

DUMF1043 Earth System Science

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

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[1]

L. R. Kump, J. F. Kasting, and R. G. Crane, The earth system, Third edition. Harlow, Essex: Pearson, 2014 [Online]. Available:
<https://www.vlebooks.com/vleweb/product/openreader?id=GlasgowUni&isbn=9781292034867>

[2]

J. Holden and Dawson Books, An introduction to physical geography and the environment, 3rd ed. Harlow, Essex: Pearson, 2012 [Online]. Available:
<https://www.vlebooks.com/vleweb/product/openreader?id=GlasgowUni&isbn=9780273740872>

[3]

J. M. Diamond, Collapse: how societies choose to fail or survive. Allen Lane, 2005 [Online]. Available:
https://uws-primo.hosted.exlibrisgroup.com/primo-explore/fulldisplay?docid=44PAI_ALMA2121617340003931&context=L&vid=44PAI_V1&search_scope=default_scope&tab=default_tab=en_US=en_US

[4]

D. I. Benn, Glaciers and Glaciation. Arnold, 1998 [Online]. Available:
https://uws-primo.hosted.exlibrisgroup.com/primo-explore/fulldisplay?docid=44PAI_ALMA2119276150003931&context=L&vid=44PAI_V1&search_scope=default_scope&tab=default_tab=en_US=en_US

[5]

M. Bell, Late Quaternary Environmental Change: physical and human perspectives, 2nd ed. Prentice Hall, 2005 [Online]. Available:
https://uws-primo.hosted.exlibrisgroup.com/primo-explore/fulldisplay?docid=44PAI_ALMA2118149340003931&context=L&vid=44PAI_V1&search_scope=default_scope&tab=default_tab=en_US=en_US=en_US

[6]

L. R. Kump, 'Chapter 2, Daisyworld An Introduction to Systems', in The Earth System, 4th ed., Pearson, 2014 [Online]. Available:
https://uws-primo.hosted.exlibrisgroup.com/primo-explore/fulldisplay?docid=44PAI_ALMA2119128100003931&context=L&vid=44PAI_V1&search_scope=default_scope&isFrbr=true&tab=default_tab=en_US=en_US=en_US

[7]

G. T. Swindles et al., 'The long-term fate of permafrost peatlands under rapid climate warming', Scientific Reports, vol. 5, Dec. 2015, doi: 10.1038/srep17951.

[8]

'NASA - Daisyworld - This World Is Black and White'. 18AD [Online]. Available:
<https://www.youtube.com/watch?v=sCxIqgZA7ag>

[9]

'Daisyworld pt.1 : James Lovelock and Gaia'. Nov. 17, 2009 [Online]. Available:
<https://www.youtube.com/watch?v=-gVERGAIeng>

[10]

'Daisyworld pt.2: Gaia and Daisyworld'. Nov. 17, 2009 [Online]. Available:
<https://www.youtube.com/watch?v=1glQShSrk1I>

[11]

'Daisyworld pt.3: Self regulation'. Nov. 17, 2009 [Online]. Available:
https://www.youtube.com/watch?v=4_lszR3B8xI

[12]

'Daisyworld Pt.4: Gaia theory and the real world'. Nov. 17, 2009 [Online]. Available: https://www.youtube.com/watch?v=4_lszR3B8xI

[13]

J. Lovelock, *Gaia: a new look at life on earth*. Oxford: Oxford University Press, 1982.

[14]

J. Lovelock, *The revenge of Gaia: why the earth is fighting back - and how we can still save humanity*, vol. Penguin celebrations. London: Penguin, 2007 [Online]. Available: https://uws-primo.hosted.exlibrisgroup.com/permalink/f/1a10t95/44PAI_ALMA2144190980003931

[15]

J. Lovelock, *The vanishing face of Gaia: a final warning*. London: Allen Lane, 2009 [Online]. Available: https://uws-primo.hosted.exlibrisgroup.com/primo-explore/fulldisplay?docid=44PAI_ALMA2117582640003931&context=L&vid=44PAI_V1&search_scope=default_scope&tab=default_tab=en_US=en_US=en_US

[16]

'NASA - Daisyworld - This World Is Black and White'. 18AD [Online]. Available: <https://www.youtube.com/watch?v=sCxIqgZA7ag>

[17]

R. Monastersky and N. Sousanis, 'The fragile framework', *Nature*, vol. 527, no. 7579, pp. 427–435, Nov. 2015, doi: 10.1038/527427a.

