#### Ryan J. Longman, Ph.D. Curriculum Vitae

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#### **QUALIFICATIONS SUMMARY:**

Over 15-years of experience teaching and conducting high-level scientific research in the Pacific with a focus on climate science, climate monitoring, the quality control and assurance of environmental data, climate change adaptation, climate finance and project proposal development. Strong working knowledge of sustainable development and the impacts of climate change in Hawai'i and in Pacific island countries and territories.

## EDUCATION:

Doctorate of Philosophy, University of Hawai'i at Mānoa, USA, 2015

• Major: Geography, Ph.D. Dissertation: "The Effects of Trade Wind Inversion Variability on High Elevation Climates in Hawai'i" Advisor: Tom Giambelluca

Masters of Arts, Geography, University of Hawai'i at Mānoa, USA, 2011

• Major: Geography, M.A. Thesis: "Homogenization of long-term solar radiation time series using a clear-sky radiation model and assessment of solar radiation variability

Bachelor of Arts, Interdisciplinary Studies, University of Hawai'i at Mānoa, USA, 2007

• Major: Human Relations within Organizations

## EXPERIENCE:

**Oceania Research Fellow,** East-West Center, Pacific Island Development Program, Honolulu Hawai'i. Nov. 2019 – Present

- Co-developed and currently co-lead the "Pacific Drought Knowledge Exchange (PDKE)", a program designed to facilitate the exchange of data and information between scientists, resource managers and the community through the creation of co-produced site-specific data and informational products.
- Co-developed and currently co-lead the "Hawai'i Climate Data Portal (HCDP)" an online repository that provides near-real-time access to a wide variety of data and information products specific to Hawai'i and the United States Affiliated Pacific Islands (USAPI).
- Co-developed and currently lead trainings focused on the development of project proposals to access climate financing.
- Manage a team of scientists, technical experts, and students on a range of projects.
- Work regularly with the Pacific Islands Development Program (PIDP) to support Governments, regional organizations, and local communities in the Pacific.

# Climate Change Adaptation Work & Short-term Consultancies, Honolulu HI, USA Dec 2017 to Present.

- **Technical Advisor** (DAI) Support the development of a concept note for the USAID Pacific Islands Climate Finance Activity (PICFA) (Jan. 2024 to Apr. 2024).
- Program Evaluation Specialist (DT-Global) Provide services to the New Zealand Ministry of Foreign Affairs and Trade (MFAT) Climate Change Programme Evaluation (CCP) activity. Work closely with Allen \* Clarke and partners to provide timely and quality information and technical advice on Climate Change. Peer-review and commenting on evaluation plans and reports (Feb. 2023 to Nov. 2023).
- **Research Assistant** Assisted a UNDP Country Capacity Development Specialist in the development of project proposals for submission to the Green Climate Fund (GCF) to finance the development of National Adaptation Plans (NAP) in several developing and least developed countries including: Somalia, Tajikistan, Kyrgyz Republic, Cambodia, Timor-Leste, Palau, and Oman; Assisted in the development of NAP's for Timor-Leste, South Sudan, Palau, and Nigeria. Assisted with various projects related to strengthening institutional capacity and disaster risk reduction capabilities in developing countries including Vanuatu, Timor-Leste, Kenya, and others (Dec. 2017 to Dec. 2022).
- Senior Environmental Specialist (Social Impact) Prepare the USAID Regional FAA 118/119 Tropical Biodiversity Analysis, to identify the current state and needs related to tropical forest and biodiversity conservation in 12 Pacific Island countries (May 2022 to Aug. 2022).
- Project Development Specialist (DT-Global) Provided strategic support to NGOs in Vanuatu and Fiji, to develop their project proposal applications for submission to UNDP AFCIA (Oct. 2021 – Dec. 2021).
- **Resilience Specialist** (DT-Global) Developed a "Climate Resilience Scorecard" for implementation in Pacific Islands Countries. (Aug. 2021 Oct 2021.)
- Project Preparation Specialist (Asian Institute of Technology Regional Resource Centre for Asia and the Pacific) 1. Assisted in the development of a specialized online course on how to develop concept notes for the Green Climate Fund's, Simplified Approval Process (SAP) (May 2020- Feb. 2021); 2) Worked directly with participants from Bhutan, Nepal, and the Maldives on GCF proposal development (June 2021)
- **Teaching Assistant** (University of the South Pacific) Assisted in the development and delivery of a specialized (online) graduate level course on climate finance and project preparation (PC 412) for the University of the South Pacific: Pacific Center for Environment and Sustainable Development (Jan. 2020 Jun. 2020).
- Project Preparation Trainer (DT-Global) Design and implement a specialized climate change adaptation project preparation course and supporting materials for stakeholders in Fiji, Kiribati, Tonga, and Samoa (Jul. 2019 – Sep. 2019).
- **Project Preparation Trainer** (AECOM) Design and implement a specialized climate change adaptation project preparation course and supporting materials for stakeholders in Vanuatu, Solomon Islands, Papua New Guinea. (Feb. 2019 April 2019).

