

## Publication List : Mark Naylor

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11 PEER REVIEWED PUBLICATIONS Hein, A.S., Hulton, N.R.J., Dunai, T.J., Schnabel, C., Kaplan, M.R., **Naylor, M.** & Xu, S. (2009) Middle Pleistocene glaciation in Patagonia dated by cosmogenic-nuclide measurements on outwash gravels, *Earth and Planetary Science Letters*, doi:10.1016/j.epsl.2009.06.026

SINCE 2005:  
64 CITATIONS,  
H-FACTOR OF 5

Touati, S., **Naylor, M.** & Main, I.G., (2009) The origin and non-universality of the earthquake inter-event time distribution, *Physical Review Letters* 102, 168501 doi: 10.1103/PhysRevLett.102.168501 [My PhD student's first paper]

**Naylor, M.**, Main, I.G. & Touati, S. (2009) Quantifying uncertainties on mean earthquake inter-event times, *Journal of Geophysical Research*, 114, B01316, doi:10.1029/2008JB005870 [cited 1 time]

Main, I.G. & **Naylor, M.**, (2008) Maximum entropy production and earthquake dynamics, *Geophysical Research Letters*, 35 L19311, doi:10.1029/2008GL035590 [GRL Editors' Highlight] [cited 1 time]

**Naylor, M.** & Sinclair, H. D., (2008) Pro- vs. retro-foreland basins, *Basin Research* 20 (3) doi: 10.1111/j.1365-2117.2008.00366.x [cited 2 times]

**Naylor, M.** & Main, I.G., (2008) Cell scale self-organisation in the OFC model: Painting by numbers, re-rupturing and memory loss, *The European Physical Journal B*, 64 139146 doi:10.1140/epjb/e2008-00279-5 [cited 1 time]

Main, I.G., Li, L., McCloskey, J. & **Naylor, M.** (2008) Effect of the Sumatran mega-earthquake on the global magnitude cut-off and event rate, *Nature Geoscience*, 1 142 doi:10.1038/ngeo141 [cited 6 times]

**Naylor, M.** & Sinclair, H. D., (2007) Reconciling punctuated thrust deformation in the context of orogenesis: implications for the localization of uplift and exhumation, *Geology*, 35 (6) 559-562 doi: 10.1130/G23448A.1 [cited 17 times]

Cowie, P.A., Attal, M., Tucker, G. E., Whittaker, A. C., **Naylor, M.**, Ganas, A. & Roberts, G. P. (2006) Investigating the surface process response to fault interaction and linkage using a numerical modelling approach. *Basin Research*, 18 (3) 231-266 doi: 10.1111/j.1365-2117.2006.00298.x [cited 16 times]

**Naylor, M.**, H. D. Sinclair, S. Willett & P. A. Cowie (2005), A discrete element model for orogenesis and accretionary wedge growth, *Journal of Geophysical Research*, 110 B12403, doi:10.1029/2003JB002940. [cited 9 times]

Sinclair, H. D., Gibson, M, **Naylor, M.** & Morris, R. G., (2005) Asymmetric growth of the Pyrenees revealed through measurement and modelling of orogenic fluxes, *American Journal of Science*, 305 369-406 [cited 10 times]

For list of citing articles see: [www.geos.ed.ac.uk/homes/mnaylor/marksPublications.html](http://www.geos.ed.ac.uk/homes/mnaylor/marksPublications.html)

6 PENDING PUBLICATIONS

**Naylor, M.** , Greenhough, J, McCloskey, J., Bell, A. & Main, I.G, Evaluation of the statistical evidence for characteristic earthquakes in the frequency-magnitude distributions of Sumatra and other subduction zones (Submitted to *Geophysical Research Letters*)

Sinclair, H.D. & **Naylor, M.**, Foreland Basin Subsidence and the growth of mountain ranges (Submitted to *GSA Bulletin*)

