

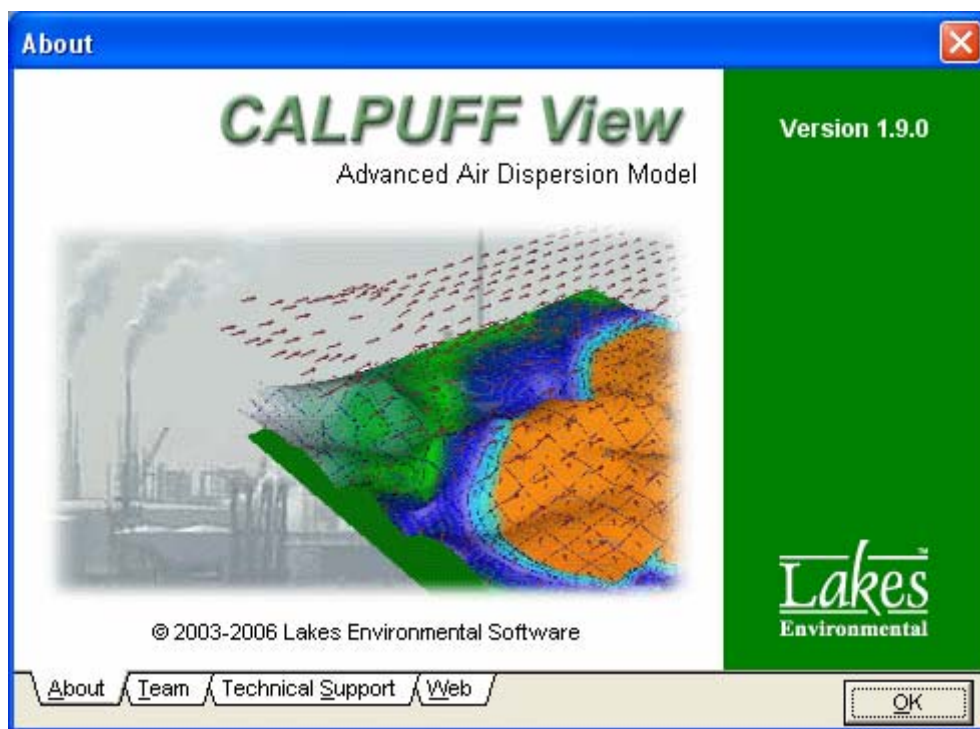
CALPUFF View Package

Advanced Puff Air Dispersion Model

Release Notes

[Release Notes – Version 1.9](#)

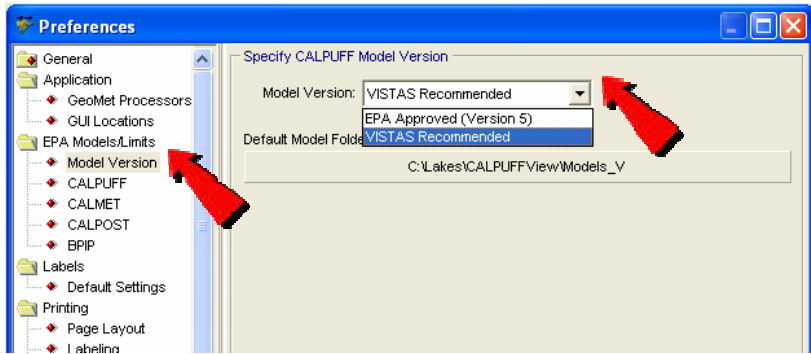
[Release Notes – Version 1.7](#)