**Lecturer**, University of Hawai'i College System: University of Hawai'i at Mānoa, University of Hawai'i, West O'ahu, and University of Hawai'i Maui College HI, USA. Jan. 2010 to Present

• Design curriculum and instruct several university level geography courses, including: The Natural Environment (GEOG101) and Natural Environment Lab (GEOG101L), World

Regional Geography (GEOG102), Introduction to Climatology (GEOG 300) and Water and Society (GEOG305)

• Have taught over 250 credit-hours over the past 14 years.

# Post Doctorate Research, Honolulu HI, USA.

May 2015 to Nov. 2019

- Climate Analyst (Research Cooperation of the University of Hawai'i) Identify and develop best practices and procedures for the quality assessment and quality control of daily meteorological data across multiple temporal resolutions (Dec. 2017– Nov. 2019).
- **Research Fellow** (University of Hawai'i at Mānoa, Department of Geography and Environment) Identified and archived 25-years of meteorological and developed methods to produce a set of daily temperature and rainfall maps for the State of Hawai'i; conducted rigorous scientific analysis centered around the identification of synoptic atmospheric disturbances in the Hawai'i(Jan. 2015 Nov. 2017).

## Graduate Research Assistant / Field Technician, Honolulu H.

Jan. 2009 to May 2015

• Assisted in climate station installation and maintenance; developed sophisticated methods for the quality assurance, quality control and homogenization of meteorological data records; optimized a clear-day solar radiation model for Hawai'i; worked on the Evapotranspiration and Climate atlas of Hawai'i.

# AFFILLIATIONS:

Oceania Research Fellow, Pacific Islands Development Program, East-West Center Associate Climatologist, Water Resources Research Center, University of Hawai'i at Mānoa Research Faculty, Center for Pacific Island Studies, University of Hawai'i at Mānoa Graduate Affiliate Faculty, Pacific Island Studies Department, University of Hawai'i at Mānoa

## **PROFESSIONAL SKILLS:**

- Scientific research and writing
- Climate adaptation project preparation (problem/objective tree analysis, theory of change, logframe preparation, monitoring and evaluation, access modalities)
- Data analysis and data visualization
- Computer programing (Visual Basic, R, Unix/Linx: Command line, Python)
- Policy analysis and Journal peer-review (International Journal of Climatology, Solar Energy, Scientific Data Journal of Renewable and Sustainable Energy, Journal of Water, Journal of Hydrometeorology)

## LANGUAGES:

English (native); Spanish (fluent by rusty)

