CURRICULUM VITAE
PAUL L. STOFFA

DATE OF BIRTH: July 9, 1948

PLACE OF BIRTH: Palmerton, Pennsylvania, U.S.A.

EDUCATION:

1966 - 1970	B.S., Physics - Rensselaer Polytechnic Institute, Troy, New York
1970 - 1974	Faculty Fellow - Columbia University, New York, New York
1974	PhD, Geophysics - Columbia University, New York, New York

PROFESSIONAL EXPERIENCE:

2009	Jackson School of Geosciences Dean's Fellow, The University of Texas at Austin
1997 - present	Shell Distinguished Chair in Geophysics, Department of Geological Sciences, The University of Texas at Austin
1994 – 2008	Director, Institute for Geophysics, The University of Texas at Austin
1991 - 1996	Carlton Centennial Professorship in Geophysics, Department of Geological Sciences, The University of Texas at Austin
1988 - 1994	Associate Director, Institute for Geophysics, The University of Texas at Austin
1983 - present	Research Professor, Institute for Geophysics, The University of Texas at Austin
1983 – 1991	Wallace E. Pratt Professor in Geophysics, Department of Geological Sciences, The University of Texas at Austin
7/1/85 - 6/30/86	Visiting Professor, Federal University of Bahia, Salvador, Brazil
1/1/83 - 8/1/83	Visiting Professor, University of Hamburg, Germany
1981 - 1983	Consultant to Gulf Research and Development Company, Pearl River, New York
1979 - 1981	Senior Research Associate, Lamont-Doherty Geological Observatory of Columbia University

1978 - 1984	Adjunct Professor of Geology, Columbia University
1974 - 1979	Research Associate, Lamont-Doherty Geological Observatory of Columbia University - Marine Seismology
1970 - 1974	Graduate Research Assistant, Lamont-Doherty Geological Observatory of Columbia University, Palisades, New York

OTHER ACTIVITIES:

07/2007 – 06/2009	Member of Board of Governors, Integrated Ocean Drilling Program Management International, Inc. (IODP-MI)
06/2007 – 2009	Member Representative for The University of Texas at Austin, Consortium for Ocean Leadership
09/2006 – 2008	Member of Executive Council, Jackson School of Geosciences, The University of Texas at Austin
2006	Member of Midterm Review Committee TU Delft Research Centres, The Netherlands
02/2005 – 06/2007	Chairman – Board of Governors, Integrated Ocean Drilling Program Management International, Inc. (IODP-MI)
09/2005 – 08/2006	Member of Strategic Planning Council, John A. and Katherine G. Jackson School of Geosciences, The University of Texas at Austin
01/2004 – 02/2005	Vice Chairman – Board of Governors, Integrated Ocean Drilling Program Management International, Inc. (IODP-MI)
04/2003 – 01/2004	Interim President, Integrated Ocean Drilling Program Management International, Inc. (IODP-MI)
2001 - 2005	Member of Steering Committee, John A. and Katherine G. Jackson School of Geosciences, The University of Texas at Austin
2001 - 2005	Member of Executive Committee, Geology Foundation, The University of Texas at Austin
2000 - 2003	Society of Exploration Geophysicists District 3 Representative
2000 - 2002	Chairman, Joint Oceanographic Institutions, Board of Governors
2000 - 2001	Member of the Strategic Planning Group for a Visualization Lab, The University of Texas at Austin

1999 – present	Member of External Scientific Advisory Board, Netherlands Research Centre, Integrated Solid Earth Sciences
1998 - 1999	Member of Information Technology Coordinating Council, The University of Texas at Austin
1998 - 1999	Member of the High Performance Computing Oversight Committee, The University of Texas at Austin
1996 - 1998	Member of the Digital Facilities and Infrastructure Committee, The University of Texas at Austin
1995 - 1999	Member of the Building Advisory Committee of the General Faculty, The University of Texas at Austin
1995 - 1998	Editorial Board of the Brazilian Journal of Geophysics
1994 - 2007	Consortium for Oceanographic Research and Education, Board of Governors
1994 – 08/2006	Joint Oceanographic Institutions, Board of Governors
1994 – 2003	Joint Oceanographic Institutions for Deep Earth Sampling, Executive Committee
1994 - 1997	Incorporated Research Institutions for Seismology, Board of Directors
1992 - present	Associate Editor, Journal of Seismic Exploration
1992 - 1999	Member of the Ocean Studies Board, National Research Council Chairman, Committee on the Arctic Research Vessel Chairman, Report Review Committee Committee Member, NOAA Sea Grant Reviews Committee Member, Marine Geology and Geophysics Reviews
1990 - 1998	Member of the Project Team "Ocean Continent Lithosphere Boundary" of the International Lithosphere Program
1987 - 1988	Editorial Board Member for Tectonophysics
1983 - 1986	Associate Editor, Journal of Geophysical Research
1982 - 1989	Member of the Society of Exploration Geophysicists' Committee on Geophysical Activity
1981 - 1985	Member IEEE Committee for Multidimensional Signal Processing

AWARDS:

2003 Society of Brazilian Geophysicists, Foreign Geophysicist Recognition Award

MEMBERSHIP IN PROFESSIONAL SOCIETIES:

Society of Exploration Geophysicists
American Geophysical Union
European Association of Geoscientists and Engineers

PUBLICATIONS

Pestana, R.C., P.L. Stoffa, 2009, Time evolution of the wave equation using the Rapid Expansion Method (REM) (in press to Geophysics).

Porsani, M., P. Stoffa, M. Sen, R. Seif, 2010, Partitioned least squares operator for large scale geophysical inversion (submitted for publication to Geophysics).

Jackson, C. S., M. K. Sen, P. L. Stoffa, and G. Huerta, Data directed importance sampling for climate model uncertainty estimation, in Advanced Computational Infrastructures for Parallel / Distributed Adaptive Applications, edited by M. Parashar, X. Li, and S. Chandra, editors, Wiley Publishers, 2010

Jin, L., P.L. Stoffa, M.K. Sen, 2009, Stochastic Inversion for Reservoir Properties Using Parallel Learning-Based VFSA and Pilot Point Parameterization, SPE International, SPE 118818

Jin, L., P.L. Stoffa, M.K. Sen, R.K. Seif, A. Sena, 2009, Pilot point parameterization in stochastic inversion for reservoir properties using time-lapse seismic and production data, J Seismic Exploration, 18(1).

Jin, L., M.K. Sen, P.L. Stoffa, 2009, Fusion based classification method and its application, J Seismic Exploration, 18 103-117 (2).

Hu, C. and P. Stoffa, 2009, Slowness-driven Gaussian-beam prestack depth migration for low-fold seismic, Geophysics, 74(6), WCA35-WCA45.

Hu, C., P. Stoffa, and K. McIntosh, 2008, First arrival stochastic tomography: Automatic background velocity estimation using beam semblances and VFSA, Geophys Res Lett, 35, L23307.

Jin, L., M.K. Sen, P.L. Stoffa, R.K. Seif, 2008, Time-lapse seismic attributes analysis for waterflooded reservoir, J Geophys Eng, (5), 210-220.

Wood, W.T., W. S. Holbrook, P.L. Stoffa, 2008, Full waveform inversion of reflection seismic data for ocean temperature profiles, Geophys Res Lett, 35, L04608.

Sena, A.R., M.K. Sen, P.L. Stoffa, 2008, Modelling of ground penetrating radar data in stratified media using the reflectivity technique, J Geophys Eng, 5, 129-146.

Stoffa, P.L, M.K. Sen, R.K. Seifoullaev, R.C. Pestana, J.T. Fokkema, 2006, Plane-wave depth migration, Geophysics, 71(6), S261-S272.

Sena, A.R, P.L. Stoffa, and M.K. Sen, 2006, Split-step Fourier migration of GPR data in lossy media, Geophysics, 71(4), K77-K91.

Bangerth W., H. Klie, M.F. Wheeler, P.L. Stoffa, and M.K. Sen, 2006, On optimization algorithms for the reservoir oil well placement problem, Computational Geosciences, 10, 303-319.

Klie, H., W. Bangerth, X. Gai, M.F. Wheeler, P.L. Stoffa, M. Sen, M. Parashar, U. Catalyurek, J. Saltz, T. Kurc, 2006, Models, methods and middleware for grid-enabled multiphysics oil reservoir management, Engineering with Computers, 22, 349-370.

Zhang, X, B. Rutt, U. Catalyurek, T. Kurc, P. Stoffa, M. Sen, J. Saltz, 2006, Supporting scalable and distributed data subsetting and aggregation in large-scale seismic data analysis, IJHPCA, 20(3), 423-438.

Roy, L., M.K. Sen, K. McIntosh, P.L. Stoffa, Y. Nakamura, 2005, Joint inversion of first arrival seismic travel time and gravity data, J Geophys and Eng, 2, 277-289.

Mukherjee, A., M.K. Sen, P.L. Stoffa, 2005, Traveltime computation and pre-stack time migration in transversely isotropic media, J Seismic Exploration, 13(3), 201-225.

Kurc, T., U. Catalyurek, X. Zhang, J. Saltz, M. Peszynska, M. Wheeler, A. Sussman, M. Sen, R. Seifoullaev, P. Stoffa, C. Torres-Verdin, 2005, A simulation and data analysis system for large scale, data-driven oil reservoir simulation studies, Concurrency and Computation: Practice and Experience, 17, 1441-1467.

Roy, L., M.K. Sen, D. Blankenship, P.L. Stoffa, and T. Richter, 2005, Inversion and uncertainty estimation of gravity data using simulated annealing: An application over Lake Vostok, East Antarctica, Geophysics, 70(1), J1-J12.

Matossian, V., V. Bhat, M. Parashar, M. Peszynska, M. Sen, P. Stoffa, and M.F. Wheeler, 2005, Autonomic oil reservoir optimization on the grid, Concurrency and Computation: Practice and Experience 17(1), 1-26.

Aldunate, G.C., R.C. Pestana, P.L. Stoffa, 2004, 2-D prestack depth migration with split-step extrapolation operators, Revista Brasileria de Geofisica, 22(2), 153-161.

Tsoflias, G.P., J-P. Van Gestel, P.L. Stoffa, D.D. Blankenship, and Sen M, 2004, Vertical fracture detection by exploiting the polarization properties of ground-penetrating radar signals, Geophysics 69(3), 803-810.

Ahmed, I., P.L. Stoffa, M.K. Sen, 2003, Residual migration velocity analysis in the offset-depth domain, Journal of Seismic Exploration, 12, 237-257.

Sen, M.K., P.L. Stoffa, R.K. Seifoullaev, J.T. Fokkema, 2003, Numerical and field investigations of GPR: Toward an airborne GPR. Subsurface Sensing Technologies and Applications, 4(1), 41-60.

Jiao, J., P.L. Stoffa, M.K. Sen, and R.K. Seifoullaev, 2002, Residual migration-velocity analysis in the plane-wave domain, Geophysics, 67(4), 1258-1269.

Pestana, R., and P.L Stoffa, 2001, Plane Wave Prestack Time Migration, Journal of Seismic Exploration, 9(3), 211-222.

Van Gestel, J.P., and P.L. Stoffa, 2001, Application of Alford rotation to ground penetrating radar data, Geophysics, 66(6), 1781-1792.

Muszala, S.P., P.L. Stoffa, and L.A. Lawver, 2001, An application for removing cultural noise from aeromagnetic data, Geophysics, Short Note, 66(1), 213-219.

Calderón-Macías, C., M.K. Sen, and P.L. Stoffa, 2000, Artificial neural networks for parameter estimation in geophysics, Geophysical Prospecting, 48, 21-47.

Liu, F., M.K. Sen, and P.L. Stoffa, 2000, Dip selective 2-D multiple attenuation operators in plane wave domain, Geophysics, 65(1), 264-274.

McIntosh, K., F. Akbar, C. Calderon, P. Stoffa, S. Operto, G. Christeson, Y. Nakamura, T. Shipley, E. Flueth, A. Stavenhagen, G. Leandro, 2000, Large aperture seismic imaging convergent margin: Techniques and results from the Costa Rica seismogenic zone, Marine Geophysical Researches, 21 5, 451-474.

Porsani, M. J., P. L. Stoffa, M. K. Sen, and R. K. Chunduru, 2000, Fitness functions, genetic algorithms and hybrid optimization in seismic waveform inversion, Journal of Seismic Exploration, 9(2), 143-164.

Xia, G., M.K. Sen, and P.L. Stoffa, 2000, Mapping of elastic properties of gas hydrates in the Carolina trough by waveform inversion, Geophysics, 65(3), 735-744.

Pestana, R., P.L. Stoffa, and M.K. Sen, 1999, Multiple attenuation in the plane wave domain by match filtering, Journal of Seismic Exploration, 8, 167-179.

Sen, V., M.K. Sen, and P.L. Stoffa, 1999, PVM based 3-D Kirchhoff depth migration using dynamically computed travel-times: An application in seismic data processing, Parallel Computing, 25, 231-248.

Sen, V., P.L. Stoffa, I.W.D. Dalziel, D.D. Blankenship, A.M. Smith, and S. Anandakrishnan, 1999, Seismic surveys in Central West Antarctica: Data processing examples from the ANTALITH field tests, Terra Antarctica, 5(4), 761-772.

Xia, G., M.K. Sen, and P.L. Stoffa, 1998, 1D elastic waveform inversion: A divide and conquer approach, Geophysics, 63(5), 1670-1684.

Anandakrishnan, S., D.D. Blankenship, R.B. Alley, and P.L. Stoffa, 1998, Influence of subglacial geology on the position of a West Antarctic ice stream from seismic observations, Nature, 394, 62–65.

Calderón-Macías, C., M.K. Sen, and P.L. Stoffa, 1998, Automatic NMO correction and velocity estimation by a feedforward neural network, Geophysics, 63(5), 1696-1707.

Luhurbudi, E.C., J. Pulliam, J.A. Austin, Jr., S. Saustrup, and P.L. Stoffa, 1998, Removal of diurnal tidal effects from an ultra-high resolution 3D marine seismic survey on the continental shelf offshore New Jersey, Geophysics, 63(3), 1036-1040.

Sen, M.K., F. Liu, P.L. Stoffa, and J.T. Fokkema, 1998, A unified treatment of free surface multiple elimination methods, Journal of Seismic Exploration, 7, 129-143.

Sen, M.K, P.L. Stoffa and G. Xia, 1998, AVO and seismic waveform inversion in the plane wave domain: Application to gas hydrate data, Geohorizons, 4-12.

Varela, C.L., Paul L. Stoffa, and Mrinal K. Sen, 1998, Background velocity estimation using nonlinear optimization for reflection tomography and migration misfit, Geophysical Prospecting, 46(1), 51-78.

Coffin, M.F., O. Eldholm, P.L. Stoffa, J.A.Austin Jr, 1998, Looking ahead to the future of marine reflection seismology, Eos, Transactions, AGU, 79, 614-615.

Calderón-Macías, Carlos, Mrinal K. Sen, and Paul L. Stoffa, 1997, Hopfield neural networks, and mean field annealing for seismic deconvolution and multiple attenuation, Geophysics, 62(3), 992-1002.

Chunduru, Raghu K., Mrinal K. Sen, and Paul L. Stoffa, 1997, Hybrid optimization methods for geophysical inversion, Geophysics, 62(4), 1196-1207.

Akbar, Faruq E., Mrinal K. Sen, and Paul L. Stoffa, 1996, Pre-stack plane wave Kirchhoff migration in laterally varying media, Geophysics, 61(4), 1068-1079.

Christeson, G.L., Y. Nakamura, K.D. McIntosh, and P.L. Stoffa, 1996, Effect of shot interval on ocean bottom seismograph and hydrophone data, Geophysical Research Letters, 23(25), 3783-3786.

Chunduru, R.K., M.K. Sen, and P.L. Stoffa, 1996, 2-D resistivity inversion by spline parameterization and simulated annealing, Geophysics, 61(1), 151-161.

Jervis, M., M.K. Sen, and P.L. Stoffa, 1996, Pre-stack migration velocity estimation using nonlinear methods, Geophysics, 61(1), 138-150.

Pulliam, Jay, J.A. Austin, Jr., E.C. Luhurbudi, S. Saustrup, and P.L. Stoffa, 1996, An ultra high resolution 3-D survey of the shallow subsurface on the continental shelf of New Jersey, The Leading Edge, 15(7), 839-845.

Sen, M.K., and P.L. Stoffa, 1996, Bayesian inference, Gibbs' sampler and uncertainty estimation in geophysical inversion, Geophysical Prospecting, 44, 313-350.

Zhao, Lian-she, Mrinal K. Sen, Paul L. Stoffa and Cliff Frohlich, 1996, Application of very fast simulated annealing to the determination of crustal structure beneath Tibet, Geophysical Journal International, 125, 355-370.

Chunduru, R.K., M.K. Sen, P.L. Stoffa, and R. Nagendra, 1995, Nonlinear inversion of resistivity profiling data for some regular geometrical bodies, Geophysical Prospecting, 43, 979-1003.

Oh, J., J.A. Austin, Jr., J.D. Phillips, M.F. Coffin, and P.L. Stoffa, 1995, Seaward-dipping reflectors offshore the southeastern U.S.: Seismic evidence for extensive volcanism accompanying sequential formation of the Carolina trough and Blake Plateau basin, Geology, 23(1), 9-12.

Sen, M.K., A. Datta-Gupta, P.L. Stoffa, L.W. Lake, and G.A. Pope, 1995, Stochastic reservoir modeling using simulated annealing and genetic algorithms: A comparative analysis, SPE Formation Evaluation, 49-55.

Zhou, R., F. Tajima, and P.L. Stoffa, 1995, Application of genetic algorithms to constrain near-source velocity structure for the 1989 Sichuan earthquakes, Bull. Seism. Soc. Am, 85, 2, 590-605.

Zhou, R., F. Tajima, and P.L. Stoffa, 1995, Earthquake source parameter determination using genetic algorithms, Geophysical Research Letters, 22(4), 517-520.

Faria, E. and P.L. Stoffa, 1994, Finite difference modeling in transversely isotropic media, Geophysics, 59(2), 282-289.

Faria, E. and P.L. Stoffa, 1994, Traveltime computation in transversely isotropic media, Geophysics, 59(2), 272-281.

Holbrook, W.S., E.C. Reiter, G.M. Purdy, D. Sawyer, P.L. Stoffa, J.A. Austin, Jr., J. Oh, and J. Makris, 1994, Deep structure of the U.S. Atlantic continental margin, offshore South Carolina, from coincident ocean-bottom and multichannel seismic data, Journal of Geophysical Research, 91(B5), 9155-9178.

