



Earth Science Week 2018 "Earth as Inspiration" October 14–20, 2018

Executive Summary

The American Geosciences Institute's 21st annual Earth Science Week celebrated the theme of "Earth as Inspiration." The program promoted public awareness of what role geoscience plays in the arts, and how the arts are influenced by Earth processes.

Reaching People

Earth Science Week 2018 reached more than **50 million people** with programs, information, education resources, and activities relating to the geosciences, mostly through direct outreach and coverage in news media online. The program's reach remained widespread, as people in every U.S. state and more than 20 countries directly participated in events and activities.

Earth Science Week offered a way to participate for virtually anyone. Millions of K–12 students are estimated to have taken part in hands-on, investigative learning activities as part of Earth Science Week, based on usage of the Earth Science Week Toolkit and the program website (www.earthsciweek.org). Many people learned about geoscience in universities, government agency facilities, parks, museums, science centers, and other settings. Hundreds actively participated in the program's long-running visual arts, video, essay, and photography contests. And many more engaged with Earth Science Week through program innovations that began in 2018.

Program Innovations

Earth Science Week 2018 provided the occasion for several programs:

- Former U.S. Secretary of the Interior Sally Jewell served as AGI's Earth Science Education Ambassador. Jewell lead various activities to help encourage people to play, learn, serve, and work in America's great outdoors, including participating in a new film series about people inspired by Earth and geoscience, attending AGI's annual Teacher Leadership Academy at ExxonMobil headquarters, leading a field experience for eighth-grade students at Valles Caldera National Preserve, and hosting an art-themed event at the Torpedo Factory Art Center.
- Earth Science Week enhanced awareness of the program, partnering with Washington Union Station and Mazza Gallerie to exhibit over 20 top photos entered in the program's 2017 photo contest, which explored the theme of "Earth and Human Activity Here." Located in the heart of the nation's capital, Union Station is one of the country's busiest train

stations, with an average of about 100,000 train and local metro passengers passing through daily. Mazza Gallerie is a premier shopping destination in Washington, DC's Friendship Heights neighborhood. The photo exhibits brought attention to Earth Science Week in the months leading up to the celebration.

- AGI staff exhibited at Energy Day festivals in Houston as part of a new collaboration with Consumer Energy Alliance. Over 25,000 students, educators, and others received Earth Science Week materials through this free event.
- AGI chose Kenneth L. Huff as the 2018 winner of the Edward C. Roy, Jr. Award for Excellence in K-8 Earth Science Teaching and promoting the importance of high-quality education in the geosciences. Huff is an exceptional sixth-grade teacher at Mill Middle School in Williamsville, New York.
- At the main celebration of the ninth annual National Fossil Day on the National Mall in Washington, D.C., AGI staff educated and entertained visitors with a greenscreen-equipped "Paleontology Play Space" photo booth, which was funded by the Paleontological Society. Visitors, who had their pictures taken virtually amid spectacular fossil finds, received photo souvenirs of the day.
- In a display of bipartisanship, members of the U.S.
 House of Representatives came together to introduce a resolution expressing support for designation of the week of October 14–20, 2018, as Earth Science Week. Representative Jared Polis (D-Colorado) submitted House Resolution 556, on behalf of himself and Representatives Barbara Comstock (R-Virginia), Dan Lipinski (D-Illinois), and Ryan Costello (R-Pennsylvania).

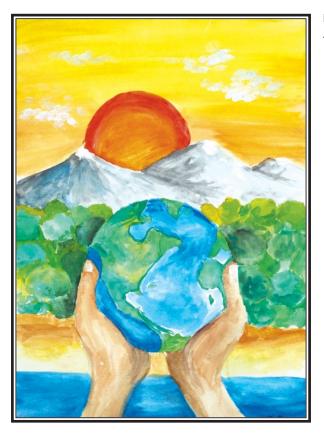


Earth Science Week 2018 Photo Contest entry by winner Matt Meisenheimer.



Earth Science Week 2018 Visual Arts Contest entry by the winner, Namit Vernekar.

- The popular Earth Science Week school-year calendar's classroom investigations featured notations explaining how each activity aligns with the **Next Generation Science Standards** (NGSS). Teachers consistently report that they look for NGSS-aligned classroom activities, and this innovation makes activities more relevant than ever.
- Earth Science Week unveiled a new addition to its repertoire of resources: the Online Toolkit.
 Users can browse resources by theme/year, type of resource, and NGSS topics. The Online Toolkit houses resources dating back to 2014 and is a feasible option to organizations that want to lower their paper use, as well as users who are limited by shipping and printing costs.
- An updated Earth Science Week Event Registry continued to give participants a way to promote their events more effectively. All registered events were listed on Earth Science Week's Events In Your Area site.
- Earth Science Week finished 2018 with a major event to highlight the year's program theme, "Earth as Inspiration." AGI welcomed hundreds of educators, students, and others to explore connections between the geosciences and the arts during the **Art Safari** at the Torpedo Factory Art Center in AGI's headquarters city of Alexandria, Virginia. The free event included hands-on activities, demonstrations linking art and geoscience, musical performances, and opportunities to craft "take-home" artworks based in Earth science. A highlight of the evening was a Geoscience Scavenger Hunt with interactive, augmented-reality elements. Participants searched the Torpedo Factory for clues that included geoscience trivia.