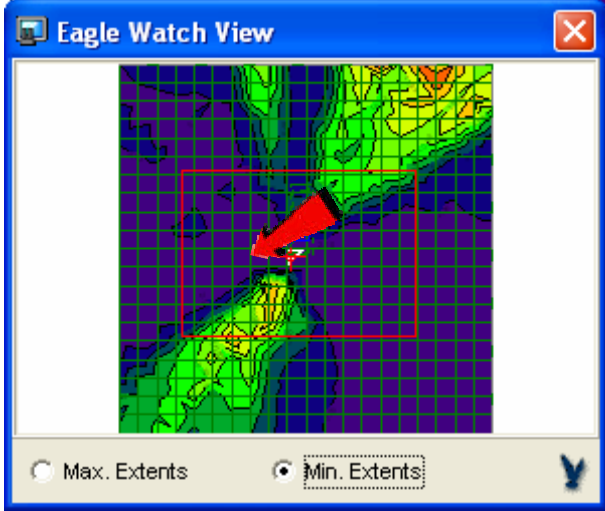

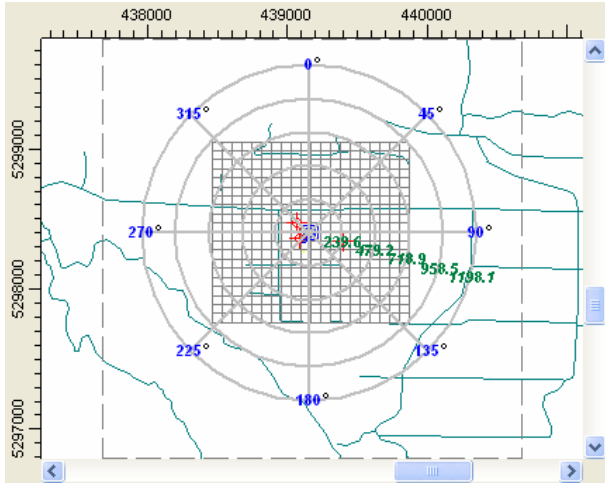


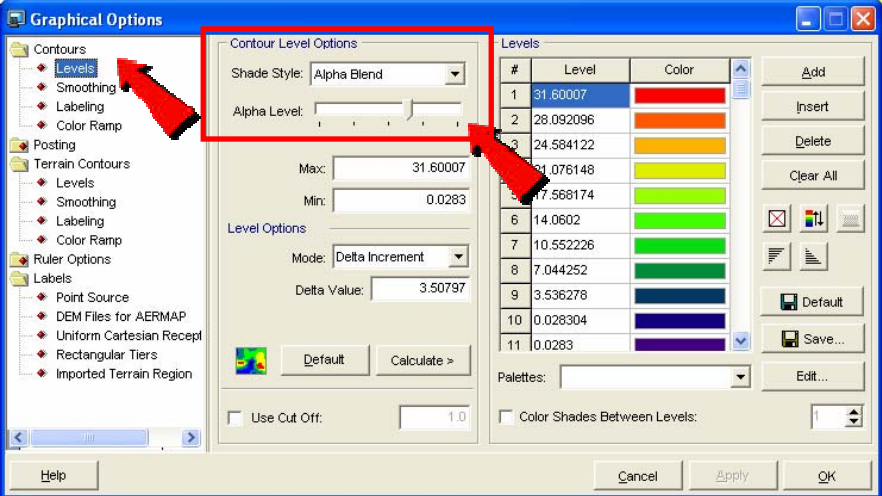
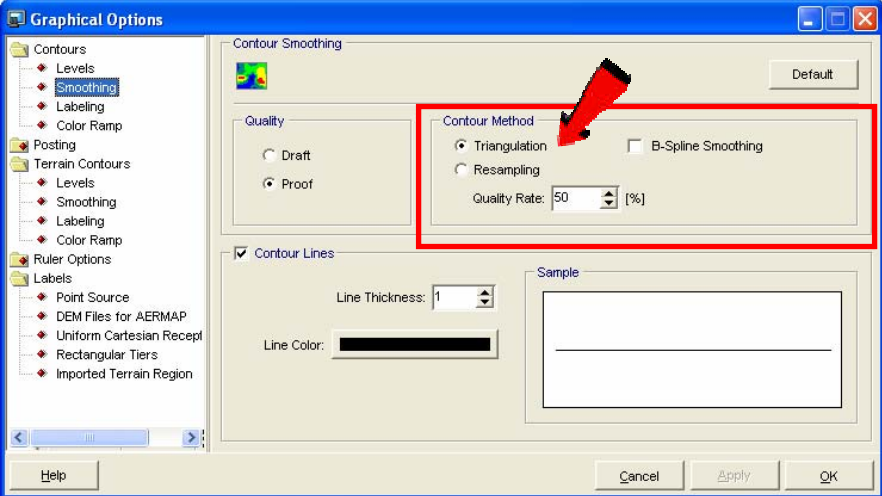
Lakes Environmental Software
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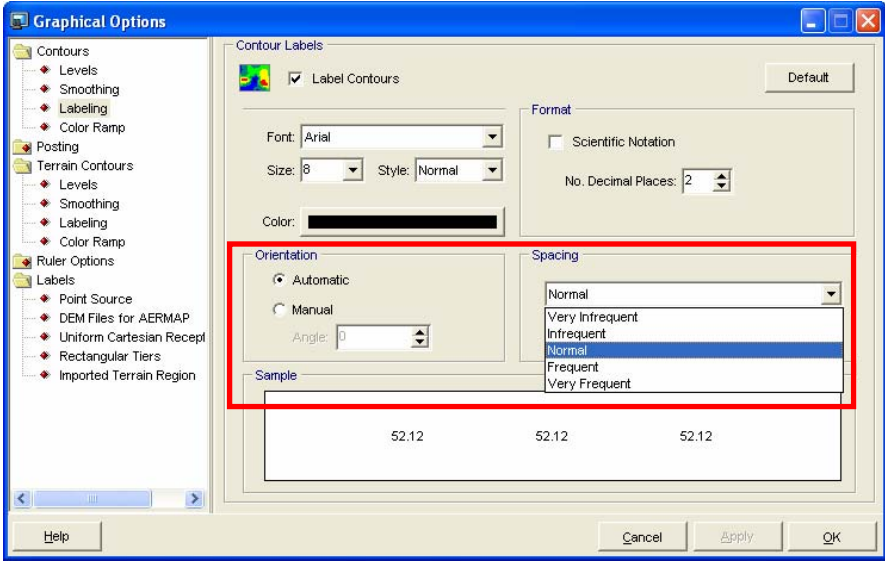
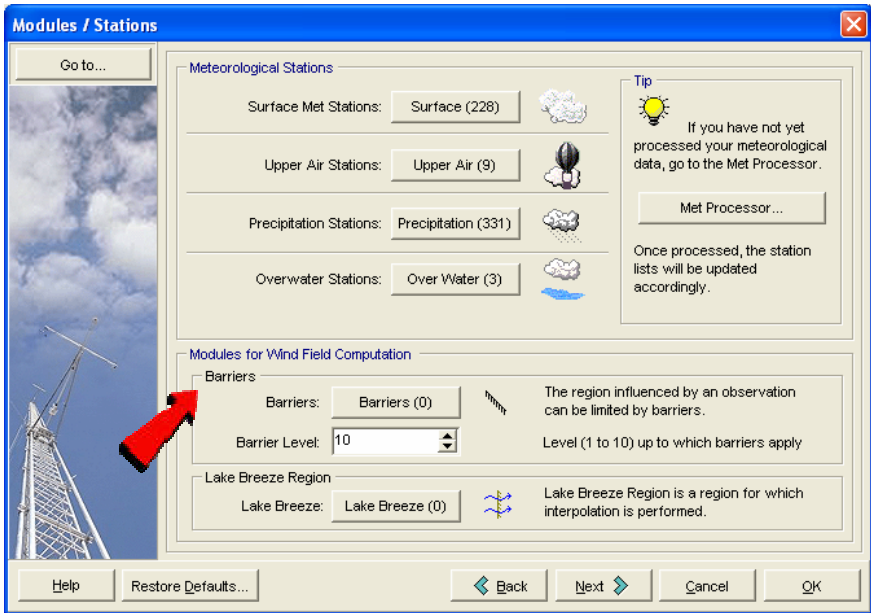
CALPUFF View Version 1.9

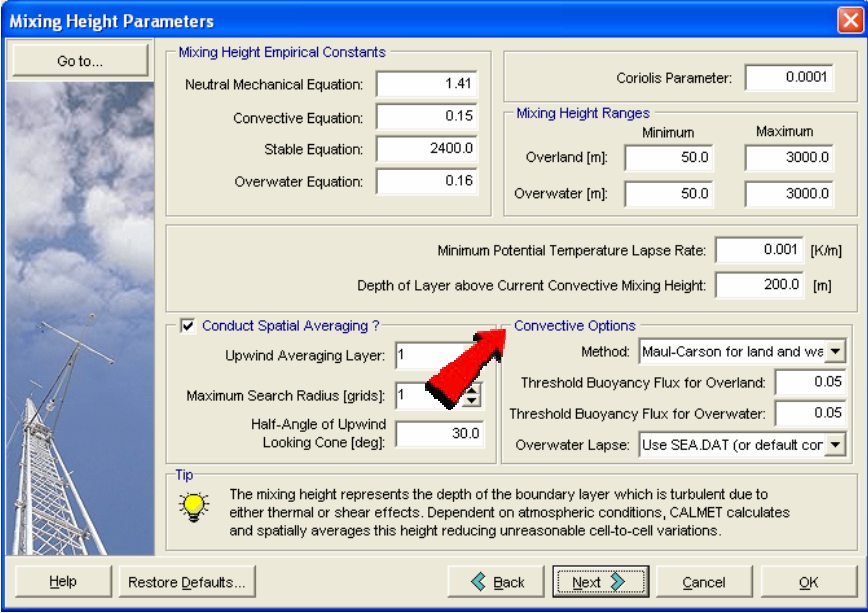
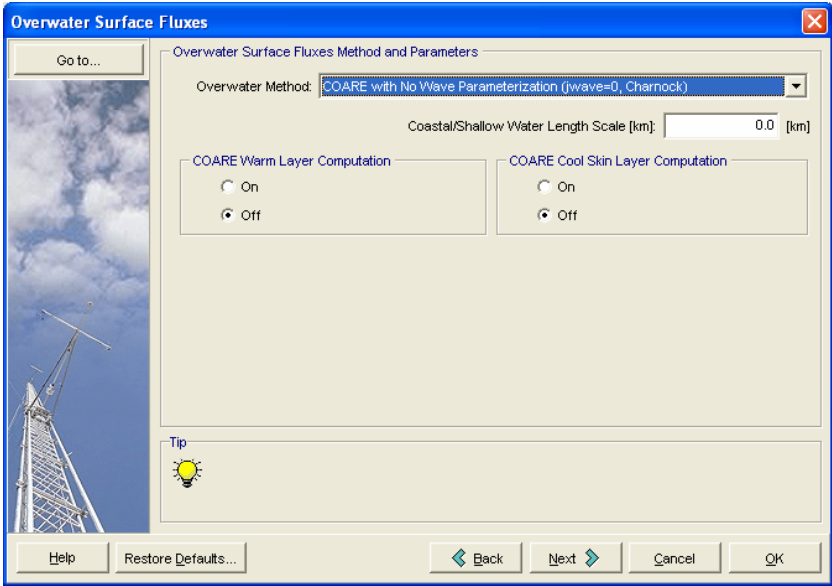
Release Notes July 13, 2006

