

# WDSparkline PHP Utility

Multifunction Script

Documentation

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a Development of



2359 West De Palma Cir., Mesa, AZ 85202  
weather@tnetweather.com

<http://www.TNETWeather.com>  
<http://www.tnet.com>

# WDSparkline Usage and Configuration

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### WDSparkline Script

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This package uses the Sparkline PHP Graphics Library which is released under a BSD License:

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# WDSparkline Usage and Configuration

## Introduction

---

### WDS Sparkline PHP Utility

The WD Sparkline (WDS) script provides a way to with a single utility, obtain Sprarkline graphs of Weather-Display's last 60 minute data obtained from the clientrawhour.txt raw data script.

It uses the Sparkline PHP Graphing Library to generate the charts is written in PHP using GD graphing capabilities...

### In the beginning...

The idea that started this project was a posting by Jozef "Pinto" Smolders ( <http://www.joske-online.be/> ) on the Weather-Watch forums

<http://www.weather-watch.com/smf/index.php/topic,27095.0>

Where he laid out a number of scripts that performed Sparkline graphs for Temp, Rain, Humidy and Barometer.

From there started the idea of recasting the multiple scripts into what has become the WDS package today.

### Contributors

There is a growing list of people who have participated in the development of this package. The following is a list of hopefully most of them, with more being added as they contribute or are found to have contributed. The following list is not necessarily in any particular order.

#### **Jozef Smolders - [www.joske-online.be](http://www.joske-online.be)**

Provided inspiration with his original work that gave me the idea of creating a consolidated script utility. Performed Beta Testing and provided Language Dutch translations and code suggestions.

#### **Ken True - [saratoga-weather.org](http://saratoga-weather.org)**

Initial Beta tester while vacationing in San Diego... provided number of code segments from various scripts that he has create/used in the past to improve the functionality of the WDS scripts.

#### **Tom Chaplin - [carterlake.org](http://carterlake.org)**

Beta tester and originator of some of the scripts used in the system. Helped start a PHP revolution in the WD weather enthusiasts circles with is CarterLake Templates.

#### **Brian "Windy" Hamilton - [weather-display.com](http://weather-display.com)**

Creator of Weather-Display, the starting point of this entire project.

#### **Henrik - [www.buskelundtoften.dk](http://www.buskelundtoften.dk)**

Provided Danish Translation text for banners.

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### **Chris - [www.sloweather.com](http://www.sloweather.com)**

Provided French Translation text for banners.

### **Bo - [www.sm6kiw.se](http://www.sm6kiw.se)**

Provided Swedish Translation text for banners.

### **Mario - MD5 Pieve Ligure - Italy**

Provided Italian Translation text for banners.

### **Luis - <http://meteo.aerolugo.com>**

Provided Spanish Translation text for banners.

I'm sure there are more and they will be added as I recall them and they added new stuff and input to the projects.

## **About the Documentation**

To reduce support requirements, a document (This one) is maintained along with the development of the code to try to keep the two in sync. Real software should have real documentation and even a "simple" script needs some.

If you find issues in the documentation that doesn't match the released version, please send an email to [Weather@TNETWeather.com](mailto:Weather@TNETWeather.com) to report it so we can fix it.



# WDSparkline Usage and Configuration

## Currently Supported Functions

---

The current WDS script supports the following functions.

### Chart Types

The current version of WDS supports the generation of 6 different 1 hour Sparkline charts. These charts can be specified by argument are are not-case sensitive. The current charts supported are:

temp	- Temperature	DEFAULT
hum	- Humidity	
rain	- Rain	
baro	- Barometric Presure	
winds	- Wind Speed	
windg	- Wind Gusts	

### Unit Types

WDS support a number of Unit designations to cause the script to output the various charts in different common formats. Unit types are not case sensitive. Organized by Chart Type they are:

temp			
	cdeg	°C	DEFAULT
	fdeg	°F	
hum			
	per	%	
baro			
	mb	Millibars	DEFAULT
	inhg	Inches of Mercury	
	kpa	kilopascals	
winds & windg			
	kts	Knots	DEFAULT
	mph	MPH	
	kmh	Km/h	
	ms	m/s	
rain			
	mm	Millimeters	DEFAULT
	in	Inches	

### Remote Data Mode

It provides a mode which allows you to obtain a remotely accessible versions of the data file from another site. This ability can be selectively configured to allow its use in CLI and WEB mode, just CLI mode and not at all. The default is CLI mode only.

