

You must include the external package 2.0

Genesis 2.1.12 (August 25, 2023) :

Corrections :

- The calculation from the last deviation to the end of hole could be wrong.

Genesis 2.1.11 (August 8, 2023) :

New Features :

- Can now add an including or excluding prism in the pit optimization
- The stripping ratio report can now generate the waste volume automatically.
- The block model extraction by envelope is now faster
- The column matching dialog was redone to fix big memory leak problem
- Volume calculation improved

Corrections :

- The invisible hole was not included in the validation
- The block model was sometime redrawn when it was not necessary
- The importation of tables could crash when there was a calculated variable in the table
- The removing noise of the pit optimization was extremely slow
- Improved slicing volume calculation for multiple volume in the same envelope
- Opening a file in a folder with special character was crashing

Genesis 2.1.10 (July 21, 2023) :

New Features :

- In the plan (wysiwyg or profile) it is now possible to print histogram or curve along hole trace
- In the importation validation, the repetitive information on deviation at 0 and same information on collar is now removed
- In the importation validation, when data goes past the hole length, The information of the hole length before it is adjusted is displayed

Corrections :

- Importation with append only could crash
- The 3D display of Hole Collar did not work properly

Genesis 2.1.9 (July 6, 2023) :

Corrections :

- The window with variography components was not redrawn correctly
- The variograms was crashing when the caption was different then the variable name
- The reimportation of logger table was crashing if no table was defined
- The remeshing parameter did not work

Genesis 2.1.8 (June 29, 2023) :

New Features :

- Edition of rotation of the extension of the border of implicit envelope
- Added the symbols used in the variograms charts legend
- Added new symbols in the variograms charts
- It is now possible to have lag increment with decimal
- Added logger data in statistical charts

Corrections :

- Fixed unique pair creation for some case where not the correct pairs were created
- Changing logger hole color was not redrawing the holes
- Setting a hole invisible did not work
- The sorting of sections was not working well for sections in the root folder
- The creation of a hole section with a dip of zero was not working correctly
- The columns in the mineralized intervals selection list was incorrect
- The importation of pairs in variograms was crashing

Genesis 2.1.7 (June 12, 2023) :

New Features :

- Added a validation to check for prism integrity when linking prism with link all tag
- Added an operation "Set variable value" in the logger menu

Corrections :

- The section list did not show the folder correctly when there was sub-folder in the list
- Hole Name did not redraw when changing the position or size
- The extraction of mineralized interval by envelope exact did not work well if an interval was snapped on the envelope but not actually crossing it
- The slicing on a section could not work properly
- The retriangulation of implicit envelope is improved

Genesis 2.1.6 (June 5, 2023) :

New Features :

- Logger, the dictionary field can now search for an item
- The deviation now has a field to set the deviation active or not
- The resource report can now display a warning when there is negative density found
- It is now possible to import assays certificate into the logger
- New triangulation for implicit model

Corrections :

- Logger, the table was not in the order defined by the schema
- Logger, Display 3D was using inactive deviation
- The structure was not set invisible when color was set white (Invisible)
- Save as could crash

- Planar envelope, the option “remove empty hole, was applied even when in manual prism mode
- Bm, the automatic creation of views could generate trailing 0 in the name
- The color for the 3D composites was not correct

Genesis 2.1.5 (May 12, 2023) :

New Features :

- The 3D composites are now displayed as sphere
- Added the functionality to project collar points on a surface
- Added 3D display of logger tables
- It is now possible to import tables with the option append and/or overwrite
- Added a button to get to the logger dictionary
- Added the possibility to import a schema from a CSV
- Fast edition mode for implicit envelope

Corrections :

- The intervals creation by cut off could generate non optimal intervals
- Bm, The fast creation method could be very slow and create wrong fraction
- Logger, Text field were limited to 255 characters
- Logger, Boolean field became long field after importing data
- Logger, the table validation before changing table was sometime falsely reporting change
- The assays were always redrawn, even if not necessary
- Sections in the section panel were not sorted correctly when there was a number in the folder name
- Corrections and improvement in hole importation

Genesis 2.1.4 (April 11, 2023) :

Corrections :

- Updated library for logger and implicit envelope

Genesis 2.1.3 (April 5, 2023) :

New Features :

- New edition mode for implicit envelope
- It is now possible to modify the position of bookmarks in their property
- Can now import a schema from a CSV
- Logger: Combo now popup directly when they have focus with tAB
- Logger: New section with user defined shortcut button to get to different table easily
- Logger: now open to the last edited table/hole
- Logger: it is now possible to close a hole so it cannot be changed anymore
- Logger: Added live validation to data, cell can become red with a error tooltip if there is a problem
- Logger: Added a warning if data were changed and not saved before closing or changing window

Genesis 2.1.2 (Marsh 21, 2023) :

New Features:

- Stope optimizer is now faster

Corrections :

- The stope optimizer did not copy value in the final model
- Renaming an envelope could generate a fatal error
- Adding predefined variable when importing block model did not work properly
- Logger: keyboard shortcut in description field did not work
- Logger: Date field did not work properly
- Logger: Could generate a fatal error if not entering correct data type in a text field
- Logger: when selecting a hole in the table, some data were not updated

Genesis 2.1.1 (Marsh 16, 2023) :

New Features:

- Logger: It is now possible to modify the default value of a field
- Logger: Added calculated field
- Improved resolution of the real size cursor

Corrections :

- The importation of holes could set holes invisible and without color by default
- Using viewport was causing the application to crash
- The real size cursor in the viewport was sometime not in the correct size
- The importation of new block model or custom table crashed
- Logger: bool field was not showing any default value
- Logger: Special character was not saved correctly
- Stope optimizer small bug fixes

Genesis 2.1.0 (Marsh 10, 2023) :

Nouveautés :

- **First logger version inside Genesis**
- **First version of implicit envelope creation**

Corrections :

- The fast method for block creation could miss some blocks
- Wysiwyg parameter could crash in the block model parameter tab
- The block model subtraction could crash when there is calculated variable
- The Boolean operation on envelope had a random effect on the resulting triangulation
- Pit optimization can now be cancelled with escape key
- When slicing an envelope on a section, the generated prism now has the envelope tag
- Importing data without creating a project could crash

Genesis 2.0.21 (December 13, 2022) :

New Features :

- Added the possibility to have color by tag for the geoline (like prism or figure)
- New Stope optimizer

Corrections :

- The option One pair per composite in the variography could crash when the composites set was too big
- The display for structure in wysiwyg and in 3D is harmonized
- The operation substract BM did not work when the schema was different
- The validation when importing hole was not checking missing azimuth and dip
- The creation of a face envelope from a surface was not always working correctly

Genesis 2.0.20 (4 novembre 2022) :**Nouveautés :**

- Improved Thickness constraint in the planar envelope
- The importation from ODBC can now use deviation from survey for the collar when there is no deviation in the collar
- Added the possibility to do a union of an intervals set with itself
- It is now possible to add a new percent variable when Generating block percent on an existing block model
- Added a function to spline with fixed point in geolines
- Added a vertical exaggeration parameter in wysiwyg
- Added a find and replace tool for the envelope name
- Added a function to generate a volume from a pit surface
- Added the possibility to do a stripping ratio report on multiple pit
- Added a function to join multiple intervals in a hole

Corrections :

- The generation of block fraction using the fast algo could generate 100% blocks outside the envelope
- The operation merge intervals did not always provide the correct information
- The Z Scale option was not applied on new drawn object
- Bug correction when using optimization block model variable for the optimization
- The operation clear estimation and clear classification could crash after a save as
- The cookie cutter line was sometime hidden by objects

Genesis 2.0.19 (September 27, 2022) :**New Features :**

- The “snap to assays” can snap only one end

Corrections :

- Some dynamic dialog did not work anymore

- Parenthesis in dictionary did not work

Genesis 2.0.18 (September 21, 2022) :

New features:

- Parameter saving is now automatic
- Added an option to force some sample to be taken in the sample selection
- Added declustering stats (percentile with weight)
- Added a clear tag button in the mineralized interval tooltip menu
- Added a keyboard shortcut (F4) for the set same view function
- In the section wizard, it is now possible to generate sections without specifying a section count
- Improved the deviations loaded messages when importing csv
- Exporting pairs now also export the From-To
- It is now possible to generate the thickness report in a csv format

Corrections :

- In the interval optimizer, the erase under minimal metal option could not erase bad intervals
- Fixed bugs in the declustering
- Mineralized intervals were sometime redrawn when not needed
- The variogram and chart window could not be moved after being pinned
- The legend in the charts could become bigger than the window

Genesis 2.0.17 (August 24, 2022) :

New Features :

- Creation of composites Original Samples is now faster
- The declustering can now be done by tags, by holes and the weight can be added in a variable
- Added Skin index in the pit optimization
- Added prism intersection constraint in the planar envelope

Corrections :

- The csv importation could import the preceding value when last value was empty
- The importation of deviation with empty azimuth column caused a fatal error
- Genesis was crashing after doing a pit optimization with reblocking
- The creation of planar envelope could be slow
- The declustering was not correctly dividing holes intervals
- The information in the tooltip of structure could be wrong when not using oriented structure
- The mineralized importation was crashing when importing more than 100 variables

Genesis 2.0.16 (August 4, 2022) :

New Features :

- Added Azimuth and dip information when clicking on a oriented structure
- Added a maximal size parameter for the “snap interval to assays”
- The variable order in the pit optimization 4D is not sorted in Z

Corrections :

- The resource report could crash if cutoff where inactive
- The Line pattern did not work with geolines
- The operation Create Surface on a pit was not working
- The order variable for optimized blocks model was always set to zero

Genesis 2.0.15 (July 27, 2022) :**New features:**

- Loading of dxf with LWPOLYLINE (Geolines, prism, figures)

Corrections :

- The extraction of a blocks model using the fast algo could generate holes

Genesis 2.0.14 (July 25, 2022) :**New Features :**

- Added macro for geolines, prisms and figures
- Added an option to go into best fit section when searching for an object
- In Database Status, it is now possible to see the last file used and not just the last GeoBase database
- When doing envelope union or addition, the result will now have the same tag if possible
- The creation of section on planned hole now use the hole algorithm
- Added an option to display precalculated oriented structure

Corrections :

- The estimation with variable ellipsoid is now faster
- The QAQC charts could crash when there was no data in the selected variable
- The sub block importation was sometime very slow
- The extraction of blocks from a pit could crash
- The extraction of a block model by envelope generated all blocks (even empty blocks)
- The fast calculation of percent envelope was not working properly when there was disjoint envelope

Genesis 2.0.12 (June 29, 2022) :**New Features :**

- Importation of envelope using a new dxf data type : AcDbPolyFace
- Added the operation Tag by pit Surface in the block model
- Macro recording in intervals and composites

Corrections :

- The tooltip in the ribbon were not always correct
- When importing dxf using layers, sometime some layers were not imported
- The compact database could crash

Genesis 2.0.11 (June 16, 2022) :

Corrections :

- The rapid calculation of block fraction was not always giving correct results.
- In the Importation/Exportation of classification parameter, the property % fraction of the filled ellipsoid was not used correctly
- Prism copy could not save the new prism
- The visibility property in the dictionary was not saved

Genesis 2.0.10 (June 1st, 2022) :

New features:

- It is now possible to import many dxf at the same time in the GeoLines
- Added a properties button in the section tooltip
- Recording of global macro for envelope and block model

Corrections :

- The viewports could display all hole name in a section
- The planar envelope was not using the mid-distance parameter

Genesis 2.0.9 (May 20, 2022) :

New features :

- It is now possible to record and execute Macro in the block model
- It is now possible to have many dictionary tables and change the current one
- The validation for hole importation has been improved (More errors can be found).
- Hole Planner, The surface name is now displayed in the property dialog, and it is now possible to change the surface.
- Planar Envelope: It is now possible to set back a prism automatic when it was set as manual
- Planar Envelope: Constraint parameter (Line, Envelope) are now accessible in the property dialog
- Boolean operation for Robust and Ultra robust settings are faster
- It is now possible to use Tab key if dialog list to edit the next property
- Added a Prism Properties button in the planar envelope tooltip to go directly to the associated prism
- Added a button Jump to section in the envelope tooltip
- Improved Zoom extent button and project origin when there is no imported hole
- Improved section image placement: it is now possible to pin a point and the border selection is easier to do
- Importing surface from dxf, if the dxf does not have triangle but only points, we can now import the points and triangulate

- Compilation with Visual Studio 2022

Corrections :

- In the planar envelope, the option Remove Empty Hole did not work properly
- When changing the dictionary color, the mineralized interval color were not updated
- When there was a lithology description, it was sometime too long for the tooltip and caused problem. Now the description is cut and displayed in full in the log.
- The hole planner name displayed were not updated when the name was changed
- The mineralized interval selection in fast mode could also select from invisible hole

Genesis 2.0.8 (April 4, 2022) :

New features :

- Added Operation Addition in the envelope to add selected volume into one envelope

Corrections :

- Test estimation on a block model did not work
- The block model sections did not regenerate
- The hole validation did not validate all overlaps
- The section name from the "Jump to hole section" was not having the hole name
- Using the lag slider for the variography is now faster

Genesis 2.0.7 (Marsh 22, 2022) :

New features:

- Improved percent calculation for block model within thin envelope

Corrections :

- Block Model transformation were not loading correctly

Genesis 2.0.6 (Marsh 14, 2022) :

Correction :

- Schema saving/loading problem fixed

Genesis 2.0.5 (Marsh 10, 2022) :

New Features :

- Added the possibility to cancel a Boolean operation with the escape key
- It is now possible to add points to topography from a points custom table
- In the sections dialog, it is now possible to generate one or more sections from hole

Corrections :

- The importation of hole data in CSV was crashing in a new gnft file.

