Executive Summary

of

Extraordinary Election Results

with

Technical Addendum

v 1.1 4-6-2012

Summary of Extraordinary Primary Election Results

Preface:

The summary you are about to read is probably the saddest thing I've ever had to write in my life. Sometimes the truth is beautiful and other times it is awful, painful, and deeply disturbing. Unfortunately this topic falls in the latter category. I can only hope that the truth will make us free.

I would like to take a moment to clarify what this summary is and is not. It is information for your use. How you choose to use the information is your own personal decision; some will place their heads firmly in the sand, but my fervent hope is that most of you will seek further clarification and use whatever means are available to you to correct the underlying problems while they may yet be corrected. This is not an academic paper. This is not a science project. This is not a who-dun-it mystery. It is only a summary of observations made by a group of interested citizens, many of whom have an understanding of basic statistics.

To quote a statistics professor I used to know, "No guts, no sausage." And so we go bravely into the world of statistics and politics.

Executive Summary

Professional pollsters, political campaigns, and political scientists have long used basic statistical methods to analyze election results and to predict election outcomes based on sampling. These methods are actually fairly straightforward and are well documented in any number of college textbooks. Polling data are often reported like this, "In a survey of likely voters, 35% support candidate X, 55% support candidate Y, and 10% are still undecided. The survey has a margin of error of +-3%, so we are predicting that candidate Y will be the next congressman." If you read further, you might find that they polled 1200 likely voters living in the district. Basic statistics told the pollsters that if they polled 1200 likely voters, they would have a margin of error of +-3% and they bet that would be close enough to make a good prediction. In this case, the odds of candidate Y getting less than 50% of the vote are less than 1%.

Sometimes the polls are wrong. This can happen for various reasons; the pollsters can fail to account for underlying demographics in their sample, a story related to the election came out between the poll and the election, voters received a persuasive advertisement between the poll and election, unusual weather on election day altered voter turnout, or that 1 in 100 chance just happened. Sometimes a series of unfortunate events means the pollsters are wrong more often than they like. Sometimes unexplained differences between polls and actual election results present a pattern which attracts the attention of data analysts.

The 2012 Republican Presidential Preference Election is one of these cases. The polls have been wrong more than usual this year. Exit polls have also been curiously wrong this year, and exit polls are traditionally reliable. While various reasons have been suggested, some people have dug deeper into the data, analyzed the results, and unearthed some frighteningly disturbing conclusions. If the math is correct (and we've been relying on the same mathematical methods for many decades), someone (or someones) is secretly altering primary election results in several states' elections. "Several states" being every state or territory that has been analyzed as of March 24, 2012 except Puerto Rico.

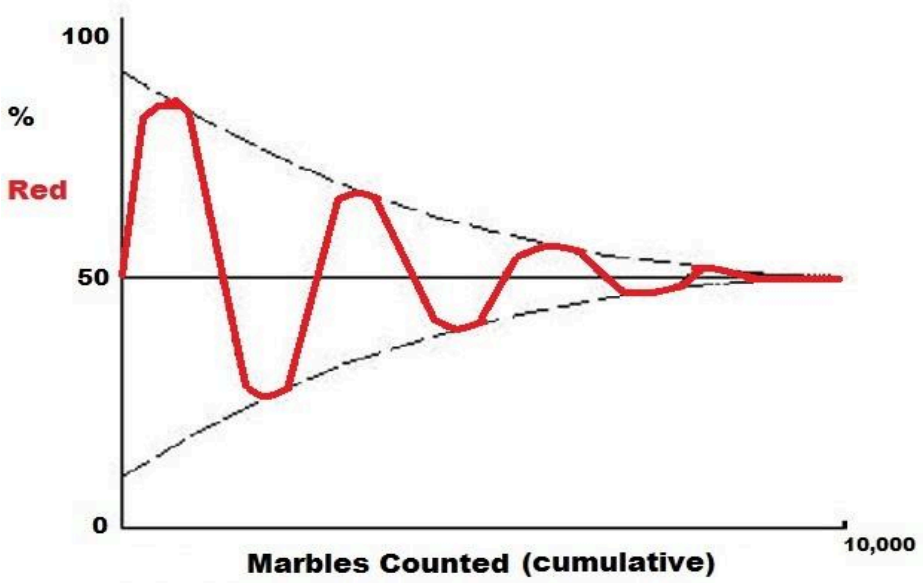
The elections apparently manipulated in 2012 include open primaries, closed primaries, caucuses, hand counted votes, optically scanned ballots, and digitally recorded elections. The discrepancies are small enough to have escaped detection of election officials and large enough to have seriously altered the outcomes of elections. Various efforts to explain the anomalies with demographics have failed. All of these candidates' vote totals and delegate totals are affected: Michele Bachman, Newt Gingrich, Jon Huntsman, Ron Paul, Rick Perry, Mitt Romney, and Rick Santorum.

While the method employed to manipulate the data is not known, tabulation and reporting software are thought to be the weakest links in the election data security. Further investigation in this area is desperately needed. County and state election administrators and GOP party officials across the United States need to be made aware of this problem as soon as possible so that action may be taken now to prevent a disaster in November.

Some More Details

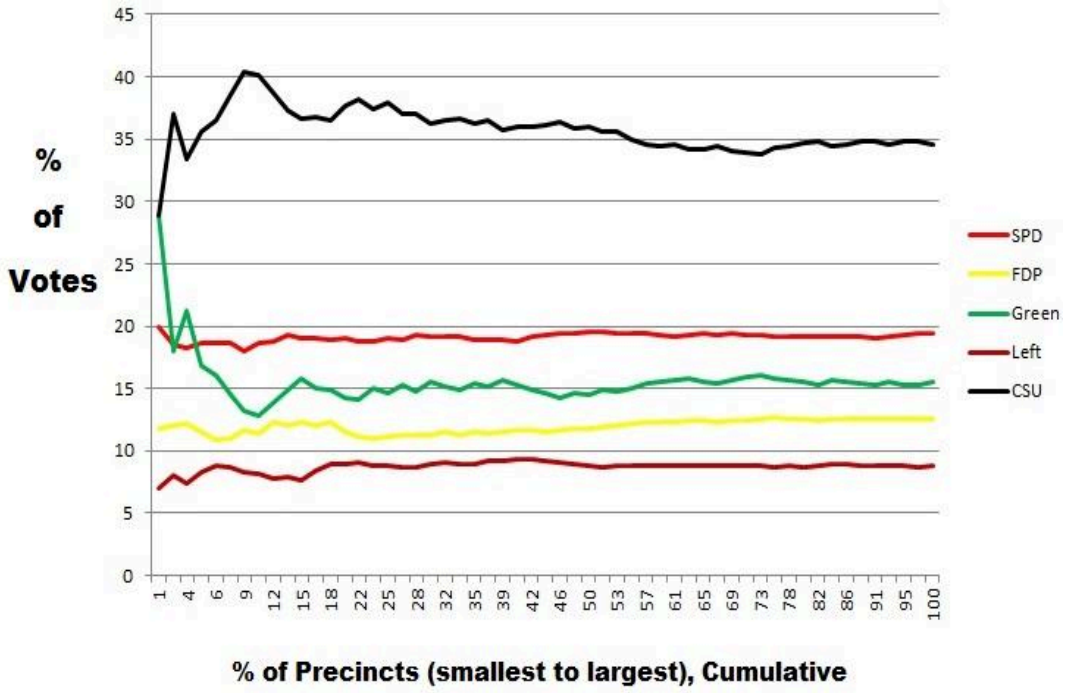
"People who like the law and sausage should never watch either being made."

Under most circumstances, ballot counting follows a fairly simple statistical model. Imagine that there is a bag of 10,000 marbles with half red and half blue. Pull out 1 marbles at a time, total the red and blue, and plot the total percentage for each color. You'll get a graph like this:

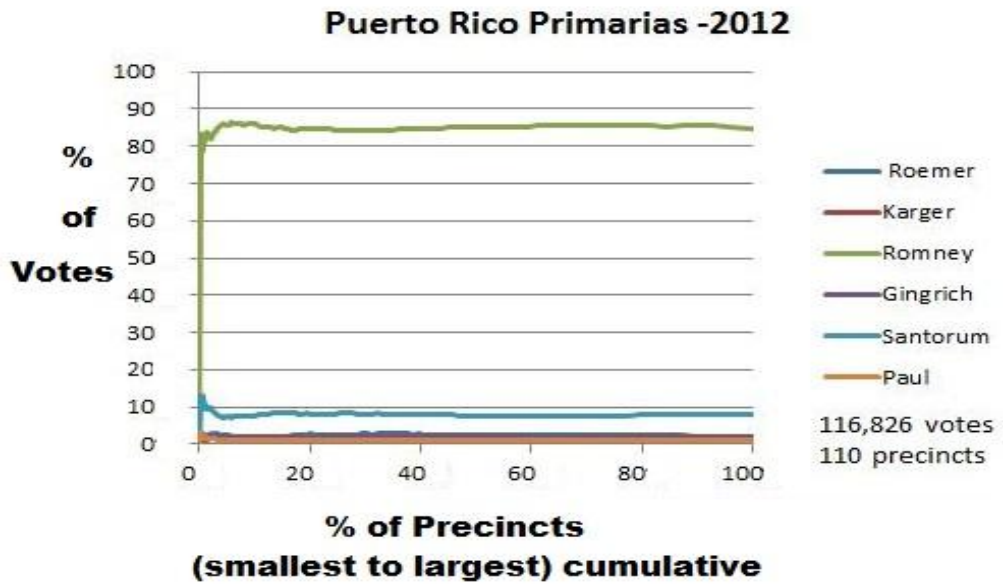


And even when the votes aren't 50/50, when a candidate's cumulative vote percentage is plotted as the votes are totaled (normally by precincts in the order headquarters receives the totals), the initial variation usually settles into a fairly straight line by the time 20 to 30% of the votes are tabulated. The results converge as the sample size (X-Axis) increases. When the sample size equals the voter population the convergence is complete and equals the final result. Unless the race is very close, most news outlets will project a winner at about 20% of the vote counted or sooner (which is why we can go to bed at 11 pm even if half the votes are still yet to be counted).

Typical election results look like this chart from a 2009 election in Germany:

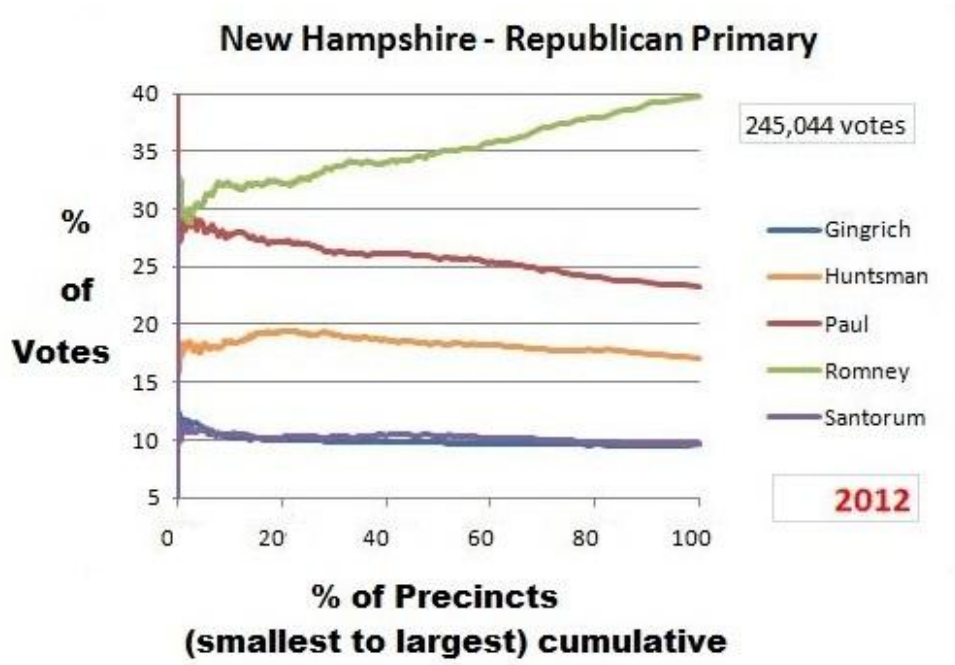


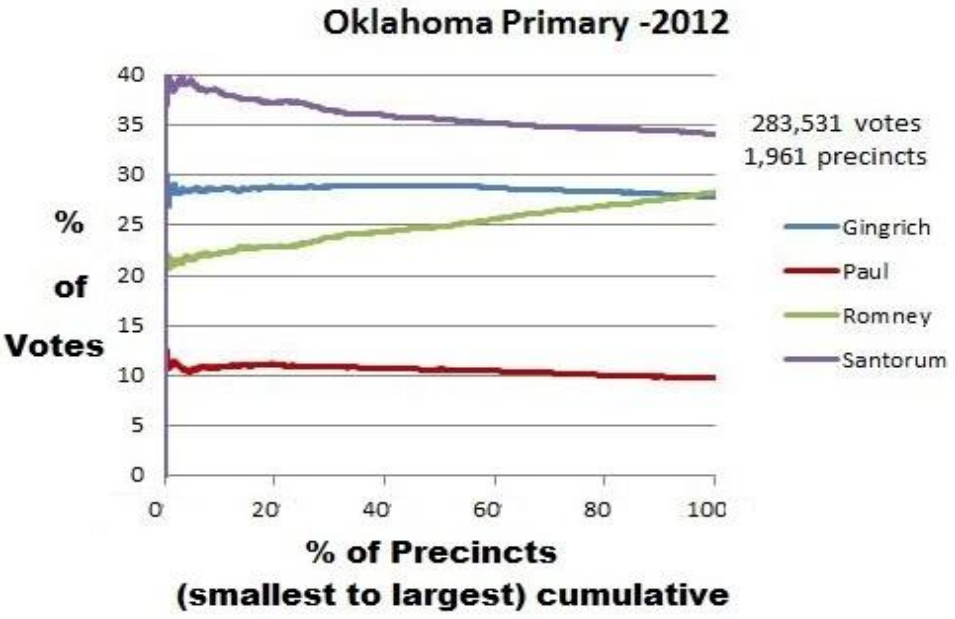
or this one from Puerto Rico 2012:

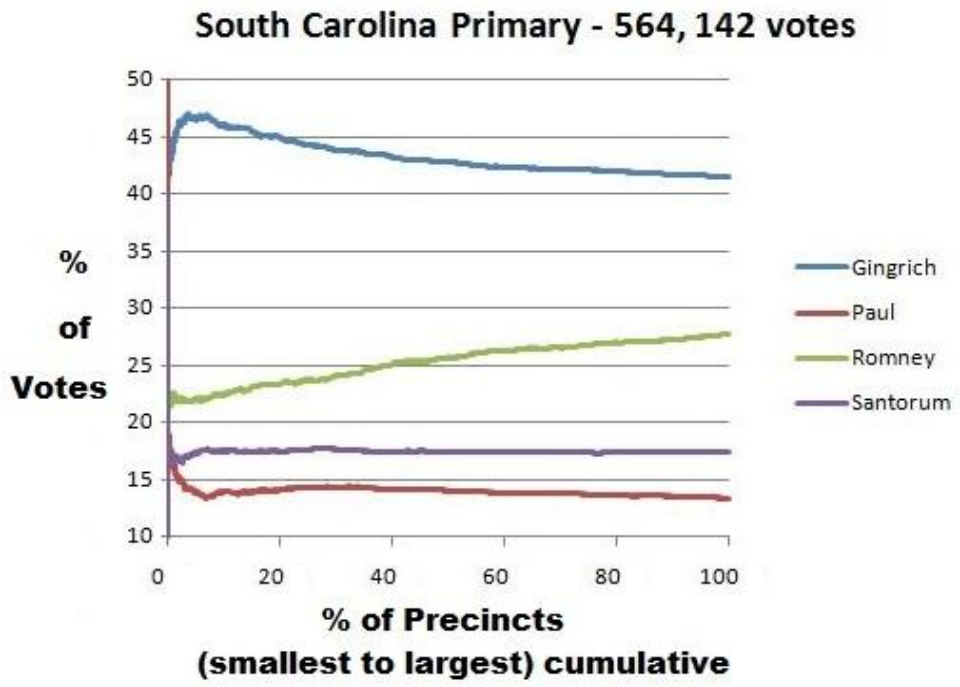


There is some variability in the data on the left hand side of each graph, but around 20-30% of the precincts counted, candidate vote percentages flat line nicely.

Recent election data do not fit the expected pattern. Instead, there are results like these :


New Hampshire - Republican Primary
40
35
30
25
20
15
10
5
0
20
40
60
80
100
% of Votes
245,044 votes
Gingrich
Huntsman
Paul
Romney
Santorum
2012
% of Precincts
(smallest to largest) cumulative


Oklahoma Primary -2012
40
35
30
25
20
15
10
5
0
20
40
60
80
100
% of Votes
283,531 votes
1,961 precincts
Gingrich
Paul
Romney
Santorum
% of Precincts
(smallest to largest) cumulative



Please note that the above charts' X-Axes do not represent the results time wise as they come in on election night. Precincts are ordered by the total number of votes cast from smallest to largest. Total number of votes cast does not indicate precinct population, voter turnout, geographical size or location of the precinct.

While some candidates' totals exhibit normal behavior in some places, such as the Santorum line in the South Carolina results chart, others do not. Mitt Romney's totals surge oddly upward in the larger precincts while one or more other candidates show downward trends (Gingrich in South Carolina, Paul and Huntsman in New Hampshire, Paul, Gingrich, and Santorum in Oklahoma). Various possible explanations for this phenomenon have been explored. Demographics have been suggested as an explanation for the results on the Y-Axis, but ponder the following: "Does candidate Romney attract such a widely different demographic compared to others as to cause a perfectly arranged inverse relationship as a function of precinct vote tally?". Consider also that this extraordinary effect is happening in thousands of precincts in 2012. Other alternative hypotheses have been similarly fruitless. Here is a summary table showing which candidates seem to be having votes siphoned off to Mitt Romney after 50% of the votes were tallied in each of the states analyzed as of March 20, 2012 (the most significant loss anomalies are highlighted):

Breakdown of Victims of Romney's Surge

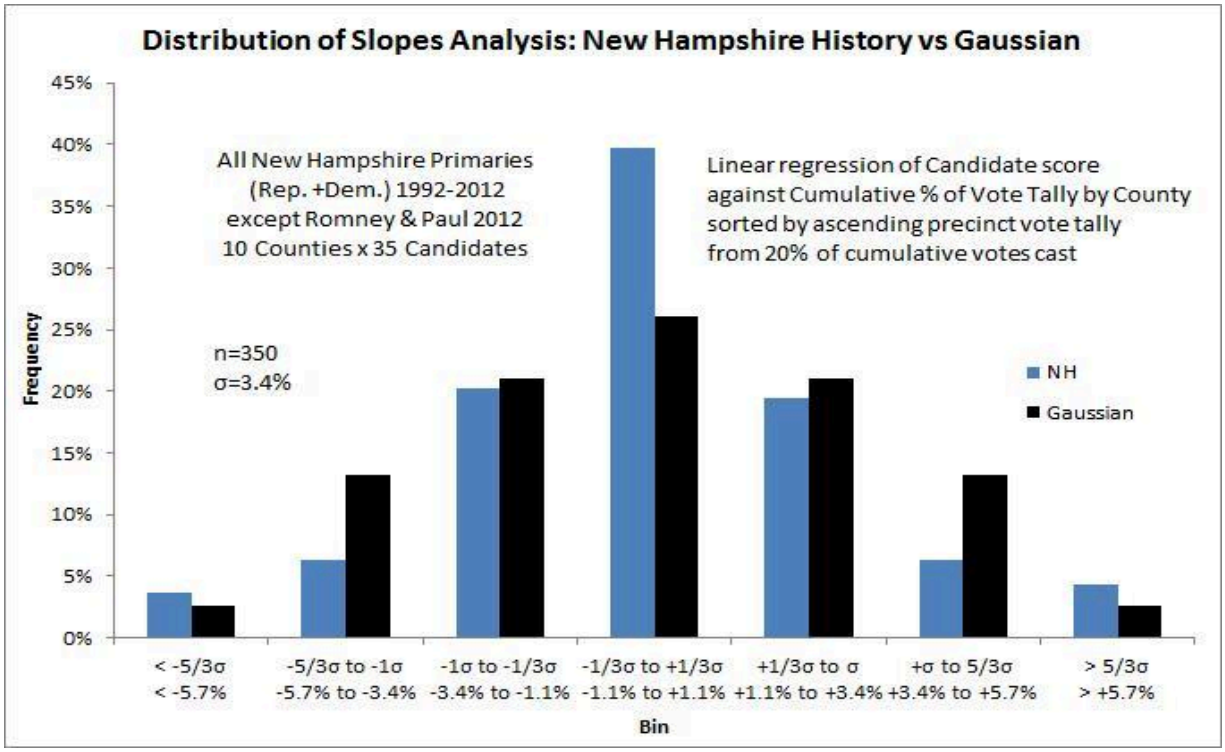
From 50% of Ballots cast, sorted by Ascending Precinct Vote Tally

Date	State	Romney	Paul	Gingrich	Santorum	Huntsman	Perry	Bachmann
Jan-03	Iowa	100%	-41%	-3%	-17%	2%	-20%	-20%
Jan-10	New Hampshire	100%	-50%	-5%	-16%	-26%	-3%	X
Feb-28	South Carolina	100%	-34%	-64%	-2%	X	X	X
Feb-28	Arizona	100%	-9%	14%	-104%	X	X	X
Mar-06	Vermont	100%	-78%	-10%	-5%	X	X	X
Mar-06	Oklahoma	100%	-39%	-27%	-34%	X	X	X
Mar-06	Ohio	100%	-41%	-4%	-56%	X	X	X
Mar-13	Alabama	100%	-4%	-33%	-63%	X	X	X

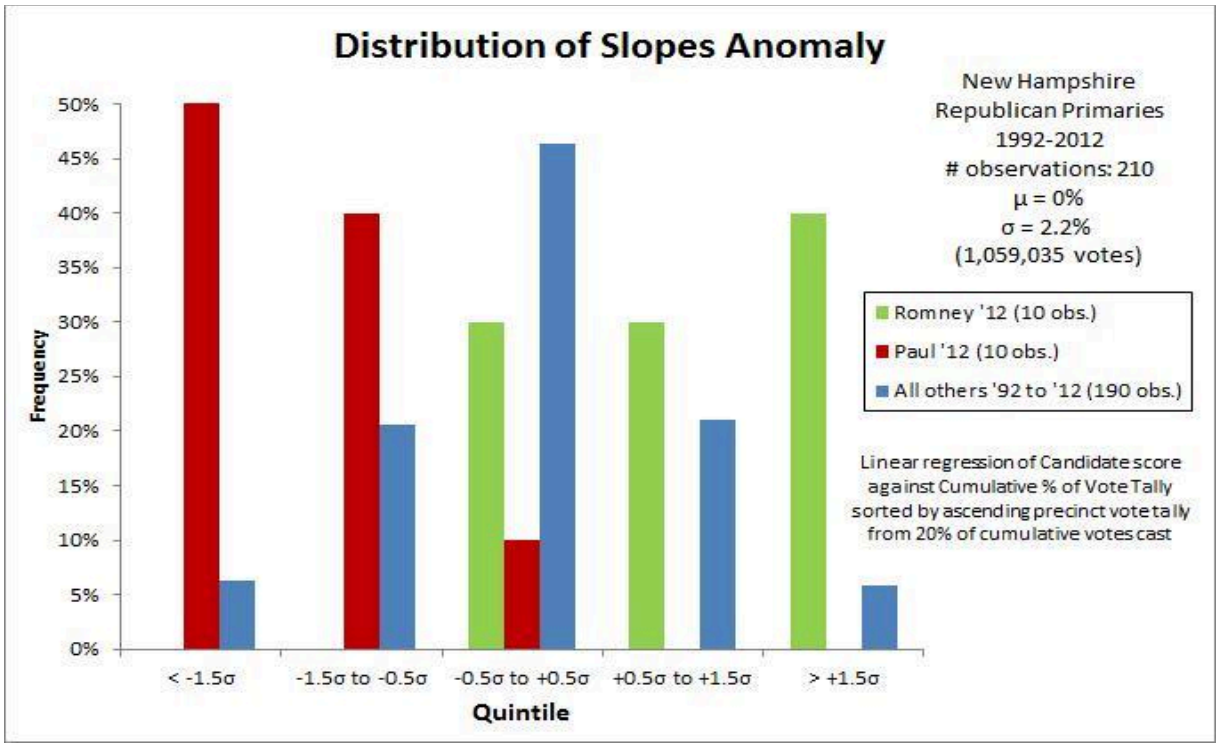
Now, those definitely look like some unusual results. Unfortunately, the simplest explanation is that somehow in the vote tabulation and reporting a small percentage of his opponents votes are switched or “flipped” to Mitt Romney. The vote totals are unchanged so as to avoid undue attention during canvassing by election officials. And the number of votes taken from each precinct are not too large either. In Nevada, the calculated average vote flip is 4 votes per precinct in the counties where anomalies are observed. Most precinct chairs would attribute such a small discrepancy to an insignificant clerical error, but added all together those little differences can make a big difference in the delegate count.