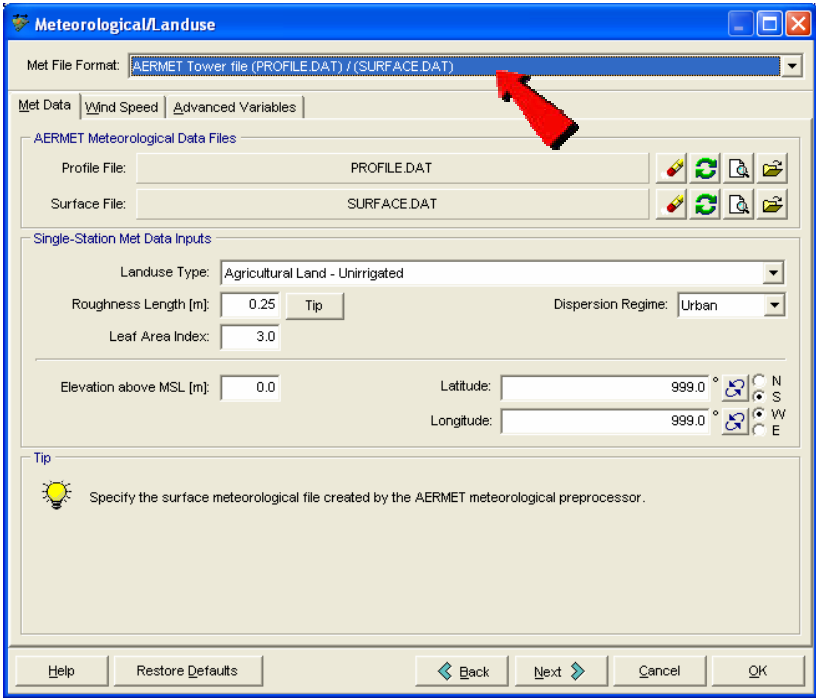
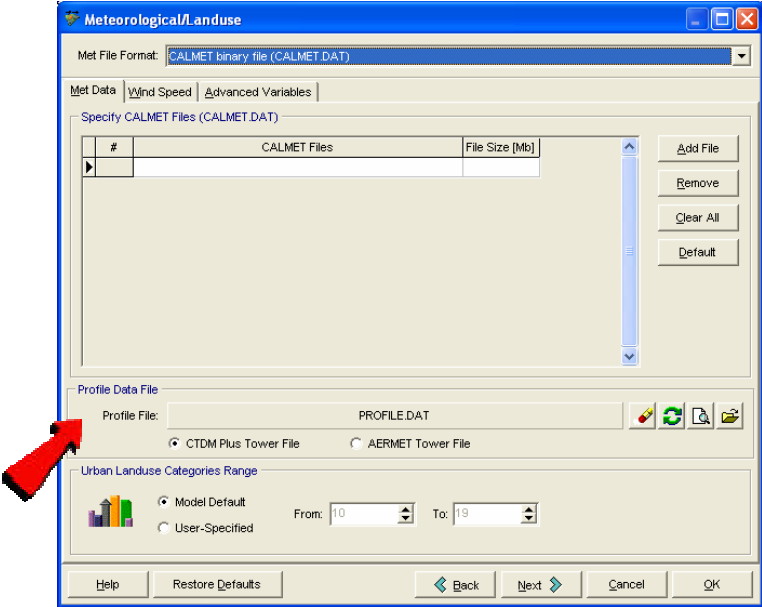
Topic	Feature Description
Models	<p>CALPUFF – VISTAS Recommended for BART Modeling The version of the CALPUFF modeling system recommended by VISTAS (and other Regional Planning Organizations) for Best Available Retrofit Technology (BART) analyses is now fully supported in the CALPUFF View interface. Model Versions supported by CALPUFF View Version 1.9 are:</p> <ul style="list-style-type: none"> ◆ CALPUFF - Version 5.754 - February 2, 2006 ◆ CALMET - Version 5.724 - April 14, 2006 ◆ CALPOST - Version 5.6393 - February 2, 2006
Models	<p>Model Preferences You can now switch seamlessly between the VISTAS Recommended and EPA Approved CALPUFF Models – model executables are specified independently for each setting. This option is available by selecting File Preferences from the menu and then selecting the Model Version panel.</p> <p>CALPUFF-VISTAS models: Download the latest models from TRC's web site and place the exe files under the Models_V folder within the installation folder (C:\Lakes\CALPUFFView\Models_V)</p> <p>Download CALPUFF-VISTAS Models from TRC Web Site</p> <p>CALPUFF- EPA Approved models: Download the latest models from TRC's web site and place the exe files under the Models folder within the installation folder (C:\Lakes\CALPUFFView\Models)</p> <p>Download CALPUFF-EPA Approved Models from TRC Web Site</p> 

