

Dr. Sean P. S. Gulick

Research Professor, Institute for Geophysics and Department of Geological Sciences,
Jackson School of Geosciences, University of Texas at Austin
10100 Burnet Rd Bldg. 196 (R2200) Austin, Texas 78758-4445
Phone: 512-471-0483, Fax: 512-471-0999, E-mail: sean@ig.utexas.edu

Research Interests

- Tectonic processes, tectonic-climate interactions and geohazards of convergent margins and transitional tectonic environments
- Role of catastrophism in the geologic record including impact cratering, hurricanes, and tectonic events
- Marine geophysical imaging at nested resolutions and ground truth through drilling, coring, logging, and submersibles

Employment

Research Professor, University of Texas at Austin	Sept. 2015 - Present
Research Associate Professor, University of Texas at Austin	Jan. 2012 - Aug. 2015
Research Scientist, University of Texas Institute for Geophysics	Aug. 2007 - Jan. 2012
Research Associate, University of Texas Institute for Geophysics	Dec. 2001 - July 2007
Post-doctoral Fellow, University of Texas Institute for Geophysics	June 1999 - Nov. 2001

Education

Ph.D. in Geological Sciences, Lehigh University, Bethlehem, Pennsylvania	1999
Dissertation: "Seismic studies of the southern Cascadia subduction zone near the Mendocino triple junction," Advisor: A. Meltzer, Committee: B. Carson, D. Anastasio, S. Clarke, Jr. (USGS), and J. Diebold (LDEO).	
Bachelor of Science in Geology, Minor in Marine Sciences, University of North Carolina, Chapel Hill, North Carolina, Advisor: Christine Powell.	1993

Field Experience

<u>Rio Grande Submarine Fan Seismic and Coring Study</u>	Oct. 2015
Chief Scientist, R/V <i>Manta</i>	
<u>Totten Glacier Ice-Ocean-Sediment Interactions Study, East Antarctica</u>	Jan-Mar, 2014
Seismic Team Leader, RVIB <i>Nathanial B. Palmer</i>	
<u>Southeast Alaska Tectonics and Climate IODP Expedition 341</u>	May-July, 2013
Co-Chief Scientist, JOIDES <i>Resolution</i>	
<u>Chicxulub Impact Crater Hazards Assessment</u>	April, 2013
Co-Chief Scientist, High resolution marine geology and geophysics, R/V <i>Justo Sierra</i>	
<u>Straits of Magellan Seismic Tests</u>	
Seismic specialist, Multichannel seismic, multibeam, chirp, RVIB <i>Palmer</i>	Aug., 2012
<u>Yakutat Bay Earthquake Fault Mapping</u>	
Chief Scientist, Multichannel seismic, chirp, R/V <i>Alaskan Gyre</i>	Aug., 2012
<u>Gulf of Alaska Law of the Sea Assessment</u>	
Co-chief Scientist, Multichannel seismic, Multibeam bathymetry, R/V <i>Langseth</i>	June, 2011

Hubbard Glacier Reconnaissance

- Co-chief Scientist, Chirp, Sidescan, and CTD R/V *Quest* **Feb.-Mar., 2010**
- REPONS: Rapid Enriquillo Plantain Offshore Neotectonic Study
- Co-chief Scientist, Chirp, Bathymetry, Sidescan, and Coring R/V *Endeavor* **Sept., 2008**
- STEEP: ST, Elias Erosion/tectonics Project
- Chief Scientist, Reflection and refraction studies on R/V *Marcus Langseth* **June-July, 2008**
- Exploring controls on great earthquake rupture, Sumatra convergent margin
- Co-Chief Scientist, Seismic imaging on R/V *Sonne* **Sept.-Nov., 2007**
- Nankai Trough Seismogenic Zone Experiment IODP Expedition 314
- Logging Specialist, Log-Seismic Integration Team on D/V *Chikyu* **Jan.-Feb., 2005**
- Imaging and modeling impact generated deformation at the Chicxulub Crater
- Co-Chief Scientist, Seismic Imaging on R/V *Maurice Ewing* **Aug.-Sept., 2004**
- High-resolution imaging and sampling of Alaskan glacial sedimentation
- Seismic Acquisition Specialist during Seismic Imaging, Swath Mapping, and Sediment Coring cruise on R/V *Maurice Ewing*
- Nankai Subduction Margin ROV and Submersible Studies of Active Venting
- Shipboard Geologist, ROV studies aboard M/V *Kairei* **July-Aug. 2002 & May-June 2003**
- Visiting Scientist, Ocean Research Institute including leg aboard M/V *Yokosuka* **July 2000**
- Office of Naval Research's Geoclutter marine acoustics research program
- Shipboard Scientist, Shallow drilling of New Jersey margin on R/V *Knorr* **Sept.-Oct. 2002**
- Shipboard Geophysicist, 2-D and 3-D CHIRP seismic on R/V *Endeavor* **Aug.-Sept. 2001**
- Shipboard Scientist, Grab sampling and coring on R/V *Cape Henlopen* **July-Aug. 2001**
- Ocean Drilling Program Leg 196: Nankai Trough accretionary prism fluid flow **Jan.-Feb. 2001**
- Logging Specialist, Logging while drilling on JOIDES *Resolution*
- Investigation of Nankai Subduction Thrust Seismicity and Fault Properties **June-Aug. 1999**
- Shipboard Geophysicist, 3-D Seismic off Japan on R/V *Maurice Ewing*
- National Undersea Research Program: Oregon-Washington seafloor deformation **Oct. 1996/1997**
- Shipboard Geologist, Submersible/ROV studies on the *M/V Laney Choest*
- Eel River Basin Gas Hydrate Study **Aug. 1997**
- Shipboard Geologist, ROV studies aboard the *R/V Point Lobos*
- Mendocino Triple Junction Seismic Experiment, Lehigh University **June 1994**
- Shipboard Geophysicist, Seismic imaging off California on *R/V Maurice Ewing*

Undergraduate Students

- Ms. Lindsay Lugin, UT DGS, Co-Advisor **B.S., 2013**
- Ms. Julie Zurbuchen, UT DGS, Jackson School Honors Student, Advisor **B.S. Honors, 2014**
- Mr. Victor Cleveland, UT DGS, Jackson School Honors Student, Advisor **B.S. expected, 2016**
- Mr. Susannah Morey, UT DGS, Jackson School Honors Student, Advisor **B.S. expected, 2016**
- Ms. Rose Palermo, UT DGS, Jackson School Honors Student, Committee **B.S. expected, 2016**

Graduate Students

- Mr. Matt McDonald, UT DGS, Advisor (now Geophysicist at Shell Oil) **M.S., 2006**
- Mr Ryan Elmore, UT DGS, Advisor (now Geophysicist at Marathon Oil) **M.S., 2008**

Curriculum Vitae: Sean P. S. Gulick

Dr. Lindsay Worthington, UT DGS, Advisor (now Asst. Prof., Univ New Mexico)	Ph.D., 2010
Dr. Kylara Martin, UT DGS, Advisor (now NRC Postdoc, Naval Research Labs)	Ph.D., 2011
Dr. Robert Reece, UT DGS, Advisor (now Asst. Professor, Texas A&M Univ.)	Ph.D., 2013
Mr. John Swartz, UT DGS, Advisor (now PhD Student UT-Austin)	M.S., 2014
Mr. Jason Sanford, UT DGS, Co-advisor (now Chevron)	M.S., 2015
Mr. Sebastian Cardona, UT DGS, Co-advisor (now PhD Student Col. Sch. Mines)	M.S., 2015
Mr. Alexander "Sasha" Montelli, UT DGS, Advisor (now PhD Student Cambridge)	M.S., 2015
Ms. Maria Prieto, UT DGS, Co-Advisor	Ph.D. Expected, 2015
Mr. Sebastian Ramirez, UT DGS, Co-advisor	Ph.D. Expected, 2016
Ms. Marina Frederik, UT DGS, Co-advisor	Ph.D. Expected, 2016
Ms. Maureen LeVoir Walton, UT DGS, Advisor	Ph.D. Expected, 2016
Mr. John Swartz, UT DGS, Advisor	Ph.D. Expected, 2019
Ms. Emily Pangborn, UT DGS, Committee Member	M.S., 2007
Ms. Keren Mendoza, UNAM, Committee Member	M.S., 2007
Dr. Jen Aschoff, UT DGS, Committee Member	Ph.D., 2008
Dr. Bryce Willems, NIU, Committee Member	Ph.D., 2009
Ms. Svetlana Burris, UT DGS, Committee Member	M.S., 2012
Mr. Mark Duncan, UT DGS, Committee Member	M.S., 2013
Ms. Julie Ditkof, UT DGS, Committee Member	M.S., 2013
Dr. Bruce Frederick, UT DGS, Committee Member	Ph.D., 2015
Dr. Drew Eddy, UT DGS, Committee Member	Ph.D., 2015
Mr. Kaustubh Thirumalai, UT DGS, Committee Member	Ph.D. Expected, 2016
Ms. Amanda Calle, UT DGS, Committee Member	Ph.D. Expected, 2017
Ms. Kubra Arisoy, UT DGS, Committee Member	M.S. Expected, 2016
Ms. Casey O'Brien, UT DGS, Committee Member	M.S. Expected, 2016

Postdoctoral Fellows Supervised

Dr. Rodrigo Fernandez, UTIG Postdoctoral Fellow	2012-2014
---	------------------

Funding History

Grant Number	Title	PI(s)	Start Date	End Date	Award
JSG- SEED	Tracking sand in the Rio Grande incised valley to deep sea fan: Modern analog for the Frio and Wilcox plays	Gulick Mohrig Stockli Fernandez	Jan. 1, 2015	Dec 31, 2015	\$73,935
OCE- 1435121	Collaborative Research: Linking climate-driven changes in erosion to tectonic processes along the southern Alaska margin	Gulick	Sept. 1, 2014	Aug. 31, 2016	\$54,782
COL T341A59 amended	Post-Expedition Award: Integrating Expedition 341 discoveries with regional seismic images	Gulick	Nov 19, 2013	Jan. 31, 2015	\$14,848

Curriculum Vitae: Sean P. S. Gulick

COL T341A59	Expedition 341: South Alaska tectonics, climate, and sedimentation, Co-Chief Salary Support	Gulick	May 29, 2013	Jan. 30, 2014	\$130,324
OPP- 1143843	Collaborative Research: Totten Glacier system and the marine record of cryosphere-ocean dynamics	Blankenship Gulick	Sept. 1, 2012	Aug. 31, 2015	\$620,716
USGS G12-PX01832	Southeast Alaska Fault Mapping Project	Gulick	Sept. 15, 2012	Jan. 16, 2014	\$20,000
RCUK 139-232603	Seabed Hazard Assessment Survey-Chicxulub impact structure, Mexico	Gulick Goff	Mar 15, 2013	Dec 31, 2013	\$227,189
USGS G12- AP20009	NEHERP: Evaluating active faulting and geohazards in the Yakutat Bay region of southeastern Alaska	Gulick	Dec 31, 2012	Dec 30, 2013	\$87,930
COL SA 12-13	Pre-Drilling Activity: Mapping the Sumatran marginal plateau in the 2004 rupture area	Gulick Austin	May 1, 2012	Apr 30, 2013	\$13,331
USGS G11-PX01641	Alaska Fault Mapping Project	Gulick	Sept 1, 2011	July 31, 2012	\$20,000
OCE-1130078	Expedition Oriented Research: Sedimentation and tectonics in Kumano forearc basin evolution, NanTroSEIZE study area	Hayman Gulick Milliken	Oct 1, 2011	Sept 30, 2014	\$299, 204
USGS G11-AC20096	Gulf of Alaska Law of the Sea Assessment	Gulick Christeson	April 7, 2011	Dec 7, 2013	\$199, 016
OCE-_1028001	RAPID: Offshore coseismic effects of the Port au Prince earthquake, Haiti	Gulick Hornbach	Feb 15, 2010	Feb 14, 2011	\$40, 954
EAR-0408584 / EAR-1009986	Collaborative Research: St. Elias Tectonics and Erosion Project (STEEP)	Gulick, Christeson, Mann, van Avendonk, Horton	August 01, 2004	September 30, 2012	\$769,119 plus 2 year renewal for \$356,600
COL SA8-03	An evaluation of Neogene sedimentation on the Surveyor Fan, Gulf of Alaska: Site Augmentation proposal for IODP 686	Gulick	August 1, 2008	July 31, 2010	\$12,962
Army Corps	Investigation of Catastrophic Flooding by the Hubbard Glacier, Alaska	Gulick Goff	March 15, 2008	March 14, 2009	\$42,923
COL T314B59	Differences in resistivity measurements and implications for lithology, permeability and fracture characteristics,	Gulick (On behalf of Martin)	Sept. 15, 2007	January 1, 2009	\$20,118

Nankai Trough, Japan

COL T314A59	Scales of deformation in fault zones from the Nankai Trough using Seismic Logging-While-Drilling Correlations	Gulick	Sept. 15, 2007	January 1, 2009	\$37,024
OCE-0623165	Exploring structural controls on great earthquake rupture and architecture of the Sumatra-Andaman convergent margin: A regional seismic reflection survey in collaboration with the UK-National Oceanographic Center	Gulick Bangs Austin	Oct. 01, 2007	Sept. 30, 2009	\$350,072
OCE-0452340	NanTroSEIZE: 3-D Seismic investigation the Nankai Trough plate boundary system in the Kumano Basin	Bangs Gulick	March 01, 2005	February 28, 2010	\$496,380
JOI/USSSP 200402646-001	Toward a sequence stratigraphy of the Chicxulub impact basin infill: Integration of lithostratigraphy, biostratigraphy, and seismic stratigraphy	Gulick	March 01, 2005	February 28, 2006	\$8,618
OCE-0351620	Collaborative Research: Establishing Quaternary Climate/Terrestrial/ Oceanic Linkages in southern Alaska and IODP Site Survey	Gulick	May 01, 2004	April 31, 2006	\$81,108
OCE-0221103	Collaborative Research: Imaging and Modeling Impact Generated Deformation at the Chicxulub Crater, Joint US/UK/Mexico Investigation and IODP Site Survey	Gulick, Christeson	January 01, 2003	December 31, 2006	\$347,497 + supplement of \$175,647
EAR-0237008	Joint Continental Dynamics/JOI Workshop on Tectonic and Climate Interplay in the Gulf of Alaska	Gulick	April 01, 2003	March 31, 2004	\$24,804
GEO-0224501	Cataclysms and Catastrophes – The Role of Science in Natural and Human-Induced Disasters	Ellins, Gutierrez, Gulick, Christeson	Oct 01, 2002	September 30, 2004	\$152,126
JOI/USSSP S20265550	Site Augmentation in the Nankai Trough	Gulick	April 01, 2003	March 31, 2004	\$9,075
JOI/USSSP 418929-BA357	Investigation of Fluid Flow Indicators in Nankai Accretionary Prism 3-D Seismic Data through Seismic-LWD Integration at Frontal Thrust	Gulick	July 02, 2001	May 04, 2002	\$27,611

Awards and Honors

University of Texas Signature Course Essential Elements Award for Excellence in Teaching Oral Communication	2015
Jackson School Research Excellence Award	2015
UTIG Director's Circle of Excellence	2010, 2012, 2013, 2014
Selected as Co-chief Scientist for IODP Expedition to Chicxulub Impact Crater	2011
Selected as Co-chief Scientist for IODP Expedition 341 to Gulf of Alaska	2011
Consortium for Ocean Leadership Distinguished Lecturer	2007-2008
Jackson School of Geosciences Research Achievement Award	2007-2009
Joint Oceanographic Institutions Distinguished Lectureship	2007-2008
Jackson School of Geosciences Research Fellowship	2006-2007
Jackson School of Geosciences Young Scientist Fellowship	2005-2006
Japanese Marine Science and Technology Award for Shinkai 6500	2000
Palisades Geophysical Institute Postdoctoral Fellow	1999-2002
Geological Society of America Annual Meeting Travel Grant	1998
Lehigh University College of Arts and Sciences Travel Grant	1998
Lehigh University Earth and Environmental Sciences Research Grant	1997
Best Student Paper Award, Seismological Society of America Eastern Section	1993

