



Understanding desert climate from solar eclipses and varying seasonal effects using GLOBE Observer protocols and professional collaborations



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EPCC Eclipse events focused on regional participation, event booths and citizen scientist collaborations.



EPCC TM – NASA GLOBE PARTNER OFFICE



Tornillo, TX (October 2023)



EPCC Mission del Paso Campus (April 2024)



University of Texas at El Paso Satellite group (April 2024)



## STEAM activities, learning opportunities regarding solar eclipses (April 2024)

**Instituto Nacional de Antropología e Historia** **ENAH**  
 Escuela Nacional de Antropología e Historia

**Eclipse Timeline (History, Archaeoastronomy)**

1000 a.c. 500 a.c. a. c. d. c. 500 d. c. 1000 d. c. 1500 d. c.

OLMeca 1200 a.c. - 400 a.c. Maya 1000 a.c. - 150 d.c. Teotihuacana 100 a.c. - 750 d.c. Totonaca 850 a.c. - 150 d.c. Mixteca 800 a.c. - 150 d.c. Mexica 1250 a.c. - 150 d.c.

**Antonio Gomez Miranda**  
<https://enah.edu.mx/>

A STRUCTURE OF:  
 20 SYMBOLS X 13 NUMERALS (260 DAYS)  
 IN COMBINATION  
 OF REAFERS

Eclipse Shadow measurements, Data Analysis (Math, Computer Science)



Viewer Construction,





# The GLOBE Program

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North



East



South

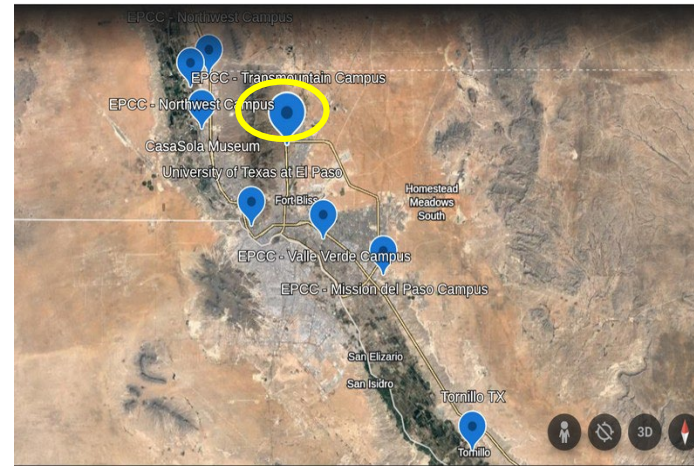


West

Citizen science cloud data collection during eclipse (October 2023)



