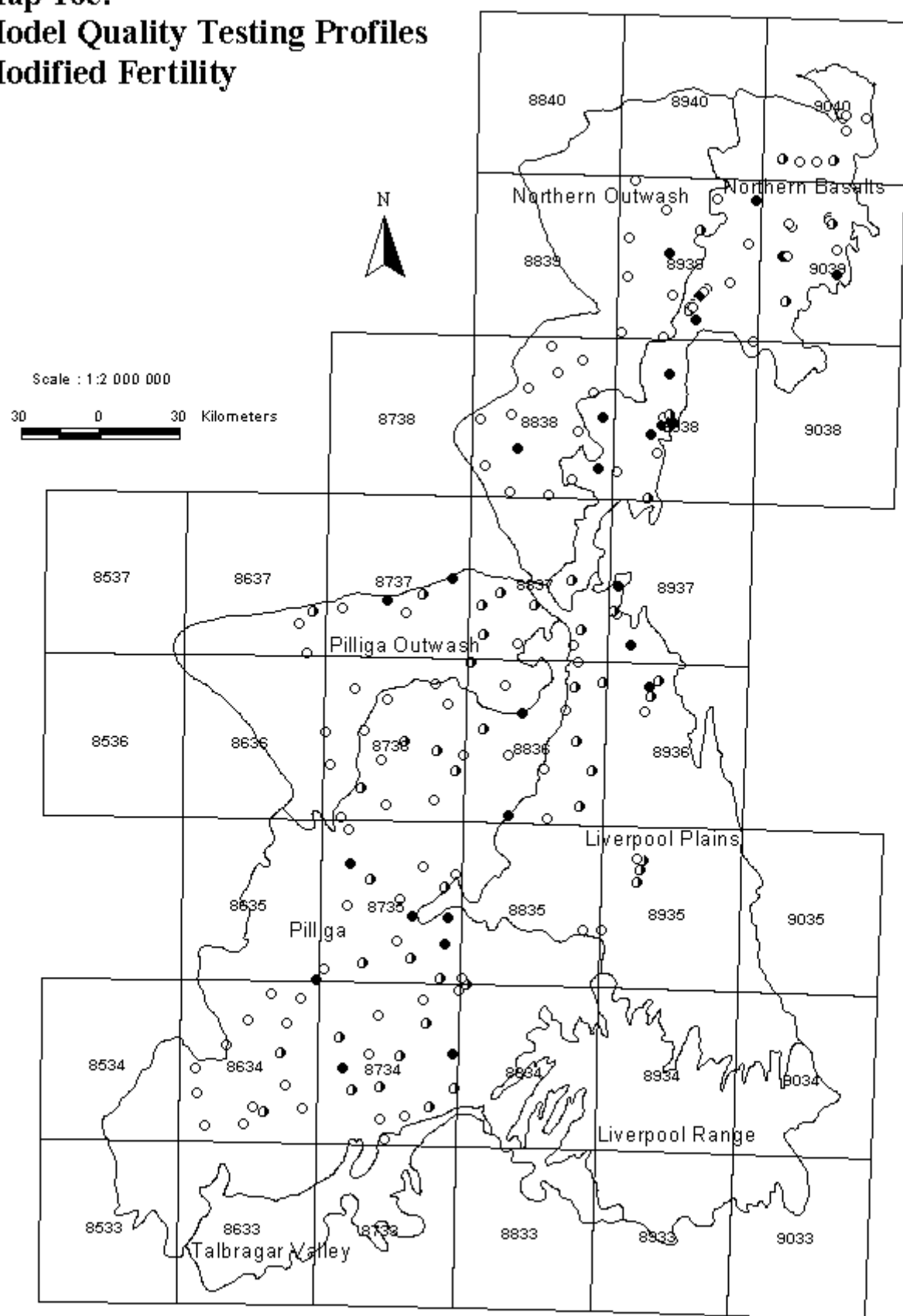
LEGEND

- Brigalow Belt South - Provinces
- 1:100 000 Map Sheet Grid
- EPAWC**
- No Match
- Partial Match
- Match

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Map 16c: Model Quality Testing Profiles Modified Fertility



