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External links

Principal Authors: ANONIPEDITS:0, WikiSysop
1 Introduction

About This Site

Purpose To explain, to those interested, the underlying design philosophy for these Wiki Help pages. The original, self imposed, objectives are:

• Page content should be maintainable by any Weather Display forum user who has useful material to add.

• No assumptions should be made about the user's computer platform or the Web tools available thereon. While the default for Weather Display is the Microsoft® Windows operating system, other operating systems are supported. If your content is for Linux, etc. denote that at the top of the content.

• Graphics should be lightweight, or sized as small as possible, to reduce download times. Remember, not everyone has a broadband connection.

• Page appearance should be consistent from page to page.

• Links to external Web sites, where appropriate, are encouraged.

Unlike a static Web page, Wiki's can be edited by anyone who registers. If you see an error, or have content to add, you're encouraged to participate.

Source: http://wiki.weather-watch.com/index.php?title=About_This_Site&oldid=1952

Principal Authors: ANONIPEDITS:0

About Weather Display

Weather Display provides more than 3,500 weather enthusiasts a way to get the more from their weather stations.

Not only does it support a huge range of stations from all major manufacturers, but it's also complete with features and options. Features include:

• Highly customizable

• Support for most major weather stations

• Real time, auto scale, and graph history graphing

• FTP uploads of the weather data to your Web page, pager, and e-mail notifications of extreme conditions

• Uploads to weather collection services such a Weather Underground, Weather For You, CWOP, AWEKAS, Anything Weather, and WEDAAL

• Web downloads, METAR/Synop e-mails

• Averages/extreme/climate/NOAA reports

• Direct Web Cam capture

• Web Cam uploading

• Animated Web cam images

• Grouped file uploads

• FTP downloads
• Decoded METAR downloads
• APRS output (Internet and direct COM ports)
• WAP for wireless data users
• Weather dials
• Weather voice
• Weather answer phone
• Dallas 1 wire sensors (lightning counter, solar sensor, barometer sensor, and extra temperature/humidity sensors with any weather station)
• Labjack to add extra temperature or humidity sensor to your existing weather station (USB)
• ... and lots more!
You can also use Weather Display to provide near real-time viewing of your weather data on the Internet using the Weather Display Live add-on.
Weather Display is compatible with Microsoft® Windows 95/NT/98/2000/ME/XP/VISTA and now Linux.

**Weather Display**
Copyright © 1999–2006 Brian Hamilton

Brian Hamilton
2 Marshall Road
RD4
Waiuku
New Zealand
Phone: +64 (0)9 2351377
E-mail: info@weather-display.com

Principal Authors: ANONIPEDITS:0

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**Purchase or Register Weather Display**

**Trial Period**

When you first download Weather Display it is fully working application. A screen at start up reminds to purchase and register the software.

There is a trial period of 30 days, during which time you can use all of the features of Weather Display. After the 30 days, Weather Display will not longer function. You can still register Weather Display after the expiration of the trial period by providing the registration number of your application. Your data collected during the the trial usage of Weather Display is saved.
Converting Trial to Registered Version

When payment is received, Brian will provide you with the necessary registration code which you can then use in a separate application that will turn all of the functionality of Weather Display back on.

This utility is located at: http://www.weather-display.com/downloadfiles/wdregistration.exe [1]

Purchasing Registered License

Weather Display is only US$70 for a lifetime registration, which includes all future updates. You can pay the registration fee in five major world currencies.

CLICK HERE TO PURCHASE USING THE SECURE LIVE CREDIT CARD WORLD PAY SERVER [2]

Notes on Using World Pay

• The charging merchant Tokaanuskihire will appear on your credit card bill.
• Diner's Club or American Express are not currently accepted.
• When you get to the shop, click on Buy 1 Now, then place an order without an account. There is no need for you to enter a valid postal address. However, please fill in Other beneath Outside US with some information, even though in italics, and don't worry about the Outside US drop down window if you are registering from the United States.
• A valid e-mail address is important. The program author doesn't receive your credit card information, as it is all processed by World Pay.
• The license price is quoted in New Zealand Dollars. For example, NZ$105 is approximately US$73 (depending on current exchange rates). You can select the currency of your choice, and then apply the exchange rate so you know exactly how much you will be charged. The whole process is live, and you should get your registration within one day.
• When confirmation of your payment is received a registration code will be e-mailed to you. You enter the registration code into the lower box on the registration display, and then click OK. Please e-mail Brian your registration key after you have purchased the software. The registration code is case sensitive.
• Customers in Germany, please purchase via http://www.weather-display.de [3].

External links


Principal Authors: ANONIPEDITS:0
Quick Start

Purpose
This document is designed to get Weather Display up and running with your weather Station equipment in the shortest possible time.

This Quick Start does not address all your questions — only those required to get a basic Weather Display setup in operation so that you can view the weather information collected by your weather station.

Minimum system requirements

- Microsoft® Windows 95 operating system
- An Intel 486 or higher CPU or AMD equivalent
- 32 MB RAM
- 6 MB hard drive space for initial setup, then approximately 10 MB additional per month for data
- 800x600 screen resolution with 256 color depth
- A compatible weather station and serial (RS-232) cable with one free COM port on your computer

Downloading Weather Display

   
      
      1. Click Download next to Main Weather Display install file.
      2. When prompted, click Save, and then specify a folder location where to save the Weather Display install program.
      3. When the download completed, browse to the folder you specified in step 4, and then double-click the Weather Display .exe file.
      4. Follow the instructions on your screen to complete the installation.
      5. At the end of the installation wizard, click Finish. If you leave the Launch Weather Display check box selected, Weather Display launches with the new version.

Note If you are upgrading the software, your weather data is not modified or deleted. However, you should make regular backup of your data, especially before updating the software. Make sure you stop Weather Display before upgrading. In Weather Display, on the Exit menu, click Save and Exit. Make sure all of the Weather Display applications, such as RealTime FTP do not appear in the Windows task bar notifications area.
Language
Once the program has loaded, the first thing you want to do is to choose your language preference.

- On the Setup menu, point to Language, and then click your language choice.
  English is the default language. You can choose from English, German, Italian, Spanish, or French.

Weather Station Type
1. On the main Weather Display window, click Control Panel, and then under Station Settings, click Station Type & Settings.
2. Click the tab that corresponds to the weather station equipment you have.
   You might need to further define your weather station equipment or configure options specific to the model.

COM port
Obviously, you have to connect your weather station to the computer that runs Weather Display. On the rear of most computers there is at least one serial port connector. Connect an appropriate serial (RS-232) cable between the serial connector of your choice. If the connector is labeled on your computer, note its name, usually COM1 or COM2. It is not common for these to be labeled.

You then need to configure Weather Display to use the correct COM port corresponding to the connector you have used.

1. On the Setup menu, select COM Port Settings.
2. Select the appropriate COM port, and then click OK. The Weather Display title bar now displays the COM port you selected.

Unfortunately, if you're not sure which COM port you're using, the trial-and-error method is the fastest for most people. Start with COM1. If that doesn't work, then change to COM2, then COM3, etc.

At the bottom of the window, below the time display, there are two small square boxes — Data Received, and Data Quality. When you start Weather Display, they should be red. When you have correctly selected your weather station and COM port, these two boxes will appear green. It might take up to 15 seconds or more before data is received. The upper (Data Received) box blinks each time data is received from your weather station. The lower (Data Quality) box should remain green. If the two boxes do not respond, verify your COM and station selections, and make sure your cables are tightly fastened on both ends.

COM port tips
COM2 is usually a 25-pin male plug, so you may need a 9-pin to 25-pin adapter. Reset to use COM1. Make sure if a modem is on COM4, it uses a different IRQ setting.
Units

1. On the main Weather Display window, click Control Panel, and then click Units & Other Settings.
2. Under Log file units, select Metric units or USA units. Selecting USA changes the date format from d/m/y to m/d/y. The setting will persist each time the program loads.
3. For Program Settings, you can set Wind speed, Temperature, Rainfall, Barometer and Date format. You can also add a Beaufort speed display and specify the number of decimal places to be used for rainfall.
4. Under Internet Settings, you can set Wind speed, Temperature, Rainfall, Barometer and Date format. Internet settings are used when uploading your data to the Internet, for example, your Web site.
5. Under Other settings, specify your Height above sea level. The other settings in this section can be left at their defaults during initial setup.
6. Click OK to save your settings.

Important Do not change log file units after you select the units for the first time. Changing units a second time can cause logging problems.

Colors

If you have problems with the default colours, you will have to make some changes.
1. On the Weather Display main window, click Control Panel.
2. Under Station Settings, click Colours.
3. Make the changes you want.
4. Click OK.

Screen display on startup

1. On the Setup menu, click Advanced Settings.
2. On the Program tab, under StartUp Commands, select the Start in center of screen check box, and then click OK.

Rain

Weather Display stores its own rainfall totals separate from the weather station.
1. On the Weather Display main window, click Control Panel.
2. Under Station Settings, click Offsets & Initial Rain.
3. Then select the amount for today's rain, yesterday's rain, monthly rain, and yearly rainfall.
4. Click OK.

Note For US units, the equivalent amount in inches is displayed. Click on Yes to set these amounts. If you are just increasing the amount, then that amount is added on to any previous numbers entered. If you are only updating the offsets, make sure you close the window with the X in the window top right hand corner when you have this set.
**Humidity**

To adjust humidity offsets, do the following:

1. On the Weather Display main window, click **Control Panel**.
2. Under **Station Settings**, click **Offsets & Initial Rain**.
3. Under **Humidity Offset**, select the check boxes for the options you want.

**Note** For the WMR-968 you should select the **Set 98% as 100%** check box and enter a and **Slope factor** of 1.

**Barometer**

For the barometer, Weather Display uses the raw pressure value from your weather station. You need to set a pressure offset. This number is in hPa. There is a conversion for US units (inches). The offset is absolute. For example, if you want to adjust the barometer, and you want the pressure to increase by 1 hPa, then the offset must be 1 hPa higher.

You need to set the offset until the pressure shown in Weather Display matches the Mean Sea Level Pressure (MSLP) for your location at that point in time. You can find the MSLP from a nearby Weather Service facility or airport. Some local newspapers might also have this information. You might need to fine tune over a period of time; your pressure reading needs to be similar to your nearest official weather station at the same time of day ideally done in light winds/clear weather when there is a large high pressure covering in your area.

**External links**


Principal Authors: ANONIPEDITS:0

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**Daily reset Time**

**Purpose** To ensure your station's observations conform with international agreements for start and end of the day.

**Daily reset**

You can choose either a 12 Midnight reset (default) or 9 a.m. reset (used in Australia, New Zealand, and a number of other countries). The Norwegian Meteorological Institute uses 06:00 UTC to reset rain and 18:00 UTC for temperature and wind.

- Under the **Setup**, click **Values Reset Time**.

At either 12 Midnight or 9 a.m., the daily high/low data will be reset, as well as, yesterday's rain total.
**Fine tune reset times**
You can also fine tune the reset times if you need to.

1. Under **Setup**, click **Display Units**.
2. Set **Hour to reset daily high/low values** (temperature, wind), **Hour to reset daily rain** (n.b. 24-hour clock - e.g. 1600 for 4 p.m.), and **month to reset the yearly rain** (to match your rain season).

Principal Authors: ANONIPEDITS:0

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**Starting: When and How**

*When Weather Displays Runs*
Weather Display is designed to run all the time, 24 hours a day, 7 days a week. If you want Weather Display to start when your computer starts, on the **Setup** menu, point to **Start When Windows Starts**, then click **Yes**. You can also copy a shortcut to Weather Display into the Windows **Startup** folder.

If you don't want to start Weather Display up automatically, a shortcut to the program is placed on your Windows desktop and on the Windows Start menu via the installer.

*How Weather Display Appears*

- **Full Screen** The default condition. Note under **Setup**, point to **Full Screen When Larger Than 800x600**, and then click **Yes**.
- **Minimized** On the **Setup** menu, point to **Start Minimized**, and then click **Yes**.
- **Hidden** On the **Setup** menu, point to **Start Hidden**, and then click **Yes**.
- **Service** On the **Setup** menu, point to **Start When Windows Starts**, and then click **Start as a service under NT/2000**.

*Note* There have been problems reported when attempting to run Weather Display as a service. Microsoft Windows Server 2003 is not supported.

Principal Authors: ANONIPEDITS:0
Weather Station Selection

General
1. On the main Weather Display window, click Control Panel.
2. Under Station Settings, click Station Type & Settings.
3. Click the tab that corresponds to your station type.

Depending on the weather station type you select, there might be further options to configure. When you have selected the appropriate model of station and click Close, you are returned to the main Weather Display window. The Weather Display title bar displays the weather station type you selected.

Initial setup for specific brands (if required)
Some brands of weather stations require additional configurations. See the list below for specifics.

Dallas 1-wire setup
Use the station selection window to check that it has correctly identified your buttons.
1. On the main Weather Display window, click Control Panel.
2. Under Station Settings, click Station Type & Settings.
3. Click the Dallas/AAG 1 tab.

On the setup page, you can also see the additional temperature sensor and the humidity sensor/temperature readings (if you have one).
Dallas 1-wire station owners also need to set up the wind direction buttons. Click on View, Setup Dallas 1-Wire Wind Direction And Rain to do this. If you have an ini.txt file that was created by Weather 204 and the create list program provided by Dallas Semi, then you can import that file to set the wind direction and rain/wind ibuttons. Next check that the windspeed ibutton ROM ID has been correctly identified. If not, check what was reported under View, WS2000/WMR900H/Dallas 1-wire Data Information. You can change the ROM ID if it is wrong, and then click Save. If you have an extra temperature sensor, then the ROM ID for it should be displayed here as well.

Davis setup
You do not have to configure the COM port release times unless you want to let Davis Weather Link gain access to the weather station at some point to download data from the Davis Datalogger. Davis owners also need to select their rain gauge resolution type.
You also need to select the data logger baud rate. The full version is for when you have a rain gauge, humidity sensor, etc. In Weather Display, the wireless WMII is the same as the WMII Full Version.

ELV/Conrad/WS2000/WS7000, Lacrosse, or WMR900h
These are all the same type of weather station. These stations all require you to do additional initial setup.
1. On the main Weather Display windows, click View.
2. Under the Station Setup/Data Reports click WS2010-13/WS2500/ WMR900H /Dallas 1-wire Data Information. Next set the outdoor temperature sensor to use. Choose from the list once you have some sample data. Click on get data to get a sample to check
that you have the correct sensor. Also set the logging interval to 5 minutes.

Click on **Set Names** to allocate names to the sensors to appear with the data in this window. You can also allocate a temperature/humidity sensor to use as your soil sensor, and have it displayed on the main Weather Display screen above the wind speed dial.

**Ultimeter**

Make sure your weather station console is in datalogging mode at all times. Check this after your restart Weather Display. If you have a U2000 that was manufactured before 2001, you might need to choose the **No average speed in the data** check box. You can also choose whether you have a humidity sensor or rain gauge.

**WMR-918H**

A WMR-918H is actually a WMR-968. Try selecting the WMR-968 station type.

**WS3600**

You don't need to use Heavy Weather.

1. Exit Heavy Weather.
2. On the main Weather Display window, click **Control Panel**.
3. Under **Station Settings**, click **Station Type & Settings**.
5. Select **La Crosse** WS2310/WS2310/WS2315/ELV/Conrad WS2300/WS2310/WS2315/Hyundai WS05 etc.
6. Click **Close**.
7. On the **Control Panel** dialog box, under **Station Settings**, click **COM Port**.
8. Select the COM port number, and then click **OK**.
9. Open the settings file **open3600.conf** and make sure that the COM port number is set correctly.
10. On the main Weather Display window, click **Exit**, and then click **Save and Exit**.
11. Start Weather Display.

Each minute the program **fetch3600.exe** runs and produces a log file called **out3600.txt**. Make sure there is data in the file and that the time and date matches that of the console.

To get missing data when Weather Display starts, do the following:

1. On the main Weather Display window, click **Control Panel**.
2. Under **Station Settings**, click **Data Logger**.
3. Click on **Extract data at start up** so that it displays **ON**.

Then the missing data will be logged to **out23002.txt** by the program **histlog3600.txt**.

**Vaisala WXT510**

Use the standard mode where the WXT-510 transmitts all data automatically in formatted ASCII to its COM port using the additional setup software/hardware tool sold by Vaisala.


Principal Authors: ANONIPEDITS:0
Calibration

You should attempt to calibrate your weather station to improve the accuracy of your weather observations. Weather Display provides a set of offsets which allow you to tune your data. For example, if you know that your outdoor temperature sensor always reads 1°C high you can set an offset for this so that Weather Display uses and stores the correct value.

To adjust the offsets for your weather station, do the following:

1. On the Weather Display main menu, click Control Panel.
2. Under Station Settings, click Offsets & Initial Rain.

Offsets are available for:

- Barometer
- Temperature
- Humidity (Inside and Outside)
- Wind Speed
- Wind Direction
- Rainfall
- Time of Day

Enter offset values as necessary. You can also set your month-to-date and year-to date rain data here, as Weather Display stores the rain totals independently from data stored in your weather station. Click Yes to save your entries.


Principal Authors: ANONIPEDITS:0

Logs and Logging

General

Logging of data is on by default, to a log file, updated every minute. These logfiles can be found under the folder logfiles in the wdisplay directory.

For the month of may 2001, the name of the log file is: 52001lg.txt

There is also 52001lg2.txt, this is for soil temperature (if you have it) and for the daily high/low temperatures

Go to the Setup menu and select "log file recording" for options, including having a comma separated log file (.csv extensions) for use with excel or other spreadsheets. You can even have weather display produce a custom log file, using the variable tags as found in the file owntemplate.txt, or see the section custom web page in this help

The log file is created every minute. Once you select the units you want, don't change them again! You can see the averages/maximum/minimums by selecting view/ view averages for month (i.e month to date). Reset log file will do this in the next minute (i.e blank the data).

Importing log files

You can import log files produced by other software. Go to Action menu and select "Import log files from other software", and chose the correct software.
For the Davis log files, you need to import the file called download.txt, produced by Weather link. The 32 bit weather display conversion is for if the automatic conversion for first time upgrade from version 7.39 was not successful.

If the 32 bit conversion when upgrading from 7.39 to 7.4+ does not work correctly, then you can convert the log files one at a time using the option "convert weather display log files to graphs". Custom log files

You can create a log files of your own design using WD's custom tags. First create a file called "customtext.txt" in your "webfiles" directory. Then add custom tags as described on the Custom Tags page.

Go to Setup menu and select "Log file recording", then select "Produce a custom text file, then select "yes". And finally return to select "update frequency" and select an appropriate interval.

Here is a sample "customtext.txt":
%date%,%time%,%dayrn%,%baro%,%temp%,%hum%,%dew%,%avgspd%,%dirdeg%,%indoortemp%,%indoorhum%,%indoordewfaren%

And here is the "customtextout.txt" that WD creates:
12/24/2002,10:31 AM,0.00 in.,29.628 in.,27.6 °F,48,10.5 °F,9.7 mph,330 °,71.1,38,44.2

Principal Authors: ANONIPEDITS:0

**Forecasts and Icons**

Weather Display uses a number of different methods to determine which current weather icon will be displayed, e.g.

- Weather Display's analysis of the weather **default**
- WM918/WMR918/VP/La Crosse 2310 forecast icon
- Weather Display's interpretation of downloaded METAR reports
- User specified thresholds for fog, rain, snow
- User selection

**WM918/WMR918 forecast icon**

If you set this to display, the icon that appears on the programs screen will be the forecast icon from the station. This icon will also be used in the summary.gif file.

If you select "Do not display", then it will not be visible at all.

If you select "Auto update", then you can have the icon updated via input daily weather, or have it updated from a downloaded METAR (see the section → Getting Weather Reports and Metar Data).

**Weather Display's interpretation of METARs**

Weather Display can extract the "Conditions" phrase from a downloaded METAR. If you have ticked "Coded" instead of "Decoded", it will use the 2 letter condition codes in the METAR, e.g. RN for rain, and use that to determine the icon to be displayed.

1. Click **Setup, Summary Image/Icon Setup**.
2. In approximately the middle of the left side of the page, there is a group of selection boxes for METAR reports. Click those boxes that support your preferences.
3. Click OK.
4. Click on Setup, Setup FTP/.../METAR.
5. Click the FTP/METAR Download tab.
6. In the METAR Download group in the lower half of the page, find and click the box labelled Use this METAR for ....
7. Click OK.

Make sure you have a METAR name selected that is in the list of METARs to download, that you have download times set, and that the switch is ON (green).

User specified thresholds

You may select the thresholds for Weather Display to use to determine if current conditions suggest the use of the Snow, Fog, or Windy icons.

You can get Weather Display to override the METAR report if you tick that option in the METAR icon setup, i.e. if you record rain or strong winds, then Weather Display will update the icon regardless of what is included in the METAR reports. This is a good idea if the METAR you are using is from an airport that is some distance away. Also some METARs are only updated every hour, so the conditions could have changed since the last METAR was produced.
1. Click on Setup, Summary Image/Icon Setup.
2. Approximately one-third of the way down the page, find and set the desired threshold.
3. Click OK.

Note   If you have a solar sensor, you can get the icon updated from that (see the solar sensor setup).

User selection

1. Click the Input Daily Weather menu.
2. Click an icon of your choice.
3. Click the box labelled Use this image as the icon, ....
4. Click OK.

This selection may be made at any time to represent the current weather. Such a selection is immediately effective, and remains so until changed by the user, or user selection is revoked.

If you cannot find a suitable icon, go to the section Replacing WD’s weather icons or see the link on the Weather Display download page.

Principal Authors:  ANONIPEDITS:0
**Replacing Weather Display's Weather Icons**

Weather Display will use the icons listed below to replace its built-in defaults.

1. Create a folder called myicons, as a subfolder of Weather Display (i.e. c:\wdisplay\myicons or c:\My Programs\Weather Display\myicons).
2. Create a set of icons in this directory and name them as follows:
   - cloudynight.gif
   - clearnight.gif
   - mainlyfine.gif
   - nightrain.gif
   - nightsnow.gif
   - nightovercast.gif
   - nightheavyrain.gif
   - sunny.gif
   - rain.gif
   - overcast.gif
   - partlycloudy.gif
   - fog.gif
   - lightrain.gif
   - heavyrain.gif
   - snow.gif
   - snowshowers.gif
   - sleetshowers.gif
   - sleet.gif
   - windy.gif
   - snowshowers2.gif (snow showers)
   - thundershowers.gif
   - thundershowers2.gif
   - thunderstorms.gif
   - showers2.gif (showers and fine intervals)
   - rain2.gif (rain)
   - cloudy2.gif (cloudy)
   - partlycloudy.gif (cloudy periods)

Thanks to Phillip Middlemiss, you can click here to download[^1] a set of icons.
Replacing Weather Display's Weather Icons

External links

Principal Authors: ANONIPEDITS:0

Setting & Tracking Station Location

Setting Fixed Station Latitude & Longitude
Purpose: This information is used to predict Sun & Moon rise and set times, and may be required by activities your weather information is sent to.
Click on the Setup menu. Then click on "Sun/Moon Rise/Set ...". Enter Latitude and Longitude data. (note: there is a link on the APRS setup page to obtain your Latitude & Longitude if you have difficulty finding it on a map.) Make sure you use a negative number for the southern hemisphere for latitude, and if you are west of GMT (i.e west of the UK/England), i.e. You live in the USA] then have a negative number for the longitude. There will appear either a setting sun or a rising sun. Setting Fixed Station Elevation
Purpose: This information is used to predict Cloud heights, and may be required by activities your weather information is sent to.
Click on the Setup menu. Then click on "Display Units Options / Reset times/ ...". In the "Other Options" section, enter station height above sea level (feet). Tracking a moving Station using GPS
Purpose: Provide a means for mobile weather stations (e.g. strom chasers, fishermen) to report weather together with their current location.
Click on the Setup menu and select "GPS Data capture". Click the tab for Com port settings. Select those settings appropriate for you GPS receiver. 4800,8N1 are the normal settings for NMEA receivers. Select / deselect DTR, RTS ( in my case both OFF ), Some units will require them to be ON to provide power, some require they be OFF. Turn Switch On ( Green ), then click the START button.
You should see "NMEA GPS" appear ( flashing ) in the Status
Click on the "Satellites" or "NMEA GPS" tab to see the results.
Currently the receiver must provide a NMEA data stream. If your's does not, here's a link for a translator unit

Principal Authors: ANONIPEDITS:0
Connecting to Internet

Getting Started
1. On the main Weather Display window, click Control Panel.
2. Under Web Site Configurations, click FTP Connections METAR/NOAA FTP.
3. Click the Connections tab.

Dial-up networking to your Internet ISP
This is the more normal case when the WD machine gets its Internet access from a modem directly connected to it.
1. Under Internet Settings, click Get ISP’s.
2. Select the ISP you want to connect to (there most likely will only be one) from the list.
3. The Username and Password text boxes should auto-complete with your information.
   If you configured dial-up networking without the password saved, you will be prompted to enter your password. This is the same password as you would normally enter when you connect to the Internet.
4. Continue with the All Setups section below.

Persistent (always on) connection to the Internet
This is if you are using ISDN, DSL, or cable modem broadband Internet service. It also applies to those with dial-up modems which are connected at all times to your ISP.
1. Under Permenant Connections, select the I have a permenant connection check box.
2. Continue with the All Setups section below.

Note Do not select the I have Internet sharing over a LAN check box.
All Setups

1. For future debugging, select **Produce a log file**. If you want to view the last log file produced, on the main Weather Display window, click **View** and then under **Logs**, click **FTP Log**. All of the current day's FTP Internet connections will be displayed. The most recent entries are at the end of the log.

2. Select the **Hit Cancel on reestablish connection** is suggested.

3. **Minimize connection box when connected (Win 95)** applies only if you are using Microsoft Windows 95.

4. You should not change the **FTP Port** from the default of 21, unless specified by your ISP.

5. If your FTP connection is very slow, the specified number in **Time out in minutes for when a slow connection** denotes the number of minutes before Weather Display will stop the FTP attempt. 5 minutes should be adequate.

6. Do not select the **Use other ISP's on list if line is busy** check box unless you have configured more than one ISP/FTP server.

7. For some configurations, the normal FTP mode will work, but if you are using a hardware or software firewall you might encounter problems. If a connection appears to hang and you have a firewall, try selecting the **Use Passive Mode** check box. You might also have to make changes to the firewall to let Weather Display access the Internet. You should consult the documentation for your firewall for instructions on how to allow a program to access the Internet.

8. **Rename the file on the server after uploading** is not supported by some FTP servers, including many Windows-based servers. Do not select this check box unless you know your FTP server supports this functionality.

9. Click the **Main Internet Switch** to toggle between **MAIN OFF** and **MAIN ON**. You must use MAIN ON to enable the FTP functionality of Weather Display.

10. Click **OK**.

Weather Display is now configured to use the Internet, but does not generate any Internet activity by itself.

Notes

- If you don’t want Weather Display to run its own FTP program, for example, because you are using a Weather display on a local server, then clear the **Use Weather Display's own FTP** check box, and you can enter in the **File to execute instead** text box a .bat file for Weather Display to execute to copy the files to the destination location. You can select the location of where to produce the files under the **Tab Files**, and then click **Set Web files location**.

- If you want Weather Display to perform other functions, such as send data to Wunderground or download METARs, etc., then select the **Still use ftpupd.exe for everything but normal uploads** check box. This check box is enabled only when you clear the **Use Weather Display's own FTP** check box.

- If you want Weather Display to update a Web page on the Internet, for example, your Web home page, then you must set up the **FTP Host/Server**, **FTP Username**, and **FTP Password**, using the server information and credentials provided by your Internet service provider (ISP). If you leave the **Remote Directory** text box blank, then the files are uploaded to your account's default folder on the FTP server. The **Remote Directory** can be the most tricky part to get correct, as you need to get the placement of any
needed "/" exactly correct. Your ISP should be able to assist you if you encounter problems.

Principal Authors: ANONIPEDITS:0

**Viewing WD data remotely**

Weather Display can be used to display data from your station on other PCs connected to your LAN or across the Internet. This allows the weather station to be connected to a PC which is not in the desired viewing location but is on the same LAN or connected to the Internet.

**General definitions**

- If a PC is the source of the data, i.e. the PC with the weather station attached to it, it is called the Server.
- If a PC is a viewer of the data, i.e. a PC without a weather station attached to it, it is called the Client.

Follow the steps in the Server or Client paragraphs below. When completed, all data collected from the weather station by the Server PC will be broadcast on the LAN. This broadcast data will be received by all client PCs and will be displayed on their Weather Display screens.

**Viewing Weather Display data across a LAN**

**Server**

At the PC where the weather station is connected:

1. Click on Setup, Setup FTP/Internet/...
2. Click on the tab labelled "TCP/IP Client/Server".
3. Click the button at the upper left side labelled "Server Enabled".
4. You may also want to click the button labelled "Show indoor temp/hum on client".
5. Click OK.

**Client**

At each PC where the weather data is to be viewed:

1. Install Weather Display on the machine.
2. Follow the procedures in → Quick Start but choose a station type of "Stationless". You do not need to select a COM port, nor do you have to enable FTP.
3. Click on Setup, Setup FTP/Internet/...
4. Click on the tab labeled "TCP/IP Client/Server".
5. Click the button at the middle left side labelled "Client Enabled".
6. You may also want to click the button labelled "Show indoor temp/hum on client".
7. Click OK.
Viewing Weather Display data across the Internet

Follow these instructions to view the data on a (Client) PC with an Internet connection where the weather station is connected to another PC which is not on your local LAN, but does have an internet connection.

1. Click on Setup, Setup FTP/Internet/...
2. Click on the tab labelled "TCP/IP Client/Server".
3. Click the button at the middle left side labelled "Client Enabled".
4. You may also want to click the button labelled "Show indoor temp/hum on client".
5. Click on the box in the lower left corner labelled “The data is from over the internet”.
6. Fill in the URL of the station supplying the data.
7. Fill in your LAN's PROXY information if appropriate.
8. Click OK.

"Client Viewer" at LAN sites

The Client Viewer provides an alternative method of viewing WD data.

You can configure Weather Display to create a clientraw.txt file, either locally on a server, or sent by FTP to your web/ftp server. By default the file is created/sent every 3 seconds, but you can change this under Web Files Setup.

Alternatively the file can be created/sent at the times you select under the advanced internet setup (Customize Internet File Creation). For this option, you need to tick to "Update this file" under Setup, Internet Setup, Client/Server. You do not need to have Weather Display set up as a client or server to have this file updated by simply ticking that option.

When the file is being uploaded, you can use the free client viewer to view the weather data, updated every 3 seconds (or as defined). You need to set the viewer to use the data from over the Internet in the setup, and enter the URL of the clientraw.txt file. The alternative is to use a fixed IP address of the PC that is acting as you Weather Display server, i.e. the PC with the weather station attached to it.

Principal Authors: ANONIPEDITS:0

Customize your screens

You can change the colour of the text and background colour in parts of Weather Display to jazz up the display and/or have background images loaded. You can also enable or disable portions of the display to suit your tastes.

Colour

Click on Setup, General and Colour/Misc/Tide/etc, and select Setup Colours. Or you can right mouse click on the main graph, and select Setup Colours.

Buttons are grouped by the part of Weather Display they effect, and are labelled for the specific item they control.
Some screens let you set the background as an image file (BMP, JPG or GIF), e.g. the trends image, summary image, etc.

You can also set the colours of the graph lines as well.

**Note:** Using more than 256 colours in your Windows settings gives the best results.

If you're looking to use a black background for the main screen, make sure you have disabled skins (Setup - Skins - No). It's a limitation with the result being any dialogs opened from the main window will have black label text on black background (i.e. you won't see any text).

For the weather dials page, i.e View, Dials, a black background and light green numbers looks cool.

**Displaying LCD numbers**

*All*

Click on Setup, General and colour/misc/tide etc.

*Wind Speed*

Click on "Show the LCD Number". Select "Yes" or "No" as desired.

*All other values*

Click on "Use LCD numbers for current conditions". Select "Yes" or "No" as desired.

*Daily Alarm LEDs*

Click on Setup, General and colour/misc/tide etc. Click on "Show the daily high/low LED alarms". Select "Yes" or "No" as desired.


Principal Authors: ANONIPEDITS:0

**Using and setting up custom screens**

Purpose: You can create your very own custom screen (up to 10 if you purchase an extra license, otherwise you have 3 to play with!) Use

See under View, custom screen (and select which custom screen number to use/setup/view).

Once in the screen, right mouse click on the background, and there you can hide/show the objects.

Click and hold on an object with the left mouse button to move a object.

Right mouse click on a object to choose to increase or decrease the size of that object.

You can also set the background image or colour of the whole screen.

You can also resize the whole window, and that new size will be remembered. Advanced

You can even set up to use custom tags (right mouse click on the custom tag, and then you can set the colour, font and the custom tag to use). Also, you can even use mesomap station data (if you have set up the mesomap stations), and thereby display other weather stations in your area weather data, live!

You can also set a image as say a downloaded satellite image/rain radar or a web cam image (right mouse click on the default weather display banners). There is even a web page window, where you can set it to any internet URL. Note, before hiding this web window if
you don't want to use it, leave it in the middle of your window working area.

