

Stefano & David,

I've attached my KML path file for this event on **Saturday**. I'm glad someone has asked for it as I was busy preparing it just when Paolo Tanga's message came through so I didn't think I could release it after that. But it includes the path for Dimorphos, so not completely redundant.

When loaded in Google Earth the view is centred on the European section of the path. Also a smaller section covering Florida, if you follow the central line over the Atlantic. There is a nominal picket fence with 100-m spacing, if required. Check out the Google Earth sidebar to see what's what and to toggle the lines on/off as needed.

David, if you hear of any willing observers further east than the Caspian Sea, I can provide a separate path for those areas later.

I also attach a screen-shot of the relative plane-of-sky positions of the two bodies as they would be seen from the Dimorphos central line near Alessandria, IT. The view is centred on the position of the star in between being occulted by Didymos and then by Dimorphos (plane-of-sky motion is 2.290 km/s at PA  $-91.880^\circ$ ). Durations are 0.36 s for Didymos and 0.09 s for Dimorphos. Occultation mid-times are separated by 0.44 s.

A note about orbits: I've used the latest JPL#201 solution for Didymos. I don't think there will any more updates for a little while, yet. For Dimorphos I've used the JPL#505 solution, which is not the most recent (JPL#510, which hasn't been released yet), but it appears there is very little difference between them. In fact, they're so close I did wonder if Steve Chesley had mistakenly used the old solution when he produced his own plane-of-sky plots (to be confirmed!).

This is a great opportunity to see a double occultation of this bright star. Hope you get to report back with some successful observations.

John.

On **Tuesday** 17-01-2023 10:22 PM, [dunham@starpower.net](mailto:dunham@starpower.net) wrote:

> Hi Stefano,

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> Thanks for this. As you saw from the message from Paolo Tanga, and my message following his, I won't be coordinating this event, but I think it will be useful for John Irwin to generate a Google Earth file for the event, to show observers like you, where the predicted Dimorphos occultation path is. The path that Paolo Tanga gives at <https://www.google.com/maps/d/u/0/edit?mid=1ipm3HGo3kW8Jbnvo4AGr8WC-LDpqyqs&usp=sharing> doesn't show the Dimorphos path, and it doesn't show the path east of Turkey, although we have some observers in Iran and northern India. Steve Chesley at JPL recently updated the orbit of Dimorphos, but for the Jan. 21/22 occultation, it didn't change the configuration significantly, from when he generated the first views of it on Dec. 30.

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> You wrote:

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> Hi David,

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> I plan to observe the Didymos event of **Jan 21** with a mobile station, a Celestron 8 and a WAT 910HX-RC camera.

> I plotted the ground path with OWC  
> <https://cloud.occultwatcher.net/event/750-65803-103092-649936-T01892-1>  
> and used the JPL#201 orbit.  
> I will move from Switzerland to northern Italy, don't know exactly  
> where, weather permitting.  
>  
> You said that John Irwin will release a more precise (Google Earth's)  
> kml-file. I will wait for it. (Could be that after the Didymos event of  
> Jan 17 there will be an orbit's update?)  
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>  
> Best regards,  
>  
> Stefano Sposetti