



Release Notes BREEZE CALPUFF 2.3

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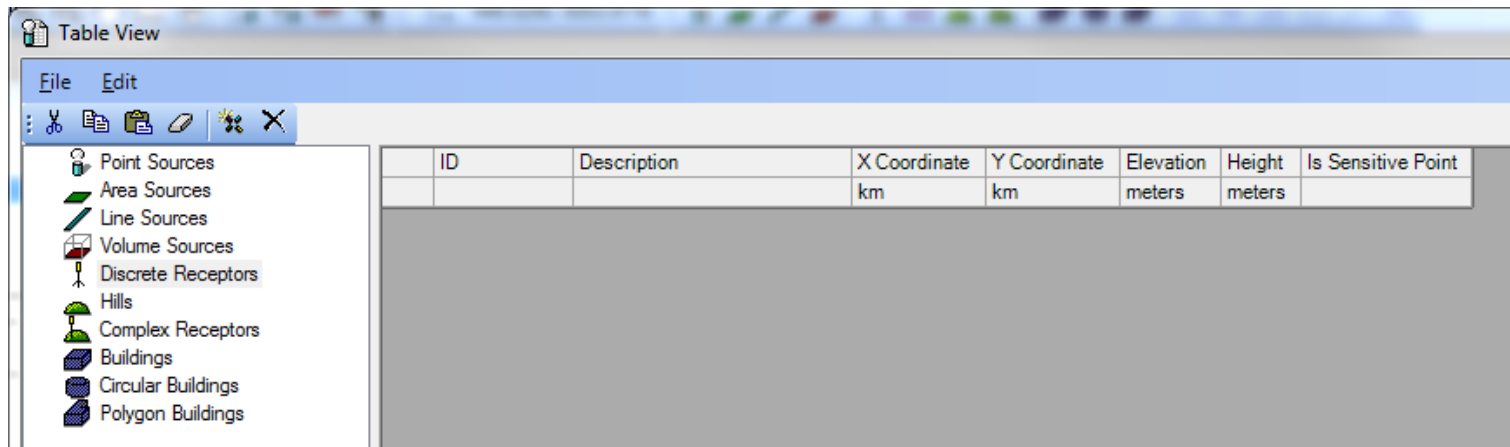
BREEZE CALPUFF 2.3

Release Notes

What's New in 2.3

- Incorporated the latest U.S. EPA-approved version of the CALPUFF modeling system:
 - CALPUFF version 5.8.5, level 151214
 - CALMET version 5.8.5, level 151214
 - CALPOST version 6.221, level 080724
- Incorporated one of Exponent's latest versions of the CALPUFF modeling system (Version 6):
 - Updated CALMET from version 6.334 to version 6.4.0
 - Updated SMERGE from version 5.661 to version 5.7.0
 - Updated CALSUM version 1.4 to version 1.5.0

- Updated map control to feature significant improvements to the map view including:
 - Added support for base map image size of 60 MB or more depending on the hardware
 - Updated projection form to include coordinate system with more projections
 - Added more accuracy on coordinate conversion
 - Improved the performance speed for the map view
 - Removed the unnecessary projection settings when importing shape files
- Added **Is Sensitive Point** option in CALPUFF Table View for discrete receptors



- Added sorting for model objects in CALPUFF Table View including sources, receptors, and buildings

ID	Description	X Coordinate km	Y Coordinate km	Stack Height meters	Elevation meters	Diameter meters	Exit Vel. m/s	Temp. K	Sigma-y meters	Sigma-z meters	Flux Factor	Platform height meters
1	3O33R001	437.3168	4969.6478	0	0	0	0	0	0	0	1	0
2	3O33R002	446.9073	4960.6478	0	0	0	0	0	0	0	1	0
3	3O33R003	456.4978	4960.6478	0	0	0	0	0	0	0	1	0
4	3O33R004	466.0883	4960.6478	0	0	0	0	0	0	0	1	0
5	3O33R005	475.6788	4960.6478	0	0	0	0	0	0	0	1	0
6	3O33R006	485.2693	4960.6478	0	0	0	0	0	0	0	1	0
7	3O33R007	494.8598	4960.6478	0	0	0	0	0	0	0	1	0
8	3O33R008	504.4503	4960.6478	0	0	0	0	0	0	0	1	0
9	3O33R009	514.0408	4960.6478	0	0	0	0	0	0	0	1	0
10	3O33R00A	523.6313	4960.6478	0	0	0	0	0	0	0	1	0
11	3O33R00B	437.3168	4969.1035	0	0	0	0	0	0	0	1	0
12	3O33R00C	446.9073	4969.1035	0	0	0	0	0	0	0	1	0

