

The following procedure can be used to determine which targets on the AAVSO Exoplanet Target List produce a transit on a user-specified night or range of nights. This procedure uses a transit finder developed by Eric Jensen of Swarthmore College, which itself queries information from the exoplanets.org database.

1. Go to [AAVSO Exoplanet Target List Perl Expression](#) and copy this concatenation of targets to a plain text file for later use.
2. Open Eric's transit finder from <https://astro.swarthmore.edu/transits.cgi>.
3. For Observatory, select "Enter specific latitude/longitude/timezone" under "Manual coordinate entry" in the dropdown list.
4. Choose either UTC or local time to be displayed on the result page(s).
5. Enter the observatory's latitude, longitude, and timezone.
6. Select the beginning date of interest, as well as the number of days since the beginning date.
7. Select constraints on elevation that should be applied to the results.
8. Copy and paste the previously stored plain text Perl expression for the target list in the box labelled: "Only show targets with names matching this string:"
9. Click on Submit.

One or more pages will then be displayed that show, for a given observing evening, the target(s) from the target list whose transits are observable that evening or into the next day. These results are based on the previously user-entered timeframe and elevation constraints.

Some of the information that will then be displayed for each predicted transit includes: the V magnitude of the target star; the Start time, Midpoint, and End times in either UTC or local time (based on the user's prior selection); the target's ingress, midpoint, and egress times in JD form; elevation angles of the target at the Start, Midpoint, and End times; the RA and DEC of the target; and the predicted depth of the transit.

In addition, other information is shown that should help the user determine the target's observability, such as the % of the transit that will be observable, as well as the azimuth and hour angle (HA) at the Start, Midpoint, and End times.

Finally, under the Name column to the left, there are finder charts and links to other useful sites, such as exoplanets.org, that provide more detailed information about each displayed target exoplanet.