

After many of my colleagues postulated that one of the reasons for "0,0"s dominance of the pixel counts being that people like particularly round numbers, I began to wonder how true that was.

I ran some analysis on three different sets of our data. One for the total canvas, one for the pixels divisible by 10, and one for the pixels divisible by 100. Leading to some interesting results.

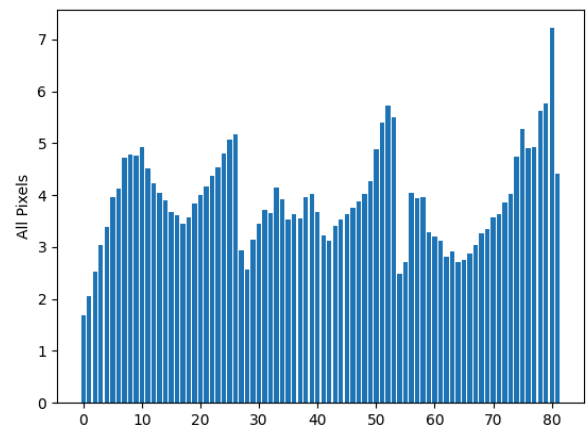
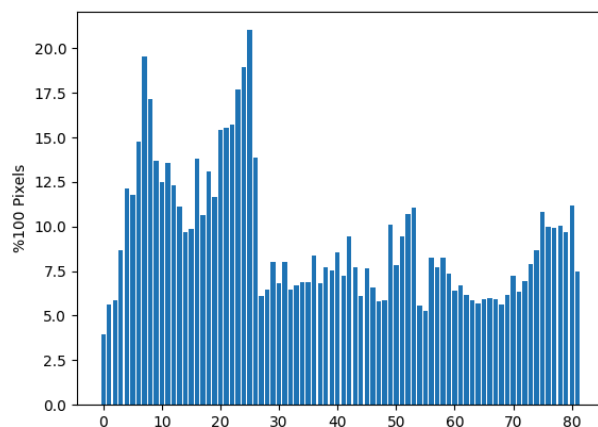
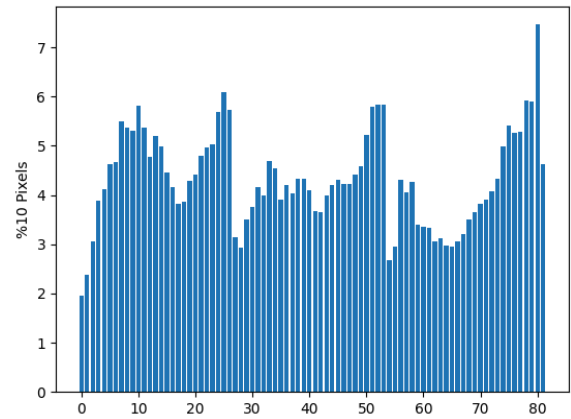
	all	10s	100s
99.5%	574	616	12219
97.5%	202	215	754
90%	79	84	132
75%	37	39	61
50%	18	18	30
25%	9	9	15
10%	5	5	8
2.5%	3	3	3

we can disregard the highest percentiles, particularly for the divisible by 100 pixels, they are particularly skewed by the most placed pixel 0,0. but even when I excluded it, the quartiles and medians remained consistent.

One thing I want to point out. the metrics across all of the pixels, compared to the divisible by ten ones, are almost exactly the same. While this is interesting, I believe this doesn't immediately rule out the hypothesis that people placed more pixels on "round" numbers, as dividing up the canvas by groups of 10 pixels is quite frankly, difficult to do, as that makes a large number of sections regardless, and the directed works of art would easily overpower that sort of inclination.

Now more interestingly is our 100s group. those numbers are significantly higher, even excluding a number of extreme outliers, considering how small this dataset is. I do think that part of this may be because of people's inclinations towards dividing things into groups of 10, specifically, because the initial canvas size of r/place was 1000x1000, which would be 10 groups of 100 pixel wide bands on each axis. Of course, with this much smaller sample, I think it is worth noting that there is much more impact caused by the hotspots of the canvas, like the Turkish flag.

However, in order to tell how true this might be, I started getting the averages per hour. As you can see, the average placement per hour per pixel ranges mostly between 3 and 6, with a spike right at the end, likely because of the impending end of that year's r/place event. We would expect, if people do indeed place more pixels on 'rounder' numbers, that the general placements would be significantly higher on those numbers. However, at least in regards to every tenth pixel, that doesn't hold, and the graph almost exactly matches the one for every pixel.



Where it starts to get interesting is the hundreds point.

This graph is actually the second iteration, in the first one, I didn't exclude the 0,0 pixel, and that alone doubled the average placement in this small sample set. This graph does have that point excluded, but that overwhelming impact draws attention to the small sample size. Indeed, while this would support the argument that people *do* place more on round numbers, I decided it wasn't enough, and looked for ways to improve on it.

My solution? Rows and Columns.
If people liked placing on round numbers, they likely would end up creating lines on each round number coordinate, both x and y. This also served to increase the sample size of my data, making it much easier to trust the data given. That being said, this data does **not** support the idea that people prefer placing on round numbers.