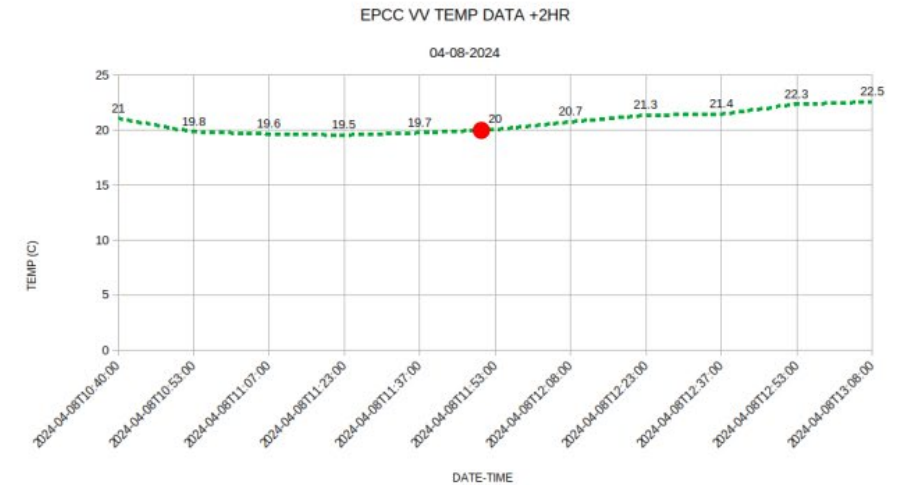
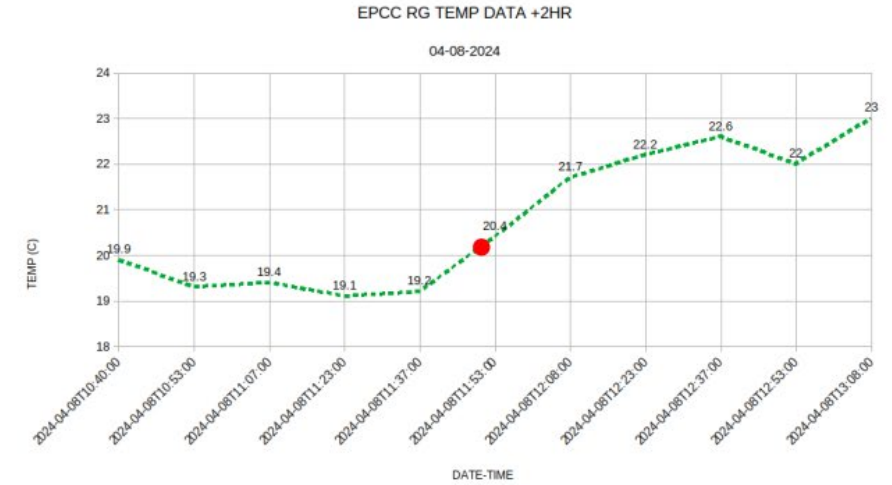
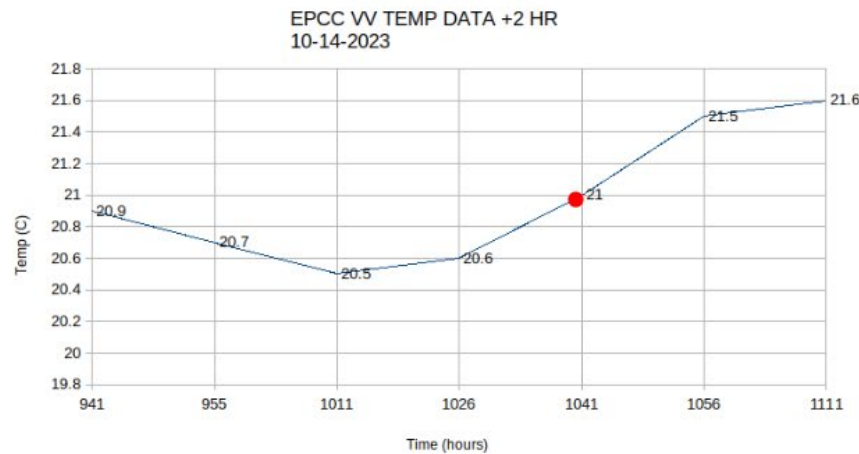
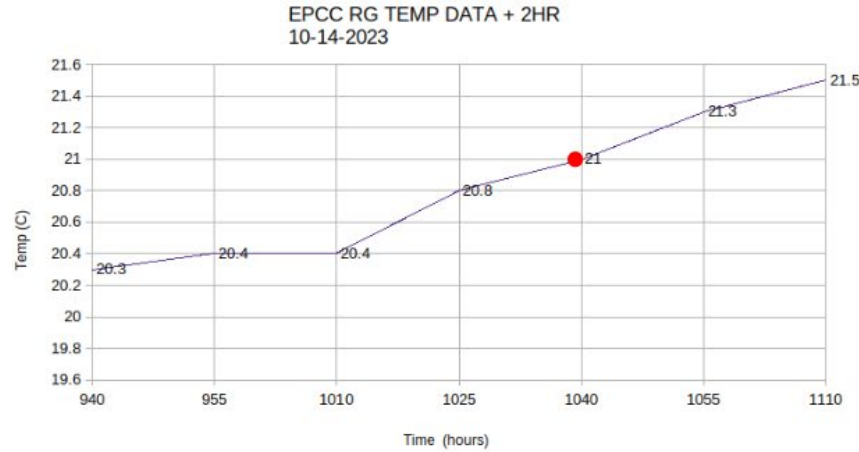
Citizen science Eclipse data collection (April 2024)





