

Global Warming



There is much controversy amongst scientists and others about whether or not global warming is actually occurring, and if it is, whether the activities of humans are a significant cause. Many articles, reports and books have been written giving different views on this phenomenon.

The websites listed below contain articles or reports that include statistical evidence to support the view being expressed. For your coursework portfolio you must analyse some statistical work done by someone else. You could use one or more articles or reports from this list for this purpose.

What you should do:

1. Look carefully at what is available on the websites and choose one or more of the reports or articles to analyse. Alternatively you can use other reports or articles that you find for yourself.
2. Print or photocopy the work you have chosen to analyse.
3. Write a report that critically analyses the use made of statistics in the work you have chosen. In your report you should consider whether you as reader of the work should accept or reject any reported findings based on the information available to you.

Websites with Information about Global Warming

<http://www.ipcc.ch>

Intergovernmental Panel on Climate Change: 'WG I Climate Change 2001 The Scientific Basis' - Summary for Policymakers and Technical Report

<http://archive.greenpeace.org/~climate/science/reports/fossil.pdf>

Greenpeace Report: 'Fossil Fuels and Climate Protection: Carbon Logic'

<http://www.meto.govt.uk/research/hadleycentre/pubs/brochures/B2000/index.html>

Hadley Centre: 'COP6 - Climate Change'

http://www.giss.nasa.gov/research/intro/hansen_04

NASA Goddard Institute for Space Studies: 'A Common Sense Climate Index: Is Climate Changing Noticeably?' (with links to other information)

<http://www.epa.gov/globalwarming>

US Environmental Protection Agency: short on-line summary with links to more detailed reports.



<http://uspirg.org/reports/flirtingwithdisaster01.pdf>

US Public Interest Research Groups report: 'Flirting with Disaster'

<http://www.ucsusa.org/index.html>

Union of Concerned Scientists – Global Warming with links to information and charts

<http://users.erols.com/dhoyt1/index.html>

'Greenhouse Warming: Fact, Hypothesis, or Myth? - A look at the scientific evidence.'

<http://www.climateark.org/vital>

Climate Change Overview - Climate graphics with interpretations.

<http://www.whrc.org/globalwarming/warmingearth.htm>

US Woods Hole Research Centre 'The Warming of the Earth - A beginner's guide to understanding the issue of global warming'.

<http://www.pbs.org/wgbh/warming>

Nova & Frontline: 'What's Up with the Weather?' – On-line information including 'graphs tell the story'.

<http://www.abd.org.uk>

'Climate Change Truths' from the Association of British Drivers

http://www.accesstoenergy.com/ate/9711/ate_1197.pdf

Article in Access to Energy Newsletter

<http://www.greeningearthsociety.org/Articles/2000/surface1.htm>

Report from the Greening Earth Society

<http://www.cato.org/pubs/pas/pa329a.pdf>

Policy Analysis by Patrick J Michaels of the Cato Institute



Teacher Notes

Unit Advanced Level, Using and applying statistics

Notes

This assignment is intended to provide the evidence for section 2 of the coursework portfolio requirements (reproduced below from the specification for this unit).

What you need to produce	You must:
2 A report in which you have analysed critically the statistical work of others. This should consider whether you as reader of the work should accept or reject any reported findings based on the information available to you	

The portfolio requirement should be discussed with students before they start this activity.

Students need to understand that:

- it is not their own views about global warming that should be the focus of their report, but the way in which someone else has used statistics to support their views;
- they should comment on the appropriateness and accuracy of the measures and diagrams used, the clarity of their presentation and to what extent they support the views being expressed;
- the comments they make about the use of statistical measures and diagrams can be positive as well as negative and in some cases a suitable comment might be that further information is needed before the truth can be judged;
- they should consider how alternative samples, measures and diagrams could have been used;
- they should consider how the chosen sample may affect how the results should be interpreted, how particular results and findings have been highlighted and how other conclusions could have been drawn.

Note that the websites listed above vary widely in the amount of scientific knowledge that they assume from their readers. Some of the reports are long and complex whereas others are much more superficial and easier to understand. It is recommended that you have a look at each website, select those that you think are most suitable for your students, then edit the Word version of this assignment to show only those websites that you think are appropriate. The websites at the start of the list support the view that human activities are a significant cause of global warming. The websites at the end of the list tend to argue that global warming either is not occurring or that it is a natural phenomenon and that there is not yet sufficient evidence to support the measures introduced as a consequence of the Kyoto Protocol. Students could choose to analyse just one of the reports or compare and contrast two reports.

As well as searching for other websites, students could also be encouraged to look for and use relevant reports from newspapers, magazines or books.

