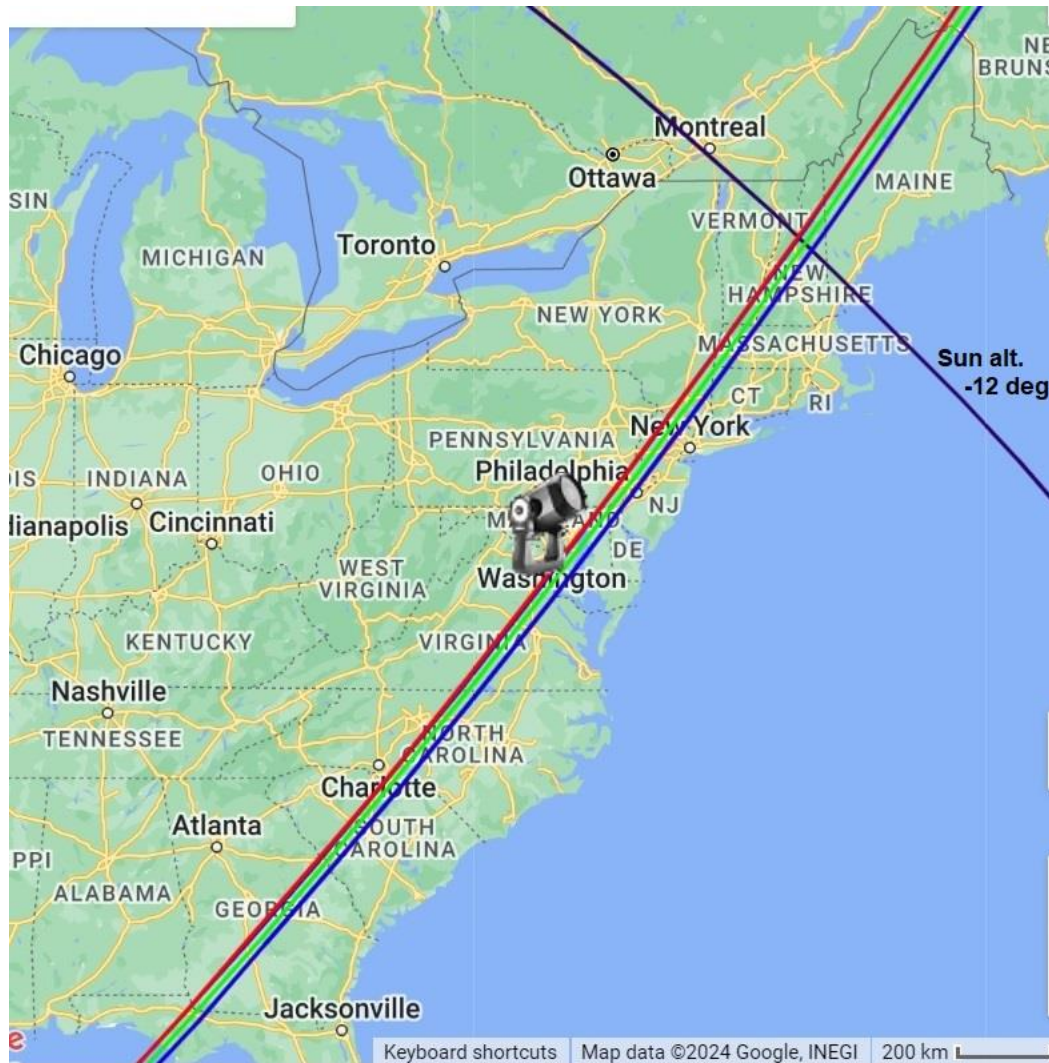


2024 Campaign Event – (5361) Goncharov Occultation of TYC 6374-00593-1

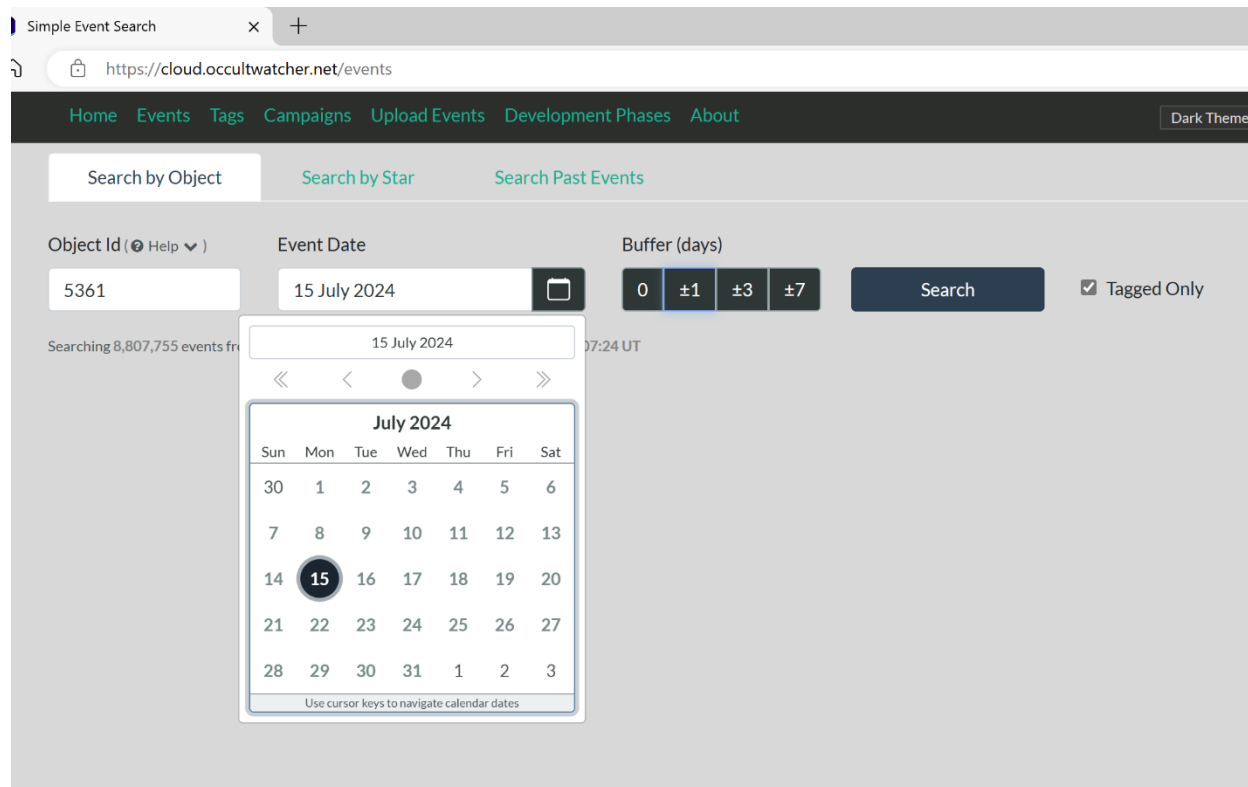
The occultation of 9.2 magnitude TYC 6374-00593-1 (SAO 190545) by (5361) Goncharov is the first of the three IOTA Campaign 2024 events. The track for this event begins in Maine just ahead of sunrise and travels down the Eastern coastal states through the Florida panhandle.