Shipley, T.H., G.F. Moore, N.L. Bangs, J.C. Moore, and P.L. Stoffa, 1994, Seismically inferred dilatancy distribution, northern Barbados ridge decollement: Implications for fluid migration and fault strength, Geology, 22, 411-414.

Squires, L.J., P.L. Stoffa, and G. Cambois, 1994, Borehole transmission tomography for velocity plus statics, Geophysics, 59(7), 1028-1036.

Wood, W.T., P.L. Stoffa, and T.H. Shipley, 1994, Quantitative detection of methane hydrate through high-resolution seismic velocity analysis, Journal of Geophysical Research, 99(B5), 9681-9695.

Cambois, G., and P.L. Stoffa, 1993, Surface-consistent phase decomposition in the log/Fourier domain, Geophysics, 58(8), 1099-1111.

Jervis, M., P.L. Stoffa, and M.K. Sen, 1993, 2-D migration velocity estimation using a genetic algorithm, Geophysical Research Letters, 20(14), 1495-1498.

Sen, M.K., B.B. Bhattacharya, and P.L. Stoffa, 1993, Nonlinear inversion of resistivity sounding data, Geophysics, 58(4), 496-507.

Cambois, G., and P.L. Stoffa, 1992, Surface-consistent deconvolution in the Log/Fourier domain, Geophysics, 57(6), 823-840.

Sen, M.K., and P.L. Stoffa, 1992, Genetic inversion of AVO, Geophysics, The Leading Edge of Exploration, 11(1), 27-29.

Sen, M.K. and P.L. Stoffa, 1992, Rapid sampling of model space using genetic algorithms: examples from seismic waveform inversion, Geophys. J. Int., 108, 281-292.

Shipley, T.H., K. McIntosh, E. Silver, and P.L. Stoffa, 1992, Three-dimensional seismic imaging of the Costa Rica accretionary prism: Structural diversity in a Small Volume of the Lower Slope, J. of Geophys. Res., 97(B4), 4439-4459.

Squires, L.J., S.N. Blakeslee, and P.L. Stoffa, 1992, The effects of statics on tomographic velocity reconstructions, Geophysics, 57, 353-362.

Stoffa, P.L. and M.K. Sen, 1992, Seismic waveform inversion using global optimization, Journal of Seismic Exploration, 1, 9-27.

Stoffa, P.L., W.T. Wood, T.H. Shipley, G.F. Moore, E. Nishiyama, M.A.B. Botelho, A. Taira, H. Tokuyama, and K. Suyehiro, 1992, Deepwater high-resolution expanding spread and split spread seismic profiles in the Nankai Trough, J. Geophys. Res., 97, 1687-1713.

Lowenthal, D. and P.L. Stoffa, 1991, Synthetic Acoustic Seismograms by Dereverberating Sources, J. Acoust. Soc. Am., 90, No. 2, Pt. 1, 1101-1105.

Moore, G.F., D.E. Karig, T.H. Shipley, A. Taira, P.L. Stoffa, and W.T. Wood, 1991, Structural Framework of the ODP Leg 131 Area, Nankai Trough, Proceedings of the Ocean Drilling Program, Initial Reports, 131, 15, 15-20.

Oh, J., J.D. Phillips, J.A. Austin, Jr., and P.L. Stoffa, 1991, Deep-penetration seismic reflection images across the southeastern United States continental margin, edited by Meissner et al., in Symposium on Deep Seismic Reflection Profiling of the Continental Lithosphere, American Geophysical Union, Geodynamics Series, 22, 225-240.

Sen, M.K., and P.L. Stoffa, 1991, Non-linear One-dimensional Seismic Waveform Inversion Using Simulated Annealing, Geophysics, 56(10), 1624-1638.

Stoffa, P.L. and M.K. Sen, 1991, Nonlinear multiparameter optimization using genetic algorithms: Inversion of plane wave seismograms, Geophysics, 56(11), 1794-1810.

Stoffa, P.L., T.H. Shipley, W. Kessinger, D.F. Dean, R. Elde, E. Silver, D. Reed, and A. Aguilar, 1991, Three-dimensional seismic imaging of the Costa Rica accretionary prism: Field program and migration examples, J. Geophys. Res., 96(B13), 21693-21712.

Austin, J.A., Jr., P.L. Stoffa, J.D. Phillips, J. Oh, D.S. Sawyer, G.M. Purdy, E. Reiter, and J. Makris, 1990, Crustal structure of the Southeast Georgia embayment-Carolina trough: Preliminary results of a composite seismic image of a continental suture(?) and a volcanic passive margin, Geology, 18, 1023-1027.

Moore, G.F., T.H. Shipley, P.L. Stoffa, D.E. Karig, A. Taira, S. Kuramoto, H. Tokuyama, and K. Suyehiro, 1990, Structure of the Nankai Trough Accretionary Zone from Multichannel Seismic Reflection Data, J. Geophys. Res., 95(B6), 8753-8765.

Shipley, T.H., P. L. Stoffa, and D. F. Dean, 1990, Underthrust Sediments, Fluid Migration Paths and Mud Volcanoes Associated with the Accretionary Wedge off Costa Rica: Middle American Trench, J. Geophys. Res., 95(B6), 8743-8752.

Stoffa, P.L., J.T. Fokkema, R.M. de Luna Freires, and W. Kessinger, 1990, Split-step Fourier Migration, Geophysics, 55(4), 410-421.

Diebold, J.B., P.L. Stoffa, and LASE Study Group, 1988, A Large Aperture Seismic Experiment in the Baltimore Canyon Trough, Geological Society of America, 1-2, 387-398.

Johansen, B., O. Eldholm, M. Talwani, P.L. Stoffa, and P. Buhl, 1988, Expanding spread profile at the northern Jan Mayen Ridge, Polar Research, 6, 95-104.

Stoffa, Paul L., 1988, Acquisition and Analysis of Wide-angle Reflection and Refraction Seismic Data, Wagner, H.C., Wagner, L.C., Wan, F.F.H., and Wong, F.L. (eds.) Petroleum resources of China and related subject: Houston, Texas, Circum-Pacific Council for Energy and Mineral Resources Earth Sciences Series, 10, 695-718.

Loewenthal, D., P.L. Stoffa, and E.L. Faria, 1987, Suppressing the Unwanted Reflections of the Full Wave Equation, Geophysics, 52(7), 1007-1012.

Keen, C., I. Reid, J. Woodside, B. Nichols, J.I. Ewing, G.M. Purdy, H. Schouten, J.B. Diebold, P. Buhl, J.C. Mutter, R. Mithal, J. Alsop, P.L. Stoffa, J.D. Phillips, T.J. Stark, and T. O'Brien, LASE Study Group, 1986, Deep Structure of the U.S. East Coast Passive Margin from the Large Aperture Seismic Experiment (LASE), Marine and Petrol. Geol., 3, 234-242.

Stoffa, P.L., 1986, Analysis of Seismic Data in the Tau-p Domain, Revista Brasileira de Geofísica, 4(2), 31-43.

Buhl, P., J.B. Diebold, J.W. Ladd, J.C. Mutter, J.D. Phillips, P.L. Stoffa, R.S. Dietrick, K. Hinz, and H. Meyer, NAT Study Group, 1985, North Atlantic Transect: A Wide Aperture, Two-ship Multichannel Seismic Investigation of the Oceanic Crust, J. of Geophys. Res., 90(B12), 10321-10341.

Gamboa, L.A., M. Truchan, and P.L. Stoffa, 1985, Middle and Upper Jurassic Depositional Environments at the Outer Shelf and Slope of the Baltimore Canyon Trough, AAPG Bulletin, 69(4), 610-621.

Mutter, J.C., P. Buhl, J.B. Diebold, JAW. Ladd, P.L. Stoffa J.D. Phillips, K. Hinz, H. Meyer, and R.S. Dietrick, NAT Study Group, 1985, Multichannel Seismic Images of the Oceanic Crust's Internal Structure: Evidence for a Magma Chamber beneath the Mesozoic Mid-Atlantic Ridge; Geology, 13, 629-632.

Stoffa, P.L., 1985, Analysis and Processing of Wide-Angle Reflection and Refraction Seismic Data in the Tau-p Domain, Advances in Geophysical Data Processing, 2, 81-117.

Carrion, Ph.M., J.T. Kuo, and P.L. Stoffa, 1984, Inversion Method in the Slant Stack Domain using Amplitudes of Reflection Arrivals, Geophysical Prospecting, 32(3), 375-391.

Ladd, J.W., M. Truchan, M Talwani, P.L. Stoffa, P. Buhl, R. Houtz, A. Mauffret, and G. Westbrook, 1984, Seismic reflection profiles across the southern margin of the Caribbean, in the Caribbean-South American Plate Boundary and Regional Tectonics, William E. Bonini, Robert B. Hargraves, and Reginald Shagam, editors, The Geological Society of America, Memoir 162, 153-160.

McCowan, D.W., P.L. Stoffa, and J.B. Diebold, 1984, Fan Filters for Data with Variable Spatial Sampling, IEEE Transactions on Acoustics, Speech, and Signal Processing, ASSP-32(6), 1154-1159.

Mutter, J.C., R. Detrick, and the NAT Study Group, 1984, Multichannel Seismic Evidence for Anomalously Thin Crust at the Blake Spur Fracture Zone, Geology, 12, 534-537.

Mutter, J.C., M. Talwani, and P.L. Stoffa, 1984, Evidence for a Thick Oceanic Crust Adjacent to the Norwegian Margin, Journal of Geophysical Research, 89(B1), 483-502.

Talwani, M., J.C. Mutter, P.L. Stoffa, and O. Eldholm, 1984, Comments on a paper by Smythe et al., entitled, Early Opening History of the North Atlantic, I. Structure and Origin of the Faeroe-Shetland Escarpment, Geophys. J. R. Astr. Soc., 78(2), 627-637.

Martinson, D.G., W. Menke, P. Stoffa, 1984, An inverse approach to signal correlation – reply, J Geophysical Research 89(B4), 2501-2504.

Stoffa, P.L., P. Buhl, and J.B. Diebold, 1983, The Seismic Reflection/Refraction Method: Wide Aperture Data Obtained in Multiship Experiments, in: Structure and Development of the Greenland-Scotland Ridge: New Methods and Concepts, Plenum Press, New York, 219-255.

Stoffa, P.L., and A. Ziolkowski, 1983, Seismic Source Decomposition, Geophysics, 48(1), 1-11.

Buhl, P., J.B. Diebold, and P.L. Stoffa, 1982, Array Length Magnification Through the Use of Multiple Sources and Receiving Arrays, Geophysics, 47(3), 311-315.

Martinson, D., W. Menke, and P.L. Stoffa, 1982, An Inverse Approach to Signal correlation, Journal of Geophysical Research, 87(B6), 4807-4818.

Mutter, J.C., M. Talwani, and P.L. Stoffa, July 1982, Origin of Seaward-Dipping Reflectors in Oceanic Crust off the Norwegian Margin by "Subaerial Sea-floor Spreading," Geology, 10, 353-357.

Stoffa, P.L., and J.B. Diebold, 1982, Seismic Signal Processing, Trends and Perspectives in Signal Processing, 2(3).

Stoffa, P.L., J.B. Diebold, and P. Buhl, 1982, Velocity Analysis for Wide Aperture Seismic Data, Geophysical Prospecting, 30, 25-57.

Talwani, Manik, P.L. Stoffa, P. Buhl, and C. Windisch, 1982, Seismic Multichannel Towed Arrays in the Exploration of the Oceanic Crust, Tectonophysics, 81, 273-300.

Diebold, J. B., and P.L. Stoffa, 1981, The Traveltime Equation Tau-p Mapping and Inversion of Common Midpoint Data, Geophysics, 46(3), 238-254.

Diebold, J.B., P.L. Stoffa, P. Buhl, and M. Truchan, 1981, Venezuela Basin Crustal Structure, Journal of Geophysical Research (Red Book), 86(B9), 7901-7923.

Sheridan, R.E., J.T. Crosby, G.M. Bryan, and P.L. Stoffa, 1981, Stratigraphy and Structure of the Southern Blake Plateau, Northern Florida Straits and Northern Bahamas Platform from Multichannel Seismic Reflection Data, American Association of Petroleum Geologists Bulletin, 65(12), 2571-2593.

Stoffa, P.L., P. Buhl, J.B. Diebold, and F. Wenzel, 1981, Direct Mapping of Seismic Data to the Domain of Intercept Time and Ray Parameter: A Plane Wave Decomposition, Geophysics, 46(3), 255-267.

Stoffa, P.L., J.B. Diebold, and P. Buhl, 1981, Inversion of Seismic Data in the Tau-p Plane, Geophysical Research Letters, 8(8), 869-872.

Stoffa, P.L., A. Mauffret, M. Truchan, and P. Buhl, 1981, Sub-B" Layering in the Southern Caribbean: The Aruba Gap and Venezuela Basin, Earth and Planetary Science Letters, 3, 131-146.

Wenzel, F., P.L. Stoffa, and P. Buhl, 1981, Seismic Modeling in the Domain of Intercept Time and Ray Parameter, IEEE Transactions on Acoustics, Speech and Signal Processing, ASSP-30(3), 406-423.

Herron, T.J., P.L. Stoffa, and P. Buhl, 1980, Magma Chamber and Mantle Reflections - East Pacific Rise, Geophysical Research Letters, 7(11), 989-992.

Stoffa, P.L., P. Buhl, T.J. Herron, T.K. Kan, and W.J. Ludwig, 1980, Mantle Reflections Beneath the Crestal Zone of the East Pacific Rise from Multi-channel Seismic Data, Marine Geology, 35, 83-97.

Stoffa, P.L., and P. Buhl, 1979, Two-Ship Multichannel Seismic Experiments for Deep Crustal Studies: Expanded Spread and Constant Offset Profiles, Journal of Geophysical Research, 84, 7645-7660.

Herron, T.J., W.J. Ludwig, P.L. Stoffa, T.K. Kan, and P. Buhl, 1978, Structure of the East Pacific Rise Crest from Multichannel Seismic Reflection Data, Journal of Geophysical Research, 83(B2), 798-804.

Sheridan, R.E., C.C. Windisch, J.I. Ewing, and P.L. Stoffa, 1978, Structure and Stratigraphy of the Blake Escarpment Based on Seismic Reflection Profiles, Geological and Geophysical Investigations of Continental Margins, AAPG Memoir 29.

Stoffa, P. and M. Talwani, 1978, Exploring the crust beneath the oceans, Lamont-Doherty Geological Observatory Yearbook, 5, 23-29.

Tatham, Robert H., and P.L. Stoffa, 1976, V_p/V_s – A Potential Hydrocarbon Indicator, Geophysics, 41(5), 837-849.

Stoffa, P.L., P. Buhl, and G.M. Bryan, 1974, Cepstrum Aliasing and the Calculation of the Hilbert Transform, Geophysics Short Note, 39(4), 543-544.

Stoffa, P.L., P. Buhl, and G.M. Bryan, 1974, The Application of Homomorphic Deconvolution to Shallow-Water Marine Seismology - Part I: Models, Geophysics, 39(4), 401-416.

Buhl, P., P.L. Stoffa, and G.M. Bryan, 1974, The Application of Homomorphic Deconvolution to Shallow-Water Marine Seismology - Part II: Real Data, Geophysics, 39(4), 417-426.

CLIMATE RELATED RESEARCH PAPERS

Mu, Q., C.S. Jackson, and P.L. Stoffa, 2004, A multivariate empirical-orthogonal-function-based measure of climate model performance. J Geophys Res 109, D15101.

Xia, Y., Z.-L. Yang, P.L. Stoffa, and M.K. Sen, 2005, Using different hydrological variables to assess the impacts of atmospheric forcing errors on optimization and uncertainty analysis of the CHASM surface model at a cold catchment. J Geophys Res, 110, D01101, doi:10.1029/2004JD005130.

Xia, Y., Z.-L. Yang, P.L. Stoffa, and M.K. Sen, 2005, Optimal parameter and uncertainty estimation of a land surface model: Sensitivity to parameter ranges and model complexities. Advances Atmospheric Science, 22(1), 142-157.

Xia, Y., M.K. Sen, C. Jackson, and P.L. Stoffa, 2004, Multidataset study of optimal parameter and uncertainty estimation of a land surface model with Bayesian stochastic inversion and multicriteria method, J Applied Meteorology, 43(10), 1477-1497.

Jackson, C., M.K. Sen, and P.L. Stoffa, 2004, An efficient stochastic Bayesian approach to optimal parameter and uncertainty estimation within climate system models, J of Climate, 17, 2828-2841.

Xia, Y., Z.-L. Yang, C. Jackson, P.L. Stoffa, and M.K. Sen, 2004, Impacts of data length on optimal parameter and uncertainty estimation of a land surface model. J Geophys Res, 109, No. D7, D07101 10.1029/2003JD004419.

Xia, Y., P.L. Stoffa, C. Jackson, and M. Sen, 2003, Effect of forcing data errors on calibration and uncertainty estimates of the CHASM model: a multi-dataset study. Observations, Theory, and Modeling of Atmospheric and Oceanic Variability, World Scientific Series on Meteorology of East Asia, Vol 3, 340-355, World Scientific Publishing Corporation, Singapore.

Jackson, C., Y. Xia, M.K. Sen, and P.L. Stoffa, 2003, Optimal parameter and uncertainty estimation of a land surface model: A case study using data from Cabauw, Netherlands, J. Geophysical Research, 108(D18), 4583.

PATENTS

Sen, M.K., P.L Stoffa, and F. Liu, 2003, Angle dependent surface multiple attenuation for two-component marine bottom sensor data, US 6,654,693 B2 granted on 11/25/03.

Ziolkowski, A.M., and P.L. Stoffa, 1984, Determination of far field signatures, for instance of seismic sources, US 4,476,550.

BOOKS & BOOK CHAPTERS

Stoffa, P.L., M.K. Sen, R.K. Seifoullaeu, R.C. Pestana, 2010, Plane Wave Seismic Data: Parallel and adaptive Strategies for Velocity Analysis and Imaging, in Parashar, M., X. Li, S. Chandra, Eds, *Advanced Computational Infrastructures for Parallel/Distributed Adaptive Applications,* Wiley Publishers.

