

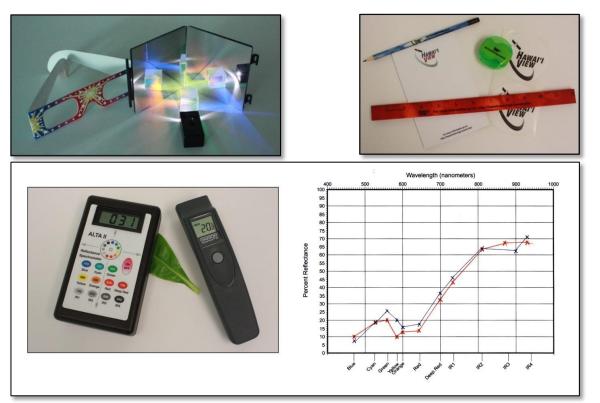
HawaiiView 2018 - 2019



## HAWAIIVIEW HISTORY AND SUCCESSES

HawaiiView became a full member of AmericaView in 2006, and for several years has been taking Landsat and Sustainable Land Imaging into the classrooms of Hawai'i. To encourage understanding of the impact of the data and the science and technology behind Sustainable Land Imaging, HawaiiView developed self-contained "Landsat 8 Science Kits". Landsat 8 carries the Operational land Imager (OLI) and Thermal Infrared Sensor (TIRS). Although these instruments are orbiting at an altitude of 705 kilometers above the Earth's surface, moving with a velocity of 7.5 kilometers per second, and cost tens of millions of dollars, students can replicate the sensors' measurements on the desktop using a low cost instrument set. Each HawaiiView Science Kit contains a handheld reflectance spectrometer and a hand held infrared radiometer, as well as a lesson plan and all stationary and materials needed to complete the activity. Students make measurements using these instruments and plot the data themselves.

This project has been ongoing since 2015, and in that time HawaiiView has impacted 1501 students, 57 teachers, and 87 parents. Most sessions were at public schools with a high number of minority and underrepresented students, as well as a high number of students in the free/reduced cost lunch program.



HawaiiView's "Landsat-in-a-box" science kits teach students about how light moves and is measured (top left), before allowing children to make their own reflectance measurements, plotting the results, and introducing them to concepts of measurements precision and accuracy (bottom). All materials needed to conduct the exercises are provided as part of the science kits (top right).

HawaiiView is a member of the AmericaView Consortium, a nationally coordinated network of academic, agency, non-profit, and industry partners and cooperators that share the vision of promoting and supporting the use of remote sensing data and technology within each state. AmericaView is funded by USGS grant agreement G18AP00077.



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## HAWAIIVIEW 2018 - 2019 ACTIVITIES

HawaiiView continued to deploy its "Landsat in a box" lesson plans around the island of Oahu. Our previous work has allowed us to build up a substantial network of schools and educators. HawaiiView partners with the NASA Hawai'i Space Grant Consortium on this activity, and to supplement our classroom visits we also take part in daylong events organized by Hawai'i Space Grant Consortium and recently held workshops at the annual Astronaut Lacey Veach Day, and Ellison Onizuka Day of Exploration. This work supports objectives 2 and 4 of the NLRSEORA (National Land Remote Sensing Education Outreach and Research Activity) program. In grant year 2019 HawaiiView's activities reached 409 students, 30 teachers, and 31 parents, including 160 people who identified as having Native Hawaiian or Pacific Island heritage.



Pupils, their teachers and their parents using desktop reflectance spectrometers and infrared thermometers to make measurements like Landsat

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