Connections Online

Receiving over 550,000 page views in 2018, the **Earth Science Week website** was accessed by users in 212 nations worldwide, according to Google Analytics. Within the site, Classroom Activities pages received over 342,000 views. Classroom Activities remained one of the program's most popular online offerings, with 100 percent of survey respondents rating it as "useful" or "very useful." The Earth Science Week website features resources too numerous to list, including Big Ideas videos, a national clickable Map of Earth Science Organizations, and the program's promotional video and quarterly webcasts.

The monthly **Earth Science Week Update e-newsletter** reached some 5,000 teacher, student, and geoscientist subscribers. The newsletter kept planners and participants up to date on program planning at the national level, encouraged participation in local areas, and provided news on geoscience topics of interest to participants.

Finally, Earth Science Week used online social networking to reach new audiences, especially young people. The program's presence on **Facebook**, the Internet's most popular networking site, included an Earth Science Week Fan Page. In addition, web surfers were invited

Earth Science Week 2018 Visual Arts Contest entry by finalist Abhiraj Das.

to receive geoscience news, resources, and opportunities by following Earth Science Week on **Twitter.** The number of people learning about Earth Science Week through social media remained impressive in 2018, as more than 155,000 people received program information from AGI and program partners through Facebook, Twitter, and pages maintained by program enthusiasts on **Pinterest.**

Print Materials

Even in today's high-tech learning environments, educators also repeatedly report that they need print materials to use with students. AGI answered this need once again by assembling some **14,000 Earth Science Week Toolkits**, the vast majority of which were distributed to teachers and geoscientists before the end of 2018. The kit featured AGI's annual Earth Science Week poster, education and outreach flyer, and school-year calendar showcasing geoscience classroom investigations and important dates of Earth science events. Additionally, program partners' contributions made the 2018 kit one of the richest in recent years, containing more than 30 educational items on a wide variety of geoscience topics.

Program partners assisted in distribution. Twelve AGI member societies requested complimentary Earth Science Week Toolkits for distribution, and 30 state geological surveys requested complimentary kits for distribution. As in past years, thousands of kits also were distributed through program partners including USGS, NASA, the National Park Service, and the AAPG Student Chapters Program. Hundreds of kits were shipped free to geoscience department chairs at colleges and universities nationwide. Toolkits were shipped to program participants in all 50 states and a number of countries overseas.

Participant making paper in an AGI 2018 STEAM workshop. Image credit: AGI/ Celia Payne





2018 Earth Science Week poster by K. Cantner/AGI.

Evaluation Findings

Following the event, AGI secured an independent contractor, PS International, to complete a formal external evaluation of Earth Science Week 2018, as it has in past years. Participants were invited to participate in a survey in the closing months of 2018, with a valid response rate of 6.5 percent. Results were overwhelmingly positive:

- Comparing participation last year and plans for next year, 99 percent of survey respondents said they anticipate either increasing or maintaining level participation. Eighty-six percent of respondents rated the program's overall usefulness as "excellent" or "good."
- A large majority (92 percent) said Earth Science Week offers opportunities for teaching and promoting Earth science that they would not have otherwise. Similarly, 90 percent said program resources and activities are very or somewhat important to educating students about geoscience.
- Participants said they were active during Earth Science Week. Many reported specific activities that were highly active. For example, 89 percent reported activities categorized as "most active" (e.g., field trips and outside lessons), "active" (e.g., external speakers and open house discussions), or "somewhat active" (e.g., lesson plans and kit distribution).

Geoscience Community

AGI organizes Earth Science Week as a service to member societies, with generous help from partners that provide funding, contribute materials, organize events, and publicize the program: United States Geological Survey, National Aeronautics and Space Administration, National Park Service, American Association of Petroleum Geologists Foundation, American Geophysical Union, Society for Mining, Metallurgy, and Exploration, Howard Hughes Medical Institute, Association of American State Geologists, Geological Society of America, Archaeological Association of America, AmericaView, ExxonMobil, Equinor, Minerals Education Coalition, Schlumberger, Water Footprint Calculator (Grace Communications Foundation), Consumer Energy Education Foundation, Keystone Policy Center, and TGS.

For additional details, please see the full Earth Science Week 2018 Highlights Report, visit online at www.earthsciweek.org, or contact staff at info@earthsciweek.org.

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