The Northern Eclipse Graze Zone across Moberly, MO – p. 1 of 2

The Graze Zone is between the 2 dark gray lines plotted. Ignore the blue line & the red circle with "crosshairs".



Northwest of Moberly, Missouri; at map left, central eclipse is at 1:12:54 pm CDT (18:12:54 UT)



Northeast of Moberly, Missouri; at map right, central eclipse is at 1:13:02 pm CDT (18:13:02 UT)

The Northern Eclipse Graze Zone across Moberly, MO – p. 2 of 2

The Graze Zone is between the 2 dark gray lines plotted. Ignore the blue line & the red circle with "crosshairs".



Northwest of Moberly, Missouri; at map center, central eclipse is at 1:12:43 pm CDT (18:12:43 UT)



East of Moberly, Missouri; at map center, central eclipse is at 1:13:14 pm CDT (18:13:14 UT)

Note that the intensity of the part of the Sun that remains visible at central eclipse will change considerably across the graze zone; that's what we want to measure! **Caution:** North of the north edge of the graze zone, the remaining piece of the Sun will be very bright, and it is recommended that observers there use eclipse glasses the whole time. Those in the graze zone, and farther south, should look for the splendor of totality, but use the eclipse glasses when the Sun is too bright to comfortably look at without them. Information about recording the eclipse, especially with smart phones, is in another flyer and at IOTA's Web site at http://occultations.org/eclipse2017/

More detailed maps can be generated using IOTA's interactive Google Map at

http://www.poyntsource.com/New/Google/Total Eclipse of 2017 Aug 21.htm. For the 260-m (850-ft.) average elevation above sea level of the northern Moberly region, the values for the offsets (specified in two boxes above the Google Map) to generate the gray-line boundaries of the northern-limit graze zone are -56.064 and -57.064. These will generate the boundaries to under 10m (30 ft.) accuracy across the region, good enough for specifying the graze zone. IOTA's Web site will be updated periodically with more detailed information about how to make and report the observations. We are interested in either individual smart phone recordings (I have some extra smart-phone telephoto lenses and tripods that I can loan), or two-person teams that can be positioned across the graze zone, or if you might be able to operate small telescope video systems that I will loan, as shown at

http://occultations.org/eclipse2017/advanced/ to make more detailed recordings; contact me to volunteer for this activity. For the small telescope systems, I hope to show you how to use them on Sunday afternoon, before eclipse day. The northern graze zone over northern Moberly is our preferred location for observing the eclipse, but if the weather forecast is poor for Moberly, we will go instead to another city with better weather prospects.

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