ISC-AERMOD View

Complete Air Dispersion Modeling System for AERMOD

Release Notes ISC-AERMOD View - Version 5.6.0

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Торіс	Feature Description
Models	US EPA AERMOD Model Update – Dated 07026 of Jan/26/07 The latest release of the US EPA AERMOD model (AERMOD.EXE) dated 07026 is incorporated into the ISC-AERMOD View Version 5.6. Several new options were incorporated into this EPA model update.
Models	US EPA AERMAP Model Update – Dated 06341 of Jan/09/07 The latest release of the US EPA AERMOD model executable (AERMAP.EXE) dated 06341 is incorporated into the ISC-AERMOD View Version 5.6. This AERMAP model version now supports the following new limits: NREC=50000 (Max Number of Receptors) NSRC= 5000 (Max Number of Sources) NNET=20 (Max Number of Cartesian and/or Polar Receptor Networks) IXM=2500 (Max Number of X-Coord. (Distance) Values Per Receptor Network) IYM=2500 (Max Number of Y-Coord. (Direction) Values Per Receptor Network) NDEM=MV*MH = 900 (Max Number of Digital Elevation MODEL(DEM) Terrain Data Files (MV*MH) MAXNOD=2500 (Max Number of Elevation Profiles within a DEM File)
	NARC = 50 (Max Number of Receptor Groupings ('ARCs') for EVALCART Keyword)
Models	US EPA AERMET Model Update – Dated 06341 of Jan/17/07 The latest release of the US EPA AERMET model executable (AERMET.EXE) dated 06341 is incorporated into the ISC-AERMOD View Version 5.6. This model update contains bug fixes and introduces a new parameter for station base elevation which was implemented in Aermet View Version 5.6.
General	Default Model The default model when creating a new project in ISC-AERMOD View is now AERMOD.



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Торіс	Feature Description
Control Pathway	Capped and Horizontal Point Source Releases The AERMOD model (dated 07026) supports capped and horizontal releases for point sources as a Non-Default BETA option. To use this option, you will need to select the Non-Default option and check the option for "Capped and Horizontal Stack Releases" as seen below.
	Control Pathway Wodel: AERMOD Pathway Pedatar / Averagin Regulatory Default Output Type Non-Default Options Provide Regulatory Default Output Type Non-Default Options Provide Provi
	Source Inputs Release Type: Type: POINT Source ID: STCK3 Release Type: Description: (Option) HORIZONTAL Image: Condinate (m) Source Location X Coordinate (m) 438423.55 VERTICAL Source Location X Coordinate (m) 5298725.11 Image: CAPPED HORIZONTAL Base Elevation (m) 0 0.0 (tt) Release Height (m) 10 32.81 (tt) Source Release Parameters Enission Rate [g/s] 2 15.9 (lb/hr) Gas Exit Temperature (K) 300 80.33 (F) Tip Stack inside Diameter (m) 1 3.28 (tt/s) Gas Exit Flow Rate [m*3/s] 7.85 277.22 (tt*3/s) Help Bemove 3 New E Qose



Торіс	Feature Description				
Control Pathway	Pollutant Type The AERMOD model (dated 07026) incorporates the following changes:				
	PM-2.5 NAAQS: This new option allows for modeling for PM-2.5 in accordance with the PM NAAQS. In summary, it consists of the following:				
	 Pollutant PM-2.5 24-hour and Annual Averages 8th highest value for 24-hr average 				
	PM10 – Pre 97 NAAQS: This option allows for modeling for PM-10 in accordance with the PM NAAQS. In summary, it consists of the following:				
	 Pollutant PM10 24-hour and Annual Averages 6th highest value for 24-hr average Single 5-year met data file 				
	PM10 – Pos 97 NAAQS: This option based on 4 th highest value for 24-hr average has been removed since this standard was vacated.				
	Control Pathway				
	Model: AERMOD Control Pathway Dispersion Options Dispersion Options (Flat) Nox to NO2 Terrain Options (Flat) Nox to NO2 Optional Files Averaging PM10 - Pre 97 NAAQS Person Obspersion Coefficient Event/Error Files Averaging PM10 - Pre 97 NAAQS Optional Files Person Optional Files Person Gas Deposition 3 Gas Deposition 3 Seasonal Categories Annual Averaging Time requires 1 year of met data. Image: Annual Averaging Time requires 1 year of met data. Image: Coptional Files				
	Help <u>Vervious</u> <u>Next</u> <u>Close</u>				



