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College of Mines and Earth Science
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Employment History:

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| 2002-present | Professor, University of Utah, College of Mines and Earth Science Department of Geology and Geophysics |
| 2019-2020 | Professor, Interdisciplinary Center for Security and Trust; Head of Remote Sensing Group |
| 2018-2019 | Vice President for Strategic Projects |
| 2017-2018 | Vice-President – Doctoral Education and Training, International Relations, and Gender |
| 2016-2019 | Chargée de mission – Doctoral Education and Training and International Relations |
| 2013-2019 | Professor, Faculté des Sciences, de la Technologie et de la Communication, University of Luxembourg |
| 2006-2013 | Associate Professor, Faculté des Sciences, de la Technologie et de la Communication, University of Luxembourg |
| 2000-2006 | Research Geophysicist, European Center for Geodynamics and Seismology |
| 1993-2000 | Research Geophysicist, Geosciences Laboratory NOAA/NGS |
| 1991-1993 | Post-doc, MIT |

Honors

- Fellow, American Geophysical Union, 2019
- Bowie Lecturer, American Geophysical Union, 2017
- Grand Prix en Sciences de l'Institut Grand-ducal, Science Geologiques/Prix Feidt (2017)
- European Geosciences Union's Vening Meinesz Medal (2019).
- Higher Education Academy Fellow (2014).

Education:

- Ph.D., Geophysics, University of Colorado, Boulder, CO, 1991, Thesis title: "Atmospheric Load Response of the Solid Earth and Oceans"
- BS, Physics and Geology, Mary Washington College (now Mary Washington University), Fredericksburg, VA 1982
- Top Management Program (40) Leadership Foundation, 2017.

Memberships

- American Geophysical Union:
 - Member: 1983-present
- European Geophysical Society
 - Member: 1997-present
- American Geophysical Union:
 - Member: 1983-present
- International Association of Geodesy:
 - 1994-present

Service to the Community

- American Geophysical Union:
 - Geodesy Section Secretary: 1998-2000; 2010-2012
- European Geophysical Society
 - Geodesy Section, President: 2004-2007
 - Geodesy Section, Program Chair: 2004-2007
- International Earth Rotation Service
 - Directing Board: 2005 to present
 - Global Geophysical Fluids Center, Chair: 2005 to present
 - Special-Bureau for loading, Chair: 2001-2015; Co-Chair 2015-present
- International Union of Geodesy and Geophysics
 - Luxembourg National Committee Secretary: 2002-present
 - Luxembourg International Association of Cryospheric Science Correspondent: 2008-present
 - Secretary Union Commission on Climatic and Environmental Change
- International Association of Geodesy
 - President Commission 1, Reference Frames, 2011 – 2015
 - Representative to the IUGG Commission on Global Change
- Associate Editor *Studia Geophysica et Geodaetica*, 2010 – present
- Associate Editor *Journal of Geodesy*: 2015 – present
- UNAVCO Board of Directors: 2007-2008; 2019-2021

Refereed Publications

Tonie van Dam is author of 100 papers, 86 in peer-reviewed scientific journals, 34 of which have been published in AGU journals.

Li, C., S. Huang, Q. Chen, T. van Dam, H.S. Fok, Q. Zhao, W. Wu, and X. Wang, Quantitative Evaluation of Environmental Loading Induced Displacement Products for Correcting GNSS Time Series in CMONOC, *Remote Sensing*, 12, 594, doi:10.3390/rs12040594, 2020.

Bevis, M. + 18 authors including T. van Dam, Accelerating changes in ice mass within Greenland, and the ice sheet's sensitivity to atmospheric forcing, *PNAS*, 116, doi.org/10.1073/pnas.1806562116, 2019.

Jäggi, A. + 30 authors including T. van Dam, European Gravity Service for Improved Emergency Management (EGSIEM)—from concept to implementation, *Geophysical Journal International*, 218, <https://doi.org/10.1093/gji/ggz238>, 2019.

Prevost, P., Chanard, K., Fleitout, L., Calais, E., Walwer, D., van Dam, T., & Ghil, M., Data-adaptive spatio-temporal filtering of GRACE data, *Geophysical Journal International* 219, doi.org/10.1093/gji/ggz409, 2019.

Zhang, B., L. Liu, Khan, S.A., van Dam, T., Bjørk, A.A., Peings, Y., Zhang, E., Bevis, M., Yao, Y., Noël, Geodetic and model data reveal different spatio-temporal patterns of transient mass changes over Greenland from 2007 to 2017, *EPSL*, 515, doi.org/10.1016/j.epsl.2019.03.028, 2019.

van Dam, T., Chen, J., & Meyrath, T.. Geodetic Observations as a Monitor of Climate Change. In T. Beer, J. Li, & K. Alverson (Eds.), *Global Change and Future Earth: The Geoscience Perspective* (Special Publications of the International Union of Geodesy and Geophysics, pp. 72-88). Cambridge: Cambridge University Press. doi:10.1017/9781316761489.009, 2018.

Chen, Q., Poropat, L., Zhang, L., Dobslaw, H., Weigelt, T. van Dam, Validation of the EGSIEM GRACE Gravity Fields Using GNSS Coordinate Timeseries and In-Situ Ocean Bottom Pressure Records, *Remote Sensing*, 10, doi.org/10.3390/rs10121976, 2018.

