



Senator Chris Evans
Leader of the Government in the Senate
Minister for Tertiary Education, Skills, Science and Research

Mr Scott Morrison MP
Member for Cook
PO Box 1306
CRONULLA NSW 2230

Dear Mr Morrison

Thank you for your letter of 10 February 2012 on behalf of your constituent, Mr Cummings, concerning global climate models and the global hydrological cycle.

I have asked CSIRO to consider the questions posed by Mr Cummings. The global climate model used by CSIRO provides robust simulations of Australia's past and future climate. Global climate models are thoroughly tested against observed data and reproduce many observed features of the current climate and past climate changes. They are based on known laws of physics, equations and observational data that describe the functioning of the atmosphere, ocean, sea ice, snow cover, the land surface, and other elements of the climate system.

CSIRO regards this as an area of important and ongoing research to address uncertainties that remain in the effect of global warming on the global hydrological cycle. CSIRO suggests that Mr Cummings be encouraged to develop his ideas more fully and prepare a paper for submission to a scientific journal.

CSIRO also advises that this uncertainty does not alter the conclusion that increasing levels of greenhouse gases in the Earth's atmosphere is causing global warming. The available observational record provides clear evidence of this global warming.

Further information about climate science and global climate models is available at <http://www.csiro.au/en/Outcomes/Climate/Understanding.aspx> and <http://www.csiro.au/news/Reliability-Climate-Models.html>.

I trust the information provided is helpful.

Yours sincerely

CHRIS EVANS

07 MAR 2012