Торіс	Feature Description					
Source Pathway	Increased Number of Vertices for AREAPOLY and AREACIRC Sources With AERMOD model dated 07026, the maximum number of vertices for					
	area sources (AREAPOLY) is now allocated dynamically at runtime. The previous version of the model was limited to 20. AREACIRC can have a maximum of 50 but if user has defined an AREAPOLY in the same project, the number of vertices for AREACIRC					
	Source Inputs X Source Type Type: AREA POLY Source ID: PAREA1 Image: Control of the c					
	Help Remove 3 New B C Qose					
Source Pathway	Variable Emission Rates You are now able to specify variable emission factors up to 8 decimal places under the Variable Emissions section in the Source Pathway. Source Pathway Model AERMOD Building Downwash Source Summay Building Downwash Source Options Source Options Source Options Building Downwash Houry Emission Chiput Unit Houry Finission Factor is a multiplier of the emission rate you specified for the source By Wonth Houry For Season / Hour / Se By Wind Speed By Season / Hour / Season By Season / Hour / Season By Season / Hour / Season					
	Help Servicus Next S Close					



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Торіс	Feature Description				
Receptor Pathway	New Nested Grid Tool The Nested Grid tool allows you to automatically create a nested grid with several tiers of spacing, centered on a bounding rectangle that contains all your sources. This nested grid is in accordance with the Ontario MOE Reg. 419/05 regulation.				
	Application Toolbar Image: Converted Control Receptors Image: Converted Control Receptors Image: Convert C				
Output Pathway	Plotfiles Created from Threshold Violation Files Now when you create a Threshold Violation File (MAXIFILE), a plotfile is automatically created and saved to the same directory as the generated MAXIFILE (e.g., CONC10.MAX and CONC10_exceedance.PLT). Plotfiles (*.PLT) created from MAXIFILES (*.MAX) contain information on the number of times the specified threshold value was exceeded at each receptor location. If you open a project created in an older version of ISC-AERMOD View, this plotfile will be created as long as the MAXIFILE options are specified in the Output Pathway.				



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Торіс	Feature Description
	Image: Setting: Image: Setting: Setting: Image: Seting: Image: Seting:
Tools	MAXIFILE to PLOTFILE Converter The MAXIFILE Converter allows you to convert any Threshold Violation Files (MAXFILEs) from any external projects into PLOTFILES. Plotfiles created from MAXIFILES contain information on the number of times a specified threshold was exceeded at each receptor location.
	MAXIFILE to Plotfile Converter Convert Threshold Violation File (MAXIFILE) to PLOTFILE MAXIFILE: C: Project Attest.MAX C D C: Project Attest.pit D Convert Close



Торіс	Feature Description							
Tools	MAX The M in al t allowi withir hour Ontar be ex	TABLE AXTAE the ava ing you this u averag io MOE ported	Viewer BLE Viewer allable Maxin to better a tility to hig e predicted Reg. 419/ into a CSV	reads your I mum Value T analyze your hlight and di concentratio 05 guideline file that can	SC/AERMOD Tables withir results. A s scard the 8 ons in a sing s. The cont be opened	Output f your ou special op hours wit gle met ye ents of th in Excel.	ile an tput fi tion is th the ear, ac is gric	d displays le s included highest 1- ccording to d can than
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	THE MA	XIMUM 100	1-HR AVERAGE CONCE	NTRATION VALUES FOR	SOURCE GROUP: ALL -	Pacantar	Pacantar	
	#	Rank	Concentration	Date - Hour	X Coord [m]	Y Coord [m]	Туре	-
	▶ <u>1</u>	1	534.37665	1996/08/19 19:00:00	571710.81	4786548.00	DC	
	2	2	522.08624	1996/08/15 01:00:00	571710.81	4786548.00	DC	
	3	3	498.83978	1996/08/15 02:00:00	571720.50	4786548.00	DC	
	4	4	496.79102	1996/08/14 23:00:00	571710.81	4786548.00	DC	
	5	5	490.87643	1996/06/03 19:00:00	571710.81	4786548.00	DC	
	6	6	486.32965	1996/06/02 03:00:00	571720.50	4786548.00	DC	
	7	7	464.53049	1996/07/08 01:00:00	571730.19	4786410.00	DC	
	8	8	464.28134	1996/09/30 19:00:00	571720.50	4786548.00	DC	
	9	9	462.97162	1996/09/10 19:00:00	572000.50	4786301.50	DC	
	10	10	457.77994	1996/08/19 19:00:00	571720.50	4786548.00	DC	_
	MC)E Reg. 419/05	Discarded/Highest Valu	les	Discarded:	Highes	st:	1
		The MAXTA A special op	BLE Viewer allows you btion is included to extra	to export all the MAXTABI ct the maximum values acc	LEs within your Output Fil cording to MOE Reg. 419/	le into CSV files. 05. <u>Export</u>	Close	



