



GeoMate

2026 · Exploration Data Platform

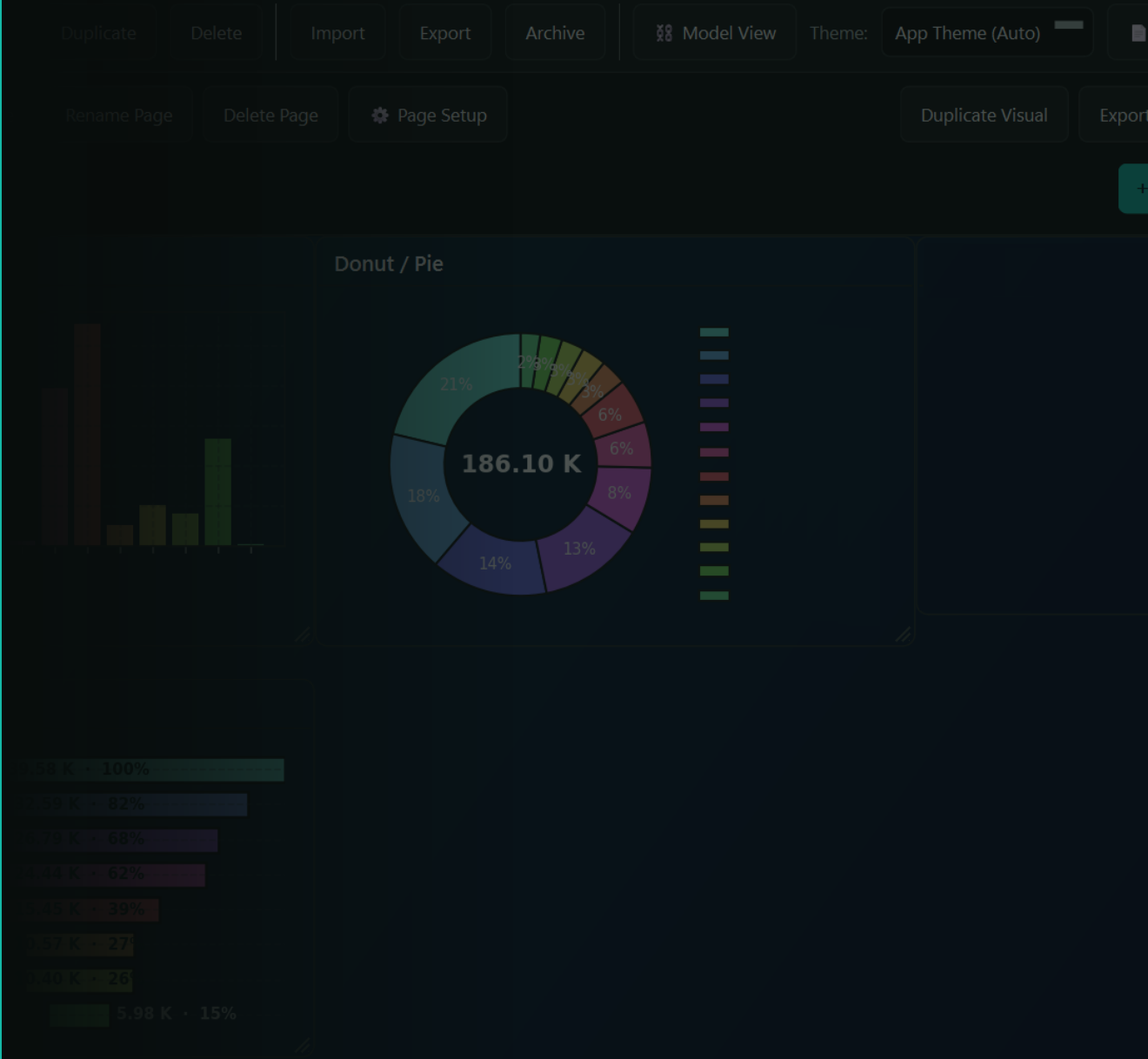
INTEGRATION

MODULE 18

Mate BI Studio

A Power BI-class business-intelligence studio, entirely offline:
thirty-two visuals, a relationship model, cross-filtering and a
faithful export to PDF, PowerPoint and images.

