

Declarations of Eric Quinnell and S. Stanley Young

Declaration of Eric Quinnell

Pursuant to 28 U.S.C Section 1746, I, Eric Quinnell, make the following declaration.

1. I am over 21 years of age, and I am competent to testify in this action. All of the facts stated herein are true and based on my personal knowledge and skillset.

2. I received a Bachelor of Science Degree in Engineering in May of 2004, a Master of Science in Circuit Design in May of 2006, and a Doctorate in Computer Arithmetic in May of 2007, all from The University of Texas at Austin.

3. I have extensive professional experience as an engineer designing and leading teams engaged in various aspects of circuit architecture and processing. In this capacity, I frequently engage in complex and sophisticated predictive mathematical modeling and statistical analysis. I am required to prepare reports and analysis on the same for presentations to executives and other decision makers. I make this declaration in my personal capacity.

Declaration of S. Stanley Young

Pursuant to 28 U.S.C Section 1746, I, S. Stanley Young, make the following declaration.

4. I am over the age of 21 years and I am under no legal disability, which would prevent me from giving this declaration.

5. I am a trained statistician with experience in multiple fields, biology, chemistry, drug discovery, etc. I am a Fellow of the American Statistical Association and also a Fellow of the American Association for the Advancement of Science. I am or have been an adjunct professor of

statistics at five research universities. I am currently on the EPA Science Advisory Board. I have over 60 published papers.

Executive Summary

6. We were asked to further analyze the results of the 2020 General Election in Fulton County, Georgia using timeseries data to corroborate our earlier analysis. Further investigation would allow us to determine if there were either additional statistical anomalies in the voting patterns or new inferences that may explain some existing results.

7. The Edison time series data shows 73,523 total absentee votes recorded by November 4th at 12:59 AM. According to 2020 Georgia election rules, the absentee ballots in all of Fulton County's precincts could be opened and recorded in advance. We therefore presume the first timestamp data on November 4th represents the overall totals of three weeks of absentee voting across all precincts.

8. According to this data, the total sum of absentee votes received and counted after November 4th is 73,471 votes – a curiously close number to the 73,523 votes received before that date. These counts show a difference of just 52 absentee votes both sides of election night. For vote totals of this magnitude, 52 votes constitute roughly just 0.07% of both tallies.

9. Candidates Donald Trump and Joe Jorgensen had 10 and 44 precincts respectively of roughly 370 precincts with all their candidate's absentee ballots in by November 4th. Candidate Joseph Biden had 0 of roughly 370 precincts with all absentee votes in by November 4th.

10. Furthermore, Trump and Jorgensen had 14 and 48 precincts respectively with more than 80% of all absentee ballots in by November 4th. Biden had 0 precincts with more than 80% of all absentee ballots in by November 4th.

11. Finally, Trump and Jorgensen had 23 and 56 precincts respectively with more than 70% of all absentee ballots in by November

4th. Biden had 1 precinct with exactly 70% all absentee ballots in by November 4th.

12. On November 5th, 309 of the 373 precincts received 90% or more of their Biden absentee total by the end of the day— a feat the 3 weeks prior was unable to achieve even once.

13. Biden's absentee vote distribution according to this data shows a probability of 0.01% that even a single would naturally receive all its votes by November 4th. This represents 4.71 times standard deviation from its own average at that time. Such a distribution mathematically represents a peculiar, non-linear external constraint unexplainable and unrelated to the arrival and counting of absentee ballots – but only for candidate Biden.

14. Further calculations on this timeseries data starting November 5th show additional unexplainable statistical anomalies indicating that this timeseries data should be considered not only improbable, but a collection of votes over time that currently fails basic sanity and mathematical fidelity checks. The analysis result stands and needs only the beginning and end timestamps to be correct. There are 4 timestamps with static values of the November 4th initial absentee count and 7 timestamps with the static values of the final November 11th absentee count.

15. If the analyzed data set agrees with other official timestamped voter count data, then we are obligated to suggest that there exists an inexplicable flaw or external event occurring on or after November 5th that compromises the either the fidelity of the absentee vote on and beyond that timestamp or the entire Edison timeseries data in Fulton County is corrupted.

16. We, the affiants, offer neither allegations nor hypotheses as to WHY the data set exists in this unnatural state, but rather just that it IS this way. The mathematical tools analyzing this data are non-proprietary and may be replicated by anyone sufficiently skilled in the art using the same Edison timeseries data and public voter tallies.

Data Set Selection

17. For static vote analysis, we retrieved publicly available data from the <https://data.fultoncountygga.gov/Elections/Election-Results-General-Election-November-8-2016/eiwi-wrhe> website containing the official Fulton County 2016 General Election Results. We also retrieved the publicly available unofficial Fulton County 2020 General Election Results from

<https://results.enr.clarityelections.com/GA/Fulton/105430/web.264614/#/detail/1> website as of November 11, 2020.

18. For timeseries vote analysis, we received Edison timeseries voting data for all of Georgia's precincts in a batch of 18 timestamps in raw JavaScript Object Notation (*.json) format on November 23, 2020. The timestamps range from November 4th at 12:59 AM to November 11th at 11:20 PM and record the updated votes in four categories: absentee ballots, election day votes, early votes, and provisional votes. This analysis specifically concentrates on precinct level timeseries data in Fulton County.

Timeseries Data Tracking Specific counties in Fulton County

19. We investigated three particular counties – specifically counties RW, JC, and SS – after a static vote analysis (already declared in separate affidavit by Eric Quinnell) identifying these counties as well outside their historical voting norms. We used a new input set of data from the Edison timeseries voting data for all of Georgia's precincts in a batch of 18 timestamps. The timestamps range from November 4th at 12:59 AM to November 11th at 11:20 PM and record the updated votes in four categories: absentee ballots, election day votes, early votes, and provisional votes.

