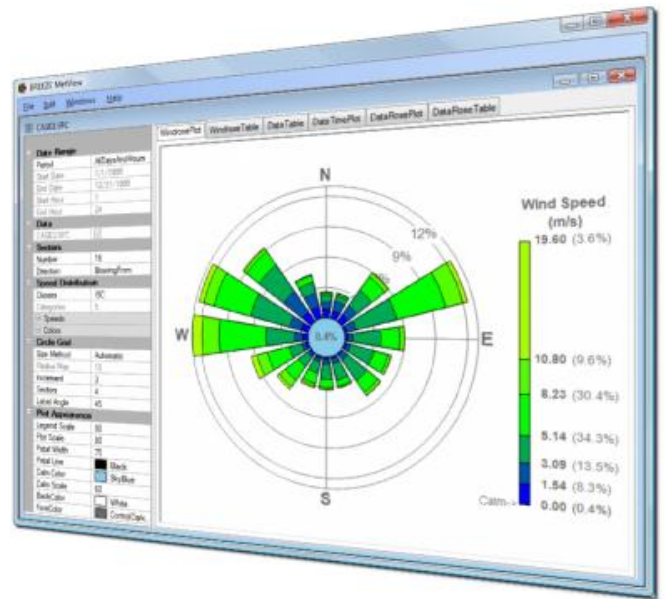# BREEZE MetView

BREEZE MetView is a powerful data analysis tool which gives users unprecedented abilities in reviewing, modifying, and analyzing meteorological data.

With BREEZE MetView, users have a wide range options at their disposal including:

- View graphical wind roses with corresponding tabular data
- Create fully customizable graphs of meteorological variables
- Analyze raw and model-ready meteorological data in easy-to-read tables
- Copy data to Microsoft Excel

Brand new to BREEZE MetView is the Data Rose functionality. Now, you can merge measured ambient air data with meteorological data files to analyze trends and correlations.

BREEZE MetView is capable of processing a wide range of meteorological data formats. The program has a large display view to show the data as well as an extensive control panel to give users full access to customize their datasets.

Plotting

With BREEZE MetView, you can view wind rose plots for a wide range of raw and model-ready meteorological data formats. Users can customize everything about the wind rose plot from the date range (which comes preloaded with seasonal and monthly options), how many sectors to display, what wind speed categories to use, the size and placement of accompanying legends. Even the color scheme can be changed with the click of a mouse. MetView is not limited to wind roses - users can now create custom data rose plots. Open up a meteorological data file, and suddently you can create a data rose plot which displays any variable within the file against wind direction.

BREEZE MetView also contains a powerful time series plot for data. Users can select which meteorological variables and date range they want to view to create detailed graphs of meteorological data over time.
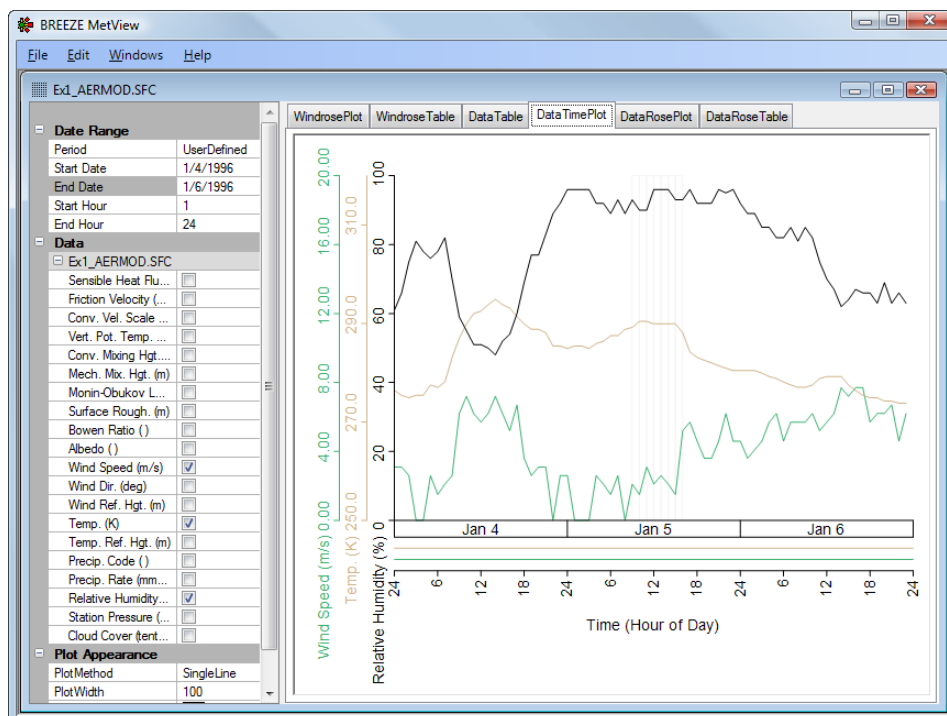
Custom data plot created from AERMOD-ready meteorological data.

Tabular Data Analysis

Most meteorological data formats are difficult to decipher on their own. BREEZE MetView removes the guesswork with data tables for every plot.

The Data Table display shows the user thei meteorological data file in an easy-to-ready table with header information so it's clear what variables are being analyzed. All tables can be exported as Microsoft Excel spreadsheets for further analysis.

- Using BREEZE MetView in conjunction with AERMOD-ready meteorological data? The Data Table display automatically identifies the missing hours so you're not left in the dark trying to find them.
- Only interested in seeing a table of a few variables? The MetView control panel allows users to turn variables off and on to create custom tables.
- Want to modify the data? Go right ahead! Users can make modifications to the data within the Data Table view. When data are saved, MetView will ensure it's in the proper text format for whatever meteorological data format you are using.