Jackson, C.S., M.K. Sen, P.L. Stoffa, and G. Huerta, 2010, Data Directed Importance Sampling for Climate Model Parameter Uncertainty Estimation, *in* Parashar, M., X. Li, S. Chandra, Eds., *Advanced Computational Infrastructures for Parallel/Distributed Adaptive Applications,* Wiley Publishers

Sena, A.R., P.L. Stoffa, M.K. Sen, 2005, Migration of ground penetrating radar data in heterogeneous and dispersive media, *in* Oluic, M., Ed., *New Strategies for European Remote Sensing: Proceedings of the 24th Symposium of the European Association of Remote Sensing Laboratories, Dubrovnik, Croatia, 25-27 May 2004*, 711-718.

Sen, M.K., P.L. Stoffa, R. Seifoullaev, and J.T. Fokkema, 2003, Numerical and field investigation of GPR: Toward an Airborne GPR, *Subsurface Sensing Technologies and Applications*, 4(1), 41-60.

Xia, G., M.K. Sen, and P.L. Stoffa, 1997, AVO analysis of Mobil offshore data by a linearized inversion in the τ-p domain, Chapter 9, *AVO Inversion of Mobil Data Set*, SEG Press, 167-185.

Sen, Mrinal K., and Paul L. Stoffa, 1996, (Book Review) *Wavelets in Geophysics*, Efi Foufoula-Georgiou and Praveen Kumar (eds.), in Mathematics of Computation 65, 436-438.

Sen, M.K., and P.L. Stoffa, 1995, *Global Optimization Methods in Geophysical Inversion*, as part of Advances in Exploration Geophysics series, Elsevier Publishing Co.

Diebold, J.B. and Stoffa, P.L., 1991, The traveltime equation, tau-p mapping, and inversion of common midpoint data, *in* Gardner, G. H. F. and Lu, L., Ed., *Slant-stack processing*, Soc. Expl. Geophys., 151-167.

Stoffa, P.L., Buhl, P., Diebold, J.B. and Wenzel, F., 1991, Direct mapping of seismic data to the domain of intercept time and ray parameter - A plane-wave decomposition, *in* Gardner, G. H. F. and Lu, L., Ed., *Slant-stack processing*, Soc. Expl. Geophys., 197-209.

Stoffa, Paul L. (editor), 1989, *Tau-p: A Plane Wave Approach to the Analysis of Seismic Data*, Kluwer Academic Publishers Group, Dordrecht, The Netherlands.

Buhl, P., Stoffa, P.L. and Bryan, G.M., 1978, The application of homomorphic deconvolution to shallow-water marine seismology - part II - Real data, *in* Webster, G. M., Ed., *Deconvolution*, Soc. Expl. Geophys., 473-482.

Stoffa, P.L., Buhl, P., Bryan, G.M., Stoffa, P.L., Buhl, P. and Bryan, G.M., 1978, The application of homomorphic deconvolution to shallow-water marine seismology - part I - Models, *in* Webster, G.M., Ed., *Deconvolution*, Soc. Expl. Geophys., 457-472.

Talwani, M., C.C. Windisch, P.L. Stoffa, P. Buhl, R.E. Houtz, 1977, Multichannel seismic study in the Venezuelan basin and the Curacao Ridge, *in* Talwani, M., Ed., *Island Arcs, Deep Sea Trenches and Back-Arc Basins,* Maurice Ewing Series, Vol 1, American Geophysical Union, 83-98.

TECHNICAL REPORTS

Sen, M.K., P.L. Stoffa, and R. Seifoullaev, 2001, Airborne GPR for the detection of underground facilities, Report to the Institute of Advanced Technology, University of Texas at Austin.

Sen, Vikramaditya, Paul L. Stoffa, Donald D. Blankenship and Ian W.D. Dalziel, 1997, Results from the ANTALITH field tests: A pilot program for seismic investigation in central-west Antarctica, UTIG TR-172.

Stoffa, P.L., M.K. Sen, and V. Sen, 1996, Parallel Algorithms for Automatic Estimation of Seismic Velocities, Report to Cray Research, Inc., UTIG TR-147.

Tanis, M.C., J.T. Fokkema, P.L. Stoffa, M.K. Sen, 1996, Prestack split-step Fourier depth migration with DSR, TU Delft Technical Report.

Sen, Mrinal K., Paul L. Stoffa, and Carlos Calderon-Macias, 1995, Artificial Neural Networks for Inversion and Interpretation of Seismic Data, Report to Cray Research, Inc., UTIG TR-135.

Tanis, M.C., A.W. Mulder, P.L. Stoffa, M.K. Sen, and J. Fokkema, 1995, Pre-stack Split-step Fourier Depth Migration in the p_o-p_s Domain, UTIG TR-133.

Jervis, M., M.K. Sen, P.L. Stoffa, 1994, 3-D Traveltime Calculations, UTIG TR-131

Wood, W.T., P.L. Stoffa, and T.H. Shipley, 1991, Detecting Clathrate Concentrations Through High Resolution Seismic Velocity Analysis of Shallow Sediments, Report to U.S. Geological Survey, UTIG TR-110.

Stoffa, P.L., January 1989, University Partnership Program, Report to Landmark Graphics Corporation, UTIG TR-99.

Stoffa, P.L., 1989, Multichannel Downhole Seismic Modelling and Processing.

Stoffa, P.L., and Warren T. Wood, January 1989, Velocity Analysis and Pre-stack Reflection Migration in the Tau-p Domain, Report to Cray Research, Inc., UTIG TR-100.

Stoffa, P.L., January 1988, Split-step Fourier Modeling and Migration, Report to Cray Research, Inc., UTIG TR-101.

INVITED SHORT COURSES

Parallel Processing of Seismic Data, August 2-6, 2004, CPGG/UFBA – Research Center in Geophysics and Geology, Federal University of Bahia, Salvador, Brazil.

Parallel Computing for Seismic Processing, August 23-25, 2000, CPGG/UFBA – Salvador, Brazil.

Practical Approaches to Uncertainty Estimation in Geophysical Inversion, Sociedade Brasileira de Geofisica, Sao Paulo, Brazil, September 1997.

Nonlinear Optimization Methods in Geophysics, March 15–17, 1993, Universidade Federal da Bahia, sponsored by the Sociedade Brasileira de Geofisica, Salvador, Brazil.

SYMPOSIA

Oceanography: The Making of a Science, People, Institutions, and Discovery, Sponsored by the Office of Naval Research, Texas A&M University, February 2000.

High Performance Parallel Computing Symposium, Cost effective parallel seismic computing using a PC cluster, Applied Research Laboratories, December 1999.

The Future of Exploration Geophysics: Meeting the Needs of Industry and Academics, UT Department of Geological Sciences, December 1999.

WORKSHOPS/FORUMS

Time Evolution of the Wave Equation Using the Rapid Expansion Method for Highly Accurate TRM, Invited Speaker, EAGE Subsalt Imaging: Focus on Azimuth Workshop, November 15-18, 2009, Cairo.

RTM Problems and Promises Workshop, workshop co-convenor, SEG Annual Meeting, October 29, 2009, Houston.

Applications (Session Chair), SEG Annual Meeting, October 28th, 2009, Houston Stress Effect and Compaction Surveillance

Using 4D Seismic (Session Chair), SEG Annual Meeting, October 27th, 2009, Houston

Seismic Imaging and Velocity Analysis: Current Status and Future Directions, Invited Speaker, Gaussian Beams with Application to Seismology Workshop, November 29, 30, and December 3, 2007, sponsored by Center for Numerical Analysis, ICES, The University of Texas at Austin.

Velocity Analysis for Depth Imaging, co-chair, Ninth International Congress of the Brazilian Geophysical Society, September 2005, Salvador, Brazil

Interactive Workshop to address Current Problems in Acquisition, Processing and Interpretation of Multicomponent Seismic Data (follow-up workshop to the EDGER Workshop held December 2003 at Shell in Houston), December 2004, Houston.

3D Parallel Processing Workshop, Cost effective parallel seismic computing using a PC cluster, Brazilian Geophysical Society, August 1999, Rio de Janeiro, Brazil.

Workshop on Wavelet Estimation and Lithology Inversion, Society of Exploration Geophysicists, SA and GA: Tools for Estimating the Macro-model, Paul L. Stoffa and Mrinal K. Sen, 1996.

Workshop on "Comparison of seismic inversion methods on a single real data set," AVO analysis of Mobil data by a linearized inversion in the τ-p domain, Xia, Ganyuan, Mrinal K. Sen, and Paul L. Stoffa, 1996.

EAGE Workshop on Removal of Multiples and Free Surface Effects in Marine Seismic Data, May 27, 1995, Glasgow, Scotland.

NATO Workshop on: Rifted Ocean-Continent Boundaries, May 11-14, 1994, Mallorca, Spain.

EDGE/MARGINS Workshop to review recent progress in continental margin research and outline outstanding scientific targets that are addressable seismically, October 1993, Woods Hole Oceanographic Institution, Woods Hole, Massachusetts.

Workshop on Shallow Water Acoustics, April 24-26, 1991, sponsored by the Office of Naval Research, Woods Hole Oceanographic Institution, Woods Hole, Massachusetts.

Gas Hydrate Workshop, April 23-24, 1991, sponsored by U.S. Department of Energy, Morgantown, U.S. Geological Survey and Naval Research Laboratory, Reston, Virginia.

A High Resolution 3D Survey, Invited Speaker, April 9-10, 1991, Workshop on High Resolution Offshore Seismic for Defense Purposes, sponsored by Naval Oceanographic and Atmospheric Research Laboratory, University of Houston, Houston, TX.

Workshop on the Antarctic International Lithosphere Project, Invited Speaker, July 19-20, 1989, National Academy of Science, Washington, D.C.

Geophysics and Computers - A Look to the Future, Co-Convener, April 27-28, 1989, Houston Area Research Center, The Woodlands, TX.

Exploration of Deep Continental Margin Crust with Closely Spaced Shots and Receivers, Co-convener, February 27-28, 1989, Houston Area Research Center, The Woodlands, TX.

Continental Margins Workshop, Participant, November 20-23, 1988, National Research Council, Irvine, CA.

INVITED PAPERS

Cost effective parallel seismic computing using a PC cluster, November 1998, Phillips Petroleum Company, Bartlesville, OK.

Migration and Inversion of Seismic Data, May 1994, NATO/ARW Advanced Research Workshop on Rifted Ocean - Continent Boundaries, Mallorca, Spain.

Tau-p: An Alternative Domain for Filtering, Velocity Analysis and Imaging, 1989, Recent Advances and the Road Ahead Symposium, Proceedings of the 59th Annual Meeting of the Society of Exploration Geophysicists, Dallas, TX.

Pre-stack Velocity Analysis in the Tau-p Domain, 1987, Research Workshop, 57th Annual Meeting of the Society of Exploration Geophysicists, New Orleans, LA.

Velocity Analysis in the Tau-p Domain, 1987, Proceedings of the 57th Annual Meeting of the Society of Exploration Geophysicists, New Orleans, LA.

INVITED LECTURES

Inversion for reservoir parameters using both time-lapse seismic and well production data, March 2008, Dallas Geophysical Society, Dallas, TX

Inversion for reservoir parameters using both time-lapse seismic and well production data, August 2007, Universidade Federal da Bahia, Salvador, Brazil.

Resolution of seismic and reservoir models, September 2006, Exploration Geophysics Seminar, The University of Texas at Austin.

An analysis of flow-simulation scales and seismic response, August 2006, Universidade Federal da Bahia, Salvador, Brazil.

An analysis of flow-simulation scales and seismic response, February 2006, MTEM Limited, Edinburgh, Scotland.

Double plane wave Kirchhoff depth migration, February 2006, MTEM Limited, Edinburgh, Scotland.

Transient EM imaging using split step Fourier methods, February 2006, MTEM Limited, Edinburgh, Scotland.

Flow/Petrogeophysics/Geophysics Integration – Instrumented Oilfield, October 2005, Fifteenth Annual Industrial Affiliates Meeting, Center for Subsurface Modeling, The University of Texas at Austin.

Double plane wave Kirchhoff depth migration, September 2005, Universidade Federal da Bahia, Salvador, Brazil.

Research projects at The University of Texas Institute for Geophysics, April 2005, Department of Earth Science Seminar Series, Rice University, Houston, TX

Research projects at The University of Texas Institute for Geophysics, February 2005, Society of Petroleum Engineers, Austin

THRUST S1: Energy testbeds, Janaury 2005, Center for Geosystems Engineering Management (C-GEM) ERC Meeting, The University of Texas at Austin.

Flow/geophyiscs integration, 2004, Fourteenth Annual Industrial Affiliates Meeting, Center for Subsurface Modeling, The University of Texas at Austin.

Status of exploration seismology at other UT research units (UT Institute for Geophysics), EDGER Forum Symposium - Successful Applications of Multicomponent Seismic Data, February 2004, Jackson School of Geosciences, The University of Texas at Austin

Pre stack 3D seismic modeling, 2003, Thirteenth Annual Industrial Affiliates Meeting, Center for Subsurface Modeling, The University of Texas at Austin.

Stoffa, P.L., M. Sen, R. Seifoullaev, R. Pestana, and M. Tanis, 2003, Seismic imaging and velocity analysis: Current status and future directions, SIAM Conference on Mathematical and Computational Issues in the Geosciences, Austin, Texas, 6.

Research projects at The University of Texas Institute for Geophysics, October 2002, Bureau of Economic Geology's Fall 2002 Technical Seminar Series, The University of Texas at Austin.

Research in subsurface modeling and geophysics, September 2002, The Institute for Information Science and Technology (IIST) Review Panel Committee's presentation to the O'Donnell Foundation's site visit, The University of Texas at Austin.

Migration velocity analysis: a problem for non linear optimization, August 2002, Universidade Federal da Bahia, Salvador, Brazil.

Geophysical research projects at the University of Texas Institute for Geophysics, August 2002, Petrobras, Rio de Janeiro, Brazil.

Estimating pre-critical seismic data from post-critical seismic data, December 2001, University of Houston.

Earth Science Research at The University of Texas Institute for Geophysics, February 2001, Lakeway Mens Breakfast Club, Lakeway, TX.

Earth Science Research at The University of Texas Institute for Geophysics, Netherlands Research Centre for Integrated Solid Earth Science Annual Assembly, December 2000, Amsterdam, The Netherlands.

Research at The University of Texas Institute for Geophysics, October 2000, Bureau of Economic Geology, UT-Austin.

UTIG: Global-Scale Basic Earth Science Research Using Geophysical Methods, March 1999, Defense Advanced Research Projects Agency, Washington, DC.

Dip Selection 2-D Multiple Attenuation Operators in Plane Wave Domain, June 1998, Delft University of Technology, The Netherlands.

Migration Velocity Analysis, July 1996, Western Atlas, Houston, TX.

Migration Velocity Estimation, May 1996, Rice University, Houston, TX.

Linear Inversion Combined with Nonlinear Optimization to Speed Convergence for Geophysical Inverse Problems, March 1996, Instituto de Geociências, Universidade Federal da Bahia, Salvador, Brazil.

Prestack Migration Velocity Analysis using Nonlinear Optimization, March 1995, German Geophysical Society, Hamburg, Germany.

Pre-stack migration velocity analysis using VFSA: A comparison of migrated misfit and reflection tomography, August 1994, Instituto de Geociências, Universidade Federal da Bahia, Salvador, Brazil.

Nonlinear Optimization Methods in Geophysics, June 1994, GeoForschungs Zentrum Potsdam, University of Potsdam, Germany.

Nonlinear Optimization Methods in Geophysics, June 1994, Norsk Hydro, Statoil and the University of Bergen, Norway.

Nonlinear Optimization Methods in Geophysics, June 1994, University of Trondheim, Norway.

Nonlinear Optimization Methods in Geophysics, May 1994, Delft University of Technology, The Netherlands.

Geophysical applications of Global Optimization Methods, February 1994, Rice University, Houston, TX.

Seismic Waveform Inversion Using Global Optimization Methods: Examples Using Genetic Algorithms, November 1993, Compagnie Générale de Géophysique, Massy, France.

Seismic Waveform Inversion Using Global Optimization Methods: Examples Using Genetic Algorithms, Petroleum Science and Technology Symposium, October 1992, Cray Research, Inc., Houston, TX.

Seismic Waveform Inversion Using Global Optimization Methods, February 1992, University of New Orleans.

Seismic Waveform Inversion Using Global Optimization Methods, August 1991, Phillips Petroleum Company, Bartlesville, OK.

Experience With a Frequency Wavenumber Migration Algorithm on Parallel Computer Architectures, February 1991, MCC Workshop on Parallel Applications in the Oil Industry, Austin, TX.

Experiences with Supercomputers in Reflection Seismology, November 1989, IEEE-ACM Supercomputing Conference '89, Reno, NV.

3-D Laterally variable phase shift migration with examples from offshore Costa Rica, April 1989, Atlantic Richfield Company, Plano, TX.

Recent Seismic Programs at The University of Texas Institute for Geophysics: Costa Rica 3D, Nankai Trough high resolution 2 ship program, Carolina Trough, March 1989, Rice University, Houston, TX.

Seismic Reflection Programs at the University of Texas at Austin and 3D Survey off Costa Rica, March 1988, The University of Houston, Houston, TX.

Velocity Analysis for Dipping Structures, April 1987, Phillips Petroleum Company, Bartlesville, OK.

Acquisition and Analysis of Wide Angle Reflection and Refraction Seismic Data, February 1985, Geophysical Society of Tulsa, Tulsa, OK.

Acquisition and Analysis of Wide Angle Reflection and Refraction Seismic Data, November 1984, Shell Development Company, Houston, TX.

Acquisition and Analysis of Wide Angle Reflection and Refraction Seismic Data, November 1984, University of Houston, Houston, TX.

PROPOSAL REVIEW PANEL

Peer review panel Small Business Innovation Research/Small Business Technology Transfer, National Science Foundation, September 2000.

Department of Geological Sciences Activities

COMMITTEES

1988 - 2000	Admissions and Support Committee
1983 - present	Budget Council
1989 - 1992	Ad Hoc - Department of Geological Sciences/Institute for Geophysics Relations

COURSES TAUGHT

<u>Fall Semester</u>

GEO 325K/383D - Computational Methods in Geological Sciences

GEO 391- Seismic Migration and Inversion I

GEO 394 - Research in Geophysics

<u>Spring Semester</u>

GEO 384S - Data Processing II

GEO 391- Seismic Migration and Inversion II

GEO 394 - Research in Geophysics

GRADUATE SUPERVISION

<u>Currently Co-supervisor of the following PhD candidates:</u>

Will Burnett
A General Transform for Reversible Seismic Data Processing by Nonstationary Filtering
Advisors: Stoffa / Fomel, Ent. Fall '07

Vladimir Bashkardin
Slope tomographic method in an Eulerian framework for seismic macro-velocit estimation
Advisors: Stoffa / Fomel, Ent. Fall '07

Alireza Shahin
Time Lapse Seismic Response to Production
Advisors: Stoffa / Tatham, Ent. Spring '06

Currently serving on the following PhD committees:

Mohammed Alhussain
Frequency Dependent Anisotropy

Xiaolei Song
.....

