

David T. Sandwell

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Present Position: Professor of Geophysics, Scripps Institution of Oceanography

Education:

Ph.D. 1981 University of California at Los Angeles, Geophysics and Space Physics
M.S. 1978 University of California at Los Angeles, Geophysics
B.S. 1975 University of Connecticut, Major Physics, Minor Mathematics

Professional Experience:

1989 – 93 Scripps Institution of Oceanography, Associate Professor
1985 – 89 University of Texas at Austin, Research Scientist
1982 – 85 National Geodetic Survey, Research Geophysicist

Awards and Memberships:

2/21 Fellow of the AAAS
12/18 Charles A. Whitten Medal - AGU
4/12 Member of the US National Academy of Sciences
4/08 Fellow of the American Academy of Arts and Sciences
11/04 George P. Woollard Award and Fellow of the Geological Society of America
12/97 Fellow of the American Geophysical Union
12/95 Bowie Lecture American Geophysical Union
6/80 International Association of Geodesy
6/77 American Geophysical Union

Other Experience:

10/21 - Member of Committee on Earth Science and Observations from Space
9/18 – 4/20 Chair of Committee on Evolving the Geodetic Infrastructure
6/16 – 4/18 Chair of the Solid Earth Panel of the NASA Decadal Planning Committee
1/14 – 2/18 Member of Temporary Nominating Group, National Academy of Sciences
1/13 – 8/16 Member of UNAVCO Board of Directors
1/13 – 1/17 Member of ALOS-2 Calibration and Validation Team, JAXA
1/12 – 9/18 Member of SCEC Planning Committee
9/11 – 9/16 Chair of Geophysics Curricular Group, SIO
1/11 - 12/14 Chair of NRC Committee on Seismology and Geodynamics
1/08 - 12/12 President Geodesy Section of the AGU
1/07 - 1/09 Chair of Western North America InSAR Consortium (WInSAR)
5/05 - 9/05 Member of committee to review ESA's Earth Observation Envelope Programme
6/03 - 7/04 Member of NASA Jupiter Orbiter Icy Moons Science Definition Team
6/01 - 4/04 Associate Editor of *Journal of Geophysical Research*
2/01 - 12/03 Member of NRC U.S. National Committee to the IUGG
10/99 - 7/02 Chair of Western North America InSAR Consortium (WInSAR)
9/98 - 6/01 Member of NRC Space Studies Board, Committee on Earth Studies
5/95 - 12/96 Member of NRC, US Committee on Geodynamics
2/92 - 12/95 Office of Technology Assessment Panel on Earth Observing Systems
6/90 - 1/95 Member of National Research Council, Committee on Geodesy
12/86 - 1/91 Science steering group member for NASA's satellite gravity program
1/87 - 12/90 Associate Editor, *Reviews of Geophysics and Space Physics*
2/85 - 1/89 Associate Editor, *Journal of Geophysical Research*

Recent Research Funding:

06/19 - NASA – Estimating Seismic Hazard along the SAFs from InSAR and GPS
10/18 - NSF - Harnessing the InSAR Data Revolution: GMTSAR
09/17 - ONR - Improved Global and Coastal Bathymetry
04/16 - NASA - Participation in the SWOT Science Team: Marine Geophysics
01/15 - SCEC - Improving the Community Geodetic Model with GPS and InSAR
10/13 - Google - Global Predicted Bathymetry for Google Earth and Beyond

Cruise Participation:

10/17	Co-chief on R/V Revelle to map Mendocino Fracture Zone
9/03	Co-chief on R/V Revelle to test feasibility of Synthetic Aperture Sonar
2/97	Participant in expedition to Foundation Seamounts, South Pacific
1/94	Co-chief scientist on R/V Melville to map Eltanin and Udintsev Fracture Zones
1/93	Chief scientist on R/V Melville to map Pukapuka En-Echelon Ridges
2/89	Assistant scientist on R/V Surveyor to map the Shackleton Fracture Zone
3/87	Assistant chief scientist on R/V Washington to explore Seasat gravity lineations
5/83	Participating scientist on Bermuda Swell heat flow experiment

Publications:**2022**

Gevorgian, J., **Sandwell**, D.T., Yu, Y., Kim, S.S. and Wessel, P., 2022. Global Distribution and Morphology of Small Seamounts. Submitted to Earth and Space Science.

Guns, K., Xu, X., Bock, Y. and **Sandwell**, D., 2022. GNSS-corrected InSAR displacement time-series spanning the 2019 Ridgecrest, CA earthquakes. *Geophysical Journal International*, 230(2), pp.1358-1373.

Sandwell, D.T., Goff, J.A., Gevorgian, J., Harper, H., Kim, S.S., Yu, Y., Tozer, B., Wessel, P. and Smith, W.H., 2022. Improved Bathymetric Prediction using Geological Information: SYN BATH. *Earth and Space Science*, 9(2), p.e2021EA002069.

Sandwell, D. T. 2022. *Advanced Geodynamics: Fourier Transform Methods*, Cambridge University Press, 281 pp.

2021

Xu, X., **Sandwell**, D.T., Klein, E. and Bock, Y., 2021. Integrated Sentinel-1 InSAR and GNSS Time-Series Along the San Andreas Fault System. *Journal of Geophysical Research: Solid Earth*, 126(11), p.e2021JB022579.

Yu, Y., **Sandwell**, D.T., Gille, S.T. and Villas Bôas, A.B., 2021. Assessment of ICESat-2 for the recovery of ocean topography. *Geophysical Journal International*, 226(1), pp.456-467.

Zhang, S., Abulaitijiang, A., Andersen, O.B., **Sandwell**, D.T. and Beale, J.R., 2021. Comparison and evaluation of high-resolution marine gravity recovery via sea surface heights or sea surface slopes. *Journal of Geodesy*, 95(6), pp.1-17.

Ward, L.A., Smith-Konter, B.R., Xu, X. and **Sandwell**, D.T., 2021. Seismic Moment Accumulation Response to Lateral Crustal Variations of the San Andreas Fault System. *Journal of Geophysical Research: Solid Earth*, 126(4), p.e2020JB021208.

Harper, H., Tozer, B., **Sandwell**, D.T. and Hey, R.N., 2021. Marine vertical gravity gradients reveal the global distribution and tectonic significance of “seesaw” ridge propagation. *Journal of Geophysical Research: Solid Earth*, 126(2), p.e2020JB020017.

Andersen, O.B., Zhang, S., **Sandwell**, D.T., Dibarboure, G., Smith, W.H. and Abulaitijiang, A., 2021. The unique role of the Jason geodetic missions for high resolution gravity field and mean sea surface modelling. *Remote Sensing*, 13(4), p.646.

Sandwell, D. T., Harper, H., Tozer, B., & Smith, W. H. (2021). Gravity Field Recovery from Geodetic Altimeter Missions. *Advances in Space Research*, 68(2), pp.1059-1072.

2020

Sepulveda, I., Haase, J.S., Liu, P.L.F., Grigoriu, M., Tozer, B. and **Sandwell**, D., 2020. Uncertainty of Bathymetry Models and Effect on Tsunami. *Coastal Engineering Proceedings*, (36v), pp.22-22.

