

CURRICULUM VITAE

Joann Miriam Stock

Seismological Laboratory 252-21
California Institute of Technology
Pasadena, CA 91125

Telephone: (626) 395-6938
Fax: (626) 564-0715

Electronic Mail: jstock@gps.caltech.edu

RESEARCH INTERESTS

Plate tectonics, structural geology, evolution of plate boundaries, physical volcanology, remote sensing, ground-penetrating radar studies of active faults, stress and deformation in the lithosphere.

EDUCATION

MASSACHUSETTS INSTITUTE OF TECHNOLOGY
PhD in geology, 1988. MS in geophysics, May 1981. BS in geophysics, May 1981

PROFESSIONAL POSITIONS

Feb. 1992 to 1998
CALIFORNIA INSTITUTE of TECHNOLOGY
Pasadena, CA Associate Professor of Geology and Geophysics

Oct. 1998 to present
CALIFORNIA INSTITUTE of TECHNOLOGY
Pasadena, CA Professor of Geology and Geophysics

1995 - 2000
CENTRO DE INVESTIGACIÓN CIENTÍFICA Y EDUCACIÓN SUPERIOR DE ENSENADA (CICESE)
Ensenada, Baja California, Mexico, Investigadora Adjunta

1988 to Jan. 1992
HARVARD UNIVERSITY
Cambridge, MA Associate Professor of Geology and Geophysics (July 1990-Jan. 1992)

HARVARD UNIVERSITY

Cambridge, MA Assistant Professor of Geology and Geophysics (July 1988-June 1990)
Sept. 1982 to Aug. 1984

US GEOLOGICAL SURVEY, MENLO PARK, CALIFORNIA Geophysicist, office of Earthquakes,
Volcanoes, and Engineering

COURSES TAUGHT

Harvard University:

EPS 174a (Field Geology)
Science A-24 (Dynamics of the Earth)
EPS 167 (Applied Geophysics)
EPS 161 (Plate Tectonics)
EPS 104 (Stratigraphy & Structural Geology)

California Institute of Technology:

Geology 213 (Plate Tectonics), Spring 1990
Ge 180 (Plate Tectonics), Fall 1992, Spring 1994, Spring 1996, Winter 1997, Fall 2000
Ge 161 (Plate Tectonics), Fall 2001, Winter 2003, Fall 2003, Fall every year 2005-2018, Winter 2020,
Fall 2020
Ge 102 (Geophysics), Spring 1993, Winter 1994, Fall 1994
Ge 105 (Geophysics), Fall 1995 and Winter 1996
Ge120 (Field Geology) Summer 2008
Ge 121a (Advanced Field and Structural Geology), Fall 1994, 1996, 1998, 1999; Winter 2001; Fall 2001,
Winter 2004, Fall 2005, 2007, 2009, 2011; Winter 2016
Ge122a (Field Geology Seminar), Fall 2015, Fall 2016, Fall 2018
Ge 260 (Physics of Earth Materials), Fall 1997, Fall 2000, Winter 2003
Ge 111a&b (Applied Geophysics Seminar and Field course), Spring& Summer 1999, 2000, 2001,
2002, 2003, 2004, 2006, 2007, 2008, Winter & Spring 2009
Ge 211 (Applied Geophysics II), Spring 2001, Fall 2002, Fall 2006, Winter 2011, Winter 2018
Ge193 (Seminar on the Tectonics of the South Atlantic), Winter 2001
Ge193 (Seminar on the Tectonics of New Zealand), Fall 2017
Ge195 (Special Opportunities in Field Geology), Fall 2002
Ge136 (Field Geology of the SW United States), Fall 2002, Spring 2012, Spring 2013, Fall 2013,Fall
2014
FS/Ge016 (Freshman Seminar) Fall each year 2012-2018,2020

Nov. 1987 Taught 1.5 days of a 4-day intensive workshop on plate reconstructions, with Prof. R. I.
Walcott, *Victoria University of Wellington, Wellington, New Zealand.*

Centro de Investigación Científica y Educación Superior de Ensenada (CICESE):

1989, 1993, 1994, 1998, 2000 Taught 2 week intensive course "Tectónica de Placas" to graduate students at the Centro de Investigación Científica y Educación Superior de Ensenada (CICESE), Ensenada, México

Universidad de Sonora:

2005 Taught Topics in Structural Geology to graduate students
2011 Taught Paleomagnetism and Its Use in Tectonics to graduate students

FELLOWSHIPS and HONORS

Fannie and John Hertz Foundation Fellowship for Graduate Study in Applied Physical Sciences
Phi Beta Kappa
Presidential Young Investigator Award, 1990-1995
Fulbright Fellowship, Japan, 2004-2005
Guggenheim Fellowship, 2004-2005
Elected as a Fellow to Geological Society of America, 2009
Elected as a Fellow of the American Geophysical Union, 2010
China Academy of Sciences President's International Fellowship Initiative, Visiting Scientist, 2019

COMMITTEE RESPONSIBILITIES (External to Caltech)

American Geophysical Union Budget and Finance Committee, 1990 – 1992
National Earthquake Prediction Evaluation Council, 1990-1994.
Member of 15-person NSF-sponsored delegation to US-PRC Joint Symposium on Earthquake Prediction along the Xianshuihe Fault Zone, Sept. 1990
Tectonophysics program co-chairman, AGU meeting, Fall 1992
Co-organizer of special sessions on the Tectonics of the Jalisco Block and on the Tectonics of Western Mexico, Mexican Geophysical Union, annual meeting, Nov. 1992 and Nov. 1993.
Member, Tectonics Panel, Ocean Drilling program, 1993-1996.
Co-convenor of Penrose conference on "Tectonic Evolution of the Gulf of California and its Margins", Loreto, Baja California, Mexico, April 1996.
Co-convenor of Chapman conference on "Plate Motions and Mantle Convection", Marshall, California, June 1997
Co-convenor of Margins workshop on "Rupturing of Continental Lithosphere in the Gulf of California/Salton Trough region", Puerto Vallarta, Mexico, October 2000
GSA Penrose Committee, 1996-1998
Editorial Board, Geology, 1995-1997
Antarctic Geology and Geophysics Working Group, 1997-2000
Steering Committee, NSF MARGINS Program, 1999-2003
Office Advisory Committee, NSF Office of Polar Programs, 2001-2003
Geological Society of America, International Section, management board, 2008-2011.
MIT EAPS Visiting Committee, 2010-2017
US Array Advisory Committee, 2007-2010
UNOLS Marine Seismic Research Oversight Committee, 2017-2018