[18]

'The explosive science of volcanoes and peat bogs | Bogology'. [Online]. Available: <http://bogology.org/2014/08/28/the-explosive-science-of-volcanoes-and-peat-bogs/>

[19]

'A Robust Response of the East Asian Monsoon Rainband to Solar Variability | Musings on Quantitative Palaeoecology'. [Online]. Available: <https://quantpalaeo.wordpress.com/2015/02/01/a-robust-response-of-the-east-asian-monsoon-rainband-to-solar-variability/>

[20]

'Animation: Satellite images of surging glaciers in Asia - Carbon Brief'. [Online]. Available: 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

[21]

'How A Simple Truth Can Be A Most Effective Lie - Dan's Wild Wild Science Journal - AGU Blogosphere'. [Online]. Available: <http://blogs.agu.org/wildwildscience/2015/12/06/half-the-truth-can-be-a-most-effective-lie/>

[22]

'The Nitrogen Cascade'. 19AD [Online]. Available: <https://www.youtube.com/watch?v=FCuuibZR6NQ>

[23]

'The most influential climate change papers of all time - Carbon Brief'. [Online]. Available: <http://www.carbonbrief.org/the-most-influential-climate-change-papers-of-all-time>

[24]

A. E. Dessler, 'A Determination of the Cloud Feedback from Climate Variations over the Past Decade', *Science*, vol. 330, no. 6010, pp. 1523-1527, Dec. 2010, doi: 10.1126/science.1192546.

[25]

L. R. Kump, J. F. Kasting, R. G. Crane, and ProQuest (Firm), *The earth system*, Third edition.

Harlow, Essex: Pearson, 2014 [Online]. Available:
<http://www.vlebooks.com/vleweb/product/openreader?id=GlasgowUni&isbn=9781292034867>

[26]

'James Hansen: Why I must speak out about climate change | TED Talk | TED.com'. [Online]. Available:
http://www.ted.com/talks/james_hansen_why_i_must_speak_out_about_climate_change

[27]

'CERES Brochure'. [Online]. Available: http://ceres.larc.nasa.gov/ceres_brochure.php

[28]

R. J. W. Brienen et al., 'Long-term decline of the Amazon carbon sink', *Nature*, vol. 519, no. 7543, pp. 344-348, Mar. 2015, doi: 10.1038/nature14283.

[29]

L. E. Lisiecki and M. E. Raymo, 'A Pliocene-Pleistocene stack of 57 globally distributed benthic $\delta^{18}\text{O}$ records', *Paleoceanography*, vol. 20, no. 1, p. n/a-n/a, Mar. 2005, doi: 10.1029/2004PA001071.

[30]

M. Bell, Late Quaternary environmental change: physical and human perspectives (Chapter 2), 2nd ed. Prentice Hall, 2005 [Online]. Available:
https://uws-primo.hosted.exlibrisgroup.com/primo-explore/fulldisplay?docid=44PAI_ALMA2118149340003931&context=L&vid=44PAI_V1&search_scope=default_scope&tab=default_tab=en_US=en_US=en_US

[31]

N. Roberts, Holocene: an environmental history, Third edition. Chichester, England: Wiley Blackwell, 2014 [Online]. Available:
<https://ebookcentral.proquest.com/lib/gla/detail.action?docID=1568771>

[32]

M. E. Mann et al., 'Proxy-based reconstructions of hemispheric and global surface temperature variations over the past two millennia', Proceedings of the National Academy of Sciences, vol. 105, no. 36, pp. 13252–13257, Sep. 2008, doi: 10.1073/pnas.0805721105.

[33]

'Catalyst: Snowball Earth - ABC TV Science'. [Online]. Available: <http://www.abc.net.au/catalyst/stories/2377133.htm>

[34]

'Plant macrofossils'. [Online]. Available: <http://mires-and-peat.net/pages/volumes/map07/map0706.php>

[35]

'Oxygen Isotopes and the Paleoclimate Record'. 16AD [Online]. Available: <https://www.youtube.com/watch?v=YfRDNyB1XOY>

[36]

'Oxygen Isotopes and the Paleoclimate Record'. 16AD [Online]. Available: <https://www.youtube.com/watch?v=YfRDNyB1XOY>

[37]

L. R. Kump, J. F. Kasting, and R. G. Crane, 'Chapter 14, Pliestocene Glaciations.', in The Earth System (Third Edition). Kump, Kasting, Crane., 3rd ed., Pearson, 2014 [Online]. Available: https://uws-primo.hosted.exlibrisgroup.com/primo-explore/fulldisplay?docid=44PAI_ALMA2119128100003931&context=L&vid=44PAI_V1&search_scope=default_scope&isFrbr=true&tab=default_tab=en_US=en_US=en_US=en_US

[38]

'Milankovitch Tutorial'. [Online]. Available: <http://www.sciencecourseware.org/eec/GlobalWarming/Tutorials/Milankovitch/>

[39]

G. T. Swindles et al., 'Spheroidal carbonaceous particles are a defining stratigraphic marker for the Anthropocene', *Scientific Reports*, vol. 5, May 2015, doi: 10.1038/srep10264.