# WDSparkline Usage and Configuration

## CLI and Web Modes

The script is designed to auto sense how it is being used and to switch its argument interpretation based on how it is called. Normally, it is called via WEB mode in that it is normally included as an img source with the intention of having its output display on the visitors web screen as a PNG image.

However, the script can also be used in CLI mode (Command Line). In this mode, the script can be used on the command line, in a crontab job or called by another program.

Each mode uses a different type of method of passing arguments, but the arguments themselves are the same.

## Debug Mode

In both the CLI and Web Modes, you can specify a debug switch which tells the script to spit out a ton of data. This information is really more for debugging info, but might tell you why you are not seeing what you expect. In this mode, NO Graphic is output.

For support, you might be asked to send a copy of that output.

# WDSparkline Usage and Configuration

## Requirements

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### Weather-Display Weather Software

This script assumes that the user is using Weather-Display Weather Software which reads Weather Station data and generates a number of required files and format.

Info About Weather-Display can be obtained from:

<http://www.weather-display.com>

### Clientraw data

You need to have had configured Weather-Display to generate and upload its Clientraw text files to a local or remote webserver where the script will be running.

In particular, the clientrawhour.txt file is used for this particular script and needs to be accessible.

**This documentation does not cover this configuration.**

Some information on how to setup clientraw in Weather-Display can be found on the Weather-Watch forum:

<http://www.weather-watch.com/smf/index.php/topic,9220.0.html>

### PHP & GD Graphics Capabilities

These scripts were tested with both PHP 4 and PHP 5. Version PHP 4.12 or higher is assumed as well as GD 2.0.

GD is used to generate the graphics

The WDS scripts will not run without either PHP or GD.

### Sparkline PHP Graphics Library

The Sparkline PHP Graphics Library is included with the WDS package and its.

<http://www.sparkline.org>

# WDSparkline Usage and Configuration

## Installation

---

Currently, the WDS package is distributed in a simple ZIP file archive format.

It will be available in a Zip self-extracting format in the future as well as a tar gzip'd version too.

It is packaged to be installed into its own subdirectory "WDS" off the directory that contains your Weather-Display Clientraw files. IF you do this, you will minimize the configuration you might need to do to get it running.

Unless you are doing something really custom, the files should be in a directory that is accessible by the webserver.

If you install the WDS package in a different location than that, you will need to make configuration changes outlined in the Configuration section. Specifically the **\$SITE['hloc']** variable located in the wdsarkline.php script

# WDSparkline Usage and Configuration

## Configuring

---

### Variable Names

There are basically three types of variables names.

#### **\$WDSvariable**

These are normally variables that are only related to the WDS package itself.

#### **\$SITE['variable']**

These are variables that can be used system-wide and are generally supportive of the TNET WebGen Include File system. Even if you are not using that package, there are some variables used in the scripts that use that type of format. They are actually an array variable and setup to make it easy to globally include them in any module that is used.

#### **\$other\_variables**

These types of variables are not normally something you change or configure. They are used internally within the system to store required data.

### Configuration Files

Most of the user configuration is done in the **wdsparkline.php** file itself at the top of the script. If you create a new language translation of the banner titles, you will need to add them to the **WDSLlanguage.php** file, but add them to the language array setting in the **wdsparkline.php** file as well to be seen.

#### **wdsparkline.php**

Contains the main script and most of the configurable items at the top of it.

#### **WDSLlanguage.php**

An included script that includes the language settings for banners used by the script. You most likely don't need to touch this file unless you are adding a new language.

# WDSparkline Usage and Configuration

## Commonly Changed Items

### **\$WDSchart\_sparklib**

Points to where the sparkline library is found. Unless you installed the scripts custom, you most likely don't need to change this.

Default:

```
$WDSchart_sparklib = 'lib/Sparkline_Line.php';
```

Location:

```
wdsparkline.php
```

### **\$SITE['hloc']**

Location of the Weather Watch clientraw data files. The different type of Variable is because this permits interfacing to the TNET WebGen System..

Again, unless you are installing the package in a custom way, you most likely don't need to change this.

