

Taylor Christopher Dorn

University of California, Los Angeles

taylordorn8@gmail.com

tdgeology.com

EDUCATION

- University of California, Los Angeles** 2018 –2023
Division of Earth, Planetary, and Space Sciences
PhD, Geology
Advisor: Mackenzie Day
- University of Louisiana at Lafayette, Lafayette, Louisiana** 2017- 2018
Master of Science in Geology (Hydrology)
Advisor: Katie Costigan
- Texas State University, San Marcos, Texas** 2010-2013
Bachelor of Science in Physical Geography, *Cum Laude*, 2013
Minor in Geology, 2013
Certificate in Geographic Information Science, 2013

APPOINTMENTS

- Front Range College – Longmont, Colorado***
Faculty November 2022 – Current
- Front Range College – Longmont, Colorado***
Geospatial Experience internship program coordinator July 2023 - Current
- Santa Monica College – Los Angeles***
Adjunct Faculty August 2022 – December 2022

COURSES TAUGHT

Global Positioning Systems
Vector Based GIS
Geospatial Statistics
Hydrology and GIS
LiDAR/Photogrammetry
Intermediate Remote Sensing
Principles and Practice of Scientific Research
Physical Geography

PROFESSIONAL EXPERIENCE

Summer Intern Howard University/NASA-GSFC	July 2021 – September 2021
Virtual Student Federal Service Intern USGS	September 2020 – May 2021
Graduate Research Assistant EPSS, University of California – Los Angeles	June 2019 – Current
Graduate Teaching Assistant EPSS, University of California – Los Angeles	March 2019 – Current
Graduate Teaching Assistant School of Geosciences, University of Louisiana at Lafayette	January 2017 – May 2018
Research Assistant School of Geosciences, University of Louisiana at Lafayette	June 2017 – July 2017
Advanced Geological Analyst Schlumberger Oilfield Services	May 2013 -December 2015

TEACHING EXPERIENCE

<i>University of California – Los Angeles</i> Teaching Assistant, EPSS 103B – Sedimentary Petrology	Fall 2020
<i>University of California – Los Angeles</i> Teaching Assistant, EPSS 111 – Stratigraphic and Field Geology	Spring 2019, Spring 2021
<i>University of Louisiana at Lafayette</i> Teaching Assistant, GEOL 107 - Geology & Man, Groundwater Geology	Fall 2017
Teaching Assistant, GEOL 111 - Physical Geology	Spring 2017
<i>Texas State University</i> Tutor - Physical and Historical Geology	2011- 2013

PUBLICATIONS

Dorn, T. and Day, M.: Exploring the transition between water and wind-dominated landscapes in Deep Springs, California as an analog for transitioning landscapes on Mars, EGU sphere, <https://doi.org/10.5194/egusphere-2022-1040>, 2022.

Lori K Fenton, Stephen M. Metzger, Tim I. Michaels, Stephen P. Scheidt, **Taylor C. Dorn**, Lynn D.V. Neakrase, Banner Cole, Owen Sprau, Meteorological and geological controls on dust devil activity: Initial results from a field study at Smith Creek Valley, Nevada, USA, *Aeolian Research*, Volume 59, 2022, 100831, ISSN 1875-9637, <https://doi.org/10.1016/j.aeolia.2022.100831>.

Dorn, T., & Day, M. (2020). Intracrater sediment trapping and transport in Arabia Terra, Mars. *Journal of Geophysical Research: Planets*, <https://doi.org/10.1029/2020JE006581>

Day, M., & **Dorn, T.** (2019). Wind in Jezero crater, Mars. *Geophysical Research Letters*, 46. <https://doi.org/10.1029/2019GL082218>

RESEARCH FUNDING

Previous Research

2017-2018 “Channel Morphology, Streamflow Patterns, and Sediment Transport of Three Intermittent Rivers Along the Balcones Fault Zone in San Marcos, Texas”

PI: Taylor Dorn (ULL)

Advisor: Dr. Katie Costigan (ULL)

Funding Source: Gulf Coast Association of Geological Societies (\$1,500)

PRESENTATIONS

Dorn, T., Day, M., Exploring a water to wind transitioning landscape in Deep Springs California as an analog for ancient and modern Martian environments. GSA, Pittsburgh, October 2023. (Invited)

Dorn, T., Day, M., Surface Changes in a transitioning wet and dry depositional environment, Deep Springs Playa, California with implications for Mars. AGU, Chicago, December 2022.