- Many Unicode bug fixes
- The caption was not kept when changing a variable name in a block model

Genesis 2.0.4 (February 21, 2022) :

New Features :

- It is now possible to record macro in the envelope window
- Skin envelope creation is now multithreaded, so faster to generate
- Added color selection for hole trace in the hole planner menu
- The operation for surface Merge Down and Merge Up is now working properly
- Added the possibility to choose the density variable and the percent variable for the pit optimization
- Added the possibility import/export prisms and geoline in csv
- Adding and placing an image in section is now much more user friendly
- Automatic prism linking is now improved to handle case that was not working properly

Corrections :

- The mineralized intervals were not redrawn when modifying hole visibility
- The global grid for block model was not saving correctly
- In the dictionary, the “Create automatic from” was crashing
- Block model validation was not working when using a calculated variable for block percent

Genesis 2.0.3 (February 4, 2022) :

New Features :

- New automatic envelope creation mode: Skin
- Exportation of dig file, projected or exact

Corrections :

- In the custom tables, the projection of points on a surface was rounding the coordinate.
- The “Create Section” on planned hole was not generating the section correctly
- The dig file was not working
- The geoline projection on a surface can now use exact coordinate

Genesis 2.0.2 (January 27, 2022) :

New Features:

- ODBC is now in Unicode
- GeoBase Importation is now using ODBC instead of ADO

Corrections :

- The composite display button did not work

Genesis 2.0.1 (January 21, 2022) :

New Features:

- .benv files can now have the surface images

Corrections :

- Many bug fixes for Unicode changes

Genesis 2.0 (January 14, 2022) :

New Features :

- **Unicode version**
- Added validation and reparation of envelope using CGAL
- Updated validation and reparation of envelope using MeshLab
- Loading Map Profile only when needed; Loading a file is now faster
- When importing holes, if there is no deviation at depth 0 or at the collar, the deviation closest to the collar will be used with a warning message.

Corrections :

- In the statistic charts, when applying a filter, the chart was not refreshing automatically
- The statistic chart on lithology was not working well
- The pit optimization was going in an endless loop when the surface or overburden was deleted

Genesis 1.9.19 (November 30, 2021) :

New Features :

- It is now possible to insert into blocks the distance to any chosen objects

Corrections :

- Could crash when renaming or deleting a variable in a block model
- In the multifolder blockmodel, the classification is now not using the unclassified blocks part for its final value.
- The variogram charts was not updated when changing the lag
- The exportation of a table did not export the calculated field correctly

Genesis 1.9.17 (September 4, 2021) :

New features:

- For the meshing settings, the use exact points is now by default (instead of projected)
- Added an operation to add an envelope to an existing Multifolder block model
- Added an operation to fill a multifolder under a surface
- In the hole window, added an operation to set a comment to many hole at the same time
- Improved Best fit section
- It now possible to export the average and the sum of weight of the composites
- Sample selection; new constraint method for the sample size
- Added 20 envelopes in the sample selection

Corrections :

- The sample selection could crash without parameter
- The sample selection was taking the wrong tag when there were identical composites

- The operation to merge mineralized intervals did not always correctly select the preceding interval
- Save or export lots of composites set is now much faster
- The planar envelope creation did not keep the last prisms parameter used
- The operation to cut a prism did not remove the old prism on the screen.
- Updating a planar envelope is now faster
- It was not possible to rename an envelope that had more than 255 characters
- Genesis was crashing if google drive was installed

Genesis 1.9.16 (September 23, 2021) :

Corrections :

- The import csv matching column was causing a fatal error

Genesis 1.9.15 (September 21, 2021) :

New Features :

- Added thickmark on the image hole traces
- Added cone creation from prism and blending report from figure
- Added a log in the envelope for the Boolean operation
- Minor improvement in the chart legend
- The resource report will now use the fraction field by default if there is one
- Machine learning now work on huge model
- Added Creating faces from fault with specified thickness

Corrections :

- L'importation d'un « shapefile » ne prenait pas en compte la couleur alpha (la transparence) du « shapefile » pour l'affichage.
- Pit Optimization on multifolder block model did not work
- ODBC database importation could crash if there was special character in table names
- Fixed some memory leak

Genesis 1.9.14 (August 5, 2021) :

Corrections :

- Capping expert was not available

Genesis 1.9.12 (August 4, 2021) :

Corrections :

- Save and Save as could crash or not save correctly

Genesis 1.9.11 (August 3, 2021) :

New Features :

- The thickmarks are now in 3D when displaying 3D Hole

- Added Capping expert operation in the charts
- Added dilution info in the composites creation log
- Added a parameter reports for the selected planar envelope
- GeoLines loading is now much faster

Corrections :

- Opening old gnft files (2008-2018) was sometime crashing and losing information
- The creation of contour polygon from a surface did not always work on complex concave envelope
- When modifying hole visibility, the data from the custom table where not updated
- The envelopes could disappear if when saving there was an apostrophe in the comments
- When modifying a prism that was part of a link, the prism was becoming black instead of keeping its link color
- The current section in the section panel was sometime not bold when changing section
- Fatal error when generating variable ellipsoid on a multifolder block model
- Jump to section on a hole did not work if the hole was in a sub-folder

Genesis 1.9.10 (June 14, 2021) :

Corrections :

- The search button did not work

Genesis 1.9.9 (June 10, 2021) :

New Features :

- Possibility to generate the pit surface without the topography
- In the custom table, added a function to extract by tag
- In the block model, added a predefined calculated variable "Bench" to display the bench in order
- Added the variable of block center x,y,z in the pit optimization profit calculation
- Added a function to join two mineralized intervals when clicking on an interval
- It is now possible to do a explode on many envelopes
- It is now possible to search for a planned hole (Ctrl+f)
- It is now possible to modify the pair creation parameter of many directions at the same time
- Added a function to set the color of the selected envelope randomly
- Added a function to set a unique tag to all selected envelope
- Improved priority dialog for the block model union
- Declustering of composites by intervals center or not

Corrections :

- The boolean operation parameter on envelope was not saved
- The importation of sub block did not work anymore
- The structures could crash when displaying or selecting them
- It was not possible to set the display to DirectX mode

- Minor bug fix in the pit optimization dialog
- Bug fix in the declustering of composites by cells and intervals

Genesis 1.9.8 (May 10, 2021) :

New Features:

- Added police size parameters for displaying the scale and section name
- Added a button to select the not up to date planar envelope in the dialog
- It is now possible to optimize a pit from a reblocked pit

Corrections:

- The operation cookie cutter, the zoom and translations was also moving the polygon
- The section wizard was generating the sections in the root instead of the current folder
- The mineralized interval calculation could be wrong when using density variable
- The pit optimization was crashing when an air block had some profit
- The ODBC connection was crashing if the computer did not have the necessary driver

Genesis 1.9.7 (April 30, 2021) :

New Features:

- Added Importation and reimportation from an ODBC connection
- It is now possible to modify a planned hole in spin
- Improved reblocking on pit field (waste, overburden, air, commodity)
- Improved stripping ratio report
- New algorithm to calculate a pit from a reblocked pit
- The envelope now has a log with the pit optimization parameter
- New 4D pit optimization chart
- The conditional simulation was crashing

Corrections:

- In the pit optimization, the dressed cone algorithm was sometime crashing
- The pit optimization did not save its log
- Too long name was crashing the charts
- In the prism and figure, the last selected element was not selected
- When importing drill hole database, the assays was not displayed correctly

Genesis 1.9.6 (April 1st, 2021) :

New features:

- Added a statistic filter in the sample selection
- It is now possible to define the number of sample wanted in the sample selection
- The pit optimization algorithm dressed cone added a min max window for the 3d pit

Corrections :

- The option one by interval from the declustering now set the same weight to all composites from one interval
- The “Use Only a Subset” from the sample selection did not work
- Fatal crash when exporting an excel charts with a sheet name having a “/”
- The wysiwyg with a rotated block model was not printing correctly
- The wysiwyg was not printing planar envelope
- The wysiwyg, the option to color value did not work
- The function “cat” in the calculated variable did not work
- The histograms on declustered composites did not work with non normalized weight
- When merging block model, there could be some problem with the column orders
- The option best fit ellipsoid in the estimation was non deterministic (the estimation could change a bit from one estimation to another)

Genesis 1.9.5 (Marsh 19, 2021) :

New features :

- In the sample selection, it is now possible to set the variable weight in the statistic filter
- In the sample selection, it is now possible to select a statistic interval instead of the deviation factor
- In the sample selection it is now possible to a statistic interval for each variable
- In the custom table, added Set tag function to set a value to a column

Corrections :

- The pit optimization was crashing when not using reblocking
- The pit optimization reblock was only allowing to reblock the same size on x, y and z
- Fixed few minor bug when changing the capping value in the global schema
- Fatal error when deleting a variable in the global schema with a name with special character
- In the function extract interval by envelope the option set tag was not working properly
- Classification centered on composites did not work with variable ellipsoid

Genesis 1.9.4 (Marsh 9, 2021) :

Corrections :

- Genesis could do a fatal error on start up

Genesis 1.9.3 (Marsh 5, 2021) :

New Features :

- New algorithm for pit optimization “Dressed Cones”. Takes less memory and can be faster.
- Added chart for pit optimization 4D and NPV

- Added a function to tag by envelope in the custom table
- Added a log for the custom table
- Added a mode to tag and generate planar envelope simultaneously
- It is now possible to export many composites set into one csv or in many csv.
- It is now possible to add a prefix to the selected envelope
- Added the capping in the exportation/Importation of estimation parameter

Corrections :

- Few bug fix in the pit optimization
- The lag slider for the variogram could crash if the associated variogram is deleted
- The automatic scale for variogram was not considering the components
- Few bug fixes in the resource report
- The chart window for variogram could not be docked
- The report charts could crash when adding a new serie to the report
- The function Export+ in the block model did not work when there was calculated variable

Genesis 1.9.2 (February 10, 2020) :

New Features :

- Removed noise in pit optimization
- Better progression message in pit optimization
- Added negative profit in the blocks of the optimized pit
- Added value commodity, air, rock and overburden in the optimized blocks.
- Added a log for the pit optimization
- Added the field comment in the envelope properties in fast mode
- In the planar envelope, it is now possible to choose geoline by tag
- The importation of flat file now proposes variable to add even when there are already some defined variable

Corrections :

- The reject factor of the stump boosting did not work in the machine learning
- The block model validation was not working correctly with blocks fraction
- In the planar envelope, the parameter empty hole was not applied at the creation.
- The extract composite from not in envelope was not working with many envelopes
- Erasing a prism, figure or geolines in fast mode was keeping the object displayed
- Tag by envelope, the option to add precision was in fact not adding any precision
- The estimation of blocks model was not working when estimating many variable

Genesis 1.9.1 (January 25, 2020) :

New Features :

- It is now possible to order columns of the dictionary by clicking on the column header
- When exporting or importing an envelope in benv format, the tag field was not included

- If you run out of memory when doing a pit optimization, there will now be a warning message.

Corrections :

- The envelope report had some formatting problem
- The hole creator mode was not going back to the last selection mode when done
- Fixed a display problem when selecting a geoline in fast mode and vertices was in exact mode
- When updating a planar envelope, the prisms was displayed even if prism were invisible
- Added an index on view field of the block model for estimation to be faster on the views.
- The creation of variable ellipsoid on block model failed on very small model

Genesis 1.9.0 (January 15, 2020) :

Corrections :

- Updating planar envelope could crash
- The volume of planar envelope was not the same on the report and on the screen

Genesis 1.8.29 (January 14, 2020) :

New Features :

- Improved planar envelope creation algorithm
- In the envelope report, it is now possible to view the number of holes and the number of intervals intersecting the envelope
- Many improvements in the QAQC Charts (better management of missing values, display of the sample number)
- It is now possible to generate QAQC charts with date criteria
- The fast mode selection is now more user friendly
- It is now possible to add variable from global schema to a block model

Corrections :

- In the interval optimization, the dilution could create problem
- In the block model status, if the model is rotated, the corner coordinate was wrong
- In some rare cases, the corridor change with mouse wheel could be very slow
- When choosing a new current interval set, the number of intervals displayed was not updated

Genesis 1.8.28 (December 8, 2020) :

New Features :

- The new section created by the operation "Jump to section" on a drill hole is not temporary anymore and can be saved.
- It is now possible to generate percent on a block model using many envelopes

Corrections :

- The creation of a new gnft file was crashing
- The hole validation was not validating suspect deviation

Genesis 1.8.27 (December 3, 2020) :

New Features :

- New standard chart for QAQC
- The QAQC charts generate faster
- In the machine learning, it is now possible to create a new variable for the prediction
- Added a test function on the composites in the machine learning
- Added a new learning and test function on the composites in the machine learning

Corrections :

- The prisms could crash when selecting them if using a variable density
- The generation of block model validation charts could sometime crash
- Many bugs fixed in the machine learning.

