

PEER-REVIEWED PUBLICATIONS (*denotes student author, **post-doc author)
26 papers since 2005; 12 first or second author, 7 to be submitted in 2011-2012

- Soule, S.A.**, Nakata, D.S., Fundis, A., Fornari, D.J., Perfit, M.R., Kurz, M.D. (2011) Syn-emplacement degassing of a submarine lava flow: constraints on eruption rate and controls on MORB CO₂ variability, *in review, Earth Plan. Sci. Lett.*
- Resing, J.A., Rubin, K.H., Embley, R.W., Lupton, J.E., Baker, E.T., Dziak, R.P., Baumberger, T., Lilley, M.D., Huber, J.A., Shank, T.M., Butterfield, D.A., Clague, D.A., Keller, N.S., Merle, S.G., Buck, N.J., Michael, P.J., Soule, S.A., Caress, D.W., Walker, S.L., Davis, R., Cowen, J.P., Reysenbach, A.-L., Thomas, H. (2011) Active submarine eruption of Boninite in the northeastern Lau Basin, *Nature Geoscience*, 4, 799-806.
- *Barreyre, T., **Soule, S.A.**, Sohn, R.A. (2011) Settling velocity of MORB volcaniclasts and implications for dispersal during deep-sea eruptions. *J. Volc. Geotherm. Res.*, 205, 84-93.
- Cashman, K.V., **Soule, S.A.**, *Deligne, N.I., *Dietterich, H., *Deardorff, N., *Mackey, B. (2011) How lava flows - new insights from applications of lidar technologies to lava flow studies, *Geosphere*, accepted.
- Lizarralde, D.L., **Soule, S.A.**, Seewald, J.F. (2010) Thermogenic-carbon flux and crustal melt distribution of a young, sedimented spreading center, *Nat. Geoscience*, doi: 10.1038/NGEO1006.
- Goss, A.R., Perfit, M.R., Ridley, W.I., Rubin, K.H., Kamenov, G.D., **Soule, S.A.**, Fundis, A., Fornari, D.J. (2010) Geochemistry of lavas from the 2005-2006 eruption at the East Pacific Rise, 9° 46'N-9° 56'N: implications for ridge crest plumbing and decadal changes in magma chamber compositions. *G-cubed*, 11, doi:10.1029/2009GC002977.
- *Fundis, A.T., **Soule, S.A.**, Fornari, D.J., Perfit, M.R. (2010) Paving the seafloor: volcanic emplacement processes during the 2005-2006 eruptions at the fast-spreading East Pacific Rise, 9° 50'N. *G-cubed*, 11, doi:10.1029/2010GC003058.
- Soule, S.A.**, Escartín, J., Fornari, D.J. (2009) A record of eruption and intrusion at a fast-spreading ridge axis: axial summit trough of the East Pacific Rise at 9°-10°N, *G-cubed*, 10, doi:10.1029/2008GC002354.
- Soule, S.A.**, Ferrini, V.L., Kinsey, J.C., Fornari, D.J., Sellers, C., White, S.M., Von Damm, K., Carbotte, S.M. (2008) Navigational infrastructure at the East Pacific Rise 9° 50'N area following the 2005-2006 eruption: seafloor benchmarks and near-bottom multibeam surveys, *G-cubed*, 9, doi:10.1029/2008GC002070.
- Bockheim, J.G., Kurz, M.D., **Soule, S.A.**, *Burke, A. (2009) Genesis of active sand-filled polygons in Lower and Central Beacon Valley, Antarctica, *Permafrost and Periglacial Processes*, 20, doi:10.1002/ppp.661.
- Maloof, A.C., Stewart, S.T., Weiss, B.P., **Soule, S.A.**, *Swanson-Hysell, N.L., *Louzada, K.L., *Garrick-Bethell, I., Poussart, P.M. (2009) *GSA Bull.*, 122, 109-126.
- Sohn, R.A., *Willis, C., Humphris, S., et al., & **Soule, S.A.** (2008) Explosive volcanism

on the ultraslow-spreading Gakkel ridge, Arctic Ocean, *Nature*, 453, doi:10.1038/nature07075

*Louzada, K.L., Weiss, B.P., Maloof, A.C., Stewart, S.T., *Swanson-Hysell, N.L., **Soule, S.A.** (2008) Paleomagnetism of Lonar impact crater, India, *Earth Plan. Sci. Lett.*, 275, 308-319.

