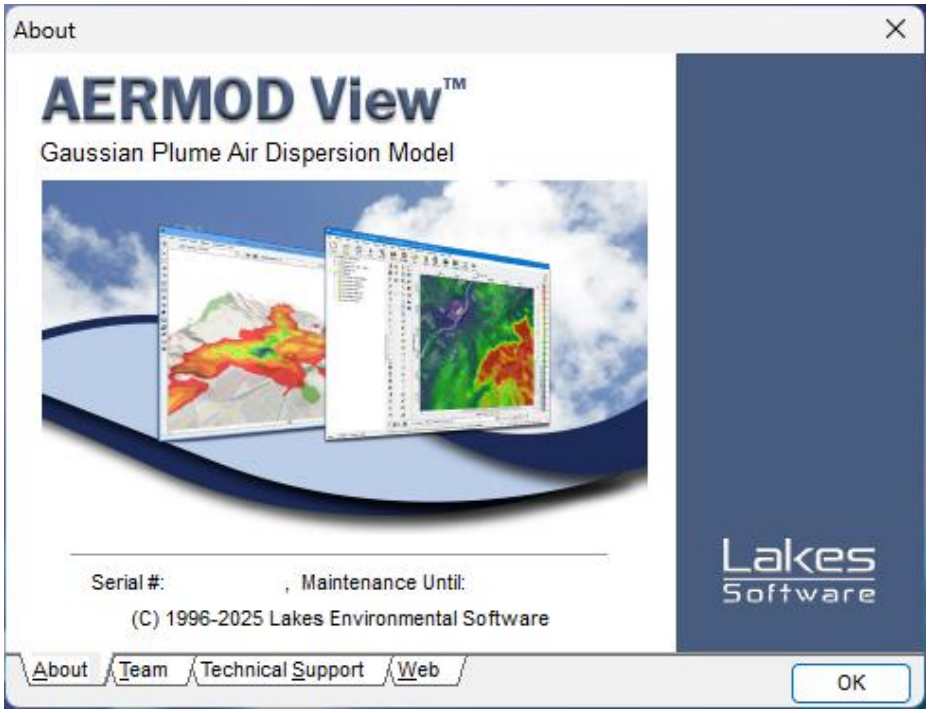
AERMOD View™

Gaussian Plume Air Dispersion Model - AERMOD

Release Notes

Version 13.0



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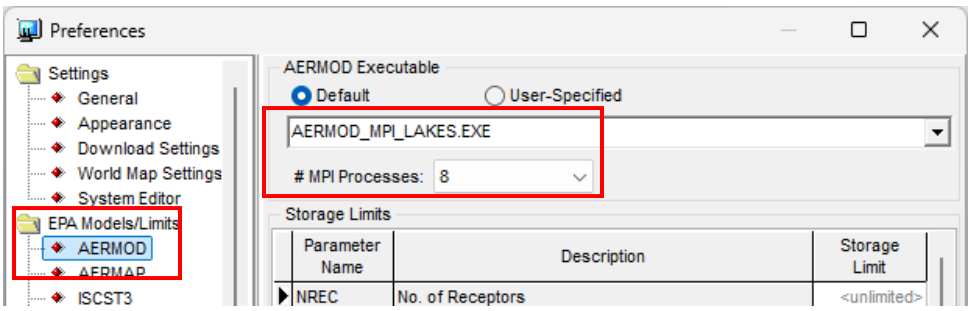
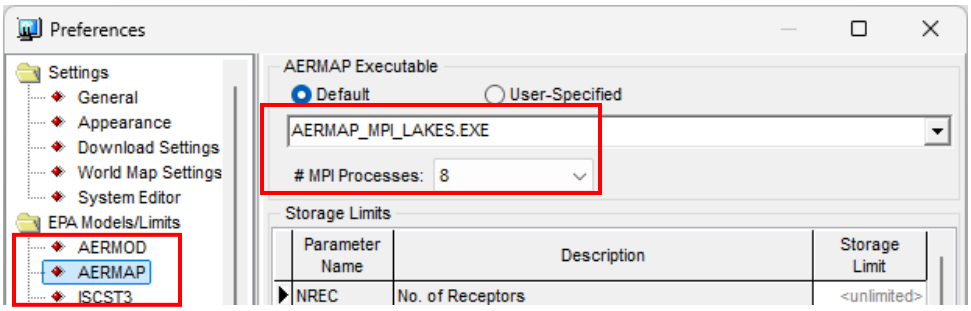
AERMOD View™ Version 13.0.0

