



Release Notes BREEZE AERMOD 7.9

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BREEZE AERMOD Version 7.9 Release Notes

What's New in 7.9

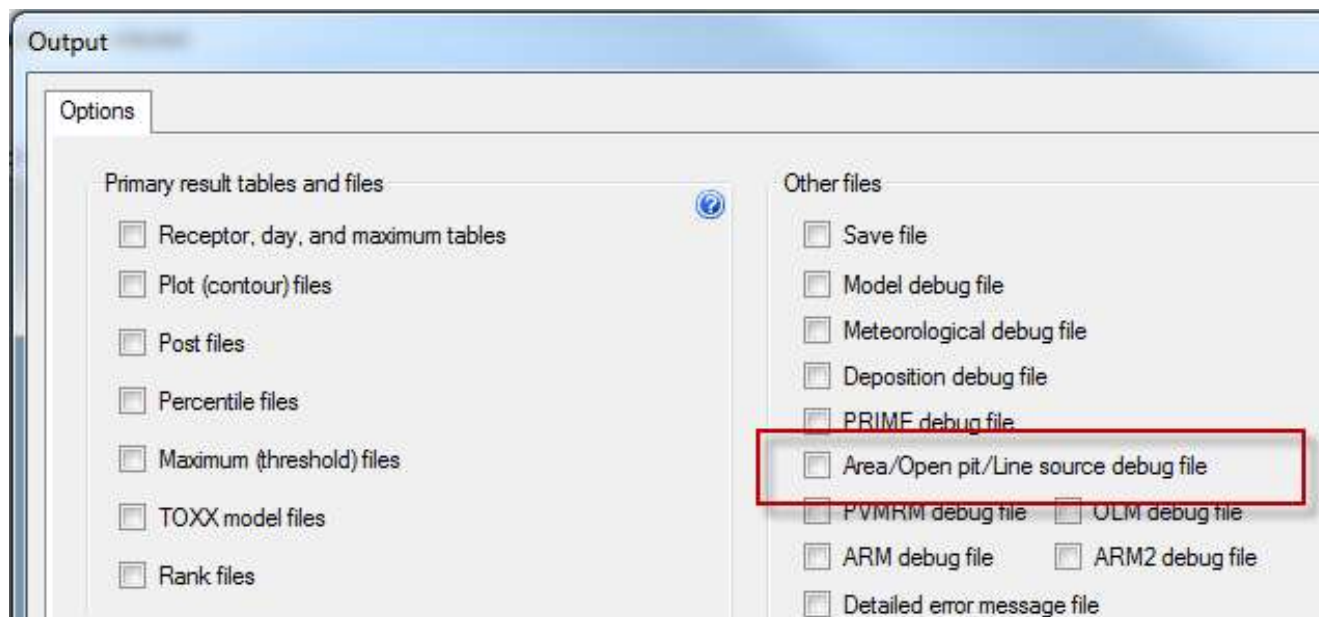
- Integrates the most recent U.S. EPA AERMOD version 14134, released on May 16, 2014, including high-speed parallel and BREEZE-enhanced versions of the new executable

The screenshot shows the 'Control' dialog box for BREEZE AERMOD. It has three tabs: 'Main Options', 'Other Options', and 'Multi-year'. The 'Main Options' tab is active. Under 'Titles (2 lines)', there is a text box containing 'NO TITLE SPECIFIED'. Under 'AERMOD executable', there are two rows of radio buttons: 'Use EPA' (selected) and 'Use Parallel' (unchecked) in the first row; 'Use BREEZE' (unchecked) and 'Use Parallel' (unchecked) in the second row. Below this is a 'Version' section with a red border, containing a list of radio buttons: '14134 (recommended)' (selected), '13350', '12345', '12060', '09292', and '07026'.

