Comments for manuscript:
"*The CRUTEM4 land-surface air temperature dataset: construction, previous versions and dissemination via Google Earth*" by T. J. Osborn and P. D. Jones

General comments:

The manuscript gives a detail summarized document how the previous and current versions of CUR temperature were constructed. They provide very useful information for data users. Baed on a user-friendly interface-- the Google Earth software, the manuscript provides a method for CRUTEM4 visualization, downloading, and analyses. This software does not need any extra cost and it is very easy to use. This is a significant contribution for scientific data development and distribution.

Some minor comments:

1) Page 601: lines 9-12 (and other places), what are the numbers (e.g., p. 1795, p. 213 etc.)? Do they mean some document page numbers for specific version of early CRU temperature data? However, not all readers/users know the representative of those numbers? If some users need the information, at least they know what and where they are?

2) Page 602:lines 6-7; 12-13; page 607: lines 11-12. The i in x_i, and j in y_j are the grid cell latitude and longitude index, and they are supposed to be "integer". I am confused with the $x_{i-0.5}$ and $y_{i-0.5}$ denoting the latitude and longitude boundary. The authors' purpose is to use $x_{i-0.5}$ and $y_{i-0.5}$ denoting the westward/ eastward half grid box of xi and yi. It might be straightforward to use the $x_i - 2/\Delta x$ and $x_i - 2/\Delta y$ to represent the boundary of grid box (where $\Delta x = \Delta y = 2.5°$ or directly use 2.5°replacingΔx and Δy).

3) Page 604 bottom and top of page 605 (option 1). From my understanding, the last sentence means that …then we estimate the 1961-1990 normal for the station using its 1951-1970 normal adjusted by the difference between the grid box averages for 1961-1990 *from early version* and 1951-1970 *from current version*.

4) Page 604: Line 2. How far is the "neighbor station"? For some regions, the available stations are very sparse. The neighbor station or the closest station might be more than hundreds of kilometer. Because this option is listed as the first priority of this case, it is better to give the criteria of neighbor used as here.

5) I did explore CRUTEM4 with the KML on my Linux pc. It is really a very good tool to visualize the data. As the already posted comments by the reviewer #1, those plots do not include the information of the black-smooth curve, which are important for the users who want to use the plots directly. Only in the captions of the Figures 3 and 5 states 20 yr smoothed variations. I arbitrarily get the seasonal and annual temperature plot for a station (ID: 560180:ZADOI), and found that the plots starts in 1956 and ended 1996. The black line at this station starts in 1961 and ended in 1991 (all from eyeball). From those values, the smoothed curve is computed on 6-yr base.

6) Page 615. Figure 1 caption miss "(blue)" in line 5.