CENTRAL PARK TEMPERATURE COMPARISON: USHCN VERSUS RAW

We compared historical Central Park, NY data from the National Weather Service site in New York City as taken from the periphery of the park from 1909 to 1919 at the Arsenal Building 5th Ave (between 63rd & 64th) and then since 1920 at the Belvedere Castle on Transverse Rd (near 79th & 81st) with the Central Park data from NCDC Climate at a Glance USHCN database with HCN adjustments made.

Belvidere Castle, Central Park, New York City

JULY COMPARISON

We picked the two extreme months (January and July) for the comparison. The two data sets for July are plotted below.
Note the adjustment was a significant one (a cooling exceeding 6 degrees from the mid 1950s to the mid 1990s.) Then inexplicably the adjustment diminished to less than 2 degrees.

The result is what was a flat trend for the past 50 years became one with an accelerated warming in the past 20 years. It is not clear what changes in the metropolitan area occurred in the last 20 years to warrant a major adjustment to the adjustment. The park has remained the same and there has not been a population decline but a spurt in the city’s population in the 1990s.
I repeated the analysis for January for Central Park using the same two data sources. A similar UHI adjustment pattern was seen.

It had the same result on the adjusted temperatures, showing recent warming not in the raw data.
If they had left the urban heat island (UHI) adjustment the same after 1990, the following would have been the adjusted result.

Clearly no global warming evident in either the unadjusted or the uniformly UHI adjusted plots for one of world’s largest cities for January or in last half century or more for July.

Now though the larger the city, the more Urban Heat Island (UHI), most of warming from UHI occurs for cities that increase rapidly in population or where the observing site (airport) initially rural has the city grow around it. In New York City, Central Park is in the center of the city which has been a big city for a long time. Though, there is no doubt
it is warmer in the city than in rural areas continued significant UHI induced warming should not be expected.