#### Peer-Reviewed Journal Articles

- Longman, R.J., Lucas, M.P., McLean, J., Cleveland, S.B., Kodama, K., Frazier, A.G., Kemelamela, K., Schriber, A., Dodge II., M., Jacobs, G., and Giambelluca T.W. The Hawai'i Climate Data Portal (HCDP) *Bulletin of the American Meteorological Society* (Link)
- Xiao L. Fracier A.G., Diaz, H.F., Longman, R.J., Giambelluca. T.W. (2024), Routine Climate Monitoring in the State of Hawai'i: Establishment of State Climate Divisions, *Bulletin of the American Meteorological Society* (Link)
- Kodama, K., Kourkchi, E., **Longman, R.J.,** Lucas., M.P., Bateni, S., Huang, Y-F, Kagawa-Viviani, A., Mclean, J., Cleveland, S.B., Giambelluca, T.W., (2024) Mapping Daily Air Temperature Over the Hawaiian Islands From 1990 to 2021 via an Optimized Piecewise Linear Regression Technique, *Journal of Earth and Space Science*, 11(1) (Link).
- Adhikari, M., Kantar, M.B., Longman, R.J., Oshiro, M., Caires, K., Lee, C.N. He, Y. (2023) Genome-wide association study for carcass weight in pasture finished beef cattle in Hawai'i, Frontiers in Genetics, 14. (Link)
- Mourey, A.J., Shea, T., Costa, F., Shiro, B., **Longman R.J.** (2023) Years of magma intrusion primed Kīlauea Volcano (Hawai'i) for the 2018 eruption: evidence from olivine diffusion chronometry and monitoring data, *Bulletin of Volcanology*, 85(18) (Link)
- Frazier, A.F., Giardina, C.P., Giambelluca, T.W., Brewington, L., Chen, Y-L., Chen, P-S., Fortini, L.B., Hall, D., Helweg, D.A., Keener, V.W., Longman, R.J., Lucas, M.P., Mair, A, Oki, D.S., Reys, J.J., Yelenik, S.G., Trauernicht, C., (2022) A century of spatial and temporal patterns of drought in Hawai'i across hydrological, ecological, and socioeconomic scales, Sustainability, 14, 12023.(Link)
- Longman, R.J.; Frazier, A.G.; Giardina, C.P.; Parsons, E.W.; McDaniel, S. (2022) The Pacific Drought Knowledge Exchange: A Co-Production Approach to Deliver Climate Resources to User Groups. Sustainability, 14, 10554.(Link)
- Adhikari, M. Longman R.J., Giambelluca, T.W., Lee, C.N., and He, Y. (2022) Climate Change Impacts and Shifting Landscape of Dairy Industry in Hawai'i, Translational Animal Science. 6(2). (Link)
- Huang, Y-F. Tsang, Y-P., Gayte, M. Longman, R.J. Nugent, A., Kodama, K., Lucas, M. and Giambelluca., T.W., (2022) Hourly rainfall data from rain gauge networks and weather radar up to 2020 across the Hawaiian Islands. *Scientific Data*. 9(334) (Link)
- Lucas, M. P., **Longman**, **R.J.**, Giambelluca, T. W., Frazier, A.F., Mclean, J. Clevland, S.B., Haung, Y, and Lee, J.H. (2022). Optimizing automated kriging to improve spatial interpolation of monthly rainfall over complex terrain. *Journal of Hydromet*eorology 23(4) (Link).
- Longman R.J., Peterson, C. L., Baroli, M., Frazier, A. F., Cook, Z., Parsons, E. W. Dina, M., Kamelamela, K. L., Steele, C., Burnett, R., Swanston, C. and Giardina, C. P. (2022). Climate Adaptation for Tropical Island Land Stewardship: Adapting a Workshop Planning Process to Hawai'i Bulletin of the American Meteorological Society, 103. (Link)
- Mclean, J., Cleveland S.B., Dodge II M., Lucas M.P., Longman R.J., Giambelluca T.W., and G. Jacobs G.A. (2021). Building a portal for climate data-mapping automation, visualization, and dissemination. Concurr. Comput. Pract. Exp. (Link)