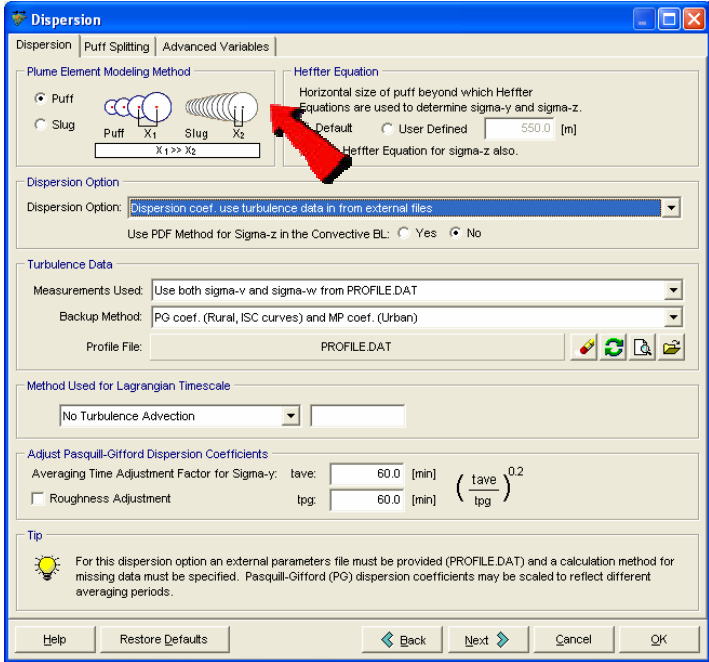
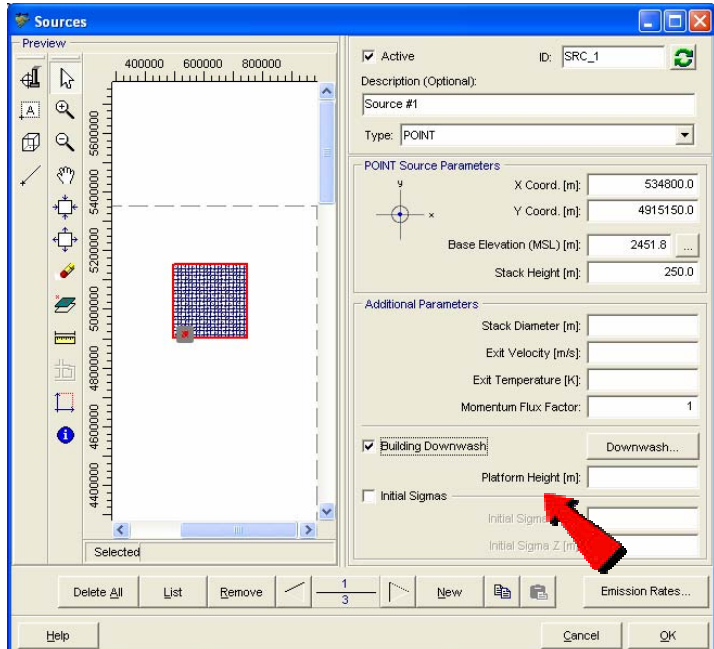
Topic	Feature Description
Graphical Tool	<p>New Eagle Watch View Tool</p>  <p>The Eagle Watch View tool displays a small window showing the full extents of your modeling domain with a red rectangle marking the area that is currently displayed in the main graphical area. In the Eagle Watch View window, you can use the mouse pointer to draw a new rectangle around the area that you would like to zoom in on. This will automatically update the display in the main window.</p> 
Graphical Tool	<p>New Web Annotation Tool</p>  <p>The Web Annotation tool allows you to draw a polar grid with the option to specify rings, rays, and labels at specific distances for annotation purposes only. This annotation tool can be especially useful when used as a scaling tool for graphical visualization of the modeling area and its dimensions.</p> 

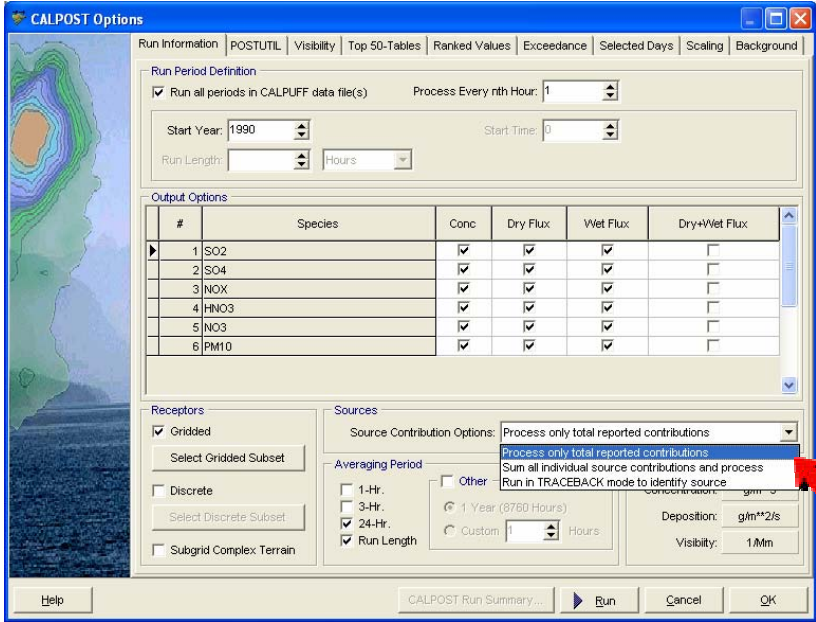
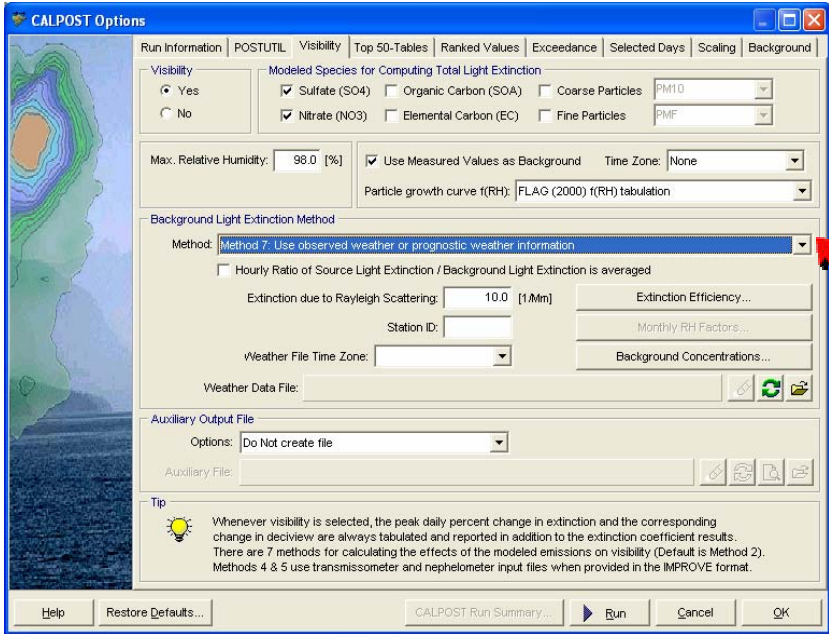
Topic	Feature Description
Graphical Options	<p>Transparency Option for Contours Using Alpha Blending</p> <p>Alpha Blending has been implemented to support real transparency of your concentration or terrain contours. You can access this option from the <i>Graphical Options</i> dialog, <i>Levels</i> panel, <i>Shade Style</i> drop-down list box.</p> 
Graphical Options	<p>New Contour Method – Triangulation</p> <p>A new contouring method, Triangulation, has been added to the Contour Smoothing options in the <i>Graphical Options</i> dialog. While the contours created by the <i>Triangulation</i> method may not be as smooth as those created by the <i>Resampling</i> method, they may be more representative in some cases.</p> 