Genesis 1.8.26 (November 20, 2020) :

New features :

- The manifold union operation can now be done on multiple envelopes
- Added boosted and random forest learner
- In the block model schema, the show and estimable check box can now be applied on many variable
- Added a warning message when trying to create a planar envelope using untagged intervals
- Many operations in the envelope and block model can now be done on many element
- Added a new lighting mode, to better see edges of object. It is not by default and must be set to change it.
- Added automatic directions of variograms component by block model in the kriging
- Added the corner position of the origin in the block model status
- Hohomogenisation of tooltips (shortcut and order of appearance of common function)
- Added Snap to assays function in the mineralized intervals

Corrections :

- Fatal error when opening a non-existing gnft file
- Many successive « U » could appears when doing interval union
- The Delete operation in fast mode did not erase all selected element correctly
- The statistics charts were sometime not displayed when the loading took too much time
- Deleting a prism from the tooltip menu did not work

Genesis 1.8.25 (November 5, 2020) :

New Features :

- We can now transform a custom table in composites
- Added Boolean operation that can use manifold envelopes to generate manifold results

Corrections :

- Fatal error when double clicking a combo box that had no element in the property dialogs
- Creation of planar envelopes, the prism was sometime not saved.
- Importation of csv files, the schema could not be read if the file was opened somewhere else.
- The meshing created non manifold mesh when updating the mesh
- The mesh normals were not well oriented

Genesis 1.8.24 (October 29, 2020) :

New Features :

- The step “prepare composites” when estimating is now much faster
- We can now unselect a file in the property dialog by clicking cancel when selecting a file
- Added an error message when doing a pit optimization and no density is defined
- It is now possible to move a prism vertex while in spin mode
- When clicking a prism, the centroid was always set at the center of the prism, now it is at the clicked position

Corrections :

- When exporting many block models, it was asking for each file name
- The option “Fit to assays” in the interval optimizer was sometime not working well
- The creation of a section from a prism was not updating the section list and the section display
- Many small bug fixes in the statistic charts
- The properties dialog of planar envelope did not remember the last property used
- When editing tie lines, there was always a red dot that was not removed
- There was sometime false warning message about the number of objects loaded vs object saved

Genesis 1.8.23 (October 21, 2020) :

New Features :

- Added the possibility to transfer a column from one table to another in the custom tables
- The first and last prism can now use snapped points when meshing
- It is now possible to import composites weight (declustering).
- It is now possible to declusterize the composites by intervals
- The weight of the composites can now be normalized or not

Corrections :

- The envelope selection in the dialog list could be slow when there was many envelopes

- The option fit to assays in the intervals optimizer could sometime not create intervals
- The intervals extraction by envelope could create 0 length intervals

Genesis 1.8.22 (October 14, 2020) :

New Features :

- It is now possible to update many planar envelopes in the dialog list
- It is now possible to modify the properties of many planar envelope at the same time
- It is now possible to use the declusterized histogram for the sample selection
- It is possible to use the histogram of another distribution for the sample selection (population vs sub group)
- Added statistics on the declusterized composites
- We can now create a copy of a chart
- It is now possible to join two geolines
- GDAL library updated

Corrections :

- Database reimportation did not keep hole properties (color, visibility, comments)

Genesis 1.8.21 (October 1st, 2020) :

New Features :

- It is now possible to estimate a block model by specifying the composite variable to use
- Added a calculated variable in the block model multifolder to have to sum of all percent
- When opening a composites or intervals window, the current set is now selected by default

Corrections :

- The option fit to assays in the interval optimization was generating too long intervals
- Importing hole from flat file was crashing
- The importation of many intervals files was only importing the first file
- Extracting a multifolder block model from a pit was generating a non multifolder block model
- The button Generate planar was not working
- The creation of many planar envelopes on intervals was not using specified properties

Genesis 1.8.20 (September 23, 2020) :

New Features :

- It is now possible to generate many planar envelopes by different tag

- It is now possible to choose the tag for a planar envelope created from a prism
- Added an option in the intervals optimizer for not cutting assays
- It is now possible to join an intervals set with another one (without creating a new set)
- It is now possible to export declusterized composites weight
- Added an option in the estimation settings to set automatically the ellipsoid orientation from the block model
- It is now possible to manually modify the coordinate of geoline vertices

Corrections :

- When searching by hole, the best fit is now only used when the hole is vertical
- When generating a block model with a thin envelope, sometimes some blocks was not properly created
- In the resource report settings, the sort by cut-off did not work properly
- The pit optimization was sometime using overburden slope as main slope and vice-versa
- The importation and display of holes pictures did not work properly.
- The create view for multi folders did not work if a variable name was a SQL keyword

Genesis 1.8.19 (August 20, 2020) :

New Features :

- New variograms charts (QQplot, scatter, pairs, stats) and it is possible to remove manually a pair in the chart
- Added the possibility to have a different Z Scale
- Added a context menu in the color table dialog to change the current table faster
- Added a delete button in the envelope tooltip

Corrections :

- In the charts, the change of marker size did not work
- In the dictionary, the selected element became grey when the list lost the focus
- Adding a new block model and deleting it was causing the application to crash
- Added a detailed list of holes that could not be imported when importing planned holes
- The postscript viewer did not work anymore
- Clearer messages for when the estimation parameter was not defined
- The message box could appear under other window

Genesis 1.8.18 (July 15, 2020) :

New Features :

- It is now possible to have color from chart in the charts
- Added variogram in the floating panel
- Boolean envelope are now much faster to process
- Fast mode for planar envelope creation

Corrections :

- The set visible/invisible on a dialog list folder did not work
- When deleting a direction from a variogram, the displayed cone did not erase correctly
- The variogram component window had problems when resizing the window
- The display of correlogram with only one composites was causing problem
- Adding a block model and deleting it was causing a fatal error
- The sample selection could never end

Genesis 1.8.17 (June 9, 2020) :

New Features :

- It is now possible to move variogram components by dragging them on the chart (Ctrl+click)
- It is now possible to display the planar envelope from the grade or metal quantity
- New visualization mode for planar envelope from the current legend
- Added custom table in the floating panel
- The automatic interval creation now has a parameter to control the size
- The automatic interval now has an option to erase depending of the metal quantity
- The exportation of composites now export the length
- When exporting holes, it is now possible to specify to export only visible hole

Corrections :

- Sort envelope by density could crash
- The selection of variogram direction needed administrator right to work correctly
- When creating a panel block model, if the model was rotated, the panel was not

Genesis 1.8.16 (May 13, 2020) :

New Features

- The operation rarefy in the block model can now be done on many block model at the same time

Corrections :

- The QAQC charts was not handling correctly missing values
- The variable ellipsoid creation with geolines was sometime not working correctly
- Displaying image on surface could crash
- After importing a csv database, the save did not work

Genesis 1.8.15 (May 4, 2020) :**Nouveautés :**

- Automatic modeling of isotropic variogram
- Improved automatic creation of variogram model
- Sample selection tools improved (by tag, many envelope groups, improved dialog)
- It is now possible to generate histogram that use the weight of declustered composites
- New Reimport tool in the custom table dialog
- The stripping ratio tool there is a new waste cut-off parameter

Corrections :

- The mid distance of empty holes in planar envelope was incorrect

Genesis 1.8.14 (April 8, 2020) :**New Features :**

- Automatic creation of simple variography (nugget + spheric)

Corrections :

- Sometime the section could not come back to the original state after doing a spin in fast mode.
- The dates in the dialog list could not sort correctly depending of the regional parameter settings in windows
- The envelope selection in fast mode, the color did not change automatically and the invisible was not set in the dialog correctly
- Color table could not get saved correctly
- Surface DXF importation could get very slow
- The creation of a rotated block model with raster bool envelope was crashing
- The rarefy operation on a block model could crash

Genesis 1.8.12 (Marsh 19, 2020) :**New Features :**

- Volume calculation for envelope is now exact when the envelope is valid
- Added automatic digitalization tools to draw lines on image

- Added the details of composites creation in the composites log
- Added reports in the QAQC charts
- It is now possible to generate a block model grid from a block file (.csv)
- Added a stripping ratio report in the block model
- It is now possible to modify the properties of an envelope in fast mode (color, tag, visibility)
- Added an additional value for each point in a surface and the possibility to have a color table on this table

Corrections :

- Statistical chart export in excel is improved (some display bug are fixed)
- The sample selection algorithm could crash on the statistical filtering
- The use middle distance of planar envelope could add the margin plus the middle distance

Genesis 1.8.11 (February 13, 2020) :

New Features:

- Added a statistic chart for QAQC

Corrections :

- Pair creation is now faster when there is a lot of composites
- When creating a new prism, there was always an error message
- The declustering did not consider the missing values

Genesis 1.8.10 (February 7, 2020) :

New features :

- Added a slider for the sill in the variography component modelling

Corrections :

- The pairs were not saved anymore

Genesis 1.8.9 (February 6, 2020) :

New Features :

- New function Sample selection in the composites dialog
- Dialog list panel are improved
 - Display modification are applied instantly
 - It is possible to switch the selected object visibility with key Ctrl+Q
- It is now possible to slice multiple envelope on sections in the envelope dialog

Corrections :

- Generating a lithology chart could crash
- Displaying degenerated prism could crash
- When importing CSV, if there was comma in the title it could create importation problem
- The error report when importing hole data is cleaner
- It is now possible to set the displayed chart in the chart dialog
- Column matching for CSV is improved

Genesis 1.8.8 (January 22, 2020) :

Nouveautés :

- It is now possible to create variography direction from an ellipsoid
- It is now possible to convert ellipsoid angle (Azimuth2 <-> Spin)
- 3D composite can now be with faces or only lines
- It is now possible to snap planned hole on a surface
- It is now possible to export variogram chart in image or excel
- Invisible element from the dictionary are now also invisible in the dictionary pannel
- Added QAQC chart generation

Corrections :

- The function Generate manifold did not work properly
- The modification of a component in the variography could sometime crash
- When there was no pair, the gamma value was zero, now it is missing.
- The automatic creation of the schema when importing data from CSV did not work when the file was opened in another software.

Genesis 1.8.7 (December 19, 2019) :

New features :

- Added a declustering tool for the composites
- The meshing now generates manifold envelope
- Automatic creation of tie lines now works properly

Corrections :

- Using Mid distance in the planar envelope was doubling the margin
- Geostat did not work anymore; updated wxWidget to 3.1.3

Genesis 1.8.6 (December 9, 2019) :

Corrections :

- When setting variogram on many variable at the same time, it could lead to kriging not using the correct variogram

Genesis 1.8.5 (December 5, 2019) :

New features :

- Invalid intervals detection in the planar envelope with a dynamic interface and report
- Added a button in the ribbon to display the chart dialog list
- Added information in the log when extracting a block model from a pit
- Tie line creation faster and more user friendly
- It is now possible to copy a direction in a variogram
- Added an option to keep existing points when gridding a surface
- When creating a planned holes, the geoline now display automatically

Corrections :

- Modification in the variance estimation for the composite population in the kriging (for QKNA)
- Extraction of blocks from a surface without using fraction did not work properly
- The creation of prism in fast mode did not always snap the vertices
- When estimating a block model, the step loading composites was very slow
- When modifying a prism, the insertion of vertex did not always insert at the correct position
- In the variogram, the perpendicular direction was sometime not drawn properly
- When importing a block model from Gems, the origin elevation was not correctly calculated

Genesis 1.8.4 (November 15, 2019) :

New Features:

- The ellipsoid creation by drawing now support long-medium azimuth2
- It is now possible to create temporary section by hole
- It is now possible to copy the parameter of planar envelope from one envelope to another
- New option to create hole in case of empty holes on the border of planar envelope

Corrections:

- Doing a cookie cutter on a surface did not keep the image on the new surface
- The section name in 3D could be displayed over the scale bar
- When importing planned hole, there could be error message in loop when there was problems
- The optimization of rotated block model was generating unrotated results
- Sometime the variogram charts did not displayed the variogram
- The option use variable ellipsoid was always selected even when unselecting it
- Importing estimation parameter did not updated the variogram of the estimation
- The parameter for planar envelope creation was not kept

- The predefined variable FromDepth and ToDepth was not available in calculated function

Genesis 1.8.2 (October 24, 2019) :

New Features:

- It is now possible to create mineralized intervals from lithology or custom table.
- It is not possible to display the section name in 3D (like to scale bar)
- Added font option for the charts
- Added a copy to clipboard for the charts
- Added an option to view the data in the dialog of custom table and block model

Corrections:

- The variable FromDepth and ToDepth from custom table did not work in the calculated variable
- In the resource report, the tonnage /grade charts by cut off did not display the block model name
- The pair creation for the variogram did not work anymore

Genesis 1.8 (October 18, 2019) :

New Features:

- Implementation of LAK (Local Anisotropic Kriging) permitting to unfold the variography and kriged folded structure.
- Statistical charts integrated in Genesis

Corrections:

- When modifying the global color table, the displayed custom table that was using this table was not updated
- When copying a prism with a translation, the copy was not redrawn
- When slicing an envelope, the old section dialog was used instead of the new one
- When exporting estimation parameter, the variogram key was exported instead of the name
- In Select All selection mode, if many objects of the same type were stacked, using the mouse wheel to change the selected object did not work properly

Genesis 1.7.20 (September 12, 2019) :

New Features:

- It is now possible to limit planar envelope by other envelope like the topo

Genesis 1.7.19 (September 4, 2019) :

Corrections:

- Deleting object in fast mode could crash
- The folder for the cad object dialog did not appear correctly

Genesis 1.7.18 (September 4, 2019) :**New Features:**

- It is now possible to limit the width of planar envelope by their neighbors (multifolder)
- It is possible to automatically generate constraint intervals of planar envelope
- It is now possible to apply a tag by envelope to many intervals set at the same time
- It is now possible to delete points inside a custom table

Corrections:

- When applying a tag to an interval set, the intervals was not redrawn
- The surface color on the z value did not work properly
- The importation of geoline could generate infinite lines

Genesis 1.7.17 (August 21, 2019) :**Corrections:**

- The planar envelope was not showing if it needed an update or not
- The planar envelope could crash if the associated intervals was deleted
- An interval could find itself closer from the border than specified
- The density of planar envelope was not used (global density was used instead)
- When generating a planar envelope, the tag used was not in the name
- The envelope report was in in CSV Format