- Longman, R.J., Elison Timm, O., Giambelluca, T.W., and Kaiser L., (2021). A 20-year analysis of disturbance-driven rainfall on O'ahu, Hawai'i." *Monthly Weather Review*,146(6), 1767-1783.(Link)
- Xue, L., Wang, Y., Newman, A.J. Ikeda, K, Rasmussen, R.M., Giambelluca, T.W., Longman, R.J., Monaghan, A.J., Clark, M.P., and Arnold, J.R., (2020). How will rainfall change over Hawai'i in the future? High-resolution regional climate simulation of the Hawaiian Islands. Bulletin of Atmospheric Science and Technology, 118, 1-32. (Link)
- McLean, J.H., Cleveland, S.B., Lucas, M.P., **Longman R.J.** Giambelluca., T.W., Leigh, J., and Jacobs., J.A., (2020). The Hawai'i Rainfall Analysis and Mapping Application (HI-RAMA): Decision Support and Data Visualization for Statewide Rainfall Data. *Practice and Experience in Advanced Research Computing*. 239-245.(Link)
- Longman, R.J., Newman, A.J. Giambelluca, T.W. Lucas, M., (2020). Characterizing the uncertainty and assessing the value of gap-filled daily rainfall data in Hawai'i. *Journal of Applied Meteorology and Climatology*, 59 (7), 1261-1276.(Link)
- Nugent, A.D., Longman, R.J., Trauernicht, C., Lucas, M.P, Diaz, H.F. Giambelluca, T.W., (2020). Fire and Rain: The Legacy of Hurricane Lane in Hawai'i, *Bulletin of the American Meteorological Society* (E954-E967). (Link)
- Longman, R.J., Frazier, A.G., Newman, A.J., Giambelluca, T.W., Schanzenbach, D., Kagawa-Viviani, A., Needham, H., Arnold, J.R., Clark, M.P., (2019). High-resolution gridded daily rainfall and temperature for the Hawai'i Islands (1990-2014). *Journal of Hydrometeorology*, 20, 489-508.(Link)
- Newman, A.J., Clark, M.P., **Longman, R.J.,** Gillard, E. Giambelluca, T.W., and Arnold, J.R., (2019). Use of daily station observations to produce high-resolution gridded probabilistic precipitation and temperature time series for the Hawaiian Islands. *Journal of Hydrometeorology*, 20, 509-5229. (Link)
- Newman, A.J., Clark, M.P., **Longman, R.J.**, and Giambelluca, T.W., (2019). Methodological InterComparisons of Station-based Gridded Meteorological Products: Utility, Limitations, and Paths Forward. *Journal of Hydrometeorology*, 20, 531-547.(<u>Link</u>)
- Longman, R.J., Giambelluca, T.W., Nullet, M.A., Frazier, A.G., Kodoma, K, Crausbay, S.D., Krushelnycky P.D., Cordell S, Clark M.P., Newman A.J. and Arnold J.R., (2018). Compilation of climate data from heterogeneous networks across the Hawaiian Islands. *Scientific Data*, 5: 180012. (Link)
- Krushelnycky, P.D., Starr, F., Starr, K., **Longman, R.J.,** Frazier, A.G., Loope, L.L. and Giambelluca, T.W., (2016). Change in trade wind inversion frequency implicated in the decline of an alpine plant. *Climate Change Responses*, 3 (1). (Link)
- Longman, R.J., Diaz, H.F., and Giambelluca, T.W., (2015). Sustained Increases in Lower Tropospheric subsidence over the central tropical North Pacific drives a decline in High Elevation precipitation in Hawai'i. *Journal of Climate*, 28(22) 8743-8759.(Link)
- Mora, C., Frazier, A.G., Longman R.J., Dacks R.S., Walton M.M, Tong, E.J., Sanchez, J.J., Kaise, r L.R., Stender, Y.O., Anderson, J.M., Ambrosino, C.M., Fernandez-Silva, I., Griffen, L.M., and Giambelluca, T.W., (2013). Mora et al. reply. *Nature*, 511. (Link)
- Gotsch, S. G., Crausbay, S.D., Giambelluca, T.W. Weintraub, A.E., **Longman R.J.**, Asbjornsen, H., Hotchkiss, S.C., Dawson, T.E., (2014). Water relations and microclimate around the upper limit of a cloud forest in Maui, Hawai'i. *Tree Physiology*, tpu050.(Link)
- Longman, R.J., Giambelluca, T.W., Allis, R.J., and Barnes, M., (2014). Temporal solar radiation change at high elevations in Hawai'i. *Journal of Geophysical Research*, 119 (10) 6022-6033. (Link)
- Crausbay, S.D, Frazier, A.G., Giambelluca, T.W., **Longman, R.J**., and Hotchkiss, S.C., (2014). Moisture status during a strong El Niño explains a tropical montane cloud forest's upper limit. *Oecologia*, 175, 273-284.(<u>Link</u>)

- Mora, C., Frazier, A.G., Longman, R.J., Dacks, R.S., Walton, M.M., Tong, E.J., Sanchez, J.J., Kaiser, L.R., Stender, Y.O., Anderson, J.M., Ambrosino, C.M., Fernandez-Silval, L., Griffen, L.M., and Giambelluca, T.W. (2013). The projected timing of climate departure from recent variability. *Nature*, 502, 183-187. (Link)
- Longman, R.J., Giambelluca, T.W., and Nullet, M.A., (2013). Use of a clear-day solar radiation model to homogenize solar radiation measurements in Hawai'i. *Solar Energy*, 91,102-11. (Link)
- Longman, R.J., Giambelluca, T.W., and Frazier, A.G. (2012). Modeling clear-sky solar radiation across a range of elevations in Hawai'i: Comparing the use of input parameters at different temporal resolutions. *Journal of Geophysical Research*, 117. (Link)

# Textbook Contributions

Longman, R.J. 2016: Solar Power. In D. Hess (Ed.) McKnights Physical Geography A landscape appreciation (12th ed., pp. 81). Hoboken N.J.

