

# CITIZEN CATE 2024: DISTRIBUTED OBSERVATIONS OF THE 8 APRIL 2024 TOTAL SOLAR ECLIPSE WITH COMMUNITY VOLUNTEERS

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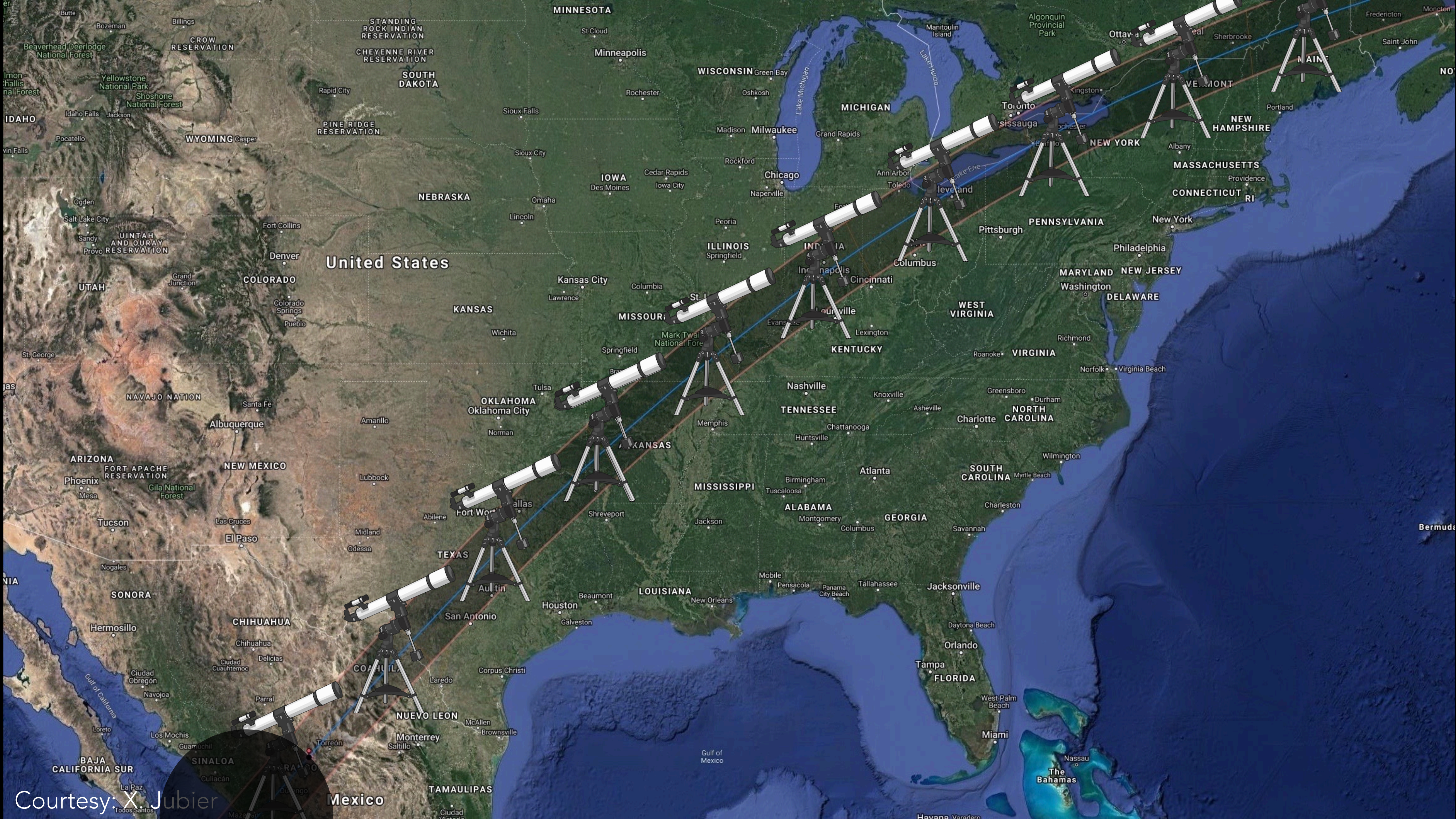


NASA Grants: 80NSSC21K0798, 80NSSC23K0946  
NSF Grant: 2231658, (+ pending)





