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The Hon. Bob Baldwin MP
Parliamentary Secretary for the Minister to Environment
PO Box 6022
House of Representatives
Parliament House
CANBERRA ACT 2600

Dear Mr Baldwin,

Re: Recommendations for the Review Panel appointed to review official national temperature records.

On the Bureau of Meteorology (BOM) website, there is a mismatch in a graph of BOM and international temperature anomalies for Australia – please see attached summary. This type of error should have been picked up during editing.

This graph of BOM and international annual temperature anomalies also shows quite clearly (please see attached summary) that, because of the wide range of values for each year, ranging from 0.1 to 0.5 degrees C., any temperature anomaly announced should be restricted to one place of decimal with a stated error of +/- 0.1 degrees C; the use of hundredths of a degree should be avoided.

Yours sincerely,

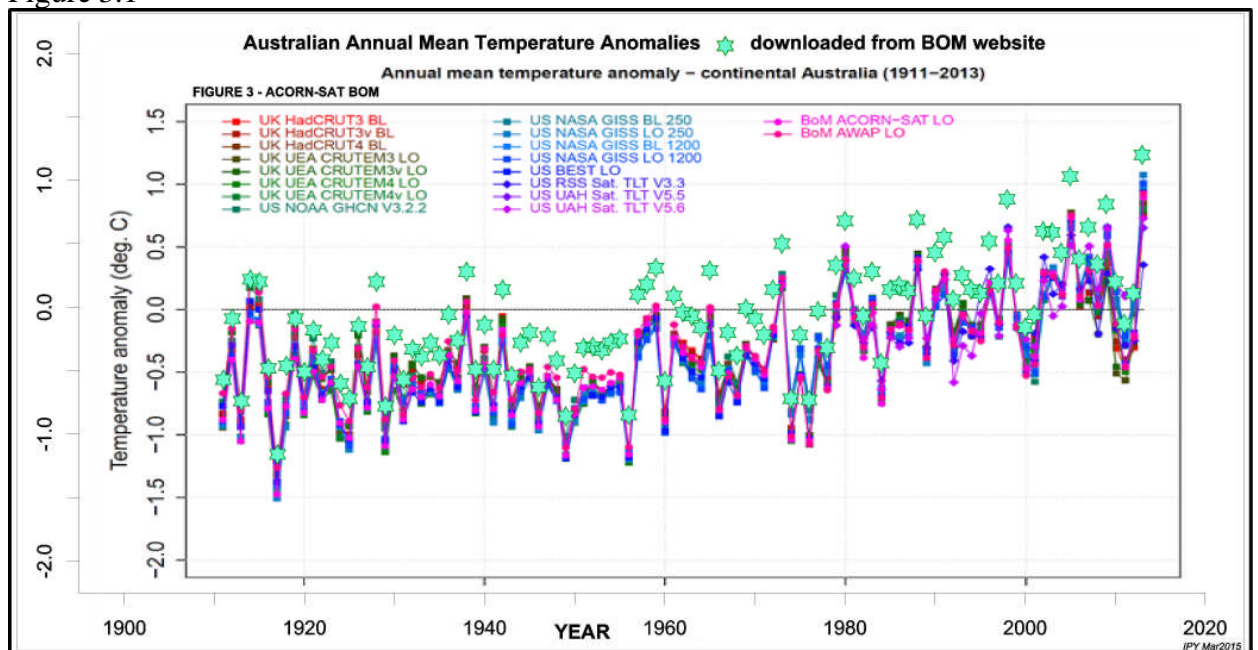


Ian Youles

Mismatch of ACORN-SAT temperature annual values and international climate data - BOM.

As the ACORN-SAT temperature annual values for Australia are not readily discernable in Figure 3 from <http://www.bom.gov.au/climate/change/acorn-sat/#tabs=Adjustments>, those values were acquired from the BOM website and added to that Figure 3. The result, Figure 3.1, below, shows that the Figure 3 data (which also includes BOM data) appear to be 0.25 to 0.5 degrees below the downloaded BOM data. This should have been corrected during editing.

Figure 3.1



Error Range to Accompany Any Announcements of Calculated Temperature Anomalies

International climate data for Australia demonstrate clearly that any announcement of a calculated temperature anomaly should be stated to one decimal place with an error range of ± 0.1 degree C.

