



QGIS Tools Applied from the Office to the Field

WAXI / Agate Project Training

13th - 18th October 2025 Saly, Senegal

This six-day training course will introduce participants to several standard and custom QGIS-based tools that are useful for geodata import, visualisation, field collection and management.

The advancements made in digital technologies over the last three decades, such as Global Positioning Systems (GPS), Geographical Information Systems (GIS), and portable hand-held devices for data collection, have led to the emergence of numerous GIS-based geological digital mapping tools. This has ushered in a new era for teaching the next generations of geologists, encouraging them to transition from the traditional paper-and-pencil approach for field data reporting towards combined data visualisation, collection, and management using GIS.

This training course will introduce participants to several standards and custom QGISbased tools relevant to exploration geology, including the open-source and free GEOL-QMAPS digital mapping solution developed within the WAXI4 project.

The course includes practical sessions and a one-day field excursion around Dakar. It is designed for exploration geologists, preferably with prior experience in QGIS; however, fundamental QGIS concepts will also be covered.

Programme

Attendees are expected to bring their own dataset to be used as training/demo material.

Time will be allocated each afternoon to demonstrate QGIS tools using these datasets.

QGIS from the Office to the Field

Day	Course elements
Day 1 13/10/2025	Introduction / Review of QGIS Basics
	General Introduction and Digital Geological Mapping Solutions
	Practical 1.1 = Review of Useful Basic QGIS Routines (1/2)
Day 2 14/10/2025	Review of QGIS Basics / Geodata import and Visualisation
	Practical 2.1 = Review of Useful Basic QGIS Routines (2/2)
	Practical 2.2 = Accessing Data over the Web
Day 3 15/10/2025	Import of Different Types of Data
	Practical 3.1 = Legacy Field Data
	Practical 3.2 = Geophysical Data
	Practical 3.3 = Drill Hole Data
Day 4 16/10/2025	Pre-Fieldwork - Preparation of the GEOL-QMAPS Mapping Project
	Practical 4.1 = Import of Existing Field Data
	Practical 4.2 = QGIS Mapping Project Customisation
	Practical 4.3 = Creating Map Themes
	Practical 4.4 = Export to QField App
Day 5	Fieldwork
17/10/2025	Early departure from the hotel
	Visit of outcrops in the Dakar area
	Field Data Collection in QField Using the GEOL-QMAPS Mapping Project
	Designed on Day 4
Day 6 18/10/2025	Post-Fieldwork Data Processing
	Practical 6.1 = Import of Field Data to the General QGIS Database using the custom GEOL-QMAPS QGIS plugin
	Practical 6.2 = Data Editing, Visualisation and Export using the custom GEOL-QMAPS QGIS plugin and other QGIS tools
	Practical 6.3 = Geological Map Production and Export
	Concluding remarks.

Key Benefits & Course leaders

Key benefits:

- Comprehensive Coverage: The course provides thorough training on both standard and custom QGIS tools.
- Hands-On Experience: Practical sessions and a field excursion ensure applied learning.
- Expert Instructors: Course leaders bring diverse expertise and extensive experience.

Course Leaders

Julien PERRET (University of Western Australia, Australia), Guillaume DUCLAUX (University of Côte d'Azur, France).



Julien Perret is Research Associate for the fourth stage of the West African eXploration Initiative (WAXI4) at the Centre for Exploration Targeting, UWA, Australia. He has been utilising structural geology to unravel the structural paragenesis and overall of mineralised camps across Sudan, Cote d'Ivoire, Ghana, Sierra Leone, and Senegal. Additionally, Julien is the primary developer of GEOL-QMAPS, a digital geological mapping solution based on QGIS.



Guillaume Duclaux is an Associate Professor at the University of Côte d'Azur, Nice, France. He studies tectonic processes in various settings using both field geology and computational methods. His research interests include the secular evolution of tectonic processes and mineral systems, the development of 3D structures in the continental lithosphere, and surface response to deformation in active tectonic settings.

Information

GEOL-QMAPS is an open-source, QGIS-based solution promoting digital geological mapping in an harmonised, comprehensive and flexible way.

Date:

13th to18th October 2025

Duration:

6 days

Venue:

Le Saly-Hotel & Hôtel Club Les Filaos - www.lesalyhotel.com Saly-Portudal SENEGAL With 1 day field excursion between Saly and Dakar.

Time:

From 8:30 to 17:00 every day, except for the field excursion. Note early departure from the hotel where the training is held on day 5.

Exact time will be confirmed to the participants.

Language:

French and English

Registation Fees:

USD 2,100 per attendee for WAXI sponsors and USD 2,450 per attendee for non-WAXI sponsors.

The price includes morning and afternoon tea, lunch, training materials, and transport to and from the field excursion.

Registration dealine:

1st September 2025

Certificat of participation:

Participants will receive their certificate at the end of the training course.

Requirements for attendees:

Prior to the course, attendees have to install the QGIS software on their laptops, and the QField app on their iOS or Android mobile device(s) (smartphone or tablet).

Detailed isntructions will be provided closer to the course date.

Field gear is required for the field excursion.

Attendees are expected to bring their own dataset to be used as training/demo material.



Field data acquisition on QField using the GEOL-QMAPS solution



QGIS from the Office to the Field 13th to 18th October 2025, Saly, Senegal Registration deadline 1st September 2025

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

Company
Address
Entity to invoice
Administrative Email contact
Attendee's Name + email.(first name and surname)
Attendee's Name + email.(first name and surname)
Attendee's Name + email(first name and surname)
Attendee's Name 4.(first name and surname)
Total Registration Fees
US\$ 2,100 per person for WAXI sponsors & US\$2,450 for non-WAXI sponsors

Currency of invoice: AUD

The organisers reserve the right to cancel the training if the minimum requirement of 10 participants is not met.