FIELD GEOLOGICAL AND GEOPHYSICAL WORK

- participant in field microseismicity projects in Greece (1979) and Peru (1980, 1981)
- active source seismology project in southeastern California (Salton Seismic Imaging Project), 2009-2011
- field geophysical work in boreholes (hydraulic fracturing, televiewer, standard geophysical logging) as part of USGS employment, 1982-1987. Projects were related to earthquake hazards along the San Andreas Fault system and site stability at Yucca Mountain, Nevada.
- ongoing field mapping (structural geology, volcanic stratigraphy) in northwestern Mexico (Baja California, Baja California Sur, and Sonora), 1985 - present. Paleomagnetic work on some of the same rocks, 1995-present.
- field mapping, South Bristol Mtns, Ash Hill, and Lava Hills, Mojave Desert, California (2009-2016)
- geophysical cruise participation (15 cruises): N. B. Palmer 92-08 West Antarctic margin, Dec. 1992 - Jan.1993; Ewing 9513, South Tasman Sea, Dec. 95-Feb. 1996 (co-chief sci); Palmer 9602, W. Antarctica Margin, Feb.-April 1996 (co- chief scientist), Palmer 97-02, N. Ross Sea, Feb-March 1997 (co-chief sci.), Ulloa 9905-79, N. Gulf of California, May-June 1999 (co-chief sci.), Palmer 0102, South Atlantic, April 2001 (chief sci.), Palmer 0207, trans-Pacific, Nov.-Dec. 2002 (chief sci.), Palmer 0209, Ross Sea, Dec. 2002-Jan. 2003 (co-chief sci.), Palmer 0304B, North Pacific, Aug-Sept. 2003 (chief sci.), Palmer 0602, Southern Ocean, Feb. 2006 (chief sci), Palmer 0607C, Chatham Rise, Oct. 2006 (chief sci), Palmer 0701, Ross Sea, Dec. 2006-Jan. 2007 (co-chief sci); IODP Expedition 367, South China Sea, Feb-April 2017 (co-chief sci); MGL1803, New Zealand, Feb-March 2018; IODP Expedition 385, Gulf of California, Sept-Nov 2019.
- GPS investigations in the Jalisco area, Mexico, 1995 - 2010.
- Field Mapping and LiDAR data analysis, Hector Mine Fault, CA, 2012-2014

STUDENT THESES SUPERVISED OR CO-SUPERVISED

- 1) Comenetz, Joshua, Harvard Univ. Senior thesis, 1992.
Thesis topic: "Use of Landsat-TM data to discriminate among volcanic lithologies, Puertecitos Volcanic Province, Mexico".
- 2) Lewis, Claudia, Harvard Univ. Ph.D., June 1994.
Thesis title: "Miocene Extensional Tectonics and Volcanism in the Sierra San Fermín, Baja California, México".
- 3) Zajac, Blair, Caltech PhD, 1998.
Thesis title: "The state of stress as inferred from deviated boreholes: Constraints on the tectonics of offshore central California and Cook Inlet, Alaska".

4) Nagy, Elizabeth, Caltech Ph.D., May 1997.

Thesis title: "Extensional deformation and volcanism within the northern Puertecitos Volcanic Province, Sierra Santa Isabel, Baja California, Mexico".

5) Holt, John W., Caltech Ph.D., April 1997 (co-supervisor)

Thesis title: "I. Detailed records of geomagnetic field behavior from Death Valley and Hawaii; II. An age constraint on Gulf of California rifting from Santa Rosalía, Baja California"

6) Melbourne, Timothy I., Caltech Ph.D., 1998 (co-supervisor)

Thesis title: "I. Rupture processes of large subduction earthquakes. II. Broadband upper mantle structure of western North America"

7) Oskin, Michael E., Caltech Ph.D., 2001

Thesis title: "Part I: Tectonic Evolution of the Northern Gulf of California, Mexico, Deduced from Conjugate Rifted Margins of the Upper Delfin Basin and Part II: Active Folding and Seismic Hazard in Central Los Angeles, California"

8) Keller, William, Caltech Ph.D., 2003

Thesis title: "Cenozoic plate tectonic reconstructions and plate boundary processes in the Southwest Pacific"

9) Persaud, Patricia, Caltech Ph.D., 2003

Thesis title: "Images of early continental breakup in and around the Gulf of California and the Role of Basal Shear in producing wide plate boundaries"

10) Dmochowski, Jane, Caltech Ph.D., 2005

Thesis title: " Application of MODIS-ASTER (Master) Simulator Data to Geological Mapping of Young Volcanic Regions in Baja California, Mexico"

11) Downey, Nathan, Caltech Ph.D., 2009

Thesis title: "Tectonic history of the Osbourn spreading center and dynamic subsidence of the Congo Basin"

12) Selvans, Michelle, Caltech Ph.D., 2011 (co-supervisor)

Thesis title: "Geophysical Investigations of the Earth and Mars".

13) Olguín-Villa, Ángel Enrique, Universidad de Sonora, MS thesis, 2013 (co-supervisor)

Thesis title: "Establecimiento de la Estratigrafía Magnética del Evento Volcánico Hiperalcalino del Mioceno Medio en la Sierra Libre, Sonora, México"

14) Skinner, Steven Michael, Caltech Ph.D., 2013 (co-supervisor)

Thesis title: "Plate Tectonic Constraints on Flat Subduction and Paleomagnetic Constraints on Rifting"

- 15) Witkosky, Rebecca Amber, Caltech Ph.D., 2018 (co-supervisor)
Thesis title: "Tectonics in Nevada and Southern California: Subsidence of the Ediacaran Johnnie Formation, Cumulative Offset Along the Lavic Lake Fault, and Geomorphic Surface Development Along the Southern San Andreas Fault"
- 16) Sabbath, Leah, Caltech Ph.D., 2020 (co-supervisor)
Thesis title: "Provenance, structural geology, and sedimentation of the Miocene and Pliocene Californias"

PAPERS IN REFEREED JOURNALS

Stock, J. M., and P. Molnar, Uncertainties in the relative positions of the Australia, Antarctica, Lord Howe, and Pacific plates since the Late Cretaceous, *Journal of Geophysical Research*, 87, 4697-4714, 1982.

King, G. C. P., A. Tselentis, J. Gomberg, P. Molnar, S. W. Roecker, H. Sinvahl, C. Soufleris, and J. M. Stock, Microearthquake seismicity and active tectonics of northwestern Greece, *Earth and Planetary Science Letters*, 66, 279-288, 1983.