Default:

```
$SITE['hloc'] = "../";
```

Location:

```
wdsparkline.php
```

### **\$WDSremote\_allow**

Sets what is allowed for use of the Remote function. The remote function could be a cause for lots of extra traffic if you allow its use by anyone.

Possible Values are:

OFF	No Remote Function
CLI	Only Allowed for CLI Usage
ON	Allows Remote function in both CLI and WEB mode

Default:

```
$WDSremote_allow = 'ON';
```

Location:

```
wdsparkline.php
```

# WDSparkline Usage and Configuration

## Colors

Colors can be changed one of two ways. The easy way is to make a change to the variables listed below. This changes ALL the charts at the same time. The harder way is to make individual changes further down in the source code.

The most common color to want to change is perhaps the background color.

**Note: You can only use predefined colors for all colors except the background. This is because only predefined colors are known and I have not yet created the ability to use custom colors on all. This is expected to change.**

### Predefined Colors are:

aqua	#00FFFF	
black	#010101	(Known Sparkline lib issue)
blue	#0000FF	
fuscia	#FF00FF	
gray	#808080	
green	#008000	
lime	#00FF00	
maroon	#800000	
navy	#000080	
olive	#808000	
purple	#800080	
red	#FF0000	
silver	#C0C0C0	
teal	#008080	
white	#FFFFFF	
yellow	#FFFF00	

The Easy change variables are:

### **\$WDSdefault\_text\_color**

Default:

```
$WDSdefault_text_color = 'green';
```

Location:

```
wdsparkline.php
```

## WDSparkline Usage and Configuration

### **\$WDSdefault\_line\_color**

Default:  
    \$WDSdefault\_line\_color               = 'green';

Location:  
    wdsparkline.php

### **\$WDSdefault\_min\_color**

Default:  
    \$WDSdefault\_min\_color               = 'blue';

Location:  
    wdsparkline.php

### **\$WDSdefault\_max\_color**

Default:  
    \$WDSdefault\_max\_color               = 'red';

Location:  
    wdsparkline.php

### **\$WDSdefault\_backgnd\_color**

Default:  
    \$WDSdefault\_backgnd\_color          = '#FFFFFF';

Location:  
    wdsparkline.php



# WDSparkline Usage and Configuration

## Languages

The banner messages have been split out into a language file called WDSLlanguage.php. This allows easy expansion of additional languages. This allows you to change the Default language used by the scripts.

Note: You can actually change what language WDS uses on the fly with the **lang** option.

Currently, there is support for:

ENGLISH DANISH DUTCH FRENCH SPANISH SWEDISH ITALIAN

FRENCH is known to have issues due to some entries that are a bit too long. It needs to be redone.

To change the language used by the script, you set the following variable:

**\$WDSLlanguages** (array)

Languages are stored in the WDSLlanguage.php file but are described in the wdsarkline.php file.

The first entry is considered the DEFAULT and is used anytime you don't specifically use the lang option. To change the default, make the first entry the language you want it to be.

The WDS package comes configured as follows:

```
$WDSLlanguages = array (  
    "ENGLISH", // Default  
    "DANISH", "FRENCH", "ITALIAN", "DUTCH", "SPANISH", "SWEDISH");
```

Default:

ENGLISH

Location:

wdsarkline.php

WDSLlanguage.php (Only if you are adding a new one )

# WDSparkline Usage and Configuration

## Changing Chart Defaults

### \$WDScharts (array)

This is an array that tells the script which types of charts and which unit options are available for those charts. The order of both the script types and the unit types for each is important as they determine which chart is a default chart and which unit is the default for that chart.

**It is recommended that you not change this array as it may cause the script to not work properly or not at all. If you do, please make a copy of the file first so that you can revert back to it if you run into a problem.**

Default:

```
$WDScharts = array (
//      Chart      Valid Units - First is Default
//      -----
"temp"    =>    array("cdeg", "fdeg"),
"rain"    =>    array("mm", "in"),
"baro"    =>    array("mb", "inhg", "kpa"),
"winds"   =>    array("kts", "mph", "kmh", "ms"),
"windg" =>    array("kts", "mph", "kmh", "ms"),
"hum" =>    array("per") );
```

Location:

wdsparkline.php

## Further Configuration

For the most part, that makes up the configuration variables. There are of course script changes you can make, but for most, the above settings will let you do common changes without having to know PHP scripting.

