

**Senate Standing Committee on Environment and Communications
Legislation Committee**

Answers to questions on notice
Environment and Energy portfolio

Question No: 260
Hearing: Additional Estimates
Outcome: Agency
Program: Bureau of Meteorology (BoM)
Topic: Homogenisation
Hansard Page:
Question Date: 6 March 2017
Question Type: Written

Senator Roberts asked:

The Bureau's homogenisation process has been peer-reviewed at least twice; but reviews have been top-down: about the process, not data; nor were they intended to be critical. The null hypothesis that the homogenisation process may be flawed was not investigated. Furthermore, as CSIRO invests heavily in various facets of climate-warming climate change, it is not in a position to conduct an 'independent' review of the Bureau's processes.

Why haven't the issues raised here been brought to light before? Did peer-review include inspections of weather stations; examinations of data and metadata; has anybody undertaken an independent audit of the Bureau's assets, capabilities and methodologies from the ground-up?

Answer:

As noted in the question, the Bureau's homogenisation process has undergone two independent reviews. Both reviews critically examined the Bureau's practices in observing and analysing temperature data, including instrumental requirements, quality control, data handling and scientific analyses and homogenisation methods. Neither review was conducted by CSIRO.

The reviews undertaken represent comprehensive assessments of observing practices from the 'ground up' within the practical limits of cost and resources associated with such a complex task. While neither review involved physical site inspections, the relevant design and operational maintenance practices were assessed, including with respect to international practices and WMO specifications. The Bureau's data quality control and metadata handling practices were also examined.

Further information on the nature and findings of these reviews can be found at www.bom.gov.au/climate/change/acorn-sat/.