*M. Druckmuller, P. Aniol, S. Habbal (2017)*



United States

Courtesy: X Jubier

Mexico

TAMAULIPAS

SINALOA

NUEVO LEON

COAHUILA

CHIHUAHUA

SONORA

BAJA CALIFORNIA SUR

SONORA

ARIZONA

NEW MEXICO

UTAH

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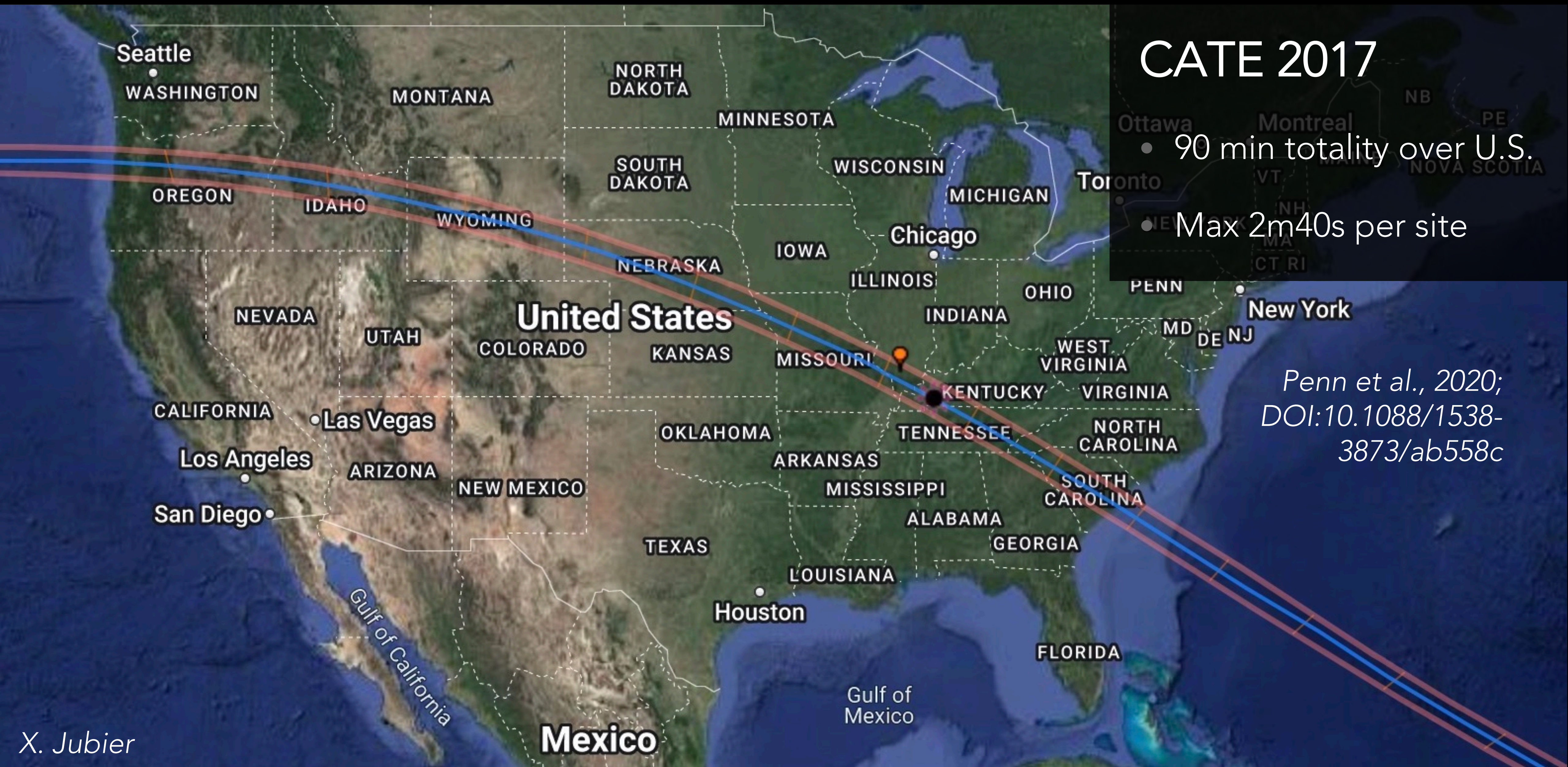
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# CITIZEN CONTINENTAL-AMERICA TELESCOPIC ECLIPSE EXPERIMENT



