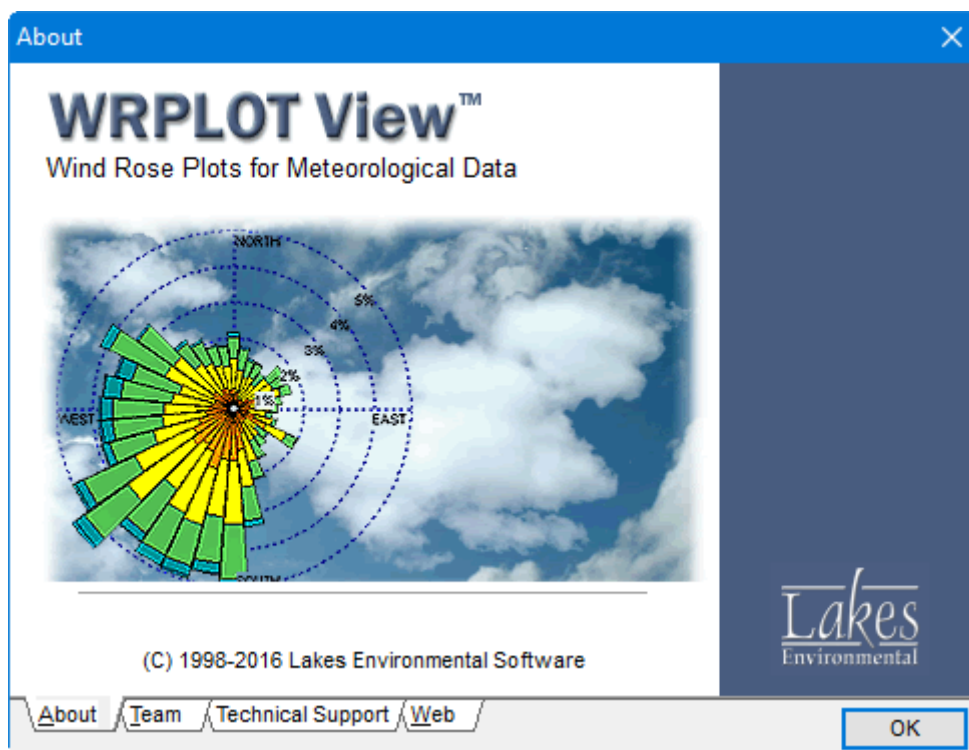


WRPLOT View™

Wind Rose Plots for Meteorological Data

Release Notes

Version 8.0



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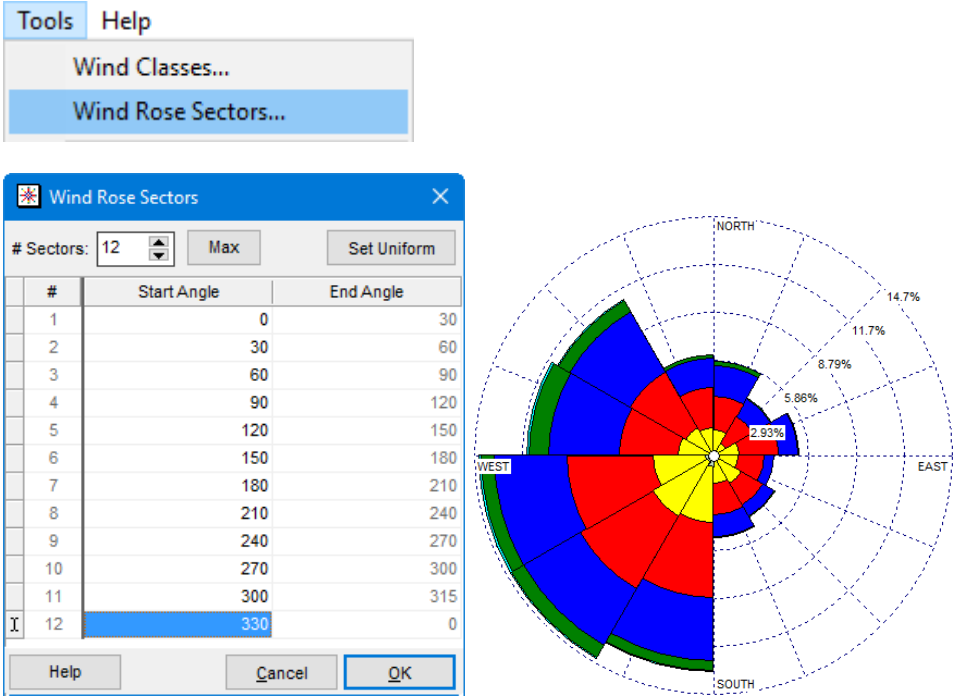
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WRPLOT View™ Version 8.0.0