Principal Authors: ANONIPEDITS:0

Solar Sensor Setup

1. Select the sensor number your weather station uses for solar readings.
2. Make sure you enter your latitude and longitude correctly here. Latitude is the up or down from the equator and anything in the Southern hemisphere is negative. Longitude is east or west of the Greenwich merian and negative is east of Greenwich.
3. Select the **Use this new calc** check box.
4. Make sure the **Minute offset needed** is always zero. You should never ever need to change this value.
5. Select the **Update solar value from this max reading for lat/long and time of day** check box.
6. The boxes for solar description and the percentage thresholds should be left as default at this time. After you have your initial readings, you can return to this dialog box and make necessary adjustments.
7. There are two check boxes that should be selected—**Set the weather icons (unless raining) from the solar data** and **Store the solar reading as extra temperature #4 for graphing solar/THSW on main screen**.
8. The last box is used to setup a 1-wire solar sensor or LabJack and should not be modified if you are using a VP sensor. This box will appear if you add any 1-wire instrument to your setup, whether or not it is a solar sensor.
9. At the bottom of the dialog box, leave the **Adjust factor for bluewave VP wm/2 (%)** at 100% if you have an original Davis solar sensor. You should not need to change the value unless you are using a sensor from another vendor, your sensor has been modified, or
your sensor has drifted out of calibration. You should only compare values at or close to solar Noon for your location on a very clear and sunny day.

10. Make sure you click on the **Main Switch** so that it is in the green **ON** position.

11. Click **OK** to save your settings and close the dialog box.


Principal Authors: ANONIPEDITS:0

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**Direct web cam capture**

1. On the main Weather Display Window, click **Control Panel**.

2. Under **Web Site Configuration**, click **Web Cam**.

3. Click **Setup/view direct live web cam capture** (Internal - #1 in the screen shot)

4. Follow the screen shots below.

5. Optional settings are your choice from here, this shows how to get Weather Display recognizing your camera and captured file.

**Note these screen shots are outdated.**


Principal Authors: ANONIPEDITS:0
Using a web cam image from another web cam program

Using a web cam image from another web cam program, step by step guide

All Day Video Setup

Bold text This page is obsolete

The alldayvideo part has been replaced to the main software under 'control panel'

I'd love to update the page, but i do not understand the logic of that menu, while the description of the buttons seem logic the actions do not always correspond to what they suggest. I hope someone with more experience will exactly describe what setting are required for what function, so this wiki page may be updated then.--Gert 09:46, 30 November 2007 (UTC)

This article will help you get started with the all day video feature in Weather Display.
The all day video compiles your Web cam images into an almost seamless video display for entire day.
For a nice example, click here [1]

First, make sure your Web camera is working properly and that your files are saved correctly. This feature uses the jpgwebcam.jpg images, so make sure these are being created and saved properly before you start.

More than 1,000 images will be used to make the video. To keep the many images from cluttering your webfiles folders, you might want to consider creating a new folder in the Weather Display folder named webcam. Change the Web cam settings so that images are saved in this new folder location. You should decide now if you want to make this change and complete the changes before proceeding.

The following image illustrates the options necessary for saving the files.

1. On the Weather Display main window, click Control Panel.
2. Under **Web Site Configurations**, click **Web Cam**.
3. Click **Setup/view direct live web cam capture**.
4. On the **File Settings** tab see the following options:

![Image]

Make sure **Every minute** is selected.

Download the Microsoft® Windows Media Encoder 9 Series [2].

After you have downloaded the file, execute it to run the setup.

In Weather Display, you need to make time stamped files.

1. On the Weather Display main window, click **Control Panel**.
2. Under **Web Site Configurations**, click **Web Cam**.
3. On the **Time stamped files setup** tab, then click the "Time Stamped Files Setup" tab.

![Image]

Make sure, the **produce every minute** check box is selected.

**Hidden Feature** Select the **Show the floating web cam image from the graph mouse position (hold left mouse button)** and **Use a jpg image for the Web image at graph time** check boxes. After your video has been produced, when you are viewing your main window in Weather Display, while your mouse is over the upper right graph (baro/wind), hold down your left mouse button, and move the mouse back and forth over the graph, your video will appear in a pop-up window and show the video move in time as you move your mouse back and forth.

1. Click the **Current Web Cam Image/Main Settings** tab.
2. Click **Setup/View Direct Live Web Cam Capture**.
3. Click the **Create All Day Video** tab.

![Image]

If you select the check boxes shown above, you will be create video for the entire day day, and it be uploaded every hour.

You can view the video during the day up until the last hour.
After sunset, the entire day’s video will appear. You can select the other check boxes to set additional options.

The text at the bottom of the screen shot above, tells you the folder used, and the image used, etc. Make sure this corresponds with your setup.

After completing the last section, click **Save**, and then **Close**. The **Current Web Cam Image/Main Settings** tab appears.

- Click the **Load/Set The Web Cam Image File**.
  You should see your Web cam image on the left and the file name should appear under the button.

Your video is created around seven minutes after the top of the hour. Look in your Weather Display folder for the **alldayvideo** folder. You should begin to see images amassing in the folder. Scroll down to the bottom of the folder, and you should see a several Windows Media files. One will be **videolastday.mpeg**. That is your original large file video. Also, you will see **videolastday.wmv**. This is the compressed file that will be uploaded to your Web site. The video is uploaded automatically after it is created each hour.

Tweaks on how to improve the the video quality of the .wmv file [3]

**External links**


Principal Authors: ANONIPEDITS:0

**Summary image/weather icons setup**
Title for Weather Summary Image  Enter your station name here, and you can change the font/colour using the buttons

Show the summary image on the Web page  Select this if you want the summary.gif image to appear on your Weather Display default Web page

Update image, but don't show on page  This could be useful if you still want the summary.gif file uploaded via FTP to your Web page for others to link to, but not actually shown on your Weather Display default Web page.

Use the WM918/WMR918/WMR968/Davis VP/La Crosse 2310 forecast icon for updating the icons  Only applies to the specified weather stations, and so you can set the main page Icon to the forecast icon provided by this weather station

Show the WM918/WMR918/WMR968/Davis VP/La Crosse 2310 forecast icon on summary image as well  Only applies to the specified weather stations, and so you can set the summary image Icon to the forecast icon provided by this weather station

Snow Icon temperature threshold  Rain (or melted snow) recorded when the temperature is below this value (°C), a snow Icon will appear instead of a rain icon (however using METAR update will override this)

Have sunrise/set or moon as separate image  If you have this selected, then the weather Icon will still be visible on the summary image, with the moon or sunrise/set icon to the right of it (this makes the summary.gif file then wider at nighttime, so do not include any width= and height= html commands if you are creating your own weather page)

Show the icons on the main screen  Normally selected, but if you clear, then a blank area will appear where there is normally an icon

Show no icons at all  Normally not selected, use this to not have the weather icon on the summary image either

Show the moon icon (at night time)  Normally selected, this will show the moon icon (current phase is displayed) on the summary image. Note, make sure you have set the lat/long correctly under view, sun/moon

Show the estimated cloud base  This number (feet or meters, select under setup, units), shows the estimated cloud height (but clouds do not actually have to appear at this height), and you must also enter your altitude, under setup, units (this is used in the calculation, which is based on your stations dew point). It is not the height above your station, but the height above sea level.

Icon update by downloaded METAR  If you want the weather icons to be updated and match a chosen METAR you have Weather Display downloading (see under setup, FTP/Internet setup, FTP download/METAR), then select this (use the downloaded METAR to update the icon)

Use coded instead of decoded to update the icons  Normally not selected, this option uses some of the abbreviations for weather conditions instead of the description in the METAR.

Include extra weather conditions from downloaded METAR  A good idea to have this selected: the text description of the weather conditions appears on the summary image, under the icon

But leave the icon to be updated by your station weather  Not normally selected, with this option, the weather conditions text can still be displayed (as per previous), but the
icon is determined by your stations rain record or wind strength, etc. Note, if under input daily weather, you have selected use this image as the icon, then that icon will override all icons.

**Show the METAR image on the Web page**  
With this selected, a separate image appears on the default Weather Display Web page next to the summary image, and shows the METAR conditions. (you can change the colour, change the background etc of this image...view the image to see these options, under view, METAR image)

**Your stations rain/wind/fog overrides the METAR**  
With this selected, if the METAR weather conditions show rain, but you have not recorded rain (for the minutes to check back for rain), then a rain icon will not be displayed). Also, conversely, if your station has recorded rain, but the METAR does not have any mention of rain, then a rain icon will be shown. This also applies to the windy, fog, haze and mist icons.

**Upload localweather.gif and weatherbanner.gif**  
These are 2 separate simply versions of the summary image, and by selecting this, they will be FTP'd (or updated if running a server and you have cleared use weather display ftpupd.exe, under the connections setup in the ftp/internet setup) to your Web site, where you can link to them, etc.

**Show Webcam as icon on banner**  
If you have selected , use the Web cam image as the icon (as long as you have selected a Web cam image file, under view, Web cam), then the Web cam image will also be displayed on the localweather.gif and weatherbanner.gif images (and the summary image weather icon will be the Web cam image if you have option selected)

**Show on main**  
If you have selected to use the Web cam image as the icon (select the file under view, Webcam), then selecting this option will show the Web cam image on the main screen (great for if you have setup to create a animated Web cam image, and you then select that file as the Web cam file (animatedWebcam.gif)

**Animate this Web cam image**  
If you have a animatedWebcam.gif as the Web cam image (setup Weather Display to produce a animated Web cam image , under view, Webcam), then to still display the animation sequence for the Webcam icon on the summary image, you need to select this check box (note, the file size of the summary.gif file increases with this option)

**Only show this Web cam image during the day time**  
If you have selected to use a Web cam image as the icon, then it will only be visible during the daytime if you select this option (daytime/night is calculated from the lat/long you have setup under view, sun moon).

**Show this Web cam image as separate image**  
With this option, you can still have the weather icon (which is either updated by your stations rain/wind or from a downloaded METAR or manually via input daily weather (by selecting use this image as the icon), displayed, as the Web cam image will be to the right of this weather icon.

**Show border**  
Normally selected, this will display a border just inside from the outside edge of the summary image

**Use jpg (and not gif) type image**  
A slight gain can be achieved and is useful for if you have the Web cam image as a icon, but the image file size is larger, but the animated summary image (for the use of the animated Web cam image) will not work.

**Do not show the weather icon if it is the default party cloudy icon**  
Normally not selected.
Show windchill  The current windchill number will be displayed. Note: you can also have the beaufort scale number displayed, see under setup, units

Use 640x480 size  Not normally selected, if you enable this, you may need to adjust the font sizes

Choose a background image  You can have a image as the background image for the summary image, and then select to show that image (show this image)

Show this image day and night  Applies to the background image, and so it will be visible all the time (normally selected, but if you have the background image as a Web cam image, maybe clear this check box.)

This is a static image  Select this normally for the background image, unless you have chosen a Web cam image, which you want Weather Display to update the summary image background image with the latest Web cam image (that you have chosen as the summary image background image)

Fog icon temperature threshold  If your stations temperature is less than or equal to this temperature (°C), AND your stations humidity is greater or equal to the humidity threshold you have set (and, under setup, offsets, you can select to set a 97% humidity reading as 100%), then the FOG icon will be displayed/chosen.

Wind speed threshold for windy icon  If your stations wind speed (set the threshold in knots, see under units, offsets, for the conversion formula) is above this threshold, then a windy icon will be displayed/set.

Threshold for snow melt  Not normally used (i.e set at 50). If you set this to say 2 (°C), and rain (i.e snow melt) is recorded, and the current temperature is greater than this setting, then the snow melt icon is displayed, and the current conditions text will not mention any rain (and instead will show the text for dry (note, use the set names for thresholds button to set the names/descriptions for each weather condition)

Minute to check back for rain to set the icon  Normally set at 10 (minutes)...i.e any rain recorded in this time will result in a rain icon (the amount recorded in that time interval also fine tunes the icon (i.e light rain, rain, heavy rain, etc, as per the thresholds listed in the threshold names setup)...unless you are using the METAR to update the icon and have not selected my stations rain/wind/fog overrides the METAR.

Minutes to check back for recent rain to set the icon  Normally set at 5 (minutes)...this will change the weather description to recent rain, but the icon will not update to a rain icon. Note, this is the period of time, in minutes selected, PRIOR to the minutes selected for time to check back for rain.

Minutes to check back for its stopped raining  Normally set at 30 (minutes)...this will change the weather description to Stopped raining, but the icon will not update to a rain icon, if any rain has been recorded in the time period allocated (minutes) from the current time, if no rain has been recorded for the above 2 thresholds.


Principal Authors: ANONIPEDITS:0
Update to Newer Weather Display Release

Weather Display is frequently updated. New releases are typically available several times a week. Use the following instructions and hints to update your Weather Display software.

Download the latest software
   1. To download the latest release, in the left navigation bar, click the [http://www.weather-display.com/inframe.php?text=Download&inframe=download.php Downloads].

On the Downloads page, there are several options. For this FAQ, only the main Weather Display download for Windows 98/2000/ME/XP is discussed.

There are three different downloads for Weather Display available — Main Weather Display install file, Weather Display with error/crash debug code debug, and Weather Display zip of the main .exe file.

Note Upgrading the software does not modify or delete your weather data. However, you should make regular backup of your data, especially before updating the software.

Install the latest software
The best way to update your version is by using the first link, Main Weather Display install file. This download includes everything in Weather Display including the Weather Display FTP software.

1. In Weather Display, on the Exit menu, click Save and Exit. Make sure all of the Weather Display applications, such as RealTime FTP do not appear in the Windows task bar notifications area.
2. Click Download next to Main Weather Display install file.
3. When prompted, click Save, and then specify a folder location where to save the Weather Display install program.
4. When the download completed, browse to the folder you specified in step 3, and then double-click the Weather Display .exe file.
5. Follow the instructions on your screen to complete the installation.
6. At the end of the installation wizard, click Finish. If you leave the Launch Weather Display check box selected, Weather Display launches with the new version.

If you are requested to run the Debug version of Weather Display by the program author, substitute the second link, Weather Display with error/crash debug code debug, in step 2 above. The debug version contains extra diagnostic information that can be used by the software developer to troubleshoot specific issues. You should only use this version when requested.

The third item, Weather Display zip of the main .exe file is a compressed file of updated items within Weather Display. This file does not include any updates for the Weather Display FTP program. After downloading, in Weather Display, on the Exit menu, click Save and Exit. Locate your downloaded .zip file, and extract the file to the folder that Weather
Display is installed (usually c:\wdisplay or c:\Program Files\wdisplay). Re-start Weather Display.

Notes

• If you are using the WDMYSQL or clientraw.txt update utilities, make sure they are completely shut down before beginning the software upgrade. If these applications are running, they will appear as icons on the Windows task bar notifications area.
• It is a good idea to keep an archive folder of Weather Display program downloads. If you encounter a problem with a new version, you can go back to an older version by following the steps above.

External links


Principal Authors: ANONIPEDITS:0

Uninstall Weather Display

These instructions are for removing Weather Display from Microsoft® Windows 98, 2000, or XP.

The Add/Remove Programs feature of Windows will not remove Weather Display from your computer. Do the following:

1. New in recent versions of WD, there is now a file called unwise.exe, simply run that.
2. Make sure Weather Display is completely shut down. You can use Task Manager to make sure there are not copies of WDisplay.exe running.
3. In Windows, click Start, and then click Run.
4. Type regedit.exe, and then click OK.
5. Expand HKEY_CURRENT_USER and locate wdisplayftp.ini.
6. Right-click the wdisplayftp.ini entry, and then click Delete.
7. In Windows, click Start, and then click My Computer.
8. Browse to the c:\ drive and then open your Windows folder. This is typically the Windows or winnt folder.
9. Right-click on the file wdisplay.ini, and then click Delete.
10. Delete the folder WDisplay or Weather Display, including all subfolders, from the c:\ or c:\Program Files folder.

Principal Authors: ANONIPEDITS:0
Setting up to use TAPR

TAPR (Tucson Amateur Packet Radio) http://www.tapr.net/ has a number of 1-wire weather sensor kits available: X1W-1, X1W-4, X1W-4 and T-238+MODEM2, which provide temperature, humidity, barometer, radiation, lightning and rain sensors or interfaces thru the Dallas 1-wire system.

Programming X1W-1 Barometer

1) In W-D, select "Control Panel", "Dallas 1-wire" then "Main/save setup". 2) Select the ROM-id for the Barometer and copy it to the clip-board. 3) Move to "Barometer setup" 4) Paste the Barometer ROM-id in the "Bray-Jennings Barometer ROM-id" space. 5) Check off "I have a barometer (Bray-Jennings or AAG)". 6) Fill in the blanks (see drawing):

   a) High Baro = 31.60
   b) Low Baro = 25.69
   c) High Voltage = 9.75
   d) Low Voltage = 1.75

7) Click "Set". 8) Return to "Main/save setup" and click "save/reset" and "Close". 9) After about a five minute delay, the barometer will start.


Principal Authors: ANONIPEDITS:0
PC Time Synchronization

You can configure Weather Display to synchronize the time on your computer with an Internet time source. Synchronization ensures that the weather observations from your station have the same time and date as others around the world.

1. On the main Weather Display window, click Control Panel.
2. Under Station Settings, click Offsets & Initial Rain.
3. Select the Sync the time every 6 hours at 30 minutes past the hour, over the Internet check box.
4. To synchronize the clock immediately, click Sync time now.

Alternatively, you can use a clock offset, which is added/subtracted every hour if your computer clock loses/gains time at a known rate.

- Enter a number of seconds in the PC Clock adjust per hour (seconds) box.

Note Weather Display does not use the time from weather station consoles.

Principal Authors: ANONIPEDITS:0

Getting Weather Reports and Metar Data

You can obtain governmental weather data data for use with your station. This data may be used either as the sole input source, or to complement data obtained by your own weather station. The data is obtained from the NOAA service, based in USA.

To configure Weather Display to collect data from other sources, click on Setup, Setup FTP/Internet/..., FTP/METAR download. Forecasts and warnings are downloaded using anonymous FTP, whereas the METARS are download by a faster HTTP download method.

There are 3 sections to this setup page:

- Times to Download
- Weather Reports /Warnings
- METAR Downloads

Download times

These times apply to both warning/forecast downloads and Metar downloads.

Weather Reports and Warnings
First, use your web browser to visit the NOAA site and determine the specific file for the area of interest to you. You can select files for different locations to use in Weather Display's setup for state or zone forecasts, etc.

Fill in the blank fields on this page with the host name, directory, and file name to be downloaded.

If you wish, you may click on the "#2 setup" button to specify a second set of warnings or forecasts to be downloaded.

Agencies in other countries also provide similar services, e.g. BOM in Australia.

**METARS**

METAR downloads are the easiest to setup. Just select a nearby airport/station from the list, so that it is added to the list on the right hand side, or enter it into the space provided and click on the '>' button. You must include the file extension '.txt' at the end of the 4 letter station ID code, e.g. EGNH.txt

If you want to use one of these METARs to update Wunderground, or to update your weather icon, or to appear as extra text on the summary image, select that metar, so that it appears in the bottom edit box, and then tick "Use this metar for local sky conditions (and wunderground)".

**Note:** You don’t need a web/FTP server or homepage to download METAR or forecasts/warnings.

If you want to have the METAR or forecast/warning visible on your web page, then you need to tick "Include these text files on my web page".

You can select the location where the files are downloaded to (double click), and then to view each file click on View, Downloaded METARs. If you have ticked "Use this METAR for local sky conditions", when you click on the weather icon on the Weather Display screen, the METAR will appear in a summarized form (and this image will appear on your web site).

**Note:** If you want to make sure that the METAR on your web site is always up to date, download it just before your web page is updated. The Weather Display FTP program can carry out multiple agenda items at the same time. Make sure you turn the switches ON (so they are green) for either the METAR or forecast/warning download.

Finally, use the Test button to see if the METAR you have choosen is actually available.

**Note:** As with all setup pages in the FTP setup, nothing is saved to be used by Weather Display until you click OK or TEST.


Principal Authors: ANONIPEDITS:0
NOAA US County and Zone Codes

It’s often useful when working with NOAA information to know your County and Zone code numbers. The following maps will help you locate your zone.

NOAA Zone Map[^1^]

The following contains all United States zones:

This file is an ASCII "dump" in pipe ("|") delimited form, of a "master" shapefile maintained by AWIPS GIS Map Group (AGMG) for the maintenance of County, Public Forecast Zones, CWA boundaries, and Time zones. Each record represents a single polygon within the master file. Multiple polygons may exist for the same zone/county that contain the same attributes, but the lat and lon fields will be different as they are the centroid of the polygon. No attempt has been made to remove these seemingly duplicate entries from this text file. In addition, the coastal and offshore marine zone shapefiles are also "dumped" to this file.

County-Public Forecast Zones Correlation file (CONUS/OCONUS) [^2^]

**File Specifications**

**Naming Convention:** bp ddmmyy.dbx.

**File Type:** Text, delimited by pipes ("|")

**Source:** NWSI 10-507 [^3^], NWSI 10-503, FIPS Pub 6-4 [^4^]

<table>
<thead>
<tr>
<th>Field name</th>
<th>Type</th>
<th>Width,Dec</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>STATE</td>
<td>character</td>
<td>2</td>
<td>[ss] State abbrev (US Postal Standard or Marine Zone two letter prefix)</td>
</tr>
<tr>
<td>ZONE</td>
<td>character</td>
<td>3</td>
<td>[zzz] Zone number</td>
</tr>
<tr>
<td>CWA</td>
<td>character</td>
<td>3</td>
<td>County Warning Area, from WSOM C-47</td>
</tr>
<tr>
<td>NAME</td>
<td>character</td>
<td>254</td>
<td>Zone name, from WSOM C-11</td>
</tr>
<tr>
<td>STATE_ZONE</td>
<td>character</td>
<td>5</td>
<td>[sszzz] For Public Zones, state+zone number</td>
</tr>
<tr>
<td>COUNTYNAME</td>
<td>character</td>
<td>24</td>
<td>County name</td>
</tr>
<tr>
<td>TIME_ZONE</td>
<td>character</td>
<td>2</td>
<td>[tt] Time zone assignment (DOT)</td>
</tr>
<tr>
<td>FE_AREA</td>
<td>character</td>
<td>2</td>
<td>Geographic area of county [^6^],TD</td>
</tr>
<tr>
<td>LAT</td>
<td>numeric</td>
<td>9,5</td>
<td>Latitude of Centroid [decimal degrees]</td>
</tr>
<tr>
<td>LON</td>
<td>numeric</td>
<td>10,5</td>
<td>Longitude of Centroid [decimal degrees]</td>
</tr>
</tbody>
</table>
Using Metar Data instead of a real weather station

You can collect weather data from a nearby official (METAR) source and use it as input to Weather Display.

Follow the instructions here → Quick Start to setup Weather Display, but use a station type of "Stationless". No COM port selection is needed.

Follow these instructions → Connecting to Internet to establish an internet connection.

1. Make sure the main Internet FTP switch is ON (green).
2. Make sure that the Client/Server option is turned off.
3. On the Setup menu, select "Setup FTP/Internet/..." and click on the "Download METAR" tab.
4. In the lower right of the screen there is a text box labeled "Use this METAR station ID", enter a file name consisting of the id code of the METAR station you wish to use followed by ".TXT", e.g. KAUG.TXT, or KWVL.TXT. For those using the USA NOAA site, the file name must be all CAPS (other sites may differ).
5. Click the "<" symbol to have the file name copied into the list box in the lower right corner.
6. Click the two boxes with labels beginning with "Use this METAR...".
7. Click the red "OFF" button on the right so that it becomes a green "ON" button.
8. Enter the schedule for collecting data into the form in the upper left.
9. Click OK.

Principal Authors: ANONIPEDITS:0
Setting up the MESOMAP

Graphics basd info...needs converting to Wiki format


Principal Authors: ANONIPEDITS:0
4 Providing Data to Other Sources

Sharing Data with Others (APRS, Wunderground, etc.)

You can send weather observations from your station to a third party for use by the public, or other Governmental or non-governmental forecasting agencies.

The following procedure applies to:

- Anything Weather
- APRS/CWOP
- Weather for you/Ham Weather
- Weather Underground

For all of the following you must have an Internet connection. Follow this link Connecting to the Internet to set that up now if you haven’t already done so.

1. Make sure Weather Display's main internet switch is ON in FTP/Internet Setup, Connections Setup.
2. On the Setup, Control Panel click "Setup Wunderground or Weather For You icons".
3. Select the service you wish to set up.
4. Click on the link to go to the sign up page, and note any ID, password, or other information assigned to you.
5. When you get your assigned station ID and password, etc, return to the setup screen and enter the details.
6. Select the times to upload the data
7. Turn the switch ON (so it shows green)
8. Try a test by clicking on Test. You should be able to see your data when you click on view data.

You can select the cloud type to include in the data, or you can include the weather conditions from a METAR you have downloaded and selected (see the section on → Getting Weather Reports and Metar Data).

Principal Authors: ANONIPEDITS:0
Sending Routine Weather Reports

You can configure Weather Display to send a routine weather report to a set of email addresses on a user specified schedule. Two separate groups of addresses, each with their own schedule, may be set up.

1. Make sure the main internet switch is ON in FTP/Internet Setup, Connections Setup.
2. Click on "Setup" in the menu bar, then control panel.
3. Click on "Weather Report Email".
4. Find the input field labeled "Enter email address". Enter your own email address (you can remove it later if you like).
5. Click on the button labeled ">".
6. You may import your Warning email address list by clicking on the button labeled "Import List From Warning List".
7. In the appropriate boxes, enter your station name, i.e. FredsBackYard, your email address, and the name of the email server you use. Also enter any necessary User ID and Password.
8. Click the Red Switch on the right. It should turn to green, indicating Report email is now enabled.
9. Click on the button labeled "Test". Wait a minute or so, and check your incoming email. You should have received a report from Weather Display.
10. Return to the input field labelled "Enter email address". For each address you wish to send the report to, enter the complete address and click on the button labeled ">". At this point you may remove your own address, but it is recommended that you leave it in the list so that you can see what the other addressees are receiving.
11. Find the group labeled "Weather Report Times" on the left side of the page.
12. Set up the time(s) for the report and click on the button labeled ">". You may have as many times in the list as you wish, but the same list of times applies to each day that you select.

You may add one or more attachments to the report. For example, you could attach the NOAA (or equivalent) forecast if you are currently downloading it. You could also attach your webcam image. Be cautious though, not all addressees will appreciate receiving too much material.

Custom reports

You can create your own report design using Weather Display's custom tags. You might create a custom report if you prefer to receive other informat than that provided in the default Weather Display report format.

1. Using a text editor, create a file named "customweatherreport.txt" in your "wdisplay/webfiles" directory.
2. In this file, layout whatever format you like using the methods described in → Using Custom Tags.
3. Go to Setup menu and select "Setup FTP/Internet/..."
4. Click the tab labeled "Weather Report Email"
5. Click the red button at the bottom labelled "Use a custom report ...". The button will turn green.

Here is a sample "customweatherreport.txt":

---

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5. Click on the button labeled ">".
6. You may import your Warning email address list by clicking on the button labeled "Import List From Warning List".
7. In the appropriate boxes, enter your station name, i.e. FredsBackYard, your email address, and the name of the email server you use. Also enter any necessary User ID and Password.
8. Click the Red Switch on the right. It should turn to green, indicating Report email is now enabled.
9. Click on the button labeled "Test". Wait a minute or so, and check your incoming email. You should have received a report from Weather Display.
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11. Find the group labeled "Weather Report Times" on the left side of the page.
12. Set up the time(s) for the report and click on the button labeled ">". You may have as many times in the list as you wish, but the same list of times applies to each day that you select.

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3. Go to Setup menu and select "Setup FTP/Internet/..."
4. Click the tab labeled "Weather Report Email"
5. Click the red button at the bottom labelled "Use a custom report ...". The button will turn green.

Here is a sample "customweatherreport.txt":

---
Weather at Ladd Rd, Mercer, ME as of %time%, %formatteddate%
Current radar & additional information available at: http://personalpages.tdstelme.net/~flaplant/
Forecast: see attachment
Weather (NOAA): %weatherreport%
Weather (PC): %weathercond%
Temperature: %tempinusa%
High: %hightempinusa% at %maxtempt%
Low: %lowtempinusa% at %mintempt%
Humidity: %hum%
High: %highhum% at %highhumt%
Low: %lowhum% at %lowhumt%
Rain today: %dayrn%
This month: %monthrn%
This year: %yearrn%
Days with no rain: %dayswithnorain%
Snow today: %snowtodayin.% inches
This month: %snowmonthin.% inches
This winter: %snowseasonin.% inches
Average Wind: %avgspd% from %dirlabel% (windchill = %windch%)
Gusts: %gstspd% at %maxgstt%
Barometer: %baro% %pressuretrendname%
High: %highbaro% at %highbarot%
Low: %lowbaro% at %lowbarot%
Sunrise: %sunrise% moonrise: %moonrise%
Sunset: %sunset% moonset: %moonset%
This report is sent automatically at 8:00AM & 7:00PM daily,
by Weather Display version %wdversion%,
based on a Davis WeatherMonitor II

This is an example of an email that Weather Display would create using that format:

Weather at Ladd Rd, Mercer, ME as of 08:03 AM, DATE: 24 December 2002
Current radar & additional information available at: http://personalpages.tdstelme.net/~flaplant/
Forecast: see attachment
Weather (NOAA): --- Weather (PC): - Dry
Temperature: 25.5 °F
High: 29.5 °F at 01:39 AM
Low: 25.5 °F at 08:02 AM
Humidity: 57
Sending Routine Weather Reports

High: 86 at 00:00 AM  
Low: 55 at 07:14 AM  
Rain today: 0.00 in.  
This month: 2.15 in.  
This year: 37.95 in.  
Days with no rain: 3  
Snow today: 0.00 inches  
This month: 5.51 inches  
This winter: 17.32 inches  
Average Wind: 3.0 mph from NNW (windchill = 25.5 °F)  
Gusts: 2.0 mph at 05:44 AM  
Barometer: 29.571 in. Rising  
High: 29.574 in. at 08:02 AM  
Low: 29.376 in. at 00:00 AM  
Sunrise: 07:12 moonrise: 18:55  
Sunset: 16:05 moonset: 09:45  
This report is sent automatically at 8:00AM & 7:00PM daily,  
by WeatherDisplay version 9.38c,  
based on a Davis WeatherMonitor II

Principal Authors: ANONIPEDITS:0

Sending Weather Warnings

Weather Display can run a program, play a sound, send an e-mail message, or notify a pager when certain local threshold conditions, that you have selected, are met.  
Make sure the **Main Internet** switch is **ON** in the **Connections** setup in the **FTP/Internet** setup.

**General**  
1. On the main Weather Display window, click **Control Panel**.  
2. Click **Setup weather warning email**.  
3. Set the threshold settings. They are Metric based, and kts for windspeed, but the equivalent US units conversion are displayed. To covert from kmh from kts, use the formula of 1.85 kmh for each 1 knot of wind.  
You can easily get to this page by clicking on the alarm LED on the main weather display page. If this is flashing, then a warning has occurred, and then click on reset alarm LEDs to stop the flashing.
E-mail message warnings

1. Next, if you want to send weather warning e-mail messages to someone, add the recipient's e-mail address to the list. After typing the e-mail address, click >.
2. Type your weather station name, your name, your e-mail address.
3. Set up your e-mail settings that you use with your Internet service provider (ISP). If necessary, change the port number of the SMTP outgoing mail server, however, port 25 is the most common.
4. Make sure you turn the switch to ON, in the top right-hand corner to enable the weather warning e-mails.
5. Click Test to send a test report.
You can also add extra text to the e-mail message.

Warning to a pager

You can send an e-mail message to a pager with the information contained in the subject of the e-mail message.

There are a few settings here (bottom left hand corner) to note:

- If going to a numeric pager, then you need to select the e-mail to a numeric pager check box, so no special characters (like % and °C) are included. You also need to type the e-mail address to of the numeric pager. If you don’t want anything to appear in the body of the e-mail message, then select the Use email subject line only for message check box. This is needed for a SMS e-mail service. If your station name is too long to fit in the SMS limited space, then enter a new shorter station name.
- If you have a list of e-mail addresses for the weather report e-mail message (see later in this help, and see under FTP setup, weather report/reboot), and you want to send the same people a weather warning e-mail message, click on import list from weather report list.

Execute a program on a warning condition

You can have any other .exe or .bat file on your computer run at the same time. Just include the full path name.

Play a sound file on a warning condition

If you want a sound to be played when a weather warning event has occurred, then just name a .wav file (either record one, or use a existing sound file (i.e a .wav file ) on your PC, but you need to rename the sounds, and have them located where weather display is installed (c:\wdisplay is the default location).

The sound file names you need to have are:

- rainin6hourswarning.wav -- For the rain in 6 hours threshold being exceeded.
- rainin1hourwarning.wav -- For the rain in 1 hour threshold being exceeded.
- pressurechangewarning.wav -- For the pressure change in 1 hour being exceeded.
- maxavwindspeedwarning.wav -- For the maximum average windspeed threshold being exceeded.
- lowavwindspeedwarning.wav -- If the threshold is not zero, then this warning will be activated when the average windspeed goes below the setting you have chosen.
• rainrecorded.wav -- each time rain is recorded, this sound will be played (to get the washing off the line!).

**Note** Any threshold will only be set off at a maximum rate of once per hour and the low temperature threshold gets reset (so it can be set off again) when the temperature next goes above that setting.

