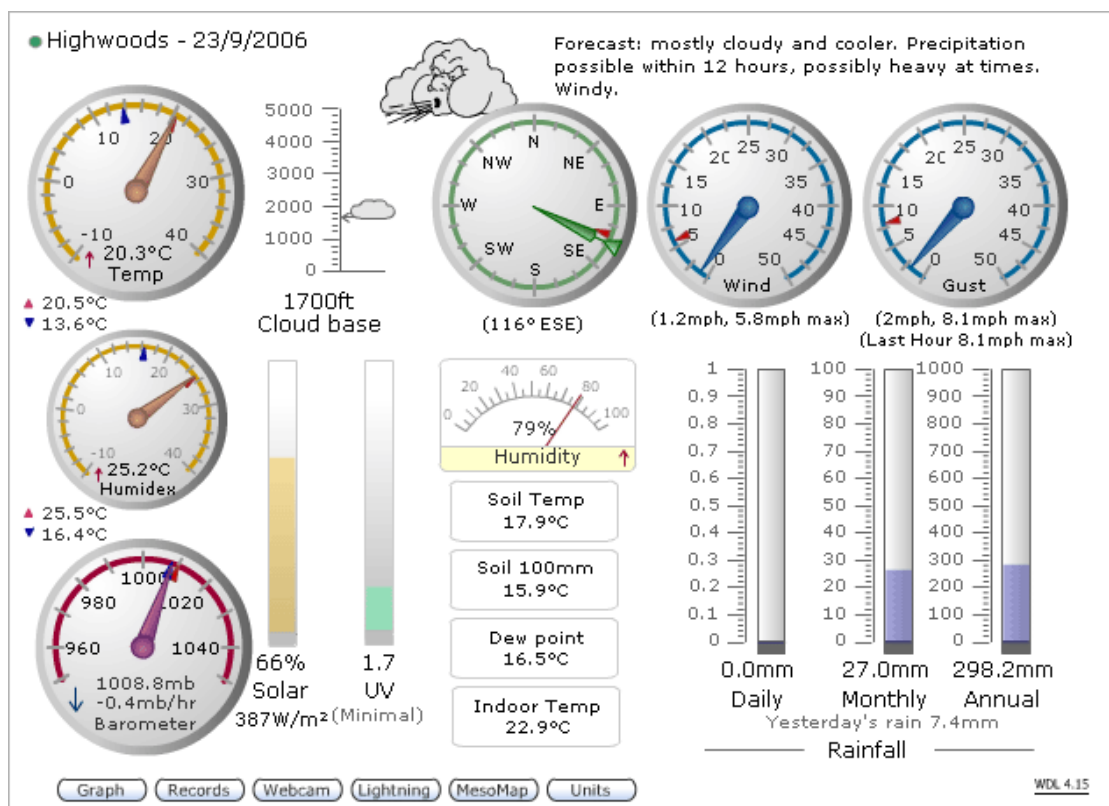


# Configuring Weather Display Live



## Table of Contents

Introduction.....	4
<i>What can be modified?</i> .....	4
<i>Pre-configured wdlconfig.xml files</i> .....	4
<i>Displaying Weather Display Live on a local PC</i> .....	5
Basic configuration options.....	6
<i>Entering your serial number</i> .....	6
<i>About serial numbers and website addresses</i> .....	6
<i>Setting the language</i> .....	7
<i>Setting the refresh rate and initial default units</i> .....	7
<i>Choosing the buttons to display</i> .....	9
<i>Setting the wind &amp; date/time options</i> .....	11
<i>Lightning activity warning</i> .....	12
<i>The clientraw files</i> .....	13
<i>Webcams</i> .....	13
The webcam tags.....	15
<i>Rainfall text</i> .....	16
<i>Live Forecast</i> .....	17
<i>Manual Weather Warning</i> .....	17
<i>Barometer decimal places</i> .....	18
<i>Graph Options</i> .....	18
Temperature and Windchill Graphing.....	18
Removing Graphs.....	18
Displaying Graphs from Instruments.....	19
Choosing Initial Graph.....	19
Embedding Graphs.....	20
<i>Locking Temperature Scales</i> .....	22
<i>Locking Wind Scales</i> .....	22
<i>Session Time Outs</i> .....	22
<i>No Data Count</i> .....	23
<i>Auto Swap Heat Index / Windchill</i> .....	23
Configuring Weather Display to send data.....	25
Integration with Lightning Software.....	27
<i>Configuring for Nexstorm</i> .....	27
Maps.....	28
Disclaimer, offset and refresh rates.....	28
Configuring Weather Display to access Nexstorm.....	29
Distance rings.....	29
<i>Configuring for Lightning 2000</i> .....	30
<i>Showing the Lightning button</i> .....	31
MesoMap Live.....	32
<i>Testing in evaluation mode</i> .....	32
<i>Configuring your own map</i> .....	33
<i>Setting the speed of weather icon rotation</i> .....	33
<i>Slide Bar</i> .....	34
<i>Changing the Colour of the Station Markers</i> .....	34
<i>Offsets and Size</i> .....	34
<i>Fine Alignment of Maps</i> .....	35
<i>Wind Arrows</i> .....	35
<i>Linking to the Full Version of MesoMap Live</i> .....	35

Customising the weather instruments .....	37
<i>The instrument tag</i> .....	37
<i>The weather instrument options</i> .....	38
<i>Trend Arrows</i> .....	50
<i>Dual Temperature Instrument</i> .....	51
<i>Dual Wind Instrument</i> .....	52
<i>Snowfall</i> .....	52
<i>Evapo-transpiration</i> .....	53
<i>Soil Moisture</i> .....	54
<i>Video Playback</i> .....	54
<i>Moving Instruments on the Screen</i> .....	56
<i>Accurately positioning instruments</i> .....	57
Advanced Styling With The Premium Version .....	58
<i>Custom Icons</i> .....	58
<i>Text Styling</i> .....	58
<i>Heartbeat Indicator &amp; Station Name</i> .....	59
<i>Weather Display Live Version Link</i> .....	60
<i>Gauge Scale Colour</i> .....	60
More configuration possibilities .....	61
Pre-built configuration templates .....	62
<i>Pre-built configuration screenshots</i> .....	62
The Default Icons .....	69
Checking for correct version of Flash .....	71
Future Developments .....	72

## Introduction

*This document assumes you've read the [readme.html](#) file in the download package. For more information on the WDL Configurator use the [Help](#) menu option.*

Weather Display Live can be customised using the xml configuration file, generally named `wdlconfig.xml`, either by editing the xml file directly using a text editor such as Notepad, or by using the WDL Configurator.

This guide explains in detail what can be customised and how, including the actual code required in the xml configuration file.

### **What can be modified?**

Weather Display Live can be customised by amending the `wdlconfig.xml` file in a number of ways –

- The units which are displayed by default can be pre-set
- The option to allow the display of buttons so the user can change units
- The rate at which Weather Display Live attempts to get new data
- A range of options to indicate the compass direction
- Whether to display date, time or both
- The position and size of each weather instrument
- The language of the text
- Hyperlinks on weather instruments
- Extra sensors can be displayed
- Lightning activity warning can be displayed
- Integration with Nexstorm and Lightning 2000

The `wdlconfig.xml` file is read once by Weather Display Live when the page is first viewed, it is only read again if the page is refreshed or re-visited. Therefore any changes to the `wdlconfig.xml` file will not take place until this happens. In some cases the web browser or a local proxy cache can store this file which results in changes not being displayed. See the troubleshooting section of the `readme.html` file for help in this situation.

***Warning!** The `wdlconfig.xml` file is an xml file and as such is very sensitive to errors and typographic mistakes. It is also case sensitive. Therefore it is recommended to always create a backup before making any changes.*

### **Pre-configured `wdlconfig.xml` files**

Weather Display Live comes with a number of pre-configured template `wdlconfig.xml` files, in the `templates` folder, for different situations, such as with no UV sensor.

The web page (index.html) must be amended to point to the wdlconfig.xml file required before it can be used or else Weather Display Live will be unable to find it and an error message will be displayed. For example if you choose to use the wdlconfig\_no\_uv.xml file then amend the reference in the index.html file to be –

```
= "wdlv6_02.swf?http://www.mywebsite.com/wdlconfig_no_uv.xml"
```

where http://www.mywebsite.com is the domain name of your website.

See *Pre-built configurations* for more details and screenshots of these files.

### **Displaying Weather Display Live on a local PC**

Weather Display Live can be tested on the local PC, without having to upload to a web server, to see the effects of making changes to the wdlconfig.xml file. This is recommended when customising the wdlconfig.xml file because it is a much faster method of seeing the effects your changes are having. To view Weather Display Live on a local PC do the following –

1. Copy the files **wdlconfig.xml** and **wdlv6\_02.swf** files from the installation folder to a directory on your PC.
2. Place a copy of the clientraw.txt, clientrawextra.txt, clientrawhour.txt and clientrawdaily.txt files to the same directory. The clientrawextra.txt file contains the all time record details, clientrawhour contains last hour data and the clientrawdaily.txt file contains 30 day information.

Weather Display Live can now be tested by double clicking on the **wdlv6\_02.exe** file. Weather Display Live will be displayed in static mode, i.e. without any live updates and only showing the clientraw.txt, clientrawextra.txt and clientrawdaily.txt data files which you've just placed in that directory.

Name	Size	Type
WDL Uninstall.exe	28 KB	Application
WDL Configurator.exe	1,468 KB	Application
WDL Configurator.exe.manifest	46 KB	MANIFEST File
WDL Configurator.application	2 KB	Application Manifest
inst.mdb	328 KB	Microsoft Office Acc...
wdlv6_01.exe	1,244 KB	Application
WDL Configurator.xml	1 KB	XML Document
WDL Uninstall.xml	1 KB	XML Document
WDL Configurator.exe.config	8 KB	XML Configuration File
licence.txt	6 KB	Text Document
Configuring_wdl.pdf	1,501 KB	AcroExch.Document
edtftpnetex.dll	612 KB	Application Extension
readme.html	45 KB	HTML Document
upload		File Folder
templates		File Folder

The same thing can be accomplished much more easily by using the WDL Configurator and using the Live Preview feature.

This is a very good method of quickly checking that changes you make to the wdlconfig.xml file are exactly what you intend. wdlv6\_02.exe is a Flash Projector file.

## Basic configuration options

There are a number of configuration options which you should be aware of even if you don't intend to customise the position or size of the weather instruments. They are at the start of the wdlconfig.xml file and are detailed here.

### **Entering your serial number**

You should copy and paste the serial number you receive into the wdlconfig.xml file in the serial number line -

```
<serialno>evaluation</serialno>
```

Replace the word 'evaluation' with this number then refresh Weather Display Live in your web browser.

In the WDL Configurator go to the Basics Tab and enter into the Serial Number text box.

### **About serial numbers and website addresses**

The URL of your website is the web server/subdomain + domain. For example if your website is at http://www.myweb.com/ the serial number will be registered to www.myweb.com; if your website is http://members.mywebsite.org/weather the serial number will be registered to members.mywebsite.org.

Even if your page is running within a frame, the relevant URL is still the one that the actual page with the Flash file is on. This is because Weather Display Live looks for that URL on the page it is running on.

It is important to get this correct or your serial number may not work.

In addition it requires that the clientraw.txt file and the wdlconfig.xml file are also on the same domain, i.e. on the same website. This is an inbuilt security feature of Flash.

Weather Display Live will always run in evaluation mode whenever the word *evaluation* is within the <serialno> tags. There is no time limit in this mode but the display will be watermarked with the words *Evaluation Version*.

If you move web servers just send me an email with proof of your original purchase and I'll send you a replacement serial number.

### ***Setting the language***

Weather Display Live includes built in support for several languages. You can select the language to use by specifying it within the language tag –

```
<language>english</language>
```

Currently the options are -

- english (default and may be specified by leaving the tag blank)
- finnish
- danish
- dutch
- french
- swedish
- german
- catalan
- spanish
- norwegian
- italian
- portuguese
- estonian
- faroese
- frisian
- greek
- czech
- hungarian
- bulgarian

Note that the options are case sensitive. Some languages may also require adjustment of the spacing between instruments to avoid any overlapping of text.

You can place characters from the extended ASCII set, for display in places such as extra sensor labels in the wdlconfig.xml file, and they will be displayed as long as the file is saved in UTF-8 format.

In the WDL Configurator go to the Basics Tab and select the language from the drop down list.

### ***Setting the refresh rate and initial default units***

It is recommended that you set the frequency with which Weather Display Live attempts to get new data to be the same rate as the clientraw.txt file gets updated from Weather Display. Therefore if Weather Display sends a new clientraw.txt file every 10 seconds change the line that says –

```
<refresh>4</refresh>  
to –  
<refresh>10</refresh>
```

The minimum is 3 and the maximum is 60. The default is 4.

You can also set the rate at which Weather Display Live requests ‘records’. Normally this is approximately every 15 minutes but you can change it to every 5 minutes by entering the word ‘fast’ in this tag instead of ‘normal’ –

```
<clientrawextraRefreshRate>normal</clientrawextraRefreshRate>
```

In the WDL Configurator go to the Basics Tab and choose the refresh rates in the data section.

### **Units**

You can change the units which are displayed in Weather Display Live at startup. To change an option such as the temperature units that Weather Display Live starts with find the line –

```
<initTempUnits>C</initTempUnits>
```

Change it so that it now reads –

```
<initTempUnits>F</initTempUnits>
```

Refresh your web page to reload Weather Display Live and see the new temperature units.

In the same way you can change the barometric pressure, rainfall, altitude, evapo-transpiration and wind units at start up.

The options are as follows –

Measurement	Options	Default	Tag
Temperature	C or F	C	<initTempUnits>
Wind	mph, kts, km/h or m/s.	mph	<initWindUnits>
Rain	mm or in	mm	<initRainUnits>
Heat	humidex or heatindex	humidex	<initHeatType>
Snow	cm or in	cm	<initSnowUnits>
Pressure	mb, inHg or hPa	mb	<initPressureUnits>
Cloud base Height (Altitude)	ft, m or yds	ft	<initCloudbaseUnits>
Evapo-transpiration	mm, cm or in	mm	<initETUnits>



For more information on Heat Index and Humidex see the Weather Display online help at <http://www.weather-display.com/>

In the WDL Configurator go to the Basics tab and go to the Initial Units section to choose the default units.

### **Choosing the buttons to display**

Now that you've set your units to display you may decide that you only want visitors to be able to change certain units, or none at all. This can be achieved by changing the appropriate tag values in the wdlconfig.xml file from 1 (the default – show the button) to 0 (don't show the button).

The relevant tags are as follows –

Temperature	<btnTemp>1</btnTemp>
Pressure	<btnPressure>1</btnPressure>
Wind	<btnWind>1</btnWind>
Rain	<btnRain>1</btnRain>
Snow	<btnSnow>1</btnSnow>
Altitude	<btnAlt>1</btnAlt>
Heat Index or Humidex	<btnHeat>1</btnHeat>
Graph	<btnGraph>1</btnGraph>
Records	<btnRecords>1</btnRecords>
Webcam	<btnWebcam>1</btnWebcam>
Lightning	<btnLightning>1</btnLightning>
MesoMap Live	<btnMml>1</btnMml>

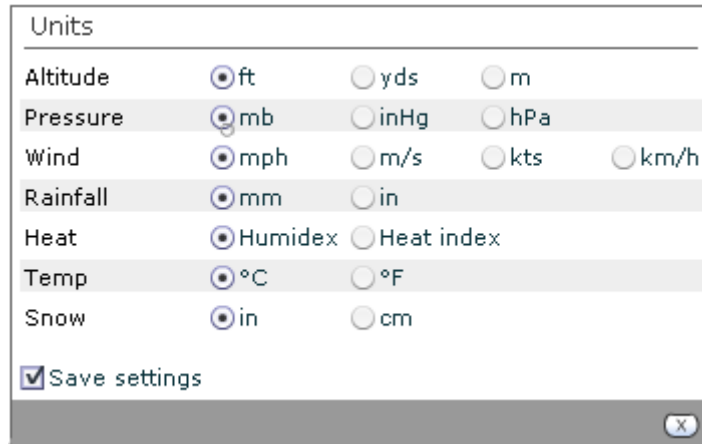
Note that as you remove buttons the remaining buttons will automatically align from the left of the screen. Additionally you can choose the order that buttons are displayed in the row. For example you may wish them to correspond to the positioning of the instruments you've chosen. To do this place the number within the <order> tag which corresponds to the position of the button. For example if you want the temperature button to be the 3<sup>rd</sup> from the left the temperature button tags would read –

```
<btnTemp>
  <show>1</show>
  <order>3</order>
</btnTemp>
```

You can specify the location of the row of buttons (the button bar) by entering their <x> and <y> co-ordinates (see *Accurately positioning instruments*).

```
<btnPosition>
  <x>15</x>
  <y>392</y>
</btnPosition>
```

Alternatively you can display a separate screen to display units which will save space on the main Weather Display Live display.



This screen is enabled by using the following tag –

```
<btnUnits>
  <show>1</show>
  <order>14</order>
  <allowUserToSaveSettings>1</allowUserToSaveSettings>
</btnUnits>
```

Setting `<show>` to 1 will replace all the units buttons with one labelled ‘Units’. The unit options displayed will be the same as for the existing buttons and in the `<order>` set.