Soule, S.A., Fornari, D.J., Perfit, M.P., Rubin, K. (2007) New insights into mid-ocean ridge volcanic processes from the 2005-06 eruption of the East Pacific Rise, 9° 46'-56'N, *Geology*, 35, 1079-1082, doi: 10.1130/G23924A.1.

Escartín, J.E., **Soule, S.A.**, Fornari, D.J., Tivey, M.A., Schouten, H., Perfit, M.P. (2007) Interactions between faults and lava flows along the axis of the East Pacific Rise (9°10'-50'N): implications for upper crust construction, *G-cubed*, 8, doi: 10.1029/2006GC001399.

Cowen, J.P., D.J. Fornari, T.M. Shank, *B. Love, B. Glazer, A.H. Treusch, *R.C. Holmes, **S.A.** **Soule**, E.T. Baker, M. Tolstoy, and K.R. Pomraning (2007), Volcanic Eruptions at the East Pacific Rise near 9° 50'N, *Eos*, 88, 81-83.

Soule, S.A., Fornari, D.J., Perfit, M.P., Ridley, I.W., Reed, M.H., Cann, J.R. (2006) Incorporation of seawater into submarine lava flows during emplacement, *Earth Plan. Sci. Lett.*, 252, 289-307.

*Garry, W.B., T.K.P. Gregg, **Soule, S.A.**, Fornari, D.J. (2006), Formation of submarine lava channel textures: Insights from laboratory simulations, *J. Geophys. Res.*, 111, doi:10.1029/2005JB003796.

*Bowles, J., Gee, J.S., Kent, D.V., Perfit, M.R., **Soule, S.A.**, Fornari, D.J. (2006), Paleointensity applications to timing and extent of eruptive activity, 9°–10°N East Pacific Rise, *G-cubed*, 7, doi:10.1029/2005GC001141.

Tolstoy, M., Cowen, J.P., Baker, E.T., Fornari, D.J., Rubin, K.H., Shank, T.M., Waldhauser, F, Bohnenstiehl, D.R., Forsyth, D.W., *Holmes, R.C., *Love, B., Perfit, M.R., *Weekly, R.T., **Soule, S.A.**, Glazer, B. (2006) A seafloor spreading event captured by seismometers, *Science*, 314, 1920-1922, doi:10.1126/science.1133950.

Geist, D.J., Fornari, D.J., Kurz, M.D., Harpp, K.S., **Soule, S.A.**, Perfit, M.R., *Koleszar, A.M. (2006) Submarine Fernandina: Magmatism at the leading edge of the Galápagos hot spot, *G-cubed*, 7, 12, doi:10.1029/2006GC001290.

Ferrini, V.L., Fornari, D.J., Shank, T.M., Kinsey, J.C., **Soule, S.A.**, Tivey, M.A., Carbotte, S.A., Whitcomb, L.L., Yoerger, D.A., Howland, J., (2006) Sub-meter Bathymetric Mapping of the East Pacific Rise Crest at 9° 50'N: Linking Volcanic and Hydrothermal Processes, *G-cubed*, 8, 1, doi:10.1029/2006GC001333.

Soule, S.A., Fornari, D.J., Perfit, M.R., Tivey, M.A., Ridley, W.I., Schouten, H. (2005) Channelized lava flows at the East Pacific Rise Crest, 9-10 ° N: the importance of off-axis lava transport in developing the architecture of young oceanic crust, *G-cubed*, 6, doi:10.1029/2005GC000912.

Soule, S.A. and Cashman, K.V. (2005) Shear rate dependence of the pahoehoe to aa transition: analog experiments, *Geology*, 33, 5, 361-364.

Soule, S.A. and Cashman, K.V. (2004) The mechanical properties of solidified polyethylene glycol 600, an analog for lava crust. *J. Volc. Geotherm. Res.* 129:139-153.

