

**PACKAGE ID** - 001303IBMPC00 TOWERS NT

**KWIC TITLE** - Meteorological Towers Display for Windows NT

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**LIMITATION CODE** -COPY                   **AUDIENCE CODE** - LIM

**COMPLETION DATE** - 12/01/1998   **PUBLICATION DATE** - 12/01/1998

**DESCRIPTION** - The Towers Display Program provides a convenient means of graphically depicting current wind speed and direction from a network of meteorological monitoring stations. The program was designed primarily for emergency response applications and, therefore, plots observed wind directions as a transport direction, i.e., the direction toward which the wind would transport a release of an atmospheric contaminant. Tabular summaries of wind speed and direction as well as temperature, relative humidity, and atmospheric turbulence measured at each monitoring station can be displayed. The current implementation of the product at SRS displays data from eight Weather Information and Display (WIND) System meteorological towers at SRS, meteorological stations established jointly by SRS/WSRC and the Augusta/Richmond County Emergency Management Agency in Augusta, GA, and National Weather Service stations in Augusta, GA. Wind speed and direction are plotted in a Beaufort scale format at the location of the station on a geographic map of the area. A GUI provides for easy specification of a desired date and time for the data to be displayed.

**PACKAGE CONTENTS** - Media Directory; Software Abstract;  
WSRC-IM-99-00002; Media Includes Source Code; User's Guide,  
Executable Module;

**SOURCE CODE INCLUDED?** - Yes

**MEDIA QUANTITY** - 1 CD Rom

**METHOD OF SOLUTION** - N/A

**COMPUTER** - IBM PC

**OPERATING SYSTEMS** - Microsoft Windows NT Workstation

**PROGRAMMING LANGUAGES** - NA

**SOFTWARE LIMITATIONS** - None

**SOURCE CODE AVAILABLE (Y/N)** - Y

**UNIQUE FEATURES** - A GUI provides easy input of date/time for the display, selection of data units (English or metric), and display

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**UNIQUE FEATURES - (CONT)** of the tabular summaries. In addition, the program provides automatically updates the display as new data are received. The GUI is configured for 256 color displays with up to 1280X1024 pixel resolution; scroll bars are employed in a virtual window for adapting to PCs with lesser resolution. A self-extracting executable is available for distribution of the Towers Display software package.

**RELATED SOFTWARE** - All software has been incorporated with the GUI application.

**OTHER PROG/OPER SYS INFO** - Tcl 7.3 and Tk 3.6 installation package for Windows NT needs to be installed on the host PC workstation. This is a freely available package distribution residing on the Tcl/Tk archive:www.neosoft.com. Once GUI software matures on Windows NT, a compiled version of the application will be developed and there will no longer be a need for the Tcl/Tk package to be installed

**HARDWARE REQS** - 486 or Pentium PC (or compatibles)

**TIME REQUIREMENTS** - Displays are available within a few seconds after execution.

**ABSTRACT STATUS** - Released AS-IS 6/29/1999.

**SUBJECT CLASS CODE** - Z

**KEYWORDS** -

COMPUTER PROGRAM DOCUMENTATION  
T CODES  
WIND  
METEOROLOGY  
AIR POLLUTION MONITORING  
AIR TRANSPORT  
ATMOSPHERIC CIRCULATION

**EDB SUBJECT CATEGORIES** -  
990200

**SPONSOR** - DOE/DP

**PACKAGE TYPE** - AS - IS