### Weather station data collected during 2023 and 2024 solar eclipses

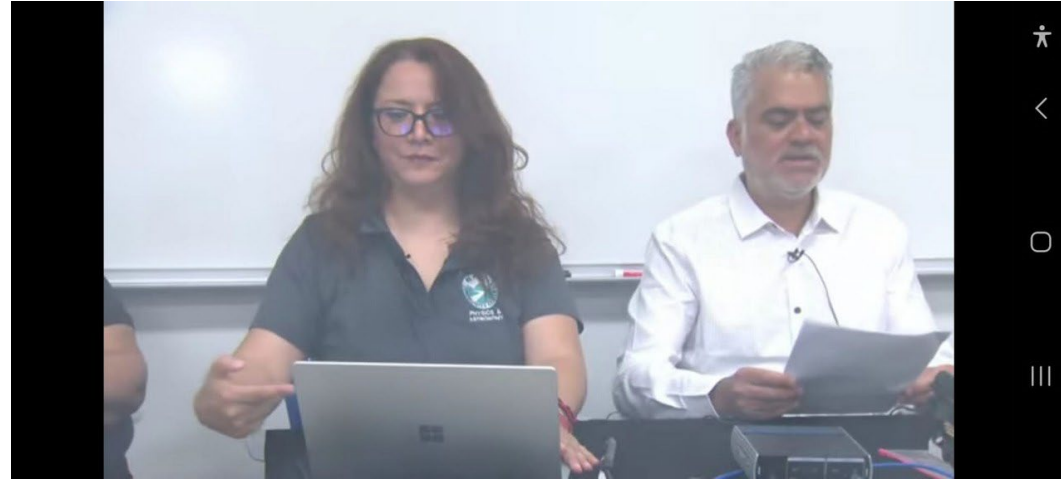
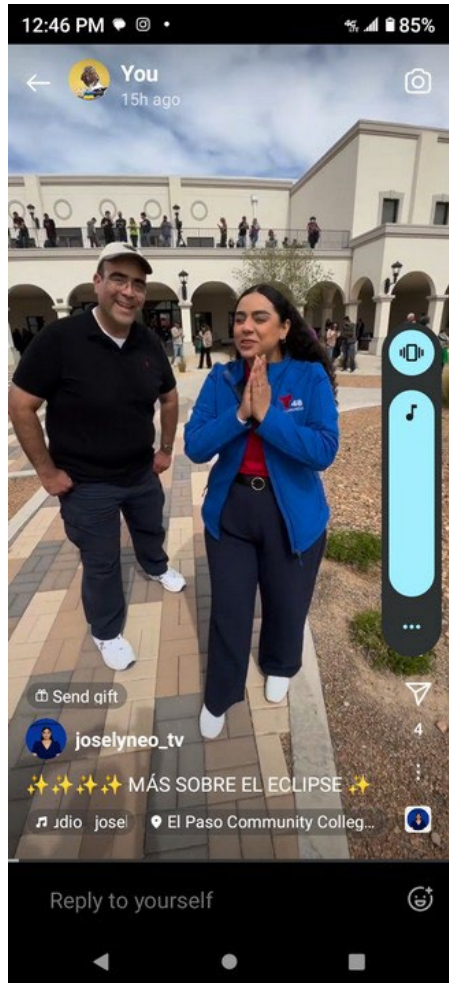
- Eclipse 2023: partly cloudy
- Eclipse 2024: mostly cloudy





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Collaborations toward success

- Resources Texas STEM Coalition, GLOBE, NASA
- Gene Roddenberry Planetarium
- Texas Tech
- Instituto Nacional de Antropología e Historia
- University of Texas at El Paso



THE RODDENBERRY  
PLANETARIUM





Thank you!