Jamin Greenbaum
Grounding line change in the Ross Sea, Antarctica (estimated 2012)

Supervised the following PhD candidates:

Chunlei Chu	Seismic modeling and imaging with the Fourier method: Numerical analyses and parallel implementation strategies December 2009
Armando Sena	Modeling and Imaging of Ground Penetrating Radar Data December 2004
Imtiaz Ahmed	Prestack Imaging and Velocity Analysis Offshore Nicaragua – December 2003
Abdulaziz Al-Aslani	3D Seismic Surface Multiple Attenuation: Algorithms and Analysis – Fall 2001
Junru Jiao	Residual Migration Velocity Analysis in the Plane Wave Domain: Theory and Applications – May 2001
Jean-Paul van Gestel	Structure and Tectonics of the Puerto Rico-Virgin Islands Platform and Multi-configuration Ground Penetrating Radar Data – May 2000
Vikramaditya Sen	A Seismic Survey in Antarctica, Parallel Schemes for Seismic Migration and Target Oriented Velocity Analysis – December 1998
Mehmet Tanis	Prestack Split-step Fourier Depth Migration Algorithms and Parallel Implementations on T2E – December 1998
Carlos Varela	Automated Background Velocity Estimation in 2D Laterally Varying Media – May 1996
Michael Jervis	Optimization methods for 2-D pre-stack migration velocity estimation – August 1993
Eduardo Lopes de Faria	Modeling, migration and focusing analysis in transversely isotropic media – August 1993

Jinyong Oh	A Deep-Penetration Seismic Study and Structural Interpretation of the Southeastern United States Continental Margin – August 1993
Livia J. Squires	Reducing Artifacts in Tomographic Velocity Reconstruction – May 1993
Warren T. Wood	Least Squares Inversion of Field Seismic Data for an Elastic 1-D Earth – May 1993
Guillaume Cambois	Surface Consistent Deconvolution in the Log/Fourier Domain – May 1991

Co-supervised the following PhD candidates:

Chaoshun Hu	Stochastic tomography and Gaussian beam depth migration – December 2008
Dhananjay Kumar	Analysis of Multicomponent Seismic Data from the Hydrate Ridge, Offshore Oregon - May 2005
Anubrati Mukherjee	Seismic Waveform Inversion in Anisotropic Media – May 2002
Georgios Tsoflias	Characterization of Near-Surface Hydrogeologic Properties Through High Frequency Electromagnetic Surveying – Fall 1999
Faqi Liu	Free Surface Multiple Elimination Operators and their Applications – August 1999
Faruq Akbar	Pre-stack 2-D and 3-D Depth Migration in the τ-p Domain – August 1997
Carlos Calderon-Macias	Artificial Neural Systems for Interpretation and Inversion of Seismic Data – August 1997
Ganyuan Xia	Prestack Migration and AVO Inversion – August 1997
Raghu Chunduru	Global and Hybrid Optimization in Geophysical Inversion – May 1996

Served on the following PhD committees:

Tiancong Hong Uncertainties in Reservoir Characterization Using Seismic Data – May 2008

Irina Filina Geophysical investigations of subglacial lakes Vostok and Concordia, East Antarctica – December 2007

Rishidev Bansal Seismic Characterization of Fractured Reservoirs – May 2007

Jason E. Gumble Complete Anisotropic Analysis of Three Component Seismic Data Related to the Marine Environment and Comparison to Nine Component Land Seismic Data – December 2006

Chandan Kumar Parameter Inversion for Seismic Anisotropy – December 2006

Celso A.M. Neto Migração Pre-Empilhamento em Profundidade Utilizando Ondas Planas – August 2004 (Universidade Federal da Bahia, Salvador, Bahia, Brazil)

Chengshu Wang Joint Inversion of P- and S-waves: Estimation of Seismic Velocity Structure and Density of Gas Hydrate-bearing Sediments, Offshore Oregon – June 2003

Eric M. Matzel Seismic Structure of the Upper Mantle Beneath Crotons – April 2002

J.W. Schoolmeesters	Three-Dimensional Processing of Marine Seismic Data by Spectral Decomposition, Delft University of Technology – Spring 2001
Salem G. Al Juhani	Data Integration for Reservoir Characterization: A Central Arabian Oil Field – May 1999
Rafael E. Banks	Time Harmonic Field Electric Logging – August 1998
Barker, Daniel H.N.	Geophysical Investigation of an Extending Marginal Basin in a Convergent Plate Margin Setting – Bransfield Strait/Antarctic Peninsula: it's Crustal Structure, Tectonic Evolution, and Implications for Andean Orogenesis – May 1997
Duk Kee Lee	The Upper Mantle Structure Beneath the Colorado Rocky Mountains and the East Pacific Rise – May 1996
Ran Zhou	High Velocity Zone Beneath the Southern Tibetan Plateau and Fast Global Optimization of Earthquake Source Parameters – May 1996
Xiao-Yang Ding	Seismic Structure of the Deep Kurile Subduction Zone – May 1995
György Marton	Jurassic Evolution of the Southeastern Gulf of Mexico – May 1995

James Layton Simmons	Practical Seismic Inversion – May 1993
Steven J. Cardimona	Studies in Seismic Scattering – May 1992
Mark James Graebner	Generalized Linear Inversion in a Transversely Isotropic Solid – May 1991
Nikolaos Bernitsas	Traveltime Inversion, Modeling and Interpretation of Fault Surface Reflections – December 1990
Christopher Jude Finn	Travel Time Inversion in Three-Dimensional, Inhomogeneous Media – December 1990
William Corso	Seismic Stratigraphy of Lower Cretaceous Carbonate Platforms, Florida and Campeche Banks – December 1987
Tracy Joseph Stark	Information from Deep Water Seismic Reflection Data: LASE Line 2 – August 1986

<u>Supervised the following MA candidates:</u>

Ali M. Aljadher	Imaging of R3 Profile of Chicxulub Offshore Seismic Data, For Better Mapping the Deformation Pattern of the Chicxulub Impact Crater – Spring 2008
Hao Xun	A 3-D Seismic Investigation of the Distribution of Gas Hydrate and Free Gas and Their Relationship to the Structure and Stratigraphy of Hydrate Ridge – Summer 2007
Saleh Al-Saleh	Processing and imaging of multi-component ocean bottom cable data in plane wave domain – Summer 2001
John Stachowiak	The Nature and Causes of Backstop Deformation in the Northern Lesser Antilles Subduction Zone – May 2000
Stefan Paul Muszala	Magnetics of the Puerto Rico Trench and Aeromagnetics of the North Slope of Alaska – December 1998
Matt Ralston	Analysis of the COCORP Texas Line – May 1994
Mehmet C. Tanis	A Comparison of Migration Methods in Laterally Varying Media – May 1993

Hugh W. Winkler	Some Strategies for Linear Inversion – May 1992
Walter P. Kessinger, III	2-D and 3-D Migration Comparisons from the Costa Rica 3-D Survey – May 1991
Paul S. Riherd	Seismic Investigations of Two Proposed Nuclear Waste Repositories – May 1990
Warren T. Wood	One and Two-Dimensional Velocity Inversion in the Domain of Intercept Time and Ray Parameter: An Example in the Nankai Trough – August, 1989

<u>Co-supervised the following MA candidates:</u>

Stephan Clark	Non-volcanic Rifted Margin, Offshore Portugal: An Integrated MCS and OBS Study – December 1999
Lis Könnecke	Early Development of the Southern Kerguelen Plateau (Indian Ocean) from Ocean Bottom Seismograph and Multichannel Seismic Reflection Data – December 1997
Eddy C. Luhurbudi	Processing a High Resolution 3D Survey of the Shallow Subsurface on the Continental Shelf of New Jersey – May 1997
Kriyanti Setiyono	A Comparative Study of Multiple Suppression Methods – May 1996

<u>Served on the following MA committees:</u>

Trevor J Aitken	Cenozoic Stratigraphic and Tectonic History of the Grenada and Tobago Basins as Determined From Marine Seismic Data, Wells, and Onland Geology - 2005
David L. Gorney	Chronology of Cenozoic Tectonic Events in Western Venezuela and the Dutch Antilles Based on Integration of Offshore Seismic Reflection Data and Onland Geology - 2005
Erick Leuro	GIS compilation of geologic, geophysical, and remote sensing data from St. Elias Mountains, southern Alaska - 2004
Paulo Ricardo Santos	Inversão Elãstica 1-D Utilizando Algorithmos Genéticos Universidade Federal da Bahia – December 1997
Timothy J. Hoar	Altimetric Observations of Oceanic Response to Atmospheric Forcing – December 1993

While at the Universidade Federal da Bahia, Salvador, Bahia, Brazil (July 1985–July 1986) as a Visiting Professor, I supervised 12 MSc. students and the following PhD Candidates:

Raimundo Mesquita de Luna Freire	Migração Por Mudança De Fase Em Duas Etapas (Defense – December, 1987)
Reynam Da Cruz Pestana	Deconvoluçã Na Presença De Ruido Coerente De Alta Amplitude ("Groundroll")(Defense – December, 1987)

Institute for Geophysics Activities

COMMITTEES

9/94 - 2008	Director
1990 - 1995	UT/TAMU Joint Advisory Council for Marine Programs
1989 - 1991	Ad Hoc - Dept. of Geological Sciences/Institute for Geophysics Relations
1988 - 1994	Associate Director
1988 - 1990	Ad Hoc - New Ship
1988 - 1994	Ship & Equipment (Chairman, 1990 - 92)
1983 - present	Budget Council
1983 - 1994	Science Council (Chairman, 1984)
1983 - 1987	Computer Committee

<u>Postdoctoral Fellows Sponsored:</u>

Armando Sena University of Texas at Austin	November 2007 -
Long Jin China Petroleum University	June 2006 – August 2008
Sanjeev Kumar Kurukshetra Univeristy, India	October 2006 – February 2007
Youlong Xia University of Munich	December 2001 – December 2003
Qiaozhen Mu Peking University	October 2001 – November 2003
Hyeong–Tae Jou Korea Ocean Research & Development Institute Seoul, Korea	October 1998 – September 1999

Reynam Pestana University of Bahia Salvador, Bahia, Brazil	January 1998 – January 1999
Phil Bording University of Tulsa Tulsa, Oklahoma	August 1995 – August 1997
Jay Pulliam University of California at Berkeley Berkeley, California	January 1995 – January 1997
Milton Porsani University of Bahia Salvador, Bahia, Brazil	September 1992 – September 1993
Eiichiro Nishiyama University of Tokyo Tokyo, Japan	March 1988 – December 1988
Marco A. B. Botelho University of Bahia Salvador, Bahia, Brazil	July 1987 – July 1989

Visiting Scholars Sponsored:

Jacira Freitas University of Bahia Salvador, Bahia, Brazil	November 2004 – March 2005
Milton Porsani University of Bahia Salvador, Bahia, Brazil	January 2001 – February 2001 January 2002 – March 2002 January 2003 – March 2003 December 2003 – February 2004
Reynam Pestana University of Bahia Salvador, Bahia, Brazil	January 1998 – January 1999 January 2000 – February 2000 May 2002 – June 2002 February 2005 – March 2005 December 2007 – March 2008
Hedi Poot Delft University of Technology The Netherlands	September 1997 – December 1997

Annejifke W. Mulder Delft University of Technology The Netherlands	September 1994 – November 1994
Radmila Tatalovic Delft University The Netherlands	January 1990 – July 1990
Rigmor Mette Elde University of Bergen Bergen, Norway	July 1987 – June 1988

CONTRACTS AND GRANTS RECEIVED AT THE UNIVERSITY OF TEXAS

Current Support:

Coupled Seismic and Reservoir Simulation and Inversion
Source of Support: Industry ConocoPhillips
Total Award Amount: $450,000
Total Award Period Covered: 06/01/06 - 05/31/10
Location of Project: The University of Texas at Austin

Seismic Refraction Study of the Northern Gulf of Mexico
Source of Support: Industry ExxonMobil
Total Award Amount: $3,267,636
Total Award Period Covered: 03/18/10 - 12/31/12
Location of Project: The University of Texas at Austin

RTM for TTI and Variable Density Wave Equations with Model Updating Using Seismic Waveform Inversion and Non-Linear Optimization
Source of Support: KAUST
Total Award Amount:$257,230
Total Award Period Covered: 05/01/10 - 04/30/11
Location of Project: The University of Texas at Austin

MRI: Acquisition of a Computational Facility for Geoscience Simulation
and Data Interpretation (pending)
Source of Support: National Science Foundation
Total Award Amount: $2,300,000
Total Award Period Covered: 10/01/10 - 09/30/13
Location of Project: The University of Texas at Austin

Past Contracts & Grants:

"Reverse Time Migration (RTM) on Distributed Memory Parallel Computer Systems." Paul Stoffa

$210,496 1 Sep 08 – 31 Aug 09 2.10 mo

"Coupled Seismic and Reservoir Simulation and Inversion." Paul Stoffa, Mrinal Sen, Robert Ferguson

ConocoPhillips $150,000($450,000) 1 June 06 – 31 May 09 1.0 mo
(JSG provided 2 year match 1 June 06 – 31 May 08)

"Data Driven Simulation of the Subsurface: Optimization and Uncertainty Estimation." Mary Wheeler, Hector Klie, Mrinal Sen, Clinton Dawson, and Paul Stoffa

National Science Foundation $1,100,000 1 Oct 04 – 30 Sept 07 NC

CNS-0427005

"Enhanced Seismic Data Access System for The University of Texas at Austin Institute for Geophysics." Thomas H. Shipley and Paul L. Stoffa

National Science Foundation OCE-0326679	$83,920	9 Sep 03 – 31 Aug 06	NC

"Interim IODP Planning." Paul L. Stoffa and James A. Austin

National Science Foundation OCE-0335224	$530,015	6 June 03 – 31 May 05	1.5 mo

"Data Intense Challenge: The Instrumented Oil Field of the Future." Mary Wheeler, Clint Dawson, Malgorzata Peszynska, Mrinal K. Sen, and Paul L. Stoffa

National Science Foundation EIA-0121523	$1,461,005	1 Sep 01 – 31 Aug 04	1.75 mo

"Air-Borne GPR Investigation of UGF Detection." Paul L. Stoffa and Mrinal K. Sen

Department of Defense-Army DAAD17-01-D0001	$116,679	1 June 00 – 31 May 01	NC

"SLOSEIS: Slowness Analysis, Waveform Inversion and Uncertainty Estimation in VTI Media." Mrinal K. Sen, and Paul L. Stoffa

Joint Industry	$240,759	1 Sep 98 – 31 Aug 01	NC

"Acquisition of an Origin 2000 for Seismic Processing." Paul L. Stoffa, Thomas H. Shipley, Mrinal K. Sen, Nathan L. Bangs, Kirk D. McIntosh, and James A. Austin, Jr.

National Science Foundation OCE-9724555	$399,112	1 Sep 97 – 31 Aug 00	NC

"Anisotropic Earth Model Calculations." Mrinal K. Sen and Paul L. Stoffa

Texas Higher Education Coordinating Board ARP-135	$107,157	1 Jan 96 – 31 Dec 97	NC

“Rock Property Estimation from Marine Seismic Data by AVO Inversion.” Mrinal K. Sen and Paul L. Stoffa

National Science Foundation OCE-9503412	$292,980	1 Nov 95 – 31 Oct 98	2 mo.

“Pre-stack Plane Wave Kirchhoff Migration on Cray T3D.” Paul L. Stoffa and Mrinal K. Sen

Cray Research, Inc.	$60,000	1 Jan 95 – 31 Dec 95	.5 mo.

“Investigation of Upper Plate Response to Subduction Plate Morphology and Seamounts as Subduction Zone Asperities: Cooperative German, Costa Rican and United States Project.” Kirk D. McIntosh, Thomas H. Shipley, Paul L. Stoffa and Yosio Nakamura

National Science Foundation OCE-9402091	$922,097	1 Dec 94 – 30 Nov 99	2 mo.

“Ocean Science Education in Quantitative Marine Seismology.” P.L. Stoffa

Office of Naval Research N00014-94-1-0508	$285,635	1 Feb 94 – 31 Jan 97	1.5 mo.

“Hybrid Linear/Nonlinear Methods of Seismic Waveform Inversion.” M.K. Sen and P.L. Stoffa

Texas Higher Education Coordinating Board – 003658264	$129,519	1 Jan 94 – 31 Aug 96	1 mo.

“SPMD Pre-stack Velocity Estimation Using PVM.” P.L. Stoffa and M.K. Sen

Cray Research, Inc.	$51,000	1 Jan 94 – 31 Dec 94	.75 mo.

“Neural Computing in Geophysics.” Mrinal K. Sen and Paul L. Stoffa

National Science Foundation EAR-9304417	$313,469	15 Jul 93 – 30 Jun 97	3 mo.

“Seismic Traverse of the Byrd Subglacial Basin – Field Test.” I.W.D. Dalziel, P.L. Stoffa and D.D. Blankenship

National Science Foundation DPP-9119177	$571,026	1 Jul 93 – 30 Jun 97	2 mo.

"Timing and Comparison of Traveltime." Paul L. Stoffa

Phillips Petroleum Company	$18,877	1 Jul 93 – 31 Oct 94	NC

"Prestack Migration-Inversion of Seismic Gathers." Paul L. Stoffa and Mrinal K. Sen

Cray Research, Inc.	$49,000	1 Jan 93 – 31 Dec 93	.5 mo.

"Imaging of Ocean Subbottom Structure Using Swath Mapping Data." Mrinal K. Sen and Paul L. Stoffa

Office of Naval Research N00014-92-J-6001	$69,445	1 Mar 92 – 31 Aug 93	.75 mo.

"Three-dimensional survey of the crust, Moho, and mantle near the East Pacific Rise." Jan D. Garmany and Paul L. Stoffa

National Science Foundation OCE-9102368	$664,484	1 Feb 1992 – 31 Jan 1994	2.2 mos.

