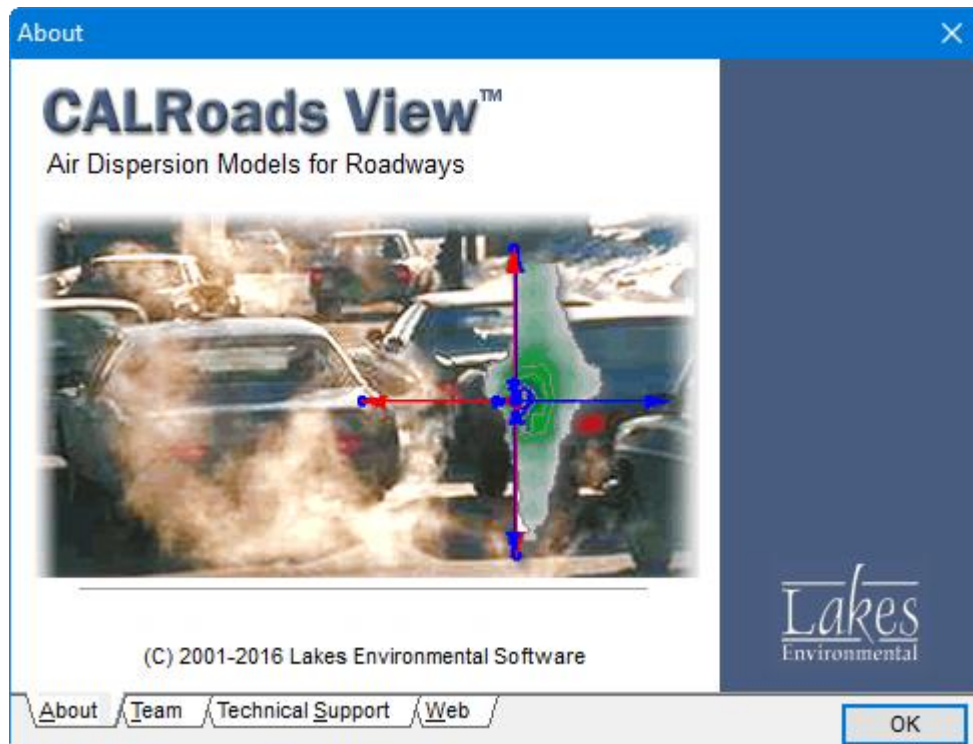


CALRoads View™

Traffic Air Dispersion Models – CALINE4, CAL3QHC, CAL3QHCR

Release Notes

Version 6.5



Lakes Environmental Software
Tel: (519) 746-5995 - Fax: (519) 746-0793
E-mail: support@webLakes.com
Web Site: www.webLakes.com

