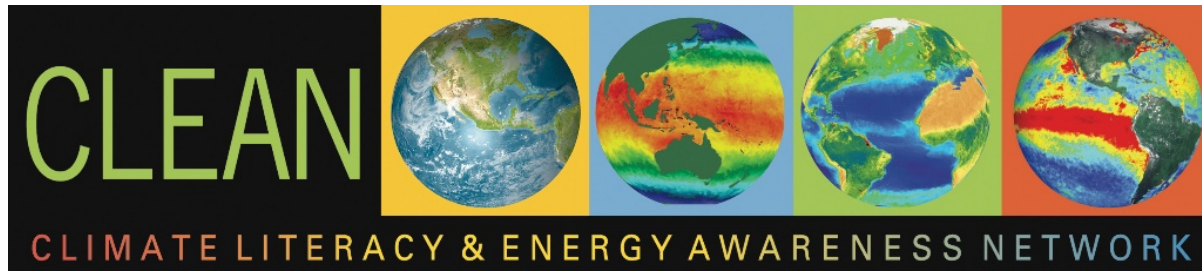
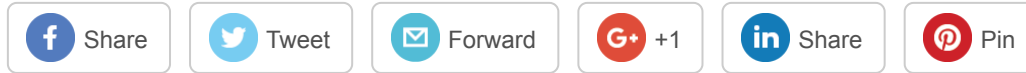


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CLEAN STEM Flash

A Timely Climate and Energy E-Learning Series to Use and Share

May 17th, 2021

Topic: Monitoring Climate

What is climate and how do we know it is changing? Climate is defined as the long-term average of weather in a location over 30 years. This means that weather needs to be monitored over long time scales in order to assess climate and climate changes. In this newsletter, you will find two resources on the topic of monitoring climate: 1) a drought monitor that looks at real-time drought conditions in the US, and 2) a video on precipitation and how we measure it. We have also included a recent article that discusses the new climate 'normal' recently released by NOAA. Lastly, we want to hear from YOU! We are calling on our subscribers to share what they value in CLEAN.

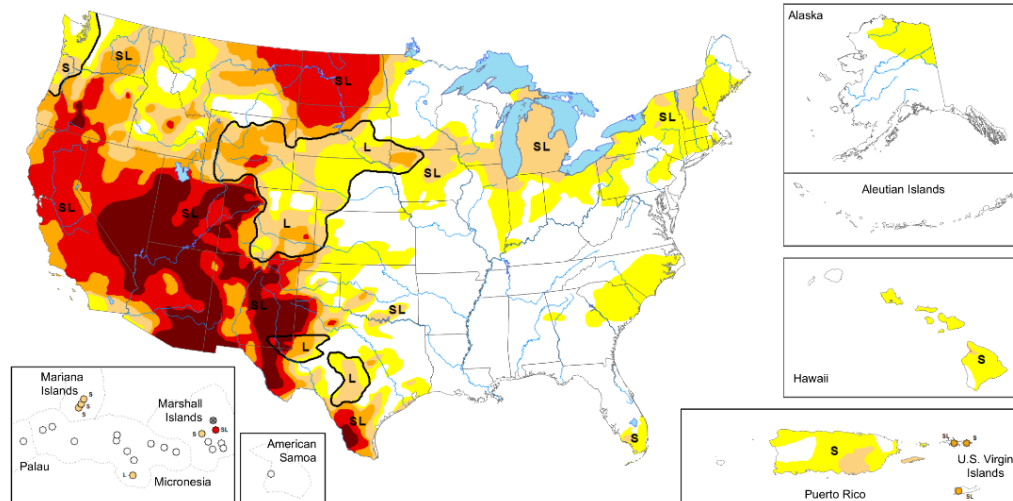
CLEAN Resource Feature

Visualization: [US Drought Monitor](#)

This is a real-time map of current drought conditions in the US and associated territories, which can be viewed at regional and state levels, and includes information and resources each level. Some of these include the National Drought Regional Summaries and animations of historical data.

Audience: Middle School, High School, College Lower

Browse CLEAN for more visualizations on [Monitoring](#).

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The Drought Monitor is a comprehensive index of current and historical drought across the United States, bringing significant information value to decision makers, from the level of individual farmer to congressperson.

CLEAN Resource Feature

Video: [Too Much, Too Little](#)

This video describes the joint NASA-JAXA GPM (Global Precipitation Measurement) satellite mission and why it is necessary for monitoring precipitation around the Earth. It also discusses the science around issues related to having too much or too little precipitation such as landslides and drought. It emphasizes the need for data to fill in gaps, why data is important to forecasting, and why being able to predict natural disasters and climate is so valuable.

Audience: Middle School, High School, College, General Public

Take a look at some more CLEAN resources focused on [Precipitation](#).

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This video would be a good introduction to any lessons around precipitation, flooding, landslides, or drought. It would also be a good way to discuss how satellites help us monitor weather (precipitation) globally.

In the News: [NOAA unveils new U.S. climate 'normals' that are warmer than ever](#)

Recently, our climate 'normals' have been updated by NOAA. Over the last decade the US has experienced higher than average temperatures and a change in precipitation. This information is visualized and compared with previous decades in this Washington Post article. It delves into the 30-year averages since the 1900s and compares the decades leading up to our present moment. The data clearly indicate that the climate is significantly warmer and areas are becoming wetter with higher amounts of precipitation. It also discusses the nuances of these trends.

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CLEAN Testimonials

We want to know how CLEAN has served you!

Please share with us how you are making use of CLEAN in your classroom or your work.

CLEAN would like to hear from you personally. Can you share with us how you are using CLEAN - in your classroom or in other ways? In what ways does CLEAN provide support or makes your life easier? Is there a favorite resource you go to time and again? Is there a teaching guidance page that has offered help in your own learning? Do you particularly enjoy the newsletters, teleconference calls, or webinars? Please take a moment to share with us through a short video or written testimonial!

Please follow [this link](#) to our survey where you can upload a short video or write about your experience.

The first 50 submissions that describe the use of CLEAN in action will receive a \$5 Amazon gift card.

Thank you for your support and participation in strengthening the work that CLEAN does!

- CLEAN Team

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