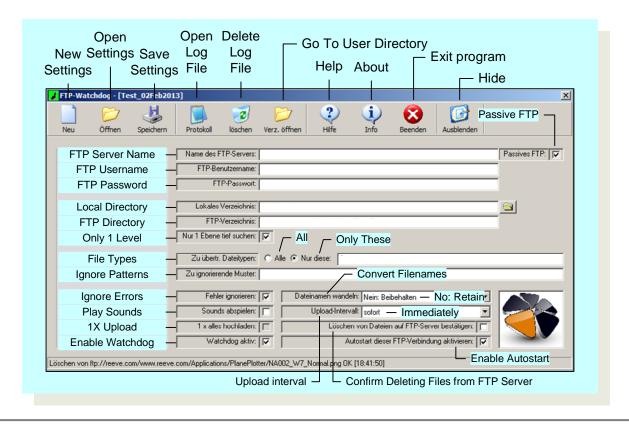
A. Introduction:

FTP-WatchDog is a reliable application program that can be used to send files using the File Transfer Protocol. FTP-WatchDog typically is used with software applications that periodically produce an image, data or text file. FTP-WatchDog detects the new file and automatically sends it to an FTP server on a website.

The FTP-WatchDog user interface is in German, so if you are unable to read it, the translations and instructions below will help you. These instructions apply only to FTP-WatchDog version 3, which is slightly different than version 2. Not all variations in FTP-WatchDog setup are covered here.

B. Installation:

- Download the free installation program ftp-watchdog-setup.exe from: http://toolsandmore.de/Central/Produkte/Software/Internet/Webmaster/FTP-Watchdog/.
- 2. Installation is straight-forward but step-by-step screenshots and translations are provided in Appendix II. Upon completion, the application Settings file will open. Refer to the screenshot below and the next section. The original program has German language text, and the screenshot shows English translations.



C. Setup and Use FTP-WatchDog V3:

- 1. The following describes each field and the action to be taken.
 - a. Refer to the screenshot, and fill in or check the following fields (additional screenshots of actual setups are provided in Appendix I):
 - FTP Server Name (use the domain name and extension, as in *myserver.com*)
 - <u>FTP Username</u> (must match the username allowed access to your FTP site)
 - <u>FTP Password</u> (must match the password allowed access to your FTP site)
 - Passive FTP (if the PC running FTP-Watchdog is behind a router with Network Address Translation (NAT) enabled, checking this box will make file transfers much more reliable)
 - b. Now fill in the following fields:
 - <u>Local Directory</u> (full path where the files are located on your PC, example *c:\myfiles\datafiles*. Enter only the path, no filename; see par. c. Alternately, browse to the folder by clicking the Folder icon on the far right of the field)
 - <u>FTP Directory</u> (full path on the remote site where the file is to be sent, typically a folder on your website, example /mydata/imagefiles). Enter only the path, no filename; see par. c. <u>Note</u>: The <u>FTP Directory</u> must be setup before using FTP-WatchDog; FTP-WatchDog does not establish its own directories
 - c. Select file types to be sent
 - <u>File Types</u>, consisting of two radio buttons and a field

Select the radio button **All** to send any file in the Local Directory (par. b) regardless of filename or extension. Do not enter any file types or extensions in the adjacent field.

Select the radio button **Only These** to send the file types or filenames listed in the adjacent field. Enter all filenames and extensions in the adjacent field.

Do not put any path information in the field (the path is specified in the <u>FTP Directory</u> field, see par. b). Be sure there are no other files in the <u>Local Directory</u> except the files to be sent. You can list more than one file or extension – separate them with a space.

<u>e-CALLISTO</u>: To send time-stamped Callisto FITS data files specify only the extension with leading dot (or period), as in .fit. If FITS files are to be sent to more than one server or website, a separate setup file is needed for each location (see par. 2 for running multiple instances of FTP-WatchDog). See Appendix I for specific examples.

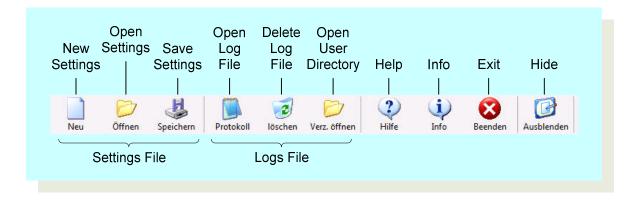
SAM: To send only SAM magnetogram image files specify the filename sam_data.png. To send any PNG-type image file specify only the extension .png (be sure to include the leading dot or period). See Appendix I for specific examples.