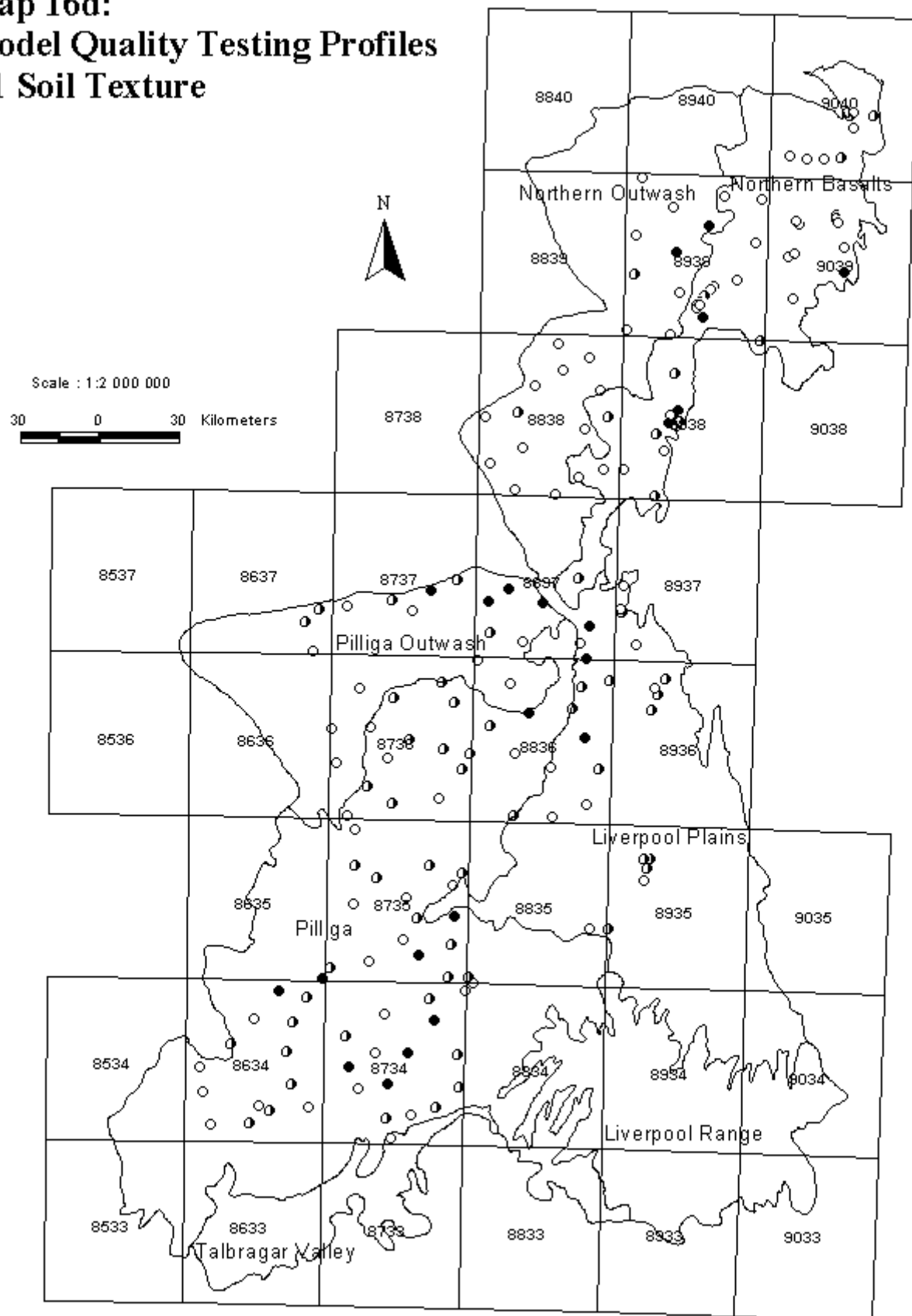
LEGEND

- Brigalow Belt South - Provinces
- 1:100 000 Map Sheet Grid
- Modified Fertility**
- No Match
- ◐ Partial match
- Match

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Map 16d: **Model Quality Testing Profiles** **A1 Soil Texture**



