**Hot Pursuit NEO Tracking Application**

**Overview**

Hot Pursuit is a Windows 10 desktop application whose purpose is to automate the tracking of a NEO object with TheSkyX.

Targets are input to TheSkyX using the *TSXToolKit Transient Search* application via the NEO Scout search. The user selects one then launches Hot Pursuit.

Hot Pursuit fetches the name of the current TSX target, queries the CNEOS Scout internet site for its current ephemeral data, slews the mount to the coordinates and changes the tracking to match the target’s pace. Hot Pursuit recaptures the ephemeral data and resets tracking speeds every few minutes as set by the user.

**Controls and Commands**

Graphical user interface, application

Description automatically generatedUpdate Period: Sets the rate at which the CNEOS Scout site is polled for new ephemeris data. The minimum period for ephemeris from Scout is 1 minute. If “Seconds” is selected, then Hot Pursuit will interpolate at the period set by the Update Period.

Pursue: Initiates query and tracking which is repeatedly updated according to the update period.

Abort: Cancels the query and update, but does not close the program.

Close: Closes the program.

**Structure**

**Diagram

Description automatically generated**

**Operation**

Diagram

Description automatically generated

Diagram

Description automatically generated**Translation**

**Requirements**

Hot Pursuit is a Windows Forms executable, written in Visual C#. The app requires TheSkyX Imaging Edition (Build 10966 or later). The application runs as an uncertified, standalone application under Windows 10 (also Win 8, maybe).

**Installation**

As of this writing, the installation packages for Hot Pursuit are available on GitHub in the “publish” directory of rrskybox/Hot-Pursuit.

Download the HotPursuit.zip and extract. Run "setup.exe". Upon completion, an application icon will have been added to the start menu under "TSXToolKit" with the name "Hot Pursuit". This application can be pinned to the Start if desired.

**Support**

This application was written for the public domain and as such is unsupported. The developer would happily entertain questions or suggestion and may update the application occasionally as time permits. Otherwise, the developer wishes you his best and hopes everything works out but recommends learning Visual C# (it's not hard and the tools are free from Microsoft) if you find a problem or want to add features. The source is supplied as a Visual Studio 2019 project on GitHub