

DUMF1043 Earth System Science

Full reading list for Earth System Science on University of Glasgow
Dumfries campus

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1. Kump, L. R., Kasting, J. F. & Crane, R. G. *The Earth System*. (Pearson, Harlow, Essex, 2014).

 2. Holden, J. & Dawson Books. *An Introduction to Physical Geography and the Environment*. (Pearson, Harlow, Essex, 2012).

 3. Diamond, J. M. *Collapse: How Societies Choose to Fail or Survive*. (Allen Lane, 2005).

 4. Benn, D. I. & Evans, D. J. A. *Glaciers & Glaciation*. (Routledge, London, 2013).

 5. Bell, M. & Walker, M. J. C. *Late Quaternary Environmental Change: Physical and Human Perspectives*. (Routledge, an imprint of the Taylor & Francis Group, Abingdon, Oxon, 2013).

 6. Kump, L. R. *The Earth System: Chapter 2 Daisyworld An Introduction to Systems*. (Prentice Hall, 2009).

7.

Swindles, G. T. et al. The long-term fate of permafrost peatlands under rapid climate warming. *Scientific Reports* **5**, (2015).

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NASA - Daisyworld - This World Is Black and White. (18 AD).

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Daisyworld pt.1 : James Lovelock and Gaia. (2009).

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Daisyworld pt.2: Gaia and Daisyworld. (2009).

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Daisyworld pt.3: Self regulation. (2009).

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Daisyworld Pt.4: Gaia theory and the real world. (2009).

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Lovelock, J. *Gaia: A New Look at Life on Earth*. (Oxford University Press, Oxford, 1982).

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Lovelock, J. *The Revenge of Gaia: Why the Earth Is Fighting Back - and How We Can Still Save Humanity*. vol. Penguin celebrations (Penguin, London, 2007).

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Lovelock, J. The Vanishing Face of Gaia: A Final Warning. (Allen Lane, London, 2009).

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<http://bogology.org/2014/08/28/the-explosive-science-of-volcanoes-and-peat-bogs/>.

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A Robust Response of the East Asian Monsoon Rainband to Solar Variability | Musings on Quantitative Palaeoecology.

<https://quantpalaeo.wordpress.com/2015/02/01/a-robust-response-of-the-east-asian-monsoon-rainband-to-solar-variability/>.

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Animation: Satellite images of surging glaciers in Asia - Carbon Brief.

http://www.carbonbrief.org/animation-satellite-images-of-surging-glaciers-in-asia?utm_content=buffer98022&utm_medium=social&utm_source=twitter.com&utm_campaign=buffer.

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How A Simple Truth Can Be A Most Effective Lie - Dan's Wild Wild Science Journal - AGU Blogosphere.

<http://blogs.agu.org/wildwildscience/2015/12/06/half-the-truth-can-be-a-most-effective-lie/>.

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The Nitrogen Cascade. (19 AD).

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The most influential climate change papers of all time - Carbon Brief.

<http://www.carbonbrief.org/the-most-influential-climate-change-papers-of-all-time>.

24.

Dessler, A. E. A Determination of the Cloud Feedback from Climate Variations over the Past Decade. *Science* **330**, 1523–1527 (2010).

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Kump, L. R. *The Earth System* (Chapter 3). (Prentice Hall, 2009).

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James Hansen: Why I must speak out about climate change | TED Talk | TED.com.

http://www.ted.com/talks/james_hansen_why_i_must_speak_out_about_climate_change.

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CERES Brochure. http://ceres.larc.nasa.gov/ceres_brochure.php.

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Roberts, N. Holocene: An Environmental History. (Wiley Blackwell, Chichester, England, 2014).

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<http://www.abc.net.au/catalyst/stories/2377133.htm>.

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Plant macrofossils.

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Oxygen Isotopes and the Paleoclimate Record. (16 AD).

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Chapter 14. Pliestocene Glaciations. The Earth System (Third Edition). Kump, Kasting,

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<http://www.sciencecourseware.org/eec/GlobalWarming/Tutorials/Milankovitch/>.

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Are ice sheet losses overestimated?

<http://www.skepticalscience.com/Are-ice-sheet-losses-overestimated.html>.

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<http://soils.org.uk/>.

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Bellamy, P. H., Loveland, P. J., Bradley, R. I., Lark, R. M. & Kirk, G. J. D. Carbon losses from all soils across England and Wales 1978–2003. *Nature* **437**, 245–248 (2005).

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Chapter 5 The Ocean Circulation. The Earth System (Third Edition). Kump, Kasting, Crane.

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Cai, W. et al. ENSO and greenhouse warming. *Nature Climate Change* **5**, 849–859 (2015).

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Chapter 4. The Atmospheric Circulation System. The Earth System (Third Edition). Kump, Kasting and Crane.