Stock, J. M., and P. Molnar, Some geometrical aspects of uncertainties in combined plate reconstructions, *Geology*, 11, 697-701, 1983.

Grange, F., P. Cunningham, J. Gagnepain, D. Hatzfeld, P. Molnar, L. Ocola, A. Rodriguez, S. W. Roecker, J. M. Stock, and G. Suárez, The configuration of the seismic zone and downgoing slab in southern Peru, *Geophysical Research Letters*, 11, 38-41, 1984.

Stock, J. M., J. H. Healy, S. H. Hickman, and M. D. Zoback, Hydraulic fracturing stress measurements at Yucca Mountain, Nevada, and relationship to the regional stress field, *Journal of Geophysical Research*, 90, 8691-8706, 1985.

M.I.T. Field Geophysics Course (S. Park, I. Brome, P. Cunningham, R. Harris, T. Hess, J. Hodges, D. Kirkpatrick, T. Madden M. Mellen, J. Menoher, A. Michael, P. Molnar, M. Murray, D. Olgaard, P. Standley, J. M. Stock, C. Stork, and S. T. Wray), A geophysical study of Mesquite Valley, Nevada-California border, *Journal of Geophysical Research*, 90, 8685-8690, 1985.

Molnar, P., and J. M. Stock, A method for bounding uncertainties in combined plate reconstructions, *Journal of Geophysical Research*, 90, 12537-12544, 1985.

Stock, J. M., and P. Molnar, Revised early Tertiary history of plate motion in the Southwest Pacific, *Nature*, 325, 495-499, 1987.

Molnar, P., and J. M. Stock, Relative motions of hotspots in the Pacific, Atlantic, and Indian Oceans since late Cretaceous time, *Nature*, 327, 587-591, 1987.

Stock, J. M., and J. H. Healy, Stress field at Yucca Mountain, Nevada, in Short Contributions to the Geology and Hydrology of a Potential Nuclear Waste Disposal Site at Yucca Mountain, Southern Nevada, edited by M. D. Carr and J. C. Yount, U.S. Geological Survey Bulletin, 1790, pp. 87-93, 1988.

Molnar, P., F. Pardo-Casas, and J. M. Stock, The Cenozoic and late Cretaceous evolution of the Indian Ocean Basin: Uncertainties in the reconstructed positions of the Indian, African, and Antarctic plates, *Basin Research*, 1, 23-40, 1988.

Stock, J. M., and J. H. Healy, Continuation of a deep borehole stress profile near the San Andreas fault II: Hydraulic fracturing stress measurements at Black Butte, Mojave desert, CA, *Journal of Geophysical Research*, 93 (B12), 15196-15206, 1988.

Stock, J. M., and P. Molnar, Uncertainties and implications of the late Cretaceous and Tertiary position of North America relative to the Farallon, Kula, and Pacific plates, *Tectonics*, 7, 1339-1384, 1988.

Stock, J. M., and K. V. Hodges, Pre-Pliocene extension around the Gulf of California and the transfer of Baja California to the Pacific plate, *Tectonics* 8, 99-115, 1989.

Hodges, K. V., L. McKenna, J. M. Stock, J. Knapp, L. Page, K. Sternlof, D. Silverberg, G. Wüst, and J. D. Walker, Evolution of extensional basins and Basin and Range topography west of Death Valley, CA, *Tectonics*, 8 (3), 453-467, 1989.

Stock, J. M., Sequence and geochronology of Miocene rocks adjacent to the Main Gulf Escarpment: southern Valle Chico, Baja California, Mexico, *Geofísica Internacional*, v. 28-5, p. 851-896, 1989.

Stock, J. M., and K. V. Hodges, Miocene to recent structural development of an extensional accommodation zone, northeastern Baja California, Mexico, *Journal of Structural Geology*, v. 12, No. 3, pp. 315-328, 1990.

Chang, T., J. M. Stock, and P. Molnar, The rotation group in plate tectonics and the representation of uncertainties in plate reconstructions, *Geophysical Journal of the Royal Astronomical Society*, v. 101, pp. 649-661, 1990.

Chang, T., J. M. Stock, and P. Molnar, Reply to comment on "The rotation group in plate tectonics and the representation of uncertainties in plate reconstructions," *Geophysical Journal Int.*, 110, p. 215-217, 1992.

Liu, C., and J. M. Stock, Quantitative determination of uncertainties in seismic refraction prospecting, *Geophysics*, 58, 553-563, 1993.

Sieh, Kerry, L. Jones, E. Hauksson, K. Hudnut, D. Eberhart-Phillips, T. Heaton, S. Hough, K. Hutton, H. Kanamori, A. Lilje, S. Lindvall, S. F. McGill, J. Mori, C. Rubin, J. A. Spotila, J. Stock, H. K. Thio, J. Treiman, B. Wernicke and J. Zachariasen, Near-field Investigations of the Landers Earthquake Sequence, April to July 1992, *Science*, 260, 171-176, 1993.

Martín-Barajas, Arturo, and Joann M. Stock, Estratigrafía y Petrología de la Secuencia Volcánica de Puertecitos, Noreste de Baja California. Transición de un Arco Volcánico a Rift, Contribuciones a la Tectónica del Occidente de México. Monografía No. 1 Unión Geofísica Mexicana (editores L.A. Delgado-Argote y A. Martín-Barajas), p. 66-89, 1993.

Marks, K. M., and J. M. Stock, Variations in ridge morphology and depth-age relationships on the Pacific-Antarctic ridge, Journal of Geophysical Research, 99, No. B1, 531-541, 1994.

Gerstell, M. and J. M. Stock, Testing the Porcupine Plate hypothesis, Marine Geophysical Researches, 16, No. 4, 313-321, August 1994.

Stock, J. M., and J. Lee, Do Microplates in subduction zones leave a Geological Record?, Tectonics, 13, No. 6, 1472-1487, December 1994.

Martín-Barajas, A., J. M. Stock, P. Layer, M. Lopez-Martínez, B. Hausback, and P. Renné, Arc-rift transition volcanism in the Puertecitos Volcanic Province, NE Baja California, Mexico, Bulletin of the Geological Society of America, 107, No. 4, 407-424, April 1995.

Marks, Karen M., and J. M. Stock, Asymmetric Seafloor spreading and short ridge jumps in the Australian-Anctartic discordance, Marine Geophysical Researches, 17 (4), 361-373, 1995.

