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RoseDiagram v. 1.02

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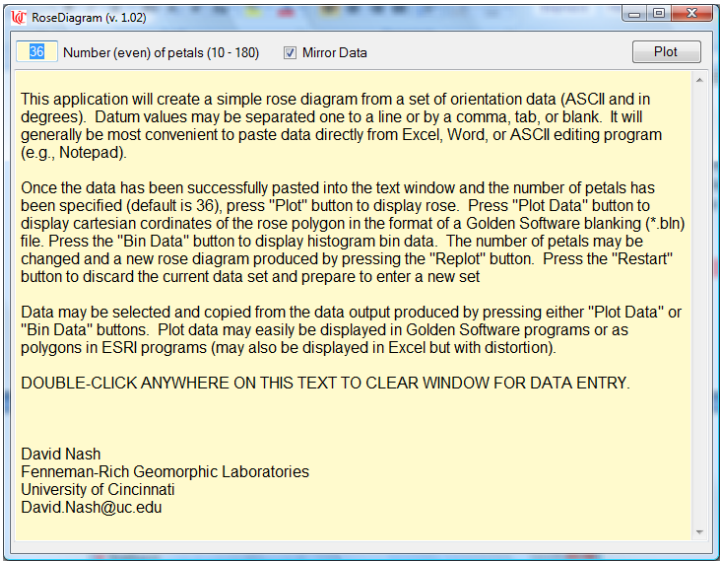
RoseDiagram[1] is a very simple program is written with Microsoft Visual Studio 2008 to produce a rose diagram (radial histogram) from a set of azimuth data (degrees). **It is intended as a simple means for previewing orientation frequency distribution data and preparing it for presentation with graphics programs such as Golden Software** (*e.g.*, *Surfer* and *Grapher*), ESRI (*e.g.,* ArcGIS), and Microsoft *Excel*. Note if using more general, non-mapping graphics programs (*e.g., Excel* or *Kaleidograph*), the rose diagram will appear distorted because these programs do not constrain the plot scale to be identical in both vertical and horizontal directions (the user will have to manipulate the plot to correct for this distortion).

The program has minimal error checking so may "crash" when causing an error unanticipated by the writer. A minimalist approach has been taken with this program; input and output files are not used nor does the program attempt to produce publishable diagrams (although it does produce output to be used by other publishable programs). Input is by typing or, more efficiently, pasting azimuth data into the input text window. Output is by selecting and copying data from the output text windows (data are tab delimited).

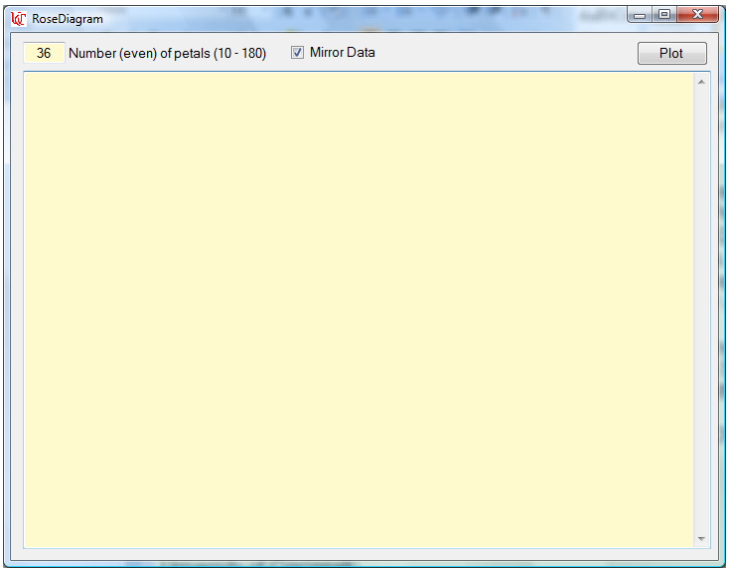
Rose diagrams may be either "mirrored" (default) for bidirectional data such as strikes of planes and lineations or not mirrored for unidirectional data such as azimuth of plunging folds. The number of petals must be an even number between 10 and 180. This number may be changed and the rose diagram replotted without reentering data.

If you find an error with the program or would like a simple feature added, please contact me at David.Nash@uc.edu.