# WDSparkline Usage and Configuration

## Usage Web Mode

---

In its most common mode, the WDsparkline script will be used in web mode, that is to say, it will be called from a webpage.

### Available Options as a URL

The WDsparkline script supports a number of options when you use it that are added to the URL you use.

While order does not really matter, the first option must follow the script name with a ? and any second option(s) needs to be preceded with an &.

### chart

You can select which chart type you want with the chart option:

#### Selects Temp Chart:

WDS/wdsparkline.php?chart=temp

#### Selects Humidity Chart:

WDS/wdsparkline.php?chart=hum

#### Selects wind speed and wind gust charts

WDS/wdsparkline.php?chart=winds

WDS/wdsparkline.php?chart=windg

## WDSparkline Usage and Configuration

### unit

Unit allows you to specify a specific type of value for the chart you have requested. Obviously, you need to use a unit that matches the type of chart you want. By default, if you select a unit that doesn't make sense (say mph for temp chart), WDS will use the default unit type instead.

By chart type the available units that can be selected are (and their DEFAULTS):

temp	cdeg	°C	DEFAULT
	fdeg	°F	
hum	per	%	
baro	mb	Millibars	DEFAULT
	inhg	Inches of Mercury	
	kpa	kilopascals	
winds & windg	kts	Knots	DEFAULT
	mph	MPH	
	kmh	Km/h	
	kpa	kPa	
rain	mm	Millimeters	DEFAULT
	in	Inches	

To select a unit type with a chart, you enter in the option unit like the following examples:

**Selects Temp Chart with °C degrees:**

WDS/wdsparkline.php?chart=temp&unit=cdeg

**Select Rain Chart with Inches for output:**

WDS/wdsparkline.php?chart=rain&unit=in

**Selects wind speed and wind gust charts with MPH**

WDS/wdsparkline.php?chart=winds&unit=mph

WDS/wdsparkline.php?chart=windg&unit=mph

## WDSparkline Usage and Configuration

### lang

You can specify which language the chart should be output by selecting the lang option. The default without specifying the lang option is normally ENGLISH, but you can change by looking in the Configuration Section of the document.

Using lang is simple...

Example:

**Without lang, the chart will be the default language:**

```
WDS/wdsparkline.php?chart=temp&unit=cdeg
```

**Same chart in Spanish:**

```
WDS/wdsparkline.php?chart=temp&unit=cdeg&lang=spanish
```

**Same chart in Danish:**

```
WDS/wdsparkline.php?chart=temp&unit=cdeg&lang=Danish
```

### debug

If you specify as an argument the word **debug** (no = needed), you will place the WDS script into debug mode. It will spit out a bunch of information about what it sees and then exit. All output will be in TEXT, with no graphic generated. The Debug mode provides info that hopefully will help you determine why a command you are entering is not working like you think and can be used to report an issue.

**Example of using the debug option:**

```
WDS/wdsparkline.php?chart=winds&unit=in&debug
```

In this case, the selected unit is **in** (Inches) but the chart requested in winds, which when used in debug mode, will provide you with an error: **DEBUG: Selected unit doesn't match chart type.** Without debug, WDS would have displayed the wind speed chart using the default of kts (knots) instead of generating an error like below:

```
WDS 1.0.4b ERROR MSG #003
Invalid Chart Unit
'in' is not valid
```

## WDSparkline Usage and Configuration

### remote

The remote options allows you to specify a remote website from where to obtain the file instead of getting it locally. This option requires the location of the server and the path that contains the data be entered **WITHOUT** the preceeding **http://** part, and **WITHOUT** the actual data filename. Both will be added automatically by the script.

All of the other options apply except instead of getting the local file, it will attempt to get it from the remote site.

Example:

```
WDS/wdsparkline.php?chart=temp&unit=m&remote=www.tnetweather.com
```

When a remote attempt is made, the script will use the UserAgent name of "WDSparkline Script" to identify to the owner of the website what the intention of the data get was.

**Note: that connections are only performed on standard port 80. If the destination webserver is not using a standard port 80 port, this function will not work.**

### Using as an Image

In the sample code below, the script is used as an image:

```

```

Since it is using no options, it will output the default which is TEMP with unit type of cdeg.