Invited Lectures

“Geophysical characterization of the Chicxulub Impact Crater: Insights into planetary processes and extinction”, Lehigh University, keynote speaker at Graduate Research Symposium, Bethlehem, Pennsylvania	2015
“Insights into late-stage basin collapse from the terrestrial Chicxulub crater”, Brown University-Vernadsky Institute Microsymposium 56- The Crust of the Moon, Insights into Early Planetary Processes, The Woodlands, Texas	2015
“Drilling the Chicxulub impact structure: IODP-ICDP Joint Expedition 364”, Latin American Forum XII, Mexico City, Mexico	2015
“Source to sink on overdrive: Tectonic-climate interactions in the Gulf of Alaska, Lehigh University, keynote speaker at Graduate Research Symposium, Bethlehem, Pennsylvania	2015
“Geophysical characterization of the Chicxulub Impact Crater: Insights into planetary processes and extinction”, Brown University, Providence, Rhode Island	2014
“Tale of two fans: Tectonics vs climate in the Gulf of Alaska sediments”, Shell Energy Company, Houston, Texas	2014
“The 65.6 million year old Chicxulub impact crater: Insights into planetary processes, extinction, and evolution”, Austin Gem and Mineral Society, Austin, Texas	2014
“From the field to Decisions Space Desktop: UTIG Marine Geology and Geophysics Field Course teaches acquisition, processing, interpretation, and integration”, Landmark Innovation Forum 2013, Houston, Texas	2013
“Geophysical characterization of the Chicxulub Impact Crater: Insights into planetary processes and extinction”, Colorado School of Mines, Golden, Colorado	2013
“Evolution of southeast Alaska shelf and fan since the Miocene: Roles of sediment accommodation, glacial systems, and tectonic-climate feedback”, Shell Energy Company, Houston, Texas	2013

Curriculum Vitae: Sean P. S. Gulick

- “The 65.5 million year old Chicxulub Impact Crater: Insights into planetary processes, extinction and evolution”, Austin Forum, Texas Advanced Computer Center, Austin, Texas **2013**
- “A kinematic backstop model for landward vergence: Implications for extended updip rupture”, GSA Penrose Conference, Forearcs of Convergent Margins, Il Ciocco, Italy **2012**
- “Effects of surface processes on subduction zone dynamics” Department of Geological Sciences, UT-Austin **2011**
- Chapman Distinguished Lecturship, University of Alaska- Fairbanks, presented talks: **2011**
- “Crustal structure, history, and deformation of the Yakutat Terrane” and “Tectonic-climate interactions in southeast Alaska”, Anchorage, AK
- “Effects of surface processes on subduction cycles and dynamics, invited talk at Alaska GeoPRISMS workshop, Portland, OR **2011**
- “Marine geophysical insights into subduction zone geohazards”, presented at University of Oklahoma, Norman, OK **2010**
- “Geohazards of subduction zones and how marine geophysics can yield insights: Examples from the Nankai Trough and Sumatran margin”, presented at University of Texas at El Paso and at University of Southampton, National Oceanography Centre, UK **2009**
- Consortium for Ocean Leadership lecture series: “One Rock to Change the World: Story of the Chicxulub Impact Crater”, presented at Univ. of St. Thomas, Univ. of Arkansas, Montana Tech., New Mexico State Univ., Renesaller Polytechnical Inst., Georgia Southern Univ., Queens College, and Univ. of Florida **2007-2008**
- Environmental Sciences Institute Hot Science, Cool Talks, University of Texas **2008**
- “Bolide impact hazards: Lessons from Chicxulub and smaller events”, IODP Geohazards Workshop, Portland, Oregon **2007**
- “Imaging and Drilling the Chicxulub Impact Crater”, Seminar Series, Universidad Nacional Autonoma Mexico, Mexico City, Mexico **2007**
- “Subduction Zones: A story of deformation, dewatering, and great earthquakes,” Foster-Hewitt Lecture Series, Lehigh University, Bethlehem, PA **2004**
- “3-D images of the outer Nankai accretionary margin: Reconstructing a prism,” Seminar Series, University of Florida, Gainesville, FL **2003**
- “Tectonic interplay between oblique subduction and Mendocino triple junction migration along the southern Cascadia subduction zone, offshore northern California,” GSA Penrose Conference: Great Cascadia Earthquake Tricentennial, Seaside, OR **2000**
- “Mendocino triple junction influence on and neotectonic implications of seismically imaged Quaternary faulting in the offshore Eel River forearc basin, northern California,” 2000 PANGA meeting, Corvallis, OR **2000**

Teaching

Professor, *The Interactive Ocean: History, Science and People on the Blue Planet*, Freshman Signature course, University of Texas at Austin **2013-2015**

Curriculum Vitae: Sean P. S. Gulick

Director and Professor/Lecturer, *Marine Geology and Geophysics Field Course*, designed and taught laboratory and at sea field course supplying hands on experience with a range of MG&G techniques, University of Texas at Austin **2008-2015**

Professor/Lecturer, Individual research directed study by graduates and undergraduates **2006-2015**

Professor/Lecturer, *Marine Tectonics*, team taught covering plate boundary processes, upper level undergraduates and graduate students, enrollment of 20-35 students per year (majority undergraduate), University of Texas at Austin **2006-2015**

Guest Lecturer, *Planetary Science*, University of Texas at Austin **2012**

Guest Lecturer, *Subduction Zones*, University of Texas at Austin **2012**

Guest Lecturer, *Tectonics*, University of Texas at Austin **2001-2005**

Substitute Lecturer, *Seismology, Rocks and Minerals, Sedimentology, and Geographic Information Systems*, Lehigh University **1997-1998**

Teaching Assistant, *Seismology, Geographic Information Systems, Structural Geology, Hydrogeology, and Introduction to Geology*, Lehigh University **1995-1998**

Workshops and Service

IRIS Scientific Grand Challenges Committee Co-chair **2014-Present**

IODP Science Evaluation Panel **2014-Present**

Jackson School of Geosciences Strategic Planning Committee **2015-Present**

Chair, Jackson School of Geosciences, Marine Geosciences Theme **2011-Present**

Jackson School of Geosciences Graduate Admissions Committee **2008-Present**

Guest Associate Editor, *Geosphere*, Alaska Tectonics and Climate Special Issue **2012-2014**

Chair, Jackson School of Geosciences, Strategic Planning Council **2011-2013**

GSA Penrose Subduction Zone Dynamics, Il Ciocco, Italy **2012**

STEEP Mini-workshop on Surface Processes **2012**

EarthScope Alaska Workshop, Co-convener **2011**

USGS Marine Geohazards Program Meeting **2011**

AGU Chapman Source to Sink systems, Oxnard, California **2011**

GeoPRISMS Subduction Cycles and Dynamics, Bastrop, Texas **2011**

NSF RAPID Haiti Workshop Steering Committee **2010**

Sumatra Great Earthquakes Workshop, Fondation des Treilles, France **2010**

Steering Committee for Future of US Academic Marine Seismology Workshop **2010**

MARGINS renewal Workshop **2010**

Earthscope Science Planning Workshop **2009**

Member of the INVEST Steering Committee for planning renewal of IODP **2008-2009**

Steering Committee US CHART meeting for planning US IODP renewal **2009**

Co-convener of STEEP/IODP Alaska Workshop, Austin, TX **2009**

Member of the Site Survey Panel of IODP **2007-2009**

Co-chair IODP-MI Depth Scales Committee **2006**

IODP-ICDP Chicxulub Drilling Workshop, Steering Committee **2006**

1st International Conference on Impact Cratering in the Solar System, ESA, Netherlands **2006**

GSA Backbone of the Americas meeting, Mendoza Argentina	2006
International Core-Log-Seismic Integration Workshop, Keynote Speaker	2005
GSA Penrose Conference: Arc-Continent Collisions	2005
International 3-D Seismic Workshop, Lamont-Doherty Earth Observatory	2005
Member of the Scientific Measurements and Science Technology Panels of IODP	2003-2005
IODP Downhole Tools Workshop	2004
Member of the interim Scientific Measurements Panel (iSciMP) of IODP	2002-2003
Co-convener of Joint NSF-JOI Tectonic-Climate Interplay Workshop	2003
3 rd International Conference on Large Meteorite Impacts	2003
University of Delaware research vessel advisory committee	2001-2003
R/V Maurice Ewing Midlife Refit Workshop	2002
NanTroSEIZE conference on Riser Drilling in Nankai Trough	2002
Conference on U.S. Participation in IODP (CUSP)	2002
Leg 190/196 2 nd Post-cruise Meeting in Kochi, Japan	2002
NSF-MARGINS Source-to-Sink planning workshop in Lake Tahoe, California	2000
PANGA GPS workshop to interface with EARTHSCOPE's Plate Boundary Observatory	2000
NSF sponsored workshop on the Mendocino triple junction, Menlo Park, California	1994

Professional Affiliations

American Geophysical Union, Geological Society of America, American Association of Petroleum Geologists, Seismological Society of America

Publications

Books

Published (1)

Jaeger, J.M., **Gulick, S.P.S.**, LeVay, L.J., and the Expedition 341 Scientists, *Proc. IODP*, 341, College Station TX (Integrated Ocean Drilling Program), doi:10.2204/iodp.proc.341.101.2014, 2014.

Journal Articles (* denotes student first author, all works peer-reviewed)

In Preparation (3)

Reece, R.*, **Gulick, S.**, Christeson, G., Horton, B., Seismicity and major submarine slope failure on a tectonically active glacial margin: *Geology*, in preparation.

Martin, K.M.*, **Gulick, S.P.S.**, Flemings, P.B., Estimating depth of invasion and permeability from LWD resistivity logs in NanTroSEIZE sands: *Geophysical Journal International*, in preparation.

Montelli, A.*, **Gulick, S.P.S.**, Worthington, L.L., Mix, A., Davies-Walczak, M., Zellers, S.D., Jaeger, J.M., Late Quaternary glacial dynamics and sedimentation variability in Bering Trough, Gulf of Alaska: *Geology*, in preparation.

Submitted (4)

Gulick, S.P.S., Jaeger, J.M., Mix, A.C., Asahi, H., Bahlburg, H., Belanger, C., Berbel, C.B.B., Childress, L., Cowan, E., Davies, M.H., Drab, L., Ribeiro, F.R., Forwick, M., Fukumura, A., Ge,

- S., Gupta, S., Kioka, A., Konno, S., LeVay, L.S., März, C., Matsuzaki, K., McClymont, E., Moy, C., Müller, J., Nakamura, A., Ojima, T., Ridgway, K., Romero, O., Slagle, A., Stoner, J., St-Onge, G., Suto, I., Worthington, L., Bailey, I., Enkelmann, E., and Reece, R., Rapid response of tectonics to changes in glacial erosion constrained by Gulf of Alaska sedimentary record: Proceedings of the National Academy of Sciences, re-submitted June 2015.
- Henstock, T. J., L. C. McNeill, J. M. Bull, B. J. Cook, S. P. S. Gulick, J. A. Austin, H. Permana, and Y. S. Djajadihardja, Downgoing plate topography halted rupture in 2005 earthquake, Sumatra, *Nature Geoscience*, (submitted), 2015
- Goff, J., **Gulick, S.**, Perez-Cruz, L., Stewart, H., Davis, M., Duncan, D., Saustrup, S., Sanford, J., Urrutia-Fucugauchi, J., Solution pans and linear sand drifts on the bare-rock limestone shelf of the Campeche Bank, Yucatán Peninsula, Mexico, *Geomorphology* (submitted), 2015.
- Sanford, J.*, Snedden, J., and **Gulick, S.**, The Cretaceous-Paleogene boundary deposit in the Gulf of Mexico: Large-scale oceanic basin response to the Chicxulub impact, *Journal of Geophysical Research* (submitted), 2015.

In Press (2)

- Davies-Walczak, M., A. C. Mix, T. Willse, A. Slagle, J. S. Stoner, J. Jaeger, **S. P. S. Gulick**, L. LeVay, A. Kioka, and the IODP Expedition 134 Scientists, Correction of non-intrusive drill core physical properties data for variability in recovered sediment volume, *Geophys. J. Int.*, (in press), 2015.
- Frederik, M. G. C.*, **S. P. S. Gulick**, J. A. Austin, N. L. Bangs, and Udrek, Investigation of accretionary wedge structures off north Sumatra using 2D multichannel seismic and multibeam bathymetric data, *Tectonics*, (in press), 2015.

Published (70)

2015

- Ramirez, S. G.*, **S. P. S. Gulick**, and N. W. Hayman, Early sedimentation and deformation in the Kumano fore arc basin linked with Nankai accretionary prism evolution, southwest Japan, *Geochem., Geophys., Geosyst.*, v 16, p 1616-1633, doi:10.1002/2014GC005643, 2015.
- Zurbuchen, J. M.*, **S. P. S. Gulick**, M. A. L. Walton, and J. A. Goff, Imaging evidence for Hubbard Glacier advances and retreats since the last glacial maximum in Yakutat and Disenchantment Bays, Alaska, *Geochem. Geophys. Geosyst.*, 16, 1962– 1974, doi:10.1002/2015GC005815, 2015.
- Swartz, J. M.*, **S. P. S. Gulick**, and J. A. Goff, Gulf of Alaska continental slope morphology, Evidence for recent trough mouth fan formation, *Geochem. Geophys. Geosyst.*, v16, p1-13, doi:10.1002/2014GC005594, 2015.
- Walton, M.*, **Gulick, S.**, Trehu, A., Roland, E., Haeussler, P., Christeson, G., New mapping and structural constraints on the Queen Charlotte-Fairweather Fault system, southeast Alaska, *Bulletin Seismological Society of America*, Vol. 105, May 2015, doi: 10.1785/0120140174 , 2015.
- Goff, J. A., M. A. Allison, **S. P. S. Gulick**, R. S. Reece, M. B. Davis, D. Duncan, S. Saustrup, and Univ. Texas MG&G Field Classes of 2010 and 2013, Shoreface ravinement evolution tracked by repeat geophysical surveys following Hurricane Ike, Bolivar Peninsula, Texas, 2008-2013, *Geophysics*, v 80, WB1-WB10, doi:10.1190/geo2014-0136.1, 2015.
- Enkelmann, E., Koons, P.O., Pavlis, T.L., Hallet, B., Barker, A., Elliott, J., Garver, J.I., **Gulick, S.P.S.**, Headley, R.M., Pavlis, G.L., Ridgway, K.D., Ruppert, N., and van Avendonk, H.J.A.,

Cooperation among tectonic and surface processes in the St. Elias Range, Earth's highest coastal mountains, *Geophys. Res. Lett.*, 42, doi:10.1002/2015GL064727.

2014

- Walton, M.L.*, Gulick, S.P.S., Reece, R.S., Barth, G.A., Christeson, G.L., van Avendonk, H., Tectonic Control on Deposition and Evolution of the Baranof Fan, Gulf of Alaska, *Geosphere*, v10, p 680-691, DOI: 10.1130/GES01034.1, 2014.
- Martin, K.M.*, **Gulick, S.P.S.**, Austin, J.A., Jr., Berglar, K., Franke, D., Udrek, U., Permana, H., The West Andaman Fault: a complex strain-partitioning boundary at the seaward edge of the Aceh Basin, offshore Sumatra: *Tectonics*, 33, p786-806, 2014.
- Pavlis, T. L., E. Enkelmann, **S. P. S. Gulick**, and G. Pavlis, Introduction: Neogene tectonics and climate-tectonic interactions in the southern Alaskan orogen themed issue, *Geosphere*, 10, 424-427, 2014.
- Tang, Q. S., **S. P. S. Gulick**, and L. T. Sun, Seismic observations from a Yakutat eddy in the northern Gulf of Alaska, *J. Geophys. Res. Oceans*, 119, 3535-3547, doi:10.1002/2014JC009938, 2014.

2013

- Gulick, S.P.S.**, Christeson, G.L., Barton, P., Grieve, R., Morgan, J. V., Urrutia-Fucugauchi, J., Geophysical Characterization of the Chicxulub Impact Crater: *Reviews of Geophysics*, v 51, p. 31-52, DOI:10.1002/rog.20007, 2013.
- Gulick, S.P.S.**, Reece, R.S., Christeson, G.L., van Avendonk, H., Worthington, L.L., Pavlis, T.L., Transition Fault and the unstable Yakutat-Pacific-North American triple junction: *Geology*, v 41, p. 571-574, DOI:10.1130/G33900.1, 2013.
- Christeson, G.L., van Avendonk, H., **Gulick, S.P.S.**, Reece, R.S., Pavlis, G.L., and Pavlis, T., Moho Interface Beneath Yakutat Terrane, Southern Alaska: *Journal of Geophysical Research*, 118, 5084-5097, doi:10.1002/jgrb.50361, 2013.
- Van Avendonk, H.J.A., **Gulick, S.P.S.**, Christeson, G.L., Worthington, L.L., Pavlis, T.L., and Ridgway, K.D., Subduction and accretion of sedimentary rocks in the Yakutat collision zone, St. Elias orogen, Gulf of Alaska: *Earth and Planetary Science Letters*, v 381, p 116-126, 2013.
- Reece, R.S.*, **Gulick, S.P.S.**, Christeson, G.L., Horton, B.K., van Avendonk, H.J., Barth, G., The role of farfield tectonic stress in oceanic intraplate deformation, Gulf of Alaska: *Journal of Geophysical Research*, published online 9 May, DOI:10.1002/jgrb.50177, 2013.
- Whalen, M.T., **Gulick, S.P.S.**, Pearson, Z.F., Norris, R.D., Perez-Cruz, L., Urrutia-Fucugauchi, J., Annealing the Chicxulub Impact: Paleogene Yucatàn Carbonate Slope Development in the Chicxulub Impact Basin, Mexico: *SEPM Special Publication No. 105*, DOI: 10.2110/sepmsp.105.04, 2013.
- Elmore, C.R.*, **Gulick, S.P.S.**, Willems, B., Powell, R., Seismic stratigraphic evidence for glacial expanse during glacial maxima in the Yakutat Bay Region, Gulf of Alaska: *Geochemistry, Geophysics, Geosystems*, v 14, p. 1294-1311, DOI:10.1002/gge.20097, 2013.