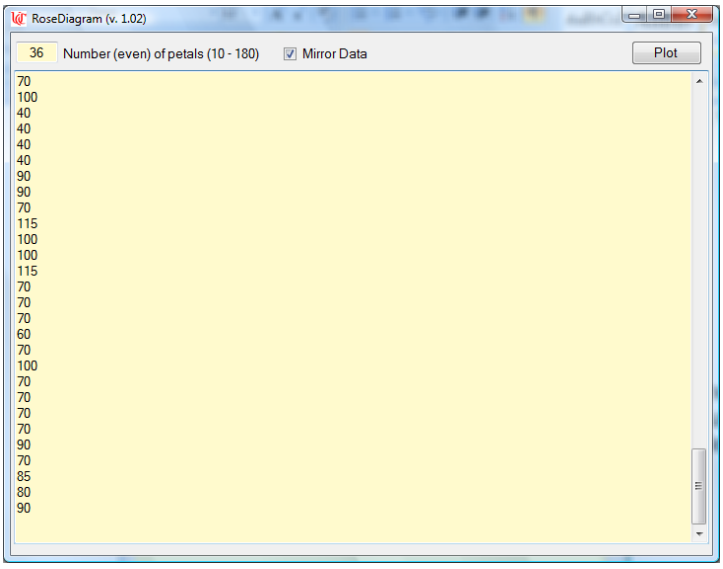
[1] This program may be duplicated and distributed in any form if its source, the University of Cincinnati, Fenneman-Rich Geomorphic Laboratories, is credited. The program is provided "as is" without warranty of any kind, either expressed or implied. The entire risk associated with the quality and performance of this program or any damage arising from the use or inability to use it is assumed entirely by the user.



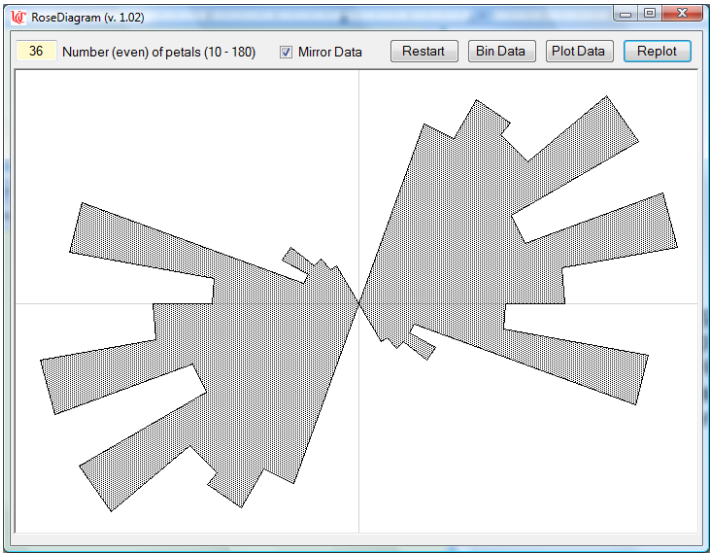
Welcome screen gives basic for running the program. The large text window is also used for input and output. Double click anywhere within this text box to clear it and prepare it for data entry (it may also be cleared by "right clicking", selecting ***Select All***, and deleting.



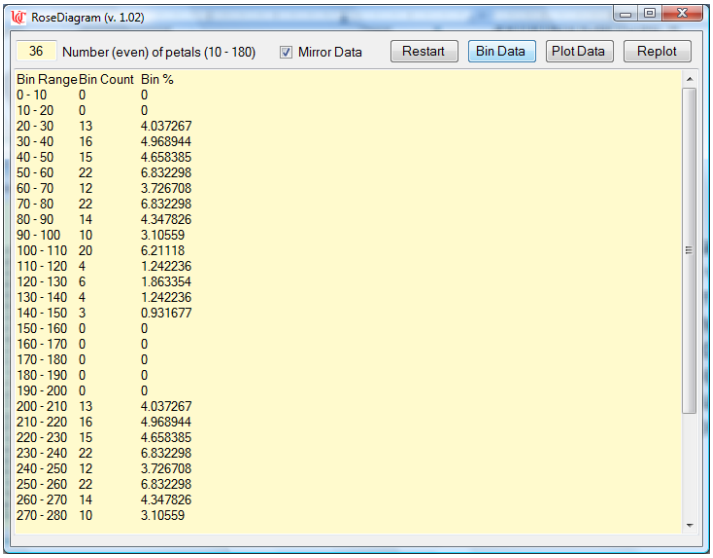
Window is ready for entering input data of azimuth directions in degrees.



