

## **Cell Phone Solar Eclipse Photography Tips**

- Solar Snap filters w/ app & Eclipse glasses – [www.eclipseglasses.com](http://www.eclipseglasses.com) (American Paper Optics)
- ALL partial eclipse viewing and photography requires a solar filter and glasses
- Remove eclipse glasses and solar filters during totality
- Switch off flash
- Shoot in Pro or Manual or use the Solar Snap app. Night Mode / maybe Auto for totality
- Pro and Manual Modes feature Exposure Compensation - darken the photo for totality
- Zoom with an optical zoom – not a digital zoom. Get a tighter shot using an additional telephoto lens with solar filter over the lens. (best on a tripod!) Or photograph through a telescope w/ solar filter
- **Go wide** for views of the landscape, horizon, overhead sky, and people around you
- **Lock focus** for sun shots w/ the filter (lock focus on distant subject, add filter and recompose on the sun)  
Lock focus before totality. The camera may hunt for focus in the dark sky and won't focus at all
- Use **burst mode** at the edge of totality to capture the 'Diamond Ring' and other transition effects
- Shoot **RAW** for the greatest amount of tonal detail capture. Download a third-party app like Halide, Yamera, or Camera+ 2 and toggle on the RAW mode (unless your phone has a RAW option) Be sure your phone has enough card space to record RAW files! RAW files do need to be edited w/ post processing
- No handheld video unless you can hold the phone nice and steady during the excitement of totality!
- Setup a **Tripod** and start a wide view clip ahead of time to record everyone's interactions during totality
- PRACTICE ahead with the solar filter for photos of the sun, evening photos after the sun has set for totality

## **Totality Viewing Tips**

- Travel early – plan to stay late. With good conditions there WILL BE TONS of traffic – especially afterwards
- Pack *eclipse glasses, solar filters, cameras and tripod, memory cards, fully charged batteries, accessories*
- Fill the gas tank ahead of time so you don't run out in slow traffic or have issues with stations out of gas
- Bring extra clothes, jackets, food, water, medications, pee bottle, sleeping bag or blankets, and any other personal or travel necessities in case you are on the road longer than expected
- Carry maps in addition to GPS. Cell service is spotty in the mountains
- Check the Solar Eclipse Timer App for eclipse timing for glasses off / on and other eclipse details (need to purchase details relevant to the current eclipse)
- Ambient temperature will drop during the partial stages to near nighttime temps during totality
- Have a headlamp or flashlight in case it's needed during totality
- ENJOY the EXPERIENCE! Don't miss the experience while trying to get a few photos!

## DSLR Solar Eclipse Photography Tips

- Eclipse glasses – [www.eclipseglasses.com](http://www.eclipseglasses.com) (American Paper Optics)
- Adjustable Baader AstroSolar Safety Film Filter [www.astromaniaoptics.com](http://www.astromaniaoptics.com) (scroll down to Solar Filters)
- ALL partial eclipse viewing & photography requires a solar filter and glasses 5.0 optical density (16.5 stops)
- Standard ND filters are not strong enough – stacking softens detail - welding glasses at least #12 strength
- Solar filters and eclipse glasses are taken off during totality
- DO NOT aim a mirrorless camera at the sun for any length of time without a solar filter over the lens
- **Tripod** / Tracker option – MoveShootMove/ iOptron Sky Guider Pro / Sky-Watcher Star Adventurer)
- **Camera(s)** with auto bracketing option and interval timer capability (or with an additional intervalometer)
- **Interval** – from 5 - 10 seconds to a minute or more during partial / 3-5 seconds near and during totality
- **Lenses** – wider angle landscape field of view / tighter in telephoto shooting. Landscape wide angle – 14 mm to 24 mm field of view. Use a 200-800mm field of view for telephoto during partial, but no longer than 400 - 500 mm while bracketing the eclipsed sun and corona during totality
- Use a Cable Release or Exposure Delay (Nikon) or Camera Timer for individual photos
- **Landscape** sequence – Shot w/ Interval Timer / Exposure Smoothing On / A mode / ISO Auto – lock exposure during totality and bracket! No solar filter for this sequence – use a DSLR with a physical shutter!
- **Telephoto** – **Partial** eclipse stages - Manual focus & set exposure ahead (clear sky w/ Baader filter - f/8-11, 1/800, ISO 100) / **Totally** – TAKE OFF FILTER – same base exposure – **BRACKET** (Note on some Nikons – turn off standard AE Bracket to set the Interval Timer – Bracket options are in the Interval Timer settings)
- Several minutes before totality, set telephoto and landscape cameras to Bracket / Check battery life / Adjust the interval timer (intervalometer) to the shorter interval
- Take the solar filter off during the diamond ring - then back on after the diamond ring appears again
- Possibility of seeing Comet 12p Pons-Brooks during totality. Exp for a bright comet f/2.8-4, 5 secs, ISO 1250 (bring along binoculars) it will be near bright Jupiter to the left of the eclipsed sun
- **LOOK ALL AROUND!!** for photos of the landscape and people around you
- Set up a video camera a few minutes before totality and record a video of the people during the event reacting to the experience!
- PRACTICE AHEAD and ENJOY THE EXPERIENCE!!

## Eclipse Links

[https://eclipse2024.org/eclipse\\_cities/statemap.html](https://eclipse2024.org/eclipse_cities/statemap.html) – zoom into local detail

<https://www.greatamericaneclipse.com/april-8-2024/> lines of duration maps

<https://svs.gsfc.nasa.gov/5073> local details map (download / zoom in)

<https://www.timeanddate.com/> Sun and Moon / Eclipses

<https://eclipse.gsfc.nasa.gov/solar.html> NASA eclipse site

[https://eclipse2024.org/xavier\\_redirect.html](https://eclipse2024.org/xavier_redirect.html) – Google Maps link

<https://eclipse.aas.org/eclipse-america/eclipse-experience> – solar eclipse phenomena

<https://solarsystem.nasa.gov/eclipses/2024/apr-8-total/where-when/>

<https://www.greatamericaneclipse.com/>

<https://eclipse2024.org/> – excellent solar photography tips and many additional details

<https://www.skyatnightmagazine.com/astrophotography/astrophoto-tips/how-to-safely-photograph-the-sun/>

[http://xjubier.free.fr/en/site\\_pages/SolarEclipsesGoogleEarth.html](http://xjubier.free.fr/en/site_pages/SolarEclipsesGoogleEarth.html)