In addition there is an option for the user to remember the units they prefer for your website. If the ‘Save settings’ check box is ticked then the selected unit settings will be shown for that user each time they visit your site assuming they use the same computer. This option can be disabled in the `wdlconfig.xml` file by setting `<allowUserToSaveSettings>` to 0.

This feature works by using Flash Shared Objects which are very similar to cookies. The user can disable this feature within the security settings for the Flash plug-in installed on their browser but Weather Display Live checks for this option and will not display a check box in this circumstance. For more on Shared Objects see [http://en.wikipedia.org/wiki/Local\\_Shared\\_Object](http://en.wikipedia.org/wiki/Local_Shared_Object)

You cannot remove or change the Weather Display Live link in the standard version. The link is removed in the Premium version which you can upgrade to from the standard. You cannot change the position of your station name but you can remove it (See *Setting the wind direction & date/time options*).

In the WDL Configurator go to the Buttons tab to select the buttons to be displayed.

### **Setting the wind & date/time options**

You can choose whether to show the wind direction heading in letters and/or the wind direction degrees beneath the instrument.

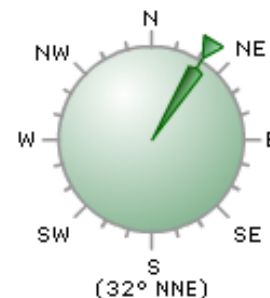
The options are –

Enter 0 to hide the compass heading.

Enter 1 to show the compass heading in letters (default)

Enter 2 to show the compass heading in degrees.

Enter 3 to show both.



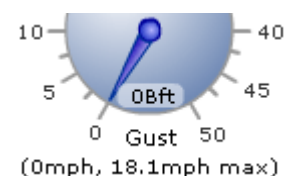
```
<showCompassHeading>1</showCompassHeading>
```

The wind direction letters can be replaced by degrees by setting the `<options>` within the `<instWindDir>` instrument tag to 1.

```
<instWindDir>  
  <options>1</options>
```

If you wish to display the current wind reading in Beaufort on the wind dials then set the tag to 1 instead of 0.

```
<showBeaufort>0</showBeaufort>
```



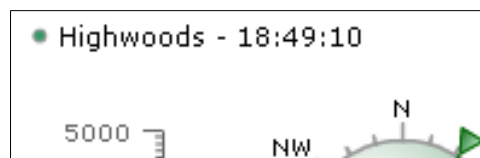
You can choose whether to display the date, the time or both alternating, next to your weather station name, with the following options -

Enter 0 to hide the name, date and time.

Enter 1 to alternate between date and time (this is the default).

Enter 2 to display date only.

Enter 3 to display time only.



```
<stationdatetime>1</stationdatetime>
```

You can choose the format that you wish date values to be displayed. For example the default is dd/mm/yyyy but you may wish to use the USA format of mm/dd/yyyy. You can do this by specifying the appropriate format in the tag –

```
<dateFormat>dd/mm/yyyy</dateFormat>
```

Options are –

- dd/mm/yyyy (default)
- mm/dd/yyyy
- yyyy/dd/mm
- yyyy/mm/dd
- dd.mm.yyyy
- mm.dd.yyyy
- yyyy.dd.mm
- yyyy.mm.dd
- dd-mm-yyyy
- mm-dd-yyyy
- yyyy-dd-mm
- yyyy-mm-dd

The date will not appear if any other format is entered.

● Lowest temperature	9.9°C - 06:24 21/08/2004
● Highest gust	21.1mph, 261° - 12:34 24/08/2004
● Highest rain rate	2.0mm/min - 09:11 09/08/2004
● Lowest barometer	999.9mB - 11:45 19/08/2004
● Highest barometer	1021.3mB - 08:59 01/08/2004

The ‘LED’ on the left of each record indicates if the record is recent. If the record occurred within the last day then the indicator shows red or orange if within the last 7 days.

In the WDL Configurator go to the Basics tab for the above settings.

### ***Lightning activity warning***

If you have a lightning detector you can enable a lightning activity animated icon by setting this tag to a number other than 0. The number you set corresponds to the number of strikes/minute recorded by your detector and Weather Display. When this threshold is reached the animated lightning icon is displayed. This icon will be displayed for approximately 5 minutes from the initial triggering.

```
<lightningAlert>0</lightningAlert>
```



### **The clientraw files**

The clientraw.txt file contains the live weather data, the clientrawextra.txt file contains the all time record information, the clientrawhour.txt file contains last hour data and clientrawdaily.txt contains 30 day information. You must be using Weather Display v10.37i or greater for the clientrawhour.txt file to be generated. Usually Weather Display Live is placed in the same directory as these files but this is not essential. If you wish to place the Weather Display Live files in a different location then you must specify the location of these files by entering the full path to them in the following tags –

```
<clientraw></clientraw>  
<clientrawextra></clientrawextra>  
<clientrawdaily></clientrawdaily>  
<clientrawhour></ clientrawhour >
```

See *Configuring Weather Display to send data* for more information about setting up the data transfer via FTP of these files to your web server.

In the WDL Configurator go to the Basics tab for the above settings.

### **Webcams**

Weather Display Live can display webcam images either on the main screen or via a button as a new window.



You can have one webcam or multiple and set a common refresh rate for them all. You could even have an embedded webcam in the main Weather Display Live page and separate multiple webcams from the webcam button!

Each webcam is specified by a webcam tag like this –

```
<instWebcam1>
  <url></url>
  <urlNight></urlNight>
  <caption></caption>
  <embedded>1</embedded>
  <widescreen>0</widescreen>
  <x>100</x>
  <y>100</y>
  <size>30</size>
  <linkUrl></linkUrl>
  <title></title>
</instWebcam1>
```

To specify multiple webcams just add extra tags and increment the webcam number each time, i.e. –

```
<instWebcam1>
  <url></url>
  <urlNight></urlNight>
  <caption></caption>
  <embedded>1</embedded>
  <widescreen>0</widescreen>
  <x>100</x>
  <y>100</y>
  <size>30</size>
  <linkUrl></linkUrl>
  <title></title>
</instWebcam1>
<instWebcam2>
  <url></url>
  <urlNight></urlNight>
  <caption></caption>
  <embedded>1</embedded>
  <widescreen>0</widescreen>
  <x>200</x>
  <y>100</y>
  <size>30</size>
  <linkUrl></linkUrl>
  <title></title>
</instWebcam2>
```

You can do this for as many webcams as you wish although if you embed webcams in the main screen you may run out of screen space. A better option would be to use the separate screen which allows different webcams to be selected via a drop down list.



If you wish to use a separate screen with a button you will need to enable the button with this tag –

```
<btnWebcam>  
  <show>1</show>  
  <order>9</order>  
</btnWebcam>
```

### ***The webcam tags***

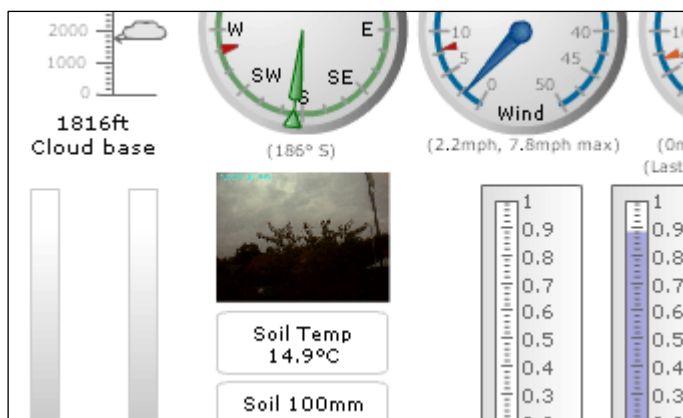
Enter the address of your webcam image in the `<url>` tag. The image is automatically sized to be 320 x 240 unless you use the `<widescreen>` tag and set it to 1. This causes the aspect ratio to change to 16:9.

If you don't wish your webcam to be displayed at night you can enter an alternative image to be displayed in the `<urlNight>` tag. This image will only be displayed during night time – this information is fed from Weather Display in the data files.

You can also enter a caption text which appears beneath the image in the separate webcam screen if only one webcam is used or as the drop down list option if you have multiple. When the webcam is embedded in the page then the caption is not available.

You can select whether to display the webcam on the main screen by entering 1 into the embedded tag, a 0 will display it in the separate screen.

```
<embedded>1</embedded>
```



The size tag affects embedded webcams only. You will probably find a size tag of 100 is too large. Try starting at 30 and adjust as necessary. See *The instrument tag* for full details.

The `<linkUrl>` and `<title>` tags will display a ‘tooltip’ and optional associated web link on an embedded webcam image.

```
<linkUrl>http://www.mywebsite.com/webcam.jpg</linkUrl>  
<title>Click to view more webcam images</title>
```

The refresh rate of all webcams is specified by the `<webcamRefreshRate>` tag within the main `<configuration>` section of the `wdlconfig.xml` file. You can specify a maximum refresh rate of 15 seconds. The default is 120 seconds.

You can position the instrument wherever you wish with the `<x>` and `<y>` tags – see *Accurately positioning instruments*.

In the WDL Configurator go to the Webcam tab for change any of the webcam settings.

### **Rainfall text**

You can determine whether lines appear and on which side of the ‘Rainfall’ text, used to highlight the rain tanks. This is useful if you choose not to show all 3 tanks. The `<txtRainFall>` tag has an `<options>` tag. You can choose to enter one of the following –

0	Both lines hidden
1	Default – both lines visible
2	Left line only
3	Right line only



### **Live Forecast**

If you are using a Davis Vantage Pro then you can display the forecast text provided via Weather Display. To do so set this tag to a number between 1 and 99 corresponding to the number of seconds between the alternating of the current conditions and the forecast text.

```
<showDavisForecast>10</showDavisForecast>
```

In this example the current conditions and forecast text will alternate at 10 second intervals. Set to 0 to only show current conditions, set to 100 to only show forecast.

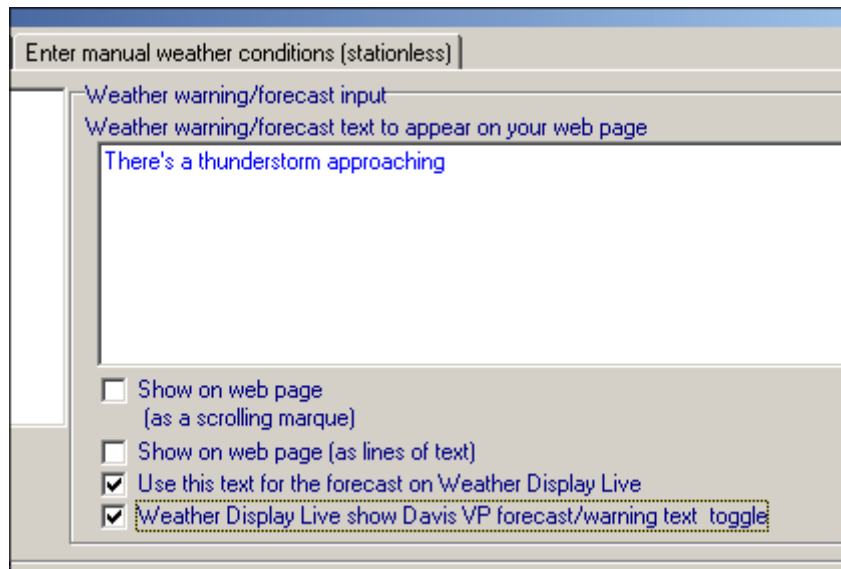
To make the icon follow the current conditions of forecast text set this tag to 1 –

```
<switchForecastIcon>1</switchForecastIcon>
```

### **Manual Weather Warning**

You can display your own weather warning from within Weather Display on the Weather Display Live forecast text, even if you have the forecast set to not be displayed (using the above tag).

In Weather Display enter your weather warning in the text box displayed via the menu option ‘Input Daily Weather’ and make sure the relevant check boxes are ticked. Your weather warning will be shown, alternating with the current conditions, in Weather Display Live within 10 minutes.



### **Barometer decimal places**

Some weather stations read pressure to 1 decimal place whilst others cannot. You can choose the number of decimal places to show for the pressure reading in mB and hPa by setting the `<dp>1</dp>` tag within the `<instBarometer>` tag. Entering 1 will display readings to 1 decimal place, 0 will not show any decimal places.

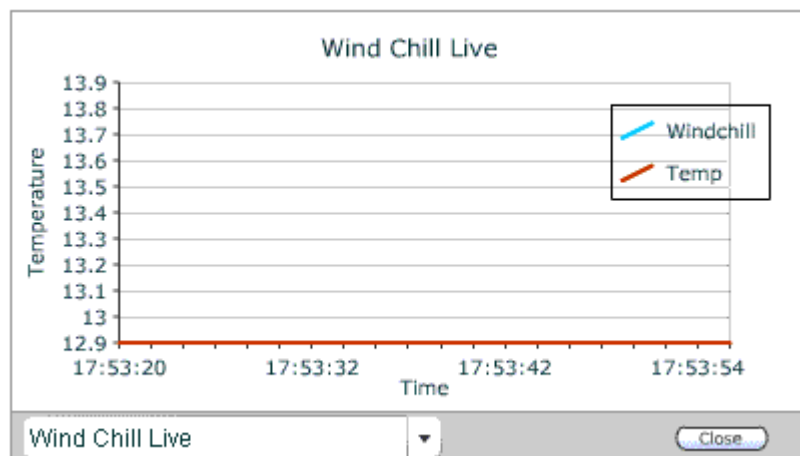
### **Graph Options**

#### **Temperature and Windchill Graphing**

Optionally you can choose to plot windchill and temperature on the same graph. To do this set the following tag to 1

```
<graph>  
  <showGraphTempAndWindChill>1</showGraphTempAndWindChill>
```

To just display windchill set the tag to 0.



### **Removing Graphs**

You can optionally choose to display a reduced number of graphs. If you set any of the following tags to 1 the associated graphs will not be displayed –

```
<graph>  
  <hideIndoorGraphs>0</hideIndoorGraphs>  
  <hideLastHourGraphs>0</hideLastHourGraphs>  
  <hide1DayGraphs>0</hide1DayGraphs>  
  <hide7DayGraphs>0</hide7DayGraphs>  
  <hide30DayGraphs>0</hide30DayGraphs>  
  <hide12MonthGraphs>0</hide12MonthGraphs>
```

Tag	Associated Graphs
<hideIndoorGraphs>	Temperature
<hideLastHourGraphs>	Barometer Humidity Rainfall Temperature Wind Direction Wind Speed
<hide1DayGraphs>	Barometer Rain Temperature Wind Direction Wind Speed Solar (if enabled) UV (if enabled)
<hide7DayGraphs>	Barometer Humidity Rainfall Solar (if enabled) Temperature UV (if enabled) Wind Direction
<hide30DayGraphs>	Barometer Humidity Rainfall Temperature Wind Speed Wind Direction
<hide12MonthGraphs>	Rainfall

### ***Displaying Graphs from Instruments***

Clicking on a tool tip for an instrument can automatically display the appropriate graph. For example clicking on the current temperature instrument can launch the graph for the last 24 hours. To enable this feature set this tag to 1 –

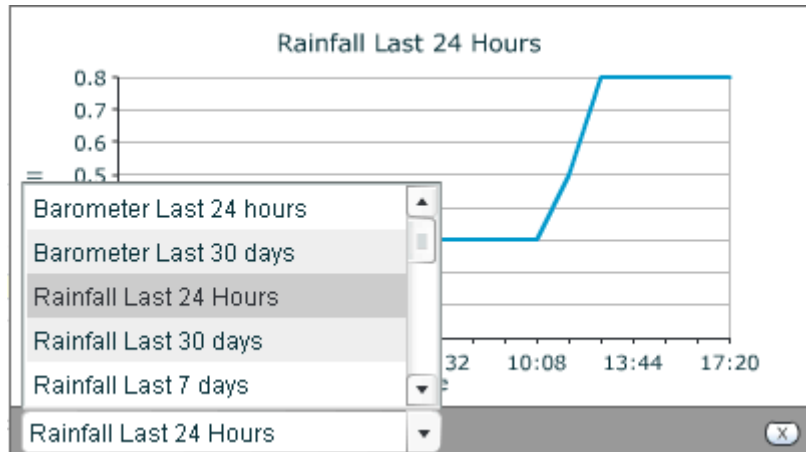
```
<instShowGraph>0</instShowGraph>
```

### ***Choosing Initial Graph***

You can choose which graph will be displayed initially in Weather Display Live by setting the following tag –

```
<graph>  
  <initGraph></initGraph>
```

By default, and with no entry in the tag, Wind speed live will be displayed initially. If you wish to have a different graph initially displayed then enter a number corresponding to the position in the drop down list of graph options. For example if you enter 3 in the tag then, for the example below, Rainfall Last 24 Hours will be displayed.