[40]

'James Balog: Time-lapse proof of extreme ice loss | TED Talk | TED.com'. [Online]. Available: http://www.ted.com/talks/james_balog_time_lapse_proof_of_extreme_ice_loss

[41]

K. K. Kjeldsen et al., 'Spatial and temporal distribution of mass loss from the Greenland Ice Sheet since AD 1900', *Nature*, vol. 528, no. 7582, pp. 396–400, Dec. 2015, doi: 10.1038/nature16183.

[42]

'Are ice sheet losses overestimated?' [Online]. Available: <http://www.skepticalscience.com/Are-ice-sheet-losses-overestimated.html>

[43]

J. Bamber, 'Ice sheet modelling proves a slippery subject' [Online]. Available: <http://environmentalresearchweb.org/cws/article/opinion/30465>

[44]

'GEF - Bhutan: Silent Tsunami'. 25AD [Online]. Available: <https://www.youtube.com/watch?v=BexXgQakves>

[45]

J. Holden, An introduction to physical geography and the environment, 3rd ed. Harlow, Essex: Pearson, 2012 [Online]. Available: <https://www.vlebooks.com/vleweb/product/openreader?id=GlasgowUni&isbn=9780273740>

872

[46]

J. A. MacGregor et al., 'Holocene deceleration of the Greenland Ice Sheet', *Science*, vol. 351, no. 6273, pp. 590–593, Feb. 2016, doi: 10.1126/science.aab1702.

[47]

J. Holden, 'Chapter 7: Soil and the Environment', in *An introduction to Physical geography and the Environment*, Pearson Prentice Hall, 2010 [Online]. Available: [https://uws-primo.hosted.exlibrisgroup.com/primo-explore/fulldisplay?docid=44PAI_ALMA2118629800003931&context=L&vid=44PAI_V1&search_scope=default_scope&isFrbr=true&tab=default_tab\[\]&lang=en_US](https://uws-primo.hosted.exlibrisgroup.com/primo-explore/fulldisplay?docid=44PAI_ALMA2118629800003931&context=L&vid=44PAI_V1&search_scope=default_scope&isFrbr=true&tab=default_tab[]&lang=en_US)

[48]

N. C. Brady, *The nature and properties of soils*. Prentice Hall, 1998 [Online]. Available: [https://uws-primo.hosted.exlibrisgroup.com/primo-explore/fulldisplay?docid=44PAI_ALMA2124386220003931&context=L&vid=44PAI_V1&search_scope=default_scope&tab=default_tab\[\]&lang=en_US\[\]&lang=en_US](https://uws-primo.hosted.exlibrisgroup.com/primo-explore/fulldisplay?docid=44PAI_ALMA2124386220003931&context=L&vid=44PAI_V1&search_scope=default_scope&tab=default_tab[]&lang=en_US[]&lang=en_US)

[49]

'Welcome to the British Society of Soil Science | British Society of Soil Science'. [Online]. Available: <http://soils.org.uk/>

[50]

P. H. Bellamy, P. J. Loveland, R. I. Bradley, R. M. Lark, and G. J. D. Kirk, 'Carbon losses from all soils across England and Wales 1978–2003', *Nature*, vol. 437, no. 7056, pp. 245–248, Sep. 2005, doi: 10.1038/nature04038.

[51]

L. R. Kump, J. R. Kasting, and R. G. Crane, 'Chapter 5, The Ocean Circulation.', in *The Earth System*, 3rd ed., Pearson, 2014 [Online]. Available: [https://uws-primo.hosted.exlibrisgroup.com/primo-explore/fulldisplay?docid=44PAI_ALMA2119128100003931&context=L&vid=44PAI_V1\[\]&lang=en_US&search_scope=default_scope&adaptor=Local%20Search%20Engine&isFrbr=true&tab=default_](https://uws-primo.hosted.exlibrisgroup.com/primo-explore/fulldisplay?docid=44PAI_ALMA2119128100003931&context=L&vid=44PAI_V1[]&lang=en_US&search_scope=default_scope&adaptor=Local%20Search%20Engine&isFrbr=true&tab=default_)

tab&query=any,contains,The%20Earth%20System&sortby=date&facet=frb
rgroupid,include,2195378439&offset=0

[52]

W. Cai et al., 'ENSO and greenhouse warming', *Nature Climate Change*, vol. 5, no. 9, pp. 849–859, Aug. 2015, doi: 10.1038/nclimate2743.

[53]

L. R. Kump, J. F. Kasting, and R. G. Crane, 'Chapter 4. The Atmospheric Circulation System.', in *The Earth System*, 3rd ed., Pearson, 2014 [Online]. Available: https://uws-primo.hosted.exlibrisgroup.com/primo-explore/fulldisplay?docid=44PAI_ALMA2119128100003931&context=L&vid=44PAI_V1=en_US&search_scope=default_scope&adaptor=Local%20Search%20Engine&isFrbr=true&tab=default_tab&query=any,contains,The%20Earth%20System&sortby=date&facet=frb&rgroupid,include,2195378439&offset=0