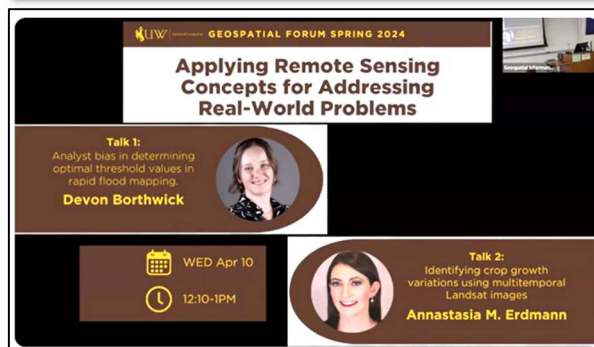
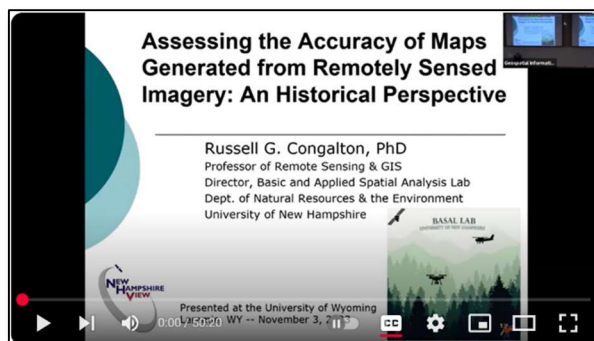


WYOMINGVIEW 2023 - 2024 ACTIVITIES

WyomingView Presentations in Geospatial Forums

Dr. Russell Congalton, Remote Sensing Professor and NHView PI, presented his perspectives on the development of accuracy assessment of maps generated from remotely sensed images in Geospatial Forum (fall 2023). More than fifty people were in attendance (in person and online). UW students gained insights on career opportunities. Video recording of this presentation is available in WyGISC's YouTube channel (<https://youtu.be/KUPHkh-J08>).

Two WyomingView interns presented their research in the spring 2024 Geospatial Forum. Ms. Devon Borthwick presented her work on quantifying analyst bias in generating flood inundation maps, and Ms. Anna Erdmann described the value of products derived from Landsat data for mapping crop growth in two irrigated fields. This was the first Geospatial Forum where WyView interns presented their research findings. This event also promoted the applied research opportunities available through WyView. Video recording of these presentations is available in WyGISC's YouTube channel (<https://youtu.be/2vHa-PEQR80>).



Presentations by Dr. Russell Congalton (fall 2023), and two WyomingView interns (spring 2024) in Geospatial Forums were the major highlights of GY 2023-24.

K-12 Outreach Activities



Students learned how thermal sensors can measure changes in body temperature and how scientists use them for observing animals and Earth surface.

WyomingView participated in the 2024 STEM Carnival. This event, hosted every fall, is aimed at introducing school students to various careers in STEM disciplines. This GY, students were introduced to concepts and applications of **thermal sensors**. Students measured the temperature of their palm before and after holding ice cream cups. More than 100 students participated in this event held in the Laramie Extension Station (West Laramie).

In GY 2023-24, WyomingView reached out to 167 students (grade levels K-8).

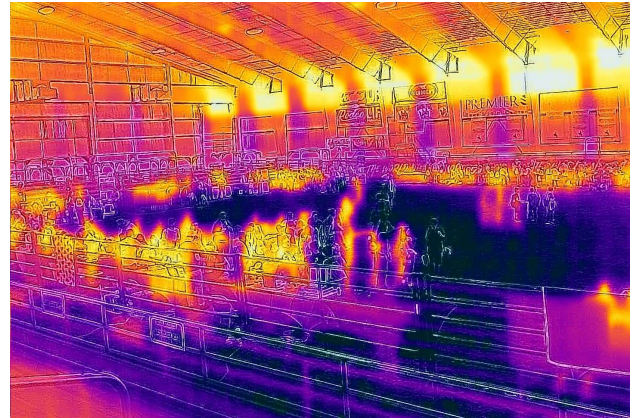
- Eighth graders at Laramie HS learned how multispectral sensors measure annual green-up and senescence at the continental and global scale (*147 students*).
- Fifth graders in Spring Creek ES saw the effects of how diverting water from two rivers converted the 4th largest inland water body – Aral Sea – to the world's newest desert (*20 students*).

EOD and outreach activities are effective to promote remote sensing technology and applications.

BENEFITS TO WYOMING

- WyomingView participated in several educational outreach activities such as STEM carnivals.
- These annual events are organized by University of Wyoming to highlight and promote STEM disciplines and career opportunities.
- Activities organized by WyomingView (floor puzzle and thermal cameras) were well attended.
- Organizers have extended a “forever” invitation to WyomingView PI for conducting similar activities in future carnivals.
- UW has invested resources to promote this annual event aimed at recruiting students to various STEM disciplines (Women in STEM, Science Kitchen, etc.).

These educational outreach activities help UW and Wyoming community colleges to showcase opportunities across STEM disciplines and career opportunities to K-12 students.

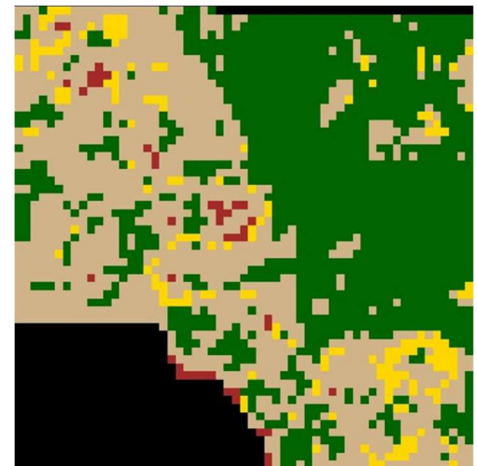


RGB (top) and Thermal IR (bottom) photos show a section of the audience in 3rd Annual STEM Carnival held in Laramie.

WYOMINGVIEW CONSORTIUM MEMBERSHIP

WyomingView consortium partners include individual **farmers and ranchers**.

- In this GY, three WyomingView interns mapped crop growth in three crop fields in Albany and Laramie counties.
- Ms. Anna Erdmann used Landsat-derived products provided by the USGS for mapping crop growth in two flood-irrigated fields.
- These fields are managed by a private foundation which has expressed interest in collaborating with WyomingView for mapping center-pivot irrigated fields and several non-irrigated pastures.
- This partnership will enable future WyomingView interns who do not have access to crop fields or rangelands.



Map of crop growth patterns in a flood-irrigated field in Albany Co. Wyo., generated by classifying 4 early season Landsat derived products.

WyomingView Principal Investigator:

Ramesh Sivanpillai

University of Wyoming

307 766 2721

sivan@uwyo.edu



<http://www.uwyo.edu/wyview>



[Facebook.com/WyomingView](https://www.facebook.com/WyomingView)