"Three dimensional seismic reflection investigation of fluid flow and structural evolution: Northern Barbados trench." Thomas H. Shipley and Paul L. Stoffa

National Science Foundation OCE-9116172	$497,548	1 Jan 92 – 31 Dec 94	2.5 mos.

"Prestack migration velocity analysis in two- and three-dimensions." Paul L. Stoffa and Mrinal K. Sen

Cray Research, Inc.	$60,000	1 Jan 92 – 31 Dec 92	.5 mo.

Solid Earth Exploration Research (Project SEER)

Various	$75,000/yr	1 Aug 91 – 31 Jul 93	NC

"Nonlinear Inversion of Plane Wave Seismograms Using Global Optimization Methods." Mrinal K. Sen and Paul L. Stoffa

National Science Foundation EAR-9105922	$157,156	15 Jul 1991 – 14 Jul 1993	1.4 mos.

"Genetic Algorithms, Simulated Annealing and Nonlinear Inversion of Plane Wave Seismograms." Paul L. Stoffa and Mrinal K. Sen

Cray Research, Inc.	$49,500	1 Apr 1991 – 31 Mar 1992	.5 mos.

"Detecting Clathrate Concentrations Through High Resolution Seismic Velocity Analysis of Shallow Sediments." Paul L. Stoffa and Thomas H. Shipley

USGS	$30,000	1 Sep 90 – 31 Aug 91	NC

"Inversion of Nankai Trough High Resolution Two-ship Profile." Paul L. Stoffa and Thomas H. Shipley

National Science Foundation OCE-9000327	$117,454	15 Mar 90 – 28 Feb 93	NC

"Nonlinear Elastic Inversion for the Background P-wave and S-wave Velocities." Paul L. Stoffa

American Chemical Society 22411-AC2	$40,000	1 Jan 90 – 31 Aug 93	.5 mo.

"Determination of Rock Properties from Wide Aperture Seismic Profiles: Proposed Low-Level Radioactive Waste." Joe Phillips and Paul L. Stoffa

Texas Higher Education Coordinating Board	$88,750	1 Jan 90 – 31 Aug 92	2 mos.

"Nonlinear Elastic Inversion for the Background P-Wave and S-Wave Velocities." Paul L. Stoffa and Jan D. Garmany

Texas Higher Education Coordinating Board - 003658-327	$150,000	1 Jan 90 – 31 Aug 92	2 mos.

"Plane Wave Split-step Fourier Migration and Velocity Analysis." Paul L. Stoffa

Cray Research, Inc.	$42,000	1 Jan 90 – 31 Dec 90	1 mo.

"A 3-D HUNTEC Survey of the New Jersey Shelf." James A. Austin, Paul L. Stoffa, Thomas A. Davies

Office of Naval Research	$233,767	1 May 89 – 30 Apr 90	1.5 mos.

"Interactive Pre-stack Direct Depth Migration Velocity Analysis." Paul L. Stoffa

Cray Research, Inc.	$42,000	1 Jan 89 – 31 Dec 89	1 mo.

"Develop and Evaluate Seismic Processing Algorithms." Paul L. Stoffa

HARC Computer Systems and Application Research Center	$45,000	1 Nov 88 – 31 Dec 89	NC

"A Deep-penetration Reflection Seismic Study at the Juncture of the Blake Plateau Basin, Carolina Trough, and Southeast Georgia Embayment." Paul L. Stoffa, Dale S. Sawyer, Joseph D. Phillips, James A. Austin, Jr.

National Science Foundation OCE-8711300	$998,674	1 Jan 88 – 31 Dec 90	4 mos.

"Multichannel Seismic Study of the Deep Structure of a Cordilleran Orogen: The Southernmost Andes." Ian W. D. Dalziel, James A. Austin, Jr., Paul L. Stoffa

National Science Foundation OCE-8716557	$478,634	1 Jan 88 – 31 Dec 90	3 mos.

"Angle of Incidence Pre-stack Direct Depth Migration." Paul L. Stoffa

Cray Research, Inc.	$36,827	1 Jan 88 – 31 Dec 88	1 mo.

"3D Subsurface Model Definition and Seismic Modeling Using an Interactive Seismic Workstation." Paul L. Stoffa

University Partnership Grant Program Landmark Graphics Corporation	$229,725	1 Jan 88 – 31 Dec 88	NC

"Japan-United States Cooperative Study of the Relationship between Sediment Physical Properties and Subduction Processes in the Nankai Trough." Thomas H. Shipley, Paul L. Stoffa, G. Moore (U. Tulsa), D. Karig (Cornell)

National Science Foundation $585,751 1 Mar 87 – 28 Feb 90 4 mos.
OCE-8613774

OCE-8414864 "3D Seismic Modeling using the Split-step Fourier Method." Paul L. Stoffa

Cray Research, Inc. $31,600 1 Jun 86 – 31 Dec 87 1 mo.

"Downhole Seismic Profiling and Imaging for the Ocean Drilling Program: Vertical Seismic Profile Experiment Leg 104 Site 642 - Data Processing and Interpretation." Joseph D. Phillips, Paul L. Stoffa

National Science Foundation $66,917 1 Feb 86 – 31 Jan 88 NC

"Three-dimensional Seismic Imaging of an Accretionary Wedge: Costa Rica." Thomas H. Shipley, Mark Cloos, Paul L. Stoffa, Milo Backus

National Science Foundation $1,036,28 1 Jan 86 – 31 Dec 89 4 mos.
OCE-8511364

"Vertical Seismic Profile (VSP) Experiment Leg 104: Site 642 Data Processing and Interpretation." Paul L. Stoffa and Joe D. Phillips

National Science Foundation $55,808

"Implement ODP Underway Navigation." Paul L. Stoffa

Texas A&M University $12,650

"Develop a Digital Seismic Data Acquisition and Processing System for the Ocean Drilling Program." Paul L. Stoffa

Texas A&M University $51,496

"Enhanced Crustal Imagery Through Compensation of Lateral System and Geophysical Variation." Milo Backus, Paul L. Stoffa, Stark

National Science Foundation $83,000

"Deaf Smith and Swisher Counties Seismic Data Study." Art Maxwell, Paul L. Stoffa, and Charles Denham

Bureau of Economic Geology $95,300

PUBLISHED ABSTRACTS

Chu, C. and P. L. Stoffa, 2010, Acoustic Anisotropic Wave Modeling Using Normalized Pseudo-Laplacian, Expanded Abstracts,Volume 29, 80th Annual International Meeting, Denver, Society of Exploration Geophysicists

Chu, C. and P. L. Stoffa, 2010, Elastic Wave Modeling with the Pseudo-analytical Method on Staggered Grid,Expanded Abstracts,Volume 29, 80th Annual International Meeting, Denver, Society of Exploration Geophysicists

Chu, C. and P. L. Stoffa, 2010, Frequency Domain Modeling Using Implicit Spatial Finite Difference Operators, Expanded Abstracts,Volume 29, 80th Annual International Meeting, Denver, Society of Exploration Geophysicists

Pestana, R. C. and P. L. Stoffa, 2010, Phase-shift plus interpolation time-stepping method for reverse time migration, Expanded Abstracts,Volume 29, 80th Annual International Meeting, Denver, Society of Exploration Geophysicists

Shahin, A and P. L. Stoffa, R. H. Tatham 2010, Timelapse CSEM analysis of a shaly sandstone simulated by comprehensive petro-electric modeling, Expanded Abstracts,Volume 29, 80th Annual International Meeting, Denver, Society of Exploration Geophysicists

Shahin, A and R. H. Tatham, P. L. Stoffa, K. T. Spikes, 2010, Comprehensive petro-elastic modeling aimed at quantitative seismic reservoir characterization and monitoring, Expanded Abstracts,Volume 29, 80th Annual International Meeting, Denver, Society of Exploration Geophysicists,

Chu, C., P.L. Stoffa, R. Seif, 2009, High-order rotated staggered finite difference modeling of 3D elastic wave propagation in general anisotropic media, SEG Annual Meeting, Houston.

Chu, C., P.L. Stoffa, R. Seif, 2009, 3D Elastic wave modeling using modified high-order time stepping schemes with improved stability conditions, SEG Annual Meeting, Houston.

Chu, C., P.L. Stoffa, R. Seif, 2009, 3D Seismic modeling and reverse-time migration with the parallel Fourier method using non-blocking collective communications, SEG Annual Meeting, Houston.

Sena, A., M. Sen, P. Stoffa, R. Seif, L. Jin, 2009, Joint inversion of time-lapse seismic and production data using VFSA with Local Thermal Regulation and pilot point parameterization, SEG Annual Meeting, Houston.

Sena, A., P. Stoffa, M. Sen, R. Seif, 2009, Assessing the value of time-lapse seismic data in joint inversion for reservoir parameter estimation in an oil reservoir subjected to water flooding recovery: a synthetic example, SEG Annual Meeting, Houston.

Shahin, A., P.L. Stoffa, R.H. Tatham, D. Sava, 2009, Multicomponent seismic time-lapse cross-plot and its applications, SEG Annual Meeting, Houston.

Stoffa, P.L, R.C. Pestana, 2009, Numerical solution of the acoustic wave equation by the rapid expansion method (REM) – A one step time evolution algorithm, SEG Annual Meeting, Houston.

Pestana, R.C., P.L. Sotffa, 2009, Rapid expansion method (REM) for time-stepping in reverse time migration (RTM), SEG Annual Meeting, Houston.

Stoffa, P.L, R.C. Pestana, 2009, Numerical solution of the acoustic wave equation by the rapid expansion method (REM) – A one step time evolution algorithm, 11^{th} International Congress of the Brazilian Geophysical Society, Salvador, Brazil, August 24-28, 2009.

Pestana, R.C., P.L. Stoffa, 2009, Rapid expansion method (REM) for time-stepping in reverse time migration (RTM), 11^{th} International Congress of the Brazilian Geophysical Society, Salvador, Brazil, August 24-28, 2009.

Sena, A.R., P.L. Stoffa, M. Sen, L. Jin, R. Seif, 2009, 4-D seismic: When should we acquire the next seismic survey? AAPG Annual Convention and Exhibition, Denver, June 7-10,2009.

Jin, L., P.L. Stoffa, M.K. Sen, 2009, Stochastic inversion for reservoir properties using parallel learning-based VFSA and pilot point parameterization, SPE Reservoir Simulation Symposium, Woodlands, Tx.

Hu, C., P. Stoffa, K. McIntosh, 2008, First arrival stochastic tomography: Automatic background velocity estimation using beam semblances and VFSA, SEG Annual Meeting, Las Vegas.

Jin, L., M.K. Sen, P.L. Stoffa, 2008, One-dimensional prestack seismic waveform inversion using Ensemble Kalman Filter, SEG Annual Meeting, Las Vegas.

Shahin, A., P.L. Stoffa, R.H. Tatham, D. Sava, 2008, Sensitivity analysis of multicomponent seismic attributes to fluid content and pore pressure, SEG Annual Meeting, Las Vegas.

Chu, C., P.L. Stoffa, 2008, A pseudospectral-finite difference hybrid approach for large-scale seismic modeling and RTM on parallel computers, SEG Annual Meeting, Las Vegas.

Chu, C., P.L. Stoffa, 2008, Parallel seismic wave simulations on Lonestar and Ranger, 2^{nd} Annual Scientific Software Days, The University of Texas at Austin.

Sen, M.K., P.L. Stoffa, L. Jin, R. Seif, A. Sena, 2008, Stochastic inversion for reservoir parameters using time-lapse seismic and well production data, Applied 4D Seismic: Reservoir Monitoring, Model Updating, and Management – SPE/AAPR/SEG Applied Technology Workshop, Galveston.

Jin, L., M.K. Sen, P.L. Stoffa, 2008, Data fusion: a possible way to reduce uncertainty in reservoir characterization, SEG Development and Production Forum, Austin.

Shahin, A., P. L. Stoffa, R.H. Tatham , D. Sava, 2008, Uncertainty in rock physics modeling: Impact on seismic reservoir characterization and monitoring, SEG Development and Production Forum, Austin.

Shahin, A., P.L. Stoffa, R.H. Tatham, D. Sava, 2008, A statistical approach to quantify the detectability of the dynamic reservoir properties using multi-component time-lapse seismic attributes, SEG Development and Production Forum, Austin.

Shahin, A., P.L. Stoffa, R.H. Tatham, D. Sava, 2008, Sensitivity analysis of multicomponent seismic attributes to fluid content and pore pressure, SEG Development and Production Forum, Austin.

Chu, C., P.L. Stoffa, 2008, Parallel seismic modeling using the pseudospectral method on Marmousi2, 70th EAGE Conference and Exhibition, Rome.

Jin, L., M. Sen, P. Stoffa, R. Seif, A. Sena, 2008, Stochastic inversion for reservoir properties using time-lapse seismic and well production data, 70th EAGE Conference and Exhibition, Rome.

Jin, L., M.K. Sen, P.L. Stoffa, R.K. Seif, 2007, Optimal model parameterization in stochastic inversion for reservoir properties using time-lapse seismic and production data, SEG Annual Meeting, San Antonio.

Jin, L., M.K. Sen, P.L. Stoffa, 2007, Fusion based classification method and its application, SEG Annual Meeting, San Antonio.

Jin, L., M.K. Sen, T. Hong, P.L. Stoffa, 2007, Joint estimation of porosity and saturation by combining a rock physics model and constrained pre-stack seismic waveform inversion, SEG Annual Meeting, San Antonio.

Hong, T., M.K. Sen, P.L. Stoffa, H. Klie, S.G. Thomas, A. Rodriguez, M.F. Wheeler, 2007, Integrated time-lapse seismic inversion for reservoir petrophysics and fluid flow imaging, SEG Annual Meeting, San Antonio.

Hu, C., M.K. Sen, P. Stoffa, K. McIntosh, 2007, Plane wave gaussian beam prestack depth migration, SEG Annual Meeting, San Antonio.

Chu, C, P.L. Stoffa, 2006, Seismic modeling in the plane wave domain using an implicit finite difference scheme, Sixteenth Annual Industrial Affiliates Meeting, Center for Subsurface Modeling, The University of Texas at Austin.

Hu, C., K. McIntosh, P. Stoffa, 2006, Voronoi cell based staggered grid SH wave numerical simulation, SEG Annual Meeting, New Orleans.

Hu, C., K. McIntosh, H van Avendonk, P. Stoffa, 2006, Hybrid ray tracer and amplitude calculation with finite difference, graph theory and ray bending, SEG Annual Meeting, New Orleans.

Sen, M.K., P.L. Stoffa, 2006, True Amplitude Migration-Inversion in Phase Space, SPG meeting, Kolkata, India.

Gai, X., J. Rungamornrat, H. Klie, W. Bangerth, M. F. Wheeler, P. L. Stoffa, M.K . Sen, and R. Seifoullaev, 2005, Fully integrated reservoir flow, geomechanics and seismic modeling: A tool for better reservoir characterization and geomechanical prediction using 4D seismic, SEG Annual Meeting, Houston.

Stoffa, P.L., M.K. Sen, R. Seifoullaev, H. Klie, X. Gai, W. Bangerth, J. Rungamornrat, M.F. Wheeler, 2005, An analysis of flow-simulation scales and seismic response, SEG Annual Meeting, Houston.

Stoffa, P.L., M.K. Sen, R.K. Seifoullaev, R. Pestana, J.T. Fokkema, 2005, Double plane wave Kirchhoff depth migration, Ninth International Congress of the Brazilian Geophysical Society, Salvador, Brazil.

Seifoullaev, R.K., P.L. Stoffa, M.K. Sen, 2005, Use of reciprocity in a double plane wave Kirchhoff depth migration, Ninth International Congress of the Brazilian Geophysical Society, Salvador, Brazil.

Jackson, C.S., M.K. Sen, and P.L. Stoffa, 2004, Statistical inversion for quantifying uncertainties in climate prediction, Eos Trans. AGU, 85(47), Fall Meet. Suppl., Abstract NG31B-0876.

Wang, F., C.S. Jackson, P.L. Stoffa, M. Fluegel, P. Chang, 2004, A stochastic bayesian approach to identify the dynamical regimes of ENSO, Eos Trans. AGU, 85(47), Fall Meet. Suppl., Abstract A14B-06.

Xun, H., N.L. Bangs, P.L. Stoffa, 2004, Estimation of free gas saturation using AVO analysis on 3D seismic data at south Hydrate Ridge, Cascadia accretionary complex, Eos Trans. AGU, 85(47), Fall Meet. Suppl., Abstract OS41C-0492.

Sena, A.R., M.K. Sen, and P.L. Stoffa, 2004, Modeling of ground penetrating radar data in stratified media, SEG Annual Meeting, Denver.

Sena, A.R., P.L. Stoffa, and M.K. Sen, 2004, Migration of ground penetrating radar data in heterogeneous and dispersive media, New Strategies for European Remote Sensing, Proceedings of the 24th EARSel Symposium, Dubrovnik, Croatia, 711-719.

Ahmed, I., P.L. Stoffa, M.K. Sen, K.D. McIntosh, 2003, Residual migration velocity analysis in the offset-depth domain via the ray parameter-depth domain, SEG Annual Meeting, Dallas.

Sena, A.R., P.L. Stoffa, and M.K. Sen, 2003, Split-step fourier migration of ground penetrating radar data, SEG Annual Meeting, Dallas.

Nowack, R.L., M.K. Sen, and P.L. Stoffa, 2003, Gaussian beam migration for sparse common-shot and common-receiver data, SEG Annual Meeting, Dallas.

Roy, L., M.K. Sen, D.Blankenship, P.L. Stoffa, and T. Richter, 2003, Gravity inversion and uncertainty analysis using simulated annealing: An application over Lake Vostok, East Antarctica, 8th International Congress of The Brazilian Geophysical Society, Rio de Janeiro, Brazil.

Aldunate G.C., R.C. Pestana & P.L. Stoffa, 2003, Migracao sismica 2D pre-empihamento em profundidade com os metodos "Split-step", "Split-step" hibrido e "Split-step" – PSPI: Uma Comparacao, 8th International Congress of The Brazilian Geophysical Society, Rio de Janeiro, Brazil.

Stoffa, P. and M. Porsani, 2003, Residual migration analysis: VFSA and LI, 8th International Congress of The Brazilian Geophysical Society, Rio de Janeiro, Brazil.

Pestana, R., J. Logrado, P. Stoffa, 2003, Migracao 2D Pre-empilhamento em Profundidade de Ondas Planas Utilizando Tecnicas de Correcao de Fase em Duas Etapas, 8th International Congress of The Brazilian Geophysical Society, Rio de Janeiro, Brazil.

