

Pieter Vermeesch

Department of Earth and Planetary Sciences
Birkbeck College, University of London
p.vermeesch@ucl.ac.uk
<http://ucl.ac.uk/~ucfbpve>

Malet Street
London WC1E 7HX
tel: +44 (0)20 7679 2418
fax: +44 (0)20 7679 2867

- EDUCATION ♦ Stanford University, Stanford, CA, United States.
 Ph.D. in Geology, June 2005.
 Thesis title: *Contributions to detrital thermochronology*.
- ♦ Massachusetts Institute of Technology, Cambridge, MA, United States.
 M.Sc. in Geosystems, July 2000.
 Thesis title: *Thermal evolution of a compositionally stratified Earth, including plates*.
- ♦ Universiteit Gent, Gent, Belgium.
 B.Sc. in Geology, July 1999.
 Thesis title: *Studie van de recente evolutie van het Issyk Kul Bekken (Tien Shan, Kirghistan) met behulp van warmtefluxmetingen, hoge-resolutie reflectie-seismische profielen en veld-waarnemingen*.
- WORK ♦ RCUK Academic Fellow, Birkbeck College (2007 – present)
- EXPERIENCE ♦ Teaching: Introduction to Geology, Assessed field techniques I
- ♦ Marie-Curie postdoctoral researcher, ETH-Zürich (2005 – 2007)
- ♦ Research Assistant, Stanford University (2001 – 2004)
 Assisted students and faculty in the School of Earth Sciences GIS lab.
- ♦ Field Engineer, Schlumberger Wireline, Ras Shukeir, Egypt (2000 – 2001)
 Performed borehole measurements on- and off-shore.
- RESEARCH (Detrital) geochronology and thermochronology, terrestrial cosmogenic nuclides, statistical
INTERESTS analysis of geochemical data, remote sensing, aeolian geomorphology.
- HONORS AND ♦ 2011 Birkbeck College's Ronald Tress Prize for excellence in research
AWARDS ♦ 2009 Geology Exceptional Reviewer
- ♦ Most cited paper award 2004-2007 for the EPSL article "How many grains are needed for a provenance study?"
- ♦ Best oral presentation at the annual Stanford School of Earth Sciences research review
- ♦ Francqui Fellow of the Belgian American Educational Foundation
- ♦ Vallère Billet Award for best geology student of Ghent University
- COMMUNITY ♦ Reviewer for Tectonics, Geology, GSA Bulletin, Chemical Geology, Terra Nova, Remote
SERVICE Sensing of Environment, Quaternary Geochronology, Earth and Planetary Science Letters,
 Journal of Sedimentary Research, Mathematical Geosciences, Geomorphology, Journal of
 Geophysical Research, Journal of Quaternary Science, Journal of the Geological Society
- ♦ Organised the CRONUS-EU field trip on applications of cosmogenic nuclides to the glacial
 geomorphology of the Alps.
- ♦ Organising committee member of the 69th annual Meteoritical Society meeting in Zürich.
- ♦ Convener of 2006 AGU fall meeting session T27: "Advances in (U-Th)/He geochronology".

