WeatherWatcher
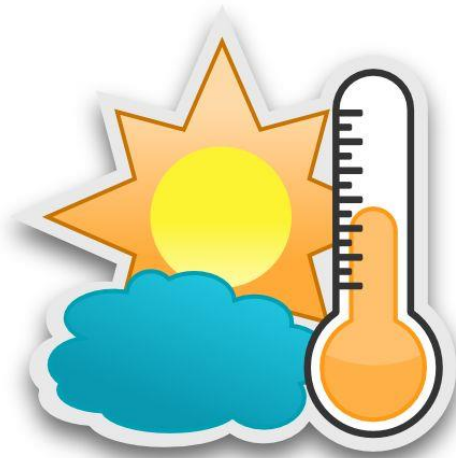
(Version 4.3.0 -- Released: November 18, 2023)

Users Guide

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TABLE OF CONTENTS

INTRODUCTION

WeatherWatcher is a utility that displays the latest weather observation for a specified location.

SYSTEM REQUIREMENTS

WeatherWatcher requires Windows Vista or later. It is a 32-bit application, and therefore will run on a computer with either a 32-bit or a 64-bit processor.

Adobe Acrobat Reader® or a similar program capable of displaying .pdf files is required to view the program documentation.

PROGRAM INSTALLATION

Run the installation package file, *WeatherWatcherSetup.exe*. This will install *WeatherWatcher* and all required supporting files on your computer. The installer will suggest a default location for the program file. You may change the location or leave it at the default, it does not matter.

PROGRAM OPERATION

When the program is started for the first time, the window shown in Figure 1 will be displayed.
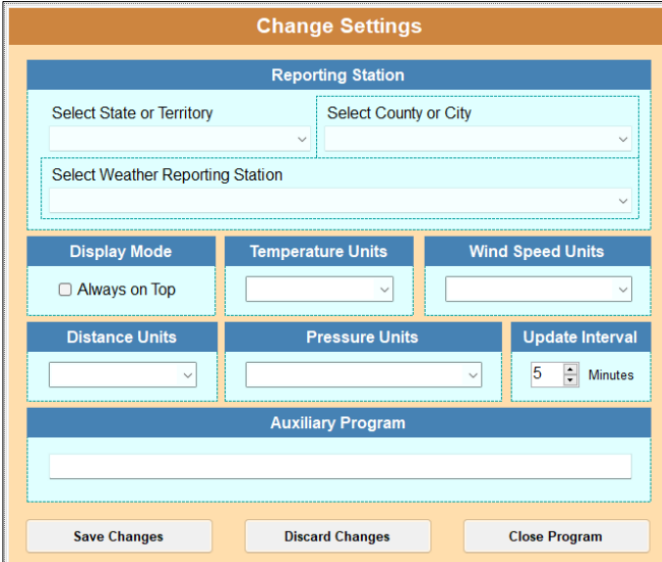

Figure 1 -- Settings Window

Before you can proceed, you must select the weather reporting station to be displayed. First, select the state, or territory where the station is located from the dropdown list of locations. Then select the desired county or city where the reporting station is located. Finally, select the desired weather reporting station from the list of stations in that county or city. The other settings on this window are discussed in the section titled "Program Settings" later in this document.

MAIN DISPLAY

After you have selected the weather reporting station, the main window, shown in Figure 2, will be displayed.
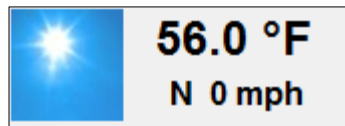

Figure 2 - Main Window

The picture is a visual representation of the current conditions. The upper line of text is the current temperature, and the lower line of text is the current wind speed and direction.

WeatherWatcher does not display an icon on the task bar, but rather puts a small icon in the system tray.

DISPLAYING OBSERVATION DETAILS

If you click on the *WeatherWatcher* window with the left mouse button, a window showing the details of the latest hourly observation is displayed. A sample is shown in Figure 3.
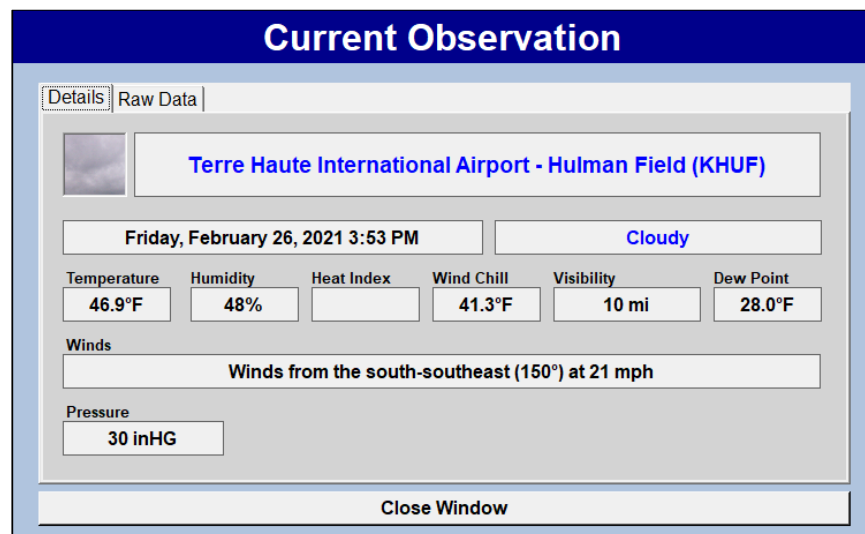

Figure 3 – Observation Details

Selecting the "Raw Data" tab will display the JSON text that was downloaded from the National Weather Service containing the hourly observation data.

