

TECHSIGHTING
SOFTWAREWorldwide Weather
Watcher

Amateur meteorologists wanting easy access to global weather conditions will find that the WeatherTracker program meets their needs at an affordable price. Using resources from Internet sites

WeatherTracker
Trexar Technologies,
Inc.

Alpharetta, GA.
\$24.95.
770-442-8045
www.trexar.com

around the world, WeatherTracker samples current weather information for specified locations and displays it in several formats. The software is easy to use and works without a browser. The program can access an impressive number of weather stations—more than 8000 worldwide. The data supplied by the stations—temperature, relative humidity, barometric pressure, wind direction, and current conditions—are the figures most commonly sought by amateurs. This information can be shown in small “digital” windows or larger “analog” windows, and users can choose from English and metric units.

In addition to standard measurements, WeatherTracker can also retrieve the local forecast, climate data (such as time of sunrise and sunset), and marine data, as well as the dewpoint, wind chill, and heat indices. Information availability, however, varies considerably among sites.

Unfortunately, the software cannot provide live data, so users can only get hourly updates, and access to information on cities outside North America may have a lag time of several hours. Also, the program is unable to provide a simple interface for tracking and displaying climate data over time. With the default mode of the program, the user will see current conditions only. However, the program will track data if the preferences are set to “data logging,” which will file data in a log folder. This folder is stored in the same location on the computer as the program, but the WeatherTracker cannot directly access the data. The data are saved in a comma-delimited format, which must be imported by a spreadsheet program for analy-

sis and plotting. Adding a spreadsheet function to WeatherTracker would certainly simplify data analysis.

The WeatherTracker is handy for monitoring weather conditions at remote sites, and amateur meteorologists will welcome this comprehensive, easy-to-use, inexpensive program. Professional meteorologists, however, will not find WeatherTracker useful because they have access to more climate information than this program can provide. WeatherTracker is available for both Macintosh and Windows-based computers.

—KEVIN AHERN

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Data Tool

PSI-Plot version 6 for Windows is a spreadsheet data analysis and graphing program from Poly Software. This latest version adds new features to an established scientific research and presentation software tool, accomplishing the difficult task of linking powerful statistical analysis with a well-designed graphical interface on a desktop computer.

The principal strength of PSI-Plot is its ability to handle large data sets and produce annotated graphs, both of which require ample memory and processor speed. The spreadsheet can organize data like Microsoft Excel, but on a much larger scale: Each of the program’s “sheets” can handle 1024 columns and 100,000 rows of data. With an automatic converter, homogeneous data sets can be easily imported from standard text or from Excel. Importing complex data is more difficult and may require copying and pasting data, or saving subsets of the data from the source application.

PSI-Plot makes available a comprehensive set of data editing and statistical analysis functions. Blocks of cells may be easily selected and edited. Cells or blocks can be filled with uniform or Gaussian random numbers, simple functions, or user-defined data. However, the program does lack a macro language for conditional or branching calculations.

Several statistical tools are available such as Student’s *t* test and F test, which measure the significance of statistical differences between two data sets; one- and two-way analysis of variance (ANOVA), linear regression, and interpolation; and nonparametric calculations for data distributions, including chi-squared test and Kendall’s tau rank correlation and sign test, which evaluate the probability that

two samples were drawn from the same set. Some mathematical analysis functions, such as an equation solver and matrix manipulations, are available, although these nonstatistical functions do not perform as well as in other math software packages.

The program’s graphing is intuitive and generally the first-time user won’t need the help files. Numerous plot formats include two- and three-dimensional scatter plots, line graphs, and surface mesh graphs. A rich set of options for drawing axes is available, as is a toolbox for making annotations. PSI-Plot produces publication-quality hardcopy and can be saved in many file formats.

The included manual contains a thorough tutorial section, which explains most of the program’s features adequately. Science students will find PSI-Plot easier to use and more robust in statistical functions than Excel.

The program is shipped on four 3.5-inch disks and runs under Windows 95, 98, or NT. In addition to individual licenses, network licenses are available for providing PSI-Plot to users via a server.

—WILLIAM SEFFENS

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TECHSIGHTING
SOFTWAREA Picture is Worth a
Thousand Words

Production of two of my favorite old volumes, illustrated with painstakingly constructed graphical data, would surely have been simplified by use of the Noesys software suite. In *The 1900 Statistical Atlas of the United States*, millions of megabytes worth of data on the population by year, by county, and by state are displayed with all the precision that engravers and watercolorists could muster. In 1960, barely a decade into the computer age, MIT press published a beautiful large-format book

Noesys 2.0
Fortner Software

Boulder, CO.
Noesys, \$495;
Noesys Plus, \$795;
Noesys+IDL, \$2390.
800-252-6479
www.fortner.com

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