Some people suggested that perhaps the straight sloped lines we are seeing are not unusual at all. Maybe there are demographic differences at work. There are a couple of problems in the data with those hypotheses; 1) Mitt Romney is always the beneficiary. 2) The candidate(s) suffering losses varies by date and state according to whose loss most benefits Mitt Romney. 3) the sloped lines aren’t present in historical data.

This is made with New Hampshire primary data from 1992 to 2012 (excludes Romney and Paul)



As you can see, the historical data in New Hampshire is normal, although a bit more peaked than the standard normal distribution (statisticians refer to kurtosis to describe this feature, but for our purposes, let's just say that republicans are so normal that the vendors in Tampa ought to stock up on vanilla ice cream). On the other hand, this year's data just do not fit in:



Just for reference, the odds of Romney's data having 40% in that last column are about 1 in 50,000 (1/50,000) or about the same as the odds of dying in a cataclysmic storm.

Another way to look at the data is to chart it and consider, what are the odds of getting to the endpoint from somewhere in the middle? This is essentially what the news agencies do on election night. They look at the votes that have come in, calculate the margin of error, figure the odds of that candidate ending up with more than 50% of the votes, and project a winner as soon as possible.

Here is a table of the odds of Mitt Romney's vote totals reaching their endpoint by county in the South Carolina primary:

Probability of Romney's cumulative score surge is 1/...	
Aiken	beyond Excel !
Anderson	794,494,528,383,541
Beaufort	beyond Excel !
Berkeley	31,679,367,149,741,600,000,000,000,000,000,000,000,000
Charleston	beyond Excel !
Clarendon	11,681,193,134,110
Darlington	363,585,028
Dillon	2,313,377,303
Dorchester	95,863,934,011,141
Florence	503,080,416,538,733
Georgetown	1,430,492,902,461,470,000,000,000,000,000,000,000,000,000,000,000,000,000,000
Greenville	18,956,358,756,591,300,000,000,000,000,000,000,000,000,000,000,000,000,000,000,000,000,000,000,000
Greenwood	435,632,702,527
Horry	beyond Excel !
Jasper	1,573,078
Lancaster	464,411,322,562,908,000,000,000,000,000,000,000,000,000,000,000,000
Laurens	4,081
Lexington	14,744,203,189,239,000,000,000,000,000,000,000,000
Oconee	1,097,502,559,035,260,000,000,000,000,000,000,000,000
Orangeburg	13,126,607,848,079,600
Pickens	910,001,420
Richland	153,852,256,996,458,000,000,000,000,000,000
Spartanburg	2,873,002,644,505,100
Sumter	216,259,721,825,361
Union	beyond Excel !
South Carolina Counties, Primary 2012	

To put this in some perspective, the odds of the Romney surge happening by chance in Lexington, SC are approximately the same as the odds of winning the Texas state lottery five weeks in a row buying a single quick pick ticket each week. The odds in Greenville are more than double that order of magnitude (or like winning the lottery ten weeks consecutively), and the odds in some counties are beyond the capacity of Microsoft Excel to calculate.

Conclusion

So, the unavoidable conclusion is this; either the statistical methodologies used in political science for many years are no longer valid or the 2012 Republican Presidential Preference Election is being manipulated. Considering the number of state elections still to be conducted, the delegate selection for the national convention, and the security of the general election in November, it is absolutely imperative that the source or sources of this problem are identified and corrected immediately. Since identifying the source(s) of the problem will take precious time, state and local officials can concurrently review procedures in light of this information to safeguard those primaries still underway.

Nothing short of the integrity of the entire American electoral process is at stake.

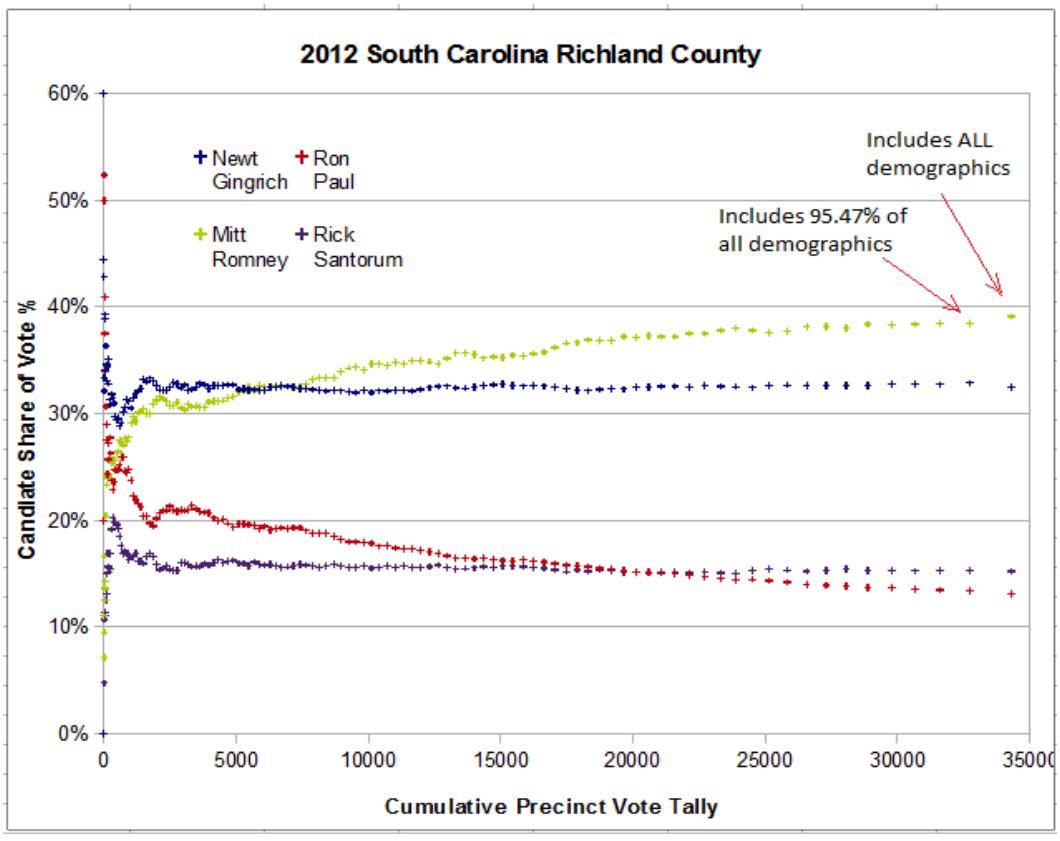
Technical Addendum

Explaining the Cumulative Precinct Vote Tally X-Axis

This is a fundamental issue related to this apparent algorithm and how it operates so precisely to create smooth upward gradients for Romney. What seems to confuse lots of people is the X-Axis in most of our charts, described as: "Cumulative Precinct Vote Tally" (sometimes expressed as a percentage)

So what is "Cumulative Precinct Vote Tally"? It is the prior sum of ALL precincts up to that point and the related candidate percentage of the vote on the Y-Axis for all votes accumulated thus far. It's similar to the way you watch votes coming in on election night in that 10% on the x-axis means 10% of the votes have been counted. But, on election night the precincts are added in whatever order they come in; here they are ordered smallest vote total to largest.

Here's a visual description: In this chart below, the very last point on the chart of Mitt Romney's line represents the final percentage achieved by Mitt Romney when all 34299 votes are counted. That single last point represents ALL 100% (34299) votes reported. **That point includes all demographics.** The previous point (to the left of the last point) represents 95.47% of ALL votes (32746 votes) and the correspondng Y-Axis is Mitt percentage (38.4%) when 95.47% of the values are included. My emphasis here is that 95.47% of all demographics is included in that point.

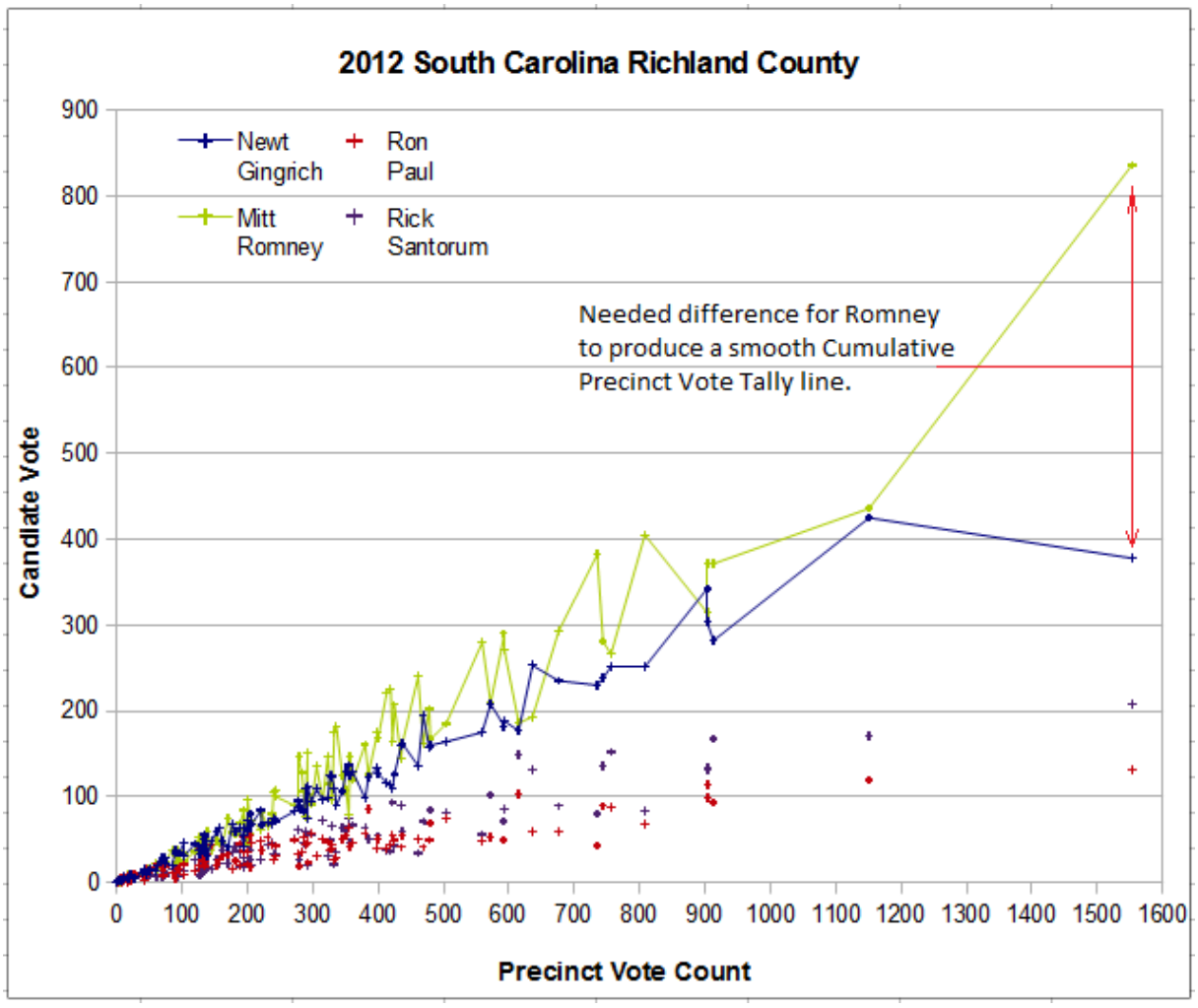


In order to produce this nice smooth slope, here's what REALLY happening underneath it all. Here's how the sausage is made:

This chart below describes what Mitt Romney has to score as a function of precinct size in order to make the above chart smooth. Those are the actual numbers as precinct sizes increase. This Romney line below is certainly not smooth and progressive. Besides why would Newt do so much worse, especially at the last point? This should put cold water on arguments that Romney does better the larger the precincts or that there are more important factors at play such as voter turnout percentage per precinct.