2012

- Chapman, J.B., Pavlis, T.L., Bruhn, R., Worthington, L.L., **Gulick, S.P.S.**, Berger, A., Fault geometry and relationships in the eastern syntaxis of the St. Elias orogen, Alaska: *Geosphere*, v 8, p. 105-126, DOI:10.1130/GES00677.1, 2012.
- Goff, J. A., Lawson, D. E., Willems, B. A., Davis, M., and **Gulick, S. P. S.**, Hubbard Glacier's

morain bank advances in concert with its tidewater terminus: *Journal of Geophysical Research- Earth Surface Processes*, v. 117, F02031, DOI: 10.1029/2011JF002312, 2012.

Pavlis, T.L., Chapman, J.B., Bruhn, R.L., Ridgway, K., Worthington, L.L., **Gulick, S.P.S.**, and Spotila, J., Structure of the Actively Deforming Fold-thrust belt of the St. Elias Orogen with Implications for Glacial Exhumation and 3D Tectonic Processes: *Geosphere*, v 8, p. 991-1019, DOI:10.1130/GES00753.1, 2012.

Worthington, L.L.*, van Avendonk, H., **Gulick, S.P.S.**, Christeson, G.L., Pavlis, T.L., Crustal structure of the Yakutat Terrane: New constraints for understanding the evolution of subduction and collision in southern Alaska: *Journal of Geophysical Research*, doi:10.1029/2011JB008612, 2012.

2011

Gulick, S.P.S., Austin, J.A., Jr., Bangs, N.L.B., McNeill, L.C., Martin, K.M., Henstock, T.J., Bull, J.M., Dean, S.M., Djajadihardja, Y., Permana, H., Thick consolidated sediments allow significant updip rupture propagation during 2004 Sumatra-Andaman earthquake and tsunami: *Nature Geoscience*, v 4, p 453-456, DOI: 10.1038/NGEO1176, 2011.

Chapman, J.B., Worthington, L.L., Pavlis, T.L., Bruhn, R.L., **Gulick, S.P.S.**, Doser, D.I., The Suckling Hills Fault and accretion of the Yakutat Microplate, Alaska: *Tectonics*, v 30, TC6011, doi:10.1029/2011TC002945, 2011.

Reece, R.S.*, **Gulick, S.P.S.**, Horton, B.K., Christeson, G.L., Worthington, L.L., Tectonic and climatic influence on the evolution of the Surveyor Fan and Channel system, Gulf of Alaska: *Geosphere*, v 7, p 830-844, DOI: 10.1130/GES00654.1, 2011.

McHugh, C.M., Seeber, L., Braudy, N., Cormier, M.-H., Davis, M.B., Diebold, J.B., Dieudonne, N., Douilly, R., **Gulick, S.P.S.**, Hornbach, M.J., Johnson, H.E., III, Mishkin, K.R., Sorlien, C.C., Steckler, M.S., Symithe, S.J., Templeton, J., The offshore record of the 12 January 2010 Haiti earthquake: *Geology*, v 39, p 723-726, DOI: 10.1130/G31815.1, 2011.

Morgan, J., Warner, M., Grieve, R., Christeson, G., **Gulick, S.**, Barton, P., Full waveform tomographic images of the peak ring at the Chicxulub impact crater and implications for future drilling: *Journal of Geophysical Research*, v. 116, B06303, 2011.

2010

Gulick, S., Bangs, N., Martin, K., Moore, G., Sawyer, D., Nakamura, Y., Rapid forearc basin uplift and megasplay fault development from 3D seismic images of Nankai Margin off Kii Peninsula, Japan: *Earth Planet. Sci. Lett.*, doi:10.1016/j.epsl2010.09.034, 2010.

Worthington, L.L.*, **Gulick, S.P.S.**, Pavlis, T.L., Coupled stratigraphic and structural evolution of a glaciated orogenic wedge, offshore St. Elias Orogen, Alaska: *Tectonics*, 29, TC6013, doi:10.1029/2010TC002723, 2010.

Martin, K.*, **Gulick, S.**, Bangs, N., Moore, G., Ashi, J., Park, J.-O., Kuramoto, S., Taira, A., Possible strain partitioning structure between Kumano forearc basin and the slope of the Nankai Trough accretionary Prism: *Geochem. Geophys. Geosyst.*, v 11, Q0AD02, doi:10.1029/2009GC002668., 2010.

Christeson, G.L., **Gulick, S.P.S.**, van Avendonk, H.J.A., Worthington, L.L., Reece, R.S., Pavlis, T.L., The Yakutat Terrane: Dramatic change in crustal thickness across the Transition fault, Alaska: *Geology*, v. 38, p. 895-898, 2010.

Hornbach, M.J., Braudy, N., Briggs, R.W., Cormier, M.-H., Davis, M.B., Diebold, J.B., Dieudonne, N., Douilly, R., Frohlich, C., **Gulick, S.P.S.**, Johnson, H., Mann, P., McHugh, C., Mishkin, K., Prentice, C.S., Seeber, L., Sorlien, C., Steckler, M.S., Smythe, S.J., Taylor, F.W.,

- Templeton, J., Uplift and sliding and tsunamigenesis along a strike-slip fault: *Nature Geosciences*, doi:10.1038/NGEO975, 2010.
- Dean, S. M., McNeill, L. C., Henstock, T. J., Bull, J. M., **Gulick, S. P. S.**, Austin Jr., J. A., Bangs, N. L. B., Djajadihardja, Y. S. & Permana, H. Contrasting Décollement and Prism Properties over the Sumatra 2004–2005 Earthquake Rupture Boundary. *Science*, v 329, p. 207-210, 2010.
- Barton, P.J., R.A.F. Grieve, J.V. Morgan, A.T. Surendra, P. Vermeesch, G.L. Christeson, **S.P.S. Gulick**, and M.W. Warner, Seismic images of Chicxulub impact melt sheet and comparisons with Sudbury, in *Large Meteorite Impacts and Planetary Evolution IV: Geological Society of America Special Paper 465*, ed. Reimhold, U.W., Gibson, R.L., 2010.
- Cowan, E.A., Seramur, K.C., Powell, R.D., Willems, B.A, **Gulick, S.P.S.**, Jaeger, J.M., Fjords as temporary sediment traps: History of glacial erosion and deposition in Muir Inlet, Glacier Bay National Park, Southeastern Alaska: *GSA Bulletin*, v 122, p. 1067-1080, doi: 10.1130/B26595.1, 2010.
- Schulte, P., Alegret, L., Arenillas, I., Arz, J., Barton, P., Brown, P., Bralower, T., Christeson, G., Claeys, P., Cockell, C., Collins, G., Deutsch, A., Goldin, T., Goto, K., Grajales-Nishimura, J., Grieve, R., **Gulick, S.**, Johnson, K., Kiessling, W., Koeberl, C., Kring, D., MacLeod, K., Matsui, T., Melosh, J., Montanari, A., Morgan, J., Neal, C., Nichols, D., Norris, R., Pierazzo, E., Ravizza, G., Rebolledo-Vierya, M., Reimold, W., Robin, E., Salge, T., Speijer, R., Sweet, R., Urrutia-Fucugauchi, J., Vajda, V., Whalen, M., Willumsen, P. The Chicxulub Asteroid Impact and Mass Extinction at the Cretaceous-Paleogene Boundary: *Science*, v 327, p. 1214-1218, doi: 10.1126/science.1177265, 2010.
- Goff, J.A., Allison, M.A., **Gulick, S.P.S.**, Offshore transport of sediment during Hurricane Ike, Texas Gulf Coast, USA: *Geology*, v 38, p. 351-354; doi: 10.1130/G30632.1, 2010.
- Henstock, T., McNeill, L., Dean, S., Barton, P., Tilmann, F., Riebrock, A., Robinson, D., **Gulick, S.**, Austin, J., Djajadihardja, Y., Natawidjaja, D., Permana, H., Exploring structural controls on Sumatran earthquakes: *EOS Trans. Amer. Geophys. Union*, 91, p 405-406, 2010.
- 2009**
- Christeson, G.L., Collins, G., Morgan, J.V, **Gulick, S.P.S.**, Barton, P.J., Warner, M.R., Mantle deformation beneath the Chicxulub impact crater: *Earth and Planetary Research Letters*, v. 284, p. 249-257, doi:10.1016/j.epsl.2009.04.033, 2009.
- Bangs, N.L.B., Moore, G.F., **Gulick, S.P.S.**, Pangborn, E.M., Tobin, H., Broad, weak regions of the Nankai Megathrust and implications for shallow coseismic slip: *Earth and Planetary Research Letters*, v. 284, p. 44-49, doi:10.1016/j.epsl.2009.04.026, 2009.
- Moore, G. F., J-O. Park, N. L. Bangs, **S. P. Gulick**, H. J. Tobin, Y. Nakamura, S. Sato, T. Tsuji, T. Yoro, H. Tanaka, S. Uraki, Y. Kido, Y. Sanada, S. Kuramoto, and A. Taira, Structural and seismic stratigraphic framework of the NanTroSEIZE Stage 1 transect: Kumano 3-D seismic survey, in *Proceedings of the Intergrated Ocean Drilling Program, Expedition Reports 314/315/316*, doi:10.2204/iodp.proc.314315316.2009, 2009.
- 2008**
- Gulick, S.**, Barton, P., Christeson, G., McDonald, M., Mendoza, K., Morgan, J., Pearson, Z., Surendra, A., Urrutia, J., Vermeesch, P., Warner, M., Importance of pre-impact crustal structure in the asymmetry of the Chicxulub impact crater: *Nature Geosciences*, v. 1, p. 131-135, DOI: 10.1038/ngeo103, 2008.
- Berger, A., **Gulick, S.**, Spotila, J., Jaeger, J., Chapman, J., Lowe, L., Pavlis, T., Ridgway, K.,

- Willems, W., Tectonic response in a glaciated orogenic wedge to late Cenozoic climate change: *Nature Geoscience*, 1, 793-799, doi: 10.1038/ngeo334, 2008.
- Worthington, L.*, **Gulick, S.**, Pavlis, T., Bruns, R., Mann, P., Localized deformation zones in the offshore leading edge of the Yakutat microplate, *Gulf of Alaska Active Tectonics and Seismic Potential of Alaska*, edited by J.T. Freymueller, P.J. Haeussler, R.L. Wesson, G. Ekström, Geophysical Monograph Series, Volume 179, 350 pp., ISBN 978-0-87590-444-3, 2008.
- Chapman, J.B., Pavlis, T.L., **Gulick, S.**, Berger, A., Lowe, L., Spotila, J., Bruhn, R., Vorkink, M., Koons, P., Barker, A., Picornell, C., Ridgway, K., Hallet, B., Jaeger, J., McCalpin, J., Neotectonics of the Yakutat collision: Changes in deformation driven by mass redistribution: *Active Tectonics and Seismic Potential of Alaska*, edited by J.T. Freymueller, P.J. Haeussler, R.L. Wesson, G. Ekström, Geophysical Monograph Series, Volume 179, 350 pp., ISBN 978-0-87590-444-3, 2008.
- Collins, G.S., Morgan, J., Barton, P., Christeson, G., **Gulick, S.**, Urrutia, J., Warner, M., Wunnemann, K., Dynamic modeling suggests asymmetries in the Chicxulub crater are caused by target heterogeneity: *Earth and Planetary Science Letters*, Vol: 270, Pages: 221 - 230, ISSN: 0012-821X, 2008.
- Mosher, D.C., J.A. Austin, Jr., D. Fisher, and **S.P. Gulick**, Deformation of the northern Sumatra accretionary prism: evidence for strain partitioning from high-resolution seismic reflection profiles and ROV observations: *Marine Geology*, v. 252, p.89-99, 2008.
- McDonald, M.*, Melosh, J., **Gulick, S.**, Oblique impacts and peak ring position: Comparing Venusian craters to Chicxulub: *Geophysical Research Letters*, v. 35, L07203, doi:10.1029/2008GL033346, 2008.

2007

- Gulick, S. P. S.**, Lowe, L., Pavlis, T., Mayer, L., Gardner, J., Geophysical insights into the Transition fault debate: Propagating strike-slip in response to stalling Yakutat block subduction in the Gulf of Alaska: *Geology*, v. 35, p. 763–766; doi: 10.1130/G23585A, 2007.
- Fisher, D., Mosher, D., Austin, J. A., Jr., **Gulick, S. P. S.**, Masterlark, T., and Moran, K., Active deformation across the Sumatran forearc over the December 2004 Mw9.2 rupture, *Geology*, v. 35., pp. 99-102, DOI: 10.1130/G22993A.1, 2007.

2006

- Nordfjord, S., Goff, J. A., Austin, J. A., Jr., **Gulick, S. P. S.**, Seismic facies of incised valley-fills, New Jersey continental shelf: Implications for erosion and preservation processes acting during latest Pleistocene-Holocene transgression: *J. Sed. Res.*, v. 76, p. 1284-1303, DOI: 10.2110/jsr.2006.108, 2006.
- Bangs, N. L., **Gulick, S. S.**, and Shipley, T. H., 2006, Seamount subduction erosion in the Nankai Trough and its potential impact on the seismogenic zone: *Geology*, v. 34, no. 8, p. 701-704, 2006.

2005

- Morgan, J., Warner, M., Urrutia-Fucugauchi, J., **Gulick, S.**, Christeson, G., Barton, P., Rebolledo-Vieyra, M., and Melosh, J., New Seismic Survey Over Chicxulub Prepares for Future Drilling Into the Crater, *EOS, Transactions American Geophysical Union*, v. 86, p. 325-328, 2005.
- Gulick, S. P. S.**, Goff, J. A., Austin, J. A., Jr., Alexander, C. R., Jr., Nordfjord, S., and Fulthorpe, C. S., Basal inflection-controlled shelf-edge wedges off New Jersey track sea-level fall:

Geology, v. 33, no. 5, p. 429-432, 2005.

Goff, J. A., Austin, J. A., Jr., **Gulick, S.**, Nordfjord, S., Christensen, B., Sommerfield, C., Olson, H., and Alexander, C., Recent and Modern Marine Erosion on the New Jersey Outer Shelf, Marine Geology, v. 216, p. 275-296, 2005.

Goldberg, D., Cheng, A., **Gulick, S.**, Blanch, J., and Byun, J.-M., Velocity analysis of LWD sonic data in turbidites and hemipelagic sediments offshore Japan, ODP sites 1173 and 808, Proc. Ocean Drilling Prog., Sci. Res., v. 190/196, 2005.

2004

Gulick, S., Jaeger, J., Freymueller, J., Koons, P., Pavlis T., and Powell, R. Examining tectonic-climatic interactions in Alaska and the northeast Pacific Ocean, EOS, Transactions American Geophysical Union, v. 85, no. 43, p. 433, 438-439, 2004.

Gulick, S. P. S., and Bangs, N. L. B., Negative-polarity at the frontal thrust, is free gas the culprit?: Insights from Nankai accretionary prism off Cape Muroto using seismic-logging integration, Proc. Ocean Drilling Prog., Sci. Res., v. 190/196, 2004.

Bangs, N. L. B., and **Gulick, S. P. S.**, Physical properties along the developing décollement in the Nankai Trough: Inferences from 3-D seismic reflection data inversion and Leg 190 and 196 drilling data, Proc. Ocean Drilling Prog., Sci. Res., v. 190/196, 2004.

Goff, J. A., Kraft, B. J., Mayer, L. A., Schock, S. G., Sommerfield, C. K., Olson, H. C., **Gulick, S. P. S.**, and Nordfjord, S., Seabed characterization on the New Jersey middle and outer shelf: Correlability and spatial variability of seafloor sediment properties, Mar. Geol., 209, 147-172, 2004.

Gulick, S. P. S., Bangs, N. L. B., Shipley, T. H., Nakamura, Y., Moore, G., and Kuramoto, S., 3-D Architecture of the Nankai Accretionary Prism's Imbricate Thrust Zone off Cape Muroto, Japan: Prism Reconstruction via *En Echelon* Thrust Propagation, Journal of Geophysical Research, v. 109, B02105, 2004.