### ***Embedding Graphs***

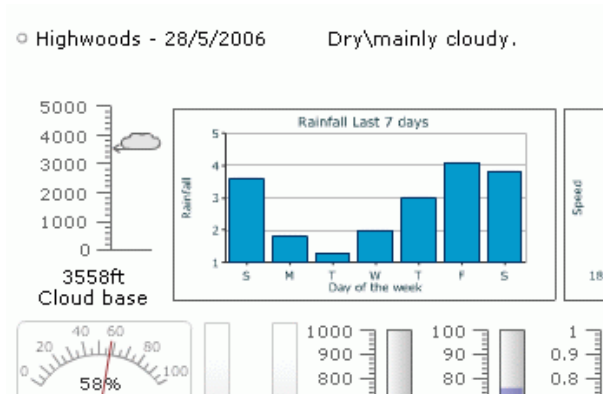
Graphs can also be embedded on the main screen of Weather Display Live although you will probably find that you will need to reduce the size down from 100 to make them fit in better with other instruments. A value of 55 in the `<size>55</size>` tags is a good starting place. You can place as many as you wish – or there's room for – using the following tags –

```
<graphEmbedded1>
  <x>95</x>
  <y>50</y>
  <show>1</show>
  <size>55</size>
  <initGraph>Rain7</initGraph>
  <url></url>
  <title></title>
</graphEmbedded1>
```

To embed more than one graph just keep repeating these tags and incrementing the number, i.e. `<graphEmbedded2>`, `<graphEmbedded3>` etc. The graph to display is decided by the `<initGraph>` tag. This works slightly differently to the normal 'initial graph' tag for the main graph as you may choose from any of the available graphs, even if you have excluded them from the main drop down list. This is the complete list of available `<initGraph>` options –

Option	Description
WindDirection	Live wind direction
WindSpeed	Live wind speed
WindChill	Live wind chill
BaroHour	Barometer for the last hour
HumidityHour	Humidity for the last hour
Rain	Rain for the last hour
Temp	Temperature for the last hour
WindDirectionHour	Wind direction for the last hour
WindSpeedHour	Wind speed for the last hour
Rain24	Rain for the last 24 hours
Temp24	Temperature for the last 24 hours
Wind24	Wind for the last 24 hours
Humidity24	Humidity for the last 24 hours
WindDirection24	Wind direction for the last 24 hours
IndoorTemp24	Indoor temperature for the last 24 hours
Solar24	Solar radiation for the last 24 hours
UV24	UV for the last 24 hours
Baro24	Barometer for the last 24 hours
Rain7	Rain for the last 7 days
Temp7	Temperature for the last 7 days
Baro7	Barometer for the last 7 days
Humidity7	Humidity for the last 7 days
WindDirection7	Wind direction for the last 7 days
WindSpeed7	Wind speed for the last 7 days
Solar7	Solar radiation for the last 7 days
UV7	UV for the last 7 days
Baro30	Barometer for the last month
Rain30	Rain for the last month
Temp30	Temperature for the last month
Wind30	Wind speed for the last month
Humidity30	Humidity for the last month
WindDirection30	Wind direction for the last month
Rain12	Rainfall for the last 12 months

Here is an example of two embedded graphs within the Weather Display Live main screen –

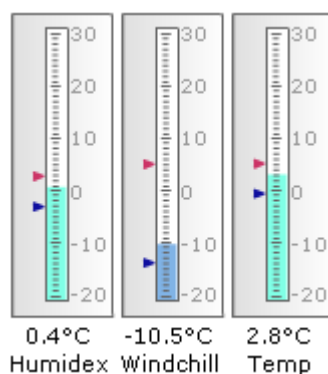


In the WDL Configurator go to the Graphs tab for change any of the graph settings.

### **Locking Temperature Scales**

Sometimes you can find that the temperature instrument scales are not the same which can be slightly confusing for the viewer. This most often happens when the wind chill factor is particularly high (causing a low temperature value). To prevent this happening you can lock the scales for temperature, wind chill, heat or humidity, dew and apparent temperature (assuming they are displayed) by setting the following tag to 1 –

```
<lockTempScales>0</lockTempScales>
```



### **Locking Wind Scales**

Similarly to the temperature instrument you can find that wind scales are not the same which can be slightly confusing for the viewer. To prevent this happening you can lock the scales for wind by setting the following tag to 1 –

```
<lockWindScales>0</ lockWindScales >
```

### **Session Time Outs**

Although Weather Display Live tries to be economical with data bandwidth it's not easy to control user's behaviour i.e. a user may leave Weather Display Live in their browser for a long time whilst not directly looking at it. To avoid this waste of bandwidth there is now a time out setting whereby you can enter the length of time of inactivity by the user before Weather Display Live "times out" and has to be "restarted". During time out Weather Display Live does not attempt to get new data thereby saving bandwidth. Restarting by the user simply requires a press of a button – it does not require the whole page to be refreshed. Activity is determined as any button presses, drop down list selections etc. Any such action will reset the time period.

To configure the duration of inactivity required to trigger the time out simply enter the required time in minutes in this tag –

```
<sessionTimeOut>15</sessionTimeOut>
```

by default the time out value is set to 15 minutes. Entering 0 will disable this feature.

### Weather Display Live session time out

To continue viewing live weather  
please click the button below.

[Continue](#)

In the WDL Configurator go to the Basics tab for change any session time out settings.

### **No Data Count**

Should your data feed fail to your webserver for whatever reason it may not be immediately obvious. To help in this situation Weather Display Live can keep track of the number of times that it has been unable to consecutively get new data.

If the number of failed attempts goes above the threshold a “No Data” warning is displayed in place of the station name alongside the “LED” at the top right of the display with the time of the last update alongside.

You can set the threshold with this tag –

```
<noDataCount>5</noDataCount>
```

By default this is set to 5 failed attempts.

In the WDL Configurator go to the Basics tab to change the no data count setting.

### **Auto Swap Heat Index / Windchill**

There are times when it is more appropriate to display heat index instruments rather than windchill. Since heat index values are not relevant below approx 17°C it is more appropriate to show windchill below this temperature and vice versa. Weather Display Live can now do this automatically for you.- set the following tag in the

wdlconfig.xml file to 1 to enable this feature –

```
<autoSwapHeatWindchill>1</autoSwapHeatWindchill>
```

If the max humidex goes above 17°C for the day then the windchill instrument will disappear and heat/humidex instrument will be shown instead in its place. This works best if you use the same instruments in exactly the same location. It will also swap the min/max text boxes for heat and windchill as well. This works for all windchill/heat instruments except dual linear and text only boxes.

If you have opted to show the ‘Heat’ button to allow users to switch between humidex and heat index this will be automatically removed when the windchill is being shown as there would be no heat instrument for the button to switch. If there are other buttons on screen they will automatically move up to fill any gap. When the heat index instrument returns so will the button.

In the WDL Configurator go to the Basics tab to change the autoswap setting.



## Configuring Weather Display to send data

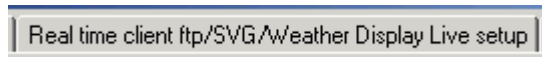
Weather Display Live gets its data from three small data files - clientraw.txt, clientrawextra.txt and clientrawdaily.txt - uploaded to the web server by Weather Display on a regular basis. To configure Weather Display you need to follow these steps:

1. On the Weather Display menu select: *Setup - Control Panel*

2. On the Control Panel select



3. Open this tab



4. On the screenshot below complete these required items (circled in red)

- Enable check box
- Weather Station Name

It is also recommended to set the two options circled in yellow below

- Rename file (may not be supported by all FTP/web servers)
- Restart instead of re-login

You can change other options, but it's probably a good idea to get the default configuration working and modify the options afterwards.

If you don't already have Weather Display's FTP set up to upload to your website, or want to put the clientraw.txt in a different location complete the items in the large circle at the bottom of the page.

Click on the OK button when done. Weather Display will start a separate program clientrawrealtimeftp.exe that shows in the system tray as



## Configuring Weather Display Live

Web Files Setup #1    Web Files Setup #2    Real time client ftp/SVG/Weather Display Live setup

### Real Time clientraw upload for the Client viewer/AVG/WDL setup

OK  
 Cancel

**Real time FTP upload for client viewer or AVG real time web page setup**  
Your weather station name to appear in the client viewer/real time avg web page

**My Weather Station**

This will upload the clientraw.txt file every 3 seconds, but you can also upload each minute (or slower) in the customise file creation and ftp upload setup.

I have only dial up connection, but I want it uploaded when I am connected to the internet automatically

Rename the file as a temporary file (recommended if you ftp server supports that)

Reset the FTP error count

I am running my own web server, and no FTP needed

Use the current weather from a Metar

Temperature to 2 dec pl.

Use last 3 hour baro trend instead of last 1 hour

Use 10 minute average wind direction

Upload the extra file every 5 minutes (instead of every 10 minutes)

Use average speed of hour for 24 hour graph

Do not show an icon in the system tray

Upload the webcam image as well

**Restart/reset interval**

Every 5 minutes

Every 10 minutes

Every 30 minutes

Restart instead of re-login

Use this filename on the FTP server instead

**Other real time clientraw.txt upload settings (not normally used)**

Use this FTP settings for the real time clientraw upload instead  
Note: normally uses the main internet connections setup

FTP Server

Username

Password

Remote directory

From the main internet connections setup

**2nd real time clientraw.txt upload settings**

Run a 2nd program, using these FTP settings

FTP Server

Username

Password

Remote directory

Name of the file

Use passive

## Integration with Lightning Software

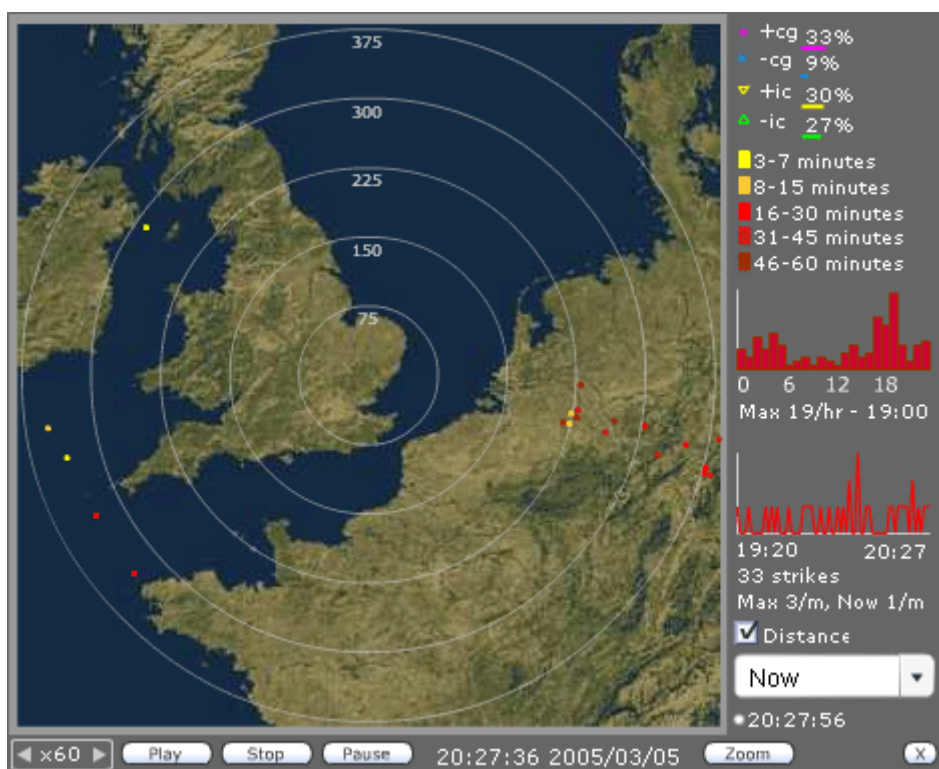
Introduced in v3\_02 is integration with lightning detection software from [Astrogenics](#) and [Aninoquisi](#).

If you are using Nexstorm from Astrogenics, the strike data can be updated and displayed at a rate of up to every 4 seconds giving you a near real time view of activity. You can even play back the recent lightning activity.

If you are using Lightning 2000 then you can incorporate the lightning strikes map into Weather Display Live and a link can be provided to a strike information text file.

### Configuring for Nexstorm

You can now display lightning maps in a very similar manner to the StormVue Java applet but from within Weather Display Live!



Make sure you're using the version of Weather Display 10.19k or later and that the file nextstorm.txt is being correctly uploaded to your website. If you wish to display the last 24 hour plots you need to be running Weather Display 10.21f or later and ensure that the 24 files named nextstormhour0.txt – nextstormhour23.txt are also being placed in the same location. Put this location into the <data> tag in the wdlconfig.xml file. Ensure you have 'nexstorm' in the <software> tag.

```
<lightning>
  <software>nexstorm</software>
  <data></data>
  <map></map>
  <mapZoom></mapZoom>
  <distanceRings>75 150 225 300 375</distanceRings>
  <distanceRingsZoom>50 100 150</distanceRingsZoom>
  <distanceRingsColor></distanceRingsColor>
  <showDistances>1</showDistances>
  <distanceUnits>miles</distanceUnits>
  <disclaimer></disclaimer>
  <refresh>15</refresh>
  <offset></offset>
  <range>375</range>
  <rangeZoom>187</rangeZoom>
</lightning>
```

### **Maps**

You'll need to specify a map for the background - this should be 350 x 350 pixels and in jpg (non progressive) format. The radius from your location in the centre should correspond to the range – normally 375 miles – but you can specify this if your installation can track storms from a greater distance. If you wish to calibrate the map in kilometres put ‘km’ into the `<distanceUnits>` tag. Put the location of the map in the `<map>` tag.

You can optionally put a ‘zoomed in’ map into the `<mapZoom>` tag with a corresponding value of the range in the `<rangeZoom>` tag. If you leave it blank then the zoom button will not be displayed.

### **Disclaimer, offset and refresh rates**

You can optionally choose to put a disclaimer message which will be displayed when the lightning window is first started. If you wish to not display a message just leave the tag empty.



If you have put an offset correction in the Nexstorm software you'll need to do the same for Weather Display Live by putting in an offset in degrees in the `<offset>` tag.

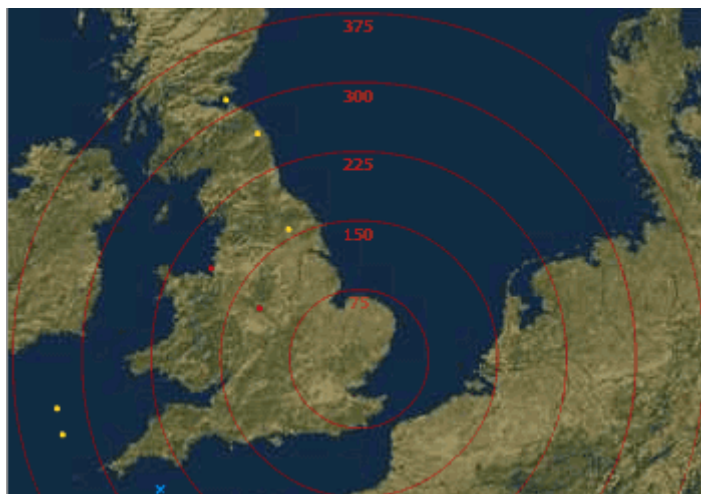
You can set the frequency with which the lighting data is refreshed by entering the appropriate value in the `<refresh>` tag. A minimum of 4 seconds is allowed and the default is 15.

### ***Configuring Weather Display to access Nexstorm***

To enable Weather Display to read the Nexstorm data make sure you've enabled the Flashgate IPC in Nexstorm: Options - FlashGate IPC - IPC strike enabled. Then in Weather Display tick the following: Setup - Extra settings/Misc Settings - I want to integrate with Nexstorm.

### ***Distance rings***

You can optionally choose to display distance rings and distance units for both the normal and the zoomed maps. You can even choose the colour of the rings to match your map colours. Here are the distance rings displayed in red –

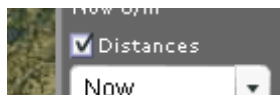


To choose the positioning of the rings enter the distance at which you wish them to appear in the `<distanceRings>` and `<distanceRingsZoom>` tags. Separate each ring distance with a space. You should enter in the same units that you've chosen in the `<distanceUnits>` tag and that you have set in Nexstorm.

You can choose to not display the distances on each ring by setting the `<showDistances>` tag to 0.

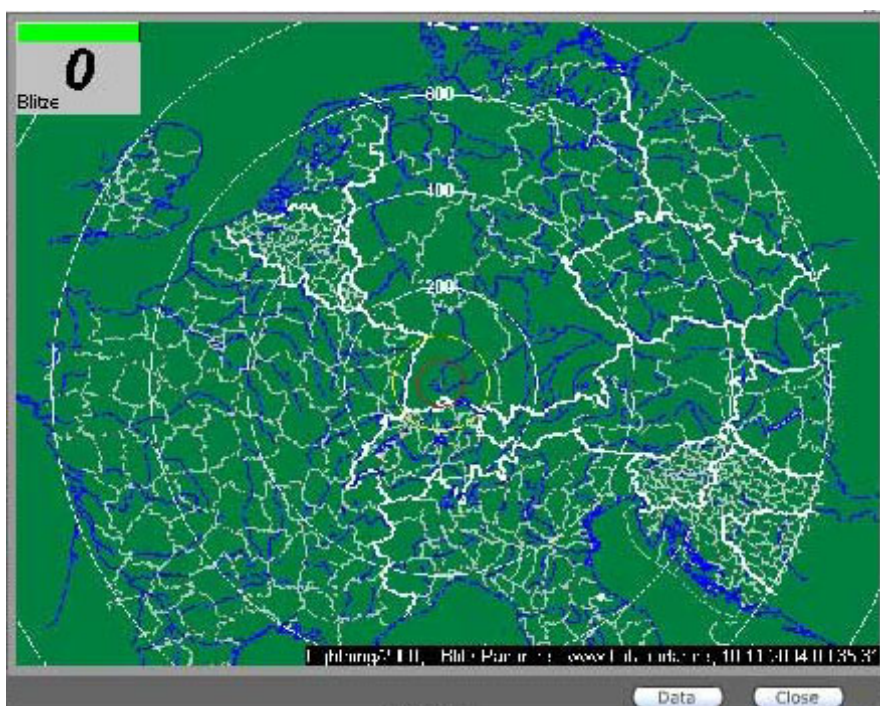
By default the rings are shown in white but you can choose whichever colour you wish by entering the appropriate colour value, in hex, in the `<distanceRingsColor>` tag. These values are readily available on the internet but, for example, white is FFFFFFFF, yellow is FFFF33, green is 33CC33, red is CC0000 and blue is 0000FF.