- Group: Integration
- Faithful 1:1 export at 300 dpi
- 32 visuals · 19 mining KPIs
- Power BI-style relationship model



Executive summary

Mate BI Studio is a Power BI-class decision studio, entirely offline: thirty-two visuals, a relationship model between tables, cross-filtering, and a faithful export to PDF, PowerPoint and images.

01 What it replaces

The online BI tool, impossible to deploy on a site with no connection — and the Excel dashboard rebuilt for every committee.

02 How it works

You place visuals on pages, bind them to the data, declare the relationships between tables, style them — and cross-filtering does the rest: clicking a prospect filters the whole page.

03 Who it is for

Technical management and the project committee, who want a decision view — and to whoever builds it, without leaving the platform.

32

visuals available

3

publication formats

0

outbound connection required



cross-filtering between visuals

Contents

01 What the module is

A dashboard studio wired to the project database, with no internet.

02 The visual catalogue

Thirty-two visuals, from KPI card to variogram and stereonet.

03 Model and relationships

Joins drawn or detected, path resolved automatically.

04 Filters and cross-filtering

Page and dashboard filters, click to filter the whole page.

05 Mining KPI library

Nineteen industry KPIs with formula, thresholds and benchmark.

06 Page setup

Size, orientation, gradient or image background, per-visual transparency.

07 Reports

PDF, PowerPoint and an image pack sharing one rendering engine.

08 Enterprise services

Sharing, snapshots, version history and an audit log.



GeoMate 2026

SECTION I

The module

The problem addressed, the capabilities delivered, the processing chain and the module's place in the platform.

-
- 01 Context
 - 02 Key capabilities
 - 03 Processing chain
 - 04 Place in the platform
-

Context

A business-intelligence dashboard normally requires a server, a subscription and a connection. On an exploration site, none of those three conditions holds.

Mate BI Studio runs the whole thing locally against the project database: design, binding, filtering and publication, with no data leaving the machine.

— The model prevents fabricated joins

Relationships between tables are drawn or detected by key name; the studio resolves the join path and refuses a cross-join.

— The report reproduces the canvas exactly

Positions, sizes and proportions are preserved; PDF, PowerPoint and images share the same 300 dpi rendering engine.

— Everything autosaves

Every change is written; a dashboard is a JSON document under `bi_studio/dashboards`, exportable as a `.gmbi` package.



For a report that is both faithful and full, arrange the tiles to occupy the page in the canvas: the export reproduces exactly what you lay out.

Key capabilities



01

Thirty-two visuals

KPI cards, gauges, tables, bars, lines, areas, Pareto, doughnuts, scatters, bubbles, hexbin density and text boxes.



02

Statistical visuals

Histogram, box plot, descriptive statistics, correlation matrix, ECDF and Sinclair log-probability.



03

Mining visuals

REE spider, stereonet, rose, downhole profile, grade-tonnage, resource classification, variogram, ternary.



04

Relationship model

Power BI-style Model View: relationships drawn or key-detected, join path resolved automatically.



05

Mining KPI library

Nineteen industry KPIs — mineralised metres, contained metal, recovery, QAQC pass rate, cost per metre and per ounce — each with formula, interpretation, thresholds and benchmark.



06

Three formats, one render

PDF, PowerPoint and PNG images share one engine: same page size, same orientation, same layout, at 300 dpi.

Processing chain

From the project tables to a published dashboard, without leaving the workstation.

