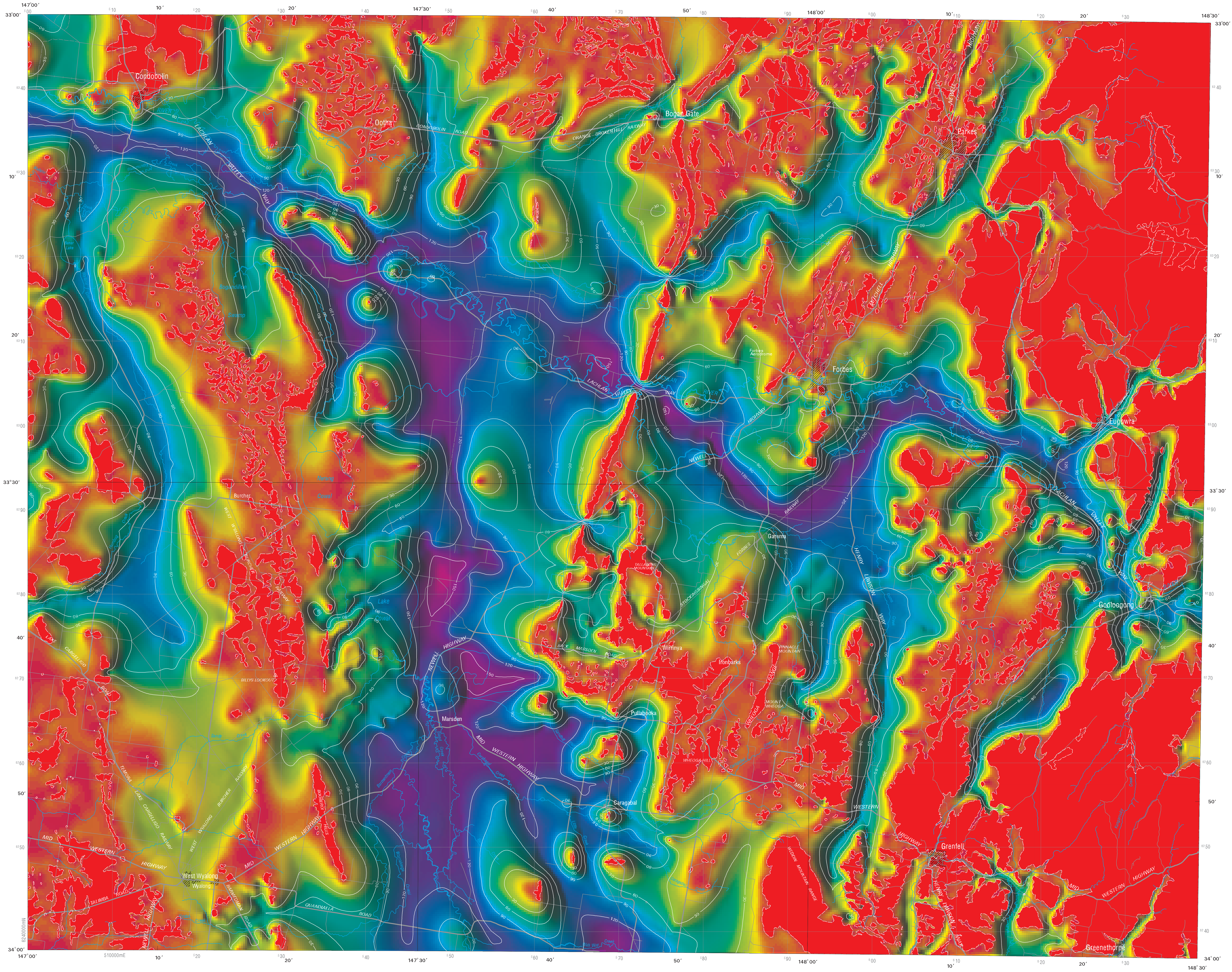
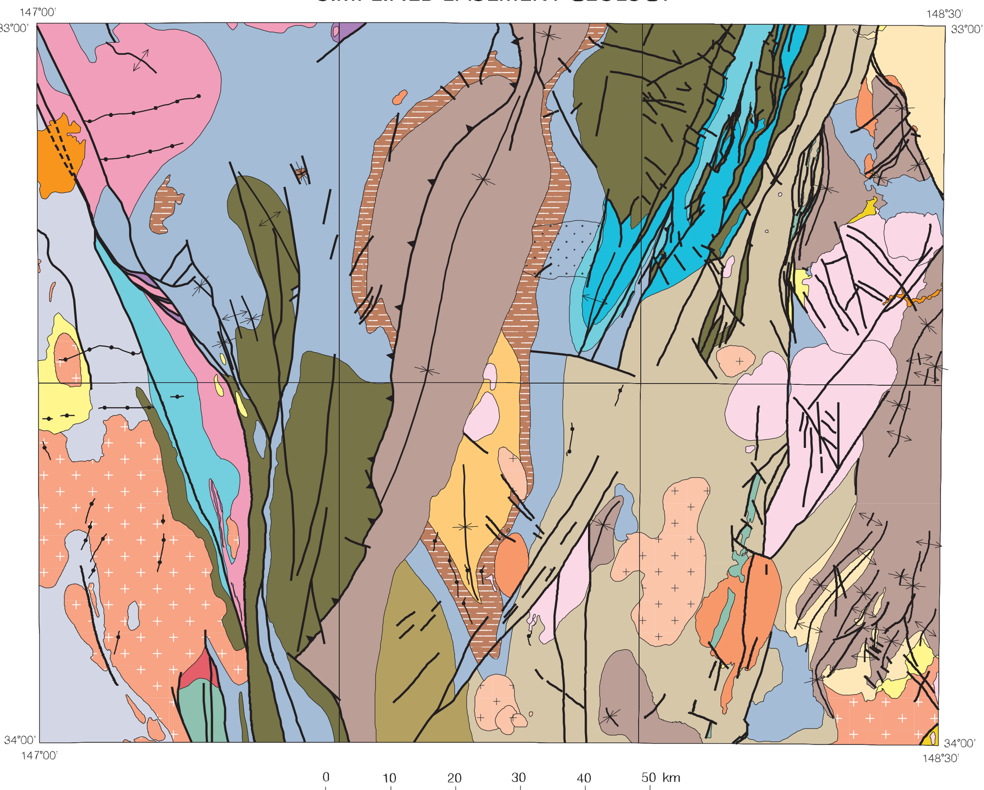
AUSTRALIA 1:250 000 DEPTH TO SLIGHTLY WEATHERED BEDROCK

