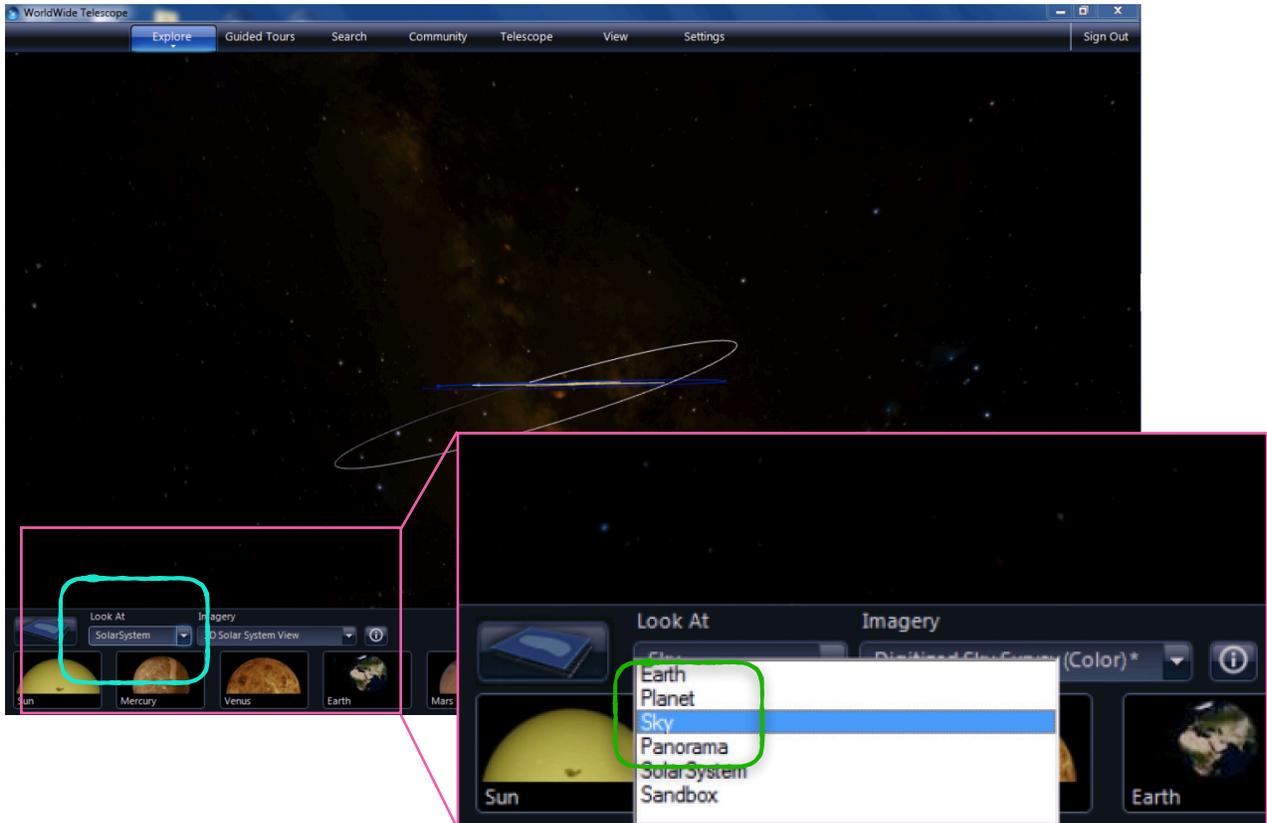


These instructions are courtesy of the [WorldWide Telescope Ambassadors Program](#), based at Harvard University, sponsored by the National Science Foundation, the John Templeton Foundation, Harvard University, and NASA.

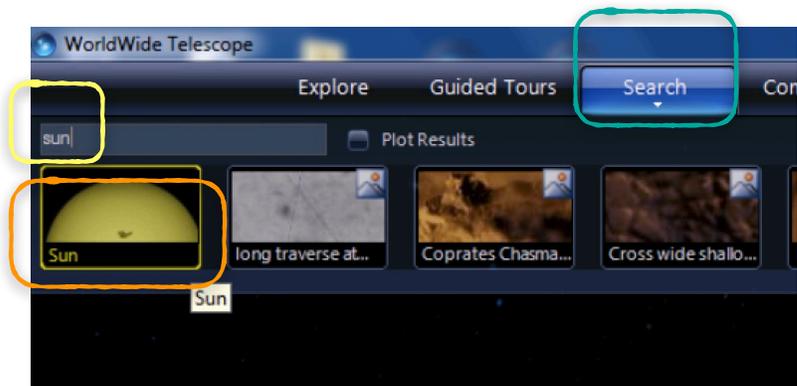
## How to use WorldWide Telescope to Simulate the 2017 Eclipse at any Location

(This set of instructions assumes you are running WorldWide Telescope on a Windows computer (or emulator), after having downloaded it for free from <http://worldwidetelescope.org>.)

