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:

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
9/98	Society for Exploration Geophysics
6/80	International Association of Geodesy
6/77	American Geophysical Union

Other Experience:

6/16 -	Chair of the Solid Earth Panel of the NASA Decadal Planning Committee
1/14 -	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 -	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
9/94 - 5/96	SIO Representative to UCSD Academic Senate
9/93 - 8/94	Chair of UCSD Academic Senate Committee on Computing
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:

04/16 -	NASA - Moment and Strain Accumulation Rate along the SAFs from InSAR and GPS
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:

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:

1. Sandwell, D. T., and K. A. Poehls, A Compensation Mechanism for the Central Pacific, *J. Geophys. Res., 85* , 3751-3758, 1980.
2. Sandwell, D. T., and G. Schubert, Geoid Height versus Age for Symmetric Spreading Ridges, *J. Geophys. Res., 85*, 7235-7241, 1980.
3. Sandwell, D. T., Thermal Isostasy: *Spreading Ridges, Fracture Zones, and Thermal Swells*, Ph.D. thesis, 214 pp., University of California, Los Angeles, 1981.
4. Sandwell, D. T., Thermal Isostasy: Response of a Moving Lithosphere to a Distributed Heat Source, *J. Geophys. Res., 87*, 1001-1014, 1982.
5. Sandwell, D. T., and G. Schubert, Lithospheric Flexure at Fracture Zones, *J. Geophys. Res., 87*, 4657-4667, 1982.
6. 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.
7. 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.
8. Sandwell, D. T., A Detailed View of the South Pacific Geoid from Satellite Altimetry, *J. Geophys. Res., 89*, 1089-1104, 1984.
9. 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.
10. Wagner, C. A., and D. T. Sandwell, The GRAVSAT Signal Over Tectonic Features, *J. Geophys. Res., 89*, 4419-4426, 1984.
11. Douglas, B. C., R. W. Agreen, and D. T. Sandwell, Observing Global Ocean Circulation with SEASAT Altimeter Data, *Marine Geodesy, 8*, 67-83, 1984.
12. Sandwell, D. T., Along-Track Deflection of the Vertical from SEASAT: GEBCO Overlays, *NOAA Technical Memorandum*, 1984.
13. Sandwell, D. T., Thermomechanical Evolution of Oceanic Fracture Zones, *J. Geophys. Res., 89*, 11401-11413, 1984.
14. 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.
15. McAdoo, D. C., and D. T. Sandwell, Folding of Oceanic Lithosphere, *J. Geophys. Res., 90*, 8563-8569, 1985.
16. Sandwell, D. T., D. G. Milbert, and B. C. Douglas, Global Nondynamic Orbit Improvement for Altimetric Satellites, *J. Geophys. Res., 91*, 9447-9451, 1986.
17. Mammerickx, J., and D. T. Sandwell, Rifting of Old Oceanic Lithosphere, *J. Geophys. Res., 91*, 1975-1988, 1986.
18. Sandwell, D. T., Thermal Stress and the Spacings of Transform Faults, *J. Geophys. Res., 91*, 6405-6418, 1986.

19. 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.
20. 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.
21. Sandwell, D. T., Biharmonic Spline Interpolation of GEOS-3 and SEASAT Altimeter Data, *Geophys. Res. Lett., 14*, 139-142, 1987.
22. 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.
23. 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.
24. Craig, C. H., and D. T. Sandwell, Global Distribution of Seamounts from Seasat Profiles, *J. Geophys. Res., 93*, 10408-10420, 1988.
25. 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.
26. 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, Mesosoic and Cenozoic Plate Reconstructions, 155*, 1-26, 1988.
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67. 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)
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