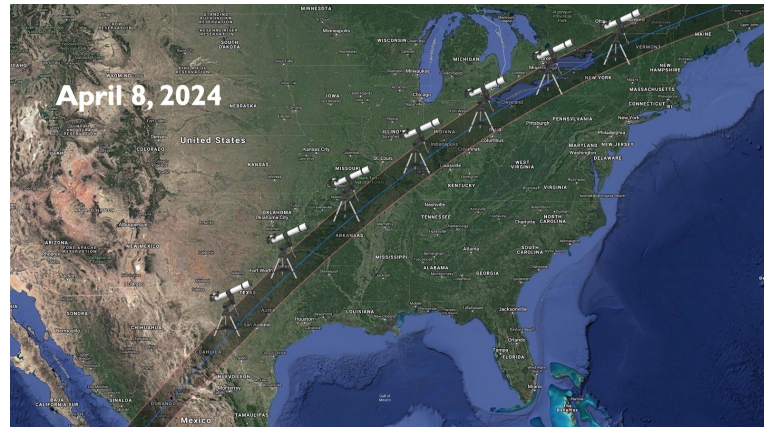


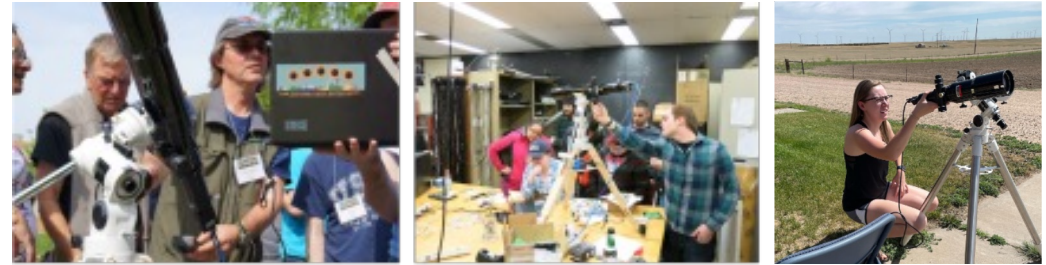
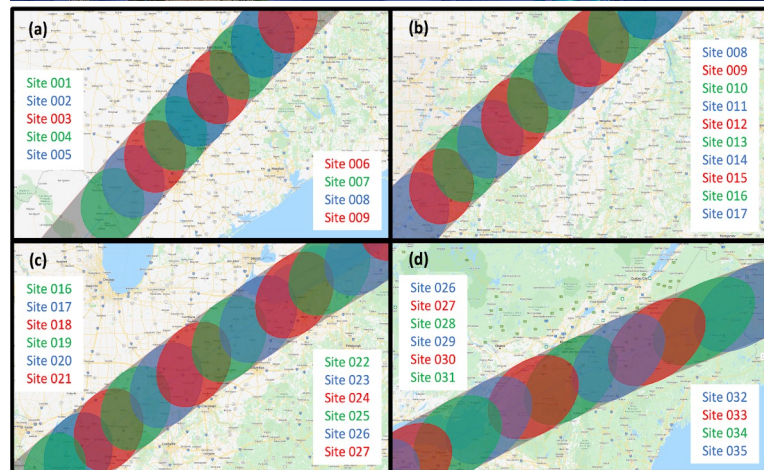
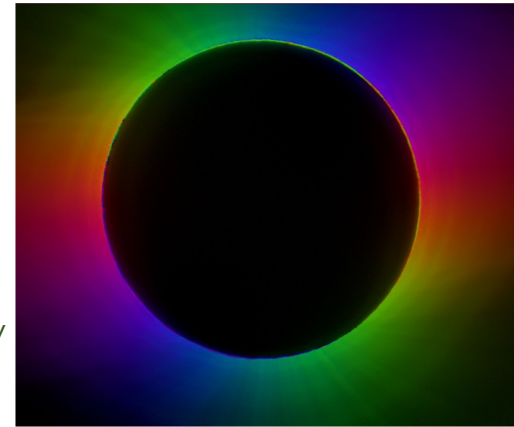
Citizen CATE 2024 Next-Generation of Coordinated Eclipse Observations

Sarah A. Kovac¹, Amir Caspi¹, D. Seaton¹, C. Raftery², P. Bryans³, D. Zietlow³, P. Yanamandra-Fisher⁴, C. DeForest¹, J. Burkepile³, D. Elmore², J. Jackiewicz⁵, J. Maldonado⁶, R. Haacker³, H. Lazrus³, A. Ursache, S. J. Davis⁷

¹Southwest Research Institute, ²National Solar Observatory, ³National Center for Atmospheric Research, ⁴Space Science Institute, ⁵New Mexico State University, ⁶Livelihoods Knowledge Exchange Network, ⁷University of Northern Colorado



The Citizen Continental-America Telescope Eclipse (CATE) next-generation experiment will take a 60-minute continuous movie of the solar corona – the Sun's outermost atmosphere – during the April 8, 2024 total solar eclipse using 40+ groups of citizen scientists along the US eclipse path. Using polarized light, we will study fine structure and fast dynamic motion in the lower and middle corona.



Left/middle: Citizen CATE training workshops at Southern Illinois University Carbondale (Image credit: Bob Baer) Right: Practice observations in Colorado (Image credit: S. J. Davis)

Join us for an eclipse relay race! We are seeking **volunteers, regardless of age or experience**, to observe totality nationwide. CATE offers motivated volunteers a once-in-a-lifetime experience.

- Keep all equipment (full telescope, camera, and laptop setup)
- Get trained by professional astronomers
- Contribute to world-class data collection

Maps of 2024 eclipse path with citizen science team locations. Shape of ellipse represents shape of eclipse shadow at each location.