DeMets, C., I. Carmichael, T. Melbourne, O. Sanchez, J. Stock, G. Suarez, and K. Hudnut, Anticipating the Successor to Mexico's Largest Historical Earthquake, EOS, Trans. American Geophysical Union, v. 76, no. 42, 417-419, October 17, 1995.

Cande, Steven C., C. A. Raymond, J. M. Stock, and W. F. Haxby, Geophysics of the Pitman Fracture Zone and Pacific-Antarctic Plate motions during the Cenozoic, Science, 270, 947-953, 1995.

Kerkela, Stacy and J. M. Stock, Compression directions north of the San Fernando Valley determined from borehole breakouts, Geophysical Research Letters, 23, No. 23, 3365-3368, 1996.

Melbourne, T., I. Carmichael, C. DeMets, K. Hudnut, O. Sanchez, J. Stock, G. Suarez, and F. Webb, The Geodetic Signature of the M8.0 Oct. 9, 1995 Jalisco Subduction Earthquake, Geophysical Research Letters, 24, No. 6, 715-718, 1997.

Wilde, Melita, and J. M. Stock, Compression directions in southern California (from Santa Barbara to Los Angeles Basin) obtained from borehole breakouts, J. Geophys. Res., 102, No. B3, 4969-4983, March 1997.

Zajac, B., and J. M. Stock, Using borehole breakouts to constrain the complete stress tensor: Results from the Sijan Deep Drilling Project and offshore Santa Maria Basin, California, J. Geophys. Res., 102, No. B5, 10,083-10,100, 1997.

Martin-Barajas, A., M. Tellez-Duarte, and J. M. Stock, The Puertecitos Formation: Pliocene Sedimentation along an accommodation zone in Northeastern Baja California, in: Markes E. Johnson and Jorge Ledesma-Vazquez, eds., Pliocene Carbonate and Related Facies Flanking the Gulf of California, Baja California, Mexico: GSA Special Paper 318, 1-24, 1997.

Marks, K. M., and J. M. Stock, Early Tertiary gravity field reconstructions of the Southwest Pacific, *Earth Planet. Sci. Lett.*, 152, 267-274, 1997.

Cande, Steven C., J. M. Stock, C. Raymond, and R. D. Müller, New Constraints on Plate Tectonic Puzzle of the SW Pacific, *EOS, Trans. American Geophysical Union*, v. 79, no. 7, February 17, 1998.

Lewis, C. J., and J. M. Stock, Paleomagnetic evidence of localized vertical axis rotation during Neogene extension, Sierra San Fermin, northeastern Baja California, Mexico, *J. Geophys. Res.*, 103, No. B2, 2455-2470, 1998.

Gaina, C., R. D. Müller, J.-Y. Royer, J. Stock, J. Hardebeck, and P. Symonds, The tectonic history of the Tasman Sea: A puzzle with thirteen pieces, *J. Geophys. Res.*, in press, 1998.

Lewis. C. J., and J. M. Stock, Late Miocene to Recent transtensional tectonics in the Sierra San Fermin, northeastern Baja California, Mexico, *J. Struct. Geol.*, 20, No. 8, 1043-1063, 1998.

Atwater, Tanya, and J. M. Stock, Pacific-North America Plate Tectonics of the Neogene Southwestern United States: An Update, *International Geol. Review*, 40, 375-402, 1998.

Marks, Karen M., J. M. Stock, and K. J. Quinn, Evolution of the Australian-Antarctic discordance since Miocene time, *J. Geophys. Res.*, 104, No. B3, 4967-4981, 1999.

Heinemann, J., J. M. Stock, R. Clayton, K. Hafner, S. Cande, and C. Raymond, Constraints on the Proposed Marie Byrd Land-Bellingshausen Plate Boundary from Seismic Reflection Data, *J. Geophys. Res.*, 104, No. B11, 25,321-25,330, 1999.

Billen, Magali I., and J. M. Stock, Morphology and origin of the Osbourn Trough, *J. Geophys. Res.*, 105, No. B6, 13,481-13,489, 2000.

Cande, Steven C., J. M. Stock, R. D. Müller, and T. Ishihara, Cenozoic Motion between East and West Antarctica, *Nature*, 404, 145-150, 2000.

Nagy, Elizabeth A., and J. M. Stock, Structural Controls on the Continent-Ocean Transition in the northern Gulf of California, *J. Geophys. Res.*, 105, No. B7, 16251-16,269, 2000.

Stock, Joann M., Relation of the Puertecitos Volcanic Province, Baja California, Mexico, to development of the plate boundary in the Gulf of California, in H. Delgado-Granados, G. Aguirre-Diaz, and J. M. Stock, eds., Cenozoic Tectonics and Volcanism of Mexico, GSA Special Paper 334, 143-156, 2000.

Raymond, Carol A., and J. M. Stock, and S. C. Cande, Fast Paleogene Motion of the Pacific Hotspots From Revised Global Plate Circuit Constraints, in M. A. Richards, R. G. Gordon, and R. D. van der Hilst, eds., History and Dynamics of Plate Motions, AGU Geophysical Monograph Series, p. 359-375, 2000.
correction

Nagy, E. A. , M. Grove, and J. M. Stock, Age and stratigraphic relationships of pre- and syn-rift volcanic deposits in the northern Puertecitos Volcanic Province, Baja California, Mexico, JVGR Special Issue on Rift-related Volcanism, v. 93 (1-2), p. 1-30, 1999.

Stock, J. M., C. J. Lewis, and E. A. Nagy, The Tuff of San Felipe: An Extensive Middle Miocene Pyroclastic Flow Deposit in Baja California, Mexico, JVGR Special Issue on Rift-related Volcanism, 93, 53-74, 1999.

Holt, John W., Elizabeth W. Holt, and Joann M. Stock, An age constraint on Gulf of California rifting from the Santa Rosalia basin, Baja California Sur, Mexico, GSA Bulletin, v. 112, no. 4, p. 540-549, 2000.

Oskin, M., J. Stock, and A. Martín-Barajas, Rapid localization of Pacific-North America plate motion in the Gulf of California, Geology, v. 29, no. 5, p. 459-462, 2001.

Marks, K. M., and J. M. Stock, Evolution of the Malvinas Plate south of Africa, Marine Geophysical Researches, v. 22, 289-302, 2001.

Masterlark, T., C. DeMets, H. F. Wang, O. Sanchez, and J. Stock, Homogeneous vs. heterogeneous subduction zone models: coseismic and postseismic deformation, Geophys. Res. Lett., v. 28, no. 21, p. 4047-4050, Nov. 1, 2001.

