



ALASKA VIEW 2020 - 2021



ALASKA VIEW 2020 - 2021 ACTIVITIES

AlaskaView developed an open access online introductory course on **Image Analysis** and re-run a course on **Remote Sensing of Wildfires (RSW)** geared toward beginners in geospatial field. The courses are running on **edX.org** (a global nonprofit online education and learning platform) since July 28, 2021 and Aug. 17, 2021, respectively.

[GIS Image Analysis](#)
[Remote Sensing of Wildfires](#)

Goal: Introduce remote sensing science and applications through image analysis and wildfire application—a problem that is worsening with climate warming and best addressed using remote sensing.

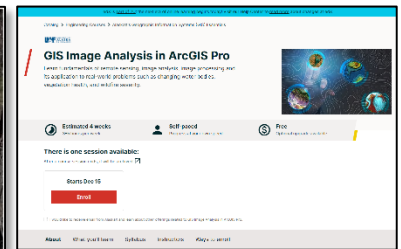
Both courses are self-paced (consisting of video lectures, illustrations, interactive exercises, and quizzes).



Map showing Image Analysis learner locations.



Course instructors surveying wildfire burn severity and shooting footage for the course.



RSW course about page

This activity meets the objective 4 of the USGS/NLI “developing online educational materials that are immediately actionable by teachers or students with a minimal implementation curve”.

Student support: Two graduate students received salary support and contributed to the course development as co-instructors. Also, we offered two AV fellowships (1x\$1000; 1x\$500) to support and promote geospatial research at University of Alaska Fairbanks. Below are the student project titles:

- Assessing the effects of wildfire on beaver dams in a boreal ecosystem, interior Alaska
- Earthquake hazard assessment of the Castle Mountain Fault

ALASKA VIEW CONSORTIUM MEMBERSHIP



Federal consortium members identified above do not receive funding from AmericaView.

AlaskaView 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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BENEFITS TO ALASKAVIEW

As a result of activities and support of AmericaView the State of Alaska have benefited as follows:

Enrollment in Image Analysis: This online course has been benefitting Alaskans and global students alike. The learners include Alaskan university students and faculty, state and tribal agencies workforce.

Total enrollment 1806 (as of Dec. 2021) from 131 countries. Female: 35%; Male: 65%.

Learners age statistics: 31% are below 25; 53% are between 26 and 40; 16% are over 41.

Learners education level: 11% high school diploma or less; 45% college degree; 40% advanced degree.

In 2019, the participants of **Alaska Summer Research Academy (ASRA)** [middle school] and **Upward Bound College Bound (UBCB)** [high school] program benefitted from two remote sensing application workshops focused on wildfires and coastal erosion. Along with introduction to remote sensing students also received hands on training on QGIS, Google My Maps, and GEE operations.

We offered two fellowships to support and promote geospatial research at University of Alaska Fairbanks.

Public Outreach: AKView participated in the 2019 Annual Science Potpourri event organized by University of Alaska Fairbanks' College of Natural Science and Mathematics. Exhibit included: Augmented Reality Sandbox, 3D printers, Landsat board games, NASA posters, USGS Landsat Science booklets.

Consortium Development: Collaborated with UAF eCamups, edX.org, NSF Alaska EPSCoR program, and U.S. Fish and Wildlife Service.

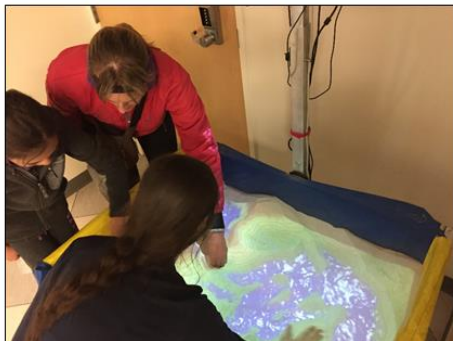


Middle-school student participants of 2019 Alaska Summer Research Academy working on a forest fire burn scar and burn severity mapping from pre- and post-fire Landsat images.



High-school student participants of 2019 Upward Bound College Bound program working on a lab on coastline erosion along Alaska's northern coastline.

Below pictures were taken during 2019 Science Potpourri event, EOD celebration, and ASRA student visit to EPSCoR VisSpace at University of Alaska Fairbanks campus.



These activities meet the objectives 2 and 4 of NLRSEORA 2018 grant: “establishing strategic partnerships to develop and deploy remote sensing applications through collaborations involving university research teams and K-12 schools” and “developing materials for an educational and training workshop”.

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