

Using the Visibility Chart to Determine if your Asteroid is Observable

So you want to observe an asteroid and you know its name. You are ready to submit an observation.

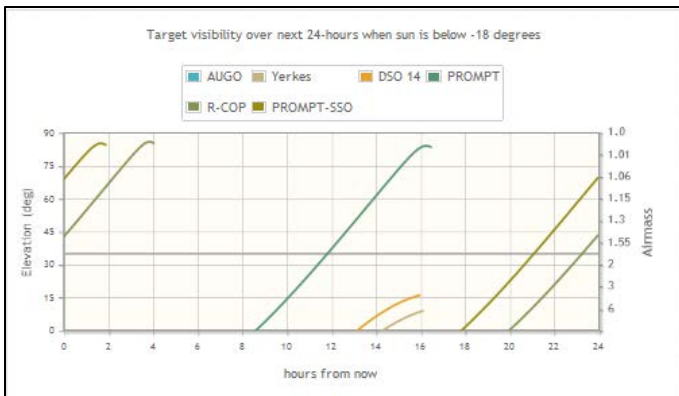
1. Click "Add New Observation".

Optical Observing | Add Observation

Target → Filters → Telescopes → Exposures → Review

The screenshot shows the 'Add Observation' interface. On the left is a 'Target Finding Interface' with a 'Sky Viewer' showing a star chart. A text box points to the chart with the instruction: "2. Search for the asteroid in the Target Lookup box. If Skynet knows the name of your asteroid, you will get a result." To the right is a 'Target Lookup' box with a search field containing 'Helena' and a 'Search' button. Below the chart are input fields for 'Observation Name' (Helena), 'Right Ascension (J2000)' (18:35:46.099), 'Declination (J2000)' (-36:19:30.5), 'Max Sun Elevation' (-18.0), 'Min Target Elevation' (35.0), and 'Min Visible Hours' (1.0). The 'Min Target Elevation' field is highlighted with a red box. Below the input fields is a 'DSS Preview' showing a star field. A text box points to the 'Min Target Elevation' field with the instruction: "3. Make sure your asteroid rises high enough in the sky for you to get good steady images. Change the 'Minimum Telescope Elevation' to 35 degrees."

4. Notice the observatories that show the visibility curve above the Minimum Telescope Elevation horizontal cut-off line. Those observatories can see your object. If none of the visibility curves are above the cutoff line, choose a different asteroid.



Lowering the Minimum Telescope Elevation could result in poor quality images because your object(s) are being observed through a lot of atmosphere, or air mass. If your object is visible high in the sky, you can even increase the Minimum Telescope Elevation. In the example above, with the asteroid Helena, you could raise the elevation to 50 degrees so the images are taken through less air mass.