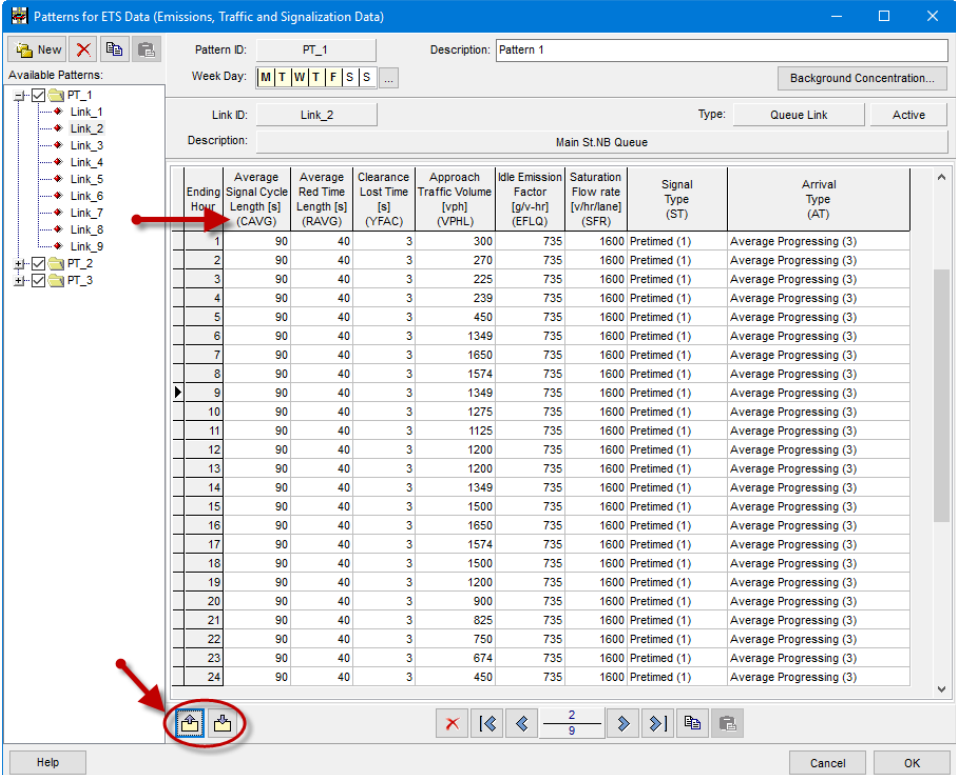


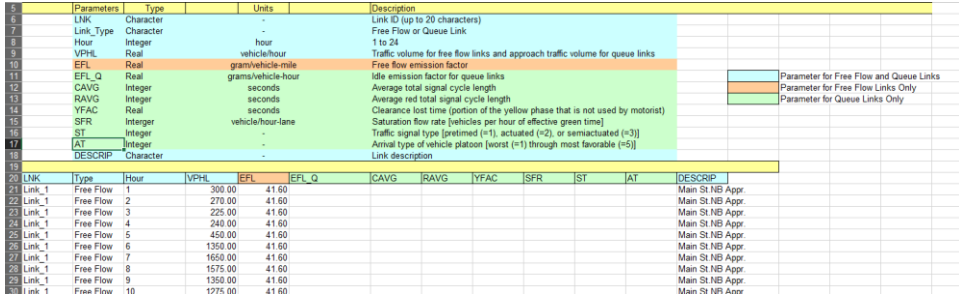
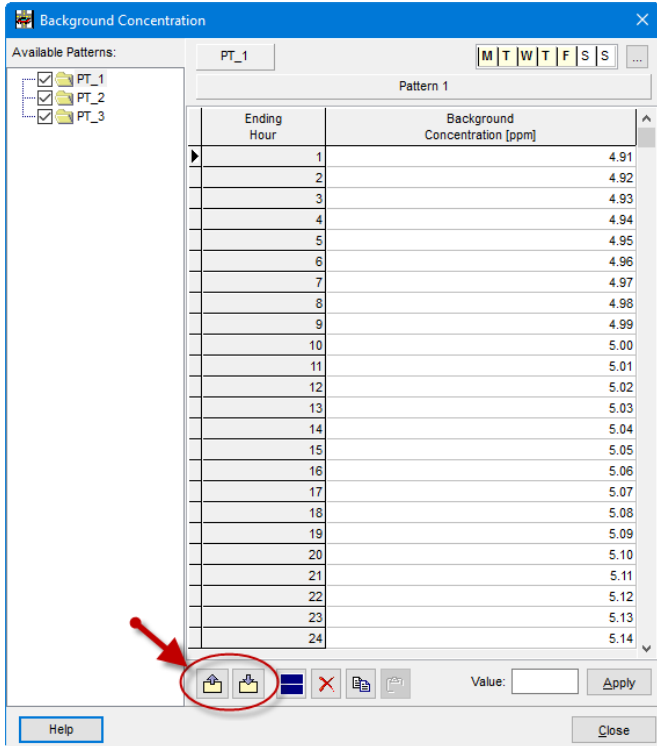
CALRoads View™ Version 6.5