Genesis 1.7.16 (August 1st, 2019) :**New Features:**

- New estimation method for planar envelope
- New block display: 3 faces centered
- Added the tag field in the selection of Geoline dialog

Corrections:

- The rotated block model by panel did not display at the correct location
- The display of geoline in interval mode was incorrect

Genesis 1.7.15 (July 26, 2019) :

New Features:

- New visualisation mode of geolines in interval mode
- New edition mode of geolines in interval mode
- Distance estimation faster and more precise

Corrections:

- Les enveloppes planaires ne s'estimaient plus.
- The planar envelope could not be estimated
- The rotated block model panel and irregular block was not estimating correctly

Genesis 1.7.14 (July 3, 2019) :

New Features:

- In the schema dialog, it is now possible to select many variables to delete them all
- Added a button to set hole invisible (in normal selection and fast mode)
- When exporting hole, the interpolated hole are no more exported (not needed for users)
- Added a function to multifolder block model to cap the sum of percent at 100% using a priority
- It is now possible to snap on a face envelope
- It is now possible to import and export fault envelope from dxf, csv and dat file

Corrections:

- When importing Geotic, the hole type selection did not work properly

Genesis 1.7.12 (June 26, 2019) :

New Features:

- When importing from Geotic, it is now possible to choose the hole type
- When selecting hole, the position is now set on the clicked position instead of the collar
- It is now possible to create prism from polygon envelope and slice many envelope at the same time
- Added a function to project points from a custom table on a topo
- It is now possible to visualize in 3D the piercing direction for the block model creation
- The interface for the percent calculation precision is now simplified
- New visualization of block model in vector field.
- It is now possible to generate the azimuth2 of variable ellipsoid

Corrections:

- In spin mode, the Ctrl+Click in empty space was sometime setting back the centroid to 0,0,0

- In some cases, the folder of dialog list did not explode
- Variography:
 - The component did not update in the chart when changing variable
 - The pair count on each point was not always updating in the chart
 - The variograms displayed in 3D stayed visible when settings them invisible
 - If many variables had different variograms, the kriging was always using only the first
 - The exportation of variograms now export all variable

Genesis 1.7.11 (June 12, 2019) :

New Features:

- The creation of ellipsoid variable now dont need an envelope or geoline
- It is now possible to add control prism to planar envelope
- It is now possible to generate all intersecting geolines from a group of envelope
- Added a reblocking option using the mode instead of the average for each variable
- Added an error message if we are estimation with a not calculated variable ellipsoid
- When importing block model, it is now possible to add the variable from the the CSV schema
- In the pit optimization, the reblocking can now be done automatically.

Corrections:

- L'extraction d'un modèle de bloc par une surface ne prenait pas en considération si c'était en haut ou en bas de la surface.
- The extraction of a block model by a surface did not take into consideration if it was over or under the surface
- There was no more dotted line

Genesis 1.7.10 (May 28, 2019) :

New Features:

- Greatly improved calculated variable speed
- It is now possible to export all graphic from Geostat in Excel

Corrections:

- The pit optimization on multifolder block model did not generate multifolder bm
- drawing line that goes beyond the graphic in a chart was generating problem

Genesis 1.7.9 (May 21, 2019) :

New Features:

- Added a button on the composites to center the variogram displayed in 3D on this composite.

- Added a function to copy a variogram and its directions
- It is now possible to add GeoLines that acts as virtual intervals for planar envelope
- It is now possible to create geolines while spinning

Corrections:

- In the block model, the function "Generate percent from envelope" did not work correctly on surface.
- The extraction function on multifolder block model was not generating multifolde bm
- Generating a pit optimization with a rotated block model was not creating the surface correctly
- The display of variogram in the 2D graphic could lack of precision when a direction was much longer than an other one
- The pit optimization did not work properly when there was grade in the overburden
- The Snap Side exact did not work correctly
- The update of a planar envelope created from non automatic prism was changing the plan of the envelope

Genesis 1.7.8 (May 13, 2019) :

Corrections:

- The estimation parameter could crash

Genesis 1.7.7 (May 6, 2019) :

New Features:

- Added shading option for the 3d display of the variograms
- The variograms cone now display both directions
- The variogram can now manage multiple variables
- It is now possible to update multiple planar envelope at the same time

Corrections:

- The merge and the copy of multifolder block model did not create multifolder block model
- The importation of DXF with multiple layer was always adding one of the envelopes in the root folder
- The creation of layer from planar envelope did not work correctly
- The update of a planar envelope created from tag on a modified prism did not work

Genesis 1.7.6 (April 26, 2019) :

New Features:

- Display of empty holes going through the planar envelope
- Display of empty hole adjacent to planar envelope
- Creation of juxtaposed layer from planar envelope

Corrections:

- The 3D display of the variogram perpendicular directions was sometime wrong
- The variograms pairs now take 100 time less space in memory
- When adding element in the dictionary, the spin mode was exiting
- When adding new element in the dictionary, the focus was always getting back on top of the list
- Crashed when pressing escape while generating missing holes
- The estimation of planar envelope generated by tag was incorrect

Genesis 1.7.5 (April 15, 2019) :**New Features:**

- Creation of planar envelope at mid distance from empty hole
- Duplicate hole validation (Same hole but different name)

Corrections:

- Some case of boolean envelope was not generated correctly
- The correlogram calculation was not perfect

Genesis 1.7.4 (April 3, 2019) :**New Features:**

- New report of orphan intervals (not associated an existing hole)
- The creation and update dialog of planar envelope are now uniform

Corrections:

- The intervals associated to a hole that was not there anymore could cause problems
- The planar envelope was not always deterministic (could changes shape)
- The ellipsoid variable generation by envelope could crash
- La génération d'ellipsoïdes variables par les enveloppes pouvait planter.

Genesis 1.7.3 (April 1st, 2019) :**New Features:**

- New button to generate automatically your reports NI-43-101 or JORC
- Added perpendicular direction to the variogram
- Reduced the size taken on disk for the saved pairs (3 times less spaces)

- The pair saving can now be disabled to reduce space taken on disk. The pairs will then be regenerated when needed
- Added information on the direction when selecting it in 3D
- Added Ctrl+A shortcut in the dictionary
- Added a button to set a direction invisible when selecting it in 3D or in the chart window
- Resource report for planar envelope
- New function to extrapolate the side of the planar envelope power two
- Improved planar envelope dialog
- The text for the X,Y,Z grid now disappear independently

Corrections:

- When importing custom tables, we could not change the variable type of the variable generated automatically
- It was not possible to generate automatically color table on the density of a block model
- We could not dock correctly the variograms panel
- The update of interval color after a tag by prism was not working
- The ellipsoid variable creation was crashing when a geoline was on a center of a block
- An automatic prism stayed automatic after a manual modification
- The creation of missing intervals in the envelope did not work well
- The option “enclosing circles” for planar envelope did not work well

Genesis 1.7.2 (Marsh 15, 2019) :

New Features:

- New functionality to create missing intervals in envelopes
- It is now possible to tag intervals by prism
- The planar envelope elements are now in dedicated folder
- Added tag by envelopes in mineralized intervals dialog
- The dictionary can now be created automatically from another table (Intervals, Envelopes, GIS)

Corrections:

- Could not delete the third point and the insert point did not work well when the line was not in the plane
- Envelope validation did not work well with big coordinates
- The sort function in dialog list did not work well when there was text and numbers in the column
- The point table in the custom tables could have rounded coordinate and displayed names was not correct
- The exportation of planar, fault, seams or cells envelope in DXF did not work
- The snaps information was sometime wrong when generating prism in fast mode
- Many bug fixes in variography:

- Could not change visible/invisible in sub folder
- It is now possible to know in which experimental variogram the direction belongs to
- Crashed when deleting a direction that was shown in the variogram chart

Genesis 1.7.1 (Marsh 1st, 2019):

New Features:

- It is now possible to create automatically variable ellipsoide from envelope
- It is now possible to create planar envelope from interval tag
- New legend creation mode on a list of values instead of range
- It is now possible to set the width and height of a section with specified values
- In the variography, added a creation mode for pairs with the same tag
- Added a small validation of the number of imported element vs the number of elements in the file when importing hole data file
- It is now possible to GeoReference an image in plan without having a surface (the surface will be created automatically)
- It is now possible to define many variable to "Not Used" at the same time in the dialog for importing CSV

Corrections:

- Generating a resource report on a variable that did not exist anymore crashed
- The Union menu in the interval dialog was disabled
- When copying a block model, the transformation was not copied
- Sometime the GeoLines were not drawn on screen
- Better handling of comma and quotation marks when importing CSV
- Bug fix in Variograms
- Improved automatic generation of tie lines
- Bug fix in planar envelope

Genesis 1.7.0 (February 1st, 2019) :

New Features:

- Added variography modeling
- Can now extract blocks from a pit with vertical walls
- Ressource report: some improvement for the cut off chart, titles and legends

Corrections:

- Adding variable in the block model schema was sometime very slow
- The log did not write the correct name of screening and limit envelope when estimating a rotated block model

- The set variable value on a multifolder block model did not work on block percent variable
- The composite create crashed when no hole was visible
- The section creation sometimes crashed when renaming it
- Improved speed of Boolean envelopes intersection
- Improved automatic planar envelope creation

Genesis 1.6.21 (November 22, 2018) :

New Features:

- The automatic generation of prism is now optimized (Moreira & Santos algorithm)
- Updated Geotic Importation for Geotic 8
- It is now possible to cut a prism in 2 parts with a line
- It is now possible to set the global block grid parameter from a block model or from an envelope
- Added Tag By envelope to the dialog list of mineralized intervals
- When importing CSV, the text field with quotation mark is now handle correctly
- Added Experimental Variogram Graphic in floating pannel

Corrections:

- The added precision was not used when creation a new block model if block model is rotated

Genesis 1.6.20 (November 2, 2018):

New Features:

- The Geostat Graphic are now clickable to get information on the selected data
- It is now possible to generate automatically prism around mineralized interval or composites
- Cutting envelope with the current section is now possible
- New error message when importing block model and block center is not in the center of block grid cell
- It is now possible to modify the property of planned hole in the dialog list of the GeoLine

Corrections:

- Fixed some problem with creation of interval by optimization
- When creating dictionary automatically, the spaces were not handled correctly

Genesis 1.6.19 (October 11, 2018) :

New Features

- Experimental variogram in 3D
- It is now possible to generate invervals by lithology using the caption or the summary

Corrections:

- The meshing was improved to better handle complex case
- The planar envelope was not created after the destruction of intervals set and envelope
- Fixed a bug where sometime the creation of interval by lithogy did not work
- The Boolean envelope could create hole on very big triangle
- The importation of GeoBase with illegal character did not work well
- The selection composite dialog was not showing the good columns

Genesis 1.6.18 (August 24, 2018) :

New Features:

- Principal Component analysis (PCA)
- Real distance of Mahalonabis (based on PCA)
- The optimisation of mineralized intervals is improved ; The dilution and the chopping is now optimal
- It is now possible to have mineralized intervals as a data source in Geostat
- Simplified the reblocking dialog
- When creating planned hole, it is now possible to use Ctrl+MouseWheel to modify the length of the hole when in move mode
- Mineralized intervals Reengineering

Corrections:

- The intervals optimization could generate too long intervals
- The creation of automatic dictionary on a custom table did not work
- It was not possible to snap an object on a custom table

Genesis 1.6.17 (July 12, 2018) :

New Features:

- It is now possible to have multiple viewport
- Added a report on median thickness of envelope
- It is now possible to set variable value in the block model on many variable at the same time
- In the resource report it is now possible to sort the cut off
- The move fast mode can now also copy the object with the Ctrl key
- It is now possible to import/export color table

Corrections:

- The sort in the dialog list did not work when there was empty field in the list
- The pit optimization on rotated bm generated error on the result surface
- The importation of GeoBase with special character in the variable did not work
- Many bug fix in the resource report

Genesis 1.6.16 (June 14, 2018) :

New Features:

- Added all needed data in the profit blocks to verify the pit optimisation
- It is now possible to define GeoLines for the planar envelope
- The Importation of DXF File now handle line type AcDb3DPolyline
- The composites selection in the estimation parameter is now done in the dialog instead of a combo box
- Added new charts in the resource report in excel with many cut off
- It is now possible to generate the block grid from an envelope
- Added a button in the ribbon to show/hide custom table and set visible/invisible tables
- Added a capping by distance in the estimation
- The function Tag By envelope in the block model can now tag the variable FixedDensity
- Added a button properties when clicking on an ellipsoid
- The text of the distance tool is now bigger, and if it goes out of screen it adjusts.