20. The first available timestamp of the Fulton County time series data is November 4th at 12:59 AM. The only votes registered at this time are absentee ballots already opened and counted per precinct. According to the rules established in Georgia for the 2020 election, absentee ballots were allowed to be opened and counted for a full 3 weeks leading up to and including election day. As we have no timestamp data before November 4th, we therefore presume the first

count represents this entire time window in lieu of more data. This first timestamp is the first data to register 73,523 absentee ballots across roughly 373 Fulton County precincts that cast such a vote.

21. The next three timestamps – November 4th at 3:14 AM, 10:44 AM, and 7:35 PM seem to register the bulk of the election day and early vote ballots. No absentee ballot counts are updated in these three timestamps.

22. The following timestamp – November 5th at 11:18 AM – represents the majority of the remainder of the absentee ballots for nearly all 373 precincts, with most precincts gaining on enough votes to exceed 90% of their final absentee tally seen by November 11th.

23. Of the remaining 13 timestamps in the data set, the absentee ballots for any precinct only update in 3 of those data points – November 5th at 8:37 PM with nearly every precinct gaining roughly 5% of their remaining total; November 6th at 1:52 AM with another 5% gain almost universally; and November 7th at 12:58 PM with a rough 2% remainder. None of the other 10 timestamps move any precinct's absentee count at all.

24. These total to 5 incremental timeseries of the 18 data points, which may be visually seen in Figure 1.

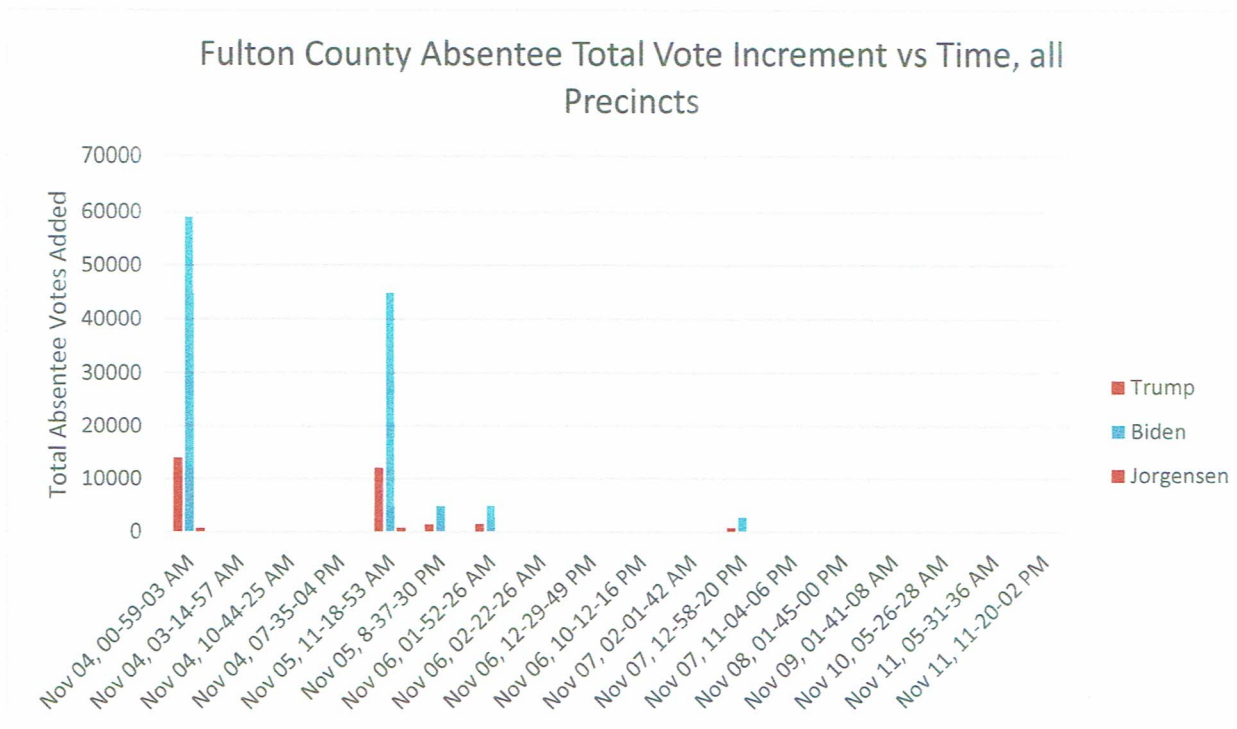


Figure 1. Incremental vote gain per presidential candidate over time in Fulton County

25. To confirm aggregate gains per precinct per timestamp, again we took our selected counties and plotted their percent of eventual total count in a visual graph for presidential candidates Donald Trump and Joseph Biden. Figure 2 shows the plot of County RW's accumulated percent total of its aggregate final absentee votes over time. What's surprising about the graph is the near perfect tracking of both Trump's and Biden's vote gains as compared to their final total.

26. To see if this pattern existed further, we plotted all three of our target counties on the same plot for both candidates, as seen in Figure 3. Again, all vote gains for all candidates track nearly perfectly. This curiosity had us abandon the targeted counties and go back to all of Fulton County to see if all precincts behaved this well. Such a synchronous result infers that the absentee votes of all precincts is at the very least centralized and coordinated.

