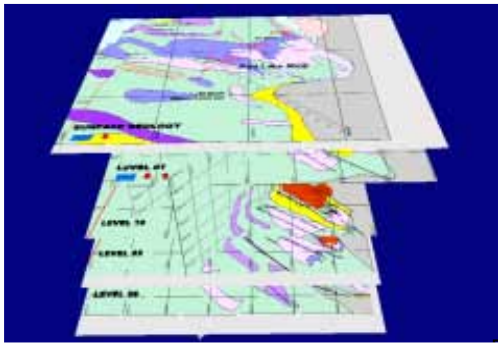
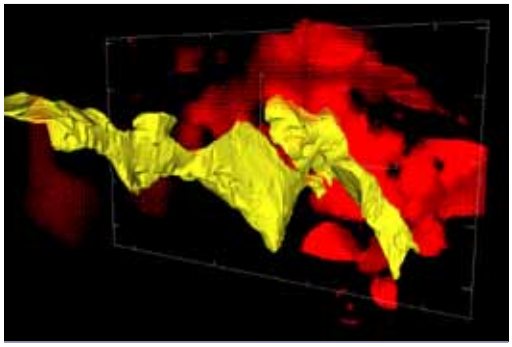
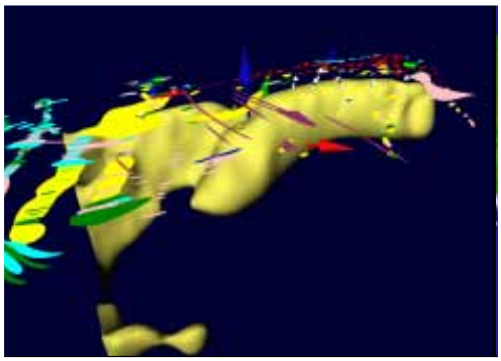
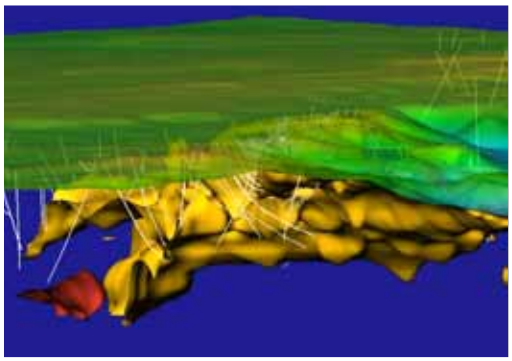
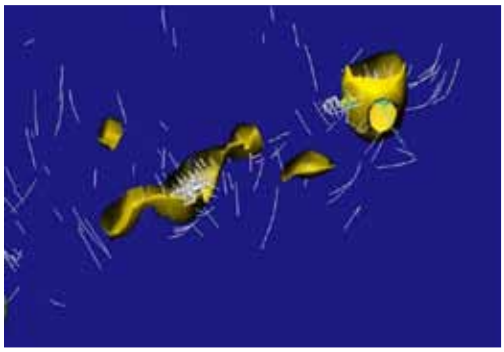
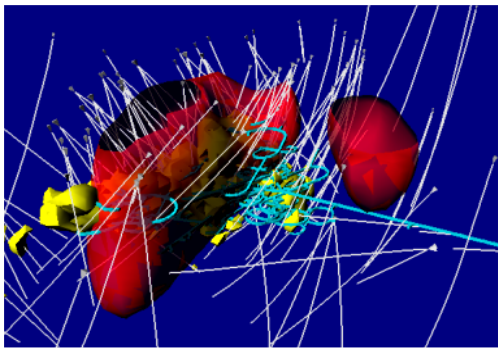
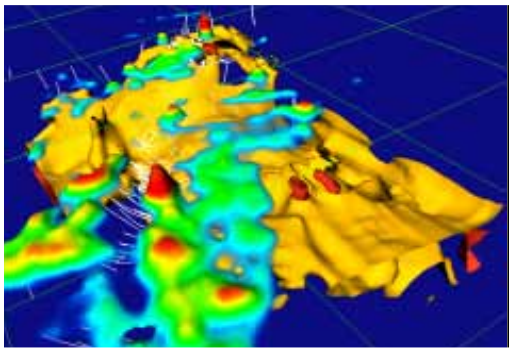








a short course on

Brownfields Exploration

High-technology exploration in data-rich environments!