To use an option, you can use two types of settings:

```

```

# WDSparkline Usage and Configuration

## Command Line (CLI) Mode Usage

---

**Warning: The use of CLI mode depends a lot on your web servers environment and may not be an option that you can use. You must have PHP configured to work in CLI mode and in most cases, you also need to be able to use and configure crontab. This is more of an advanced mode for those who know what they are doing...**

The WDsparkline script also support usage on a command line. The command line might be useful when used with crontab to automatically update images that your webpages use instead of having your webpages hammer away making new images for each viewer.

Command line arguments however work differently. Unlike in WEB Mode where on the URL you use `?chart=wind?unit=mph`, you need to separate the arguments with white space. Check below for info on this.

### Note about PHP

To invoke a php script normally on a server, you need to use the php command followed by the php script. Some servers don't have the path to the php command itself in its path so you might need to add the path to the php program when using CLI scripts.

**Also, some PHP installations require the option `-q` to be passed to prevent generation of HTML headers:**

```
The -q flag suppresses HTTP header output. As long as your script itself does
not send anything to stdout, -q will prevent cron from sending you an email
every time the script runs. For example, print and echo send to stdout. Avoid
using these functions if you want to prevent cron from sending you email.
```

### Available Options as arguments

The WDsparkline script supports a number of options when you use it that are added as arguments to the script you are calling.

While order doesn't matter, if you plan on using DEBUG, it helps to use that one as the first argument.

## WDSparkline Usage and Configuration

### chart

You can select which chart type you want with the chart option:

#### **Selects Temp Chart:**

```
php WDS/wdsparkline.php chart=temp
```

#### **Selects Humidity Chart:**

```
php WDS/wdsparkline.php chart=hum
```

#### **Selects wind speed and wind gust charts**

```
php WDS/wdsparkline.php chart=winds
```

```
php WDS/wdsparkline.php chart=windg
```

You might need to both define the path to PHP AND use -q option like:

#### **Selects Temp Chart:**

```
/pathto/php -q WDS/wdsparkline.php chart=temp
```

#### **Selects Humidity Chart:**

```
/pathto/php -q WDS/wdsparkline.php chart=hum
```

#### **Selects wind speed and wind gust charts**

```
/pathto/php -q WDS/wdsparkline.php chart=winds
```

```
/pathto/php -q WDS/wdsparkline.php chart=windg
```



## WDSparkline Usage and Configuration

### unit

Unit allows you to specify a specific type of value for the chart you have requested. Obviously, you need to use a unit that matches the type of chart you want. By default, if you select a unit that doesn't make sense (say mph for temp chart), WDS will use the default unit type instead.

By chart type the available units that can be selected are (and their DEFAULTS):

temp	cdeg	°C	DEFAULT
	fdeg	°F	
hum	per	%	
baro	mb	Millibars	DEFAULT
	inhg	Inches of Mercury	
	kpa	kilopascals	
winds			
windg	kts	Knots	DEFAULT
	mph	MPH	
	kmh	Km/h	
	kpa	kPa	
rain	mm	Millimeters	DEFAULT
	in	Inches	

To select a unit type with a chart, you enter in the option unit like the following examples:

**Selects Temp Chart with °C degrees:**

```
php WDS/wdsparkline.php chart=temp unit=cdeg
```

**Select Rain Chart with Inches for output:**

```
php WDS/wdsparkline.php chart=rain unit=in
```

**Selects wind speed and wind gust charts with MPH**

```
php WDS/wdsparkline.php chart=winds unit=mph
```

```
php WDS/wdsparkline.php chart=windg unit=mph
```

## WDSparkline Usage and Configuration

### lang

You can specify which language the chart should be output by selecting the lang option. The default without specifying the lang option is normally ENGLISH, but you can change by looking in the Configuration Section of the document.

Using lang is simple...

Example:

**Without lang, the chart will be the default language:**

```
php WDS/wdsparkline.php chart=temp unit=cdeg
```

**Same chart in Spanish:**

```
php WDS/wdsparkline.php chart=temp unit=cdeg lang=spanish
```

**Same chart in Danish:**

```
php WDS/wdsparkline.php chart=temp unit=cdeg lang=Danish
```

### debug

If you specify as an argument the word **debug** (no = needed), you will place the WDS script into debug mode. It will spit out a bunch of information about what it sees and then exit. All output will be in TEXT, with no graphic generated. The Debug mode provides info that hopefully will help you determine why a command you are entering is not working like you think and can be used to report an issue.