- d. Leave the following field blank:
 - Ignore Patterns (Use this field to specify directories or files in the <u>Local Directory</u> that you do not
 want sent to the FTP server. This is useful if you have a temporary folder or backup directory that
 you do not want sent to the FTP server, for example \temp or \backup. FTP-WatchDog will ignore
 these entries and not upload them. Separate multiple entries by spaces)
- e. Setup the following boxes and fields:

- **☑ Ignore Errors** (check)
- Play Sounds unchecked (unless you want to be driven crazy, but this can be useful when troubleshooting FTP problems)
- ☐ **1X Upload** (normally unchecked. Check this box to resend files in the <u>Local Directory</u> after an FTP server, PC or internet failure that prevented some of the files from being uploaded. FTP-WatchDog will upload all files and then automatically gray out the box when all files have been successfully uploaded. If a subsequent upload failure occurs, the unchecked box ☐ will become available so that this function may be used again)
- **☐ Enable WatchDog** (check to allow FTP-WatchDog to send files; ☐ uncheck if you want it to stop)
- Change or Convert Filename: From drop-down menu, select No: Retain (Nein: Beibehalten)
- Upload Interval: 10 seconds (10 Sekunden) for most applications. (This drop-down menu can be used to set the upload interval over a very wide range of time intervals from immediately (sofort) to seconds (Sekunden), minutes (Minuten), hours (Stunden) or days (Tage). The longer intervals could be useful where internet access is by dialup modem. The Immediately (sofort) setting is not recommended because of the CPU resources required to rapidly scan for appearance of new files)
- Confirm Deleting Files from FTP Server (normally uncheck. If you delete or rename a file in the Local Directory, FTP-WatchDog will delete them on the FTP server. If this box is checked, FTP-WatchDog will ask for confirmation before deleting the files from the server)
- ☑ Enable Autostart (check to cause FTP-WatchDog to automatically open and start sending when you reboot the PC; ☐ uncheck if you do not want the program to automatically open and start sending on reboot)

Note: It is not necessary to setup a shortcut in the Windows Startup folder to automatically run FTP-WatchDog when the PC reboots. FTP-WatchDog's built-in Autostart function is the preferred method (Autostart Enabled is checked). If Autostart Enabled is checked, DO NOT put a shortcut to FTP-WatchDog in the Windows Startup folder.

f. After you have everything setup properly, click the **Save** icon on the Toolbar. The default filename is Unnamed FTP-Setting.ftpwd (in German). If desired, change to another name, such as My Application_Setup (extension will be appended automatically). At this time FTP-WatchDog should start sending files. The howling dog icon in the taskbar system tray should turn green to indicate that FTP-WatchDog is active.



 You can setup different configurations and Save as many of them as you need. For most applications, one Settings file is sufficient; however, if you want to send files to more than one website or FTP server, you can

run multiple instances of FTP-WatchDog. In this case, you would have a separate Settings configuration file for each one. Care is required when running multiple instances to avoid overloading CPU resources (do not use the Immediate upload interval).

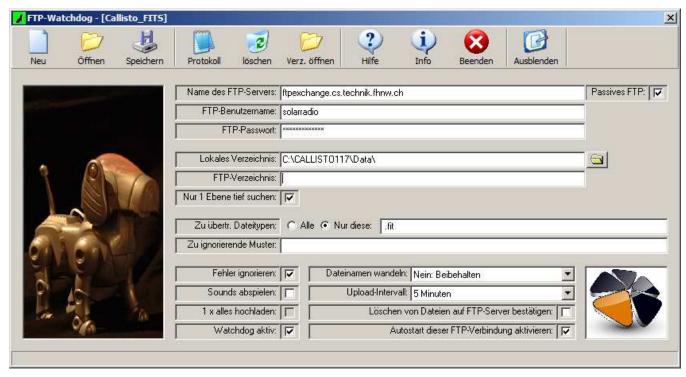
- 3. When FTP-WatchDog starts, it automatically loads the last used Settings file. You can manually load a Settings file by clicking the **Open** icon or setup a new file by clicking the **New** icon on the Toolbar. If setting up multiple instances, be sure to watch CPU usage. CPU usage depends on the **Upload Interval** with Immediate upload interval using the most CPU resources, but PC characteristics also will have an effect.
- 4. If you have problems getting file transfers to work properly, click the **Open Log File** icon on the Toolbar. This opens a text file of all activity. Although the logs are in German, it should be apparent what is causing the problem (FTP server error responses may be in English anyway). Alternately, you can use http://translate.google.com/ to translate the logs. Copy the log entry in question and Paste it into the Google text entry box. Be sure to select German > English translation in the dropdown boxes. If you want to start fresh logs, click the **Delete Log File** icon.

