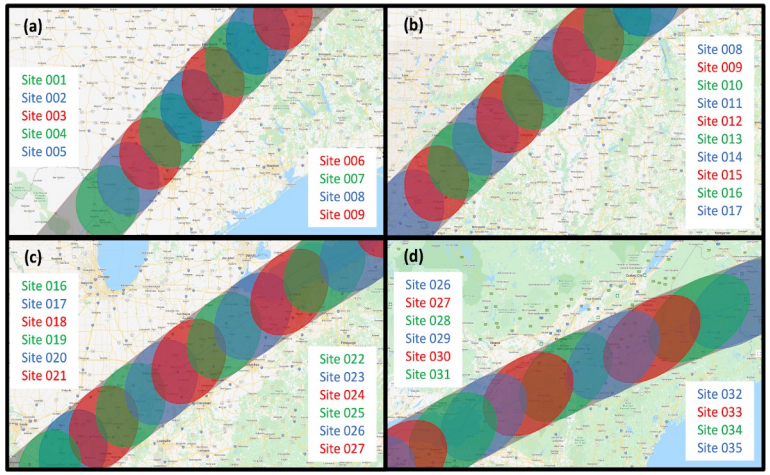
Citizen CATE 2024 *Next-Generation of Coordinated Eclipse Observations*

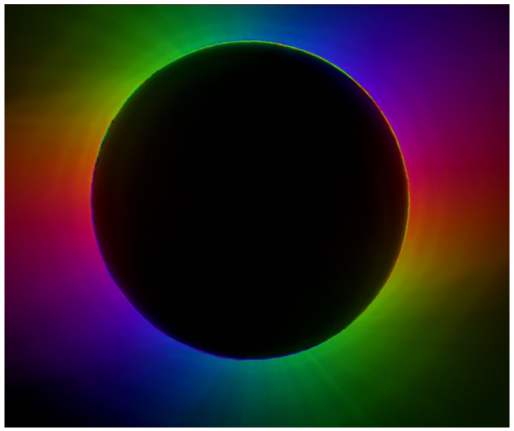
Sarah A. Kovac[1], Amir Caspi[1], D. Seaton[1], C. Raftery[2], P. Bryans[3], D. Zietlow[3], P. Yanamandra-Fisher[4], C. DeForest[1], J. Burkepile[3], D. Elmore[2], J. Jackiewicz[5], J. Maldonado[6], R. Haacker[3], H. Lazrus[3], A. Ursache, S. J. Davis[7]

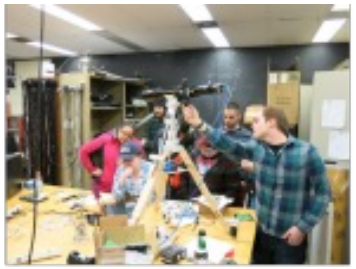
[1]Southwest Research Institute, [2]National Solar Observatory, [3]National Center for Atmospheric Research, [4]Space Science Institute, [5]New Mexico State University, [6]Livelihoods Knowledge Exchange Network, [7]University of Northern Colorado



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

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

Interested? Contact us!
cate@boulder.swri.edu