

STEPHEN MARSHAK

Business Address

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Education

1983 Ph.D. Columbia University, in geology
1979 M.S. University of Arizona, in geology
1976 A.B. Cornell University, in geology (with distinction)

Professional

2008-present Director, School of Earth, Society, & Environment, University of Illinois
(*includes*: Dept. of Geology; Dept. of Atmospheric Sciences; Dept. of
Geography & GIS; Interdisciplinary Environmental Studies major)
2008 Visiting Professor, University of Naples, Italy (sabbatical)
2008 Visitor, University of Lausanne, Switzerland (sabbatical)
2007 Visitor, US Geological Survey, Woods Hole, MA (sabbatical)
1999-2007 Head, Department of Geology, University of Illinois
1999 Honorary Visiting Fellow, University of Leicester, UK (sabbatical)
1997-present Professor, University of Illinois
1989-1997 Associate Professor, University of Illinois
1992 Visiting Research Academic, University of Adelaide, Australia (sabbatical)
1991 Visiting Research Associate, Lamont-Doherty Geological Observatory
1990-2011 Instructional Staff, Wasatch-Uinta Geological Field Camp, Utah
1985-1996 Visiting Professor of Geotectonics, Federal University of Ouro Preto, Brazil
1983-1989 Assistant Professor, University of Illinois

Selected Services to Professional Organizations

- Field trip leader for 2016 Earth Education Rendezvous; Led the workshop on online education for 2017 Earth Educator Rendezvous.
- Panel, NSF Summit on Undergraduate Geoscience Education, 2014.
- Member, National Science Foundation panel for Continental Dynamics Program, 2008-2011
- Lead Convener, National Science Foundation-sponsored EarthScope Workshop on the Continental Interior, 2010
- Field trip leader, Geological Society of America Structure & Tectonics Specialist Group, 2010
- Advisory Board, National Science Foundation Center for Spatial Intelligence and Learning Center, 2006-2010
- Keynote speaker and field trip leader, New York State Geological Association, 2009
- Member, Editorial Board, *Tectonophysics*, 1998-2007
- Invited Speaker, National Science Foundation-sponsored workshop, USArray in the Midcontinent, 2003; 2004; 2006
- Co-Editor for structural geology, *Glossary of Geology* (AGI), 1995; 2003

- Group Leader, National Science Foundation-sponsored workshop, Priorities in the Solid Earth Sciences, 2002
- Member, National Science Foundation panel for Structure and Tectonics Program, 1997-2000
- Board member, International Basement Tectonics Association, 1995-2000
- Chair, Division of Structural Geology and Tectonics, Geological Society of America, 1999; Board Member, 1996-1999
- Associate Editor, *Geology*, 1996-1999
- Lead Convener, Geological Society of America Penrose Conference on Continental Interior Tectonics, 1997
- Joint Technical Program Committee, Geological Society of America national meeting, 1997
- Chair, Short-Course Committee, Division of Structural Geology and Tectonics, Geological Society of America, 1995
- Member, National Science Foundation panel for instructional equipment awards, 1991
- Paper reviewer for: *GSA Bull.*, *Geology*, *Tectonics*, *Tectonophys.*, *JSG*, *EPSEL*, *AJS*, *J. Geology*, *Science*, and other journals
- Proposal reviewer for: NSF, U.S. Geol. Survey, Am. Chem. Soc., Australian Research Council, and other agencies or foundations.

Selected Services to University of Illinois

- Recent campus committees: Institute for Sustainable Energy and Environment Board; Strategic Advisory Board for College of Liberal Arts & Sciences; LAS On-Line Board; Associate Dean Search Committee; Global Studies Program board; CERL lab liaison.
- University of Illinois Council on General Education, 2004-2007
- Ad Hoc Committee for development of an Earth and Environment School, 2004-2005
- University of Illinois Environmental Council, 2001-2004
- University of Illinois State Surveys Advisory Board, 2001-2004
- University of Illinois Council on Undergraduate Education, 1990-1994

Professional Society Memberships

- Geological Society of America (Fellow)
- American Geophysical Union
- American Association for the Advancement of Science
- Sigma Xi