Alafate, J., Freund, Y., **Sandwell**, D.T. and Tozer, B., 2020. Experimental Design for Bathymetry Editing. *arXiv preprint arXiv:2007.07495*.

Ponti, D.J., Blair, J.L., Rosa, C.M., Thomas, K., Pickering, A.J., Akciz, S., Angster, S., Avouac, J.P., Bachhuber, J., Bacon, S. et al., 2020. Documentation of Surface Fault Rupture and Ground-Deformation Features Produced by the 4 and 5 July 2019 M w 6.4 and M w 7.1 Ridgecrest Earthquake Sequence. *Seismological Society of America*, 91(5), pp.2942-2959.

Xu, X., **Sandwell**, D.T., Ward, L.A., Milliner, C.W., Smith-Konter, B.R., Fang, P. and Bock, Y., 2020. Surface deformation associated with fractures near the 2019 Ridgecrest earthquake sequence. *Science*, 370(6516), pp.605-608.

Verron, J., Bonnefond, P., Andersen, O., Arduin, F., Bergé-Nguyen, M., Bhowmick, S., Blumstein, D., Boy, F., Brodeau, L., Crétaux, J.F. and Dabat, M.L., 2020. The SARAL/AltiKa mission: A step forward to the future of altimetry. *Advances in Space Research*.

Xu, X., **Sandwell**, D.T. and Smith-Konter, B., 2020. Coseismic displacements and surface fractures from Sentinel-1 InSAR: 2019 Ridgecrest earthquakes. *Seismological Research Letters*, 91(4), pp.1979-1985.

Sandwell, D. T., et al., (2020). *Evolving the Geodetic Infrastructure to Meet New Scientific Needs*, The National Academies Press, DOI: 10.17226/25579, <https://www.nap.edu/catalog/25579/evolving-the-geodetic-infrastructure-to-meet-new-scientific-needs>

2019

Xu, X. and **Sandwell**, D.T., 2019. Toward absolute phase change recovery with InSAR: Correcting for earth tides and phase unwrapping ambiguities. *IEEE Transactions on Geoscience and Remote Sensing*, 58(1), pp.726-733.

Tymofyeyeva, E., Fialko, Y., Jiang, J., Xu, X., **Sandwell**, D., Bilham, R., Rockwell, T.K., Blanton, C., Burkett, F., Gontz, A. and Moafipoor, S., 2019. Slow slip event on the southern San Andreas fault triggered by the 2017 M w 8.2 Chiapas (Mexico) earthquake. *Journal of Geophysical Research: Solid Earth*, 124(9), pp.9956-9975.

DeSanto, J.B. and **Sandwell**, D.T., 2019. Meter-Scale Seafloor Geodetic Measurements Obtained from Repeated Multibeam Sidescan Surveys. *Marine Geodesy*, 42(6), pp.491-506.

Abulaitijiang, A., Andersen, O. B., & **Sandwell**, D. (2019). Improved Arctic Ocean bathymetry derived from DTU17 gravity model. *Earth and Space Science*.

DeSanto, J. B., Chadwell, C. D., & **Sandwell**, D. T. (2019). Kinematic Post-processing of Ship Navigation Data Using Precise Point Positioning. *The Journal of Navigation*, 72(3), 795-804.

Garcia, E. S. M., **Sandwell**, D. T., & Bassett, D. (2019). Outer trench slope flexure and faulting at Pacific basin subduction zones. *Geophysical Journal International*, 218(1), 708-728.

Tozer, B., **Sandwell**, D.T., Smith, W.H., Olson, C., Beale, J.R. and Wessel, P., 2019. Global bathymetry and topography at 15 arc sec: SRTM15+. *Earth and Space Science*, 6(10), pp.1847-1864.

Klein, E., Bock, Y., Xu, X., **Sandwell**, D.T., Golriz, D., Fang, P. and Su, L., 2019. Transient deformation in California from two decades of GPS displacements: Implications for a three-dimensional kinematic reference frame. *Journal of Geophysical Research: Solid Earth*, 124(11), pp.12189-12223.

2018

National Academies of Sciences, Engineering, and Medicine, *Thriving on Our Changing Planet: A Decadal Strategy for Earth Observation from Space, Ch. 10 Earth Surface and Interior: Dynamics and Hazards*, The National Academies Press, Washington, DC, DOI: 10.17226/24938, <https://www.nap.edu/catalog/24938/thriving-on-our-changing-planet-a-decadal-strategy-for-earth> , 2018.

Wittich, Christine E.; Hutchinson, Tara C.; DeSanto, J.; and **Sandwell**, D., "3-D Reconstructions and Numerical Simulations of Precarious Rocks in Southern California", *Civil Engineering Faculty Publications*. 154. <https://digitalcommons.unl.edu/civilengfacpub/154>, 2018.

Xu, X., Ward, L. A., Jiang, J., Smith-Konter, B., Tymofyeyeva, E., Lindsey, E. O., ... & **Sandwell**, D. T. (2018). Surface creep rate of the Southern San Andreas Fault modulated by stress perturbations from nearby large events. *Geophysical Research Letters*, 45(19), 10-259.

Sandwell, D., B. Smith-Konter, Maxwell: A Semi-analytic 4D Code for Earthquake Cycle Modeling of Transform Fault Systems, *Computers and Geosciences*, 10.1016/j.cageo.2018.01.009, 2018.

Tong, X., D. T. **Sandwell**, and D. A. Schmidt. Surface creep rate and moment accumulation rate along the Aceh segment of the Sumatran fault from L-band ALOS-1/PALSAR-1 observations. *Geophysical Research Letters*, doi.org/10.1002/2017GL076723, 2018.

González-Ortega, J. A., González-García, J. J., & **Sandwell**, D. T.. Interseismic velocity field and seismic moment release in northern Baja California, Mexico. *Seismological Research Letters*, 89(2A), 526-533, doi.org/10.1785/0220170133, 2018.

2017

Mueller, R. D., Matthews, K. J., & **Sandwell**, D. T., Advances in imaging small-scale seafloor and sub-seafloor tectonic fabric using satellite altimetry. Stammer D and Cazenave A. *Satellite Altimetry over Ocean and Land Surfaces*. doi, 10, 9781315151779-16., 2017

Xu, X., **Sandwell**, D. T., & Bassett, D., A spectral expansion approach for geodetic slip inversion: implications for the downdip rupture limits of oceanic and continental megathrust earthquakes. *Geophysical Journal International*, 212(1), 400-41, doi.org/10.1093/gji/ggx408, 2017

Zhang, S., D. T. **Sandwell**, T. Jin, and D. Li, Inversion of marine gravity anomalies over southeastern China seas from multi-satellite altimeter vertical deflections. *Journal of Applied Geophysics*, 137, 128-137, http://dx.doi.org/10.1016/j.jappgeo.2016.12.014, 2017.