A Inputs

Data model

- Project tables, chosen and named
- Declared relationships between tables
- Business measures and indicators
- Library of predefined mining KPIs
- Page-level and visual-level filters

B Design

Visuals and interaction

- Thirty-two visuals: charts, tables, maps, gauges
- Statistical visuals: distribution, correlation, scatter
- Specialised mining visuals
- Styling: colours, titles, axes, legends
- Cross-filtering: one click filters the whole page

C Publication

Three formats, one rendering

- PDF for circulation and archiving
- PowerPoint for the committee presentation
- Images for insertion into a report
- Controlled resolution, identical rendering across the three
- Reusable dashboard package

OFFLINE BY CONSTRUCTION

No data leaves the workstation and no outbound connection is required. That is the decisive practical difference on an exploration site with an intermittent link — and the answer to the question legal always asks.

Place in the platform

FED BY

01 Dashboard

Supplies the progress aggregates, taken up here in a bespoke presentation.

17 Geological Intelligence

Supplies the prospect ranking and the geostatistical quantities.

06 QAQC Manager

Supplies the batch verdicts, to be followed over time.



Mate BI Studio

The decision view: it computes nothing new, it shows together what the other modules produce separately.

FEEDS

Project committee

The exported PowerPoint is the presentation itself.

14 Report Builder

The exported images go into the periodic report.

Management and head office

The PDF circulates without requiring the recipient to have the platform.