The following is a complete list of all sound files that Weather Display can use:

- firstrain.wav
- pressurechangewarning.wav
- tempchangewarning.wav
- rainin1hourwarning.wav
- rainin6hourswarning.wav
- maxtemperaturewarning.wav
- mintemperaturewarning.wav
- lowavwindspeedwarning.wav
- maxindoortempwarning.wav
- minindoortempwarning.wav
- frostwarning.wav
- wm918battery.wav
- wmr918battery.wav
- minwetbulb.wav
- mildewwarning.wav
- maxindoorphumwarning.wav
- mintempextrawarning.wav
- maxtempextrawarning.wav
- mintempextrawarning.wav
- mintempextrawarning.wav
- minwindchillwarning.wav
- maxbarowarning.wav
- minbarowarning.wav
- maxheatwarning.wav
- speeaddirwarning.wav
- dirtime.wav
- maxavwindspeedwarning.wav


Principal Authors: ANONIPEDITS:0
Creating a Weather Web Page

Purpose: Create a web page(s) for use on either the local LAN or at a public WEB site. Also to transmit that page(s) to the web server. Let WD Create the page(s)

* Click "Setup" in the menu bar, then control panel.
* Click "then, Web files/web page setup".
* Click the tab labeled "Web Files setup #1".

To set the name of the file that will be uploaded to your web page, and be part of the URL, enter that under weather station filename.

No spaces, but you can use - or _ and don't include '.html' or '.htm'. The file name will have '.htm' put on the end of it automatically. You may click the "Use .html instead of .htm", if you prefer that option.

If you are uploading a web cam file (the file name must remain static; see Help topic for web cam to setup this up), then add in the title of the web cam image that you want to appear on the web page (e.g. mybackyard).

If you want a wallpaper /background image to appear on the web site, then you enter the name of the wallpaper or image (jpg or ..gif only), but this file must be on your FTP server. You can have WD upload it to the server (see the "manual upload" tab), or use another FTP program.

Title of Web page: This will appear on people's bookmark of your URL, on the browser window, and on the Table title on the web page.

Special status message: use this as a quick and easy way to let people know the status of the weather station.

The real time graph upload is the one you can see under view, real time graph (or right mouse click on the graph in weather display to see this option)

Right mouse clicking on most of the screen in weather display gives you some popup options, and a left mouse click will also go straight to some screens.

Tick the screen shot option to have the weather display screen, as you see it now, appear on the web page. You can change the colour of the screen shot; see the button to set screen shot colour (this is independent from the colour you have selected for normal viewing).

The upload time stamped 24 hour graph files option is useful if you want to limit the amount of web server space weather display uses (i.e. un-tick this option to limit the file space used).

Tick don't show indoor temperature/humidity on web page if you don't want these values to appear on the screen shot (some weather station types do not have indoor temperature/humidity anyway).

If you only want some images/dials on your web page, and no table, then you can tick that option.

The upload daily high/low pressure is to upload and include on your web page the daily high/low extremes (see under view, or click the extreme conditions section on the weather display screen to see this image).

There are additional selections available at the tab labeled "Web Files #2".
You can create links to other web sites, and a email to yourself link. Click on “reset” to reset these links to start over if you make a mistake.

You can change the back ground colour and cell spacing of the web table. Using WD images in your own web page(s)

If you already have web pages of your own, you can include WD images within them.

- Click "Setup" in the menu bar.
- Click "Control panel, web files/web page setup"
- Click the tab labeled "Web Files setup#1".

As described in the section "Let WD Create the page(s)", select the images of your choice. Then tick that option to have them produced, and tick to upload them (un-tick this option of you are running on a web server). Customizing the Summary image

- Click "Setup" in the menu bar.
- Click "Then control panel,Summary Image / Icon Setup".

The summary image is the first image that appears on the default web page.

Enter a title for this image ( I have entered Awhitu for my location, see http://weather-display.com/windy/otherdat.htm for my weather page.)

You can have the summary.gif file updated and uploaded, but not shown on the web page if you want.

If you are downloading a METAR (see the METAR download section), then tick include extra METAR info to have a separate METAR image produced (which you can view in weather display by clicking on the weather icon).

The snow icon temperature threshold is to set the temperature at which weather display decides you are having snow when precipitation is recorded.

If you don't have the WM918 forecast icon selected, then the weather icon that appears on the summary image is based on either the one you have chosen under input daily weather, or based on the rain in the last 10 minutes, or if below 10oC and over 97% humidity, then it will be a foggy icon, or if over 30 kts average speed, then it will be a windy icon. You can even have the weather conditions reported in the chosen downloaded METAR to update the icon. You can select the background colour, text colour (i.e for the words wind speed, and the Title colour). Hopefully soon I will get the chosen font to be selected properly.

Half an hour before and half an hour after sun set /sunrise (please set up the sun moon settings correctly first -- see view, sun moon; enter here your latitude/longitude).

If you don't want this off to one side, and instead want it to appear where the weather icon is, then tick don't have sunrise/set as a separate image.

After half an after sun set, the current phase of the moon will appear. If you have the above mentioned option ticked, it will replace the current weather icon instead of appearing to the side.

Click on the weather icon in weather display to see the summary image at any time.

If you don't want this weather icon to appear on the screen shot on the web page, then tick don't show the icons on the main screen (useful if your PC screen colour is only set to 16 colours). Sending the page(s) to the web server
* Click "Setup" in the menu bar.
* Click "Control panel, Setup FTP / Internet / ...".
* Click the tab labeled "Web File Upload Times".

Also, make sure you set up the FTP server details in the connections setup, and you turn on the Main internet switch as well. Next you will want to select the times that your web page is updated under Upload times.

If you want the files updated/uploaded every minute, then tick Update every minute. The daily averages/extreme files are updated at the times specified, and you can set these to update at a more convenient time. The actual averages/extreme files are updated at either 5 minutes past midnight (if you have the midnight reset time selected), or 5 minutes past 9am (if you have 9am reset time selected) (see under setup, reset times), regardless of the time you set for when the files are updated to your web page. If you untick do daily uploads of averages/extreme, then the files will neither be created or uploaded.

Further refinement of file creation time is possible: Click "Setup" in the menu bar; Click "Customize the Internet File Creation FTP Schedule". Create your own custom page(s)

If you are unfamiliar with web page creation, you might want take a look at this site for a good introduction. (Yeah, I know it says it's for kids, but it's all there, and well done too!)

Create a text file called wxlocal.html in the folder that contains Weather Display's web files (default is c:\wdisplay\webfiles). This will be your weather web page that Weather Display will upload to your web site.

Create your HTML template using the special tags found on the "using Custom Tags" page. Weather Display will replace these tags with the appropriate weather data (in the units you have chosen) and then weather display will create a new file called wx.html and upload it, leaving the original intact.

If you want to upload another file, then call it wxlocal2.html It will upload as wx2.html (even if use normal file name selected). You can have up to 30 pages this way! You could also use the customise internet and file creation setup to set times to update and times to upload the wxlocal.html and wx.html file respectively, and you can also change the remote filename there too (dont forget to set times to create and also set times to upload all other files needed on the customise file creation and setup screen too)

Now go to the "Setup" menu. Click on "Setup ftp / internet / ...". Select the tab labeled "custom web page".

Use the various checkboxes and buttons on this page to suit your needs. Click the red OFF button to make it a Green ON button. Click the "Test" button to have WD create the corresponding WX.htm files. If the resulting file is what you want, click OK.

You can refine the update and upload times using "Customize the Internet file creation / ftp schedule" option in the Setup menu.

Here is a sample of how to use WD's custom tags:

```
<table border="1">
  %formatteddate% at %time%
<tr><td colspan="3">
<tr><th>Temperature</th>
<tr><td>Current: %tempinusa%
<tr><td>Min: %lowtempinusa% at %mintempt%
```
<tr><td>
<td>( %tempchangehour% )
<td>Max: %hightempinusa% at %maxtemp%
</td></tr>
<tr><td colspan="3">
<tr><th>Wind
<td>Current: %avgspd%
<td>from %dirdeg% ( %dirlabel% )
</td></tr>
<tr><td>
<td>Average
<td>Max %maxavgspd% at %maxavgspdt%
</td></tr>
<tr><td>
<td>Gusts
<td>Max %maxgst% at %maxgstt%
</td></tr>
<tr><td colspan="3">
<tr><th>Rain
<td>Today: %dayrn%
<td>This month: %monthrn%
</td></tr>
<tr><td>
<td>This year: %yearrn%
</td></tr>
<tr><td>
<td>days without: %dayswithoutrain%
</td></tr>
<tr><td colspan="3">
<tr><th>Snow
<td>Today: %snowtodayin.% in.
<td>This month: %snowmonthin.% in.
</td></tr>
<tr><td>
<td>This winter: %snowseasonin.% in.
</td></tr>
<tr><td colspan="3">
<tr><th>Barometer
<td>Current: %baro%
<td>Min: %lowbaro% at %lowbarot%
</td></tr>
<tr><td>
<td>%pressuretrendname% ( %trend% )
</td></tr>
And this is what you will get:

as of 31 December 2002 at 6:00 pm Temperature Current: 11.7 °F Min: 11.7 °F at 7:50 PM ( -4.0 °F/last hr ) Max: 27.0 °F at 12:42 PM Wind Current: 0.0 mph from 331 ° ( NNW ) Average Max 11.3 mph NNE at 11:19 AM Gusts Max 21.0 mph NNW at 11:08 AM Rain Today: 0.00 in. This month: 0.18 in. This year: 0.18 in. This winter: 34.25 in. Barometer Current: 29.267 in. Min: 29.264 in. at 7:41 PM Falling ( -0.024 in./hr ) Max: 29.619 in. at 00:04 AM Weather data collected using Davis Weather Monitor II and displayed using Weather Display 9.43

Principal Authors: ANONIPEDITS:0, WikiSysop

Creating a Weather WML Page

Wireless Application Protocol (WAP) provides a way for delivering Web-like pages on mobile devices. WML is the language used to create pages to be displayed in a WAP browser.

Turn on WAP file creation

1. On the main window in Weather Display, click Control Panel.
2. Click FTP & Connections METAR/NOAA FTP.
3. Click WAP tab.

1. Under Set up, type your weather station location name. For example, type Anywhere Weather.
2. Type your home page Web address. For example, type http://www.example.com.
3. Select the Nokia and/or USA format check boxes.
   Make sure the Use my own custom WAP file check box is not selected.
4. Click Create WAP directory for first time.
5. Click Test and then verify the WAP file (index.wml) is created in the webfiles folders.
6. Enter a schedule for WAP uploads.
7. Click on the red Off button so that it becomes green and the label changes to On.
8. Click OK to save settings and return to the main Weather Display window.

**Create custom WML files**

Make sure the default .wml file is being created.

1. Return to the WAP screen as described above.
2. Select the Use my own Custom WAP file check box.
3. Use the index.wml file, located in the folder webfiles, as a starter. Rename the file waplocal.txt.

**Note** Make sure you do not accidentally rename the file as waplocal.txt.txt. At the scheduled times, this file will be read and a new index.wml created using that format as a guide.

Replace actual weather conditions numbers with a custom tag. If you want to add other information, add an appropriate label and its custom tag. ("indoor temperature: %indoorhum%).

More information about using custom tags can be found on the → Using Custom Tags page.

A simple WAP page might look like the following:

```xml
<?xml version='1.0'?><!DOCTYPE wml PUBLIC '-//WAPFORUM//DTD WML 1.1//EN' 'http://www.weather-display.de/DTD/wml_1.1.xml'>
<wml>
<head>
</head>
<card id="Weather-Display" title="Weather-Display">
<p>
CURRENT WEATHER REPORT FROM: LaddRd<br/>
Temperature: %temp%<br/>
Windspeed: %avgspd%<br/>
Gustspeed: %gstspd%<br/>
Direction: %dirlabel% %dirdeg%<br/>
Barometer: %baro%<br/>
Humidity: %hum% percent<br/>
Dew point: %dew%<br/>
Today's rain: %dayrn%<br/>
Maximum temperature: %maxtemp% at %maxtempt%<br/>
Minimum temperature: %mintemp% at %mintempt%<br/>
Maximum gust today: %maxgst% at %maxgstt%<br/>
%time% %date%<br/>
```

Using Custom Tags

Purpose This material is for users who wish to produce a custom document containing calculated data produced by Weather Display. No specialized knowledge is required for their use, though it may be for the document in which they are placed (i.e. a web page requires knowledge of HTML).

You only need to use the ones you want. e.g. Current Temperature %temp% (Heat Index %heati%)

The Tags have been arranged into broad categories for ease of identification - this is no way implies any order of precedence.

The following is a complete list of tags and their corresponding parameters.

General OR Non Weather Specific/SUN/MOON

%customscreenownlabelusethistag% Use this tag for a title/description label on the custom screen
%loadfile%................Loads a text file into this location, e.g
%loadfile%c:\wdisplay\webfiles\test.txt# the # is needed at the end of the full path and file name
%loadfile1% ...............uses only the 1st line in the file
%time% ...................current time
%date% ...................current date
%sunrise% .................sun rise time (make sure you have the correct lat/lon in view/sun moon)
%sunset% ..................sunset time
%dayornight%..............If day time, its says Day, if night time, its says, Night (based on your sunrise/sunset)
%moonrise% ...............moon rise time
%moonset% ...............moon set time
%moonage%..................current age of the moon (days since new moon)
%moonphase%...............Moon phase %
%marchequinox%............March equinox date
Using Custom Tags

%junesolstice%............. June solstice date
%sepequinox%.............. September equinox date
%dec solstice%............. December solstice date
%moonperihel%............. Next Moon perihel date
%moonaphel%.............. Next moon perihel date
%moonperigee%............ Next moon perigee date
%moonapogee%............. Next moon apogee date
%newmoon%.................. Date/time of the next/last new moon
%nextnewmoon%............. Date/time of the next new moon for next month
%firstquarter%............ Date/time of the next/last first quarter moon
%lastquarter%............. Date/time of the next/last last quarter moon
%fullmoon%................ Date/time of the next/last full moon
%sun eclipse%............. Next sun eclipse
%mooneclipse%............. Next moon eclipse date
%easterdate%............. Next easter date
%chinesenewyear%......... Chinese new year
%pesachdate%.............. Pesach date
%weathercond%............. Current weather conditions, based on your data
%weatherreport%........... Current weather conditions from selected METAR
%metar/report=%NZAA.MET Insert downloaded METARS or weather reports/warnings.

Please replace NZAA.MET with the file name downloaded. Note: use

and

html tags before and after this custom tag
%extrametarlabel% ........ Extra METAR label from the metar.gif
%metarcloudreport% ....... Cloud METAR label from the metar.gif
%statusmessage% .......... Special status message
%warningemailalarm%...... For the warning email custom email (what warning was exceeded)
%NOAAEvent%............... If you have setup the Noaa warning system (if nor warning, then it will be NO CURRENT ADVISORIES)
%wdversion%............... Weather Display version number you are running
%inputdailyweather%....... The text you enter for current weather conditions
%formatteddate%.......... Date with "January", for example, in it
%current alarm flashing%... What it says - for the weather warning....
%time-minute%............ Current minute
%time-hour%............... Current hour
%date-day%..................Current day
%date-month%................Current month
%date-year%................Current year
%utctime-minute%............UTC Current minute
%utctime-hour%..............UTC Current hour
%utcdate-day%...............UTC Current day
%utcdate-month%.............UTC Current month
%utcdate-year%..............UTC Current year
%cloudheightfeet%...........Estimated cloud base height, feet, (based on dew point, and you height above sea level...enter this under setup)
%cloudheightmeters%.........Estimated cloud base height, metres, (based on dew point, and you height above sea level...enter this under setup)
%stationaltitude%..........Station altitude, feet, as set in the units setup
%stationlatitude%..........Latitude (from the sun moon rise/set setup)
%stationlongitude%..........Longitude (from the sun moon rise/set setup)
%stationname%..............Station name, from noaa setup, or client raw real time ftp
%noaacityname%.............City name, from the noaa setup (in the av/ext setup)
%noaastatename%............State name, from the noaa setup
%windowsuptime%.............Windows up time
%freememory%...............Amount of free memory on the pc
%timeofnextupdate%.........Time of next Update/Upload of the weather data to your web page (based on the web table update time)
%Startimedate%..............Time/date WD was started
%Startime%..................Just the time of when started
%Stardate%..................Just the date of when started
%5dayforecastday1%.........Forecast from the 5 day forecast graphic image from a downloaded NOAA zone forecast file (which must be first selected),, repeat up to day 8
%rawdataheader%............Raw weather data for first line of web for sharing raw data with others
%hoursofpossibledaylight%...Total hours/minutes of possible daylight for today
%seaconditions%.............The expected local sea conditions based on the BFT average windspeed
%heatcolourword%...........How hot/cold it feels at the moment, based on the humidex, used with the conditionscolour.jpg image (which is updated with the gizmo.gif)
%filenamewapgraph%.........The current minute stamped .wbmp graph for use with a custom wap page (temp/hum graph)
%filenamewapgraph2%........The current minute stamped .wbmp graph for use with a custom wap page (baro/wind graph).
i.e use this code:
WapSeer Control
WapSeer Control
%batteryvolts%...........Rain wise 2000/Weather Hawk/ battery level
%iconnumber%...............Current icon number
US Navy
========
%usnavycloudheight1%.......Cloud height from the ceilometer, feet
%usnavycloudheight2%.......Cloud height from the ceilometer, feet
%usnavycloudheight3%.......Cloud height from the ceilometer, feet
%usnavycloudtype1%.........Cloud type
%usnavycloudtype2%.........Cloud type
%usnavycloudtype3%.........Cloud type
%watertempcelsius%.........Water temperature, oC
%watertempfaren%...........Water temperature, oF
%visibility%................Visibility (miles)

Averages/Extreme
=================
%monthtodateavtemp%.........Average temperature so far for the month
%monthtodateavtempcelsius%..Average temperature so far for the month, celsius always
%monthtodateavhum%..........Average humidity so far for the month
%monthtodateavdp%..........Average dew point so far for the month
%monthtodateavdpcelsius%....Average dew point so far for the month, celsius always
%monthtodateavbaro%.........Average barometer so far for the month
%monthtodateavbaromb%.......Average barometer so far for the month, mb (hPa) always
%monthtodateavspeed%........Average windspeed so far for the month
%monthtodateavspeedkts%.....Average windspeed so far for the month, knots always
%monthtodateavspeedms%......Average windspeed so far for the month, m/s always
%monthtodateavspeedkmh%.....Average windspeed so far for the month, kmh always
%monthtodateavgust%.........Average gustspeed so far for the month
%monthtodateavgustkts%......Average gustspeed so far for the month, knots always
%monthtodateavgustms%......Average gustspeed so far for the month, m/s always
%monthtodateavgustkmh%......Average gustspeed so far for the month, kmh always
%monthtodateavdir%.........Average direction so far for the month
%monthtodateavdirword%.....Average direction so far for the month, in words
%monthtodatemaxgustdirword% Max gust direction in words.
%monthtodatemaxgustdirdeg%....Max gust direction in Degrees.
%monthtodatemaxtemp%............Maximum temperature so far for the month
%monthtodatemaxtempcelsius%..Maximum temperature so far for the month, celsius always
%monthtodatemintemp%........Minimum temperature so far for the month
%monthtodatemintempcelsius%...Minimum temperature so far for the month, celsius always
%monthtodatemaxhum%.........Maximum humidity so far for the month
%monthtodateminhum%.........Minimum humidity so far for the month
%monthtodatemaxdhp%.........Maximum dew point so far for the month
%monthtodatemindp%..........Minimum dew point so far for the month
%monthtodatemaxbaro%........Maximum barometer so far for the month
%monthtodatemaxbaromb%......Maximum barometer so far for the month, mb (hpa) always
%monthtodateminbaro%........Minimum barometer so far for the month
%monthtodateminbaromb%......Minimum barometer so far for the month, mb (hpa) always
%monthtodatemaxwind%.........Maximum av speed so far for the month
%monthtodatemaxwindms%......Maximum av speed so far for the month, m/s always
%monthtodatemaxwindkts%.....Maximum av speed so far for the month, knots always
%monthtodatemaxwindkmh%.....Maximum av speed so far for the month, kmh always
%monthtodatemaxgust%........Maximum max gust so far for the month
%monthtodatemaxgustms%......Maximum max gust so far for the month, m/s always
%monthtodatemaxgustkts%.....Maximum max gust so far for the month, knots always
%monthtodatemaxgustkmh%.....Maximum max gust so far for the month, kmh always

%last24houravtemp%..........Average temperature last 24 hours
%houraveragetemp%..........Average temperature for the hour (put the hour number immediately after this tag, and then the month and then the year numbers e.g. %houraveragetemp%08032003 for the average temperature for 8 am (use a 24 hour clock) (hour preceding that, for the month of March 2003)
%houraveragehum%............Same thing, but for humidity
%last24houravbaro%..........Average barometer last 24 hours
%tempfortimedate%..........Actual temperature for the hour (put the hour number immediately after this tag, and then the month and then the year numbers e.g. %tempfortimedate%08032003 for the temperature for 8 am (use a 24 hour clock) (hour preceding that, for the month of March 2003)
Using Custom Tags

%daysTmax<0C%..............Days where the maximum temperature did not go over 0oC (current month)
%daysTmax>30C%..............Days where the maximum temperature went over 30oC
%daysTmax>25C%..............Days where the maximum temperature went over 25oC
%daysTmin<0C%..............Days where the minimum temperature went below 0oC
%daysTmin<-15C%.............Days where the minimum temperature went below -15oC
%daysTmax>40C%..............Days where the maximum temperature went over 40oC
%daysTmaxyear<0C%..........Days where the maximum temperature did not go over 0oC (current month)  ****year to date
%daysTmaxyear>30C%...........Days where the maximum temperature went over 30oC
%daysTmaxyear>25C%..........Days where the maximum temperature went over 25oC
%daysTminyear<0C%..........Days where the minimum temperature went below 0oC
%daysTminyear<-15C%.........Days where the minimum temperature went below -15oC
%daysTmaxyear>40C%..........Days where the maximum temperature went over 40oC
%hddmonth%..................Heating degree days month to date
%cddmonth%..................Cooling degree days month to date
%hddday%....................Heating degree days ,today
%cddday%....................Cooling degree days ,today
%hddyear%...................Heating degree days year to date (slow)
%cddyear%...................Cooling degree days year to date (slow)
%raindifffromav%............Difference between the current month to date rainfall and the average rainfall for the month (total for the current month)
%raindifffromavyear%........Difference between the current year to date and the average for the year to date (includes current month as total)  (from your entered averages)

Tags from the daily averages/extreme page (month to date) (note that will still need to be enabled)
=================================================================
%averagesextdata1%  " "  i.e in the same data sequence as that appears on
Using Custom Tags

the averages/extreme page (e.g. february2003.htm)
the last 31 are the rain for the day of the month
(blank if no rain that day)
%averagesextdata66%

%averagetempfordaytimeofyearfromyourdata%...The average temperature for the day you would expect from your data records for that day (updates at midnight and midday)
%maxtempfordaytimeofyearfromyourdata%.....Max temperature to be expected for the day from your data records (you need at least 2 years of data)
%mintempfordaytimeofyearfromyourdata%....The minimum of above

%maxtempfortodayfromyourdata%............The maximum temperature reached for this day, from your data records
%mintempfortodayfromyourdata%............The minimum temperature reached for this day, from your data records
%yearmaxtempfortodayfromyourdata%.......The year the above reading was reached
%yearmintempfortodayfromyourdata%

%WUmaxtemp%...............Todays average max temperature from the selected Wunderground almanac station
%WUmintemp%...............Todays average min temperature from the selected Wunderground almanac station

%WUmaxtempr%..............Todays record max temperature from the selected Wunderground almanac station
%WUmintempr%..............Todays record min temperature from the selected Wunderground almanac station
%WUmaxtempryr%............Year that it occured
%WUmintempryr%............year that it occurred

%currentmonthtodatefilename%....The filename, of the current averages/extreme web file (e.g. April2004.htm)
%dropdownlist%...................Creates the drop down list selection

%maxtempweek%........Max temp over the last week
%mintempweek%.........Min temp over the last week
%maxbaroweek%........Max baro over the last week
%minbaroweek%.........Min baro over the last week
%maxhumweek%.........Max hum over the last week
%minhumweek%.........Min hum over the last week
%maxwindweek%.........Max wind (average) over the last week
%maxgustweek%.........Min gust over the last week
Using Custom Tags

%maxtempweekday%......Day of max temp over the last week
%mintempweekday%......Day of min temp over the last week
%maxbarowekday%......Day of max baro over the last week
%minbarowekday%......Day of min baro over the last week
%maxhumweekday%......Day of max hum over the last week
%minhumweekday%......Day of min hum over the last week
%maxwindweekday%......Day of mMax wind (average) over the last week
%maxgustweekday%......Day of min gust over the last week

%avtempweek%.........Average temp over the week
%avhumweek%........Average hum over the week
%avbarowekweek%......Average baro over the week
%avwindweek%.........Average wind over the week
%avgustweek%.........Average gust over the week
%rainforweek%.........total rain over the last 7 days (from graph data)

Temperature/Humidity
====================
Current:
---------
%temp% ......................temperature
%tempnodp% .................temperature, no decimal place
%dewnodp% ....................dew point, no decimal place
%hum% ......................humidity
%dew% ......................dew point
%heati% .....................current heat index
%heatinodp% ................current heat index, no decimal place
%maxtemp% ..................today's maximum temperature
%maxtempnodp% .............today's maximum temperature, no decimal place
%maxempt% ...................time this occurred
%mintemp% ..................today's minimum temperature
%mintempnodp% .............today's minimum temperature, no decimal place
%mintempt% ..................time this occurred
%windch% ...................current wind-chill
%windchnodp% ...............current wind-chill, no decimal place
%minwindch% ................minimum wind-chill
%minwindcht% ................time this occurred
%maxwindchill% .............maximum wind-chill
%maxwindchillt% ............time this occurred
%highhum% ..................high humidity
%highhumt% ..................time this occurred
%lowhum% ...................low humidity
%lowhumt% ..................time this occurred
%indoortemp% ............... indoor temperature
%indoohum% .................. indoor humidity
%maxdew% ..................... high dew point
%maxdewt% ..................... time this occurred
%mindew% ..................... low dew point
%mindewt% ..................... time this occurred
%maxheat% .................... high heat index
%maxheatt% ................... time this occurred
%minheat% .................... low heat index
%minheatt% ................... time this occurred
%avtempsince6amUSA%......... Average temperature since 6am in °F
%avtempsince6am%............ Average temperature since 6am in °C
%avtempsince6pmUSA%........ Average temperature since 6pm in °F
%avtempsince6pm%............ Average temperature since 6pm in °C
%tempinmetric% ............. outdoor temperature always in metric (even if US units selected)
%dewinmetric% .............. dew point always in metric
%heatindexinmetric% ......... heat index always in metric
%windchillinmetric% .......... wind chill always in metric
%maxheatinmetric%........... maximum heat always in metric
%minheatinmetric%........... minimum heat always in metric
%maxhighdewinmetric%....... maximum dew point always in metric
%minlowdewinmetric%........ minimum dew point always in metric
%maxhighchillinmetric%...... maximum high windchill always in metric
%minlowchillinmetric%....... minimum low windchill always in metric
%wetbulb%................... Current wet bulb reading
%tempinusa%................ Temperature in °F
%dewinusa%.................. Dew point temperature in °F
%hightempinusa%............. Today's high temp in °F
%lowtempinusa%.............. Today's low temp in °F
%indoortempinmetric%....... Indoor temperature always in °C
%dewchangelasthour%........ Dew point change last hour
%tempchangelasthourmetric%.. Temperature change last hour always in metric
%tempchangelasthourfaren%.. Temperature change last hour always in faren
%wholeroundedtempcelcius%... Temperature rounded to whole number, celsius
%wholeroundedtempfaren%..... Temperature rounded to whole number, faren
%humchangelasthour%......... Humidity change last hour
%maxindoortemp%............. Maximum indoor temperature
%maxindoortempcelsius%...... Maximum indoor temperature, celsius always
%minindoortemp%............. Minimum indoor temperature
%minindoortempcelsius%...... Minimum indoor temperature, celsius always
%maxindoortempt%........... Time of Maximum indoor temperature
%minindoortempt%........... Time of Minimum indoor temperature
%watertempcelsius%......... US Navy water temperature, celsius
Using Custom Tags

%watertempfaren%.............US Navy water temperature, faren
%visibility%..................US Navy visibility reading (miles)
%soiltemp%....................Current soil temperature
%apparenttemp%..............Apparent temperature
%apparentsolartemp%.........Apparent temperature in the sun (you need a solar sensor)
%apparenttempc%..............Apparent temperature, °C
%apparentsolartempc%........Apparent temperature in the sun, °C (you need a solar sensor)
%apparenttempf%..............Apparent temperature, °F
%apparentsolartempf%........Apparent temperature in the sun, °F (you need a solar sensor)
%extratemp1%..................Extra temperature sensor 1 (change through to 8)
%indoordewfaren%.............Indoor dew point (oF)
%indoordewcelsius%...........Indoor dew point (oC)
%humidexfaren%..............Humidex value in oF
%humidexcelsius%............Humidex value in oC
%maxtemplast24hours%........The maximum temperature in the last immediate 24 hours
%mintemplast24hours%........The minimum temperature in the last immediate 24 hours
%maxtemplatlast24hourst%....Time/date of the maximum temperature in the last immediate 24 hours
%mintemplast24hourst%.......Time/date of the minimum temperature in the last immediate 24 hours
%blackglobe%..................Black globe temperature from Environdata weather master 2000 station (oC)
%THI%..........................Heat stress calculation (oC)
%HLL%..........................Heat stress load (used with Cattle), gust windspeed used (oC)
%HLLavwind%..................Heat stress load (used with Cattle), average windspeed used (oC)
%THIf%..........................Heat stress calculation (oF)
%HLLf%..........................Heat stress load (used with Cattle), gust windspeed used (oF)
%HLLavwindf%..................Heat stress load (used with Cattle), average windspeed used (oF)
%maxindoorhum%..............Maximum indoor humidity
%minindoorhum%...............Minimum indoor humidity
%dailyhighindoorhumtime%....Time of maximum indoor humidity
%dailylowindoorhumtime%.....Time of minimum indoor humidity
%airdensity%..................Current air density, kg/m3
%abshum%.....................Absolute humidity, kg/m3
%generalextratemp1%.........If using non standard extra temperature sensors, but will work for any station
%generalextratemp2%
Using Custom Tags

%generalextratemp3%
%generalextratemp4%
%generalextratemp5%
%generalextratemp6%
%generalextratemp7%

%wetbulbdiff%.................Difference between the wet bulb temperature and the outdoor temperature
%maxsoiltemp%..................Maximum daily soil temperature (either you have set a extra temperature sensor as soil or its a VP soil temperature)
%maxsoiltemp%..................Minimum daily soil temperature
%soiltempincelsius%..........Soil temperature °C (no matter what units selected in WD)
%feelslike%..................Shows heat index or humidex or windchill (if less than 16°C)
%feelslikedp%...............same, but shows it with a decimal place
%dailyhitemp12%..............Hi temperature since 6am (to 6pm (resets then)
%dailylotemp12%..............Low temperature since 6am (to 6pm (resets then)
%nightlyhitemp12%...........HI temperature since 6pm (till 6am, resets then)
%nightlylotemp12%............Low temperature since 6pm (till 6am, resets then)

Yesterday:
-----------
%tempchangehour%.............Temperature change in the last hour
%maxdewyest%..................Yesterday's max dew point
%mindewyestt%...............Time of yesterday's max dew point
%mindewyest%..................Yesterday's min dew point
%mindewyestt%...............Time of yesterday's min dew point
%maxhummyest%................Time of yesterday's max humidity
%minhummyest%................Yesterday's min humidity
%minhummyestt%...............Time of yesterday's min humidity
%maxchillyest%..............Yesterday's max windchill
%minchillyest%...............Yesterday's min windchill
%minchillyestt%...............Time of yesterday's min windchill
%maxheatyest%...............Yesterday's max heatindex
%maxheatyestt%...............Time of yesterday's max heatindex
%minheatyest%...............Yesterday's min heatindex
%minheatyestt%...............Time of yesterday's min heatindex
%maxtempyest%...............Yesterday's max temperature
%mintempyest%...............Yesterday's min temperature
%mintempyestt%...............Time of yesterday's min temperature
%maxindoortempyest%........Yesterday's Maximum indoor temperature
%minindoortempyest%........Yesterday's Minimum indoor temperature
%maxindoortempyestt%........Time of yesterday's Maximum indoor temperature
%minindoortempyestt%........Time of yesterday's Minimum indoor temperature

Trends:
-------
%tempchange24hour%........Temperature change in the last 24 hours (from the trends, includes units)
%barochange24hour%........Barometer change in the last 24 hours (from the trends, includes units)
%humchange24hour%.........Humidity change in the last 24 hours (from the trends, includes units)
%windchange24hour%........Wind change in the last 24 hours (from the trends, includes units)
%dewchange24hour%.........Dew change in the last 24 hours (from the trends, includes units)
%rainchange24hour%........Rain change in the last 24 hours (from the trends, includes units)
%temp24hoursago%.........The temperature 24 hours ago
%baro24hoursago%.........The barometer 24 hour ago
%maxtempyrago%...............Maximum temperature this day 1 year ago (if you have that data)
%maxtempyrago%...............Minimum temperature this day 1 year ago (if you have that data)

