

Research Interests

Glacier dynamics and mass change, surge-type glaciers; remote sensing (LIDAR, SAR, Optical), big data analysis, uncertainty quantification, interpolation and inverse methods; data visualization, accessible science, outreach.

Education

2020–Present	<b>Ph.D. – Geophysics</b> , <i>University of Alaska Fairbanks</i> , Fairbanks, USA – <i>Advisor: Martin Truffer</i> Thesis: Understanding glacier dynamics through remote sensing techniques Participation in the McCarthy Glaciology Summer School (10 days), GlaMacLeS Machine Learning in Glaciology Summer School (10 days), FieldEx field safety and preparedness workshop (6 days).
2018–2020	<b>Master’s Degree – Geophysics</b> , <i>University of Grenoble–Alpes</i> , Grenoble, France Major: Atmosphere, Climate, Continental Surfaces
2015–2018	<b>Bachelor of Science – Geology</b> , <i>University of Grenoble–Alpes</i> , Grenoble, France

Professional Appointments

Summer 2023	<b>Intern – Alaska Satellite Facility</b> , <i>University of Alaska Fairbanks</i> , Fairbanks, USA
2020–25	<b>Graduate Student Assistant</b> , <i>University of Alaska Fairbanks</i> , Fairbanks, USA
Summer 2020	<b>Intern – Geography and Hydrology</b> , <i>University of Oslo</i> , Oslo, Norway

Peer-reviewed Publications

In Prep.	<b>Devaux-Chupin, V.</b> , Truffer, M., Loso, M.G., Larsen, C.F., Fahnestock, M. – Validation of fluxgate-based mass balance calculation from remote sensing datasets over Sít’ Tlein’s (Malaspina Glacier) lobe. <i>To be submitted to The Cryosphere in September 2025.</i>
In Prep.	<b>Devaux-Chupin, V.</b> , Truffer, Larsen, C.F., M., Loso, C.F., Fahnestock, M. – Anatomy of a piedmont glacier surge: uncovering Sít’ Tlein’s (Malaspina Glacier) dynamic balance. <i>To be submitted to JGR: Earth Surface in August 2025</i>
Under review	<b>Devaux-Chupin, V.</b> , Truffer, M., Brinkerhoff, D., Fahnestock, M., Loso, M.G., Christoffersen, M., Daniel, M., Tober, B.S., Larsen, C.F., Holt, J.W. – A century of flow and surge history of Sít’ Tlein (Malaspina Glacier), Southeast Alaska. (Submitted to <i>Journal of Glaciology</i> )
2025	Brinkerhoff, D., Tober, B., Daniel, M., <b>Devaux-Chupin, V.</b> , Christoffersen, M., Holt, J.W., Larsen, C.F., Fahnestock, M., Loso, M.G., Timm, K.M. and Mitchell, R., 2024. The demise of the world's largest piedmont glacier: a probabilistic forecast. <i>EGUsphere</i> , 2024, pp.1-52.

Presentations

2024	<b>American Geophysical Union</b> (Washington D.C.) – The impact of scale when calculating the Climatic Mass Balance of Sít’Tlein (Malaspina Glacier), Southeast Alaska. [Poster] <b>Northwest Glaciologists Meeting</b> (Fairbanks)- Ice surface dataset analysis. [Talk]
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2023	<p><b>Northwest Glaciologists Meeting</b> (Seattle) - DEM Differentiation of Sit'Tlein (Malaspina) glacier. [Talk]</p> <p><b>American Geophysical Union</b> (San Francisco) - 20 years of Climatic Mass Balance of Sit'Tlein (Malaspina Glacier), Southeast Alaska. [Lightning Talk]</p> <p>- ITS_LIVE Tools: a comprehensive python package and interactive notebooks to download and analyze global glacier surface velocity data. [Poster]</p> <p>- Streamlined processing and analysis of glacier surface velocity data using ITS_LIVE Tools [Talk]</p>
2022	<p><b>American Geophysical Union</b> (Chicago) - A Century of Surges of Sit'tlein (Malaspina Glacier), Southeast Alaska. [Poster, presented by M.Truffer]</p> <p><b>Northwest Glaciologists Meeting</b> (Moscow, Idaho) - Sit' Tlein glacier dynamics. [Talk]</p> <p><b>IGS 2022 Maritime Glaciers International Symposium</b> (Juneau, Alaska) - Flow and ice flux history of the Malaspina Glacier, Southeast Alaska, from Landsat 5 to 8 and Sentinel 1-2 images. [Talk]</p>
2021	<p><b>American Geophysical Union</b> (New Orleans) - Ice-Flow and Surge History of the Malaspina Glacier, Alaska, From Landsat and Sentinel Data, and Autonomous Repeat Image Feature Tracking (autoRIFT). [Talk]</p> <p><b>Northwest Glaciologists Meeting</b> (Online) - 37 years of wiggling-ice: a history of movement and velocity for the Malaspina Glacier. [Talk]</p>

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## Awards

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2024	<b>Brian R. Zelenka Memorial Award</b> for "hard working graduate student dedicated to the profession" Department of Geosciences, UAF. (Monetary award of \$2000).
2023	<b>Peter MacKeith Memorial Award</b> for best student in glaciology/glacial geology. Department of Geosciences, UAF. (Monetary award of \$1000).
2023	<b>Geoscience Student Symposium:</b> first prize for best student talk. UAF.
2022	<b>Three Minute Thesis Presentation Competition:</b> Third place (jury), first place (people's choice). Graduate School, UAF.

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## Teaching

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2022-2024	<b>Earthquakes, Volcanoes, Glaciers</b> - GEOS120/119. Lectures (8x2h), training TAs, designing lab exercises for 3 semesters (>50 students each semester).
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## Field Experience

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2024	<b>Gulkana Glacier, Alaska:</b> passive seismic survey. Fall, 3 days.
2021-23	<b>Sit' Tlein, Alaska:</b> snow-pits, ground penetrating radar (snow + ice surveys), weather station, GNSS, mass balance stakes, GNSS setup, seismic investigation. Multiple campaigns in Summer, from 3 to 15 days.
2021	<b>Sourdough Glacier, Alaska:</b> seismic investigation, ground penetrating radar survey. Summer, 15 days.
	<b>North Slope, Alaska:</b> LIDAR survey. Summer, 10 days.
2019	<b>Longyearbyen, Svalbard:</b> permafrost coring, ground penetrating radar. Winter, 3 days.

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## Professional Service and Outreach

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2023, 2025	<b>"Science for Alaska Kickoff":</b> Popular science presentations to the public.
2024-25	<b>Student Union (AGWA) - Vice-president:</b> Organizing Committee, Discrimination And Sexual Harassment workgroup, Grievances negotiation team, student representation, new students orientation.
2022-25	<b>Undergraduate students outreach:</b> introducing graduate student research. Yearly occurrence.
2021-24	<b>Geophysical Institute Student Association - Vice-president, treasurer:</b> Travel grant coordination, student cohort building organization, student representation, new students orientation.
2023-24	<b>Associated Students of UAF - Student Senator:</b> Finance committee, Travel grant system overhaul, new students orientation.
2023	<b>UAF Student ambassador at AGU:</b> UAF representation at the university booth. Networking with prospective students.
2021/24	<b>Interviews in media outlets:</b> Atlas Obscura and French national television about glaciers in Alaska.