# Technical Reports

- Bettinger, K., and Longman, R.J., (2020). Pacific Island Country Climate Factsheets. USAID Climate Ready Knowledge Products, Contract Number AID-492-H-17-00001 (Link)
- Longman, R.J., Elison-Timm, O., Giambelluca, T.W., and Kaiser, L. (2018). A Climatology of Cold Fronts in O'ahu Hawai'i (1990-2010). Technical Report Honolulu Board of Water Supply, Honolulu Hawai'l 43 pp.
- Longman, R.J., Giambelluca, T.W., Nullet, M.A., and Loope, L.L. (2015). Climatology of Haleakalā. Technical Report No. 193. Pacific Cooperative Studies Unit, University of Hawai'i, Honolulu, Hawai'i. 126 pp. (Link)
- Giambelluca, T.W., Shuai, X., Barnes, M.L., Alliss, **R.J., Longman**, R.J., Miura, T., Chen, Q., Frazier, A.G., Mudd, R.G., Cuo,, L., and Businger, A.D. (2014). Evapotranspiration of Hawai'i. Final report submitted to the U.S. Army Corps of Engineers—Honolulu District, and the Commission on Water Resource Management, State of Hawai'i.

## **Factsheets**

Longman et al. (2024) 2024 El Nino Drought In Microneais (Link)

- Longman et al. (2023) Mapping Drought In Micronesia (Link)
- Longman et al. (2023) Wildfire on Guam, Pacific Drought Knowledge Exchange (Link)
- Longman et al. (2023) Impacts of El Nino on climate and Ecosystems in Guam. Pacific Drought Knowledge Exchange (Link)
- Longman et al. (2023) Future Climates of Guam, Pacific Drought Knowledge Exchange (Link)
- Longman R.J., McDaniel S., Frazier A.G. Giardina C.P. (2021) Impacts of El Niño on Climate in Hawai'i Volcanoes National Park, Pacific Drought Knowledge Exchange. (Link)
- Longman R.J., McDaniel S., Frazier A.G. Giardina C.P. (2021) Future Climate Projections at Hawai'i Volcanoes National Park, Pacific Drought Knowledge Exchange. (Link)
- Longman R.J., McDaniel S., Frazier A.G. Giardina C.P. (2021) A 100-Year History of Drought at Hawai'i Volcanoes National Park, Pacific Drought Knowledge Exchange. (Link)
- Longman R.J., Parsons. E, Adkins, E., Frazier A.G. Giardina C.P. (2021) Impacts of El Niño on Climate in Pu'u Wa'awa'a, Pacific Drought Knowledge Exchange. (Link)
- Longman R.J., Parsons. E, Adkins, E., Frazier A.G. Giardina C.P. (2021) The Future Climate of Pu'u Wa'awa'a, Pacific Drought Knowledge Exchange. (Link)

- Longman R.J., Parsons. E, Adkins, E., Frazier A.G. Giardina C.P. (2021) A 100-Year History of Drought at Pu'u Wa'awa'a, Pacific Drought Knowledge Exchange. (Link)
- Longman R.J., Parsons. E, Adkins, E., Trauernicht, P. Frazier A.G. Giardina C.P. (2021) Fire History and Risk at Pu'u Wa'awa'a, Pacific Drought Knowledge Exchange. (Link)
- Kunz, M., Longman R.J., Frazier A.G. Giardina C.P. (2021) Drought & Non-Native Mammals in Hawai'i, Pacific Drought Knowledge Exchange. (Link)
- Kunz, M., Longman R.J., Frazier A.G. Giardina C.P. (2021) Drought & Conservation Operations in Hawai'i, Pacific Drought Knowledge Exchange (Link)
- Kunz, M., Longman R.J., Frazier A.G. Giardina C.P. (2021) Drought & Ecological Restoration in Hawai'i, Pacific Drought Knowledge Exchange (Link)