The visitor to your website can choose to turn the rings off or on by unticking the 'Distances' checkbox.



### **Configuring for Lightning 2000**

Weather Display Live can also display information from Lightning 2000 although not with the same sophistication. This is due to a live feed not being accessible as yet from Lightning 2000.



To configure Lightning 2000 in Weather Display Live first make sure you have 'l2k' entered in the `<software>` tag.

```
<lightning>
  <software>l2k</software>
  <data></data>
  <map></map>
  <distanceUnits></distanceUnits>
  <refresh>15</refresh>
  <offset></offset>
  <range></range>
</lightning>
```

In the `<map>` tag enter the location for the lightning strikes map.

You can set the frequency with which the lighting data is refreshed by entering the appropriate value in the `<refresh>` tag. A minimum of 4 seconds is allowed and the default is 15.

If you wish to let visitors view the `nowcast.txt` or `summary.txt` files put their location into the `<data>` tag.

You can optionally choose to put a disclaimer message which will be displayed when the lightning window is first started. If you wish to not display a message just leave the tag empty.

The other lightning tags are not used with Lightning 2000.

### ***Showing the Lightning button***

Finally make sure you're displaying the button 'lightning' to give users the option to see the lightning display –

```
<btnLightning>
  <show>1</show>
  <order>10</order>
</btnLightning>
```

Note that Weather Display Live will count strikes even if they are off the map. Just because they are not displayed doesn't mean they haven't occurred!

In the WDL Configurator go to the Lightning tab to change any of the lightning settings.

## MesoMap Live

Introduced with v4\_01 of Weather Display Live is MesoMap Live which provides you with a way of displaying weather data from Metars and Weather Display stations on a map. The version included with Weather Display Live is a reduced feature version of the full MesoMap Live incorporating support for one map only. The weather data is updated every 15 minutes from Weather Display stations and on a less frequent basis from Metars which vary depending upon the airport.

MesoMap Live is free to use in Evaluation mode for a limited number of stations for a fixed map of the UK. If you wish to configure your own map then you'll need to subscribe to a live data feed at <http://wxd.weather-watch.com/amember/signup.php>

To set up a map you will need to –

1. Configure your map location by entering longitude and latitude co-ordinates at the **MesoMap Live Management Centre (MMLMC)** [http://wxd.weather-watch.com/mml\\_sys/index.php](http://wxd.weather-watch.com/mml_sys/index.php)
2. Make a map to match your co-ordinates. Maps can be generated from the MesoMap Live Management Centre or can be found on the internet at places such as [http://www.aquarius.geomar.de/omc\\_intro.html](http://www.aquarius.geomar.de/omc_intro.html). Each map must be in jpg format (not progressive jpg). This is a requirement in Flash. For best results the map must be 350x350 pixels
3. Configuring the wdlconfig.xml file to match your map.

### **Testing in evaluation mode**

Place the file mapsmall.jpg in the same directory as Weather Display Live and make sure that the following tags haven't been changed –

```
<map>
  <number>1</number>
  <url>mapsmall.jpg</url>
</map>
<userName>evaluation</userName>
```

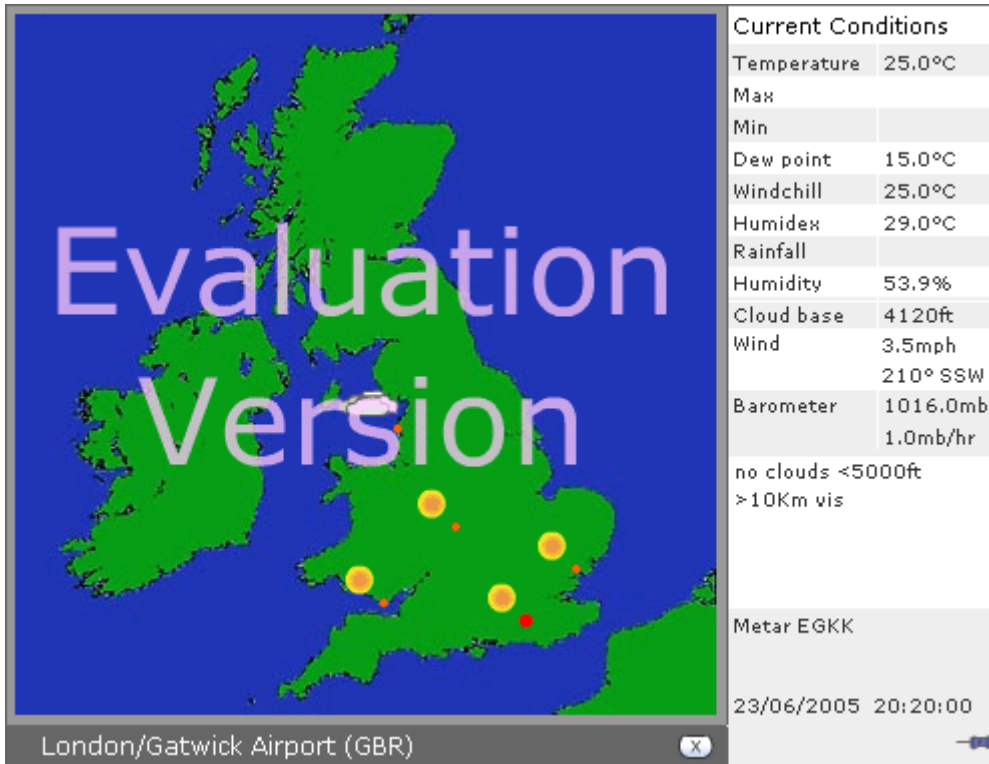
Then display the MesoMap Live button so that you can show MesoMap Live –

```
<btnMml>
  <show>1</show>
  <order>12</order>
</btnMml>
```

Ensure that the `<order>` number corresponds to the position at which you wish the button to appear. If you enable all 12 available buttons you will find that they won't all fit on the screen but this is an unlikely situation.

You should then be able to refresh Weather Display Live in your browser, click on the MesoMap button and see the evaluation version displaying a few stations on a map of the UK.





Note that you can keep the slide bar permanently open by clicking on the “push pin” at the bottom right of the screen.

### **Configuring your own map**

After signing up for a data feed at <http://wxd.weather-watch.com/amember/signup.php>, and hopefully sharing your own weather data with the world, you’ll be able to create your own map.

There are several sources of free maps on the internet with one of the best being at [http://www.aquarius.geomar.de/omc\\_intro.html](http://www.aquarius.geomar.de/omc_intro.html) You will probably need to make some adjustments to it in your favourite image editing program but the effort will be well worth it. Enter the location of your map into the `<url></url>` tags.

### **Setting the speed of weather icon rotation**

To change the speed of rotation between weather parameters enter the required speed in seconds into this line

```
<auto>5</auto>.
```

Change 5 to 10 for a pause of 10 seconds between each rotation. Setting to 0 will cause the rotation to stop and allow you to have a static display showing all parameters at once. You will need to amend the offsets in this situation to avoid icons overlapping.

### **Slide Bar**

You can choose whether the current conditions slide bar is always open or opens only when a station is ‘moused over’. Use the tag –

```
<slideBar>0</slideBar>
```

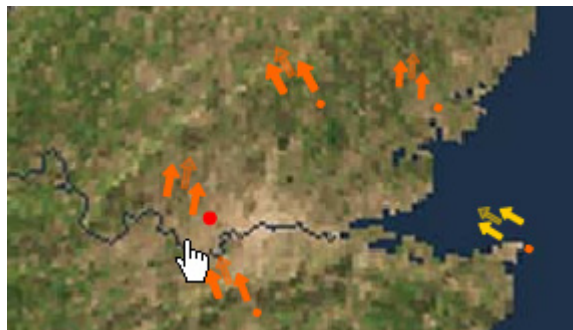
Set to 0 to keep it closed until ‘moused over’ or 1 for it to always be open.

### **Changing the Colour of the Station Markers**

By default the station markers are an “orangey-red” colour but this might not suit the colour of the map you are using. However this can be customised. To change the colour simply enter the colours for when “moused over” and normal in hexadecimal as you would do for a web page. For example to change the markers to a bright yellow and an orange when “moused over” you would change the tags –

```
<stationColour>#FFFF00</stationColour>  
<stationHighlight>#FF9900</stationHighlight>
```

Most image editors will show you the hexadecimal equivalents for colours and they are also readily available on the intranet.



### **Offsets and Size**

You can specify the offset from the station marker for the temperature, wind, pressure and condition icons. Default values have been used but if you change the size of icons or use a static rather than rotational display of information you may wish to make amendments. This can also be useful if you have a limited number of stations for your map, enlarging the icons can improve the look.

To change the offset simply enter values, corresponding to the number of pixels away from the station marker into the <x> and <y> tags.

The size tags are based on a percentage. Therefore to increase the size of an icon by 50% you would enter 150.

For example to increase the size of the temperature values by three quarters and move

them away from the station marker by twice the amount you would enter values such as –

```
<tempOffsetx>24</tempOffsetx>
<tempOffsety>24</tempOffsety>
<tempSize>175</tempSize>
```

Don't forget you can do this for individual weather parameters, either globally or for individual maps – see *Global and Individual Map Settings*.

### ***Fine Alignment of Maps***

Sometimes it can be difficult to ensure your map is accurately aligning with the location of stations. To assist you can tweak the position by +- 50 pixels globally or for individual maps. Simply enter the required offset into this tag then refresh your webpage to view the changes –

```
<fineAlignx>0</fineAlignx>
<fineAligny>0</fineAligny>
```

### ***Wind Arrows***

The wind arrows can be animated or static. By default they are set to be animated but can be changed to static by entering a 0 into this tag –

```
<windAnimated>1</windAnimated>
```

Wind arrows are not displayed if the wind direction is variable or the wind speed is 0.

### ***Linking to the Full Version of MesoMap Live***

If you have the full version of MesoMap Live then you can add a button to the screen which will launch a new browser window with the appropriate web page.

To do this enter your MesoMap Live web page into the `<fullVersionUrl></fullVersionUrl>` tag and enter the label that you want to appear on the button on the WDL MML screen into the `<fullVersionLabel></fullVersionLabel>` tag

```
<fullVersionUrl></fullVersionUrl>
<fullVersionLabel></fullVersionLabel>
```

Alternatively you can launch the full version directly from the MML button on the main screen of WDL and bypass the WDL MML screen completely. To do this enter 1 into the following tag –

```
<fullVersionFromButton>1</fullVersionFromButton>
```

If you wish to have more than one map, larger maps, more user controls and more customisable features then upgrade to the full version of MesoMap Live. See <http://www.weather-display.com/mmlive.php> for more information.

In the WDL Configurator go to the MesoMap Live tab to change any of the MesoMap Live settings.

## Customising the weather instruments

Introduced with v2 of Weather Display Live is the ability to configure the visibility, size and position of all the weather instruments and most of the other objects. Additionally, for many instruments you can choose whether to display the data on an instrument, as text or not display it at all. If you display the data as an instrument then you have the option of setting a hyperlink on it with tool tip type text of your choice. This is all set within the wdlconfig.xml file.

A number of pre-built wdlconfig.xml files are bundled in the installation package, to meet common requirements, but virtually any configuration can be achieved through amending the wdlconfig.xml file, or one of the other configuration files, yourself.

### **The instrument tag**

A typical instrument tag in the wdlconfig.xml file looks like this –

```
<instTemp>
  <x>520</x>
  <y>262</y>
  <show>1</show>
  <size>100</size>
  <url></url>
  <linkType></linkType>
  <title></title>
  <colour></colour>
  <instrument>temp</instrument>
</instTemp>
```

This particular set is for the main Temperature instrument.

- The `<x>` and `<y>` tags are co-ordinates specifying the position of the instrument (see *Accurately positioning instruments*).
- The `<show>` tag determines whether the instrument is displayed or not, 1 to show, 0 to hide.
- The `<size>` tag sets the percentage size of the instrument – 100 is normal size, 50 is half size, 200 is twice normal size etc.
- The `<url>` tag is the hyperlink to place on the instrument and the `<title>` tag is the associated tool tip type text. If you don't enter a hyperlink then only a tool tip is displayed.
- The `<title>` tag is the tooltip that appears when you hover over the instrument with the mouse.
- The `<linkType>` is active if a URL has been entered into the `<url>` tag. The values are as follows -

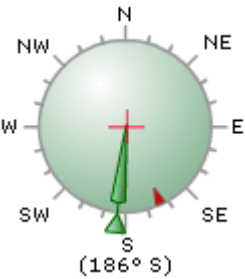
- 0 - Blank - opens link in a new window
- 1 - Self - opens link in the current frame in the current window
- 2 - Parent - opens link in the parent of the current frame
- 3 - Top - opens link in the top-level frame in the current window

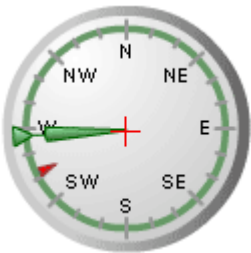
- The <colour> tag is specific to this instrument and determines the colour of mercury in the thermometer. If left blank the colour changes dependent upon temperature or else a hexadecimal value can be entered for a fixed colour.
- Finally the <instrument> tag determines how the data will be shown, the options for this instrument being temp (as a thermometer), textLinear for a gauge style instrument or textTemp (as text). Note that this is case sensitive.

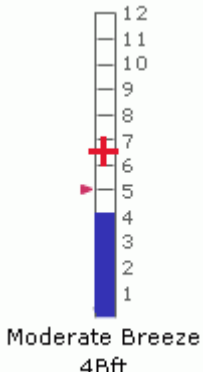
Some data readings can be displayed as animated dials or gauges, or as text, whilst others can only be displayed as instruments (the wind dials) or as text (the barometer). There are also some objects which are text only, by nature, but can still be placed anywhere on the screen, such as the rainfall rate, the current conditions or the minimum/maximum temperature readings.

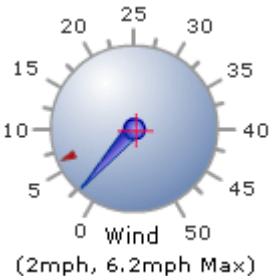
### The weather instrument options


+ indicates the registration point (see *Accurately positioning instruments*)


	<b>Description</b>	Wind Direction – open style instrument
	<b>Tag</b>	<instWindDir>
	<b>Instrument options</b>	windDirOpen windDirGauge textWindDir (text only)
	<b>Notes</b>	Red arrow indicates the averaged wind direction. Set <hideText> to 1 to hide the text beneath the instrument. Entering 1 into the <options> tag will show degrees instead of compass points. Scale colour can be changed in Premium version <colour>.

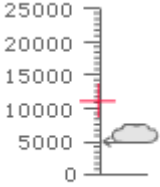
	<b>Description</b>	Wind Direction – gauge style instrument
	<b>Tag</b>	<instWindDir>
	<b>Instrument options</b>	windDirOpen windDirGauge textWindDir (text only)
	<b>Notes</b>	Red arrow indicates the averaged wind direction. Set <hideText> to 1 to hide the text beneath the instrument. Entering 1 into the <options> tag will show degrees instead of compass points. Scale colour can be changed in Premium version <colour>.

	<b>Description</b>	Wind Speed – Beaufort instrument
	<b>Tag</b>	<instWindBeaufort>
	<b>Instrument options</b>	Enter 0 – 2 in the <options> tag for the following - 0. Text and scale displayed. 1. Scale only 2. Text only
	<b>Notes</b>	Red arrow indicates the maximum for the day averaged wind speed.

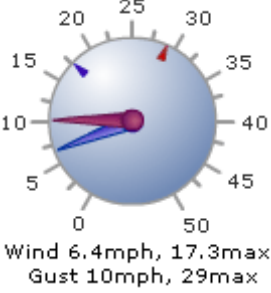
	<b>Description</b>	Average Wind Speed, or Gust Wind Speed. Open style instrument
	<b>Tag</b>	<instWindAvg> <instWindGust>
	<b>Instrument options</b>	windSpeedOpen windSpeedGauge textWindAvg (text only) textWindGust (text only)
	<b>Notes</b>	Red arrow indicates the maximum wind speed or gust of the day. . Set <hideText> to 1 to hide the text beneath the instrument Scale colour can be changed in Premium version <colour>.


