## **ExoVista Installation Instructions**

- 1. Ensure that you have Python 3 installed (3.8 or higher recommended).
  - a. You may wish to create an isolated virtual environment for the installation. However, we have tested everything in the native Python environment.
  - b. **Note**: ExoVista was tested in a command line environment. User reports suggest there may be compatibility issues with Spyder.
- 2. Install the following Python packages if you do not have them already: numpy, pandas, matplotlib, scipy, astropy, and cython. (Package installer will vary by Python build.)
- 3. Ensure that you have a C/C++ compiler installed (cython should work with whatever is available).
  - a. Linux: g++ recommended.
  - Mac OS: Xcode recommended; follow the instructions at <u>https://developer.apple.com/xcode</u> or the Apple App Store. This should also install wget automatically.
  - c. Windows: Microsoft Visual Studio recommended; follow the instructions at https://visualstudio.microsoft.com
    - i. You may also use another tool such as Cygwin or MinGW.
- 4. Clone the ExoVista repository at <a href="https://github.com/alexrhowe/ExoVista">https://github.com/alexrhowe/ExoVista</a>. Click the "Code" menu in the upper right for download options.
  - a. If you have git installed locally, you can also do this on the command line with: "git clone https://github.com/alexrhowe/ExoVista"
- 5. Go to the Terminal (Mac or Linux) or Command Prompt (Windows) or other Python-compatible interface.
  - a. Windows users: type "command" in the search bar to find the Command Prompt.
- 6. Navigate to the ExoVista/src/ subdirectory.
- Run the following on the command line: "python setup.py build\_ext --inplace"
- 8. Check to ensure that the files wrapImage.cpp and wrapIntegrator.cpp have been created in the src/ directory.

ExoVista may be run from the main ExoVista/ directory. If the above process fails, you should still be able to run all of the post-processing routines (all Python scripts in this directory except "ExoVista.py" and "ExoVistaSystem.py").

## Wget Installation Instructions for Windows

- 1. Open the Command Prompt.
- 2. Run "wget --help" on the command line to see if it is already installed. If the Command Prompt says it is **not** a recognized command, continue.
- 3. Download a wget installer. Recommended source: <u>https://sourceforge.net/projects/gnuwin32/</u>
- 4. Run the installer. The default options should be adequate. Note the installation directory.
- 5. Edit your Environment Variables to include the path for wget. You should be able to access them by typing "environment" into the search bar, which will suggest the option of "Edit the system environment variables."

- 6. You should be in the "System Properties > Advanced" menu. Click on "Environment Variables," then "Path" under "User variables," then "Edit."
- 7. Add to the list of path variables the full file path for the wget.exe executable, based on the installation directory. It should include the final backslash, but not the filename. For example, "C:\Program Files (x86)\GnuWin32\bin\"
- 8. Click "Okay" until it closes all the menus.
- Return to the Command Prompt. "wget --help" should now bring up a list of options for wget. If so, the installation was successful. To download ExoVista data products, follow the instructions at <u>https://tools.emac.gsfc.nasa.gov/exovista/</u>
  - a. If this fails, you may use the provided example file in the ExoVista/output/ subdirectory for the purpose of the tutorial.