- Added a feature to import grid settings from other project files in CALMET

Grid Settings

Origin (SW corner)

X coordinate km

Y coordinate km

Size

X cells

Y cells

Z cells

Spacing km

Heights

Height meters
1
2
3
4
5
6
7
8
9
10

Import grid parameters from MAKEGEO

OK Cancel Help

- Added and modified some recommended default values for some modules in order to correct archived input files when the corresponding Exponent executable are installed
- Added sensitive exceedance violations in CALPOST
- Allowed remote updating of USB hardware key unlocking system
- Generated bln file for buildings to enable users to directly use the file in Surfer®
- Added warning messages in case of errors in the input for SMERGE, CALMET, and MAKEGEO module
- Added an option to change units from Mass to Odor in CALPUFF
- Added the function to save plot settings in BREEZE 3D Analyst
- Changed the suffix of SMERGE output file from .srf to .sgf to avoid confusion with Surfer files
- Updated ComponentOne to version 20151
- Made UI change of POSTUTIL "Recompute HNO3/NO3 Partition"
- Added a column to list the numbers of every object automatically in CALPUFF Table View form

- Added elevation of receptors in the CALPOST Summary Results table

The screenshot shows the BREEZE CALPOST software interface. The 'Data' window is open, displaying three tables of results. The left sidebar shows a tree view of reports, including 'Results summary', 'Sensitive Exceedance Summary', 'Sensitive Maximum Table', 'Sensitive Exceedance Violations', and 'SO15S1C.CSL'.

Top50 pollutant (//GROUP1/ASPEC) concentration

Receptor location	UTM		Elevation(m)	Concentration	Date	Grid type
	X(km)	Y(km)			YYYYMMDDHH	

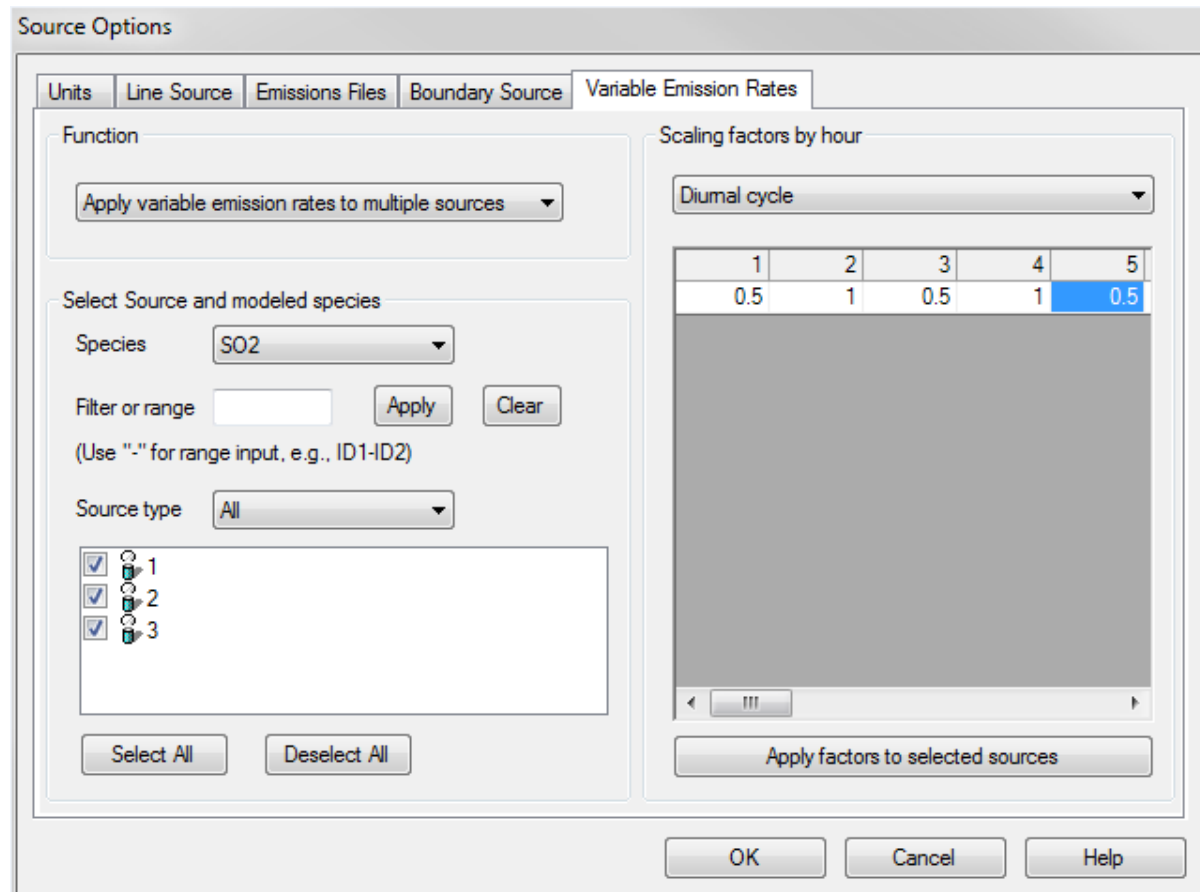
Top(//GROUP3/NTOP) pollutant (//GROUP1/ASPEC) concentration