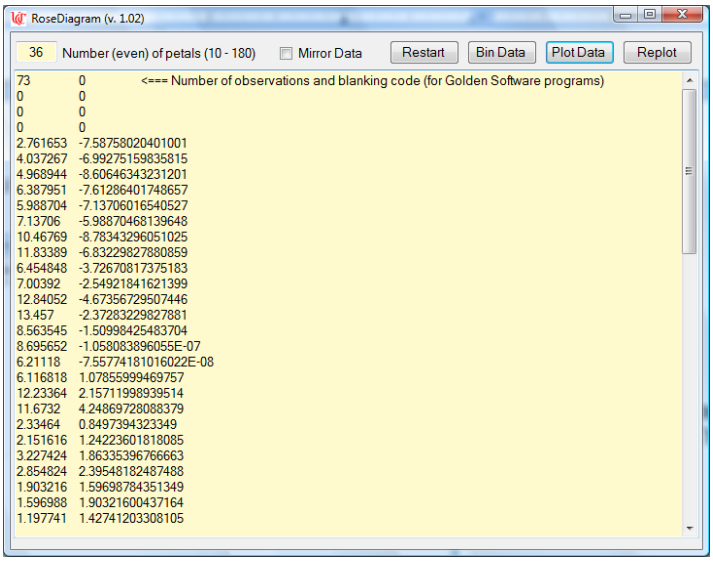
Data may either by typed or pasted from another program (*e.g.*, Excel). Observations may be entered on to separated by carriage returns, commas, spaces, or tabs.



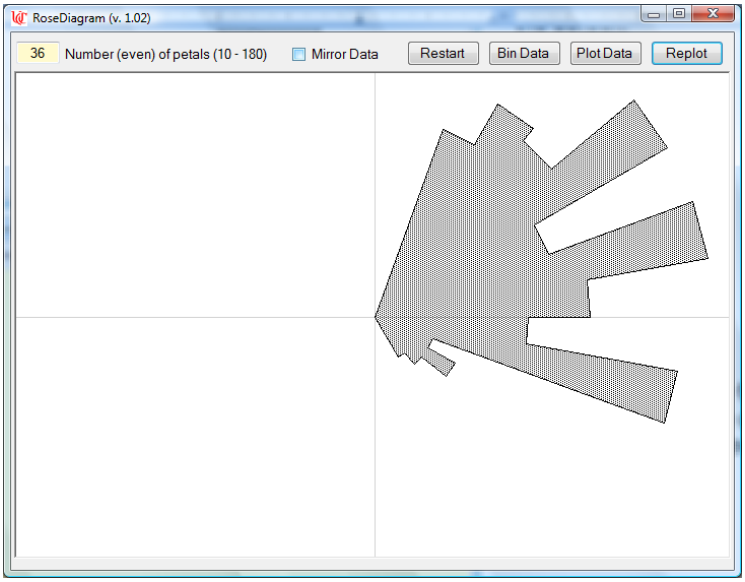
After the data has been entered, pressing the ***Plot/Replot*** button will display the azimuth frequency distribution. In this example, ***Mirror Data*** has been checked producing a symmetrical rose.



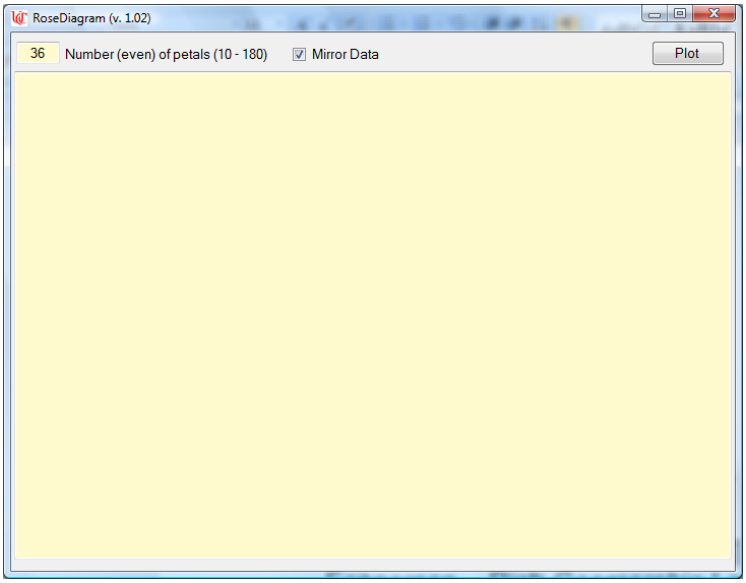
Pressing the ***Bin Data*** will display bin frequency data (tab delimited). First column is the upper and lower boundaries of the bin. The second column is the number of observations in the bin. The third column is the percent of the total observations within the bin.



Pressing the ***Plot Data*** button displays the Cartesian pairs used to plot the rose diagram (tab delimited). These data are in Golden Software's "blanking" format. The first line gives the number of observations (closed polygon) and blanking code. If the data is to be displayed with other programs (*e.g.*, ESRII), delete this line.



Non-mirrored rose diagram for unidirectional data. This is not the default.



Press ***Restart*** button to clear input and output data and prepare program to receive new data.