Zhang, B., Liu, L., Khan, S. A., van Dam, T., Zhang, E., & Yao, Y. (2017), Transient

- variations in glacial mass near Upernavik Isstrøm (west Greenland) detected by the combined use of GPS and GRACE data. *J. Geophys. Res.: Solid Earth*, 122. <https://doi.org/10.1002/2017JB014529>, 2017.
- Meyrath, T., T. van Dam, X. Collilieux, and P. Rebischung, Seasonal low-degree changes in terrestrial water mass load from global GNSS measurements, *J. Geod.*, 91, doi: DOI 10.1007/s00190-017-1028-8, 2017.
- Abbondanza, C., T. M. Chin, R. Gross, M.B. Heflin, J.W. Parker, B.S. Soja, T. van Dam, T. and X. Wu., JTRF2014, The JPL Kalman Filter and Smoother Realization of the International Terrestrial Reference System. *J. Geophys. Res. Solid Earth*, 122, doi:10.1002/2017JB014360, 2017.
- Compton, K., R. A. Bennett, S. Hreinsdóttir, T. van Dam, A. Bordoni, V. Barletta, and G. Spada, Short-term variations of Icelandic ice cap mass inferred from cGPS coordinate time series, *Geochem. Geophys. Geosyst.*, 18, 2099–2119, doi:[10.1002/2017GC006831](https://doi.org/10.1002/2017GC006831), 2017.
- Tabibi, S., F. Geremia-Nievinski, T. van Dam, Statistical Comparison and Combination of GPS, GLONASS, and Multi-GNSS Multipath Reflectometry Applied to Snow Depth Retrieval, *IEEE Transactions on Geoscience and Remote Sensing*, 99, [10.1109/TGRS.2017.2679899](https://doi.org/10.1109/TGRS.2017.2679899), 2017.
- Liu, L., S. A. Khan, T. van Dam, J. H. Y. Ma, and M. Bevis, Annual variations in GPS-measured vertical displacements near Upernavik Isstrøm (Greenland) and contributions from surface mass loading, *J. Geophys. Res. Solid Earth*, 122, doi:[10.1002/2016JB013494](https://doi.org/10.1002/2016JB013494), 2017.
- van Dam, T., O. Francis, J. Wahr, S.A. Khan, M. Bevis, M.R. van den Broeke, Using GPS and absolute gravity observations to separate the effects of present-day and Pleistocene ice-mass changes in South East Greenland, *EPSL*, 459, p. 127-135, 2017.
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- Li, Z. and T. van Dam, The Phase 2 North America Land Data Assimilation System (NLDAS-2) products for modeling water storage displacements for Plate Boundary Observatory GPS stations, *International Association of Geodesy Symposia 2015*, doi:10.1007/1345_2015_176, 2015.
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- Meyrath, T., T. van Dam, M. Weigelt, and M. Cheng, An assessment of degree-2 Stokes coefficients from rotation data, *GJI*, 2013, doi:10.1093/gji/ggt263, 2013.
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- van Dam, T., J. Wahr, and D. Lavallee, A comparison of annual vertical crustal displacements from GPS and GRACE, *J. Geophys. Res.*, vol. 111, B05405, doi:10.1029/2005JB003784, 2006.
- Nicolas, J. J.-M. Nocquet, M. Van Camp, T. van Dam, J.-P. Boy, J. Hinderer, P. Gegout, E. Calais, and M. Amalvict, Seasonal effect on vertical positioning by Satellite Laser Ranging and GPS and on Absolute Gravity at the OCA geodetic station, Grasse, France, *Geophysical Journal International*, vol. 167, pp. 1127-1137, doi:10.1111/j.1365-246X.2006.0320, 2006.
- Van Camp, M., M. Vanclooster, O. Crommen, T. Petermans, K. Verbeeck, B. Meurers, T. van Dam and A. Dassargues, Hydrogeological investigations at

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- Francis O., M. van Camp, T. van Dam, R. Warnant, and M. Hendrickx, Uplift of the Ardenne in long-term gravity variations in Membach (Belgium), *Geophysical Journal International*, 158, 346-352, 2004.
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- van Dam, T.M., K. Larson, J. Wahr, O. Francis and S. Gross, Using GPS and Absolute gravity to observe ice mass changes in Greenland, *Earth in Space*, 13, pp.1-16, 2001.
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- van Dam, T.M., G. Blewitt, and M. Heflin, Detection of atmospheric pressure loading using the Global Positioning System, *J. of Geophys. Res.*, 99, pp. 23,939-23,950, 1994.
- van Dam, T.M. and T.A. Herring, Detection of atmospheric pressure loading using Very Long Baseline Interferometry measurements, *J. of Geophys. Res.*, 99, pp. 4505-4518, 1994.
- van Dam, T.M and J.M. Wahr, Atmospheric load response of the oceans determined using Geosat data, *Geophysical Journal International*, 113, 1-16, 1993.
- van Dam, T.M. and J. Wahr, Displacements of the Earth's surface due to atmospheric loading: Effects on Gravity and Baseline Measurements, *J. Geophys. Res.*, 92, 1281-1286, 1987.

Refereed Proceedings Publications

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