John Naliboff

a. Professional Preparation

Institution	Location	Major or Area	Degree & Year
University of California, Davis	Davis	Geology	B.S. (2003)
University of California, Davis	Davis	Geology	M.S. (2005)
University of Michigan	Ann Arbor	Geology	Ph.D. (2009)
University of California, Davis	Davis	Geophysics	Postdoctoral (2010-2013)
Geological Survey of Norway	Trondheim	Geophysics	Postdoctoral (2013-2015)

b. Appointments

2016-Present Project Scientist, Department of Earth and Planetary Sciences, UC Davis
2011-2013 Part-time Lecturer, Department of Earth and Planetary Sciences, UC Davis

c. Products

PRODUCTS MOST CLOSELY RELATED

1. Naliboff, J.B., Buiter, S.J.H., Péron-Pinvidic, G., Osmundsen, P.T., Tetreault, J., Complex fault interaction controls continental rifting. *Nat Comm.*, 8(1179), doi: 10.1038/s41467-017-00904-x.
2. Zwann, Z.H., Schreurs, G., *Naliboff, J.B.* and Buiter, S.J.H., Insights Into the Effects of Transtension on Continental Rift Interaction from 3D Analogue and Numerical Modeling. *Tectonophysics* 693(B), 239-260, doi:10.1016/j.tecto.2016.02.036.
3. *Naliboff, J.B.* and Buiter, S.J.H. (2015), Rift reactivation and migration during multiphase extension. *Earth Planet. Sci. Letts.* 421, 58-67, doi:10.1016/j.epsl.2015.03.050.
4. *Naliboff, J.B.*, Billen, M.I. and Gerya, T. (2013), Dynamics of outer rise faulting in oceanic-continental subduction systems. *Geophys. Geochem. Geosyst.,* doi: 10.1002/ggge.20155
5. *Naliboff, J.B.,* Lithgow-Bertelloni, C., Ruff, L. and de Koker, N. (2012) The effect of lithospheric thickness and density structure on Earth's stress field. *Geophys. J. Int. 88(1), 1-17*, doi:10.1111/j.1365-246X.2011.05248.x.
6. *Naliboff, J.B.*, Conrad, C. and Lithgow-Bertelloni, C. (2009), Modification of the lithospheric stress field by lateral variations in plate-mantle coupling. *Geophys. Res. Lett. 36*, L22307, doi:10.1029/2009GL040484.

OTHER SIGNIFICANT PRODUCTS

1. *Naliboff, J.B.* and Kellogg, L.H. (2007), Can large increases in viscosity and thermal conductivity preserve large-scale heterogeneity in the mantle? *Phys. Earth Planet. Inter. 161, 86-102*.
2. *Naliboff, J.B.* and Kellogg, L.H. (2006), Dynamic effects of a step-wise increase in thermal conductivity and viscosity in the lowermost mantle. *Geophys. Res. Lett. 33*, L12S09, doi:10.1029/2006GL025717.

d. Synergistic Activities

1. During both my graduate and post-graduate career, I have conducted extensive research in the field of computational geodynamics, which in many cases required the use of high-performance computing resources. The range of investigated topics includes global stress field modeling, mantle convection, subduction and continental extension. My active research primarily focuses on high-resolution 3-D modeling of continental extension, which involves the use of multiple massively scalable long-term tectonics codes and direct comparisons to geologic and geophysical data sets.
2. In addition to current work on high-resolution 3-D modeling of continental extension, I am also actively participating in international collaborations focusing on resolving the origins of the lithospheric stress field. These projects involve building high-resolution, adaptively refined models that contain density anomalies associated with surface topography, the lithosphere and deep

convecting mantle. These simulations will provide predictive data sets that can be compared directly to a wide range of observations associated with active plate tectonic deformation.