Corrections:

- The pit optimisation did not work correctly with patterns bigger than two.
- The planar envelope was self intersecting when the minimal distance was too big
- View or Export Hole was crashing
- The litho was not redrawn when we settings some hole to visible/invisible
- The folder structure in the docking panel was not always up to date
- The classification log was only logging the first pass
- The block model creation with planar envelope with a cross other than YZ was not working
- Importation of flat file, if the level of the lithology does not exist, the default is now 0 instead of -999

Genesis 1.6.15 (May 9, 2018) :

Corrections:

- The classification centered on composites worked only with the first pass.
- Calculated variable with numbers in their name did not work
- The resource report did not work when there was no cut off or all cut off were inactive
- The panel creation in block model was crashing

Genesis 1.6.14 (may 1st,2018) :

New Features:

- Added the prism perimeter in the prism report
- It is now possible to export hole data in an excel with multiple sheets
- Added a cumulative frequency graphic in the block model comparison tool
- Removal of too small triangle in planar envelope

Corrections:

- The cookie cutter was not showing the cutting polygon correctly
- The importation of estimation parameter could not import more than ID^9
- Improved speed for Boolean envelope subtraction
- Geostat was not always exporting graphic to excel correctly

Genesis 1.6.12 (April 24, 2018) :

New Features:

- Ressource report for planar envelope
- Lithology dialog improved and added Unmerge and Visible/Invisible

Corrections:

- The composite table was not created when creating a new document
- Bm Cumulative Frequency from Genesis did not work

Genesis 1.6.11 (April 12, 2018) :

New Features:

- Machine learning by decision tree with a metric choice to optimize
- Machine learning domain adaptation
- The context menu now only contains selection choice and does not change between show and selection menu
- New graphic on lithology
- Added cumulative frequency graphic on block model
- It is now possible to reblock the profit for pit optimization

- The bookmarks now remember the last parameter used, and it is now possible to create multiple bookmark in a row
- It is now possible to remove an image from a surface

Corrections:

- The planar envelope was crashing when the related intervals were deleted
- The planar envelope was not refreshing when changing the legend
- The image transparency on a section was not saved
- The calculation method on prism was not saved
- The classification centered on composite was not working anymore
- It was possible to lose a composites set
- The view could be modified when modifying a prism
- The key delete in the dictionary dialog was always deleting the selected litho

Genesis 1.6.10 (February 23, 2018) :

Warning:

- It is now impossible to load composites made with the old software sectcad (The view on collars is now handled by the collars list.)

New Features:

- New planar envelope with triangular resource estimation.
- New function to import and export one or many block model in a proprietary format (Genesis Block Model XML .gbmx)
- It is now possible to do a resource report without sorting by block model (the calculation will be made for all selected bm)
- In the resource report it is now possible to write a formula in the cut Off. The formula must return true or false.
- Added 1st and 3rd quartiles in the Geostat statistic report
- It is now possible to import and export classification parameters
- When clicking a planned hole, the information (x,y,z,azimuth,dip,length) are now displayed
- It is now possible to change the length dynamically of a planned hole
- New intelligent sorting in dialog list (numerical and alphanumeric portion are independently sorted)
- The classification by composites can now use composite that are not inside the block model

Corrections:

- The block model validation in Genesis did not use the selected envelope
- The resource report did not remember the density variable used

- Going in Spin mode in a mode when there was already a spin mode could change the current view

Genesis 1.6.9 (February 5, 2018) :

New Features:

- Creation of thin planar envelope
- Can now add bookmark marker with a description. It is possible to navigate from one marker to another with F2 and F3
- It is now possible to compare and validate block model directly in Genesis
- It is now possible to simplify a surface x,y,z file before importing it
- It is now possible to sort by any variable in the resource report
- In the resource report, the line Total is now optional
- In the resource report, a new type of report (one table) is available
- The context menu of the dialog list is now specific for each object type
- It is now possible to modify the tag and the comments of many envelope at the same time
- It is now possible to extract a block model with many envelope

Corrections:

- The Machine learning (boosting) was crashing when there were absolutely no correlation
- Renaming a section did not work properly
- In the interval menu, Tag by not in envelope did not work with multiple envelope
- The creation of intervals by hole did not work correctly for wedged hole
- In the custom table, the function extract by envelope was crashing
- In the resource report, the cut off did not work on a calculated variable that is on another calculated variable

Genesis 1.6.8 (January 11, 2018) :

New Features:

- Creation of thin envelope by Voronoï
- Added optional columns in the collars (Contractor, Logged By, Description, etc). All the GeoBase Collars columns are now imported in the Genesis collars
- Added sample number in the assays (When importing and when selecting assays)
- It is now possible to export the comments of planned hole
- It is now possible to change the color of a planned hole
- The create Face on a surface now handle envelope that contains many disjoint surface
- New button in the ribbon to show/hide real size cursor
- The sections with an image are now in color in the section dialog; it is now possible to show or not the image and to modify its transparency with the context menu
- When importing hole data, if the collar has no deviation, the deviation at depth 0 will be used (if it exists)

Corrections:

- When meshing, the densified point where not always displayed
- The sort by color in the docking panel did not work (crashed)
- The cookie cutter on a surface was generating a volume instead of a surface
- The wind roses (xyz) was flicking when changing section

Genesis 1.6.7 (December 15, 2017) :

New Features:

- In the ressources report, the line order is modified: now is measured, indicated, mes+ind, inferred, total.
- In the resource report, it is now possible to enable or disable a cut off
- In the resource report, it is now possible to set a formula for the percent or the density
- It is now possible to add or do the union of many intervals set
- New function to view intervals and composites in excel
- The Select All Mode can now also select custom tables
- The Hole List dialog is now also in a docking panel
- The schema of block model has been improved:
 - Added a description for each variable
 - Added a checkbox to set a variable to be estimable or not
 - Added a checkbox to show or hide a variable
 - Can now export the schema

Corrections:

- When opening a gnft with a double click on the file, it could crash on specific circumstance
- The wedges imported from Geotic was not well positioned
- Exporting many intervals set at the same time did not work properly
- In the hole dialog list, it was possible to modify the hole visibility only with the context menu
- The progress bar could crash Genesis if the message displayed was longer than 100 characters
- The resource report in excel was creating a corrupted excel file if there was a "<" character in the filter variable

Genesis 1.6.6 (November 28, 2017) :

New Features:

- The automatic Cell envelope now generate equilateral triangle.
- The creation and the modification of the virtual intervals for the cell envelope is improved
- When printing section Wysiwyg the section dialog was replaced with the new section dialog
- It is possible to undo the operation set Same View To

Corrections:

- The surface generated from the pit optimization was not correct if block model was rotated
- Adding or removing tie mesh in mode Select All was not working
- Cursor could disappear when using real size cursor and editing a prism, geoline or figure.
- When creating planned hole, the hole could get inverted.
- When displaying only one axis of the grid, the coordinate was still displayed
- When printing wysiwyg the invisible section was always printed
- Using a trace size factor greater than one was sometime hiding hole information (for example assays could hide the lithology)

Genesis 1.6.5 (November 20, 2017) :

New Features:

- It is now possible to export swatplots in Geostat to Excel
- It is now possible to generate optimal section with composites or intervals

Corrections:

- Geostat Graphic did not show correctly
- The optimal section corridor could be incorrect

Genesis 1.6.4 (November 16, 2017) :

New Features:

- It is now possible to export Geostat graphic to Excel
- It is now possible to create optimal section on envelopes
- It is now possible to import / export dictionary in .csv or Excel
- Added the option Property when selecting hole in normal mode or fast mode
- When importing a shapefile on a surface or on a section it is now possible to define a color and a resolution
- When importing/Exporting estimation parameter, the elliptic distance is now exported
- In Dialog list, the context menu now contains a new option: Switch Visibility
- The Tag by envelope or set variable value from block model now tell how many blocks where modified.

Corrections:

- When spinning in a section, the distance was not displayed well
- Added an error message when trying to map an image more than 1 GO.

- Image mapping should now work even if Genesis is not in administrator mode
- The Open Fast was still drawing surfaces
- When importing a database, it was possible to import duplicate Hole
- When importing database, some temporary table were sometime not deleted
- The object sorting in dialog list was not working on more than 100 characters
- Opening a file older than when Custom Tables exists (couple of years ago) crashed

Genesis 1.6.3 (November 3, 2017) :

Corrections:

- The grid was not displayed correctly (Since version 1.5.23)
- Irregular block kriging did not work properly (was using only one composite)
- Prism skeleton was displayed when editing

Genesis 1.6.2 (November 1st, 2017) :

New Features:

- It is now possible to paste text in the search object dialog

Corrections:

- The meshing algorithm was adding wall to all prism
- When adding tie-line the meshing algorithm was not working anymore
- The maximum angle for the meshing algorithm is now expressed in deg/m
- The spline function is removed
- In the resource report, the header for the different multifolder view was always the same
- The transparency was not always working well on a surface with an image projected
- When editing a prism, there was sometime a missing point and when pressing shift one of the line did not show the distance

Genesis 1.6.1 (October 26, 2017) :

New Features:

- The meshing algorithm was completely redone. It is now more stable and much simpler to debug and modify.
- It is now possible to create layers
- New Dialog list to manage Collars data
- There is now only one log panel (interval log dialog was merge into log dialog)
- The display dialog is now simpler, lot of the button was moved in the ribbon
- New prism visualisation mode: Shadow prism. This display the prism on the previous and the next section.
- New Display mode for block model: Shaded & Wire
- The real size cursor is now a circle and can be activated / deactivated anytime
- It is now possible to move multiple points at the same time when modifying a prism

- Added a new tool to compare block model in Geostat
- In Geostat added the weighted average on length on hole object that have a From-To
- Added a function to copy a custom table
- Added a function to copy composite or mineralized interval
- When importing a table in custom table, the schema can now be created automatically from the file header

Corrections:

- The X,Y,Z in the section dialog list was sometime displayed in scientific notation
- In the dictionary, the modification on an element was always modifying the first one
- When creating a prism in fast mode there was often a vertex that was not snapped
- Some minor correction in the dialog for importing flat file
- The snap distance did not keep the good information for the meshing
- The displayed of corridor in the ribbon was not always up to date
- The function Copy Zoom did not work when clicking on a section
- In the block model multifolder, the variable name of the views contained the path of the envelope, wich made variable name too long for nothing
- Fixed a bug in interval optimization

Genesis 1.5.25 (August 29, 2017) :

New features:

- New more user friendly interface for importing CSV
- Added QQPlot Graphic in Geostat
- Added distance classification Mahalanobis as machine learning algorithm
- In Geostat it is now possible to export all graphic form a current tab in picture in a folder
- Genesis should now work without the need to have administrator right
- Added an option to display a cursor real size
- Added the possibility to have a capping by pass in the block model estimation

Corrections:

- The classification with variable ellipsoid did not work
- The force to minimal length from interval optimization could dilute too much.

Genesis 1.5.24 (July 19, 2017) :

New Features:

- The Hole length is now adjusted when importing hole data that exceeds hole length
- We can now delete an image on a section
- It is now possible to import GIS Shape File in image on a surface or on a section

- When importing an image on a section, its image placement is now much smoother
- It is now possible to enlarge a surface

Corrections:

- The importation of hole could crash when there was a calculated variable in the schema
- In Geostat, Block Model validation could crash when composite was in sub folder
- When changing section, if grid was displayed it was not refreshing automatically
- Block model rotation were not saved
- Sometime lithology was hidden by assays

Genesis 1.5.23 (July 7, 2017) :

New Features:

- Added borders and creation/edition of virtual intervals in cell envelope
- The section modification dialog was remade
- In Geostat the graphic window are now the size of the screen instead of a smaller size
- In Geostat the cumulative frequency graphic can show a sample of random points if there are too many points to show
- In Geostat Added Contact Analysis Graphics generation
- When importing Hole Data, there is now a validation report
- Automatic creation of lithology dictionary
- When creating a block model it is now possible to add the envelope tag
- New function for reducing the number of points in a surface

Corrections:

- The Save As was crashing
- The envelope validation with MeshLab did not work
- When creating a prism, figure or geoline the application was always proposing an already existing name

Genesis 1.5.22 (May 11, 2017) :

New Features:

- Added Machine Learning (stumps boosting) and phylogenetic
- It is now possible to tag intervals and composites by lithology
- Added new parameter in pit optimisation: Mining Recovery, Process Recovery and mining dilution.
- Added a new cutting mode of envelope (Cookie Cutter)
- Added Several new options in the exportation/Importation of block model parameter (Envelope, discretization, ID2, ID3)
- The Mineralized intervals validation has been improved (better error report and creation of an error intervals set)
- Better variable association when importing GeoBase
- Better handling of centroid and zoom in Oculus virtual reality

- Removed the shortcut "S" in the selection menu because this could create some confusion with the spin shortcut
- It is now possible to validate and repair envelope with MeshLab and display error

Corrections:

- The importation of a database with Append Only with a variable name that is a sql keyword could cause problem
- The planned Hole where not in 3D when displaying Hole in 3D
- Added an error Message when trying to estimate with an ellipse that is no more existing
- The resource report with calculated variable was not working
- The Select All was not working well with Tie Point / Tie Mesh

Genesis 1.5.21 (Marsh 27, 2017) :

Corrections:

- The Operation "Extract intervals exact" could generate an empty set if the object already existed.
- The estimation of blocks with variable ellipsoid was not multithreaded
- The classification with the method centered on composites was not multithreaded
- A calculated value in a dialog box starting with "-" was generating an endless wait time

Nouveautés:

- Added the predefined variable "interval_length" for access to interval length in calculation
- Better Graphical interface for mapping an image on a surface (the cursor is now a big cross)
- The block model log now open with notepad for better conviviality
- Genesis is now linked to the linear algebra libraries LAPACK/BLAS.

