Sensing The Earth:
Tribal College Faculty Data Science Experience

Join us at Haskell Indian Nations University on Thursday November 17th thru Friday November 18th, 2022, for Sensing The Earth: Tribal College Faculty Data Science Experience. TCU Faculty will have funding to support in-person attendance and will gain hands-on experience with LiDAR, accessing local climate and geospatial data, and more and also contribute to strategy sessions to identify pathways for continued faculty training, resources for climate resilience, and revitalizing the Indigenous Peoples’ Climate Change Working Group (IPCCWG) and more. The latest iteration of the Red Bus Charter and inter-institutional resource map and shared framework will be presented with opportunities to build partnerships, along with a share-out useful tools as a takeaway package for TCU partners to share and discuss with their home institutions.

Welcome and Opening Ceremony
Plenary Session - Strategic Partnerships with TCU's
Revitalizing the IPCCWG Strategy Session
Planning for AIHEC Tribal Climate Resilience

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Day 2:
Introduction to LiDAR and Accessing Big Data Workshop
Local Climate Forecasting and Modeling Workshop
Supporting TCU Faculty with Data Skills Strategy Session
Localizing Data and Building TCU Capacity Strategy Session

Build Relationships and Foster Partnerships with TCU Faculty, Students, Staff, and Community, and also partners from The National Ecological Observatory Network (NEON), The Carpentries, Colorado University Boulder: EarthLab, The Environmental Data Science Innovation & Inclusion Lab (ESIIL), Haskell Indian Nations University Cooperative Extension, the American Indian Higher Education Consortium and more!

Gain Hands On Experience in TCU Faculty-Focused workshops which introduce open-source, open-access, advanced tools for geospatial applications and climate modeling, such as: LiDAR, Google Earth Engine, Climate Futures Toolkit, Jupyter Notebook, Macrosystems EDDIE Modules, GitHub, and more. TCU Faculty are also connected to support from The Carpentries, ESIIL, EarthLab, and other partners, to continue building data-science skills

Access Detailed Data with overviews from NEON, ESIIL, EarthLab, and others. Also, attendees will contribute to critical strategic planning specific to data sovereignty and access, with discussion and visioning to detail how TCUs will play a crucial role in Tribal Climate Resilience, and identify pathways for building capacity and funding for TCU Data Infrastructure, Faculty Support, and inter-institutional partnerships.

Connect to Classroom Resources such as open-access curated climate curriculum with the Climate Literacy and Energy Awareness Network (CLEAN), the Native Food Energy & Water Systems (FEWS) Alliance and learn more about resources available and connect to Project Red Bus an intertribal-institutional resource-mapping initiative led by the American Indian Higher Education Consortium (AIHEC) and share in planning its next steps!