It is recommended that you use debug as the first option as the debugging messages don't start until that option is seen.

**Example of using the debug option:**

```
WDS/wdsparkline.php debug chart=winds unit=in
```

In this case, the selected unit is in (Inches) but the chart requested in winds, which when used in debug mode, will provide you with an error: **DEBUG: Selected unit doesn't match chart type.** Without debug, WDS would have displayed the wind speed chart using the default of kts (knots) instead of generating an error like below in the output PNG file:



```
WDS 1.0.4b ERROR MSG #003  
Invalid Chart Unit  
'in' is not valid
```

## WDSparkline Usage and Configuration

### remote

The remote options allows you to specify a remote website from where to obtain the file instead of getting it locally. This option requires the location of the server and the path that contains the data be entered **WITHOUT** the preceeding **http://** part, and **WITHOUT** the actual data filename. Both will be added automatically by the script.

All of the other options apply except instead of getting the local file, it will attempt to get it from the remote site.

Example:

```
WDS/wdsparkline.php chart=temp unit=fdeg remote=www.tnetweather.com
```

### Wrong Usage:

```
remote=http://www.tnetweather.com
```

```
remote=http://www.tnetweather.com/clientrawhour.txt
```

```
remote=/clientrawhour.txt
```

When a remote attempt is made, the script will use the UserAgent name of "WDSparkline Script" to identify to the owner of the website what the intention of the data get was.

**Note: that connections are only performed on standard port 80. If the destination webserver is not using a standard port 80 port, this function will not work.**

# WDSparkline Usage and Configuration

## CLI Usage using Crontab

**Warning: These are just examples... The configuration of your web server may be quite different and may not allow or use completely different syntax usage for cron and crontab entries. If you don't know, DON'T TRY.... ask for assistance as you could cause existing crontab entries to stop, or generate output you didn't intended.**

As an example, you want to update the images for all the WDSparklines via Cron, to happen once every 5 minutes....

You could have a crontab entry like:

```
0,5,10,15,20,25,30,35,40,45,50,55 * * * * *  
/path_to_your_web_root/WDS/update.ksh
```

Note: this would be all on one line:

Then you could then have in that update.ksh script

(Typical American Site - °F - % - InHg - MPH - Inches):

```
#!/usr/bin/ksh  
cd /path_to_your_web_root/WDS  
php wdsarkline.php chart=temp unit=fdeg > temp.png  
php wdsarkline.php chart=hum unit=per > hum.png  
php wdsarkline.php chart=baro unit=inhg > baro.png  
php wdsarkline.php chart=winds unit=mph > winds.png  
php wdsarkline.php chart=windg unit=mph > windg.png  
php wdsarkline.php chart=rain unit=in > rain.png
```

(European Site - °C - % - Millibars - Knots - Milliliters):

```
#!/usr/bin/ksh  
cd /path_to_your_web_root/WDS  
php -q wdsarkline.php chart=temp unit=cdeg > temp.png  
php -q wdsarkline.php chart=hum unit=per > hum.png  
php -q wdsarkline.php chart=baro unit=mb > baro.png  
php -q wdsarkline.php chart=winds unit=kts > winds.png  
php -q wdsarkline.php chart=windg unit=kts > windg.png  
php -q wdsarkline.php chart=rain unit=mm > rain.png
```

**Some PHP installations require the option -q to be passed to prevent generation of HTML headers:**

The -q flag suppresses HTTP header output. As long as your script itself does not send anything to stdout, -q will prevent cron from sending you an email every time the script runs. For example, print and echo send to stdout. Avoid using these functions if you want to prevent cron from sending you email.

# WDSparkline Usage and Configuration

## Remote Sites

If you have the WDS system configured to allow it, you can also use crontab to obtain and store images from other WD sites (With their permission of course). Remember that you should only include the hostname and the direct path to the location of the Weather-Watch clientraw files. Do not include http:// or it will fail.