Nowack, R.L., M.K. Sen, P.L. Stoffa, and H. Ge, 2002, Gaussian beam migration for sparse common-shot and common-receiver data, AGU Fall Meeting, San Francisco.

Roy, L., M.K. Sen, D. Blankenship, P.L. Stoffa, and T. Richter, 2002, Estimation of uncertainty in 3D gravity inversion using simulated annealing, AGU Fall Meeting, San Francisco.

Xia, Y., C. Jackson, M.K. Sen, and P.L. Stoffa, 2002, Optimal parameter estimation and uncertainty analysis of the common land model using the Cabauw dataset, 7th Annual CCSM Workshop, Breckenridge, Colorado.

Jackson, C., Q., Mu, M. Sen, and P. Stoffa, 2002, Measures of GCM performance as functions of model parameters affecting clouds and radiation, EOS Trans. AGU, 83(19), Spring Meeting Suppl. Abstract A51C-03.

Jackson, C., M.K. Sen, and P. Stoffa, 2002, Optimal parameter and uncertainty estimation within climate and land surface models using Bayesian stochastic inversion, EOS Trans. AGU, 83(19), Spring Meeting Suppl. Abstract B32A-22.

Xia, Y., C. Jackson, M. Sen, and P. Stoffa, 2002, Optimal parameter estimation and uncertainty analysis of a land surface model using the Cabauw dataset, EOS Trans. AGU, 83(19), Spring Meeting Suppl. Abstract B32A-08.

Jackson, C., M.K. Sen, and P. Stoffa, 2002, Optimal parameter and uncertainty estimation within climate and land surface models using Bayesian stochastic inversion, Mississippi River Climate and Hydrology Conference, New Orleans, LA (abstract).

Xia, Y., C. Jackson, M.K. Sen, and P. Stoffa, 2002, Optimal parameter estimation and uncertainty analysis of a land surface model using the Cabauw dataset, Mississippi River Climate and Hydrology Conference, New Orleans, LA (abstract).

Alaslani, A., P.L. Stoffa, and M.K. Sen, 2001, Estimation of 3D seafloor geometry for multiple prediction using a simulated annealing algorithm or 3D seismic multiple prediction and attenuation, Seventy-First Annual International Meeting and Exposition, San Antonio, TX, Expanded Abstracts.

Dantas, E., P. Gama, R. Pestana, and P. L. Stoffa, 2001, Mét odo bidimensional de atenuação de múltiplas de superficie no dominio das ondas plans através de um filtro modelador, Proceedings of the 9th International Congress of the Brazilian Geophysical Society, Salvador, Brazil, Expanded Abstracts, 1237-1240.

Fernandes, A.O., M.J. Porsani, and P.L. Stoffa, 2001, Um algoritmo combinado (Genético e Newton) aplicado à inversão de sondagem elétrica vertical, Proceedings of the 9th International Congress of the Brazilian Geophysical Society, Salvador, Brazil, Expanded Abstracts, 578-581.

Gonçalves, J.E., R. Pestana, and P.L. Stoffa, 2001, Migração residual de seções de parametro de raio constante, Proceedings of the 9th International Congress of the Brazilian Geophysical Society, Salvador, Brazil, Expanded Abstracts, 1067-1071.

Mukherjee, A., M.K. Sen, and P.L. Stoffa, 2001, Traveltime computation, pre-stack Fourier and Kirchhoff migration in transversely isotropic media, Seventy-First Annual International Meeting and Exposition, San Antonio, TX, Expanded Abstracts.

Pestana, R., P.L. Stoffa, and A.S.B. Melo, 2001, 3-D Common plane wave section migration, Proceedings of the 9th International Congress of the Brazilian Geophysical Society, Salvador, Brazil, Expanded Abstracts, 1026-1030.

Santos, J.R.S.B., 2001, Migração pré-empilhamento em profundidade no dominio das Ondas Planas, Proceedings of the 9th International Congress of the Brazilian Geophysical Society, Salvador, Brazil, Expanded Abstracts, 1063-1067.

Stoffa, P.L., M.K. Sen, and J. Jiao, 2001, Residual migration velocity analysis in the plane-wave domain, Proceedings of the 9th International Congress of the Brazilian Geophysical Society, Salvador, Brazil, Expanded Abstracts, 1198-1201.

Eldholm, O., M.F. Coffin, P.L. Stoffa, and J.A. Austin, Jr., 2000, Academic/Industrial Cooperation in Marine Seismology: An International Model, Proceedings of the Offshore Technology Conference, Houston, TX, Expanded Abstracts (OTC 11944).

Jiao, J., P.L. Stoffa, M.K. Sen, and R.K. Seifoullaev, 2000, Residual migration velocity analysis in the plane wave domain, Society of Exploration Geophysicists Seventieth Annual International Meeting and Exposition, Calgary, Alberta, Canada, Expanded Abstracts (MIG7.8).

Pestana, R., P.L. Stoffa, and J.R. Santos, 2000, Plane Wave Prestack Time Migration, Society of Exploration Geophysicists Seventieth Annual International Meeting and Exposition, Calgary, Alberta, Canada, Expanded Abstracts (MIG3.7).

van Gestel, J.P., and P.L. Stoffa, May 2000, Migration using multi-configuration GPR data, Proceedings of the GPR 2000 Eighth International Conference on Ground Penetrating Radar, Gold Coast, Australia, Expanded Abstracts, 448-452.

Liu, F., M.K. Sen, and P.L. Stoffa, 1999, Surface multiple attenuation for multi-component ocean bottom seismometer data, Society of Exploration Geophysicists Sixty-Ninth Annual International Meeting and Exposition, Expanded Abstracts (SPRO10.6).

Pestana, R., P.L. Stoffa, and M.K. Sen, 1999, Multiple attenuation in the plane wave domain by match filtering, Proceedings of the 7th International Congress of the Brazilian Geophysical Society, Sao Paulo, Brazil.

Tsoflias, G., J.P. van Gestel, P.L. Stoffa, and M.K. Sen, Detection of vertical fractures in geologic formations using the polarization properties of ground-penetrating radar signal, 1999, Proceedings of the Society of Exploration Geophysicists Sixty-Ninth Annual International Meeting and Exposition, Expanded Abstracts (NSG5.8).

van Gestel, J.P., and P.L. Stoffa, 1999, Multi-configuration ground penetrating radar data, Society of Exploration Geophysicists Sixty-Ninth Annual International Meeting and Exposition, Expanded Abstracts (NSG5.1).

Akbar, F.E., C. Calderon-Macias, V. Sen, M.K. Sen, and P.L. Stoffa, 1998, A comparative study of first arrival time computation for 3-D inhomogeneous isotropic velocity models, Proceedings of the Society of Exploration Geophysicists Sixty-Eighth Annual International Meeting and Exposition, New Orleans, LA, 1728-1731.

Akbar, F.E., P.L. Stoffa, and M.K. Sen, 1998, Three-dimensional Plane-wave Kirchhoff depth migration, Proceedings of the Society of Exploration Geophysicists Sixty-Eighth Annual International Meeting and Exposition, New Orleans, LA, 1708-1711.

Liu, F., M.K. Sen, and P.L. Stoffa, 1998, 2-D multiple attenuation operators in the t-p domain, Proceedings of the Society of Exploration Geophysicists Sixty-Eighth Annual International Meeting and Exposition, New Orleans, LA, 1256-1259.

Tanis, Mehmet C., Paul L. Stoffa, and Reynam Pestana, 1998, Prestack depth migration in the source-offset domain, Proceedings of the Society of Exploration Geophysicists Sixty-Eighth Annual International Meeting and Exposition, New Orleans, LA, 1839-1842.

Xia, G., M.K. Sen, and P.L. Stoffa, 1998, Mapping of elastic properties of gas hydrates in the Carolina Trough by waveform inversion, Proceedings of the Society of Exploration Geophysicists Sixty-Eighth Annual International Meeting and Exposition, New Orleans, LA, 1146-1149.

Coffin, M.F., O. Eldholm, and P.L. Stoffa, 1998, Looking ahead to the future of marine reflection seismology, Eos Transactions, American Geophysical Union 79(50), 614-615.

Fulthorpe, C.S., P.L. Stoffa, and M.K. Sen, 1997, University of Texas Institute for Geophysics: Field studies and geological syntheses, Southeast Consortium of Ocean Research Workshop, Stennis Space Center, MS.

Sen, M.L, P.L. Stoffa, and C.S. Fulthorpe, 1997, Quantitative marine geophysical research at UTIG, Southeast Consortium of Ocean Research Workshop, Stennis Space Center, MS.

Stoffa, Paul L., Mrinal K. Sen, and Ganyuan Xia, 1997, Simulated Annealing: A tool for estimating the macro-model for prestack migration velocity analysis and AVO, Proceedings of the 5th International Congress of the Brazilian Geophysical Society, Sao Paulo, Brazil.

Tanis, Mehmet C., and Paul L. Stoffa, 1997, Parallel implementation of 3-D split-step Fourier depth migration algorithm on T3E, Proceedings of the Society of Exploration Geophysicists Sixty-Seventh Annual International Meeting and Exposition, Dallas, TX, 1433-1436.

Akbar, Faruq, Paul L. Stoffa, Mrinal K. Sen, And Carlos L. Varela, 1996, Automated background velocity estimation in the plane wave domain using VFSA, Proceedings of the Society of Exploration Geophysicists Sixty-Sixth Annual International Meeting and Exposition, Denver, CO, I, 731-734.

Bording, R. Phillip, Carlos L. Varela, Mrinal Sen, Paul L. Stoffa, 1996, Automatic background velocity estimation in rugose topography and complex geology with visualization, Eos-Transactions, AGU, F461.

Calderon, Carlos, Mrinal K. Sen, and Paul L. Stoffa, 1996, A neural network optimization approach for automatic NMO correction and velocity estimation, Proceedings of the Society of Exploration Geophysicists Sixty-Sixth Annual International Meeting and Exposition, Denver, CO, II, 1979-1982.

Chunduru, R.K., M.K. Sen, and P.L. Stoffa, 1996, Development of efficient hybrid optimization for geophysical inversion, Proceedings of the Sixty-Sixth Annual International Meeting and Exposition, Denver, CO, II, 1130-1133.

Lee, D.K., S.P. Grand, M.K. Sen, and P.L. Stoffa, Upper mantle attenuation beneath the East Pacific Rise, EOS Transactions of American Geophysical Union, 77(46), F490, 1996.

Pulliam, Jay, P.L. Stoffa, E.C. Luhurbudi, S. Saustrup, and J.A. Austin, Jr., 1996, 3-D depth migration of an ultra high resolution seismic survey on New Jersey’s continental shelf, Proceedings of the Society of Exploration Geophysicists Sixty-Sixth Annual International Meeting and Exposition, Denver, CO, 847-850.

Sen, M.K., P.L. Stoffa, J.T. Fokkema, and C. Calderon, 1996, On two approaches to wave equation based multiple attenuation, proceedings of the European Association of Geoscientists and Engineers 58th Annual Meeting and Exposition, Amsterdam, The Netherlands, paper no. B002.

Tanis, Mehmet C., Paul L. Stoffa, Mrinal K. Sen, and Jacob T. Fokkema, 1996, Pre-stack split-step Fourier depth migration, Proceedings of the European Association of Geoscientists and Engineers 58th Annual Meeting and Exposition, Amsterdam, The Netherlands, paper no. X048.

Varela, Carlos L., Paul L. Stoffa and Mrinal K. Sen, 1996, Automatic background velocity estimation in 2D media, Proceedings of the European Association of Geoscientists and Engineers 58th Annual Meeting and Exposition, Amsterdam, The Netherlands, paper no. X009.

Xia, Ganyuan, Mrinal K. Sen, and Paul L. Stoffa, 1996, Two-step velocity estimation and AVO inversion in the τ-p domain, Proceedings of the Society of Exploration Geophysicists Sixty-Sixth Annual International Meeting and Exposition, Denver, CO, II, 1727-1730.

Akbar, F., C. Calderón, S. Operto, P.L. Stoffa, M.K. Sen, K. McIntosh, and T. Shipley, 1995, 3-D prestack Kirchhoff depth migration of OBS data from offshore Costa Rica, Eos-Transactions, AGU, 76(46), 550.

Calderon-Macias, C., M.K. Sen, and P.L. Stoffa, 1995, A neural network based approach to NMO correction and velocity estimation, presented at IUGG meeting, Boulder, CO, 1995.

Christeson, G.L., S. Operto, K.D. McIntosh, Y. Nakamura, T.H. Shipley, and P.L. Stoffa, 1995, TICOSECT: Structure of subduction zone off Nicoya Peninsula, Costa Rica, from wide-angle OBS data, Eos-Transactions, AGU, 76(46), 550.

Chunduru, C.K., M.K. Sen, and P.L. Stoffa, Seismic and resistivity inversion by hybrid optimization, presented at IUGG meeting, Boulder, CO, 1995.

McIntosh, K.D., Y. Nakamura and TICOSECT participants, 1995, TICOSECT: Experiments to evaluate the crustal structure of the Costa Rica convergent margin, Eos-Transactions, AGU, 76(46), 550.

Operto, S., C. Calderón, P. Stoffa, F. Akbar, K. McIntosh, T. Shipley, J. Floyd, Y. Nakamura, J. Pulliam and G. Christeson, 1995, Preliminary 3-D velocity structure offshore Costa Rica travel time inversion from 2-D intersecting in-line seismic profiles, Eos-Transactions, AGU, 76(46), 551.

Pulliam, J., M.K. Sen, and P.L. Stoffa, Downsizing the seismic workplace: compression and denoising of seismic data, presented at the IRIs workshop, 1995.

Pulliam, J., P.L. Stoffa, J.A. Austin, Jr., S. Saustrup, and E.C. Luhurbudi, 1995, Processing a high resolution 3D subsurface on the Continental Shelf of New Jersey, Eos-Transactions, AGU, 76(46), 308.

Sen, M.K., and P.L. Stoffa, Bayesian inversion in geophysics, presented at IUGG meeting, Boulder, CO, 1995.

Sen, M.K., and P.L. Stoffa, Computational seismological research at UTIG using Cray supercomputers, presented at UNAM-Cray symposium, 1995.

Sen, M.K., P.L. Stoffa, C. Varela, M. Jervis, and R. Chunduru, Optimization methods for automatic velocity estimation, SIAM meeting on Geophysical Inverse Problems, Yosemite, CA, 1995.

Sen, V., P.L. Stoffa, S. Anandakrishnan, I.W.D. Dalziel, D.D. Blankenship, and A.M. Smith, 1995, A seismic survey in central West Antarctic: Data processing and preliminary results, Eos-Transactions, AGU, 76(46), 401.

Varela, C., P.L. Stoffa, and M.K. Sen, Migration velocity estimation, presented at IUGG meeting, Boulder, CO, 1995.

Zhao, Lian-She, Mrinal Sen, Paul Stoffa, and Cliff Frohlich, 1995, Application of very fast simulated Annealing to the Inversion of Receiver Structure, Seismological Research Letters, 66(2), 53.

Akbar, F.E., M.K. Sen, and P.L. Stoffa, 1994, Prestack plane wave Kirchhoff depth migration using a cluster of workstations, Proceedings of the Society of Exploration Geophysicists Sixty-Fourth Annual International Meeting and Exposition, Los Angeles, CA, 225-228.

Akbar, F.E., M.K. Sen, and P.L. Stoffa, Rapid 2-D Plane Wave Kirchhoff Migration using PVM, 1994, PVM Users' Group Meeting, Oak Ridge, TN.

Bangs, N.L., T. Shipley, and P.L. Stoffa, 1994, Pore fluid pressures along the decollement thrust as inferred from 3-D seismic reflection data from the Northern Barbados Ridge, Eos-Transactions, AGU, 75(16), 324.

Chunduru, R.K., M.K. Sen, and P.L. Stoffa, 1994, Resistivity inversion for 2-D geologic structures using very fast simulated annealing, Proceedings of the Society of Exploration Geophysicists Sixty-Fourth Annual International Meeting and Exposition, Los Angeles, CA, 640-643.

Sen, M.K., A. Duttagupta, P. Stoffa, L. Lake, and G. Pope, 1994, Stochastic reservoir modeling by simulated annealing and genetic algorithms: A comparative analysis, Proceedings of the Society of Petroleum Engineers Sixty Seventh Annual Technical Conference and Exhibition, Washington, D.C., paper no. SPE 24754, 939-950.

Sen, M.K., and P.L. Stoffa, 1994, Bayesian Inference, Gibbs Sampler and Uncertainty Estimation in Nonlinear Geophysical Inversion, Proceedings of the European Association of Exploration Geophysicists 56th Annual Meeting and Exposition, Vienna, Austria, paper no. G019.

Sen, M.K, and P.L. Stoffa, 1994, Sampling based approaches to estimating uncertainties in geophysical inversion, Eos Transactions, AGU, 457.

Sen, V., M.K. Sen and P.L. Stoffa, Seismic Processing Using PVM: Prestack 3D Kirchhoff Migration and Modeling, 1994, PVM Users' Group Meeting, Oak Ridge, TN.

Sen, V., M.K. Sen, P.L. Stoffa, and M. Jervis, 1994, Generation of 3-D velocity models, seismic modeling and migration: an application of the Kirchhoff-Helmholtz approach to ocean bottom seismometer data, Proceedings of the Society of Exploration Geophysicists Sixty-Fourth Annual International Meeting and Exposition, Los Angeles, CA, 699-702.

Stoffa, P.L., M.K. Sen, C. Varela, and R.K. Chunduru, 1994, Geophysical Applications of Global Optimization Methods, Proceedings of the European Association of Exploration Geophysicists 56th Annual Meeting and Exposition, Vienna, Austria, paper no. P134.

Tajima, F., P.L. Stoffa, and R. Zhou, 1994, Application of Genetic Algorithms to Broad-Band Body Waveform Modeling, Proceeding of the Sixth Annual IRIS Workshop, 61.

Tajima, F., P.L. Stoffa, and R. Zhou, 1994, Broad-Band Body Waveform Source Inversion Incorporating Genetic Algorithms to Constrain Near-Source Structure, International Association of Seismology and Physics of the Earth's Interior, New Zealand, 430.

Varela, C.L., P.L. Stoffa, and M.K. Sen, 1994, Migration misfit and reflection tomography: Criteria for pre-stack migration velocity estimation in laterally varying media, Proceedings of the Society of Exploration Geophysicists Sixty-Fourth Annual International Meeting and Exposition, Los Angeles, CA, 1347-1350.