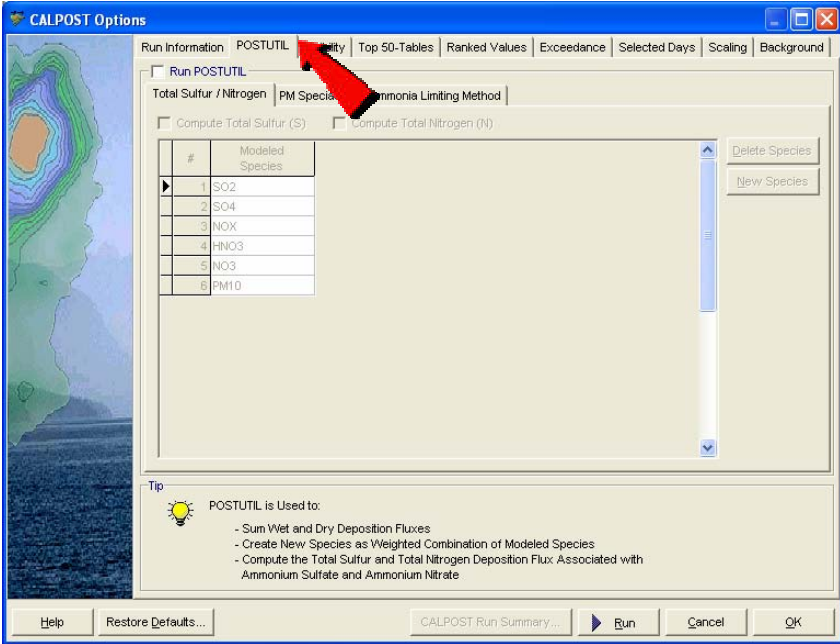
Topic	Feature Description
Graphical Options	<p>New Contour Label Options – Orientation and Spacing</p> <p>Two new contour label options are available, <i>Orientation</i> and <i>Spacing</i>. You can now specify the orientation angle, as well as the spacing between labels, for contour labels. These options can be accessed from the <i>Graphical Options</i> dialog, <i>Labelling</i> panel for concentration or terrain contours.</p> 
VISTAS CALMET	<p>Barrier Levels</p> <p>The VISTAS version of CALMET now includes barriers, which may be used to limit the influence of an observation.</p> 

Topic	Feature Description
VISTAS CALMET	<p>Convective Options</p> <p>A series of convective options have been introduced in the VISTAS version of CALMET.</p> 
VISTAS CALMET	<p>Overwater Surface Fluxes</p> <p>New methods for the calculation of overwater surface fluxes have been introduced in the VISTAS version of CALMET.</p> 

Topic	Feature Description
VISTAS CALPUFF	<p>New Met File Format</p> <p>AERMET tower file has been added as an accepted met file format.</p>  <p>The screenshot shows the 'Meteorological/Landuse' dialog box. The 'Met File Format' dropdown is set to 'AERMET Tower file (PROFILE.DAT) / (SURFACE.DAT)'. Below this, there are tabs for 'Met Data', 'Wind Speed', and 'Advanced Variables'. The 'Met Data' tab is active, showing fields for 'Profile File' (PROFILE.DAT) and 'Surface File' (SURFACE.DAT). There are also fields for 'Landuse Type' (Agricultural Land - Unirrigated), 'Roughness Length [m]' (0.25), 'Leaf Area Index' (3.0), 'Elevation above MSL [m]' (0.0), 'Latitude' (999.0), and 'Longitude' (999.0). A 'Tip' section at the bottom states: 'Specify the surface meteorological file created by the AERMET meteorological preprocessor.'</p>
VISTAS CALPUFF	<p>Profile Data file</p> <p>VISTAS CALPUFF accepts a profile data file to be used in addition to another met file (E.g. CALMET.DAT)</p>  <p>The screenshot shows the 'Meteorological/Landuse' dialog box. The 'Met File Format' dropdown is set to 'CALMET binary file (CALMET.DAT)'. Below this, there are tabs for 'Met Data', 'Wind Speed', and 'Advanced Variables'. The 'Met Data' tab is active, showing a table for 'Specify CALMET Files (CALMET.DAT)' with columns for '#', 'CALMET Files', and 'File Size [Mb]'. There are buttons for 'Add File', 'Remove', 'Clear All', and 'Default'. Below the table, there is a 'Profile Data File' section with a 'Profile File' field (PROFILE.DAT) and radio buttons for 'CTDM Plus Tower File' (selected) and 'AERMET Tower File'. At the bottom, there is a 'Urban Landuse Categories Range' section with radio buttons for 'Model Default' (selected) and 'User-Specified', and fields for 'From' (10) and 'To' (19).</p>

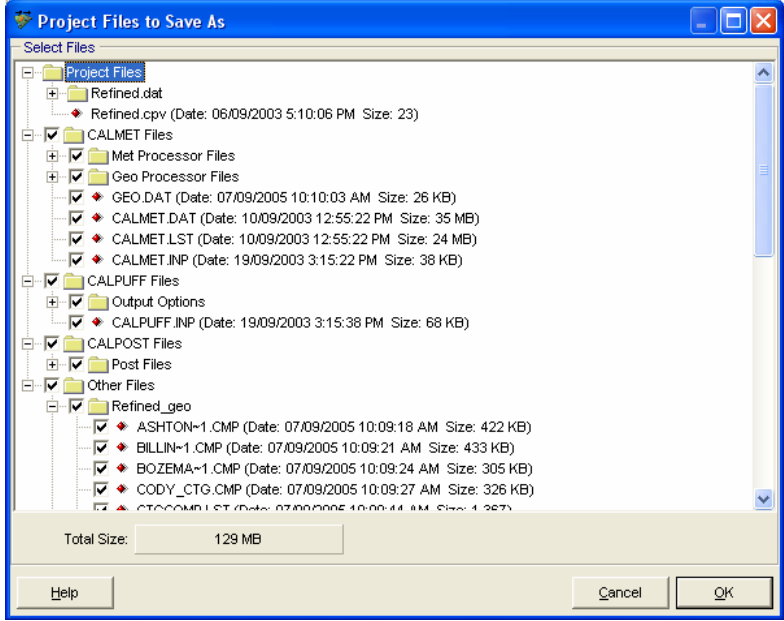
Topic	Feature Description
VISTAS CALPUFF	<p>Additional Dispersion Options</p> <p>Dispersion options have been added to the VISTAS CALPUFF, including turbulence data and Lagrangian timescale methods.</p> 
VISTAS CALPUFF	<p>Platform Height</p> <p>The VISTAS version of CALPUFF now contains a platform height parameter for point sources.</p> 