CODES

7–18 June 2010

CODES, ARC Centre of Excellence in Ore Deposits, University of Tasmania

Exploration in data-rich environments close to existing mines has become the preferred method of increasing company resources in recent years. With this change in exploration philosophy in mind, CODES is proud to present a Masters-level short course that is designed to bring students up-to-date with the latest techniques. The course will cover cutting-edge technologies in geophysics, geochemistry and 3D visualisation and will use real data from world-class mineralised districts. Expert teaching staff are drawn from within CODES and within industry to deliver a high-quality learning experience. Students will have access to their own PC with advanced 3D viewing software to manipulate the data as they choose. This, however, means that numbers are strictly limited.

Brownfields Exploration is offered as part of the National Minerals Geoscience Masters Program.

COURSE PRESENTERS

Dr Michael Roach
CODES/School of Earth Sciences, University of Tasmania

Is a Senior Lecturer in geophysics and GIS at the University of Tasmania. He has been involved with GIS training and development for over 18 years.

Dr Jun Cowan
Prestologic

Dr Jun Cowan is the owner of Prestologic and was the conceptual founder of Leapfrog 3D geological modelling software (developed by Zaparo Ltd). Jun uses Leapfrog daily in the geological consulting arm of his business where he has examined more than 400 deposits of all types of commodities using Leapfrog, and has more than 12,000 hours of experience using the software

Dr Scott Halley
Mineral Mapping Pty Ltd.

Scott is a very busy consultant who in recent times consulted to 45 different companies in 12 different countries in 2.5 years, on Archaean gold, porphyry copper, epithermal gold, VMS, unconformity-type U, calcrete-type U, SEDEX and lateritic Ni deposits.

BROWNFIELDS EXPLORATION FORUM PRESENTERS

Matt Briggs, Exploration Manager, St Ives Gold Mining Co, Gold Fields Australia.
The processes that that led to the recent discovery of the Athena Complex at St Ives.

Kim Denwar, Exploration Manager, Bass Metals.
Exploration successes in the Mt Read Volcanics, Tasmania.

Dave Green, Senior Geologist, Minerals Resources Tasmania.
Geological Survey data.

Peter Hills, Manager Technical Services, Beaconsfield Gold Mine.
Exploration in the Beaconsfield region of northern Tasmania.

Doug Kepert, Senior Exploration Geologist and/or Eamon Hannon, General Manager Exploration, Fortescue Metals Group.
The discovery of the Chichester and Solomon deposits, Pilbara Western Australia: Examples of simple geological premises overlooked by previous explorers.

Angela Lorrigan, Bendigo Mining Limited (formerly of Pasminco/Zinifex/MMG).
Exploration on the west coast of Tasmania and a new look at exploration around the Henty Gold Mine, Tasmania.

Ian Willis, Vice President Exploration Anglo American Plc.
Case studies of Brownfields exploration.

Bruce Gemmell, Professor and Head of the School of School of Earth Sciences, University of Tasmania.
Applications of the science: Some examples of the use of analytical techniques in exploration.

Grant Macdonald, Exploration Geologist Bass Metals.
Historic mine records and their use in exploration.

Tony Webster, Senior Lecturer and Master of Economic Geology Co-ordinator, CODES/School of Earth Sciences, University of Tasmania.
Increasing the understanding of mineralised system architecture using historic mining and exploration data.

NATIONAL MINERALS GEOSCIENCE MASTERS PROGRAM

THE MOST COMPREHENSIVE MASTERS DEGREE IN MINERAL EXPLORATION AND MINING GEOLOGY ANYWHERE IN THE WORLD

This coursework Masters program is for geoscientists who want to gain a thorough up-date on advances across the spectrum of economic geology applied to mineral exploration. The course is offered jointly between the University of Tasmania (CODES), the University of Western Australia (CET), James Cook University (EGRU), Monash University (VIEPS) and Australian National University (CRC LEME).

Course structure
The Masters course can be completed in either of two ways:

Option 1 requires the completion of six units of coursework and a minor research thesis. Four of the units must be completed at CODES, the remainder are completed at other participating universities. Duration: 18-24 months full time; up to 30 months part time (flexible in recognition of industry participants).