Zhao, L.-S., M.K. Sen, and P.L. Stoffa, 1994, Statistical Study of Norms of Waveform Fit for Source Estimation from Regional Seismograms, 89th Annual Meeting of the Seismological Society of America, 65(1), 29.

Zhou, R., F. Tajima, and P.L. Stoffa, 1994, Earthquake Source Parameter Determination Using Genetic Algorithms, Eos-Transactions, AGU, 75(16), 66.

Faria, E.L., and P.L. Stoffa, 1993, Traveltime computation in transverse isotropic media, Proceedings of the Society of Exploration Geophysicists Sixty-Third Annual International Meeting and Exposition, Washington, DC, 839-842.

Jervis, M., M. K. Sen, and P.L. Stoffa, 1993, Optimization methods for 2D pre-stack migration velocity estimation, Proceedings of the Society of Exploration Geophysicists Sixty-Third Annual International Meeting and Exposition, Washington, DC, 965-968.

Jervis, M., P.L. Stoffa, and M.K. Sen, 1993, 2-D Velocity Estimation Using a Genetic Algorithm, Eos-Transactions, AGU, 74(16), 201.

Moore, G.F., Z. Zhao, T.H. Shipley, N.L. Bangs, P.L. Stoffa, and J.C. Moore, 1993, Structure of the Northern Barbados Ridge Accretionary Prism from 3-D Seismic Reflection Data, Eos-Transactions, AGU, 74(43), 224.

Porsani, M., M.K. Sen, P.L. Stoffa, R. Chunduru, and W.T. Wood, 1993, Seismic Waveform Inversion by a Hybrid Linearized-Genetic Algorithm, Eos-Transactions, AGU, 74(16), 201.

Porsani, M.J., P.L. Stoffa, R.K. Chunduru, and M.K. Sen, 1993, Evaluation of Measures of Error Using a Genetic Algorithm, 3rd International Congress of the Brazilian Geophysical Society.

Porsani, M.J., P.L. Stoffa, M.K. Sen, R. Chunduru, and W.T. Wood, 1993, A combined genetic and linear inversion algorithm for seismic waveform inversion, Proceedings of the Society of Exploration Geophysicists Sixty-Third Annual International Meeting and Exposition, Washington, DC, 692-695.

Sen, M.K., F.A. Akbar, and P.L. Stoffa, 1993, Imaging of ocean subbottom structure using swath mapping data: Feasibility studies, Acoustical Society of America, Ottawa, Canada.

Sen, M.K. and P.L. Stoffa, 1993, Geophysical Inversion Using Global Optimization, Society of Industrial and Applied Mathematics Conference on Mathematical and Computational Issues in the Geosciences, Houston, TX.

Sen, M. K., P. L. Stoffa, and J. A. Austin, Jr., 1993, High resolution shallow water 3-D survey and inversion for geophysical parameters, Journal of Acoustical Society of America, Ottawa, Canada, 93, 4, 2269.

Sen, M.K, P.L. Stoffa, R.K. Chunduru, and M. Jervis, 1993, Geophysical Applications of Global Optimization Methods, 3rd International Congress of the Brazilian Geophysical Society.

Shipley, T.H., G.F. Moore, N.L. Bangs, P.L. Stoffa, and J.C. Moore, 1993, Seismically Inferred Spatial Pattern of Fluid Content of the Northern Barbados Ridge Decollement: Implication for Fluid Migration and Fault Strength, 1993, Eos-Transactions, AGU, 74(43), 579.

Zhou, R., F. Tajima, and P.L. Stoffa, 1993, A Feasibility Study of Genetic Algorithms to Constrain Near-Source Velocity Structure, Eos-Transactions, AGU, 74(43), 394.

Zhao, Z., G.F. Moore, T.H. Shipley, N.L. Bangs, P.L. Stoffa, A.C. Teagan and V. Sen, J.C. Moore, and G. Zwart, 1993, Hydrogeology of the Northern Barbados Ridge Accretionary Prism: Constraints from 3-D Seismic Reflection Data, Eos-Transactions, AGU, 74(43), 241.

Bhattacharya, B.B., M.K. Sen, and P.L. Stoffa, 1992, Nonlinear inversion of resistivity sounding data, Proceedings of the SEG/Moscow ‘92 International Conference and Exposition on Exploration and Development Geophysics, Moscow, Russia, 171.

Kao, Jason C., and Paul L. Stoffa, 1992, Parallel Implementation of Post-stack 3-D Split-step Depth Migration on the Cray Y-MP C90, Proceeding of the Society of Exploration Geophysicists Sixty-Second Annual International Meeting and Exposition, New Orleans, LA, 307.

Oh, J., J.A. Austin, Jr., J.D. Phillips, M.F. Coffin and P.L. Stoffa, 1992, nature of Basement Offshore the Southeastern United States – Foundation of the Rifted Continental Margin, Eos-Transactions, AGU, 73(43), 542.

Sen, Mrinal K., and Paul L. Stoffa, 1992, Multilayer AVO inversion by genetic algorithms, Proceedings of the Society of Exploration Geophysicists Sixty-Second Annual International Meeting and Exposition, New Orleans, LA.

Sen, Mrinal K., and Paul L. Stoffa, 1992, Multilayer AVO inversion by genetic algorithms, Proceedings of the SEG/EAEG Summer Research Workshop, Big Sky, Montana, 581-589.

Sen, V., Y. Nakamura, P.L. Stoffa, Y Hello, T.H. Shipley, and N.L. Bangs, 1992, Preliminary Results from an Ocean Bottom Seismograph Experiment at the toe of the Barbados Trench, Eos-Transactions, AGU, 73(43), 356.

Shipley, T.H., K. McIntosh, E. Silver, and Stoffa, P.L., 1992, Three-dimensional seismic imaging of the Costa Rica Accretionary Prism: structural diversity in a small volume of the lower slope, Geophysical Abstracts, 2, 20.

Shipley, T.H., G.F. Moore, J.C. Moore, N.L. Bangs, P.L. Stoffa, V. Sen, Y. Nakamura, and S. Kuramoto, 1992, Three-dimensional seismic survey at the toe of the Barbados Trench: Some first observations, Eos-Transactions, AGU, 73(43),356.

Stoffa, P.L., W.T. Wood, T.H. Shipley, G.F. Moore, E. Nishiyama, M.A.B. Botelho, A. Taira, H. Tokuyama, K. Suyehiro, 1992, Deep water high resolution expanding spread and split-spread seismic profiles in the Nankai Trough, Geophysical Abstracts, 2, 13.

Botelho, Marco A.B., and Paul L. Stoffa, 1991, Finite-Difference Prestack Reverse Time Migration Using the P-SV Wave Equation, Proceedings of the 61st Annual International Society of Exploration Geophysicists Meeting and Exposition, Houston, TX, II, 1009-1011.

Botelho, Marco A.B., and Paul L. Stoffa, 1991, Finite-Difference Reverse Time Migration of Multi-Configuration Marine Seismic Data, 2nd International Congress of the SBGf, Salvador, Brazil, Expanded Abstracts, 11, 953-959.

Jervis, M., and P. L. Stoffa, 1991, Seismic Waveform Inversion for Velocity, Eos-Transactions, AGU, 72(44), 333.

Sen, Mrinal K., and Paul L. Stoffa, 1991, Simulated Annealing, Genetic Algorithms and Seismic Waveform Inversion, Proceedings of the 61st Annual International Society of Exploration Geophysicists Meeting and Exposition, Houston, TX., II, 945-947.

Shipley, T.H., W.T. Wood, and P.L. Stoffa, Seismic reflection velocity study of a gas-hydrate zone on the continental slope offshore South Carolina, April 1991, invited for Special Session on Measurements of Gassy Sediments, Journal Acoustical Society of America, 89, No. 4, 1853.

Squires, Livia J., and Paul L. Stoffa, 1991, Borehole Traveltime Tomography With Statics and a Priori Constraints, Eos-Transactions, AGU, 72(44), 334.

Squires, Livia J., Paul L. Stoffa, and Guillaume Cambois, 1991, Tomographic Inversion for Velocity Plus Statics, Proceedings of the 61st Annual International Society of Exploration Geophysicists Meeting and Exposition, Houston, TX., II, 821-824

Stoffa, Paul L., and Mrinal K. Sen, 1991, Seismic Waveform Inversion Using Global Optimization Methods: Examples Using GA, 2nd International Congress of the SBGf, Salvador, Brazil, Expanded Abstracts, 11, 837-842.

Wood, W.T., P.L. Stoffa, and M.K. Sen, 1991, Practical Acoustic Inversion of Multi-Channel Reflection Seismic Data for Velocity and Density in a 1-D Earth, Eos-Transactions, AGU, 72(44), 295.

Cambois, Guillaume, and Paul L. Stoffa, 1990, Surface-Consistent Deconvolution in the Log/Fourier Domain, Proceedings of the 52nd European Association of Exploration Geophysicists Meeting and Technical Exhibition, Copenhagen, Denmark.

Cambois, Guillaume, and Paul L. Stoffa, 1990, Surface Consistent Phase Decomposition, Proceedings of the 60th Annual International Society of Exploration Geophysicists Meeting and Exposition, San Francisco, CA, 2, 1593-1596.

Hatcher, R.D., Jr., J.A. Austin, Jr., P.L. Stoffa, J.K. Costain, J. Coruth, A.C. Johnson, D.S. Sawyer, and D.T. Secor, 1990, Southern Appalachian Crustal Section (SACS), Geol. Soc. America Abs. with Programs.

Holbrook, W. Steven, G. Michael Purdy, Edmund C. Reiter, M.N. Toksoz, J.A. Austin, Jr., P.L. Stoffa, and D. Sawyer, 1990, Crustal Structure of the Carolina Trough, U.S. East Coast Margin, From Coincident Multichannel Reflection and Ocean-Bottom Seismic Data, Eos-Transactions, AGU, 71, 1616.

Oh, J., P.L. Stoffa, J. A. Austin, Jr., J.D. Phillips, and D.S. Sawyer, 1990, Alternative Interpretation for the Brunswick Magnetic Anomaly from Deep-penetration Multichannel Seismic Reflection Profiling: Southeastern United States Passive Continental Margin, Eos-Transactions, AGU, 71, 1616.

Phillips, J.D., L.M. Gahagan, D.M. Müller, J.A. Austin, J. Oh, P.L. Stoffa, and D. Sawyer, 1990, Synthetic Modeling of the East Coast and Brunswick Magnetic Anomaly Trends, Southeastern U.S.: Geologic Interpretation, Eos-Transactions, AGU, 71, 1616.

Sen, Mrinal K., and Paul L. Stoffa, 1990, Non-linear Seismic Waveform Inversion in One-dimension Using Simulated Annealing, Proceedings of the 60th Annual International Society of Exploration Geophysicists Meeting and Exposition, San Francisco, CA, 2, 1119-1122.

Sen, Mrinal K., and Paul L. Stoffa, Pre-stack Migration in Shot-Geophone Coordinates Using the Split-step Fourier Algorithm, 1990, Proceedings of the Society of Exploration Geophysicists Forty-Third Annual Midwest Meeting and Exposition, Midland, TX.

Shipley, T.H., K. McIntosh, P.L. Stoffa, and E.A. Silver, 1990, Accretionary Processes Along the Middle America Trench off Costa Rica, Proceedings of the Circum-Pacific Conference, Honolulu, Hawaii.

Shipley, T.H., K. McIntosh, P.L. Stoffa, and E.A. Silver, 1990, Seismic Reflection Images of the Accretionary Wedge off Costa Rica, Proceedings of the AAPG Convention, San Francisco, California.

Stoffa, Paul L., Mrinal K. Sen, Jacob Fokkema, Walter Kessinger, and Radmila Tatalovic, 1990, Pre-stack Shot Point and Common Midpoint Migration Using the Split-step Fourier Algorithm, Proceedings of the 52nd European Association of Exploration Geophysicists Meeting and Technical Exhibition, Copenhagen, Denmark.

Tatalovic, Radmila, Paul L. Stoffa, Jacob T. Fokkema, and Mrinal Sen, 1990, Velocity Estimation Using the Pre-stack Split-step Fourier Migration Algorithm for Plane Wave Decomposed CMP Data, Proceedings of the EAEG/SEG Research Workshop on Estimation and Practical Use of Seismic Velocities, Cambridge, U.K.

Wood, Warren T., and Paul L. Stoffa, 1990, Velocity Analysis by Iterative Delay Time Modeling of Plane Wave Seismograms, Proceedings of the EAEG/SEG Research Workshop on Estimation and Practical Use of Seismic Velocities, Cambridge, U.K.

Austin, J.A., Jr., P.L. Stoffa, J.D. Phillips, J. Oh, D. Sawyer, G.M. Purdy, and E. Reiter, 1989, Imaging a Reactivated(?) Crustal Suture and a Complex Continent-Ocean Transition - A Reflection Profile Across the Carolina Trough, Eos-Transactions, AGU, 70(43), 346.

Austin, J., D. Sawyer, P. Stoffa, J. Phillips, J. Oh, E. Reiter, and G.M. Purdy, 1989, Imaging Submerged Continental Lithosphere - A Deep Reflection Profile Across The Carolina Trough, East Coast U.S. Divergent Margin, Proceeding of the IFP-ILP-IUGS Research Conference on exploration, The potential of deep seismic profiling for hydrocarbon exploration, Arles, France.

Botelho, M.A.B., and P.L. Stoffa, April 1989, Iterative Finite Difference reverse Time Migration of Surface Vertical and Cross Hole Seismic Data, Proceeding of the Society of Exploration Geophysicists/Midwest Meeting and Exposition, Denver, CO.

Botelho, M.A.B., and P.L. Stoffa, 1989, Velocity Analysis Using Iterative Pre-stack Reverse Time Migration, Proceeding of the European Association of Exploration Geophysicists, Berlin, Germany.

Cambois, Guillaume, and Paul L. Stoffa, 1989, Surface Consistent Deconvolution, Eos-Transactions, AGU, 70(43), 1215.

Guimarães, Marcos A.G, and Paul L. Stoffa, Inversão de Tempo de Percurso Para Camadas Mergulhantes No Dominio τ-p, November 1989, Proceeding of the Congresso de Sociedade Brasileira de Geofisica, Rio de Janeiro, Brasil.

Guimarães, Marcos A. Gallotti and Paul L. Stoffa, 1989, Inversão de Tempo de Percurso Para Camadas Mergulhantes No Dominio τ-p, Proceedings of the Brazilian Geophysical Society, Rio de Janeiro, 12.

Jervis, M., and P.L. Stoffa, 1989, Recovery of the Background P and S-wave Velocity by Nonlinear 2D Elastic Waveform Inversion Through Frequency and Offset Staging, Eos-Transactions, AGU, 70(43), 1215.

Oh, J., Paul L. Stoffa, J.A. Austin, Jr., J.D. Phillips, and D. Sawyer, 1989, Images of Basin Structures Beneath the Postrift Unconformity - A Deep Reflection Profile from the Blake Plateau Basin, Eos-Transactions, AGU, 70(43), 346.

Phillips, J.D., J. Austin, Jr., J. Oh, P.L. Stoffa, D. Sawyer, G.M. Purdy, and E. Reiter, 1989, Magnetic Anomaly Modeling of the East Coast and Brunswick Magnetic Anomaly Trends Over the Carolina Trough, Eos-Transactions, AGU, 70(43), 346.

Reiter, E., G.M. Purdy, N. Toksoz, and P.L. Stoffa, 1989, Imaging with Deep Water Multiples, Eos-Transactions, AGU, 70(43), 1223.

Sawyer, D., P. Stoffa, J. Austin, J. Phillips, J. Oh, E. Reiter, and G.M. Purdy, 1989, Images of a Reactivated Crustal Suture - Deep Reflection Profiles From the Carolina Trough and Blake Plateau Basin, Proceeding of the IFP-ILP-IUGS Research Conference on exploration, The potential of deep seismic profiling for hydrocarbon exploration, Arles, France.

Squires, Livia J., and Paul L. Stoffa, 1989, Tau-p Processing of Carolina Trough Line 6, Eos-Transactions, AGU, 70(43), 346.

Stoffa, Paul L., 1989, Tau-p: An Alternative Domain for Filtering, Velocity Analysis, and Imaging, Proceedings of the 59th Annual International Society of Exploration Geophysicists Meeting and Exposition, Dallas, TX, 1, 551-554.

Vera, E.E., J.C. Mutter, P. Buhl, J.A. Austin, Jr., I.W.D. Dalziel, and P.L. Stoffa, 1989, Deep Seismic Structure of the Southernmost Andes, Eos-Transactions, AGU, 70(43), 1314.

Wood, W.T., and P.L. Stoffa, 1989, Results of a High Resolution Two Ship Seismic Experiment in the Nankai Trough, Eos-Transactions, AGU, 70(43), 1347.

Botelho, M.A.B., and P.L. Stoffa, 1988, Velocity Analysis Using Reverse Time Migration, Eos-Transactions, AGU, 69(44), 1326.

Botelho, Marco A.B., Peter Hubral, Paul L. Stoffa, 1988, Seismic Modeling of Complex Structures in the Reconcavo Basin (Brasil) Using Asymptotic Ray Theory: A Case History, Proceedings of the 58th Annual International Society of Exploration Geophysicists Meeting, Anaheim, California, 9-1.

Jervis, M., P.L. Stoffa, J.A. Austin, Jr. and I.W.D. Dalziel, and J.C. Mutter, 1988, Preliminary Report on a Multichannel Seismic Study of the Deep Structure of a Cordilleran Orogen: The Southernmost Andes, Eos-Transactions, AGU, 69(44), 1460.

Kessinger, Walter, Paul L. Stoffa, Thomas H. Shipley, 1988, A Study of Navigation Data for a Three-Dimensional Seismic Survey, Proceedings of the 58th Annual International Society of Exploration Geophysicists Meeting, Anaheim, California, 508-510.

Nishizawa, A., K. Suyehiro, A. Taira, T.H. Shipley, and P.L. Stoffa, 1988, Shallow Crustal Structure of the Inner Slope at the Nankai Trough, Seismological Research Letters, 59(1), 47.

Phillips, J.D., and P. L. Stoffa, 1988, Vertical Seismic Profile: ODP Site 504B Costa Rica Rift, Interpretations and Seismic Correlations, Eos-Transactions, AGU, 69(44), 1401.