	<b>Description</b>	Average Wind Speed, or Gust Wind Speed. Gauge style instrument
	<b>Tag</b>	<instWindAvg> <instWindGust>
	<b>Instrument options</b>	windSpeedOpen windSpeedGauge textWindAvg (text only) textWindGust (text only)
	<b>Notes</b>	Red arrow indicates the maximum wind speed or gust of the day. Set <hideText> to 1 to hide the text beneath the instrument Scale colour can be changed in Premium version <colour>.


 <p>Wind 4.4mph, 17.3max Gust 7mph, 29max</p>	<b>Description</b>	Dual Wind instrument indicating Average Wind Speed and Gust Wind Speed. Gauge style instrument
	<b>Tag</b>	<instWindDual>
	<b>Instrument options</b>	windSpeedDualOpen windSpeedDualGauge
	<b>Notes</b>	Set <hideText> to 1 to hide the text beneath the instrument Additionally you can display temperature and wind direction on the dial. Enter 1 into the <options> tag for wind direction, 2 for temperature and 3 for both Scale colour can be changed in Premium version <colour>.

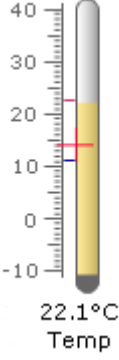
 <p>5153ft Cloud base</p>	<b>Description</b>	Cloud Base Height
	<b>Tag</b>	<instCloudBase>
	<b>Instrument options</b>	This instrument only, text option not available
	<b>Notes</b>	

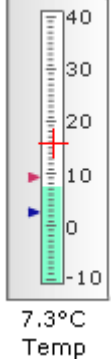


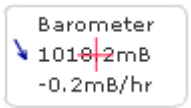
	<b>Description</b>	Dual Wind instrument indicating Average Wind Speed and Gust Wind Speed. Open style instrument
	<b>Tag</b>	<instWindDual>
	<b>Instrument options</b>	windSpeedDualOpen windSpeedDualGauge
	<b>Notes</b>	Set <hideText> to 1 to hide the text beneath the instrument. Additionally you can display temperature and wind direction on the dial. Enter 1 into the <options> tag for wind direction, 2 for temperature and 3 for both Scale colour can be changed in Premium version <colour>.

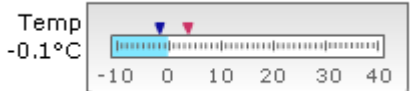
	<b>Description</b>	Weather Icons
	<b>Tag</b>	<instIcons>
	<b>Instrument options</b>	Icon only, text option not available
	<b>Notes</b>	The lightning activity warning icon is displayed here when triggered.

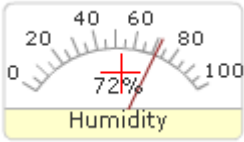
	<b>Description</b>	Rainfall rate / days without rain
	<b>Tag</b>	<txtRainRate>
	<b>Instrument options</b>	<showRainRateHour>
	<b>Notes</b>	Rainfall rate appears during and after rain. The total number of days without rain will be shown if more than 3. Setting the tag <showRainRateHour> to 1 will display the rate /hour.

	<b>Description</b>	Temperature, WindChill, Heat, Dew point, Indoor temperature, Apparent temperature, extra sensors.
	<b>Tag</b>	<pre>&lt;instTemp&gt; &lt;instWindChill&gt; &lt;instHeat&gt; &lt;instDew&gt; &lt;instTempIndoor&gt; &lt;instApparent&gt; &lt;instTempSoil&gt;</pre>
	<b>Instrument options</b>	<pre>temp (thermometer) tempLinear (bar) tempLinearHorizontal (bar) tempGauge (gauge) textTemp (text only)</pre>
	<b>Notes</b>	<p>&lt;colour&gt; tag will set colour of 'mercury' – enter a value in hexadecimal. 'Mercury' will auto colour if tag left blank. Instrument options tag is case sensitive!</p>


	<b>Description</b>	Temperature, WindChill, Heat, Dew point, Indoor temperature, Apparent temperature. Bar style instrument, extra sensors.
	<b>Tag</b>	<pre>&lt;instTemp&gt; &lt;instWindChill&gt; &lt;instHeat&gt; &lt;instDew&gt; &lt;instTempIndoor&gt; &lt;instApparent&gt; &lt;instTempSoil&gt;</pre>
	<b>Instrument options</b>	<pre>temp (thermometer) tempLinear (bar) tempLinearHorizontal (bar) tempGauge (gauge) textTemp (text only)</pre>
	<b>Notes</b>	<p>&lt;colour&gt; tag will set colour of 'mercury' – enter a value in hexadecimal. 'Mercury' will auto colour if tag is left blank. Instrument options tag is case sensitive!</p>


	<b>Description</b>	Barometer including direction of change icon and rate of change (text and mercury version only).
	<b>Tag</b>	<instBarometer>
	<b>Instrument options</b>	textBarometer gaugeBarometer (gauge) meterBarometer (displays meter below) mercuryBarometer (displays mercury barometer below)
	<b>Notes</b>	Entering 1 into the <options> tag will display QNH instead of “Barometer”, 2 will display QFH. The tooltip is removed in both these situations and it’s recommended you enter your own description in the tool tip.

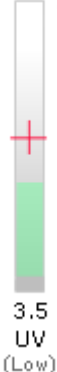
	<b>Description</b>	Temperature, WindChill, Heat, Dew point, Indoor temperature, Apparent temperature, extra sensors. Bar style horizontal instrument
	<b>Tag</b>	<instTemp> <instWindChill> <instHeat> <instDew> <instTempIndoor> <instApparent> <instTempSoil>
	<b>Instrument options</b>	temp (thermometer) tempLinear (bar) tempLinearHorizontal (bar) tempGauge (gauge) textTemp (text only)
	<b>Notes</b>	<colour> tag will set colour of ‘mercury’ – enter a value in hexadecimal. ‘Mercury’ will auto colour if the tag is left blank. Instrument options tag is case sensitive!

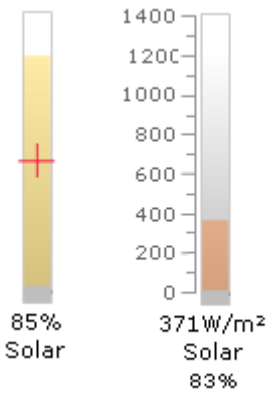
	<b>Description</b>	VU style meter for Humidity, Indoor humidity, Barometer
	<b>Tag</b>	<instHumidity> <instHumidityIndoor> <instBarometer>
	<b>Instrument options</b>	meterHumidity (meter) meterBarometer (meter) textHumidity (text only)
	<b>Notes</b>	When displaying barometric pressure entering 1 into the <options> tag will display QNH instead of “Barometer”, 2 will display QFH. The tooltip is removed in both these situations and it’s recommended you enter your own description in the tool tip. Instrument options tag is case sensitive! Scale colour can be changed in Premium version <colour>.

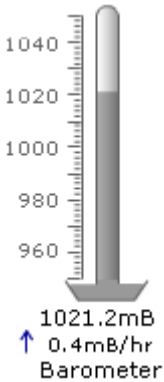
	<b>Description</b>	Rain tank Daily, Monthly, Annual
	<b>Tag</b>	<instRainDay> <instRainMonth> <instRainYear>
	<b>Instrument options</b>	rain (tank) rainLinear (bar) textRain (text only)
	<b>Notes</b>	Instrument options tag is case sensitive!

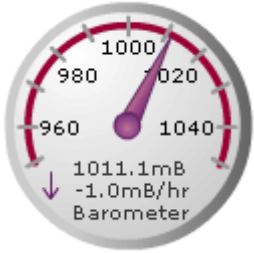
<p>Scattered clouds at 4500 ft</p> 	<b>Description</b>	Current Conditions text.
	<b>Tag</b>	<txtConditions>
	<b>Instrument options</b>	None
	<b>Notes</b>	This object can hold several lines of text which is why the registration point appears too low.

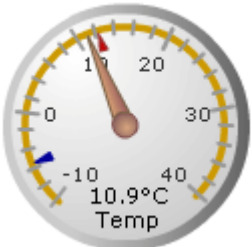
	<b>Description</b>	Text logo for rain tanks
	<b>Tag</b>	<txtRainFall>
	<b>Instrument options</b>	None
	<b>Notes</b>	This object has an <options> tag which determines whether the lines appear either side of the text.


	<b>Description</b>	UV Bar
	<b>Tag</b>	<instUV>
	<b>Instrument options</b>	None
	<b>Notes</b>	Last 24 hour UV graph will be displayed if <show> is set to 1.

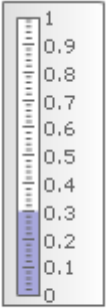
	<b>Description</b>	Solar Bar
	<b>Tag</b>	<instSolar>
	<b>Instrument options</b>	None
	<b>Notes</b>	Enter 0 – 9 in the <options> tag for the following combination of bar styles and values: For options 0 – 4 the Solar bar will be displayed in percent along with - 0. Percent. 1. W/m2 value. 2. Percent and W/m2 value 3. Percent and W/m2 value and sunshine hours 4. As above but different order For options 5 – 8 the Solar bar will be displayed in W/m2 along with - 5. W/m2. 6. Percent value. 7. W/m2 and Percent value 8. Percent and W/m2 value and sunshine hours 9. As above but different order

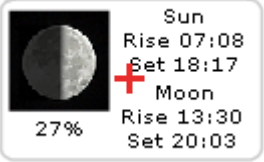
	<b>Description</b>	Mercury style barometer including direction of change icon and rate of change.
	<b>Tag</b>	<instBarometer>
	<b>Instrument options</b>	mercuryBarometer gaugeBarometer (gauge) meterBarometer (displays meter above) textBarometer (displays text barometer above)
	<b>Notes</b>	Entering 1 into the <options> tag will display QNH instead of “Barometer”, 2 will display QFH. The tooltip is removed in both these situations and it’s recommended you enter your own description in the tool tip. Instrument options tag is case sensitive!

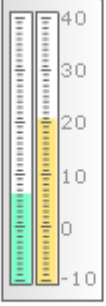
	<b>Description</b>	Gauge style barometer including direction of change icon and rate of change.
	<b>Tag</b>	<instBarometer>
	<b>Instrument options</b>	gaugeBarometer (gauge) mercuryBarometer meterBarometer (displays meter above) textBarometer (displays text barometer above)
	<b>Notes</b>	Entering 1 into the <options> tag will display QNH instead of “Barometer”, 2 will display QFH. The tooltip is removed in both these situations and it’s recommended you enter your own description in the tool tip. Instrument options tag is case sensitive! Scale colour can be changed in Premium version <colour>.

	<b>Description</b>	Gauge for Temperature, WindChill, Heat, Dew point, Indoor temperature, Apparent temperature, extra sensors.
	<b>Tag</b>	<pre>&lt;instTemp&gt; &lt;instWindChill&gt; &lt;instHeat&gt; &lt;instDew&gt; &lt;instTempIndoor&gt; &lt;instApparent&gt; &lt;instTempSoil&gt;</pre>
	<b>Instrument options</b>	<pre>temp (thermometer) tempLinear (bar) tempLinearHorizontal (bar) tempGauge (gauge) textTemp (text only)</pre>
	<b>Notes</b>	<p>Instrument options tag is case sensitive!</p> <p>Scale colour can be changed in Premium version &lt;colour&gt;.</p>

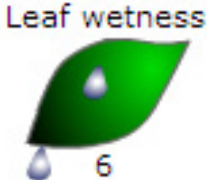
	<b>Description</b>	Minimum / Maximum readings for Temperature, Indoor temperature, Apparent temperature, WindChill, Heat, Barometer, Dew, Extra sensors
	<b>Tag</b>	<pre>&lt;txtTempMinMax&gt; &lt;txtTempIndoorMinMax&gt; &lt;txtTempApparentMinMax&gt; &lt;txtWindChillMinMax&gt; &lt;txtHeatMinMax&gt; &lt;txtBaroMinMax&gt; &lt;txtDewMinMax&gt; &lt;txtInstExtra1TempMinMax&gt; to &lt;txtInstExtra8TempMinMax&gt;</pre>
	<b>Instrument options</b>	None
	<b>Notes</b>	Text only

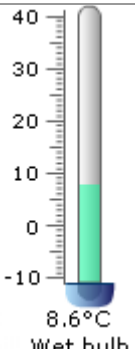
 <p>0.3mm Daily</p>	<b>Description</b>	Rain bar Daily, Monthly, Annual
	<b>Tag</b>	<instRainDay> <instRainMonth> <instRainYear>
	<b>Instrument options</b>	rain (tank) rainLinear (bar) textRain (text only)
	<b>Notes</b>	Instrument options tag is case sensitive!

	<b>Description</b>	Sun and Moon times
	<b>Tag</b>	<instSunMoon>
	<b>Instrument options</b>	Set to 1 to show text only, 2 for moon only.
	<b>Notes</b>	Red LED is shown when the moon is adjusting to the correct illumination.

 <p>6.1°C/20.6°C Soil/Indoor Temp</p>	<b>Description</b>	Dual temperature
	<b>Tag</b>	<instDualTemp1> <instDualTemp2> etc.
	<b>Instrument options</b>	tempDualLinear tempDualLinearHorizontal
	<b>Notes</b>	You can determine what to display by entering one of the following into the tags <temp1> and <temp2>. Choose from – Temp, Dew, Heat, WindChill, Apparent, TempSoil, TempIndoor or any of the extra sensors when displaying temperature – Extra1 - Extra16. See below for more on this instrument.



	<b>Description</b>	Leaf Wetness
	<b>Tag</b>	<instLeafWetness>
	<b>Instrument options</b>	None
	<b>Notes</b>	Leaf wetness is animated based upon the value. You can set the first value that triggers raindrops by setting the <options> tag to a value between 1 and 10. There are 3 degrees of severity of rain drops and the steps between each one depend upon the setting of the initial trigger value.

	<b>Description</b>	Wet Bulb
	<b>Tag</b>	<instWetBulb>
	<b>Instrument options</b>	None
	<b>Notes</b>	

Not applicable	<b>Description</b>	Extra Sensors
	<b>Tag</b>	<instExtra1> to <instExtra16>
	<b>Instrument options</b>	temp (thermometer) tempLinear (temp gauge) textTemp (text only) meterHumidity (meter) textHumidity (text only)
	<b>Notes</b>	There is an additional tag called <label></label> which is the text that appears below the instrument.

<p>Fire Weather Index</p>	Description	Fire weather instrument
	Tag	<instFwi>
	Instrument options	None
	Notes	

The extra sensor tags can be used to display a wide range of instruments or text, depending upon what is fed into those inputs on Weather Display. To use them effectively though you will have to customise Weather Display Live as they do not appear on the basic Weather Display Live screen.

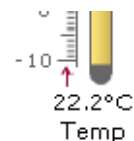
The <instExtra1> tags map to extra sensors like this –

- <instExtra1> Extra Temp Sensor1
- <instExtra2> Extra Temp Sensor2
- <instExtra3> Extra Temp Sensor3
- <instExtra4> Extra Temp Sensor4
- <instExtra5> Extra Temp Sensor5
- <instExtra6> Extra Temp Sensor6
- <instExtra7> Extra Hum Sensor1
- <instExtra8> Extra Hum Sensor2
- <instExtra9> Extra Hum Sensor3
- <instExtra10> Extra Temp Sensor7
- <instExtra11> Extra Temp Sensor8
- <instExtra12> Extra Hum Sensor4
- <instExtra13> Extra Hum Sensor5
- <instExtra14> Extra Hum Sensor6
- <instExtra15> Extra Hum Sensor7
- <instExtra16> Extra Hum Sensor8

### Trend Arrows

Most of the main temperature and humidity instruments include arrows indicating the trend of the value shown. These can be globally hidden by setting the following tag to 1 –

```
<hideTrendArrows>0</hideTrendArrows>
```

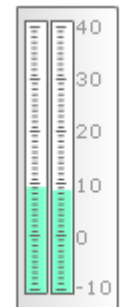
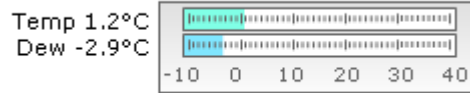


## Dual Temperature Instrument

The dual temperature instrument provides a lot of flexibility as to what is displayed. The instrument can be used as many times as you wish on the display and you can choose from 6 different temperature options plus any of the 16 extra sensors.

The basic tags are as follows –

```
<instDualTemp1>
  <x>50</x>
  <y>262</y>
  <show>0</show>
  <size>100</size>
  <url></url>
  <title></title>
  <colour></colour>
  <temp1>Dew</temp1>
  <temp2>Temp</temp2>
  <instrument>tempDualLinear</instrument>
</instDualTemp1>
```



Dew/Temp

If you wish to add more than one instrument simply add the group of tags above again to the wdlconfig.xml file but increment the tag to be `<instDualTemp2>` or `<instDualTemp3>` etc. as required.

The instrument tag can be either `tempDualLinear` or `tempDualLinearHorizontal` – both styles are shown above. Note that the scales are permanently locked so it's not advisable to display two values which exceed a difference of 50°C.