# **Recent Oral Presentations and Conference Proceedings**

May 2024	Pacific Ocean Pacific Island Climate Change Conference Presentation Title: "The Pacific Drought Knowledge Exchange (PDKE): A coproduction approach to building resilience to climate change in the Pacific, May 20-23, (Virtual Presentation).	
May 2024	Conference: University of Hawaii Water Resources Research Center Water Symposium: Presentation Title "New Tools and Data Products for the Hawaii Climate Data Portal", May 2, 2024, University of Hawaii.	
Apr 2024	Resilient Pacific Island Leaders Program. Presentation Title: "The Climate of Hawaii", Discussion: Honolulu Hawai'i.	
Apr 2024	Conference on Island Sustainability (CIS) Presentation Title: "The Pacific Drought Knowledge Exchange (PDKE): A co-production approach to building resilience to climate change in the Pacific, April 9-12, Tumon Bay, Guam.	
Mar 2024	Guest Lecture Geography & Environment GEOG 696 "Research Design in Geography" Presentation Title: Writing and Publishing", April 1, 2024 University of Hawai'i Honolulu, HI.	
Mar 2024	Pacific Drought Knowledge Exchange (PDKE) Annual Meeting: Presentation Title: "Funding the PDKE one grant at a time.	
Feb 2024	Hawai'i-Alabama-Canada Hydrological Sciences Summit. Presentation Title: Hawai'i Climate Data Portal, February 15, 2024 University of Hawai'i Water Resources Research Center, Honolulu, Hawai'i.	
Feb 2024	East-West Center International Graduate Student Conference. Presentation Title: Publishing Your Way to Better Career Opportunities in a Competitive Job Market February 16, 2024 University of Hawai'i Water Resources Research Center, Honolulu, Hawai'i.	
Jan 2024	Guest Lecture: Data Science 101 Title: Climate Science in Hawaii", January 24th, 2024 Chaminade University, Honolulu, HI.	
Jan 2024	Lunch and Learn, Meeting with Hawai'i State Legislators: Presentation Title: The Hawai'i Climate Data Portal: Building Decision support tools to improve local adaptability, January 16th, Hawai'i State Capital, Honolulu HI.	
Jan 2024	Hawai'i Climate Roundtable, Presentation Title: The Hawai'i Climate Data Portal, Jan. 11, University of Hawai'i at Mānoa, Honolulu HI.	
Jan. 2024	The Pacific Islands Climate Adaptation Science Center Seminar Series Slice of PI-CASC, Presentation Title: "The Hawai'i Climate Data Portal From Soup to Nuts, January 8th, University of Hawai'i at Mānoa, Honolulu HI.	
Dec. 2023	American Geophysical Union (AGU) Fall Meeting, "The Hawai'i Climate Data Portal (HCDP)", San Francisco, CA (Dec 11-15).	