Xu, X., **Sandwell**, D. T., Tymofeyeva, E., González-Ortega, A., & Tong, X., Tectonic and anthropogenic deformation at the Cerro Prieto geothermal step-over revealed by Sentinel-1A InSAR. *IEEE Transactions on Geoscience and Remote Sensing*, 55(9), 5284-5292, DOI: 10.1109/TGRS.2017.2704593, 2017.

2016

Sandwell, D. T., and P. Wessel, Interpolation of 2-D vector data using constraints from elasticity, *Geophys. Res. Lett.*, 43, doi:10.1002/2016GL070340, 2016.

DeSanto, J. B., D. T. **Sandwell**, and C. D. Chadwell, Seafloor geodesy from repeated sidescan sonar surveys, *J. Geophys. Res. Solid Earth*, 121, 4800–4813, doi:10.1002/2016JB013025, 2016.

Zhang, S., D. T. **Sandwell**, Retracking of SARAL/AltiKa radar altimetry waveforms for optimal gravity field recovery, *Marine Geodesy*, DOI: 10.1080/01490419.2016.1265032, 2016.

Howell, S., B. Smith-Konter, N. Fraizer, X. Tong, and D.T. **Sandwell**, The vertical fingerprint of earthquake-cycle loading in Southern California, *Nature Geosciences*, doi: 10.1093/2015-03-04591 2016.

Müller RD, Qin X, **Sandwell** DT, Dutkiewicz A, Williams SE, Flament N, et al., The GPlates Portal: Cloud-Based Interactive 3D Visualization of Global Geophysical and Geological Data in a Web Browser. *PLoS ONE* 11(3): e0150883. doi:10.1371/journal.pone.0150883, 2016.

Basset, D. D. T. **Sandwell**, Y. Fialko, and A. B. Watts, Upper-plate controls on co-seismic slip in the 2011 magnitude 9.0 Tohoku-oki earthquake, *Nature*, 531, 92-96, doi:10.1038/nature16945. 2016.

Matthews, K. J., R.D. Müller, D.T. **Sandwell**, Oceanic microplate formation records the onset of India–Eurasia collision, *Earth and Planetary Science Letters* 433, 204-214 , 2016.

2015

Xu, X., X. Tong, D. T. **Sandwell**, C. Millner, J. F. Dolan, J. Hollingsworth, S. Leprince, F. Ayoub, Refining the shallow slip deficit, *Geophys. J. Int.*, 203, 48-62, doi: 10.1093/gji/ggv269, 2015.

Neves, M.C., J. Cabral, K. Luttrell, P. Figueiredo, T. Rockwell, and D. **Sandwell**, The effect of sea level changes on fault reactivation potential in Portugal, *Tectonophysics*, 658, 206-220, 2015.

Lindsey, E., R. Natsuaki, X. Xu, M. Shimada, H. Hashimoto, D. Melgar, and D. **Sandwell**, Line of Sight Deformation from ALOS-2 Interferometry: Mw 7.8 Gorkha Earthquake and Mw 7.3 Aftershock, *Geophysical Research Letters*, 42. doi:10.1002/2015GL065385, 2015.

O'Connor, J., K. Hoernle, N. Butterworth, R. D. Müller, F. Hauff, D. **Sandwell**, J. Morgan, W. Jokatt, and P. Stoffers, Deformation-related volcanism links the Hawaiian Bend to slab subduction and mantle flow, *Nature Geosciences*, 8, p393-397, DOI: 10.1038/NNGEO2416, 2015.

Tong, X., D.T. **Sandwell**, and B. Smith-Konter, An integral method to estimate the moment accumulation rate on the Creeping Section of the San Andreas Fault, *Geophys. J. Int.*, 203, 48-62, doi: 10.1093/gji/gjis140783, 2015.

2014

Garcia, E. S., D. T. **Sandwell**, and K. M. Luttrell, An Iterative Spectral Solution Method for Thin Elastic Plate Flexure with Variable Rigidity, *Geophys. J. Int.*, 200, 1012-1028, doi: 10.1093/gji/ggu449, 2014.

Trugman, D. T., A. A. Borsa, and D. T. **Sandwell**, Did Stresses From the Cerro Prieto Geothermal Field Influence the El Mayor-Cuapah Rupture Sequence?, *Geophys. Res. Lett.*, 41, doi:10.1002/2014GL061959, 2014.

Sandwell, D. T., R. D. Müller, W. H. F. Smith, E. Garcia, R. Francis, New global marine gravity model from CryoSat-2 and Jason-1 reveals buried tectonic structure, *Science*, Vol. 346, no. 6205, pp. 65-67, doi: 10.1126/science.1258213, 2014.

Lindsey, E. O., Y. Fialko, Y. Bock, D. T. **Sandwell**, and R. Bilham, Localized and distributed creep along the southern San Andreas Fault, *J. Geophys. Res. Solid Earth*, 119, 7909–7922, doi:10.1002/2014JB011275, 2014.

Malinverni, E. S., D. T. **Sandwell**, A. N. Tasseti, and L. Cappelletti, InSAR decorrelation to assess and prevent volcanic risk, *European Journal of Remote Sensing*, 47, 537-556, doi: 10.5721/EuJRS20144730, 2014.

Schultz, R. A., K. A. Soofi, P. H. Hennings, X. Tong, and D. T. **Sandwell**, Using InSAR to detect active deformation associated with faults in Suban field, South Sumatra Basin, Indonesia, *The Leading Edge*, 33(8), 882-888, August, 2014.

Smith-Konter, B. R., G. M. Thornton, and D. T. **Sandwell**, Vertical crustal displacement due to interseismic deformation along the San Andreas fault: Constraints from tide gauges, *Geophys. Res. Lett.*, 41, doi:10.1002/2014GL060091, 2014.

Tong, X., B. Smith-Konter, and D. T. **Sandwell**, Is there a discrepancy between geological and geodetic slip rates along the San Andreas Fault System? , *J. Geophys. Res. Solid Earth*, 119, doi:10.1002/2013JB010765, 2014.

Gonzalez-Ortega, A., Y. Fialko, D. **Sandwell**, F. Alejandro Nava-Pichardo, J. Fletcher, J. Gonzalez-Garcia, B. Lipovsky, M. Floyd, and G. Funning, El Mayor-Cucapah (Mw 7.2) earthquake: Early near-field postseismic deformation from InSAR and GPS observations, *J. Geophys. Res. Solid Earth*, 119, doi:10.1002/2013JB010193, 2014.

Garcia, E., D. T. **Sandwell**, W. H. F. Smith. Retracking CryoSat-2, Envisat, and Jason-1 Radar Altimetry Waveforms for Improved Gravity Field Recovery, *Geophysical Journal International*, doi: 10.1093/gji/ggt469, 2014.

2013

Sandwell, D. T., and W. H. F. Smith, Slope Correction for Ocean Radar Altimetry, *Journal of Geodesy*, DOI 10.1007/s00190-014-0720-1, 2013.

Sandwell, D. T., Book Review: Physical principles of remote sensing: third edition, *Geophysical J. Int.*, doi: 10.1093/gji/ggt314, 2013.