FORBES
NEW SOUTH WALES

SHEET SI55-7



SIMPLIFIED BASEMENT GEOLOGY



DEVONIAN

- Tertiary basalts
- Late Devonian sediments — Hervey Group
- Middle Devonian felsic volcanics — Rocky Ponds Group
- Middle Devonian felsic intrusives — predominantly high level, A-type granites
- Early Devonian intrusives — I-type (including Eugowra Suite); S-type (including Bogalong Suite)
- Early Devonian sediments and volcanics — Trundle and Yarra Yarra Creek Groups; Carawandool Volcanics; Warrangong and Coonambro Volcanics

SILURIAN

- Silurian-Devonian sediments and volcanics — Derriwong and Ootha Groups, Moura Formation
- Silurian sediments — Forbes Group, Burcher Greywacke
- Silurian S-type felsic volcanics — Douro Group, Ugalong Dacite, Ina Volcanics

SIL.

- Silurian intrusives — I-type (Bland Diorite); S-type (including Ungarie Suite)

ORDOVICIAN

- Ordovician-Silurian sediments — Cotton Formation
- Ordovician calc-alkaline intermediate-mafic volcanics, intrusives and associated sediments — Goonumbla Volcanic Group, Lake Cowal Volcanic Complex
- Ordovician tholeiitic basalt, chert and serpentinite — Narragudgil and Brangan Volcanics, Wambidgee Serpentinite
- Ordovician ultramafic rocks
- Ordovician clastic sediments and metasediments — Kirribilli Formation, Mugincoble Chert; Jingerangle Formation (some interbedded ?volcanics); Wagga Group; Girilambone Group
- Shallowly buried intrusion or dyke swarm of unknown age

- Geological boundary
- Fault
- Thrust fault. Triangle on older rocks
- Dyke: mafic to intermediate composition
- Anticline
- Syncline

- Main road
- Minor road
- Railway
- Town, built up area
- Trigonometrical station
- Limit of outcrop
- 30 Depth to slightly weathered bedrock (metres) (White lines on map face)
- River or creek

DIGITAL DATA
Map data are stored digitally in topologically structured ARC/INFO export format. This format may be suitable for transfer to other digital systems. Map information can be purchased from AGSO and NSW DLWC as hardcopy plots and as digital datasets. Information on formats, release conditions, and costs are available from the AGSO Sales Centre, GPO Box 378, CANBERRA, ACT, 2601, Ph (02) 6249 9519; and NSW DMR Information and Customer Services, PO Box 536, ST LEONARDS, NSW, 1590, Ph (02) 9901 8215

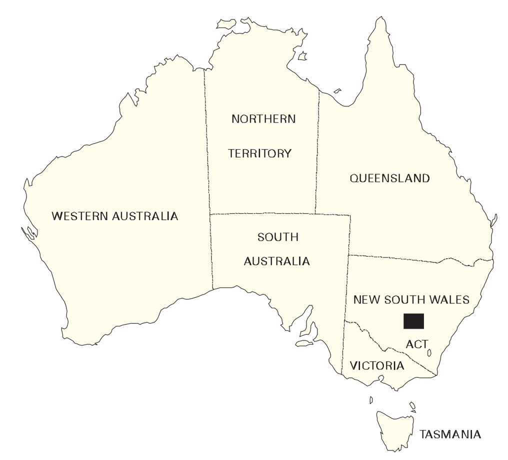
DEPTH TO BEDROCK IMAGE AND CONTOURS
The image and contours show the depth to slightly weathered bedrock. In many areas, for instance in the deep palaeovalleys of the Lachlan River and Bland and Goobang Creeks, this is most probably broadly equivalent to the depth of transported sediment cover. However, from the drill hole logs available, it is generally not possible to distinguish between transported material and highly weathered saprolite. It is therefore difficult in some areas to estimate the thickness of transported versus in situ regolith material