Bangs, N. L. B., Shipley, T. H., Moore, G. F., **Gulick, S. P. S.**, and Nakamura, Y., Evolution of the Nankai Trough Décollement from the Trench into the Seismogenic Zone: Inferences from 3-D Seismic Reflection Imaging, Geology, v. 32, p. 273-276, 2004.

2003

Mikada, H., Kinoshita, M., Becker, K., Davis, E. E., Meldrum, R. D., Flemings, P., **Gulick, S.**, Matsubayashi, O., Morita, S., Goto, S., Misawa, N., Fujino, K., and Toizumi, M., Hydro-geological and geothermal studies around Nankai trough (KR02-10 Nankai Trough Cruise Report), JAMSTEC J. Deep Sea Res., 22: 125-171, 2003.

2002

Gulick, S. P. S., and Meltzer, A. S., Effect of the northward migrating Mendocino triple junction on the Eel River forearc basin, California: Structural Evolution, GSA Bulletin, v. 114, p. 1505-1519, 2002.

Burger, R. L.*, Fulthorpe, C. S., Austin, J. A., and **Gulick, S. P. S.**, Lower Pleistocene to present structural deformation and sequence stratigraphy of the continental shelf, offshore Eel River Basin, northern California, Marine Geology, v. 185, p. 249-281, 2002.

Gulick, S. P. S., Meltzer, A. S., and Clarke, S. H., Jr., Effect of the northward migrating Mendocino triple junction on the Eel River forearc basin, California: Stratigraphic Development, GSA Bulletin, v. 114, p. 178-191, 2002.

2001 and Earlier

- Gulick, S. P. S.**, Meltzer, A. S., Levander, A., and Henstock, T., Internal deformation of the southern Gorda plate: Implications for plate boundary stresses north of the Mendocino triple junction, *Geology*, v. 29, p. 691-694, 2001.
- Kuramoto, S., Ashi, J., Greinert, J., **Gulick, S.**, Ishimura, T., Morita, S., Nakamura, K., Okada, M., Okamoto, T., Rickert, D., Saito, S., Suess, E., Tsunogai, U., and Tomosugi, T., Surface observations of subduction related mud volcanoes and large thrust sheets in the Nankai subduction margin: Report on YK00-10 and YK01-04 cruises, *JAMSTEC Journal of Deep Sea Research*, v. 19, pp. 131-139, 2001.
- Moore G. F., Taira, A., Bangs, N. L., Kuramoto, S., Shipley, T. H., Alex, C. M., **Gulick, S. S.**, Hills, D. J., Ike, T., Ito, S., Leslie, S. C., McCutcheon, A. J., Mochizuki, K., Morita, S., Nakamura, Y., Park, J.-O., Taylor, B. L., Toyama, G., Yagi, H., and Zhao, Z. Data Report: Structural setting of the ODP Leg 190 Muroto transect, in Moore, G.F., Taira, A., Klaus, A., et al., *Proc. ODP, Init. Repts.*, 190, p. 1-14 [CD-ROM], 2001.
- Gulick, S. P. S.**, Meltzer, A. S., Clarke, S. H., Jr., and Tréhu, A. M., Seismic study of the southern Cascadia subduction zone and accretionary prism north of the Mendocino triple junction, *Journal of Geophysical Research*, v. 103, pp. 27207-27222, 1998.
- Tréhu, A. M., Lendl, C., Leitner, B., Meltzer, A., **Gulick, S.**, Holl, J., Levander, A., Henstock, T., Beaudoin, B., Godfrey, N., Hole, J., Klemperer, S., Clarke, S., Luetgert, J., and Mooney, W., Pulling the rug out from under California: Seismic images of the Mendocino triple junction region, *EOS*, v. 76, no. 38, pp. 369, 380-381, 1995.

Extended Abstracts Published (13) (* denotes student first author)

- Morgan, J., Barton, P., Christeson, G., Gulick, S., Collins, G., Asymmetry of the Chicxulub Crater- Is It Produced by Asymmetry in the Target?, *Bridging the Gap II: Effect of Target Properties on the Impact Cratering Process*, Abstract 8028, 2007.
- Barton, P. J., **Gulick, S. P. S.**, Morgan, J. V., Urrutia-Fucugauchi, J., Warner, M. R., Christeson, G., Rebolledo-Vieyra, M., New Geophysical Data from the Chicxulub Impact Crater, 40th ESLAB Symposium, First International Conference on Impact Cratering in the Solar System, European Space Agency, Abstract Book, pp. 23-24, 2006.
- Christeson, G. L., **Gulick, S. P. S.**, Morgan, J., Warner, M., Barton, P., Moho Structure Beneath the Chicxulub Impact Crater, 40th ESLAB Symposium, First International Conference on Impact Cratering in the Solar System, European Space Agency, Abstract Book, p. 41, 2006.
- Gulick, S. P. S.**, Christeson, G. L., Morgan, J., Warner, M., Barton, P., Structure of the Multi-Ring Chicxulub Impact Crater: What Fault Patterns Tell Us About Pre-existing Structures, Impact Obliquity, and Crater Collapse. 40th ESLAB Symposium, First International Conference on Impact Cratering in the Solar System, European Space Agency, Abstracts, p. 85, 2006.
- McDonald, M.*, **Gulick, S.**, Christeson, G., Mendoza, K., Gorney, D., Barton, P. J., The Terrace Zone Structure of the Chicxulub Impact Crater, Yucatan, Mexico, 40th ESLAB Symposium, First International Conference on Impact Cratering in the Solar System, European Space Agency, Abstracts, p. 139, 2006.
- Mendoza-Cervantes, K.*, **Gulick, S. S.**, Urrutia-Fucugauchi, J., McDonald, M., Christeson, G. L., Barton, P. J., 3-D Image of the Chicxulub Crater Peak Ring Based on 2-D Seismic Reflection Profiles from R/V Maurice Ewing 2005 Survey, 40th ESLAB Symposium, First International

- Conference on Impact Cratering in the Solar System, European Space Agency, Abstracts, p. 145, 2006.
- Morgan, J., Warner, M., Urrutia-Fucugauchi, J., **Gulick, S.**, Christeson, G., Barton, P., Rebolledo-Vieyra, M., Grieve, R., Structure of Chicxulub: Results from Past Drilling and Targets for Future Drilling, 40th ESLAB Symposium, First International Conference on Impact Cratering in the Solar System, European Space Agency, Abstract Book, p. 153, 2006.
- Surendra, A. T. *, Barton, P. J., Morgan, J., **Gulick, S. P. S.**, Christeson, G. L., 3-D Tomographic Imaging of the Chicxulub Impact Crater, 40th ESLAB Symposium, First International Conference on Impact Cratering in the Solar System, European Space Agency, Abstract Book, p. 211, 2006.
- Gulick, S.**, Mann, P., Christeson, G., van Avendonk, H., Pavlis, T., Jaeger, J., Powell, R., Cowan, E., Geophysical and Geologic Investigations of the Yakutat Terrane Collision, Glacial Erosion, and Marine Deposition, St. Elias Orogen, Southeast Alaska, Lessons in Tectonics, Climate and Eustacy from the Stratigraphic Record in Arc Collision Zones, GSA Penrose Conference Proceedings, 2005.
- Jaeger, J., Powell, R., Cowan, E., **Gulick, S.**, Mann, P., Pavlis, T., Finney, B., Uplift versus Denudation: the Sedimentary Record of Yakutat Terrane Collision and Glacial Erosion in Southeast Alaska, Lessons in Tectonics, Climate and Eustacy from the Stratigraphic Record in Arc Collision Zones, GSA Penrose Conference Proceedings, 2005.
- Gulick, S.**, Bangs, N., Goldberg, D., Nordfjord, S., and Sommerfield, C., The use of Core-Log-Seismic Integration in Academia: Examples from within and outside of IODP. Proceedings of CDEX/JAMSTEC/J-DESC International Workshop on Core-Log-Seismic Integration: New Scientific and Technological Challenges, JAMSTEC Tokyo Office, pp. 7-9, 2005.
- Sakurai, S., **Gulick, S.**, and Hovorka, S., Integrated Evaluation of CO₂ Sequestration: Use of Core, Wireline Logs, and Seismic Data, Proceedings of CDEX/JAMSTEC/J-DESC International Workshop on Core-Log-Seismic Integration: New Scientific and Technological Challenges, JAMSTEC Tokyo Office, pp. 13-15, 2005.
- Gulick, S. P. S.**, Meltzer, A. S., Clarke, S. H., Jr., Tectonic Interplay Between Oblique Subduction and Mendocino Triple Junction Migration Along the Southern Cascadia Subduction Zone, Offshore Northern California, Proceedings of the GSA Penrose Conference, Great Cascadia Earthquake Tricentennial, Oregon Department of Geology and Mineral Industries, pp. 34-35, 2000.

Abstracts Published (204) (* denotes student first author)

- Gulick, S.**, Montelli, A., Frederick, B., Domack, E., Shevenell, A., Sjunneskog, C., Bohaty, S., Leventer, A., Blankenship, D., Fernandez, R., Sangiorgi, F.T., Smith, C., Insights into changing East Antarctic paleoenvironments since the Eocene based on first-ever seismic imaging and coring on the Sabrina Coast shelf: Abstract S15-371 presented at XII International Symposium on Antarctic Earth Sciences, 13-17 July 2015, Goa, India, 2015.
- Fernandez, R., Domack, E., Lavoie, C., **Gulick, S.**, Frederick, B., Leventer, A., Post, A., Did the Recent Geomorphic and Sedimentary Record off the Sabrina Coast, East Antarctica, Originate as Result of Past Subglacial Water Outbursts and Ice Sheet Collapse?: Abstract S07-256 presented at XII International Symposium on Antarctic Earth Sciences, 13-17 July 2015, Goa, India, 2015.
- Montelli, A. *, **Gulick, S.**, Frederick, B., Blankenship, D., Leventer, A., Shevenell, A., Domack,

- E., Seismic Stratigraphy of the Sabrina Coast Shelf, East Antarctica: History of Late Paleogene to Early Neogene Glacial Evolution: Abstract S07-273 presented at XII International Symposium on Antarctic Earth Sciences, 13-17 July 2015, Goa, India, 2015.
- Asahi, H., Mix, A., Suto, I., Belanger, C., Fukumura, A., Gupta, S., Konno, S., Matsuzaki, K., Romero, O., **Gulick, S.**, Jaeger, J., Schneider, L., Oxygen isotope stratigraphy in the Gulf of Alaska (IODP Exp. 341): Abstract PP21A-1286 presented at 2014 Fall Meeting, AGU, San Francisco, Calif., 15-19 Dec., 2014.
- Frederik, M.*, **Gulick, S.**, Austin, J., Bangs, N., Udrek, U., What controls landward vergence of the accretionary prism offshore northern Sumatra?: Abstract T51A-4592 presented at 2014 Fall Meeting, AGU, San Francisco, Calif., 15-19 Dec., 2014.
- Goff, J., **Gulick, S.**, Lawson, D., O'Halloran, W., Bluefin 9M AUV Survey of the Hubbard Glacier Morainal Bank: Proof-of-Concept Study of Autonomous Underwater Vehicle Investigations Proximal to a Tidewater Glacier: Abstract OS33D-04 presented at 2014 Fall Meeting, AGU, San Francisco, Calif., 15-19 Dec., 2014.
- Montelli, A.*, **Gulick, S.**, Worthington, L., Mix, A., Zellers, S., Jaeger, J., Seismic stratigraphy of the Bering Trough, Gulf of Alaska: Late Quaternary history of Bering Glacier dynamics: Abstract PP21A-1287 presented at 2014 Fall Meeting, AGU, San Francisco, Calif., 15-19 Dec., 2014.
- Penkrot, M.*, Jaeger, J., LeVay, L., St-Onge, G., Mix, A., Bahlburg, H., Davies-Walczak, M., **Gulick, S.**, Northern Cordilleran Ice Sheet Dynamics in Coastal Alaska from MIS 3 to the Present: Initial Results: Abstract PP21A-1285 presented at 2014 Fall Meeting, AGU, San Francisco, Calif., 15-19 Dec., 2014.
- Jaeger, J., **Gulick, S.**, Gulf of Alaska Cryosphere and Paleoceanography in the Neogene: IODP Expedition 341 Southern Alaska (Invited): Abstract PP23D-03 presented at 2014 Fall Meeting, AGU, San Francisco, Calif., 15-19 Dec., 2014.
- Walton, M.*, **Gulick, S.**, Haeussler, P., Rohr, K., Roland, E., Trehu, A., Updated mapping and seismic reflection data processing along the Queen Charlotte fault system, southeast Alaska: Abstract T11A-4544 presented at 2014 Fall Meeting, AGU, San Francisco, Calif., 15-19 Dec., 2014.
- Reece, R., **Gulick, S.**, Jaeger, J., Deciphering the Transitional Tectonics of the Southern Alaska Margin Through Gulf Sedimentology and Geophysics: IODP Expedition 341 (Invited): Abstract T11A-4540 presented at 2014 Fall Meeting, AGU, San Francisco, Calif., 15-19 Dec., 2014.
- Gulick, S.**, Fernandez-Vasquez, R., Frederick, B., Sastrup, S., Domack, E., Lavoie, C., Shevenell, A., Blankenship, D., Leventer, A., Environmental and ice volume changes based on seismic stratigraphy in Sabrina Coast, East Antarctica: Preliminary results from NBP1402: Abstract PP24A-03 presented at 2014 Fall Meeting, AGU, San Francisco, Calif., 15-19 Dec., 2014.
- Shevenell, A., Snow, T., Domack, E., Leventer, A., **Gulick, S.**, Huber, B., Orsi, A., Goddard, E., Fernandez-Vasquez, R., High-resolution Deglacial to Holocene paleoceanographic records from the Sabrina Coast, East Antarctica: Preliminary foraminifer-based results from NBP14-02: Abstract PP21A-1316 presented at 2014 Fall Meeting, AGU, San Francisco, Calif., 15-19 Dec., 2014.
- Fernandez-Vasquez, R., Domack, E., Lavoie, C., **Gulick, S.**, Sastrup, S., Frederick, B., Leventer,

- A., Shevenell, A., Blankenship, D., The geomorphic and sedimentary record of past subglacial water outbursts, Sabrina Coast, East Antarctica: Abstract PP21A-1313 presented at 2014 Fall Meeting, AGU, San Francisco, Calif., 15-19 Dec., 2014.
- Leventer, A., Armand, L., Redovian, M., Domack, E., Shevenell, A., Smith, C., Lavoie, C., Orsi, A., Huber, B., **Gulick, S.**, Fernandez-Vasquez, R., Holocene Sedimentary Record of Unusual Primary Productivity, Dalton Polynya, Sabrina Coast, East Antarctica: Abstract PP21A-1315 presented at 2014 Fall Meeting, AGU, San Francisco, Calif., 15-19 Dec., 2014.
- Roland, E., Walton, M., Ruppert, N., **Gulick, S.**, Christeson, G., Haeussler, P., Aftershock source properties of events following the 2013 Craig Earthquake: new evidence for structural heterogeneity on the northern Queen Charlotte Fault: Abstract T11A-4545 presented at 2014 Fall Meeting, AGU, San Francisco, Calif., 15-19 Dec., 2014.
- Snow, T.*, Leventer, A., Domack, E., Huber, B., Orsi, A., Blankenship, D., **Gulick, S.**, Shevenell, A., Lavoie, C., NBP14-02: The Sabrina Coast Marine Record of Ocean-Cryosphere Dynamics: Abstract PP21A-1312 presented at 2014 Fall Meeting, AGU, San Francisco, Calif., 15-19 Dec., 2014.
- Swartz, J.*, **Gulick, S.**, Goff, J., Quantitative morphologic analysis of the Gulf of Alaska Yakutat margin: evidence for recent trough mouth fan growth: Abstract PP21A-1289 presented at 2014 Fall Meeting, AGU, San Francisco, Calif., 15-19 Dec., 2014.
- Domack, E., **Gulick, S.**, Fernandez-Vasquez, R., Frederick, B., Lavoie, C., Leventer, A., Shevenell, A., Sastrup, S., Boharty, S., Sangiorgi, F., Pre-glacial, Early Glacial, and Ice Sheet Stratigraphy Cored During NBP1402, Sabrina Coast, East Antarctic Margin: Abstract PP24A-04 presented at 2014 Fall Meeting, AGU, San Francisco, Calif., 15-19 Dec., 2014.
- Frederick, B.*, **Gulick, S.**, Sastrup, S., Fernandez-Vasquez, R., Domack, E., Lavoie, C., Blankenship, D., Leventer, A., Shevenell, A., Seismic Stratigraphy of Ice Sheet Advance-Retreat Cycles on the Sabrina Coast Continental Shelf, East Antarctica: Abstract PP21A-1314 presented at 2014 Fall Meeting, AGU, San Francisco, Calif., 15-19 Dec., 2014.
- Lawson, D., **Gulick, S.**, Goff, J., O'Halloran, W., An Initial AUV Investigation of the Morainal Bank and Ice-Proximal Submarine Processes of the Advancing Hubbard Glacier, Southeast Alaska: Abstract C44B-08 presented at 2014 Fall Meeting, AGU, San Francisco, Calif., 15-19 Dec., 2014.
- Orsi, A., Zielinski, N., Durkin, W., Clark, P., Wiederwohl, C., Rosenberg, M., Huber, B., Gwyther, D., Greenbaum, J., Lavoie, C., Shevenell, A., Leventer, A., Blankenship, D., **Gulick, S.**, Domack, E., On the Revealing Firsthand Probing of Ocean-Ice-Atmosphere Interactions off Sabrina Coast During NBP1402 (Invited): Abstract PP24A-02 presented at 2014 Fall Meeting, AGU, San Francisco, Calif., 15-19 Dec., 2014.
- Duncan, D., Davis, M., Goff, J., **Gulick, S.**, McIntosh, K., Sastrup, S., The University of Texas Institute for Geophysics Marine Geology and Geophysics Field Course: Abstract ED21C-3457 presented at 2014 Fall Meeting, AGU, San Francisco, Calif., 15-19 Dec., 2014.
- Ramirez, S. G.*, **Gulick, P.S.** and Hayman, N.W., Initiation and early evolution of a forearc basin in SW Japan based on 3D seismic data analysis: Geological Society of America Abstracts with Programs. Vol. 46, No. 6, p.377, 2014.
- Gulick, S.**, Jaeger, J., Mix, A., Swartz, J., Worthington, L., Reece, R., Development of a glacially dominated shelf-slope-fan system in tectonically active southeast Alaska: Results of IODP Expedition 341 core-log-seismic integrated studies at glacial cycle resolution: EGU General