Marks, K. M., W. H. F. Smith, and D. T. **Sandwell**, Significant improvements in marine gravity from ongoing satellite missions, *Marine Geophysical Researches*, DOI 10.1007/s11001-013-9190-8, 2013.

Sandwell, D., E. Garcia, K. Soofi, P. Wessel, M. Chandler, and W. H. F. Smith, Toward 1-mGal accuracy in global marine gravity from CryoSat-2, Envisat, and Jason-1, *The Leading Edge*, 32(8), 892–899. doi: 10.1190/tle32080892.1, 2013.

Crowell, B. W., Y. Bock, D. T. **Sandwell**, and Y. Fialko, Geodetic investigation into the deformation of the Salton Trough, *J. Geophys. Res. Solid Earth*, 118, 5030–5039, doi:10.1002/jgrb.50347, 2013.

Kaneko, Y., Y. Fialko, D. T. **Sandwell**, X. Tong, and M. Furuya, Interseismic deformation and creep along the central section of the North Anatolian Fault (Turkey): InSAR observations and implications for rate-and-state friction properties, *J. Geophys. Res. Solid Earth*, 118, doi:10.1029/2012JB009661, 2013.

Tong, X., D. T. **Sandwell**, and B. Smith-Konter, High-resolution interseismic velocity data along the San Andreas Fault from GPS and InSAR, *J. Geophys. Res.; Solid Earth*, 118, doi:10.1029/2012JB009442, 2013.

2012

Meyer, F.J., **Sandwell**, D.T., SAR interferometry at Venus for topography and change detection. *Planetary and Space Science*, <http://dx.doi.org/10.1016/j.pss.2012.10.006>, 2012.

Luttrell, K., and D. **Sandwell**, Constraints on 3-D stress in the crust from support of mid-ocean ridge topography, *J. Geophys. Res.*, 117, B04402, doi:10.1029/2011JB008765, 2012.

2011

Luttrell, K. M., X. Tong, D. T. **Sandwell**, B. A. Brooks, and M. G. Bevis, Estimates of stress drop and crustal tectonic stress from the 27 February 2010 Maule, Chile, earthquake: Implications for fault strength, *J. Geophys. Res.*, 116, B11401, doi:10.1029/2011JB008509, 2011.

Sandwell, D. T., R. . Mellors, X. Tong, M. Wei, and P. Wessel, Open radar interferometry software for mapping surface deformation, *Eos Trans. AGU*, 92(28), doi:10.1029/2011EO280002, 2011

Smith-Konter, B., D. **Sandwell**, and P. Shearer, Comparison of locking depths estimated from geodesy and seismology along the San Andreas Fault System, *J. Geophys. Res.*, 116, B06401, doi:10.1029/2010JB008117., 2011.

Wei, M., D. **Sandwell**, Y. Fialko, and R. Bilham Slip on faults in the Imperial Valley triggered by the 4 April 2010 Mw 7.2 El Mayor-Cucapah earthquake revealed by InSAR *Geophys. Res. Lett.*, 8, L01308, doi:10.1029/2010GL045235, 2011

2010

Tong, X., D. **Sandwell**, K. Luttrell, B. Brooks, M. Bevis, M. Shimada, J. Foster, R. Smalley Jr., H. Parra, J. C. Báez Soto, M. Blanco, E. Kendrick, J. Genrich, and D. J. Caccamise II, The 2010 Maule, Chile earthquake: Downdip rupture limit revealed by space geodesy, *Geophys. Res. Lett.*, 37, L24311, doi:10.1029/2010GL045805, 2010.

Marks, K. M., W. H. F. Smith, and D. T. **Sandwell**, Evolution of errors in the altimetric bathymetry model used by Google Earth and GEBCO, *Mar. Geophys. Res.*, 31, p., 223-238, DOI 10.1007/s11001-010-9102-0, 2010.

Wei, M., D. T. **Sandwell**, and B. Smith-Konter, Optimal Combination of InSAR and GPS for Measuring Interseismic Crustal Deformation, *J. Adv. in Space Res.* doi:10.1016/j.asr.2010.03.013, 2010.

Sandwell, D. T. and G. Schubert, A buckling model for the flattening and equatorial ridge of Iapetus, Icarus, 210, p., 817-822, 2010.

Wei, M., and D. T. **Sandwell**, Decorrelation of ALOS and ERS interferometry over vegetated areas in California, *IEEE Geosciences and Remote Sensing*, 10.1109/TGRS.2010.2043442, 2010.

Sandwell, D. T., and P. Wessel, Seamount discovery tool aids navigation to uncharted seafloor features, *Oceanography*, 23:1, p. 34 - 36, 2010.

Wessel, P., D. T. **Sandwell** and S-S. Kim, The global seamount census, *Oceanography*, 23:1, p. 24 - 33, 2010.

Tong, X., D. T. **Sandwell**, and Y. Fialko, Coseismic Slip Model of the 2008 Wenchuan Earthquake Derived From Joint Inversion of InSAR, GPS and Field Data, *J. Geophys. Res.*, 115, B04314, doi:10.1029/2009JB006625, 2010.

Luttrell, K., D. **Sandwell**, Ocean loading effects on stress at near shore plate boundary fault systems, *J. Geophys. Res.*, 115, B08411, doi:10.1029/2009JB006541., 2010.

2009

Becker, J. J., D. T. **Sandwell**, W. H. F. Smith, J. Braud, B. Binder, J. Depner, D. Fabre3, J. Factor, S. Ingalls, S-H. Kim, R. Ladner, K. Marks, S. Nelson, A. Pharaoh, G. Sharman, R. Trimmer, J. VonRosenburg, G. Wallace, P. Weatherall., *Global Bathymetry and Elevation Data at 30 Arc Seconds Resolution: SRTM30_PLUS*, *Marine Geodesy*, 32:4, 355-371, October 8, 2009.

Wei, M., D. T. **Sandwell** and Y. Fialko, A Silent M4.8 Slip Event of October 3-6, 1 2006, on the Superstition Hills Fault, Southern California, *J. Geophys. Res.*, 114, B07402, doi:10.1029/2008JB006135, 2009.

Sandwell, D. T., and W. H. F. Smith, Global marine gravity from retracked Geosat and ERS-1 altimetry: Ridge Segmentation versus spreading rate, *J. Geophys. Res.*, 114, B01411, doi:10.1029/2008JB006008, 2009.

Barbot, S. Y. Fialko, and D. T. **Sandwell**, Three-dimensional models of elasto-static deformation in heterogeneous media: application to the East California Shear Zone, *Geophys. J. Int.*, 179, p. 500-520, doi: 10.1111/j.1365-246X.2009.04194.x, 2009.

Smith-Konter, B., D. T. **Sandwell**, Stress evolution of the San Andreas Fault System: Recurrence interval versus locking depth, *Geophys. Res., Lett.*, 35, L13304, doi:10.1029/2009GL037235, 2009.

2008

Brooks, A. B., J. Foster, D. **Sandwell**, C. Wolfe, P. Okubo, M. Poland, and D. Myer, Magmatically Triggered Slow-Slip at Kilauea Volcano, Hawaii, *Nature*, 321, 2008.