Hutton, W., C. DeMets, O. Sanchez, G. Suarez, and J. Stock, Slip kinematics and dynamics during and after the 1995 October 9 Mw=8.0 Colima-Jalisco earthquake, Mexico, from GPS geodetic constraints, Geophys. J. Int., v. 146, p. 637-658, 2001.

Larson, R. L., R. A. Pockalny, R. F. Viso, E. Erba, L. J. Abrams, B. P. Luyendyk, J. M. Stock, and R. W. Clayton, Mid-Cretaceous tectonic evolution of the Tongareva triple junction in the southwestern Pacific basin, Geology, v. 30, no. 1, p. 67-70, 2002.

Stock, J. M., and S. C. Cande, Tectonic History of Antarctic Seafloor in the Australia-New Zealand-South Pacific Sector: Implications for Antarctic Continental Tectonics, "Antarctica at the close of a Millennium", edited by J. A. Gamble, D.N. B. Skinner, and S. Henrys, Royal Society of New Zealand Bulletin 35, p. 251-259, 2002.

Melbourne, T., F. Webb., J. Stock, and C. Reigber, Rapid postseismic transients in subduction zones from continuous GPS, J. Geophys. Res., v. 107, no. B10, 2241, doi:10.1029/2001JB000555, 2002.

Oskin, M., and J. Stock, Marine incursion synchronous with plate boundary localization in the Gulf of California, Geology, v. 31, no 1, p. 23-26, 2003.

Courtillot, V., A. Davaille, J. Besse and J. Stock, Three distinct types of hotspots in the Earth's mantle, *Earth and Planetary Science letters* v. 205, p. 295-308, 2003.

Oskin, M., and J. Stock, Miocene to Recent Pacific-North America plate motion and opening of the Upper Delfin basin, northern Gulf of California, Mexico, *Geol. Soc. Am. Bulletin*, v. 115, no. 10, pp. 1173-1190, 2003.

Persaud, P., J. M. Stock, M. S. Steckler, A. Martin-Barajas, J. B. Diebold, A. Gonzalez-Fernandez, G. S. Mountain, Active deformation and shallow structure of the Wagner, Consag, and Delfin Basins, northern Gulf of California, Mexico, *J. Geophys. Res.*, vol. 108, No. B7, 2355, doi: 10.1029/2002JB001937, 31 July 2003.

Stock, J. M., Hotspots come unstuck, *Science*, v 301 (no 5636), 1059-1060, Aug 22, 2003.

McQuarrie, N., J. M. Stock, C. Verdel, and B. P. Wernicke, Cenozoic evolution of Neotethys and implications for the causes of plate motions, *Geophys. Res. Lett.*, v. 30, no. 20, p. 2036, doi:10.1029/2003GL017992, 2003.

Oskin, M., and J. Stock, Cenozoic volcanism and tectonics of the continental margins of the Upper Delfin Basin, northeastern Baja California and western Sonora, in Johnson, S. E., Paterson, S.R., Fletcher, J. M., Girty, G. H., Kimbrough, D. L., and Martin-Barajas, A., eds., *Tectonic evolution of northwestern Mexico and the southwestern USA*, Boulder, Colorado, GSA Special Paper 374, p. 421-438, 2003.

S. C. Cande and J. M. Stock, Pacific-Antarctic-Australia motion and the formation of the Macquarie Plate, *Geophys. J. Int.*, v. 157, p. 399-414, 2004.

Cande, S. C. and J. M. Stock, Cenozoic reconstructions of the Australia-New Zealand-South Pacific Sector of Antarctica, in "The Cenozoic Southern Ocean: Tectonics, Sedimentation and Climate Change Between Australia and Antarctica", edited by Neville Exon, James P. Kennett, and Mitchell Malone, AGU Monograph Series v. 151, p. 5-19, 2004.

Hook, S. J., J. E. Dmochowski, K. A. Howard, L. C. Rowan, K. E. Karlstrom, and J. M. Stock, Mapping variations in weight percent silica from multispectral thermal infrared imagery - Examples from the Hiller Mountains, Nevada, USA and Tres Virgenes-La Reforma, Baja California Sur, Mexico, *Remote Sensing of Environment*, v. 95, issue, 3, 15 April 2005, p. 273-289, 2005.

Muller, R. D., S. C. Cande, J. M. Stock, and W. R. Keller (2005), Crustal structure and rift flank uplift of the Adare Trough, Antarctica, *Geochem. Geophys. Geosyst.*, 6, Q11010, doi: 10.1029/2005GC001027.

Cande, S. C., and J. M. Stock, Constraints on the timing of extension in the Northern Basin, Ross Sea, in Futterer, D.K., D. Damaske, G. Kleinschmidt, H. Miller, and F. Tessensohn (eds.), *Antarctica: Contributions to Global Earth Sciences*, Springer-Verlag, Berlin, Heidelberg New York, pp. 317-324, 2005.

Davey, F. J., S. C. Cande, and J. M. Stock, Extension in the western Ross Sea region - links between Adare Basin and Victoria Land Basin, *Geophys. Res. Lett.*, VOL. 33, L20315, doi:10.1029/2006GL027383, 2006.

N. Downey, J. Stock, R. Clayton, and S C. Cande, History of the Cretaceous Osbourn spreading center, *J. Geophys. Res.*, v. 112, B04102, doi:10.1029/2006JB004550, 2007.

S. V. Schmitt, C. DeMets, J. Stock, O. Sanchez, B. Marquez-Azua, G. Reyes, A geodetic study of the 22 January 2003 Tecoman, Colima, Mexico earthquake, *Geophys. J. International*, v. 169, p. 389-406, 2007.

Ai, H-A., J. M. Stock, R. Clayton, and B. Luyendyk, Vertical Tectonics of the High Plateau region, Manihiki Plateau, Western Pacific, from seismic stratigraphy, *Mar. Geophys. Res.*, v. 29, p. 13-26, DOI 10.1007/s11011-008-9042-0, 2008.

Croon, M. M., S. C. Cande, and J. M. Stock, Revised Pacific-Antarctic plate motions and geophysics of the Menard Fracture zone, *Geochem. Geophys. Geosyst.*, v. 9, no. 7, Q07001, doi:10.1029/2008GC002019, 2008.