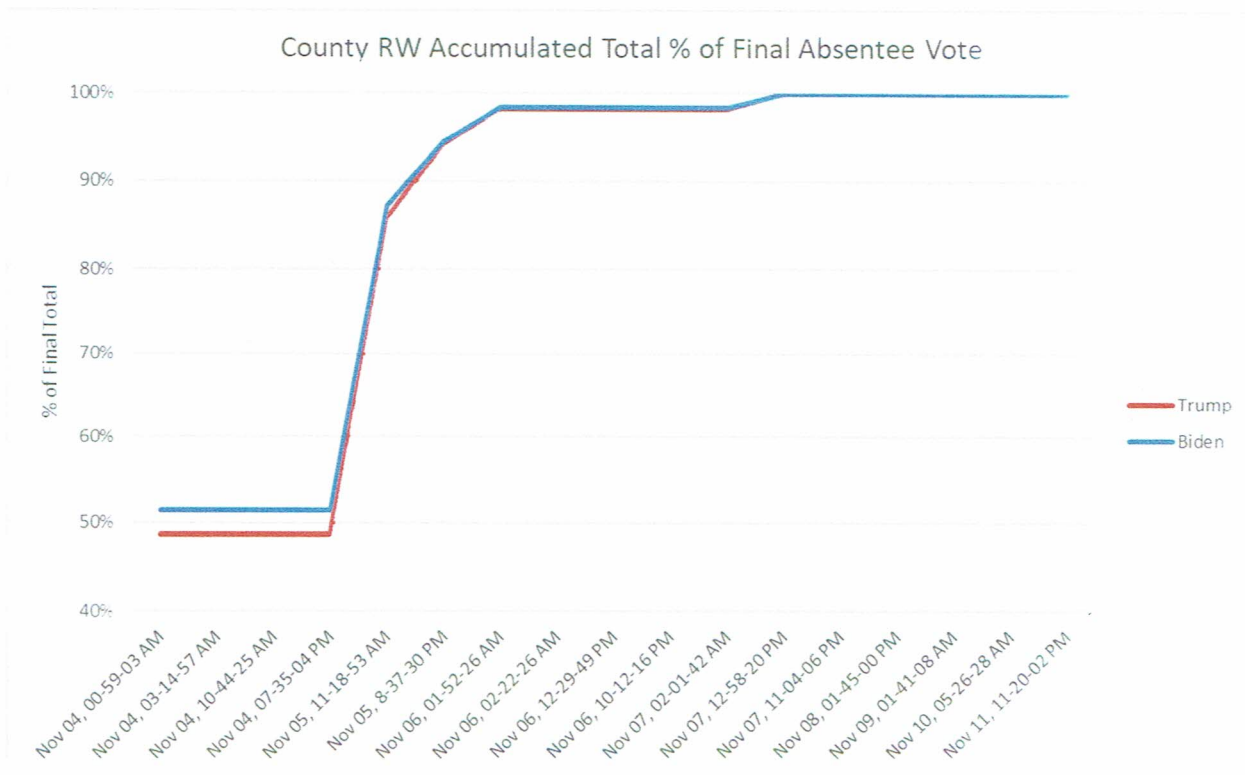


Figure 2. County RW accumulated % of eventual total absentee votes over time

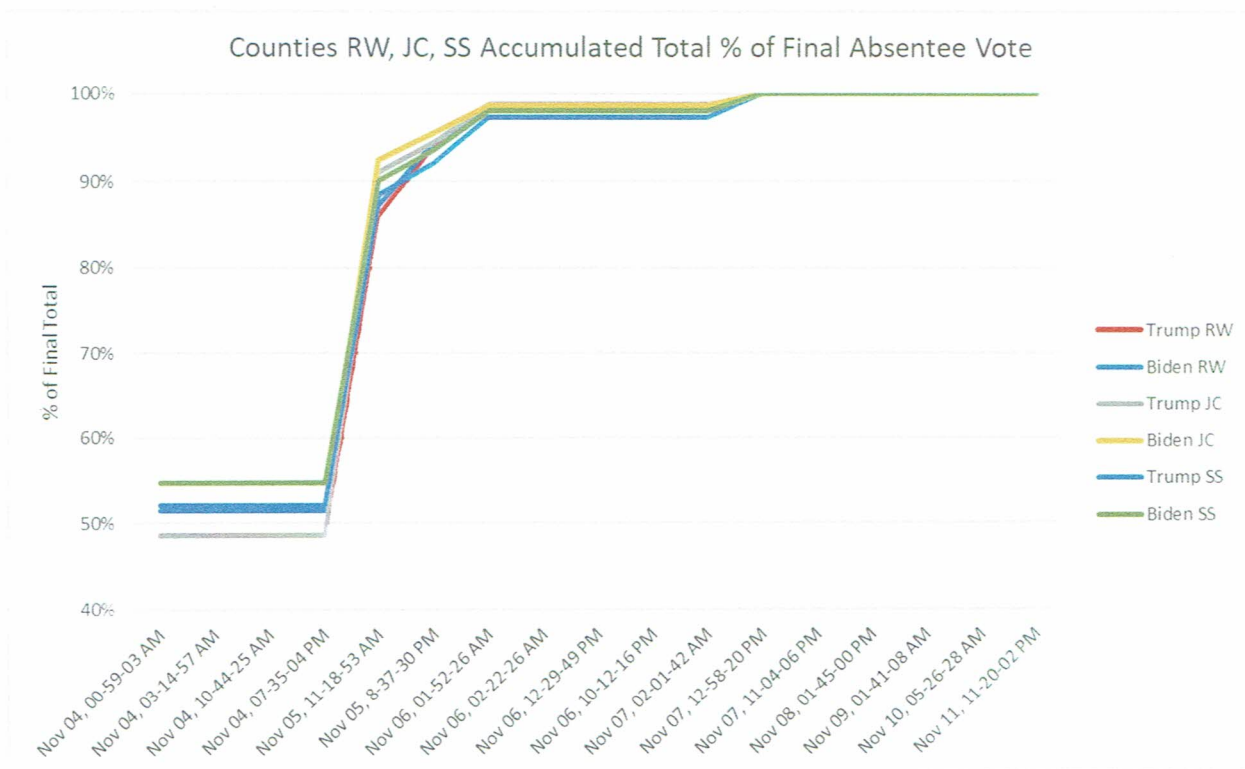


Figure 3. Counties RW, JC, and SS accumulated % of eventual total absentee votes over time

