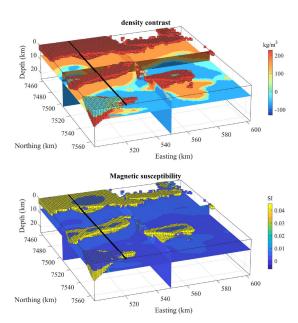






## Inversion of regional Grav-Mag data Agate/WAXI Training

16-18 Oct 2023 Abidjan, Cote d'Ivoire



This 3 day training course will provide an introduction to modern inversion techniques applied to the regional gravity and magnetic data of the West African Craton

This course is aimed at geoscientists wishing to improve their skill base in modern integrated potential-field inversion methods using the Open Source Tomofast-x Platform.

No prior knowledge of the software is required, however attendees will have to install the Open Source Tomofast-x software prior to the course.

The Tomofast-x software platform is one of the new generation of codes that integrates geophysical, geological and petrophysical constraints to perform inversions. It is a scalable code that runs on laptops and supercomputers and is fully parallelised for improved performance.

Two of the principal authors of the Tomofast-x code (Vitaliy Ogarko and Jeremie Giraud) will lead the course with additional materials specifically related to West Africa provided by Mark Jessell.

Attendees are encouraged to bring their own gravity, magnetic, geologicial and petrophysical data so they can learn how to apply these methods to their data.

## **Programme**

Day	Date	Course Element	Lecturer
Day 1 09:00 to 17:00	16 October 2023 Introduction: to gravity and magnetic inversion methods.	Morning Lecture: Introduction to Inversion with Tomofast.  Afternoon Lab: Installation and Introduction to the parfile and running simple inversion.	VO, JG & MWJ
Day 2 09:00 to 17:00	17 October 2023 Application of Tomofast-x to datasets with petrophysical constraints	Morning Lecture: Introduction to the petrophysics of density and magnetisation (I can do that) and Different methods for adding Petrophysical constraints  Afternoon Lab: Inversion with Petrophysical constraints	VO, JG &
Day 3 09:00 to 17:00	18 October 2023 Advanced methods and user data	Morning Lecture: Advanced inversion (joint, guided, level-set) and post-inversion model exploration (null space shuttles)  Afternoon Lab: Advanced inversion of re- al-world data	VO, JG &

#### The training includes full code and manual for Open Source Tomofast-x software

- All practical training will use PC's provided by attendees
- All relevant data will be provided, although attendees should have access to their own GIS software if possible, if not they will be provided with QGIS.

#### Certificate of attendance

Upon completion, participants will receive a certificate of attendance.

## Information

## Course Leaders: Vitaliy Ogarko, Jeremie Giraud & Mark Jessell



#### Vitaliy Ogarko

Research Fellow at the Centre for Exploration Targeting at The University of Western Australia, Vitaliy has long experience in modelling and inversion of aeromagnetic and gravity data in 2D and 3D, as well as development of parallel computing



#### Jeremie Giraud

Marie Sklodowska-Curie Fellow at the GeoRessources Centre, University of Lorraine, France. Jeremie Giraud has has experience in modelling and inversion of aeromagnetic and gravity data in 2D and 3D using Tomofast-x.



#### 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 2D and 3D.

## **Registration Fees**

For the full 3 days of training, including training materials, lunch, morning and afternoon tea.

WAXI Sponsors US\$1,000\* per attendee - Non-WAXI sponsors US\$1,200\* per attendee \* Net price - (specific tax to be added). Currency of invoice AU\$.

## Language

English and French

#### Where

Online and Face to face in Abidjan, Cote d'Ivoire, University Houphouet Boigny

#### Duration

3 days, 8 hours/day lectures + lab excercises

#### **Time**

09:00 - 17:00 Abidjan Time



# AGATE/WAXI Grav-Mag Inversion 16-18 October 2023 Abidjan, Cote d'Ivoire <u>To complete and return</u>

Company
Address
Phone
Administrative Email contact
Attendee's Name 1
Attendee's Name 2
Attendee's Name 3
Attendee's Name 4
Total Registration Fees
Invoice adressed to:
US\$1,000* per person for WAXI sponsors & US\$1,200* for non-WAXI sponsor

US\$1,000\* per person for WAXI sponsors & US\$1,200\* for non-WAXI sponsors
Invoice Currency AU\$

\*Net price - Additional tax to be added (if applicable)

Email: Corinne.Debat@agate-project.org

Registration valid only when the invoice is paid in full