Wind
====
Current:
--------
%avgsspd% ......................average wind speed (current)
%avnodp% .......................current average wind speed, no dec. place.
%avndodpmph% ...................current average wind speed, no dec. place., mph always
%gstspd% .......................current/gust wind speed
%gustnodp% .....................current/gust wind speed, no dec. place.
%gustnodpmph% ..................current/gust wind speed, no dec. place., mph always
%dirdeg% .......................wind direction (degrees)
%dirlabel% .....................wind direction (NNE etc)
%dirlabeledutch% ..............wind direction (NNE etc), Dutch
%winddirinwords% .............Wind direction in words
%winddirinwordsdutch% .........Wind direction in words, Dutch
%maxgst%  ................... today's maximum wind speed
%maxgstdnodp% ................ today's maximum wind speed, no dec. place
%maxgstwords% ................ "        "       "     ", with words, i.e.
westerly (i.e for telephone)
%maxgstdirectionletter%..... Max Gust direction, i.e. W
%maxavgdirectionletter%..... Max Average direction, i.e. W
%maxgstt%  .................... time this occurred
%maxavgspd%  ................... maximum average wind speed
%maxavgspdt%  ................ time this occurred
%maxgsthr%  .................... maximum gust last hour
%maxgstht%  .................... time this occurred
%maxgustlastimediatehour%... Maximum gust for the last prior 1 hour
period
%maxgustlastimediatehourtime% time that the max gust last prior 1 hour
occurred
%maxgustlastimediatehourdir% Direction from Max gust last prior 1 hour
period
%maxgustlastimediatehourdirword% Direction from Max gust last prior 1
hour period, in words
%maxgustlastimediate10%..... Maximum gust for the last immediate 10
minute period
%maxgustlastimediate15%..... Maximum gust for the last 10 to 15 minutes
%maxgustlastimediate30%..... Maximum gust for the last 15 to 30 minutes
%maxgustlastimediate60%..... Maximum gust for the last 30 to 60 minutes
%maxgustlastimediate120%.... Maximum gust for the last 60 to 120 minutes
%avwindlastimediate10%...... Average wind for the last immediate 10
minute period
%avwindlastimediate15%...... Average wind for the last 10 to 15 minutes
%avwindlastimediate30%...... Average wind for the last 15 to 30 minutes
%avwindlastimediate60%...... Average wind for the last 30 to 60 minutes
%avwindlastimediate120%..... Average wind for the last 60 to 120 minutes
%avdirlastimediate10%....... Average dir wind for the last immediate 10
minute period
%avdirlastimediate15%....... Average dir wind for the 10 to 15 minutes
%avdirlastimediate30%....... Average dir wind for the 15 to 30 minutes
%avdirlastimediate60%....... Average dir wind for the 30 to 60 minutes
%avdirlastimediate120%..... Average dir wind for the 60 to 120 minutes
%avtenminute% .............. average ten minute wind direction (degrees)
%avtenminutewind% ........... average ten minute wind speed
%1mingustwind% .............. maximum gust in the last minute
%max1minuteavwind% ......... maximum 1 minute average wind speed (since
the reset time)
%avspeedinmetric% ........... current average wind speed always in knots
%gustspeedinmetric% ....... current gust speed always in knots
%avspeedinkmh% ............. current average wind speed always in kmh
%gustspeedinkmh% ........... current gust speed always in kmh
%beaufortnum% .............. Beaufort wind force number
%currbftspeed%.............Current Beaufort wind speed
%todaygustspeedinmetric%.....Today's maximum gust in knots
%maxgustlasthourinmetric%...Maximum gust last hour in knots
%10minavspeedinmetric%.....Average 10 minute speed in knots
%10minavspeedinkmh%.........Average 10 minute speed in kmh
%maxavspeedinkts%...........Maximum daily average speed in kts
%maxgustlasthourkts%........Maximum gust immediate last hour in kts
%maxgustlastmininkts%.......Maximum gust last minute in kts
%max1minavspeedlast12hrs%...Maximum 1 minute average speed in kts last 12 hours
%maxdailygustinkts%.........Maximum daily gust in kts
%windgaugepointer%..........Create your own windspeed dial (will replace this with avwindpoint1 for 1 kt speed, etc
%gustgaugepointer%..........Create your own windspeed dial (will replace this with gustwindpoint1 for 1 kt speed, etc
%10minuteavspeedbft%........10 minute average speed, in bft number
%windinmph%..................Average wind in mph always
%gustinmph%..................Gust wind in mph always
%curdir10minutelabel%.......Current average 10 minute wind direction label (i.e NNE)
%currentavtenminutewindms%..Current average 10 minute windspeed in m/s
%highavtenminutewind%.......Highest average 10 minute windspeed in the last 12 hours (in the units you have selected)
%highavtenminutewindms%.....Highest average 10 minute windspeed in the last 12 hours, m/s
%highavtenminutewindkts%....Highest average 10 minute windspeed in the last 12 hours, knots
%highavtenminutewindkmh%....Highest average 10 minute windspeed in the last 12 hours, kmh
%todaygustspeedinm/s%.......Today's maximum gust in m/s
%maxgustlasthourinm/s%......Maximum gust last hour in m/s
%10minavspeedinm/s%.........Average 10 minute speed in m/s
%maxavspeedinm/s%...........Maximum daily average speed in m/s
%maxgustlasthourm/s%........Maximum gust immediate last hour in m/s
%maxgustlastminm/s%..........Maximum gust last minute in m/s
%todaygustspeedinkmh%.......Today's maximum gust in kmh
%max1minavspeedlast12hrsrm/s%...Maximum 1 minute average speed in kts last 12 hours
%maxdailygustinm/s%.........Maximum daily gust in m/s
%maxdailygustinmph%.........Maximum daily gust in mph
%windruntodatethismonth%....Wind run to date this month
%windruntodatethisyear%.....Wind run to date this year
%windruntoday%..............Wind run today
%bftspeedtext%...............Beaufort scale in text (i.e Fresh Breeze)
%bftspeedtext10%.............Beaufort scale in text (i.e Fresh Breeze), based on 10 minute average
%last24houravdir%..........Last 24 hours average direction
%last24houravdirword%......Last 24 hours average direction in words
%last24houravdirday%.......Average direction so far for today (from midnight)
%last24houravdirwordday%....Average direction in words for today (from midnight)

Yesterday:
------------
%maxgustyest%...............Yesterday's max gust speed
%maxgustyestnodir%..........Yesterday's max gust speed, no direction
%maxgustyestt%.............Time of yesterday's max gust speed
%maxaverageyest%............Yesterday's max average speed
%maxaverageyestnodir%.......Yesterday's max average speed, no direction
%maxaverageyestt%..........Time of yesterday's max average speed

Barometer
==========
Current:
--------
%baro% .....................barometric pressure
%trend% ....................amount of change in the last hour
%highbaro% .................high pressure
%highbarot% ................time this occurred
%lowbaro% ..................low pressure
%lowbarot% ................time this occurred
%pressurechangein3hour% ......pressure change in the last 3 hours
%pressurechangein6hour% ......pressure change in the last 6 hours
%pressurechangein12hour% ...pressure change in the last 12 hours
%pressurechangein24hour% ...pressure change in the last 24 hours
%pressuretrendname% .......pressure trend (i.e. "falling"), last hour
%pressuretrendname3hour% ...pressure trend (i.e. "falling"), last 3 hours
%maxbaroinmetric%..........maximum pressure always in metric
%minbaroinmetric%..........minimum pressure always in metric
%baroinusa%.................Current barometer reading in inches.
%baroinusa2dp%..............Current barometer reading in inches, 2 decimal places only.
%baroinmetric%............Current barometer reading in metric.
%baroinkpa%...............Current baro in kpa
%currentpressureinmb%......Current barometer always in mb (hpa is the same value);
%pressurechangehourinmb%....Pressure change last hour in mb
%pressurechange3hourinmb%...Pressure change last 3 hours in mb
%pressurechange6hourinmb%...Pressure change last 6 hours in mb
%pressurechange12hourinmb%..Pressure change last 12 hours in mb
%pressurechange24hourinmb%..Pressure change last 24 hours in mb
Using Custom Tags

Pressure in inches to decimal places only

Forecast text from the Davis VP
Vapour pressure (kpa)
Words for the forecast icon

Yesterday:

Yesterday's max barometer
Time of yesterday's max barometer
Yesterday's min barometer
Time of yesterday's min barometer
Yesterday's max humidity

Rain

Current:

Today's rain
day's rain, in inches
rain so far this month
rain so far this year
rain in the last hour
maximum rain per minute in the last hour
maximum rain per hour in the past 6 hours
Total rain last 3 hours
Total rain last 6 hours
Total rain last 24 hours
Your average monthly rain you have entered (current month)
Your average monthly temperature you have entered (current month)
Consecutive days with no rain
Days with rain for the month
Days with rain for the year
Current rain episode duration, minutes
Today's rain in mm
Monthly rain in mm
Yearly rain in mm
Rain last hour in mm
Rain last 3 hours in mm
Rain last 6 hours in mm
Rain last 10 minutes
Maximum rain per minute last hour in mm
Maximum rain per hour last 6 hours in mm
Time that the last rain tip was recorded.
Date that the last rain tip was recorded
Using Custom Tags

%currentrainrate% ...........Current rain rate, mm/min (or in/min)
%currentrainratehr%.........Current rain rate, mm/hr (or in./hr)
%maxrainrate% ...............Max rain rate, for the day, mm/min (or in./min)
%maxrainratehr%.............Max rain rate, for the day, mm/hr (or in.mm)
%maxrainratetime% ..........Time that occurred
%raincurrentweek% ...........Total rain last 7 days
%maxrain/hourlastmonthtodate% Max rain for hour month to date

Yesterday:

%ystdyrain% .................yesterday’s rain
%yesterdayrain% ............Yesterday rain
%yesterdayrainmm% ..........Yesterday rain in mm always

Over the last Week

%rainonmonday% .............Rain on monday
%rainontuesday% ............Rain tuesday
%rainonwednesday%.........Rain on wednesday
%rainonthursday%..........Rain on thursday
%rainonfriday%.............Rain on friday
%rainonsaturday%..........Rain on saturday
%rainonsunday%.............Rain on sunday

Fire Weather

=%FWIffmc%.................Fire weather index fine fuel moisture code
%FWIbui%.................. " " " build up index
%FWIisi%.................. " " " initial spread index
%FWIdmc%.................. " " " duff moisture code
%FWIdc%................... " " " drought code
%FWIfwi%.................. " " " fire weather index

Sunshine/Solar/ET

%Currentsolardescription%...Current cloud cover based on the solar sensor
%sunshinehourstodatemonth%..Sunshine hours from the solar sensor
%sunshinehourstodateyear%.. " " " " " " "
%sunshineyesterday%.........Yesterday sunshine hours
%VPsolar%.................. Solar energy number (W/M2)
%VPuv%....................UV number
%VPet%......................Evaportranspiration (daily)
%VPetmonth%................Evaportranspiration (month to date)
%highsolar%.................Daily high solar (for Davis VP and Grow stations)
%lowsolar%..................Daily low solar (for Davis VP and Grow stations)
%highuv%....................Daily high UV (for Davis VP stations)
%lowuv%.....................Daily low UV (for Davis VP stations)
%currentsolarpercent%.......Current solar percent for stations with a temperature solar sensor (like the dallas 1 wire)
%currentwdet%................The current evapotranspiration rate calculated by WD every minute
%yesterdaywdet%.............The final reading at midnight of WD's ET
%yesterdaydaviset%..........The final reading at midnight of Davis ET
%etcurrentweek%...............ET total for the last 7 days
%raincurrentweek%...........Total rain last 7 days
%growsolar%................Current solar reading from a Davis Grow station
%hoursofpossibledaylight%...Total hours/minutes of possible daylight for today
%daylengthyesterday%.......Yesterdays' reading (updated at 11:46pm)
%highsolarartime%...........Time that the daily high solar occured
%lowsolarartime%............Time that the daily low solar occured
%highuvtime%................Time that the daily high UV occured
%lowuvtime%..................Time that the daily low UV occured
%highsolaryest%.............Yesterday's high solar
%highsolaryesttime%....Time of yesterday's high solar
%highuvyest%................Yesterday's high UV
%highuvyesttime%...........Time of yesterday's high UV
%maxsolarfortime%...........Max solar expected for the time of day
%sunshinehoursinlastwholehour% Sunshine hours in the last immediate full hour
%sunshinehoursinlast10%.....Sunshine hours last 10 minutes (fraction of hour)
%burntime%..................Time (minutes) to burn (normal skin) at the current UV rate, from the Davis VP with UV sensor
%THSW%....................Current Davis THSW index (temperature/humidity/solar/wind). You need a solar sensor, and have the solar setup.
%hiTHSW%...................Hi THSW today
%loTHSW%...................Lo THSW today

VP soil temp/moisture/extra temperature/humidity
=================================================================

%VPsoilmoisture%...........Davis VP soil moisture
%VPsoilmoisture2%...........Davis VP soil moisture, #2 sensor
%VPsoilmoisture3%...........Davis VP soil moisture, #3 sensor
%VPsoilmoisture4%...........Davis VP soil moisture, #4 sensor
Using Custom Tags

%-VPsoiltemp%................Davis VP soil temperature #2
%-VPsoiltemp2%..............Davis VP soil temperature #3
%-VPsoiltemp3%..............Davis VP soil temperature #4
%-VPextratemp1%..............Davis VP extra temperature #1
%-VPextratemp2%..............Davis VP extra temperature #2
%-VPextratemp1hi%............Davis VP extra temp 1 daily high
%-VPextratemp1lo%............Davis VP extra temp 1 daily low
%-VPextratemp2hi%............Davis VP extra temp 2 daily high
%-VPextratemp2lo%............Davis VP extra temp 2 daily low
%-VPextrahum1%...............Davis VP extra humidity #1
%-VPextrahum2%...............Davis VP extra humidity #2
%-VPleaf%....................Davis VP leaf wetness
%-VPleaf2%...................Davis VP leaf wetness, # 2 sensor
%-VPleaf3%...................Davis VP leaf wetness, # 3 sensor
%-VPleaf4%...................Davis VP leaf wetness, # 4 sensor
%-hiVPleaf%..................Davis VP leaf wetness, daily high (#1 sensor)
%-loVPleaf%...................Davis VP leaf wetness, daily low
%-hiVPsoilmoisture%.........Davis VP soil moisture, daily high
%-loVPsoilmoisture%.........Davis VP soil moisture, daily low
%-leafminlast10min%........Minutes last 10 minutes leaf wetness was above zero
%-leafminlast60min%........Minutes last 60 minutes leaf wetness was above zero
%-vpconsolebattery%........The Console battery, volts
%-vpreception%...............The reception of the data from the ISS status, Total packets received, Total packets missed, Number of resynchronizations, The largest number of packets in a row that were received, and the number of CRC errors detected.
%-vpreception2%.............The current % reception

WS2000/WMR900h/La crosse 2010-13 data logger
============================================================================
%-ws2000sen1t%...............Temperature of sensor 1 for the
WS2000/WMR900h or La Crosse station. Change the 1 to any number up to 9
%-ws2000sen1h%...............Humidity of sensor 1 for the WS2000/WMR900h
or La Crosse station. Change the 1 to any number up to 8
%-hiws2000sen1t%.............Daily high Temperature of sensor 1 for the
WS2000/WMR900h or La Crosse station. Change the 1 to any number up to 9
%-lows2000sen1t%.............Daily low temperature of sensor 1 for the
WS2000/WMR900h or La Crosse station. Change the 1 to any number up to 9
%-hiws2000sen1h%.............Daily high humidity of sensor 1 for the
WS2000/WMR900h or La Crosse station. Change the 1 to any number up to 9
Using Custom Tags

%lows2000sen1h%............Daily low humidity of sensor 1 for the WS2000/WMR900h or La Crosse station. Change the 1 to any number up to 9
%hiws2000sen1ht%............Time of daily high humidity (1 to 9)
%lows2000sen1ht%............Time of daily low humidity (1 to 9)
%hiws2000sen1tt%............Time of daily high temperature (1 to 9)
%lows2000sen1tt%............Time of daily low temperature (1 to 9)

Record Readings
=============
%recordhightemp%............All time record high temperature
%recordlowtemp%............All time record low temperature
%recordwindgust%............All time record high wind gust
%recordwindspeed%............All time record high average speed
%recorddailyrain%............All time record daily rain
%recordlowchill%............All time record low windchill
%recordlowchillhour%........All time record low windchill, hour
%recordlowchillminute%......All time record low windchill, minute
%recordlowchillday%.........All time record low windchill, day
%recordlowchillmonth%......All time record low windchill, month
%recordlowchillyear%.......All time record low windchill, year
%recordhighbaro%..........All time record high barometer
%recordbaro%..............All time record low barometer
%recorddailyrainday%.......Day of record daily rain
%recorddailyrainmonth%.....Month of record daily rain
%recorddailyrainyear%......Year of record daily rain
%recordlowbaroday%..........Day of record low baro
%recordhighbaroday%.........Day of record high baro
%recordlowbaromonth%-------Month of record low baro
%recordhighbaromonth%......Month of record high baro
%recordlowbaroyear%........Year of record low baro
%recordhighbaroyear%.......Year of record high baro
%recordlowtempday%.........Day of record low temperature
%recordhightempday%.........Day of record high temperature
%recordlowtempmonth%-------Month of record low temperature
%recordhightempmonth%-------Month of record high temperature
%recordlowtempyear%--------Year of record low temperature
%recordhightempyear%........Year of record high temperature
%recordhighgustday%........Day of record high wind gust
%recordhighgustmonth%......Month of record high wind gust
%recordhighgustyear%-------Year of record high wind gust
%recordhighavwindday%......Day of record high wind average speed
%recordhighavwindmonth%....Month of record high wind average speed
%recordhighavwindyear%.....Year of record high wind average speed
%recordhighheatindex%......Record high heat index
%recordhighheatindexday%...Record high heat index day
Using Custom Tags

%recordhighwindrunyr%.......Record high wind run, year
%recordhighrainmth%...........Record high rain total for month
%recordhighrainmthmth%.......Record high rain for, month
%recordhighrainmthyr%........Record high rain for, year

for current month to date:

%mrecordhightemp%.............All time record high temperature
%mrecordlowtemp%..............All time record low temperature
%mrecordwindgust%............All time record high wind gust
%mrecordwindspeed%...........All time record high average speed
%mrecorddailyrain%...........All time record daily rain
%mrecordlowchill%............All time record low windchill
%mrecordlowchillhour%........All time record low windchill, hour
%mrecordlowchillminute%......All time record low windchill, minute
%mrecordlowchillday%
%mrecordlowchillmonth%.......All time Record low windchill month
%mrecordlowchillyear%
%mrecordhighbaro%............All time record high barometer
%mrecordlowbaro%.............All time record low barometer
%mrecorddailyrainday%.........Day of record daily rain
%mrecorddailyrainmonth%.......Month of record daily rain
%mrecorddailyrainyear%-------Year of record daily rain
%mrecordlowbaroday%..........Day of record low baro
%mrecordhighbaroday%.........Day of record high baro
%mrecordlowbaromonth%-------Month of record low baro
%mrecordhighbaromonth%-------Month of record high baro
%mrecordlowbaroyear%.........Year of record low baro
%mrecordhighbaroyear%-------Year of record high baro
%mrecordlowtempday%..........Day of record low temperature
%mrecordhightempday%.........Day of record high temperature
%mrecordlowtempmonth%--------Month of record low temperature
%mrecordhightempmonth%.......Month of record high temperature
%mrecordlowtempyear%.........Year of record low temperature
%mrecordhightempyear%--------Year of record high temperature
%mrecordhighgustday%.........Day of record high wind gust
%mrecordhighgustmonth%-------Month of record high wind gust
%mrecordhighavwindday%.......Day of record high wind average speed
%mrecordhighavwindmonth%.....Month of record high wind average speed
%mrecordhighavwindyear%.....Year of record high wind average speed
%mrecordhighheatindex%.......Record high heat index
%mrecordhighheatindexday%....Record high heat index day
%mrecordhighheatindexday%....Record high heat index month
%mrecordhighheatindexyear%...Record high heat index year
%mcoldestnightonrecord%......Coldest night on record (6pm to 6am)
mcoldestdayonrecord%........Coldest day on record (6am to 6pm)
Using Custom Tags

%mwarmestnightonrecord%......Warmest night on record (6pm to 6am)
%mwarmestdayonrecord%.........Warmest day on record (6am to 6pm)
%recorddailyrainday%.........Day of record daily rain
%recordhighdew%..............Record high dew point
%recordhighdewday%..........Record high dew point, day
%recordhighdewmonth%........Record high dew point, month
%recordhighdewyear%.........Record high dew point, year
%recordlowdew%...............Record low dew point
%recordlowdewday%..........Record low dew point, day
%recordlowdewmonth%.........Record low dew point, month
%recordlowdewyear%.........Record low dew point, year
%recordhighhum%..............Record high humidity
%recordhighhumday%..........Record high humidity, day
%recordhighhummonth%.......Record high humidity, month
%recordhighhumyear%........Record high humidity, year
%recordlowhum%...............Record low humidity
%recordlowhumday%............Record low humidity, day
%recordlowhummonth%.........Record low humidity, month
%recordlowhumyear%.........Record low humidity, year
%recordhighsolar%..............Record high solar
%recordhighsolarday%........Record high solar, day
%recordhighsolarmonth%.....Record high solar, month
%recordhighsolaryear%......Record high solar, year
%recordhighuv%...............Record high uv
%recordhighuvday%..........Record high uv, day
%recordhighuvmonth%.........Record high uv, month
%recordhighuvyear%.........Record high uv, year
%recordhighsoil%.............Record high soil temp
%recordlowsoil%..............Record low soil temp
%recordhighsoilday%.........Record high soil temp, day
%recordlowsoilday%.........Record low soil temp, day
%recordhighsoilmth%.........Record high soil temp, month
%recordlowsoilmth%.........Record low soil temp, month
%recordhighsoilyear%........Record high soil temp, year
%recordlowsoilyear%.........Record low soil temp, year
%recordlowgrass%............Record low grass temp
%recordlowgrassday%.........Record low grass temp, day
%recordlowgrassmonth%......Record low grass temp, month
%recordlowgrassyear%........Record low grass temp, year
%recordhighths%..............Record high THSW
%recordlthsw%...............Record low THSW
%recordhighwindrun%.........Record high wind run
%recordhighwindrun%.........Record high wind run
%recordhighwindrunday%......Record high wind run, day
%recordhighwindrunmth%......Record high wind run, month
%recordhighwindrunyr%......Record high wind run, year
%recordhighrainmth%.........Record high rain for month
Using Custom Tags

m%recordhighrainmthmth%......Record high rain for month, month
m%recordhighrainmthyr%......Record high rain for month, year

for current year to date:

%yrecordhightemp%.............All time record high temperature
%yrecordlowtemp%..............All time record low temperature
%yrecordwindgust%.............All time record high wind gust
%yrecordwindspeed%...........All time record high average speed
%yrecorddailyrain%............All time record daily rain
%yrecordlowchill%............All time record low windchill
%yrecordlowchillhour%........All time record low windchill, hour
%yrecordlowchillminute%......All time record low windchill, minute
%yrecordlowchillday%
%yrecordlowchillmonth%
%yrecordlowchillyear%
%yrecordhighbaro%............All time record high barometer
%yrecordlowbaro%.............All time record low barometer
%yrecorddailyrainday%.........Day of record daily rain
%yrecorddailyrainmonth%......Month of record daily rain
%yrecorddailyrainyear%-------Year of record daily rain
%yrecordlowbaroday%..........Day of record low baro
%yrecordhighbaroday%.........Day of record high baro
%yrecordlowbaromonth%-------Month of record low baro
%yrecordhighbaromonth%.......Month of record high baro
%yrecordlowbaroyear%--------Year of record low baro
%yrecordhighbaroyear%-------Year of record high baro
%yrecordlowtempday%..........Day of record low temperature
%yrecordhightempday%.........Day of record high temperature
%yrecordlowtempmonth%........Month of record low temperature
%yrecordhightempmonth%.......Month of record high temperature
%yrecordlowtempyear%.........Year of record low temperature
%yrecordhightempyear%.......Year of record high temperature
%yrecordhighgustday%.........Day of record high wind gust
%yrecordhighgustmonth%.......Month of record high wind gust
%yrecordhighgustyear%.......Year of record high wind gust
%yrecordhighavwindday%.......Day of record high wind average speed
%yrecordhighavwindmonth%.....Month of record high wind average speed
%yrecordhighavwindyear%.....Year of record high wind average speed
%yrecordhighheatindex%.......Record high heat index
%yrecordhighheatindexday%...Record high heat index day
%yrecordhighheatindexday%....Record high heat index month
%yrecordhighheatindexyear%...Record high heat index year
%ycoldestnightonrecord%.....Coldest night on record (6pm to 6am)
%ycoldestdayonrecord%.......Coldest day on record (6am to 6pm)
%ywarmestnightonrecord%.....Warmest night on record (6pm to 6am)
%ywarmestdayonrecord%.......Warmest day on record (6am to 6pm)
Using Custom Tags

%yrecorddailyrainday%........Day of record daily rain
%yrecordlowchillmonth%
%yrecordlowchillday%
%yrecordhighdew%.............Record high dew point
%yrecordhighdewday%.........Record high dew point, day
%yrecordhighdewmonth%........Record high dew point, month
%yrecordhighdewyear%.........Record high dew point, year
%yrecordlowdew%............Record low dew point
%yrecordlowdewday%..........Record low dew point, day
%yrecordlowdewmonth%........Record low dew point, month
%yrecordlowdewyear%.........Record low dew point, year
%yrecordhighdewday%........Record high dew point, day
%yrecordhighdewmonth%.......Record high dew point, month
%yrecordhighdewyear%.......Record high dew point, year
%yrecordlowdew%.............Record low dew point
%yrecordlowdewday%..........Record low dew point, day
%yrecordlowdewmonth%........Record low dew point, month
%yrecordlowdewyear%.........Record low dew point, year
%yrecordhighhum%...........Record high humidity
%yrecordhighhumday%.........Record high humidity, day
%yrecordhighhummonth%.......Record high humidity, month
%yrecordhighhumyear%........Record high humidity, year
%yrecordlowhum%............Record low humidity
%yrecordlowhumday%.........Record low humidity, day
%yrecordlowhummonth%........Record low humidity, month
%yrecordlowhumyear%.........Record low humidity, year
%yrecordhighsolar%.........Record high solar
%yrecordhighsolarday%.......Record high solar, day
%yrecordhighsolarmonth%.....Record high solar, month
%yrecordhighsolaryear%......Record high solar, year
%yrecordhighuv%............Record high uv
%yrecordhighuvday%.........Record high uv, day
%yrecordhighuvmonth%.......Record high uv, month
%yrecordhighuvyear%.........Record high uv, year
%yrecordhighsoil%..........Record high soil temp
%yrecordhighsoilday%.......Record high soil temp, day
%yrecordhighsoilmth%.......Record high soil temp, month
%yrecordhighsoilyear%......Record high soil temp, year
%yrecordlowsoil%...........Record low soil temp
%yrecordlowsoilday%........Record low soil temp, day
%yrecordlowsoilmth%........Record low soil temp, month
%yrecordlowsoilyear%.......Record low soil temp, year
%yrecordlowgrass%.........Record low grass temp
%yrecordlowgrassday%.......Record low grass temp, day
%yrecordlowgrassmonth%.....Record low grass temp, month
%yrecordlowgrassyear%......Record low grass temp, year
%yrecordhighthsw%..........Record high THSW
%yrecordlowthsw%...........Record low THSW
%yrecordhighwindrun%.......Record high wind run
%yrecordhighwindrun%.......Record high wind run
%yrecordhighwindrunday%....Record high wind run, day
%yrecordhighwindrunmth%.....Record high wind run, month
%yrecordhighwindrunyr%.....Record high wind run, year
%yrecordhighrainmth%.......Record high rain for year
Using Custom Tags

%recordhighrainmthmth%.......Record high rain for year, month
%recordhighrainmthyr%.......Record high rain for year, year

Dallas 1 Wire , Note: Now supports up to 10 for the tags (also labjack hi/lo temperature readings use these tags too)

==============
%dallasextratemp1%..........Dallas 1 wire current extra temp sensor temperature
%dallasextratemp2%..........Dallas 1 wire current 2nd extra temp sensor temperature
%dallasextratemp3%..........Dallas 1 wire current 3rd extra temp sensor temperature
%dallasextratemp4%..........Dallas 1 wire current 4th extra temp sensor temperature
%dallasextratemp5%..........Dallas 1 wire current 5th extra temp sensor temperature
%dallasextratemp6%..........Dallas 1 wire current 6th extra temp sensor temperature
%dallasextratemp7%..........Dallas 1 wire current 7th extra temp sensor temperature
%dallasextratemp8%..........Dallas 1 wire current 8th extra temp sensor temperature
%dallasextratemp9%..........Dallas 1 wire current 9th extra temp sensor temperature
%dallasextratemp10%.........Dallas 1 wire current 10th extra temp sensor temperature
%dallasextratemp1low%.......Dallas 1 wire low extra temp sensor temperature
%dallasextratemp2low%.......Dallas 1 wire low 2nd extra temp sensor temperature
%dallasextratemp3low%.......Dallas 1 wire low 3rd extra temp sensor temperature
%dallasextratemp4low%.......Dallas 1 wire low 4th extra temp sensor temperature
%dallasextratemp5low%.......Dallas 1 wire low 5th extra temp sensor temperature
%dallasextratemp6low%.......Dallas 1 wire low 6th extra temp sensor temperature
%dallasextratemp7low%.......Dallas 1 wire low 7th extra temp sensor temperature
%dallasextratemp8low%.......Dallas 1 wire low 8th extra temp sensor temperature
%dallasextratemp9low%.......Dallas 1 wire low 9th extra temp sensor temperature
%dallasextratemp10low%.......Dallas 1 wire low 10th extra temp sensor temperature
%dallasextratemp1high%......Dallas 1 wire high extra temp sensor temperature
%dallasextratemp2high%......Dallas 1 wire high 2nd extra temp sensor temperature
%dallasextratemp3high%......Dallas 1 wire high 3rd extra temp sensor temperature
%dallasextratemp4high%......Dallas 1 wire high 4th extra temp sensor temperature
%dallasextratemp5high%......Dallas 1 wire high 5th extra temp sensor temperature
%dallasextratemp6high%......Dallas 1 wire high 6th extra temp sensor temperature
%dallasextratemp7high%......Dallas 1 wire high 7th extra temp sensor temperature
%dallasextratemp8high%......Dallas 1 wire high 8th extra temp sensor temperature
%dallasextratemp9high%......Dallas 1 wire high 9th extra temp sensor temperature
%dallasextratemp10high%......Dallas 1 wire high 10th extra temp sensor temperature
%dallasextratemp1lowtime%...Dallas 1 wire low time extra temp sensor temperature
%dallasextratemp2lowtime%...Dallas 1 wire low time of 2nd extra temp sensor temperature
%dallasextratemp3lowtime%...Dallas 1 wire low time of 3rd extra temp sensor temperature
%dallasextratemp4lowtime%...Dallas 1 wire low time of 4th extra temp sensor temperature
%dallasextratemp5lowtime%...Dallas 1 wire low time of 5th extra temp sensor temperature
%dallasextratemp6lowtime%...Dallas 1 wire low time of 6th extra temp sensor temperature
%dallasextratemp7lowtime%...Dallas 1 wire low time of 7th extra temp sensor temperature
%dallasextratemp8lowtime%...Dallas 1 wire low time of 8th extra temp sensor temperature
%dallasextratemp9lowtime%...Dallas 1 wire low time of 9th extra temp sensor temperature
%dallasextratemp10lowtime%...Dallas 1 wire low time of 10th extra temp sensor temperature
%dallasextratemp1hightime%..Dallas 1 wire high time of extra temp sensor temperature
%dallasextratemp2hightime%..Dallas 1 wire high time of 2nd extra temp sensor temperature
%dallasextratemp3hightime%..Dallas 1 wire high time of 3rd extra temp sensor temperature
%dallasextratemp4hightime%..Dallas 1 wire high time of 4th extra temp sensor temperature
%dallasextratemp5hightime%..Dallas 1 wire high time of 5th extra temp sensor temperature
%dallasextratemp6hightime%..Dallas 1 wire high time of 6th extra temp sensor temperature
%dallasextratemp7hightime%..Dallas 1 wire high time of 7th extra temp sensor temperature
%dallasextratemp8hightime%..Dallas 1 wire high time of 8th extra temp sensor temperature
%dallasextratemp9hightime%..Dallas 1 wire high time of 9th extra temp sensor temperature
%dallasextratemp10hightime%..Dallas 1 wire high time of 10th extra temp sensor temperature

%dallasextrahum%............Dallas 1 wire current humidity
%dallasextrahumhigh%.........Dallas 1 wire humidity high
%dallasextrahumlow%.........Dallas 1 wire humidity low
%dallasextrahumhightime%....Dallas 1 wire humidity high time
%dallasextrahumlowtime.....Dallas 1 wire humidity low time
%dallasextrahum2%...........Dallas 1 wire 2nd extra humidity
%dallasextrahum2high%.......Dallas 1 wire 2nd humidity high
%dallasextrahum2low%........Dallas 1 wire 2nd humidity low
%dallasextrahum2hightime%...Dallas 1 wire 2nd humidity high time
%dallasextrahum2lowtime....Dallas 1 wire 2nd humidity low time
%dallasextrahum3%............Dallas 1 wire 3rd extra humidity
%dallasextrahum3high%.......Dallas 1 wire 3rd humidity high
%dallasextrahum3low%........Dallas 1 wire 3rd humidity low
%dallasextrahum3hightime%...Dallas 1 wire 3rd humidity high time
%dallasextrahum3lowtime....Dallas 1 wire 3rd humidity low time
%dallasextrahum4%............Dallas 1 wire 4th extra humidity
%dallasextrahum4high%.......Dallas 1 wire 4th humidity high
%dallasextrahum4low%........Dallas 1 wire 4th humidity low
%dallasextrahum4hightime%...Dallas 1 wire 4th humidity high time
%dallasextrahum4lowtime....Dallas 1 wire 4th humidity low time

dallassolarvolts%.........Volts from a dallas 1 wire solar sensor
%barometertemperature%.....Temperature from a Bray/Jennings or AAG barometer

dallashumtemp%.............Current Dallas 1 wire humidity sensor temperature
%highdallashumtemp%.........Daily high " " " " " " " 
Using Custom Tags

