CALLEGRNIA ACADEMY OF SCIENCES



Welcome to Science Action Club!

Science Action Club (sAc) is a hands-on, fun, STEM learning experience created by the California Academy of Sciences in San Francisco, California. The California Academy of Sciences is an aquarium, planetarium, rainforest, and natural history museum in the heart of San Francisco's Golden Gate Park—and a powerful voice for biodiversity research and exploration, environmental education, and sustainability across the globe. SAC was designed by the Academy to provide hands-on STEM activities and nature challenges to middle school youth in out of school time. When you join SAC you join a global community of youth collecting data alongside scientists. Today you and a trusted adult will learn to do a Sky Survey by observing the sky and recording what you see. Your observations will be added to the GLOBE Observer app to help scientists at NASA answer questions about weather and climate changes.

What is citizen and community science?

Citizen and community science is a global effort that recognizes that anyone can be a scientist. You, your best friend, and even your teacher are all scientists! Being a citizen and community scientist is easy. By the end of this activity, you will understand how to collect data for citizen and community scientist projects.

What is GLOBE Observer?

SLOBE Observer is an international network of scientists and students working together to study how clouds affect Earth's environment. By observing the sky from the ground and reporting what you see, you can help NASA researchers track changes in sky and cloud conditions to support Earth science research. Clouds affect weather and climate by controlling the flow of energy through Earth's atmosphere. Since clouds can change rapidly, scientists need frequent observations from citizen and community scientists to better understand cloud cover over Earth's surface.





Why do I need to observe sky condtions and clouds?

True or false: There are more opportunities for sky observations than there are scientists.

True and false! There are not enough NASA scientists to be making sky observations everyday. There are also not enough NASA scientists across the world to record observations in every nook and cranny. However, there are enough citizen and community scientists across the globe to help! With the support of the global community and citizen scientists, scientists at NASA can get a better understanding of how the weather and climate works. Your observations can help identify weather patterns that help solve some of the world's most pressing issues. Now that you know who SAC is and what you'll do during a Sky Survey, let's get started! Click on the PDF titled *Conduct a Sky Survey*.