## CATE 2017

- 90 min totality over U.S.
- Max 2m40s per site

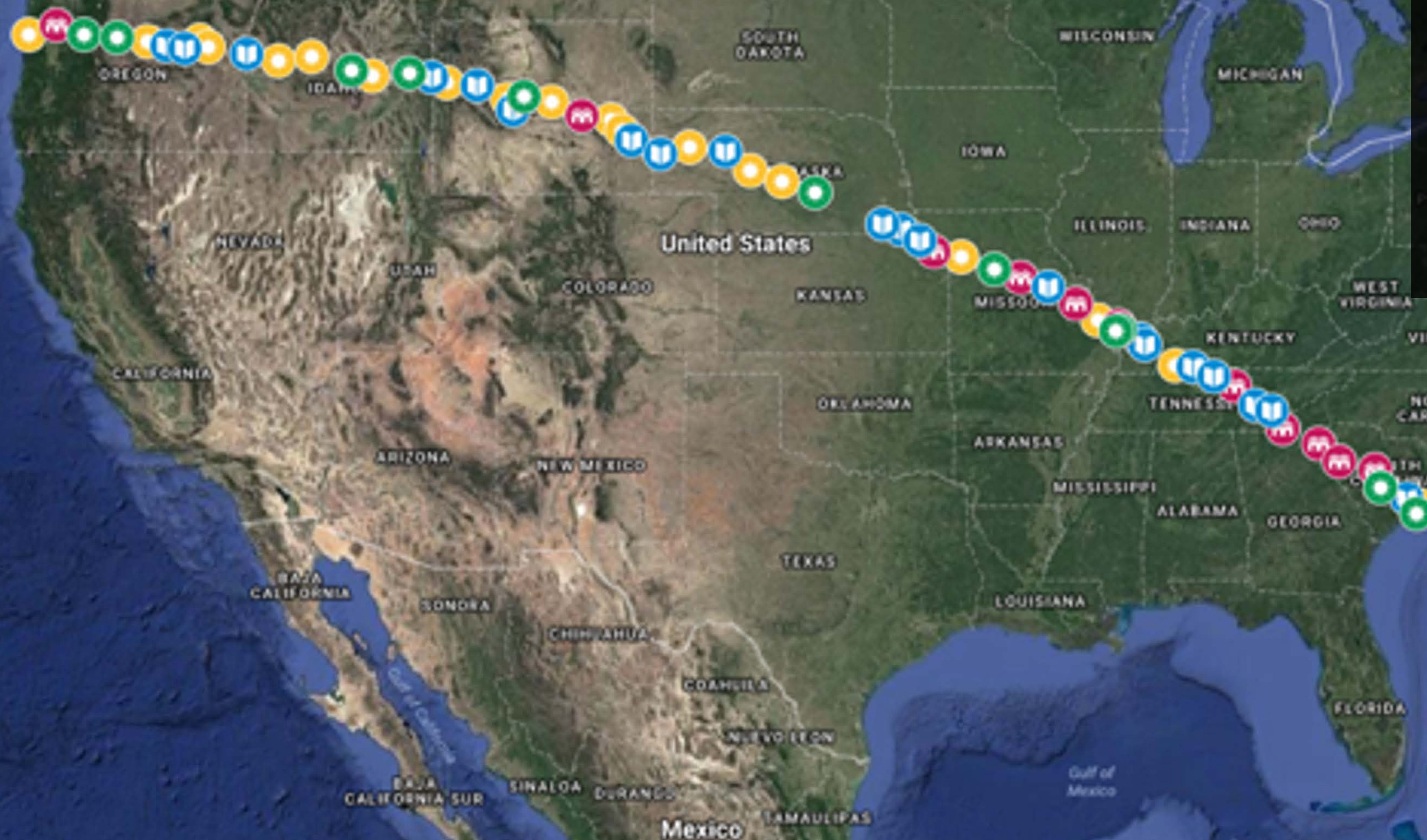
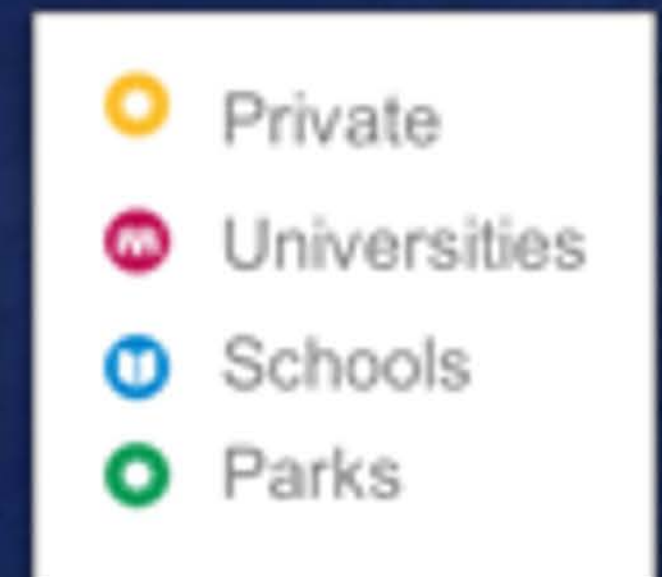
*Penn et al., 2020;  
DOI:10.1088/1538-3873/ab558c*