A script like:

```
#!/usr/bin/ksh
cd /path_to_your_web_root/WDS/remotesites
php wdsarkline.php chart=temp unit=cdeg remote=example.com > temp.png
php wdsarkline.php chart=hum unit=per remote=example.com > hum.png
php wdsarkline.php chart=baro unit=kpa remote=example.com > baro.png
php wdsarkline.php chart=winds unit=kmh remote=example.com > winds.png
php wdsarkline.php chart=windg unit=kmh remote=example.com > windg.png
php wdsarkline.php chart=rain unit=mm remote=example.com > rain.png
```

# WDSparkline Usage and Configuration

## Included in Package

---

The following files are included in this package.

### WDSparkline Package files

#### HISTORY

Should be the most recent copy of the History file that outlines changes made to the script. Each section is the most recent on top and inside each section are the changes made beginning to bottom.

#### README

Very basic text files with common usages of the script. Needs to be beefed up.

#### wdsparkline.php

This is the main WDS script. Most of the configuration is done at the top of the script and this is what you are calling via the web or the command line to get the generated sparkline charts.

#### Clientraw.php

It contains functions used to obtain and process Clientraw datafiles. Note that this is a subset, and only contains the scripts needed for the WDS system.

WARNING: There are new functions contained within that are not completed and need some work. These should be updated in newer versions of the WDS scripts but don't effect its operation.

#### Common.php

Contains all the Weather Math functions used by the script as well as some other common functions.

#### WDSLlanguage.php

A file containing different language banner messages.

#### PDF Document File

A copy of the PDF document file (This file)

## WDSparkline Usage and Configuration

### Included Sparkline PHP Graph Package Files

**lib/DESIGN**

Sparkline library Design document

**lib/LICENSE**

Sparkline License document

**lib/Object.php**

Sparkline object file for library

**lib/README**

Sparkline Readme file

**lib/Sparkline.php**

Sparkline sample script

**lib/Sparkline\_Bar.php**

Sparkline bar graph library file

**lib/Sparkline\_Line.php**

Sparkline line graph library file.

# WDSparkline Usage and Configuration

## Known Issues

---

At this time the following are known issues:

### Script cannot be called from a website as an included file

If you attempt to include the file you will end up with a mess, because the script itself doesn't output required mime data to tell the webserver what it is dealing with.

#### **This won't work:**

```
include("WDS/wdsparkline.php?chart=winds&unit=m");
```

#### **Neither will:**

```
include("WDS/wdsparkline.php chart=winds unit=m");
```

#### **Instead use:**

If you want to include an image using it, use an image tag instead like:

```

```

### Can't assume Location based on \$\_SERVER['DOCUMENT\_ROOT'];

Actually you can, but not if you plan on using the script in CLI mode as that doesn't exist. You can add the direct path to your website if you know it, or just stick with the original configuration which assumes that the package is installed in the WDS directory off the directory containing the clientraw datafile.

### Using CLI produces html headers in output of graphic

#### **Some PHP installations require the option -q to be passed to prevent generation of HTML headers:**

The -q flag suppresses HTTP header output. As long as your script itself does not send anything to stdout, -q will prevent cron from sending you an email every time the script runs. For example, print and echo send to stdout. Avoid using these functions if you want to prevent cron from sending you email.

See example in the manual above under **CLI Usage using Crontab**.



## WDSparkline Usage and Configuration

### To Do List

---

A list of possible additions... do you have any suggestions...

#### Support for Clientrawextra 24 hour Charts

Add to the system the ability to chart the 24 hour values for:

24temp	24baro	24intemp
24winds	24solar	24lighting
24windg	24uv	
24rain	24hum	

24windr (wind direction ??)  
wkrain (7 day Rain Totals)

#### Sparkline Wind Dir ??

Both for the 60 minute and 24 hour possible if it makes sense.

#### Allow Custom #XXXXX Colors

Currently only the background color can use them. Need to add ability to allow for custom (non-pre-defined colors for all areas).

#### Add option to output Bars instead of Line Graphs

This ability will be added in the next major release. Code is already being worked on but is not yet ready.

#### Add Help Graphic??

Perhaps add a help mode where help by itself displays the various charts. help with chart specified shows which units supported. Option setting help???

#### Add Color options to the command line

With the lang options now available, and using remote, you could with color options use a CLI script or a live page to use different background colors etc... for each site.