Myer, D., D. **Sandwell**, B. Brooks, J. Foster, and M. Shimada, Inflation along Kilauea's southwest rift zone in 2006, *Journal of Volcanology and Geothermal Research*, 177, p. 418-424, 2008

Sandwell, D. T., D. Myer, R. Mellors, M. Shimada, B. Brooks, and J. Foster, Accuracy and resolution of ALOS interferometry: Vector deformation maps of the Father's Day Intrusion at Kilauea, *IEEE Trans. Geosciences and Remote Sensing*, 46, 3524-3534, 2008.

Barbot, S. Y. Fialko, and D. **Sandwell**, Effect of a compliant fault zone on the inferred earthquake slip distribution, *J. Geophys. Res.*, 113, B06404, doi:10.1029/2007JB00525614, 2008.

Becker, J. J., D. T. **Sandwell**, Global Estimates Of Seafloor Slope From Single-Beam Ship Soundings, *J. Geophys. Res.*, 113, C05028, doi:10.1029/2006JC003879 30 May 2008

2007

Luttrell, K., D. **Sandwell**, B. Smith-Konter, B. Bills, and Y. Bock, Modulation of the earthquake cycle at the southern San Andreas fault by lake loading, *J. Geophys. Res.*, 112, B08411, doi:10.1029/2006JB004752., 2007.

Sandwell, D. T. Ocean Bathymetry and Plate Tectonics, in: *Our Changing Planet: The view from Space*, editors, King, M. D., C. L. Parkinson, K. C. Partington, and R. G. Williams, Cambridge University Press, 2007.

Wdowinski, S., B. Smith, Y. Bock, and D. **Sandwell**, Diffuse interseismic deformation across the Pacific-North American plate boundary, *Geology*, v. 35; no. 4; p. 311–314 2007.

Sandwell, D. and B. Smith, The San Andreas Fault: Adjustments in the Earth's Crust, in: *Our Changing Planet: The view from Space*, editors, King, M. D., C. L. Parkinson, K. C. Partington, and R. G. Williams, Cambridge University Press, 2007.

2006

Sandwell, D. T., Smith, W. H. F., S. Gille, S., Kappel E., Jayne S., Soofi K. , Coakley B., and L. Geli, Bathymetry from Space: Rationale and requirements for a new, high-resolution altimetric mission, *Comptes Rendus de l'Académie des Sciences*, 338, p. 1049-1062, 2006.

Wei, M. and D. **Sandwell**, Estimates of heat flow from Cenozoic seafloor using global depth and age data, *Tectonophysics*, 417, p. 325-335, 2006.

Watts, A. B., D. T. **Sandwell**, W. H. F. Smith, and P. Wessel, Global gravity, bathymetry, and the distribution of submarine volcanism through space and time, *J. Geophys. Res.*, 111, B08408, 2006.

Luttrell, K., and D. **Sandwell**, Strength of the Lithosphere of the Galilean Moons, *Icarus*, Volume 183, Issue 1, July 2006, p. 159-167 2006.

Smith, B., and D. T. **Sandwell**, A Model for the Earthquake Cycle Along the San Andreas Fault System for the Past 1000 Years, *J. Geophys. Res.*, 111, B01405, 2006.

2005

Sandwell, D. T., D. Anderson, and P. Wessel, Global Tectonic Maps, in Foulger, G. L., Natland, J. H., Presnall, D. C. and Anderson, D. L., eds. *Plates, Plumes & Paradigms: GSA Special Paper 388*, p. 1-10, 2005.

Sandwell, D. T., and W.H.F. Smith, Retracking ERS-1 Altimeter Waveforms for Optimal Gravity Field Recovery, *Geophys. J. Int.*, 163, 79-89, 2005.

Fialko, Y., D. **Sandwell**, M. Simons, and P. Rosen, Three-dimensional deformation caused by the Bam, Iran, earthquake and the origin of shallow slip deficit, *Nature*, 435, 19 May, 2005.

2004

Smith, B., and D. **Sandwell**, A three-dimensional semianalytic viscoelastic model for time-dependent analyses of the earthquake cycle, *J. Geophys. Res.*, 109, B12401, doi:10.1029/2004JB003185, 2004.

Sandwell, D., P. Rosen, W. Moore, and E. Gurrola, Radar interferometry for measuring tidal strains across cracks on Europa, *J. Geophys. Res.*, 109, E11003, doi:10.1029/2004JE002276, 2004.

Sandwell, D. T., Y. Fialko, Warping and Cracking of the Pacific Plate by Thermal Contraction, *J. Geophys. Res.*, 109, B10411, doi:10.1029/2004JB003091, 2004.

2003

Kilb, D., C.S. Keen, R.L. Newman, G.M. Kent, D.T. **Sandwell**, F.L. Vernon, C.L. Johnson, J.A. Orcutt, "The Visualization Center at Scripps Institution of Oceanography: Education & Outreach" *Seis. Res. Lett.* V. 74, no. 5, p. 641-648, 2003.

Sandwell, D., S. Gille, J. Orcutt, and W. Smith, Bathymetry from Space is Now Possible, *Eos, Trans, AGU*, Vol. 84, No. 5, 4 February 2003.

Smith, B. and D. **Sandwell**, Accuracy and Resolution of Shuttle Radar Topography Mission Data, *Geophys. Res. Lett.*, 30 (9), doi:10.1029/2002GL016643, 2003.

Smith, B. and D. **Sandwell**, Coulomb Stress Accumulation Along the San Andreas Fault System, *J. Geophys. Res.*, 108 (B6), doi:10.1029/2002JB002136, 2003.

Lyons, S. and D. **Sandwell**, Fault creep along the southern San Andreas from InSAR, permanent scatterers, and stacking, *J. Geophys. Res.*, 108 (B1), 2047, doi:10.1029/2002JB001831, 2003.

2002

Fialko, Y., D. **Sandwell**, D. Agnew, M. Simons, P. Shearer, and B. Minster, Deformation on Nearby Faults Induced by the 1999 Hector Mine Earthquake, *Science*, 297, 1858-1862, 2002.

Lyons, S. N., Y. Bock, and D. **Sandwell**, Creep along the Imperial fault, southern California, from GPS measurements, *J. Geophys. Res.*, 107(B10), 2249, doi:10.1029/2001JB000763, 2002.

Mellors, R. J., L. Sichoix, and D. T. **Sandwell**, Constraints on precursory slip to the Hector Mine earthquake using INSAR, *Bull. Seismo. Soc. Am.*, 92, 2002.

Jacobs, A., D. **Sandwell** and L. Sichoix, The 1999 (Mw 7.1) Hector Mine earthquake: Near-field postseismic deformation from ERS Interferometry, *Bull. Seismo. Soc. Am.*, 92, 1433-1442, 2002.

Sandwell, D. T., L. Sichoix, and B. Smith, The 1999 Hector Mine Earthquake, Southern California: Vector near-field displacements from ERS InSAR, *Bull. Seismo. Soc. Am.*, 92, 1341-1354, 2002.