Release Notes

January 29, 2025

New Features

Topic	Feature Description
AERMOD	**Latest Release of U.S. EPA AERMOD Model Available – Dated 24142** The following U.S. EPA Models were released on November 20, 2024 and are incorporated into **AERMOD View Version 13.0**: 1. AERMOD.EXE is the latest version 24142 (32-Bit Version) 2. AERMOD_24142_X32.EXE – The same as above (32-Bit Version) 3. AERMOD_24142_X64.EXE – 64-Bit Version See the Model Change Bulletin for a list of changes and bug fixes: https://gaftp.epa.gov/Air/aqmg/SCRAM/models/preferred/aermod/aermod_mcb18.pdf
AERMOD MPI	**New Version of Lakes AERMOD MPI 24142 (Parallel Version)** A new version of the Lakes AERMOD MPI model for the U.S. EPA Model Version 24142 is now available (AERMOD_MPI_LAKES_24142.exe). The installation includes 64-bit and 32-bit versions. You can select this model under the **Preferences** dialog. **Note:** AERMOD_MPI_LAKES_24142.EXE or AERMOD_MPI_LAKES.EXE will run the latest version of the AERMOD model (24142) in parallel mode using up to a maximum of 8 cores. 

Topic	Feature Description
AERMAP	**Latest Release of U.S. EPA AERMAP Model Available – Dated 24142** The following U.S. EPA Models were released on November 20, 2024 and are incorporated into **AERMOD View Version 13.0**: • AERMAP.EXE is the latest version 24142 (32-Bit Version) • AERMAP_24142_X32.EXE – The same as above (32-Bit Version) • AERMAP_24142_X64.EXE – 64-Bit Version See the Model Change Bulleting for a list of changes and bug fixes: https://gaftp.epa.gov/air/aqmg/scram/models/related/aermap/aermap_mcb5.pdf
AERMAP MPI	**New Version of Lakes AERMAP MPI 24142 (Parallel Version)** A new version of the Lakes AERMAP MPI model for the U.S. EPA Model Version 24142 is now available (AERMAP_MPI_LAKES_24142.exe). The installation includes 64-bit and 32-bit versions. You can select this model under the **Preferences** dialog. **Note:** AERMAP_MPI_LAKES_24142.EXE or AERMAP_MPI_LAKES.EXE will run the latest version of the AERMAP model (24142) in parallel mode using up to a maximum of 8 cores. 
Terrain Processor	**Support for Single Pathway Runs in AERMAP** AERMAP 24142 allows runs to be conducted for **sources only** (i.e., projects with no receptors). Existing support for receptor-only runs still exists.

