

## HOW TO MIGRATE TO **GDA**

Australia and New Zealand are aligning their spatial coordinates to be compatible with international systems. As part of this process, public and private sector organisations in both countries are adopting a geocentric datum for the spatial information they use and generate. The Geocentric Datum of Australia (GDA) and the New Zealand Geodetic Datum 2000 (NZGD2000) will both be implemented in 2000.

Included in this issue is a copy of the AUSLIG brochure, *Get in Step With the Geocentric Datum – Discussing the Business Issues*, which sets out how the geocentric datum will affect businesses and how they can start planning for its introduction.

The CD-ROM version of the GDA video, *Going Geocentric*, along with the GDA Technical Manual and other material will be ready for distribution by early February next year. As a subscriber to *Data Directions*, you will automatically receive a copy of the CD with an order form for additional free copies. The CD provides a lot of information about GDA on the one media so it is easier for you to access and use as a reference.

In the meantime, you will find a lot of information about GDA on the AUSLIG and Intergovernmental Committee on Surveying and Mapping (ICSM) websites which can both be accessed through: [www.auslig.gov.au/ausgda/gdastrat.htm](http://www.auslig.gov.au/ausgda/gdastrat.htm)

## DIGITAL ELEVATION MODEL OF THE WORLD LANDMASS

AUSLIG has contributed data to produce a worldwide one-kilometre grid Digital Elevation Model (DEM) through a Memorandum of Understanding with the National Geophysical Data Centre (NGDC) of the National Oceanic and Atmospheric Administration (NOAA). The DEM was launched recently and contains the best available data for Australia at 30 seconds of arc.

The four-volume collection of the Global Land One-Kilometre Base Elevation (GLOBE) dataset covers all land areas of the world using a 30 arc-second latitude-longitude grid. It comes with a 130-page manual.

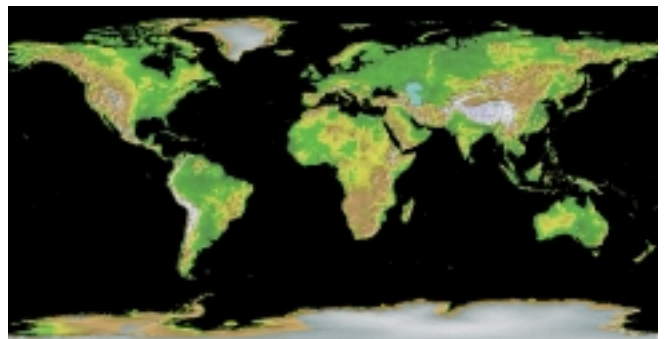
GLOBE was an international effort and data came from 11 sources, via 18 combinations of source and lineage processing. Scientists compiled DEMs at griddings of one-kilometre or smaller, adding or making the best available grids for other areas to complete global coverage of land areas. Organisations in all settled continents contributed in some way to source data or post-source processing and quality control.

Source data included satellite imagery, aerial photography, satellite altimetry, cadastral survey data,

and hardcopy topographic maps converted to digital format. It was converted to 16-bit raster grids by a variety of techniques, including stereoprofiling, image pattern recognition, contour-to-grid and point-to-grid surface generation. AUSLIG licensed NOAA's National Geophysical Data Centre to make a 30-arc-second grid from copyrighted AUSLIG digital mapping data.

Currently, there are two ways to obtain the GLOBE data:

- downloading data from the NGDC website at: [www.ngdc.noaa.gov/seg/topo/globe.shtml](http://www.ngdc.noaa.gov/seg/topo/globe.shtml)
- purchasing the four CD-ROMs and manual from AUSLIG Data Sales for \$500.



*Global DEM from NGDC website*

# 1:1 MILLION GLOBAL MAP — **PROGRESS REPORT**



The Global Map Initiative aims to bring all nations and concerned organisations together to develop and provide easy and open access to global digital geographic information, at a scale of 1:1 million.

The idea for a Global Map came from the need to have access to accurate and up-to-date global maps to cooperatively monitor and solve environmental problems on a global scale.

AUSLIG's Mapping Research and Development Group is currently undertaking work on the boundaries, population centres, hydrology and transportation layers of the project. Once the Global Map has been developed, there are plans for its revision and upgrading.

For more information, visit

[www.auslig.gov.au/mapping/global\\_m/global.htm](http://www.auslig.gov.au/mapping/global_m/global.htm)

## **LOWER FEES FOR EDUCATIONAL USE OF DATA**

AUSLIG has introduced a special pricing structure to encourage the use of its data for educational purposes, particularly in GIS and geography related courses.