Vidal-Solano, J. R., H. Lapierre, J. M. Stock, A. Demant, F. A. Paz Moreno, D. Bosch, P. Brunet and A. Amortegui, Isotope geochemistry and petrogenesis of peralkaline Middle Miocene ignimbrites from central Sonora: relationship with continental break-up and the birth of the Gulf of California, *Bull. Soc. geol. Fr.*, v. 179, no. 5, p. 453-461, 2008.

Molnar, P., and J. Stock, A slowing of India's convergence with Eurasia at ~10 Ma and its implications for Tibetan mantle dynamics, *Tectonics*, 28, TC3001, doi 10.1029/2008TC002271, 2009.

Molnar, P., and J. M. Stock, Decreased convergence rate between India and Eurasia at ~10 million years ago, in Proceedings of the 4th international symposium on "Geodynamics of Intracontinental Orogens and Geo-ecological Problems", Moscow-Bishkek, 4-10, 2009.

Lin, Yunung, K. Sieh and J. Stock, Submarine landslides along the Malacca Strait- Mergui Basin shelf margin: Insights from sequence-stratigraphic analysis, *Journal of Geophysical Research*, V. 115, B12102, doi:10.1029/2009JB0087050, 2010.

Granot, R., S. C. Cande, J. M. Stock, F. J. Davey, and R. W. Clayton, Post-spreading rifting in the Adare Basin, Antarctica: Regional Tectonic Consequences, *Geochemistry, Geophysics, Geosystems*, v. 11 (8), Q08005, doi:10.1029/2010GC003105, 2010.

Selvans, M., J. Stock, C. DeMets, O. Sanchez and B. Marquez-Azua, Constraints on Jalisco Block motion and tectonics of the Guadalajara Triple Junction from 1998-2001 campaign GPS data, *PAGEOPH*, DOI . 10.1007/s00024-010-0201-2, v. 168, p. 1435-1447, 2011.

Andrews, V., J. Stock, G. Reyes-Davila and C. A. Ramirez-Vazquez, Double-difference relocation of aftershocks of the Tecoman, Colima, Mexico earthquake of 23 January 2003, *PAGEOPH*, DOI 10.1007/s00024-010-0203-0, v. 168, p. 1331-1338, 2011.

Hauksson, E., J. Stock, L. K. Hutton, W. Yang, A. Vidal, and H. Kanamori, The 2010 Mw7.2 El Mayor-Cucapah earthquake sequence, Baja California, Mexico and southernmost California, USA: Active seismotectonics along the Mexican Pacific Margin, PAGEOPH, DOI 10.1007/s00024-010-0209-7, v. 168, p. 1255-1277, 2011.

Croon, M., S. C. Cande, and J. M. Stock, Abyssal hill deflections at Pacific-Antarctic ridge-transform intersections, doi: 10.1029/2010GC003236, Q11004, Geochemistry, Geophysics, Geosystems, v. 11(11), November 9, 2010.

Austermann, J., Z. Ben-Avraham, P. Bird, O. Heidbach, G. Schubert, and J. M. Stock, "Quantifying the forces needed for the rapid change of Pacific Plate motion at 6 Ma," Earth and Planetary Science Letters, vol. 307, no. 3–4, pp. 289–297, 2011.

Selvans, M. M., R. Clayton, J. M. Stock, and R. Granot, Using overlapping sonobuoy data from the Ross Sea to construct a 2D deep crustal velocity model, Marine Geophysical Research, DOI: 10.1007/s11001-011-9143-z, 2011.

Meng, L., J.-P. Ampuero, J. Stock, Z. Duputel, Y. Luo, and V. C. Tsai. "Earthquake in a Maze: Compressional Rupture Branching During the 2012 Mw 8.6 Sumatra Earthquake." Science (July 19). <http://www.sciencemag.org/content/early/2012/07/18/science.1224030>., 2012.

Duputel, Z., H. Kanamori, V. C. Tsai, L. Rivera, L. Meng, J.-P. Ampuero, and J. M. Stock. "The 2012 Sumatra Great Earthquake Sequence." Earth and Planetary Science Letters 351–352: 247–257. doi:10.1016/j.epsl.2012.07.017. 2012.

Hauksson, J. Stock, R. Bilham, M. Boese, X. Chen, E. J. Fielding, J. Galetzka, K. W. Hudnut, K. Hutton, L. M. Jones, H. Kanamori, P. M. Shearer, J. Steidl, J. Treiman, S. Wei, and W. Yang, "Report on the August 2012 Brawley Earthquake Swarm in Imperial Valley, Southern California," Seismological Research Letters, vol. 84, no. 2, pp. 177–189, Apr. 2013.

J. R. Vidal-Solano, R. Lozano Santa Cruz, O. Zamora, A. Mendoza-Cordova and J. M. Stock, Geochemistry of the extensive peralkaline pyroclastic flow deposit of NW Mexico, based on conventional and handheld X-ray fluorescence. Implications in a regional context. Journal of Iberian Geology, vol. 39, (1) 2013:121-130. http://dx.doi.org/10.5209/rev_JIGE.2013.v39.nl.41754

Olgun-Villa, A., E., J. R. Vidal-Solano and J. M. Stock, Petrografía, geoquímica, petro-fábrica y paleomagnetismo de la Toba de San Felipe en la región de Cataviña, Baja California, Mexico, Revista Mexicana de Ciencias Geologicas, v.30 (2), 282-298, 2013.

Granot, R., Cande S. C., Stock, J. M., and Damaske, D., Revised Eocene-Oligocene kinematics for the West Antarctic rift system, Geophysical Research Letters, v. 40, p. 279–284, 2013, doi:10.1029/2012GL054181, 2013

J. M. Fletcher, O. J. Teran, T. K. Rockwell, M. E. Oskin, K. W. Hudnut, K. J. Mueller, R. M. Spelz, S. O. Akciz, E. Masana, G. Faneros, E. J. Fielding, S. Leprince, A. Morelan, J. M. Stock, D. K. Lynch, A. J. Elliott, P. Gold, J. Liu-Zeng, A. Gonzalez-Ortega, A. Hinojosa-Corona, and J. Gonzalez-Garcia, "Assembly of a Large Earthquake from a Complex Fault System: Surface Rupture Kinematics of the April 4, 2010 El Mayor-Cucapah (Mexico) Mw7.2 Earthquake," *Geosphere*, doi:10.1130/GES00933.1 10 (4), 797-827, 2014.

Hauksson, E., Kanamori, H., Stock, J., Cormier, M.-H., Legg, M., 2014. Active Pacific North America Plate boundary tectonics as evidenced by seismicity on the oceanic lithosphere offshore Baja California, Mexico. *Geophysical Journal International* 196, 16919-1630. doi:10.1093/gji/ggt467.