- Assembly 2014, held 27 April - 2 May, 2014 in Vienna, Austria, id.13279, 2014.
- März, C., Mix, A.C., McClymont, E., Nakamura, A., Berbel, G., **Gulick, S.**, Jaeger, J., Schneider (LeVay), L., Variations of marine pore water salinity and chlorinity in Gulf of Alaska sediments (IODP Expedition 341): EGU General Assembly 2014, held 27 April - 2 May, 2014 in Vienna, Austria, id.4860, 2014.
- Saustrop, S, **Gulick, S P**, Goff, J A, Davis, M B, Duncan, D, Reece, R, Immersive, hands-on, team-based geophysical education at the University of Texas Marine Geology and Geophysics Field Course: Abstract ED11F-03 presented at 2013 Fall Meeting, AGU, San Francisco, Calif., 9-13 Dec., 2013.
- Gulick, S P**, Goff, J A, Stewart, H A, Perez-Cruz, L L, Davis, M B, Duncan, D, Saustrop, S, Sanford, J C, Urrutia-Fucugauchi, J, Storm-generated bedforms and relict dissolution pits and channels on the Yucatan carbonate platform: Abstract OS13C-1713 presented at 2013 Fall Meeting, AGU, San Francisco, Calif., 9-13 Dec., 2013.
- Jaeger, J M, **Gulick, S P**, and the Expedition 341 Science Party, The Impact of Neogene Climate and Tectonics on Sediment Dispersal and Accumulation on a Glaciated Continental Margin: IODP Expedition 341 Southern Alaska: Abstract T22C-03 presented at 2013 Fall Meeting, AGU, San Francisco, Calif., 9-13 Dec., 2013.
- Gulick, S P**, Jaeger, J M, and the Expedition 341 Science Party, Extreme mass flux from the glaciated, collisional St. Elias Orogen: Preliminary results from IODP Expedition 341 (Invited): Abstract T22C-04 presented at 2013 Fall Meeting, AGU, San Francisco, Calif., 9-13 Dec., 2013.
- Worthington, L L, **Gulick, S P**, Ridgway, K R, Jaeger, J M, Cowan, E A, Slagle A L, Forwick, M, and the Expedition 341 Science Party, Interplay between climatic and tectonic processes in the St. Elias foreland, southern Alaska: Evolution of a glaciated convergent margin since the mid-Pleistocene: Abstract T22C-05 presented at 2013 Fall Meeting, AGU, San Francisco, Calif., 9-13 Dec., 2013.
- St-Onge, G., Stoner, J S, Ge, S, Mix, A C, Jaeger, J M, **Gulick, S P**, and the Expedition 341 Science Party, Shipboard Paleomagnetic Records from IODP Expedition 341 (Southern Alaska Margin) and Their Potential for Chronostratigraphy: Abstract T22C-06 presented at 2013 Fall Meeting, AGU, San Francisco, Calif., 9-13 Dec., 2013.
- Ridgway, K R, Bahlburg, H, Childress, L B, Cowan, E A, Forwick, M, Moy, C M, Müller, J, Ribeiro, F, Gupta, S, **Gulick, S P**, Jaeger, J M, and the Expedition 341 Science Party, Neogene marine sedimentary record of the Gulf of Alaska: from the glaciers to the distal submarine fan systems: Abstract T22C-08 presented at 2013 Fall Meeting, AGU, San Francisco, Calif., 9-13 Dec., 2013.
- Forwick, M, Cowan, E A, Bahlburg, H, Childress, L B, Jaeger, J M, Moy, C M, Müller, J, Ribeiro, F, Ridgway, K R, **Gulick, S P**, Worthington, L L, Reece, R, and the Expedition 341 Science Party, Early Pleistocene to Holocene glacial activity along the southern Alaska continental shelf inferred from the sedimentary record in the northern Gulf of Alaska – preliminary results: Abstract T23D-2616 presented at 2013 Fall Meeting, AGU, San Francisco, Calif., 9-13 Dec., 2013.
- Swartz, J M*, Levoir, M A, **Gulick, S P**, Preliminary analysis of temperate glacial shelf-crossing troughs and associated trough-mouth fans in southeast Alaska: Abstract T23D-2618 presented

- at 2013 Fall Meeting, AGU, San Francisco, Calif., 9-13 Dec., 2013.
- Zurbuchen, J*, **Gulick, S P**, LeVoi, M A, Goff, J A, Haeussler, P J, Imaging Evidence for Hubbard Glacier Advances and Retreats since the Last Glacial Maximum in Disenchantment and Yakutat Bays, Alaska: Abstract T23D-2620 presented at 2013 Fall Meeting, AGU, San Francisco, Calif., 9-13 Dec., 2013.
- Slagle, A L, Worthington, L L, Drab, L, **Gulick, S P**, and the Expedition 341 Science Party, Correlation of borehole and seismic data in the Gulf of Alaska through synthetic seismograms: Preliminary results from IODP Expedition 341: Abstract T23D-2623 presented at 2013 Fall Meeting, AGU, San Francisco, Calif., 9-13 Dec., 2013.
- Childress, L B, Ridgway, K D, Blair, N E, Bahlburg, H, Berbel, G, Cowan, E A, Forwick, M, **Gulick, S P**, Jaeger, J M, Maerz, C, McClymont, E, Moy, C M, Müller, J, Nakamura, A, Ribeiro, F, and the Expedition 341 Science Party, Potential links between onshore tectonics and terrestrial organic carbon delivery to distal submarine fan environments: IODP Site U1417, Surveyor Fan, Gulf of Alaska: Abstract T23D-2624 presented at 2013 Fall Meeting, AGU, San Francisco, Calif., 9-13 Dec., 2013.
- Mix, A C, Maerz, C, McClymont, E, Nakamura, A, Berbel, G, Worthington, L L, Davies, M H, **Gulick, S P**, Jaeger, J M, and the Expedition 341 Science Party, Porewater salinity and $\delta^{18}\text{O}$ reveal a kilometer-deep subsurface pathway for glacial meltwater into the Gulf of Alaska: Abstract T23D-2625 presented at 2013 Fall Meeting, AGU, San Francisco, Calif., 9-13 Dec., 2013.
- Ramirez, S G, **Gulick, S P**, Hayman, N W, Exploring the tecto-sedimentary history of the lower Kumano basin: insights from 3D seismic analysis: Abstract T31F-2579 presented at 2013 Fall Meeting, AGU, San Francisco, Calif., 9-13 Dec., 2013.
- Stoner, J S, Ge, S, St-Onge, G, Jaeger, J M, **Gulick, S P**, The 800-meter Long Road to Jaramillo and Other Paleomagnetic Observations from IODP Expedition 341(Southern Alaska Margin) (Invited): Abstract GP41E-05 presented at 2013 Fall Meeting, AGU, San Francisco, Calif., 9-13 Dec., 2013.
- Sanford, J C, **Gulick, S P**, Snedden, J, The Cretaceous-Paleogene boundary unit in the Gulf of Mexico: Large-scale oceanic basin response to the Chicxulub impact: Abstract P41F-1981 presented at 2013 Fall Meeting, AGU, San Francisco, Calif., 9-13 Dec., 2013.
- Mix, A C, Davies, M H, Praetorius, S, Cook, M S, Prael, F G, Schmittner, A, Asahi, H, Belanger, C L, Stoner, J S, St-Onge, G, Jaeger, J M, **Gulick, S P**, From the Pacific to the Arctic: Paleoclimatic History of the Gulf of Alaska and the Bering Sea (Invited): Abstract PP42B-08 presented at 2013 Fall Meeting, AGU, San Francisco, Calif., 9-13 Dec., 2013.
- LeVoi, M A*, Roland, E C, **Gulick, S P**, Haeussler, P J, Christeson, G L, Van Avendonk, H J, New mapping and structural constraints on the Queen Charlotte-Fairweather Fault system, southeast Alaska: Abstract T43A-2624 presented at 2013 Fall Meeting, AGU, San Francisco, Calif., 9-13 Dec., 2013.
- Roland, E C, **Gulick, S P**, LeVoi, M A, Haeussler, P J, Offshore observations of aftershocks following the January 5th 2013 Mw 7.5 Queen Charlotte-Fairweather fault earthquake, southeast Alaska: Abstract T43A-2625 presented at 2013 Fall Meeting, AGU, San Francisco, Calif., 9-13 Dec., 2013.
- Tang, Q, **Gulick, S P**, Sun, Longtao, Seismic observations from a Yakutat eddy in the northern Gulf of Alaska: Abstract OS51B-1655 presented at 2013 Fall Meeting, AGU, San Francisco,

Calif., 9-13 Dec., 2013.

- Gulick, S P S**, Christeson, G L, Barton, P J, Grieve, R A F, Morgan, J V, Urrutia Fucugauchi, J, Geophysical Characterization of the Chicxulub impact structure: Abstract PPXX-02 presented at 2013 Meetings of the Americas, AGU, Cancun, Mexico, 14-17 May, 2013.
- Christeson, G L, Van Avendonk, H J, **Gulick, S S**, Reece, R S, Pavlis, G L, Hansen, R F, Deep Structure of the Yakutat Terrane, Southern Alaska: Abstract T23C-2688 presented at 2012 Fall Meeting, AGU, San Francisco, Calif., 3-7 Dec., 2012.
- Gulick, S S**, LeVoir, M A, Haeussler, P J, Saustrop, S, Tectonic Origin of the 1899 Yakutat Bay Earthquakes, Alaska, and Insights into Future Hazards: Abstract NH14A-06 presented at 2012 Fall Meeting, AGU, San Francisco, Calif., 3-7 Dec., 2012.
- *Lugrin, L, **Gulick, S S**, Goff, J A, Geometry of the Paleo-Nueces River Incised-Valley, Corpus Christi Bay, Texas as it Relates to Quaternary Sea Level History: Abstract EP33B-0873 presented at 2012 Fall Meeting, AGU, San Francisco, Calif., 3-7 Dec., 2012.
- *Reece, R S, Christeson, G L, **Gulick, S S**, Barth, G A, Van Avendonk, H J, The effect of plate structure on intraplate volcanism, Kodiak-Bowie seamount Chain, Gulf of Alaska: Abstract T31B-2592 presented at 2012 Fall Meeting, AGU, San Francisco, Calif., 3-7 Dec., 2012.
- *LeVoir, M A, **Gulick, S S**, Reece, R S, Barth, G A, Christeson, G L, Tectonic Control on Deposition and Evolution of the Baranof Fan, Gulf of Alaska: Abstract OS43F-03 presented at 2012 Fall Meeting, AGU, San Francisco, Calif., 3-7 Dec., 2012.
- Duncan, D, Davis, M B, Allison, M A, **Gulick, S P**, Goff, J A, Saustrop, S, Marine Geology and Geophysics Field Course Offered by The University of Texas Institute for Geophysics: Abstract ED53B-0926 presented at 2012 Fall Meeting, AGU, San Francisco, Calif., 3-7 Dec., 2012.
- *Frederik, M C, **Gulick, S P**, Austin, J A, Martin, K M, Udrek, U, Henstock, T, McNeill, L C, Berglar, K, Franke, D, Goldfinger, C, Patton, J R, Fujiwara, T, Continuing Investigation of Structures of the Accretionary Wedge off Aceh Province, Sumatra, using 2D MCS and Multibeam Bathymetric Data: Abstract T52A-02 presented at 2012 Fall Meeting, AGU, San Francisco, Calif., 3-7 Dec., 2012.
- Pavlis, T L, **Gulick, S S**, Bruhn, R L, Christeson, G L, Enkelmann, E, Freymueller, J T, Hallet, B, Horton, B K, Hansen, R A, Koons, P O, Pavlis, G L, Ridgway, K D, Spotila, J A, Van Avendonk, H J, Flat-slab subduction, orogenesis, intraplate deformation, and glacial erosion in southern Alaska: A tectonic-glacial progression from STEEP: Abstract T13I-07 presented at 2012 Fall Meeting, AGU, San Francisco, Calif., 3-7 Dec., 2012.
- Gulick, S P S**, Fisher, D F, A kinematic backstop model for landward vergence: Implications for extended updip rupture: GSA Penrose Conference, Forearcs of Convergent Margins, Il Ciocco, Italy, 2012.
- Gulick, S.P**, Varying Neogene Impact of Glacial Sediment Flux from Source to Sink on Tectonics and Stratigraphy in the Gulf of Alaska: AGU Chapman Conference on Source to Sink systems throughout the world and through time, Oxnard California, 2011.
- Reece, R.*, Tectonic and climate influence on the evolution of the Surveyor Fan and Channel system, Gulf of Alaska: AGU Chapman Conference on Source to Sink systems throughout the world and through time, Oxnard California, 2011.
- Gulick, S P**, Christeson, G L, Norton, I O, Pavlis, T L, Reece, R, van Avendonk, H, Worthington, L L, Transition Fault and the Yakutat-Pacific-North American Triple Junction: Abstract T33A-2383 presented at 2011 Fall Meeting, AGU, San Francisco, Calif., 5-9 Dec., 2011.
- Reece, R*, **Gulick, S P**, Christeson, G L, Barth, G A, van Avendonk, H, Effects of the Yakutat