%lowdallashumtemp%............Daily low
%highdallashumtemp%............Time of Daily high
%lowdallashumtemp%............Time of Daily low

dallashumtemp2%............Current Dallas 1 wire humidity sensor temperature #2
%highdallashumtemp2%............Daily high
%lowdallashumtemp2%............Daily low
%highdallashumtemp2%............Time of Daily high
%lowdallashumtemp2%............Time of Daily low

dallashumtemp3%............Current Dallas 1 wire humidity sensor temperature #3
%highdallashumtemp3%............Daily high
%lowdallashumtemp3%............Daily low
%highdallashumtemp3%............Time of Daily high
%lowdallashumtemp3%............Time of Daily low

dallashumtemp4%............Current Dallas 1 wire humidity sensor temperature #4
%highdallashumtemp4%............Daily high
%lowdallashumtemp4%............Daily low
%highdallashumtemp4%............Time of Daily high
%lowdallashumtemp4%............Time of Daily low

Lightning counts

=--------------------------=
%lighteningcountlasthour%...Lightening count last immediate hour
%lighteningcountlastminute%...Lightening count last minute
%lighteningcountlast5minutes%..Lightening count 5 minutes
%lighteningcountlast12hour% ..Lightening count last 12 hours
%lighteningcountlast30minutes% ..Lightening count last 30 minutes
%lighteningcountlasthournextstorm%...Lightening count last immediate hour, from the nextstorm integration
%lighteningcountlastminutenextstorm%...Lightening count last minute
%lighteningcountlast12hournextstorm% ..Lightening count last 12 hours
%lighteningcountlast30minutesnextstorm% ..Lightening count last 30 minutes
%lighteningcount%...........Lightening counts since noon
%lighteningcountmonth%......Lightening counts this month
%lighteningcountnoon%.......Lightening counts since noon (the correct one)
%lighteningcountlasttime%...Time of last count
%lighteningcountmidnight%.. Lightening counts since midnight

WMR918/68

------------------
%Solar%..................WMR918/68 and WS2000 Solar sensor
%wmr918/68extrahum%.......WMR918/68 extra sensor #1 humidity
%wmr918/68extrahum2%.......WMR918/68 extra sensor #2 humidity
%wmr918/68extrahum3%.......WMR918/68 extra sensor #3 humidity
%wmr918/68extratemp%.......WMR918/68 extra sensor #1 temperature
%wmr918/68extratemp2%......WMR918/68 extra sensor #2 temperature
%wmr918/68extratemp3%......WMR918/68 extra sensor #3 temperature
%wmr918/68extratemphigh%...WMR918/68 extra sensor #1 high temperature
%wmr918/68extratemphigh2%..WMR918/68 extra sensor #2 high temperature
%wmr918/68extratemphigh3%..WMR918/68 extra sensor #3 high temperature
%wmr918/68extrahumhigh%.....WMR918/68 extra sensor #1 high humidity
%wmr918/68extrahumhigh2%...WMR918/68 extra sensor #2 high humidity
%wmr918/68extrahumhigh3%...WMR918/68 extra sensor #3 high humidity
%wmr918/68temphightime%....WMR918/68 extra sensor #1 temperature high time
%wmr918/68temphightime2%...WMR918/68 extra sensor #2 temperature high time
%wmr918/68temphightime3%...WMR918/68 extra sensor #3 temperature high time
%wmr918/68extratemplow%.....WMR918/68 extra sensor #1 low temperature
%wmr918/68extratemplow2%...WMR918/68 extra sensor #2 low temperature
%wmr918/68extratemplow3%...WMR918/68 extra sensor #3 low temperature
%wmr918/68extrahumlow%.....WMR918/68 extra sensor #1 low humidity
%wmr918/68extrahumlow2%....WMR918/68 extra sensor #2 low humidity
%wmr918/68extrahumlow3%....WMR918/68 extra sensor #3 low humidity
%wmr918/68templowtime%.....WMR918/68 extra sensor #1 temperature low time
%wmr918/68templowtime2%....WMR918/68 extra sensor #2 temperature low time
%wmr918/68templowtime3%....WMR918/68 extra sensor #3 temperature low time
%wmr918/68extrahumhightime%.WMR918/68 extra sensor #1 high humidity time
%wmr918/68extrahumhigh2time%.WMR918/68 extra sensor #2 high humidity time
%wmr918/68extrahumhigh3time%.WMR918/68 extra sensor #3 high humidity time
Using Custom Tags

%wmr918/68extrahumlowtime%..WMR918/68 extra sensor #1 low humidity time
%wmr918/68extrahumlow2time%..WMR918/68 extra sensor #2 low humidity time
%wmr918/68extrahumlow3time%..WMR918/68 extra sensor #3 low humidity time
%wmr918/68tempbat3%........Battery status of the extra temp hum #3
%wmr918/68tempbat2%........Battery status of the extra temp hum #2
%wmr918/68tempbat1%........Battery status of the extra temp hum #1
%wmr918/68tempbat%.........Battery status of the temp hum sensor
%wmr918/68consbat%........Battery status of the console
%wmr918/68rainbat%.........Battery status of the rain gauge
%wmr918/68windbat%.........Battery status of the wind sensor

Snow
=====
%snowseasonin%........Snow for season you have entered under input daily weather, inches
%snowmonthin%..........Snow for month you have entered under input daily weather, inches
%snowtodayin%.........Snow for today you have entered under input daily weather, inches
%snowseasoncm%.........Snow for season you have entered under input daily weather, cm
%snowmonthcm%..........Snow for month you have entered under input daily weather, cm
%snowtodaycm%..........Snow for today you have entered under input daily weather, cm
%snowyesterday%........Yesterdays' snow
%snowheight%..........Estimated height snow will fall at

Download metars
=================
%downloadedmetar1extrasky%..Sky conditions
%downloadedmetar1sky%......More sky conditions
%downloadedmetar1cloud%....Cloud conditions or weather
%downloadedmetar1press%....Barometer reading
%downloadedmetar1humi%.....Humidity reading
%downloadedmetar1dewp%.....Dew point reading
%downloadedmetar1temp%.....Temperature reading
%downloadedmetar1tempcelsius%.....Temperature reading in celsius
%downloadedmetar1wind%.....Wind readings (speed and direction)
%downloadedmetar1location%..Metar name and time stamp
%downloadedmetar1vis%......Visibility
%downloadedmetar1name%.....Just the metar name. (1st 10 metars only)
%downloadedmetar1time%.....Just the time of update.(1st 10 metars only)
%downloadedmetar1rainlasthour% Rain in the last hour (if its available)
%downloadedmetar1windonly%..Shows just the windspeed only (1st 10 metars only)
%downloadedmetar1dironly%...Shows direction in letter (1st 10 metars only)
%downloadedmetar1dironlydir%.. Shows dir in degrees.(1st 10 metars only)
Repeat this for up to 50 downloaded airport metars (i.e %downloadedmetar2location% for the next one)

%metar/report=%NZAA.MET Insert downloaded METARS or weather reports/warnings.
Please replace NZAA.MET with the file name downloaded. Note: use

and

html tags before and after this custom tag

and also note you can use the tag to add other text files to your page too, if those files are in the metar download dir

%5dayforecastday1%..........Forecast from the 5 day forecast graphic image from a downloaded NOAA zone forecast file (which must be first selected),,,repeat up to day 8
%5dayforecastdayday1%.......Day (i.e Monday, tuesday, etc)...Forecast from the 5 day forecast graphic image from a downloaded NOAA zone forecast file (which must be first selected),,,repeat up to day 8
%5dayforecasttimestamp%.....The heading and time stamp from the NOAA downloaded forecast.
Note, for XML, use the format %d5ayforecastday1%
%downloadedmetarrainlasthour% Rain in the last hour from the main downloaded metar (if it is in the metar)

Current weather warning/forecast from input daily weather
---------------------------------------------------------------------
%dailywarning/forecast%

GPS
---
%gpslat% IF you have a GPS unit setup in weather display
%gpslong%

%wapstationname%......Station name for the WAP
Using Custom Tags

Tags for using comma decimal place

%temp,%................Current temperature
%windch,%..............Current windchill
%heati,%...............Current heat index
%dew,%................Current dew point
%currentpressureinmb,%...Current barometer reading (mb/hpa)
%avgspd,%...............Average windspeed
%gstspd,%...............Current (gust) speed
%dayrn,%..............Today's rain
%hourrn,%..............Rain last hour
%monthrn,%.............Month to date rain
%yearrn,%.............Year to date rain
%yesterdayrain,%......Yesterday's rain

%customscreenownlabelusethistag%

Mesomap stations data (If you have setup and are using the mesomap feature)

%mesomaptemp1%
%mesomaphum1%
%mesomapdew1%
%mesomapspeed1%
%mesomapgust1%
%mesomapdir1%
%mesomapbaro1%
%mesomaprain1%
%mesomaptime1%
%mesomaptemp2%
%mesomaphum2%
%mesomapdew2%
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<td>Humidity</td>
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<td>Dew Point</td>
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Using Custom Tags

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%mesomaptemp28%
%mesomaphum28%
%mesomapdew28%
%mesomapspeed28%
%mesomapgust28%
%mesomapdir28%
%mesomapbaro28%
%mesomaprain28%
%mesomaptime28%
%mesomaptemp29%
%mesomaphum29%
%mesomapdew29%
%mesomapspeed29%
%mesomapgust29%
%mesomapdir29%
%mesomapbaro29%
%mesomaprain29%
%mesomaptime29%
Using Custom Tags

%mesomaptemp30%
%mesomaphum30%
%mesomapdew30%
%mesomapspeed30%
%mesomapgust30%
%mesomapdir30%
%mesomapbaro30%
%mesomaprain30%
%mesomaptime30%
%mesomaptemp31%
%mesomaphum31%
%mesomapdew31%
%mesomapspeed31%
%mesomapgust31%
%mesomapdir31%
%mesomapbaro31%
%mesomaprain31%
%mesomaptemp32%
%mesomaphum32%
%mesomapdew32%
%mesomapspeed32%
%mesomapgust32%
%mesomapdir32%
%mesomapbaro32%
%mesomaprain32%
%mesomaptemp33%
%mesomaphum33%
%mesomapdew33%
%mesomapspeed33%
%mesomapgust33%
%mesomapdir33%
%mesomapbaro33%
%mesomaprain33%
%mesomaptemp34%
%mesomaphum34%
%mesomapdew34%
%mesomapspeed34%
%mesomapgust34%
%mesomapdir34%
%mesomapbaro34%
%mesomaprain34%
%mesomaptemp35%
%mesomaphum35%
%mesomapdew35%
%mesomapspeed35%
%mesomapgust35%
%mesomapdir35%
Using Custom Tags

%mesomapbaro35%
%mesomaprain35%
%mesomaptemp36%
%mesomaphum36%
%mesomapdew36%
%mesomapspeed36%
%mesomapgust36%
%mesomapdir36%
%mesomapbaro36%
%mesomaprain36%
%mesomaptemp37%
%mesomaphum37%
%mesomapdew37%
%mesomapspeed37%
%mesomapgust37%
%mesomapdir37%
%mesomapbaro37%
%mesomaprain37%
%mesomaptemp38%
%mesomaphum38%
%mesomapdew38%
%mesomapspeed38%
%mesomapgust38%
%mesomapdir38%
%mesomapbaro38%
%mesomaprain38%
%mesomaptemp39%
%mesomaphum39%
%mesomapdew39%
%mesomapspeed39%
%mesomapgust39%
%mesomapdir39%
%mesomapbaro39%
%mesomaprain39%
%mesomaptemp40%
%mesomaphum40%
%mesomapdew40%
%mesomapspeed40%
%mesomapgust40%
%mesomapdir40%
%mesomapbaro40%
%mesomaprain40%

%mesomapmaxtempclient1%  *** available from clientraw.txt data source
%mesomapmaxtempclient2%
%mesomapmaxtempclient3%
%mesomapfeelslikeclient11%
%mesomapfeelslikeclient12%
%mesomapfeelslikeclient13%
%mesomapfeelslikeclient14%
%mesomapfeelslikeclient15%
%mesomapfeelslikeclient16%
%mesomapfeelslikeclient17%
%mesomapfeelslikeclient18%
%mesomapfeelslikeclient19%
%mesomapfeelslikeclient20%

History data
------------
%temp0minuteago%  ****this one is needed for all the others to work
%wind0minuteago%
%gust0minuteago%
%dir0minuteago%
%hum0minuteago%
%dew0minuteago%
%baro0minuteago%
%rain0minuteago%

%temp1minuteago%
%wind1minuteago%
%gust1minuteago%
%dir1minuteago%
%hum1minuteago%
%dew1minuteago%
%baro1minuteago%
%rain1minuteago%

%temp2minuteago%
%wind2minuteago%
%gust2minuteago%
%dir2minuteago%
%hum2minuteago%
%dew2minuteago%
%baro2minuteago%
%rain2minuteago%

%temp3minuteago%
%wind3minuteago%
Using Custom Tags

You can also link to the following image files that are uploaded by Weather Display, according to the options selected under FTP setup, files e.g.
Using Custom Tags

(Name of your station)dial.gif .dials image
(Name of your station).gif .screen shot or default graph
48hourgraph.gif ............updated daily with the averages/extreme
72hourgraph.gif .............updated daily with the averages/extreme
alltimerecords.gif........... " " " " " "...i.e the
all time records to date image, uploaded daily with the
averages/extreme upload
curr24hourgraph.gif.........The current last 24 hour graph
curr48hourgraph.gif.........The current last 48 hour graph
curr72hourgraph.gif.........The current last 72 hour graph
dailyhighlowbaroetc.gif ......daily high/low pressure/humidity and
wind-chill low image
dailyhighlowyest.gif ........yesterday's daily high/low
pressure/humidity and wind-chill low image
dirplot.gif...................The wind direction distribution image
energy.gif...................Wind energy/hours
extrarealtimegraph.gif.......The extra real time graph file
fwigraph.gif ..................fire weather index graph (if selected)
largedisplay.gif.............If selected under the files section
localweather.gif...............a smaller summary image
metar.gif....................The metar you have selected to update the
summary.gif image or wunderground
monthtodate.gif ............graph of month to date
summary.gif ..................summary image, with icon
sunmoonimage.jpg ............sun/moon rise/set times image
weatherbanner.gif.............another banner
weekgra.gif..................weekly graph
windtempraintrend11.gif......Month to date temp/wind and rain trend
column chart. The number is the current month (i.e november)
windtempraintrend.gif........Current " "
yesterday.gif ...................yesterday's 24 hour graph
vprealtimegraph.gif..........Davis VP solar and uv graph (if upload
extra sensor graph is enabled)
animatedwebcam.gif...........If you have that setup
animatedhttpfile.gif...........
raindetail.gif..............Rain for the last 7 days and the graph of
the rain to date for the year. (updated/uploaded with the daily
averages/extreme upload)
forecasticon.gif ............The icon you can see visible on the WD
screen
forecasticonstation.gif......The icon that the weather station has
visible
conditionscolour.jpg.........colour coded image with description of the
feels like weather
cloudheight.gif.............A graphical representation of the cloud
height
If you have produce dial files ticked, then you also have these individual dials to insert on your web page:

- raindial.gif .................the rain dial
- raintoday.gif ...............the rain today dial
- rainrate.gif ................the rain rate dial
- humdial.gif ..................the humidity dial
- gustdial.gif .................the wind speed gust dial
- averagedial.gif .............the average speed dial
- directiondial.gif ..........the wind direction dial
- barodial.gif ..................the barometer dial
- dewdial.gif ...................the dew point dial
- tempdial.gif ..................the temperature dial
- wetbulbdial.gif ..............the wetbulb dial
- solardial.gif..............if you have a solar sensor
- uvdial.gif....................for a Davis VP
- raintodaytank.gif..........If you have set to produce and upload rain tank option (in the custom web page setup)
- rainyeartank.gif
- rainmonthtank.gif

Using your own icons (they will replace forecasticon.gif, which is uploaded automatically:
Just create a folder called myicons, as a subdirectory for where Weather Display is (i.e c:\wdisplay\myicons\sunny.gif)
Then name them as follows:
- cloudynight.gif
- clearnight.gif
- mainlyfine.gif
- nightrain.gif
- nightsnow.gif
- nightovercast.gif
- nightheavyrain.gif
- sunny.gif
- rain.gif
- overcast.gif
- partlycloudy.gif
- fog.gif
- lightrain.gif
- heavyrain.gif
- snow.gif
- snowshowers.gif
- sleetshowers
- sleet.gif
- windy.gif
- snowshowers2.gif (snow showers)
thundershowers.gif
thundershowers2.gif
thunderstorms.gif
showers2.gif (showers and fine intervals)
rain2.gif  (rain)
cloudy2.gif (cloudy)
partlycoudy.gif  (cloudy periods)

If you want to upload another file, then call it wxlocal2.html. It will upload as wx2.html (even if use normal file name selected). You can have up to 40 pages this way!

Principal Authors: ANONIPEDITS:0, WikiSysop

**Posting WebCam Images to a Web Page**

Purpose: Weather Display can FTP your web cam file (either captured directly by weather display or by another webcam program) to your web site. General

Click on "Setup" in the menu bar, then control panel. Click on "Setup FTP/internet/reboot/METAR/etc". Then click on the Tab labeled "Web cam".

Then click on choose a web cam file, and select the file to FTP. Then set the times to upload, and turn the switch ON, on that page.

If you want it uploaded to a different directory, then enter that directory name, and tick that option.

If you do not want weather display to automatically insert the image in the default web page, then tick "don't display image on web page".

Note that if you have ticked "let me manage datahtm2.txt" in the web file setup, then you will have to add the link yourself to the image to the datahtm2.txt file, which is located in the folder web files.

Finally, click on "Test" to see an upload. If all is as you want it, click on OK to save the settings.

Note: The main internet switch under connections also needs to be ON, and you will need the appropriate FTP settings entered in the connection setup win

Principal Authors: ANONIPEDITS:0
Weather Talker and Telephony

Weather Talker

You will need to download the files/components listed below and run/install them to get Weather Talking working. These are not needed for Windows 2000 (and Windows XP??), it is all ready to go.

- The core component (needed for win95/98).
- The basic English driver. Also, download the British female driver.
- The British English drivers, that may be needed.
- You may also need the SAPI 4.0 runtime file.
- Internet explorer 3.02 or later.

Once downloaded you need to run the files. There will be no message when they have finished installing.

Windows 98 users are likely to need to select and download the English British speech drivers as well.

In Weather Display, click on Setup, Weather Talk and then select "Setup / control panel".

Make sure that your speakers are connected, and any necessary power is turned on.

- Click button labelled "Select Speech Driver", and make a choice.
- Click button labelled "Select Audio Device", and make a choice.
- Click red "Talk OFF" so that it turns into a green "Talk ON" button.
- Click the "Test" button, you should hear a weather report!
- Select the start and ending times for voice reports.
- Select the report interval.
- Specify the information to be included in the report.
- Enter any Introductory words, e.g. "local weather report".
- Click the "Test" button, you should hear a weather report!
- Click the button labeled "SaveSettings".
- Click the button labeled "Close".

Telephony

Not yet Available.


Principal Authors: ANONIPEDITS:0
Using XML to show weather data on any web page

Still needs some work!

By using an XML data file you can create a static Weather Display web page that doesn't need to be uploaded frequently and also update multiple web pages just by uploading a single file. This is a good way to reduce upload traffic or to display data from multiple stations.

Step by step example:

1. Tick the option in the Custom Web Page setup, under Setup, FTP/Internet setup.
2. If a template file hasn't already been created, Weather Display will create a new template file called wdfulldata.htm, at the custom web page update times, or you can set times to update and upload the wxlocal.html file (even if you don't have it in use) in the customise internet and file creation setup you can alter that afterwards then from that wdfulldata.xml is created and uploaded then to use the data in the xml page (and any number of pages can use this one page, or you can even use pages from other web sites) to add (example) to your custom web pages (and you can even add to the default wd datahtm0.txt etc if you tick that option).

Add the following code somewhere near the start of your HTML code, i.e. after the BODY command. Each ID must be different and formatted as 'dsoCitySt', according to the city and state you are grabbing data from, e.g. dsoOmahaNE.

1. Now create a table. Tables are needed for this to work. The table tag should look like this: ??? You can add anything into this table tag, but DATASRC="#dsoCityST" must be included in it.
2. Grab the data! Where you want the temperature to be, you simply add and that's it! This will go where you would normally add your WD tags. Of course, you will still need to add units text, e.g. 'mph' and " text after that as you normally would using a WD template.
3. Tables cannot share data. Each City/State must have its own table to work. There is no closing tag for the XML. Your normal will work for this.

Example:

°C (°F) kts at time/date:/

Note: To use data from other web sites you will need to adjust your browser settings.

1. In IE, go to Tools > Internet Options > Security Tab.
2. Select Internet
3. Select Custom Level.
4. Select Access Data Sources Across Domains from Miscellaneous.


Principal Authors: ANONIPEDETS:0
4.10 Weather Display Custom Tag Reference

Weather Display Custom Tag Reference

This is a reference of the Weather Display custom tags. Custom tags allow you to create highly customized Web pages with hundreds of different data variables.

This option is for users who either have an HTML composer/editor or who know HTML.

Create your HTML template using these special tags and Weather Display will replace these tags with the appropriate weather data (in the units you have chosen), then create a new file called wxhtml.html and upload it to your Web site.

The tags have been arranged into broad categories for ease of identification. This is no way implies any order of precedence.

→ Averages/Extremes
→ Barometer
→ Comma Decimal Places
→ Current Weather Warning/Forecast from Input Daily Weather
→ Daily Averages/Extreme Page
→ Dallas 1 Wire
→ Davis Vantage Pro Soil Temperature/Moisture/Extra Temperature/Humidity
→ Download METARs
→ Fire Weather
→ General or Non-Weather Specific/Solar/Lunar
→ GPS
→ Historical Data
→ Lightning Counts
MesoMap Data
→ Oregon Scientific WMR 918/968
→ Rain
→ Rainwise WS2000, WMR900h, La Crosse 2010-13 Data Logger
→ Records
→ Snow
→ Sunshine/Solar/ET
→ Tag History by Version
→ Temperature and Humidity
→ Trends
→ US Navy
→ Wind

Principal Authors: ANONIPEDITS:0

Averages/Extremes

%monthtodateavtemp%
Average temperature so far for the month

%monthtodateavtempcelsius%
Average temperature so far for the month, celsius always

%monthtodateavhum%
Average humidity so far for the month

%monthtodateavdp%
Average dew point so far for the month

%monthtodateavdpcelsius%
Average dew point so far for the month, celsius always

%monthtodateavbaro%
Average barometer so far for the month

%monthtodateavbaromb%
Average barometer so far for the month, mb (hPa) always

%monthtodateavspeed%
Average windspeed so far for the month

%monthtodateavspeedkts%
Average windspeed so far for the month, knots always

%monthtodateavspeedms%
Average windspeed so far for the month, m/s always

%monthtodateavspeedkmh%
Average windspeed so far for the month, kmh always

%monthtodateavgust%
Average gustspeed so far for the month

%monthtodateavgustkts%
Average gustspeed so far for the month, knots always

%monthtodateavgustms%
Average gustspeed so far for the month, m/s always

%monthtodateavgustkmh%
Average gustspeed so far for the month, kmh always

%monthtodateavdir%
Average direction so far for the month
%monthtodateavdirword%
Average direction so far for the month, in words
%monthtodatemaxgustdirword%
Max gust direction in words
%monthtodatemaxgustdirdeg%
Max gust direction in Degrees
%monthtodatemaxtemp%
Maximum temperature so far for the month
%monthtodatemaxtempcelsius%
Maximum temperature so far for the month, celsius always
%monthtodatemintemp%
Minimum temperature so far for the month
%monthtodatemintempcelsius%
Minimum temperature so far for the month, celsius always
%monthtodatemaxhum%
Maximum humidity so far for the month
%monthtodateminhum%
Minimum humidity so far for the month
%monthtodatemaxdp%
Maximum dew point so far for the month
%monthtodatemaxdpcelsius%
Maximum dew point so far for the month, celsius always
%monthtodatemindp%
Minimum dew point so far for the month
%monthtodatemindpcelsius%
Minimum dew point so far for the month, celsius always
%monthtodatemaxbaro%
Maximum barometer so far for the month
%monthtodatemaxbaromb%
Maximum barometer so far for the month, mb (hpa) always
%monthtodateminbaro%
Minimum barometer so far for the month
%monthtodateminbaromb%
Minimum barometer so far for the month, mb (hpa) always
%monthtodatemaxwind%
Maximum av speed so far for the month
%monthtodatemaxwindms%
Maximum av speed so far for the month, m/s always
%monthtodatemaxwindkts%
Maximum av speed so far for the month, knots always

%monthtodatemaxwindkmh%
Maximum av speed so far for the month, kmh always

%monthtodatemaxgust%
Maximum max gust so far for the month

%monthtodatemaxgustms%
Maximum max gust so far for the month, m/s aways

%monthtodatemaxgustkts%
Maximum max gust so far for the month, knots aways

%monthtodatemaxgustkmh%
Maximum max gust so far for the month, kmh aways

%last24houravtemp%
Average temperature last 24 hours

%houraveragetemp%
Average temperature for the hour (put the hour number immediately after this tag, and then the month and then the year numbers

eg : %houraveragetemp:%08032003 for the average temperature for 8am (use a 24 hour clock) (hour preceding that, for the month of March 2003)

%houraveragehum%
Same thing, but for humidity

%last24houravbaro%
Average barometer last 24 hours

%last24houravhum%
Average humidity last 24 hours

%tempfortimedate%
Actual temperature for the hour (put the hour number immediately after this tag, and then the month and then the year numbers

%daysTmax<0C%
Days where the maximum temperature did not go over 0oC (current month)

%daysTmax>30C%
Days where the maximum temperature went over 30oC

%daysTmax>25C%
Days where the maximum temperature went over 25oC

%daysTmin<0C%
Days where the minimum temperature went below 0oC

%daysTmin<-15C%
Days where the minimum temperature went below -15oC

%daysTmax>40C%
Days where the maximum temperature went over 40oC
%daysTmaxyear<0C%
   Days where the maximum temperature did not go over 0oC (current month)
   ****year to date
%daysTmaxyear>30C%
   Days where the maximum temperature went over 30oC
%daysTmaxyear>25C%
   Days where the maximum temperature went over 25oC
%daysTminyear<0C%
   Days where the minimum temperature went below 0oC
%daysTminyear<-15C%
   Days where the minimum temperature went below -15oC
%daysTmaxyear>40C%
   Days where the maximum temperature went over 40oC
%hddmonth%
   Heating degree days month to date
%cddmonth%
   Cooling degree days month to date
%hddday%
   Heating degree days ,today
%cddday%
   Cooling degree days ,today
%cddyear%
   Cooling degree days year to date (slow)
%hddyear%
   Heating degree days year to date (slow)
%raindifffromav%
   Difference between the current month to date rainfall and the average rainfall for
   the month (total for the current month)
%raindifffromavyear%
   Difference between the current year to date and the average for the year to date
   (includes current month as total) (from your entered averages)


Principal Authors: ANONIPEDITS:0
Barometer

Current

%baro%  
barometric pressure
%trend%  
amount of change in the last hour
%highbaro%  
high pressure
%highbarot%  
time this occurred
%lowbaro%  
low pressure
%lowbarot%  
time this occurred
%pressurechangein3hour%  
pressure change in the last 3 hours
%pressurechangein6hour%  
pressure change in the last 6 hours
%pressurechangein12hour%  
pressure change in the last 12 hours
%pressurechangein24hour%  
pressure change in the last 24 hours
%pressuretrendname%  
pressure trend (ie "falling"), last hour
%pressuretrendname3hour%  
pressure trend (ie "falling"), last 3 hours
%maxbaroinmetric%  
maximum pressure always in metric
%minbaroinmetric%  
minimum pressure always in metric
%baroinusa%  
Current barometer reading in inches
%baroinusa2dp%  
Current barometer reading in inches, 2 decimal places only
%baroinmetric%  
Current barometer reading in metric
%baroinkpa%  
Current baro in kpa
Current barometer always in mb (hpa is the same value); Pressure change last hour in mb Pressure change last 3 hours in mb Pressure change last 6 hours in mb Pressure change last 12 hours in mb Pressure change last 24 hours in mb Pressure in inches to decimal places only Forecast text from the Davis VP Vapour pressure (kpa) Words for the forecast icon

Yesterday

Yesterday's max barometer Time of yesterday's max barometer Yesterday's min barometer Time of yesterday's min barometer Yesterday's max humidity

Comma Decimal Places

%temp,%
Current temperature

%windch,%
Current windchill

%heati,%
Current heat index

%dew,%
Current dew point

%currentpressureinmb,%
Current barometer reading (mb/hpa)

%avgspd,%
Average windspeed

%gstspd,%
Current (gust) speed

%dayrn,%
Today's rain

%hourrn,%
Rain last hour

%monthrn,%
Month to date rain

%yearrn,%
Year to date rain

%yesterdayrain,%
Yesterday's rain

Principal Authors: ANONIPEDITS:0
Current Weather Warning/Forecast from Input Daily Weather

%dailywarning/forecast:%
Daily warning/forecast

Principal Authors: ANONIPEDITS:0

Daily Averages/Extreme Page

%averagesextdata1%
In the same data sequence as that appears on the averages/extreme page (eg february2003htm) the last 31 are the rain for the day of the month (blank if no rain that day)

%averagesextdata66%
%averagetempfordaytimeofyearfromyourdata%
The average temperature for the day you would expect from your data records for that day (updates at midnight and midday)

%maxtempfordaytimeofyearfromyourdata%
Max temperature to be expected for the day from your data records (you need t 2 years of data)

%mintempfordaytimeofyearfromyourdata%
The minimum of above

%maxtempfortodayfromyourdata%
The maximum temperature reached for this day, from your data records

%mintempfortodayfromyourdata%
The minimum temperature reached for this day, from your data records

%yearmaxtempfortodayfromyourdata%
The year the above reading was reached

%yearmintempfortodayfromyourdata%

%WUmaxtemp%
Todays average max temperature from the selected Wunderground almanac station

%WUmintemp%
Todays average min temperature from the selected Wunderground almanac station

%WUmaxtempr%
Todays record max temperature from the selected Wunderground almanac station
%WUmintempr%
   Today’s record min temperature from the selected Wunderground almanac station

%WUmaxtempryr%
   Year that it occurred

%WUmintempryr%
   Year that it occurred

%currentmonthtodatefilename%
   The filename of the current averages/extreme web file (e.g., April2004htm)

%dropdownlist%
   Creates the drop down list selection

%maxtempweek%
   Max temp over the last week

%mintempweek%
   Min temp over the last week

%maxbaroweek%
   Max baro over the last week

%minbaroweek%
   Min baro over the last week

%maxhumweek%
   Max hum over the last week

%minhumweek%
   Min hum over the last week

%maxwindweek%
   Max wind (average) over the last week

%maxgustweek%
   Min gust over the last week

%maxtempweekday%
   Day of max temp over the last week

%mintempweekday%
   Day of min temp over the last week

%minchillweekday%
   Day of min wind chill over the last week

%maxbaroweekday%
   Day of max baro over the last week

%minbaroweekday%
   Day of min baro over the last week

%maxhumweekday%
   Day of max hum over the last week

%minhumweekday%
Day of min hum over the last week
\%maxwindweekday\%
Day of mMax wind (average) over the last week
\%maxgustweekday\%
Day of min gust over the last week
\%avtempweek\%
Average temp over the week
\%avhumweek\%
Average hum over the week
\%avbaroweek\%
Average baro over the week
\%avwindweek\%
Average wind over the week
\%avgustweek\%
Average gust over the week
\%rainforweek\%
total rain over the last 7 days (from graph data)

Principal Authors: ANONIPEDITS:0

Dallas 1 Wire

\%dallasextratemp1\%
Dallas 1 wire current extra temp sensor temperature
\%dallasextratemp2\%
Dallas 1 wire current 2nd extra temp sensor temperature
\%dallasextratemp3\%
Dallas 1 wire current 3rd extra temp sensor temperature
\%dallasextratemp4\%
Dallas 1 wire current 4th extra temp sensor temperature
\%dallasextratemp5\%
Dallas 1 wire current 5th extra temp sensor temperature
\%dallasextratemp6\%
Dallas 1 wire current 6th extra temp sensor temperature
\%dallasextratemp7\%
Dallas 1 wire current 7th extra temp sensor temperature
\%dallasextratemp8\%
Dallas 1 wire current 8th extra temp sensor temperature
%dallasextratemp9%
Dallas 1 wire current 9th extra temp sensor temperature