Option 2 requires the completion of eight units of coursework, at least four of which must be undertaken at CODES. Duration: 12-18 months full time; up to 30 months part time (flexible in recognition of industry participants).

Course content: Each of the participating universities offers up to five courses in rotation over a two-year period. Each course is of two weeks' duration.

Course offered by CODES
- Volcanology and mineralisation in volcanic terrains (New Zealand, western Tasmania)
- Brownfields exploration
- Ore deposit models and exploration strategies
- Ore deposits of South America (Chile, Peru)
- Ore deposit geochemistry, hydrology and geochemistry

Fees
UTAS charges a course administration fee of $2000 per unit for enrolled Masters students, and for international students is $AUD 17 800 pa (approx. $US 16 000). International students should contact the Masters Co-ordinator (see details below). There are some additional costs associated with field-based courses.
Entry qualifications: BSc (Hons) or BSc with at least two years' industry experience.

For further information contact Tony Webster, Masters Coordinator, CODES, Private Bag 79, Hobart 7001, Australia.
Tel: + 61 3 6226 1942, Fax: + 61 3 6226 2547, E-mail: awebster@utas.edu.au,
Website: www.codes.utas.edu.au/masters

The National Minerals Geoscience Masters Program is funded by the Minerals Council of Australia, DEST, and the host institutions (UTAS, JCU, UWA).

UTAS

Minerals Council of Australia

PRELIMINARY PROGRAM

GIS AND DATABASE APPLICATIONS IN MATURE EXPLORATION ENVIRONMENTS

Monday	*Presenter: Michael Roach*
7 June	A review of the applications of GIS in exploration in mature environments
	Databases and GIS Introduction to GIS and database applications GIS Applications
Tuesday 8 June	*Presenter: Michael Roach* Advanced GIS applications

GEOPHYSICAL EXPLORATION TECHNIQUES

Wednesday 9 June	*Presenter: Michael Roach* A comprehensive review of key geophysical exploration techniques and their applications in a mature exploration environment.
Thursday 10 June	*Presenter: Michael Roach* Potential field methods – Magnetics and gravity Potential field methods – Magnetics and gravity
	Electrical methods – EM, IP

EXPLORATION DATA INTEGRATION AND TARGETTING WORKSHOP: A CASE STUDY

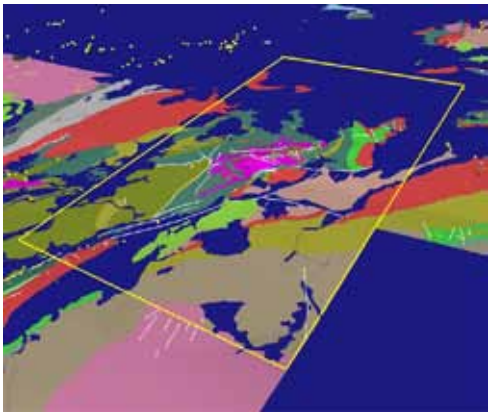
Friday 11 June – Saturday 12 June	*Presenter: Scott Halley* Using a killer data set from a current exploration project in Western Australia. Scott will lead the participants through a two day targeting workshop in which outcrop mapping, aeromag and gravity will be used to interpret the solid geology and the results will then me compared with the immobile elements from the geochemistry. The results will be integrated with other information to identify exploration targets.
Sunday 13 June	Day off!