Q & A

Check out my blog at

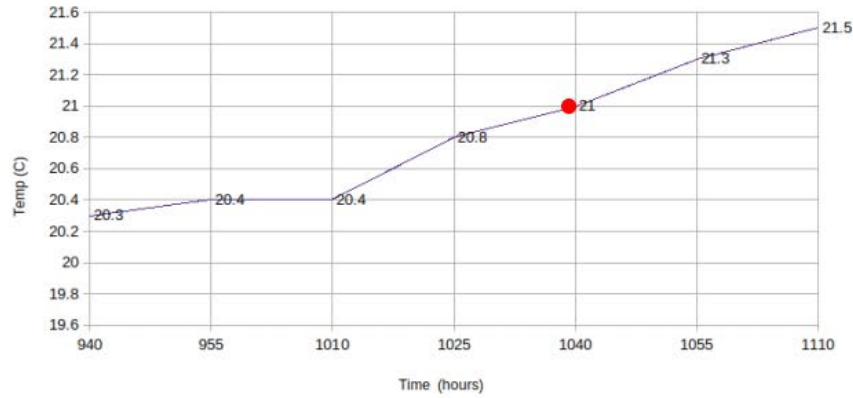
<https://www.globe.gov/web/jolgin.2/>

For more information visit [www.globe.gov](http://www.globe.gov)

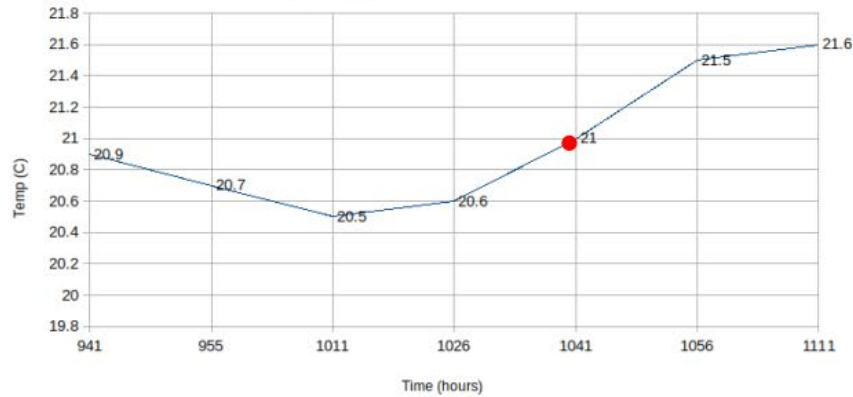




EPCC RG TEMP DATA + 2HR  
10-14-2023



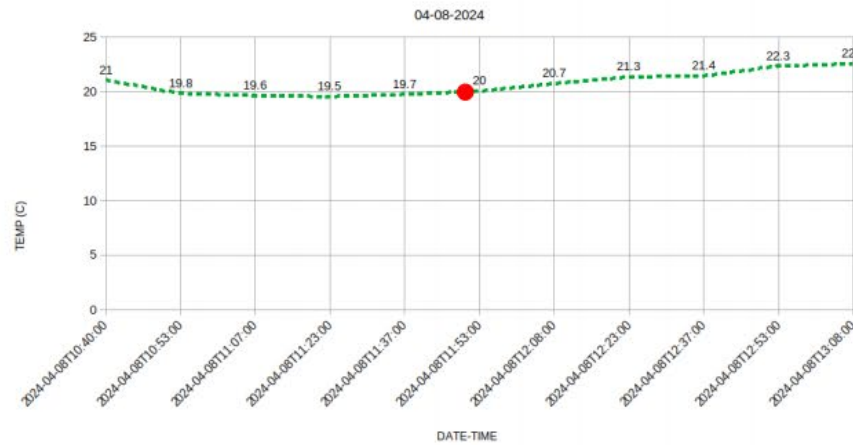
EPCC VV TEMP DATA + 2 HR  
10-14-2023



EPCC RG TEMP DATA + 2HR



EPCC VV TEMP DATA + 2HR







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