Receptor location	UTM		Elevation (m)	Concentration	Date	Rank	Average time	Grid type
	X(km)	Y(km)			YYYYMMDDHH			

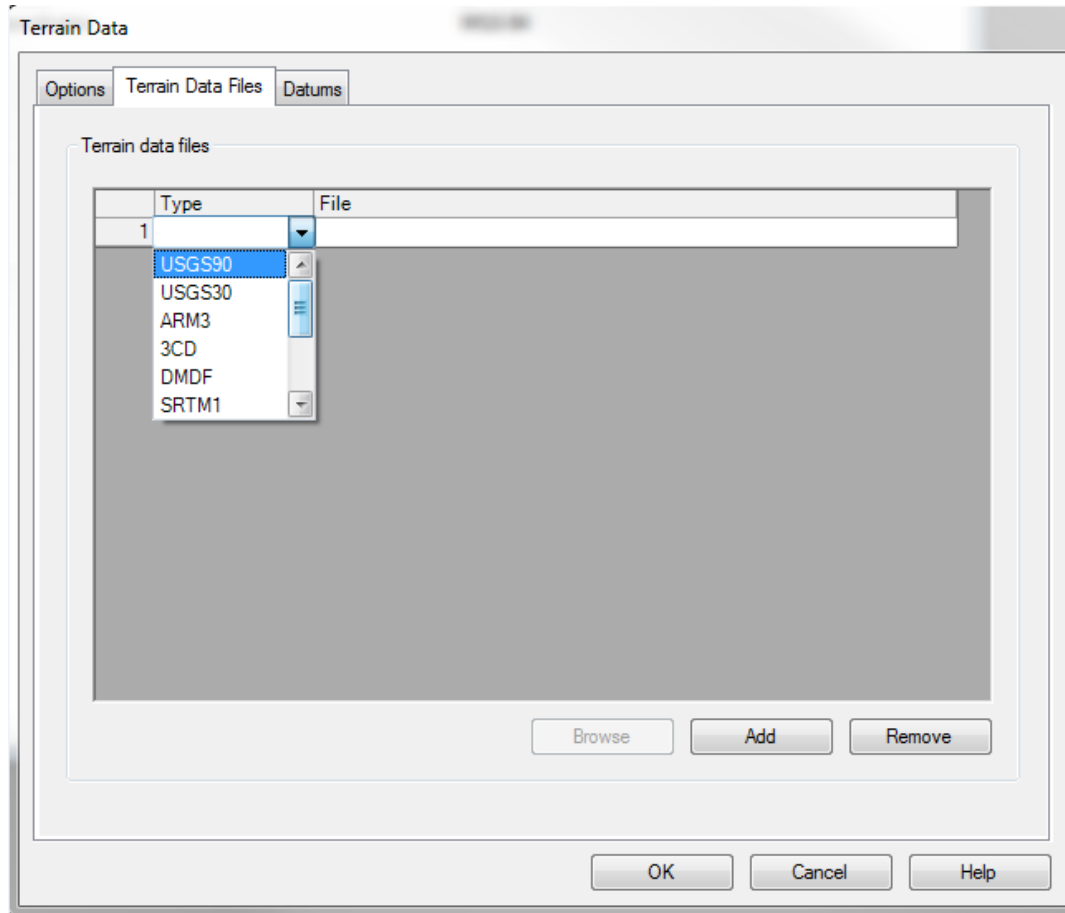
Top50 pollutant NMHC concentration (ug/m3) 1 HOUR**

Receptor location	UTM		Elevation(m)	Concentration	Date	Grid type
	X(km)	Y(km)			YYYYMMDDHH	
(0, 785)	12.500	13.394	0	9.4424E+01	2009010910	D
(0,1111)	11.500	12.394	0	8.4785E+01	2009010910	D
(0, 786)	12.500	13.894	0	8.2106E+01	2009010910	D
(0, 773)	12.000	13.394	0	8.0381E+01	2009010910	D
(0,1099)	10.500	10.394	0	8.0044E+01	2009010910	D