Selected Academic Courses Taught or Developed

- 100 Planet Earth (Introductory Geology, large lecture)
- 199 Earth's Resources and Sustainability (honors class)
- 411 Structural Geology and Tectonics (majors' class)
- 415/515 Regional geology field course (lead faculty member for Arizona and California; co-lead on trips to Bonaire, western Ireland, Scotland, and Cyprus)
- 417 Summer geology field camp (multi-university group, based in Park City, Utah)
- 511 Advanced Structural Geology (graduate course)
- 512 Geotectonics (graduate course)

Supervision of Graduate Students, as principal thesis/dissertation advisor

Oswaldo Araujo	Ph.D. (Professor emeritus, University of Brazilia)
Kurt Burmeister	Ph.D. (Associate Professor, University of the Pacific)
Michael DeLucia	Ph.D. (<i>in progress</i>)
Michael Harrison	Ph.D. (Professor and Chair, Tennessee Tech)
Stephen Laubach	Ph.D. (Senior Research Scientist, Texas Bureau of Economic Geology)
Juliano Macedo	Ph.D. (Director of Exploration, Brazil)
Stephanie Mager	Ph.D. (Exploration Geologist, BP)
Jorge Mariño	Ph.D. (Professor, Technological University, Colombia)
Timothy Paulsen	Ph.D. (University Endowed Professor, Univ. of Wisconsin Oshkosh)
Scott Wilkerson	Ph.D. (Professor and Chair, DePauw University)
Snehal Bhagat	M.S. (Environmental Geologist, TRC Environmental)
Sarah Brown	M.S. (Ph.D., Univ. of British Columbia)
Nancye Dawers	M.S. (Ph.D. Columbia University; Associate Professor, Tulane University)
Josh Defrates	M.S. (Environmental Geologist, Colorado)
Roberto Hernandez	M.S. (Chief Geologist, Ecopetrol, Colombia)
Joel Johnson	M.S. (Ph.D. Oregon State; Associate Professor, Univ. of New Hampshire)
Gang Lu	M.S. (Ph.D. Louisiana State; geologist with Marthon Oil)
Chris Majerczyk	M.S. (Field Evaluator, Caterpillar Inc.)
Chris McCracken	M.S. (Ph.D., Winnepeg; Professor, Eastern Michigan University)
David McEachran	M.S. (deceased; geologist with RockWare Inc.)
Chris McGarry	M.S. (GIS manager, City of Rockford)
Bruce Miller	M.S. (Vice President, Schlumberger International)
Sharon Qi	M.S. (Physical Scientist, U.S. Geological Survey, Denver)
Mary Seid	M.S. (Science Teacher, Massachusetts)
John Tabor	M.S. (Ph.D. Univ. of Minnesota, Senior Geologist and Manager, ExxonMobil)
Doug Tinkham	M.S. (Ph.D., Univ. of Alabama; Assoc. Professor and Chair, Laurentian Univ.)
Judd Tudor	M.S. (Account Manager and geologist, Schlumberger)
Lisa Tranel	M.S. (Ph.D., Virginia Tech, Associate Professor, Illinois State)
Ch'yi Wang	M.S. (Environmental Geologist)

Awards

2012	Neil Miner Award, National Association of Geoscience Teachers
2011	University of Illinois Undergraduate Teaching Award
2006	College of Liberal Arts & Sciences Distinguished Teaching Award, University of Illinois
1996	Stilwell Medal (shared), Australian Journal of Earth Science
1994	Luckman Undergraduate Distinguished Teaching Award, University of Illinois
1994	Prokasy Award for Distinguished Teaching, College of Liberal Arts & Sciences, UIUC
1991	Amoco Foundation Award for Innovation in Instruction

Field Study Areas

Appalachian foreland (NY); Baraboo (WI); Minas Gerais, Brazil; Apennines, Italy; Tunisia; Transantarctic Mountains, Antarctica; western Arizona.