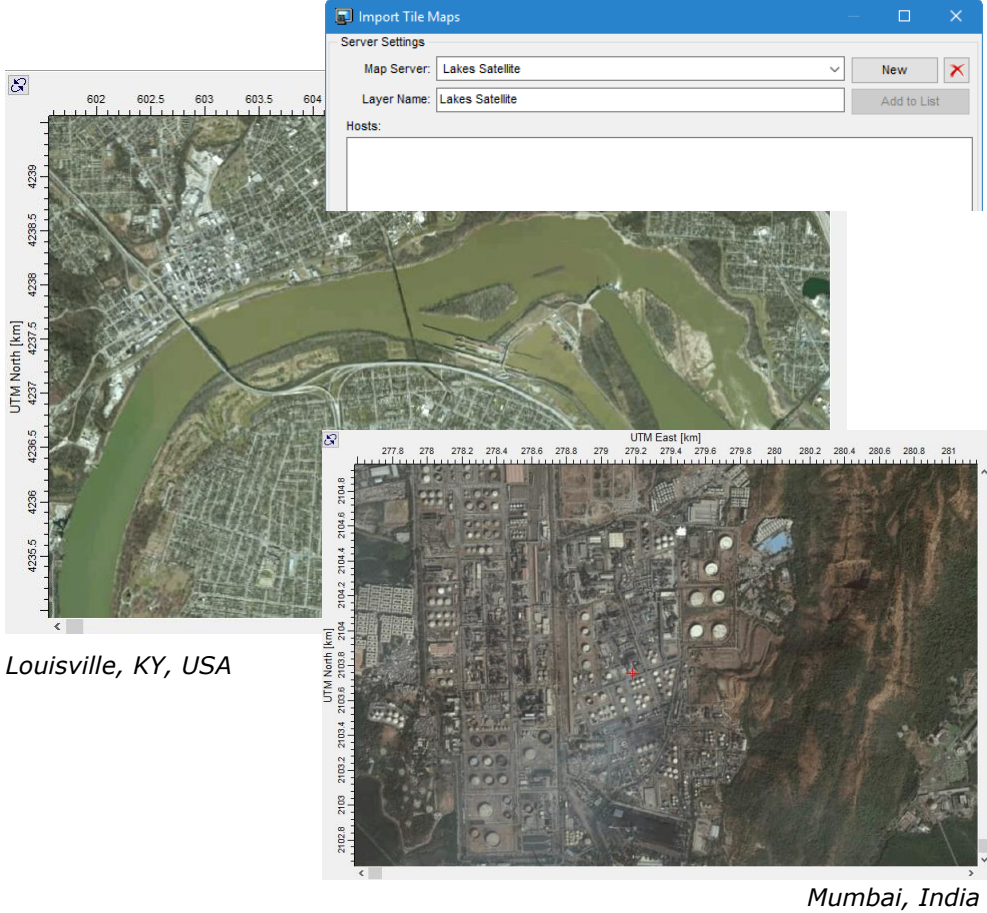
Release Notes



October 5, 2016

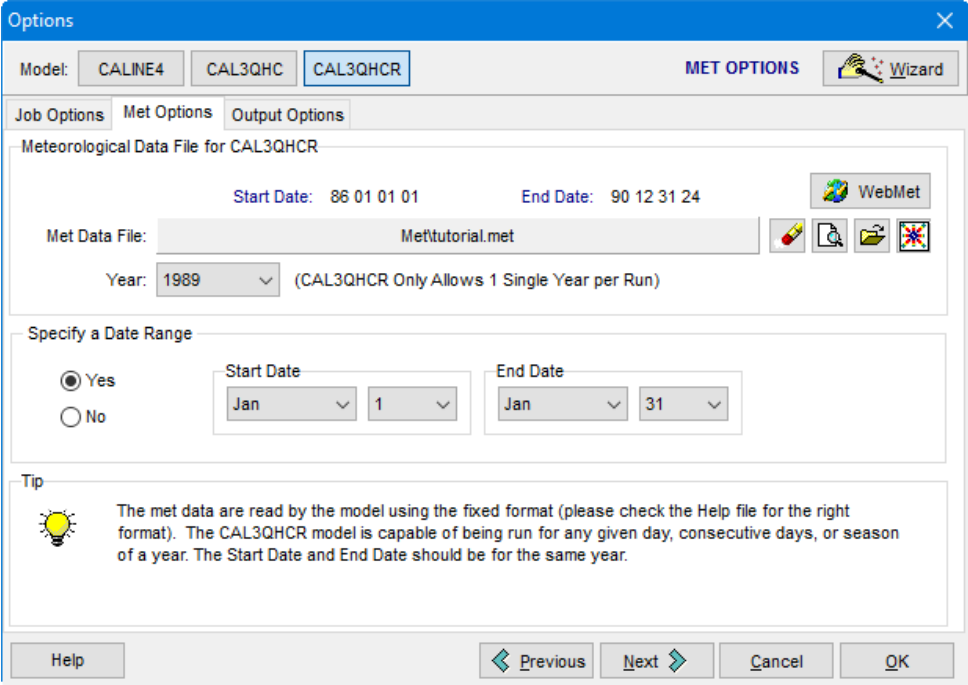
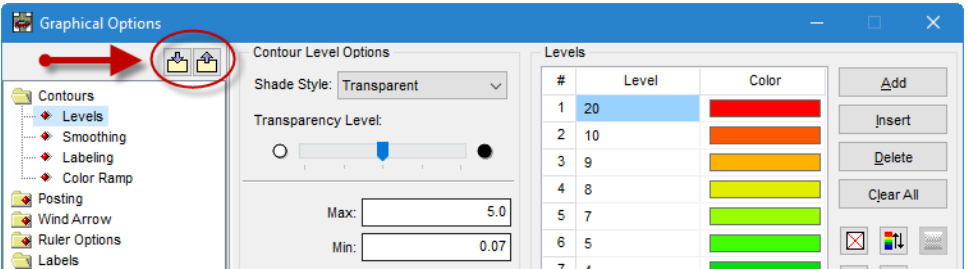
New Features

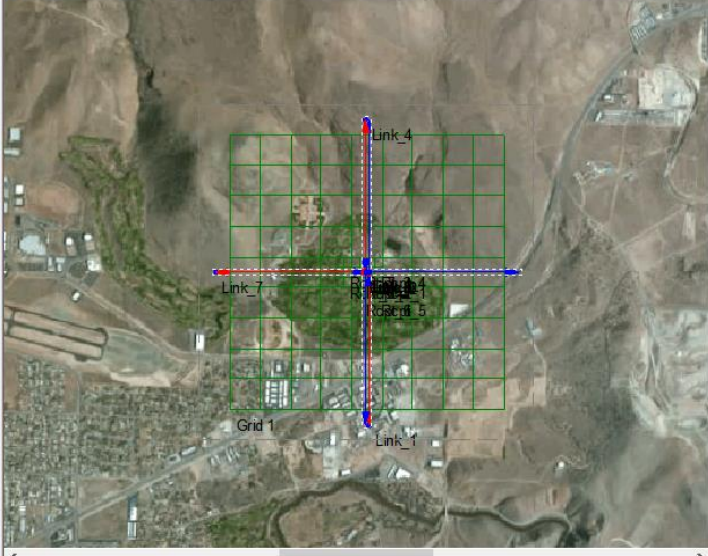
Topic	Feature Description
<p>Tier II Approach</p>	<p>Import / Export ETS Patterns Data from Excel</p> <p>CALRoads View now features the ability to import from and export to Excel spreadsheet the Emissions, Traffic, and Signalization (ETS) Patterns Data called when using the Tier II approach.</p> <p>The Patterns for ETS Data window was expanded in order to display all 24 hours without scrolling. Parameters keywords, present in the Excel template, are also displayed under the header of each column of the ETS grid for easy reference.</p> 

