

Steve McIntyre

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Steven McIntyre (born c. 1947) is a Canadian mining exploration company director, a former minerals prospector and semi-retired mining consultant whose work has included statistical analysis. He is best known as the founder and editor of Climate Audit, a blog devoted to the analysis and discussion of climate data. He is most prominent as a critic of the temperature record of the past 1000 years and the data quality of NASA's Goddard Institute for Space Studies. He is known in particular for his statistical critique, with economist Ross McKittrick, of the hockey stick graph which appears to show that the increase in late 20th century global temperatures is unprecedented in the past 1,000 years.^[1]

Contents

- 1 Early life and education
- 2 Career
- 3 The Hockey stick controversy
- 4 ClimateAudit.org
 - 4.1 Auditing
 - 4.2 Role in the Climatic Research Unit controversy
- 5 Selected publications
- 6 See also
- 7 References
- 8 External links

Steve McIntyre

Born	c. 1947
Nationality	Canadian
Education	BSc (mathematics) MA (philosophy, politics, and economics)
Alma mater	University of Toronto University of Oxford
Occupation	Mining consultant
Known for	Critique of the hockey stick graph

Website

Climate Audit (<http://www.climateaudit.org>)

Early life and education

McIntyre, a native of Ontario, attended the University of Toronto Schools, a university-preparatory school in Toronto, finishing first in the national high school mathematics competition of 1965.^[2] He went on to study mathematics at the University of Toronto and graduated with a bachelor of science degree in 1969. McIntyre then obtained a Commonwealth Scholarship to read philosophy, politics and economics (PPE) at

Corpus Christi College, Oxford, graduating in 1971.^{[1][2]} Although he was offered a graduate scholarship, McIntyre decided not to pursue studies in mathematical economics at the Massachusetts Institute of Technology.^[2]

Career

McIntyre worked for 30 years in the mineral business,^[2] the last part of these in the hard-rock mineral exploration as an officer or director of several public mineral exploration companies.^[3] He was a policy analyst for several years for the governments of Ontario and of Canada.^[4] He was the president and founder of Northwest Exploration Company Limited and a director of its parent company, Northwest Explorations Inc. When Northwest Explorations Inc. was taken over in 1998 by CGX Resources Inc. to form the oil and gas exploration company CGX Energy Inc., McIntyre ceased being a director. McIntyre was a strategic advisor for CGX in 2000 through 2003.^[5] McIntyre says that during his career his skills in statistical analysis enabled him to analyse mineral prospecting data and out-bet his rivals.^[6]

Prior to 2003 he was an officer or director of several small public mineral exploration companies. He retired from full-time work, but still sometimes engaged in mining consultancy.^[7] He is an active squash player and once won a gold medal in the World Masters Games in squash doubles.^[2]

In April 2011, Trelawney Mining and Exploration Inc. of Toronto, Ontario announced the appointment of McIntyre to their board of directors and then later to chairman in June 2011.^{[8][9]} In September 2011, McIntyre was appointed to the board of directors of Augen Gold Corp. which was shortly acquired by Trelawney Mining and Exploration Inc. in November 2011.^{[10][11]} In October 2011, McIntyre was appointed to the board of directors of Southeast Asia Mining Corp. and later resigned in May 2012.^{[12][13]} Trelawney Mining and Exploration Inc. was acquired by Iamgold Corporation in June 2012.^[14]

The Hockey stick controversy

In 2002, McIntyre became interested in climate science after a leaflet from the Canadian government warning of the dangers of global warming was delivered to his residence. McIntyre states that he noticed discrepancies in climate science papers that reminded him of the false prospectus that had duped investors involved in the Bre-X gold mining scandal.^[6]

The Canadian government pamphlets were based on the IPCC Third Assessment Report section which prominently displayed the hockey stick graph based on the 1999 reconstruction by Mann, Bradley and Hughes (MBH99). McIntyre began studying Mann's research which had produced the graph, and met Ross McKittrick.^[15] They co-authored two papers disputing the data and methodology set out in the Mann, Bradley and Hughes 1998 journal article (MBH98).^[16] McIntyre has remarked on how his suspicions of this graph were aroused: "In financial circles, we talk about a hockey stick curve when some investor presents you with a nice, steep curve in the hope of palming something off on you."^[17]

McIntyre & McKittrick's papers were cited by Senator Jim Inhofe and Representative Joe Barton to support their political criticisms of the MBH studies, and Representative Sherwood Boehlert requested the US National Academy of Sciences to arrange an investigation. The outcome was the North Report, published in

2006, which endorsed the MBH studies with a few reservations. The principal component analysis methodology criticised by McIntyre & McKittrick had a small tendency to bias results so was not recommended, but it had little influence on the final reconstructions, and other methods produced similar results.^[18]

ClimateAudit.org

McIntyre's blog has as a recurrent topic the struggle to obtain underlying data from peer reviewed papers. McIntyre has stated that he started Climate Audit so that he could defend himself against attacks being made at the climatology blog RealClimate.^[19] An earlier website, Climate2003, provided additional information for papers co-written by McIntyre and Ross McKittrick, including raw data and source code, and comments by McIntyre. On 26 October 2004 McIntyre commented on climate2003.com, "Maybe I'll start blogging some odds and ends that I'm working on. I'm going to post up some more observations on some of the blog criticisms."^[20] On 1 December Mann and nine other scientists launched the RealClimate website.^[21] On 2 February McIntyre set up his Climate Audit blog, having found difficulties with posting comments on the climate2003.com layout.^[22]