PUBLICATIONS

College Textbooks

- Marshak, S., 2018, *Earth: Portrait of a Planet, 6th edition*, W.W. Norton & Co., 920 pp.
- Marshak, S., and Rauber, R., 2017, *Earth Science: The Earth, The Atmosphere, and Space, 1st edition*: W.W. Norton & Co., 847 p.
- Marshak, S. 2016, *Essentials of Geology, 5th edition*, W.W. Norton & Co. , 567 p. (3rd edition won "best college textbook" at New York Book Fair and Chicago Book Fair)
- Ludman, A., and Marshak, S., 2015, *Laboratory Manual for Introductory Geology, 3rd edition*: W.W. Norton & Co, New York: 440 pp. (introductory geology laboratory book)
- Wilkerson, M.S., Wilkerson, M.B., and Marshak, S., 2017, *Geotours Workbook: A Guide for Exploring Geology and Creating Projects Using Google Earth™* 2nd edition, W.W. Norton & Co., New York: 161 p. (ancillary textbook for introductory geology).
- Marshak, S., Long, A., and Altaner, S., 2016, *Planet Earth Discussion Guide, 23th edition*, Stipes Publishers, Champaign, 120 p. (laboratory book for a course at Illinois).
- van der Pluijm, B., and Marshak, S., 2004, *Earth Structure: An Introduction to Earth Structure and Tectonics, 2nd edition*: W.W. Norton & Co., New York: 520 p. (majors' textbook)
- Marshak, S., and Mitra, G., 1988, *Basic Methods of Structural Geology*, Prentice-Hall Publishers, Englewood Cliffs, New Jersey, 448 p. (laboratory book still in print; in its >25th printing).

Peer-Reviewed Research Articles

- Hu, J., Liu, L., Faccenda, M., Zhou, Q., Fischer, K.M., Marshak, S., and Lundstrom, C., 2018, Western Gondwana craton modification by plume-lithosphere interaction: *Nature Geoscience*.
- DeLucia, M.S, Guenther, W.R., Marshak, S., Thomson, S.N., and Ault, A.K., 2018, Thermo-chronology links denudation of the Great Unconformity surface to the supercontinent cycle and snowball Earth: *Geology*, v. 46.
- Chen, C., Gilbert, H., Fischer, K.M., Andronicos, C.L., Pavlis, G.L., Hamburger, M.W., Larson, T., and Yang, X., 2018, Lithospheric discontinuities beneath the U.S. Midcontinent — Signatures of Proterozoic terrane accretion and rifting: *Earth and Planetary Science Letters*, v. 481, p. 223-235.
- Yang, X., Pavlis, G.L., Hamburger, M.W., Marshak, S., Gilbert, H., Rupp, J., Larson, T.H., Chen, C., and Carpenter, N.S., 2017, Detailed crustal thickness variations beneath the Illinois Basin area: Implications for crustal evolution of the midcontinent: *Journal of Geophysical Research: Solid Earth*: v. 122, p. 6323-6345.
- Marshak, S., Domrois, S., Abert, C., Larson, T., Pavlis, T., Hamburger, M., Yang, X., Gilbert, H., and Chen, C., 2017, The basement revealed: Tectonic insight from a digital elevation model of the Great Unconformity, USA cratonic platform: *Geology*, 45, p. 391-394.
- Marshak, S., Wilkerson, M. S., and DeFrates, J., 2016, Structural geology of the Baraboo District: An introduction: (in) Davis, R.A., Jr., Dott, R. H., Jr., and Dalziel, I. W. D., *Geology of the Baraboo, Wisconsin, Area: Geological Society of America Field Guide*, 43, p. 13-36.
- Chen, C., Gilbert, H., Andronicos, C., Hamburger, M.W., Larson, T., Marshak, S., Pavlis, G.L., and Yang, X., 2016, Shear velocity structure beneath the central United States: implications for the origin of the Illinois Basin and intraplate seismicity: *Geochemistry, Geophysics, Geosystems*, v. 17, p 1020-1041.