In the following extract from the Bureau of Meteorology (BOM) website, no mention is made by BOM about the wide spread of anomalous values (which includes BOM values) for each year from at least 18 different methods. In general, that spread is about ± 0.1 to 0.15 degrees C.

This means that whatever individual organizations may state as the error for their temperature calculations, the actual error or uncertainty in real world terms is at least ± 0.1 degrees C. This should be stated with all announcements of any temperature change; the use of hundredths of a degree in announcements should be avoided.

Extract from BOM document at: <http://www.bom.gov.au/climate/change/acorn-sat/#tabs=Adjustments>:-

“Comparison with international climate data

The warming trend across Australia is also evident in at least 18 different methods of preparing and analysing the temperature data.

The graph below represents Australian temperatures from multiple authoritative sources, including overseas agencies who (sic) prepare their own estimates of

temperature changes over Australia. These data include a mix of homogenisation techniques, unadjusted data and satellite data.

A comparison of 18 different estimates of Australian annual average temperatures for 1911 to 2013 shows the same overall warming trend. The data come from the Bureau of Meteorology (ACORN-SAT homogenised, AWAP raw), satellites ('Sat'), and 15 international datasets.

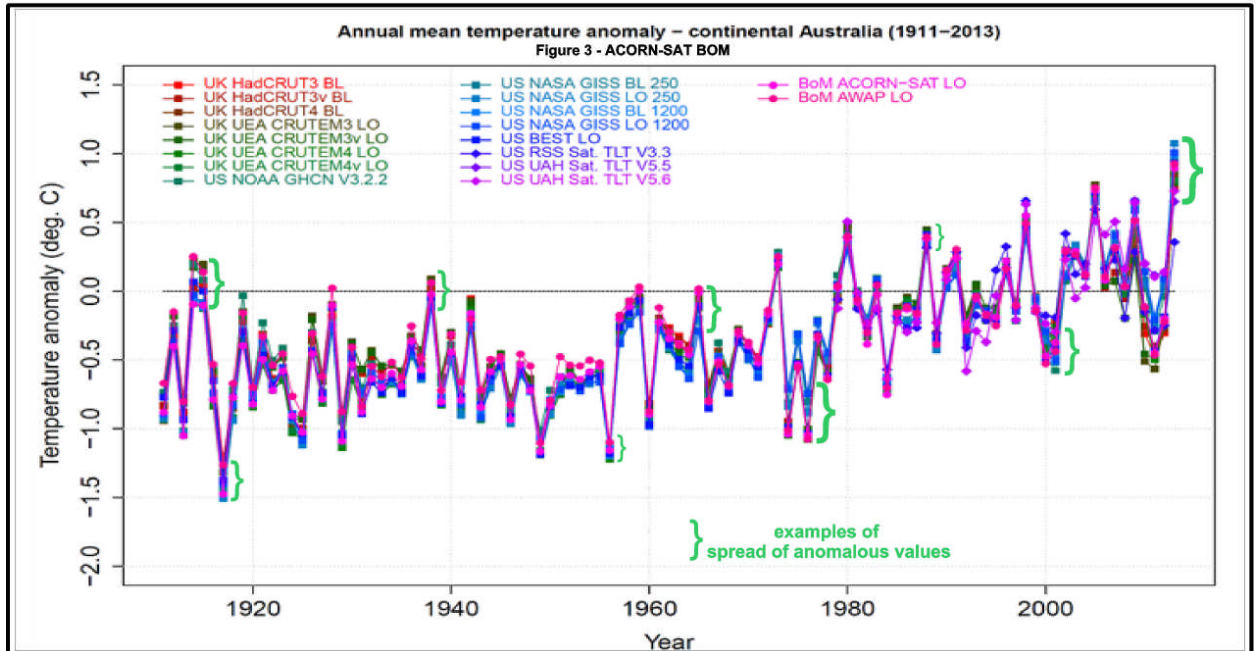


Figure 3: Comparison of 18 different Australian and international temperature datasets for Australia.”

Note: spread of anomalous values for each year is generally 0.2 to 0.3 degrees C within a range of 0.1 to 0.5 degrees C.