

John-Morgan Manos

Curriculum Vitae

September 2022

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Research Interests

Glacier Environmental Change | Glaciology | Geophysics
Numerical Modeling | Machine Learning | Glacier and Ice Sheet Dynamics
Climate Change | Remote Sensing | Photogrammetry | GPS Surveying | GIS

Education

Ph.D. Earth and Space Sciences, University of Washington, June 2021 – 2026 (expected)

B.S. Atmospheric Sciences, Ohio State University, 2018

Positions

2018 – 2021 Remote Sensing Engineer, Maxar Technologies Inc.

2017 – 2018 GIS Assistant, Facilities and Information Technology Services, Ohio State University

2015 – 2018 Undergraduate Researcher, Byrd Polar and Climate Research Center

Oral Presentations at Professional Meetings

2022 **Manos, J.**, Lipovsky, B., Fichtner, A., Gräff, D., Martin, E. R., Paitz, P., & Walter, F. (2022). Using distributed acoustic sensing (DAS) to constrain glacier surface melt [89A3753]. presented at 2022 IGS International Symposium on Maritime Glaciers, 19-24 June.

Poster Presentations at Professional Meetings

2021 **Manos, J.**, Lipovsky, B., Fichtner, A., Gräff, D., Martin, E. R., Paitz, P., & Walter, F. (2021). From DAS to Discharge: Using Distributed Acoustic Sensing to Estimate the Hydrological Response of the Rhonegletscher, Switzerland. [C25C-0849]. presented at 2021 Fall Meeting, AGU, 13-17 Dec.

2020 Schoessow, F., Soni, N., **Manos, J.**, Mark, B.G., DeGrand, J., Vega, E.M., Reinemann, S., and Porinchu, D. Multi-annual measures of rock glacier-wide volume change and surface kinematics in Great Basin National Park. Abstract GC026-0020. 2020 Fall Meeting, AGU, all virtual, 1-17 Dec.

2019 Soni, N., Mark, B.G., **Manos, J.**, Vega, M.E., Schoessow, F., DeGrand, J.Q., Reinemann, S.A., and Porinchu, D.F. Interannual Rock Glacier Surface Elevation Changes using UAS in Great Basin National Park, Nevada. Submitted abstract #633654. 2019 Fall Meeting, AGU, San Francisco, CA, 9-13 Dec.

2018 Schoessow, F.S., **Manos, J.**, Mark, B.G., DeGrand, J., Soni, N., Reinemann, S., and Porinchu, D. Mapping rock glacier surface elevation changes in Great Basin National Park, Nevada. Geological Society of America Abstracts with Programs. Vol. 50, No. 6, ISSN 0016-7592.

doi:10.1130/abs/2018AM-324542. Paper #84-8 presented at the Geological Society of America Annual Meeting, Indianapolis, IN, 4-7 November.

- 2018 **Manos, J.**, B.G. Mark, J. DeGrand and O. Wigmore. Annual Surface Elevation Change of the Lehman Rock Glacier in Great Basin National Park, Nevada, USA. Poster presented at Association of American Geographers Annual Meeting, New Orleans, LA. Physical Geography Poster Session II #046. 12 April.
- 2018 **Manos, J.**, B.G. Mark, J. DeGrand and O. Wigmore. Annual Surface Elevation Change of the Lehman Rock Glacier in Great Basin National Park, Nevada, USA. Poster Presented at Denman Undergraduate Research Forum Annual Meeting, Ohio State University, Columbus, OH. Session #1, Poster #134. 3 April.