Dorn, T., Day, M., Spatial Variability of Aeolian Abrasion: Early Results from Ixex Dune Field, Death Valley National Park. AGU, New Orleans, December 2021. (Poster)

Dorn, T., Day, M., Intracrater sediment trapping and transport in Arabia Terra. AGU, Online, December 2020. (Poster)

Dorn, T. Day, M., Intracrater sediment trapping and transport in Arabia Terra, Mars. 6th International Planetary Dunes Conference, Woodlands, Texas, May 2020. (Poster)

Dorn, T., Day, M., Intracrater sediment trapping and transport in Arabia Terra, Mars. Lunar and Planetary Science Conference, Woodlands, Texas, March 2020.

Dorn, T., Day, M., Intracrater sediment trapping and transport in Arabia Terra, Mars. Planetary Science Seminar, UCLA, Los Angeles, California, March 2020.

Dorn, T., Day, M., Temporal wind variability and erosion of the western delta fan in Jezero crater Ninth International Conference on Mars. Pasadena, California, July 2019. (Poster)

Dorn, T. Day, M., Wind in Jezero crater, Mars. Planetary Science Seminar, UCLA, Los Angeles, California, April 2019.

Dorn, T., Day, M., Temporal variations in wind patterns within Jezero crater. 50th Lunar and Planetary Science Conference, Woodlands, Texas, 2019. (Poster)

Dorn, T.C., Costigan, K.H., Channel Morphology, Streamflow Patterns, and Sediment Transport of Three Intermittent Rivers Along the Balcones Fault Zone in San Marcos, Texas. Abstract H51C-1274 presented at 2017 Fall Meeting, AGU, New Orleans, LA, 11-15 Dec. (Poster)

Dorn, T.C., Costigan, K.H., Perkin, J.S. Streamflow Variability Within Four Rivers in the Eastern Highland Rim Region of Tennessee. Binghamton Symposium, San Marcos, TX, October 2017. (Poster)

HONORS AND AWARDS

Bakersfield College Faculty Diversification Fellowship: 2022

UCLA Dissertation Year Fellowship: 2022

UCLA EPSS Outreach Award: 2021

UCLA EPSS Excellence in Teaching Award: 2021

UL Lafayette Alumni Association Outstanding Master's Graduate Award Nominee: 2018

Graduate Student Organization Scholarship: 2017

Binghamton Geomorphology Symposium Scholarship: 2017

Chevron-Gulf Oil Foundation Endowed Geology Scholarship: 2018

Gulf Coast Association of Geological Societies research grant: 2017

Geography Department Outstanding Service award, Texas State University: 2013

Housley Principled Leadership Scholarship: 2012

Geology Outstanding Leadership Award, Texas State University: 2011

SERVICE

Community

Palos Verdes Gem and Mineralogical Society, November 2022

Explore Your Universe, 2019, 2020, 2021

CicLAvia, 2019

City Language Immersion Center (CLIC), 2019

Letters to a Pre-Scientist (8th grader), 2019-2020

St. Martin Parish 'STEM Night' (1st graders), 2017

Bayou Vermilion District Earth Day, 2017

Nutty Scientist of Acadiana (ages 5-13), 2015-2016

San Marcos River Clean-Up Days, August 2011-2013

Heritage Museum of the Texas Hill Country, April 2011-2013

Department

UCLA Explore Your Universe, 2019,2020

UCLA EPSS July 50th anniversary celebration of the Apollo 11 moon landing, 2019

University of Louisiana at Lafayette Science Day, October 2016, November 2017

PROFESSIONAL MEMBERSHIPS

Geological Society of America

American Geophysical Union

Gamma Theta Upsilon Geographic Honors Society

MISCELLANEOUS

Wilderness first aid certified

Adult CPR certified