GeoMate 2026

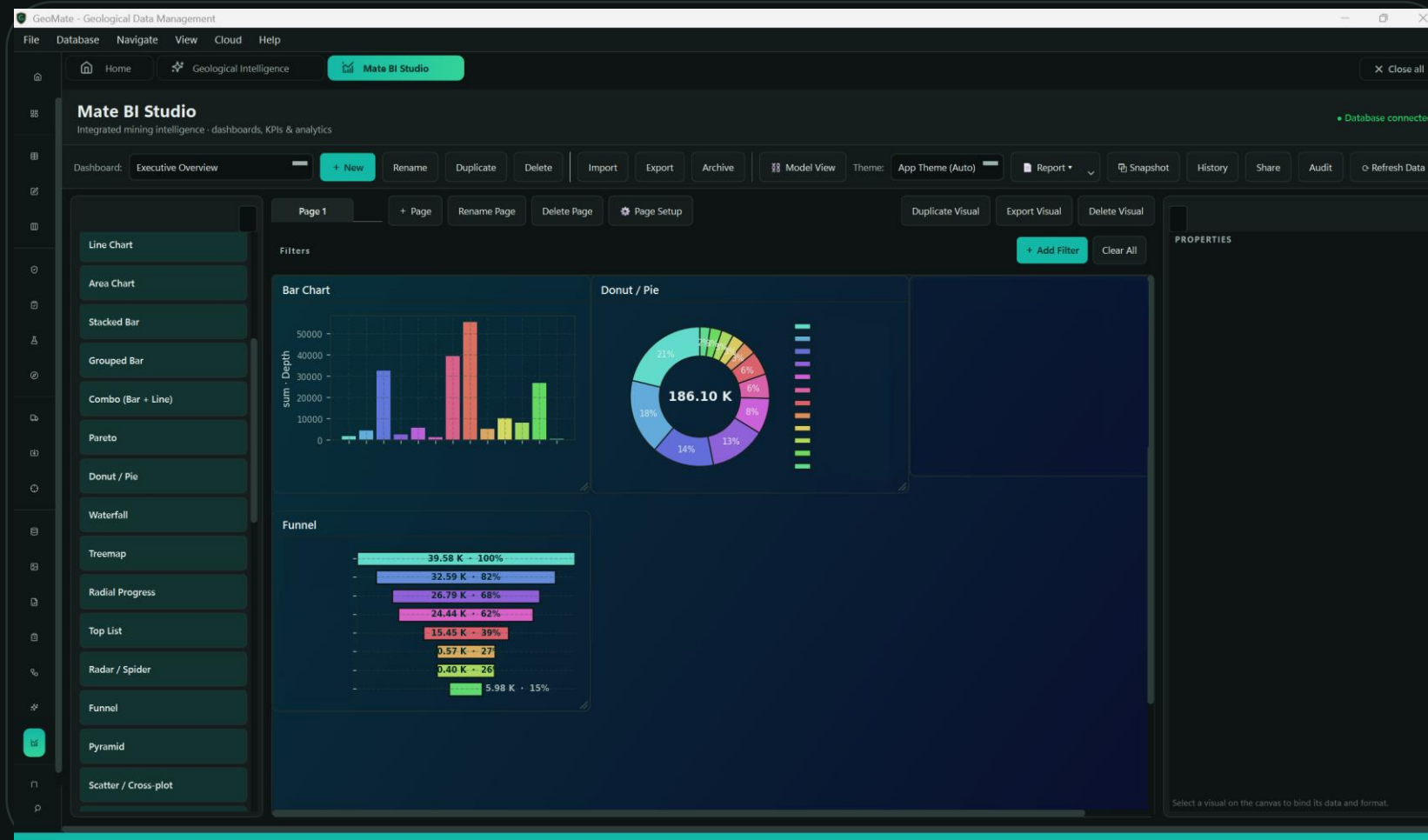
SECTION II

In practice

The real interface, the operating workflow, the reference settings, good practice and the questions that come up.

-
- 01 The interface
 - 02 Operating workflow
 - 03 In depth
 - 04 Good practice
 - 05 Frequently asked
-

The interface



1 Dashboard bar

Create, rename, duplicate, import, export, archive; Model View, theme, report, snapshot, history, share, audit.

2 Visual palette

The thirty-two visuals, grouped by family, dragged onto the canvas.

3 Page canvas

Draggable, resizable tiles with grid snapping; several pages per dashboard.

4 Filters and cross-filtering

Page filters, and a click on a bar to filter the whole page.

5 Properties panel

Source, dimension, measure and aggregation; per-visual appearance and transparency.

Actual GeoMate 2026 v2026.3.1.5 screen capture — Midnight theme.

Operating workflow

Four steps to publish a consultant-grade dashboard.

1

Create the dashboard

Name and category:
executive, operational or
geological.

2

Place the visuals

Drag from the palette, move
and resize with grid
snapping.

3

Bind to the data

Source table, dimension and
measure with aggregation;
the model resolves the join.

4

Format

Appearance, transparency,
page size and background.

5

Publish

PDF, PowerPoint or an
image pack — faithful to
the canvas, at 300 dpi.

The catalogue of thirty-two visuals

FAMILY	VISUALS
Core	KPI Card · gauge and bullet · table · bar · line · area · stacked or grouped bar · dual-axis combo · Pareto · doughnut and pie · scatter · bubble · hexbin density · text box
Statistics	Histogram · box plot · descriptive statistics · correlation matrix · ECDF · Sinclair log-probability
Mining	REE spider · stereonet · rose · downhole profile · grade-tonnage · resource classification · variogram · ternary
QAQC	CRM control chart · blank chart · duplicate scatter

Page setup and publication

SETTING	OPTIONS
Page size	Free · A3 · A4 · A5 · A6 · B4 · B5 · B6 · Letter · Legal · Tabloid · custom in pixels
Orientation	Landscape or portrait
Background	Theme default · solid colour · two-stop gradient vertical, horizontal or diagonal · image fit, fill, stretch, tile or centre
Per-visual transparency	Transparent background with 0 to 100 % fill opacity, traces and text intact
Export	PDF, PowerPoint and one PNG per page — one rendering engine, 300 dpi, faithful to the canvas
Package	The .gmbi format — a ZIP package bundling the dashboard and its background images; legacy .json dashboards still import

Good practice

What separates a useful dashboard from a wall of charts.

✓ One question per page

A page answering three questions answers none of them well. Separate progress, quality and geology.

✓ Declare the relationships before the visuals

Without a relationship model, cross-filtering does not propagate and each visual lives in isolation.

✓ Choose the visual to fit the question

Thirty-two visuals are available; two or three per page suffice. Variety is not a goal.

✓ Check the rendering on export

What is legible on screen is not always legible in a printed PDF. Check before circulating.

✓ Date the dashboard

An export with no date becomes an orphan figure within a week. The period must appear on the page.

