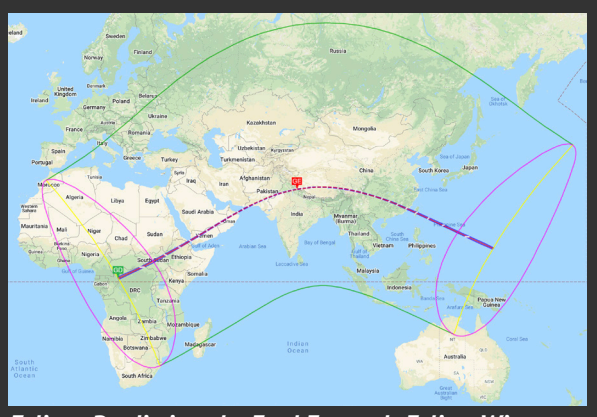
21 June 2020 Annular Solar Eclipse

The path of the annular solar eclipse of 21 June 2020 will start early in the morning in central Africa, cross over from eastern Africa to the Arabian peninsula, South Asia, China and Taiwan. The eclipse will cover this distance of 14000 km in about 3 hr 45 min.



Eclipse Predictions by Fred Espenak, EclipseWise.com

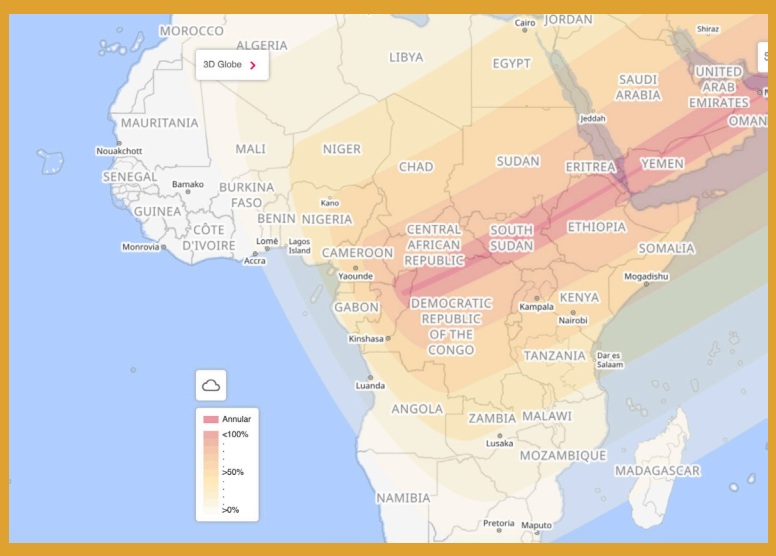
In Africa, this 60 km wide annular path will pass through Democratic Republic of the Congo, Central African Republic, South Sudan, Ethiopia and Eritrea. For those in this path of annularity, 97% of the sun's disc will be covered by the moon for a few minutes during maximum eclipse.

Farther away a location is from this annular path, less of the sun will be covered during maximum eclipse. This obscuration is about 70% in central Sudan, Chad, southern Ethiopia and Kenya, about 35-50% in Libya, Egypt and Tanzania, and even less for regions farther away.

This image from timeanddate.com shows the extent of the sun that will be covered during maximum eclipse. The central dark line marks the path of annularity.

For locations within the large magenta oval, the eclipse would have started before sunrise. The further north-east you are within this oval, longer is the duration of the eclipse that can be seen after sunrise.

It is best to find a spot with an unobstructed view of the eastern horizon to look at the eclipse. The purple thick line from the DRC through Ethiopia marks the annular path. The cloud cover is expected to be least for more eastern locations.



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Did you know?

Between 2 to 5 solar eclipses can occur every year somewhere on Earth, but a total solar eclipse is much rarer, once roughly every 18 months. Eclipses occur in complicated cycles, and a total eclipse usually happens for the same location roughly every 400 years

Activity

Go to the interactive map of the eclipse here or here and find the eclipse timings for your location. Next, try this for other cities and see how these numbers change.

LOOKING AT THE SUN DIRECTLY WITH YOUR NAKED EYES OR THROUGH A TELESCOPE, BINOCULARS OR A LENS, MAY PERMANENTLY DAMAGE YOUR EYES.

Download this poster series and our Eclipse Handbook for Africa from our website

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African Astronomical Society

Background image: A montage of the stages of the annular solar eclipse of 26 Dec 2019, by Aasif Iqbal J from Coonoor, India.