

A. Additional Notes for understanding the charts:

- The red plot lines are either daily maxima anomalies (ACORN – CDO) or in some charts where CDO data is missing, may additionally show blocks of temperatures, (not temperature differences/anomalies). Blue plots are daily minima.
- The daily data are on a highly compressed scale spanning up to ~38,000 days across the page. In most cases an annual cycle is clearly evident because of seasonality.
- Some data may be smothered by that plotted secondly. A choice is made as to which sequence is best to display, (generally minima over maxima).
- In some charts where it is appropriate to show it, those values that go up or down (in °C) to the boundaries of the chart are the result of no data in either ACORN or CDO and thus are corrupted, (they are not anomalies in the sense as used here). If employed, they are mostly of interest in indicating the completeness of the record or a particular distribution of bad data.
- The horizontal zero axis origin is typically not at the base of the chart because of both positive and negative temperature anomalies.
- In all cases, running back in time from 2014, for unknown reasons, ACORN is the same as CDO for greatly varying periods. Thus there are no anomalies (differences) in those periods, and only a thin red or blue horizontal axis zero line indicates that this is so.
- Negative temperature anomalies (ACORN – CDO) that are biased towards 1910 mean that the homogenization has resulted in an increased warming trend. (Vice versa for any positive anomalies)
- Anomalies are of great variety in their magnitude, profile, and displacement. (By displacement is meant the distance up or down of their centroids relative to the zero horizontal axis).
- Summer in Australia is from 1/December to end February
- BTW, the regimented cycling and step-changes seen in the charts are a partial validation of this anomaly methodology. Other validations include exquisite proof of corrupted data being out of sequence with each other and generation of long series of anomalies = 0, consistently for varying periods prior to 2014, (meaning ACORN same as CDO in every one of over sixty cases tested).

B. More background on the BoM controversies:

- This is a summary of a major study involving almost 80 megabytes of data in EXCEL spreadsheets. It was prompted by various controversies over the BoM's 'homogenization' of temperature records. The Bureau have made 'corrections' for nominal and sometimes vague changes in site conditions, over which criticisms have included that it has resulted in exaggeration of the recently reported warming trend. BoM's exclusion of much evidence of hotter times before 1910, (the starting point of ACORN time), is openly controversial.
- Still further controversy surrounds data from before that of the CDO "raw data" used here. However, it has been established alongside this summary that with the possible exception of some long-record sites which are devoid of CDO digitized records, (commonly prior to 1/Jan/1957), that the homogenised data are undoubtedly based on the CDO "raw data" in those long records. That said, many stations have short records and unfortunately much data in the shorter term have been made common between CDO and the homogenized ACORN files, and effectively lost in terms of data and process.
- Despite all that, any discovery of substantive corruption in that data is enough to say that the ACORN homogenization is not credible, **regardless** of what their methodology was **OR** the "rawness" of the data used.
- It cannot be shown what the BoM methodology should result in, because their processes have not been released to the public in sufficient detail. However, it ought to be possible to validate if what they have published meets the required *standards of reasonableness*, without knowing **HOW** they got there!

- So.....CDO daily data were subtracted from the ACORN version via digital processes and plotted in *EXCEL 2010* spreadsheet software and are charted herewith for twenty-four rural sites, (that's additional to six long-record capital cities in Part 1).

C. Comments on Melbourne and big city UHI effect:

- It has been reported elsewhere that ACORN "corrections" in long-record rural sites result in progressively increased cooling further back in time, and thus a warming trend from 1910 towards now. The opposite is mostly the case in ACORN "corrections" for the six capital cities, where ACORN increases the temperatures towards 1910!
- However, to correct for UHI in the contextual allegory of "carbon" = "global warming", the temperatures at 1910 should be the datum, and those towards now should be REDUCED to correct for any UHI effects, which are NOT a "carbon" signal.
- To construct a "carbon signal" without proper consideration of UHI is not credible, and to apply it to calibrate broader non-UHI regional effects is arguably unscientific.
- This note on the CDO Network Map Site (previously the HQ network) relates: *Urban sites have some urban influence during part or all of their record, hence are excluded from the [annual temperature analyses](#)*
- Ken Stewart advised in Part 1: Classified urban sites are not used in regional and national analyses according to BoM/CSIRO 'Centre for Australian Weather and Climate Research' reports CTR049 and 050).
- However Ken also noted in part 1: Melbourne RO is used as a comparison neighbour station for surrounding Acorn sites. The same happens elsewhere- Mackay is adjusted using Townsville and for example Rockhampton and Snowtown use Adelaide.