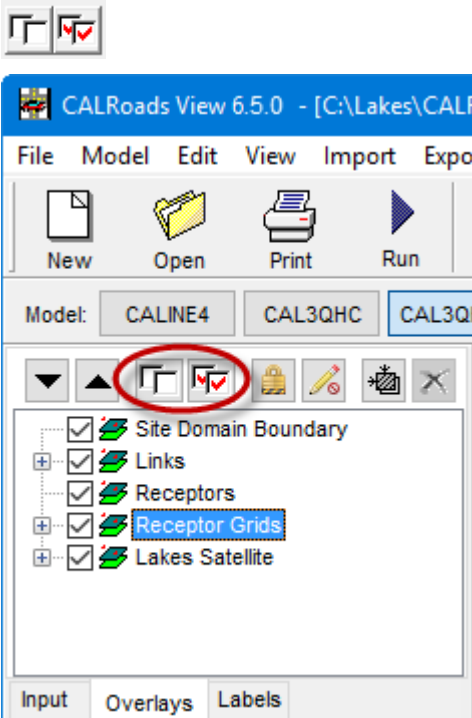
Topic	Feature Description
<p>Tier II Approach</p>	<p>Import / Export ETS Patterns Data from Excel – Cont.</p> <p>Users will find a template spreadsheet in the program’s Templates sub-folder (C:\Lakes\CALRoads View\Templates)</p> 
<p>Tier II Approach</p>	<p>Import / Export Background Concentration Data from Excel</p> <p>CALRoads View now features the ability to import from and export to Excel spreadsheet Background Concentrations. The Background Concentration option is only available for the Tier II approach.</p> <p>The Background Concentrations windows was expanded in order to display all 24 hours without scrolling.</p> 

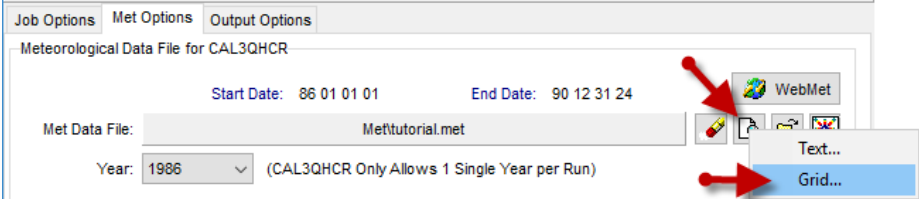
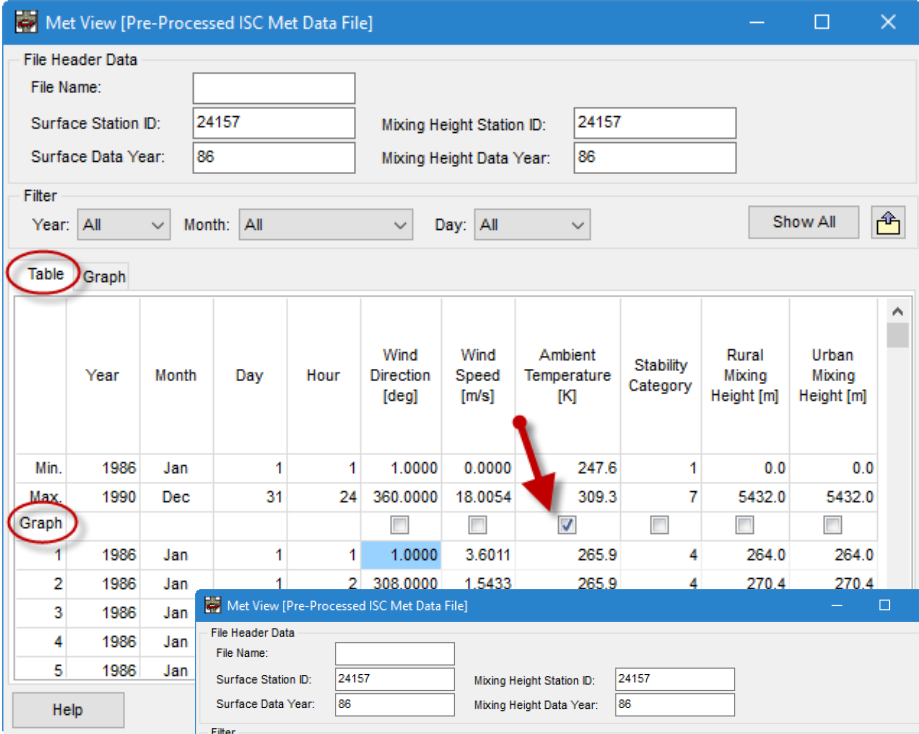
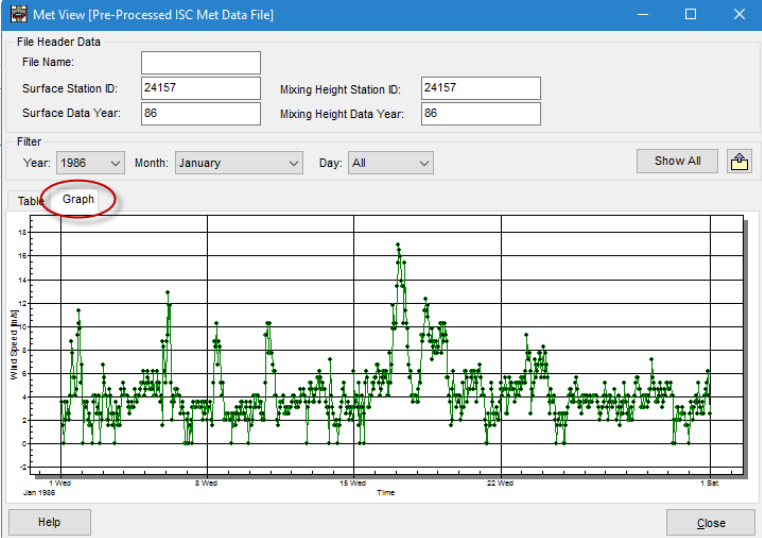
Topic	Feature Description
<p>Tile Maps</p>	<p>New Map Server – Lakes Satellite</p> <p>CALRoads View now provides a new tile map server featuring aerial photography from satellite. This new Lakes Satellite map server has <u>more spatial coverage and higher resolution</u> than the MapQuest Satellite and MapQuest Aerial options that were previously available in CALRoads View (see Fixed Issues).</p> <p>Select Import Tile Maps menu option to access this new option.</p> <div data-bbox="440 604 1421 1512" style="border: 1px solid gray; padding: 10px;">  <p><i>Louisville, KY, USA</i></p> <p><i>Mumbai, India</i></p> </div>