You can choose which temperature values to display by entering the appropriate values into the tags –

```
<temp1>Dew</temp1>
<temp2>Temp</temp2>
```

In this example the instrument will display Dew on the left and Temperature on the right but you can choose from –

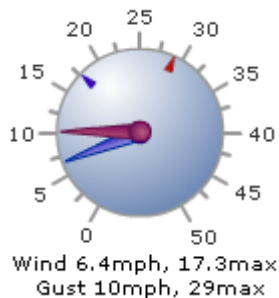
- Temp
- Apparent
- Dew
- Heat
- WindChill
- TempIndoor
- TempSoil
- Extra1
- to
- Extra16

When you use one of the 16 extra sensors the label shown corresponds to the label value you entered in the wdlconfig.xml file for that extra sensor tag.

In the WDL Configurator go to the Dual Temperature tab to change any of the above settings.

### **Dual Wind Instrument**

There is a choice of 2 dual wind instruments available which you can use to help save screen space. Entering 1 into the `<hideText>0</hideText>` tag will remove the text beneath the instruments, also saving space.



Additionally you can display temperature and wind direction on the dial. Enter 1 into the `<options>` tag for wind direction, 2 for temperature and 3 for both. This would make WDL suitable for 'widget' type use.

### **Snowfall**

You can enter details of snowfall into Weather Display and then optionally choose to display the information from Weather Display Live. There are 4 instrument tags for snowfall as follows –

```
<txtSnowDepth>  
  <x>50</x>  
  <y>300</y>  
  <show>0</show>  
  <size>100</size>  
  <url></url>  
  <title>Snow depth</title>  
</txtSnowDepth>
```

Snow today  
10mm

```
<txtSnowToday>
  <x>50</x>
  <y>100</y>
  <show>0</show>
  <size>100</size>
  <url></url>
  <title></title>
</txtSnowToday>
```

```
<txtSnowMonth>
  <x>50</x>
  <y>50</y>
  <show>0</show>
  <size>100</size>
  <url></url>
  <title></title>
</txtSnowMonth>
```

```
<txtSnowSeason>
  <x>50</x>
  <y>250</y>
  <show>0</show>
  <size>100</size>
  <url></url>
  <title></title>
</txtSnowSeason>
```

When the `<show>1</show>` tag is set to 1 then a text box is displayed indicating the snowfall for the day, month or season as appropriate. Note that you'll need to position the text box at a suitable place on the screen.

You can choose to show a 'snow' button which will allow your users to choose between inches and centimetres. See the earlier section in this guide about configuring buttons and initial units.

### ***Evapo-transpiration***

The current evapo-transpiration (ET) rate is fed in the clientrawextra.txt file from Weather Display which you can then display as text in Weather Display Live. You can choose the units to display from mm or inches. The units will change with the "Rain" units button.

ET 0.8mm
-------------

```
<txtET>
  <x>50</x>
  <y>100</y>
  <show>1</show>
  <size>100</size>
  <url></url>
  <title></title>
</txtET>
```

### **Soil Moisture**

Soil moisture can be displayed in a text box similar to the evapo-transpiration box above. The units are fixed as cb and the tags are –

```
<txtSoilMoisture>
  <x>55</x>
  <y>310</y>
  <show>0</show>
  <size>100</size>
  <url></url>
  <title></title>
</txtSoilMoisture>
```

### **Video Playback**

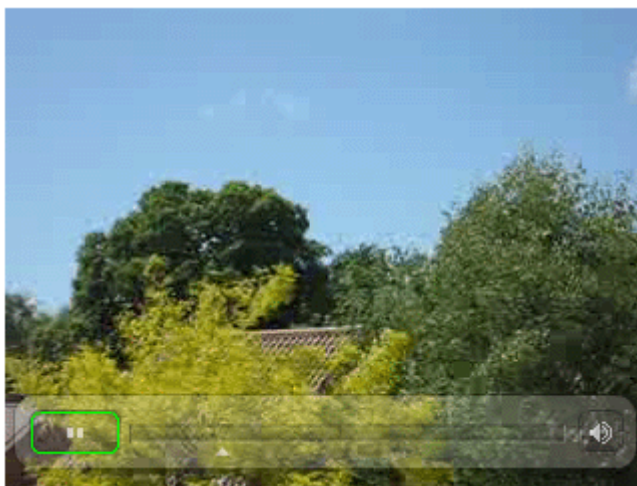
Weather Display Live can playback video files in the .flv Flash video format. The player can be embedded in the main screen and you can choose whether the video file should start automatically or wait for the user to manually start the playback (the default).

Tooltips and links can be added to the player as required. The playback controls appear when the player is moused over. The video file should have the size 320 x 240 for the best quality but can be resized as required in the normal way. The full path to the .flv file must be in the <path> tag. For automatic play enter 1 into the <options> tag. A sample .flv file (windyday.flv) is included in the WDL installation.

In the WDL Configurator the instrument is referred to as the Video player.

The tags are as follows –

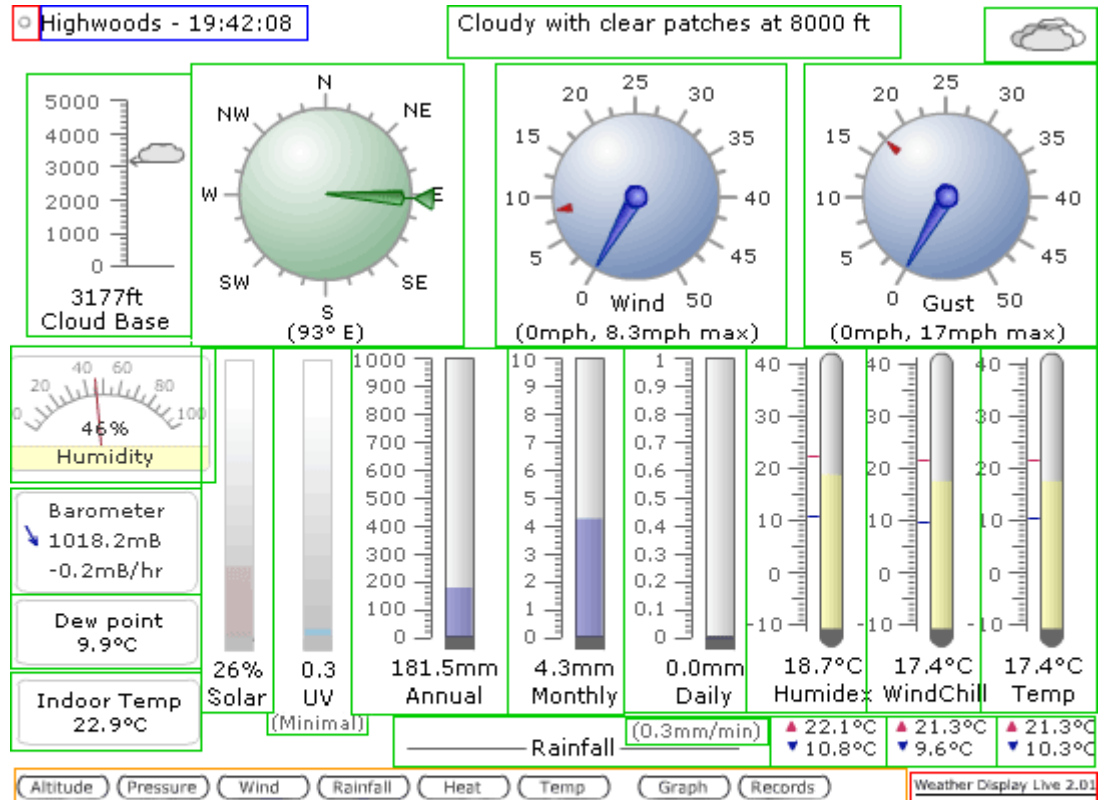
```
<instVideo>  
  <x>55</x>  
  <y>310</y>  
  <show>0</show>  
  <size>100</size>  
  <url></url>  
  <title></title>  
  <path></path>  
  <options>0</options>  
</txtSoilMoisture>
```



*Windyday.flv* – the sample flash video file.

### Moving Instruments on the Screen

Each of the instrument or text objects can be moved or positioned according to this picture –

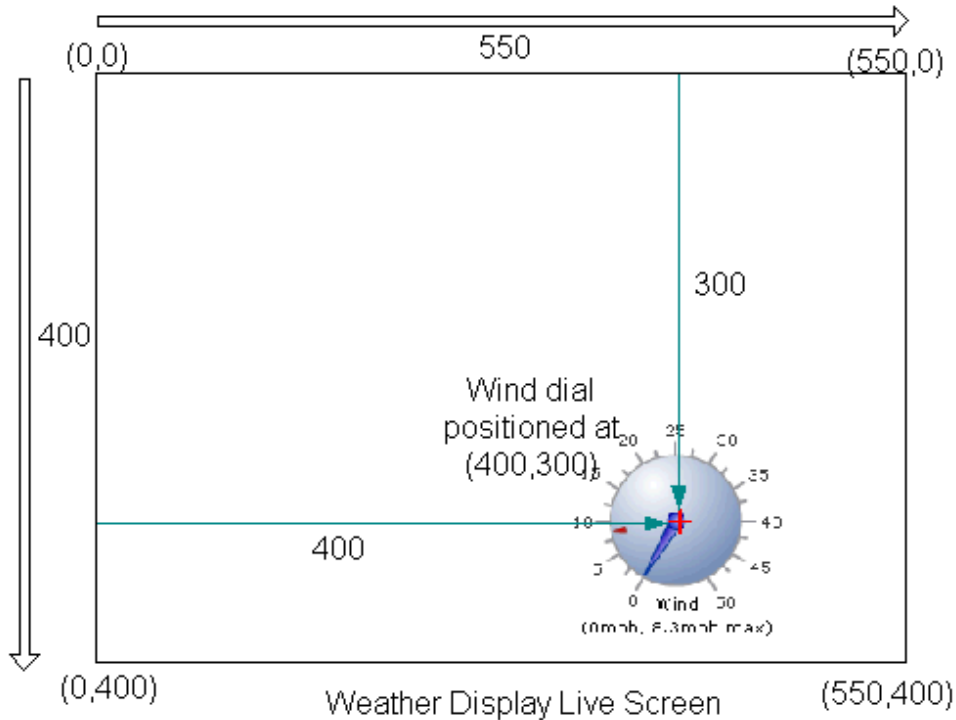




### **Accurately positioning instruments**

The screen is based upon a blank screen 550 units wide by 400 units deep. The position of each weather object is based upon the x,y co-ordinates where the top left corner is 0,0.

The following diagram shows this graphically –



A weather object, perhaps a wind speed instrument, has been positioned in the lower right of the screen, where its co-ordinates are (400,300).

Therefore the tag in the wdlconfig.xml file would look like this –

```
<instWindAvg>
  <x>400</x>
  <y>300</y>
  <show>1</show>
  <size>100</size>
  <url></url>
  <title></title>
</instWindAvg>
```

All objects have a registration point, usually directly in the middle, which corresponds to where they are positioned. The registration point of each object is shown in the list of objects above by the red cross +. In this manner all the objects on the Weather Display Live screen can be accurately positioned.

Positioning instruments is easy using the WDL Configurator Instruments tab.

## Advanced Styling With The Premium Version

### Custom Icons

In the Premium version of Weather Display Live you can use your own weather icon symbols. You can use icons in jpg, gif, png or swf format and enter the full path to their locations on your website in the following tags –

```
<icons>
  <iconOvercast></iconOvercast>
  <iconWindy></iconWindy>
  <iconRain></iconRain>
  <iconWindyRain></iconWindyRain>
  <iconPartCloud></iconPartCloud>
  <iconCloud></iconCloud>
  <iconHaze></iconHaze>
  <iconSun></iconSun>
  <iconSnow></iconSnow>
  <iconThunder></iconThunder>
  <iconFog></iconFog>
  <iconMist></iconMist>
  <iconClearNight></iconClearNight>
  <iconPartCloudNight></iconPartCloudNight>
  <iconDrizzle></iconDrizzle>
  <iconLightningAlert></iconLightningAlert>
  <iconTornado></iconTornado>
</icons>
```

So, for example, if you have an icon for windy weather, called windy.gif, stored in your images folder, you would enter the following –

```
<iconWindy>http://www.mywebsite.com/images/windy.gif
</iconWindy>
```

### Text Styling

In the Premium version of Weather Display Live you can use a standard html cascading style sheet (css) to format the text in boxes, on button and on instruments.

This give virtually limitless possibilities as you can change most aspects of text including colour, weight, size, etc.

A default style sheet called wdlstyles.css is available in the download package or you can create your own. In the wdlconfig.xml file enter the full path to the location on your website. If you've placed it in the folder 'stylesheets' then you would enter the following –

```
<styleSheet>http://www.mywebsite.com/stylesheets/wdlstyles.css
</styleSheet>
```

Within the style sheet each instrument or object has its own class to which you can apply different styling. For example to apply a blue italicised style to the cloudbase text you would enter –

```
.cloudBase{
    color: #0000CD;
    font-style: italic;
}
```

Note that the colour value must be in hex format.

To apply a slightly darker blue colour to the cloudbase scale you might enter the following –

```
.cloudBaseScale{
    color: #00008B;
}
```

You cannot currently change the styling for the webcam, lightning, records, graphs and MML Lite screens but these screens have fixed colour backgrounds so the need to do so is less.

### ***Heartbeat Indicator & Station Name***

Also with the Premium version you can choose whether to display and where to position the heartbeat indicator and station name text.



The relevant tags are –

```
<heartbeat>
  <x>10</x>
  <y>10</y>
  <show>1</show>
  <size>50</size>
</heartbeat>
<stationName>
  <x>15</x>
  <y>1</y>
  <show>1</show>
  <size>100</size>
</stationName>
```

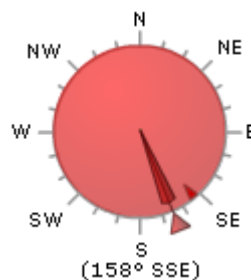
### ***Weather Display Live Version Link***

In the standard version of Weather Display Live there is a permanent link to the Weather Display Live site with the version and text WDL vX.XX. This is configurable in the Premium version and by default does not appear. However you can choose to display it and where to position it should you so wish. The tag is –

```
<wdlLogo>
  <x>533</x>
  <y>390</y>
  <show>0</show>
  <size>100</size>
</wdlLogo>
```

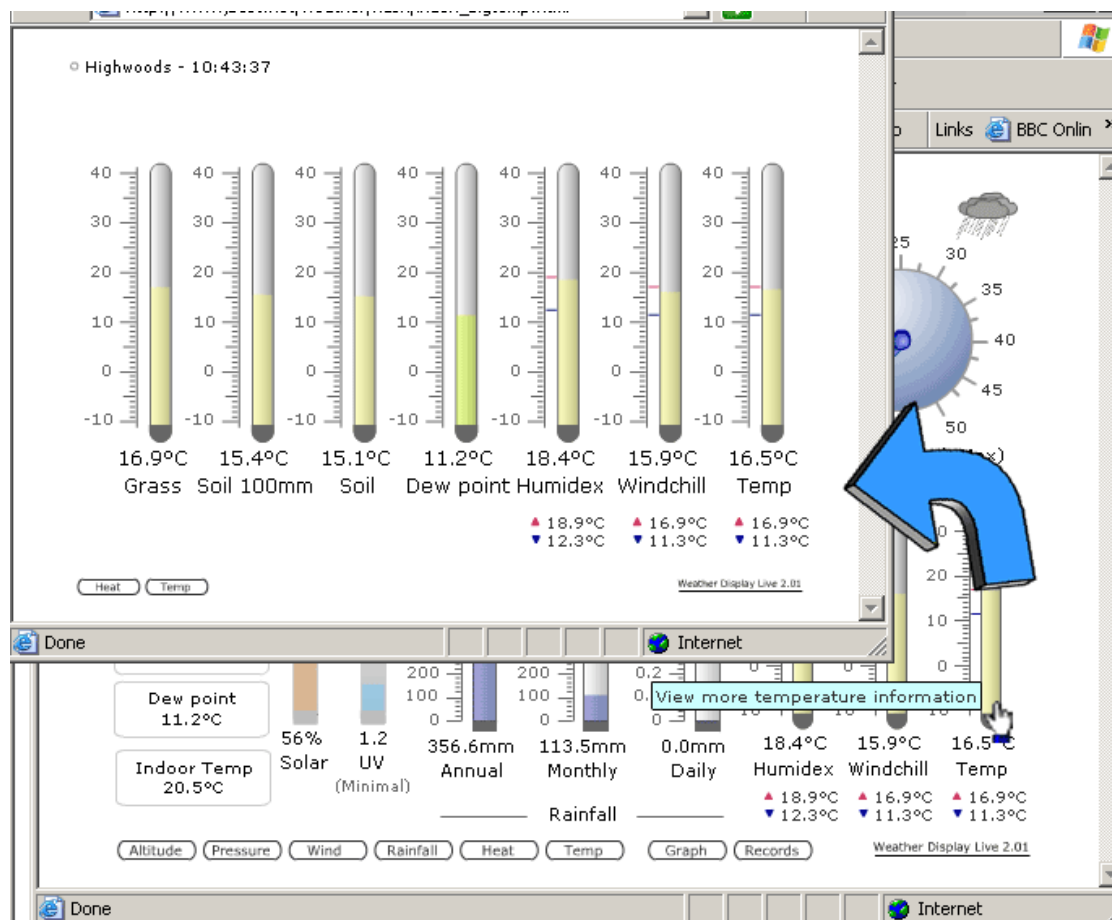
### ***Gauge Scale Colour***

Premium version users can change the scale colour tint for the wind open and gauge instruments, the gauge barometer and the humidity meter. In the WDL Configurator simply change the colour of the instrument in the Instrument tab. In the wdlconfig.xml file enter the required colour into the <colour> tag.