Fornari, D., Tivey, M., Schouten, H., Perfit, M., Yoerger, D., Bradley, A., Edwards, M., Haymon, R., Scheirer, D., Von Damm, K., Shank, T., **Soule, S.A.** (2004) Submarine lava flow emplacement at the East Pacific Rise 9° 50'N: implications for uppermost ocean crust stratigraphy and hydrothermal fluid circulation, in *Mid-Ocean Ridges: Hydrothermal Interactions Between the Lithosphere and Oceans*, eds. German, C.R., Lin, J., Parson, L.M., 187-217.

Soule, S.A., Cashman, K.V., Kauahikaua, J.P. (2004) Examining flow emplacement through the surface morphology of three rapidly emplaced, solidified lava flows, Kilauea Volcano, Hawaii, *Bull. Volc.*, 66, 1-14.

Miller, M.G., Ryter, D.A., and **Soule, S.A.** (2000) Drawing contours on clay models; a hands-on introduction to topographic maps, *J. Geoscience Ed.*, 48, 5, p. 596.

Blake Jr., M.C., Graymer, R.W., and D.L. Jones; digital database by **Soule, A.**, and R.W. Graymer, (1998) Geologic map and map database of parts of Marin, San Francisco, Alameda, Contra Costa, and Sonoma Counties, California, *U.S. Geological Survey, Miscellaneous Field Study MF 2337*.

PUBLICATIONS IN PREPARATION (*denotes student author, **post-doc author)

***Mittelstaedt, E.**, **Soule, S.A.**, Harpp, K., Fornari, D.J., Geist, D. (2011) Variable expressions of plume-ridge interaction at the Galápagos Spreading Center, *to be submitted to Earth. Plan. Sci. Lett.*

*Pontbriand, C., **Soule, S.A.**, Sohn, R., Humphris, S. (2011) Evidence for explosive basaltic eruptions in the deep ocean, Gakkel Ridge 85°E, Arctic Basin. *to be submitted to J. Volc. Geotherm. Res.*

Escartin, J.E., **Soule, S.A.**, Cannat, M., et al. (2011) Magmatic cyclicity and seamount construction at the Lucky Strike segment of the Mid-Atlantic Ridge 37°N, *to be submitted to G-cubed*.

Soule, S.A., Escartin, J.E., Nakata, D.S., Bezos, A., et al. (2011) Volcanic accretion at a melt-focused, slow-spreading segment, Mid-Atlantic Ridge 37°N, *to be submitted to G-cubed*.

Rubin, K.H., **Soule, S.A.**, Chadwick, W.W., Fornari, D.J., Embley, R.W., Baker, E., Perfit, M., Dziak, R., Clague, D.A. (2011) Active volcanism in the deep sea, *to be submitted to Oceanography*.

Soule, S.A., Lizarralde, D.L., Stevens, L., Ponce, F. (2012) Seafloor expression of wide-aperture magmatic accretion at the Guaymas Basin sedimented spreading center, *to be submitted to G-cubed*.

Rubin, K.H., **Soule, S.A.**, Perfit, M.A., Fornari, D.J. (2012) Chronology of the 2005-06 eruptions at the EPR near 9° 50'N. *to be submitted to Nature*.

SUMMARY OF RECENT ABSTRACTS

2011 Fall AGU, San Francisco: 6 total abstracts, 2 first author, 1 invited, 1 student led, 1 post-doc led.

2011 AGU Chapman Conference, Galapagos, Ecuador: 2 total abstracts, 1 first author, 1 post-doc led.

2010 Fall AGU, San Francisco: 8 total abstracts, 2 first author, 2 invited, 3 student led.

2009 Fall AGU, San Francisco: 7 total abstracts, 2 first author, 1 invited, 4 student led.

2008 Fall AGU, San Francisco: 8 total abstracts, 0 first author, 2 invited, 3 student led, 1 post-doc led.

2007 IAVCEI General Assembly, Reykjavik: 2 total abstracts, 1 first author, 1 invited.

2007 Fall AGU, San Francisco: 5 total abstracts, 1 first author, 2 student led.

2007 GSA Annual Mtg., Denver, CO: 1 abstract, 1 student led.

2006 Fall AGU, San Francisco: 9 total abstracts, 1 first author, 3 invited, 1 student led.