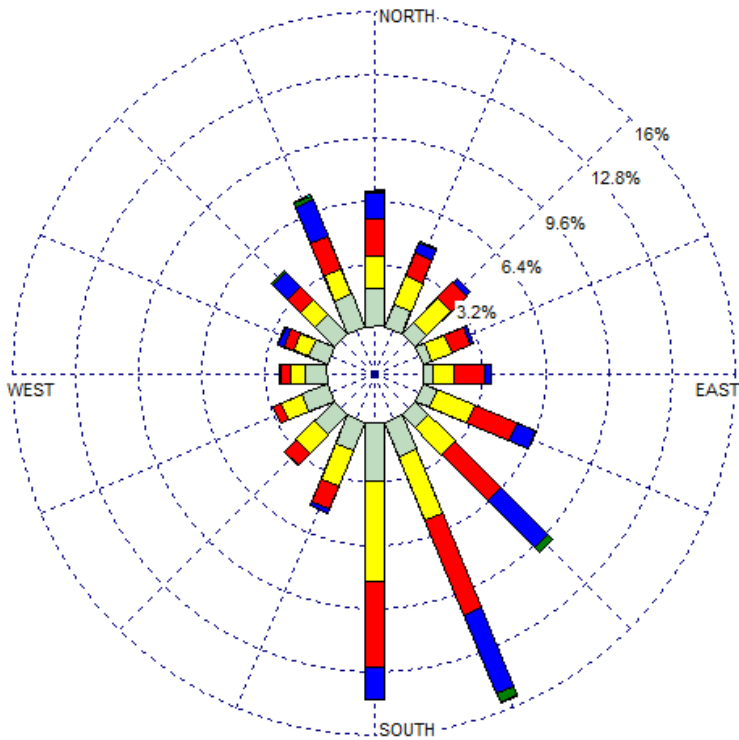
Topic	Feature Description
<p>Tile Maps</p>	<p>New Map Server – Lakes Satellite – Cont.</p> <p>Below you will see a comparison of the previous satellite map and the new higher resolution Lakes Satellite map.</p> <div style="display: flex; justify-content: space-around;"> <div data-bbox="444 466 932 928">  <p><i>Previous maps on those few areas with coverage at maximum resolution.</i></p> </div> <div data-bbox="948 466 1419 928">  <p><i>Maximum resolution of new map system is 4 times higher.</i></p> </div> </div> <p>Note: Due to the high acquisition and maintenance cost of the new satellite maps, Lakes Satellite Tile Maps service is only available to users with a current paid maintenance agreement. If your maintenance has expired, or you are not eligible for this map service, please contact our sales department at sales@webLakes.com to upgrade your license.</p>
<p>Tile Maps</p>	<p>Open Street Map Optimization</p> <p>The Open Street Map tile maps server was optimized to allow for faster downloads. This option is only available for users in current maintenance.</p>