- | | |
|------------------------|---|
| RESEARCH GRANTS | <ul style="list-style-type: none"> ◇ 2011-2014: NERC Standard Grant for “A novel approach to in-situ zircon U-Th-He geochronology” (£528,527, in review) ◇ 2011-2014: NERC Standard Grant for “Dust storms and Chinese loess over the last 22 million years.” (£360,996) ◇ 2011-2016: ERC Starting Grant for “K-Ar and Ar-Ar geochronology by stepwise dissolution.” (€580,992) ◇ 2011: NERC-CIAF award for “Sediment storage and recycling in the Namib Sand Sea and its Miocene ancestor” (£13,200) ◇ 2009: NERC-CIAF award for “Measuring the residence time of sand in Namib dunes with cosmogenic nuclides.” (£8,565) |
| PEER REVIEWED ARTICLES | <p>Vermeesch, P., 2011. A 45 year time series of Saharan dune mobility from remote sensing (in preparation for submission to Science).</p> <p>Vermeesch, P. and Carter, A., 2011. A simplified method for in-situ U-Th-He dating. <i>Geochimica et Cosmochimica Acta</i> (in review).</p> <p>Vermeesch, P., 2011. Reply to five comments on “Lies, damned lies, and statistics (in geology)”, <i>Eos</i> (in press).</p> <p>Vermeesch, P., Fenton, C.R., Kober, F., Wiggs, G.F.S., Bristow, C.S. and Xu, S., 2010. One million year residence time of Namib dune sand from cosmogenic nuclides, <i>Nature Geoscience</i>, 3, 862-865.</p> <p>Vermeesch, P., 2010. HelioPlot, and the treatment of overdispersed (U-Th-Sm)/He data, <i>Chemical Geology</i>, 271 (3-4) 108-111</p> <p>Vermeesch, P., 2009. Lies, damned lies, and statistics (in <i>Geology</i>), <i>Eos</i>, 90 (47), p.443</p> <p>Vermeesch, P., Baur, H., Heber, V. S., Kober, F., Oberholzer, P., Schäfer, J. M., Schlüchter, C., Strasky, S., and Wieler, R., 2009. Cosmogenic ³He and ²¹Ne measured in quartz targets after one year of exposure in the Swiss Alps, <i>Earth and Planetary Science Letters</i>, 284, 3-4, 417-425.</p> <p>Vermeesch, P., 2009, RadialPlotter: a Java application for fission track, luminescence and other radial plots, <i>Radiation Measurements</i>, 44, 4, 409-410.</p> <p>Vermeesch, P., Avigad, D. and McWilliams, M., 2009. 500 Myr of thermal history elucidated by multi-method detrital thermochronology of North Gondwana Cambrian sandstone (Eilat area, Israel), <i>Geological Society of America Bulletin</i>, v. 121, n. 7/8, 1204-1216.</p> <p>Vermeesch, P. and Drake, N., 2008. Remotely sensed dune celerity and sand flux measurements of the world’s fastest barchans (Bodélé, Chad): <i>Geophysical Research Letters</i>, 35, L24404.</p> <p>Vermeesch, P., 2007, Quantitative geomorphology of the White Mountains (California), using detrital apatite fission track thermochronology: <i>Journal of Geophysical Research – Earth Surface</i>, 112, F03004.</p> <p>Vermeesch, P., 2007, CosmoCalc: an Excel add-in for cosmogenic nuclide calculations: <i>Geochemistry, Geophysics, and Geosystems</i>, Vol. 8, Q08003.</p> <p>Vermeesch, P., 2007, Reply to Comment by Agrawal and Verma on .Tectonic classification of basalts with classification trees., <i>Geochimica et Cosmochimica Acta</i>, v.71, p.3391-3392</p> <p>Vermeesch, P., Seward, D., Latkoczy, C., Wipf, M., Günther, D. and Baur, H., 2007, α-emitting mineral inclusions in apatite, their effect on (U-Th)/He ages, and how to reduce it: <i>Geochimica et Cosmochimica Acta</i>, v. 71, no. 7, pp. 1737-1746.</p> <p>Vermeesch, P., 2006, Tectonic discrimination diagrams revisited: <i>Geochemistry, Geophysics, and Geosystems</i>, 7, Q06017.</p> |

- Vermeesch, P., Miller, D. D., Graham, S. A., De Grave, J., and McWilliams, M. O., 2006, Multi-method detrital thermochronology of the Great Valley Group near New Idria (California) : Geological Society of America Bulletin, v. 118, no. 1, pp. 210-218
- Vermeesch, P., 2006, Tectonic discrimination of basalts with classification trees: *Geochimica et Cosmochimica Acta*, v. 70, no. 7, pp. 1839-1848.
- Vermeesch, P., 2005, Statistical uncertainty associated with histograms in the Earth Sciences, *Journal of Geophysical Research – Solid Earth*, Vol 110, B02211.
- Vermeesch, P., 2004, How many grains are needed for a provenance study? *Earth and Planetary Science Letters*, v.224, n.3-4, pp. 441-451.
- Vermeesch, P., Poort, J., Duchkov, A. D., Klerckx, J., and De Batist, M., 2004, Lake Issyk-Kul (Tien Shan): Unusually low heat-flow in an active intermontane basin.: *Russian Geology and Geophysics*, v.45, n.5, pp. 616-625.
- Vermeesch, P., 2003, A second look at the geologic map of China: the “Sloss approach”. *International Geology Review*, v.45, p. 119-132.