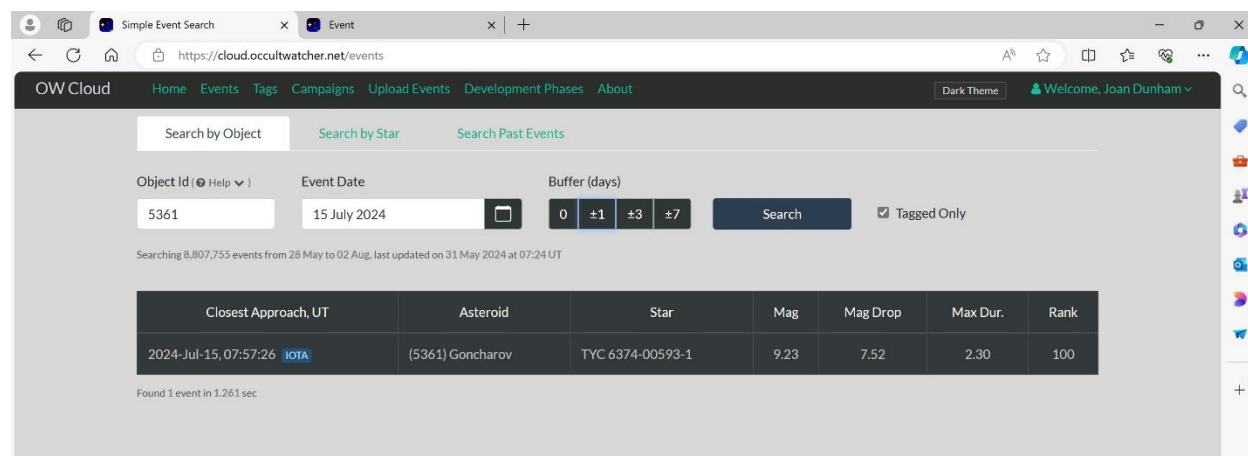
There will be observers, singly and in groups, along this occultation track, coordinating their locations to produce an outline of the asteroid at the moment of the occultation. The 9.2 magnitude star can be observed with relatively modest scopes so this event should be accessible by many along the event path.