Cumulative Precinct Vote Tally is the best independent variable to explain the upward smooth lines on the charts.

What's fascinating and important to understand is that these seemingly random variations precisely sum up, or stating differently, the integration of these values under the curve, produces a near perfect, smoothly increasing line. (I know that the integration has an averaging effect, but the straight linear increase is what concerns most of us) The above sloped resulting line typically correlates to the X-Axis with as much as 0.993 correlation.



To make sure I'm fully understood: Accumulation does tend to average things. The average of a large sequence of vote percentages should normally cause a smooth horizontal line, not a well defined upward slope.

The reason why it should not be a slope is that these last few points (and specifically the very last single point) **includes all demographics** for the entire state/county being charted and needs to match the final vote.

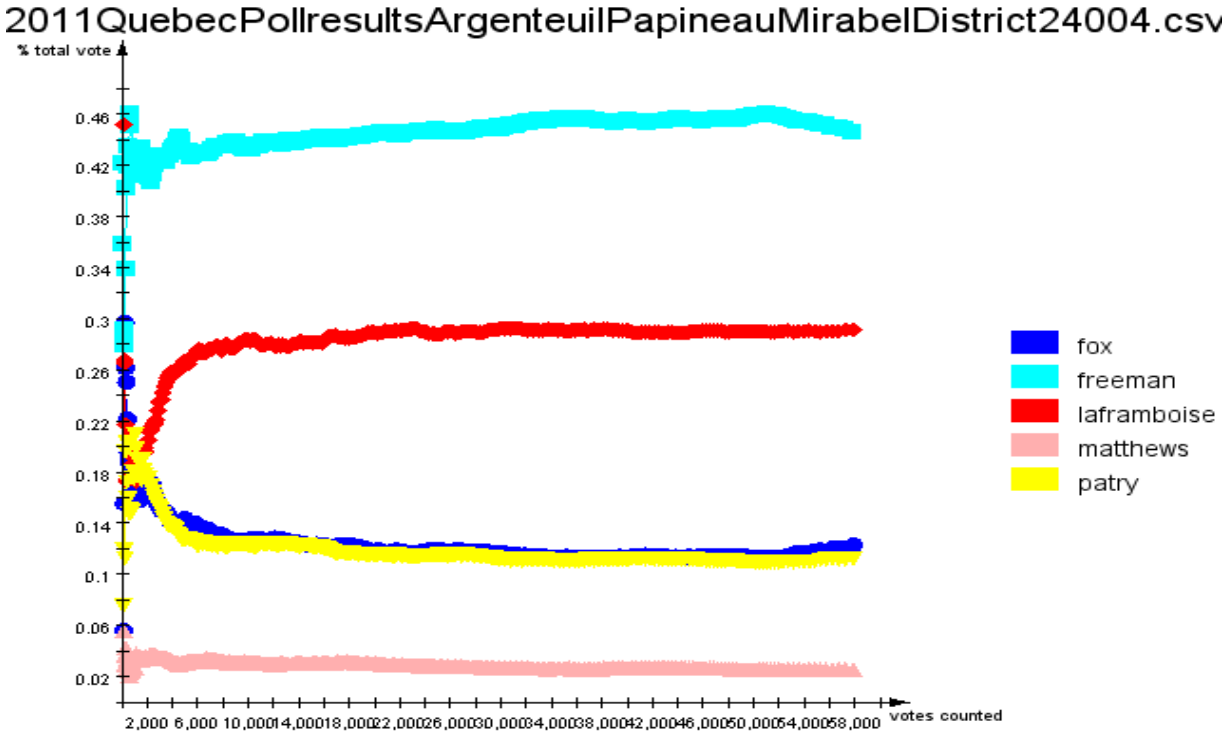
This is why, as we have seen multiple times in prior American and European elections, a nice flat-line as expected, once we're past 20-30% on the X-Axis.
RonRules

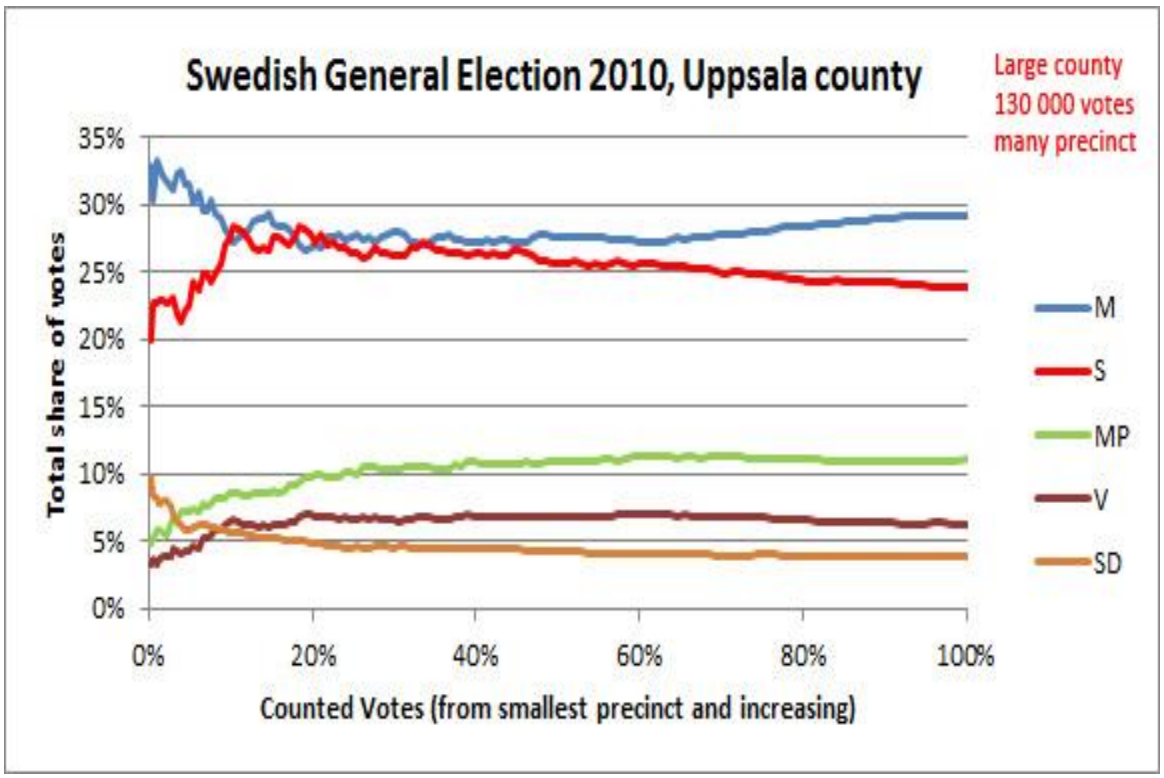
More demographics

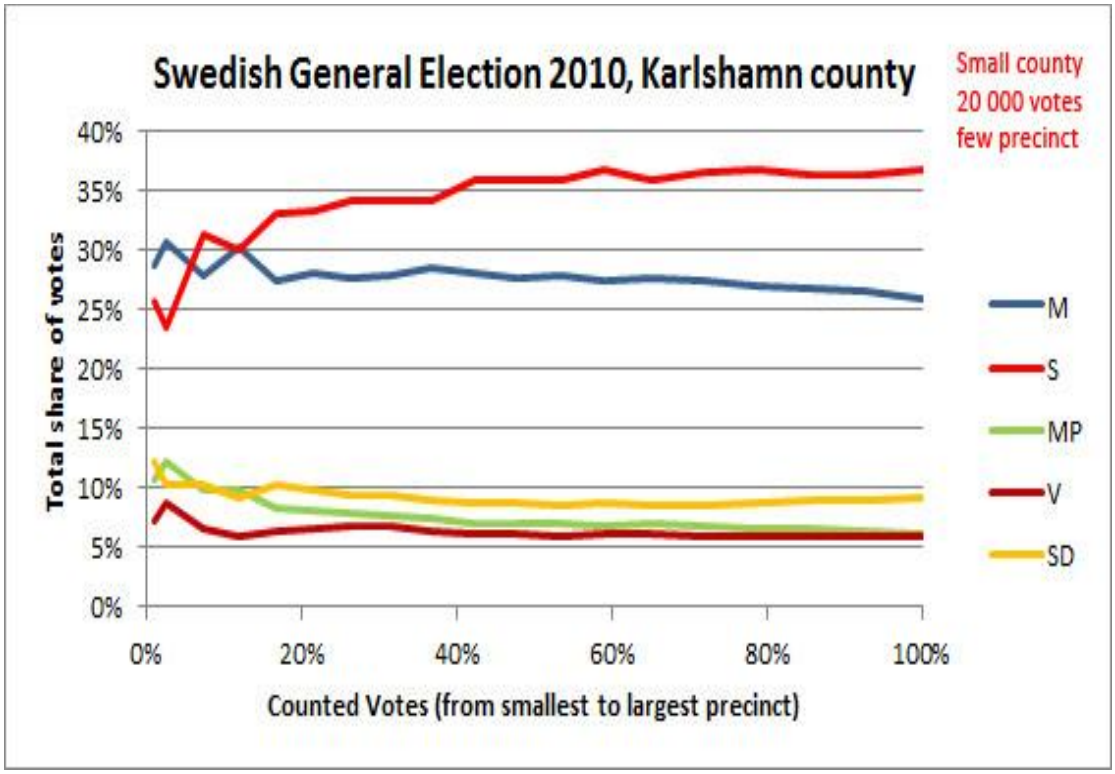
Ron Paul voter demographics (CNN entrance and exit polls through 2-17-2012) in Iowa, New Hampshire, South Carolina, and Florida:

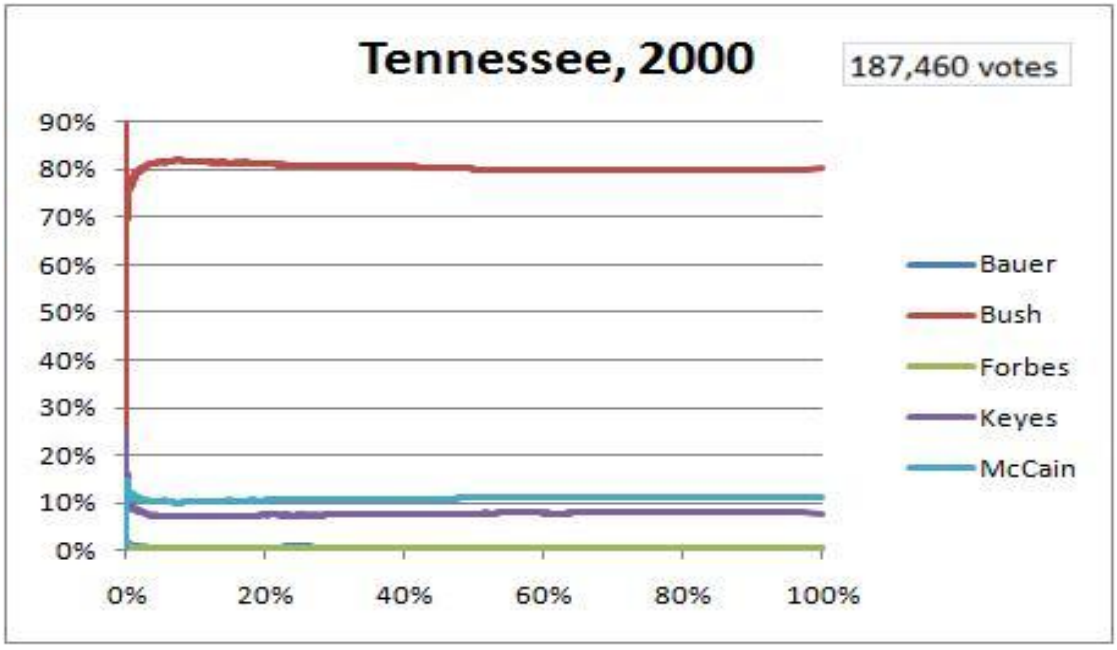
Overall	**16%**
Urban	**17%**
Suburban	**15%**
Rural	**17%**

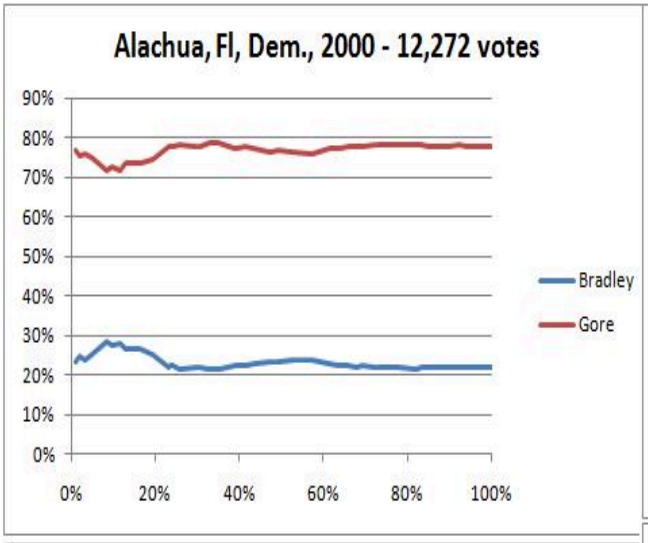
Examples of regular (no vote flipping) data plots

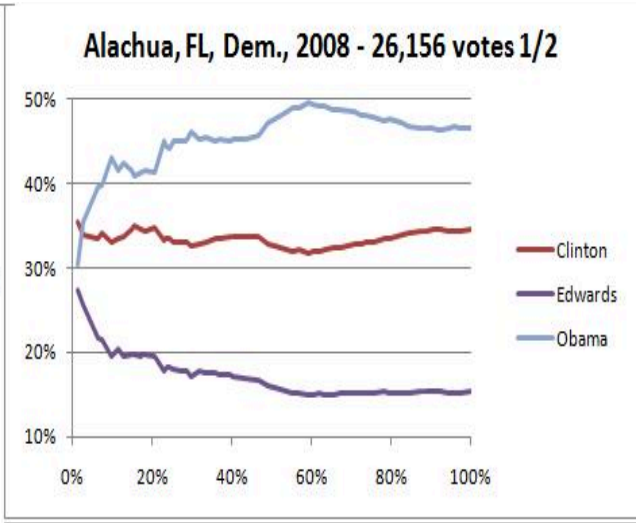


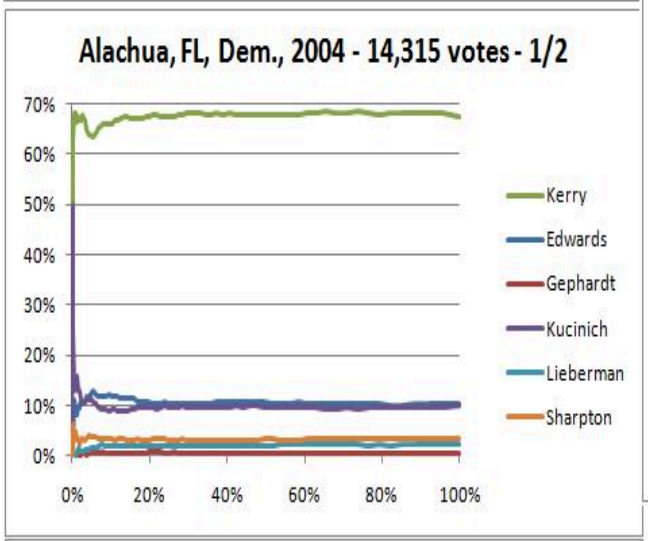


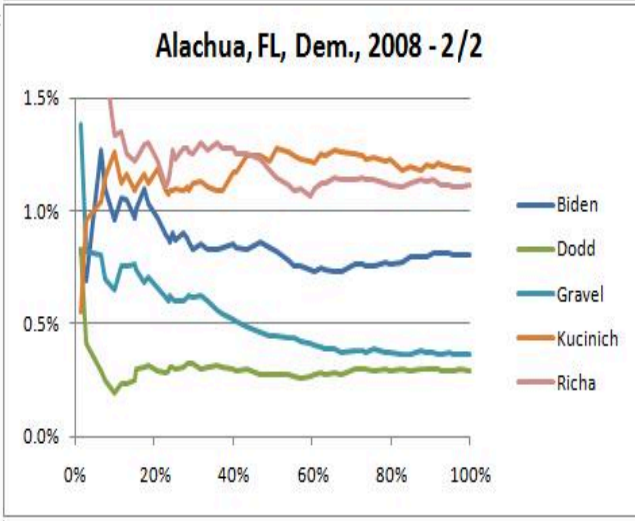

Swedish General Election 2010, Karlshamn county
Small county
20 000 votes
few precinct
Total share of votes
40%
35%
30%
25%
20%
15%
10%
5%
0%
0%
20%
40%
60%
80%
100%
Counted Votes (from smallest to largest precinct)
M
S
MP
V
SD

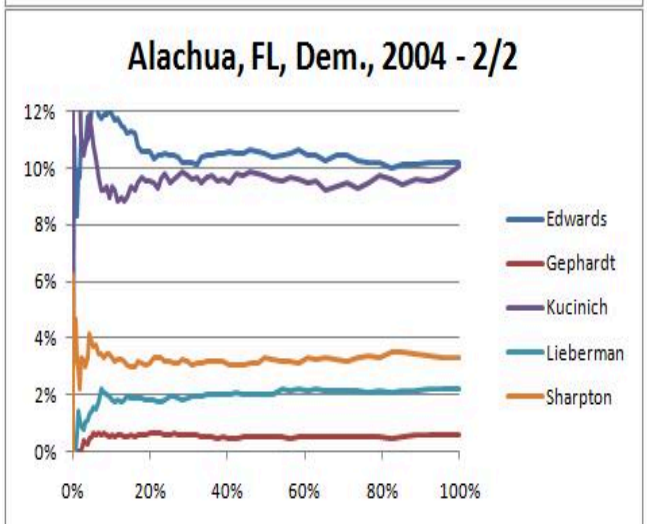

Tennessee, 2000
187,460 votes
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
0%
20%
40%
60%
80%
100%
Bauer
Bush
Forbes
Keyes
McCain


Alachua, Fl, Dem., 2000 - 12,272 votes
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
0%
20%
40%
60%
80%
100%
Bradley
Gore

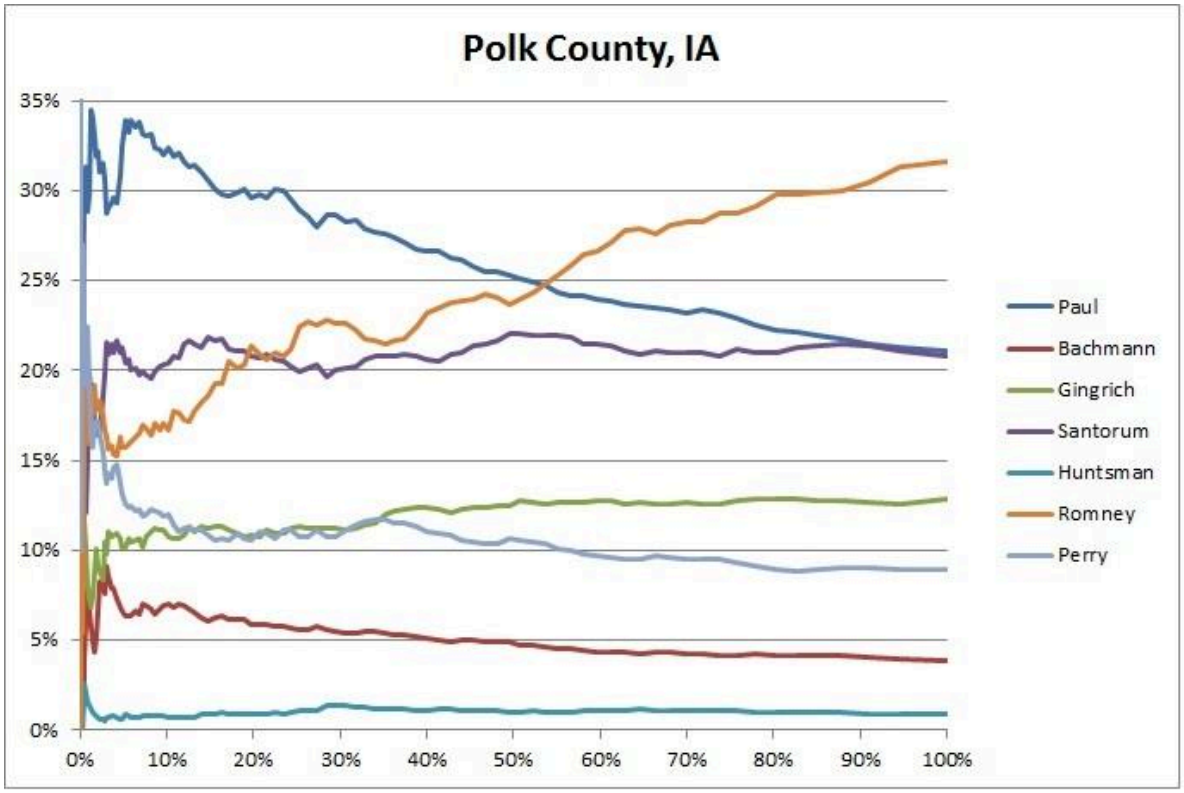

Alachua, FL, Dem., 2008 - 26,156 votes 1/2
50%
40%
30%
20%
10%
0%
20%
40%
60%
80%
100%
Clinton
Edwards
Obama