✓ Do not redo a calculation in it

The quantities must come from the modules that produce them. A figure recomputed in the dashboard ends up diverging.

Frequently asked

The questions asked before building a dashboard.

Q Is an internet connection needed?

No. The studio works entirely offline: the data stays on the workstation and nothing leaves it.

Q Is the exported PowerPoint editable?

It reproduces the pages faithfully. It is presentation material; substantive editing happens in the studio, then you re-export.

Q How does cross-filtering work?

Clicking a value in one visual filters the other linked visuals on the page, according to the declared relationship model.

Q Can the dashboard be shared?

The dashboard package travels between workstations; for recipients without the platform, the PDF or the PowerPoint is enough.

Q Are there ready-made KPIs?

Yes: a library of mining KPIs is supplied, to be dropped directly onto the page.

Q What separates this from the Dashboard?

The Dashboard is a standard, ready-made view. The studio lets you build the view this particular project needs.



GeoMate 2026

SECTION III

The data

What the module produces on a real dataset, and the vocabulary needed to read those results.

01 Anonymised data

02 Key concepts

Anonymised data

What a Mate BI Studio dashboard can read on the KOUKOUDAN database.

32

AVAILABLE VISUALS

of which 8 specifically mining

19

REFERENCE MINING KPIs

with formula, thresholds and
interpretation

105

BINDABLE TABLES

joined through an explicit relationship
model

300 dpi

FAITHFUL 1:1 EXPORT

PDF, PowerPoint and images, one engine

On the KOUKOUDAN database, an executive dashboard reads the 805 collars, the 26,377 samples and the 11,740 assays through one relationship model — with no hand-written query and with no data leaving the workstation.

Source: KOUKOUDAN project database (Senegal) — figures computed from the real data exported from GeoMate.

Key concepts

The vocabulary of business intelligence.

Visual

A data-bound graphical element — chart, table, map, gauge — placed on a dashboard page.

Cross-filtering

The mechanism by which a selection in one visual restricts every linked visual on the page.

Page

The dashboard's unit of composition. A good page answers one question and one only.

Relationship model

The declaration of the links between tables. It is what lets a filter set on one propagate to the others.

KPI

Key performance indicator: a single quantity, defined once, tracked over time and comparable across projects.

Faithful rendering

The guarantee that the PDF, PowerPoint or image export reproduces exactly what is on screen — with no re-layout.



GeoMate 2026

SECTION IV

Value & specifications

What the module changes for the project, and its technical integration profile.

01 Business value

02 Technical profile

Business value

Business intelligence that works with no internet

No server, no subscription, no data sent outside — the exploration camp gets the same tool as head office.

100 % offline

Thirty-two visuals, eight specifically mining

Stereonet, variogram, grade-tonnage and resource classification exist in no general-purpose BI tool.

8 mining visuals

Fabricated joins are impossible

The relationship model resolves the join path; two unrelated tables never produce a cross-join.

Explicit model

The report matches the canvas

PDF, PowerPoint and images share one engine: what is laid out is what is published, at 300 dpi.

Faithful 1:1

The dashboard is shared and versioned

Private or shared visibility, named snapshots, version restore, and an append-only audit log.

.gmbi package

Technical profile

Design

Visuals

32, across 4 families

Pages

Several pages per dashboard

Model

Relationships drawn or key-detected

Saving

Automatic, one JSON document per dashboard

Interaction

Filters

Page and dashboard level, bound values

Operators

Equals, contains, between, in-list

Cross-filter

Click a bar or point, active chip displayed

Security

Table names validated, values as bound parameters

Publication

Formats

PDF · PowerPoint · one PNG per page

Resolution

300 dpi, on-screen-sized fonts

Package

.gmbl — portable ZIP with background images

Enterprise

Sharing, snapshots, history, audit



One platform, from field to report

The “Mate BI Studio” module is one of the 19 modules of GeoMate 2026 — a single, fully offline platform covering the whole chain: database design, data entry, validation, QA/QC, dispatch, analysis and reporting.