- terrane collision with North America on the neighboring Pacific plate: Abstract T33A-2382 presented at 2011 Fall Meeting, AGU, San Francisco, Calif., 5-9 Dec., 2011.
- LeVoir, M A*, **Gulick, S P**, Reece, R, Barth, G A, Childs, J R, Everson, E D, Hart, P E, Johnson, K M, Lester, W R, Sliter, R W, Preliminary analysis of the Baranof Fan system, Gulf of Alaska, based on 2D seismic reflection and multibeam bathymetry data: Abstract T33A-2372 presented at 2011 Fall Meeting, AGU, San Francisco, Calif., 5-9 Dec., 2011.
- Davis, M B, **Gulick, S P**, Allison, M A, Goff, J A, Duncan, D D, Saustrup, S, The University of Texas Institute for Geophysics Marine Geology and Geophysics Field Course: Abstract ED11A-0769 presented at 2011 Fall Meeting, AGU, San Francisco, Calif., 5-9 Dec., 2011.
- Martin, K M*, **Gulick, S P**, Austin, J A, Berglar, K , Franke, D , Udrek, U , Permana, H, Djajadihardja, Y S, The West Andaman fault as a strain partitioning structure in the Sumatran forearc: Abstract T51F-2422 presented at 2011 Fall Meeting, AGU, San Francisco, Calif., 5-9 Dec., 2011.
- van Avendonk, H , Worthington, L L, Christeson, G L, **Gulick, S P**, Pavlis, T L, Seismic structure of sediments and basement of the Yakutat Terrane offshore southern Alaska from a combined OBS and MCS tomography inversion: Abstract T33A-2373 presented at 2011 Fall Meeting, AGU, San Francisco, Calif., 5-9 Dec., 2011
- Barth, G A, **Gulick, S P**, Reece, R , Childs, J R, LeVoir, M A, Hart, P E, Sliter, R W, Lester, W R, Johnson, K , Everson, E D, Basement Control of Sediment Routing in the Gulf of Alaska: Abstract T33A-2370 presented at 2011 Fall Meeting, AGU, San Francisco, Calif., 5-9 Dec., 2011.
- Christeson, G L, Van Avendonk, H J, **Gulick, S P**, Pavlis, G L, Hansen, R A, Moho Depth of the Yakutat Terrane, Southern Alaska, Abstract T33A-2381 presented at 2011 Fall Meeting, AGU, San Francisco, Calif., 5-9 Dec., 2011.
- McHugh, C M, Seeber, L, Cormier, M, Hornbach, M, Momplaisir, R, Waldhauser, F, Sorlien, C C, M S, **Gulick, S**, A Seismo-Tectonic Signal From Offshore Sedimentation: The 2010 Haiti Earthquake and Prior Events: Abstract T33G-2492 presented at 2011 Fall Meeting, AGU, San Francisco, Calif., 5-9 Dec., 2011.
- Cormier, M, Seeber, L, Sorlien, C C, Steckler, M S, Gulick, S P, McHugh, C M, Hornbach, M., Distributed active folding across the northern Caribbean plate boundary derived from the combined analysis of SRTM topography and seismic profiling: Abstract T31F-03 presented at 2011 Fall Meeting, AGU, San Francisco, Calif., 5-9 Dec., 2011.
- Gulick, S.P.S.**, Christeson, Gail, Morgan, J.V., Barton, P., and Warner, M. R., Insights into the geologic process of peak ring formation from the Chicxulub impact crater: Abstract 24-9 presented at 2011 GSA Annual Meeting in Minneapolis (9–12 October 2011)
- Reece, R.S.*, Gulick, S.P.S., Barth, G., LeVoir, M., Controls on high variation in sinuosity and avulsion in neighboring deep-sea channels in the Gulf of Alaska: Abstract 16-11 presented at 2011 GSA Annual Meeting in Minneapolis (9–12 October 2011)
- Pavlis, T., Chapman, J.B., Bruhn, R., Ridgway, K., Worthington, L.L., and **Gulick, S.P.S.**, Structure of the actively deforming fold-thrust belt of the St. Elias Orogen with implications for glacial exhumation and 3D tectonic processes: Abstract 230-12 presented at 2011 GSA Annual

Meeting in Minneapolis (9–12 October 2011)

- Gulick, S P**, Pavlis, T L, Bruhn, R L, Christeson, G L, Freymueller, J T, Hansen, R A, Koons, P O, Pavlis, G L, Roeske, S, Reece, R, Van Avendonk, H J, Worthington, L L, Flat-slab subduction, whole crustal faulting, and geohazards in Alaska: Targets for Earthscope: Abstract G14A-02 presented at 2010 Fall Meeting, AGU, 2010.
- Davis, M B, **Gulick, S P**, Allison, M A, Goff, J A, Duncan, D D, Saustrop, S S, The University of Texas Institute for Geophysics Marine Geology and Geophysics Field Course: Abstract ED13A-0611 presented at 2010 Fall Meeting, AGU, 2010.
- Reece, R, **Gulick, S P**, Christeson, G L, Evidence for seismic strengthening and climate influence in creation of an anomalously large slope failure, Aleutian-Yakutat margin, Gulf of Alaska: Abstract OS22C-07 presented at 2010 Fall Meeting, AGU, 2010.
- Martin, K M, **Gulick, S P**, Flemings, P B, Relative permeability estimates from differences in LWD resistivity measurements in NanTroSEIZE boreholes, Offshore Japan: Abstract T13A-2155 presented at 2010 Fall Meeting, AGU, 2010.
- Worthington, L L, Van Avendonk, H J, **Gulick, S P**, Christeson, G L, Pavlis, T L, Crustal Structure of the Yakutat Microplate: New Constraints for Understanding the Evolution of Subduction and Collision in southern Alaska: Abstract T12C-04 presented at 2010 Fall Meeting, AGU, 2010.
- Goff, J A, Davis, M, **Gulick, S P**, Lawson, D E, Wilems, B A, Marine Geophysical Surveying Along the Hubbard Glacier Terminus, Southeast Alaska: Abstract C21A-0514 presented at 2010 Fall Meeting, AGU, 2010.
- McHugh, C M, **Gulick, S P**, Cormier, M, Dieudonne, N, Diebold, J B, Douilly, R, Hornbach, M, Johnson, H E, Mishkin, K, Seeber, L, Sorlien, C C, Steckler, M S, Symithe, S J, Project REPONS: Offshore Faults, Tectonic Deformation and Turbidite Record in Response to the January 12 2010 Earthquake, Haiti, Abstract U13A-0006 presented at 2010 Fall Meeting, AGU, 2010.
- Lawson, D E, Hamilton, G S, Finnegan, D C, Stearns, L A, Willems, B A, O'Neel, S, Goff, J A, **Gulick, S P**, Davis, M B, Damming of Russell Fiord by Tidewater Hubbard Glacier, Alaska: Role of Subglacial Meltwater in Preventing Closure in 2010: Abstract C21B-0535 presented at 2010 Fall Meeting, AGU, 2010.
- Cormier, M, McHugh, C M, **Gulick, S P**, Braudy, N, Davis, M B, Diebold, J B, Dieudonne, N, Douilly, R, Hornbach, M J, Johnson, H E, Mishkin, K, Seeber, L, Sorlien, C C, Steckler, M S, Symithe, S J, Templeton, J, Vertical Deformation of Late Quaternary Features Across Port-au-Prince Bay, Haiti: Abstract U13A-0005 presented at 2010 Fall Meeting, AGU, 2010.
- Johnson, H E, Hornbach, M, Cormier, M, McHugh, C M, **Gulick, S P**, Braudy, N, Davis, M, Dieudonne, N, Diebold, J B, Douilly, R, Mishkin, K, Seeber, L, Sorlien, C C, Steckler, M S, Symithe, S J, Templeton, J, Nearshore geophysical investigation of the underwater trace of the Enriquillo-Plantain Garden Fault following the 12 January 2010 Haiti earthquake: Abstract U13A-0010 presented at 2010 Fall Meeting, AGU, 2010.
- Willems, B A, Lawson, D E, Trusel, L D, Davis, M, Goff, J A, **Gulick, S P**, Diversion of Sediment from Russell Fiord by Ice-marginal and Marine Processes, Hubbard Glacier: Implications for Calculating Sediment Yield and Denudation Rates: Abstract C21B-0534 presented at 2010 Fall Meeting, AGU, 2010.
- Gulick, S.**, Christeson, G., Morgan, J., Barton, P., Grieve, R., Koeberl, C., Collins, G., Warner,

- M., Effects of large impacts on crustal structure and basin evolution: Example of the 65.5 Ma Chicxulub impact crater; AAPG Annual Convention, INVITED, 2010.
- Gulick, S P**, J ABangs, N L, Martin, K, McNeill, L C, Henstock, T Bull, J M, Dean, S M, Djajadihardja, Y, Permana, H, Thick Consolidated Sediments Allow Rupture to Reach the Trench During December 2004 Sumatra-Andaman Great Earthquake, , Eos Trans. AGU, 90(52), Fall Meet. Suppl., Abstract T23B-1924, 2009.
- Reece, R, **Gulick, S P**, Christeson, G L, Worthington, L L, Intraplate shearing and basin deformation in the Pacific Plate as a result of the Yakutat Block collision with North America, Eos Trans. AGU, 90(52), Fall Meet. Suppl., Abstract T33C-1924, 2009.
- Worthington, L L, Christeson, G L, Van Avendonk, H J, **Gulick, S P**, Crustal Structure of the Yakutat Microplate: New Parameters for Understanding the Evolution of the Chugach-St.Elias Orogeny, Eos Trans. AGU, 90(52), Fall Meet. Suppl., Abstract T53F-03, 2009.
- Berger, A L, **Gulick, S P**, Spotila, J A, Worthington, L L, Upton, P, Jaeger, J M, Pavlis, T, Orogenic Response to Augmented Erosion Associated with Northern Hemisphere Glaciation: The St. Elias Orogen of Alaska, Eos Trans. AGU, 90(52), Fall Meet. Suppl., Abstract G53B-0675, 2009.
- Willems, B A, Powell, R D, Cowan, E A, **Gulick, S P**, Trusel, L D, Inferring Glacial Dynamics From Temperate Glacimarine Grounding-Line Deposits, Eos Trans. AGU, 90(52), Fall Meet. Suppl., Abstract C23C-0505, 2009.
- Nakamura, Y, **Gulick, S P**, Moore, G F, Bangs, N L, Park, J , Ashi, J, Seismic characteristics of lower Kumano Basin in the Nankai Trough, Eos Trans. AGU, 90(52), Fall Meet. Suppl., Abstract T21C-1835, 2009.
- Martin, K M, **Gulick, S P**, Flemings, P B, Tudge, J, Implications for differences in LWD resistivity measurements in NanTroSEIZE boreholes within the Nankai Trough, Offshore Japan, Eos Trans. AGU, 90(52), Fall Meet. Suppl., Abstract T53C-1602, 2009.
- Goff, J A, Allison, M A, **Gulick, S P**, Offshore Transport of Sediment During Cyclonic Storms: Hurricane Ike (2008), Texas Gulf Coast, USA, Eos Trans. AGU, 90(52), Fall Meet. Suppl., Abstract NH11A-1107, 2009.
- Gulick, S.P.S.**, Pavlis, T.L., Christeson, G., Jaeger, J. M., Ridgway, K.D., Worthington, L.L., Reece, R.S., and Horton, B.K., Marine records of flat slab subduction, influenced by temperate glaciation in the St. Elias Orogen, Gulf of Alaska, Geological Society of American Annual Meeting, Geol. Soc. Abstracts w/Programs, Paper 108-17, 2009.
- Gulick, S.P.S.**, Bangs, N.L.B., Moore, G.F., Austin, J.A., Jr., Meltzer, A.S., Levander, A., Henstock, T.J., McNeill, L., Martin, K.M., Forearc basins as recorders of accretionary processes and indicators of geohazards: Examples from the Nankai Trough, southern Cascadia, and Sumatra, Geological Society of American Annual Meeting, Geol. Soc. Abstracts w/Programs, Paper 200-4, 2009.
- Reece, R.S.* , **Gulick, S.P.S.**, Jaeger, J.M., Christeson, G., Worthington, L.L., Pavlis, T.L., Erosion and deposition by cross-shelf glacial advance as a mechanism for channel inception in the Surveyor Fan, Gulf of Alaska, Geological Society of American Annual Meeting, Geol. Soc. Abstracts w/Programs, Paper 108-20, 2009.
- Worthington, L.L.* , **Gulick, S.P.S.**, Pavlis, T.L., Christeson, G., Reece, R.S., Structural evolution of the submarine Pamplona Zone fold and thrust belt, St. Elias Orogen, Geological Society of American Annual Meeting, Geol. Soc. Abstracts w/Programs, Paper 108-19, 2009.
- Christeson, G., van Avendonk, H., **Gulick, S.P.S.**, Worthington, L.L., Pavlis, T.L., Crustal

- structure of the Yakutat Block: Constraints from STEEP wide-angle seismic data, Geological Society of American Annual Meeting, Geol. Soc. Abstracts w/Programs, Paper 108-18, 2009.
- Pavlis, T.L., Pavlis, G.L., Enkelmann, E., **Gulick, S.P.S.**, Koons, P., and STEEP Research Group, Tectonics of North America's greatest mountain range: Results of the St. Elias Erosion and tectonics Project (STEEP) and its importance to Wrangell-St. Elias, Kluane, and Glacier Bay National Parks, Geological Society of American Annual Meeting, Geol. Soc. Abstracts w/Programs, Paper 136-8, 2009.
- Gulick, S.P.**, Bangs, N.L., Moore, G.F., Martin, K.M., Sawyer, D.S., Nakamura, Y., Tobin, H.J., Kumano Forearc Basin Uplift and Megasplay Development: 3D Seismic Images of Nankai Margin off Kii Peninsula, Japan, Eos Trans. AGU, 89(53), Fall Meet. Suppl., Abstract T21F-08, 2008.
- Gulick, S.P.**, Austin, J.A., Martin, K.M., Bangs, N.L., Henstock, T.J., McNeill, L.M., Dean, S., Bull, J.M., Permana, H., Djajadihardja, Y.S., New Images of Margin Structure within the 2004 Indonesian Great Earthquake Rupture Area: Preliminary Results from the Northern Extent of the CRUST Seismic Experiment, Eos Trans. AGU, 89(53), Fall Meet. Suppl., Abstract U51A-0008, 2008.
- Henstock, T.J., Dean, S.M., McNeil, L.C., Bull, J.M., Austin, J.A., **Gulick, S.S.**, Permana, H., Djajadihardja, Y.S., Ridge structure control of segmentation of the Sumatra subduction zone, Eos Trans. AGU, 89(53), Fall Meet. Suppl., Abstract U51A-0006, 2008.
- Dean, S., Henstock, T., McNeill, L., Djajadihardja, Y., Permana, H., Bull, J., **Gulick, S.**, Austin, J., Deformation Structures on the Sumatran Subduction Margin from 2008 Multichannel Seismic Reflection Data, Eos Trans. AGU, 89(53), Fall Meet. Suppl., Abstract U51A-0007, 2008.
- Christeson, G.L., Van Avendonk, H., **Gulick, S.P.**, Worthington, L., Pavlis, T., Crustal Structure of the Yakutat Microplate: Constraints from STEEP Wide-angle Seismic Data, Eos Trans. AGU, 89(53), Fall Meet. Suppl., Abstract T53B-1942, 2008.
- Lowe, L.A., **Gulick, S.P.**, Christeson, G., van Avendonk, H., Reece, R., Elmore, R., Pavlis, T., Crustal Structure and Deformation of the Yakutat Microplate: New Insights from STEEP Marine Seismic Reflection Data, Eos Trans. AGU, 89(53), Fall Meet. Suppl., Abstract T53B-1941, 2008.
- Willems, B.A., Powell, R.D., **Gulick, S.P.**, Evolution of a Temperate Glaciated Shelf: Insights from the Bering Trough Region, Gulf of Alaska, Eos Trans. AGU, 89(53), Fall Meet. Suppl., Abstract C11A-0476, 2008.
- Nakamura, Y., Moore, G., **Gulick, S.**, Sawyer, D.S., Tsuji, T., Kinoshita, M., Tobin, H., Seismic Attribute and Logging Data Correlation at IODP NanTroSEIZE Sites C0001, C0002, and C0004, Eos Trans. AGU, 89(53), Fall Meet. Suppl., Abstract T31B-1998, 2008.
- Moore, G.F., Park, J., Bangs, N.L., **Gulick, S.P.**, Tobin, H.J., Kuramoto, S., Taira, A., Structural and Stratigraphic Setting of the NanTroSEIZE Kumano Transect from 3D Seismic Data, Eos Trans. AGU, 89(53), Fall Meet. Suppl., Abstract T14A-04, 2008.
- Martin, K.M., **Gulick, S.P.**, Bangs, N.L., Ashi, J., Moore, G.F., Nakamura, Y., Tobin, H.J., Possible Strain Partitioning between the Kumano Forearc Basin and the Slope of the Nankai Trough Accretionary Prism, Eos Trans. AGU, 89(53), Fall Meet. Suppl., Abstract T31B-2006, 2008.
- Pavlis, T.L., Bruhn, R.L., Ridgway, K., Enkelmann, E., **Gulick, S.**, Shennan, I., Koons, P.,

