

Senate Standing Committee on Economics
ANSWERS TO QUESTIONS ON NOTICE
Industry, Innovation, Science, Research and Tertiary Education Portfolio
Additional Estimates Hearing 2011-12
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AGENCY/DEPARTMENT: COMMONWEALTH SCIENTIFIC AND INDUSTRIAL RESEARCH ORGANISATION

TOPIC: ‘State of the Climate’ leaflet

REFERENCE: Written Question –Senator Bernardi

QUESTION No.: AI-68

The CSIRO’s leaflet ‘State of the Climate’ (released 5 July 2010) includes a map from the Bureau of Meteorology about the trend in annual rainfall from 1960-2009, to illustrate that “the geographic distribution of rainfall has changed significantly over the past 50 years.”

Why did the CSIRO not choose the trend in annual rainfall map from 1900-2009, which is also available from the Bureau of Meteorology? This map indicates that much of Australia actually got wetter from 1900-2009.

Link to State of the Climate leaflet: <http://www.csiro.au/Outcomes/Climate/Understanding/State-of-the-Climate.aspx>

ANSWER

CSIRO and the Bureau of Meteorology jointly released the *State of the Climate 2010* on 15 March 2010 (<http://www.csiro.au/en/Portals/Media/State-of-the-Climate.aspx> - updated on 5 July 2010).

Australia’s Bureau of Meteorology are responsible for measuring rainfall and analysing trends in rainfall amounts.

The intent of the rainfall section in the *State of the Climate 2010* is to show the changing geographical distribution of rainfall using observational data from the Bureau of Meteorology; i.e. observational data shows that some areas are getting wetter and other areas are becoming drier.

The complete section in the *State of the Climate 2010* states:

“While total rainfall on the Australian continent has been relatively stable, the geographic distribution of rainfall has changed significantly over the past 50 years. Rainfall decreased in south-west and south-east Australia, including all the major population centres, during the same period.”

The *Climate Science Update* prepared by CSIRO and the Bureau of Meteorology in 2011 (Keenan and Cleugh, 2011), also using the rainfall data and analyses from the Bureau of Meteorology, concluded that:

“Trends in annual mean rainfall during 1900-2010 are presented in Fig. 1.9. Monsoonal rainfall has increased in the Top End and the north-west of the continent since 1900, while rainfall declined in parts of the south-west, north-east and south-east.”

This shows that the statement “the geographic distribution of rainfall has changed significantly over the past 50 years” also applies for the longer period of 1900-2010.

These trends are apparent in the Bureau of Meteorology maps available at <http://www.bom.gov.au/cgi-bin/climate/change/trendmaps.cgi>.

Reference:

KB Keenan, T.D. and Cleugh, H.A. (Editors). 2011. Climate Science Update: A Report to the 2011 Garnaut Review. CAWCR Technical Report No. 036
<http://www.cawcr.gov.au/publications/technicalreports.php>