Justin T. Hicks

In-situ Sensing Facility
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1. Education

2023	B.S. in Environmental Science, California State University Chico, Chico CA Advisor: Dr. Shane D. Mayor
2020	A.S. in Construction Technology, College of the Redwoods, Eureka CA

2. Currently

2023 Jun–Present	Technician II in the In-situ Sensing Facility (ISF) of the Earth Observing Laboratory (EOL) at the National Center for Atmospheric Research (NCAR) supporting observational science. (Supervisor: Dr. Holger Vömel)

2.1 Responsibilities

Supports the development and deployment of the NCAR Airborne Vertical Atmospheric Profiling System (AVAPS) for the NSF/NCAR C-130 and GV as well as the Air Force's 53rd Weather Reconnaissance Squadron (Hurricane Hunters) aircraft. Provides hardware and software support and coordinates upgrades to the dropsonde systems to meet the needs of field campaigns and hurricane/atmospheric river surveillance programs.

Operates and maintains the EOL calibration laboratory and calibrates meteorological and electronic equipment in preparation, and follow-up, of field campaigns. The lab performs temperature, humidity, gas, pressure, and wind speed calibrations as well as uncertainty analysis of instrumentation.

Participates in field deployments of AVAPS and the Integrated Surface Flux System (ISFS).

2.2 NCAR/EOL Field Support Activities

2024 Mar	Technician for AVAPS deployment on NSF/NCAR C-130 for CAESAR (Cold-Air outbreak Experiment in the Sub-Arctic Region) in Kiruna, Sweden.

2023 Jul–Oct Technician for ISFS deployment for M^2HATS (Multi-point Monin-Obukhov similarity Horizontal Array Turbulence Study) in Tonopah, Nevada.

2023 Jun Technician for ISFS teardown for SOS (Sublimation of Snow) in Crested Butte, Colorado.

3. Past Positions

2022–23 Undergraduate Research Assistant, Chico State Enterprises, Atmospheric Lidar Research Group. (Supervisor: Dr. Shane D. Mayor)

- Performed various technical and setup tasks to prepare the Raman-shifted Eye-safe Aerosol Lidar (REAL) for M^2HATS.
- Assisted with assembling and troubleshooting pressure sensor modules to measure surface pressure perturbations.

2022–23 Instructional Student Assistant, Department of Earth and Environmental Sciences, California State University Chico. (Supervisor: Dr. Susan G. Riggins)

- Evaluated student assignments for ERTH265: Soils and Surficial Processes and ERTH355: Natural Disasters.

2019–22 Various Positions, Agland Engineering Inc., Ferndale CA

- Drafted the environmental baseline report for the conveyance of the Mattole Headwaters Forest Conservation Easement (CE) in Humboldt County.
- Created and edited maps using MapInfo Pro and maintained data sets and file directories to support CE proposals and monitoring, land resource management, and regulatory compliance of forestry operations (NTMP, NTO, NSO).
- Supported various projects; such as conservation, farm/ranch development, and timber harvest; through project management, construction, and equipment maintenance.

4. Professional Memberships

2022–Present American Meteorological Society
2022–Present American Geophysical Union

4.1 Service

Jan 2023	Student assistant at the American Meteorological Society annual meeting in Denver, CO.