- Temporal Variations in the Structural Evolution of the St. Elias Orogen: Long Term Variations Driven by Dramatic Exhumation vs Short Term Uncertainties, *Eos Trans. AGU*, 89(53), Fall Meet. Suppl., Abstract T44A-03, 2008.
- McNeill, L., Moore, J.C., Yamada, Y., Chang, C., Tobin, H., Kinoshita, M., **Gulick, S.**, Moore, G., Changes in In Situ Stress Across the Nankai and Cascadia Convergent Margins from Borehole Breakout Measurements During Ocean Drilling, *Eos Trans. AGU*, 89(53), Fall Meet. Suppl., Abstract T22B-02, 2008.
- Chang, C., McNeill, L., Moore, J., Yamada, Y., Tobin, H., Kinoshita, M., Lin, W., Conin, M., **Gulick, S.**, Constraining in situ stress tensors in the upper Nankai accretionary wedge using borehole wall failures observed in the LWD boreholes C0001, C0002, and C0004, *Eos Trans. AGU*, 89(53), Fall Meet. Suppl., Abstract T22B-03, 2008.
- Gulick, S.P.S.**, Barton, P., Morgan, J., Christeson, G., McDonald, M., Mendoza, K., Collins, G., Surendra, A., Urrutia, J., Vermeesch, P., Imaging and Drilling the Chicxulub Impact Crater: Testing Models for Crater Collapse, GSA Annual Meeting, Paper 269-2, Houston, TX, Oct. 5-9, 2008.
- Cowan, E.A., Seramur, K.C., Willems, B.A., Poweel, R.D., **Gulick, S.P.S.**, Jaeger, J.M., Retreat Sequences from the Last Glacial Maximum and Little Ice Age Preserved in Muir Inlet, Glacier Bay National Park, Southeastern Alaska, GSA Annual Meeting, Paper 181-11, Houston, TX, Oct. 5-9, 2008.
- Pavlis, T.L., Chapman, J., Berger, A., Spotila, J., Enkelmann, E., Bruhn, R., Ridgway, K., Lowe-Worthington, L., **Gulick, S.**, and Pavlis, G. Active tectonics of an onshore-offshore fold-thrust belt undergoing intense mass redistribution by erosion and deposition: Initial results from the St. Elias Erosion and tectonics Project (STEEP), *Geol. Soc. Abstracts w/Programs*, 320-4, 2008.
- Berger, A.L., Spotila, J.A., **Gulick, S.P.S.**, Pavlis, T.L., Upton, P., Orogenic response to intense Quaternary glaciation: The St. Elias Orogen, Alaska, GSA Annual Meeting, Paper 320-5, Houston, TX, Oct. 5-9, 2008.
- Whalen, M.T., Pearson, Z.F., **Gulick, S.P.S.**, Norris, R.D, Sequence Stratigraphy of the Chicxulub Crater Infill and Yucatàn Carbonate Platform Development: Implications for the Evolution of Large Terrestrial Impact Craters, GSA Annual Meeting, Paper 269-4, Houston, TX, Oct. 5-9, 2008.
- Worthington, L.L., **Gulick, S.**, Pavlis, T., Temporal and Spatial Shifts in Deformation Pattern of a Glacially Impacted Submarine Fold-Thrust Belt, Northern Gulf of Alaska, GSA Annual Meeting, Paper 320-6, Houston, TX, Oct. 5-9, 2008.
- Gulick, S.P.**, Bangs, N.L., Moore, G.F., Martin, K., Nakamura, Y., Kuramoto, S., Tobin, H.J., Taira, A., Uplift and deformation of the Kumano forearc basin: Preliminary results from Nankai Trough 3D seismic imaging offshore Kii Peninsula, Japan, *Eos Trans. AGU*, 88(52), Fall Meet. Suppl., Abstract T53A-1118, 2007.
- Gulick, S.P.**, Barton, P.J., Christeson, G.C., McDonald, M., Mendoza-Cervantes, K., Morgan, J.V., Pearson, Z., Surendra, A., Urrutia-Fucugauchi, J., Vermeesch, P., Imaging the Asymmetric Chicxulub Impact Crater and Plans for Drilling, *Eos Trans. AGU*, 88(52), Fall Meet. Suppl., Abstract U22A-03 INVITED, 2007.
- Collins, G.S., Morgan, J.V., Wunnemann, K., Elbeshausen, D., **Gulick, S.**, Christeson, G., Barton, P., Is the Chicxulub Crater Asymmetry due to Target Asymmetry or Oblique Impact? Insight

- From Numerical Modeling, *Eos Trans. AGU*, 88(52), Fall Meet. Suppl., Abstract U22A-02, 2007.
- Willems, B.A.*, Powell, R.D., **Gulick, S.P.**, Jaeger, J.M., Elmore, R., Glacier Dominated Shelf Stratigraphy Interpreted From High-Resolution Seismic Reflection Profiles Within the Yakutat Sea Valley Region, Gulf of Alaska, *Eos Trans. AGU*, 88(52), Fall Meet. Suppl., Abstract C41A-0039, 2007.
- Bangs, N.L., Moore, G.F., Pangborn, E.M., **Gulick, S.P.**, Tobin, H., Taira, A., Kuramoto, S., Massive sediment underthrusting beneath the Nankai Trough splay fault inferred from 3D seismic reflection data, *Eos Trans. AGU*, 88(52), Fall Meet. Suppl., Abstract T52A-03, 2007.
- Martin, K.M.*, **Gulick, S.P.**, Bangs, N.L., Moore, G.F., Tobin, H., Kuramoto, S., Taira, A., Preliminary Analysis of an Anomalous Bathymetric "Notch" Between the Kumano Forearc Basin and the Slope of the Nankai Trough Accretionary Prism, *Eos Trans. AGU*, 88(52), Fall Meet. Suppl., Abstract T53A-1115, 2007.
- Elmore, R.*, **Gulick, S.P.**, Mohrig, D., Willems, B.A., Powell, R.D., Jaeger, J.M., Investigation Into the Origin of Submarine Channelized Deposits Found on the Continental Shelf of Southern Alaska, *Eos Trans. AGU*, 88(52), Fall Meet. Suppl., Abstract C41A-0040, 2007.
- Fisher, D., Mosher, D., Austin, J., **Gulick, S.**, Moran, K., Masterlark, T., Results from SCS Profiling of the Sumatra accretionary prism: insights into tsunamigenesis, *Eos Trans. AGU*, 88(52), Fall Meet. Suppl., Abstract S23D-05 INVITED, 2007.
- Whalen, M.T., Pearson, Z.F., **Gulick, S.P.**, Norris, R.D., Chicxulub Crater Infilling and Yucatan Carbonate Platform Development: Implications for the Evolution of Large Terrestrial Impact Craters, *Eos Trans. AGU*, 88(52), Fall Meet. Suppl., Abstract U22A-05, 2007.
- Christensen, B.A., Alexander, C., Stackhouse, S., Turner, R., Nordfjord, S., Austin, J., Goff, J., **Gulick, S.**, Fulthorpe, C., Latest Pleistocene Deposition and Erosion on the New Jersey Shelf, *Eos Trans. AGU*, 88(52), Fall Meet. Suppl., Abstract OS53A-0979, 2007.
- Gulick, S.P.**, McDonald, M.A., Mendoza, K., Pearson, Z., Barton, P., Christeson, G., Morgan, J., Surendra, A., Vermeesch, P., Urrutia, J., Asymmetric Structure of the Chicxulub Impact Crater: Possible Causes of Heterogeneity and Targets for Drilling, *Eos Trans. AGU* 88 (23), Jt. Assem. Suppl., Abstract U34A-03, 2007.
- Barton, P., Morgan, J., **Gulick, S.**, Price, V., Blackburn, M., Christeson, G., Urrutia, J., Characterising the Melt Sheet in the Chicxulub Impact Crater using Seismic Data Prior to New Drilling, *Eos Trans. AGU* 88 (23), Jt. Assem. Suppl., Abstract U34A-04, 2007.
- Surendra, A.T.*, Barton, P.J., Morgan, J., **Gulick, S.P.**, Christeson, G.L., 3-D Variation in Peak Ring Structure of the Chicxulub Impact Crater, *Eos Trans. AGU* 88 (23), Jt. Assem. Suppl., Abstract U34A-05, 2007.
- Whalen, M.T., Pearson, Z.F., Perez Cruz, L., Urrutia, J., Norris, R., Bralower, T.J., **Gulick, S.P.**, Sedimentologic and Stable Isotope Response to the PETM at Chicxulub, *Eos Trans. AGU* 88 (23), Jt. Assem. Suppl., Abstract U34A-06, 2007.
- McDonald, M.*, **Gulick, S.**, Melosh, H., Christeson, G., The Chicxulub Impact Crater and Oblique Impact, *Eos Trans. AGU* 88 (23), Jt. Assem. Suppl., Abstract U34A-07, 2007.
- Mendoza-Cervantes, K.*, Fucugauchi, J.U., **Gulick, S.**, Chicxulub Peak Ring Characteristics from 2D Reflection Seismic Survey, *Eos Trans. AGU* 88 (23), Jt. Assem. Suppl., Abstract S41A-05, 2007.
- Gulick, S.P.**, Jaeger, J.M., Willems, B., Powell, R.D., Lowe, L.A., Glacial climate driven sedimentation overwhelms tectonics in the battle for control of margin architecture: Southeast

- Alaska, St. Elias Orogeny, *Eos Trans. AGU*, 87(52), Fall Meet. Suppl., Abstract T24B-05, 2006.
- Lowe, L.A.*, **Gulick, S.P.**, Pavlis, T., Bruhn, R.L., Mann, P., Localized deformation zones in the offshore leading edge of the Yakutat microplate, Gulf of Alaska, *Eos Trans. AGU*, 87(52), Fall Meet. Suppl., Abstract T23B-0492, 2006.
- Bangs, N.L., Moore, G.F., Yoro, T., Tanaka, H., **Gulick, S.P.**, 3-D Seismic images of thrust systems along the NanTroSEIZE Kumano Basin transect, Southwestern Japan, *Eos Trans. AGU*, 87(52), Fall Meet. Suppl., Abstract T21A-0386, 2006.
- Diebold, J. B., Tolstoy, M., Barton, P. J., **Gulick, S. P.**, Propagation of Exploration Seismic Sources in Shallow Water, *Eos. Trans. AGU*, 87(36), Jt. Assem. Suppl. Abstract OS41A-03.
- Morgan, J. V., Urrutia, J., **Gulick, S.**, Christeson, G., Grieve, R., Warner, M., Barton, P., Rebolledo, M., and Melosh, J., Future Drilling of the Chicxulub Impact Crater, GSA Annual Meeting, Paper 44-6, Philadelphia, PA, Oct. 22-25, 2006.
- Gulick, S.**, Barton, P., Christeson, G., McDonald, M., Mendoza, K., Morgan, J., Urrutia, J., and Warner, M., Sub-surface Asymmetries of the Chicxulub Impact Crater, GSA Annual Meeting, Paper 44-7, Philadelphia, PA, Oct. 22-25, 2006.
- Barton, P., Surendra, A., Masoomzadeh, H., **Gulick, S.**, and Morgan, J., Structure of Chicxulub Peak Ring and Shallow Crater Floor from New Seismic Data, GSA Annual Meeting, Paper 44-8, Philadelphia, PA, Oct. 22-25, 2006.
- Christeson, G., **Gulick, S.**, Morgan, J., Warner, M., and Barton, P., Moho Upwarping Beneath the Chicxulub Impact Crater, GSA Annual Meeting, Paper 44-9, Philadelphia, PA, Oct. 22-25, 2006.
- McDonald, M., **Gulick, S.**, Melosh, H. J., and Mendoza, K., Oblique Impact and Peak Ring offset: Venusian Craters Compared to Chicxulub, GSA Annual Meeting, Paper 44-10, Philadelphia, PA, Oct. 22-25, 2006.
- Trehu, A. M., Beaudoin, B. C., Clarke, S. H., Godfrey, N., **Gulick, S. P. S.**, Henstock, T. J., Hole, J. A., Klemperer, S., Leitner, B., and Lendl, C.; Levander, A., Meltzer, A. S., Mooney, W., GSA Annual Meeting, Paper 109-6, Philadelphia, PA, Oct. 22-25, 2006.
- Fisher, D., Mosher, D., Austin, J., **Gulick, S.**, Masterlark, T., Moran, K., Active Deformation Across the Sumatran Forearc Over the December 2004 M9.3 Rupture, GSA Annual Meeting, Paper 110-5, Philadelphia, PA, Oct. 22-25, 2006.
- Pearson, Z. F.*, Whalen, M. T., **Gulick, S.**, and Norris, R., GSA Annual Meeting, Paper 119-3, Philadelphia, PA, Oct. 22-25, 2006.
- Austin, J. A., Jr., Nordfjord, S., Duncan, C., Fulthorpe, C., Goff, J., **Gulick, S.**, Deciphering the Modern Seafloor and Seismic Geomorphology of the Latest Pleistocene-Holocene Sedimentary Record, New Jersey Middle and Outer Continental Shelf. SealAix'06 International Symposium on Sea Level Changes: Records, Processes and Modeling, 2006.
- Goff, J. A., Austin, J. A., Jr., **Gulick, S.**, Nordfjord, S., Christensen B., Sommerfield, C., Olson, H. and Alexander, C., Recent and modern marine erosion on the New Jersey outer shelf, International Sedimentary Congress, 2006.
- Gulick, S. P.**, Willems, B., Freymueller, J., Powell, R., Jaeger, J., Kalbas, J., Pavlis, T., Lowe, L., Mayer, L., and Gardner, J., Significant tectonic and climatic events for the Yakutat block collision, Gulf of Alaska: Pleistocene glacial intensification in the St. Elias Mountains and the

- relationship between the Fairweather and Transition faults. GSA Backbone of the Americas Meeting, 2006.
- Lowe, L.*, **Gulick, S. S.**, Mann, P., Freymueller, J., and Pavlis, T., Seismicity Patterns and High Resolution Bathymetry Define Active Structures on the Yakutat Microplate Shelf and Slope, Alaska. GSA Backbone of the Americas Meeting, 2006.
- Lowe, L.A.*, **Gulick, S. P. S.**, Mann, P., Pavlis, T., Mayer, L. A., Gardner, J. V., Seismicity Patterns and High Resolution Bathymetry Constrain Extent of Deformation in Yakutat Microplate's Leading Edge. AGU Chapman Conference on the Active Tectonics and Seismic Potential of Alaska, Abstracts, 2006.
- Gulick, S. P., Willems, B., Powell, R. D., Jaeger, J. M., and Cowan, E. A., High-resolution seismic images of southeast Alaskan glacial fjords and continental shelf: Is the present the key to the past? EOS Trans. AGU, Fall Meet. Suppl., H51G-0444, 2005.
- Willems, B.A.* , Gulick, S. P., Powell, R. D., Jaeger, J. M., and Cowan, E. A., Multiple Glacial Advance and Retreat Cycles Preserved in Yakutat Bay, Southern Alaska: Potential for Constraining Cordilleran Ice Sheet and Southern Alaskan Climate Histories. EOS Trans. AGU, Fall Meet. Suppl., H51G-0445, 2005.
- Mendoza-Cervantes, K.* , Gulick, S. S., Urrutia-Fucugauchi, J., McDonald, M., Barton, P., Christeson, G., Morgan, J., Warner, M., and Melosh, J., Preliminary Chicxulub Crater Peak Ring Interpretation on 2-D Seismic Reflection Profiles From R/V Maurice Ewing 2005 Survey. EOS Trans. AGU, Fall Meet. Suppl., P51A-0907, 2005.
- Gulick, S. S., Barton, P. J., Christeson, G., Morgan, J. V., Warner, M. R., Urrutia-Fucugauchi, J., Melosh, H. J., Rebolledo-Vieyra, M., McDonald, M., Vermeesch, P. M., Surendra, A. T., Goldin, T., Mendoza, K., and Sears, T. J., Seismically Imaged Architecture of the Chicxulub Impact Crater: Preliminary Results From the Last Cruise of the R/V Maurice Ewing. EOS Trans. AGU, 2005 Joint Meeting Suppl., P11A-05, 2005.
- McDonald, M.A.* , Gulick, S. P., Gorney, D. L., Christeson, G. L., Barton, P. J., Morgan, J. V., Warner, M. R., Urrutia-Fucugauchi, J., Melosh, Vermeesch, P. M., Surendra, A. T., Goldin, T., and Mendoza, K., Terrace Zone Structure in the Chicxulub Impact Crater Based on 2-D Seismic Reflection Profiles: Preliminary Results from EW0501, EOS Trans. AGU, 2005 Joint Meeting Suppl., P21A-03, 2005.
- Morgan, J., Urrutia, J., Gulick, S., Grieve, R., Rebolledo, M., Melosh, J., Warner, M., Christeson, G., Barton, P., IODP drilling at Chicxulub, EOS Trans. AGU, 2005 Joint Meeting Suppl., P11A-02, 2005.
- Surendra, A. T.* , Barton, P. J., Vermeesch, P. M., Morgan, J. V., Warner, M. R., Gulick, S. P. S., Christeson, G. L., Urrutia-Fucugauchi, J., Rebolledo-Vieyra, M., Melosh, H. J., McDonald, M. A., Goldin, T., and Mendoza, K., 3-D tomographic imaging of the Chicxulub impact crater: Preliminary results from EW0501, EOS Trans. AGU, 2005 Joint Meeting Suppl., P21A-04, 2005.
- Barton, P., Owen, T., Gulick, S., Urrutia, J., Morgan, J., Warner, M., Christeson, G., Rebolledo, M., Seismics in the environmental spotlight: counting the cost, SEG Extended Abstracts, v. 24, p. 29, doi:10.1190/1.2144326.
- Gorney, D.* , Gulick, S. P. S., Christensen, G., Structural Character of the Terrace Zone and Implications for Crater Formation, Chicxulub Impact Crater, GSA Annual Meeting, Abstracts with Program, paper 81-5, 2004.