1. Open WorldWide Telescope. The default opening screen will bring you to “Solar System” View. For now, **switch that “Look At” menu to the “Sky” view.**

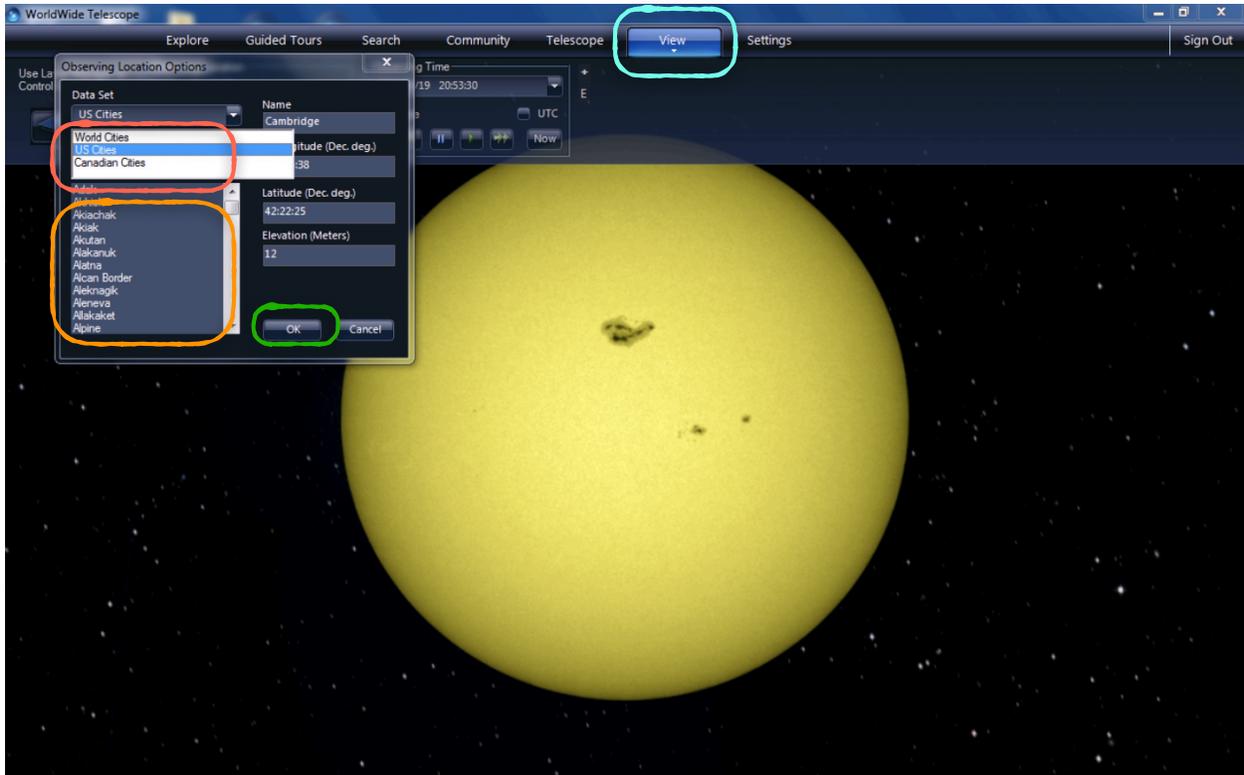


2. Select the “Search” menu, and type “Sun,” hit return, and then **click on the preview image of the Sun**, to go to the Sun’s position on the Sky.



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3. Now, you should see the Sun on your screen, and you will set up a location. Choose the “View” menu, and then choose “US Cities” and choose **your city from the list**. (Click “OK” when you are done.) In this example, we are switching from Cambridge, MA to Jackson, WY, but you can choose any city you like. (In Cambridge, the eclipse will be partial, and in Jackson, it will be total.)



4. Now you are ready to **choose the time**. (The window shown open here is accessed by clicking on the time section, next to the location section you used in Step 3.) Assuming you will be using these instructions on the day of the eclipse, you should set the date to 2017, 8, 21. As for the time, that’s up to you. The service at [tinyurl.com/wwteclipse](http://tinyurl.com/wwteclipse) will let you calculate the time of maximum obscuration for any US zip code. Guessing a time around mid-day will be close, and then you can use the time adjustments in the next step to “find” the eclipse. Also, you might want to use WWT in “real time” to see what’s going on as it happens where you live. If that’s the case, just set the time to the actual time on the clock. (If you’re worried about Daylight savings or you’re unsure of the true time, you can use Universal Time, by clicking “UTC” checkbox, and entering the time from [time.is/UTC](http://time.is/UTC).)