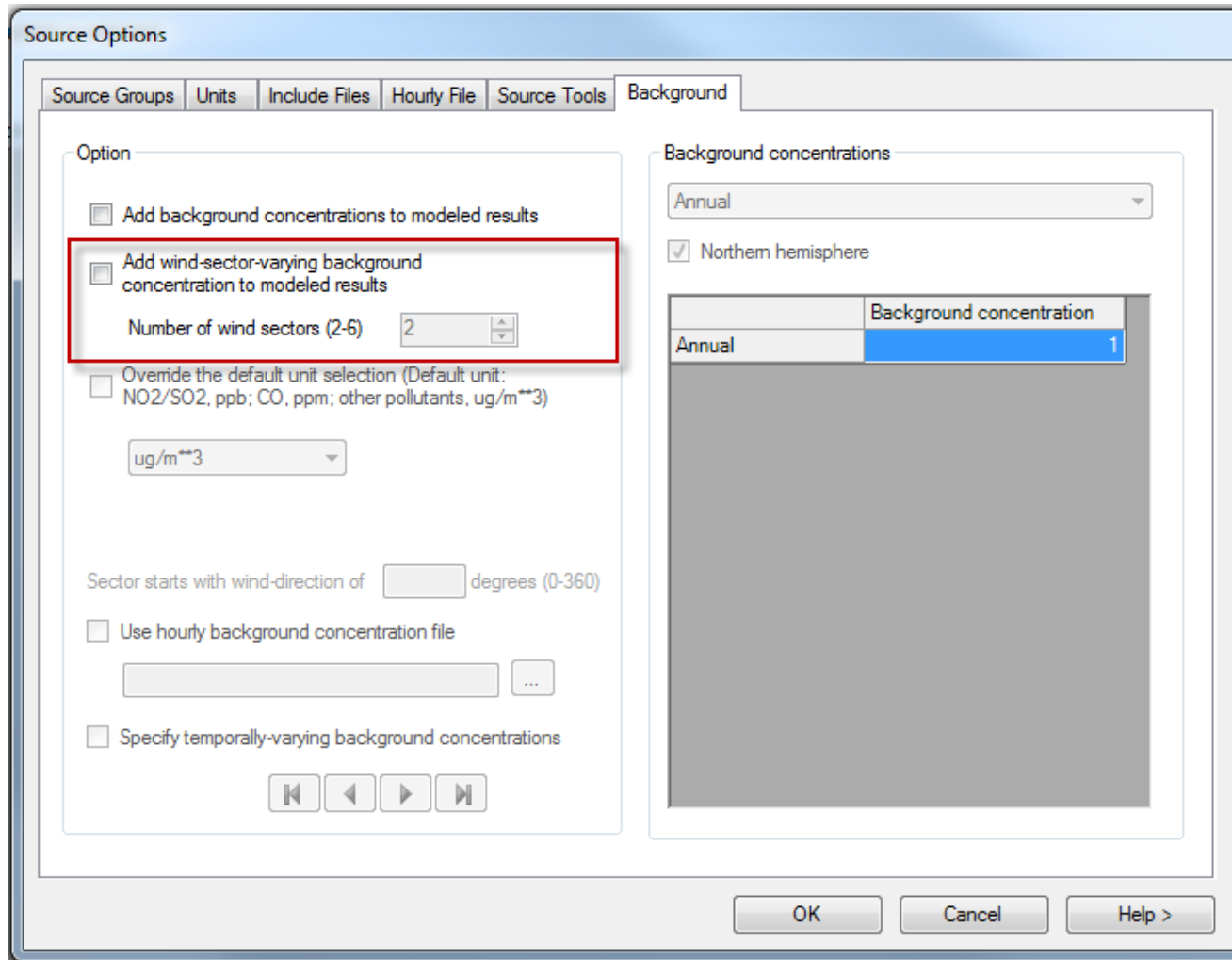
- Features an option to change the processing of 1-hour NO₂, 1-hour SO₂, and 24-hour PM_{2.5} results, depending on whether modeling is being done for the U.S. NAAQS standards or some other standard

The screenshot shows the 'Control' dialog box with the 'Main Options' tab selected. The 'Titles (2 lines)' field contains 'NO TITLE SPECIFIED'. Under 'AERMOD executable', 'Use EPA' is selected. Under 'Pollutant', 'NO2' is selected. A checkbox labeled 'Disable the special analysis for SO2, NO2 or PM25 NAAQS' is highlighted with a red box.

- Introduces an Area/Open pit/Line source debug output file to allow users to create and examine separate debug files containing the calculations of concentration for Area, Open pit, and Line sources



- Includes the wind-sector-varying background concentration option



- Includes wind-sector-varying ozone concentration option

Control

Main Options Other Options Multi-year NO2 / NOx Conversion

Ozone background concentrations

Wind-sector-varying background option Number of wind sectors (2-6) 2

Sector 1 of 2

Sector starts with wind-direction of 0 degrees (0-360)

Method Single background concentration

Ozone file ... Override default (ug/m**3) unit ug/m**3

Concentration 0 Override default (ug/m**3) unit ug/m**3

Concentrations Set temporally-varying background concentrations Override default (ppb) unit ppb

Ozone options

Use Ozone Limiting Method (OLM)

Use Plume Volume Molar Ratio Method (PVMRM)

Calculate increment consumption with PSD credits (Beta test option)

In-stack NO2/NOx ratio

Override default in-stack NO2/NOx ratio

Ratio

NO2/NOx equilibrium ratio

Override default NO2/NOx ambient equilibrium ratio

- **Upgrades MPICH2 libraries for parallel executable to MPICH2 1.4.1p1**

 **Note**

If you have previously worked with BREEZE Parallel AERMOD locally using MPICH2 1.2.1, you will need to uninstall MPICH2 1.2.1 and install MPICH2 1.4.1p1. Otherwise, BREEZE Parallel AERMOD won't work in the new BREEZE AERMOD. After you successfully install BREEZE AERMOD 7.9, please go to Home → Others → BREEZE AERMOD Parallel Installation for instruction.

- **Displays emission rates in a consistent format for all pollutants simulated in Multi-Scenario Processor mode**

- **Includes Sort function for data in Data tab**

- **Preserves compatibility with U.S. EPA AERMOD versions 13350, 12345, 12060, 09292, and 07026**

Bug Fixes:

- EPA line source was not displayed properly in 3D Analyst.
- The station number and year for onsite meteorology were not loaded properly.
- AERMAP could not be run if there is only buildings but without sources in BREEZE AERMOD.
- Reports tab displayed a problematic input summary table after BRMS results were merged.
- Some debug output files were not collected and zipped into .amz result file.
- Some input files with certain RECTABLE high values were not loaded properly.

Known Issues:

- When the multi-year option is enabled in the Control Options, subsequent years must be run immediately after prior years in order properly read the output files.
- Some USB Hardware Keys (dongles) for multi-core licenses of AERMOD that were issued for use with the 11103 and earlier executables will not be compatible with the most recent editions of the AERMOD Parallel and BREEZE Parallel executables. These keys may need to be updated; please contact Support with related questions.
- When using the click/drag interface to add rectangular objects in the Map tab, in some cases the orientation of the object will "flip", requiring the user to manually move it to the originally intended position. It is recommended that users begin drawing all rectangular objects in the bottom left corner of the object.
- Event runs must be executed immediately after the corresponding standard AERMOD run.