





#### Continuation of Service Learning with NASA's GLOBE Observer

#### on Dust Monitoring of the Chihuahuan desert

In collaboration with









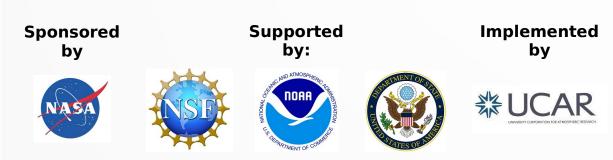


# **GLOBE** at EPCC

Global Learning & Observations to Benefit the Environment (GLOBE) Program

El Paso Community College (EPCC) – Official GLOBE Partner since April 2019

Incorporation of GLOBE Observer in the remote/virtual curriculum (Physical Science/Astronomy) and service learning activities





Cloud observations November 2019







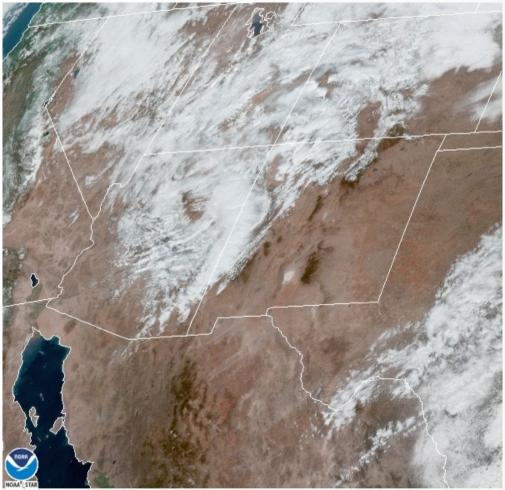


Analysis of Dust Storms – Introduction into curriculum March 16, 2021 Dust Storm Survey

Used the online New Mexico Department of Transportation Situational Awareness Display to study dust emissions.



Incorporation of online resources and GLOBE Observer app protocol *Clouds* allows students and citizen scientists learn more about dust storms in our area.



16 Mar 2021 17:51Z NESDIS/STAR GOES-East GEOCOLOR

ArcGIS Dashboard for Dust: snapshot of dust storm on March 16, 2021

#### Analysis of March 16<sup>th</sup> Dust Storms

#### 03/16/2021, 12:03 MST

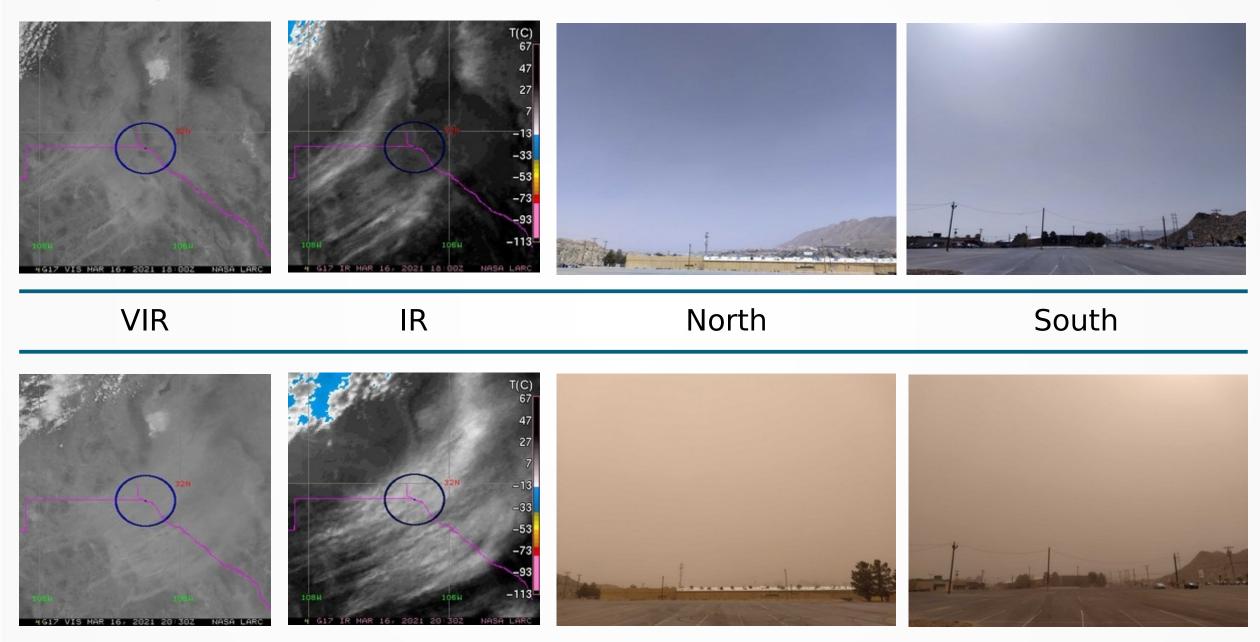
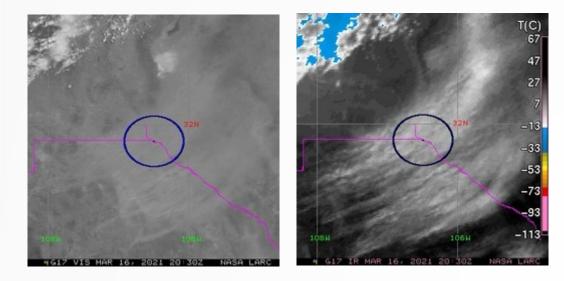


Photo credit: NASA GLOBE

#### 03/16/2021, 14:33MST

#### Physical science applications





Mars

El Paso (UTEP)

#### **Planetary Science**



#### **Environmental Science**

Applications in Electromagnetic Radiation

Photo credit: NASA GLOBE

#### GLOBE Program – Weather Station Network



El Paso Community College - Valle Verde Campus



## Future work



# Works and Collaborations

### AGU 100 Advancing earth and space science

ED32A-06 - EXPLORING STEAM THROUGH SERVICE LEARNING AND CITIZEN SCIENCE ACTIVITIES: ENHANCING EDUCATION/PUBLIC OUTREACH IN THE INTERNATIONAL COMMUNITY AT EL PASO COMMUNITY COLLEGE AND THE UNIVERSITY OF TEXAS AT EL PASO

Wednesday, 11 December 2019

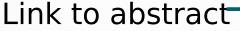
11:10 - 11:20

Moscone South - 215, L2

#### Swirl Topics

Ethics, Diversity and Inclusion Field Guide - Track Science & Society - SWIRL







### Thank You

### Questions/ Comments





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