DISPLAYING AN AUXILIARY PROGRAM

If you click on the *WeatherWatcher* window with the right mouse button, you can launch another program. An example would be *Weather Radar Pro* which displays the current weather radar.

SETTING THE DISPLAY POSITION

To position the display on the screen, place the cursor over the *WeatherWatcher* window, hold both the Ctrl key and the left mouse button down, and drag the display to the desired position.

PROGRAM MENU

To open the program menu, hold the Ctrl key down and click on the *WeatherWatcher* window with the right mouse button or click on the system tray icon with the right mouse button. The pop-up menu shown in Figure 4 will be displayed.
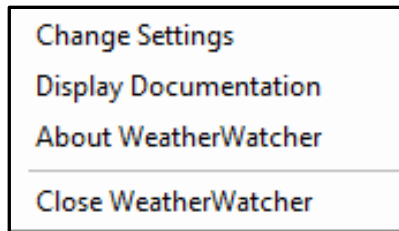

Figure 4 – Menu

The menu items and their functions are:

- **Change Settings** – Displays a window where you can set the program options and settings.
- **Display Documentation** -- Displays the program documentation (this document).
- **About WeatherWatcher** -- Displays basic information about the program.
- **Close WeatherWatcher** -- Closes the program.

PROGRAM SETTINGS

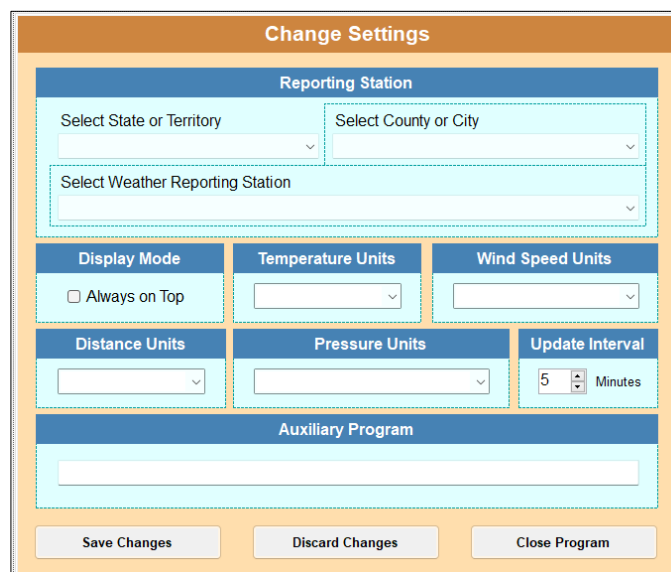Selecting "Change Settings" from the menu will cause the window shown in Figure 5 to be displayed.

Figure 5 – Change Settings Window

This window allows you to set the various program settings and options as follows:

- **Select State or Territory** – This dropdown box contains a list of all of the states and territories where the National Weather Service has weather reporting stations. Select the location of the weather reporting station that you want to have displayed.

- **Select County or City** – This dropdown list contains a list of all counties and independent cities in the selected state or territory. Select the county or city where the weather reporting stations that you want to display is located.
- **Select Weather Reporting Station** – This dropdown box contains a list of all weather reporting stations in the selected state/territory & county/city. Select the weather reporting station that you want to have displayed.
- **Display Mode** – If the "Always on Top" box is checked, then the main window will be displayed on top of any other running applications.
- **Temperature Units** – Select the temperature units (Fahrenheit or Celsius) to be used for the main window temperature display.
- **Wind Speed Units** – Select the temperature units (Fahrenheit or Celsius) to be used for the main window temperature display.
- **Distance Units** – Select the temperature units (Fahrenheit or Celsius) to be used for the main window temperature display.
- **Pressure Units** – Select the temperature units (Fahrenheit or Celsius) to be used for the main window temperature display.
- **Update Interval –** The current observations data for each weather reporting station is updated once per hour by the National Weather Service. The data update interval setting allows you to select how often, in minutes, the program will access the NWS website to download the latest data.
- **Auxiliary Program –** This text box allows you to specify the full path and file name of an auxiliary program that you want to start when you right-click on the main display.

The Change Settings window includes the following action buttons:

- **Save Changes** – Clicking on this button will save any changes you have made to the settings and close the Change Settings window.
- **Discard Changes** – Clicking on this button will close the Change Settings window without saving any changes you have made to the settings.
- **Close Program** – Clicking on this button will close the program.

ABOUT THE AUTHOR

WeatherWatcher was written by Ray Andrews, K9DUR.

Ray holds an Amateur Extra class amateur radio license and was first licensed in April 1960. He is a retired electronic design engineer and software developer and resides in West Terre Haute, IN.

For more information, visit Ray's web page: http://k9dur.us

REVISION HISTORY

4.3.0 – Nov 18, 2023 – Changed mouse actions used to display pop-up menu and launch auxiliary program.

4.2.0 – Dec 23, 2022 – Changed mouse actions used to display pop-up menu and launch auxiliary program. Corrected display of temperatures when no value reported. Changed code that determines whether user is dragging window or requesting display of details.

4.1.1 – Oct 21, 2021 – Added code to handle a null temperature reported.

4.1.0 – Oct 17, 2021 – Added ability to start auxiliary program. Changed the mouse actions that perform different functions.

4.0.2 – Oct 9, 2021 – Corrected parsing of raw data.

4.0.1 – Mar 18, 2021 – Re-arranged data on details screen. Corrected weather icon image mode.

4.0.0 – Feb 28, 2021 – Complete re-write to use the new National Weather Service API.

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