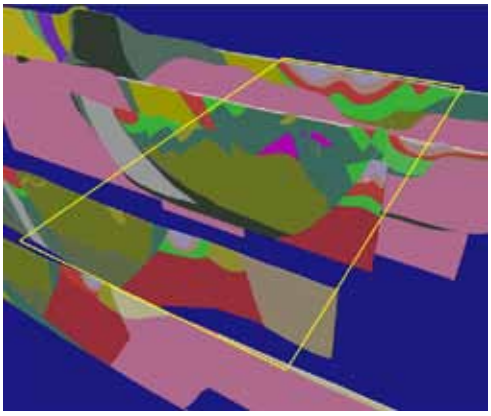
DATA INTEGRATION AND 3D MODELLING

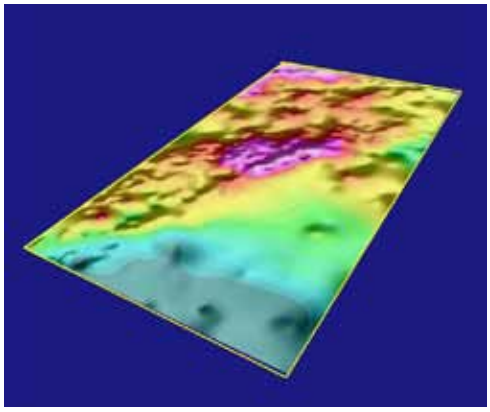
Monday 14 June – Wednesday 16 June	The 'Goldcorp Challenge' revisited *Presenter: Jun Cowan* In March 2000, the Canadian mining company Goldcorp released all of its proprietary data on the web and offered a cash prize to any exploration expert that could identify the next 6 million ounces of gold at its high-grade gold mine at Red Lake, Ontario, Canada. The "Goldcorp Challenge" offered a total of $575,000 in prize money to participants with the best methods and estimates. Some 400 Mb of proprietary data about the 55,000-acre property was revealed on Goldcorp's website. News of the contest spread quickly around the Internet, as more than one thousand virtual prospectors from 50 countries got busy crunching the data. An independent panel of judges reviewed the submissions and selected 25 semi-finalists who were awarded US $10,000 each. On March 12, the three finalists were announced. Dr Jun Cowan will lead participants through a comprehensive 3D modelling workshop that will use the original data sets and 'Leapfrog' modelling software to recreate the 'Goldcorp Challenge', one of the most famous examples of brownfields exploration.

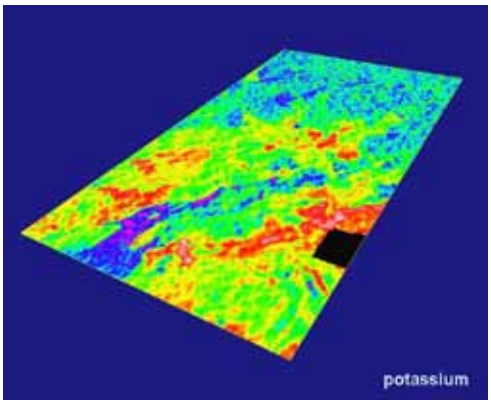
BROWNFIELDS EXPLORATION FORUM

Thursday 17 June – Friday 18 June	Real world examples of brownfield exploration success and the philosophy behind exploration in mature environments A two-day forum of real-world exploration in mature environments presented by some of the most successful explorationists in Australia. Each presenter has been asked to provide and in-depth review of their experiences in exploring in mature environments.









Brownfields Exploration
7–18 June 2010

REGISTRATION FORM

Please complete and return to:
Izzy von Lichtan
School of Earth Sciences/CODES
University of Tasmania, Private Bag 79
Hobart, Tasmania, Australia 7001
email: ij_von@utas.edu.au
Fax: +61 3 6226 2547

ARC Centre of Excellence in Ore Deposits
University of Tasmania

PERSONAL DETAILS

Title – Please circle (Prof / Dr / Mr / Mrs / Ms / Miss)

First Name ..... Last Name .....

Preferred Name .....

Position .....

Company/University .....

Address .....

City ..... State .....Postcode ..... Country .....

Email..... Mobile .....

Telephone ..... Facsimile .....

REGISTRATION FEES

All prices include 10% GST.

Please indicate ☑

MGM Masters students: included in enrolment fees
CODES postgraduate students/staff: $550 full course
Postgraduate students, other institutions: $2000 full course
Industry participants: $5500 full course, $550 per day

Full course	☐
Day 1	☐
Day 2	☐
Day 3	☐
Day 4	☐
Day 5	☐
Day 6	☐
Day 7	day off
Day 8	☐
Day 9	☐
Day 10	☐
Day 11	☐
Day 12	☐

Total cost .....

PAYMENTS

Cheques or bank drafts should be made payable to "The University of Tasmania". Bank drafts should be made out in Australian dollars.

OR

Please debit my credit card

Visa ☐ Mastercard ☐

Card No. _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _

Expiry date .....

Signature .....

Print name of card holder .....

An invoice can be issued on request.
Email ij_von@utas.edu.au

MGM MASTERS STUDENTS: THIS FORM DOES NOT CONSTITUTE AN OFFFICIAL UNIVERSITY ENROLMENT - YOU STILL NEED TO ENROL AT YOUR HOME INSTITUTION.