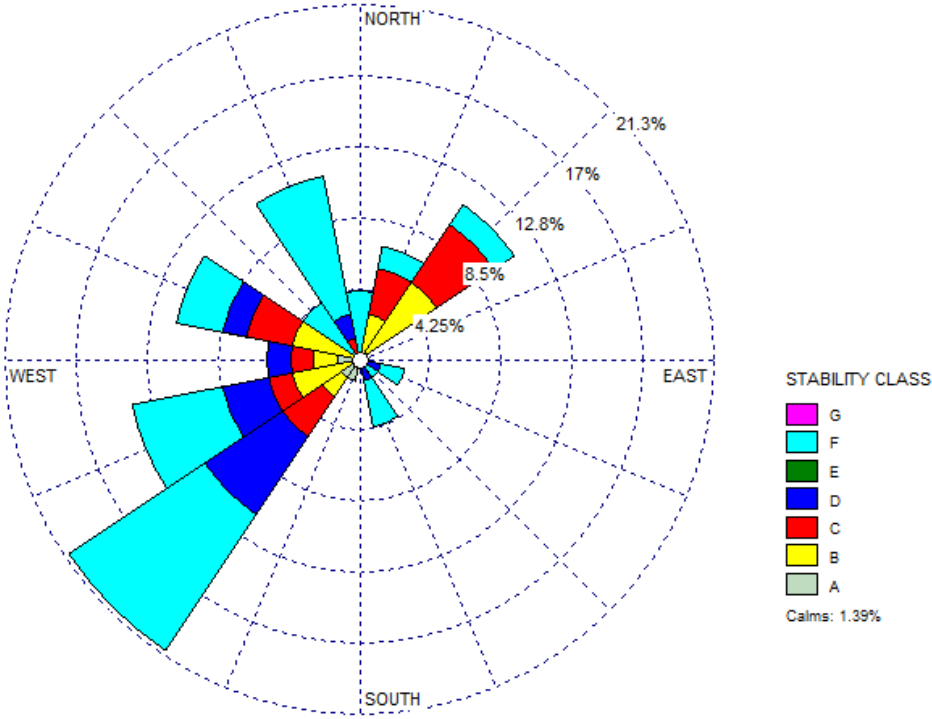
Release Notes


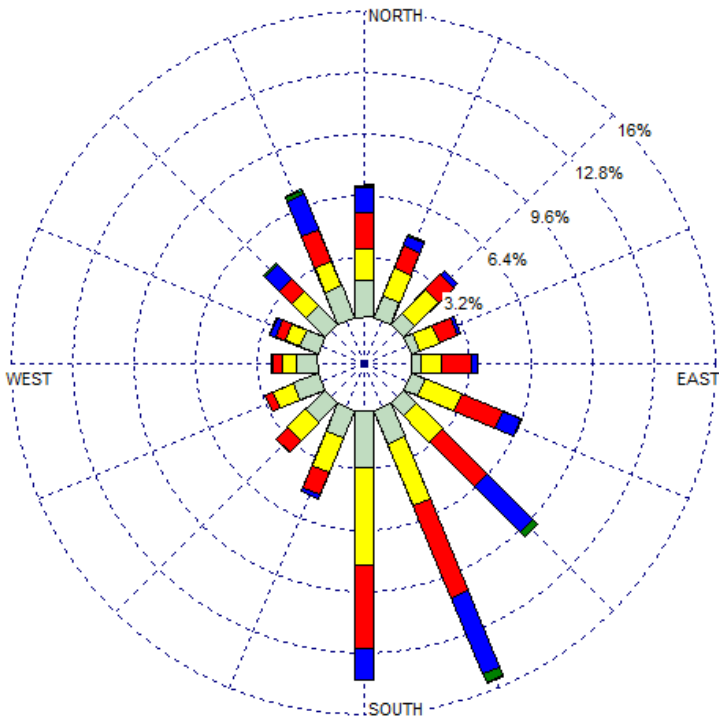
November 14, 2016

New Features

Topic	Feature Description																																							
<p>Tools</p>	<p>Wind Rose Sectors Definition</p> <p>A new tool – Wind Rose Sectors – was added to allow users to define custom start and end angles for the sectors.</p>  <p>The 'Wind Rose Sectors' dialog box includes the following table:</p> <table border="1"> <thead> <tr> <th>#</th> <th>Start Angle</th> <th>End Angle</th> </tr> </thead> <tbody> <tr><td>1</td><td>0</td><td>30</td></tr> <tr><td>2</td><td>30</td><td>60</td></tr> <tr><td>3</td><td>60</td><td>90</td></tr> <tr><td>4</td><td>90</td><td>120</td></tr> <tr><td>5</td><td>120</td><td>150</td></tr> <tr><td>6</td><td>150</td><td>180</td></tr> <tr><td>7</td><td>180</td><td>210</td></tr> <tr><td>8</td><td>210</td><td>240</td></tr> <tr><td>9</td><td>240</td><td>270</td></tr> <tr><td>10</td><td>270</td><td>300</td></tr> <tr><td>11</td><td>300</td><td>315</td></tr> <tr><td>12</td><td>330</td><td>0</td></tr> </tbody> </table> <p>The wind rose plot shows a circular chart with 12 sectors. The sectors are colored in a sequence: blue, green, red, yellow, blue, red, blue, red, blue, red, blue, green. The plot includes radial lines for percentages: 2.93%, 5.86%, 8.79%, 11.7%, and 14.7%. The cardinal directions NORTH, SOUTH, EAST, and WEST are labeled.</p>	#	Start Angle	End Angle	1	0	30	2	30	60	3	60	90	4	90	120	5	120	150	6	150	180	7	180	210	8	210	240	9	240	270	10	270	300	11	300	315	12	330	0
#	Start Angle	End Angle																																						
1	0	30																																						
2	30	60																																						
3	60	90																																						
4	90	120																																						
5	120	150																																						
6	150	180																																						
7	180	210																																						
8	210	240																																						
9	240	270																																						
10	270	300																																						
11	300	315																																						
12	330	0																																						