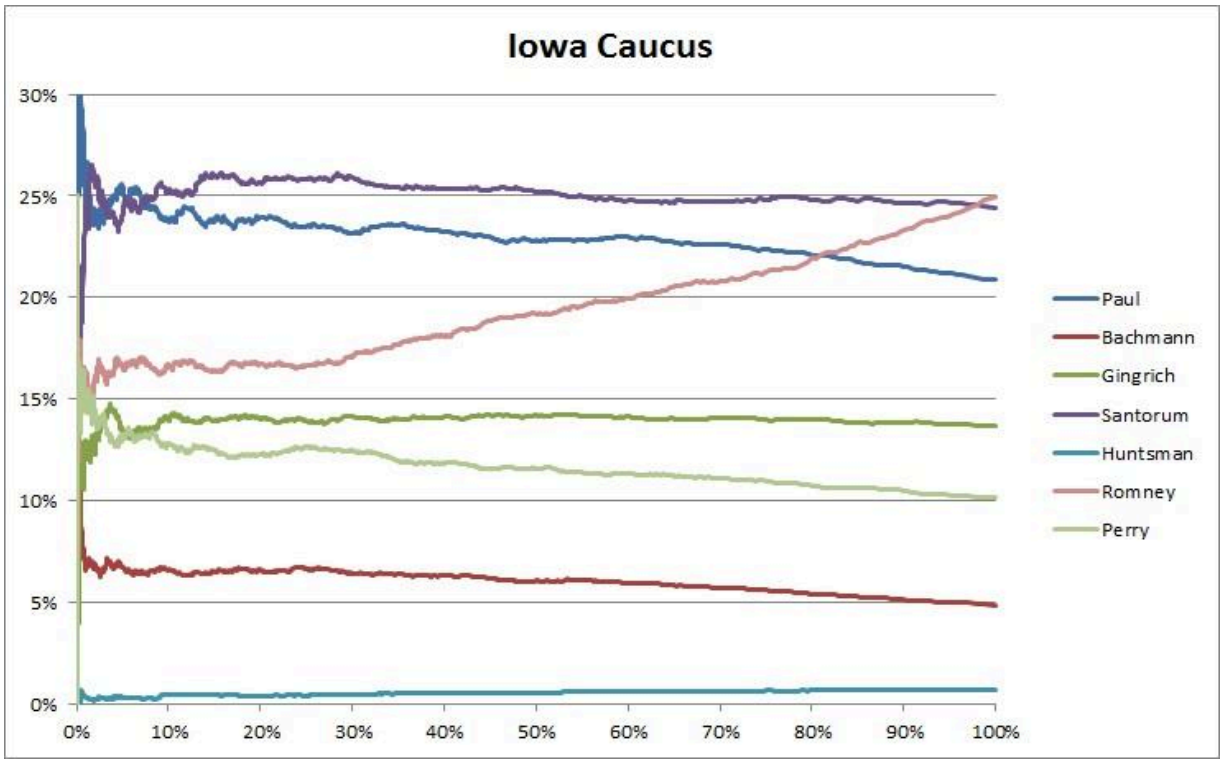

Alachua, FL, Dem., 2004 - 14,315 votes - 1/2
70%
60%
50%
40%
30%
20%
10%
0%
0%
20%
40%
60%
80%
100%
Kerry
Edwards
Gephardt
Kucinich
Lieberman
Sharpton


Alachua, FL, Dem., 2008 - 2/2
1.5%
1.0%
0.5%
0.0%
0%
20%
40%
60%
80%
100%
Biden
Dodd
Gravel
Kucinich
Richa


Alachua, FL, Dem., 2004 - 2/2
12%
10%
8%
6%
4%
2%
0%
0%
20%
40%
60%
80%
100%
Edwards
Gephardt
Kucinich
Lieberman
Sharpton

Examples of abnormal plots:





"The chart allows to deconstruct the algorithm.

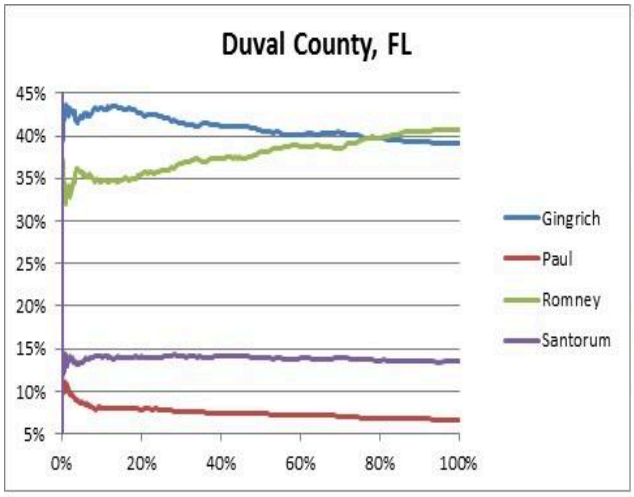
Romney's quasi perfect straight line between 30% and 80% (R-squared 0.99%) indicates that for every additional 10% of votes cast, 10% of them, i.e. 1% is transferred to Romney.

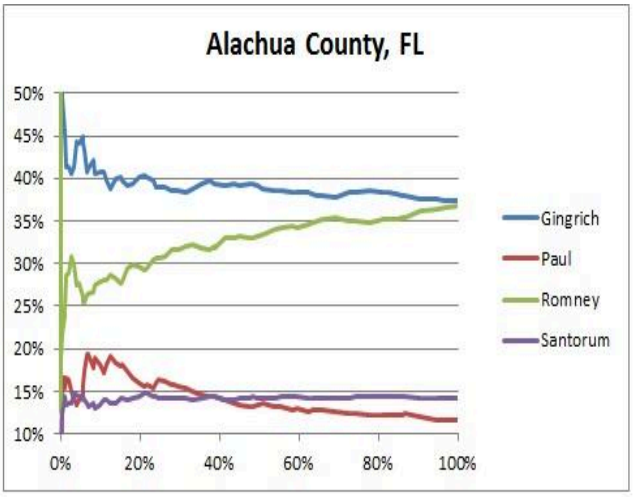
There is a new slope at 80%.

The quasi perfect line between 80% and 100% (R-squared 0.99%) indicates that for every additional 10% of votes cast, 15% of them, i.e. 1.5% is transferred to Romney." *by Liberty1789; 02-21-2012*

Iowa Caucus, 2012

Cumulative % of votes cast by ascending precinct size	Number of precincts	Avg. number of votes cast per precinct	Romney 's cumulative score	Std deviation of Romney's score	Santorum 's cumulative score	Std deviation of Santorum's score	Gingrich 's cumulative score	Std deviation of Gingrich's score
0-10%	579	21	16.7%	1.6%	23.5%	3.6%	13.4%	1.9%
10-20%	293	41	18.1%	0.1%	25.4%	0.2%	14.0%	0.2%
20-30%	214	57	18.2%	0.1%	25.5%	0.1%	13.7%	0.1%
30-40%	170	71	18.6%	0.3%	25.5%	0.1%	13.6%	0.1%
40-50%	139	87	19.3%	0.2%	25.5%	0.0%	13.5%	0.0%
50-60%	112	109	20.1%	0.2%	25.3%	0.1%	13.5%	0.0%
60-70%	90	135	20.8%	0.2%	25.1%	0.0%	13.4%	0.0%
70-80%	72	168	21.4%	0.2%	25.1%	0.1%	13.4%	0.0%
80-90%	56	218	22.3%	0.4%	25.1%	0.1%	13.4%	0.0%
90-100%	33	364	23.7%	0.5%	24.9%	0.1%	13.3%	0.0%


Duval County, FL
45%
40%
35%
30%
25%
20%
15%
10%
5%
0%
20%
40%
60%
80%
100%
Gingrich
Paul
Romney
Santorum


Alachua County, FL
50%
45%
40%
35%
30%
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15%
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40%
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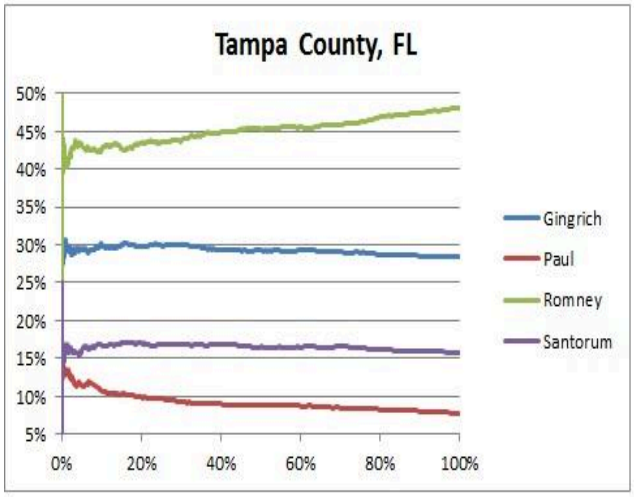
80%
100%
Gingrich
Paul
Romney
Santorum


Tampa County, FL
50%
45%
40%
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25%
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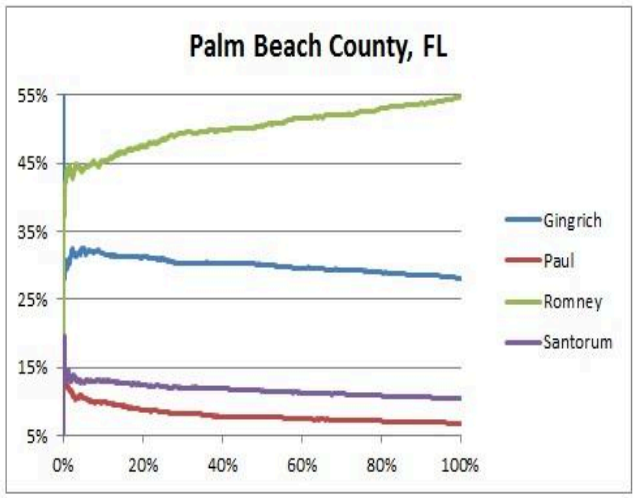
Gingrich
Paul
Romney
Santorum


Palm Beach County, FL
55%
45%
35%
25%
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5%
0%
20%
40%
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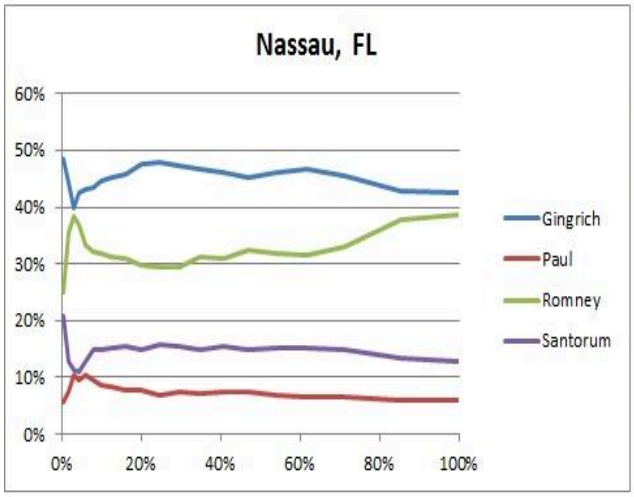
80%
100%
Gingrich
Paul
Romney
Santorum