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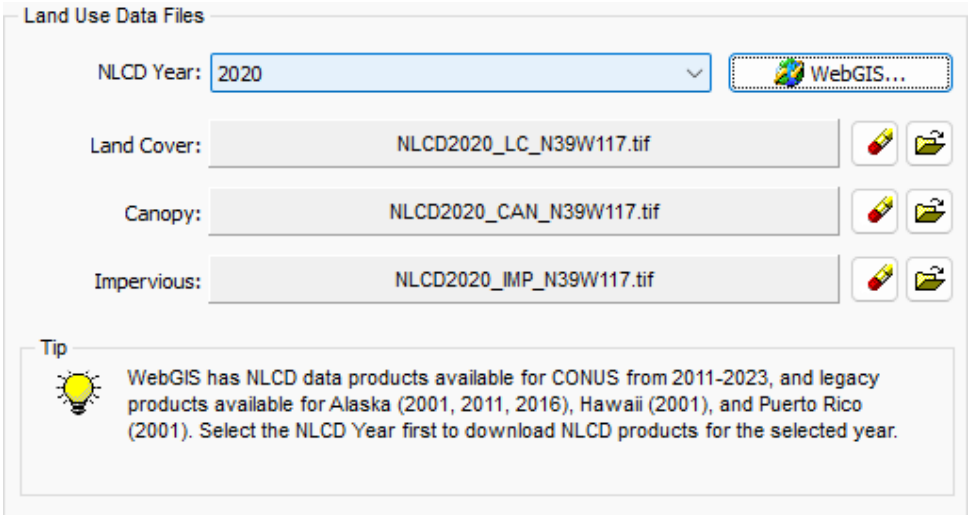
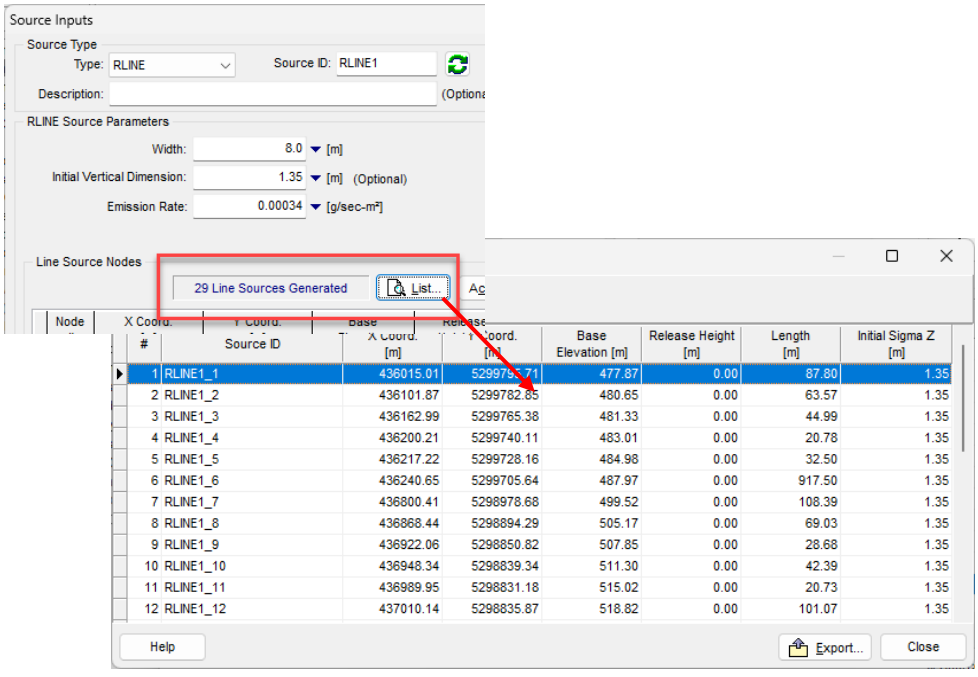
AERMET	**Latest Release of U.S. EPA AERMET Model Available – Dated 24142** The following U.S. EPA Models were released on November 20, 2024 and are incorporated into **AERMET View Version 13.0**: • AERMET.EXE is the latest version 24142 (32-Bit Version) • AERMET_24142_X32.EXE – The same as above (32-Bit Version) • AERMET_24142_X64.EXE – 64-Bit Version See the Model Change Bulleting for a list of changes and bug fixes: https://gaftp.epa.gov/Air/aqmg/SCRAM/models/met/aermet/aermet_mcb14.pdf
AERMET View	**Upper Air Pathway Improvements** Input settings on the Upper Air pathway of AERMET View have been improved based on NOAA's removal of the Forecast Systems Laboratory (FSL) radiosonde database. Modifications include: • Making NCEI's **Integrated Global Radiosonde Archive (IGRA)** the default **Format** selection • Expanded upper air **Station Database** including new global station information • Automated import of station coordinates for the input data file • Automated import of **Base Elevation** values from the new Station Database. **NOTE:** This parameter is **required** on the Upper Air pathway with the **24142** model release. • Added a project check to ensure the upper air Base Elevation is provided.
AERMET View	**Expanded List of Onsite & Prognostic Variables** The list of variables for the Onsite & Prognostic Pathways has been expanded to include single-level variables associated with overwater processing. The new parameters include: • TSEA – Sea surface temperature (°C) • ZDEP – Depth of sea surface temperature (m) • HWAV – Significant wave height (m) • TWAV – Significant wave period (m) • RDOW – Longwave downward radiation (watts/sq. meter)

Topic	Feature Description
AERSURFACE	**Latest Release of U.S. EPA AERSURFACE Tool Available – Dated 24142** The U.S. EPA released a new version of AERSURFACE on November 20, 2024 replacing the previous release (20060). See the Model Change Bulleting for a list of changes and bug fixes: https://gaftp.epa.gov/Air/aqmg/SCRAM/models/related/aersurface/aersurface_mcb4.pdf
WebGIS	**Enhanced NLCD Downloads for AERSURFACE** With AERSURFACE 24142 supporting the latest Annual NLCD data products from MRLC, WebGIS now has expanded data downloads of **land cover**, **percent canopy**, and **percent impervious** data files. For projects in the **continental United States**, WebGIS will download all three products for the years **2011-2021**. Land cover data only can be downloaded for **2022-2023**. Users can manually insert files for other product years that have been downloaded from the MRLC website. Legacy data is also available for **Alaska** (2016), **Hawaii** (2001), and **Puerto Rico** (2001). 

