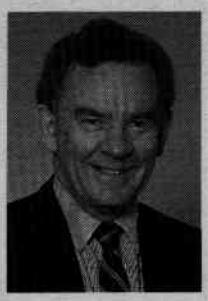
Australian Centre for Remote Sensing

ACRES

UPDATE



Manager's Message

The challenge for our industry is to successfully promote the benefits of satellite remote sensing to a much wider constituency.

This was the message from the recent Australasian Remote Sensing Conference in Wellington. User friendly products, flexible pricing policies and innovative sales activities are obvious strategies.

The European Space Agency's Principal Investigator's early results were presented to an audience of 500 in France during the same week as the Wellington meeting.

We received a briefing at the ERS-1 ground station meeting the following week. While the range of potential applications for the SAR data is impressive, I was most impressed by the rapid progress made in the derivation of Digital Elevation Models using interferometry.

ACRES has acquired a large ERS–1 SAR data archive over Australia and we are joining the ESA 'Fringe' group, which is coordinating the 30 groups working worldwide on DEMs from SAR.

A major milestone was reached on 24 November when our General Manager, Graham Bashford, signed the Memorandum of Understanding (MOU) with NASDA for the reception and distribution of Japan's JERS data at Alice Springs and Hobart when the TERSS ground station is operational next year. This MOU addresses data for research only, but we expect to broaden the arrangements to allow commercial distribution at a later date.

C. McMaster

MANAGER, ACRES

LANDSAT TM Prices Reduced

A new LANDSAT TM price list has been released effective from 1 January 1993. Substantial price reductions of up to 40% for quarter scene and map sheet digital products are the major changes to be introduced. Full scenes, floppy disks and photographic product prices are not substantially changed.

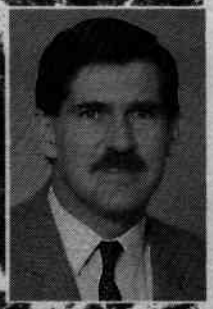
The price lists have also been simplified to be more readable and easier to interpret by new users. Several less popular levels of product do not appear on the price list, however these are still available by special request.

Four band digital map sheet products are now $990 with 1:100 000 photographic map products at $570, which are excellent value, particularly for GIS applications.

For a copy of the price list or more information contact John Lee (06)252 4431 or Madeleine Clark (06)252 4430.

INSIDE

January 1993



EDITORIAL

ACRES Update is a newsletter published quarterly by the Austalian Centre for Remote Sensing and is intended to provide the remote sensing community with information on new satellite and sensor developments, ACRES product and organizational news, national and international developments of interest to ACRES clients and information on remote sensing applications.

ACRES is a business unit within the Australian Surveying and Land Information Group in the Department of Administrative Services.

Items for publication are invited from interested parties and should be forwarded to the Editor.

Contact: Dennis Puniard, Editor/Director Marketing. Phone: (06)252 4429. FAX: (06)251 6326.

SURVEY RESULTS

The response to the questionnaire circulated with the last ACRES Update was most useful in ensuring the continuation of publishing this Newsletter and for input on its future content. In summary, readers thought the current publication is:

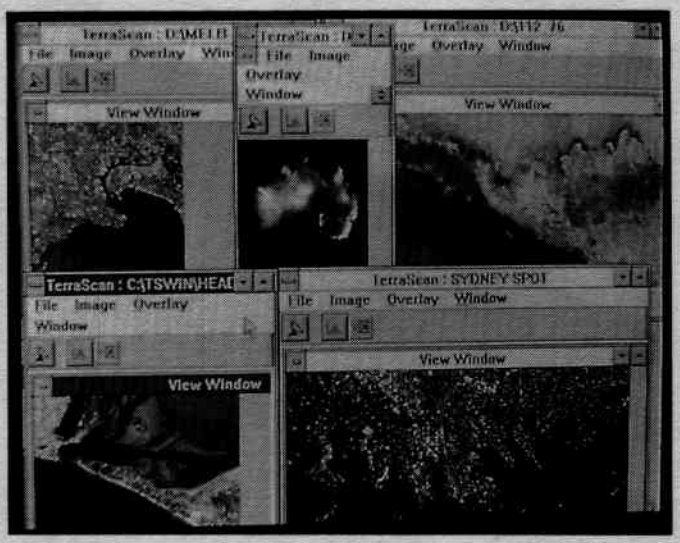
Excellent 41%; Adequate 59%.

