## Bright Occultation by 143 Adria on Sunday Night 29th November

Dear All,

On the evening of Sunday 29th November just before 1am (technically 00:59:01, Monday morning the 30th November) an occultation of the asteroid 143 Adria is predicted to occur, and be visible over most of Sydney / Blue Mountains. The occulted star is in the constellation Perseus, and given as magnitude 9.4, with a 4 magnitude drop during the occultation lasting up to 7 seconds.

This is the brightest occultation I've heard predicted for these parts in a long time, and might be bright enough for visual observers with an 8" telescope or larger to observe visually. The probability of seeing the occultation (weather permitting) is also very high; at Bankstown it is 68%, at Werrington it is 83%; while at Linden the odds rise to about 90%.

Now the bad news. The target star is at 18° altitude in the north, with a full moon about 21° away. This could make it a challenge to find.

The wiki article on 143 Adria is not extensive, but lists some useful facts about the minor planet. <a href="https://en.wikipedia.org/wiki/143\_Adria">https://en.wikipedia.org/wiki/143\_Adria</a>

The prediction is here:

http://www.asteroidoccultation.com/2020\_11/1129\_143\_67332.htm

The path plot is shown below (page 2), being a Google Map of the areas where the occultation should be visible with a probability over 50%.

The Finder chart is also shown, being for an 8" f/10 SCT with a standard Watec camera field of view (approx 11' x 9') shown in red; and an overall field of view of 45 arc minutes (a little larger than the full moon). The bright star SAO 57083, Mag. 7.43 is just to the upper left of the camera field; this star should be listed in the handbox of most Celestron and possibly Meade Goto scopes.

Stellar co-ords (Jnow, for Goto scopes) RA 04h 16m 03s Dec +38° 35' 00"

Stellar co-ords (J2000, for planetarium programs like Stellarium) RA 04h 14m 38s Dec 38° 31' 54"

At present, more than one month in advance, three observers are listed on OccultWatcher to attend the occultation. During this CoViD time, the club will not be organising an event to observe the occultation, but members are encouraged to observe at home as they are able.

Regards, Tony Barry WSAAG Occ Crew.



