

Total: 100 publications, 28 as first author, 22 as second of two authors; 16 as second of more than two authors; 20 in GJI; 7 in JGR; 6 in GRL; 6 in EPSL; 3 in PNAS; 1 in Nature; 1 in SIAM Review; 1 in Nature Geoscience; 2 in Nature Communications; 1 in Sci. Rep.; 3 in Geophysics; 2 in GEM; 3 in SRL; 1 in Lithos; 1 in BSSA; 1 in Inv. Probl.; 1 in ACHA; 1 in APJ; 1 in G3; 1 in JFAA; 1 in JGEOD; 1 in JGS; 1 in IJCG; 4 Springer book chapters. 5 in Eos; 6 SEG Extended Abstracts; 5 LPSC Extended Abstracts; 1 EAGE Extended Abstract; 4 invited SPIE proceedings; 3 in TLE; 1 in IEEE proceedings; 1 in Planet Earth; 1 in Acoustics Today; 1 in Physics Today; 1 in MATLAB Digest.

Frederik J. Simons | 25 Selected Publications

- Bevis, M., Harig, C., Khan, S. A., Brown, A., **Frederik J. Simons**, Willis, M., Fettweis, X., van den Broeke, M. R., Madsen, F. B., Kendrick, E. C., Caccamise II, D. J., van Dam, T., Knudsen, P. & Nylén, T., 2019. Accelerating changes in ice mass within Greenland, and the ice sheet’s sensitivity to atmospheric forcing, *Proc. Natl. Acad. Sci.*, **116**(6), 1934–1939. doi: 10.1073/pnas.1806562116.
- Dahlen, F. A. & **Frederik J. Simons**, 2008. Spectral estimation on a sphere in geophysics and cosmology, *Geophys. J. Int.*, **174**(3), 774–807. doi: 10.1111/j.1365-246X.2008.03854.x.
- Galanti, E., Kaspi, Y., **Frederik J. Simons**, Durante, D., Parisi, M., Scott & Bolton, J., 2019. Determining the depth of Jupiter’s Great Red Spot with Juno: A Slepian approach, *Astroph. J. Lett.*, **874**, L24. doi: 10.3847/2041-8213/ab1086.
- Gualtieri, L., Bachmann, E., **Frederik J. Simons** & Tromp, J., 2020. The origin of secondary microseism Love waves, *Proc. Natl. Acad. Sci.*, **117**(47), 29504–29511. doi: 10.1073/pnas.2013806117.
- Harig, C. & **Frederik J. Simons**, 2012. Mapping Greenland’s mass loss in space and time, *Proc. Natl. Acad. Sci.*, **109**(49), 19934–19937. doi: 10.1073/pnas.1206785109.
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- Kopp, R. E., **Frederik J. Simons**, Mitrovica, J. X., Maloof, A. C. & Oppenheimer, M., 2009. Probabilistic assessment of sea level during the last interglacial stage, *Nature*, **462**, 863–867. doi: 10.1038/nature08686.
- Nolet, G., Hello, Y., van der Lee, S., Bonnieux, S., Ruiz, M. C., Pazmino, N. A., Deschamps, A., Regnier, M. M., Font, Y., Chen, Y. J. & **Frederik J. Simons**, 2019. Imaging the Galápagos mantle plume with an unconventional application of floating seismometers, *Sci. Rep.*, **9**, 1326. doi: 10.1038/s41598-018-36835-w.
- Pipatprathanporn, S. & **Frederik J. Simons**, 2022. One year of sound recorded by a MERMAID float in the Pacific: Hydroacoustic earthquake signals and infrasonic ambient noise, *Geophys. J. Int.*, **228**, 193–212. doi: 10.1093/gji/ggab296.
- Plattner, A. & **Frederik J. Simons**, 2014. Spatiospectral concentration of vector fields on a sphere, *Appl. Comput. Harmon. Anal.*, **36**, 1–22. doi: 10.1016/j.acha.2012.12.001.
- Plattner, A. & **Frederik J. Simons**, 2017. Internal and external potential field estimation

- from regional vector data at varying satellite altitude, *Geophys. J. Int.*, **211**, 207–238. doi: 10.1093/gji/ggx244.
- Reuber, G. S. & **Frederik J. Simons**, 2020. Multi-physics adjoint modeling of Earth structure: combining gravimetric, seismic, and geodynamic inversions, *Intern. J. Geomath.*, **11**(30), 1–38. doi: 10.1007/s13137-020-00166-8.
- Simon, J. D., **Frederik J. Simons** & Irving, J. C. E., 2022. Recording earthquakes for tomographic imaging of the mantle beneath the South Pacific by autonomous MERMAID floats, *Geophys. J. Int.*, **228**, 147–170. doi: 10.1093/gji/ggab271.
- Sukhovich, A., Bonnieux, S., Hello, Y., Irissou, J.-O., **Frederik J. Simons** & Nolet, G., 2015. Seismic monitoring in the oceans by autonomous floats, *Nature Commun.*, **6**, 8027. doi: 10.1038/ncomms9027.
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