Essential Reading 20%; Useful 73%; Marginal Interest 7%.

Content priorities: Product News 25%; Satellite/Sensor News 40%; Applications 28%; Other 7%.

Readers thought it should be: As Is 34%; Broader Remote Sensing News 38%; Generic GIS/Remote Sensing News 28%.

The image in the margin on each page is an ERS1 SAR Image on Irian Jaya



Terrascan in action!

Desktop Image Processing Software Released

ACRES Distributor, Resource Industry Associates (RIA), is pleased to announce the release of its image processing programs for display and enhancement of satellite and geophysical data sets. TerraScan Version 1.0, the SHAREWARE version, was recently released by ACRES and SPOT Imaging Services at the Remote Sensing Conference in Wellington, and the subsequent AURISA Conference on the Gold Coast. Jeff Bailey of RIA said that over 130 copies of the program are in use. RIA has now released Version 1.1 which has many enhancements and new features. As well as performing on 16 bit (32 000 colours) and 24 bit (16 million colours) video cards the program operates effectively with only 8 bit (256 colour) VGA cards.

TerraScan operates under Microsoft Windows 3.1 on any DOS computer. By using the Windows shell the processed images can be annotated and printed.

TerraScan has been developed by Elvin Slavik in association with RIA and AMIRA. An advanced version of the program called TerraScan Pro is also available at a cost of $1 000.

TerraScan has been developed primarily as a program to display on a PC the Landsat and SPOT digital data distributed in Australia by RIA. The availability of such a program will develop many new users of satellite data.

Bailey advised that one advantage of TerraScan to users was the ability of the program to display the output from advanced systems such as MicroBrian, DISIMP and ERMapper, a program which he initiated at AMIRA in 1987. It is interesting to note that the mining and oil companies that were quick to pick up

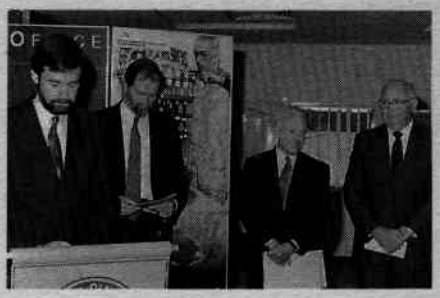
image processing have also been keen to use TerraScan in their field offices to display data sets that have been warped and processed on their advanced head office systems.

RIA is one of the biggest distributors of raw satellite data and GPS systems and is keen to extend these technologies to a wider user group. The company has been very successful with its introduction of the Magellan PRO GPS receivers into the resource industries in Australia and overseas. While it has continued to work with the Magellan technology for a range of professional applications, RIA has used its expertise to extend GPS technology to a wider community via the introduction of the range of GPS products from Sony Corporation.

The interest in the tiny eight channel SONY GPS core module by the security industry has also given RIA the opportunity to introduce satellite imagery using TerraScan. Jeff describes this example of the security industry as just one of many opportunities where GPS and TerraScan have complimented each other. Just as the GPS technology has been transferred to the consumer market, RIA hopes that TerraScan will be the vehicle to transfer satellite image data to the wider professional and education markets.

Contact Jeff Bailey or Terry Boyd at RIA on (03)482-4945 for a copy of TerraScan Version 1.1 for evaluation as well as a suitable graphics card to display your data with improved speed and resolution. Registered users of TerraScan receive an upgrade to version 1.1.

Mr Alistair Hodgson, Managing Director BAeA, explains some aspects of the FDP to Senator Button



Drew Clarke, Acting General Manager, AUSLIG, at handover ceremony with (left to right) John Boyd, Executive Director, Australian Space Office, Senator Button, and Noel Tanzer, Secretary DAS

Fast Delivery Processor for SAR Products installed at ACRES

On 11 November 1992 the Minister for Industry, Technology and Commerce, Senator John Button, officially handed over to ACRES the Fast Delivery Processor (FDP) for SAR products, developed and built by British Aerospace Australia (BAeA).

The FDP development was funded by the Australian Space Office. The FDP, which is specified to deliver products at 1/10th real time, is a world leader and surpasses anything available in Europe at this time.