Phillips, J.D., P.L. Stoffa, and H. Winkler, 1988, Vertical Seismic Profile Experiment: ODP Site 642, Seaward Dipping Reflectors, Interpretations and Seismic Correlations, Eos-Transactions, AGU, 69(44), 1401.

Reiter, E., G.M. Purdy, D. Sawyer, P.L. Stoffa, J.D. Phillips, J.A. Austin, Jr., and N. Toksoz, 1988, Ocean Bottom Hydrophone Results from a Multichannel Seismic Survey in the Carolina Trough and Southeast Georgia Embayment, Eos-Transactions, AGU, 69(44), 1405.

Shipley, Thomas H., Paul L. Stoffa, Don F. Dean, and Eli Silver, 1988, Comments on the 3D Structure of the Accretionary Wedge off Costa Rica, Eos-Transactions, AGU, 69(44), 1406.

Stoffa, P.L., and J. Oh, 1988, A deep Crustal MCS Study Offshore of the Carolina Trough and Southeast Georgia Embayment, Eos-Transactions, AGU, 69(44), 405.

Stoffa, Paul L., Thomas H. Shipley, Donald Dean, Rigmor Elde, Eli Silver, 1988, 3D Seismic Survey of the Accretionary Prism Complex Offshore Costa Rica, Proceedings of the 58th Annual International Society of Exploration Geophysicists Meeting, Anaheim, California, 3-5.

Stoffa, Paul L., Mark Wiederspahn, and Warren T. Wood, Fall 1988, Interactive τ-p Velocity Analysis on the Landmark Workstation - Methodology, Proceedings of the Landmark University Partners Research Conference, Houston, TX.

Wood, Warren T., Mark Wiederspahn, and Paul L. Stoffa, Fall 1988, Interactive τ-p Velocity Analysis on the Landmark Workstation - Examples, Proceedings of the Landmark University Partners Research Conference, Houston, TX.

Wood, W.T., and P.L. Stoffa, 1988, Reflection Velocity Analysis and Pre-stack Migration in the τ-p Domain for 1D and 2D Earth Structure, Eos-Transactions, AGU, 69(44), 1326.

Botelho, M.A.B., and P.L. Stoffa, 1987, Seismic Modeling of Real Geological Complex Structures Using Asymptotic Ray Theory (ART), Eos-Transactions, AGU, 68(44), 1370.

Kessinger, W., C.R. Denham, P.L. Stoffa, T.H. Shipley, H.V. Winkler, A. Aguilar, and F. Rojas, 1987, Three Dimensional Seismic Imaging of The Accretionary Wedge in the Middle America Trench off Costa Rica: Navigation Precision, Eos-Transactions, AGU, 68 (44), 1485.

Shipley T.H, P.L. Stoffa, M.P. Cloos, E. Silver, D.L. Reed, A. Aguilar, F. Alvarado, C. Calvo, and F. Rojas, 1987, Some Preliminary Observations of the Costa Rica Three Dimensional Seismic Data, Eos-Transactions, AGU, 68(44), 1485.

Stoffa, P., T.H. Shipley, W. Wood, G. Moore, D. Karig, A. Taira, H. Tokuyama, K. Suyehiro, 1987, Geophysical estimate of sediment physical properties in the Nankai Trough: preliminary results of a high resolution two-ship seismic experiment, Eos-Transactions, AGU, 68, 1466.

Stoffa, P. L., T.H. Shipley, C. Denham, M.A.B. Botelho, D. Dean, H. Winkler, R. Elde, P. Riherd, M.P. Cloos, E.A. Silver, D.L. Reed, G. Miscovich, A. Aguilar, F. Alvarado, C. Calvo, and F. Rojas, 1987, Three Dimensional Seismic Imaging of the Accretionary Wedge in the Middle America Trench off Costa Rica: The Field Experiment and Processing Techniques, Eos-Transactions, AGU, 68(44), 1466.

Wood, W.T., P.L. Stoffa, T.H. Shipley, G.F. Moore, D.E. Karig, A. Taira, H. Tokuyama, and K. Suyehiro, 1987, Geophysical Estimate of Sediment Physical Properties in the Nankai Trough: Preliminary results of a High Resolution Two-ship Seismic Experiment, Eos-Transactions, AGU, 68(44), 1486.

Freire, R., and P.L. Stoffa, 1987, Migration Using the Split-step Fourier Method, Geophysics, 52(3), 402-403.

Loewenthal, D., and P.L. Stoffa, 1987, Synthetic Seismograms by Dereverberating Sources, Geophysics, 52(3), 437.

de Faria, E.L., P. L. Stoffa, and D. Loewenthal, 1986, Migration before Stack Using Reverse Time Propagation, Geophysics, 52(3), 403.

de Faria, E.L., D. Loewenthal, and P.L. Stoffa, 1985, Migracao Antes do Empilhamento Utilizando Propagacao Reversa no Tempo, 1o Encontro Regional de Geofisica, SBGf Divisao regional sul, Instituto de Pesquisas Espaciais, Brasil, 129. in Portuguese.

Freire, R.M.L., and P.L. Stoffa, 1985, Migracao por Mudanca de Fase em Duas Etapas, 1o Encontro Regional de Geofisica, SBGf Divisao regional sul, Instituto de Pesquisas Espaciais, Brasil, 128. in Portuguese.

Phillips, J.D., H. Winkler, P.L. Stoffa, and the ODP Leg 104 Scientific Team, 1985, Vertical Seismic Profile of Seaward Dipping Reflector Sequence Voring Plateau, ODP Leg 104, Site 642, Eos-Transactions, AGU, 66(46), 977.

Stoffa, P.L., 1985, Analysis of Seismic Data in the Tau-P Domain, 1o Encontro Regional de Geofisica, SBGf Divisao regional sul, Instituto de Pesquisas Espaciais, Brasil, 131.

Stoffa, P., 1985, Multiple suppression and deconvolution, Geophysics, 50(4), 718.

Mithal, R., P.L. Stoffa, 1984, Phase of Seismic Arrivals by Complex Trace Analysis, Eos-Transactions, AGU, 65(16).

Phillips, J.D., P.L. Stoffa, C. Denham, D. Dean, E. Rosencrantz, E.W. Behrens, J. Crowe, A.E. Maxwell, J. Grow, R. Mattick, A. Trehu, T. Edgar, D. McCowan, and J. Parks, 1984, Deep Structure of the Shelf and Slope Along the Gulf of Mexico Transect: Two Ship Expanding Spread Profiles, Eos-Transactions, AGU, 65(45), 1007.

Buhl, P., J.C. Mutter, J.M. Alsop, P.L. Stoffa, J.B. Diebold, K. Hinz, J.D. Phillips, and R. Detrick, 1983, Structure of the North Atlantic Oceanic Crust from Wide Aperture CDP Profiling, Eos-Transactions, AGU, 64(18) 269.

Detrick, R., J. Mutter, P. Buhl, P. Stoffa, J. Diebold, J. Phillips, and K. Hinz, 1983, Multichannel Seismic Evidence for Anomalously Thin Crust Beneath the Blake-Spur Fracture Zone in the Western North Atlantic, Eos-Transactions, AGU, 64(45).

Mithal, R., P. Buhl, P.L. Stoffa, and J.B. Diebold, November 8, 1983, X-P Control on Extremal Inversion in the Tau-p Domain, Eos-Transactions, AGU, 64(45).

Mutter, J.C., P. Buhl, J. Alsop, R. Detrick, P.L. Stoffa, J. B. Diebold, K. Hinz, and J. Phillips, 1983, Two-ship Multichannel Transect Across 200 m.y. of Oceanic Crust in the Central North Atlantic, Proceedings of the Geodynamics Symposium on Oceanic Lithosphere, Texas A&M, collected abstracts.

Phillips, J.D., J.T. Green, G. Treadgold, E. Rosencrantz, P. Buhl, J. Mutter, R. Detrick, P. Stoffa, and K. Hinz, 1983, Crustal Structure of the Puerto Rico Trench-Antilles Outer Ridge: North Atlantic Transect, Eos-Transactions, AGU, 64(18).

Stark, T.J., J.D. Phillips, M.M. Backus, P. Buhl, J.M. Alsop, P.L. Stoffa, J.B. Diebold, and C. Keen, 1983, Possible Moho reflections off the U.S. East coast continental margin, LASE Line 2, Eos-Transactions, AGU, 64(18).

Stoffa, P., P. Carrion, and R. Mithal, 1983, Exploiting Tau-p Waveform Data: A Preliminary Investigation, abstract, Proceedings of the 53rd Annual International Meeting of the Society of Exploration Geophysicists, Houston, TX.

Carrion, P., J.T. Kau, and P.L. Stoffa, 1983, Separate Recovery of Velocity and Density Profiles in the Slant Stack Domain, Geophysics 48(4), 430.

Buhl, P., J.C. Mutter, J.M. Alsop, P.L. Stoffa, J.B. Diebold, K. Hinz, J.D. Phillips, and R. Detrick, 1982, North Atlantic Transect: Wide Aperture CDP Data, Eos-Transactions, AGU, 63(45), 1031.

Detrick, R., J. Phillips, P. Buhl, J. Mutter, P. Stoffa, J. Diebold, and K. Hinz, 1982, North Atlantic Transect: Expanding Spread Profiles, Eos-Transactions, AGU, 63(45), 1031.

Diebold, J.B., P.L. Stoffa, J. Ewing, M. Truchan, D. McCowan, P. Buhl, J. Mutter, and R. Mithal 1982, Velocity Analysis and Stacking of Large Aperture Seismic Data, Eos-Transactions, AGU, 63(45), 1031.

Hinz, K., H. Meyer, W. Krause, A. Popovici, J.A. Austin, Jr., J.D. Phillips, E. Rosencrantz, P. Buhl, J. Mutter, R. Mithal, J. Yang, R. Detrick, J. Diebold, R.E. Houtz, and P.L. Stoffa, 1982, A Wide Aperture CDP Transect Across the Western North Atlantic, Eos-Transactions, AGU, 63, 427.

Mithal, R., P.L. Stoffa, J. Diebold, and P. Buhl, 1982, The Large Aperture Seismic Experiment: Velocity Analysis, Eos-Transactions, AGU, 63, 427.

Mutter, J.C., M. Talwani, and P.L. Stoffa, 1982, Crustal Structure of the Shallow Oceanic Crust Adjacent to the Norwegian Margin; Eos-Transactions, AGU, 63, 445.

Phillips, J.D., J.A. Austin, E. Rosencrantz, F. Taylor, K. Hinz, W. Kause, H. Meyer, A. Popvici, J. Diebold, P. Buhl, R. Houtz, J. Ladd, J. Mutter, P. Stoffa, and R. Detrick, 1982, Multichannel Seismic Studies Across the Puerto Rico Trench and Antilles Outer Ridge: North Atlantic Transect; Eos-Transactions, AGU, 63, 427.

Backus, M.M., P.L. Stoffa, C.J. Tsai, and T. Stark, 1982, Current Limitations on Deep Crustal Mapping with Marine Seismic Systems, Geophysics, 47(4), 431.

Stoffa, P.L., and A. Ziolkowski, 1981, Seismic Source Decomposition, Proceedings of the 51st Annual International Meeting of the Society of Exploration Geophysicists, Los Angeles, California.

Wenzel, F., P.L. Stoffa, and P. Buhl, 1981, Seismic Modeling in the Domain of Intercept Time and Ray Parameter, Annual Meeting of the Deutsche Geophysikalisches Gesellshaft, Heidelburg, Germany.

Stoffa, P.L. and F. Wenzel, Seismic Inversion in the Tau-p Plane, 1981, Geophysics, 46(4), 472.

Buhl, P., J.B. Diebold, and P.L. Stoffa, Wide Aperture Reflection Experiments Using Multiple Sources and Receiving Arrays, 1980, Special Session on Reflection/Refraction I and Refraction Theory: Eos-Transactions, AGU, 61(46), 1038.

Diebold, J.B., P. Buhl, and P.L. Stoffa, Wave Slowness Approach to Wide Aperture Seismic Interpretations, 1980, Special Session on Reflection/Refraction I and Refraction Theory, Eos-Transactions, AGU, 61(46), 1037.

Herron, T.J., P.L. Stoffa, and P. Buhl, 1980, Magma Chamber and Mantle Reflections East Pacific Rise, Eos-Transactions, AGU, 61(17), 367.

Herron, T.J., P.L. Stoffa, and P. Buhl, 1980, Shallow Crustal Layers - East Pacific Rise, Eos-Transactions, AGU, 61(46), 1104.

Johansen, B., P.L. Stoffa, and P. Buhl, Jan-Mayen Ridge of the Norwegian Sea, 1980, Eos-Transactions, AGU, 61(46), 1105.

Stoffa, P.L., J.B. Diebold, and P. Buhl, Velocity Analysis for Wide Aperture Common Midpoint Data, 1980, Special Session on Reflection/Refraction 1 and Refraction Theory, Eos-Transactions, AGU, 61(46), 1037.

Stoffa, P.L., and F. Wenzel, 1980, Seismic Modeling in the Domain of Intercept Time and Ray Parameter, Eos-Transactions, AGU, 61(17), 302.

Diebold, J.B., and P.L. Stoffa, 1980, Wide Aperture CDP Traveltime Data: Tau-p Mapping and Inversion, Geophysics, 45(4), 544.

Stoffa, P.L., P. Buhl, and J.B. Diebold, 1980, The Direct Mapping of Seismic Data to The Domain of Intercept Time and Ray Parameters: A Plane Wave Decomposition, Geophysics, 45(4), 540.

Buhl, P., P.L. Stoffa, and J.B. Diebold, 1979, Velocity-Depth Inversion from the Tau-p Plane for Large Aperture Common Midpoint Seismic Data, Eos-Transactions, AGU, 60(46), 888.

Diebold, J.B., P.L. Stoffa, and P. Buhl, 1979, Preliminary Results from the Two-Ship Expanding Spread Profiles Acquired during ROSE, Eos-Transactions, AGU, 60(46), 887.

Stoffa, P.L., A. Mauffret, M. Truchan, and P. Buhl, 1979, Subcrustal Layering in the Aruba Gap, Eos-Transactions, AGU, 60(18).

Buhl, P., P.L. Stoffa, T.K. Kan, M. Talwani, and J. Ewing, 1978, Observation of Reflections from the M-Discontinuity in the Western Pacific by Near Vertical Incidence Multichannel Profiling, Eos-Transactions, AGU, 59(4), 321.

Houtz, R.E., P. Buhl, P.L. Stoffa, C.C. Windisch, and S. Murachi, 1978, Observations of the Decrease in Upper Mantle Seismic Velocity Beneath the Japan-Bonin Trench, Eos-Transactions, AGU, 59(4).

Stoffa, P.L., P. Buhl, T.K. Kan, M. Talwani, and J. Ewing, 1978, Expanding Spreading Profiles: Velocity Analysis and Results, Eos-Transactions, AGU, 59(4), 320.

Talwani, M., P. Buhl, P.L. Stoffa, T.K. Kan, and J. Ewing, 1978, Application of Multichannel Seismics to the Study of the Outer Gravity High near the Japan Trench, Eos-Transactions, AGU, 59(4), 321.

Windisch, C.C., P.L. Stoffa, P. Buhl, T.K. Kan, M. Talwani, and J. Ewing, 1978, Multichannel Constant Offset Profiles in the Western Pacific Results, Eos-Transactions, AGU, 59(4), 320.

McCamy K., P.L. Stoffa, J.L. Chute, 1977, Spatial processing of seismic data, Geophysics, 42(7), 1524.

Talwani, M., C. Windisch, P.L. Stoffa, P. Buhl, and R.E. Houtz, 1977, Island Arcs Deep Sea Trenches and Back-Arc Basins, Multichannel Seismic Study in the Venezuelan Basin and the Curacao Ridge, Eos-Transactions, AGU, 57(4), 266.

Buhl, P., P.L. Stoffa, T.K. Kan, C.C. Windisch, J. Ewing, and M. Talwani, 1977, A Critical Angle Reflection Experiment to Map the M-Discontinuity: Preliminary Data Analysis, Eos-Transactions, AGU, 58(6), 510.

Herron, T.J., W.J. Ludwig, P.L. Stoffa, T.K. Kan, and P. Buhl, 1977, Structure of the Ridge Crest of the East Pacific Rise from Multichannel Seismic Reflection Data, Eos-Transactions, AGU, 58(6), 511.

Kan, T.K., P.L. Stoffa, P. Buhl, and C.S. Clay, 1977, The Coherent Transmission of Shear Waves through a Randomly Rough Interface, Proceedings of the 47th Annual International Meeting of the Society of Exploration Geophysicists, Calgary, Alberta, Canada.

Kan, T.K., P.L. Stoffa, P. Buhl, T.J. Herron, and M. Truchan, 1977, Wave Equation Migration: A Powerful Tool to Improve Deep Sea Multichannel Seismic Reflection Data, Eos-Transactions, AGU, 58(6), 510.

Stoffa, P.L., and P. Buhl, 1977, Multichannel Seismic Processing - An Academic Approach, Geophysics, 42.

Stoffa, P.L., T.K. Kan, P. Buhl, and H. Kutschale, 1977, The Application of the Split-step Algorithm to the Migration of Marine Seismic Data, Proceedings of the 47th Annual

International Meeting of the Society of Exploration Geophysicists, Calgary, Alberta, Canada.

Windisch, C.C., P.L. Stoffa, P. Buhl, M. Talwani, T.K. Kan, and S. Murachi, 1977, A Critical Angle Reflection Experiment to Map the M-Discontinuity: The Field Experiment, Eos-Transactions, AGU, 58(6), 510.

Tatham, R.H., P.L. Stoffa, 1975, Bright spots and dilatancy – convergence of exploration and earthquake seismology, Geophysics, 40(1), 162-163.

Tatham, Robert H., and P.L. Stoffa, 1974, V_p/V_s - A Geophysical Diagnostic Parameter, Proceedings of the 44th Annual International Meeting of the Society of Exploration Geophysicists, Dallas, TX.

Buhl, P., J. LaBrecque, and K. McCamy, and P.L. Stoffa, 1973, Dismantling Marine Magnetic Anomalies: The Reversal Pattern, Earth Filter, and Process Filter, Eos-Transactions, AGU, 54(4).

Buhl, P., and P.L. Stoffa, 1973, The Application of Homomorphic Deconvolution to Marine Seismology, Eos-Transactions, AGU, 54(4).

Stoffa, P.L., P. Buhl, and G.M. Bryan, 1973, Homomorphic Deconvolution of the Marine Seismic Source, Geophysics, 38(6).