Timeseries Data Tracking of all precincts of Fulton County

27. We took all the timestamp data and re-analyzed the sum of all precincts at a Fulton County level. This simple top-level analysis discovered an exceptional mathematical anomaly – the total sum of all absentee votes in all of Fulton County after the initial November 4th timestamp was exactly 73,471 votes – a mere difference of 52 votes between the first (presumed) three weeks of absentee votes which netted 73,523 votes independently. This means each independent collection of results landed within 0.07% of each other's total. The relative gains and totals for each candidate are shown below, as well as in a bar chart in Figure 4 .

Absentee Vote Increments in Fulton County

	Trump	Biden	Jorgensen	Total
<i>Nov 04, 00-59-03 AM</i>	13913	58946	664	73523
<i>All Remaining Future Timestamps</i>	15566	56842	1063	73471
<i>Difference</i>	1653	-2104	399	-52

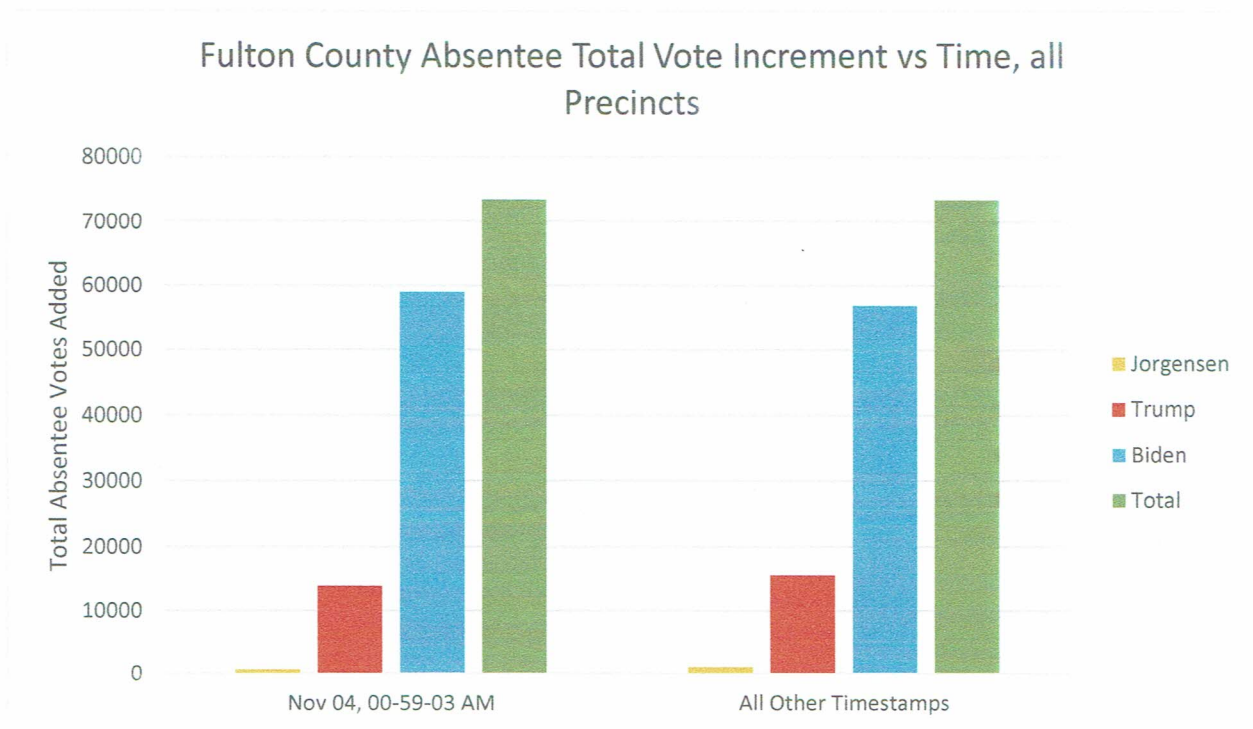


Figure 4. Absentee total vote counts for Nov 4 12:59 am as compared to the sum of all following timestamps

28. We continued by plotting all precinct aggregate percent totals over time for each candidate over timestamps. Each candidate requires two full graphs due to a software limitation of unique plots per chart. Precincts which had zero absentee votes for either candidate are excluded, which numbers 23 precincts for Trump and 10 precincts for Biden. Trump's absentee percent totals per precinct over time are seen in Figure 5 and Figure 6, and Biden's are seen in Figure 7 and Figure 8. All of these timestamps even between candidates have a correlation coefficient aggregate of 0.58, which hints they are somewhat, but not entirely independent variables.