- Bangs, N. L. B., Gulick, S. P. S., Shipley, T. H., and Moore, G. F., Thrust fault systems of the Nankai Trough accretionary wedge interpreted from 3-D seismic reflection images, *Eos Trans. AGU, Fall Meet. Suppl.*, T31B-1310, 2004.
- Finney, B. P., Jaeger, J. M., Mix, A. C., Cowan, E. A., Gulick, S. S., Mayer, L. A., Pisias, N. G., Powell, R. D., Prahl, F., Stoner, J. S., High-Resolution Holocene Records of Paleoceanographic and Paleoclimatic Variability from the Southern Alaskan Continental Margin, *Eos Trans. AGU, Fall Meet. Suppl.*, OS52A-04, 2004.
- Goff, J. A., Austin, J. A., Jr., **Gulick, S.**, Nordfjord, S., Christensen, B., Sommerfield, C., Olson, H., Alexander, C., Post-Transgressive and Modern Erosion on the New Jersey Outer Shelf, *Eos Trans. AGU, Fall Meet. Suppl.*, OS41D-0525, 2004.
- Gulick, S. S., Powell, R. D., Jaeger, J. M., Cowan, E. A., Mayer, L. A., Mix, A. C., Finney, B. P., Pisias, N. G., Prahl, F., Stoner, J. S., Glacial Advances and Retreats in Tectonic Southeast Alaska during the Little Ice Age and Last Glacial Maximum: Preliminary Results from EW0408, H51A-1099, 2004.
- Nordfjord, S. *, Goff, J. A., Austin, J. A., Jr., Gulick, S. P. S., Sommerfield, C., Alexander, C., Schock, S., Seismic facies analysis of shallowly buried channels, New Jersey continental shelf: understanding late Quaternary paleoenvironments during the last transgression, *Eos Trans. AGU, Fall Meet. Suppl.*, OS41D-0520, 2004.
- Gulick, S. P., Fulthorpe, C. S., Goff, J. A., Austin, J. A., Nordfjord, S., Sommerfield, C., Alexander, C., Christensen, B., Schock, S., Nielson, D. L., Mapping a Pre-Last Glacial Maximum Paleo-Sea-floor and Shelf-Slope Sediment Wedges beneath the New Jersey shelf, *Eos Trans. AGU, 84, Fall Meet. Suppl., Abstract OS52B-0905, 2003.*
- Fulthorpe, C. S., Goff, J. A., Austin, J. A., Gulick, S. P., Nordfjord, S., Alexander, C., Sommerfield, C., Christensen, B., Schock, S., Nielson, D. L., Enigmatic Shallow Subsurface Stratigraphy on the New Jersey Mid-Outer Shelf: Catastrophic Erosion or Diagenesis?, *Eos Trans. AGU, 84, Fall Meet. Suppl., Abstract OS52B-0904, 2003.*
- Nielson, D. L., Pardey, M., Austin, J. A., Goff, J. A., Alexander, C., Christensen, B. A., Gulick, S. P., Fulthorpe, C. S., Nordfjord, S., Sommerfield, C., and Venherm, C., Active Heave-Compensated Coring on the New Jersey Shelf, *Eos Trans. AGU, 84, Fall Meet. Suppl., Abstract OS52B-0908, 2003.*
- Christensen, B. A., Goff, J. A., Alexander, C. R., Austin, J. A., Gulick, S. P., Fulthorpe, C. S., Nordfjord, S., Sommerfield, C., Venherm, C. S., Nielson, D. L., Late Pleistocene Depositional Environments of the New Jersey Continental Shelf: Foraminiferal Evidence, *Eos Trans. AGU, 84, Fall Meet. Suppl., Abstract OS52B-0907, 2003.*
- Nordfjord, S. *, Goff, J. A., Austin, J. A., Fulthorpe, C. S., Gulick, S. P., Sommerfield, C., Alexander, C., Christensen, B., Schock, S., Geomorphologic comparisons of shallowly buried, dendritic drainage systems on the outer New Jersey shelf with modern fluvial and estuarine analogs, *Eos Trans. AGU, 84, Fall Meet. Suppl., Abstract OS52B-0906, 2003.*
- Alexander, C., Sommerfield, C., Austin, J., Christensen, B., Fulthorpe, C., Goff, J., Gulick, S., Nordfjord, S., Nielson, D., Schock, S., Sedimentology and Age Control of Late Quaternary New Jersey Shelf Deposits, *Eos Trans. AGU, 84, Fall Meet. Suppl., Abstract OS52B-0909, 2003.*
- Nakamura, Y., Bangs, N. L., Gulick, S. P., Moore, G. F., Kuramoto, S., Shipley, T. H., Taira, A., Detailed Structure of the Large Thrust Slice Zone in the Nankai Trough off Muroto, *Eos Trans. AGU, 84, Fall Meet. Suppl., Abstract T52C-0291, 2003.*

- Tsuji, T., Nakamura, Y., Matsuoka, T., Yamada, Y., Tokuyama, H., Kuramoto, S., Bangs, N. L., Gulick, S. P., Shipley, T. H., Moore, G. F., Characterization of Decollement in the Nankai Trough Using Seismic Attributes Analysis, *Eos Trans. AGU*, 84, Fall Meet. Suppl., Abstract T52C-0909, 2003.
- Zscheile, G., Moore, J. C., Bangs, N., Gulick, S., Moore, G., Diagenetic Phase Boundary at the Nankai Trough, SW Japan: Relationship to the Decollement/ Proto-Decollement, *Eos Trans. AGU*, 84, Fall Meet. Suppl., Abstract T52B-0274, 2003.
- Adamson, S. P. *, Moore, C., Bangs, N. L., Gulick, S. P., Moore, G. F., Controls on the Morphological Variability of the Decollement in the Nankai Trough Subduction Zone, *Eos Trans. AGU*, 84, Fall Meet. Suppl., Abstract T52B-0273, 2003.
- Costa Pisani, P., Ike, T., Moore, G., Reshef, M., Bangs, N., Gulick, S., Shipley, T., Kuramoto, S., 3D Pre-stack depth imaging of the Nankai Trough accretionary prism off Shikoku Island, Japan, *Eos Trans. AGU*, 84, Fall Meet. Suppl., Abstract T52C-0286, 2003.
- Gulick, S. P. S.**, Christeson, G. L., Morgan, J. V., Warner, M. R., Barton, P., Urrutia-Fucugauchi, J., and Melosh, H. J., Active Seismic and Drilling Studies of the Chicxulub Impact Crater: A Status Report, Third International Conference on Large Meteorite Impacts, Aug. 5-7, 2003, Noerdlingen, Germany, Abstract CD-ROM, published by Lunar and Planetary Institute, Houston, Texas, 2003.
- Nordfjord, S. *, **Gulick, S. P. S.**, Austin, J. A., Jr., Goff, J. A., Fulthorpe, C. S., Late Quaternary incisions and related shallow subsurface stratigraphy on the New Jersey mid-outer shelf: preliminary results from ultra-high resolution chirp sonar images Part I, *Eos, Transactions American Geophysical Union*, v. 83 Supplement, p. F728, 2002.
- Fulthorpe, C. S., Goff, J. A., Austin, J. A., Jr., **Gulick, S. P. S.**, and Nordfjord, S., Late Quaternary incisions and related shallow subsurface stratigraphy on the New Jersey mid-outer shelf: preliminary results from ultra-high resolution chirp sonar images Part II, *Eos, Transactions American Geophysical Union*, v. 83 Supplement, p. F728, 2002.
- Kinoshita, M., Goto, S., **Gulick, S. P.**, Mikada, H., Very focused expulsion of pore fluid along the western Nankai accretionary complex detected by closely-spaced heat flow measurements, *Eos Trans. AGU*, 83 (47), Fall Meet. Suppl., Abstract T11B-1247, 2002.
- Mikada, H., Kinoshita, M., Becker, K., Davis, E. E., Meldrum, R. D., Flemings, P. B., **Gulick, S. P.**, Matsubayashi, O., Morita, S., Goto, S., Misawa, N., Fujino, K., Toizumi, M., Scientific Cruise Report from KR02-10: Hydrogeological and Geothermotic study around the Nankai Trough, *Eos Trans. AGU*, 83 (47), Fall Meet. Suppl., Abstract T11B-1250, 2002.
- Morita, S., Aoike, K., Sawada, T., Ashi, J., **Gulick, S. P.**, Flemings, P. B., Kuramoto, S., Saito, S., Mikada, H., Kinoshita, M., Observations and Rock Analyses in a Kumano Mud Volcano in Nankai Accretionary Prism, *Eos Trans. AGU*, 83 (47), Fall Meet. Suppl., Abstract T62C-1323, 2002.
- Gulick, S. P. S.**, Bangs, N. L., Shipley, T. H., Moore, G. F., Kuramoto, S., and the Leg 196 Shipboard Science Party, Integration of Leg 196 LWD data and 3-D seismic data in the Nankai accretionary prism: Preliminary interpretations of fluid flow indicators, *EOS Trans. AGU*, 82(47), F1221, 2001.
- Moore, J. C., Mikada, H., Klaus, A., Tobin, H., Bourlang, S., Broilliard, J., Brueckmann, W., Hayward, N., Goldberg, D., Saito, S., Bangs, N., **Gulick, S.**, Hansen, M., Hills, D., Hunze, S., Ienaga, M., McNeill, L., Peacock, S., Becker, K., and Scientific Party, Compactive and dilative deformation and fluid pressure cycling: Evidence from log-core integration, ODP Leg 196,

- Nankai subduction zone, EOS Trans. AGU, F1249, 2001.
- Hills, D. J.*, Moore, G. F., Bangs, N. L., **Gulick, S. S.**, and the Leg 196 Shipboard Science Party, Preliminary results from integration of 2D PSDM and ODP Leg 196 LWD velocity data in the Nankai accretionary prism, EOS Trans. AGU, 82 (47), F1221, 2001.
- Austin, J., Goff, J., **Gulick, S.**, Fulthorpe, C., Nordfjord, S., Wiederspahn, M., Saustrup, S., Schock, S., Wulf, J., Gjerding, K., Mayer, L. and Sommerfield, C., Assessing the “GEO” in GEOCLUTTER: New chirp sonar, sampling, and compressional wave velocity results from the New Jersey shelf, EOS Trans. AGU, 82 (47), F655, 2001.
- Gulick, S. P. S.**, Bangs, N., Shipley, T., Zhao, Z., Nakamura, Y., Moore, G., Kuramoto, S., Taira, A., Hills, D. J., and Park, J.-O., 3-D Structural geometry and fluid flow indicators from the 1st out-of-sequence thrust to the deformation front of the Nankai accretionary prism: Preliminary results from the Nankai Trough 3-D seismic experiment, EOS Trans. AGU, 81 (48), F1067, 2000.
- Nakamura, Y., Kuramoto, S., Taira, A., Bangs, N. L., Shipley, T. H., Moore, G. F., Zhao, Z., **Gulick, S. S.**, Hills, D. J., Park, J.-O., and Mochizuki, K., 3-D Seismic imaging of the large thrust zone in the Nankai trough, EOS Trans. AGU, 81 (48), F1067, 2000.
- Zhao, Z., Bangs, N., Shipley, T., Moore, G., **Gulick, S.**, Nakamura, Y., Hills, D., Kuramoto, S., Taira, A., Park, J.-O., and Morita, S., 3-D Observation and analysis of the BSR in the central Nankai accretionary wedge, EOS Trans. AGU, 81 (48), F1067, 2000.
- Bangs, N., Shipley, T., Moore, G., Zhao, Z., **Gulick, S.**, Nakamura, Y., Hills, D., Kuramoto, S., Taira, A., and Park, J.-O., Character of the Central Nankai Trough Subduction Thrust: Preliminary Results from 3-D Seismic Reflection Imaging, EOS Trans. AGU, 81 (48), F1097-1098, 2000.
- Burger, R. L.*, Fulthorpe, C. S., Austin, J. A., and **Gulick, S. P. S.**, Mid-Pleistocene to present structural deformation and sedimentation patterns in the offshore Eel River basin, northern California, EOS Trans. AGU, 81 (48), F649, 2000.
- Gulick, S. P. S.**, Meltzer, A. S., Levander, A. R., and Henstock, T. H., The transition from subduction to transform regime: Structural and stratigraphic signatures associated with triple junction migration offshore northern California: Part 1, the leading edge, GSA, 2000 Meeting.
- Gulick, S. S.**, Meltzer, A. S., Levander, A., and Henstock, T. J., Internal deformation of the southern Gorda plate: Implications for plate boundary stresses north of the Mendocino triple junction, EOS Trans. AGU, 80(46), F1181, 1999.
- Bangs, N. L., Taira, A., Kuramoto, S., Shipley, T. H., Moore, G. F., Mochizuki, K., **Gulick, S. S.**, Zhao, Z., Nakamura, Y., Park, J.-O., Taylor, B. L., Morita, S., Ito, S., Hills, D. J., Leslie, S. C., Alex, C. M., McCutcheon, A. J., Ike, T., Yagi, H., Toyama, G., US-Japan collaborative 3-D seismic investigation of the Nankai Trough plate-boundary interface and shallowmost seismogenic zone, EOS Trans. AGU, 80 (46), F569, 1999.
- Moore, G. F., Taira, A., Kuramoto, S., Shipley, T. H., Bangs, N. L. and EW9907/8 Shipboard Scientific Party, Structural setting of the 1999 U.S.-Japan Nankai Trough 3-D seismic reflection survey, EOS Trans. AGU, 80(46), F569, 1999.
- Morita, S., Kuramoto, S., Taira, A., Bangs, N. L., Shipley, T. H., Moore, G. F. and Science parties of EW9907/08, BSR distribution in the Nankai accretionary prism – Preliminary

- inference from US-Japan Nankai 3D seismic survey, EOS Trans. AGU, 80 (46), F481, 1999.
- Gulick, S. S.**, Meltzer, A. S., and Clarke, S. H., Jr., The southern Cascadia subduction zone: Transition from oblique subduction to triple junction tectonics, EOS Trans. AGU, 79 (45), 1998.
- Gulick, S. P. S.**, Meltzer, A. S., and Clarke, S. H., Jr., Tectonic history of the Eel River basin: Influence of the Mendocino triple junction from MCS data, GSA Abstracts with Programs, v. 30, A-74, 1998.
- Gulick, S. P. S.**, Meltzer, A. S., and Clarke, S. H., Jr., Tectonic history of the Eel River basin from MCS data: Influence of the Mendocino triple junction, EOS Trans. AGU, 78 (46), F717, 1997.
- Gulick, S. P. S.**, Meltzer, A. S., Clarke, S. H., Jr., Deformation and velocity structure of the southern Cascadia accretionary prism, EOS Trans. AGU, 77 (46), F657, 1996.
- Tréhu, A. M., Fleming, S. W., ten Brink, U., Flueh, E., Meltzer, A. S., and **Gulick, S. P. S.**, Crustal structure of the Cascadia forearc beneath the northern California and central Oregon continental margins, EOS Trans. AGU, 77 (46), F656, 1996.
- Tréhu, A.M., Fleming, S., Brocher, T., Clarke, S., Luetgert, J., Parsons, T., Meltzer, A. and **Gulick, S.**, Crustal architecture of the Cascadia forearc updated, GSA Abstracts with Programs, v. 28, n. 5, p. 118, 1996.
- Gulick, S. P. S.**, Meltzer, A. S., Tréhu, A. M., and the Mendocino Working Group, Results from the 1994 Mendocino triple junction seismic experiment: Multichannel seismic images of the Cascadia subduction zone north of the triple junction, EOS Trans. AGU, 76 (46), F629, 1995.
- Gulick, S. P. S.**, Meltzer, A. S., and Tréhu, A. M., Multichannel seismic images of the Cascadia accretionary prism deformation front near the Mendocino triple junction, EOS Trans. AGU, 76 (46), F629, 1995.
- Gulick, S. P. S.**, and the Mendocino Working Group, The 1994 Mendocino triple junction seismic experiment: Preliminary results north of the triple junction, EOS Trans. AGU, 75 (46), 1994.
- Gulick, S. P. S.**, Meltzer, A. S., Tréhu, A. M., and S. H. Clarke, Jr., Structure and velocity from the deformation front of the southern Cascadia accretionary prism: Preliminary results, EOS Trans. AGU, 75 (46), 1994.
- Gulick, S. P. S.**, and Powell, C., Analysis of P-wave travel time residuals and polarization values for the Wake Island seismic array, Seismological Research Letters, v. 64, n. 3-4, p. 260, 1993.