Climate Audit was co-winner of a 2007 Weblog Award for "Best Science Blog", receiving 20,000 votes in the online poll.^[23]

Auditing

Stephen McIntyre has been highlighted by the press including *The Wall Street Journal*.^[24]

In 2007, McIntyre started auditing the various corrections made to temperature records, in particular those relating to the urban heat island effect. He discovered a discontinuity in some U.S. records in the Goddard Institute for Space Studies (GISS) dataset starting in January 2000. He emailed GISS advising them of the problem and within a couple of days GISS issued a new, corrected set of data and thanked McIntyre for "bringing to our attention that such an adjustment is necessary to prevent creating an artificial jump in year 2000".^[25] The adjustment caused the average temperatures for the continental United States to be reduced about 0.15 °C during the years 2000-2006. Changes in other portions of the record did not exceed 0.03 °C; it made no discernible difference to the global mean anomalies.

McIntyre later commented:^[26]

My original interest in GISS adjustment procedures was not an abstract interest, but a specific interest in whether GISS adjustment procedures were equal to the challenge of "fixing" bad data. If one views the above assessment as a type of limited software audit (limited by lack of access to source code and operating manuals), one can say firmly that the GISS software had not only failed to pick up and correct fictitious steps of up to 1 deg C, but that GISS actually introduced this error in the course of their programming. According to any reasonable audit standards, one would conclude that the GISS software had failed this particular test. While GISS can (and has) patched the particular error that I reported to them, their patching hardly proves the merit of the GISS (and USHCN) adjustment procedures. These need to be carefully examined.

Role in the Climatic Research Unit controversy

Colby Cosh, writing for Maclean's magazine, believes McIntyre's criticisms of climate science are at the heart of the Climatic Research Unit email controversy in November–December 2009. McIntyre is mentioned over 100 times in the hacked emails. In the emails, one climate researcher dismisses him as a "bozo". Others speculate over his funding, and argue about whether to ignore or counterattack him—although, according to Cosh, some unnamed scientists acknowledge that his criticisms have merit.^[1]

The Associated Press analysis of the CRU e-mails stated: "Some e-mails said McIntyre's attempts to get original data from scientists are frivolous and meant more for harassment than doing good science. There are allegations that he would distort and misuse data given to him. McIntyre disagreed with how he is portrayed. 'Everything that I've done in this, I've done in good faith,' he said."^[27] The independent Science Assessment Panel's chair, Lord Oxburgh, said at a press conference that the repeated FOI requests made by Steve McIntyre and others could have amounted to a campaign of harassment, and the issue of how FOI laws should be applied in an academic context remained unresolved.^[28]

In May 2010 BBC environment analyst Roger Harrabin wrote that McIntyre "arguably knows more about CRU science than anyone outside the unit - but none of the CRU inquiries has contacted him for input." ^[29] In March McIntyre had submitted evidence to the Independent Climate Change Email Review (chaired by Sir Muir Russell), and points he raised were discussed in the Review report published on 7 July 2010.^[30] *New Statesman* named McIntyre as 32nd of its "50 People Who Matter 2010", citing his role in the email controversy. It said "The influence might not be positive, but there's no doubt he has shaped the debate."^[31]

Selected publications

- McIntyre, Stephen; McKittrick, Ross (2003). "Corrections to the Mann et al. (1998) Proxy Data Base and Northern Hemispheric Average Temperature Series" (<http://multi-science.metapress.com/content/r27321306377t46n/>). *Energy & Environment* **14** (6): 751–771. doi:10.1260/095830503322793632 (<https://dx.doi.org/10.1260%2F095830503322793632>).
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See also

- Global warming controversy
- Instrumental temperature record - Calculating the global temperature

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External links

McIntyre's websites and publications

- ClimateAudit (<http://climateaudit.org/>) — McIntyre's blog
- Publications by Stephen McIntyre and Ross McKittrick (<http://sites.google.com/site/rossmckitrick/>) (at McKittrick's site).
- Article detailing the Wegman and North Reports with links and summarization (<http://www.climateaudit.org/?p=2322>)
- McIntyre's biography (<http://www.uoguelph.ca/~rmckitri/research/stevebio.doc>) (.doc file, last updated in 2003)
- The M&M Project: Replication Analysis of the Mann *et al.* Hockey Stick (<http://www.uoguelph.ca/~rmckitri/research/trc.html>) at McKittrick's website
- "The IPCC, the 'Hockey Stick' Curve, and the Illusion of Experience (<http://www.marshall.org/article.php?id=188>) by McIntyre and McKittrick, Marshall Institute, 18 November 2003
- Publications by McIntyre (<http://www.marshall.org/experts.php?id=98>) at the Marshall Institute's website
- McIntyre's interview on BBC (<http://www.climateaudit.org/pdf/news/bbc.aug07.MP3>)

Articles about McIntyre and responses

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- Nasa climate change error spotted by blogger (<http://www.telegraph.co.uk/earth/main.jhtml?xml=/earth/2007/08/16/eaclimate116.xml>), Natalie Paris, *Daily Telegraph*, 16 August 2007.
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- "Revenge of the Climate Laymen" (<http://online.wsj.com/article/SB10001424052748704335904574496850939846712.html>), *Wall Street Journal* Europe article on McIntyre & Climate Audit, November 18, 2009.

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- Profile of McIntyre (<http://www.thestar.com/printarticle/737357>) at the Toronto Star, December 12, 2009
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| Businesspeople in mining

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