- Mariño, J., Marshak, S., and Mastalerz, M., 2015, Evidence for stratigraphically controlled paleogeotherms in the Illinois Basin based on vitrinite-reflectance analysis: Implications for interpreting coal-rank anomalies: *American Association of Petroleum Geologists Bulletin*, v. 99, p. 1803-1825.
- Yang, X., Pavlis, G., Hamburger, M. W., Sherrill, E., Gilbert, H., Marshak, S., Rupp, J., and Larson, T. H., 2014, Seismicity of the Ste. Genevieve seismic zone based on observations from the EarthScope OIINK flexible array: *Seismological Research Letters*, v. 85, p. 1285-1294.
- Lundstrom, C.C., Marshak, S., DeFrates, J., and Mabon, J., 2011, Alternative processes for developing fabric and mineral compositional zoning in intrusive rocks: *International Geology Review*, v. 53, p. 377-405.
- F. Huang, Lundstrom, C.C., Glessner, J., Ianno, A., Boudreau, A., Li, J., Ferré, E.C., Marshak, S., and DeFrates, J., 2009, Thermal migration in wet andesite, I: Experiments and models suggesting a new mechanism of magma differentiation: *Geochimica et Cosmochimica Acta*, v. 73, p. 729-749.
- ten Brink, U.S., Marshak, S., and Granja Bruna, J.-L., 2009, Bivergent thrust wedges surrounding oceanic island arcs: Insights from observations and sandbox models of the northeastern Caribbean plate: *Geological Society of America Bulletin*, v. 121, p. 1522-1536.
- Burmeister, K.C., Harrison, M.J., Marshak, S., Ferré, E.C., and Kodama, K.P., 2009, Tectonic trends defined by anisotropy of magnetic susceptibility (AMS) in low-strain sedimentary rocks: examples from the Appalachian fold-thrust belt: *Journal of Structural Geology*, v. 31, p. 1028-1038.
- Goia, G., Chakraborty, P., Marshak, S., and Kieffer, S., 2006, Unified model of tectonics and heat transport in a frigid Enceladus: *Proceedings of the National Academy of Sciences*.
- Kieffer, S.W., Lu, X., Bethke, C., Spencer, J., Marshak, S., and Navrotsky, A., 2006, A clathrate reservoir hypothesis for Enceladus' south polar plume: *Science*, v. 314, p. 1764-1766.
- Alkmim, F.F., Marshak, S., Pedrosa-Soares, A.C., Peres, G.G., Cruz, S.C., and Whittington, A., 2006, Kinematic evolution of the Araçuaí-West Congo orogen in Brazil and Africa: Nutcracker tectonics during the Neoproterozoic assembly of Gondwana: *Precambrian Research*, v. 149, p. 43-64.
- Holbrook, J., Autin, W.J., Rittenour, T.M., Marshak, S., and Goble, R.J., 2006, Stratigraphic evidence for millennial-scale temporal clustering of earthquakes on a continental-interior fault: Holocene Mississippi River floodplain deposits, New Madrid seismic zone, USA: *Tectonophysics*, v. 420, p. 431-454.
- Marshak, S., Alkmim, F.F., Whittington, A., and Pedrosa-Soares, A.C., 2006, Extensional collapse in the Neoproterozoic Araçuaí Orogen, eastern Brazil: A setting for reactivation of asymmetric crenulation cleavage: *Journal of Structural Geology*, v. 28, p. 129-147.
- Harrison, M., Marshak, S., and McBride, J., 2004 The Lackawanna synclinorium, Pennsylvania: a basement-controlled salt-collapse structure, partially modified by thin-skinned folding: *Geological Society of America Bulletin*, v. 116, p. 1499-1514.
- Tinkham, D.K., and Marshak, S., 2004, Precambrian dome-and-keel structure in the Penokean orogen near Republic, Upper Peninsula of Michigan: (in) Whitney, D.L., Teyssier, C., and Siddoway, C.S., (eds.) *Gneiss Domes in Orogeny: Geological Society of America Special Paper 380*, p. 321-338.
- Marshak, S., 2004, Arcs, Oroclines, Salients, and Syntaxes -- The origin of map-view curvature in fold-thrust belts: in McClay, K.R., (ed.), *Thrust Tectonics and Petroleum Systems: Am.*