Nassau, FL
60%
50%
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30%
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10%
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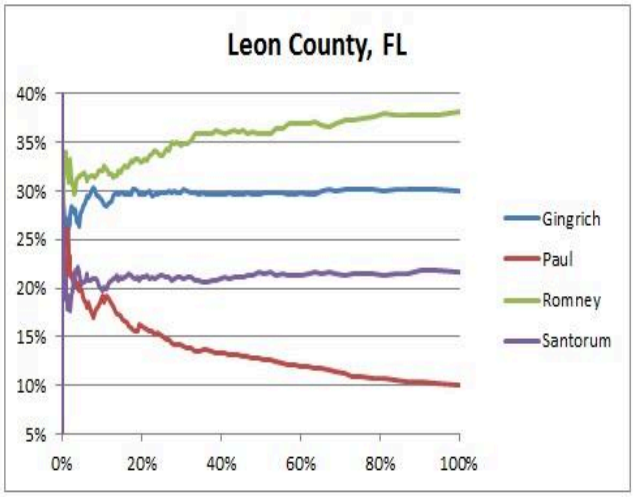
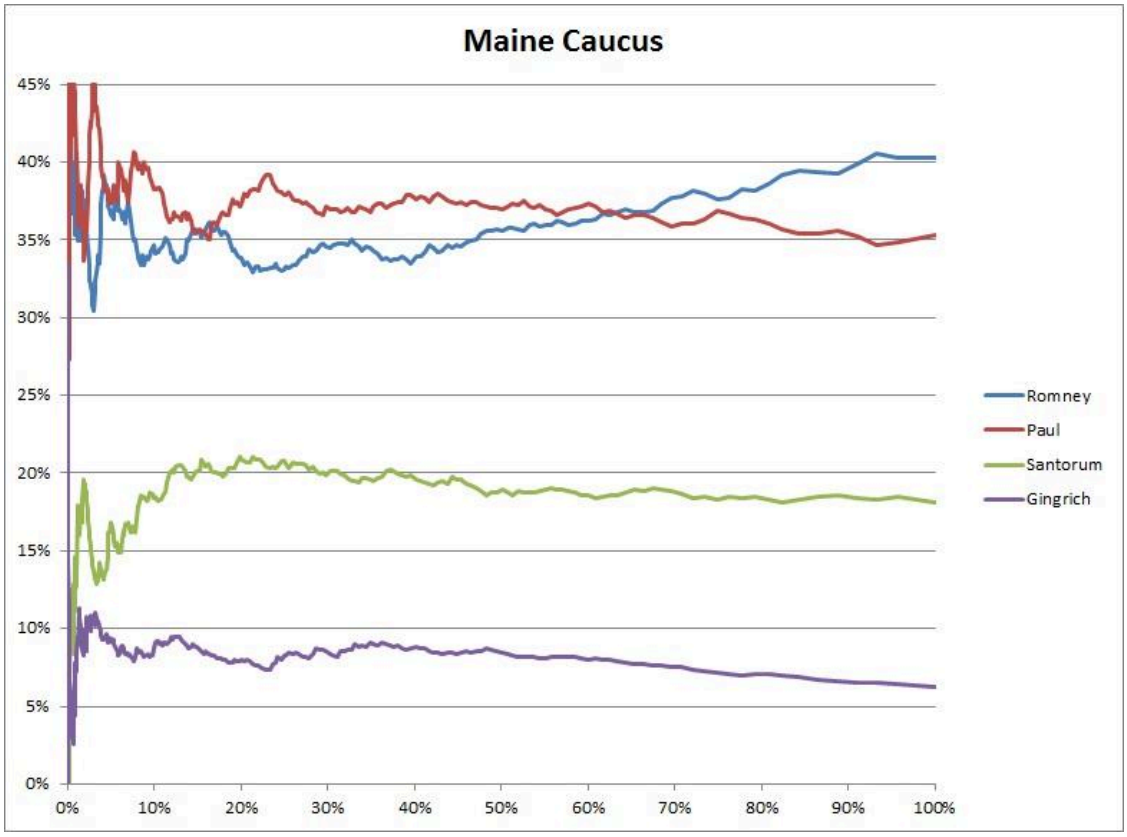
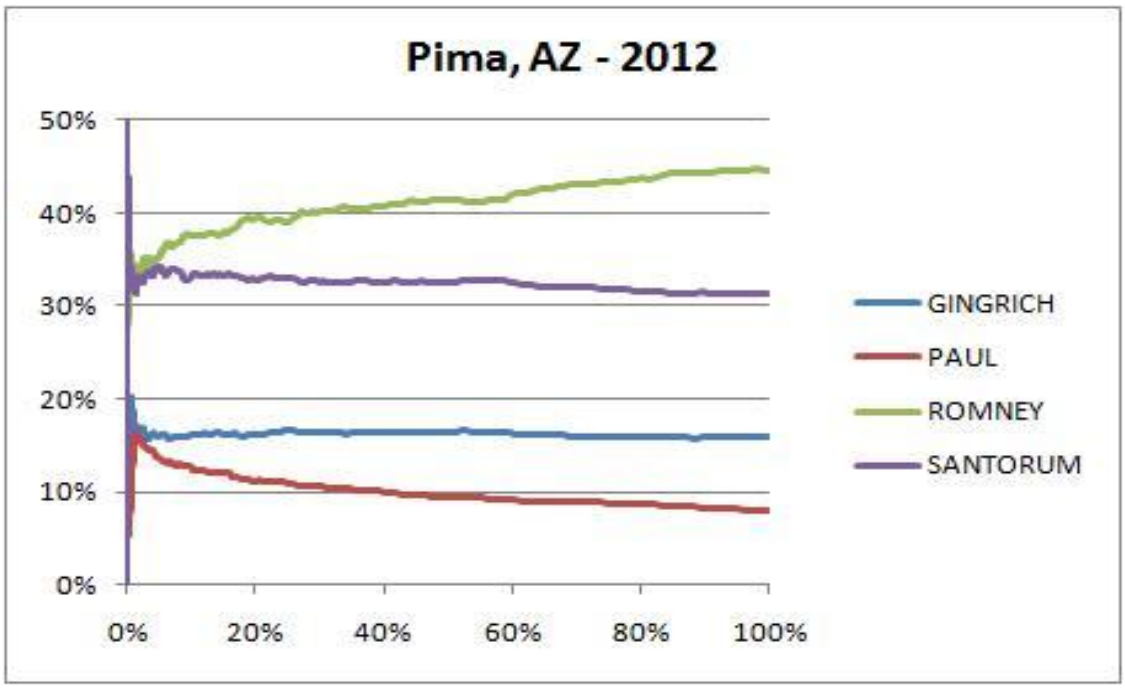
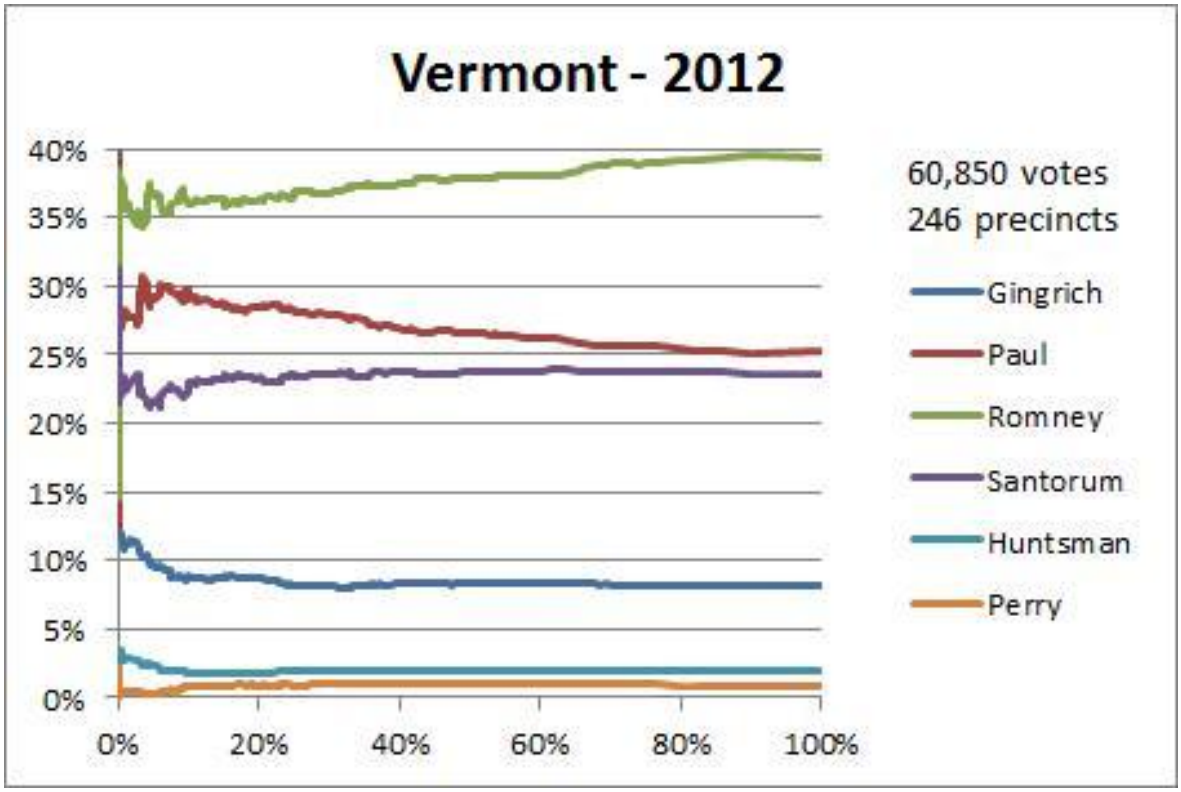
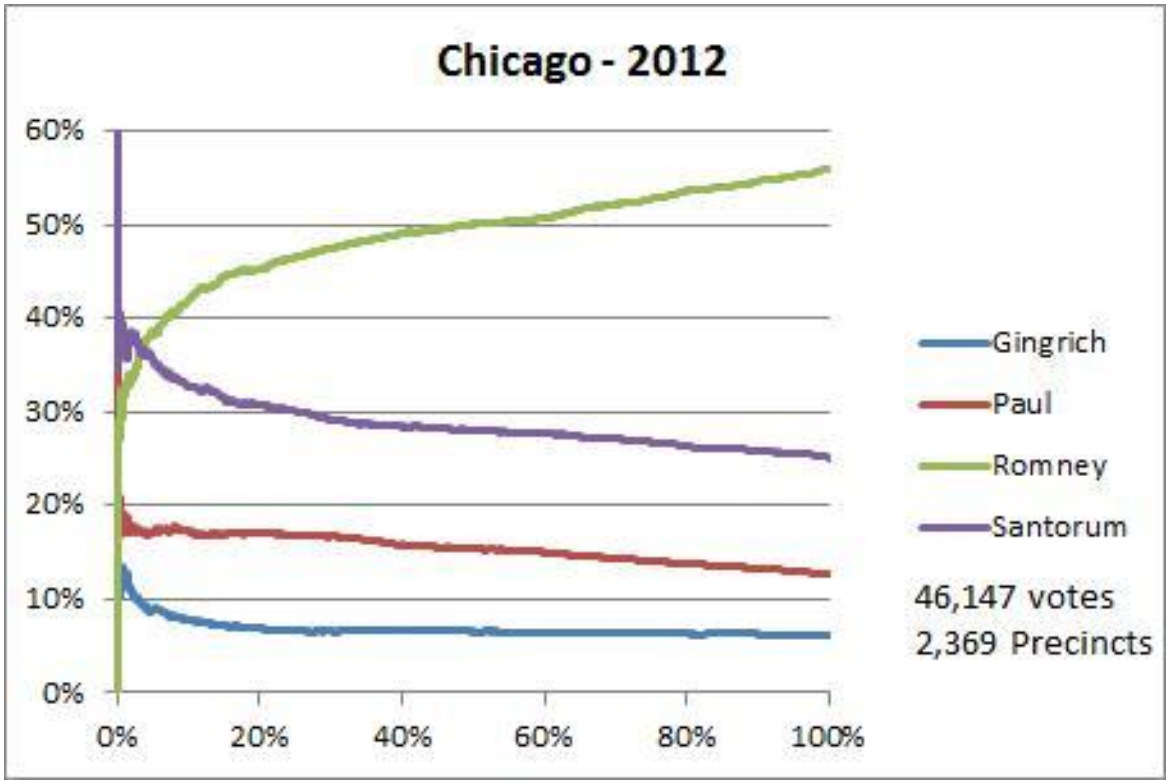
60%
80%
100%
Gingrich
Paul
Romney
Santorum


Leon County, FL
40%
35%
30%
25%
20%
15%
10%
5%
0%
20%
40%
60%
80%
100%
Gingrich
Paul
Romney
Santorum


Maine Caucus
45%
40%
35%
30%
25%
20%
15%
10%
5%
0%
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%
Romney
Paul
Santorum
Gingrich


Pima, AZ - 2012
50%
40%
30%
20%
10%
0%
0%
20%
40%
60%
80%
100%
GINGRICH
PAUL
ROMNEY
SANTORUM


Vermont - 2012
40%
35%
30%
25%
20%
15%
10%
5%
0%
0%
20%
40%
60%
80%
100%
60,850 votes
246 precincts
Gingrich
Paul
Romney
Santorum
Huntsman
Perry


Chicago - 2012
60%
50%
40%
30%
20%
10%
0%
0%
20%
40%
60%
80%
100%
Gingrich
Paul
Romney
Santorum
46,147 votes
2,369 Precincts

Logical Proof (adapted from posts of Liberty1789)

As you are versed in stats, here is what I would consider a mathematical proof of vote rigging. I apologize to our friends who will get a headache out of the analysis.

