

John Naliboff  
Assistant Research Scientist  
UC Davis Earth and Planetary Sciences  
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### **a. Professional Preparation**

<u>Undergraduate Institutions</u>	<u>Location</u>	<u>Major or Area</u>	<u>Degree &amp; Year</u>
University of California, Davis	Davis	Geology	B.S. (2003)
<u>Graduate Institutions</u>	<u>Location</u>	<u>Major or Area</u>	<u>Degree &amp; Year</u>
University of California, Davis	Davis	Geology	M.S. (2005)
University of Michigan	Ann Arbor	Geology	Ph.D. (2009)
<u>Postdoctoral Institutions</u>	<u>Location</u>	<u>Major or Area</u>	<u>Inclusive Dates</u>
University of California, Davis	Davis	Geophysics	Postdoctoral (2010-2013)
Geological Survey of Norway	Trondheim	Geophysics	Postdoctoral (2013-2015)

### **b. Appointments**

2018- Present	Assistant Research Scientist	Department of Earth and Planetary Sciences, UC Davis
2016-2018	Assistant Project Scientist	Department of Earth and Planetary Sciences, UC Davis
2013-2015	Postdoctoral Researcher	Geological Survey of Norway
2011-2013	Part-time Lecturer	Department of Earth and Planetary Sciences, UC Davis
2010-2013	Postdoctoral Scholar	Department of Earth and Planetary Sciences, UC Davis

### **c. Products**

#### Five Publications Most Closely Related to the Project

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.

#### Five Other Significant Products

1. 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.

2. 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.

3. 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.

4. Assumpção, M., Dias, F.L., Zevallos (2016), I. and J.B. Naliboff, Intraplate stress field in South America from earthquake focal mechanisms. *J South Am Earth Sci.* 71, 278-295, doi:10.1016/j.jsames.2016.07.005.

5. Eberhart-Phillips, D., Reyners, M., Faccenda, M. and Naliboff, J.B. (2013), Along-strike variation in subducting plate seismicity and mantle wedge attenuation related to fluid release beneath the North Island, New Zealand. *Phys. Earth Planet. Inter.* 225, 12-27. doi:10.1016/j.pepi.2013.10.002.

#### **d. Synergistic Activities**

- I am currently an employee of the Computational Infrastructure for Geodynamics (CIG), whose mission is to “advance Earth science by developing and disseminating software for geophysics and related fields”. As an employee of CIG, I support this mission through open-source software development and testing, significant online community support, training through workshops/tutorials and hosting visitors at CIG. To date, I have participated in and helped coordinate three CIG workshops/tutorials and hosted multiple visiting scholars at CIG. I am also a member of the CIG Long-Term Tectonics working group, which advises the CIG Science Steering committee on software development, establishes long-term plans and organizes broad community efforts including the development of white papers and software benchmarking efforts.
- In conjunction with my position at CIG, I am also one of 8 primary developers of the open-source and CIG-supported mantle convection and lithospheric code ASPECT. As an ASPECT developer, I focus on implementing features that will enable the geodynamics community to model a wide range of lithospheric deformation processes. Such features include both source code and example problem suites that enable new users to quickly develop models based on simplified tests cases.
- To facilitate and support undergraduate and graduate research, I mentor students undertaking senior research projects and currently advise one undergraduate researcher working with CIG.