<u>Note</u>: FTP-WatchDog log files grow as the program runs and should be regularly deleted so they do not get larger than 45 KB. Notepad cannot open a file that exceeds 54 KB and does not allow editing if the file size reaches between 45 and 54 KB.

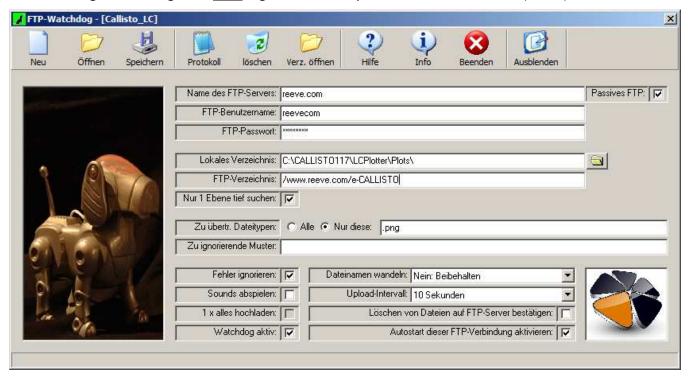
- 5. To hide the user interface, click the **Hide** icon on the Toolbar. This will hide the interface window but the program will continue to run in the background and it will be available from the taskbar. If you see a howling dog icon in the taskbar, FTP-WatchDog is running. If the icon is red, FTP-WatchDog is disabled and not sending; if the icon is green, it is enabled and sending.
- 6. To shutdown and exit FTP-WatchDog, click the **Exit** icon on the taskbar. This will terminate the FTP session and shutdown the program. However, if **Autostart Enabled** is checked, FTP-WatchDog will automatically open when the PC is rebooted.
- 7. To restart the program, from the main Windows screen go to Start All Programs Tools&More FTP-Watchdog FTP-Watchdog. FTP-WatchDog automatically loads the last saved Settings file. If Enable WatchDog was checked in setup, the program will start sending immediately and the taskbar icon should be green. If Enable WatchDog was not checked, the icon will be red. Click the taskbar icon and the user interface window will appear. Check the Enable WatchDog box and click Save. The taskbar icon should turn green, indicating that the program is sending.
- 8. If desired, you can put a Shortcut on your Desktop by right-dragging the FTP-WatchDog.exe file from the folder C:\Program Files\Tools&More\FTP-Watchdog to the Desktop and selecting Create Shortcuts here.
- 9. Test the **Autostart Enabled** feature by rebooting the PC. When the PC reboots, FTP-WatchDog should automatically open and start and you should see the howling dog icon in the taskbar. The icon should be green if **Enable WatchDog** is checked in the Settings file.
- 10. When FTP-WatchDog sends a file, the howling dog icon momentarily turns from green to white and then back to green.
- 11. To uninstall the program, from the main Windows screen go to Start All Programs Tools&More FTP-Watchdog *Deinstallieren*.

Appendix I – Specific Application Setups

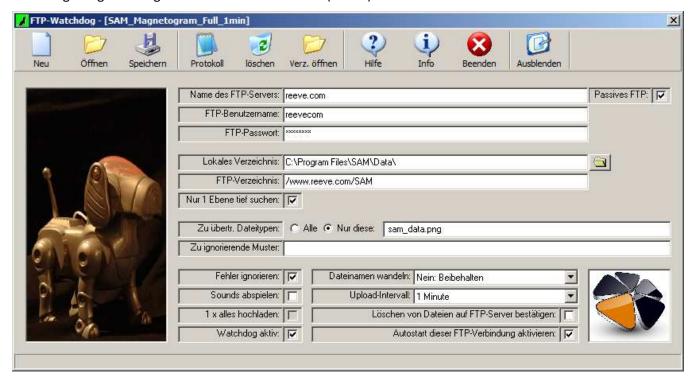
e-CALLISTO FITS File sent to FHNW server. <u>Caution</u>: Send only FITS files to this server exactly as shown below and NEVER include a subdirectory or subfolder; otherwise, your data will be lost. <u>Note</u>: If PERL-FTP seems to be failing due to not being able to resolve the FTP server name, possibly due to timeouts on satellite links, enter the IP address **147.86.8.73** in place of the FTP server name.



e-CALLISTO Lightcurve Image File. Note: Lightcurves usually are sent to a user website (below).



SAM Magnetogram Image sent at 1 minute intervals (below)



SAM Magnetogram Thumbnail Image sent at 2 minute intervals (below)



Appendix II – FTP-WatchDog Installation Sequence

When you run the installation program (ftp-watchdog-setup.exe), you may see a security warning (below).
 If so, click Run.