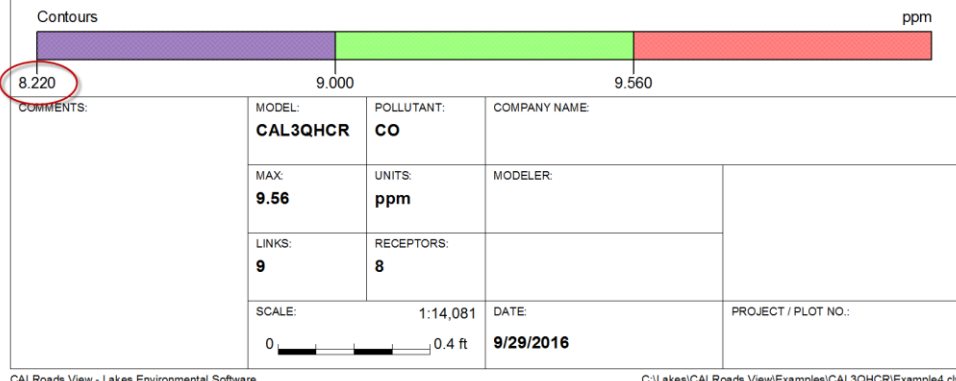



Topic	Feature Description
<p>Met Options</p>	<p>Revised Layout of CAL3QHCR Met Options Window</p> <p>The CAL3QHCR Met Options window has been reconfigured to more clearly display file parameters and required user inputs.</p> 
<p>Graphical Options</p>	<p>Save Graphical Options to a Layout</p> <p>The Graphical Options window now contains Import Layout and Export Layout buttons. The following Graphical Options will be saved to the layout.</p> <ul style="list-style-type: none"> • Contours: Levels, Smoothing, Labeling, and Color Ramp • Posting 

Topic	Feature Description
<p>Base Maps</p>	<p>Quality Selector for Printing and Exporting Tile Maps Imagery</p> <p>Users can now select the quality level for imported Tile Maps which are included in Print displays. Higher quality levels require additional downloading and processing time.</p> <p>This feature is available in the File Preferences Settings World Map Settings.</p> <div data-bbox="440 575 1240 768" style="border: 1px solid #ccc; padding: 5px; margin: 10px 0;"> <p>World Map Options</p> <p>Quality in Print & 3D View: Ultra ▼ (affects downloading/processing time)</p> <ul style="list-style-type: none"> <li style="border: 1px solid #ccc; padding: 2px;">Low <li style="border: 1px solid #ccc; padding: 2px;">Medium <li style="border: 1px solid #ccc; padding: 2px;">High <li style="border: 1px solid #ccc; padding: 2px;">Very High <li style="border: 1px solid #ccc; padding: 2px;">Ultra </div> <div data-bbox="440 800 1386 1562" style="border: 1px solid #ccc; padding: 5px; margin: 10px 0;"> <p>Print To PDF File</p> <p>Title: EXAMPLE - TWO WAY INTERSECTION <input checked="" type="checkbox"/> Default Titles</p> <p>Preview: </p> <p>User Defined Scale: 1:67,938 <input type="button" value="Apply"/></p> <p>Orientation: <input checked="" type="radio"/> Portrait <input type="radio"/> Landscape</p> <p>Comments: <input type="text"/></p> <p>Project / Plot No.: <input type="text"/></p> <p>Margin: 100 [%]</p> <p><input type="button" value="Help"/> <input type="button" value="Preferences"/> <input type="button" value="PDF Setup"/> <input type="button" value="Print"/> <input type="button" value="Close"/></p> </div>

Topic	Feature Description
<p>Overlays</p>	<p>Hide All/Show All Layers Buttons in Overlays Tab</p> <p>Two new buttons are now available under the Overlay tab allowing for easy manipulation of the visibility status of layers:</p> <ol style="list-style-type: none"> 1. Hide All Layers 2. Show All Layers  <p>The screenshot shows the CALRoads View 6.5.0 software interface. At the top, there is a menu bar with 'File', 'Model', 'Edit', 'View', 'Import', and 'Export'. Below the menu bar is a toolbar with icons for 'New', 'Open', 'Print', and 'Run'. The 'Model' section shows three buttons: 'CALINE4', 'CAL3QHC', and 'CAL3QI'. Below this is another toolbar with several icons, including two that are circled in red: one showing a window with a red 'X' (Hide All) and another showing a window with a red checkmark (Show All). Below the toolbars is a list of layers with checkboxes: 'Site Domain Boundary', 'Links', 'Receptors', 'Receptor Grids', and 'Lakes Satellite'. At the bottom, there are three tabs: 'Input', 'Overlays', and 'Labels'.</p>