- Assoc. of Petroleum Geologists Memoir 82, p. 131-156.
- Harrison, M., Marshak, S., and Onasch, C., 2004, Stratigraphic control of hot fluids on anthracitization, Lackawanna synclinorium, Pennsylvania: *Tectonophysics*, v. 378, p. 85-103.
- Marshak, S., Nelson, W.J., and McBride, J., 2003, Strike-Slip faulting in the Continental Interior of North America: *in* Storty, F., Holdsworth, R.E., and Salvine, F. (eds.), *Intraplate Strike-Slip Deformation Belts*, Geological Society of London, Special Publication 210, p. 171-196.
- Alkmim, F.F., Marshak, and S. Fonseca, M.A., 2001, Assembling West Gondwana in the Neoproterozoic: Clues from the São Francisco craton region, Brazil: *Geology*, v. 29, p. 319-322.
- Marshak, S., Karlstrom, K., and Timmons, J.M., 2000, Inversion of Proterozoic extensional faults: An explanation for the pattern of Laramide and ancestral Rockies intracratonic deformation, United States: *Geology*, 28: 735-738.
- Brueckner, H.K., Cunningham, W.D., Alkmim, F.F., and Marshak, S., 2000, Tectonic Implications of Precambrian Sm-Nd dates from the southern São Francisco craton and adjacent Araçuaí and Ribeira Belts, Brazil: *Precambrian Research*, 99: 255-269.
- Macedo, J., and Marshak, S., 1999, The geometry of fold-thrust belt salients: *Geological Society of America Bulletin*, v. 111, p. 1808-1822.
- Paulsen, T., and Marshak, S., 1999, Origin of the Uinta recess, Sevier fold-thrust belt, Utah: influence of basin architecture on fold-thrust belt geometry: *Tectonophysics*, v. 312, p. 203-216.
- Marshak, S., 1999, Deformation style way back when: Thoughts on the contrasts between Archean-Paleoproterozoic orogens and modern ones: *Journal of Structural Geology*, 20th anniversary issue, v. 21, p. 1175-1182.
- Cunningham, W.D., Alkmim, F.F., and Marshak, S., 1998, A structural transect across the coastal mobile belt in the Brazilian Highlands (latitude 20°S); the roots of a Precambrian transpressional orogen: *Precambrian Research*, v. 92, p. 251-275.
- Marshak, S., Tinkham, D., Alkmim, F.F., Brueckner, H., Bornhorst, T., 1998, REPLY: Dome-and-keel provinces formed during Paleoproterozoic orogenic collapse: *Geology*, v. 26, p. 475-477.
- Alkmim, F.F., and Marshak, S., 1998, Transamazonian orogeny in the southern São Francisco craton region, Minas Gerais, Brazil: Evidence for Paleoproterozoic collision and collapse in the Quadrilátero Ferrífero: *Precambrian Research*, v. 90, p. 29-58.
- Paulsen, T., and Marshak, S., 1998, Structure of the Charleston transverse zone, Wasatch Mountains, Utah: Tectonic evolution of the northern margin of the Provo salient in the Sevier fold-thrust belt: *Geological Society of America Bulletin*, v. 110, p. 512-522.
- Paulsen, T., and Marshak, S., 1997, Structure of the Mount Raymond transverse zone at the southern end of the Wyoming salient in the Sevier fold-thrust belt, Utah: *Tectonophysics*, v. 280, p. 199-211.
- Marshak, S., and Paulsen, T., 1997, Structural style, regional distribution, and seismic implications of midcontinent fault-and-fold-zones, United States: *Seismological Research Letters*, v. 68, p. 511-520.
- Marshak, S., Tinkham, D., Alkmim, F.F., Brueckner, H., and Bornhorst, T., 1997, Dome-and-keel provinces formed during Paleoproterozoic orogenic collapse -- Diapir clusters, core complexes, or neither? Examples from the Quadrilátero Ferrífero (Brazil) and the Penokean Orogen (USA): *Geology*, v. 25, p. 415-418.
- Daniels, E.J., Marshak, S., and Altaner, S.P., 1996, Fracture permeability in coal beds during

