KARTOTRAK BENEFITS

Optimize your costs
- Adopt sampling programs according to real-time results.
- Anticipate soil volumes management.
- Minimize waste quantity.

Improve your decision-making process
- Increase data value with optimal data quality control.
- Assess the risk of exceeding remediation levels.
- Base your decision on an adequate probabilistic framework.

Benefit from standard regulatory rules
- Implement MARSSIM tools for sample design.

Rely on a double expertise
- Geovariances’ expertise based on 125 years experience in geostatistics and software development and on 40 years experience in applying geostatistics for site remediation optimization.
- CEA’s acknowledged know-how for radiological characterization and cleaning of radio-contaminated soils.

Strengthen your skills through a global service
- Top-quality services: technical support, training, consulting.

KEY ADVANTAGES

Get started at once
- Intuitive use.
- Easy data visualization.
- Customizable reporting.
- Comprehensive user guide and technical references.

Share a unique software across the team
- Kartotrak® can be applied:
  - During the scoping or the characterization phase.
  - After the remediation to check the site compliance with cleanup regulations.
  - In post-accidental context to map the contaminated area.
- Kartotrak® can be implemented by a whole team within a company or across contractors:
  - By operators to load data, achieve a simplified data analysis and perform a first mapping.
  - By engineers to clean, analyze and process data.
  - By project managers or decision makers to visualize the global project and take decisions about the contaminated volumes to be remediated.

TECHNICAL FEATURES AND REQUIREMENTS

- High performances thanks to multi-core processing.
- Fast software installation taking only a few minutes.
- Minimum system requirements: 2 GHz x86 processor, 3 Gb of system memory, graphic cards and monitor capable of 1024x768 pixels.
- Supported operating systems: Windows XP / Vista / 7, 32 / 64-bit.

Using Kartotrak® for streaming data acquisition and mapping
Kartotrak® can be connected to a GPS and several measuring devices, allowing a real-time monitoring of several areas for a quick survey.

Kartotrak is embedded in a 4x wheel drive truck (here, CEA VEGA2, vehicle for the radiological evaluation of site).
Thanks to Kartotrak®’s GPS connection, it’s also easy to go on site, to measure the contamination concentration on a spot and to store its value in Kartotrak® database.

Kartotrak is used to store and locate measurements as they are acquired.

Connectivity
Kartotrak® can connect with the following positioning and radiological data delivery systems:
- GPS with NMEA output
- Nal detector by ORTEC
- Gamma detector by CANBERRA
- ESF detector by SARYMPO

Should your measuring device not appear in the above list, Geovariances offers development services to interface it with Kartotrak®.

MINIMIZING THE IMPORTANCE OF PRELIMINARY SITE CHARACTERIZATION MAY RESULT IN HAZARDS, UNEXPECTED AMENDMENTS AND ADDITIONAL COSTS DURING SITE CLEANUP.

Through Kartotrak® software, you:
- Increase your knowledge and understanding of the contamination.
- Make use of all available data to improve decision-making.
- Assess and minimize risks more effectively.
- Benefit from best available technology and practice workflows.

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Integrated software solution, for contaminated site characterization
KARTOTRAK SETS NEW STANDARDS FOR THE CHARACTERIZATION OF CONTAMINATED SITES

As a player involved in environmental site characterization projects, you need to locate and estimate contaminated soil volumes confidently. Born out of a 10-year partnership between the French Alternative Energies and Atomic Energy Commission CEA and Geovariances, KortotraK® is a comprehensive software solution designed for you.

KortotraK® brings a cost-effective solution for thorough contamination diagnosis facilitating your decision-making process.

KARTOTRAK® PROVIDES AN INTEGRATED WORKFLOW WHICH CAN BE APPLIED FOR IN-SITU CONTAMINATION CHARACTERIZATION BUT ALSO FOR FINAL CONTROL AFTER REMEDIATION:

PREPARATION OF THE SAMPLING CAMPAIGN
- Delineation of target areas

PRELIMINARY SAMPLING PLAN
- Mesh definition, control of resolution and orientation

DATA ACQUISITION
- On site real-time data acquisition or file import

ESTIMATION AND MAPPING
- Kriging and variogram maps

DATA ANALYSIS
- Delineation of target geological layers, statistical and spatial analysis, vortography

DATA VALIDATION
- Correction levels, duplicates and outliers management

RISK ASSESSMENT
- Probability, quantile and confidence interval maps, initial volumes to be excavated

VARIATIONAL OF RESULTS
- Identification of areas requiring further action (under-sampled areas, hot spots, etc.)

REPORTING
- On the fly creation of report

Through its 3D Viewer, KortotraK® strengthens your understanding of the contamination by displaying a global 3D model of the study area.

KortotraK optimizes your survey design

Sampling acquisition and analysis represent a considerable part of the site characterization budget. KortotraK® gives you the ability to wisely design your sampling survey in order to maximize information while minimizing investigation costs.

KARTOTRAK® provides decision makers with the tools required for efficient risk assessment, helping you categorizing waste and anticipating the management of contaminated soil volumes.

INNOVATIVE SOFTWARE SOLUTION

KortotraK puts the contamination in its global environmental context

KortotraK® is a Geographical Information System - based software giving you the power to collect and display appropriate information on the contamination vicinity. Computed maps are added to the view, so you know precisely the contamination extent and where hot spots are located.

KortotraK controls data quality before any further process

KortotraK® provides an integrated database enabling the storage of 3D data. KortotraK® database organization makes the addition of new samples in an existing project easy and safe. The software lets you carefully check your data and edit values through user-friendly spreadsheets. Your data is fully validated.

KortotraK® offers high-value exploratory data analysis tools with interconnected statistical representations. You have the power to interactively check your data, analyze their spatial behavior and assess the correlation with other variables.

KortotraK® provides the probabilistic framework on which to found your decision process

KortotraK® focuses on an efficient and simplified geostatistical workflow. The software delivers accurate and reliable interpolated maps with information on their reliability. Results also help in identifying areas which are sub-sampled or inside which contamination levels are highly variable.