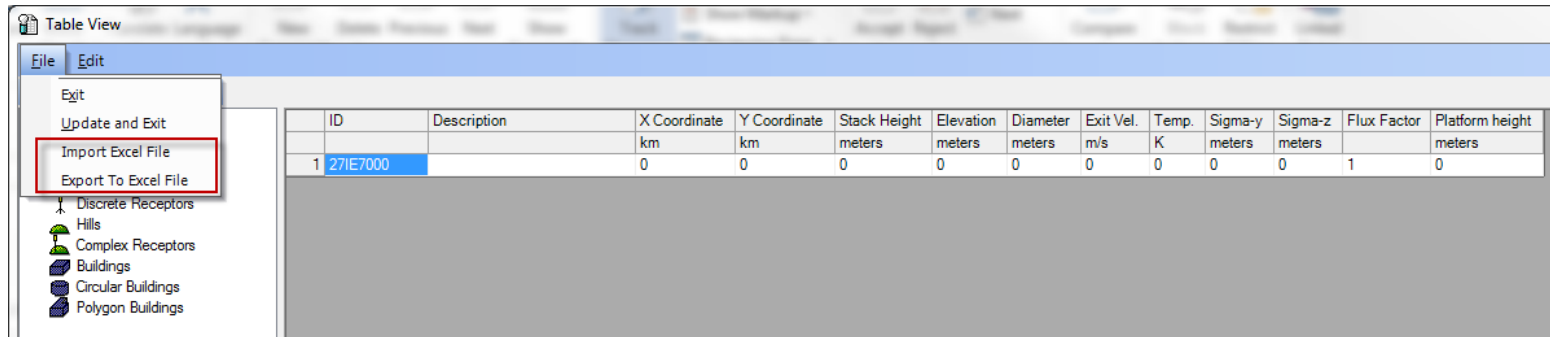
- Added a Variable Emission Rates Tab in CALPUFF source options to allow users to set variable emission rates for multiple sources



- Added a column to label a sensitive receptor in CALPUFF Table View form
- Added a dropdown list to select terrain type in MAKEGEO and CALPUFF



- Added a function to automatically set a default output file name when creating a new project
- Incorporated the ability to import and export excel files in CALPUFF Table View



- Added support for additional terrain format suffix
- Added coordinate converter in MAKEGEO tools menu

Bug Fixes

- Fixed a bug that caused the loss of description information after saving in certain BREEZE CALPUFF versions
- Fixed a bug that asked the user to enter Map Manager after importing an image
- Fixed a bug that caused the value in sensitive maximum table to be set to zero in CALPOST when the concentration was very small
- Fixed a bug that caused the plot path to not be defined when only Peak value time series was selected
- Fixed an issue that caused nothing to be displayed in Result Summary when "Run length averages" was selected
- Fixed a bug that caused the memory to overflow and the value in sensitive maximum table to display as infinity when the concentration file was too large
- Fixed the error when importing or pasting data from Excel® file to Table View in CALPUFF
- Changed "Source group" to "Species group" in CALPUFF Input-Species settings
- Fixed a bug that caused buildings to be lost and not display when reopening cpi file
- Fixed a bug that caused Elevation value in SMERGE to be automatically overwritten

- Fixed a bug that prevented users from generating a dongle license request file
- Fixed a bug that caused emission rates to be automatically overwritten by incorrect values when deleting a pollutant in CALPUFF
- Fixed a bug in CALPOST result summary that caused non-numerical values to be displayed
- Fixed a bug that prevented users from copying and pasting variable emissions in data table
- Fixed a bug that prevented users from creating polygon building via drawing in map window
- Fixed a bug that prevented users from deleting temporary folder after running BPIP in CALPUFF
- Fixed a bug that prevented users from unchecking “display input landuse properties tab” in MAKEGEO once it was checked
- Fixed a bug that prevented users from changing the split number of input categories in MAKEGEO land use form
- Fixed a bug in the Spanish operating system that prevented a number string using the format of `.[number]`, such as `.4`, to be converted to `0.4` causing the application to crash
- Fixed a bug that prevented user-defined length average for sensitive receptor from being displayed in sensitive receptor maximum

- Fixed a bug in CALPOST that prevented the sensitive maximum table from being opened if users did not open Result Summary first
- Fixed a bug that prevented users from showing CALPOST results under 64-bit system if it was not run as an administrator
- Fixed a bug that prevented CALPOST results from being updated when a new .CPI file was opened
- Fixed a bug that prevented users from using the clear function in the table view

Known Issue

- If the run length average is longer than 9999 hours, the run length average results cannot show in Results Summary since the maximum supported number is 9999 according to CALPUFF Fortran code. The results can only be found in the .CSL file.