The fee charged for the supply of data for educational purposes is now based on the cost of supplying the specific data product(s) and is calculated on a case by case basis. It does not include the usual pro-rata

share of the indirect costs of providing the distribution service such as archiving, capital equipment and customer support.

A special educational-use licence is issued for data supplied for educational purposes.

For more information, phone AUSLIG Data Sales staff on 6201 4340 or e-mail: [datasales@auslig.gov.au](mailto:datasales@auslig.gov.au)

## **WEB MAPPING TECHNOLOGY FOR REAL WORLD PROBLEMS**

A consortium of 24 industry, research and government partners are working together to show how the latest web mapping technology can be used to solve problems in the real world.

The Australian World Wide Web Mapping Consortium is a cooperative venture which promotes the development and use of advanced open systems standards and techniques in geoprocessing and related information technologies.

As a member of the US-based Open GIS Consortium, the Australian Consortium has established an Australian Testbed to evaluate and extend the use of the World Wide Web for commercial and public sector mapping.

The Testbed is based on two natural disasters which occurred in early 1999 - Cyclone Rona near Cairns and the Sydney hailstorm.

This initiative aims to demonstrate how different agencies can interoperate and provide more informed responses in the event of natural disasters.

It is anticipated that the Testbed initiative will develop many new Open GIS specifications.

Online web mapping will be developed as a critical component of the Australian Spatial Data Infrastructure (ASDI) Clearinghouse. With gains already made in the field of online mapping, Australia has been nominated as the lead nation to develop a Web Mapping chapter of the Global Spatial Data Infrastructure's (GSDI) National SDI Implementation Cookbook.

Further details on the Clearinghouse and the Australian Consortium can be found on the ASDI website at:

[www.auslig.gov.au/asdi/index.htm](http://www.auslig.gov.au/asdi/index.htm)



*AUSLIG staff, Dean Coslett and Steve Blake, took the opportunity to showcase the use of map data to disaster managers attending the 1999 Australian Disaster Conference in Canberra in November.*

## SPOT-LITE UPDATE

GEODATA SPOT-LITE is satellite imagery you can download directly off the Web. It is derived from data acquired by the panachromatic (PAN) sensor on board the SPOT series of satellites. The PAN sensor provides black and white images of 10m resolution.

SPOT-LITE is available in a series of "tiles" which are supplied in industry standard GeoTIFF format.

250K Map No	250K Map Name	Date of Acquisition
SD5204	Darwin, NT	June 98
SE5102	Pender, WA	May 99
SE5103	Yampi, WA	May 99
	Broome, WA	May 99
SE5304	Avon Downs, NT	April 98–April 99
SE5315	Alroy, NT	May 98
SE5316	Ranken, NT	May 98
SE5513	Clarke River, QLD	Oct 97–Aug 98
SE5514	Townsville, QLD	June–Aug 98
SF5501	Hughenden, QLD	Aug 98
SG5305	Kulgera, NT	June–Nov 98
SG5309	Alberga, SA	June–Dec 98
SG5313	Everard, SA	Nov 98–April 99
SG5414	Innamincka, SA	March 99
SG5415	Durham Downs, SA/NSW	April–May 99
SG5605	Mundubbera, QLD	April–Dec 98
SG5606	Maryborough, QLD	June–Dec 98
SG5615	Brisbane, QLD	May 97–May 98
SH5015	Kellerberrin, WA	Oct 97–March 98
SH5313	Fowler, SA	March 98–April 99

This means that they can be easily displayed by any graphics package that can read TIFF.

See the SPOT-LITE website ([www.auslig.gov.au/spotlite](http://www.auslig.gov.au/spotlite)) for more information or to download SPOT-LITE images.

Since March 1999, the following tiles have been updated:

250K Map No	250K Map Name	Date of Acquisition
SH5314	Childara, SA	March 98–April 99
SH5503	Dirranbandi, QLD	Jan–June 98
SH5602	Warwick, QLD/NSW	May 98
SH5603	Tweed Heads, QLD	May 97–April 99
SH5605	Grafton, NSW	Feb–Aug 97
SH5607	Maclean, NSW	April 99
SH5216	Nullabor, SA	Nov 98–Jan 99
SH5614	Hastings, NSW	Sept 98–April 99
SI5002	Pinjarra, WA	Dec 98–Feb 99
SI5003	Carrigin, WA	Dec 97–Jan 98
SI5007	Dumbleyung, WA	Jan 98–Feb 99
SI5010	Pemberton, WA	Dec 98–March 99
SI5302	Streaky Bay, SA	March 98–April 99
SI5306	Elliston, SA	Feb–April 99
SI5514	Jerilderie, NSW	April–June 98
SI5609	Wollongong, NSW	Aug 98
SI5014	Irwin Inlet, WA	Feb–March 99
SI5408	Ballarat, VIC	Jan–April 99
SI5503	Tallangatta, VIC	March 99
SI5506	Warburton, VIC	Feb–March 98

