

## Further Reading List for London Lecture: 'Earth's Climate Evolution'

Colin Summerhayes, Scott Polar Research Institute, University of Cambridge

Wednesday 15 April

The reading list can also be found at <http://www.geolsoc.org.uk/climateevolution>

### Popular Articles and Resources

#### 1. Background Information

- a. BBC Science and Environment – A brief history of climate change

<http://www.bbc.co.uk/news/science-environment-15874560>

- b. NASA – Global Climate Change – Vital Signs of the Planet, Evidence for Climate Change

<http://climate.nasa.gov/evidence/>

- c. NASA Earth Observatory – Feature on John Tyndall

<http://earthobservatory.nasa.gov/Features/Tyndall/>

- d. The Guardian – Svante Arrhenius, 'The Father of Climate Change'

<http://www.theguardian.com/environment/2005/jun/30/climatechange.climatechangeenvironment2>

- e. Geosociety – 'Rock Stars' – Thomas Chowder Chamberlain

<http://www.geosociety.org/gsatoday/archive/16/10/pdf/i1052-5173-16-10-30.pdf>

- f. Kings College London – Biography of Charles Lyell

<http://www.kcl.ac.uk/aboutkings/history/famouspeople/charleslyell.aspx>

- g. Pangea – An animated documentary on the life of polar explorer Alfred Wegener, the unlikely scientist behind the continental drift theory.

[https://www.youtube.com/watch?v=mRqjo-N\\_TDU](https://www.youtube.com/watch?v=mRqjo-N_TDU)

- h. Encyclopaedia of Earth – James Cross and the astronomical theory of climate change

<http://www.eoearth.org/view/article/153942/>

- i. NOAA Paleoclimatology – Astronomical Theory of Climate Change & The Milankovitch Theory

<http://www.ncdc.noaa.gov/paleo/milankovitch.html>

- j. Open University – Palaeoenvironmental Change – Isotope Geochemistry

<http://palaeoenvironmentalchange.org/themes/geochemistry/>

## 2. Geological Society Resources

- a. Climate change: evidence from the geological record

<http://www.geolsoc.org.uk/climaterecord>

- b. Climate change resource page, including videos of past lectures, policy submissions and Geoscientist articles

<http://www.geolsoc.org.uk/climatechange>

- c. Geological Society Blog - 'Earth's Climate Evolution', a guest post from Colin Summerhayes

<http://blog.geolsoc.org.uk/2015/04/13/earths-climate-evolution-a-geological-perspective-on-climate-change/>

## **Journal Articles and Books**

1. Alley, R.B. (2000) *The Two-Mile Time Machine: Ice Cores, Abrupt Climate Change, and our Future*, Princeton Univ. Press, Princeton, 229 pp.
2. Alley, R.B. (2011) *Earth: The Operators' Manual*, Norton, New York, 479 pp.
3. Alverson, K., Bradley, R.S., and Pedersen, T. (2003) *Paleoclimate, Global Change and the Future*, Springer, London, 220pp.
4. Archer, D., and Pierrehumbert, R. (2011) *The Warming Papers: The Scientific Foundation for the climate Change Forecast*, Wiley-Blackwell, Chichester, 419 pp.
5. Battarbee, R.W., and Binney, H.A., (eds.) (2008) *Natural Climate Variability and Global Warming: A Holocene Perspective* Wiley-Blackwell, Chichester, 276 pp.
6. Broecker, W. (2010) *The Great Ocean Conveyor: Discovering the Trigger for Abrupt Climate Change*, Princeton Univ. Press, Princeton, 154 pp.

7. Cowie, J. (2013) *Climate Change: Biological and Human Aspects*, 2nd Ed., Cambridge Univ. Press, Cambridge, 558 pp.
8. Cronin, T.M. (2010) *Paleoclimates*, Columbia Univ. Press, New York, 441 pp.
9. Hay, W.W. (2013) *Experimenting on a Small Planet: A Scholarly Entertainment*, Springer, London, 983 pp.
10. Jouzel, J., Lorius, C., and Raynaud, D. (2013) *The White Planet: The Evolution and Future of our Frozen World*, Princeton Univ. Press, Princeton, 306 pp.
11. Köppen, W. and Wegener, A. (1924) *Die Klimate der geologischen Vorzeit*, Borntraeger Publishing House, Berlin, 255 pp. Reprinted in 2015 by the same publishing house, as well a translation into English by Bernard Oelkers (Bremen).
12. Maccougall, D. (2006) *Frozen Earth: The Once and Future Story of Ice Ages*, Calif. Univ. Press, Berkeley, 256 pp.
13. Mann, M.E. (2012) *The Hockey Stick and the Climate Wars: Dispatches from the Front Lines*, Columbia Univ. Press, New York, 395 pp.
14. Masson-Delmotte, V. (2011) *Climat: Le Vrai et le Faux*, Éditions Le Pommier, Paris, 103 pp.
15. Mayewski, P.A., and White, F. (2002) *The Ice Chronicles: The Quest to Understand Global Climate Change*, University Press of New England, Hanover, 233 pp.
16. North, G.R., et al. (2006) *Surface Temperature Reconstructions for the Last 2,000 Years*, National Academies Press, Washington, D.C., 145 pp.
17. Pollack, H. (2009) *A World Without Ice*, Avery-Penguin, New York, 290 pp.
18. Ruddiman, W.F. (2005) *Plows, Plagues and Petroleum*, Princeton Univ. Press, Princeton, 202 pp.
19. Turner, J., and Marshall, G.J. (2011), *Climate Change in the Polar Regions*, Cambridge Univ. Press, 434 pp.
20. Zalasiewicz, J., and Williams, M. (2012) *The Goldilocks Planet: The Four Billion Year Story of Earth's Climate*, Oxford Univ. Press, Oxford, 303 pp.