Fulton County Trump % of Final Absentee Total vs TimeStamps Precincts 1-254

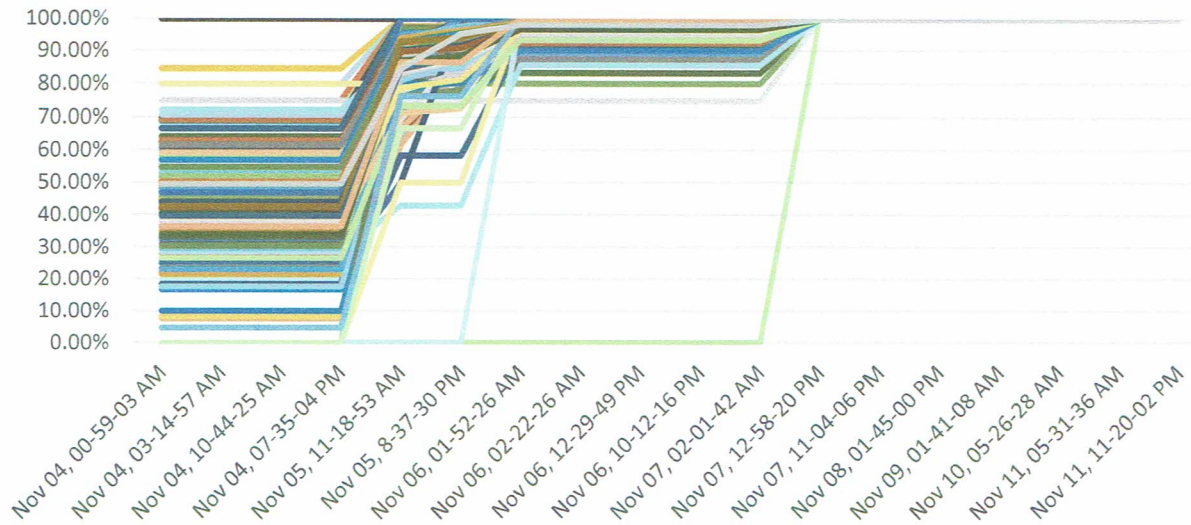


Figure 5. Trump cumulative % of final absentee over time, precincts 1-254

Fulton County Trump % of Final Absentee Total vs TimeStamps Precincts 255-360

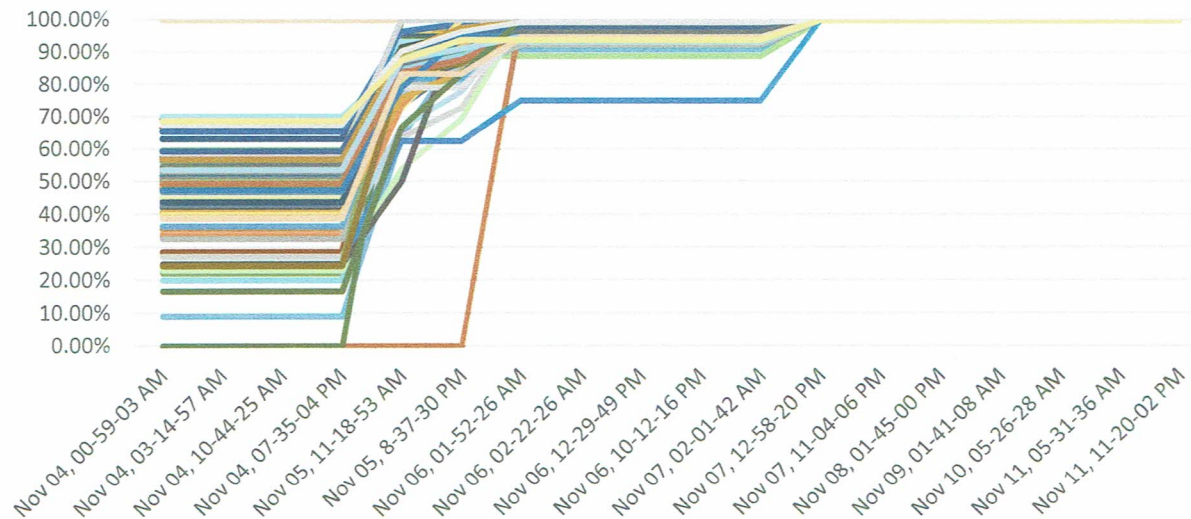


Figure 6. Trump cumulative % of final absentee over time, precincts 255-360

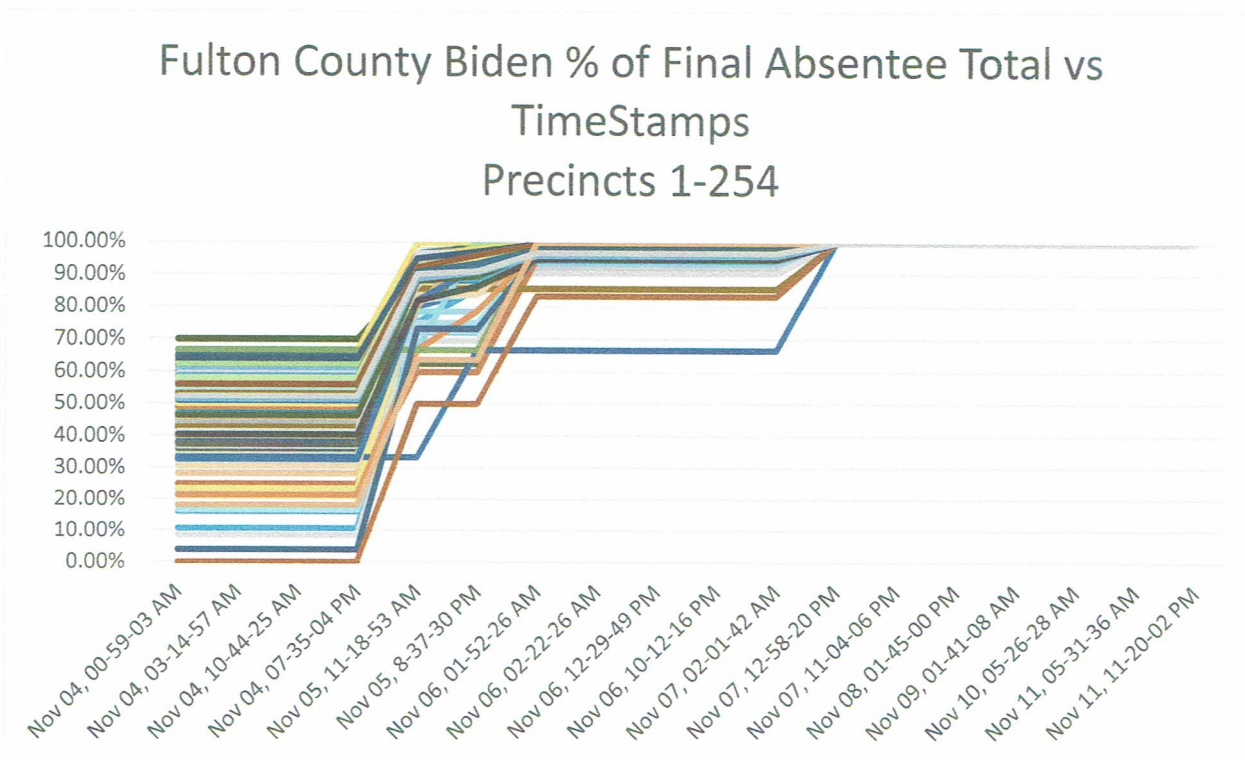


Figure 7. Biden cumulative % of final absentee over time, precincts 1-254

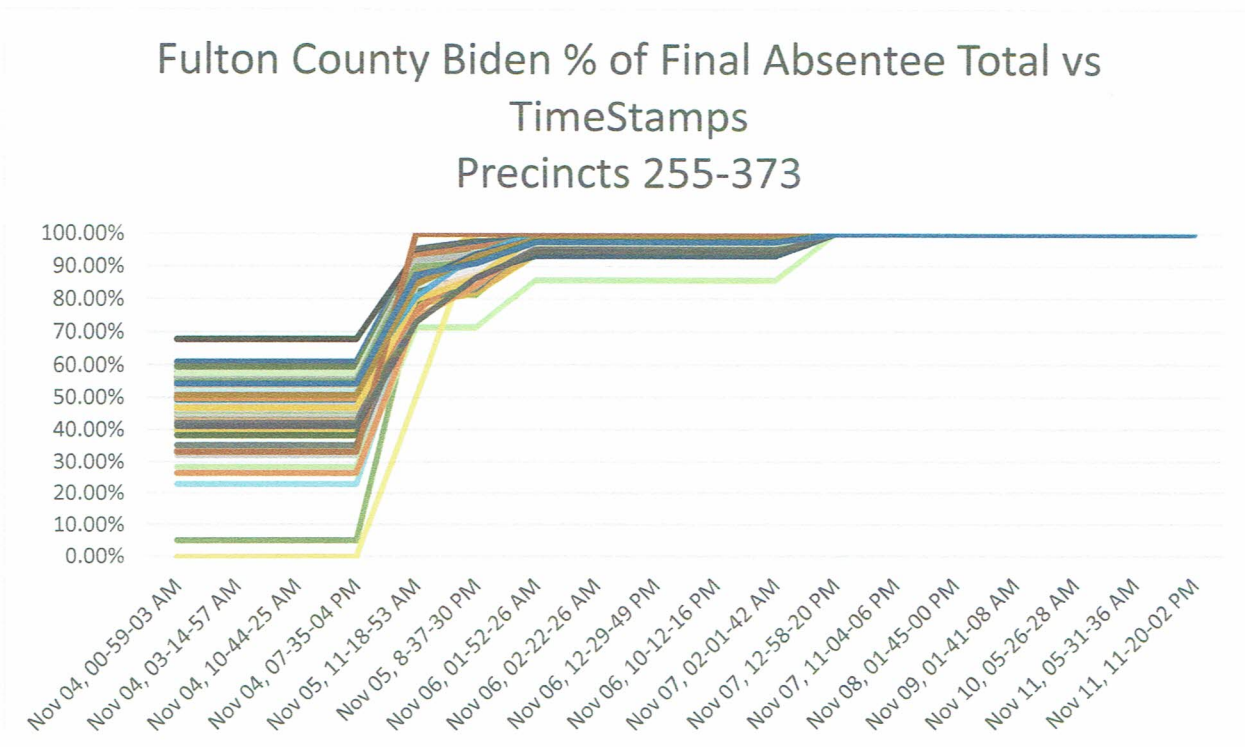


Figure 8. Biden cumulative % of final absentee over time, precincts 255-373

29. Before we quantify these very peculiar charts mathematically, we first must refer back to our anecdote of Henri and the baker. 0 of the 373 precincts across all of Fulton County broke 71% of their eventual final total in the timestamp representing the preceding 3 weeks of collection, regardless of their clear natural distribution in the initial data set. Precincts only broke the 71% barrier exactly the following day and in almost a perfect majority. Anecdotally, a batch of bread was baked, and Henri's heavy bread went missing entirely until the next day, when it re-appeared in full as shown in Figure 9.