## More configuration possibilities

The ability to create hyperlinks on instruments brings the possibility of having a main screen which can then offer links to further screens showing more information about that particular measurement. For example you may have a basic Weather Display Live screen which has a link on the main temperature thermometer. When this link is clicked it opens a new web page with a different Weather Display Live screen containing further thermometers for soil temperature, grass temperature etc. which can be set up using the extra sensors. There is no limit to the number of Weather Display Live instances that can be used on one website.



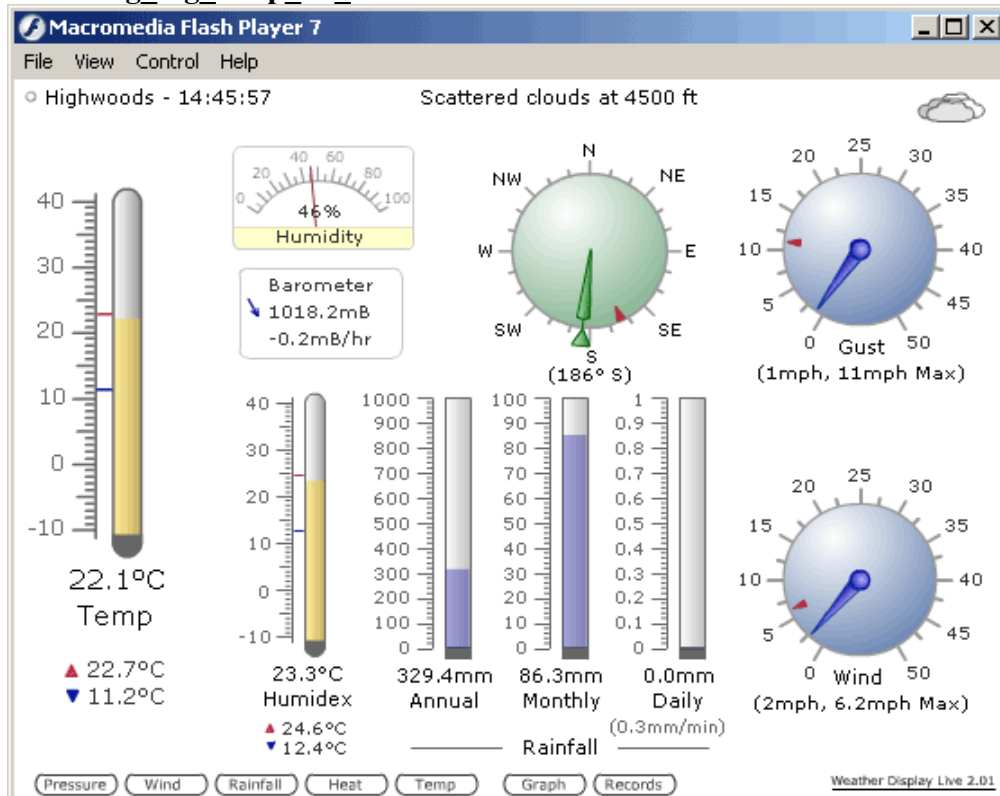
## Pre-built configuration templates

The download package contains a folder called 'templates'. Within it are several wdlconfig.xml files offering a range of Weather Display Live screens. These can be used as they are or used as the basis for a customised display.

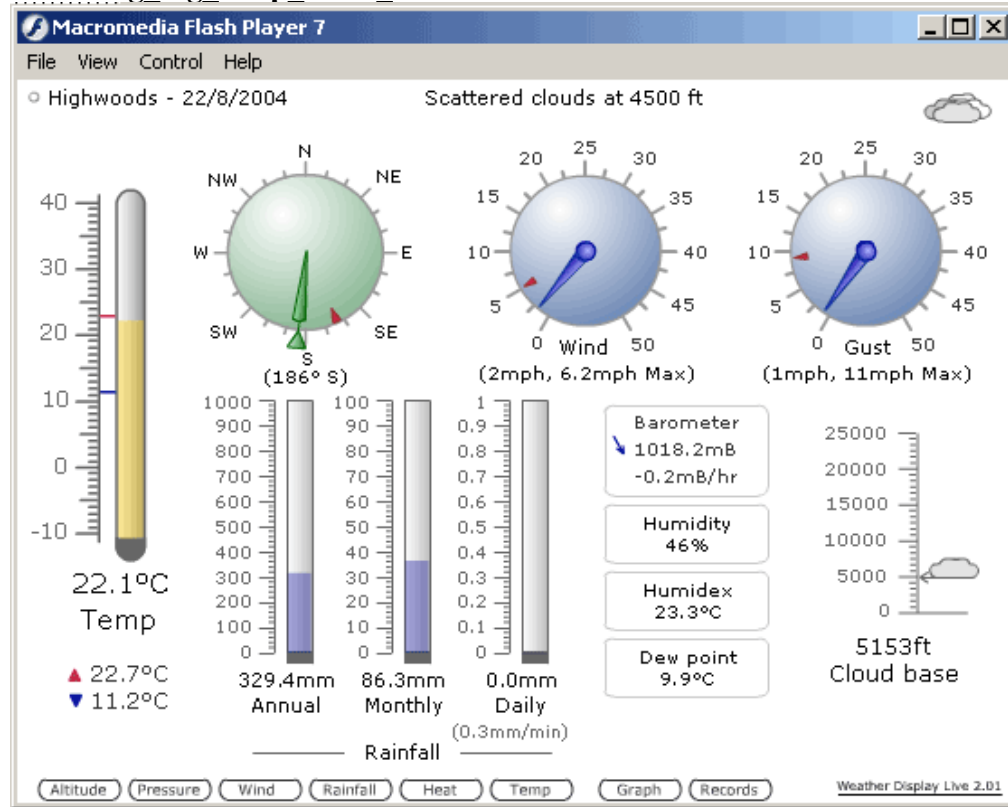
Remember to alter the 2 lines in the index.html file so that the reference is pointing to the wdlconfig.xml file you wish to use. There is no need to rename the file to wdlconfig.xml unless you are viewing it on the local PC. This is because the index.html file is not used when viewing locally so a different name cannot be specified.

## Pre-built configuration screenshots

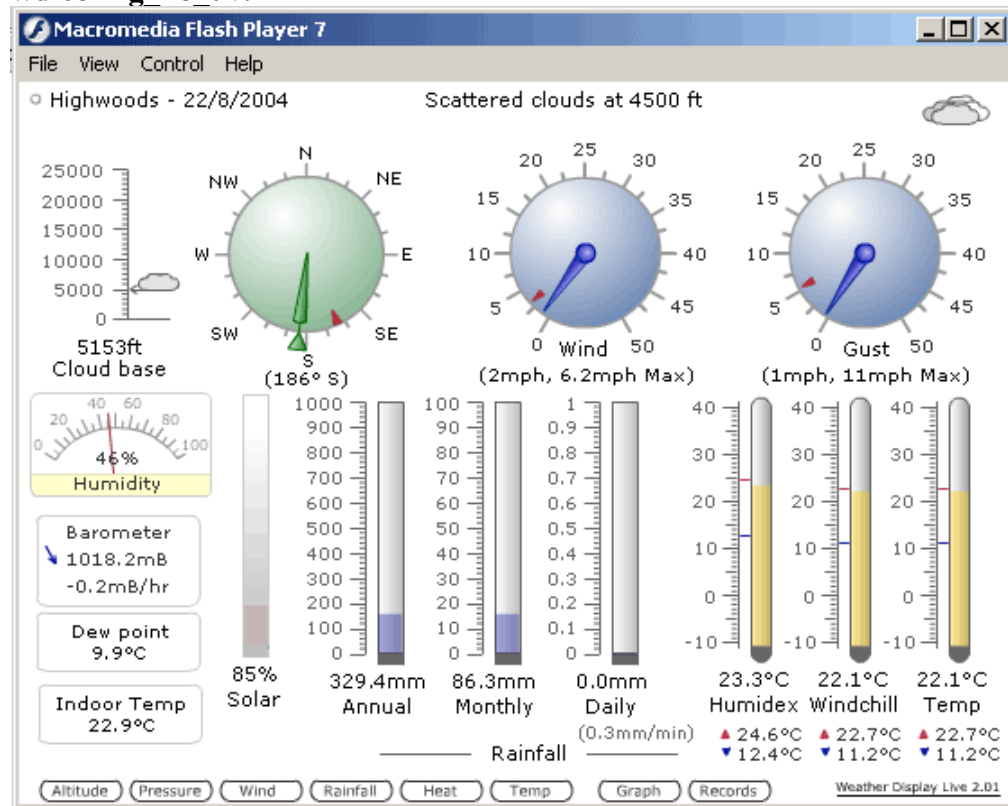
### wdlconfig\_big\_temp\_no\_indoors.xml



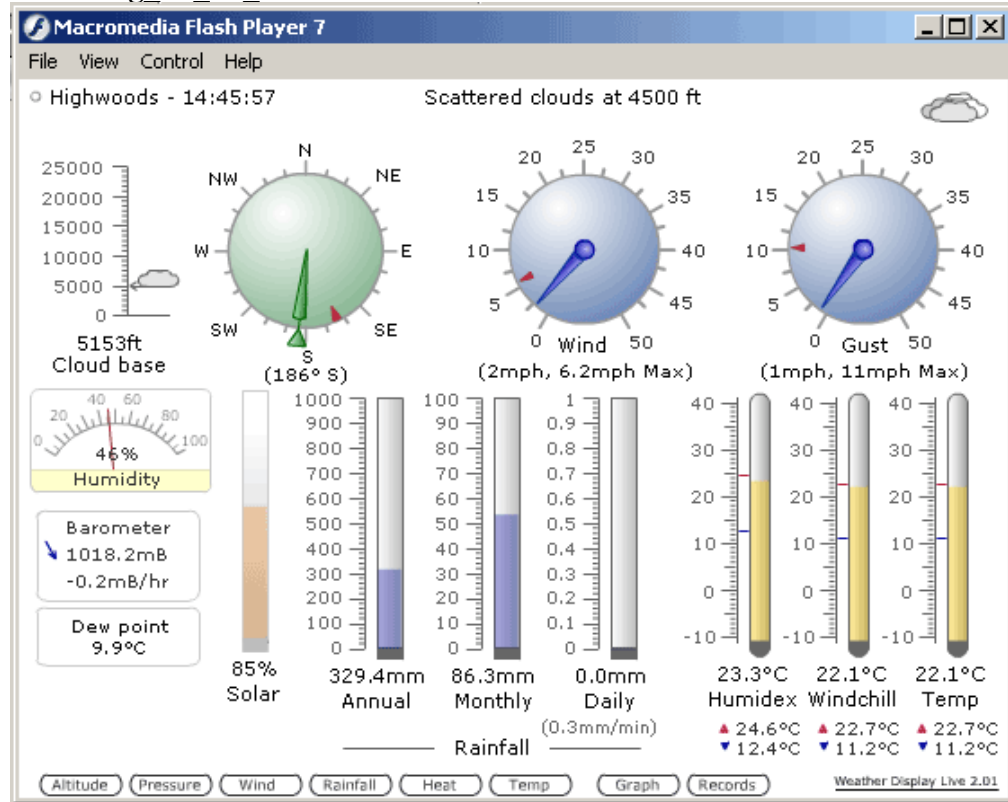
**wdlconfig\_big\_temp\_small\_heat.xml**