Sengör, A.M. Celâl and Joann Stock, The Ayyubid Orogen: An Ophiolite Obduction-Driven orogen in the Late Cretaceous of the Neo-Tethyan South Margin, *Geoscience Canada*, v. 41, <http://dx.doi.org/10.12789/geocanj.2014.41.042>, 2014.

Seton, M., Whittaker, J.M., Wessel, P., Müller, R.D., DeMets, C., Merkouriev, S., Cande, S., Gaina, C., Eagles, G., Granot, R., Stock, J., Wright, N. Williams, S.E., 2014. Community infrastructure and repository for marine magnetic identifications. *Geochemistry, Geophysics, Geosystems* 15, 1629-1641. doi:10.1002/2013GC005176.

E.E. Ramirez-Ramos, A. Vidal-Villegas, A. Gonzalez-Fernandez, and J.M. Stock. A Crustal Velocity Model for the Southern Mexicali Valley, Baja California, Mexico, *Seismological Research Letters*, vol. 86, no. 1, pp. 181-191, Jan. 2015.

Chen,T., S.O. Akciz, K.W. Hudnut, D.Z. Zhang, and J.M. Stock, Fault slip distribution of the 1990 Mw 7.1 Hector Mine Earthquake, California, estimated from post-earthquake airborne LiDAR data, *Bulletin of the Seismological Society of America*, v. 105, doi: 10.1785/0120130108, February 2015.

Schuler, J., T. Greenfield, R. S. White, S. W. Roecker, B. Brandsdóttir, J. M. Stock, J. Tarasewicz, H. Martens, and D. Pugh (2015), Seismic imaging of the shallow crust beneath the Krafla central volcano, NE Iceland, *J. Geophys. Res. Solid Earth*, 120, doi:10.1002/2015JB012350.

Davey, F. J., R. Granot, S. C. Cande, J. M. Stock, M. Selvans, and F. Ferraccioli (2016), Synchronous oceanic spreading and continental rifting in West Antarctica, *Geophys. Res. Lett.*, 43, 6162–6169, doi:10.1002/2016GL069087.

Schuler, Juerg, David J. Pugh, Egill Hauksson, Robert S. White, Joann M. Stock, and Bryndis Brandsdóttir, Focal mechanisms and size distribution of earthquakes beneath the Krafla central volcano, NE Iceland. *Journal of Geophysical Research: Solid Earth* 121, doi:10.1002/2016JB013213, July 2016.

Castro, R. R., J. M. Stock, E. Hauksson, and R. W. Clayton. "Active Tectonics in the Gulf of California and Seismicity ($M > 3.0$) for the Period 2002–2014." *Tectonophysics* 719 (2017): 4–16.

Castro, Raúl R., Joann M. Stock, Egill Hauksson, and Robert W. Clayton. "Source Functions and Path Effects from Earthquakes in the Farallon Transform Fault Region, Gulf of California, Mexico That Occurred on October 2013." *Pure and Applied Geophysics* 174, no. 6 (2017): 2239–56.

Fuis, Gary S., Klaus Bauer, Mark R. Goldman, Trond Ryberg, Victoria E. Langenheim, Daniel S. Scheirer, Michael J. Rymer, Joann M. Stock, John A. Hole, and Rufus D. Catchings. "Subsurface Geometry of the San Andreas Fault in Southern California: Results from the Salton Seismic Imaging Project (SSIP) and Strong Ground Motion Expectations." *Bulletin of the Seismological Society of America*, 2017.

<https://doi.org/10.1785/0120160309>.

Castro, R. R., R. Clayton, E. Hauksson, and J. Stock. 2017. "Observations of Remotely Triggered Seismicity in Salton Sea and Coso Geothermal Regions, Southern California, USA, after Big ($M_w > 7.8$) Teleseismic Earthquakes." *Geofisica Internacional* 56 (3): 269–86.

Han, L., J.A. Hole, J.M. Stock, G. S. Fuis, A. Kell, N. W. Driscoll, G. M. Kent, A. J. Harding, M. J. Rymer, and A. González-Fernández. 2016a. "Continental Rupture and the Creation of New Crust in the Salton Trough Rift, Southern California and Northern Mexico: Results from the Salton Seismic Imaging Project." *Journal of Geophysical Research: Solid Earth* 121 (10): 7469–89.

Han, L., J.A. Hole, J.M. Stock, G. S. Fuis, C. F. Williams, J. R. Delph, K. K. Davenport, and A. J. Livers. 2016b. "Seismic Imaging of the Metamorphism of Young Sediment into New Crystalline Crust in the Actively Rifting Imperial Valley, California." *Geochemistry, Geophysics, Geosystems* 17 (11): 4566–84.

<https://doi.org/10.1002/2016GC006610>.

Persaud, P, Y. Ma, J. Stock, J. Hole, G. Fuis, and L. Han, 2016, Fault zone characteristics and basin complexity in the southern Salton Trough, California, *Geology*, <https://doi.org/10.1130/G38033.1>.

Ramirez-Ramos, E. E., A. Vidal-Villegas, J. Ramírez-Hernández, A. González-Fernández, and J. M. Stock; 2018. A Crustal Velocity Model for the Peninsular Ranges of Baja California and Southwestern Laguna Salada, Mexico. *Seismological Research Letters* ; 90 (3): 1219–1229. doi:
<https://doi.org/10.1785/0220180248>

Sun, Z., Jian, Z., Stock, J.M., Larsen, H.C., Klaus, A., Alvarez Zarikian, C.A., and the Expedition 367/368 Scientists (2018). South China Sea Rifted Margin. Proceedings of the International Ocean Discovery Program, 367/368 : College Station, TX (International Ocean Discovery Program).

Larsen, H.C., Mohn, G, Nirrengarten, M., Sun, Z. and 65 others, 2018. Rapid transition from continental breakup to igneous oceanic crust in the South China Sea, 2018, Nature Geoscience, doi:
<https://10.1038/s41561-018-0998-1>

Ajala, R., Persaud, P., Stock, J. M., Fuis, G. S., Hole, J. A., Goldman, M., & Scheirer, D. (2019). Three-dimensional basin and fault structure from a detailed seismic velocity model of Coachella Valley, Southern California. *Journal of Geophysical Research: Solid Earth*, 124.