2. Upon seeing the Welcome screen (below), click Continue (*Weiter*). In this and following windows, click Cancel (*Abbrechen*) if you wish to abort or cancel the installation or Back (*Zurück*) if you wish to go back..



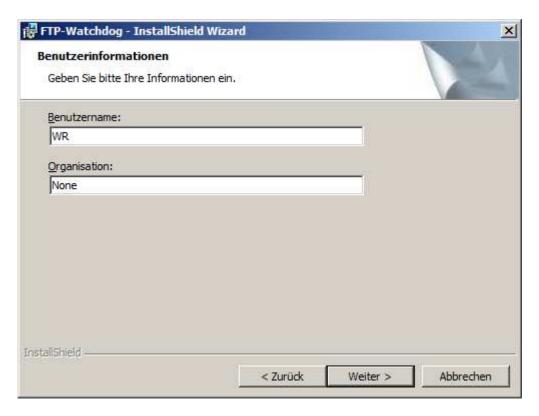
3. Read and accept the License (select upper radio button, *Ich akzeptiere die Bedingungen der Lizenzvereinbarung*, in screen below), click Continue (Weiter).



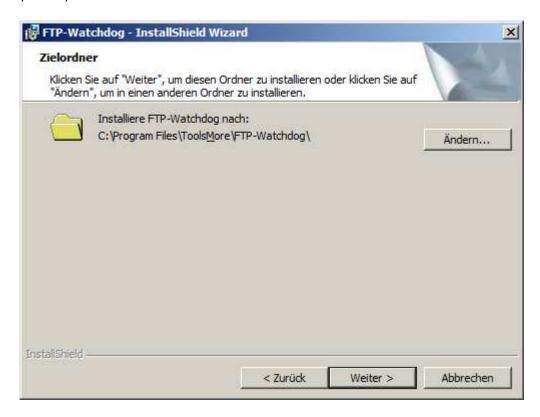
4. The next screen is Readme information, click Continue (Weiter).



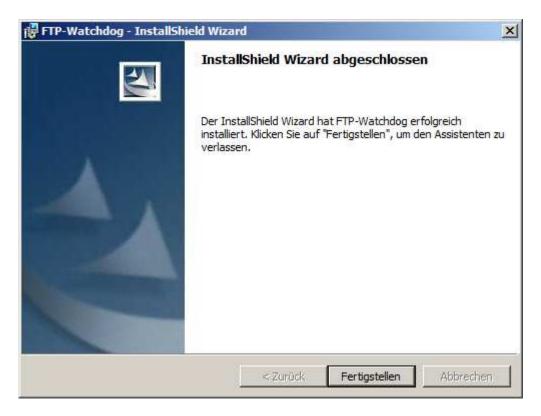
5. Fill in the User Information (below), and click Continue (Weiter).



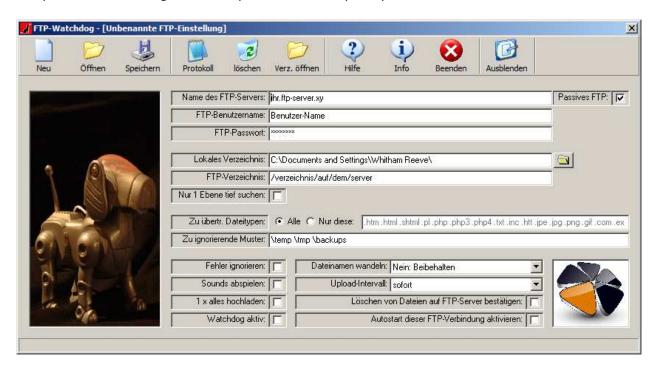
6. Browse (*Andern*) to the target folder for the program files or accept the default (below), click Continue (*Weiter*).



7. Finish installation (below), click Complete (Fertigstellen).



8. When installation is finished, the default Settings window will open (below). At this time, your installation is complete and the Settings file is ready to be edited for your system.



Document Information:

Author: Whitham D. Reeve

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0.1 (Changed upload interval, 3 Feb 2013)

0.2 (Minor edits, 5 Feb 2013)

0.3 (Final draft, edits, added Appendix II, 26 Feb 2013)

1.0 (Issued for distribution, 26 Feb 2013)1.1 (Startup shortcut warning, 28 Feb 2013)

1.2 (Changed ETH FTP server address, 26 Feb 2014)

1.3 (Edited Appendix I to caution data loss, 10 Sep 2015)

1.4 (Added Callisto FITS file server IP address, 25 Oct 2016)