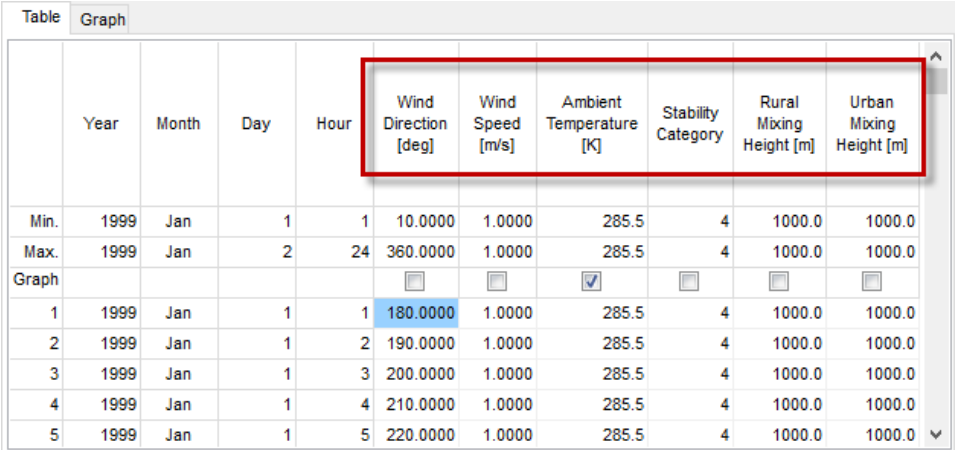
Topic	Feature Description
<p>Met View</p>	<p>New Time Series Graph Display</p> <p>A new Graph option is available for all variables of a meteorological data file opened with the Met View utility. Enabling the check box for variables under the Table tab will create a time series line graph in the Graph tab. The graph can be customized and exported to Bitmap or PNG image. Access to these new options are shown images below:</p>   

Topic	Feature Description
<p>WRPLOT View</p>	<p>Uniform Petal Size</p> <p>Users can now set the Rose Petal size in WRPLOT View to Uniform. This avoids the over-proportional growth of the colored sector areas for high frequency values. This option is set in the Wind Rose Options under the Colors & Brushes tab.</p> <div data-bbox="446 514 620 562" style="border: 1px solid #ccc; padding: 2px; margin-bottom: 10px;">  Options... </div> <div data-bbox="446 598 1003 735" style="border: 1px solid #ccc; padding: 5px; margin-bottom: 10px;"> <p>Rose Petal</p> <p><input checked="" type="radio"/> Uniform</p> <p><input type="radio"/> User-defined size: 100 %</p> </div> <div data-bbox="548 772 1282 1507" style="text-align: center;">  </div>

Topic	Feature Description																
<p>Printouts</p>	<p>Maximum Value Decimal Places</p> <p>The maximum value field, shown in the Printout, is now controlled by the "No. Decimal Places" field in the Graphical Options Contours Color Ramp settings. The full maximum value to 5 decimal places is still displayed in the Contours Panel.</p>  <table border="1" data-bbox="454 609 1404 882"> <tr> <td>COMMENTS:</td> <td>MODEL: CAL3QHCR</td> <td>POLLUTANT: CO</td> <td>COMPANY NAME:</td> </tr> <tr> <td></td> <td>MAX: 9.56</td> <td>UNITS: ppm</td> <td>MODELER:</td> </tr> <tr> <td></td> <td>LINKS: 9</td> <td>RECEPTORS: 8</td> <td></td> </tr> <tr> <td></td> <td>SCALE: 0  0.4 ft</td> <td>DATE: 9/29/2016</td> <td>PROJECT / PLOT NO.:</td> </tr> </table> <p><small>CALRoads View - Lakes Environmental Software</small> <small>C:\Lakes\CALRoads View\Examples\CAL3QHCR\Example4.clv</small></p>	COMMENTS:	MODEL: CAL3QHCR	POLLUTANT: CO	COMPANY NAME:		MAX: 9.56	UNITS: ppm	MODELER:		LINKS: 9	RECEPTORS: 8			SCALE: 0  0.4 ft	DATE: 9/29/2016	PROJECT / PLOT NO.:
COMMENTS:	MODEL: CAL3QHCR	POLLUTANT: CO	COMPANY NAME:														
	MAX: 9.56	UNITS: ppm	MODELER:														
	LINKS: 9	RECEPTORS: 8															
	SCALE: 0  0.4 ft	DATE: 9/29/2016	PROJECT / PLOT NO.:														

Fixed Issues

Topic	Issue Description
<p>Contours</p>	<p>CALINE4 Contour Display with Large Background Concentrations</p> <p>Fixed an issue where contours could not be displayed if the background concentration was greater than or equal to 100 ppm (CO, NO₂, Inert Gas) or 100 ug/m³ (Particulates). Projects that encountered this problem previously will need to be re-run in order for contours to appear.</p>
<p>Tile Maps</p>	<p>MapQuest Servers Removed</p> <p>On July 11, 2016, MapQuest announced they were discontinuing access to their map servers. This policy change means that the MapQuest Streets, MapQuest Satellite, and MapQuest Aerial tile maps are no longer available for display in our software and they have been removed from the list.</p>