## DATA DIRECTIONS READER SURVEY

Congratulations to the winners of the *Data Directions* reader survey and thanks to everyone who responded. The feedback was very positive. A bottle of Australian wine was forwarded to each of the following people:

Mr Brian Brumby, KANGAROO POINT, QLD  
Mr Frank Blanchfield, BELCONNEN, ACT  
Mr Kevin Devin, COORPAROO, QLD  
Mr John Hardie, COORPAROO, QLD  
Mr Scott Taylor, GRAFTON, NSW  
Mr Stewart Noble, CANBERRA, ACT  
Mr Philip Burton, HINDMARSH, SA  
Mr John Gillet, WINDSOR, NSW  
Mr Greg Heron, DARWIN, NT  
Mr Craig Macauley, PROSERPINE, QLD

## COMMONWEALTH DATA UPDATED

Two data products distributed by AUSLIG on behalf of other Commonwealth organisations have been revised in the last 12 months:

- the **Register of National Estate** data, distributed on behalf of the Australian Heritage Commission; and
- the **Commonwealth Electoral Boundaries** data, distributed on behalf of the Australian Electoral Commission.

The updates were prepared by LANDINFO Pty Ltd on behalf of each Commission and forwarded to AUSLIG for distribution and licensing purposes.

The reliability date of the revised data products is 1998. The licence fee for the products is \$400 each and updates from the previous version are available for \$150 each.

## TOPO-250K SERIES 2 *UPDATE*

GEODATA TOPO-250K Series 2 provides a base layer of geographic information on which a wide number of applications can be built. The data in this product is provided in five themes covering hydrography, infrastructure, relief, vegetation and renewed areas.

AUSLIG has adopted the Geocentric Datum of Australia (GDA) for all new GEODATA TOPO-250K Series 2 data. The GDA coordinates are immediately compatible with global coordinates obtained from GPS and the coordinate systems already adopted in many parts of the world.

The Forward Program for Series 2 can be viewed at:  
**[www.auslig.gov.au/corpinfo/maps/250prog.htm](http://www.auslig.gov.au/corpinfo/maps/250prog.htm)**

The following new tiles have become available since March 1999.

Map No	Map Name
F5314	Alice Springs
E5515	Ayr
I5103	Balladonia
H5008	Barlee
G5401	Bedourie
G5602	Bundaberg
I5405	Burra
D5207	Cape Scott Special
F5511	Clermont
F5516	Duaringa
H5106	Edjudina
F5014	Edmund
F5303	Frew River
H5315	Gairdner
I5512	Goulburn
D5416	Hann River
H5012	Jackson
F5403	Julia Creek
G5001	Kennedy Range
E5202	Lissadell
F5513	Longreach
I5107	Malcolm Special
F5407	McKinlay
D5210	Medusa Banks
G5511	Mitchell
E5112	Noonkanbah
E5407	Normanton
H5413	Parachilna
I5414	Pinaroo
I5304	Port Augusta
I5105	Ravensthorpe
I5410	Renmark
F5203	The Granites
H5316	Torrens
F5015	Turee Creek
I5515	Wagga Wagga
I5613	Wollongong Special
H5002	Yalgoo
H5004	Youanmi

## AUSLIG *DISTRIBUTORS*

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Landinfo Pty Ltd (Townsville)	07 4772 2990
Technical Solutions	07 3378 8702
Terra Search Pty Ltd	07 4728 6851

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Landinfo Pty Ltd	08 8424 3840

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ESRI Australia Pty Ltd	08 9242 1005
Landinfo Pty Ltd	08 9268 4500
National Geographic Information Systems	08 9277 9600
Terra Search Pty Ltd	08 9277 9161
GEOIMAGE Pty Ltd	08 9367 6700

NT	
Landinfo Pty Ltd	08 8941 0222
GEOIMAGE Pty Ltd	08 8941 3677

TAS	
Land Information Services Division (DPIWE)	03 6233 3723

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