In its initial configuration the FDP will be used to process images from the ERS-1 SAR sensor. Products now released are full scene (100km x 100km) data sets at two levels:

Level 0 Raw Data CCT	$1250
Level 1 Fast Delivery Product CCT or Photo	$1350

Sample images for assessment are also available at $170 for a CCT sample product or $270 for a sample photo product. For further information contact John Lee (06)252 4431 or Madeleine Clark (06)252 4430.

AGREEMENT SIGNED FOR JERS-1 RECEPTION IN AUSTRALIA

On 24 November 1992 a Memorandum of Understanding was signed between AUSLIG and Japan's National Space Development Agency (NASDA) for the reception in Australia of data from the Japanese Earth Resources Satellite (JERS-1). The agreement will allow ACRES to receive and process data from both the optical and SAR instruments on JERS for Australian based research projects. ACRES, with the help of the CSIRO Office of Space, Science & Applications and NASDA, has approved nine projects which this agreement will now allow to proceed.

Reception facilities at ACRES Alice Springs facility have already been upgraded to receive JERS-1 data and the processing system upgrade now in progress will provide processing capability for the data from the OPS sensor. No committment has yet been made for JERS SAR processing.

ACRES Manager, Carl McMaster, oversees the signing of the JERS MOU by Mr Graham Bashford, AUSLIG General Manager, and Mr Juichi Kawakami, NASDA Executive Director. Mr Noel Tanzer, Secretary DAS (far left), observed proceedings.

ACRES Trains Taiwanese in Remote Sensing Operations

In December 1992 ACRES conducted a training course for four remote sensing specialists from the Republic of China. The four specialists were from the Centre for Space and Remote Sensing Research at the National Central University, which is responsible for the establishment and operation of the new remote sensing ground station and processing centre due to commence operations in mid 1993. The system they will be using will be similar to that at ACRES.

Professors A.J. Chen and Hsien Ta Wang are directors of the centre and Mrs Sha-Li (Sally) Tang and Jue-Jean (Anne) Chen will be responsible for operations at the Centre. Extensive training in all aspects of operations and marketing was conducted over a two week period involving most ACRES senior Staff. Mr Don Gray, ex Manager of ACRES, has acted as a consultant for Taiwan and was responsible for arranging the training, which was very well regarded by the visitors.

Satellite Programming Needs to be Customer Driven

As ACRES becomes more involved with the reception of data from a range of satellites it is becoming more critical with only one receiving antenna that customers provide their input to satellite programming. Already there are clashes between the satellites and choices have to be made. In the near future for both SPOT and LANDSAT our reception will be limited to a certain quota of time for each year due to the cost structures of the new agreements. This quota will be considerably less than we are now receiving which means selective programming will occur rather that the 'blanket' coverage we have been able to achieve in the past. Thus if customers have a requirement for a particular season or time coverage they must advise our satellite programmers to ensure they acquire their data needs. Contact: Rosalie Booth ph: (06) 252 4404 or Steve Alder ph: (06) 252 4409.

MICROFICHE Subscriptions Reminder

All microfiche subscriptions end the first week in January 1993. Renewal letters are being sent out. Please return them promptly. Any queries contact Sandra Browne (06)252 4407.

Drew Clarke, AUSLIG Acting General Manager, presents Dr Soegiarto with a framed image of Canberra.

INDONESIAN MARINE SCIENCE EXPERT IN CANBERRA

AUSLIG and ACRES were privileged to host a visit to Canberra on 28 October 1992 by Dr Aprilani Soegiarto, Deputy Chairman for Natural Sciences of the Indonesian Institute of Sciences (LIPI). Dr Soegiarto is also Professor of Oceanology at Bogor Agricultural University and an internationally recognized marine scientist. He inspected AUSLIG GIS and remote sensing facilities in Canberra and fruitful discussions were held which should further progress AUSLIG and ACRES developing links with Indonesian government agencies.

Transcription Software for Exabyte Data

TEX1 is a new software product from Canada that transcribes satellite data from Exabyte tapes to the hard disk on an IBM PC or 100% compatible PCs. The data can then be accessed by an application program, such as Eidetic's RSVGA image analysis package, by reading the data from the hard disk. TEX1 is the only PC software product available that gives PC owners access to Exabyte satellite data. It is generic and can be used with many different GIS and remote sensing systems.

An Australian version of the program, called ATEX1, has been made specifically to handle ACRES Exabyte data products.

ATEX1 consists of two menu-driven programs. One is used for transcribing

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