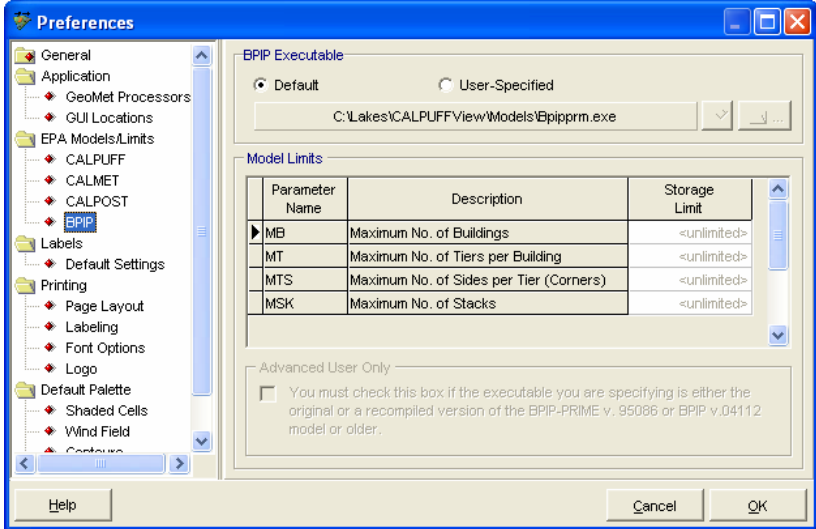
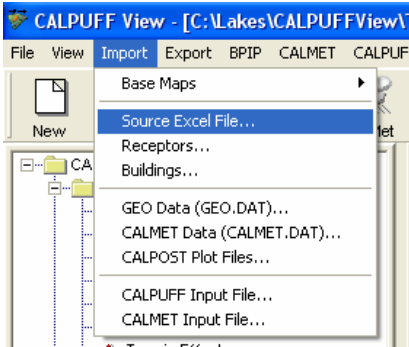
Topic	Feature Description
VISTAS CALPOST	<p>Source Contribution Options</p> <p>The VISTAS version of CALPOST includes source contribution options.</p>  <p>The screenshot shows the 'CALPOST Options' dialog box with the 'Source Contribution Options' tab selected. The 'Source Contribution Options' dropdown is set to 'Process only total reported contributions'. A red arrow points to this dropdown.</p>
VISTAS CALPOST	<p>New Light Extinction Methods</p> <p>A seventh method of light extinction – “use observed weather or prognostic weather information” – has been added to the VISTAS CALPOST.</p>  <p>The screenshot shows the 'CALPOST Options' dialog box with the 'Background Light Extinction Method' tab selected. The 'Method' dropdown is set to 'Method 7. Use observed weather or prognostic weather information'. A red arrow points to this dropdown.</p>

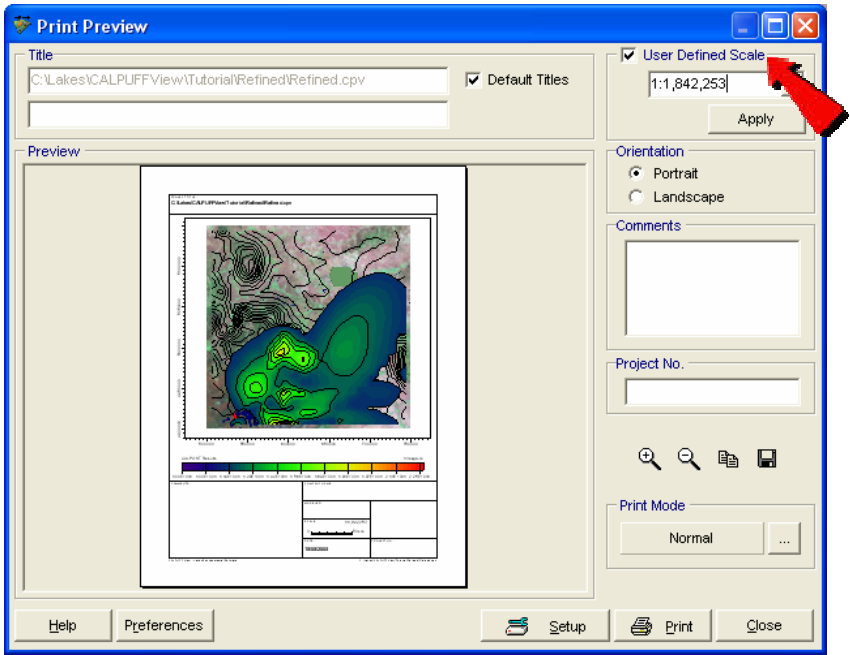
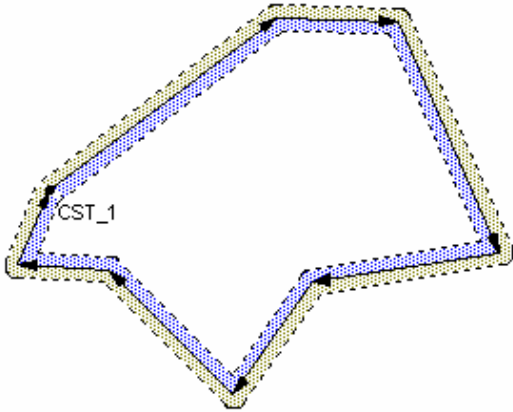
Topic	Feature Description
VISTAS CALPOST	<p>POSTUTIL TAB</p> <p>In VISTAS mode, CALPOST contains a separate POSTUTIL tab.</p> 

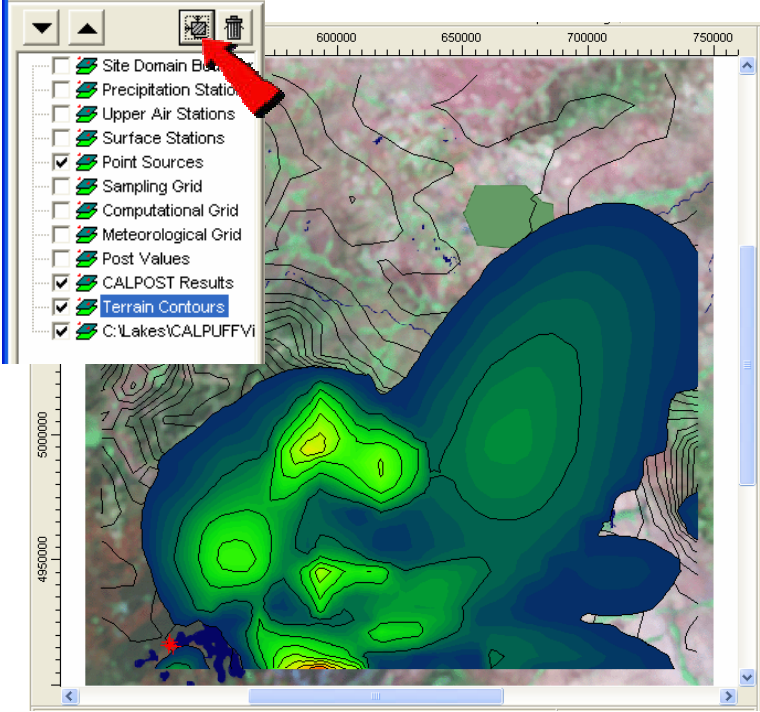
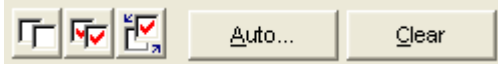
CALPUFF View Version 1.7