Genesis 1.5.20 (Marsh 23, 2017) :

Corrections:

- A calculated variable starting with "-" became an infinite loop
- If there was a single quote (') in the dictionary, then it could not be saved

Genesis 1.5.19 (Marsh 20, 2017) :

New Features:

- Added the Oculus Touch to the virtual reality
- Added the field x,y,z,ix,iy,iz for the creation of views of block model
- Added the field x,y,z,ix,iy,iz for the operation Set Variable Value in SQL in the block model

- Added an option to have more precision at the cost of time in the operation Extract From Envelope Exact in the mineralized intervals

Corrections:

- The block model reblocking was using the global grid instead of the selected block model grid
- The calculated values was giving wrong result if there was many subtraction in a row (ex : a-b-c-d)
- The operation Set Same View To in the sections was sometime not working properly

Genesis 1.5.18 (Marsh 8, 2017) :

Corrections:

- The optimization algorithm for creating intervals was always optimising the first variable
- The optimization algorithm for creating intervals was not handling missing values
- The optimization algorithm for creating intervals was not considering the value that was exactly the same as the cutoff

Genesis 1.5.17 (Marsh 7, 2017) :

New Features:

- The exportation and importation of block model parameters is now available
- The algorithm for optimizing mineralized intervals was completely redone and is now faster and more robust
- It is now possible to generate convex-hull and concave-hulls from composites

Corrections:

- The creation of block model could not work if we did not have selected the Grid tab
- It was not possible to classify multiple views at the same time
- Many menu of the block model and envelopes was inaccessible
- When opening a document, the current section was not always selected in the section list
-

Genesis 1.5.16 (December 21, 2016) :

New Features:

- New option for having software key on local web server
- The operation Generate union on many envelopes is now multithreaded and so much faster
- Added the importation of GeoTIFF and other geo-referenced format on surface or on a section
- Added the table type points X,Y,Z in the custom tables
- Added Anti-Aliasing in Geostat for better rendering
- The image for the surface Mapping is now saved in the document (gnft).
- Added a point for displaying the mean in the box plot of Geostat

Corrections:

- It was not possible to open or save an envelope with the STL format (binary STL)
- The tagging of blocks by envelope was not working when using the option block percent
- We could not import more than 100 variables in the composites
- An envelope of more than 1 millions triangles could not be completely exported in DXF

Genesis 1.5.15 (November 22, 2016) :

New Features:

- New fast method for estimating distance or nearest neighbor
- All estimations are now in multithread (much faster estimations)
- New function to extract a blocks model from a pit (also handle surface with many pit)
- Added an option of priority when tagging a blocks model by envelope
- When copying a variable value from one block model to another, it is now possible to choose the variable name (before the variable name had to be the same in both block model)

Genesis 1.5.14 (November 15, 2016) :

New Features:

- Nouveau module d'optimisation d'intervalles minéralisés par "cutoff" entièrement multithreads.
- New Interval optimization by cut off, multithread and very efficient
- The kriging is now fully multithread
- The plangeneration (wysiwyg) now take into account the prism, figure, geoline visibility
- We can now display hole collars from a dictionary color table
- It is now possible to set a transparency on a section image
- Added the function Set Current Set in the composites dialog
- It is now possible to create a section from a prism figure or geoline
- New button in the section docking panel for applying the same corridor to all section in the current folder
- It is now possible to set a section invisible when clicking on it
- In the section docking panel, all keyboard shortcut are now working normally (instead of jumping to the section starting with the letter pressed)
- The up and down arrow key now change the section even if the section docking panel list does not have the focus

Corrections:

- In the ressource report, the cut off was not displayed if there was only one
- We could not set an envelope to white color
- When modifying a planned hole the name was not displayed correctly
- The extract intervals from envelope exact did not work if an start or end of the hole was exactly on the edge of the envelope

- When creating a tie mesh in spin mode, the escape key was existing the edition mode instead of exiting the spin mode

Genesis 1.5.12 (October 12, 2016) :

Nouveautés:

- It is now possible to subtract composites from envelope and tag them.
- When in spin mode, the Enter key now keep the centroid and the current corridor as opposed of the escape key.
- It is now possible to do intersection on many blocks model at the same time.
- It is now possible to do many create faces envelopes operation at the same time.
- It is now possible to do a “explode” surface.
- The generation of automatic sections group (BMX, BMY, BMZ) is now an option and can be disabled

Corrections:

- The mineralized intervals selection in “fast mode” only worked when they where displayed as lines (not in 3d tube or sphere)
- Improved legend and color for blocks model validation graphic in Geostat
- The Composites folder was not already saved correctly
- The planned hole dialog was rounding the numbers
- When importing hole, the option Append or overwrite was not working if the document was not saved before.
- When importing hole, the append and overwrite was not working if both option was choosen.
- The filter hole by prism property was not saved
- The composites exportation was crashing when having more than 100 variables
- The coordinates displayed in the bottom task bar was sometime not up to date

Genesis 1.5.11 (August 25, 2016) :

Nouveautés:

- The shortcut to show/hide objects (Shift+Letter) now work even if the focus is on the section panel
- The capping of composites can now be done on multiple set at the same time.
- Added a validation report on hole and deviations
- It is now possible to put an image on a section

Corrections:

- Sorting of envelopes by color did not work
- Sorting of blocks model by the numbers of blocks did not work
- We could not change the display of envelope when doing a right click on a folder
- When copying prism, the name was getting longer and longer (x_1, x_1_1, x_1_1_1, ...)
- It was possible that a far object could not be selected
- A Zero corridor could cause some display problem

- Changing the name of a composites set could crash the application

Genesis 1.5.10 (August 11, 2016) :

Nouveautés:

- It is now possible to remove the hole without assays limitation when creation cells envelope

Corrections:

- The saving is faster when there is a lot of element to save.
- The renaming of an intervals set could erase all the intervals in that set
- In the dialog list, when clicking on the scroll bar, the resize mode of the dialog was starting automatically
- The "link all tags" was sometime not in the good order.

Genesis 1.5.9 (August 9, 2016) :

Corrections:

- La densification des prismes d'une enveloppe mailée pouvait entrainer l'impossibilité de sélectionner les points des prismes par la suite.
- The prism densification of a meshed envelope could make the prism vertices not selectable
- The section saving was slow

Genesis 1.5.8 (July 22, 2016) :

Nouveautés:

- Creation of envelopes with cut off from blocks model
- Added a new dialog for managing the sections
- It is now possible to choose the collars color for planned hole

Corrections:

- In the docking pannel, the blocks model was not redraw after estimation
- The creation of blocks model using bool envelope was very slow

Genesis 1.5.7 (June 28, 2016) :

Nouveautés:

- Added precision and direction option to the "Generate percent from envelope"
- Tag By Envelope in the blocks model is faster
- Added a display option for Anti-Aliasing; better 3d rendering at the cost of performance
- It is now possible to do a set variable value on many blocks model at the same time
- It is now possible to create one or many faces envelope from prism

Corrections:

- The ribbon combo box of the composite could not get updated as it should.
- The creation of blocks model with legacy bool envelope was very slow
- Moving and copying a prism was not working as intended
- It was not possible to export more than 255 fields at the same time
- Many minor correction in Geostat and block model validation
- The TAB key to change the corridor in the ribbon was not working anymore

Genesis 1.5.6 (May 30, 2016) :

Corrections:

- The option New Document was crashing
- Moving a planned hole with the move function was not working as intended
- The automatic legend creation was not creating the good intervals when there was missing values
- The creation of blocks model without percent could include blocks that touch the envelope but the centre of the block was outside the envelope

Genesis 1.5.5 (May 20, 2016) :

Nouveautés:

- The common properties are now displayed when looking at the properties of object in fast mode.
- It is now possible to display the hole name of planned holes
- It is now possible to import planned hole without a surface (a new surface will be automatically generated in that case)

Corrections:

- The surface triangulation was not working in Windows 10 and could crash
- Sometime the composites count displayed in the dialog list was wrong
- On some operation in the dialog list of blocks model, the new blocks model could be generated in the wrong folder
- The cursor was not always coming back to normal after a Fast Mode
- The operation on mineralized intervals was not working anymore

Genesis 1.5.4 (May 12, 2016) :

Nouveautés:

- The Default script is improved and contain a complete exemple for the new API
- A GNFT can now be opened directly with Geostat (context menu and open With)
- It is now possible to use the new Oculus Rift runtime and headset
- Extract Intervals Exact can now be done on many envelope at the same time and be tagged by the tag of the envelope

Corrections:

- When creating a new blocks model, if not modifying the transformation it was not applied
- In Geostat the color of the graphic elements was not always applied correctly
- In Geostat we can now set the legend everywhere

- It was possible to create composites and intervals names with illegal character that could lead to future problem

Genesis 1.5.3 (4 mai 2016) :

Nouveautés:

- **Installation program now with Inno Setup**
- The default script is now a SQL Console
- Create intervals Exact can now be done on many envelopes at the same time and set the tag of the envelope
- Extract interval from tag can now be done on any tags
- Composites Tag By Envelope not put the tag of the envelope in the field tag instead of the name

Corrections:

- The automatic creation of views could not work properly
- The save as could crash
- The rename of some element in the dialog list could sometime not work properly
- Test One Block was crashing on block model Pannel
- We could not delete a variable of a blocks model in the export dialog
- The script console was not working
- A DOS Window could appear and disappear
- Logarithmic histogram with negative values could lose their data

Genesis 1.5.2 (April 29, 2016) :

Nouveautés:

- **Compilation with Visual Studio 2015**

Corrections:

- Dialog list could be slow when there was a lot of element (name not indexed)
- The color of cumulated frequency graphic was random

Genesis 1.5.1 (April 19, 2016) :

Nouveautés:

- **Blocks Model Pannel Kriging**
- SQL API for scripting
- New SQL Function (match, percentile)
- Automatic creation of formula for Boolean envelope
- Automatic generation of schema when importing holes data from a csv file
- Pit optimization on an existing profit variable
- It is now possible to change all variable at the same time from a color table

Corrections:

- Sometime interline was inserted in a script when edited in another editor

- The opening of a non-existing file does not crash anymore

Genesis 1.5 (2 mars 2016) :

Warning :

- The 1.5 version has lost its forward compatibility. It will not be possible to open a version 1.5 gnft file with a lower version if there are cells envelope in the gnft

New Features:

- **New cellular Envelopes**
- **New Docking Pannel for object list dialog**
- **New Dialog List for mineralized intervals**
- The predefined variable pass number can be added for each variable in the block model
- The display of blocks model is 3 times faster
- New display option for classification in blocks model report
- It is now possible to import/export ellipsoid to .csv
- Added a field "tag" to the envelopes
- Can copy selected parameter from a blocks model to another
- Can append and/or replace blocks from a blocks model to another blocks model
- It is now possible to export many composites set at the same time
- In the blocks model, the field "type" is better managed: we can see it alphanumeric value instead of just the numeric value
- When clicking on an envelope, the centroid is position is now on the selected triangle and the volume is no more automatically calculated

Corrections:

- The first element of the fast mode was not selected for real
- The "Snap Mid Distance" was not working properly
- The exportation of .benv envelope was not exporting the information of the draped images on surfaces
- The GeoLine was sometime flicking or becoming invisible in Oculus
- Fixed a problem when creating a blocks model with many percent when there was already a percent field existing.

Genesis 1.4.32 (December 9, 2015) :

New Features :

- The boolean operation on envelope is a 1000 times faster
- Added the possibility to subtract blocks from a block model (without creating a new blocks model with the result)

Corrections:

- The standard error of kriging could (again) be incorrect if discretisation was not 10 x 10 x 10
- The selection of vertex of a prism could sometime not work when editing the prism.
- When creating a new block model, the checkbox transform was not there anymore
- When creating planified hole, if display was in the mode "Line Center Snapped", the collar and the trace was not aligned
- It was possible that the selected variogram could change in the estimation parameter after kriging a blocks model
- Oculus was not displaying correctly prisms and lines
- Oculus can now show a sky texture
- The extraction of mineralized intervals by envelope was sometime working incorrectly

Genesis 1.4.31 (November 25, 2015) :

New Features :

- Last version of Angel script
- Script editor is improved
- New API version of the script for dynamic array and dictionary

Corrections:

- The Importation of prisms and figures containing '/' was not creating the necessary folder
- The cut off in reports could not save correctly (problem with '.')
- The creation of rotated blocks model with a piercing other than YZ was crashing
- In Geostat, the refresh of validation graphic was not working

Genesis 1.4.30 (November 6, 2015) :

New Features :

- The name of the prisms for the Voronoï diagram are more significative (name = hole name, tag = zone, comment = from-to).

Corrections:

- Possible infinite wait when creating a mesh
- The mesh points using snapped distance are not placed correctly in space
- The intervals subtraction was generating incorrect name in simple case

Genesis 1.4.29 (November 4, 2015) :

New Features :

- Many new statistic graphic option (color, axis)

Corrections:

- The voronoï's extent was not big enough

Genesis 1.4.28 (october 21, 2015) :

Corrections:

- In Oculus, in image mapping on a surface was not showing up
- The surface image mapping was losing point information when changing the image.
- The Test One Block was not filtering the composites with the global box
- The Test One Block was rewriting the result every pass
- The WOMSK was not working with multiple pass; same problem of the Test One Block
- The global variance was not calculated with all composites before filtering with the global box

Genesis 1.4.27 (October 8, 2015) :

New Features :

- Added Virtual Reality Visualisation with Oculus Rift
- It is possible to copy/paste and print report in Geostat
- We can now import a GEMS Blocks Model, rotated or not
- It is now possible to modify the rotation reference point of a blocks model
- It is possible to add Blocks Model variable to color table without adding them to the global schema
- New Blocks model operation: Rarefy

Corrections:

- Fixed a problem of discretization other than 10,10,10
- Fixed a problem with the operation Create Face on concave surface (result was always convex)
- Fixed a problem with Boolean operation when a triangle A passes between two triangles of B
- The creation of Planned hole could crash when in Select All Selection Mode
- The surface Image mapping was using absolute file name instead of relative
- A few minor bug fix in blocks model validation in Geostat
- Fixed a problem when using diagonals in ellipsoid research
- Problème lors de l'utilisation des diagonales de l'ellipse de recherche

Genesis 1.4.26 (August 28, 2015) :

New Features :

- New Validation graphic of blocks model in Geostat and new BoxPlot Graphic
- Added KNA Variables in Blocks Model
- The calculated variable can now contains other calculated variable
- Report can now be created with .xlsx format (Excel 2003 and more)
- Added the function "Tag By Envelope" in the composites
- We can now define a default GIS table
- We can now define many cut off in the resource report
- Added a button "Test One Block" in the tooltip of a block
- Added a variable "Profit" in the pit optimization

Corrections:

- Problème de pente dans l'optimisation (pentes complexes seulement).
- Fixed a slope problem in the pit optimization (complex slope only)
- The composites could not be saved when being imported
- The "Set Variable Value" was not using the variable ix,iy,iz,x,y,z
- The saving of composites was taking too much memory

Genesis 1.4.25 (June 10, 2015) :

New Features :

- New operation to add for each composites the value of the blocks it is inside
- New composites extract operation by extent

Corrections:

- The composites could disappear in particular case
- The merge of composites set did not work
- The pit optimization was not working with negative blocks size in Z

Genesis 1.4.24 (May 8, 2015) :

New Features :

- New operation to create automatically color table
- Remeshing by isoSurface

Corrections:

- La modification d'un variogramme global n'affectait pas automatiquement ceux des modèles de blocs.
- The modification of a global variogram did not affect automatically those of the blocks model
- Fix a problem where there could be composites set or envelope to disappear.