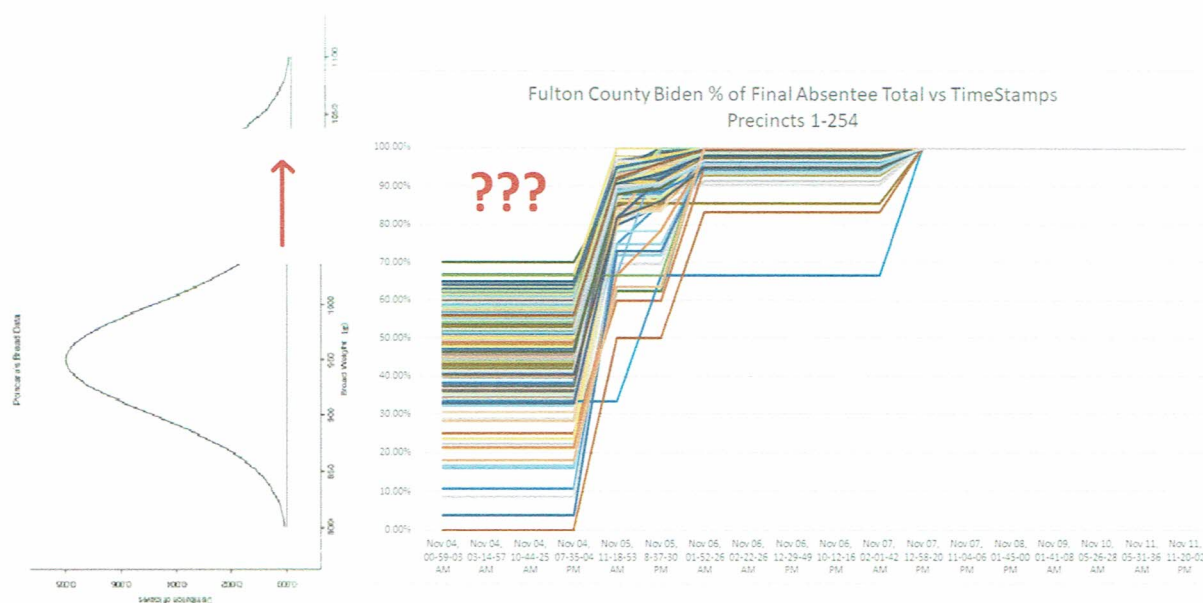


Figure 9. Henri's Poincaré's missing bread

30. Both candidate Trump and candidate Jorgensen have several bins of all 100% of a precinct's eventual final total of absentee votes in the November 4th 12:59 AM timestamp. To quantify, Trump's quantitative and visual distribution of precinct's relative percent total of the eventual result on November 4th are shown below in the table and Figure 10. The histogram of precincts includes the calculation of this distributions Probability Density Function (PDF) plotted over each bin. The November 4th Trump average completion of absentees per precinct was 44%, with a tight standard deviation of 19.5%, a skew that leans

slightly left, and kurtosis tail that covers most of the distribution range, albeit technically platykurtic by being below 3.

Trump % of final
Absentee distribution,
November 4th 12:59 AM

MEAN	44.0%
STDEV	19.5%
SKEW	-2.6%
KURT	127.1%

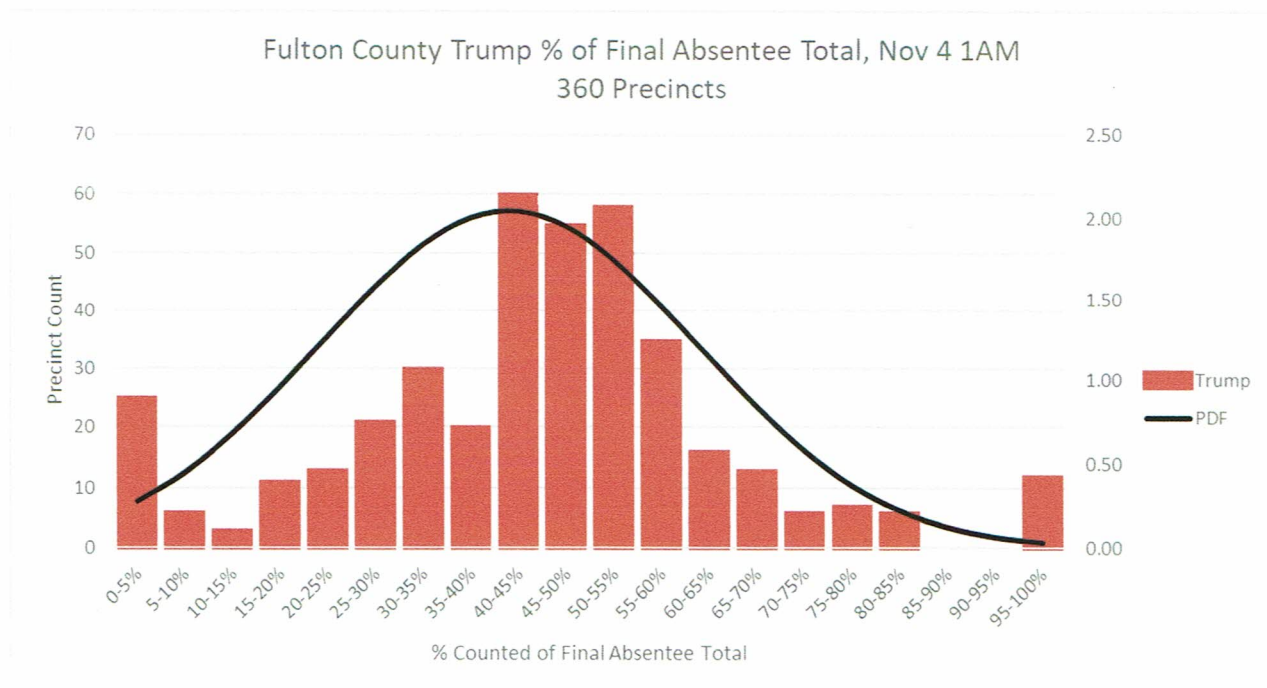


Figure 10. Trump distribution of absentee % of total per precinct on November 4th 12:59 AM.