%dallasextratemp10%
Dallas 1 wire current 10th extra temp sensor temperature

%dallasextratemp1low%
Dallas 1 wire low extra temp sensor temperature

%dallasextratemp2low%
Dallas 1 wire low 2nd extra temp sensor temperature

%dallasextratemp3low%
Dallas 1 wire low 3rd extra temp sensor temperature

%dallasextratemp4low%
Dallas 1 wire low 4th extra temp sensor temperature

%dallasextratemp5low%
Dallas 1 wire low 5th extra temp sensor temperature

%dallasextratemp6low%
Dallas 1 wire low 6th extra temp sensor temperature

%dallasextratemp7low%
Dallas 1 wire low 7th extra temp sensor temperature

%dallasextratemp8low%
Dallas 1 wire low 8th extra temp sensor temperature

%dallasextratemp9low%
Dallas 1 wire low 9th extra temp sensor temperature

%dallasextratemp10low%
Dallas 1 wire low 10th extra temp sensor temperature

%dallasextratemp1high%
Dallas 1 wire high extra temp sensor temperature

%dallasextratemp2high%
Dallas 1 wire high 2nd extra temp sensor temperature

%dallasextratemp3high%
Dallas 1 wire high 3rd extra temp sensor temperature

%dallasextratemp4high%
Dallas 1 wire high 4th extra temp sensor temperature

%dallasextratemp5high%
Dallas 1 wire high 5th extra temp sensor temperature

%dallasextratemp6high%
Dallas 1 wire high 6th extra temp sensor temperature

%dallasextratemp7high%
Dallas 1 wire high 7th extra temp sensor temperature

%dallasextratemp8high%
Dallas 1 wire high 8th extra temp sensor temperature
\%dallasextratemp9high\%
Dallas 1 wire high 9th extra temp sensor temperature
\%dallasextratemp10high\%
Dallas 1 wire high 10th extra temp sensor temperature
\%dallasextratemp1lowtime\%
Dallas 1 wire low time extra temp sensor temperature
\%dallasextratemp2lowtime\%
Dallas 1 wire low time of 2nd extra temp sensor temperature
\%dallasextratemp3lowtime\%
Dallas 1 wire low time of 3rd extra temp sensor temperature
\%dallasextratemp4lowtime\%
Dallas 1 wire low time of 4th extra temp sensor temperature
\%dallasextratemp5lowtime\%
Dallas 1 wire low time of 5th extra temp sensor temperature
\%dallasextratemp6lowtime\%
Dallas 1 wire low time of 6th extra temp sensor temperature
\%dallasextratemp7lowtime\%
Dallas 1 wire low time of 7th extra temp sensor temperature
\%dallasextratemp8lowtime\%
Dallas 1 wire low time of 8th extra temp sensor temperature
\%dallasextratemp9lowtime\%
Dallas 1 wire low time of 9th extra temp sensor temperature
\%dallasextratemp10lowtime\%
Dallas 1 wire low time of 10th extra temp sensor temperature
\%dallasextratemp1hightime\%
Dallas 1 wire high time of extra temp sensor temperature
\%dallasextratemp2hightime\%
Dallas 1 wire high time of 2nd extra temp sensor temperature
\%dallasextratemp3hightime\%
Dallas 1 wire high time of 3rd extra temp sensor temperature
\%dallasextratemp4hightime\%
Dallas 1 wire high time of 4th extra temp sensor temperature
\%dallasextratemp5hightime\%
Dallas 1 wire high time of 5th extra temp sensor temperature
\%dallasextratemp6hightime\%
Dallas 1 wire high time of 6th extra temp sensor temperature
\%dallasextratemp7hightime\%
Dallas 1 wire high time of 7th extra temp sensor temperature
%dallasextratemp8hightime%
Dallas 1 wire high time of 8th extra temp sensor temperature

%dallasextratemp9hightime%
Dallas 1 wire high time of 9th extra temp sensor temperature

%dallasextratemp10hightime%
Dallas 1 wire high time of 10th extra temp sensor temperature

%dallasextrahum%
Dallas 1 wire current humidity

%dallasextrahumhigh%
Dallas 1 wire humidity high

%dallasextrahumlowlow%
Dallas 1 wire humidity low

%dallasextrahumhightime%
Dallas 1 wire humidity high time

%dallasextrahumlowlowtime%
Dallas 1 wire humidity low time

%dallasextrahum2%
Dallas 1 wire 2nd extra humidity

%dallasextrahum2high%
Dallas 1 wire 2nd humidity high

%dallasextrahum2low%
Dallas 1 wire 2nd humidity low

%dallasextrahum2hightime%
Dallas 1 wire 2nd humidity high time

%dallasextrahum2lowlowtime%
Dallas 1 wire 2nd humidity low time

%dallasextrahum3%
Dallas 1 wire 3rd extra humidity

%dallasextrahum3high%
Dallas 1 wire 3rd humidity high

%dallasextrahum3low%
Dallas 1 wire 3rd humidity low

%dallasextrahum3hightime%
Dallas 1 wire 3rd humidity high time

%dallasextrahum3lowlowtime%
Dallas 1 wire 3rd humidity low time

%dallasextrahum4%
Dallas 1 wire 4th extra humidity

%dallasextrahum4high%
Dallas 1 wire 4th humidity high
\%dallasextrahum4low\%
  Dallas 1 wire 4th humidity low
\%dallasextrahum4hightime\%
  Dallas 1 wire 4th humidity high time
\%dallasextrahum4lowtime\%
  Dallas 1 wire 4th humidity low time
\%dallassolarvolts\%
  Volts from a dallas 1 wire solar sensor
\%barometertemperature\%
  Temperature from a Bray/Jennings or AAG barometer
\%dallashumtemp\%
  Current Dallas 1 wire humidity sensor temperature
\%highdallashumtemp\%
  Daily high " " " " "
\%lowdallashumtemp\%
  Daily low " " " " "
\%highdallashumtemp\%
  Time of Daily high " " " " 
\%lowdallashumtemp\%
  Time of Daily low " " " " 
\%dallashumtemp2\%
  Current Dallas 1 wire humidity sensor temperature #2
\%highdallashumtemp2\%
  Daily high " " " " "
\%lowdallashumtemp2\%
  Daily low " " " " "
\%highdallashumtemp2\%
  Time of Daily high " " " " 
\%lowdallashumtemp2\%
  Time of Daily low " " " " 
\%dallashumtemp3\%
  Current Dallas 1 wire humidity sensor temperature #3
\%highdallashumtemp3\%
  Daily high " " " " "
\%lowdallashumtemp3\%
  Daily low " " " " "
\%highdallashumtemp3\%
  Time of Daily high " " " " 

Dallas 1 Wire

%lowdallashumtempt3%
Time of Daily low " " " " 
%dallashumtemp4%
Current Dallas 1 wire humidity sensor temperature #4
%highdallashumtemp4%
Daily high " " " " 
%lowdallashumtemp4%
Daily low " " " " 
%highdallashumtemp4%
Time of Daily high " " " " 
%lowdallashumtemp4%
Time of Daily low " " " " 

Principal Authors: ANONIPEDITS:0

Davis Vantage Pro Soil Temperature/Moisture/Extra Temperature/Humidity

%VPsoilmoisture%
Davis VP soil moisture
%VPsoilmoisture2%
Davis VP soil moisture, # 2 sensor
%VPsoilmoisture3%
Davis VP soil moisture, # 3 sensor
%VPsoilmoisture4%
Davis VP soil moisture, # 4 sensor
%VPsoiltemp%
Davis VP soil temperature #2
%VPsoiltemp2%
Davis VP soil temperature #3
%VPsoiltemp3%
Davis VP soil temperature #4
%VPextratemp1%
Davis VP extra temperature #1
%VPextratemp2%
Davis VP extra temperature #2
%VPextratemp1hi%
Davis VP extra temp 1 daily high
%VPextratemp1lo%
Davis VP extra temp 1 daily low
%VPextratemp2hi%
Davis VP extra temp 2 daily high
%VPextratemp2lo%
Davis VP extra temp 2 daily low
%VPextrahum1%
Davis VP extra humidity #1
%VPextrahum2%
Davis VP extra humidity #2
%VPleaf%
Davis VP leaf wetness
%VPleaf2%
Davis VP leaf wetness, # 2 sensor
%VPleaf3%
Davis VP leaf wetness, # 3 sensor
%VPleaf4%
Davis VP leaf wetness, # 4 sensor
%hiVPleaf%
Davis VP leaf wetness, daily high (#1 sensor)
%loVPleaf%
Davis VP leaf wetness, daily low
%hiVPsoilmoisture%
Davis VP soil moisture, daily high
%loVPsoilmoisture%
Davis VP soil moisture, daily low
%leafminlast10min%
Minutes last 10 minutes leaf wetness was above zero
%leafminlast60min%
Minutes last 60 minutes leaf wetness was above zero
%vpconsolebattery%
The Console battery, volts
%vpreception%
The reception of the data from the ISS status, Total packets received, Total packets missed, Number of resynchronizations, The largest number of packets in a row that were received, and the number of CRC errors detected
%vpreception2%
The current: % reception
Download METARs

%downloadedmetar1extrasky%
Sky conditions
%downloadedmetar1sky%
More sky conditions
%downloadedmetar1cloud%
Cloud conditions or weather
%downloadedmetar1press%
Barometer reading
%downloadedmetar1humi%
Humidity reading
%downloadedmetar1dewp%
Dew point reading
%downloadedmetar1temp%
Temperature reading
%downloadedmetar1tempscelsius%
Temperature reading in celsius
%downloadedmetar1wind%
Wind readings (speed and direction)
%downloadedmetar1location%
Metar name and time stamp
%downloadedmetar1vis%
Visibility
%downloadedmetar1name%
Just the metar name (1st 10 metars only)
%downloadedmetar1time%
Just the time of update (1st 10 metars only)
%downloadedmetar1rainlasthour%
Rain in the last hour (if its available)
%downloadedmetar1windonly%
Shows just the windspeed only (1st 10 metars only)
%downloadedmetar1dironly%
Shows direction in letter (1st 10 metars only)
%downloadedmetar1dironlydir%
Shows dir in degrees (1st 10 metars only)
Repeat this for up to 50 downloaded airport metars. For example, %downloadedmetar2location%: for the next one)

%metar/report%
Insert downloaded METARS or weather reports/warnings

%NZAAMET%
Replace NZAAMET with the file name downloaded. Use <pre> and </pre> HTML tags before and after this custom tag and also note you can use the tag to add other text files to your page too, if those files are in the METAR download.

%5dayforecastday1%
Forecast from the 5 day forecast graphic image from a downloaded NOAA zone forecast file (which must be first selected), repeat up to day 8

%5dayforecastdayday1%
Day (ie Monday, tuesday, etc) Forecast from the 5 day forecast graphic image from a downloaded NOAA zone forecast file (which must be first selected), repeat up to day 8

%5dayforecasttimestamp%
The heading and time stamp from the NOAA downloaded forecast

Note, for XML, use the format :%5dayforecastday1:%

%downloadedmetarrainlasthour:% Rain in the last hour from the main downloaded metar (if it is in the metar)


Principal Authors: ANONIPEDITS:0

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Fire Weather

%FWIffmc%
Fire weather index fine fuel moisture code

%FWIbui%
"" build up index

%FWIisi%
"" initial spread index

%FWIdmc%
"" duff moisture code

%FWIdc%
"" drought code

%FWIfwi%
"" fire weather index

General or Non-Weather Specific/Solar/Lunar

%customscreenownlabelusethistag%
Use this tag for a title/description label on the custom screen

%loadfile%
Loads a text file into this location. For example,
%loadfile:c:\wdisplay\webfiles\testtxt# The # is needed at the end of the full path and file name.

%loadfile1%
Uses only the 1st line in the file

%time%
Current time

%date%
Current date

%sunrise%
Sun rise time (make sure you have the correct latitude/longitude)

%sunset%
Sunset time

%dayornight%
If day time, it displays Day, if night time, it displays Night (based on your sunrise/sunset)

%moonrise%
Moon rise time

%moonset%
Moon set time

%moonage%
Current age of the moon (days since new moon)

%moonphase%
Moon phase :%

%marchequinox%
March equinox date

%junesolstice%
June solstice date

%sepequinox%
September equinox date

%decsolstice%
General or Non-Weather Specific/Solar/Lunar

December solstice date

%moonperihel%
Next Moon perihel date

%moonaphel%
Next moon perihel date

%moonperigee%
Next moon perigee date

%moonapogee%
Next moon apogee date

%newmoon%
Date/time of the next/last new moon

%nextnewmoon%
Date/time of the next new moon for next month

%firstquarter%
Date/time of the next/last first quarter moon

%lastquarter%
Date/time of the next/last last quarter moon

%fullmoon%
Date/time of the next/last full moon

%suneclipse%
Next sun eclipse

%mooneclipse%
Next moon eclipse date

%easterdate%
Next easter date

%chinesenewyear%
Chinese new year

%pesachdate%
Pesach date

%weathercond%
Current weather conditions, based on your data

%weatherreport%
Current weather conditions from selected METAR

%metar/report%
Insert downloaded METARS or weather reports/warnings

%NZAAMET%
Replace NZAAMET with the file name downloaded. Note use <pre> and </pre> html tags before and after this custom tag

%extrametarlabel%
Extra METAR label from the metargif
%metarcldreport%
Cloud METAR label from the metargif
%statusmessage%
Special status message
%warningemailalarm%
For the warning email custom email (what warning was exceeded)
%NOAAEvent%
If you have setup the Noaa warning system (if no warning, then NO CURRENT ADVISORIES appears)
%wdversion%
Weather Display version number you are running
%inputdailyweather%
The text you enter for current weather conditions
%formatdate%
Date with "January", for example, in it
%current alarm flashing%
What it says - for the weather warning
%time-minute%
Current minute
%time-hour%
Current hour
$date-day%
Current day
$date-month%
Current month
$date-year%
Current year
%monthname%
Current month name
%dayname%
Current day name
%utctime-minute%
UTC Current minute
%utctime-hour%
UTC Current hour
%utcdate-day%
UTC Current day
%utcdate-month%
UTC Current month
%utcdate-year%
UTC Current year

%cloudheightfeet%
Estimated cloud base height, feet, (based on dew point, and you height above sea levelenter this under setup)

%cloudheightmeters%
Estimated cloud base height, metres, (based on dew point, and you height above sea levelenter this under setup)

%stationaltitude%
Station altitude, feet, as set in the units setup

%stationlatitude%
Latitude (from the sun moon rise/set setup)

%stationlongitude%
Longitude (from the sun moon rise/set setup)

%stationname%
Station name, from noaa setup, or clientraw real time ftp

%noaacityname%
City name, from the noaa setup (in the av/ext setup)

%noaastatename%
State name, from the noaa setup

%windowsuptime%
Length of time Microsoft Windows has been running since starting.

%freenmemory%
Amount of free RAM on the computer.

%timeofnextupdate%
Time of next Update/Upload of the weather data to your web page (based on the web table update time)

%Startimedate%
Time/date Weather Display started

%Startime%
Just the time of when started

%Stardate%
Just the date of when started

%5dayforecastday1%
Forecast from the 5 day forecast graphic image from a downloaded NOAA zone forecast file (which must be first selected),...,repeat up to day 8

%rawdataheader%
Raw weather data for first line of web for sharing raw data with others

%hoursofpossibledaylight%
Total hours/minutes of possible daylight for today
The expected local sea conditions based on the BFT average windspeed

How hot/cold it feels at the moment, based on the humidex, used with the conditionscolourjpg image (which is updated with the gizmogif)

The current minute stamped wbmp graph for use with a custom wap page (temp/hum graph)

The current minute stamped wbmp graph for use with a custom wap page (baro/wind graph. Use the following code:

```
<img alt="WapSeer Control" src=":'''%filenamewapgraph:'''%" vspace="0" hspace="0" align="middle"/>
```

Rain Wise 2000/Weather Hawk/ battery level

Current icon number

Principal Authors: ANONIPEDITS:0

GPS

Latitude if you have a GPS unit setup in Weather Display

Longitude if you have a GPS unit setup in Weather Display

Station name for the WAP

Principal Authors: ANONIPEDITS:0
%temp0minuteago:% ****this one is needed for all the others to work
%wind0minuteago:%
%gust0minuteago:%
%dir0minuteago:%
%hum0minuteago:%
%dew0minuteago:%
%baro0minuteago:%
%rain0minuteago:%
%temp1minuteago:%
%wind1minuteago:%
%gust1minuteago:%
%dir1minuteago:%
%hum1minuteago:%
%dew1minuteago:%
%baro1minuteago:%
%rain1minuteago:%
%temp2minuteago:%
%wind2minuteago:%
%gust2minuteago:%
%dir2minuteago:%
%hum2minuteago:%
%dew2minuteago:%
%baro2minuteago:%
%rain2minuteago:%
%temp3minuteago:%
%wind3minuteago:%
%gust3minuteago:%
%dir3minuteago:%
%hum3minuteago:%
%dew3minuteago:%
%baro3minuteago:%
%rain3minuteago:%
%temp4minuteago:%
%wind4minuteago:%
%gust4minuteago:%
%dir4minuteago:%
%hum4minuteago:%
Lightning Counts

%lighteningcountlasthour%
Lightning count last immediate hour

%lighteningcountlastminute%
Lightning count last minute

%lighteningcountlast5minutes%
Lightning count 5 minutes

%lighteningcountlast12hour%
Lightning count last 12 hours

%lighteningcountlast30minutes%
Lightning count last 30 minutes

%lighteningcountlasthournextstorm%
Lightning count last immediate hour, from the nextstorm integration

%lighteningcountlastminutenextstorm%
Lightning count last minute
Lightning Counts

Lightning count last 12 hours
Lightning count last 30 minutes
Lightning counts since noon
Lightning counts this month
Lightning counts this year
Lightening counts since noon (the correct one)
Time of last count
Lightning counts since midnight
Lightning counts since noon from 1 wire or Labjack
Lightning counts since midnight from 1 wire or Labjack

Principal Authors: ANONIPEDITS:0

Oregon Scientific WMR 918/968

WMR918/68 and WS2000 Solar sensor
WMR918/68 extra sensor #1 humidity
WMR918/68 extra sensor #2 humidity
WMR918/68 extra sensor #3 humidity
WMR918/68 extra sensor #1 temperature
WMR918/68 extra sensor #2 temperature
WMR918/68 extra sensor #3 temperature
WMR918/68 extra sensor #3 temperature

%wmr918/68extratemphigh%
  WMR918/68 extra sensor #1 high temperature

%wmr918/68extratemphigh2%
  WMR918/68 extra sensor #2 high temperature

%wmr918/68extratemphigh3%
  WMR918/68 extra sensor #3 high temperature

%wmr918/68extrahumhigh%
  WMR918/68 extra sensor #1 high humidity

%wmr918/68extrahumhigh2%
  WMR918/68 extra sensor #2 high humidity

%wmr918/68extrahumhigh3%
  WMR918/68 extra sensor #3 high humidity

%wmr918/68temphightime%
  WMR918/68 extra sensor #1 temperature high time

%wmr918/68temphightime2%
  WMR918/68 extra sensor #2 temperature high time

%wmr918/68temphightime3%
  WMR918/68 extra sensor #3 temperature high time

%wmr918/68extratemplow%
  WMR918/68 extra sensor #1 low temperature

%wmr918/68extratemplow2%
  WMR918/68 extra sensor #2 low temperature

%wmr918/68extratemplow3%
  WMR918/68 extra sensor #3 low temperature

%wmr918/68extrahumlow%
  WMR918/68 extra sensor #1 low humidity

%wmr918/68extrahumlow2%
  WMR918/68 extra sensor #2 low humidity

%wmr918/68extrahumlow3%
  WMR918/68 extra sensor #3 low humidity

%wmr918/68templowtime%
  WMR918/68 extra sensor #1 temperature low time

%wmr918/68templowtime2%
  WMR918/68 extra sensor #2 temperature low time

%wmr918/68templowtime3%
  WMR918/68 extra sensor #3 temperature low time

%wmr918/68extrahumhightime%
  WMR918/68 extra sensor #1 high humidity time
%wmr918/68extrahumhigh2time%
WMR918/68 extra sensor #2 high humidity time

%wmr918/68extrahumhigh3time%
WMR918/68 extra sensor #3 high humidity time

%wmr918/68extrahumlowtime%
WMR918/68 extra sensor #1 low humidity time

%wmr918/68extrahumlow2time%
WMR918/68 extra sensor #2 low humidity time

%wmr918/68extrahumlow3time%
WMR918/68 extra sensor #3 low humidity time

%wmr918/68tempbat3%
Battery status of the extra temp hum #3

%wmr918/68tempbat2%
Battery status of the extra temp hum #2

%wmr918/68tempbat1%
Battery status of the extra temp hum #1

%wmr918/68tempbat%
Battery status of the temp hum sensor

%wmr918/68consbat%
Battery status of the console

%wmr918/68rainbat%
Battery status of the rain gauge

%wmr918/68windbat%
Battery status of the wind sensor

Principal Authors: ANONIPEDITS:0

Rain

Current

%dayrn%
today's rain

%dayrnusa%
today's rain, in inches

%monthrn%

rain so far this month

%yearrn%
rain so far this year

%hourn%
    rain in the last hour

%maxrain/minlasthour%
    maximum rain per minute in the last hour

%maxrain/hourlast6hours%
    maximum rain per hour in the past 6 hours

%totalrainlast3hours%
    Total rain last 3 hours

%totalrainlast6hours%
    Total rain last 6 hours

%totalrainlast24hours%
    Total rain last 24 hours

%currentmonthaveragerain%
    Your average monthly rain you have entered (current month)

%currentmonthaveragetemp%
    Your average monthly temperature you have entered (current month)

%dayswithnorain%
    Consecutative days with no rain

%dayswithrain%
    Days with rain for the month

%dayswithrainyear%
    Days with rain for the year

%rainduration%
    Current rain episode duration, minutes

%todayraininmm%
    Today's rain in mm

%monthraininmm%
    Monthly rain in mm

%yearlyraininmm%
    Yearly rain in mm

%rainlasthourmm%
    Rain last hour in mm

%rainlast3hourmm%
    Rain last 3 hours in mm

%rainlast6hourmm%
    Rain last 6 hours in mm

%rainlast10min%
    Rain last hour in mm
%maxrain/minlasthourmm%  
Maximum rain per minute last hour in mm

%maxrain/hourlast6hoursmm%  
Maximum rain per hour last 6 hours in mm

%timeoflastrain%  
Time that the last rain tip was recorded

%dateoflastrain%  
Date that the last rain tip was recorded (not retrospective)

%currentrainrate%  
Current rain rate, mm/min (or in/min)

%currentrainratehr%  
Current rain rate, mm/hr (or in/hr)

%maxrainrate%  
Max rain rate, for the day, mm/min (or in/min)

%maxrainratehr%  
Max rain rate, for the day, mm/hr (or in mm)

%maxrainratetime%  
Time that occurred

%raincurrentweek%  
Total rain last 7 days

%maxrain/hourlastmonthtodate:% Max rain for hour month to date

Yesterday

%ystdyrain%  
yesterday's rain

%yesterdayrain%  
Yesterday rain

%yesterdayrainmm%  
Yesterday rain in mm always

Over the last Week

%rainonmonday%  
Rain on monday

%rainontuesday%  
Rain tuesday

%rainonwednesday%  
Rain on wednesday

%rainonthursday%  
Rain on thursday

%rainonfriday%
Rain on friday
%rainonsaturday%
Rain on saturday
%rainonsunday%
Rain on sunday

Principal Authors: ANONIPEDITS:0

Rainwise WS2000, WMR900h, La Crosse 2010-13 Data Logger

%ws2000sen1t%
Temperature of sensor 1 for the WS2000/WMR900h or La Crosse station Change the 1 to any number up to 9

%ws2000sen1h%
Humidity of sensor 1 for the WS2000/WMR900h or La Crosse station Change the 1 to any number up to 8

%hiws2000sen1t%
Daily high Temperature of sensor 1 for the WS2000/WMR900h or La Crosse station Change the 1 to any number up to 9

%lows2000sen1t%
Daily low temperature of sensor 1 for the WS2000/WMR900h or La Crosse station Change the 1 to any number up to 9

%hiws2000sen1h%
Daily high humidity of sensor 1 for the WS2000/WMR900h or La Crosse station Change the 1 to any number up to 9

%lows2000sen1h%
Daily low humidity of sensor 1 for the WS2000/WMR900h or La Crosse station Change the 1 to any number up to 9

%hiws2000sen1ht%
Time of daily high humidity (1 to 9)

%lows2000sen1ht%
Time of daily low humidity (1 to 9)

%hiws2000sen1tt%
Time of daily high temperature (1 to 9)

%lows2000sen1tt%
Time of daily low temperature (1 to 9)

Records

All-time

%recordhightemp%
All time record high temperature

%recordlowtemp%
All time record low temperature

%recordwindgust%
All time record high wind gust

%recordwindspeed%
All time record high average speed

%recorddailyrain%
All time record daily rain

%recordlowchill%
All time record low windchill

%recordlowchillhour%
All time record low windchill, hour

%recordlowchillminute%
All time record low windchill, minute

%recordlowchillday%
All time record low windchill, day

%recordlowchillmonth%
All time record low windchill, month

%recordlowchillyear%
All time record low windchill, year

%recordhighbaro%
All time record high barometer

%recordlowbaro%
All time record low barometer

%recorddailyrainday%
Day of record daily rain

%recorddailyrainmonth%
Month of record daily rain

%recorddailyrainyear%
Year of record daily rain

%recordlowbaroday%
Day of record low baro
%recordhighbaro_day%
   Day of record high baro
%recordlowbaro_month%
   Month of record low baro
%recordhighbaro_month%
   Month of record high baro
%recordlowbaro_year%
   Year of record low baro
%recordhighbaro_year%
   Year of record high baro
%recordlowtemp_day%
   Day of record low temperature
%recordhightemp_day%
   Day of record high temperature
%recordlowtemp_month%
   Month of record low temperature
%recordhightemp_month%
   Month of record high temperature
%recordlowtemp_year%
   Year of record low temperature
%recordhightemp_year%
   Year of record high temperature
%recordhighgust_day%
   Day of record high wind gust
%recordhighgust_month%
   Month of record high wind gust
%recordhighgust_year%
   Year of record high wind gust
%recordhighavgwind_day%
   Day of record high wind average speed
%recordhighavgwind_month%
   Month of record high wind average speed
%recordhighavgwind_year%
   Year of record high wind average speed
%recordhighheatindex%
   Record high heat index
%recordhighheatindex_day%
   Record high heat index day
%recordhighheatindex_day%
Record high heat index month
%recordhighheatindexyear%
Record high heat index year
%coldestnighthonrecord%
Coldest night on record (6 p.m. to 6 a.m.)
%coldestdayonrecord%
Coldest day on record (6 p.m. to 6 a.m.)
%warmestnighthonrecord%
Warmest night on record (6 a.m. to 6 p.m.)
%warmestdayonrecord%
Warmest day on record (6 a.m. to 6 p.m.)
%recordhighdew%
Record high dew point
%recordhighdewday%
Record high dew point, day
%recordhighdewmonth%
Record high dew point, month
%recordhighdewyear%
Record high dew point, year
%recordlowdew%
Record low dew point
%recordlowdewday%
Record low dew point, day
%recordlowdewmonth%
Record low dew point, month
%recordlowdewyear%
Record low dew point, year
%recordhighhum%
Record high humidity
%recordhighhumday%
Record high humidity, day
%recordhighhummonth%
Record high humidity, month
%recordhighhumyear%
Record high humidity, year
%recordlowhum%
Record low humidity
%recordlowhumday%
Record low humidity, day
%recordlowhummonth%
Record low humidity, month
%recordlowhumyear%
Record low humidity, year
%recordhighsolar%
Record high solar
%recordhighsolarday%
Record high solar, day
%recordhighsolarmonth%
Record high solar, month
%recordhighsolaryear%
Record high solar, year
%recordhighuv%
Record high uv
%recordhighuvday%
Record high uv, day
%recordhighuvmonth%
Record high uv, month
%recordhighuvyear%
Record high uv, year
%recordhighsoil%
Record high soil temp
%recordlowsoil%
Record low soil temp
%recordhighsoilday%
Record high soil temp, day
%recordlowsoilday%
Record low soil temp, day
%recordhighsoilmonth%
Record high soil temp, month
%recordlowsoilmonth%
Record low soil temp, month
%recordhighsoilyear%
Record high soil temp, year
%recordlowsoilyear%
Record low soil temp, year
%recordlowgrass%
Record low grass temp
%recordlowgrassday%
Month to Date

All time record high temperature
All time record low temperature
All time record high wind gust
All time record high average speed
All time record daily rain
All time record low windchill
All time record low windchill, hour
All time record low windchill minute
All time record low windchill, minute
%recordlowchillday%
%recordlowchillmonth%
All time Record low windchill month
%recordlowchillyear%
%recordhighbaro%
All time record high barometer
%recordlowbaro%
All time record low barometer
%recorddailyrainday%
Day of record daily rain
%recorddailyrainmonth%
Month of record daily rain
%recorddailyrainyear%
Year of record daily rain
%recordlowbaroday%
Day of record low baro
%recordhightbaroday%
Day of record high baro
%recordlowbaromonth%
Month of record low baro
%recordhightbaromonth%
Month of record high baro
%recordlowbaroyear%
Year of record low baro
%recordhightbaroyear%
Year of record high baro
%recordlowtempday%
Day of record low temperature
%recordhightempday%
Day of record high temperature
%recordlowtempmonth%
Month of record low temperature
%recordhightempmonth%
Month of record high temperature
%recordlowtempyear%
Year of record low temperature
%recordhightempyear%
Year of record high temperature
%mrecordhighgustday%
    Day of record high wind gust
%mrecordhighgustmonth%
    Month of record high wind gust
%mrecordhighgustyear%
    Year of record high wind gust
%mrecordhighavwindday%
    Day of record high wind average speed
%mrecordhighavwindmonth%
    Month of record high wind average speed
%mrecordhighavwindyear%
    Year of record high wind average speed
%mrecordhighheatindex%
    Record high heat index
%mrecordhighheatindexday%
    Record high heat index day
%mrecordhighheatindexday%
    Record high heat index month
%mrecordhighheatindexyear%
    Record high heat index year
%mcoldestnightonrecord%
    Coldest night on record (6 p.m. to 6 a.m.)
%mcoldestdayonrecord%
    Coldest day on record (6 a.m. to 6 p.m.)
%mwarmestnightonrecord%
    Warmest night on record (6 p.m. to 6 a.m.)
%mwarmestdayonrecord%
    Warmest day on record (6 a.m. to 6 p.m.)
%mrecorddailyrainday%
    Day of record daily rain
%mrecordhighdew%
    Record high dew point
%mrecordhighdewday%
    Record high dew point, day
%mrecordhighdewmonth%
    Record high dew point, month
%mrecordhighdewyear%
    Record high dew point, year
%mrecordlowdew%

Record low dew point
%recordlowdewday%
Record low dew point, day
%recordlowdewmonth%
Record low dew point, month
%recordlowdewyear%
Record low dew point, year

Record high humidity
%recordhighhum%
Record high humidity
%recordhighhumday%
Record high humidity, day
%recordhighhummonth%
Record high humidity, month
%recordhighhumyear%
Record high humidity, year

Record low humidity
%recordlowhum%
Record low humidity
%recordlowhumday%
Record low humidity, day
%recordlowhummonth%
Record low humidity, month
%recordlowhumyear%
Record low humidity, year

Record high solar
%recordhighsolar%
Record high solar
%recordhighsolarday%
Record high solar, day
%recordhighsolarmonth%
Record high solar, month
%recordhighsolaryear%
Record high solar, year

Record high uv
%recordhighuv%
Record high uv
%recordhighuvday%
Record high uv, day
%recordhighuvmonth%
Record high uv, month
%recordhighuvyear%
Record high uv, year
%mrecordhighsoil%
   Record high soil temp

%mrecordlowsoil%
   Record low soil temp

%mrecordhighsoilday%
   Record high soil temp ,day

%mrecordlowsoilday%
   Record low soil temp, day

%mrecordhighsoilmouth%
   Record high soil temp ,month

%mrecordlowsoilmouth%
   Record low soil temp, month

%mrecordhighsoilyear%
   Record high soil temp ,year

%mrecordlowsoilyear%
   Record low soil temp, year

%mrecordlowgrass%
   Record low grass temp

%mrecordlowgrassday%
   Record low grass temp, day

%mrecordlowgrassmonth%
   Record low grass temp, month

%mrecordlowgrassyear%
   Record low grass temp, year

%mrecordhighthsw%
   Record high THSW

%mrecordlowthsw%
   Record low THSW

%mrecordhighwindrun%
   Record high wind run

%mrecordhighwindrun%
   Record high wind run

%mrecordhighwindrunday%
   Record high wind run, day

%mrecordhighwindrunmth%
   Record high wind run, month

%mrecordhighwindrunyr%
   Record high wind run, year

%mrecordhighrainmth%
Record high rain for month
m:%recordhighrainmthmth%
Record high rain for month, month
m:%recordhighrainmthyr%
Record high rain for month, year