Watson, K., Y. Bock, and D. **Sandwell**, Satellite interferometric observations of displacement associated with seasonal ground water in the Los Angeles Basin, *J. Geophys. Res.*, 107, B4, ETG8-1 - ETG8-12., 2002.

Baer, G., U. Schattner, D. Wachs, D. **Sandwell**, S. Wdowinski, and S. Frydman, The lowest place on Earth is subsiding - An InSAR perspective, *GSA Bulletin* 114, 12-23, 2002.

2001

Sandwell, D. T., Plate Tectonics: A Martian View, Chapter 18 in *Plate tectonics: An insider's history of the modern theory of the Earth*, ed. N. Oreskes and LeGrand, Westview Press, ISBN 0-8133-3981-2, 2001.

Baer, G., G. Shamir, D. **Sandwell**, and Y. Bock, Crustal deformation during 6 years spanning the Mw=7.2 1995 Nuweiba earthquake, analyzed by Interferometric Synthetic Aperture Radar, *Isr. J. Earth. Scis.*, 50, 9-22, 2001.

Sandwell, D. T., W.H.F. Smith, Bathymetric Estimation, in *Satellite Altimetry and Earth Sciences*, ed., L.L. Fu and A. Cazenave, Academic Press, 441-457, 2001.

2000

Sandwell, D.T. and L. Sichoix, Topographic phase recovery from stacked ERS interferometry and a low resolution digital elevation model, *J. Geophys. Res.*, 105, B12, 28211-28222, 2000.

Sandwell, D. T., L. Sichoix, D. Agnew, Y. Bock, and J-B. Minster, Near-real-time radar interferometry of the Mw 7.1 Hector Mine Earthquake, *Geophys. Res., Lett.*, 27, 3101-3104, 2000.

Maia, M; Ackermann, D; Dehghani, GA; Gente, P; Hekinian, R; Naar, D; O'Connor, J; Perrot, K; Morgan, JP; Ramillien, G; Revillon, S; Sabetian, A; **Sandwell, D**; Stoffers, P. The Pacific-Antarctic Ridge-Foundation hotspot interaction a case study of a ridge approaching a hotspot, *Mar. Geol.*, 167 61-84, 2000.

Lyons, S.N., D. T. **Sandwell** and W. H. F. Smith, Three-dimensional estimation of elastic thickness under the Louisville Ridge, *J. Geophys. Res.*, 105, 13239-13252, 2000.

Gille, S. T., M. M. Yale and D. T. **Sandwell**, Global correlation of mesoscale ocean variability with seafloor roughness from satellite altimetry, *Geophys. Res. Lett.*, 27, no.9, 1251-1254, 2000.

1999

Baer, G., D. **Sandwell**, S. Williams, and Y. Bock, Coseismic Deformation Associated with the November 1995, Mw=7.1 Nuweiba earthquake, Gulf of Elat (Aqaba), Detected by Synthetic Aperture Radar Interferometry, *J. Geophys. Res.*, 104, 25221-25232, 1999.

Yale, M. M., D. T. **Sandwell**, Stacked global satellite gravity profiles, *Geophysics*, 64, 1748-1755, 1999.

1998

Sandwell, D. T. and E. J. Price, Phase gradient approach to stacking interferograms, *J. Geophys. Res.*, 103, 30183-30204, 1998.

Price, E. J. and D. T. **Sandwell**, Small-scale deformation associated with the Landers 1992 California earthquake mapped by InSAR Phase Gradient, *J. Geophys. Res.*, 103, 27001-27016, 1998.

Yale, M.M., D. T. **Sandwell** and A.T. Herring, What are the limitations of satellite altimetry?, *The Leading Edge*, 17, no. 1, p. 73-76, 1998.

1997

Smith, W. H. F. and D. **Sandwell**, Global seafloor topography from satellite altimetry and ship depth soundings, *Science*, 277, p.1956-1962, 1997.

Smith, W. and **Sandwell**, D., Measured and Estimated Seafloor Topography (version 4.2), World Data Center A for Marine Geology and Geophysics, research publication RP-1, poster 34"x53", 1997.

Phillips, R. J., C. L. Johnson, S. J. Mackwell, P. Morgan, D. T. **Sandwell** and M. T. Zuber, Lithospheric Mechanics and Dynamics of Venus, in *Venus II*, ed. S.W. Bougher, D. M. Hunten and R. J. Phillips, The University of Arizona Press, 1997.

Sandwell, D. T. and W. H. F. Smith, Marine Gravity from Geosat and ERS-1 Altimetry, *J. Geophys. Res.*, 102, 10039-10054, 1997.

Sandwell, D. T., C. L. Johnson, F. Bilotti and J. Suppe, Driving Forces for Limited Tectonics on Venus, *Icarus*, 129, 232-244, 1997.

1996

Small, C. and D. **Sandwell**, Sights Unseen, *Natural History*, p. 28-32., March, 1996.

Levitt, D. A. and D. T. **Sandwell**, Modal depth anomalies from multibeam bathymetry: Is there a South Pacific Superswell?, *Earth Planet. Sci. Lett.*, 139, 1-16, 1996.

1995

Sandwell, D. T. and W. H. F. Smith, Marine Gravity Anomaly from Satellite Altimetry, map Geological Data Center, Scripps Institution of Oceanography, December, 1995. (digital file, anonymous ftp topex.ucsd.edu)

Sandwell, D. T. Mara M. Yale, D. C. McAdoo and W. H. F. Smith, Marine Gravity from Satellite Altimetry over Ocean and Sea Ice, IUGG Publication, July, 1995.

Sandwell, D. T., Exploration of the remote ocean basins with satellite altimeters, 1996 McGraw-Hill Yearbook of Science and Technology, p. 178-182, McGraw-Hill, INC., New York, 1995.

Schubert, G. and D. T. **Sandwell**, A global survey of possible subduction sites on Venus, *Icarus*, 117, 173-196, 1995.

Yale, M. M., D. T. **Sandwell** and W. H. F. Smith, Comparison of along-track resolution of stacked Geosat, ERS-1 and Topex satellite altimeters, *J. Geophys. Res.*, 100, 15117-15127, 1995.

Smith, W. H. F. and D. T. **Sandwell**, Seafloor Topography Predicted from Satellite Altimetry and Ship Depth Measurements (Map), World Data Center-A for Marine Geology and Geophysics, Report MGG-09, National Geophysical Data Center, Boulder, Colorado, 80303, 1995.

Sandwell, D. T., E.L. Winterer, J. Mammerickx, R. A. Duncan, M. A. Lynch, D. A. Levitt, and C. L. Johnson, Evidence for diffuse extension of the Pacific plate from Pukapuka ridges and crossgrain gravity lineations, *J. Geophys. Res.*, 100, 15087-15099, 1995.

Levitt, D. A. and D. T. **Sandwell**, Lithospheric bending at subduction zones based on depth soundings and satellite gravity, *J. Geophys. Res.*, 100, 379-400, 1995.

