QGIS Tools Applied from the Office to the Field

WAXI / Agate Project Training

13th - 18th October 2025
Dakar, 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 in digital technologies over the past three decades, including Global Positioning Systems (GPS), Geographical Information Systems (GIS), and portable handheld devices for data collection, have facilitated the development of numerous GIS-based geological digital mapping tools. This has marked a significant shift in the training of future geologists, encouraging them to move beyond the traditional paper-and-pencil approach for field data reporting towards integrated data visualisation, collection, and management using GIS.

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

The course comprises 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.

Program

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 *17/10/2025*	**Fieldwork - Field Data Collection** Early Departure from the Course Venue 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 - Field Data Processing** Practical 6.1 = Import of Field Data to the General QGIS Database Practical 6.2 = Field Data Editing, Visualisation, Processing and Export Practical 6.3 = Geological Map Production and Export Concluding Remarks

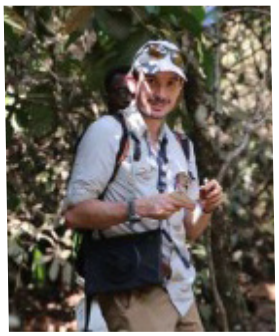
Key Benefits & Course Leaders

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 a Research Associate for the fourth phase of the West African eXploration Initiative (WAXI4) at the Centre for Exploration Targeting, UWA, Australia. His research applies structural geology to decipher the structural paragenesis and crustal architecture of mineralised camps across Sudan, Côte d'Ivoire, Ghana, Sierra Leone, and Senegal. Additionally, Julien is the principal developer of GEOL-QMAPS, a QGIS-based digital geological mapping solution.

Guillaume Duclaux is an Associate Professor at the University of Côte d'Azur, Nice, France. His research focuses on tectonic processes across diverse geological settings, integrating field geology with computational methods. His interests include the secular evolution of tectonic processes and mineral systems, the development of 3D structures in the continental lithosphere, and the surface response to deformation in active tectonic settings.

Information

Date:

13th to18th October 2025 (6 days, including one-day field excursion on Day 5)

Venue:

Dakar, Senegal, venue to be confirmed

Time:

From 8:30 to 17:00 every day, except for the field excursion around Dakar

Note early departure from the hotel where the training is held on Day 5 (time to be confirmed)

Language:

French and English

Registration Fees:

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

The price includes lunchtime meals, training materials, and transport for the field excursion

Registration Deadline:

1st September 2025

Certificate 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 instructions 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

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Field data acquisition in QField using the GEOL-QMAPS solution

Registration

AGATE PROJECT
Knowledge, Skills, Networks in Earth and Planetary Science

QGIS from the Office to the Field

13th to 18th October 2025, Dakar, Senegal

Registration Deadline: 1st September 2025

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

Company .....

Address .....

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Entity to invoice .....

.....

Administrative Email contact .....

Attendee's Name + email.(first name and surname)

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Attendee's Name + email.(first name and surname)

.....

Attendee's Name + email(first name and surname)

.....

Attendee's Name 4.(first name and surname)

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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.