Topic	Feature Description
Control Pathway	**Updates to Regulatory Default Options (24142)** Following the promulgation of the latest update to the *Guideline on Air Quality Models (Appendix W to 40 CFR Part 51)*, the following model options have been elevated to AERMOD's regulatory default (**DFAULT**) settings: • **RLINE** mobile source type • **Generic Reaction Set Method (GRSM)** NOX to NO2 Tier 3 conversion method • Meteorology prepared using the **Coupled Ocean Atmosphere Response Experiment (COARE)** algorithms in AERMET for calculating marine / overwater boundary layer parameters. These options existed in prior releases of AERMOD View as non-default selections invoking the BETA model keyword.
Source Pathway	**Added Source Tables to the RLINE & RLINEXT Sources** The RLINE & RLINEXT Source Inputs dialogs now feature tables displaying the model input parameters for the generated sources along the user-drawn polyline. The tables can be exported to CSV format for easy QA.  | #	Source ID	X Coord. [m]	Y Coord. [m]	Base Elevation [m]	Release Height [m]	Length [m]	Initial Sigma Z [m]
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1	RLINE1_1	436015.01	5299795.71	477.87	0.00	87.80	1.35
2	RLINE1_2	436101.87	5299782.85	480.65	0.00	63.57	1.35
3	RLINE1_3	436162.99	5299765.38	481.33	0.00	44.99	1.35
4	RLINE1_4	436200.21	5299740.11	483.01	0.00	20.78	1.35
5	RLINE1_5	436217.22	5299728.16	484.98	0.00	32.50	1.35
6	RLINE1_6	436240.65	5299705.64	487.97	0.00	917.50	1.35
7	RLINE1_7	436800.41	5298978.68	499.52	0.00	108.39	1.35
8	RLINE1_8	436868.44	5298894.29	505.17	0.00	69.03	1.35
9	RLINE1_9	436922.06	5298850.82	507.85	0.00	28.68	1.35
10	RLINE1_10	436948.34	5298839.34	511.30	0.00	42.39	1.35
11	RLINE1_11	436989.95	5298831.18	515.02	0.00	20.73	1.35
12	RLINE1_12	437010.14	5298835.87	518.82	0.00	101.07	1.35

Topic	Feature Description
Output	**Support for Overlapping Flagpole Receptors** For projects containing overlapping receptors with unique heights above ground (flagpole heights), the following enhancements have been made: • Contours are based on the maximum concentration from the overlapping receptors. • Posting values only display the maximum concentration at a specific X,Y coordinate. • When exporting data from the **Plot File Grid View**, the Discrete Receptor ID will display the proper Group Name for each unique flagpole height.

Fixed Issues

Topic	Feature Description
Preferences	**Removed WordPad from System Editor Settings** The System Editor selection no longer includes MS WordPad following its removal from Windows 11 by Microsoft. The default editor is now MS Notepad. Users can still define third-party editors via the User-Specified option. 
Control Pathway	**NO2-Specific Option Cleared** The NOMINO3 keyword associated with the NO2 pollutant ID was not properly removed from the model input file (CO MODELOPT) if the pollutant ID was changed to a non-NO2 selection. This has been addressed.

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Topic	Feature Description
Source Pathway	**Paste Error When Copying Line Volume Sources** When existing Line Volume sources are copied, the paste function resulted in a “Key violation” error. This has been addressed.

Known Issues

Topic	Issue Description
AERMOD Model	**AERMOD System Bugs, Errata, and Related Guidance** The U.S. EPA now maintains a list on their website of known issues with the current modeling system. Users will find the list at: https://gaftp.epa.gov/Air/aqmg/SCRAM/models/preferred/aermod/AERMOD_System_Bugs_and_Related_Guidance.pdf
New Project Wizard	**No Spaces in Project Name with ISC** The ISCST3 and ISC-PRIME models are included in AERMOD for backwards compatibility purposes. Due to limitations in their code, these models will issue a fatal error if the project name contains spaces or special characters.

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