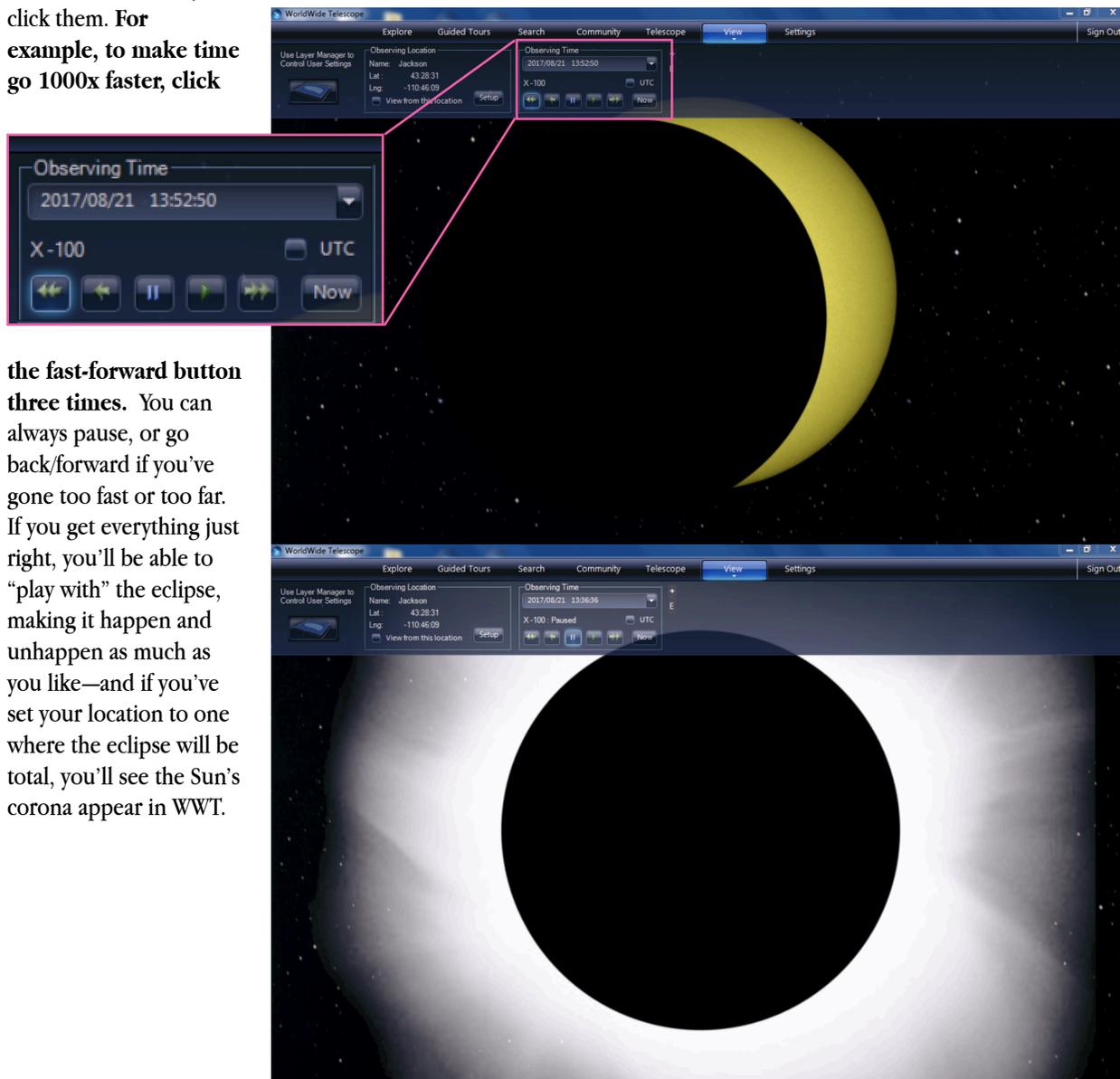
Click “OK” when you’ve chosen the time you want.

Go to the next page for the fun part!

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Now it's time to let time run, thereby simulating the motion of the visible disk of Moon across the visible disk of Sun. (Remember that the Sun is 93 million miles away from Earth, and the Moon only about 228 thousand miles away from Earth—an eclipse is just the shadow of the Moon on the Earth, and nothing more!)

5. To control time in WWT, you can use the controls in the “Observing Time” box (which, remember, appears once you’ve clicked on the “View” tab.) The single forward arrow lets time go forward “real time” pace. (The backward arrow does the reverse.) The double arrows for “rewind” and “fast forward” will make time go 10x faster either backwards or forwards each time you click them. For example, to make time go 1000x faster, click



the fast-forward button three times. You can always pause, or go back/forward if you’ve gone too fast or too far. If you get everything just right, you’ll be able to “play with” the eclipse, making it happen and unhappen as much as you like—and if you’ve set your location to one where the eclipse will be total, you’ll see the Sun’s corona appear in WWT.

While these instructions offer specific guidelines for simulating the 2017 Solar Eclipse, *don't forget to mess around with other options while you are using WWT!* Feel free to zoom in and out, pan around, and don't forget about that “Solar System Mode” you saw under “Look at” at the beginning...in that mode, you can understand what’s happening in the eclipse, in 3D! Videos and more explaining the eclipse using WWT’s Solar System mode are at the WorldWide Telescope Ambassadors web site, at [wwtambassadors.org/news/2017-eclipse-sun](http://wwtambassadors.org/news/2017-eclipse-sun).