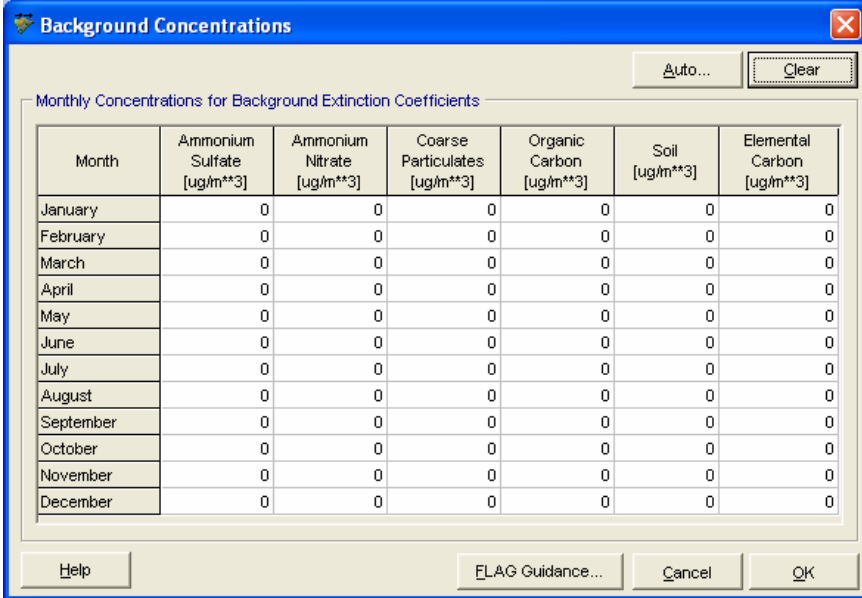
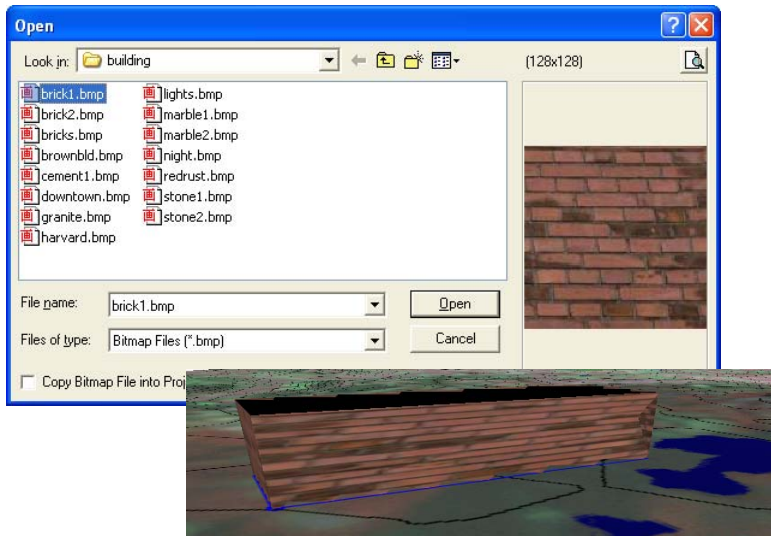
Release Notes Sep 27, 2005

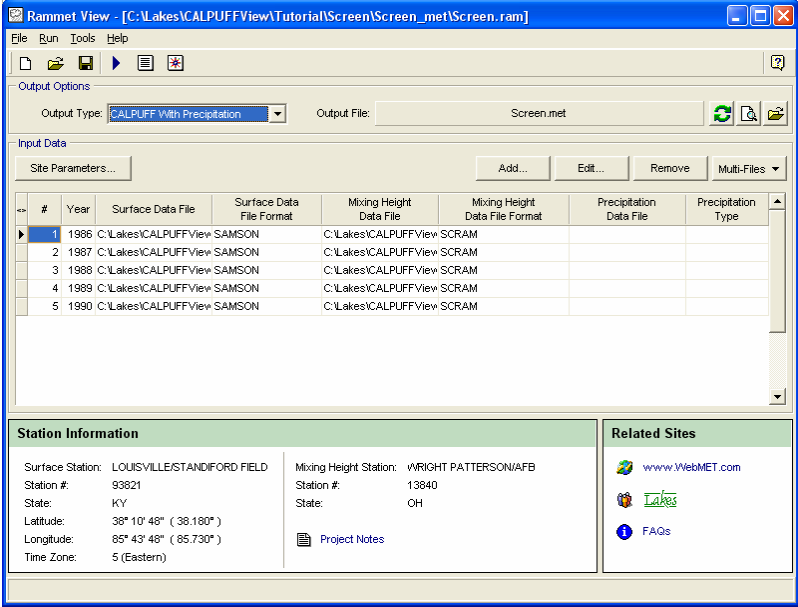
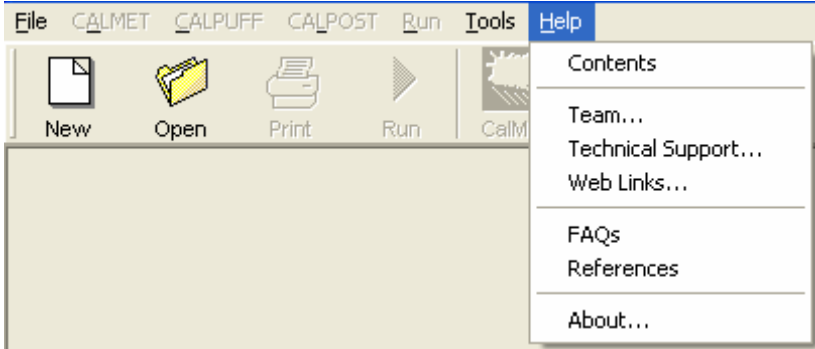
Topic	Feature Description
Installation	<p>Default Installation Path</p> <p>CALPUFF View is now being installed, by default, under C:\Lakes\CALPUFFView instead of C:\CALPUFFView. Tutorial files are also being included with the install.</p>
General	<p>Save Project As</p> <p>CALPUFF View now has a Save Project As feature that allows you to save your current project under another name. You may also choose which files you wish to include in the new project folder.</p> 

