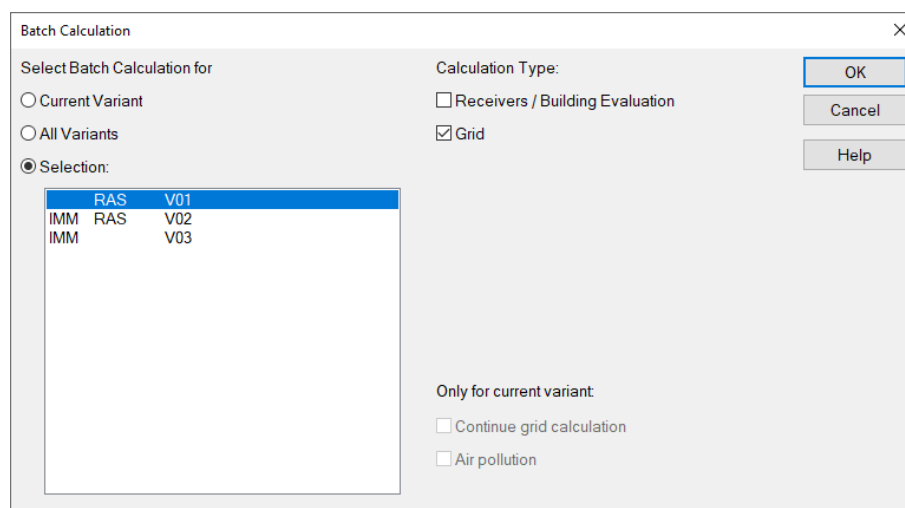


## New features of CadnaA 2025

New features of *CadnaA 2024 MR1* can be found [here](#).

### Features

- New import *GeoTiff DTM* enables direct import of elevation data from GeoTiff files. Available import options are:
  - Import just every N<sup>th</sup> point (horizontal / vertical)
  - Store height points as cluster
  - Import only section
  - Thin out height points
  - Transformation
- Import format *Ascii-Grid DTM* now includes an additional option to thin out height points? to simplify the DTM during import.
- Compact Protocol: Outputs a protocol with one line per combination of source and receiver, summarizing the effective corrections and attenuations. For extended sources, all rays and for spectral sources, all frequencies are consolidated. Export formats include txt and html.
- New menu *Calculation | Batch | Batch Mode* to activate or deactivate batch mode in the current CadnaA instance.
- New menu *Calculation | Batch | Select Batch Calculation* to define calculations to be performed in batch mode (previously set via CNABATCH text block). This function also allows to define calculations for a customized selection of variants.



- In the menu *Options | Appearance*, an ID and description can now be assigned to each layer for improved identification.
- Selected objects can be moved in 10 cm increments along the x-axis (← →) or y-axis (↑ ↓) using the arrow keys while holding the CTRL key. Adding the SHIFT key increases the increment to 1 m.
- The function *Break Lines via Modify Objects* can now be applied exclusively to either active or inactive objects.
- At *File | Import | Options*, a checkmark now indicates when a transformation is set.


Transform... ✓

- Migration assistant RLS90 → RLS19: When *Attributes per Variant* are used in road objects, all variants are now considered (previously, only the currently selected variant was migrated).
- The rendering of polygons with a large number of points can now be interrupted by pressing ESC.
- New train classes for NMPB-08 according to the publication of 13.04.2023.
- New attributes SZ, WZ, and WOD have been introduced for approach and descent segments for aircraft noise.
- Lua: New functions `cnaobj.set(<ATTRIBUTE>, <VALUE>)` and `cnaobj.get(<ATTRIBUTE>)` enable writing and reading attributes, including variant-specific syntax such as “DTV@V2”.
- CadnaA installation files are now signed.
- When using the protocol with an unsaved .cna file, CadnaA now uses a temporary directory for the protocol file (previously resulted in an error requiring the .cna file to be saved first).

### Calculation methods

- New aircraft noise standard “DIN 45689 - Determination of aircraft noise immission at airports” implemented.
- ISO 9613-2 (2024): Calculation for wind turbines is now supported via the settings specified in Appendices D.3 and D.5 within the calculation configuration.
- Adjustment to the implementation of chimney directivity of ISO 9613-2 (2024) Appendix B were made to correctly calculate the angle  $\vartheta$  for  $z_R > z_S$ . Correction of formula B.1 to  $\vartheta = 90^\circ + \arctan\left(\frac{z_S - z_R}{d_p}\right) - \arcsin\left(\frac{d}{2r}\right)$ .

### Bug Fixes

- The checkbox for directivity in industrial sources is now correctly updated when stepping through objects using -> or <-. 
- Lua: The attribute H\_ATT is now available for point sources.
- Stability improvements have been made in the ObjectTree.
- Fixed a bug where for example LP2@SOF500 incorrectly returned the LP1 value for LP2 to LP4.
- Newly created HJ24 rail objects are now included in the calculations.
- In the table *ObjectTree | Sound Power Level*, the object's sound power levels of Master were always displayed when using attributes per variant. The issue is now resolved, and the selected variant's sound power levels are shown.
- Errors in text field calculations, for example when using `$(ObjAtt, 02000000, LP1@V2-LP1@V1, 1, 0.500)` have been corrected.
- Fixed an issue where the first and last points were duplicated when using *Parallel object* for area objects (e.g. area source), leading to consistency warnings.
- Resolved issues where airport, aircraft groups, and flight paths were not properly imported from QSI AzB files.
- Fixed incorrect export of STRO\_ID and NO\_K1 (related to sonRoad18) in .shp files for road objects.

- Bugfix for the import of CityGML files (explicitly when importing files with „lod2TerrainIntersection“).
- Attribute STYPI for sound levels now returns value of type integer (before string).

#### **DataKustik Launcher**

- DataKustik Launcher installation files are now signed.
- Adjustments were made to eliminate false-positive warnings from antivirus software in earlier versions.
- Specification of installation paths for CadnaA/R/B is now more tolerant, allowing either the installation folder or the .exe to be used.

## New features of CadnaA 2024 MR1

### Features

- New option “Check MULTISEL” for the function “Connect lines” to execute the action only for objects which are part of the current multi-selection.
- When finishing the input of an object while pressing the ALT key, a default object can now be created (instead of a copy of the last object in the object table)
- 3D reflectors are now displayed in the 3D view as a coplanar surface (instead of a triangulation as before). This representation corresponds to the geometry taken into account in the calculation.

### Bug Fixes

- ISO 9613-2 (2024): Critical Bugfix for the calculation of Abar occurring in case of negative path differences in combination with larger distances.
- Fixed a crash when using "Generate Report" (more specifically when exporting geometry tables or number of trains).
- Fixed a bug where the facade points were invalidated when deactivating / activating already calculated building evaluations.
- Bugfix for the calculation of  $L_{max}$  using the Nordic Prediction Method in combination with the use of “Attributes per variant”
- When inserting screenshots in CadnaA (as a symbol), the left / right border was displayed incorrectly by a few pixels. This is now corrected.