Dec. 2023	Southeast Asia Vulnerable Deltas Workshop, "Nusantara the paradox of building a new green capital city in the context of a changing climate", Samarinda, Indonesia (Dec 4.7)	
Sep. 2023	Indonesia (Dec 4-7). Southwest Climate Hub Drought Learning Network Annual Meeting. Presentation Title: The Pacific Drought Knowledge Exchange, Glancing Back and Charging Forward", Southwest Polytechnic Institute, September 27-28 Albuquerque NM.	
Jul. 2023	Resilient Pacific Island Leaders Program. Presentation Title: "The Climate of Hawaii" & Discussion, July 10, 2023: Imin Conference Center, Honolulu Hawai'i.	
Jul. 2023	The Earth Workshop for Teachers. Presentation Title: "New tools and data that can be used to develop climate curriculum for schools in Hawai'i and beyond. July 10 <sup>th</sup> 2023, University of Hawai'i Honolulu, HI.	
Jul. 2023	The Hawai'i Ecosystems Meeting, Presentation Title: "The Frontier of Climate Science in Hawai'i. Hilo, Hawai'i.	
Jun. 2023	The Hawaii Conservation Conference, Forum titled "New tools, data sources, and approaches for managing climate impacts in Hawaii. Presentation Title: "Improving Access to Climate Data and Information for Conservation Professionals in Hawaii and the USAPI. Forum Title "New knowledge Tool for Delivering Site-specific Climate and Drought Information in Hawaii."	
Apr. 2023	The State Commission on Water Resource Management (CWRM) monthly meeting, "The Pacific Drought Knowledge Exchange", Honolulu HI. (Link)	
Mar. 2023	Hawai'i Climate Data Portal User Group (HUG) first annual meeting Presentation Title: The HCDP, Lessons Learned the Path Forward, Honolulu Hawai'i	
Jan. 2023	2023 Pacific Water Conference. Presentation Title: Data at your fingertips: The Frontier of climate science in Hawai'i., Honolulu HI,	
Jan. 2023	Pacific Islands Climate Adaptation Science Summit. Presentation Title: Data at your fingertips: The Frontier of climate science in Hawai'i., Honolulu HI	
Jan. 2023	University of Guam, Water and Environment Research Institute Seminar Series, "The Hawai'i Climate Data Portal: Scaling up to improve data access in the USAPI", Guam.	
Oct. 2022	Hawai'i Drought Monitoring and Knowledge Exchange workshop series hosted by the National Drought Mitigation Center and the East-West Center. Presentation Title: The Pacific Drought Knowledge Exchange, In person - Līhu'e, Honolulu, Kahului and Hilo, HI.	
Sep. 2022	12 <sup>th</sup> Pacific Islands Conference of Leaders, Honolulu Hawai'i. Side event: Climate Data and Information, for Adaptation Planning in the Pacific, Honolulu HI.	
Sep. 2022	12th Pacific Islands Conference of Leaders, Honolulu Hawai'i. Public Plenary: Scaling up Climate Finance for the Blue Pacific Continent. Panel moderator, Honolulu, HI.	
Aug. 2022	Honolulu Geospatial Expo. Presentation Title: Hawaiʻi Climate Data Portal, Honolulu HI.	
Jun. 2022	East-West Center Insights. Presentation Title: The Pacific Drought Knowledge Exchange, virtual.	
Jun. 2022	Southwest Climate Hub (SWCH) Drought Learning Network Annual Meeting, Presentation Title: The Pacific Drought Knowledge Exchange, Las Cruses, New Mexico.	
May. 2022	2022 USDA Forest Service Region 5 Climate Change Integration Team (CCIT) Webinar Series.: The Pacific Drought Knowledge Exchange. Virtual presentation.	
Apr. 2022	Technology, Colleges, and Community Worldwide Online Conference Title: The Hawai'i Climate Data Portal (HCDP). Virtual presentation.	
Apr. 2022	Briefing with the National War College. Title: Climate Monitoring and the Development of Decisions Support Tools, Honolulu, HI.	

- Mar. 2022 The Hawai'i Climate Data Portal (HCDP). Official Launch Title: HCDP overview and attributes. . Virtual presentation.
- Jan. 2022 Hawaiian Studies 651<sup>°</sup> 'Aina Waiwai: Water, Food Sovereignty, and Ancestral Abundance Presentation Title: The Climate of Hawai'i. Virtual presentation.
- Dec. 2021 The Pacific Drought Knowledge Exchange Kickoff Meeting. Presentation Title: The Pacific Drought Knowledge Exchange I, Projects and Products. Virtual presentation.
- Nov. 2021 Hawai'i Cattlemen's Council Annual Meeting. Presentation Title: The Hawai'i Rangeland Information Portal. A decision Support Tool for Ranchers. Virtual