# WDSparkline Usage and Configuration

## **Future Support / Changes / New Versions**

---

This is a FREEware package developed by TNET... however it is a community based project in that pieces and parts of it came from different source.

The idea, is that TNET will maintain the product package, documentation, coordinate Beta testing and maintain both a Stable and Development version of the code in central place to download.

Suggestions are always welcome and many times will be coded into the project.

### **Contributed Code:**

If you add something to the script that you think should be added to the package, please send a copy of that code to Weather@TNETWeather.com and I will work it into the package if it makes sense.

### **Limited Email Support:**

Suggestions are always welcome with posting to Weather-Watch forums in appropriate topic areas or via email addressed to Email: **weather@tnetweather.com**

### **Updates and Documentation:**

You can find current documentation and downloadable files from the following Scripts Support web page at:

**<http://www.TNETWeather.com/scripts>**

### **Forum Support:**

Forums support will be available via a topic on the Weather-Watch Forum soon.

## WDSparkline Usage and Configuration

### About the Author

---

This was developed by TNET Services, Inc which is a Arizona Corporation located in Mesa, AZ .

TNET is owned and operated by Kevin Reed who is a Systems Analyst that specializes in system and software development as well as Disability Systems, Web design, graphics, hosting services and consulting.

TNET Services, Inc.  
2359 W De Palma Cir., Mesa, AZ 85202

<http://www.tnet.com>  
<http://www.tnetweather.com>

# WDSparkline Usage and Configuration

## History

---

History is displayed with the most recent on top by section (oldest to newest in the section).

### 1.0.5b 2007-11-22 TurkeyDay GENERAL RELEASE

- o Added lang option to allow generation of graphic banners with different languages on the fly.
- o Added Dutch Language to supported list.
- o Updated documentation to match changes.

### 1.0.4b 2007-11-21 BETA RELEASE

- o Corrected ksh script examples in documentation
- o Added Language Support for SPANISH From Luis - <http://meteo.aerolugo.com/>
- o Added Graphic Error output module
- o Corrected bug in CLI mode where the default value overrode the requested value for chart Reported by Josef.
- o Added Chart Unit types to provide for complete access to most common settings for various chart types.
- o Renamed Weather-math-sub.php to Common.php
- o Renamed Clientraw-sub.php to Clientraw.php
- o Added output\_gfx\_error Banner Error Display Function.
- o Added kpa (kPa) Barometer Unit Type
- o Added ms (m/s) Winds Windg Unit Type
- o Replace debug statements with dbmsg function.
- o Added Language Support for ITALIAN From Mario - MD5 Pieve Ligure - Italy
- o Added Language Support for SWEDISH From Bo - <http://www.sm6kiw.se/> Had to replace one of the characters with a letter o
- o Added Language Support for DANISH From Henrik - <http://www.buskelundtoften.dk/vejret/English>
- o Added Language Support for FRENCH From [www.sloweather.com](http://www.sloweather.com) - Note that these most likely need to be reworked as they are too long.
- o Updated documentation to match changes made

### 1.0.3b 2007-11-19 No Release

- o Cleaned up Debug Messages to show info better.
- o Added Debug to show when a connection fails.. This ONLY shows however when in Debug mode as there is no current method in the script to output the error graphically (coming soon).
- o Added code from Ken True to detect PHP GD Library
- o Removed Settings.php script from system (Still uses TNET WebGen if there though)
- o Moved most common configuration variables to top of script for easier access.
- o Moved Banner messages to WDSlanguage.php file for support for other languages.
- o Added ability to disallow remote commands for both CLI and WEB or just WEB.
- o Added debugging code to show when file load fails (Again, only seen in Debug Mode)
- o Updated documentation to match changes made so far.

## WDSparkline Usage and Configuration

### 1.0.2b Internal - No Release

- o Corrected a number of typos, rearranged the Setup Paramters

### 1.0.1b 2007-11-19

- o Fixed detection of CLI/Web
- o Upgrade Remote URL code with enhancements from Ken True
- o Fixed invalid reference to \$default\_units in CLI
- o Corrected release date, off by 10. Wierd.

### 1.0.0b 2007-11-19 Beta Release

- o Initial Beta release for some testing