31. In contrast, Biden's distribution quantization and visual plot of the same is seen below and in Figure 11. The November 4th Biden average completion of absentees per precinct was 48.9%, with a tighter standard deviation of 10.8%, a skew of -153% with a kurtosis tail of 381%. The skew of -153% is a meaningless nonsense calculation, implying that the mass of the curve exists below 0%. Additionally, using the mean and the standard deviation, the probability to achieve 100% of all eventual absentee votes in the first 3 weeks leading up to and

including Election day is 0.01% probability, requiring a 4.71-sigma natural event to occur. This probability does not exist for the 0% bins, as the skew is so unnaturally negative.

Biden % of final Absentee distribution, November 4 th 12:59 AM	
MEAN	48.9%
STDEV	10.8%
SKEW	-153.5%
KURT	381.3%

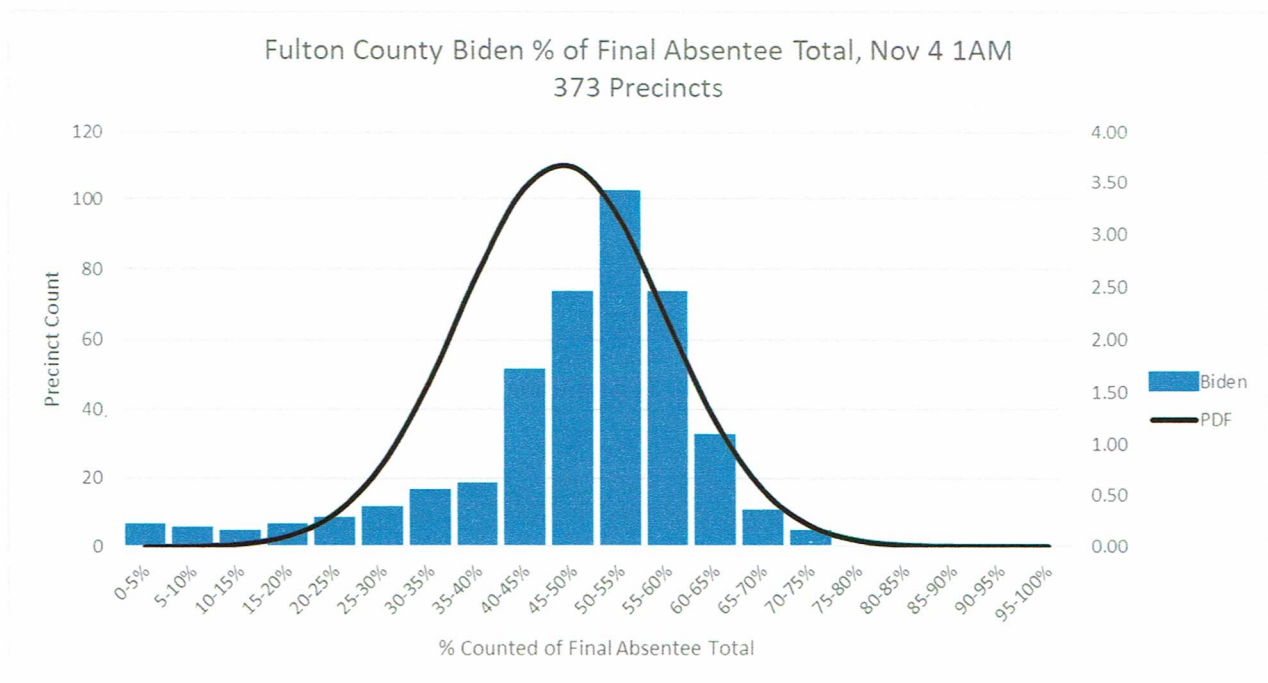


Figure 11. Biden distribution of absentee % of total per precinct on November 4th 12:59 AM

32. Results such as these that have 5-figure independent ballot counts land within 0.071% of each other, precincts that track with each other in partial correlation, entire tails of initial distributions seemingly missing until the following day, and calculated skews not even in the range of their output, are what the engineering world considers “garbage data”. These kinds of signatures are not merely improbable – even though we may assign a probability to each of these oddities – but

further represent some kind of major external constraint or non-linear event that is corrupting the fidelity of the data. Such a signature would most certainly block any attempts of any device going to production until a root cause could be found to describe the phenomenon and prove it either true, safe, or discarded.

33. Real absentee votes likely exist in these timestamps starting November 5th, but mathematically we cannot delineate any useful conclusions about this data until the non-linearity corrupting this data set is explained. The database of these records fails basic quality and sanity checks mathematically and is therefore professionally untrustworthy until a sufficient root cause or explanation of these calculations are found. There clearly exists an event or constraint (or perhaps alternate actual data set?) outside mere voting pattern or absentee delivery distributions, and an explanation is required to revive the fidelity of either the absentee voter data from November 5th and beyond or the correctness of the entire Edison database in Fulton County.

We declare under the penalty of perjury that the foregoing is true and correct.

November 29, 2020



Eric Quinnell, Ph.D.

Signature
S Stanley Young
Printed Name

S. Stanley Young, Ph.D.