# CITIZEN CONTINENTAL-AMERICA TELESCOPIC ECLIPSE EXPERIMENT

## CATE 2017

- 300+ volunteers
- 68 sites
- 90% coverage

*Penn et al., 2020;  
DOI:10.1088/1538-  
3873/ab558c*



Bob Baer, Matt Penn, & co. have a new groundbreaking campaign for 2024

# DYNAMIC ECLIPSE BROADCAST INITIATIVE

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<https://debinitiative.org>

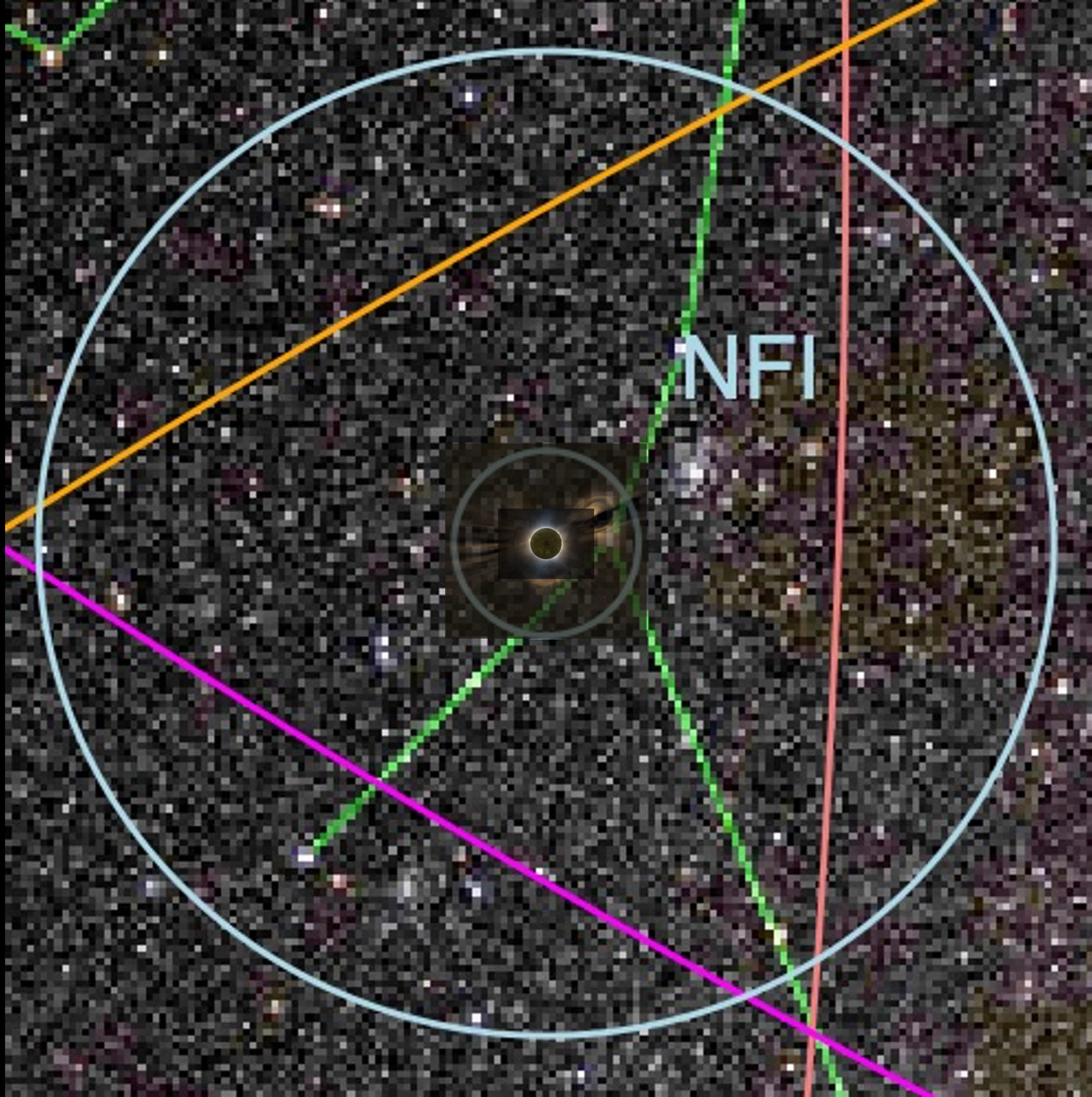




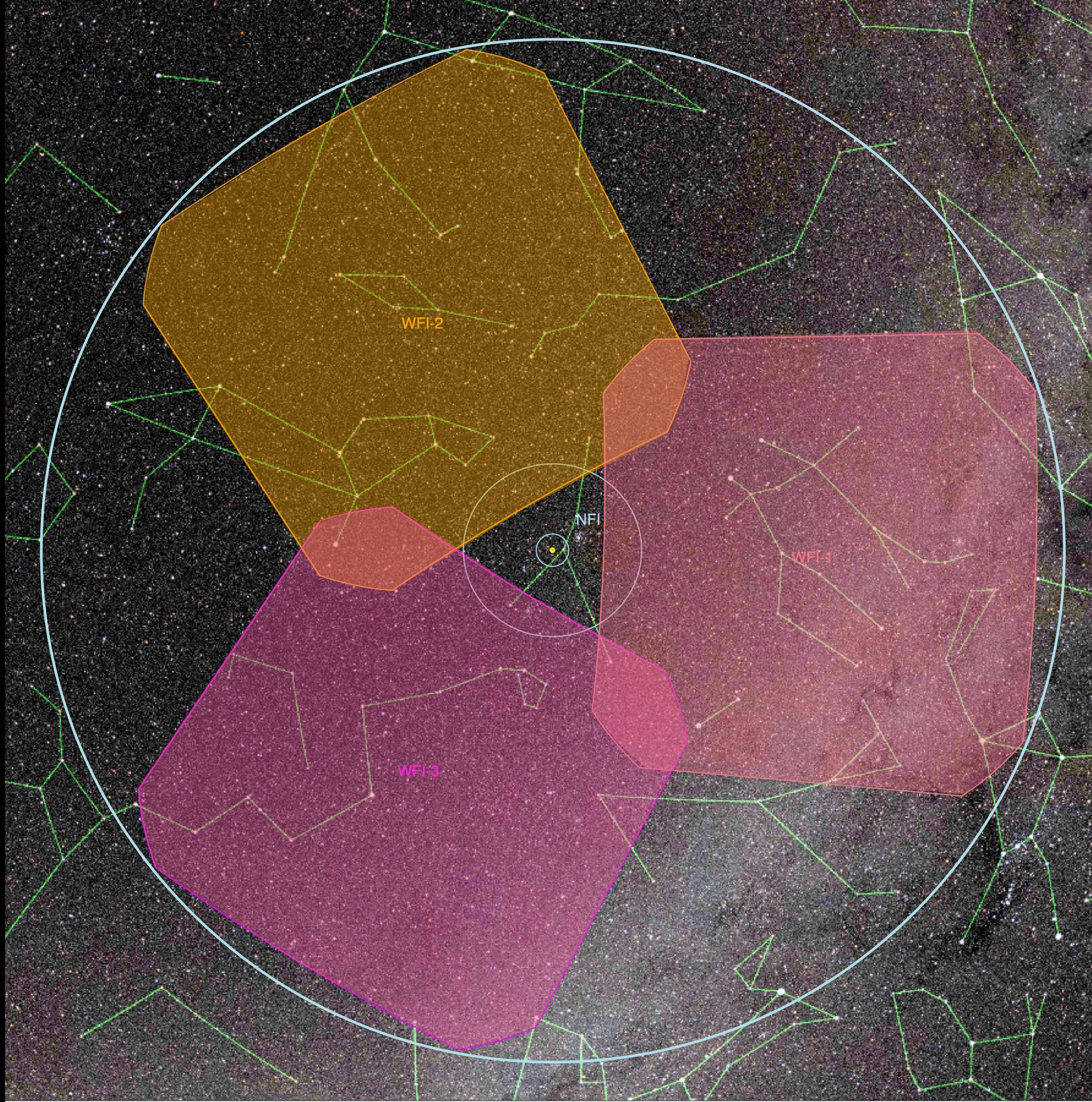




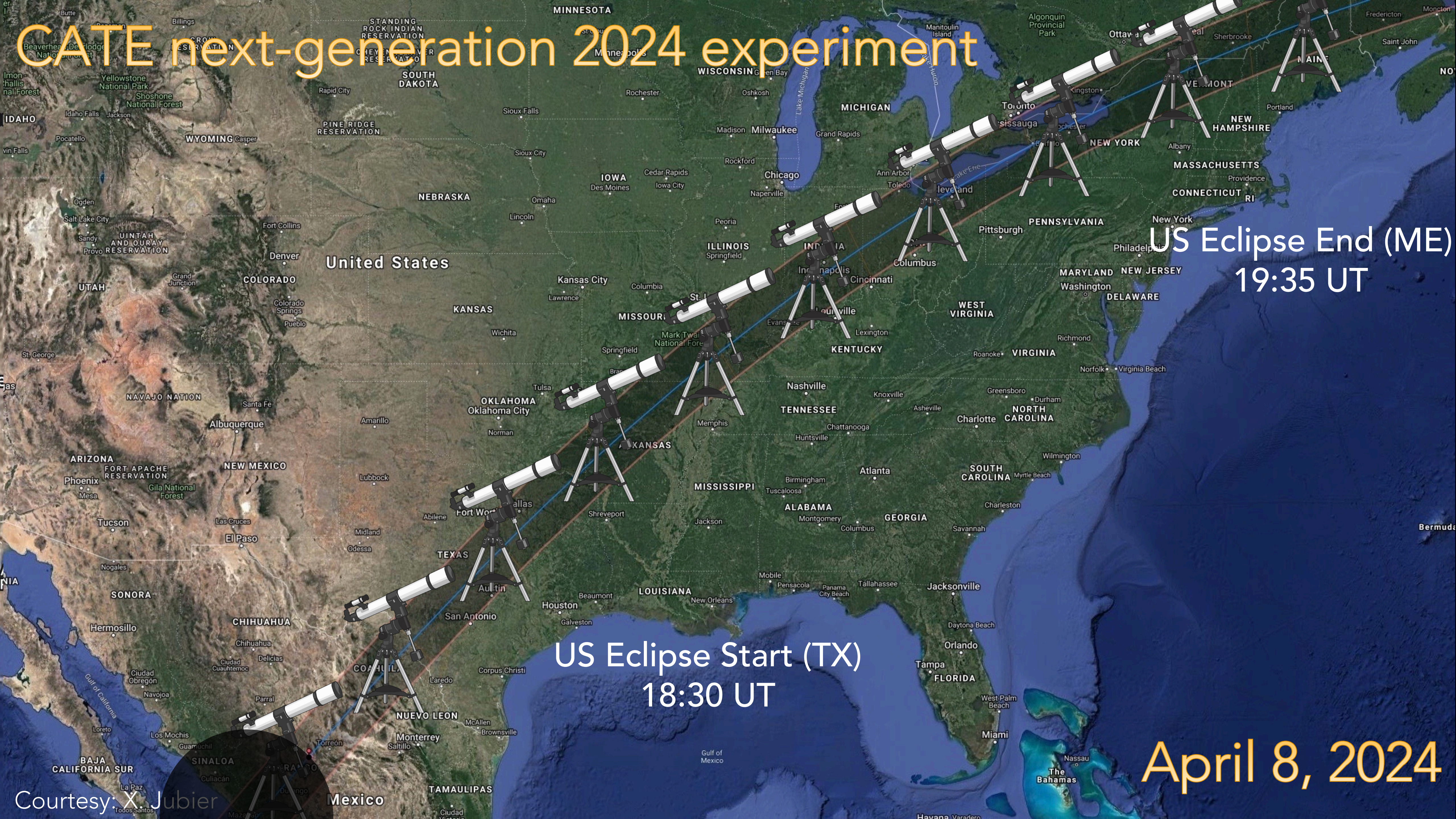




NFI



# CATE next-generation 2024 experiment

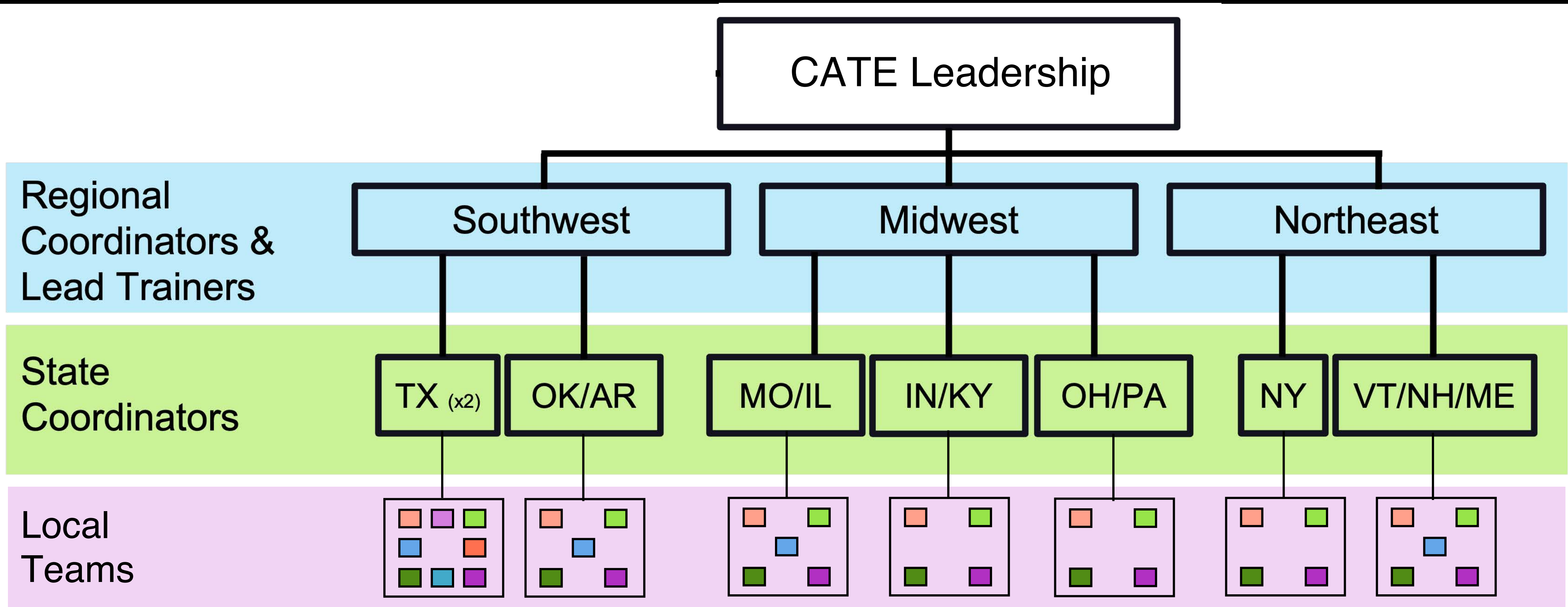


US Eclipse Start (TX)  
18:30 UT

US Eclipse End (ME)  
19:35 UT

April 8, 2024

# CATE 2024 will recruit 35+ teams from communities all along the eclipse path, with support at multiple levels



Coordinators provide training, logistical support, and networking, with detailed knowledge of local communities.  
All volunteers receive honoraria for their participation!

CATE 2024 will deploy 35+ identical stations run by community participants to capture a 60-minute movie of the inner solar corona in polarized light



Participant communities keep their telescope setups after the eclipse!

**Interested? Contact us!**

**[cate@boulder.swri.edu](mailto:cate@boulder.swri.edu)**

 [@citizenCATE2024](https://twitter.com/citizenCATE2024)