1994

Smith, W. H. F. and D. T. **Sandwell**, Bathymetric prediction from dense satellite altimetry and sparse shipboard bathymetry, *J. Geophys. Res.*, 99, 21803-21824, 1994.

Schubert, G., W. B. Moore and D. T. **Sandwell**, Gravity over coronae and chasmata on Venus, *Icarus*, 112, 130-146, 1994.

Johnson, C. L. and D. T. **Sandwell**, Lithospheric flexure on Venus, *Geophys. J. Int.*, 22, 627-647, 1994.

Small, C. and D. T. **Sandwell**, Imaging mid-ocean ridge transitions with satellite gravity, *Geology*, 22, 123-126, 1994.

Phipps Morgan, J. and D. T. **Sandwell**, Systematics of ridge propagation south of 30°S, *Earth and Planet. Sci. Letts.*, 121, 245-258, 1994.

1993

Neumann, G. A., D. W. Forsyth and D. **Sandwell**, Comparison of marine gravity from shipboard and high-density satellite altimetry along the mid-Atlantic Ridge, 30.5°S-35.5°S, *Geophys. Res. Letts.*, 20, 1639-1642, 1993.

Atwater, T., J. Sclater, D. **Sandwell**, J. Severinghaus, and M. S. Marlow, Fracture Zone traces across the North Pacific Cretaceous quiet zone and their tectonic implications, In *Mesozoic Pacific: Geology Tectonics, and Volcanism*, Geophysical Monograph 77, American Geophysical Union, 137-154, 1993.

1992

Sandwell, D. T. and G. Schubert, Evidence for Retrograde Lithospheric Subduction on Venus, *Science*, 257, 766-770, 1992.

Sandwell, D. D., L. A. Lawver, and I.W.D. Dalziel, W.H.F. Smith and M. Wiederspahn, ANTARCTICA Gravity Anomaly and Infrared Satellite Image, Scripps Institution of Oceanography, Geological Data Center, 1992. USGS MAP 1-2284

Sandwell, D. T., Ocean Bumps and Dips, *World & I*, 3, 252-255, 1992.

Small, C. and D. T. **Sandwell**, An Analysis of Ridge Axis Gravity Roughness and Spreading Rate, *J. Geophys. Res.*, 97, 3235-3245, 1992.

Small, C. and D. T. **Sandwell**, A Comparison of Satellite and Shipboard Gravity Measurements in the Gulf of Mexico, *Geophysics*, 57, 885-893, 1992.

Sandwell, D. T., Antarctic Marine Gravity Field from High Density Satellite Altimetry, *Geophys. J. Int.*, 109, 437-448, 1992.

McKenzie, D., P. G. Ford, C. L. Johnson, B. Parsons, G. H. Pettengill, D. **Sandwell**, S. Saunders and S. Solomon, Features on Venus Generated by Plate Boundary Processes, *J. Geophys. Res.*, 97, 13533 - 13544, 1992.

Sandwell, D. T., and G. Schubert, Flexural Ridges, Trenches and Outer Rises Around Coronae on Venus, *J. Geophys. Res.*, 97, 16069-16083, 1992.

Johnson, C. L. and D. T. **Sandwell**, Joints in Venusian Lava Flows, *J. Geophys. Res.*, 97, 13601 - 13610, 1992.

Sandwell, D. T., M. B. Ruiz, Along-Track Gravity Anomalies from Geosat and Seasat Altimetry: GEBCO Overlays, *Marine Geophys. Res.*, 14, 165-205, 1992.

1991

Marks, K. M. and D. T. **Sandwell**, Analysis of Geoid Height versus Topography for Oceanic Plateaus and Swells using Nonbiased Linear Regression, *J. Geophys. Res.*, 96, 8045-8055, 1991.

Sandwell, D. T., Geophysical Applications of Satellite Altimetry, *Reviews of Geophysics Supplement*, 132-137, 1991.

1990

Shum, C. K., R. A. Werner, D. T. **Sandwell**, B. H. Zhang, R. S. Nerem and B. D. Tapley, Variations of Global Mesoscale Eddy Energy Observed from Geosat, *J. Geophys. Res.*, 95, 17865-17876, 1990.

Sandwell, D. T. and D. C. McAdoo, High Accuracy, High Resolution Gravity Profiles from 2 Years of Geosat Exact Repeat Mission, *Journal of Geophysical Research*, 95, 3049-3060, 1990.

Royer, J. Y., L. M. Gahagan, L. A. Lawver, C. L. Mayes, D. Nurnberg, D. T. **Sandwell** and C. R. Scotese, A Tectonic Chart for the Southern Ocean Derived from Geosat Altimetry Data, in *Antarctica as an Exploration Frontier: Hydrocarbon Potential, Geology, and Hazards*, B. St. John (ed.), AAPG Studies in Geology #31, Tulsa, OK, pp. 89-99, 1990.

Muller, R. D., D. T. **Sandwell**, B. E. Tucholke, J. G. Sclater and P. R. Shaw, Depth to Basement and Geoid Expression of the Kane Fracture Zone: A Comparison, *Marine Geophysical Researches*, 13, 105-129, 1990.

Koeberl, C. K., V. L. Sharpton, T. M. Harrison, D. T. **Sandwell**, A. V. Murali, and K. Burke, The Kara/Ust-Kara Twin Impact Structure: A Large Scale Impact Event in the Late Cretaceous, *Geological Society of America Special Paper* 247, 1990.

Mayes, C. L., L.L. Lawver and D. T. **Sandwell**, Tectonic History and New Isochron Chart of the South Pacific, *J. Geophys. Res.*, 95, 8543-8567, 1990.

1989

Marks, K. M., D. T. **Sandwell**, P. R. Vogt and S. A. Hall, Downwelling beneath the Australian-Antarctic discordance zone: Evidence from geoid height versus topography, *Earth. Planet. Sci. Lett.*, 103, 325-338, 1989.

Royer, Y. Y., J. G. Sclater and D. T. **Sandwell**, A Preliminary Tectonic Fabric Chart of the Indian Ocean, *Proceedings of the Indian Academy of Sciences*, 98, 7-24, 1989.

Sandwell, D. T. and B. Zhang, Global Mesoscale Variability from Geosat Exact Repeat Mission: Correlation with Ocean Depth, *J. Geophys. Res.*, 94, 17971-17984, 1989.

Small, C. and D. T. **Sandwell**, An Abrupt Change in Ridge-Axis Gravity with Spreading Rate, *J. Geophys. Res.*, 94, 17383-17392, 1989.

Royer, J. Y. and D. T. **Sandwell**, Evolution of the Eastern Indian Ocean Since the late Cretaceous: Constraints from GEOSAT altimetry, *J. Geophys. Res.*, 94, 13755-13782, 1989.

McAdoo, D. C. and D. T. **Sandwell**, On the Source of Crossgrain Lineations in the Central Pacific Gravity Field, *J. Geophys. Res.*, 94, 9341-9352, 1989.

Sandwell, D. T. and K. R. MacKenzie, Geoid Height Versus Topography for Oceanic Plateaus and Swells, *J. Geophys. Res.*, 94, 7403-7418, 1989.

