

Updates from CTEMPS Shared-use DTS and DAS Facility

Scott Tyler, University of Nevada - Reno

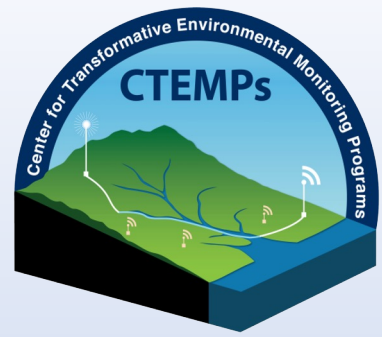


Oregon State
University



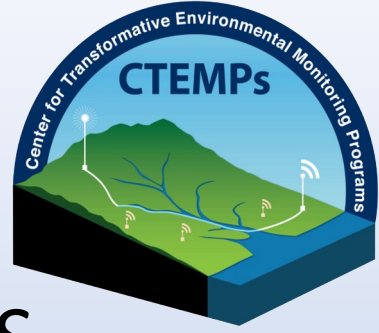
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CTEMPs Overview



- *Launched in late 2009 through NSF-EAR, CTEMps was the first community user facility focusing on hydrologic measurement advances.*
- *Initial focus on fiber-based distributed temperature sensing.*
- *CTEMps' goal is to bring very high resolution (in time and space) surface earth sensing.*
- *CTEMps is now jointly operated by the Univ. of Nevada, Reno, Oregon State Univ., Colorado School of Mines and Desert Research Institute*
- *Modeled after IRIS and UNAVCO*
- *Recently renewed by NSF through 2027*

CTEMPs Inventory



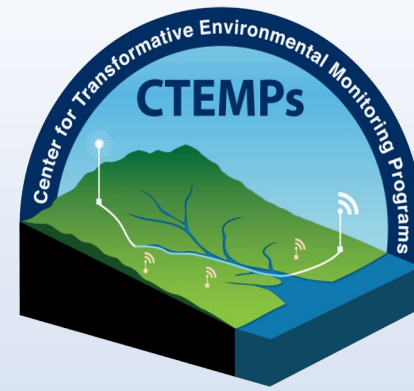
- *CTEMPs maintains a fleet of 11 field deployable DTS systems along with higher resolution laboratory grade instruments.*
- *Inventory of fiber, fiber splicing and supporting equipment*
- *Data management and storage*
- *Since inception, CTEMps has supported over 200 DTS research projects on all seven continents*
- *In 2023, DAS interrogators will be added through an “Instrument Pool”.*

CTEMPs Today

- *Maintaining support for all aspects of earth science in advancing fiber-based temperature sensing*
- *Developing UAS systems for high resolution topography, multi/hyper spectral sensing, thermal sensing and airborne magnetics, Collaborative with EarthScope, Open Topography and NCALM*
- *Environmental sensing instrument development through the Openly Published Environmental Sensing Laboratory (OPeNS) at OSU.*



What can you expect from CTEMPs DAS Going Forward?



- Beginning in Q3-2023, CTEMPs will be leading a DAS instrument pool for the community.
- DAS interrogators will be available from CTEMPs, EarthScope , NHERI as well as from Colo. School of Mines, Penn State and Cal State-Long Beach.
- Lease costs will be up to pool participants, but likely to be roughly similar across members.
- Fiber and fiber splicing are also be available.
- CTEMPs DAS Team: Eileen Martin, CSM; Megan Wendroth, OSU and Mark Hausner, UNR.
- For access prior to Q3-2023, contact CTEMPs directly (styler@unr.edu)

CTEMPs website: <http://ctemps.org>



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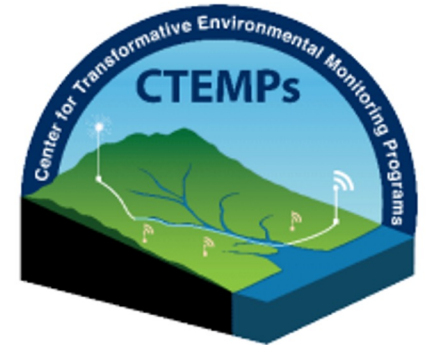
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