



# SOUTH DAKOTAVIEW 2021 - 2022

**AmericaView**<sup>SM</sup>  
Empowering Earth Observation Education  
[americaview.org](http://americaview.org)

## SOUTH DAKOTAVIEW 2021 - 2022 ACTIVITIES

South DakotaView (SDView) is focused on remote sensing education and outreach to students, educators, and current workforce personnel across South Dakota. SDView activities during this past year include:

- **South Dakota as Art Workshop for American Indians**

The workshop was held at the American Indian Science & Engineering Society 2022 AISES Region 5 Conference. The objective was to develop material for and conduct a South Dakota as Art Workshop for American Indians. *SDView* downloaded Landsat imagery from the USGS Global Visualization Viewer (GloVis). Image modifications and enhancements were performed using an open-source software called GNU Image Manipulation Program (GIMP). Attendees were provided with laptops and preloaded software.

Selected topics covered by the *South Dakota as Art* workshop included:

- Background of Earth as Art and USGS website.
- Instructions on the application and techniques for using the GNU Image Manipulation Program (GIMP) to modify Landsat imagery.
- Discussion on Landsat imagery band combinations.
- Describing resolution and spatial features.
- Discussion of landform/landscape features in South Dakota.
- STEAM discussion on merging sciences and arts.



American Indian Science & Engineering Society 2022 AISES Region 5 Conference.



Reid Dettbarn (SDSU student) identifies Landsat land features.



L9T2 event. (from L to R) Millett, Applegate, Trujillo, and O'Neill.

- **53<sup>rd</sup> Annual South Dakota State Geography Convention**

- Thursday, March 31<sup>st</sup> and Friday, April 1<sup>st</sup>, 2022.
- Students presented remote sensing research posters.
- Physiographic identification from Landsat imagery.
- South Dakota as Art display.
- Open to the public (>200 visitors).

- **Landsat 9 Transition Time (L9T2) Event**

- August 10-11, 2022, at the Earth Resources Observation and Science (EROS) Center in Sioux Falls, SD.
- SDView PI served on the planning committee for the Landsat 9 transition from NASA to USGS.
- Dr. Hankui Zhang, Khuong Tran, and Mary O'Neill presented papers.
- Keynote Speaker - Assistant Secretary, Tanya Trujillo (ASWS)
- Speaker - Dave Applegate, Ph.D., Director, U.S. Geological Survey.
- 135 attendees between online and in-person.

- **Two \$1000 mini-grants**

- Competitively awarded to graduate students for projects involving geospatial technologies.

South DakotaView 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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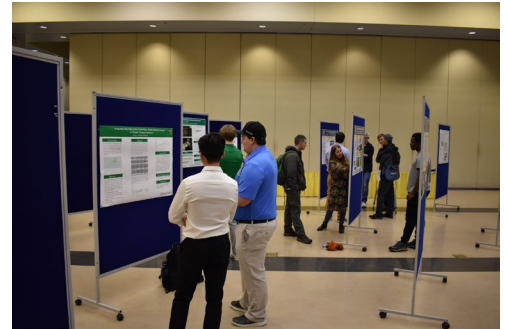
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## BENEFITS TO SOUTH DAKOTA

- **Remote Sensing as Art Workshop** - The *South Dakota as Art Workshop for American Indians* strived to bring awareness and foster an interest in geospatial technologies with American Indian students in South Dakota. In addition, it encouraged American Indian students to express their interpretation Earth's varied landscapes as art.
- **Conferences / Conventions** - SDView participated in the Annual South Dakota State Geography Convention. It is the oldest continuous student-run conference in the nation. The conference provides a venue for students and invited speakers in the geospatial community to present, learn, and connect with experts in the field and for students to present their research and projects.
- **Minigrants** – Provided support for technology in the classroom and students to present their research:
  - Implementation of GPS technology in Public Schools.
  - Estimation and Evaluation of Particulate Emissions for Indonesian Peatland and Non-peatland Fires.



Attendees creating art from Landsat imagery.



Student poster presentations at the 53<sup>rd</sup> South Dakota State Convention.

## SOUTH DAKOTAVIEW CONSORTIUM MEMBERSHIP



South Dakota Department of  
Agriculture & Natural Resources



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

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