Genesis 1.4.20 (April 14, 2015) :

New Features :

- Added a dialog for composites and the saving and loading on demand (Composites are no more loaded and drawn if not needed)
- Added the variogram used in the log of operation when kriging a blocks model
- Added an option of loading (Open Fast) with all object hidden for a faster loading of a document

Corrections:

- Lors de la création de composites par des longueurs calculées, l'algorithme pouvait choisir de mauvais composites.
- When creating composites with calculated length, the algorithm could choose wrong intervals size
- Many correction and amelioration of blocks model multifolder
- The classification without an Ellipsoid caused the software to crash
- The operation to substract mineralized intervals was not working

Genesis 1.4.19 (marsh 24, 2015) :

New Features :

- Added Statistic Report in Geostat
- Multifolder Blocks Model
- New intersection operation in blocks model
- New display mode in blocks model wich allow to reduce the size of the blocks displayed

Corrections :

- When importing a flat files, if there was an empty field, all following field were considered empty
- The classification centered on composites could sometime not work properly
- The Holes in 3D were sometimes not drawn correctly
- The importation of polyline in dxf was not working if they were of type continuous
- The operation "Extract intervals exact" could sometime not work properly
- The centroid cube could flick when panning

Genesis 1.4.18 (February 18, 2015) :

Corrections :

- The Global schema could crash when renaming a variable
- The kriging could not start properly
- The sensibility on the volume evaluation was too big (consider wrong too fast)
- The bool envelope could crash on a particular case of degenerated triangle
- The volume evaluation was too slow

New Features :

- The volume precision in relative value

- New explosion operation on envelopes

Genesis 1.4.17 (January 28, 2015) :

Corrections :

- The creation of rotated blocks model with a bool envelope was crashing
- The simulation was not working (have to install external package v 1.3.3 wich includes Python)
- The estimation with octant could estimate a block even if the octant criteria was not met
- The checkbox GSLib was not working in the kriging dialog (always checked)
- The selection of a topography was not working anymore in the pit optimization
- The variography was not working if the composite schema was different than the global schema

Genesis 1.4.16 (January 21, 2015) :

New Features :

- Added the simulation with SGems
- The display speed of the mineralized intervals was greatly improved
- Added progress bar for the bool operations

Corrections :

- Create intervals by cut off was crashing if the capping was lower than the CutOff
- Removed some error that could appear in a loop in the create Intervals by cut off
- Create intervals by cut off was not working well if using hole filter
- The saving of the enveloppes could be very slow when having multiple big envelopes
- The seams was crashing when trying to display them
- The importation of files could crash if the file name had more than 64 character

Genesis 1.4.15 (November 25, 2014) :

New Features :

- A new button "reset layout" to set the docking pane to their initial default position
- A new option to show or hide the yellow rectangle for the sections
- A new spin cube without texture. Note that it is still possible to put the old cube in Options->Display
- It is now possible to change the color of the lines and arrows of the wind roses
- It is now possible to define an origin for the project even if there is no hole in the project. (In "Data->Data Constraint->Model Extent")
- It is now possible to create planified hole on the current section (not only on plan view)
- It is now possible to import/export the tag(zone) of the planified hole

- Added the exportation in dxf of exact bool envelope

Corrections :

- Lors de la création d'une enveloppe à partir d'intervalles minéralisés, l'enveloppe ne s'affichait pas toujours (problème de rafraichissement).
- When creating envelope from mineralized intervals, the envelope was not always displayed correctly (refresh problem)
- The color table was not always being updated after a modification
- Correction of some small problems in the GIS Custom tables (table creation, legend modification, display)

Genesis 1.4.14 (November 11, 2014) :

New Features :

- New exact boolean envelope
- Added the functionality Reblock in pit optimization
- Added an option to display the collars in 3D
- Added the display options in the context menu of the blocks model and envelope
- Can now display the Snapped Geoline in 3D, like the prisms and figures

Corrections :

- The generation of wysiwyg was not using the parameter to display the prism/figures in color
- "Generate Face" on mineralized intervals could crash

Genesis 1.4.12 (October 22, 2014) :

New Features :

- Conditional Simulation (GSLib).
- The duplication of variable name (supplementary or imported like X, Y, Z) is now possible for calculated variable
- In the block model, the "set variable value" has a new option to execute it in SQL (much faster)

Corrections :

- The boolean operation on exact mesh was not working well in the case of triangle superposition
- The pit optimization was not working well on very thin model
- In the resource reports, the calculated variable for fraction was not working
- The view Filter for drill hole was not working
- The cad object (prism, figures and geolines) now only redraw when necessary
- The "Estimation By Script" and "Classification By Script" dialog was crashing

Genesis 1.4.11 (September 25, 2014) :

New Features :

- Exact boolean operation on mesh
- Mesh Smoothing, Mesh Simplification, 3D Convex Hull
- Creation of mineralized intervals where hole intersect an envelope
- It is now possible to kriging using GSLib (Ordinary Kriging or Indicator Kriging)
- Added copy view functionality in blocks model
- Added a mode for create views automatically (one view by tag value)
- Added the minimal length when creating composites by calculated length
- It is now possible to do a *tab* ou *shift tab* to change the corridor. Also, there is a new shortcut ("C" by default) to access directly the corridor dialog

Corrections :

- The copy of a color table did not work
- Changing multiple object from a folder to another in the dialog list could be very slow
- The Hole in 3D was not in the inverse color (it stayed black on black background)
- Geostat was crashing in 32 bits
- The size of the text of the hole name of size 6 did not work
- Fixed some problems with importation of Geotoc file in 32 bits

Genesis 1.4.10 (August 15, 2014) :

Corrections :

- "File New" was crashing.
- "Reset Zoom" was crashing.
- "Kriging Irregular" was not saved.

Genesis 1.4.9 (August 12, 2014) :

New Features :

- It is now possible to display hole object in 3D (Tube)
- Added the minimal length when creating composite with calculated length

Corrections :

- In the new Geostat, the scattergrams where not always displayed correctly
- The snap was not working

Genesis 1.4.8 (June 10, 2014) :

Corrections :

- Fixed problems for importing dxf with multiple layers
- Fixed kriging with variable ellipsoid ; bad management of multithreading
- Cut-Off and Width in the schema was not saved

Genesis 1.4.7 (may 29, 2014) :

New Features :

- Added Indicator Kriging
- Added 4D in simple interface for optimization
- Added information on predefined block model variable

Corrections :

- The creation of a face envelope from a block model did not work with negative Z in the grid

Genesis 1.4.6 (May 27, 2014) :

New Features :

- DXF are imported as surface even if they are not valid (for superposed points on whittle pit)
- Importation of many surfaces in layers (DXF)
- Added Variable Ellipsoid for Kriging

Corrections :

- Fixed "**Save As**" problems
- Fixed "save" problem, was not always working (cad object)

Genesis 1.4.5 (May 21, 2014) :

New Features :

- New framework for data visualization and Graphics

Corrections :

- Fixed a problem with meshing when prisms had aligned points
- Fixed some problem with block model views

Genesis 1.4.4 (April 22, 2014) :

New Features :

- The importation of sub block now manage the rotated block model and the Classification
- Added an option for more precision when tagging an envelope in block model
- It is now possible to have many criteria in view creation
- It is now possible to access the dialog list (blocks,envelopes,prisms,figures and geolines) in demo mode.
- We can now export the true thickness generated by the projection of the composites onto a section

Corrections :

- The true thickness was not calculated correctly when doing a projection of composite on a section
- The voronoi was not managed correctly in a section with an angle (not orthogonal)
- The kriging of irregular blocks was crashing with more than 1000 selected composites
- The composites search could sometime not work properly on very thin blocks

Genesis 1.4.3 (Marsh 6, 2014) :

New Features :

- New merge functionality for composites
- New functionality to create a set of capped composites

Corrections :

- The importation of hole data (csv or GeoBase) could crash
- The estimation parameter was not always saved correctly when adding or deleting variable

Genesis 1.4.2 (February 28, 2014) :

New features :

- New function for calculation hole trace

Corrections :

- Many problem of tables saving, in particular on new project
- Problem of managing indefinite value (division by zero) in calculated variable
- Many problem with intervals edition (Move did not work properly, dilution was not working anymore, wrong calculation)

Genesis 1.4.1 (February 26, 2014) :

Corrections :

- The default value of variable from the global schema was always reset to -1 when opening a file. Same thing for the missing value.
- The creation of mineralized intervals on an assay was not done on the correct assays and/or hole
- The importation of sub block (Reblocking) now manage correctly the missing value

Genesis 1.4.0 (February 21, 2014) :

New Features:

- Toutes les tables de données de forage sont maintenant GIS.
- Nouvelles tables de légende.
- Ajout du nombre de composites et d'intervalles dans leurs panneaux respectifs.
- Lorsqu'on génère un modèle de blocs, il y a maintenant une option pour choisir dans quel sens l'algorithme de perçage (cross) vas être effectué.
- Dans les paramètres de rapport de ressources, on peut maintenant entrer un cutoff directement au lieu d'avoir besoin de créer une variable calculée.

Corrections :

- The resource report was not working when using a calculated variable for the density
- The extraction of block model with seam was not working
- The views on block model was not working properly on rotated block model
- The Importation of data with the option "overwrite only" was not working properly

Genesis 1.3.4 (Decembre 4, 2013) :

Corrections :

- The select Geoline had disappeared
- The variable ellipsoid did not work on rotated block model
- Fixed The importation of many envelopes at the same time

New Features :

- Added Function RAND(), RAND(x) et RAND(x,y) in the syntactic analyser.

Genesis 1.3.3 (November 5, 2013) :

Corrections :

- The edition of commodity variable in the block model was crashing
- The alteration and mineralisation where not drawn

New Features :

- It is now possible to create views on block model

Genesis 1.3.2 (October 9, 2013) :

Corrections :

- The Pit optimization is corrected (the mining cost was doubled in the economic function) and is now positively compared with Whittle
- The creation of Voronoï with a minimal distance now generate a correct circular frontier. (the frontier was sometime random)

Genesis 1.3.1 (September 18, 2013) :

Corrections :

- In Pit optimization, the mode commodities :Fixed was not implemented
- The import/export of dictionary did not work

- The estimation of blocks by script did not use the envelope for filtering the composites

New Features:

- In the dialog list (bm,env,...) Added a new visualisation mode that let see only the content of a folder instead of viewing the folder and all its subfolder
- We can now select tie line and delete them
- Added a shortcut for options->Data (Q by default)
- Added a link in the tooltips of the blocks model to access directly the block model from the list

Genesis 1.3.0 (September 5, 2013) :

Corrections :

- "Recalculate All Intervals" was not working
- The creation of pseudo-hole was generating fatal error
- The edition of intervals crashed when pressing "Esc"

New Features:

- **Possibility to add personalized hole table like in GIS**
- In blocks model, added the function to extract by SQL Query, wich is much faster than Boolean extraction
- Added the display of oriented structure
- We can now select ellipsoid and modify their properties

Genesis 1.2.11 (August 19, 2013) :

Corrections :

- The selection of blocks was not always working properly
- When copying envelopes, the copy did not keep parameter (color, display mode etc.)
- The exportation in DXF of CAD objects was generating empty line and the file could not be opened in AutoCAD
- The importation of composites was inserting -999 instead of the missing value
- The composites was not displaying the number decimal specified in the global schema

New Features :

- Added the variables X,Y,Z at the extraction of blocks by boolean function
- Added the perspective visualisation mode, and it is now possible to view genesis in 3D if you have the necessary material.
- In the report of block model, added the information of the density variable and filter variable
- In the report of block model, added the line Indicated+Measured

- Displaying blocks is now faster (the search color is improved when there is only one variable in the search table)
- Added the number of blocks in the column size of the block model

Genesis 1.2.10 (June 27, 2013) :

Corrections :

- The importation of hole database (Geobase or Geotic) with the option overwrite crashed
- The reports in xls was sometime having unusual negative value
- The generation of variables ellipsoid is now managing all case
- Added variables ix, iy, iz in the Extract by Boolean function in blocks model
- The importation of a database in 64bits with office 64bits is now working properly
- There is now a significative error message when attempting to import a 32 bit office documents with 64 bit genesis or vice versa

New Features :

- Added a verification of overlaps in the mineralized intervals
- It is now possible to delete a variable in a block model
- New function for exporting many envelopes at the same time in dxf

Genesis 1.2.7 (May 27, 2013) :

Corrections :

- Tuning of variable ellipsoid on real projects
- Irregular krigging works (for at least more than 2000 composites)
- Fixed a problem of map plotting with some polyline