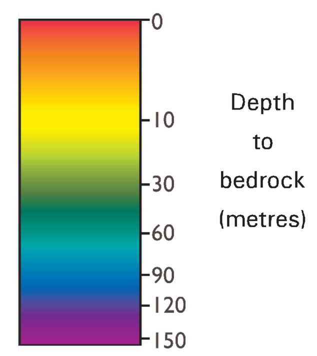
The model of depth to slightly weathered bedrock is derived primarily from the NSW Department of Land and Water Conservation database of almost 2000 water bores drilled on the Forbes 1:250,000 sheet. These drill holes were supplemented with point and contour data from over 300 mineral exploration industry drill holes. The model was also constrained by the boundaries of outcropping bedrock, and by known and inferred palaeochannel locations interpreted largely from seismic and aeromagnetic surveys

The data were gridded using the TOPOGRID module of ESRI's Arc/Info software, which is based on the ANUDEM program developed by M. Hutchinson ("A new procedure for gridding elevation and stream line data with automatic removal of spurious pits", Journal of Hydrology, 106, 211-232, 1989)

ASSOCIATED PRODUCTS
1:250 000 and 1:100 000 outcrop and basement geology maps can be obtained from the AGSO Sales Centre

MAP LOCALITY





LAND & WATER CONSERVATION

AGSO AUSTRALIAN GEOLOGICAL SURVEY ORGANISATION

MINERAL RESOURCES NEW SOUTH WALES

Geological Survey of New South Wales

Image created by O.L. Raymond (AGSO)

Cartography by R. Lacey (AGSO)
Produced and printed by AGSO Information Managment Branch using ARC/INFO software

Bibliographic reference: It is recommended that this map be referred to as: Raymond O.L., Gibson D.L.and Chan, R.A., 2000, Forbes (SI55-7) Depth to slightly weathered bedrock 1:250 000 scale map (First edition). Australian Geological Survey Organisation, Canberra / New South Wales Department of Land and Water Conservation, Forbes / Geological Survey of New South Wales, Orange

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AUSTRALIA

SCALE 1:250 000

5 0 5 10 15 20 25 kilometres

UNIVERSAL TRANSVERSE MERCATOR PROJECTION
LATITUDE OF ORIGIN: 0° LONGITUDE OF ORIGIN: 147°
HORIZONTAL DATUM: AUSTRALIAN GEODETIC DATUM 1966

AGSO 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

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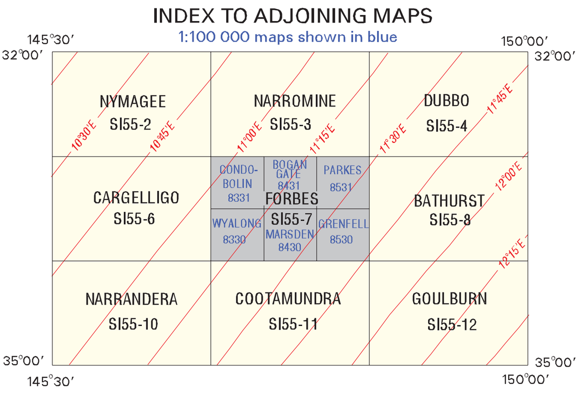
UNIVERSAL GRID REFERENCE

GRID ZONE DESIGNATION: 55H	TO GIVE A STANDARD REFERENCE ON THIS SHEET TO NEAREST 1000 METRES	
100 000 METRE SQUARE IDENTIFICATION: ED FD / EC FC	SAMPLE POINT: BILLYS LOOKOUT	
	1 Read letters identifying 100 000 metre square in which the point lies:	EC
	2 Locate first VERTICAL grid line to LEFT of point and read LARGE figures labelling the line either in the top or bottom margin, or on the line itself:	2
	3 Estimate tenths from grid line to point:	9
	4 Locate first HORIZONTAL grid line BELOW point and read LARGE figures labelling the line in either the left or right margin, or on the line itself:	7
	5 Estimate tenths from grid line to point:	1
IGNORE the SMALLER figures of any grid number; these are for finding the full co ordinates. Use ONLY the LARGER figures of the grid number; example : 640000	SAMPLE REFERENCE :	EC2971
	If reporting beyond 18 Degrees in any direction, prefix Grid Zone Designation, as:	55HEC2971

Grey numbered lines are 10 000 metre intervals of the Australian Map Grid, Zone 55. Grid values are shown in full only at the southwest corner of the map

INDEX TO ADJOINING MAPS
1:100 000 maps shown in blue



Red lines show magnetic declination for epoch 1998.5 derived from the 1995 AGRF model. Annual change is 6′0″ per year easterly at the centre of the map. Information is current to 2000

FORBES

DEPTH TO SLIGHTLY WEATHERED BEDROCK

SHEET SI55-7

FIRST EDITION 2000