<https://doi.org/10.1029/2018JB016260>

Gurnis, M., van Avendonk, H., Gulick, S. P. S., Stock, J., Sutherland, R., Hightower, E., Shuck, B., Patel, J., Williams, E., Kardell D., Herzig E., Idini B., Graham, K., Estep, J., and L. Carrington (2019), Incipient Subduction at the contact with stretched continental crust: The Puysegur Trench, *EPSL*, v. 520.

Wang, Lijie, Zhen Sun, Jinhai Yang, Zhipeng Sun, Jitian Zhu, Haiteng Zhuo, and Joann Stock. "Seismic Characteristics and Evolution of Post-Rift Igneous Complexes and Hydrothermal Vents in the Lingshui Sag (Qiongdongnan Basin), Northwestern South China Sea." *Marine Geology* 418 (December 1, 2019): 106043. <https://doi.org/10.1016/j.margeo.2019.106043>.

Sun, Liheng, Zhen Sun, Xiaolong Huang, Yingde Jiang, and Joann Miriam Stock. "Microstructures Documenting Cenozoic Extension Processes in the Northern Continental Margin of the South China Sea." *International Geology Review* 62, no. 7–8 (May 23, 2020): 1094–1107.
<https://doi.org/10.1080/00206814.2019.1669079>.

Patel, Jiten, Rupert Sutherland, Michael Gurnis, Harm Van Avendonk, Sean P. S. Gulick, Brandon Shuck, Joann Stock, and Erin Hightower (2020). "Stratigraphic Architecture of Solander Basin Records Southern Ocean Currents and Subduction Initiation beneath Southwest New Zealand." *Basin Research*
<https://doi.org/10.1111/bre.12473>.

Persaud, P., E. H. Pritchard and J. Stock (2020), Scales of Stress Heterogeneity Near Active Faults in the Santa Barbara Channel, Southern California. *Geochemistry, Geophysics, Geosystems*, 21, e2019GC008744. <https://doi.org/10.1029/2019GC008744>

Li, F., Sun, Z., Yang, H., Lin, J., Stock, J.M., Zhao, Z., Xu, H., and Sun, L. (2020). Continental interior and edge breakup at convergent margins induced by subduction direction reversal: A numerical modeling study applied to the South China Sea margin, *Tectonics*, <https://doi.org/10.1029/2020TC006409>

Tkalčić, H., C. Eakin, M. F. Coffin, N. Rawlinson, and J. Stock (2021), Deploying a submarine seismic observatory in the Furious Fifties, *Eos*, 102, <https://doi.org/10.1029/2021EO159537>. Published on 14 June 2021.

MAPS AND FIELD GUIDES

Stock, J. M., The geology of southern Valle Chico and adjacent regions, Baja California, Mexico, 1:20,000 scale geologic map, cross sections, and text, Geological Society of America Map and Chart Series, MCH-076, 1993.

Stock, J. M., A. Martín B., F. Suárez V., and M. Meghan Miller, Miocene to Holocene extensional tectonics and volcanic stratigraphy of NE Baja California, Mexico, in Walawender, M. J., and B. B. Hanan, eds., *Geological Excursions in Southern California and Mexico*, Guidebook for 1991 Geological Society of America Annual Meeting (San Diego, October 1991), published by San Diego State University, San Diego, Ca., pp. 44-67.

Stock, J. M., A. Martin-Barajas, and M. Tellez-Duarte, 1996, Early Rift Sedimentation and Structure along the NE Margin of Baja California, in P. L. Abbott and J. D. Cooper, eds., *Field Conference Guidebook and*

Volume for the American Association of Petroleum Geologists, 1996 Pacific Section SEPM Book 80, p. 337-371.

OTHER PUBLICATIONS

Stock, J. M., Tectónica de placas y la Evolución Geológica del Bloque de Jalisco, GEOS (quarterly of the Mexican Geophysical Union), v. 13, no. 3, p. 3-9, June 1993.

Stock, Joann M., Baja California: The Geology of Rifting, Engineering & Science, California Institute of Technology, Fall 1993.

Stock, J. M., "Plate Tectonics," article for Encyclopedia of Applied Physics, Vol. 14, p. 273-293, 1996.

Stock, J. M., Geophysical secrets beneath Antarctic waters, Engineering & Science, California Institute of Technology, v. LX, no. 3, 1997.

Martin-Barajas, A., M. Steckler, and J. M. Stock, Ruptura de la litósfera continental en la región del Golfo de California y Salton Trough: Reporte del taller Margins de Puerto Vallarta, GEOS (quarterly of the Mexican Geophysical Union), v. 21, no. 1, p. 41-46, 2001.

Sawyer, D. S., M.F. Coffin, T.J. Reston, J.M. Stock and J.R. Hopper, COBBOOM: The Continental Breakup and Birth of Oceans Mission. Scientific Drilling, No. 5, September 2007 (2007)

Stock, J. M., Sismos en el Alto Golfo de California: tres ejemplos recientes, Nuestra Tierra, no. 15, p. 3-7, 2011.

U. S. GEOLOGICAL SURVEY OPEN-FILE REPORTS

Stock, J. M., J. Healy, and S. Hickman, Report on televiewer log and stress measurements in core hole USW G-2, Nevada Test Site, U.S. Geological Survey Open-File Report 84-172, 1984.

Carr, M. D., S. J. Waddell, G. S., Vick, J. M. Stock, S. A. Monsen, A. G. Harris, B. W. Cork, and F. M. Byers, Jr., Geology of drill hole UE25p#1: A test hole into pre-Tertiary rocks near Yucca Mountain, southern Nevada, U.S. Geological Survey Open-File Report 86-175, 1986.

Stock, J. M., J. H. Healy, J. Svitek, and L. Mastin, Report on televiewer log and stress measurements from core holes USW G-3 and UE25p#1, Yucca Mountain, Nevada Test Site, U.S. Geological Survey Open-File Report 86-236, 1986.

Murphy, Janice, M. Goldman, G. Fuis, M. Rymer, R. Sickler, S. Miller, L. Butcher, J. Ricketts, C. Criley, J. Stock, J. Hole, and G. Chavez , Seismic Calibration Shots Conducted in 2009 in the Imperial Valley, Southern California, for the Salton Seismic Imaging Project (SSIP) , Open-File Report 2010-1295 , US Geological Survey, 2010.

Rose et al (2012), Report for Borehole Explosion Data Acquired in the 2011 Salton Seismic Imaging Project (SSIP), Southern California: Description of the Survey, Open-File report 2013-1172, US Geological Survey, 2013.