If you want to participate, be sure to use Occult Watcher to select your site. Best practice is for observers to select sites so that observer lines are evenly spaced across the path but do still observe even if you are unable to move to a non-conflicting site.

If you do not see the Goncharov event in your OW feed, go to <https://cloud.occultwatcher.net/events> and do a simple event search as shown in the figure below:



This will generate



Then click on the event to bring up the prediction

OW Cloud (5361) Goncharov occults TYC 6374-00593-1 on 2024-Jul-15 at 07:57 UT

Closest Approach	Rank	Asteroid	Star	Mag	Comb.	Drop	Max Dur
2024-Jul-15, 07:57 UT	100	(5361) Goncharov (16.8 ^m)	TYC 6374-00593-1 (9.23 ^m) [RUWE: 0.90] Star Chart: 15° 5° 2° 0.5° 0.1°	9.2 ^m	9.2 ^m	7.5 ^m	2.3 sec

Predictions

Data Sources	Last Updated (UT)	Orbit Date	Error (PW ^{*)}	Error (time)
Horizons/GaiaEDR3 <small>default</small>	15 May, 17:22 <small>OWCI</small>	15 Apr 2024 <small>JPL#68</small>	0.03	0.2 sec

* PW = path widths

Countries in 1- σ Zone (4): Canada, Greenland, Mexico, United States of America

Tags (1): IOTA

Tag Event

Shadow crossing the Earth for 15:53 min from 07:49:29 UT to 08:05:23 UT

If you want to see more information on this page, you can simply request it!

Clicking on the Earth will produce a display of the track across the Earth's surface. Zoom in and navigate to locations near you to find a location accessible to you. Enter the coordinates of a good location into your OW configuration as a new site. You can select that as your observing site. Then use OW to find the local circumstances for the event at that site as well as how that location fits in with others' chosen observing sites.

Here is an example of selecting a site near Bryantown, MD for observing the Goncharov event.

The screenshot shows the OW Cloud interface. The main map area displays a Google Map of Maryland with a popup for a station named "(1) Bryantown MD". The popup text reads: "Long: -76° 50' 39", Lat: 38° 32' 58", Alt: 39m". Below the coordinates are three links: "To edit this station info click here", "To delete this station click here", and "To center this station click here".

The right sidebar contains the following information:

- Prediction:** Last Updated: 15/May/24, 17:22; UT; Data Sources: Horizons/GaiaEDR3; Error (path widths): 0.026; Err. Ellipse: 0.0011" x 0.0002"; Err. Basis: Known errors; Computed By: OWC; Orbit Date: 15 Apr 2024 (JPL#68); Error in time: 0.2 sec; Err. Ellipse PA: 74°; OWC Id: 1633520
- Event:** From: 07:49:29 UT; To: 08:05:23 UT; Combined Mag: 9.23; Max Duration: 2.3 sec; Mag Drop (V): 7.52; Moon Phase: 63% sunlit; Shadow Width: 30.8 km; Moon Elong: 101°; Solar Elong: 152°
- Target Star:** Name: TYC 6374-00593-1; Constellation: Capricornus; Diameter: 0.10 mas; RUWE: 0.90; Gaia SourceId: 6817538718656670336; RA [ICRS]: 21° 40' 52".0904; Dec [ICRS]: -22° 10' 17".031; V mag: 9.23; R mag: 8.49; B mag: 9.82; Gaia Flags: RA [aprrt]: 21° 42" 16".3218; Dec [aprrt]: -22° 03' 30".863
- Object:** Name: (5361) Goncharov; Class: Main-belt Asteroid; Diameter: 23.714 ± 1.6 km (Horizons); Distance: 2.2302 au; Motion RA: -18.82 "/hr; Moons: 0; Diameter: 14.66 mas; Mag: 16.8 ⚠️; Motion Dec: -13.17 "/hr; Rings: 0

At the bottom of the map area, there is a form with fields for Distance (1.50 km left), Altitude (56 m), Site name, Method, Timing, Show site to others, and Commitment. There are "Cancel" and "Submit" buttons.

Selecting events from OW Cloud can take longer to replicate onto the OW desktop display, but doing it with OW Cloud is a quicker way to select sites for mobile or remote stations.