Main, I.G & **Naylor, M.**, Entropy production, self-organisation, and criticality in natural and model earthquake populations (Submitted to *Phil. Trans. Royal Soc. A*) [Invited paper]

**Naylor, M.**, M.Wilkinson & R.S.Haszeldine, Estimation of CO<sub>2</sub> column heights in depleted gas fields (In prep. for the Journal of the Society of Petroleum Engineers)

Bell, A., Touati, S., **Naylor, M.** & Main, I.G. The structure of earthquake interevent-time distributions at Kilauea volcano, Hawaii (In prep for Geophysical Research Letters)

17 MOST RELEVANT  
CONFERENCE  
PRESENTATIONS

Main, I.G. & **Naylor, M.**, Maximum entropy production as a driver for earthquake dynamics and implications for earthquake predictability, IASPEI 2009, Cape Town

**Naylor, M.**, Main, I.G. & Touati, S., Exploring the statistical convergence of earthquake inter-event times, AGU Fall Meeting, 2008

Sinclair, H.D. & **Naylor, M.**, Contrasting pro- and retro-foreland basins as records of orogenesis, AGU Fall Meeting, 2008

Touati, S., Main, I.G. & **Naylor, M.**, Quantifying uncertainty on mean earthquake inter-event times for a finite sample, ESF Research Conference: New Challenges In Earthquake Dynamics , Austria, 2008

*Invited:* **Naylor, M.**, Main, I.G. & McCloskey, J., Finite sample effects and fluctuations in b-value, SSA (2008)

*Key Note:* Sinclair, H.D. & **Naylor, M.**, Pro- versus retro-peripheral foreland basins as records of orogenesis, Paper No. 161-1, GSA Denver Annual Meeting, 28-31 October 2007

**Naylor, M.** & Main, I.G., Predictability and statistical stability of the inter-event record in the OFC model Natural Complexity, Data and Theory in Dialogue, BAS, 2007

Main, I.G., **Naylor, M.**, Li, L. & McCloskey, J. Statistical mechanics and earthquake statistics, 28th Workshop of the International School of Geophysics, p103 (May 31-June 6, 2007)

Sinclair, H. D. & **Naylor, M.**, Reconciling punctuated thrust deformation in the context of orogenesis: implications for the localization of uplift and exhumation, T43B-1643, AGU Fall 2006

**Naylor, M.** & Main, I.G., Maximum entropy production in earthquake dynamics: Spatial Order and Temporal Unpredictability in the slider block model, NG51B-1031, AGU Fall 2006

*Invited Lecture:* Main, I.G. & **Naylor, M.**, Maximum entropy production in earthquake dynamics: origin of spatial order and temporal unpredictability in a complex system, EGU06-A-01028, Vienna, (April 2-7, 2006)

**Naylor, M.** & Main, I.G., Maximum entropy production in earthquake dynamics: Analytic description and comparison with a modified OFC model. Scale Invariance in Geophysics, BGA meeting, London, (March 9-10, 2006)

**Naylor, M.** & Sinclair, H.D., The emergent natural variability of tectonic forcing on erosional denudation, EGU05-A-08499, Vienna, (April 23-30, 2005)

Cowie, P.A., **Naylor, M.** & Whittaker, A., A numerical investigation of drainage network evolution during fault initiation and linkage, T22B-0520, AGU (Fall, 2004)

**Naylor, M.** Natural variability in the tectonic forcing of mountain landscapes. William Smith Meeting, Geological Society of London, London (October 4-5, 2004)

Sinclair, H. D., Gibson, M., **Naylor, M.** & Morris, R. G., Growth of the Pyrenees: erosion, exhumation, sedimentation and modelling, EGU04-A-07493

**Naylor, M.**, Cowie, P.A., & Sinclair, H.D., Modelling of tectonic-surface process feedback on strain localisation during orogenesis using a discrete element model. Earth System Processes - Global Meeting, Edinburgh (June 24-28, 2001)