- burial: evidence from patterns of clay mineral alteration: *Tectonophysics*, v. 263, p. 123-136.
- Nelson, W.J., and Marshak, S., 1996, Devonian tectonism in the Illinois Basin region, U.S. continental interior: *Geological Society of America Special Paper* 308, p. 169-179.
- Marshak, S., and Flöttmann, T., 1996, Structure and origin of the Fleurieu and Nackara Arcs in the Adelaide fold thrust belt, South Australia: *Journal of Structural Geology*, v. 18, p. 891-908.
- Cunningham, W.D., Marshak, S., and Alkmim, F.F., 1996, Structural style of basin inversion at mid-crustal levels: two transects in the internal zone of the Brasileiro Araçuaí belt, Minas Gerais, Brazil: *Precambrian Research*, v. 77, p. 1-15.
- Marshak, S., and Paulsen, T., 1996, Midcontinent U.S. fault and fold zones: A legacy of Proterozoic intracratonic extensional tectonism?: *Geology*, v. 24, p. 151-154.
- Flöttmann, T., James, P., Menpes, R., Cesare, P., Twining, M., Fairclough, M., Randabel, J., and Marshak, S., 1995, The structure of Kangaroo Island, South Australia: strain and kinematic partitioning during Delamerian basin and platform reactivation: *Australian Journal of Earth Sciences*, v. 42, p. 35-49.
- Paulsen, T., and Marshak, S., 1994, An example of a cratonic crustal weak zone in the USA: The Dakota-Carolina corridor: *Geology*, v. 22, p. 15-18.
- Marshak, S., Bonatti, E., Brueckner, H., and Paulsen, T., 1992, Fracture zone tectonics at Zabargad Island, Red Sea (Egypt): *Tectonophysics*, v. 216, p. 379-385.
- Marshak, S., Alkmim, F.F., and Jordt-Evangelista, H., 1992, Proterozoic extensional tectonics and the architecture of an Archean granite-greenstone terrane in Brazil: *Nature*, v. 357, p. 491-493.
- Wilkerson, M.S., Marshak, S., and Bosworth, W., 1992, Computerized tomographic analysis of displacement trajectories and three-dimensional fold geometry above oblique thrust ramps: *Geology*, v. 20, p.439-442.
- Marshak, S., and Wilkerson, M.S., 1992, Effect of overburden thickness on thrust-belt geometry and development: *Tectonics*, v. 11, p. 560-566.
- Marshak, S., Wilkerson, M.S., and Hsui, A.T., 1991, Formation of curved fold-thrust belts: Insight from simple physical and analytical modeling: in McClay, K.R. (ed.), *Thrust Tectonics*, Chapman & Hall, London, p. 83-92.
- Marshak, S., and Bosworth, W., 1991, Noncoaxial deformation along the northeastern edge of the Appalachian Plateau, New York: Implications for faulting processes in orogenic forelands: *Northeastern Geology*, v. 13, p. 263-270.
- Wilkerson, M.S., Medwedeff, D.A., and Marshak, S., 1991, Geometrical modeling of fault-related folds: a pseudothree- dimensional approach: *Journal of Structural Geology*, v. 13, p. 801-812.
- Wilkerson, M.S., and Marshak, S., 1991, Factors controlling slip-trajectory orientation in fold-thrust belts: *Tectonophysics*, v. 196, p. 203-208.
- Daniels, E., Altaner, S., Marshak, S. and Eggleston, J.R., 1991, Discussion and Reply of Hydrothermal alteration in anthracite from eastern Pennsylvania: Implications for mechanisms of anthracite formation: *Geology*, v. 19, p. 188-189.
- Hsui, A., Wilkerson, M.S., and Marshak, S., 1991, Topographically driven crustal flow and its implication to the development of pinned oroclines: *Geophysical Research Letters*, v. 17, p. 2421-2424.
- Lu, G., Marshak, S., and Kent, D.V., 1990, Magnetic carriers responsible for Late Paleozoic remagnetization in carbonate strata of the mid-continent, U.S.A.: *Earth and Planetary Science*