There are also tables in BREEZE MetView that are linked to the wind rose and data rose plots. Whatever options the user chooses for their plots will be linked to the associated tables so the raw data used to create the plot can be easily verified.

Append Data

With the new Append function, users can compare multiple files from the same period. It's easier than ever to compare variables from two datasets. Click to enlarge the image to the right which shows variables from two AERMOD-ready meteorological datasets being compared side-by-side.

Data Rose

New to BREEZE MetView is the data rose functionality. Similar to a wind rose, a data rose allows users to plot any meteorological variable against wind direction. BREEZE MetView also gives users the unique ability to append data to their meteorological data file. With this ability, users can turn the data rose into a true pollution rose.

This funcationality was developed to merge measured ambient air data with meteorological data to identify geospatial trends, patterns, and correlations that can be used to explain relationships between meteorological data and measured ambient chemical concentrations. Specifically, pollution rose diagrams are designed to visually illustrate the distribution of wind direction temporally correlated wtih ambient air monitoring data. Pollution rose diagrams are often used to correlate wind direction with observed or measured amibent air data to identify the met conditions (e.g., wind speed, wind direction) that occur during a specific measurement event such as the maximum annual benzene concentration or based on measured values above a user-defined range (e.g., >50 ug/m**3). The information can be used to identify or exclude possible emission sources responsible for the measured monitor value. Overlaying pollution rose diagrams with emission and monitor locations using a GIS system often reveals a wealth of additional information not obvious when looking at the data sets individually.
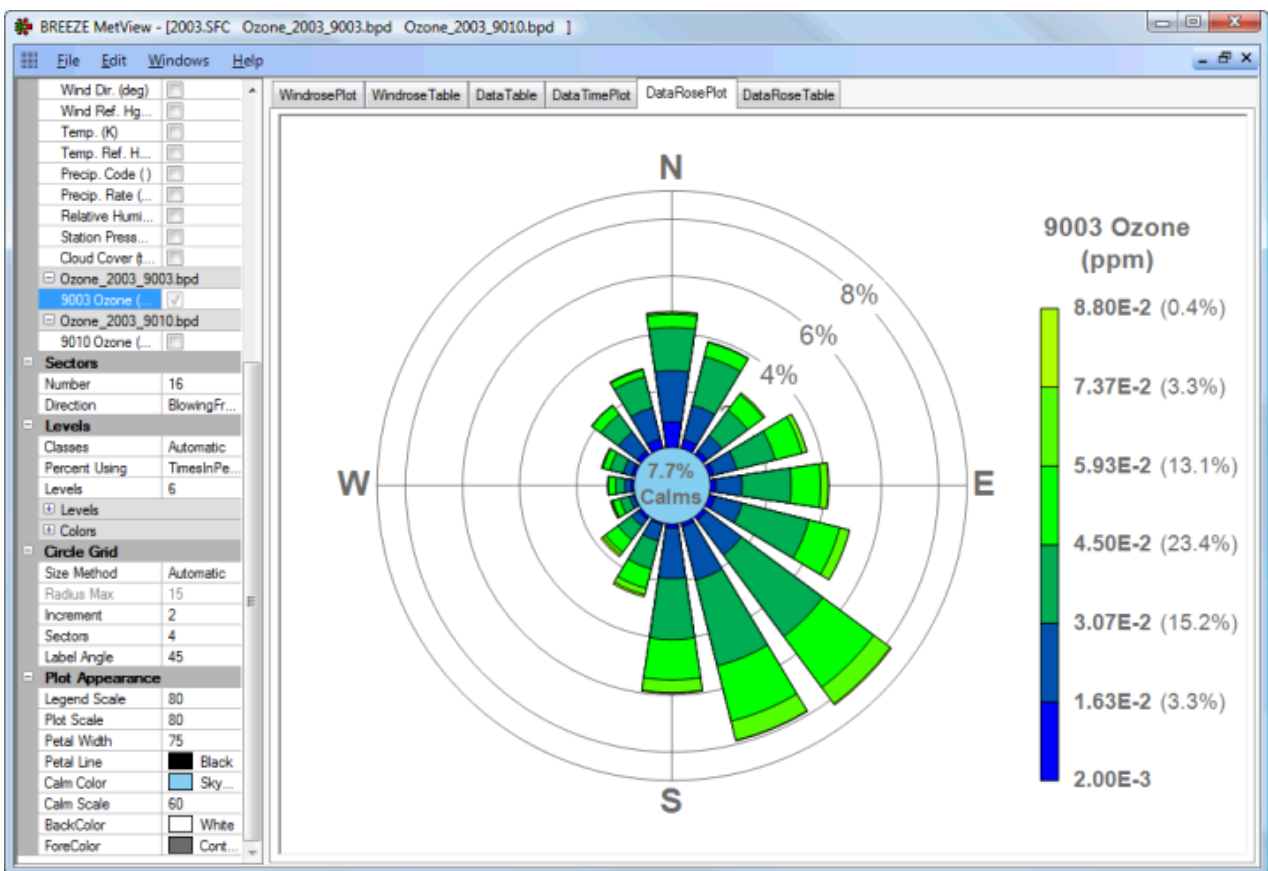
An example pollution rose comparing ozone data against AERMOD-ready meteorological data

Maind srl è distributore unico per l'Italia dei software di Trinity Consultant.