Topic	Feature Description
Met Data Information	New File Formats Support was added to WRPLOT View for the following file formats: <ul style="list-style-type: none">• CALPUFF Time Series File – Output from the Wind Rose Tool in CALPUFF View. This format includes both Wind Speed and Stability Class Display options.• AERMINUTE Data File – Output files from the US EPA AERMINUTE pre-processor of ASOS 1-minute and 5-minute wind data
Tools	Support for XLSX Files The Import Surface Data from Excel tool now supports XLSX files (up to 1048576 rows of data).

Topic	Feature Description
<p>Display</p>	<p>Stability Class Support for CALPUFF Time Series File</p> <p>The Stability Class Display option is now available when reviewing CALPUFF Time Series files in addition to the existing Pre-Processed ISC met data file support.</p> <div data-bbox="431 485 703 617" style="border: 1px solid gray; padding: 5px; margin-bottom: 10px;"> <p>Display</p> <p><input type="radio"/> Wind Speed</p> <p><input checked="" type="radio"/> Stability Class</p> </div>  <p>The wind rose plot displays the frequency of wind blowing from various directions, categorized by stability class. The most frequent wind direction is from the West-Northwest, with a peak frequency of 21.3%. Other significant directions include West (17%), West-Southwest (12.8%), and West-South (8.5%). The plot also shows smaller frequencies from the North, East, and South. The legend indicates that the most common stability class is F (cyan), followed by D (blue) and C (red). Calms account for 1.39% of the total observations.</p>

Topic	Feature Description
<p>Options</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="435 520 1230 661" style="border: 1px solid #ccc; padding: 5px; margin: 10px 0;"> <p>Rose Petal</p> <p><input checked="" type="radio"/> Uniform</p> <p><input type="radio"/> User-defined size: <input style="width: 50px;" type="text" value="100 %"/></p> </div> <div data-bbox="435 611 609 655" style="margin-bottom: 10px;">  Options... </div>  <p>The figure is a wind rose plot with a circular grid. The grid has concentric dashed circles representing frequency percentages: 3.2%, 6.4%, 9.6%, 12.8%, and 16%. The plot is divided into 16 directional sectors. Each sector contains a petal whose length corresponds to the frequency. The petals are composed of stacked colored segments (red, yellow, blue, green). The 'Uniform' option is selected in the control panel above, and the 'User-defined size' is set to 100%.</p>

Topic	Feature Description
Misc.	Additional Updates <ul style="list-style-type: none">• A new algorithm was implemented for Auto scaling rose displays• The "Add File" option now remembers the last opened folder, and the "Files of type" box is set to All Files• The last-used number of Wind Directions is saved between uses• Wind Classes display now shows 2 decimal places and conversions between m/s and knots were refined• Inclusion of February 29 in the Specify Days option when a leap year is present.• All percentages normalized to the total number of hours. Previous versions would correct calm frequencies to remove missing records.• Modification to reading TD-3505/ISHD files to match code from AERMET. The program now reads observations found between :30 of the previous hour and :01 of the current hour.• Modifications to the Years and Time Range fields to allow subsets of multiple years and overnight hours to be analyzed.

WRPLOT View Knowledgebase is accessible to all users at:

<http://www.weblakes.com/kb/FreewareKB/>

Resolved Issues

Topic	Issue Description
Wind Directions	Incorrect Number of Petals Displayed In some cases, WRPLOT View would default to a display with the full 36 petals while ignoring the user-specified Wind Directions value. This has been resolved.
Data File Info	Incomplete/Missing Hours Adjusted to Date & Time Period 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.
Data File Info	Incorrect Unit for Precipitation Intensity The Average Precipitation Intensity field used m/s as the unit instead of mm/hr. This has been corrected.
Options	Title Updates for Precipitation Intensity Titles and group headers were updated to reflect the Precipitation Intensity option when selected. Previously, these items still referred to 'Wind Rose' and 'Wind Classes'.
Precipitation Intensity	Rain Rate Conversion Adjustment When SAMSON files were added to WRPLOT View, an incorrect conversion was applied to convert rain rate from hundredths of inches to millimeters. This has been corrected.