- Letters, v. 99 p. 351-361.
- Marshak, S., 1990, Structural Geology of Silurian and Devonian Strata in the Central Hudson River Valley, New York: New York State Museum and Science Service map and chart series monograph 41, New York State Museum and Science Service, Albany, 66p. monograph (& 3 colored maps and cross sections).
- Bhagat, S., and Marshak, S., 1990, Changes in microlithons associated with development of solution cleavage in limestone: Textural, trace-elemental, and stable-isotopic observations: *Journal of Structural Geology*, v. 12, p. 165-175.
- Bethke, C.M., and Marshak, S., 1990, Brine migrations across North America -- The plate tectonics of groundwater: *Annual Review of Earth and Planetary Sciences*, v. 18, p. 287-315.
- Daniels, E., Altaner, S., Marshak, S., and Eggelston, J.R., 1990, Hydrothermal alteration in anthracite from eastern Pennsylvania: Implications for mechanisms of anthracite formation: *Geology*, v.18, p. 247-250.
- Laubach, S.E., Reynolds, S.J., Spencer, J.E., and Marshak, S., 1989, Progressive deformation and superposed fabrics related to Cretaceous crustal underthrusting in western Arizona, U.S.A.: *Journal of Structural Geology*, v. 11, p. 735-750.
- Marshak, S., and Tabor, J., 1989, Structure of the Kingston orocline in the Appalachian fold-thrust belt, New York: *Geological Society of America Bulletin*, v. 101, p. 683-701.
- Marshak S., and Alkmim, F.F., 1989, Proterozoic contraction/extension tectonics of the southern São Francisco region, Minas Gerais, Brazil: *Tectonics*, v. 8, p. 555-571.
- Marshak, S., and Vander Meulen, M., 1989, Geology of the Battleship Mountain region, Buckskin Mountains, Arizona: Structural style below the Buckskin detachment: *in* Spencer, J., and Reynolds, S. (eds.), *Geology and Mineral Resources of the Buckskin Mountains, west-central Arizona: Ariz. Bur. Geology Bull.* 198, p. 51-66.
- Marshak, S., 1988, Kinematics of orocline and arc formation in thin-skinned orogens: *Tectonics*, v. 7, p. 73-86.
- Laubach, S.E., and Marshak, S., 1987, Geometry of fault arrays generated during extension of fractured crystalline basement: *in* Coward, M.P., Dewey, J.F., and Hancock, P.L., (eds.), *Continental Extensional Tectonics*, Geological Society of London, Special Publication 28, p. 495-499.
- Marshak, S., 1986, Structure and tectonics of the Hudson Valley fold-thrust belt, New York: *Geological Society of America Bulletin*, v. 97, p. 354-368.
- Marshak, S., and Engelder, T., 1985, Development of cleavage in limestones of a fold-thrust belt in eastern New York: *Journal of Structural Geology*, v. 7, p. 345-359.
- Engelder, T., and Marshak, S., 1985, Disjunctive cleavage formed at shallow depths in sedimentary rocks: *Journal of Structural Geology*, v. 7, p. 327-343.
- Marshak, S., Geiser, P., Alvarez, W., and Engelder, T., 1982, Mesoscopic fault array of northern Umbrian Apennine fold belt, Italy: Geometry of conjugate shear by pressure-solution slip: *Geological Society of America Bulletin*, v. 93, p. 1013-1022.
- Sbar, M.L., Engelder, T., Plumb, R., and Marshak, S., 1979, Stress pattern near the San Andreas fault, Palmdale, California, from near-surface *in situ* measurements: *J. Geophysical Research*, v. 84, p. 156-164.
- Marshak R.S., and Karig, D.E., 1977, Triple junctions as a cause for anomalously near-trench igneous activity between the trench and volcanic arc: *Geology*, v. 5, p. 233-236.

Edited Books

Marshak, S., van der Pluijm, B., and Hamburger, M., (eds.), 1999, *The Tectonics of Continental Interiors*, special volume of *Tectonophysics*: v. 305, 417p.

Field Guides, Maps, and Other Publications

- Marshak, S., Larson, T., and Abert, C., The Missouri-Illinois-Indiana-Kentucky map series, in prep., (a series of 12 maps done in ArcGIS, of surface topography, bedrock topography, surface geology, bedrock geology, basement topography, Paleozoic isopachs, etc.).
- Sen, P., Marshak, S., Majerczyk, C., Yakovlev, P., 2011, Geologic Map of the Central Hudson Valley Fold-Thrust Belt: 1:10,000.
- Maderis, L.G., Jr., Dott, R.H., Jr., Craddock, J.P., Marshak, S., 2011, The Baraboo District—A North American classic: Geological Society of America, Field Guide 24, p. 63-82.
- Burmeister, K., and Marshak, S., 2006, Along-strike changes in fold-thrust belt architecture: Examples from the Hudson Valley, New York: *in* Pazzaglia, F.J., (ed.), *Excursions in Geology and History: Field Trips in the Middle Atlantic States*: Geological Society of America, Field Guide 8, p. 199-216.
- Burmeister, K., and Marshak, S., 2003, Structural geology of the Rosendale natural cement region, Ulster County, New York: Examples of along-strike changes in fold-thrust belt architecture: New York State Geological Association Guidebook.
- Marshak, S., van der Pluijm, B., and Hamburger, M., 1999, The tectonics of continental interiors, preface: special volume *Tectonophysics*, v. 305, p. vii-x.
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