New Features:

- Report of blocks model now available in xls
- In the kriging of irregular blocks, the filter is now the maximum distance from the block model

Genesis 1.2.6 (May 15, 2013):

Corrections:

- The merge of block model was not working
- The scatterplot and histogram could crash when cancelling the selection of a block model
- The scatterplot and histogram could not work properly if global schema was different than composites schema

New Features:

- The creation of mineralized intervals and the tool for measuring distance is now available in spin mode

- In the operation of mineralized intervals, added the operation addition, wich simply merge two set of intervals

Genesis 1.2.5 (May 10, 2013):

Corrections:

- The Blocks model were all saved when estimating or classifying
- Many improvement to the blocks model log (classification, envelope, ellipsoid)
- The scale bar was black even if the background was black
- It was not possible to cancel the expand of a prism or figure
- The naming of editable object has been improved (was too restrictive)
- The extraction of composites by envelope can now be done with many envelope
- The importation and exportation of editable object in DXF was not managing the comments
- The merge of blocks model was not working when there was a calculated variable in the schema
- The bool envelope were not redrawn when modifying the formula
- Fixed an error when the variable in the resource reports was a keyword of SQL
- The project was not saved when doing a compact database
- The fast mode was something crossing the lines and did not want to create some polygon

New Features:

- New Variable Ellipsoid for the estimation and classification (with complete rewrite of the code for the composites search)
- Added the username in log of blocks model
- Added the option to export blocks model in xls and xlsx
- New envelope report that list the volume for each selected envelope
- Nouveau mode de visualisation des ellipsoïdes variables.
- Creation of variable ellipsoid from the geolines
- The tag by envelope from blocks model can now tag many variable at the same time
- New function to extract mineralized intervals from an envelope

Genesis 1.2.4 (April 18, 2013):

Corrections:

- The ellipsoid was taking the transformation of a block model after a classification
- The white cursor on black background had disappeared

Genesis 1.2.3 (April 16, 2013):

Corrections:

- The solids where not going through certain point
- Fixed a few problem of managing snapped points (Display, Solid generation, tooltip)
- The path of the ellipsoid where not displayed in the dialog

- The text and the scale bar was disappearing when displaying a compass in 2D

New Features :

- Kriging of irregular blocks
- Generation on sections from geolines
- Invisibility of objects in fast mode

Genesis 1.2.2 (marsh 28, 2013):

Corrections:

- Modifying the name of an ellipsoid could cause a fatal error
- The limit by envelope of the estimation of a block model could be shifted
- The resource report of block model could sometime not use the good fraction field
- The section could have strange behaviour when having many ":" in the section name
- The subtraction of bool envelope was not working well when there was many subtraction in the formula
- The bool envelope of infinite size was not well managed
- The problem of the formula of the bool envelope being sometime lost is now probably resolve

New Features:

- Added a new demo mode for the dongle (limited in time or in number of used)

Genesis 1.2.1 (marsh 25, 2013):

Corrections:

- The importation of wedges was not using the specified table name in the dialog
- The redo of an object displayed in real coordinate was crashing
- The snap distance on objects displayed in snap mode did not work
- Fixed problems with the algorithm of volume by needling on thin envelope folded on themselves
- When importing hole data, the extent limit did not work properly

New Features:

- The optimization is much simpler to use and only need a topo and a block model
- The optimization is now much faster and the 4D was implemented
- We can now select many objects with a lasso or a rectangle
- It is now possible to extract composites by tag
- The densification now support real coordinate
- It is now possible to define the global grid from a block model
- It is now possible to display thickmark on mineralized intervals
- It is now possible to densify a surface using geolines
- It is now possible to move many objects at the same time

Genesis 1.1.18 (Marsh 5, 2013) :

Corrections:

- Many problems of clipping plane visualisation
- The block model displayed and then set to invisible were not repaint when the search table changed
- The transformation was not copied when creating a block model with the copy of the schema
- The Functionality Recalculate One Interval was not working
- In the dialog list, the sort order was not always kept
- The Envelope displayed in Raster mode was using the global matrix grid instead of the max extent of the envelope
- The Boolean envelope was not working when the block size were negative

New Features:

- It is now possible to choose the composites set to use when estimating or classifying a block model
- It is now possible to copy the classification configuration from un block model to another
- Added the number of block estimated or classified to the log of the block model
- Amelioration of the ellipsoid dialog (added field, azimuth, dip, spin, major, median, minor)
- Added the functionality to extract the mineralized intervals by tag

Genesis 1.1.17 (February 18, 2013):

Corrections:

- The blocks could become black and it was not possible anymore to apply the search table
- The estimation of the blocks model was using the global missing values instead of the one from the current block model
- Doing a save As and creating/modifying a block model could cause fatal error
- For the creation of a block model, the copy of the grid from another model was not working if the model was rotated
- We could not change the name of a planified hole in the property dialog
- The grid was sometime red instead of grey
- The tie lines were not following the points when they were displayed in exact position
- The option use projected coordinate was not working when meshing
- If we press on escape when loading a document, it is no more possible to save it (for not losing any data)
- The coordinate displayed on the bottom of the screen are rounded at 4 decimals (no more .99999999)
- The preferred corridor was staying as the ancient corridor when we were modifying the corridor of a section
- The pit optimisation was not managing the rotated block model
- The pit optimisation could crash depending on the slope parameter

New Features:

- It is now possible to merge blocks model with different grid; only the origin when the block size must be the same
- All operation of pit optimization now have a progress bar

Genesis 1.1.16 (February 8, 2013):

Corrections:

- The caps reduction to zero was not working
- The vertex could be drag when editing polygon and going in distance mode
- The creation of faces envelope from block model was not working
- The block model marker was not in the centre of the block when the model was rotated
- The dxf exportation did not have enough precision for the coordinate
- It was not possible to merge 2 block model with different default values
- The mesh points are showed on the real or projected coordinate depending on the selected option in solid/settings

New Features:

- New display mode fore envelope in wireframe and faces
- Can substract a blocks model from an envelope
- Can now give an envelope priority to the block model when doing a merge

Genesis 1.1.15 (February 5, 2013):

Corrections:

- The default value of the density was destroyed when there was a modification of the schema
- The change of the section name could generate duplicate or deleted element
- Removed a possibility of crashing when doing automatic meshing
- The snaps was sometime not working well
- The total in the prism report in csv was not displayed
- The view and export hole is now using the filter applied on hole
- The dxf exported in real coordinate(Snapped) could not be reimported in Genesis
- The dxf did not contain the linking information
- Fixed a flicking when changing section
- The deletion of prism or figure when displayed in real coordinate mode was crashing
- Keyboard problem fixed (loss of some typed character)

New Features:

- When creating voronoi, the possibility to give a maximum length to the prism is added
- Improved management of the wedge when importing from Geobase or Geotic

Genesis 1.1.14 (January 28, 2013):

Corrections:

- The exportation in DXF Real Coordinate could not work
- The Creation of new block model was not working well when doing a save as
- The color of the block model could not fit when modifying the global schema
- When typing text in the dialog, some character can miss.
- Automatic meshing could crash
- Amelioration of trace of trench for big intervals

Genesis 1.1.12 (January 23, 2013):

Corrections:

- The densification could destroy the points of the prisms and figures
- The caps creation could generate enormous prism or figures
- A crash could happen on figure that was fold on itself
- The slicing on sections was slow
- The prisms generated by the slicing could not be saved
- The intervals could disappear when opening a file with a filter on the hole
- When creating voronoi the thickness of the prisms was wrong and they were not automatically recalculated

Genesis 1.1.11 (January 21, 2013):

Corrections:

- Interval property for mast mode it was written Tag instead of Zone
- The classification of a rotated block model was not working when using a screening envelope for the composite
- The seam envelope where not working properly when creating a rotated block model
- The composite could not load when the global schema was changed

New features:

- Amelioration of the "Select All" mode; if many elements are selected we can use the mouse wheel to scroll through the selected object
- In the block model it is now possible to modify the value of a variable

Genesis 1.1.10 (January 10, 2013):

Corrections:

- The Automatic Meshing was generating only one tie mesh
- The loading of intervals was slow
- The composites were not loading correctly when they were imported and the schema had a calculated variable
- The creation of intervals by lithology was not working if the lithology code was different from the lithology name

New features:

- We can see the angle of line in edition mode when pressing "SHIFT"
- There is a new automatic validation for the saved element with the loaded elements

Genesis 1.1.9 (January 4 2013) :

Corrections:

- Object Selection could cause fatal error
- Meshing on slim prism could generate degraded comportment

Genesis 1.1.8 (December 21 2012) :

Corrections:

- Fatal corruption possible when extracting composites by envelope
- The value of an interval could be “default” instead of “missing” if the preceding assays touch the interval by an epsilon
- There could be an infinite wait when selecting an object
- Can now add a point to the extremity of the geoline
- Some cursor was still black when using a black background
- When merging two block models, the transformation was lost
- When copying the schema of a block model the grid was not copied
- Print screen could not work when opening a document with a double click
- Amelioration of the display of error message when importing mineralized intervals

Genesis 1.1.7 (December 14 2012) :

Corrections:

- Importation of assays from flat file could failed when calculated variable where defined in the schema
- Multiple window problem fixed (resize, full screen, etc)
- The imported intervals could go past the hole length
- The composites could have an invalid schema and not be displayed correctly
- Voronoi creation could be very slow
- When creating map, the name of the map could be invalid

Nouveautés :

- New dictionary language
- It is now possible to change the color of the search table from the docking pane
- New scale bar, wind roses and north arrow

Genesis 1.1.6 (December 5 2012):

Corrections:

- Prism and Figures modification was not updating the date in the object list
- The mouse pointer could be offset when modifying user interface (toolbar, docking pane)
- The object like GeoLine could be very slow to import or open when they had the same name
- When exporting more than 1 block model in same time in Access, they were all exported in the same table
- We can now scroll in the list box of the generic dialog
- The Map Profiles were not destroyed when attempting to delete them
- The Option “Use One File” had to be checked for printing map
- The Automatic linking was sometime inverting the link
- Fix some issue with the automatic meshing

Features:

- New Selection mode for selecting any kind of object

- It is now possible to change the background color

Genesis 1.1.5 version (November 29 2012):

Corrections:

- Corridor were inverted when going from Sectcad To Genesis (Front <->Back)
- Object selection could not select the good object when 2 objects where superimposed
- The saving of mineralized intervals could failed when there was duplicate values
- In the List Box of the generic dialog, it was possible the element could go off the screen and be inaccessible. (temporary solution down arrow)
- The envelope list when creating bool envelope was empty (in 64 bit only)
- The Fast mode was sometime crossing the line
- The Global grid could change when there was a transformation setup
- The Map Profile were slow to load

New features:

- Possibility to load and save sections
- New Full Screen Mode (F11)
- The marker and the line for creating/modifying mineralized intervals are now more visible
- Added shortcut with CTRL/SHIFT in the tooltip bubble

Genesis 1.1.4 version (November 26 2012)

Corrections:

- The "BACKSPACE" and the "SHIFT+BACKSPACE" allow to surf into the last sections
- The envelopes of the preceding opened GNFT document were still drawn when opening a new document
- Mineralized intervals could disappear when changing document
- The modification of the name of a prism was sometime saying the name already exist when it was not true

New features:

- Undo/Redo of sections modifications
- Double click on mouse wheel + CTRL + SHIFT to reinitialize the corridor (+ and -)
- A Surface generated from block model now cover all block (instead of just the center)
- You can now choose the variable to import when importing a database and the schema is undefined

Genesis 1.1.3 version (November 16 2012):

Corrections:

- Add Cap on 2 prisms was not working
- Flicking with mouse pointer when going from spin to normal mode
- Flicking when spinning and selecting objects

- The section were not repainted when creating new sections
- The importation of mineralized intervals can no longer be greater than hole length
- Object copy was copying the old date instead of giving a new date to the object
- The 64 bit version do not crash anymore on some hardware when quitting the application

New features:

- Economical pit optimization
- Estimation/Classification in memory for block model (much faster estimation)
- Creation of voronoi diagram inside a prism (like polycad)
- Estimation of the grade of the prisms by intervals or by composites (like polycad)
- The creation of planified hole target the nearest point of a prism instead of the centre
- Composite generation, added the property minimum length of the composite at the end of the hole
- Creation of intervals by lithology, the zone is now the description of the lithology
- New color table with the color invisible

Genesis 1.1.1 (October 26 2012) :

Corrections:

- The creation of mineralized intervals by lithologies was not working
- The automatic linking of prism and figures was still mixing the order
- Using line width factor is now drawing using the right draw order
- The exportation of assays and other hole object was not working
- Add a button to show the RQD legend
- Pseudo Hole are no more generated on invisible prisms

New feature:

- Polycad Integration
- We can now set a prism or a figure invisible when clicking on the object

Here is the Release version of GENESIS. It contains the following new functionality:

- **A new performant graphic engine**
- **An interface with ribbon**
- **Docking panes for legends and new legends (block models and surface elevation)**
- **Management of set of prisms, figures, geoline, intervals and composites**
- **New compositing module**
- **Variography and statistic graphic**
- **Automatic meshing**
- **The creation and edition of polygons is completely redone, now highly performant**

- **Importation and exportation of prisms, figures and geolines in DXF**
- **Fast mode for creation of polygons**
- **Importation of Geotic**
- **Create new section from the current view**
- **Licenses management with hardware key (USB dongle)**
- **Creation of intervals with the geology**
- **Creation of surface from the intervals or geoline**
- **Display the extent of the global grid**
- **Management of the text size (grid and hole name)**
- **Image projection on a surface**
- **Creation of planified hole**
- **And much more...**