## How to install VStar under Windows

Prerequisites: *VStar* is a Java-based application. It requires Java Runtime Environment (JRE) version 1.8 or later. You can download JRE installer for free from the official site: <a href="https://www.java.com/en/download/">https://www.java.com/en/download/</a>

*Vstar* for Windows is distributed in a form of a ZIP-package (requires manual installation) and as an executable installer. ZIP-package can be downloaded from the *SourceForge* repository. Follow the link <a href="https://sourceforge.net/projects/vstar/files/">https://sourceforge.net/projects/vstar/files/</a>, select a directory corresponding to the highest version (2.21.1 on 07-May-2020). Click on *vstar-<version>-win.zip* (*vstar-2.21.1-win.zip* for a version 2.21.1) to download.

# Manual installation from ZIP-package

Unpack downloaded zip archive into the desired location (for example, to *Documents* folder or to your home folder). Inside the *vstar* folder, find the *VStar.exe* executable file and launch it like any other application.

You can also create desktop and user menu shortcuts to *VStar.exe* launching *CreateVStarShortcuts.vbs* script.

### Using the executable installer

Launch *VStarSetup\_<version>.exe*. In most cases, you can simply follow the installation wizard. In the beginning, the installer checks if JRE is installed (trying to execute *javaw.exe*) and prompts you to download JRE if an attempt to launch *javaw.exe* fails.

The installer creates a desktop shortcut (labelled "AAVSO VStar") and VStar program group in the Windows Start menu. This program group contains a shortcut to VStar, a shortcut to VStar.ini (launcher configuration) and "Debug Mode VStar" to see possible startup errors. See also "Troubleshooting memory problems".

#### Troubleshooting memory problems

Sometimes VStar may not start because of memory allocation errors. If you encountered this, please use the "Debug Mode VStar" shortcut from VStar program group in the Windows Start menu. If you see a message like this:

```
    ✓ VStar Debug Mode

Launching java.exe
With parameters:
--splash:"C:\Users\mpta\vstar\extlib\vstaricon.png"
--Xms800m
--Xmx4036m
--jar "C:\Users\mpta\vstar\dist\vstar.jar"

Error occurred during initialization of UM
Could not reserve enough space for 4132864KB object heap
```

please open "VStar.ini" (using a shortcut from VStar program group) and comment out the "Parameters=" line:

```
[Settings]

Description=VStar.exe configuration file created at 2020-07-28T13:48:01
; Additional JVM parameters
; Parameters=-Xms800m -Xmx4036m
; Set ShowParameters=1 to view parameters to be passed to Java VM
ShowParameters=0
; VSTAR_HOME parameter overrides environment variable VSTAR_HOME
VSTAR_HOME=
; JavaPath
JavaPath
JavaPath
Put a semicolon before the line to disable it
```

Save VStar.ini and try to launch VStar again using the "AAVSO VStar" shortcut. If VStar runs normally, you can try to uncomment the "Parameters=" line and decrease the value of -Xmx parameter (see VStar.ini).

### Plug-ins

The functionality of VStar is extendable with plug-ins. There are plenty of plug-ins available, you can find an instruction on how to use and install plugins here: <a href="https://aavso.org/vstar-plugin-library">https://aavso.org/vstar-plugin-library</a>