Schubert, G. and D. T. **Sandwell**, Crustal Volumes of the Continents and of Oceanic and Continental Submarine Plateaus, *Earth Planet. Sci. Lett.*, 92, 234-246, 1989.

1988

Gahagan, L. M., D. T. **Sandwell**, C. R. Scotese, J. Y. Royer, D. Mueller, C. L. Mayes, C. Heubeck, and M. Coffin, Tectonic Fabric Map of the Ocean Basins from Satellite Altimetry Data, *Tectonophysics Special Issue, Mesozoic and Cenozoic Plate Reconstructions*, 155, 1-26, 1988.

Sandwell, D. T. and D. C. McAdoo, Marine Gravity of the Southern Ocean and Antarctic Margin from Geosat, *J. Geophys. Res.*, 93, 10389-10396, 1988.

Craig, C. H., and D. T. **Sandwell**, Global Distribution of Seamounts from Seasat Profiles, *J. Geophys. Res.*, 93, 10408-10420, 1988.

Sandwell, D. T., and M. L. Renkin, Compensation of Swells and Plateaus in the North Pacific: No Direct Evidence for Mantle Convection, *J. Geophys. Res.*, 93, 2775-2783, 1988.

1987

Winterer, E. L., and D. T. **Sandwell**, Evidence From En Echelon Cross-grain Ridges for Tensional Cracks in the Pacific Plate, *Nature*, 329, 534-537, 1987.

Sandwell, D. T., Biharmonic Spline Interpolation of GEOS-3 and SEASAT Altimeter Data, *Geophys. Res. Lett.*, 14, 139-142, 1987.

1986

Cheney, R. E., B. C. Douglas, D. C. McAdoo, and D. T. **Sandwell**, Geodetic and Oceanographic Applications of Satellite Altimetry, in *Space Geodesy and Geodynamics*, A. J. Anderson and A. Cazenave, eds., Academic press, Orlando, Florida, 1986.

Detrick, R., R. von Herzen, B. Parsons, D. T. **Sandwell**, and M. Dougherty, Heat Flow Observations on the Bermuda Rise and Thermal Models of Mid-Plate Swells, *J. Geophys. Res.*, 91, 3701-3723, 1986.

Sandwell, D. T., Thermal Stress and the Spacings of Transform Faults, *J. Geophys. Res.*, 91, 6405-6418, 1986.

Mammerickx, J., and D. T. **Sandwell**, Rifting of Old Oceanic Lithosphere, *J. Geophys. Res.*, 91, 1975-1988, 1986.

Sandwell, D. T., D. G. Milbert, and B. C. Douglas, Global Nondynamic Orbit Improvement for Altimetric Satellites, *J. Geophys. Res.*, 91, 9447-9451, 1986.

1985

McAdoo, D. C., and D. T. **Sandwell**, Folding of Oceanic Lithosphere, *J. Geophys. Res.*, 90, 8563-8569, 1985.

1984

Cheney, B. E., B. C. Douglas, D. T. **Sandwell**, J. G. Marsh, and T. V. Martin, Applications of Satellite Altimetry to Oceanography and Geophysics, *Mar. Geophys. Res.*, 7, 17-32, 1984.

Sandwell, D. T., Thermomechanical Evolution of Oceanic Fracture Zones, *J. Geophys. Res.*, 89, 11401-11413, 1984.

Sandwell, D. T., Along-Track Deflection of the Vertical from SEASAT: GEBCO Overlays, NOAA Technical Memorandum, 1984.

Douglas, B. C., R. W. Agreen, and D. T. **Sandwell**, Observing Global Ocean Circulation with SEASAT Altimeter Data, *Marine Geodesy*, 8, 67-83, 1984.

Wagner, C. A., and D. T. **Sandwell**, The GRAVSAT Signal Over Tectonic Features, *J. Geophys. Res.*, 89, 4419-4426, 1984.

Sandwell, D. T., and R. W. Agreen, Seasonal Variation in Wind Speed and Sea State from Global Satellite Measurements, *J. Geophys. Res.*, 89, 2041-2051, 1984.

Sandwell, D. T., A Detailed View of the South Pacific Geoid from Satellite Altimetry, *J. Geophys. Res.*, 89, 1089-1104, 1984.

1983

1982

Liu, C. S., D. T. **Sandwell**, and J. R. Curray, The Negative Gravity Field Over the 85°E Ridge, *J. Geophys. Res.*, 87, 7673-7686, 1982.

Sandwell, D. T., and G. Schubert, Geoid Height-Age Relation from Seasat Altimeter Profiles across the Mendocino Fracture Zone, *J. Geophys. Res.*, 87, 3949-3958, 1982.

Sandwell, D. T., and G. Schubert, Lithospheric Flexure at Fracture Zones, *J. Geophys. Res.*, 87, 4657-4667, 1982.

Sandwell, D. T., Thermal Isostasy: Response of a Moving Lithosphere to a Distributed Heat Source, *J. Geophys. Res.*, 87, 1001-1014, 1982.

1981

Sandwell, D. T., Thermal Isostasy: Spreading Ridges, Fracture Zones, and Thermal Swells, Ph.D. thesis, 214 pp., University of California, Los Angeles, 1981.

1980

Sandwell, D. T., and G. Schubert, Geoid Height versus Age for Symmetric Spreading Ridges, *J. Geophys. Res.*, 85, 7235-7241, 1980.

Sandwell, D. T., and K. A. Poehls, A Compensation Mechanism for the Central Pacific, *J. Geophys. Res.*, 85, 3751-3758, 1980.

Popular and Unpublished Work:

Sandwell, D., Mellors, R., Tong, X., Xu, X., Wei, M. and Wessel, P., 2016. GMTSAR: An InSAR Processing System Based on Generic Mapping Tools http://topex.ucsd.edu/gmtsar/tar/GMTSAR_2ND_TEX.pdf.

Sandwell, D. T., Gille, S. T., and W. H. F. Smith, eds., *Bathymetry from Space: Oceanography, Geophysics, and Climate*, Geoscience Professional Services, Bethesda, Maryland, June 2003 24 pp.

Sandwell, D. T., and J. Labrecque, SAR Interferometry for Solid Earth and Natural Hazards, Report of NASA workshop on Synthetic Aperture Radar, Greenbelt Md., January 16-17, 2003.

Sandwell, D. T., Smith, W. H. F., Gille, S., and Soofi, K., *Bathymetry from Space: White paper in support of a high-resolution, ocean altimeter mission*, June 2001. http://topex.ucsd.edu/marine_grav/white_paper.pdf

Sandwell, D. T. and W. H. F. Smith, *Exploring the Ocean Basins with Satellite Altimeter Data*, (article on radar altimetry for general audience), 1997. http://topex.ucsd.edu/marine_grav/explore_grav.html

Sandwell, D. T. and W. H. F. Smith, *Gravity Anomaly from Geosat and ERS-1 Altimetry, Versions 1-18, 1992-2014.* (digital file available from anonymous ftp topex.ucsd.edu)