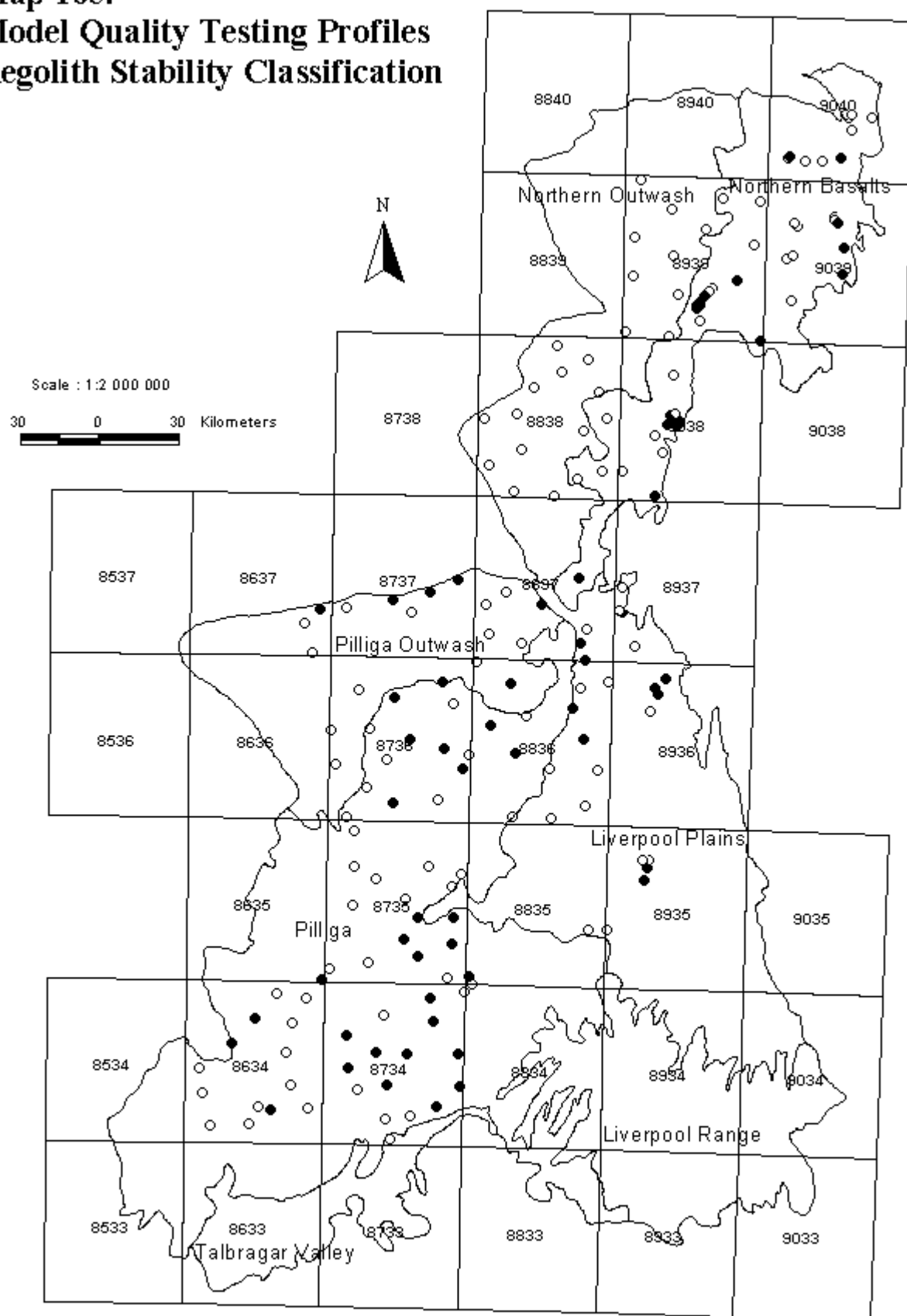
LEGEND

- Brigalow Belt South - Provinces
- 1:100 000 Map Sheet Grid
- A1 Texture**
 - No Match
 - Partial Match
 - Match

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Map 16e: **Model Quality Testing Profiles** **Regolith Stability Classification**



LEGEND

- Brigalow Belt South - Provinces
- 1:100 000 Map Sheet Grid
- Regolith Stability Classification**
- No Match
- Match

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