#### **Recent Press Releases and News Articles**

Apr. 2023	Honolulu KIT News, "Firefighters in Hawaii prepare ahead of predicted above- average wildland fire conditions" April 9, 2024 (Link)
Apr. 2023	Honolulu Civil Beat, "Hawaii Faces An Above Normal Risk Of Significant Wildfires Over The Next Three Months" April 8, 2024 (Link)
Nov. 2023	Honolulu Civil Beat, "Hawaii Should Use Artificial Intelligence To Improve Fire Forecasts, Researchers Say" (Link)
Mar. 2023	UH News, "Visitors from more than 100 countries access the Hawai'i Climate Data Portal" (Link)
Dec. 2022	National Integrated Drought Information System Research and Learn, "NIDIS in Hawai'i: Expanding and Enhancing Stakeholder-Driven Drought Products and Services" (Link)
Dec. 2022	Pacific Islands Climate Adaptation Science Center News "Promoting PDKE's H- RIP to the cattleman crowd" (Link)
Nov. 2022	Hawai'i Public Radio, "The Conversation: Climate conference continues negotiations (Link)
Nov. 2022	Livestock Wala'au, "S2 Ep 08 Pacific Knowledge Drought Exchange (PDKE) and Hawaii Rangelands Portal" (Link)
Sep. 2022	Valuable data tool designed for Hawai'i Island Farmers, University of Hawai'i News. (Link)
Jul. 2022	Climate Adaptation Science Center Collaboration, "Launch of Hawai'i climate portal provides powerful tools for local decision-making" (Link)
Jun. 2022	Honolulu Civil Beat "Hawaii's Extreme Drought Is Forcing Ranchers And Farmers To Get Creative" (Link)
May. 2022	UH News "Machine learning' improves rainfall mapping, water plans" (Link)
Mar. 2022	Anybody can make a rainfall map with new climate portal. National Public Radio (Link)
Mar. 2022	Revolutionary climate data portal critical to future planning. University of Hawai'i News (Link)
Dec. 2021	American Geophysical Union Meeting Fall meeting Video Series Title: Hawai'i EPSCoR Ike Wai Project, University of Hawai'l AGU (Link)
Jun. 2021	Pacific Islands CASC Supports Drought Community of Practice in Hawai'i; USGS, Climate Adaptation Insights. (Link)
Jun. 2021	Pacific Islands CASC Supports Drought Community of Practice in Hawai'i; USGS, Climate Adaptation Insights. (Link)
Jun. 2021	Kona lows, other storm events make outsize contribution to state's rainfall; Honolulu Star Advertiser (Link)
Jun. 2021	Better water management goal of storm, rainfall data analysis; University of Hawai'i News. (Link)
Jul. 2020	Hurricane Lane brought fire and rain to Hawai'i; University of Hawai'i News. (Link)

- Jul. 2020 Fire and Rain? New UH study sheds light on Hurricanes effect of wildfire; Hawai'i News Now (<u>Link</u>) Fire and Rain: The Legacy of Hurricane Lane In Hawai'i; East West Center News.
- Jul. 2020 (Link)

# Academic Grants

Award Dates	Title	Amount
2024-2026	Lead Investigator: Title: "Supporting Akamai Agriculture in Keaukaha-Pana'ewa Community, using a PDKE co- production approach". National Marine Sanctuary.	\$76,000
2023 - 2027	Lead Investigator: Title: "Automated production of site-specific climate change climate variability and drought (CCVD) portfolios". National Resource Conservation Society (NRCS)	\$50,000
2023-2024	Lead Investigator: Title: "Supporting the Pacific Drought Knowledge Exchange". State of Hawai'i Commission on Water Resources Management (CWRM)	\$76,000
2023-2025	Lead Investigator Title: "Improving the availability and accessibility of climate data and information for users in Hawai'i, American Sāmoa, and Guam". Pacific Islands Climate Adaptation Science Center (PI-CASC).	\$408,000
2023-2025	Co-Lead Investigator: Title Enhancing Collection and Application of Hydrologic Data to Improve Operationalized Weather and Flood Prediction in American Samoa". NOAA Cooperative Institute for Research in Hydrology (CIROH).	\$236,135
2022-2023	Co-Lead Investigator: Title: "An evaluation of the NextGen National Water Model in tropical conditions with the aim of improving hyperlocal flood forecasting". NOAA Cooperative Institute for Research in Hydrology (CIROH).	\$900,000
2022-2026	Lead Investigator Title: "Supporting the development and delivery of climate data and information to resource managers in Hawai'i and the USAPI through the Pacific Drought Knowledge Exchange". National Resource Conservation Society (NRCS)	\$50,000
2022-2024	Lead Investigator: Title: "NIDIS in Hawaii – Expanding and enhancing stakeholder-driven drought products and services" NOAA National Integrated Drought Information System (NIDIS)	\$295,000
2022-2025	Senior Personal: Title: "Harnessing the Data Revolution for Island Resilience. The University of Hawai'i proposes the RII Track 1 EPSCoR Proposal". National Science Foundation	\$20,000,000
2020-2022	Co-Lead Investigator: Title "Routine Monitoring of Climate in the State of Hawai'i: Establishment of State Climate Divisions. NOAA National Weather Service".	\$94,991