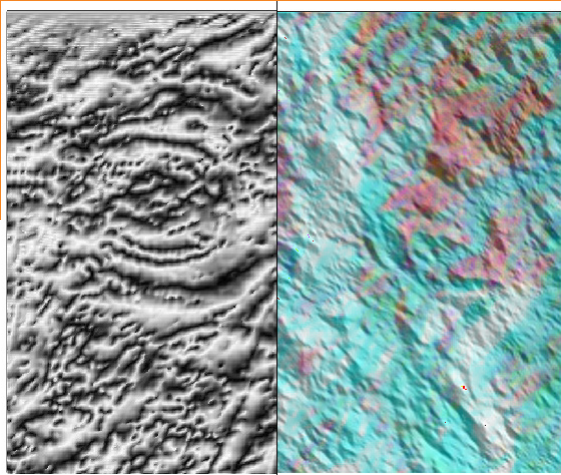


Structural Geophysics

Agate/WAXI Training

13th - 17th October 2025

Dakar, Senegal



This five-day training course will provide an introduction to modern laboratory-based techniques applied to the regional geophysical data of the West African Craton.

This course is aimed at geologists wishing to improve their skill base in modern integrated Structural Geophysics mapping techniques.

Many regions in the world now are covered at a high-resolution by airborne geophysical data sets, including magnetic, electromagnetic, digital terrain models and radiometric surveys. When combined with multi-spectral satellite data, and of course the available geological observations, these geophysical data provide key constraints on our geological interpretation, in particular in ancient terrains.

This training course, organised by Mark Jessell (UWA) who has many years experience of interpretation and modelling of aeromagnetic, radiometric and other regional geophysical data, is aimed at participants who would like to acquire the fundamental interpretation techniques needed to use very high resolution data sets and those who are faced with the problem of integrating their geological and geophysical data.

Participants will be trained on case studies using data from the region, and are encouraged to bring their own regional datasets.

Attendees will be provided with custom Open Source QGIS plugins and will be taught how to process magnetic grids, create complete maps from their interpretations, build 3D geological models and perform geophysical inversions.

Programme

Day	Date	Course Element	Lecturer
Day 1 13 Oct 9am to 5pm	Lectures	1 Introduction: what can potential field data tell us about geology? 2 Geophysical principles; 3 Regional Geophysics and the Regolith	MWJ
	Laboratory exercises	Collaborative Case Study: Regolith, making Geological maps from geophysical interpretations using QGIS	
Day 2 14 Oct 9am to 5pm	Lectures	4 Data processing and data degradation during processing 5 Data/Image filtering/processing – enhancing the geological signal	MWJ
	Laboratory exercises	6 Structural Geophysics Collaborative Case Study: Processing geophysical grids using the SGTool plugin; Interpreting Structures	MWJ
Day 3 15 Oct 9am to 5pm	Lectures	7 Interpretation strategies 8 Petrophysics / lithologies	MWJ
	Laboratory exercises	Collaborative Case Study Attendees' Data Sets	MWJ
Day 4 16 Oct 9am to 5pm	Lectures	9 Structural Controls on Ore Deposits	MWJ
	Laboratory exercises	Collaborative Case Study Attendees' Data Sets	
Day 5 16 Oct	Lectures	10 3D Geological Modelling and Geophysical Inversion	
		3D Geological Modelling and Geophysical Inversion using Loop3D and Tomofast-x QGIS plugins	

* All practical training will use PC's provided by attendees.

All relevant data will be provided, although attendees MUST have QGIS installed on their machines to be able to use the custom plugins provided with this course.

Information

All attendees will have the opportunity to participate in collaborative interpretations of their own data sets.

Course Content: Hands On Exercises

Attendees' Data Sets

Attendees wishing to provide datasets for discussion should prepare a 5 slide introduction to their area of interest so that the audience can understand the regional or local context of the data.

If digital data are available then both processing and interpretation procedures can be performed.

Course Leader: Mark Jessell



Professor at the Centre for Exploration Targeting at The University of Western Australia, Mark Jessell has a vast experience in interpretation and modelling of aeromagnetic, radiometric and other regional geophysical data in 2 and 3D.

Venue

To be confirmed

Registration Fees

For the full 5 days of training, including training materials, lunch and morning and afternoon tea: WAXI Sponsors US\$1,750 per attendee. Non-WAXI sponsors US\$1,900 per attendee.

Language

English and French

Duration

5 days - from Monday 13th to Friday 17th October 2025

Time

9 am to 5 pm

Registration

Register using the form on the next page

Certificate of Attendance

Upon completion, participants will receive a certificate of attendance

Structural Geophysics

13th- 17nd October 2025 - Dakar, Senegal

Registration deadline 15th September 2025

Please complete this form and email it to Corinne.Debat@agate-project.org

Company

Entity to invoice

Address

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Phone

Administrative Email contact

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Attendee's 1 First name, surname.....

Email.....

Attendee's 2 First name, surname.....

Email.....

Attendee's 3 First name, surname.....

Email.....

Attendee's 3 First name, surname.....

Email.....

Total Registration Fees

US\$1,750 per person for WAXI sponsors &
US\$1,900 for non-WAXI sponsors

Currency of invoice AUD