

## ABBREVIATED CURRICULUM VITAE [2015–2021]

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## BIOGRAPHY

### EDUCATION:

January, 1990      Ph. D., Geological Sciences, Columbia University, New York

### PROFESSIONAL SOCIETY MEMBERSHIPS:

Fellow, Geological Society of America, Elected 2003  
Fellow, American Geophysical Union, Elected 2012

### AWARDS:

University of Hawaii Board of Regents' Medal for Excellence in Research, 1998  
European Geosciences Union's Ian McHarg Medal for "distinguished research in information technology applied to Earth and Space Sciences", 2020

### RECENT/CURRENT TEACHING (NOTE: DEPARTMENT CHAIR 7/2018–6/2021):

Fall 2021:            Extramural buyout from teaching  
Fall 2019:            EARTH 250 Scientific Programming in MATLAB  
Fall 2018:            EARTH 413/613 Introduction to Statistics & Data Analysis  
Spring 2018:        EARTH 691 Data Exploration and Processing  
Fall 2017:            EARTH 413/613 Introduction to Statistics & Data Analysis  
Spring 2017:        EARTH 632 Gravity, Magnetism, & Heat Transfer  
                          EARTH 675 Generic Mapping Tools  
Fall 2016:            Chief Scientist on expedition to Ellice Basin, South Pacific.  
Spring 2016:        EARTH 250 Scientific Programming in MATLAB  
                          EARTH 691 Data Exploration and Processing

### RESEARCH GRANTS:

PI (22) or co-PI (6) on 28 National Science Foundation grants, extramural funding ~\$ 6.3M.

### CITATIONS (GOOGLE SCHOLAR):

Published papers: **106**. Cumulative citations 1987–2020: **~24,900**. Hirsch index (H-index): **42**

## SCIENTIFIC SOFTWARE

1. The Generic Mapping Tools (GMT). 25,000+ estimated users worldwide and supported by NSF since 1993. Available from <http://www.generic-mapping-tools.org/>.
2. GSHHG Global Self-Consistent High-Resolution Hierarchical Geography database. Software and data from <http://www.soest.hawaii.edu/pwessel/gshhsg>.

## BIBLIOGRAPHY [Since 2015 only]

\*indicates first author was my student [% is my contribution for multi-authored papers]

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106. Uieda, L., Tian, D., Leong, W. J., Schlitzer, W., Toney, L., Grund, M., Jones, M., Yao, J., Materna, K., Newton, T., Anant, A., Ziebarth, M., and Wessel, P., 2021, PyGMT: A Python interface for the Generic Mapping Tools (version v0.4.0), *Zenodo*, doi:10.5281/zenodo.4978645. [2%].

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105. Ward, L., B. Smith-Konter, P. Wessel, and L. Uieda (2020), Seismicity of the Hawaiian Islands (2008 - 2019), doi:10.6084/m9.figshare.13065953.v1. [20%].
104. Pleus, A., G. Apuzen-Ito, P. Wessel, and N. L. Frazer, 2020, Rheology and thermal structure of the lithosphere beneath the Hawaiian Ridge inferred from gravity data and models of plate flexure, *Geophys. J. Int.*, 222, 207–224, doi:10.1093/gji/ggaa155. [8%].
103. Garcia, M. O., J. Tree, P. Wessel, and J.R. Smith, 2020, Pūhāhonu: Earth's biggest and hottest shield volcano, *Earth Planet. Sci. Lett.*, 542 (116296), doi: 10.1016/j.epsl.2020.116296 [30%].

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102. Wessel, P. and C. P. Conrad, 2019, Assessing models for Pacific Absolute Plate and Plume Motions, *Geochem. Geophys. Geosyst.*, 8, doi:10.1029/2019GC008515 [80%].
101. \*Benyshek, E., P. Wessel, and B. T. Taylor, 2019, Tectonic Reconstruction of the Ellice Basin, *Tectonics*, 38, 11, 3854–3865, doi:10.1029/2019TC005650 [30%].
100. Hamilton, M. T., P. Wessel, J. Luis, B. Taylor, and Y. Ko, 2019, The seagoing scientist's toolbox: Integrated methods for quality control of marine geophysical data at sea, *Geochem. Geophys. Geosyst.*, 20, 5415–5424, doi:10.1029/2018GC007891 [10%].
99. Tozer, B., D. T. Sandwell, W. H. F. Smith, C. Olsen, J. R. Beale, P. Wessel, and J. J. Becker, 2019, Global bathymetry and topography at 15 arc seconds: SRTM15+V2.0, *Earth and Space Sciences*, 6(10), 1847–1864, doi:10.1029/2019EA000658 [5%].
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97. P. Wessel, J. Luis, L. Uieda, R. Scharroo, F. Wobbe, W.H.F. Smith, and D. Tian, 2019, The Generic Mapping Tools Version 6, *Geochem. Geophys. Geosyst.*, 20, 5556–5564, doi:10.1029/2019GC008515 [65%].

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96. Jicha, B. R., M. O. Garcia, and P. Wessel (2018), Mid-Cenozoic Pacific plate motion change: Implications for the Northwest Hawaiian Ridge and circum-Pacific, *Geology*, 46(11), 939–942, doi:10.1130/G45175.1 [15%].

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95. Conrad, C. P., Selway, K., Hirschmann, M. M., Ballmer, M. D., and Wessel, P., 2017, Constraints on Volumes and Patterns of Asthenospheric Melt from the Space-Time

- Distribution of Seamounts, *Geophys. Res. Lett.*, *44*, doi:10.1002/2017GL074098 [5%].
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93. Xiong, L., G. Wang, and P. Wessel, 2017, Anti-aliasing Filtering for Deriving High-Accuracy DEMs from TLS Data: Case Study at Freeport, Texas, *Computers & Geosciences*, *100*, 125–134, doi:10.1016/j.cageo.2016.11.006 [15%].
- 2016 [4]
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90. \*Kim, S.-S. and Wessel, P., 2016, New analytical solutions for modeling of vertical gravity gradient data, *Geochem. Geophys. Geosyst.*, *17*, doi:10.1002/2016GC006263 [50%].
89. Wessel, P., 2016, Regional-residual separation of bathymetry and revised estimates of Hawaii plume flux, *Geophys. J. Int.*, *204*(2), 932–947, doi:10.1093/gji/ggv472.
- 2015 [5]
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