

Patrick J. Wright*Inversion Labs, LLC | Victor, ID USA | pwright@inversionlabs.com***EXPERIENCE**

Synoptic Data, PBC **Apr 2023 – present**
 Engineering Manager/Data Engineer. Ingest, storage and dissemination of global weather, water and environmental data via SaaS/DaaS/IaaS. *Remote, USA.*

Geological Survey of Denmark and Greenland (GEUS) **Sep 2022 – Mar 2023**
 Data Scientist. Development of data processing software for the Programme for Monitoring of the Greenland Ice Sheet (PROMICE). *Copenhagen, Denmark.*

Synoptic Data, PBC **Jun 2018 – Aug 2022**
 Developer/Data Scientist. Ingest, storage and dissemination of global weather, water and environmental data via SaaS/DaaS/IaaS. *Remote, USA.*

Inversion Labs, LLC **Jan 2016 – present**
 Co-founder/co-owner. Data analysis, graphic visualization, software development. Design-build-installation for environmental monitoring systems. *Victor, Idaho, USA.*

Jackson Hole Mountain Guides **Jan 2016 – Mar 2018**
 Avalanche course instructor. *Jackson, WY, USA*

Jackson Hole Ski Patrol **Nov 2016 – Apr 2017**
 Ski patroller, avalanche lab technician. *Jackson, WY, USA*

Summit Research Station, Greenland **Apr – Nov 2012**
 Science technician. Operation/maintenance of atmospheric instrumentation including: cloud radar, LiDAR, microwave radiometer, infrared interferometer, SODAR, twice daily weather balloon launches, and snow crystal microphotography. *Summit, Greenland.*

EDUCATION

M.S. Geosciences, University of Montana **Dec 2015**
 Advisor: Dr. Joel Harper, UM Group for Quantitative Study of Snow and Ice
 Thesis: *"Temporal Evolution of Basal Water Pressure and Ice Velocity Along a 50 km Flow Line Transect of Western Greenland"*
Missoula, Montana, USA

M.S. Atmospheric Science, University of Houston **May 2012**
 Advisor: Dr. Barry Lefer
 Thesis: *"Comparison of MODIS snow albedo to field measurements in central Greenland"*
Houston, Texas, USA

B.S. Geology, B.S. Environmental Science, University of Oregon **Jun 2005**
 Honors thesis: *"Evidence for shear in accreted terranes of eastern Oregon"*
Eugene, Oregon, USA

BOARD POSITIONS & PROFESSIONAL MEMBERSHIP

- Member, **Teton County Natural Resources Technical Advisory Board (NRTAB)**, 2012 – 2018. Six-member board advising Teton County Commissioners (*Jackson, WY, USA*) on natural resource science as related to policy and planning.
- Proposal review panel member, **NASA Citizen Science for Earth Systems (CSES)**, Nov. 2016 (*Washington, D.C.*). Specialty area: snow science and albedo measurements.
- Professional member, **American Avalanche Association**

CERTIFICATIONS

- Wilderness First Responder (WMI/NOLS, 2006, re-certified 2018)
- Outdoor Emergency Care Technician (JHSP, 2017)
- Pro I Avalanche certification (AAI, 2018)
- AIARE Avalanche Course Instructor (2016)

SELECTED PUBLICATIONS & PROFESSIONAL REPORTS

(* indicates peer-reviewed articles)

- * How, P. R., **P. J. Wright**, K. D. Mankoff, B. Vandecrux, R. S. Fausto, and A. P. Ahlstrøm (2023), pypromise: A Python package for processing automated weather station data, *Journal of Open Source Software*, 8(86), 5298, doi:10.21105/joss.05298.
- Wright, P.** (2019), Assessing Impacts to Air Quality from Vehicle Emissions in Teton County, WY, *Final Report for the Teton Conservation District*, Jackson, WY, USA.
- Wright, P.** (2019), Brake Emissions at the Base of Teton Pass, WY, *White Paper for the Teton Conservation District*, Jackson, WY, USA.
- Wright, P. J.**, T. Carman, and B. Comey (2018), Snowpack Tracker: the Development and Application of a Web-based Visualization Tool for Avalanche and Weather Data, *Proceedings of the 2018 International Snow Science Workshop*, Innsbruck, Austria.
- Wright, P. J.**, B. Comey, and M. Comey (2018), Thresholds in Wind Speed, Air Temperature and Relative Humidity Controlling Slab Formation, *Proceedings of the 2018 International Snow Science Workshop*, Innsbruck, Austria.
- Wright, P.** and T. Carman (2018), New data visualization tool for the Bridger-Teton Avalanche Center, *The Avalanche Review*, Vol. 36.4, 8.
- Wright, P.** (2017), December 2016 deep slab avalanche cycle in northwest Wyoming: Analysis using historical loading thresholds, *The Avalanche Review*, Vol. 35.4, 40-41.
- Wright, P. J.**, B. Comey, C. McCollister, and M. Rheam (2016), Estimation of new snow density using 42 seasons of meteorological data from Jackson Hole Mountain Resort, Wyoming, *Proceedings of the 2016 International Snow Science Workshop*, Breckenridge, CO, USA.
- * **Wright, P. J.**, J. T. Harper, N. F. Humphrey, and T. W. Meierbachtol (2016), Measured basal water pressure variability of the western Greenland Ice Sheet: Implications for hydraulic potential, *Journal of Geophysical Research – Earth Surface*, 121, doi:10.1002/2016JF003819.
- * **Wright, P.**, M. Bergin, J. Dibb, B. Lefer, F. Domine, T. Carman, C. Carmagnola, M. Dumont, Z. Courville, C. Schaaf, and Z. Wang (2014), Comparing MODIS daily snow albedo to spectral albedo field measurements in Central Greenland, *Remote Sensing of Environment*, 140, 118-129, doi:10.1016/j.rse.2013.08.044.