

Professor Manfred Strecker

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Research Interests Geomorphology of fault zones, evolution of tectonic stress fields, relations between tectonics and climate in landscape evolution, catastrophic mass movements, impact of climate variability on erosion and sedimentation patterns at different timescales

Academic Training

1983-1987	PhD in Geology, Cornell University, Ithaca, N.Y.
1980-1983	MSc in Geology, Cornell University, Ithaca, N.Y.
1984-1985	Visiting scientist, Instituto Miguel Lillo, Tucumán, Argentina
1979-1980	Geology studies at University of North Carolina, Chapel Hill
1976-1980	Pre-diploma in Geography and Biology, Univ. Göttingen

Professional Experience

1995-current	Chair of Geology, Department of Earth and Environmental Sciences, U Potsdam
2009	Adjunct Professor, Cornell University
01/1993	Heisenberg Scholar and Visiting Associate Professor, Department of Geophysics, Stanford University, Stanford, CA
1987-1993	Hochschulassistent, Geologisches Institut, U Karlsruhe (Habilitation 05/1991)

Cooperation with other institutions / Consultancy in National and International Committees

- Elected reviewer for DFG in the field of geosciences (2004-2008);
- Member of the steering committee of DFG special research project 267;
- Reviewer for National Science Foundation, Belgian Federal Office for Scientific, Technical and Cultural Affairs, FFW Austria, NERC, UK;
- DAAD (5 years) and A. v. Humboldt Foundation (2004-2008) review boards for overseas assignments;
- Member of the evaluation committee for the geoscience departments at Vienna and Salzburg universities, Austria and geoscience departments in Lower Saxony, Germany

Editorial Activities Editorial Board: *Geology* (2x), *J. of Asian Earth Sci.* (2x), GSA's *Geosphere*, *Intl. J. of Earth Science*; *Earth Science Reviews*, *Tectonics* associate editor

Other Professional Service Activities (national and international)

- Deputy Chairman of the Intern. Lithosphere Project, South American section;

- Member of Committee of Visitors at the U.S. National Science Foundation, 2005

Honors, Awards, Nominations and Special Appointments

- Maucher Preis, DFG 1991;
- Heisenberg-scholarship, DFG 1992;
- Leibniz-Award, DFG 2004;
- Allan Cox Visiting Professorship, Stanford University (08/2005-08/2006; 10/2009-04/2010);
- Adjunct Professor, Cornell University (2009-2014)

Selected peer-reviewed publications

1. Hilley, G. and Strecker, M.R., 2004. Steady-state erosion of critical Coulomb wedges. *J. Geophysical Research*, 109, B1, B01411 10.1029/2002 JB002284.
2. Hilley, G. and Strecker, M.R., 2005. Processes of oscillatory basin filling and excavation in a tectonically active orogen: Quebrada del Toro Basin, NW Argentina. *Geological Society of America Bulletin*, 117, 887-901.
3. Bookhagen B., Thiede, R. and Strecker, M.R., 2005. Monsoonal forcing and catastrophic landslides in the NW Indian Himalaya. *Earth and Planetary Science Letters*, 231, 131-146.
4. Trauth, M.H., Maslin, M., Deino, A. and Strecker, M.R., 2005. Moisture history of East Africa. *Science*, 309, 2051-2053.
5. Strecker, M.R. , Alonso, R., Bookhagen, B., Carrapa. B., Hilley, G.E., Sobel, E.R., Trauth, M.H., 2007. Tectonics and climate of the southern central Andes. *Annual Reviews in Earth and Planetary Sciences*, 35, 747-787.
6. Uba, C.E., Strecker, M.R., Schmitt, A.K., 2007. Increased sediment accumulation rates in the Central Andes during the late Miocene due to climate forcing. *Geology*, 35, 979 - 982.
7. Bookhagen, B. and Strecker, M.R., 2008. High-resolution TRMM rainfall, hillslope angles, and relief along the eastern Andes. *Geophysical Research Letters*, 35, L06403.
8. Melnick, D., Bookhagen, B., Strecker, M.R., and Echtler, H., 2009. Segmentation of megathrust rupture zones from forearc deformation patterns over hundreds of millions of years, Arauco peninsula, Chile. *J. Geophysical Research – Solid Earth*, 114, doi: 10.1029/2008JB005788.
9. Zielke, O. and Strecker, M.R., 2009. Recurrence of large earthquakes in magmatic continental rifts: Insights from a paleoseismic study along the Marmanet-Laiipia fault, Subukia Valley, Kenya Rift. *Bull. Seismological Soc. America*, 99, 61-70, doi:10.1785/0120080015.

10. Strecker, M.R., Alonso, R., Bookhagen, B., Carrapa, B., Coutand, I., Hain, M.P., Hilley, G.E., Mortimer, E., Schoenbohm, L., and Sobel, E.R., 2009. Does the topographic distribution of the central Andean Puna Plateau result from climatic or geodynamic processes? *Geology*, 37, 643-646.
11. Wichura, H., Bousquet, R., Oberhaensli, R., Strecker, M.R., Trauth, M.H., 2010. Evidence for middle Miocene uplift of the East African Plateau. *Geology* 38, 543-546.
12. Mulch, A., Uba, C.E., Strecker, M.R., Schoenberg, R., Chamberlain, C.P., 2010. Late Miocene climate variability and surface elevation in the central Andes. *Earth and Planetary Science Letters* 290, 173-182.
13. Hintersberger, E., Thiede, R.C., Strecker, M.R., Hacker, B.R., 2010. East-west extension in the NW Indian Himalaya. *Geological Society of America Bulletin* 122, 1499-1515.
14. Scherler, D., Bookhagen, B., Strecker, M.R., von Blanckenburg, F., Rood, D., 2010. Timing and extent of late Quaternary glaciation in the western Himalaya constrained by Be-10 moraine dating in Garhwal, India. *Quaternary Science Reviews* 29, 815-831.
15. Hintersberger, E., Thiede, R.C., Strecker, M.R., 2011. The role of extension during brittle deformation within the NW Indian Himalaya. *Tectonics* 30.
16. Scherler, D., Bookhagen, B., Strecker, M.R., 2011a. Hillslope-glacier coupling: The interplay of topography and glacial dynamics in High Asia. *Journal of Geophysical Research-Earth Surface* 116.
17. Scherler, D., Bookhagen, B., Strecker, M.R., 2011b. Spatially variable response of Himalayan glaciers to climate change affected by debris cover. *Nature Geoscience* 4, 156-159.
18. Garcin, Y., Melnick, D., Strecker, M.R., Olago, D., Tiercelin, J.-J., 2012. East African mid-Holocene wet-dry transition recorded in palaeo-shorelines of Lake Turkana, northern Kenya Rift. *Earth and Planetary Science Letters* 331, 322-334.
19. Pingel, H., Strecker, M.R., Alonso, R.N., Schmitt, A.K., 2013. Neotectonic basin and landscape evolution in the Eastern Cordillera of NW Argentina, Humahuaca Basin (similar to 24 degrees S). *Basin Research* 25, 554-573.
20. Rohmann, A., Strecker, M., Bookhagen, B., 2014. Can stable isotopes ride out storms? The role of convection for water isotopes in models, records, and paleoaltimetry studies in the central Andes, *Earth and Planetary Science Letters*, 407, 187-195

Manfred Strecker is the author of 219 articles published in international peer reviewed journals (bibliometric parameters H-index 41, 5013 citations on 20th January, 2015).