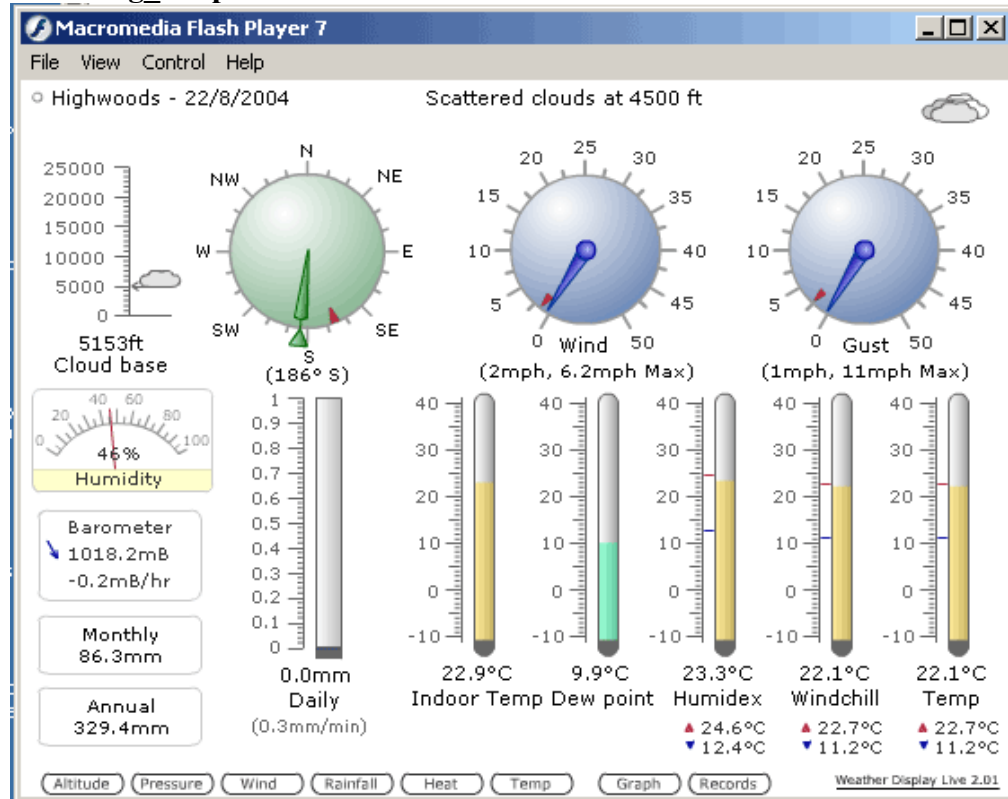
**wdlconfig\_no\_uv.xml**



wdlconfig\_no\_uv\_indoor.xml

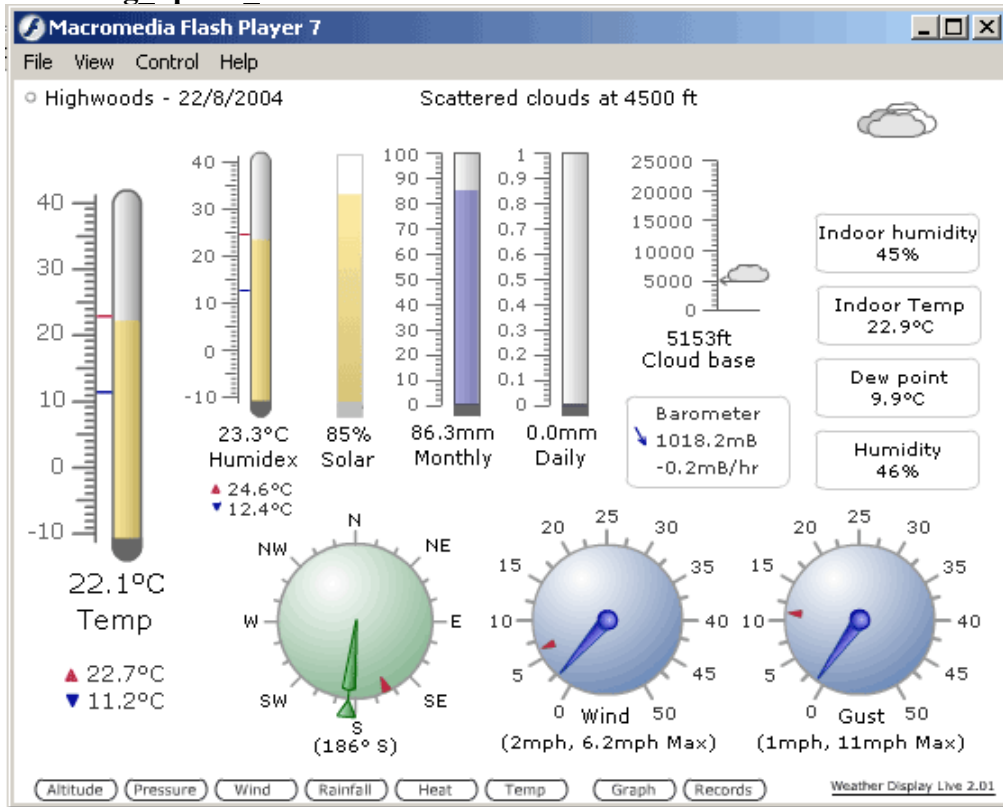


wdlconfig\_temp.xml

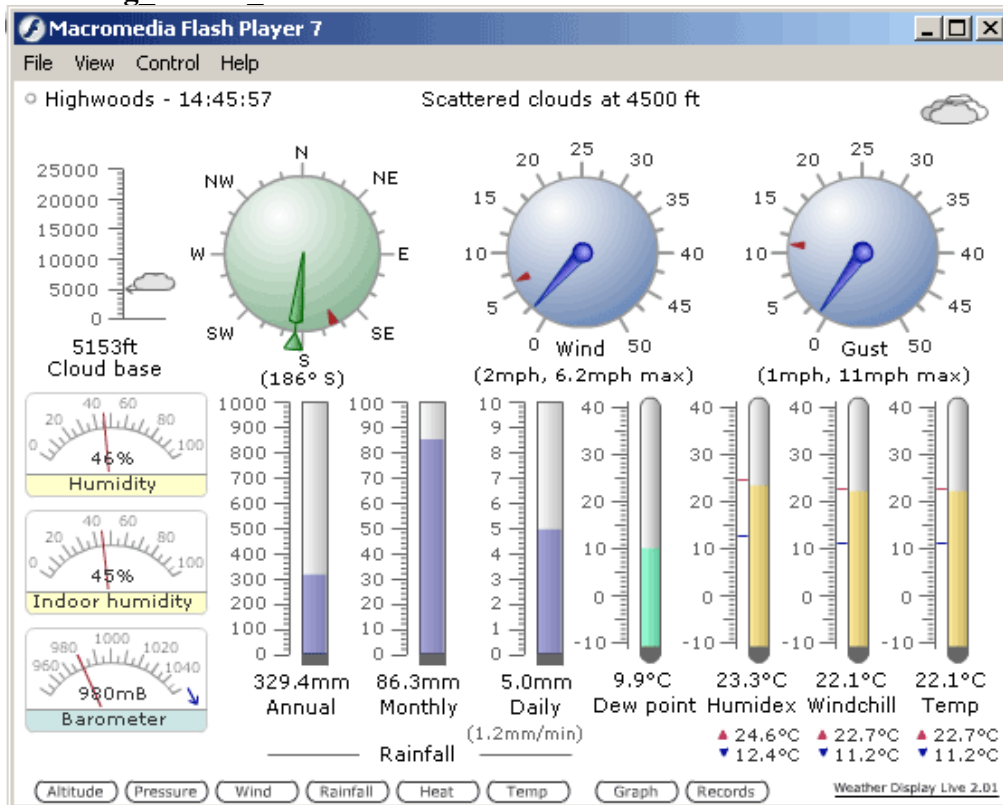




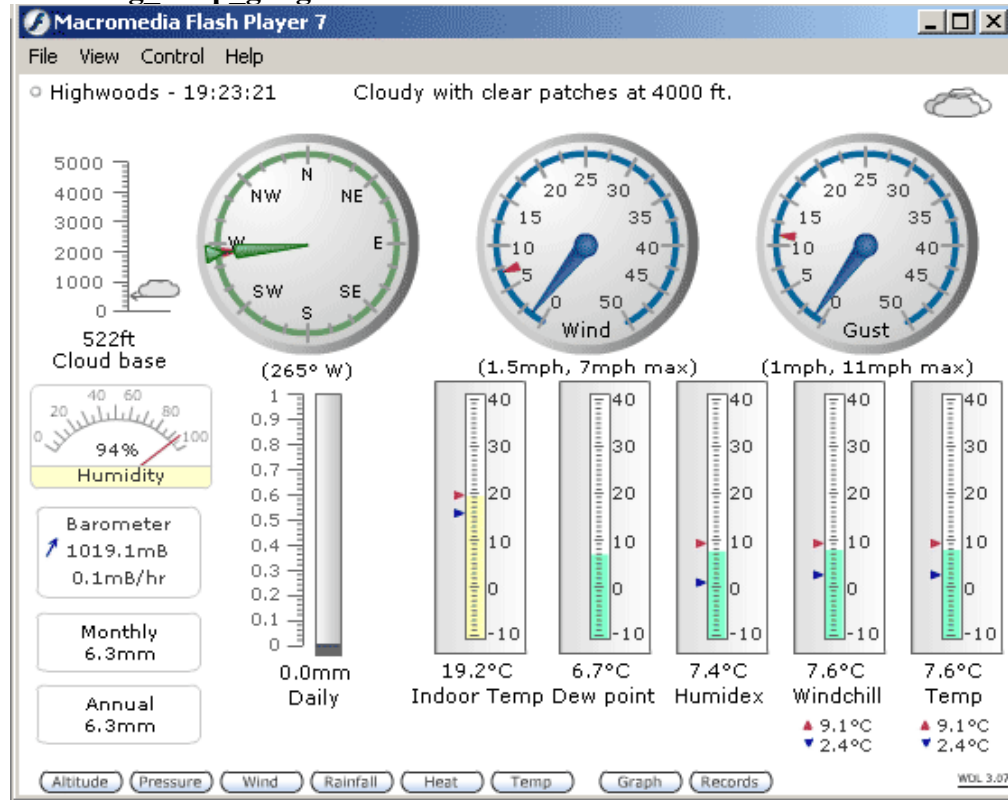
wdlconfig\_upside\_down.xml



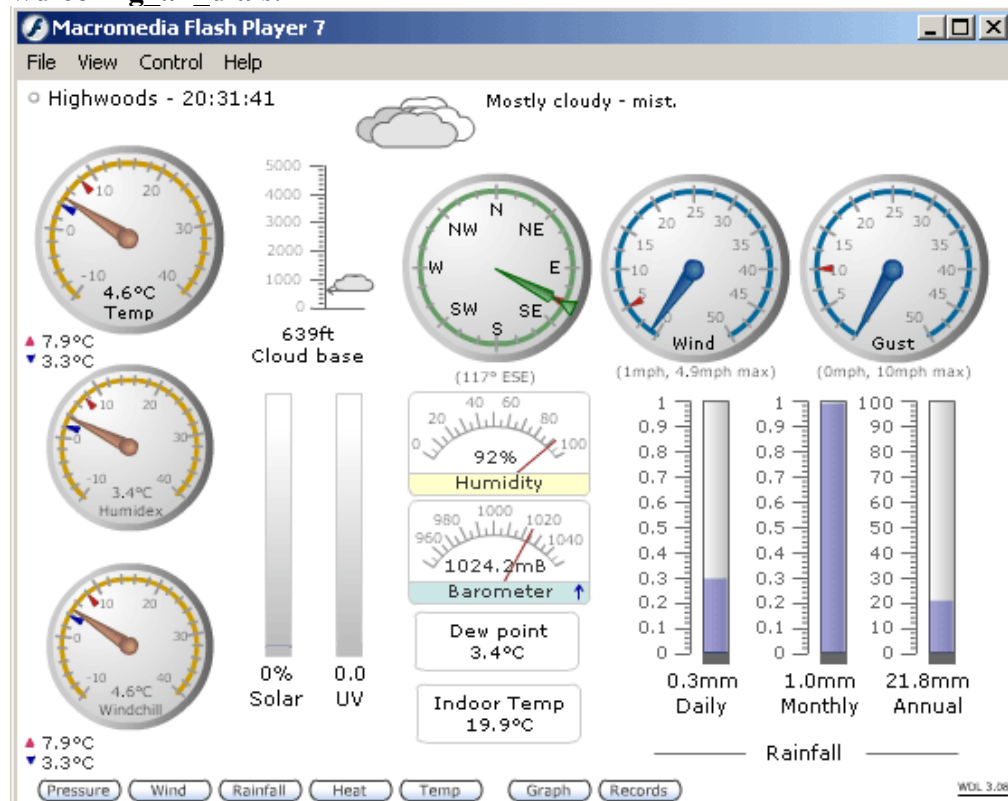
wdlconfig\_meters\_dew.xml



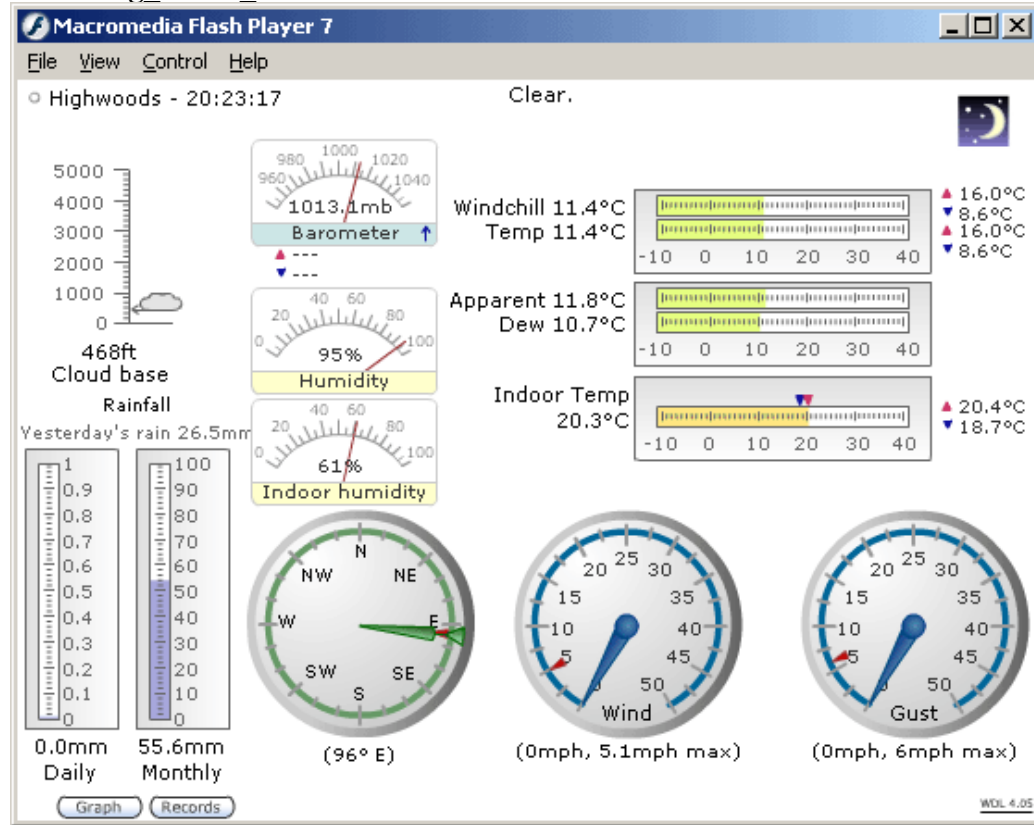
wdlconfig temp\_gauges.xml



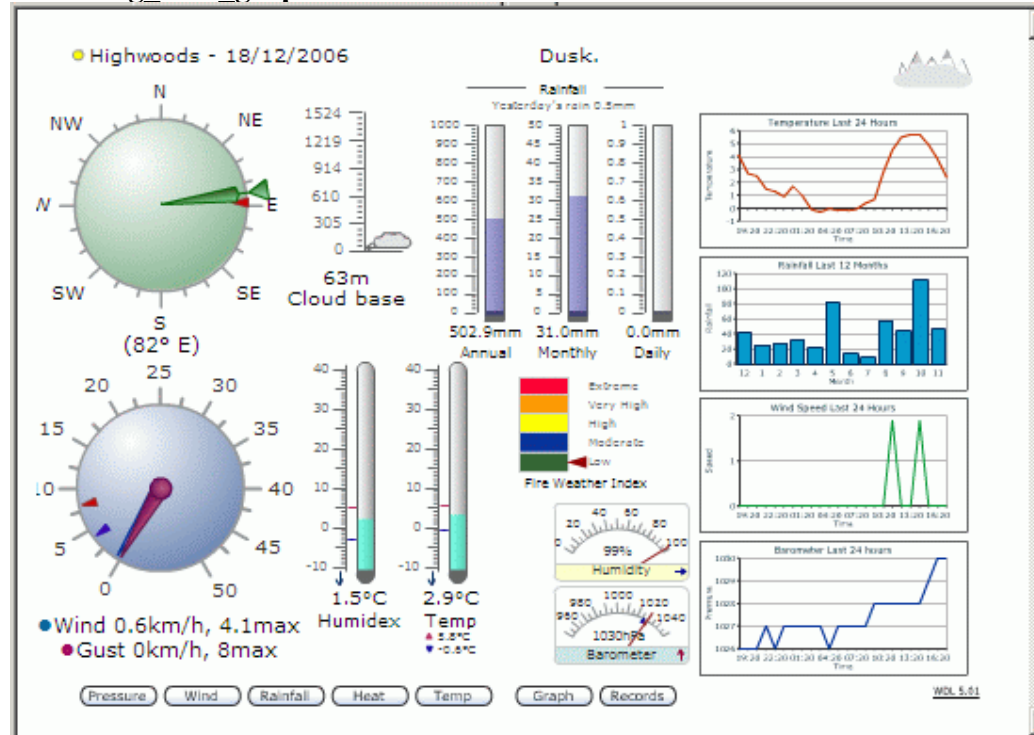
wdlconfig\_all\_dials.xml



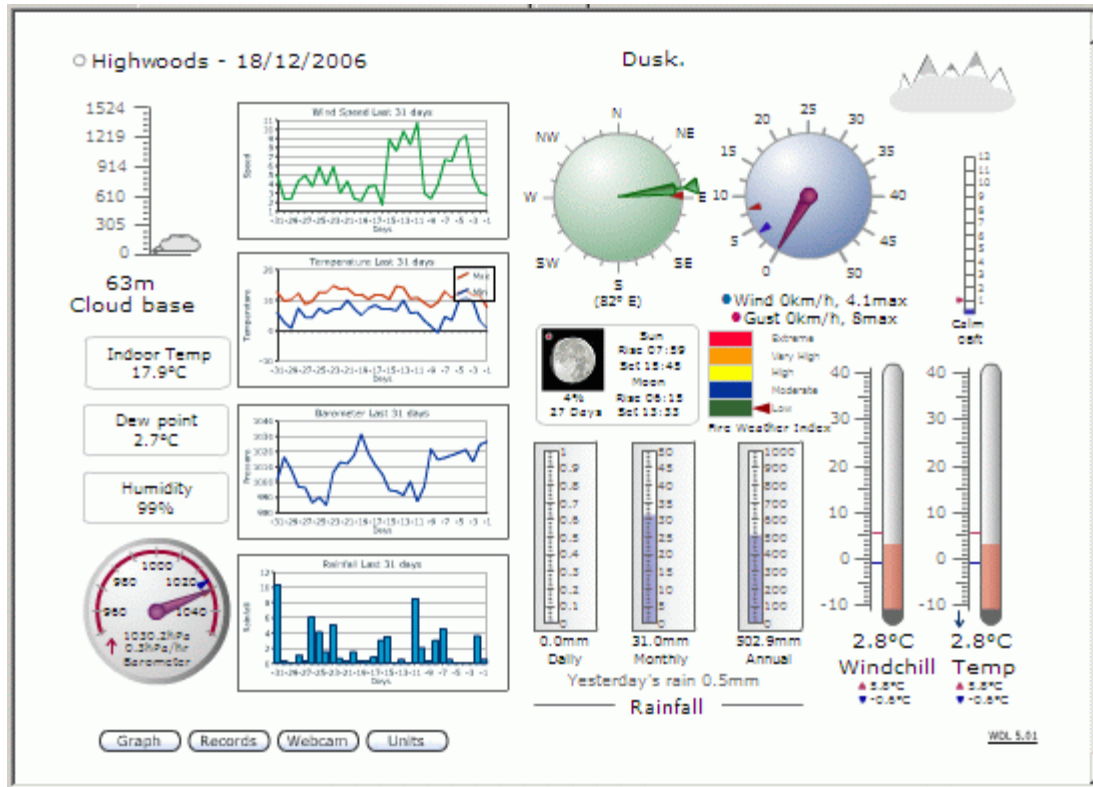
wdlconfig\_linear\_vus.xml



wdlconfig\_four\_graphs2.xml




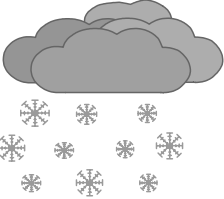
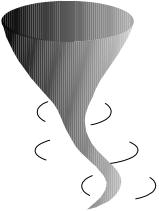





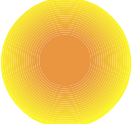








wdlconfig\_four\_graphs.xml



## The Default Icons

The following icons are displayed in Weather Display Live. Which icon is displayed depends upon whether you have sync icons enabled within Weather Display and/or the presence of keywords found in the current conditions text.

			
Clear Night	Partly Cloudy Night	Windy	Snow (animated)
			
Tornado (animated)	Lightning (animated)	Thunder	Fog
			
Haze	Partly Cloudy	Sunshine	Mist
			
Rain (animated)	Drizzle or showers (animated)	Cloudy	Overcast
			
Windy Rain (animated)			

In some situations you may wish to display icons based purely upon the sync feed from Weather Display and ignore the keywords. You can do this by setting the following tag to 1 –

```
<ignoreIconKeywords>0</ignoreIconKeywords>
```

## Checking for correct version of Flash

Weather Display Live v5 and later requires visitors to your website to use Flash Player v8 or later otherwise it will not load or display incorrectly.

Weather Display Live will check that the user has v5 or greater installed but cannot detect if the Flash Player is installed. By using the supplied index.html file, and associated swfobject.js file, installation of Flash and its versions are both checked. The user will need JavaScript enabled on their browser for this to work though.

The message displayed to users who do not have the correct version installed is –

### **Weather Display Live**

You need to install v8, or greater, of Flash Player from [Adobe](#) and have javascript enabled to view Weather Display Live.

This can be changed within the index.html file.

## Future Developments

An area has been setup on the Weather Display forum website for users to share and exchange wdlconfig.xml files they have built.

Other suggestion for improvements and enhancements are always welcome and can be posted on the Weather Display forum at <http://www.weather-watch.com/smf/>