Awards and Honors

- 2022 Best Glaciology Talk
University of Washington, Department of Earth and Space Sciences Research Gala 2022
- 2018 Cum Laude
- 2018 Edward J. “Ned” Taaffe Award – \$1000
Recognizes the most outstanding Atmospheric Sciences, Climate, and Physical Geography graduates.
- 2018 Garry McKenzie & Henry Brecher Undergraduate Scholarship – \$600
Stipend to be used to facilitate research efforts or offset travel to present at academic conferences.
- 2018 Office of Energy and Environment Sustainability Award Finalist
Presented at the 2018 Denman Undergraduate Research Forum at the Ohio State University.
- 2015 – 2018 Dean’s List – AU15, SP16, AU16, SP17, AU17, and SP18 semesters

Fieldwork

- 2022 Whidbey Island, Washington distributed acoustic sensing (DAS) deployment.
- 2021 Ocean Observatories Initiative Regional Cabled Array DAS deployment, Oregon.
- 2021 DAS deployment on the Alpentel Ski Resort and Easton Glacier on Mt. Baker, Cascade Range, Washington.
- 2016 – 2018 Great Basin Research Experience, Great Basin National Park, 3 seasons.

Outdoor Education and Experience

- 2022 Crevasse Rescue, Mountain Madness, Seattle, WA
- 2021 First Aid, CPR, and AED certified, MEDIC First Aid, Seattle, WA
- 2020 AIARE 1 Certification, Colorado Mountain School, Estes Park, CO

- 2020 Avalanche Awareness Clinic, Colorado Mountain School, virtual
- 2020 Basic Rock Climbing, Colorado Mountain Club, Denver, CO
- 2020 Navigation 1, Colorado Mountain Club, Denver, CO
- 2019 Wilderness Trekking School, Colorado Mountain Club, Denver, CO
- 2018 Belay Certification, Ohio State University
- 2018 Wall Climbing, Ohio State University

Professional Society Memberships

International Glaciological Society (IGS)

American Geophysical Union (AGU)

American Association of Geographers (AAG)

American Meteorological Society (AMS)

Outreach and Engagement

- 2022 Graduate student mentor to an incoming first year Department of Earth and Space Sciences graduate student.
- 2022 Advised on the development of an animation depicting light backscatter in fiber optic cables for a University of Washington UW News article.
- 2022 Presented recent research findings in a talk titled “Glacier discharge prediction using machine learning and acoustic wavefield detection” at the 2022 Department of Earth and Space Sciences Research Gala.
- 2022 Invited to present "Optical fiber constraints on glacier surface mass balance and meltwater discharge" at the Glaciology Lunch seminar series at the University of Washington.
- 2022 Invited to present current Distributed Acoustic Sensing research on glaciers at the weekly Seismolunch seminar series at the University of Washington.
- 2021 Assisted in resume review of current undergraduate or graduate students in the Atmospheric Sciences program at The Ohio State University.
- 2021 Served as graduate mentor to undergraduate student in Earth and Space Sciences Department to foster professional connections and share knowledge, experience, and expertise.
- 2021 Participated in the Earth and Space Sciences peer mentoring program for which I am a peer mentee to a second year PhD student within the department.

- 2019 Presented new technologies in satellite image enhancement and educated colleagues in quality validation procedures during annual quality summit at Maxar Technologies.
- 2019 Acted as talent recruiter for Maxar Technologies at annual career fairs at Colorado State University.
- 2018 Invited to present undergraduate research to the National Park Service and visitors of Great Basin National Park.
- 2018 Invited to discuss undergraduate research during the “Takeover Tuesday” event hosted by the Office of Undergraduate Research & Creative Inquiry at Ohio State which highlights new and innovative research being conducted by undergraduate students.
- 2018 Interviewed by an Ohio State University journalist about my research as an undergraduate which was featured on the Ohio State University website frontpage.
- 2018 Elected President of the Scarlet and Gray Weather Forecasting Team at Ohio State University, mentored a team of undergraduate weather enthusiasts in weather forecasting, and helped create point weather forecasts for the Columbus area.
- 2017 Featured in The Lantern’s *Humans of OSU* segment where I discussed my academic goals and my passion for climate research.
- 2016 Created a video showcasing the research taking place during the 2016 Great Basin Research Experience expedition which was featured on the Byrd Polar and Climate Research Center website.
- 2016 Investigated wildfire history in Great Basin National Park which was featured in the 2016 Ohio State Severe Weather Symposium brochure.
- 2015 – 2018 Served as an active member of the Meteorology Club at Ohio State University.