**Year to Date**

%yrecordhightemp%
All time record high temperature
%yrecordlowtemp%
All time record low temperature
%yrecordwindgust%
All time record high wind gust
%yrecordwindspeed%
All time record high average speed
%yrecorddailyrain%
All time record daily rain
%yrecordlowchill%
All time record low windchill
%yrecordlowchillhour%
All time record low windchill, hour
%yrecordlowchillminute%
All time record low windchill, minute
%yrecordlowchillday:%
%yrecordlowchillmonth:%
%yrecordlowchillyear:%
%yrecordhighbaro%
All time record high barometer
%yrecordlowbaro%
All time record low barometer
%yrecorddailyrainday%
Day of record daily rain
%yrecorddailyrainmonth%
Month of record daily rain
%yrecorddailyrainyear%
Year of record daily rain
%yrecordlowbaroday%
Day of record low baro
%yrecordhighbaroday%
Day of record high baro
%yrecordlowbaromonth%
   Month of record low baro
%yrecordhighbaromonth%
   Month of record high baro
%yrecordlowbaroyear%
   Year of record low baro
%yrecordhighbaroyear%
   Year of record high baro
%yrecordlowtempday%
   Day of record low temperature
%yrecordhightempday%
   Day of record high temperature
%yrecordlowtempmonth%
   Month of record low temperature
%yrecordhightempmonth%
   Month of record high temperature
%yrecordlowtempyear%
   Year of record low temperature
%yrecordhightempyear%
   Year of record high temperature
%yrecordhighgustday%
   Day of record high wind gust
%yrecordhighgustmonth%
   Month of record high wind gust
%yrecordhighgustyear%
   Year of record high wind gust
%yrecordhighavwindday%
   Day of record high wind average speed
%yrecordhighavwindmonth%
   Month of record high wind average speed
%yrecordhighavwindyear%
   Year of record high wind average speed
%yrecordhighheatindex%
   Record high heat index
%yrecordhighheatindexday%
   Record high heat index day
%yrecordhighheatindexday%
   Record high heat index month
%yrecordhighheatindexyear%
Record high heat index year
%ycoldestnighthonrecord%
   Coldest night on record (6 p.m. to 6 a.m.)
%ycoldestdayonrecord%
   Coldest day on record (6 a.m. to 6 p.m.)
%ywarmestnighthonrecord%
   Warmest night on record (6 p.m. to 6 a.m.)
%ywarmestdayonrecord%
   Warmest day on record (6 a.m. to 6 p.m.)
%yrecorddailyrainday%
   Day of record daily rain
%yrecordlowchillmonth:%
%yrecordlowchillday:%
%yrecordhighdew%
   Record high dew point
%yrecordhighdewday%
   Record high dew point, day
%yrecordhighdewmonth%
   Record high dew point, month
%yrecordhighdewyear%
   Record high dew point, year
%yrecordlowdew%
   Record low dew point
%yrecordlowdewday%
   Record low dew point, day
%yrecordlowdewmonth%
   Record low dew point, month
%yrecordlowdewyear%
   Record low dew point, year
%yrecordhighhum%
   Record high humidity
%yrecordhighhumday%
   Record high humidity, day
%yrecordhighhummonth%
   Record high humidity, month
%yrecordhighhumyear%
   Record high humidity, year
%yrecordlowhum%
   Record low humidity
Records

%yrecordlowhumday%
Record low humidity, day

%yrecordlowhummonth%
Record low humidity, month

%yrecordlowhumyear%
Record low humidity, year

%yrecordhighsolar%
Record high solar

%yrecordhighsolarday%
Record high solar, day

%yrecordhighsolarmonth%
Record high solar, month

%yrecordhighsolaryear%
Record high solar, year

%yrecordhighuv%
Record high uv

%yrecordhighuvday%
Record high uv, day

%yrecordhighuvmonth%
Record high uv, month

%yrecordhighuvyear%
Record high uv, year

%yrecordhighsoil%
Record high soil temp

%yrecordlowsoil%
Record low soil temp

%yrecordhighsoilday%
Record high soil temp, day

%yrecordlowsoilday%
Record low soil temp, day

%yrecordhighsoilmont%
Record high soil temp, month

%yrecordlowsoilmont%
Record low soil temp, month

%yrecordhighsoilyear%
Record high soil temp, year

%yrecordlowsoilyear%
Record low soil temp, year

%yrecordlowgrass%
Record low grass temp
%yrecordlowgrassday%
Record low grass temp, day
%yrecordlowgrassmonth%
Record low grass temp, month
%yrecordlowgrassyear%
Record low grass temp, year
%yrecordhighthsw%
Record high THSW
%yrecordloighthouse%
Record low THSW
%yrecordhighwindrun%
Record high wind run
%yrecordhighwindrun%
Record high wind run
%yrecordhighwindrunday%
Record high wind run, day
%yrecordhighwindrunmonth%
Record high wind run, month
%yrecordhighwindrunyr%
Record high wind run, year
%yrecordhighrainmonth%
Record high rain for year
%yrecordhighrainmonthmth%
Record high rain for year, month
%yrecordhighrainmonthyr%
Record high rain for year, year

Principal Authors: ANONIPEDITS:0
Snow

%snowseasonin%
Snow for season you have entered under input daily weather, inches

%snowmonthin%
Snow for month you have entered under input daily weather, inches

%snowtodayin%
Snow for today you have entered under input daily weather, inches

%snowseasoncm%
Snow for season you have entered under input daily weather, cm

%snowmonthcm%
Snow for month you have entered under input daily weather, cm

%snowtodaycm%
Snow for today you have entered under input daily weather, cm

%snowyesterday%
Yesterdays' snow

%snowheight%
Estimated height snow will fall at

%snownowin%
Current snow depth, inches

%snownowcm%
Current snow depth, centimeters

Principal Authors: ANONIPEDITS:0

Sunshine/Solar/ET

%Currentsolardescription%
Current cloud cover based on the solar sensor

%sunshinehourstodatemonth%
Sunshine hours from the solar sensor to date this month

%sunshinehourstodateyear%
Sunshine hours from the solar sensor to date this year

%sunshinehourstodateday%
Sunshine hours from the solar sensor today

%sunshineyesterday%
Yesterday sunshine hours

%VPsolar%
Solar energy number (W/M2)
%VPuv%
UV number
%VPet%
Evaportranspiration (daily)
%VPetmonth%
Evaportranspiration (month to date)
%highsolar%
Daily high solar (for Davis VP and Grow stations)
%lowsolar%
Daily low solar (for Davis VP and Grow stations)
%highuv%
Daily high UV (for Davis VP stations)
%lowuv%
Daily low UV (for Davis VP stations)
%currentsolarpercent%
Current solar percent for stations with a temperature solar sensor (like the dallas 1 wire)
%currentwdet%
The current evapotranspiration rate calculated by WD every minute
%yesterdaywdet%
The final reading at midnight of WD's ET
%yesterdaydaviset%
The final reading at midnight of Davis ET
%etcurrentweek%
ET total for the last 7 days
%raincurrentweek%
Total rain last 7 days
%growsolar%
Current solar reading from a Davis Grow station
%hoursofpossibledaylight%
Total hours/minutes of possible daylight for today
%daylengthyesterday%
Yesterdays' reading (updated at 11:46pm)
%highsolartime%
Time that the daily high solar occured
%lowsolartime%
Time that the daily low solar occured
%highuvtime%
Time that the daily high UV occured
%lowuvtime%
   Time that the daily low UV occurred

%highsolaryest%
   Yesterday's high solar

%highsolaryesttime%
   Time of yesterday's high solar

%highuvyest%
   Yesterday's high UV

%highuvyesttime%
   Time of yesterday's high UV

%maxsolarfortime%
   Max solar expected for the time of day

%sunshinehoursinlastwholehour:%
   Sunshine hours in the last immediate full hour

%sunshinehoursinlast10%
   Sunshine hours last 10 minutes (fraction of hour)

%burntime%
   Time (minutes) to burn (normal skin) at the current UV rate, from the Davis VP with UV sensor

%THSW%
   Current Davis THSW index (temperature/humidity/solar/wind) You need a solar sensor, and have the solar setup

%hiTHSW%
   Hi THSW today

%loTHSW%
   Lo THSW today

Principal Authors: ANONIPEDITS:0

Tag History by Version

As new tags are added to Weather Display, they will be listed here.

<table>
<thead>
<tr>
<th>Version added</th>
<th>New tags</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.36u</td>
<td>raintodatemonthago</td>
<td>rain to date last month (via the trends)</td>
</tr>
<tr>
<td></td>
<td>raintodateyearago</td>
<td>rain to date year last year (via the trends)</td>
</tr>
<tr>
<td>10.36r update</td>
<td>minchinlweekday</td>
<td>day of minimum wind chill over the last week</td>
</tr>
<tr>
<td>10.36r</td>
<td>snownowin</td>
<td>current snow depth, inches</td>
</tr>
<tr>
<td></td>
<td>snownowcm</td>
<td>current snow depth, centimeters</td>
</tr>
</tbody>
</table>
Temperature and Humidity

Current

%temp%
 Temperature

%tempnodp%
 Temperature, no decimal place

%dewnodp%
 Dew point, no decimal place

%hum%
 Humidity

%dew%
 Dew point

%heati%
 Current heat index

%heatinodp%
 Current heat index, no decimal place

%maxtemp%
 Today's maximum temperature

%maxtempnodp%
 Today's maximum temperature, no decimal place

%maxtempt%
 Time this occurred

%mintemp%
 Today's minimum temperature

%mintempnodp%
 Today's minimum temperature, no decimal place

%mintempt%
 Time this occurred

%windch%
 Current wind-chill

%windchnodp%
 Current wind-chill, no decimal place

%minwindch%
Minimum wind-chill
%minwindchtl% 
Time this occurred
%maxwindchill% 
Maximum wind-chill
%maxwindchillt% 
Time this occurred
%highhum% 
High humidity
%highhumt% 
Time this occurred
%lowhum% 
Low humidity
%lowhumt% 
Time this occurred
%indoortemp% 
Indoor temperature
%indoorhum% 
Indoor humidity
%maxdew% 
High dew point
%maxdewt% 
Time this occurred
%mindew% 
Low dew point
%mindewt% 
Time this occurred
%maxheat% 
High heat index
%maxheatt% 
Time this occurred
%minheat% 
Low heat index
%minheatt% 
Time this occurred
%avtempsince6amUSA% 
Average temperature since 6 a.m. in °F
%avtempsince6am% 
Average temperature since 6 p.m. in °C
Temperature and Humidity

- **%avtempsince6pmUSA%** Average temperature since 6 p.m. in °F
- **%avtempsince6pm%** Average temperature since 6 p.m. in °C
- **%tempinmetric%** Outdoor temperature always in Metric (even if US units selected)
- **%dewinmetric%** Dew point always in Metric
- **%heatindexinmetric%** Heat index always in Metric
- **%windchillinmetric%** Wind chill always in Metric
- **%maxheatinmetric%** Maximum heat always in Metric
- **%minheatinmetric%** Minimum heat always in Metric
- **%maxhightemp%** Maximum dew point always in Metric
- **%minlowdewinmetric%** Minimum dew point always in Metric
- **%maxhighchillinmetric%** Maximum high windchill always in Metric
- **%minlowchillinmetric%** Minimum low windchill always in Metric
- **%wetbulb%** Current wet bulb reading
- **%tempinusa%** Temperature in °F
- **%dewinusa%** Dew point temperature in °F
- **%hightempinusa%** Today's high temp in °F
- **%lowtempinusa%** Today's low temp in °F
- **%indoortempinmetric%** Indoor temperature always in °C
- **%dewchangelasthour%** Dew point change last hour
- **%tempchangelasthourmetric%**
Temperature and Humidity

Temperature change last hour always in Metric

%tempchangelasthourfaren%
Temperature change last hour always in Farenheit

%wholeroundedtempcelcius%
Temperature rounded to whole number, Celsius

%wholeroundedtempfaren%
Temperature rounded to whole number, Farenheit

%humchangelasthour%
Humidity change last hour

%maxindoortemp%
Maximum indoor temperature

%maxindoortempcelsius%
Maximum indoor temperature, Celsius always

%minindoortemp%
Minimum indoor temperature

%minindoortempcelsius%
Minimum indoor temperature, Celsius always

%maxindoortempt%
Time of Maximum indoor temperature

%minindoortempt%
Time of Minimum indoor temperature

%watertempcelsius%
US Navy water temperature, Celsius

%watertempfaren%
US Navy water temperature, Farenheit

%visibility%
US Navy visibility reading (miles)

%soiltemp%
Current soil temperature

%apparenttemp%
Apparent temperature

%apparentsolartemp%
Apparent temperature in the sun (you need a solar sensor)

%apparenttempc%
Apparent temperature, °C

%apparentsolartempc%
Apparent temperature in the sun, °C (you need a solar sensor)

%apparenttempf%
Apparent temperature, °F
Temperature and Humidity

%apparentsolartemp%  
- Apparent temperature in the sun, °F (you need a solar sensor)

%extratemp1%  
- Extra temperature sensor 1 (change through to 8)

%indoordewfaren%  
- Indoor dew point (°F)

%indoordewcelsius%  
- Indoor dew point (°C)

%humidexfaren%  
- Humidex value in °F

%humidexcelsius%  
- Humidex value in °C

%maxtemplast24hours%  
- The maximum temperature in the last immediate 24 hours

%mintemplast24hours%  
- The minimum temperature in the last immediate 24 hours

%maxtemplast24hourst%  
- Time/date of the maximum temperature in the last immediate 24 hours

%mintemplast24hourst%  
- Time/date of the minimum temperature in the last immediate 24 hours

%blackglobe%  
- Black globe temperature from Environdata weather master 2000 station (°C)

%THI%  
- Heat stress calculation (°C)

%HLL%  
- Heat stress load (used with Cattle), gust windspeed used (°C)

%HLLawind%  
- Heat stress load (used with Cattle), average windspeed used (°C)

%THIf%  
- Heat stress calculation (°F)

%HLLf%  
- Heat stress load (used with Cattle), gust windspeed used (°F)

%HLLawindf%  
- Heat stress load (used with Cattle), average windspeed used (°F)

%maxindoorhum%  
- Maximum indoor humidity

%minindoorhum%  
- Minimum indoor humidity

%dailyhighindoorhumtime%
Temperature and Humidity

Time of maximum indoor humidity
\%dailylowindoorhumtime\%

Time of minimum indoor humidity
\%airdensity\%

Current air density, kg/m³
\%abshum\%

Absolute humidity, kg/m³
\%generalextratemp1\%

If using non standard extra temperature sensors, but will work for any station
\%generalextratemp2\%
\%generalextratemp3\%
\%generalextratemp4\%
\%generalextratemp5\%
\%generalextratemp6\%
\%generalextratemp7\%

\%wetbulbdiff\%

Difference between the wet bulb temperature and the outdoor temperature

\%maxsoiltemp\%

Maximum daily soil temperature (either you have set a extra temperature sensor as soil or its a VP soil temperature)

\%maxsoiltemp\%

Minimum daily soil temperature

\%soiltempincelsius\%

Soil temperature °C (no matter what units selected in Weather Display)

\%feelslike\%

Shows heat index or humidex or windchill (if less than 16°C)

\%feelslikedp\%

Same, but shows it with a decimal place

\%dailyhitemp12\%

High temperature since 6 a.m. to 6 p.m., then resets

\%dailylotemp12\%

Low temperature since 6 a.m. to 6 p.m., then resets

\%nightlyhitemp12\%

High temperature since 6 p.m. to 6 a.m., then resets

\%nightlylotemp12\%

Low temperature since 6 p.m. to 6 a.m., then resets
Yesterday

%tempchangehour%
Temperature change in the last hour

%maxdewyest%
Yesterday's max dew point

%maxdewyestt%
Time of yesterday's max dew point

%mindewyest%
Yesterday's min dew point

%mindewyestt%
Time of yesterday's min dew point

%maxhumyestt%
Time of yesterday's max humidity

%minhumyest%
Yesterday's min humidity

%minhumyestt%
Time of yesterday's min humidity

%maxchillyest%
Yesterday's max windchill

%maxchillyestt%
Time of yesterday's max windchill

%minchillyest%
Yesterday's min windchill

%minchillyestt%
Time of yesterday's min windchill

%maxheatyest%
Yesterday's max heatindex

%maxheatyestt%
Time of yesterday's max heatindex

%minheatyest%
Yesterday's min heatindex

%minheatyestt%
Time of yesterday's min heatindex

%maxtempyest%
Yesterday's max temperature

%maxtempyestt%
Time of yesterday's max temperature

%mintempyest%
Yesterday's min temperature
%mintempyestt%
Time of yesterday's min temperature

%maxindoortempyest%
Yesterday's Maximum indoor temperature

%minindoortempyest%
Yesterday's Minimum indoor temperature

%maxindoortempyestt%
Time of yesterday's Maximum indoor temperature

%minindoortempyestt%
Time of yesterday's Minimum indoor temperature

Principal Authors: ANONIPEDITS:0

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**Trends**

%tempchange24hour%
Temperature change in the last 24 hours (from the trends, includes units)

%barochange24hour%
Barometer change in the last 24 hours (from the trends, includes units)

%humchange24hour%
Humidity change in the last 24 hours (from the trends, includes units)

%windchange24hour%
Wind change in the last 24 hours (from the trends, includes units)

%dewchange24hour%
Dew change in the last 24 hours (from the trends, includes units)

%rainchange24hour%
Rain change in the last 24 hours (from the trends, includes units)

%temp24hoursago%
The temperature 24 hours ago

%baro24hoursago%
The barometer 24 hour ago

%maxtempyrago%
Maximum temperature this day 1 year ago (if you have that data)

%mintempyrago%
Minimum temperature this day 1 year ago (if you have that data)

Principal Authors: ANONIPEDITS:0
US Navy

Cloud height from the ceilometer (feet)
Cloud height from the ceilometer (feet)
Cloud height from the ceilometer (feet)
Cloud type
Cloud type
Cloud type
Water temperature (°C)
Water temperature (°F)
Visibility (miles)

Principal Authors: ANONIPEDITS:0

Wind

Current

average wind speed (current)
current average wind speed, no dec place
current average wind speed, no dec place, mph always
current/gust wind speed
current/gust wind speed, no dec place
current/gust wind speed, no dec place, mph always
Wind

%dirdeg%
wind direction (degrees)

%dirlabel%
wind direction (NNE etc)

%dirlabeledutch%
wind direction (NNE etc), Dutch

%winddirinwords%
Wind direction in words

%winddirinwordsdutch%
Wind direction in words, Dutch

%maxgst%
today's maximum wind speed

%maxgstenodp%
today's maximum wind speed, no dec place

%maxgstwords%
" " " ", with words, ie westerly (ie for telephone)

%maxgstdirectionletter%
Max Gust direction, ie W

%maxavgdirectionletter%
Max Averge direction, ie W

%maxgstt%
time this occurred

%maxavgspd%
maximum average wind speed

%maxavgspdt%
time this occurred

%maxgsthcr%
maximum gust last hour

%maxgsthrt%
time this occurred

%maxgustlastimediatehour%
Maximum gust for the last prior 1 hour period

%maxgustlastimediatehourtime:% time that the max gust last prior 1 hour occurred

%maxgustlastimediatehourdir:% Direction from Max gust last prior 1 hour period

%maxgustlastimediatehourdirword:% Direction from Max gust last prior 1 hour period, in words

%maxgustlastimediate10%
Maximum gust for the last immediate 10 minute period

%maxgustlastimediate15%
Maximum gust for the last 10 to 15 minutes
%maxgustlastimediate30%
   Maximum gust for the last 15 to 30 minutes
%maxgustlastimediate60%
   Maximum gust for the last 30 to 60 minutes
%maxgustlastimediate120%
   Maximum gust for the last 60 to 120 minutes
%avwindlastimediate10%
   Average wind for the last immediate 10 minute period
%avwindlastimediate15%
   Average wind for the last 10 to 15 minutes
%avwindlastimediate30%
   Average wind for the last 15 to 30 minutes
%avwindlastimediate60%
   Average wind for the last 30 to 60 minutes
%avwindlastimediate120%
   Average wind for the last 60 to 120 minutes
%avdirlastimediate10%
   Average dir wind for the last immediate 10 minute period
%avdirlastimediate15%
   Average dir wind for the 10 to 15 minutes
%avdirlastimediate30%
   Average dir wind for the 15 to 30 minutes
%avdirlastimediate60%
   Average dir wind for the 30 to 60 minutes
%avdirlastimediate120%
   Average dir wind for the 60 to 120 minutes
%avdir10minute%
   average ten minute wind direction (degrees)
%avtenminutewind%
   average ten minute wind speed
%1mingustwind%
   maximum gust in the last minute
%max1minuteavwind%
   maximum 1 minute average wind speed (since the reset time)
%avspeedinmetric%
   current average wind speed always in knots
%gustspeedinmetric%
   current gust speed always in knots
%avspeedinkmh%
current average wind speed always in kmh

%gustspeedinkmh%
  current gust speed always in kmh

%beaufortnum%
  Beaufort wind force number

%currbftspeed%
  Current Beaufort wind speed

%todaygustspeedinmetric%
  Today's maximum gust in knots

%maxgustlasthourinmetric%
  Maximum gust last hour in knots

%10minavspeedinmetric%
  Average 10 minute speed in knots

%10minavspeedinkmh%
  Average 10 minute speed in kmh

%maxavspeedinkts%
  Maximum daily average speed in kts

%maxgustlasthourkts%
  Maximum gust immediate last hour in kts

%maxgustlastmininkts%
  Maximum gust last minute in kts

%max1minavspeedlast12hrs%
  Maximum 1 minute average speed in kts last 12 hours

%maxdailygustinkts%
  Maximum daily gust in kts

%windgaugepointer%
  Create your own windspeed dial (will replace this with avwindpoint1 for 1 kt speed, etc

%gustgaugepointer%
  Create your own windspeed dial (will replace this with gustwindpoint1 for 1 kt speed, etc

%10minuteavspeedbft%
  10 minute average speed, in bft number

%windinmph%
  Average wind in mph always

%gustinmph%
  Gust wind in mph always

%curdir10minutelabel%
  Current average 10 minute wind direction label (ie NNE)

%currentavtenminutewindms%
Current average 10 minute windspeed in m/s

%highavtenminutewind%
Highest average 10 minute windspeed in the last 12 hours (in the units you have selected)

%highavtenminutewindms%
Highest average 10 minute windspeed in the last 12 hours, m/s

%highavtenminutewindkts%
Highest average 10 minute windspeed in the last 12 hours, knots

%highavtenminutewindkmh%
Highest average 10 minute windspeed in the last 12 hours, kmh

%todaygustspeedinm/s%
Today’s maximum gust in m/s

%maxgustlasthourinm/s%
Maximum gust last hour in m/s

%10minavspeedinm/s%
Average 10 minute speed in m/s

%maxavspeedinm/s%
Maximum daily average speed in m/s

%maxgustlasthourm/s%
Maximum gust immediate last hour in m/s

%maxgustlastminim/s%
Maximum gust last minute in m/s

%todaygustspeedinkmh%
Today’s maximum gust in kmh

%max1minavspeedlast12hrs/m/s%
Maximum 1 minute average speed in kts last 12 hours

%maxdailygustinm/s%
Maximum daily gust in m/s

%maxdailygustinmph%
Maximum daily gust in mph

%windruntodatethismonth%
Wind run to date this month

%windruntodatethisyear%
Wind run to date this year

%windruntoday%
Wind run today

%bftspeddtext%
Beaufort scale in text (ie Fresh Breeze)

%bftspeddtext10%
Beaufort scale in text (ie Fresh Breeze), based on 10 minute average
%last24houravdir%
Last 24 hours average direction

%last24houravdirword%
Last 24 hours average direction in words

%last24houravdirday%
Average direction so far for today (from midnight)

%last24houravdirwordday%
Average direction in words for today (from midnight)

Yesterday

%maxgustyest%
Yesterday's max gust speed

%maxgustyestnodir%
Yesterday's max gust speed, no direction

%maxgustyestt%
Time of yesterday's max gust speed

%maxaverageyest%
Yesterday's max average speed

%maxaverageyestnodir%
Yesterday's max average speed, no direction

%maxaverageyestt%
Time of yesterday's max average speed

Principal Authors: ANONIPEDITS:0
Update to newer Weather Display release

Weather Display is frequently updated. New releases are typically available several times a week. Use the following instructions and hints to update your Weather Display software.

   1. To download the latest release, in the left navigation bar, click the [http://www.weather-display.com/inframe.php?text=Download&inframe=download.php Downloads].

On the Downloads page, there are several options. For this FAQ, only the main Weather Display download for Windows 98/2000/ME/XP is discussed.

There are three different downloads for Weather Display available — Main Weather Display install file, Weather Display with error/crash debug code debug, and Weather Display zip of the main .exe file.

Note Upgrading the software does not modify or delete your weather data. However, you should make regular backup of your data, especially before updating the software.

The best way to update your version is by using the first link, Main Weather Display install file. This download includes everything in Weather Display including the Weather Display FTP software.

1. In Weather Display, on the Exit menu, click Save and Exit. Make sure all of the Weather Display applications, such as RealTime FTP do not appear in the Windows task bar notifications area.
2. Click Download next to Main Weather Display install file.
3. When prompted, click Save, and then specify a folder location where to save the Weather Display install program.
4. When the download completed, browse to the folder you specified in step 3, and then double-click the Weather Display .exe file.
5. Follow the instructions on your screen to complete the installation.
6. At the end of the installation wizard, click Finish. If you leave the Launch Weather Display check box selected, Weather Display launches with the new version.

If you are requested to run the Debug version of Weather Display by the program author, substitute the second link, Weather Display with error/crash debug code debug, in step 2 above. The debug version contains extra diagnostic information that can be used by the software developer to troubleshoot specific issues. You should only use this version when requested.

The third item, Weather Display zip of the main .exe file is a compressed file of updated items within Weather Display. This file does not include any updates for the Weather Display.
Display FTP program. After downloading, in Weather Display, on the Exit menu, click Save and Exit. Locate your downloaded .zip file, and extract the file to the folder that Weather Display is installed (usually c:\wdisplay or c:\Program Files\wdisplay). Re-start Weather Display.

**Notes**

- If you are using the WDMYSQL or clientraw.txt update utilities, make sure they are completely shut down before beginning the software upgrade. If these applications are running, they will appear as icons on the Windows task bar notifications area.
- It is a good idea to keep an archive folder of Weather Display program downloads. If you encounter a problem with a new version, you can go back to an older version by following the steps above.

**Read beyond end of file error**

1. Exit Weather Display.
2. In the folder **datafiles**, delete the following files:
   - latest.inf
   - latestindoor.inf
   - latesttime.inf
   - graphdata.inf
   - graphdata2.inf
   - direction.inf
   - direction2.inf

Restart Weather Display.

**Export data from WeatherLink to Weather Display**

I know that WeatherLink is supposed to be able to output a file called "download.txt", but where do I find that option in WeatherLink, and then, how do I get that data to replace Weather Display's data for this month.

Download.txt is located in your station directory.

I am assuming that you have the datalogger attached and have installed the Weatherlink software. If you haven't installed the Weatherlink software, you won't have the download.txt.

Next be sure that Wdisplay is not working, then boot the weather link software, download the station into the Weatherlink software. Then exit weatherlink software. Boot Wdisplay, go to import logs and then open weatherlink station directory (that is the directory you set up for the Davis software). Then click on import from davis, click the wl5.2 option find the directory exactly, click convert and ta dah!! (but it depends on the weather link version and what extra sensors you have logged in the download.txt file, so no gaurentees it will work)

Of course you should remember not to click on the Weathedisplay to clear the archive after download. That is why you can't find or don't have any data remaining in the logger. You have stuff on the console though.

And if you have your weather display software read and running, with it recognizing the VP and all the goodies checked. To down to Davis Weatherlink area and have it imported on
program start up to the wdisplay directly. Again, I wouldn't click to have archive cleared. The reason I go on about not clearing the archive is several reasons. First the weather logger will over write any old data first leaving the most recent. Second. If for some reason you didn't get a completed upload, or deleted a directory, file, etc, the data logger will re-load on to the computer what didn't. This way you don't lose information.

**Back up Weather Display data and configuration settings**

All the parameters for Weather Display for various display or computations are stored in wdisplay.ini. The parameters for the FTP program upload or download functions are stored in the Windows Registry. Most data is stored in the various files in the datafiles and logfiles folders. There is also data saved in the wdisplay.ini file.

Back up wdisplay.ini from c:\windows or c:\winnt. Export and backup the Windows Registry entry wdisplayftp.ini. And, of course, back up your datafiles, logfiles, and webfiles folders.

On the Action menu, click **Back up registry entry**, and then click **Backup now**. This saves your Weather Display registry entries in a file named wdisplayftp.reg in the databackup folder. You can also configure Weather Display to perform the backup daily (under **Setup, Databackup**). Note that some systems do not handle the daily automated backup well.

Your current datafiles and logfiles are also automatically added to a compressed (.zip) file with this backup function.

**Get SMTP AUTH for weather warnings**

If you have it set for the weather report, it should work for the weather warning too. So basically to get SMTP AUTH, you have to set it up weather reports first, even if you don't use them. That then gives you email warnings and weather reports. Slightly complex, but it works.

My weather report email appears on all 1 line, i.e jumbled together Untick use HTML in the weather report/email setup (control panel, ftp/internet setup).

And you can reset the monthly and yearly rain totals, via setup, enter barometer offset, other offsets and rainfall. Just remember to click on yes to save the settings.

**Specify custom rain years (for example July through June)**

Click on "setup" then "Display units options/reset times..." In the window that pops up, you'll eventually find "Month to Reset the Yearly Rain Total" - just enter your desired month there.

**Calculate heating degree or cooling degree days**

They show up on the NOAA report - dailynoaareport.htm Also go to View Menu and select "Averages / Extremes for month". Then click "NOAA style report". Values are calculated daily and is a separate column for each value, and a monthly total at the bottom. A calendar style control allows selection of past months.
Create custom text file customtext.txt
See the page labeled "Logs and Logging"; there is even a sample. While described as a Log file, You can actually use it to transfer data to any program in any format you wish. The example was used to send data to the HoomSeer program.

What is customtext.txt?
To tell WD what data is required to be placed in customtextout.txt

Convert this customtext.txt file to a CSV file
The customtext.txt text file is already formatted in CSV format. No conversion is required.

Create files in .asp or .php file format
Use "Setup | customise the file creation/ftp schedule". There you can set the remote name for the wxlocal.html file. If you are running your own server, then you can use the special file conversion in the custom web page setup, under setup, ftp setup, to force a new file name (i.e you put in the local file name as anything but wxlocal.html, and set a new remote file name.)

Error logging for Weather Display
The error logs for Weather Display can be useful when troubleshooting problems.
On the View menu, click on Program Error Log.
If the problem concerns uploading or downloading data, check the FTP error log. Click View, and then click FTP error log.

Print the Weather Display main window
On the Action menu, click Print this page.

Where do the wind chill and dew point numbers originate?
Weather Display calculates the values for wind chill and dew points. Even if your weather station generates these values, Weather Display uses its own calculated values.
The wind chill is calculated from the outside temperature and wind speed. The dew point is calculated from the temperature and humidity readings.
No data appears on the display panel
Check that under "weather station type" your station is selected and or you have the correct com port selected.

Weather Display crashes during start up
This is most commonly caused by corrupted real time graph data files. Delete the graphdata.inf (and graphdata2.inf etc) files from the folder data files. Try starting WD again.

Data does not appear on my Web site
Check under "control pannel, ftp/internet set up" and make sure that you have all of the appropriate data filled out and that it is correct, and you have the main internet switch on (on the connection setup page)

Extreme/average page does not appear on my Web site
Go to "setup" than "setup ftp" and click on reset.

What is the "Input daily weather" dialog box for?
This serves as a weather log that will be put onto your extreme/average page. It also allows you to select the current weather icon. And finally, you can enter snowfall data there.

What is the "Daily fire index/data" for?
That is an index for how easily fires can be started.

Weather Underground is not updated
Make sure that the data is correct and that you are registered. Also check and see if your station I.D is correct.

Weather Display does not download a METAR file
Make sure that under ftp down load that you have selected a METAR station.

Current weather icon does not update and match specified METAR station
Make sure that under the list of METAR stations that "use this METAR for local sky conditions (and weather underground)" is checked. Also make sure that the box next to that has the name of the METAR station that you want to be displayed. Example KEWR.TXT

Make image from Input daily weather stay on the main screen
To turn off the forecast image, go to ftp setup, then files, then untick show wm918/wmr918 forecast image on summary.gif then under input daily weather, tick "use this image on the web page instead". This is not permanent, and will be unticked on program re-start.
Weather Display rain totals don't match my weather station

Weather Display saved its own rain records separate from the weather station, and you can enter start values in under: setup, control panel, barometer offset, other offsets, and rainfall. Then enter the correct amount, then click on set, then click on Yes to save settings. Same applies to the rain rate.

Unable to receive data from WMR900H or WS2000/7000 weather station

Make sure you have your station setup as described in the Weather Station Selection page, and you have set the outdoor sensor # to use in the view, ws2010-13(ws2500 data setup correct (i.e as 1)

What happens if I shut my computer off during part of the day?

All of the graphs will be added on to according to time. The high and low data will also still be there.

Add a METAR report on my Web site

Within the Setup menu, click "setup FTP / ...", then select the tab "FTP /METAR download". Go to the lower portion of the display and choose a METAR station. Tick "include the text files on my web page". Finally, set up the scheduled times for downloading and click the red button to turn it ON.

Update to a later release of Weather Display

A good idea is to rename/back up your current downloaded installer file, wdisplay32.exe or beta.exe. Then before you run the latest downloaded installer file, exit weather display first (and make sure other associated .exe programs are not also running). Note: you must have installed a recent full or beta version before downloading and extracting the zip of just the main weatherd.exe file (which you need to unzip to where you have weather display installed. No data will be lost, and your registration will be kept as well.
Upload a graph of weather data for a day from the graph history to my Web site
All you need to do is go to view, graph history, get the graph that you want, then click "saved to file." The next step is you need to go to action, manage my ftp server, and choose the file that you want to upload. EX: the graph will be saved as savedgraph.gif under weather display.

Create custom weather Web pages and HTML for beginners
To get you started with HTML coding, take a look at: Creating a Weather Web Page.

Change the background color of the default weather page
Go to the setup menu. Click on "Setup FTP / Internet/ ...". Click on the tab labeled "Web Files #2". In the section at the bottom labeled "WEB Table Setup", click the button labeled "Set Background web page colour". Pick a colour from the display and click OK. The page background you selected will be used.