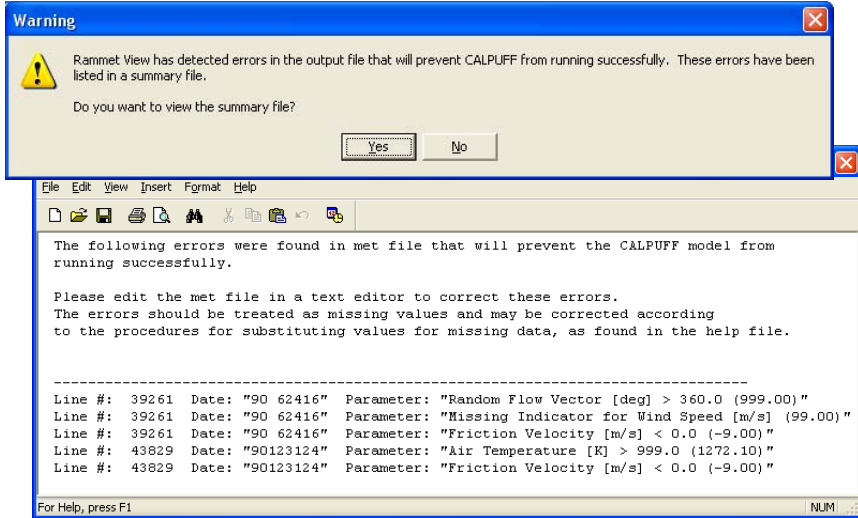
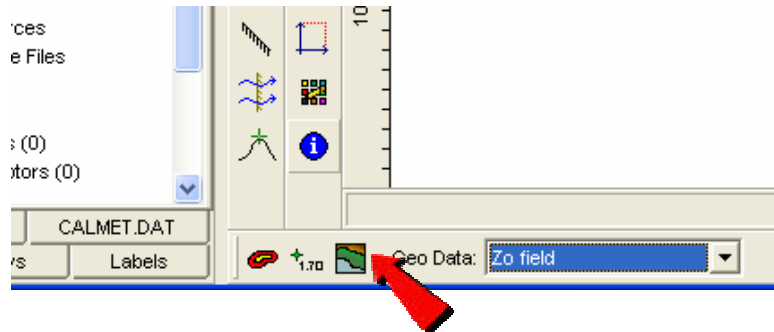
Topic	Feature Description															
BPIP	<h3>Latest U.S. EPA BPIP PRIME Model</h3> <p>The latest U.S. EPA BPIP model (BPIPRRM.EXE dated 04274) is now being included with this version. This latest model allows for an unlimited number of buildings, tiers, stacks, etc.</p>  <table data-bbox="774 602 1310 770"><thead><tr><th>Parameter Name</th><th>Description</th><th>Storage Limit</th></tr></thead><tbody><tr><td>MB</td><td>Maximum No. of Buildings</td><td><unlimited></td></tr><tr><td>MT</td><td>Maximum No. of Tiers per Building</td><td><unlimited></td></tr><tr><td>MTS</td><td>Maximum No. of Sides per Tier (Corners)</td><td><unlimited></td></tr><tr><td>MSK</td><td>Maximum No. of Stacks</td><td><unlimited></td></tr></tbody></table>	Parameter Name	Description	Storage Limit	MB	Maximum No. of Buildings	<unlimited>	MT	Maximum No. of Tiers per Building	<unlimited>	MTS	Maximum No. of Sides per Tier (Corners)	<unlimited>	MSK	Maximum No. of Stacks	<unlimited>
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MSK	Maximum No. of Stacks	<unlimited>														
General	<h3>Import Sources from Excel</h3> <p>Sources can now be imported directly from Excel; this includes source parameters and emission rates. The Excel file, Source-Parameters.xls, is being supplied in the installation under the folder "Templates". This file contains the format structure that your Excel file should have in order for CALPUFF View to successfully import sources parameters and emissions from your Excel file. See the help files for more information.</p> 															

Topic	Feature Description
General	<p>Printing to Scale</p> <p>You can now specify the scale of your printouts. Select from a predefined list, or type in the desired scale.</p> 
General	<p>Coastline Tool</p> <p>An improved coastline tool now maintains land/water color indicators for closed polygons.</p> 

Topic	Feature Description
General	<p>Zoom to Overlay Tool</p> <p>A Zoom to Overlay option has been added to the Overlays tab of the Tree View allowing you to zoom to a specified layer.</p> 
General	<p>Grid Spacing</p> <p>When creating a new project, the computational grid may now be specified with greater accuracy.</p>
General	<p>UTM Coordinate Check</p> <p>UTM coordinates are now checked to ensure they are within a valid range. A warning will be issued if they are not.</p>
General	<p>Import From ISC</p> <p>The “Create from ISC input file” tool has an improved ability to import rotated area sources.</p>
CALPOST	<p>Run Period Check</p> <p>The run period check in CALPOST has been corrected.</p>
CALPOST	<p>Select Tools</p> <p>New select tools have been added to CALPOST to help you enter your data more quickly.</p> 

Topic	Feature Description
CALPOST	<p>Monthly Concentrations for Background Extinction</p> <p>The default values for the Monthly Concentration for Background Extinction Coefficients have been changed to zero. In addition, a FLAG Guidance suggested values button has been added.</p> <div></div>
3D View	<p>Building Textures</p> <p>BITMAP files for the building textures in 3D View have been added to the CALPUFF View installation.</p> <div></div>

Topic	Feature Description
CALMET	<p>Run Period Check</p> <p>The CALPUFF run period is now checked for validity against the CALMET meteorological period.</p>
RAMMET	<p>Multi-Year Rammet View</p> <p>Rammet View can now easily process multiple years of data in its completely redesigned interface. You have the option to output a combined multi-year file in addition to individual year files. This avoids the need for multiple runs to create a multi-year file.</p> 
Documentation	<p>FAQs and References</p> <p>FAQs and reference articles are now available directly from the help menu. The FAQ page will require your user name and password, the references page will not.</p> 

Topic	Feature Description
General	Source Check Before running, CALPUFF will now check that all sources are within the computational grid.
Documentation	Help File and User's Guide The Help File, User's Guide, and Getting Started guide have been revised and improved.
RAMMET	Error Checking Rammet View now includes a built-in error checker that will search for and identify errors in the meteorological data file that will cause CALPUFF runs to fail. <div data-bbox="506 695 1360 1209">  <p>The Warning dialog box states: "Rammet View has detected errors in the output file that will prevent CALPUFF from running successfully. These errors have been listed in a summary file. Do you want to view the summary file?" with Yes and No buttons.</p> <p>The summary window lists the following errors:</p> <pre> The following errors were found in met file that will prevent the CALPUFF model from running successfully. Please edit the met file in a text editor to correct these errors. The errors should be treated as missing values and may be corrected according to the procedures for substituting values for missing data, as found in the help file. ----- Line #: 39261 Date: "90 62416" Parameter: "Random Flow Vector [deg] > 360.0 (999.00)" Line #: 39261 Date: "90 62416" Parameter: "Missing Indicator for Wind Speed [m/s] (99.00)" Line #: 39261 Date: "90 62416" Parameter: "Friction Velocity [m/s] < 0.0 (-9.00)" Line #: 43829 Date: "90123124" Parameter: "Air Temperature [K] > 999.0 (1272.10)" Line #: 43829 Date: "90123124" Parameter: "Friction Velocity [m/s] < 0.0 (-9.00)" </pre> </div>
General	Show Terrain Tool The Show Terrain Tool allows you to easily switch between hiding and viewing the terrain contours. <div data-bbox="548 1375 1318 1705">  <p>The screenshot shows the CALMET.DAT file interface. A red arrow points to the 'Geo Data' dropdown menu, which is currently set to 'Zo field'. The interface includes a toolbar with various icons and a list of sources and contours.</p> </div>