Торіс	Feature Description					
Graphical Options	New Color Mappings Options for Discrete Cartesian Receptors You can now apply different colors and markers to Discrete Cartesian Receptors, making it easier to identify special receptors in your project These options can be accessed from the <i>Graphical Options</i> dialog, <i>Colo</i> <i>Mappings</i> panel for Discrete Cartesian Receptors.					
	Color Mapping Color Mapping Color Ramp Color Ramp Color Ramp Color Ramp Color Ramp Color Ramp Color Ramp Color Ramp Color Ramp Color Mapping Color Mapping Color By Attribute Color by Attribute Color Name Customize Colors Customize Colors Style Options Customize Colors Style Options Customize Colors Customize Colors.					



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Торіс	Feature Description
Batcher	Model Executable Check When specifying the model executable, Batcher now defaults to the Models folder and, in addition, performs a check to make sure the ISCAERView.exe is not accidentally selected.
	Model Executables Clear All Remove Add Executable ISCST3 Executables ISC-PRIME Executables AERMOD Executables Executable Model Description 1 d' Vakes Visc-aermodview/vnodels/vaermod.exe Tip Image: the executables with different storage limits. Use the optional description field as a reminder of what type of executable is specified and its limits. Help Close



Торіс	Feature Description				
Aermet View	New Station Elevation Parameter The new parameter "Station Elevation above mean sea level" was implemented in the Hourly Surface, Upper Air and Onsite Data tabs in Aermet View. This parameter was introduced by the US EPA AERMET dated 06341 and it is currently used by the model for estimating surface pressure from sea level pressure in case this parameter is missing from the surface met data in the TD-3505 format (ISHD). A default value of 100 meters is assumed if this optional elevation parameter is not specified. For any other surface met data format (e.g., CD-144, SAMSON, etc.), this parameter is ignored.				
	Acrmet View - [D:16. Project Management\Lakes_Small_Packages\ISC-AERMOD-View\ Image: Construction File Mode Data Data New Open Save Run Image: Construction On-Site Image: Construction Image: Construction<				



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Торіс	Feature Description
Aermet View	Version in AERMET Surface Files Every time the US EPA releases a new version of AERMET and AERMOD models, the model update version number is assigned to the header of meteorological surface data file (*.SFC) pre-processed by the AERMET model. When running AERMOD, the model checks for this version number and if incompatible it gives a fatal error message as shown below. For the Jan 2007 update release of the US EPA models, AERMOD will check for the Version: 06341. Pre-processing your surface and upper air met data files again using AERMET View Version 5.6 will produce new surface files containing the correct version number.
	■ TUTORIAL.SFC - WordPad ■ TUTORIAL.SFC - WordPad ■ Ele Edit Yew Insert Format Help 47.633N 117.533W UA_ID: 00024157 SF_ID: 24157 0S_ID: 0 VERSION: 06341 86 1 1 1 -16.5 0.301 -9.000 -9.000 -999. 379. 136.2 0.120 2.00 1.00 3.60 181. 86 1 1 2 -2.9 0.068 -9.000 -9.999. 134. 8.9 0.120 2.00 1.00 1.50 128. 86 1 1 3 -999.00 -9.000 -9.999. -999.999.0 0.120 2.00 1.00 1.50 128. 86 1 1 4 -7.3 0.134 -9.000 -9.999. -999.999.0 0.120 2.00 1.00 3.60 13. 86 1 1 5 -16.5 0.301 -9.000 -9.900 -999.999.379. 136.5 0.120 2.00 1.00 3.60 13. 86 1 1 6 -7.3 0.134 -9.000 -999
	For Help, press F1 Interfield SFC - WordPad Interfield Sector Sect