Where do I create the wxlocal.html folder?
Go to "Windows explorer" once there, go to "wdisplay" you will see a whole bunch of files and folders, you are looking for the folder named "webfiles". That's where you need to make the wxlocal.html file, in "webfiles" Make sure it has a file extension of .html and not .htm (but you can change the extension needed in the ftp/internet/custom web page setup)

What is the "Remove wind speed spikes" option under graph setup options?
That would be for the WM-918 users, that station some times produced winds that were of biblical proportions, this problem is not caused by Weather Display. The use of a optoisolator on the windspeed cable or rain cable fixes that.

Copy Weather Display data to another computer
Copy the data files, log files, and web files folders across, then also wdisplay.ini from c:\winnt or c:\windows and export/import wdisplayftp.ini from the registry. (Look here!) and send me the new code shown in the "Register" menu.

Vertical lines appear on the real time graph
Adjust the minimum temperature offset lower (bottom right hand corner), default is -20<supo C.
Why is the LED blinking on the main Weather Display page?
Try clicking on it and or go to "view, all time records to date". There you will see another blinking LED with a label, or you might end up on the weather warning setup page, and there will be a blinking led there too (if a weather warning had been sent) That should answer your question.

The "Alarm" is flashing. What do I do now?
When a warning threshold is reached, the LED next to the COM port status will flash. Click the flashing red LED, and then click Reset Alarm LEDs. Reset the alarm threshold(s) if you like. Click OK.

I've installed Weather Display on a new computer. How do I get a new registration code?
Just ask! Send a request to Brian following the procedure described in the Register / Purchase help page. If you wish to keep all your old data, you will need to copy wdisplay.ini from c:\windows as well as all the files and sub-folders (like data files, log files and webfiles). You will also need to export wdisplayftp.ini from the registry to a file (search for it, and you may have to do search again to find the correct entry) New: go action, back up registry entry now, then that creates the wdisplayftp.reg file in the folder databackup. Copy that to the new pc, and double click it there to load into the new registry (but it assumes default user)

Manually enter weather observations
Click on "Input daily weather" in the menu bar. You can select the icon to show on the web page monthly data. Click update for first time to create the icons You can enter text - treat like a weather diary - this will be in weather emails as well, but not on the main screen. You can also enter snow fall observations here.

Make changes to the default Web page
Weather Display Web pages are created from three files: datahtm0.txt, datahtm2.txt and datahtm3.txt. If you know HTML, you can alter datahtm2.txt, and Weather Display will keep the changes. But first you must go to "Setup, control panel | FTP / Internet ... | Web Files", and click the box labeled "Let me manage the datahtm2.txt file". Also, you can add of course add email link, images and web links on this same page. See also Creating a Weather Web Page for more information.

Configure Sunrise and Moonrise for your location
Follow the procedures described in the Entering Location Data help page. Only enter degrees, and minutes (i.e no decimal places). For southern hemisphere, the latitude is a negative number. (The latitude is the lines parallel to the equator.) For places West of GMT (i.e England), the longitude needs to be negative. For some time zones, you may need to use the "fine tunes" to get the rise and set times for your location to be accurate.
**Make rain data corrections**

You can set the correct totals under *control panel, barometer offset, other offset* and *initial rain totals*. You can also set other months rain totals under *view, rain in detail*, but that does not change the rain totals in the log file (the log file also affects the totals under *view, averages/extremes/noaa reports*), it just sets the totals for the monthly rain graphs in the *rain in detail* screen (and same applies for rain for each day of the last 7 days. When setting/resetting there, the changes only apply to that data on that screen. To correct rain totals under *view, averages/extremes* you need to change the last rain total for the day (i.e. the last entry just before the daily rain total is reset) in the log file for the appropriate month.

If you have lost your rain totals, then you should be able to find the last good rain total in the log file.

Note that you can restore the log file for a month if it is bad, but the graph data is still available for that month (under *Graph history*), by using the action *Convert log files to graphs*, but select *convert graph files to log files*, and then make sure the correct graph data file is selected (for example month102005.inf for October 2005), and then click *Convert*. Wait for the *Finished* alert.

**Graphs show spikes and when the mouse rolls over the spikes, abnormal readings appear**

This appears most often with the dew point or windchill graph lines. The problem is display-only issue due to an out of range graphing error. The actual data is not affected.

The solution is to extend the graphing range. Either use the lift/lower buttons in the Setup, Graph Setup, or in the Graph Setup, change the graph ranges to prevent the spikes.

**COM port error**

This often results because another software application is using the same COM port. Possible conflicting devices include PDA synchronization applications or bluetooth cell phone synchronization programs, etc.

Make sure no other software is accessing the COM port, especially other weather station software applications (for example, Heavy Weather with La Crosse weather stations). Also note that Microsoft Windows can swap COM port numbers.

If you are unable to resolve the COM port failure, you might be able to use a USB to serial adaptor, or a serial port PCI card. Windows Device Manager will identify the assigned COM ports. To access Windows Device Manager, do the following:

1. Click *Start*, and then click *Control Panel*.
2. Double-click *System*.
3. On the *Hardware* tab, click *Device Manager*. 
La Crosse 2010/7000/2200/2500 type station problems
If no data is coming from the separate WS2010-15 data logger.

After inserting the batteries, you need to wait 20 minutes before any software should access the data logger. Also it’s a good idea to place the data logger away from the PC, and put RF baluns clamps around the serial cable. Note that Weather Display gets the data every 3 minutes or 5 minutes, depending on the station type.

Note, you can now use the newer La Crosse 3600 with Weather Display without the need to run Heavy Weather, thanks to 3rd party software developed by Sandere of Denmark.

Manual upload works, but Auto does not.
I have set times to upload the web pages in the FTP/internet setup, but it does not work at that times, but If I click on action, update internet now, it uploads the files. Answer: Check you have the main internet switch turned ON in the connection setup in the FTP/internet setup, or, if you are using the customise internet setup (i.e. you have the switch ON there), then make sure you set the times to create AND upload the files their (using the customise internet and file creation I recommend (ignore the not in use yet parts), because then you have control!.

Where can I purchase a Weather Station?
For New Zealand or Australia, then try: http://www.weatherdownunder.net or http://www.metinstruments.co.nz or http://www.scientificsales.co.nz
For the UK, try http://www.ukweathershop.co.uk
For the USA try http://www.provantage.com or http://www.scientificsales.com or http://www.ambientweather.com

Which weather station type do you recommend?
If you can afford it then a Davis VP. A Rain wise MKII is a good station, as its also wireless and has 1 second update rate. Next I would recommend a Oregan Scientific (or clone) WMR968 type station. Next would be a La Crosse (or clone) 2310 type station, or a 3600 type station (only every 1 minute update rate). You could add a 1 wire weather station (gives windspeed and direction for every 1 second update rate) to the weather stations with slower update rates, cost only 90$ (US), with Weather Display ability to do that.
Frequently Asked Questions (FAQ)

FTP upload stalls when uploading a file (it just sits there)
A common cause of this issue is the need to use Passive mode with the FTP connection. To turn on Passive mode, do the following:

1. On the Weather Display main window, click Control Panel.
3. On the Connections tab, select the Use Passive mode check box.

Also, not all FTP servers support the file rename option (mainly Windows-based servers), so you might turn off the rename feature. To turn off the rename feature, do the following:

1. On the Weather Display main window, click Control Panel.
3. On the Connections tab, clear the Rename the file on the server after uploading check box.

The FTP log should provide you with error messages and allow you to see exactly where the FTP failure is occurring. To review the FTP log, do the following:

1. On the Weather Display main window, click View.
2. On the View panel window, under Logs, click FTP log.

The rainfall totals do not match my weather station
Weather Display keeps its rain totals separate from the weather station, which makes it more flexible for rain reset times, rain reset month, etc.

To set the starting values, use control panel, barometer offset, other offsets, initial rainfall totals. Once you set the amount in the manual input (e.g enter 55.5 for mm, or 2.5 for inches if inches is ticked), then click on set then click on yes to save the values. An alternative is to select the value from the slider (click and it will show the equivalent in inches).

Lightning 2000 and WD
For updating the nowcast.txt from Lightning 2000 use the two screenshot for help.
**Weather Display Software Hints & Tips**

**TIP: Data logger**
For weather stations that have a data logger, make sure the time and date match the computer system clock (and there are options to have that updated auto from the PC time and date too), especially after daylight saving changes, etc.

**TIP: Quick hide/show**
*(Applies to later Weather Display versions)* When minimized to the Windows system tray (next to the clock), right-click the Weather Display icon. You can click Show or Hide. This allows you to easily display or hide the main Weather Display window.

**TIP: Upgrade to a new version of Weather Display**
Sometimes you need to download the full install to get updated programs, like the ftpupd.exe program (to upload files to your web site). Refer to the history [http://www.weather-display.com/history.php](http://www.weather-display.com/history.php) link for changes to those support programs. Make sure you exit Weather Display before running the installer, and then simply install to the same location. Some separate programs that are started by WeatherDisplay (such as clientrawrealtimeftp.exe and wdmysqlimml.exe) need to be shut down separately. If you get an error about a file in use, and you have shut down all such separate programs, then check that WeatherD.exe is not still running with task manager (right mouse click on the windows task bar to bring that up, then go to the processes tab, and if needed, kill the process). When downloading the zip version, make sure to extract the zipped WeatherD.exe program to where you have Weather Display installed already (e.g. c:\wdisplay), or for some windows setups with winzip, it means copying the WeatherD.exe file out of that zip folder after it has downloaded. Also you may need to set your firewall to allow any changed program, like WeatherD.exe, ftpupd.exe or clientrawrealtimeftp.exe, to access the internet.
TIP: Rain over time period on real time graph
To see the amount of rain fallen and the time period that it fell in do the following: while viewing the real time graph, double click on the windspeed scale on the main screen graph (or see under view), next hold down the left mouse button at the start of the rain, move the mouse to the right and then release the mouse when the rain has stopped.

TIP: Web cam image at time of cursor on graph
If you have a web cam in use with Weather Display (or via the 3rd party web cam setup), and you have selected the file to use for the animation in the web cam setup, and you have turned on the switch in the time stamped setup TAB, and ticked, produce every minute, then hold down the left mouse button as you move the mouse over the main screen graph, to see the web cam image in a pop up window at that time that corresponds to the time on the graph...and so you get a movie created...and you can even go backwards, etc.

FAQ: How do I correct bad data?
There are a few ways
• Directly edit the log file
  This file is found in the logfiles folder. For example, the October 2005 log file is named 102005.txt. Double-click the file to open it in Windows Notepad (or you can choose your own text editing application) It is best to view the folder in list option (Under View in the Windows folder). Edit the data, close the file, and then in Weather Display, do the following:
  1. On the Weather Display main window, on the Action menu, click Convert Weather Display log file(s) graphs /Reset WD graphs.
  1. Select the log file, and then click Convert.
• Edit/fix all time records
  1. On the Weather Display main window, on the Action menu, click Reset selected all time record values or Enter your own all time extreme records.
  1. Select the log file to edit -- all time, year to date, or month to date.
  1. Click Set when you have entered the correct reading. Do not enter any units.
  1. Click Yes to save your changes.
• Use the graph correct function
  1. On the Weather Display main window, on the Setup menu, click Graph setup.
  1. Click and hold then release while over the area of the graph to correct. Select which readings to correct (it sets to the previous good reading), then click on Correct, and then click Save.
• Data more than 12 hours old
  1. Use the > than 12 hour old correction, use the retrieve button first, and click its own save button when done (after repeating the above steps).
• Rain data corrections
  You can set the correct totals under control panel, barometer offset, other offset and initial rain totals. You can also set other months rain totals under view, rain in detail, but that does not change the rain totals in the log file (the log file also affects the totals under view, averages/extremes/noaa reports), it just sets the totals for the monthly rain graphs in the
rain in detail screen (and same applies for rain for each day of the last 7 days. When setting/resetting there, the changes only apply to that data on that screen. To correct rain totals under view, averages/extremes you need to change the last rain total for the day (i.e. the last entry just before the daily rain total is reset) in the log file for the appropriate month.

If you have lost your rain totals, then you should be able to find the last good rain total in the log file.

Note that you can restore the log file for a month if it is bad, but the graph data is still available for that month (under Graph history), by using the action Convert log files to graphs, but select convert graph files to log files, and then make sure the correct graph data file is selected (for example month102005.inf for October 2005), and then click Convert. Wait for the Finished alert.

**FAQ: Graphs show spikes and when the mouse rolls over the spikes, abnormal readings appear**

This appears most often with the dew point or windchill graph lines. The problem is display-only issue due to an out of range graphing error. The actual data is not affected.

The solution is to extend the graphing range. Either use the lift/lower buttons in the Setup, Graph Setup, or in the Graph Setup, change the graph ranges to prevent the spikes.

**FAQ: COM port error**

This often results because another software application is using the same COM port. Possible conflicting devices include PDA synchronization applications or bluetooth cell phone synchronization programs, etc.

Make sure no other software is accessing the COM port, especially other weather station software applications (for example, Heavy Weather with La Crosse weather stations). Also note that Microsoft Windows can swap COM port numbers.

If you are unable to resolve the COM port failure, you might be able to use a USB to serial adaptor, or a serial port PCI card. Windows Device Manager will identify the assigned COM ports. To access Windows Device Manager, do the following:

1. Click Start, and then click Control Panel.
2. Double-click System.
3. On the Hardware tab, click Device Manager.

**FAQ: La Crosse 2010/7000/2200/2500 type station**

If no data is coming from the separate WS2010-15 data logger.

After inserting the batteries, you need to wait 20 minutes before any software should access the data logger. Also it’s a good idea to place the data logger away from the PC, and put RF baluns clamps around the serial cable. Note that Weather Display gets the data every 3 minutes or 5 minutes, depending on the station type.

Note, you can now use the newer La Crosse 3600 with Weather Display without the need to run Heavy Weather, thanks to 3rd party software developed by Sandere of Denmark.
FAQ: Manual upload works, but Auto does not.
I have set times to upload the web pages in the FTP/internet setup, but it does not work at
that times, but If I click on action, update internet now, it uploads the files. Answer: Check
you have the main internet switch turned ON in the connection setup in the FTP/internet
setup, or, if you are using the customise internet setup (i.e. you have the switch ON there),
then make sure you set the times to create AND upload the files their (using the customise
internet and file creation I recommend (ignore the not in use yet parts), because then you
have control!

FAQ: Where can I purchase a Weather Station?
For New Zealand or Australia, then try: http://www.weatherdownunder.net or http://
www.metinstruments.co.nz or http://www.scientificsales.co.nz
For the UK, try http://www.ukweathershop.co.uk
For Europe, try http://www.weatherdisplay.de/inframe.php?text=Online-Shop&
inframe=http://www.ffs.net/weather-display/shop/index.htm
For the USA try http://www.provantage.com or http://www.scientificsales.com or http://
/www.ambientweather.com

FAQ: Which weather station type do you recommend?
If you can afford it then a Davis VP. A Rain wise MKII is a good station, as its also wireless
and has 1 second update rate. Next I would recommend a Oregan Scientific (or clone)
WMR968 type station. Next would be a La Crosse (or clone) 2310 type station, or a 3600
type station (only every 1 minute update rate). You could add a 1 wire weather station
gives windspeed and direction for every 1 second update rate) to the weather stations with
slower update rates, cost only 90$ (US), with Weather Display ability to do that.

FAQ: FTP upload stalls when uploading a file (it just sits there)
A common cause of this issue is the need to use Passive mode with the FTP connection. to
turn on Passive mode, do the following:
1. On the Weather Display main window, click Control Panel.
2. On the Control panel, under Web site configurations, click
   FTP/internet/metar/e-mail/report/connections Setup Client/Server Setup.
3. On the Connections tab, select the Use Passive mode check box.
Also, not all FTP servers support the file rename option (mainly Windows-based servers), so
you might turn off the rename feature. To turn off the rename feature, do the following:
1. On the Weather Display main window, click Control Panel.
2. On the Control panel, under Web site configurations, click
   FTP/internet/metar/e-mail/report/connections Setup Client/Server Setup.
3. On the Connections tab, clear the Rename the file on the server after uploading
   check box.
The FTP log should provide you with error messages and allow you to see exactly where the
FTP failure is occurring. To review the FTP log, do the following:
1. On the Weather Display main window, click **View**.

1. On the **View panel** window, under **Logs**, click **FTP log**.

**FAQ: The rainfall totals do not match my weather station**

Weather Display keeps its rain totals separate from the weather station, which makes it more flexible for rain reset times, rain reset month, etc.

To set the starting values, use **control panel**, **barometer offset**, **other offsets**, **initial rainfall totals**. Once you set the amount in the manual input (e.g., enter 55.5 for mm, or 2.5 for inches if inches is ticked), then click on **set** then click on **yes** to save the values. An alternative is to select the value from the slider (click and it will show the equivalent in inches).


Principal Authors: ANONIPEDITS:0

## Troubleshooting

This is a list of common problems when using Weather Display and possible solutions.

Make sure you are running a current version of Weather Display. There are frequent updates to the program. You can find the latest version at Weather Display downloads [1].

If upgrading to a more recent version doesn't fix the problem you have encountered, review this list of common issues to see if a solution is provided. If you still can't find a solution, post a message in the Weather-Watch Forum [2]. Our forum members are very active and someone should be able to assist you quickly.

### Read beyond end of file error

1. Exit Weather Display.
2. In the folder **datafiles**, delete the following files:
   - latest.inf
   - latestindoor.inf
   - latesttime.inf
   - graphdata.inf
   - graphdata2.inf
   - direction.inf
   - direction2.inf

Restart Weather Display.
Data arrives from station then stops

If you see the message **Client - COM port disconnected**, then you have configured Weather Display in client mode. Client mode allows one copy of Weather Display to collect data from another copy of Weather Display that is physically connected to the weather station hardware. To change this setting, do the following:

1. Go to the FTP setup screen page.
2. Select the **Client/Server** setup tab.
3. Switch off the option **Client server (use only for when you are getting data from a version connected to a weather station)**.
4. Exit and restart Weather Display.

Some settings are lost when Weather Display starts or when I click an action, nothing happens

The first place to check is on the **Program Error Log** menu item on the **View** menu. If there is an access violation when Weather Display starts, then check if you have previously enabled either the Weather Voice or Web cam options.

If Weather Voice is enabled, make sure you have a suitable speech driver installed. If you don't have a speech driver installed, you probably need to download the British female speech driver.

If direct Web cam capture is enabled, go back to the **Settings** page, and clear the **Restore settings on restart** check box.

Other errors can result from a corrupted Weather Display.ini file, in the folder `c:\windows` or `c:\winnt` (depending on what operating system you are running). There is a backup of this file produced every 10 minutes, called `Weather Display.ini backup.ini`, in the folder where Weather Display is installed.

Wunderground only updates when I click on update now

Make sure you have the **Main Internet switch** turned on. (Under **Setup, FTP/Internet setup, Connections**). If you are running your own Web server, either on the same computer as Weather Display or over a local area network (LAN), and you have cleared the **Use Weather Display ftpupd.exe** check box because you don't need to FTP files to the Web server, you will need to select the **Still use for all other** check box.

Web page updates only when I click on Action, Update Internet now

Make sure you have the **Main Internet switch** turned on. (Under **Setup, FTP/Internet setup, Connections**).

Web page is not updated after installing a new version of Weather Display

It might be because of an updated version of the ftpupd.exe file and your hardware or software firewall has blocked its access. You must configure your firewall to allow FTPUPD permission to access the Internet.
**Change the background image for the summary page**

Delete or rename the background image file you are currently using, and then restart Weather Display. The default image will be used.

**Custom Web page files with custom tags have been specified, but there is no updated wx.html file**

Make sure the custom web page file is called wxlocal.html (and not wxlocal.htm) and that it is in the Webfiles folder, or where you have configured Weather Display to save the web files (under **Setup, FTP/Internet Setup, Web Files**).

**Every minute strange data appears**

Make sure you don't have the option **Use this METAR data to update the weather station data** turned on. (Under **Setup, FTP/Internet Setup, FTP/METAR download**).

**Weather report e-mail messages are not sent at the scheduled times**

Try scheduling the send time to a time when there are no other scheduled agenda items.

**Update the DUN/ISP name to a new provider**

You need to change the dial-up networking (DUN) name in Windows Control Panel. Use the **Network Connections** options in Windows Control Panel.

**Always see the dark (night) icon**

Make sure you have your weather station latitude and longitude configured correctly (under **View, Sun/moon**). If you've upgraded from an older release of Weather Display, a new formula is in use, resulting in the longitude (i.e West/East coordinate) number being a positive number now for those located in the United States.

**Weather icon never changes**

Make sure you do not have the **Use this image as the icon** check box selected (under **Input Daily Weather**). Alternatively, make sure that you selected the **Use the forecast icon as the icon** option (under **Setup, Summary Image / Icon setup**).
Weather Display was not running for a few hours. The graph stops, then starts abruptly from old to new data.
Under Graph Setup turn on Graph Time Delay. This works best for short duration data breaks, but does not apply to the WS2010 data logger.

Weather Display crashes just as it starts to download data from my Davis WMII during start up
Weather display has known issue where it does not properly handle a full data logger buffer that has wrapped around. Clear the data logger.

Start over from scratch
1. Install Weather Display to a new folder.
2. Use Windows Notepad to create an empty file called 2Weather Display.txt (or 3Weather Display.txt, etc.) in the new folder.
3. Start the newly installed Weather Display.
Or...
1. Delete the settings found in Weather Display.isplay.ini. This file will be in either c:\windows or c:\winnt depending on the version of Windows you are running. Your windows/winnt folder could also be on another drive letter.
2. Delete the registry entry Weather Displayisplayftp.ini from the registry using regedit.exe.
Caution Editing your Windows Registry might cause your system to become unstable or not load. Make a back up of your Windows Registry before attempting modifications to the Registry.

Weather Display encounters a problem at Noon or 1 p.m.
You might need to delete the Fire Weather Index data file.
1. Exit Weather Display.
2. Delete the file fwi.inf, in the Datafiles folder.
3. Restart Weather Display.

Averages/extreme data is not updating
• Check View, Program Error Log for any errors.
• Make sure that that you have selected the Do averages/extreme update check box under Setup, FTP/Internet Setup, Web Upload Times.
• Try using Action, Update averages/extreme now.
If none of these work, then...
1. Delete the mothly and weekly report files in the Webfiles folder, for example for December 2005, delete december2005.htm and weekrep.htm.
2. Delete the file dailylog.txt, in the folder logfiles.
3. Exit and restart Weather Display.
You can reset/recreate the averages/extreme web file, via View, Averages/Extreme (scroll down).
Remove bad records the all time records
On the Action menu, click Reset Selected All Time Records.

Weather station name appears in a box just above the default Web table
Delete the file datahtm0.txt, in the webfiles folder, and then restart Weather Display.

My own links/images on my Web page keep getting overwritten
You can add what you like to the files datahtm0.txt, datahtm3.txt, but to alter datahtm2.txt, you will need to tick, let me manage datahtm2.txt, under Setup, FTP/Internet Setup, Web Files.

Web files do not update each minute as specified
You need to select which files to update in the box at the bottom of that setup screen. It is recommended that you use the option Setup, Customise the Internet File Creation/Upload. Turn on the Master Over-ride switch.

Words, numbers, and images on my Web site are large or cut off
You cannot use the Windows large fonts display options with Weather Display. To change this setting in Windows, do the following:

1. Right-click on an empty area of the Windows Desktop.
1. Click Properties.
1. On the Appearance tab, click Effects.
1. Clear the Use large fonts check box.

All pages on my Web site update, except the main page
You might have Use Custom Web Page enabled under Setup, FTP/Internet Setup, Custom Web Page. If you must have the custom tags as found in the file owntemplate.txt in a file called wxlocal.html. This file is converted by Weather Display into wx.html, which is then uploaded to your Web site instead of the filename you have saved in the Webfiles folder.

Barometer value differs from physical weather station console
Weather Display uses the raw unadjusted barometer reading from your station. You need to add a barometer offset, under Setup, Barometer Offset, Other Offsets and Rainfall. The offset can be large for some stations. For the Oregon Scientific WMR968/928 weather stations the offset is approximately 61 mb.
Troubleshooting

Rainfall totals are zero, but my weather station has rain recorded

Weather Display stores its rain totals separately from the weather station, so that you can set rain seasons, or use 9am reset time. You need to enter starting rain totals, under Setup, Barometer Offset, Other Offsets and Rainfall.

There are spikes on the real time graph, and the value reported is 3600

You need to decrease the minimum temperature scale in the bottom right-hand corner of the real time graph.

Weather Display begins using a high amount of System Resources after 10 minutes

If you have configured Weather Display to FTP download NOAA forecast and warning information and selected the 10 minute check box, this can be an indication that you have entered the wrong file location path. As a result, the FTP process is stalled and consuming high amounts of resources. Make sure that you have entered the correct path information, including slashes on the NOAA forecast page.

External links


Principal Authors: ANONIPEDITS:0
Information on Heat Index

The human body contains several mechanisms to maintain its internal operating temperature at 37°C. When threatened with above normal temperatures, the body will try to dissipate excess heat by varying the rate and depth of blood circulation, by losing water through the skin and sweat glands, and, as a last resort, by panting.

When weather conditions lead to an air temperature above 32°C and the relative humidity is high, the body does everything it can to maintain its normal temperature. Unfortunately, conditions can exceed the body's ability to cope with the combined affects of heat and humidity. At such times the body may succumb to any of a number of heat disorders including sun stroke, heat cramp, heat exhaustion and heat stroke.

To use the heat index chart below, find the temperature on the left of the chart. Read across until you reach the desired relative humidity. The number which appears at the intersection of the temperature and relative humidity is the heat index.

Note: The heat index under direct sunlight will be 8°C higher than the number shown in the chart.

MDI - Modified Discomfort Indicator

The Modified Distress Indicator indicates the temperature felt. The MDI LED in Weather Display will change colour in accordance with the temperature as follows:

- Black - Extremely hot
- Red - Very Hot
- Yellow - Hot
- Green - Getting warm

When the mouse pointer hovers over the Weather Display LED the temperature and a comment appears.

Information on Apparent Temperature

Apparent Temperature is calculated with the wind speed, direction, humidity, and outdoor temperature on a fully clothed human body. Apparent Solar Temperature calculates all the above factors, but it also adds the Solar Intensity.

Apparent Temperature is a measure of relative discomfort due to combined heat and high humidity. It was developed by R.G. Steadman (1979) and is based on physiological studies of evaporative skin cooling for various combinations of ambient temperature and humidity. The Apparent Temperature equals the actual air temperature when the dew-point temperature is 14°C (57.2°F). At higher dew-points, the Apparent Temperature exceeds the Actual Temperature and measures the increased physiological heat stress and discomfort associated with higher than comfortable humidities.

When the dew-point is less than 14°C (57.2°F), on the other hand, the apparent temperature is less than the actual air temperature and measures the reduced stress and increased comfort associated with lower humidities and greater evaporative skin cooling.

Apparent temperatures greater than 26.6°C (80°F) are generally associated with some discomfort. Values approaching or exceeding 40.5°C (105°F) are considered life-threatening, with severe heat exhaustion or heatstroke possible if exposure is prolonged or physical activity high. The degree of heat stress may vary with age, health, and body characteristics.


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Glossary

- **APRS** Automatic Position Reporting System. An amateur radio system originally developed to maintain an ongoing record of the location of a mobile radio-transmitter. It has been expanded to allow reporting of weather information within a position report. Originally restricted to reporting via amateur radio, it is now possible to send (and receive) these reports via the Internet. The Internet APRS system feeds data into the USA Hurricane warning center and other NOAA systems.

- **ASOS** Automatic Surface Observing Station. Used for automatic METAR report generation. Has a ceilometer to measure cloud height and type automatically.

- **CWOP** Citizen Weather Observer Program[^1]. A private-public partnership with three main goals: 1) to collect weather data contributed by citizens; 2) to make these data available for weather services and homeland security; and 3) to provide feedback to the data contributors so that they have the tools to check and improve their data quality. In fact, the web address, wxqa.com, stands for weather quality assurance.
• **CSV** Comma Separated Values/Variables. A computer file format in which individual data values are separated from each other by commas. Used in Microsoft Excel[2] and database software.

• **DDE** Dynamic Data Exchange. A data transfer mechanism available within Microsoft® Windows that allows computer programs to directly exchange data. For example, Weather Display can make its data available to Microsoft Excel[3] spreadsheets using DDE.

• **FTP** File Transfer Protocol. FTP allows local or remote client and server machines to share files and data using the TCP transport mechanism. FTP is an interactive protocol with provisions to Copy (in either direction), Rename, or Delete files on a server machine.

• **HTM** A file type designator. Most commonly used in Microsoft Windows computers to indicate that the file contains HTML content.

• **HTML** HyperText Markup Language. The markup language with which World Wide Web (WWW) documents are written. It allows you to create hypertext links, fill-in forms, etc.

• **HTTP** HyperText Transfer Protocol. The set of messages used between Web browsers and servers to provide a means to deliver requested documents, i.e. HTML files, to a user.

• **IMAP** Internet Message Access Protocol. An application layer Internet protocol used for accessing email on a remote server from a local client. IMAP and POP3 (Post Office Protocol version 3) are the two most prevalent Internet standard protocols for email retrieval. Both are supported by virtually all modern email clients and servers, although in some cases in addition to vendor-specific, typically proprietary, interfaces. For example, while proprietary protocols are typically used between Microsoft’s Outlook client and an Exchange server and between IBM’s Notes client and a Domino server, all of these products also support IMAP and POP3 allowing interoperability with other servers and clients. (From Wikipedia[4])

• **IP** - Internet Protocol. Data to be transmitted across a network, i.e. the Internet, is enclosed in a "datagram" with originating and destination addresses attached. Individual datagrams are sent via whatever route makes sense at that instant. Successive datagrams between the same points may take different routes. Datagrams are sent on a "best effort" basis and are not guaranteed to reach the recipient. The structure of datagrams is defined by the Internet Protocol specifications.

• **ISP** Internet service provider. The company you have chosen to give you Internet access, e.g. AOL[5], Comcast[6], Verizon.net[7], BigPond[8], Wanadoo[9], etc.

• **LAN** Local Area Network. A network covering a small area, i.e. a building or a group of buildings within a few hundred meters of each other.

• **METAR** An acronym derived from the French, and basically meaning "aerodrome weather". This weather observation coding format is the primary format for weather data distribution in North America, though it is used at many airports in other regions. The format is relatively readable and is designed mostly for the aviation sector. METAR observations are usually taken every hour, although larger airports may produce a report every 30 minutes. Special reports can also be sent when conditions have changed significantly since the last report was sent. (Part of this definition is from "Weather Forecasting Handbook", 5th ed., Tim Vasquez).
• **MIME**  Multipurpose Internet Mail Extension. A definitive list of file types used by e-mail clients and Web browsers (among others) to determine how to process the content of a file.

• **MML**  MesoMap Live. Flash movie software which displays animated weather data from thousands of stations across the world on your web page. The user can define the areas covered by their own maps and the stations to be displayed on each map.


• **POP3**  Post Office Protocol version 3. Local e-mail programs use the Post Office Protocol version 3 (POP3), an application-layer Internet standard protocol, to retrieve e-mail from a remote server over a TCP/IP connection. Nearly all subscribers to individual Internet service provider e-mail accounts access their e-mail with client software that uses POP3. (From Wikipedia[^13])

• **SMTP**  Simple Mail Transport Protocol. The set of processes used for email transmission by the bulk today's Internet e-mail systems. In practice, this protocol gets the e-mail message from the originator to the e-mail server supporting the recipient(s). The actual e-mail receipt is usually handled using either POP3 or IMAP.

• **SYNOP**  Synoptic Observation. This observation coding format is used worldwide, and comprises the primary method for weather distribution outside of North America. The format, designed mainly for meteorologists, consists of blocks of numerical data. The observations are usually taken every 6 or 12 hours (sometimes every three). (From *Weather Forecasting Handbook*, 5th ed., Tim Vasquez)

• **TCP**  Transmission Control Protocol. Data to be transmitted across a network, i.e. the Internet, is broken up into "packets" of a specific number of characters for transmission over a network within an IP envelope. Since the nature of computer networks is such that the delivery of packets can not be guaranteed, each packet also contains additional information that the receiving computer can use to assure that all packets have been received and placed into their correct order. This information is defined in the TCP standards specifications.

• **URL**  Uniform Resource Locator. The unique address of a document on the World Wide Web, e.g. http://www.weather-watch.com/smf/index.php. A URL consists of the document name (index.php) preceded by the hierarchy of directory names in which the document is stored (smf), the Internet domain name of the server that hosts the file (www.weather-watch.com), and the software and manner by which the browser and the document's host server communicate to exchange the document (http://).

• **WAP**  Wireless Application Protocol. The description of a data format suitable for viewing on mobile phones that have this functionality.

• **WD**  Weather Display. Software which collects data from a variety of automatic weather station types and displays it on a computer and formats the data for display on Web pages.

• **WDL**  Weather Display Live. Flash movie software which displays data from the Weather Display clientraw.txt using animation. The WDL display is configurable, allowing different instruments to be displayed and their location within the display area defined.
• **Wind run** A measurement of how much wind has passed a given point in a period of time. A wind blowing at three miles per hour for an entire hour would give a wind run of three miles.

• **Wunderground** A contraction of Weather Underground [14]. A program of the University of Michigan that posts weather observations from private weather stations around the country on a Web site.

**External links**


Principal Authors: ANONIPEDITS:0