Topic	Issue Description																																																																																																			
<p>Import</p>	<p>Importing Links from Excel</p> <p>When importing links from an Excel spreadsheet, the link description was imported as the Link ID instead of the description. This has been resolved.</p>																																																																																																			
<p>Export</p>	<p>Exporting Colored Contour Lines to Google Earth</p> <p>Fixed an issue where un-filled, colored contour lines would sometimes have incorrect settings on one of the levels when exported to Google Earth.</p>																																																																																																			
<p>Export</p>	<p>Export Failure for Specific Link IDs</p> <p>Link IDs which followed the format E#, where # represents a numeric value, were improperly exported to Excel format due to Excel's default format assignment of such values. This has been corrected.</p>																																																																																																			
<p>Met View</p>	<p>Updated Column Headers</p> <p>When viewing CAL3QHCR-ready meteorological data in Met View (Job/Met Met Options Met Data File View File – Grid), the first four column headers were repeated. The correct column headers have been implemented.</p>  <table border="1" data-bbox="444 1094 1393 1541"> <thead> <tr> <th></th> <th>Year</th> <th>Month</th> <th>Day</th> <th>Hour</th> <th>Wind Direction [deg]</th> <th>Wind Speed [m/s]</th> <th>Ambient Temperature [K]</th> <th>Stability Category</th> <th>Rural Mixing Height [m]</th> <th>Urban Mixing Height [m]</th> </tr> </thead> <tbody> <tr> <td>Min.</td> <td>1999</td> <td>Jan</td> <td>1</td> <td>1</td> <td>10.0000</td> <td>1.0000</td> <td>285.5</td> <td>4</td> <td>1000.0</td> <td>1000.0</td> </tr> <tr> <td>Max.</td> <td>1999</td> <td>Jan</td> <td>2</td> <td>24</td> <td>360.0000</td> <td>1.0000</td> <td>285.5</td> <td>4</td> <td>1000.0</td> <td>1000.0</td> </tr> <tr> <td>Graph</td> <td></td> <td></td> <td></td> <td></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>1</td> <td>1999</td> <td>Jan</td> <td>1</td> <td>1</td> <td>180.0000</td> <td>1.0000</td> <td>285.5</td> <td>4</td> <td>1000.0</td> <td>1000.0</td> </tr> <tr> <td>2</td> <td>1999</td> <td>Jan</td> <td>1</td> <td>2</td> <td>190.0000</td> <td>1.0000</td> <td>285.5</td> <td>4</td> <td>1000.0</td> <td>1000.0</td> </tr> <tr> <td>3</td> <td>1999</td> <td>Jan</td> <td>1</td> <td>3</td> <td>200.0000</td> <td>1.0000</td> <td>285.5</td> <td>4</td> <td>1000.0</td> <td>1000.0</td> </tr> <tr> <td>4</td> <td>1999</td> <td>Jan</td> <td>1</td> <td>4</td> <td>210.0000</td> <td>1.0000</td> <td>285.5</td> <td>4</td> <td>1000.0</td> <td>1000.0</td> </tr> <tr> <td>5</td> <td>1999</td> <td>Jan</td> <td>1</td> <td>5</td> <td>220.0000</td> <td>1.0000</td> <td>285.5</td> <td>4</td> <td>1000.0</td> <td>1000.0</td> </tr> </tbody> </table>		Year	Month	Day	Hour	Wind Direction [deg]	Wind Speed [m/s]	Ambient Temperature [K]	Stability Category	Rural Mixing Height [m]	Urban Mixing Height [m]	Min.	1999	Jan	1	1	10.0000	1.0000	285.5	4	1000.0	1000.0	Max.	1999	Jan	2	24	360.0000	1.0000	285.5	4	1000.0	1000.0	Graph					<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	1999	Jan	1	1	180.0000	1.0000	285.5	4	1000.0	1000.0	2	1999	Jan	1	2	190.0000	1.0000	285.5	4	1000.0	1000.0	3	1999	Jan	1	3	200.0000	1.0000	285.5	4	1000.0	1000.0	4	1999	Jan	1	4	210.0000	1.0000	285.5	4	1000.0	1000.0	5	1999	Jan	1	5	220.0000	1.0000	285.5	4	1000.0	1000.0
	Year	Month	Day	Hour	Wind Direction [deg]	Wind Speed [m/s]	Ambient Temperature [K]	Stability Category	Rural Mixing Height [m]	Urban Mixing Height [m]																																																																																										
Min.	1999	Jan	1	1	10.0000	1.0000	285.5	4	1000.0	1000.0																																																																																										
Max.	1999	Jan	2	24	360.0000	1.0000	285.5	4	1000.0	1000.0																																																																																										
Graph					<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																																																																																										
1	1999	Jan	1	1	180.0000	1.0000	285.5	4	1000.0	1000.0																																																																																										
2	1999	Jan	1	2	190.0000	1.0000	285.5	4	1000.0	1000.0																																																																																										
3	1999	Jan	1	3	200.0000	1.0000	285.5	4	1000.0	1000.0																																																																																										
4	1999	Jan	1	4	210.0000	1.0000	285.5	4	1000.0	1000.0																																																																																										
5	1999	Jan	1	5	220.0000	1.0000	285.5	4	1000.0	1000.0																																																																																										
<p>WRPLOT View</p>	<p>Incomplete/Missing Hours Adjusted to Date & Time Period</p> <p>The number of Incomplete / Missing hours in the Data File Info has been corrected to change based on the user-defined date and hour selections.</p>																																																																																																			