Iowa Caucus, 2012				
Cumulative % of votes cast by ascending precinct size	Number of precincts	Average number of votes cast per precinct	Romney 's average score in precincts	Standard deviation of Romney's score
0-10%	270	22	15.6%	2.7%
10-20%	216	42	16.7%	0.2%
20-30%	157	59	16.7%	0.1%
30-40%	125	75	17.7%	0.3%
40-50%	103	93	18.7%	0.3%
50-60%	88	116	19.6%	0.3%
60-70%	70	144	20.5%	0.3%
70-80%	60	178	21.3%	0.3%
80-90%	47	232	22.6%	0.4%
90-100%	30	370	24.1%	0.5%

Consider ballots as a random variables. Look how fast small precincts become a powerful predictor of Romney's score: a standard deviation of 0.2% as soon as the second decile, 0,1% in the 3rd!

And then? The mathematically impossible happens:

Romney's score jumps by 1%,

10 times the previous standard deviation,

every decile

FOR AN AVERAGE PRECINCT VOTE SIZE UP ONLY A COUPLE OF DOZENS OF VOTES

Are demographics of 50-vote precincts different from 70-vote precincts? No way.

The impossibly large systematic linear deviation is the mathematical smoking gun.
2-22-12

This is what you need to forward to your math/statistician teacher/friend. This is the mathematically impossible to the mathematical brain.

This is where we need feedback fast.

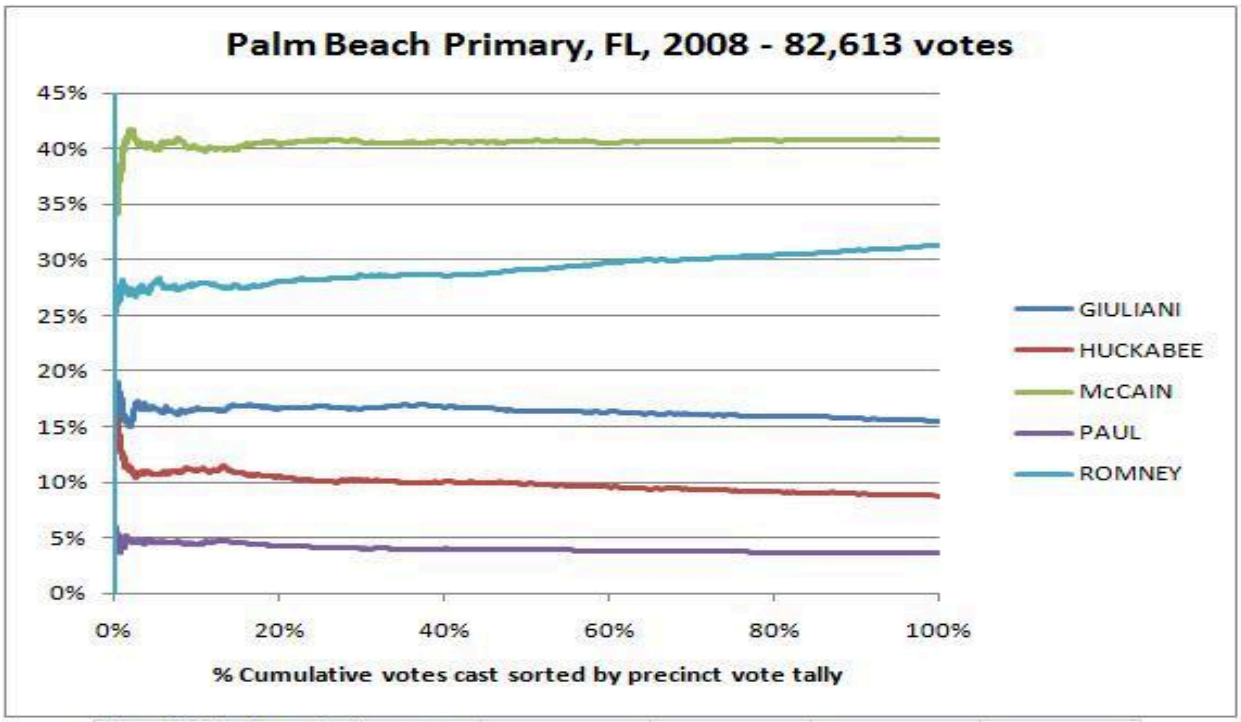
Iowa Caucus, 2012								
Cumulative % of votes cast by ascending precinct size	Number of precincts	Average number of votes cast per precinct	Romney 's cumulative score	Std deviation of Romney's score	Santorum 's cumulative score	Std deviation of Santorum's score	Gingrich 's cumulative score	Std deviation of Gingrich's score
0-10%	270	22	15.6%	2.7%	22.8%	4.9%	12.5%	2.6%
10-20%	216	42	16.7%	0.2%	25.6%	0.3%	14.0%	0.1%
20-30%	157	59	16.7%	0.1%	25.9%	0.1%	14.0%	0.1%
30-40%	125	75	17.7%	0.3%	25.5%	0.1%	14.0%	0.1%
40-50%	103	93	18.7%	0.3%	25.3%	0.1%	14.2%	0.1%
50-60%	88	116	19.6%	0.3%	25.0%	0.1%	14.2%	0.0%
60-70%	70	144	20.5%	0.3%	24.7%	0.0%	14.0%	0.0%
70-80%	60	178	21.3%	0.3%	24.8%	0.1%	14.0%	0.0%
80-90%	47	232	22.6%	0.4%	24.8%	0.1%	13.9%	0.1%
90-100%	30	370	24.1%	0.5%	24.6%	0.1%	13.8%	0.1%

Ok. How do we seriously, professionally tell when votes where flipped or not? What is a natural straight line and one doctored with?

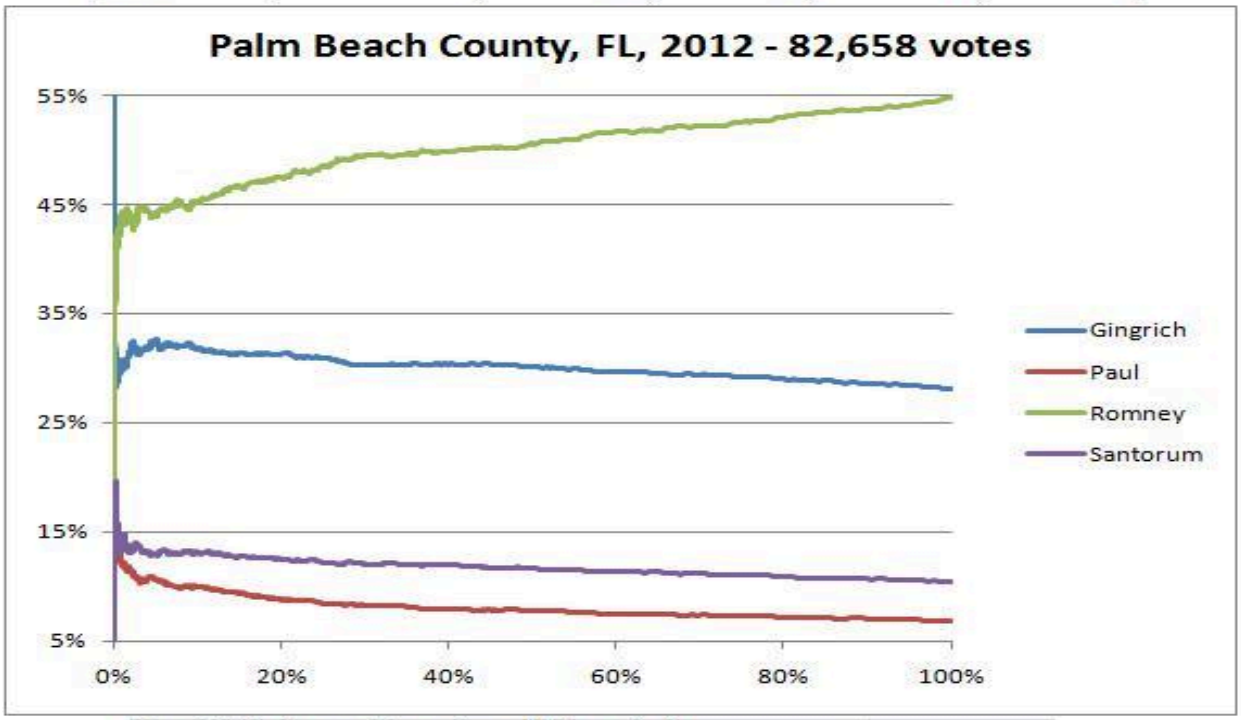
Just staring at graphs is not so convincing. Fair enough.

It's gonna be tricky for those without stat training. The others will see quickly why I start to speak of absolute mathematical proof of vote rigging.

Here are the Republican Primary results for Palm Beach. Loads of voters and precincts. Perfect. Look at the charts:



from 50% of cumulative votes	GIULIANI	HUCKABEE	McCAIN	PAUL	ROMNEY
Slope	-1.70%	-2.09%	0.44%	-0.73%	4.07%
St dev slope	0.02%	0.02%	0.03%	0.01%	0.04%
R-Squared	97%	98%	52%	97%	98%
F value	4636	8699	166	5060	9648
t-stat	-68	-93	13	-71	98



from 40% of cumulative votes, 147 precincts	Gingrich	Paul	Romney	Santorum
Slope	-4%	-2%	8%	-2%
St Dev Slop	0.04%	0.03%	0.07%	0.02%
R-2	0.98	0.97	0.99	0.99
F	8969	4415	12554	11888
t-stat	-95	-66	112	-109

In 2008, something extraordinary goes on.

McCain's score goes dead flat very early. This is what one should expect. You cumulate so many votes so quickly that you can reliably project Mc Cain's final score at 100% with the score at 10%. Good.

Now look at the rest of the pack.

Romney climbs CONSTANTLY at the sole expense of the 3 others.

How constantly? That is what the table below the chart explains. Even though all the candidates' lines look identically straight to the naked eye from 50% cumulative onwards, they are totally different mathematical animals to the analytical microscope.

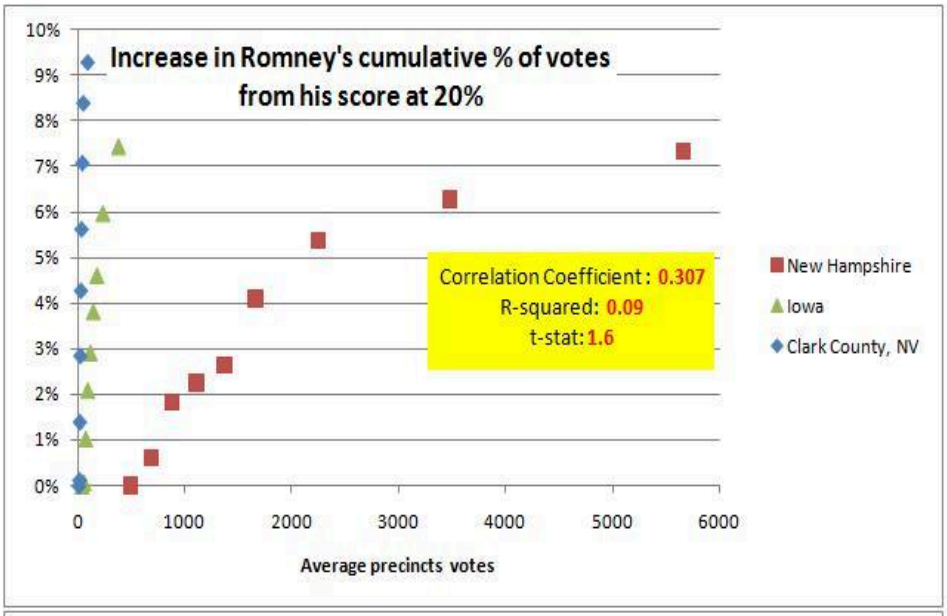
The variation in the cumulative % (X-axis) explains 97-98% of the variation in the score of Giulani, Huckabee, Paul and Romney (it is what the R-squared number means). Those 4 lines are identically straight. Amazingly straight. **Algorithmetically smoothed.** McCain's line is not at all like them. McCain was just left alone.

F factor and t-stat are sophisticated statistical indicators giving the probability of this happening by chance. The higher the value, the lower the chance of simply random correlation. F and t are HUGE, leaving no room whatsoever for chance.

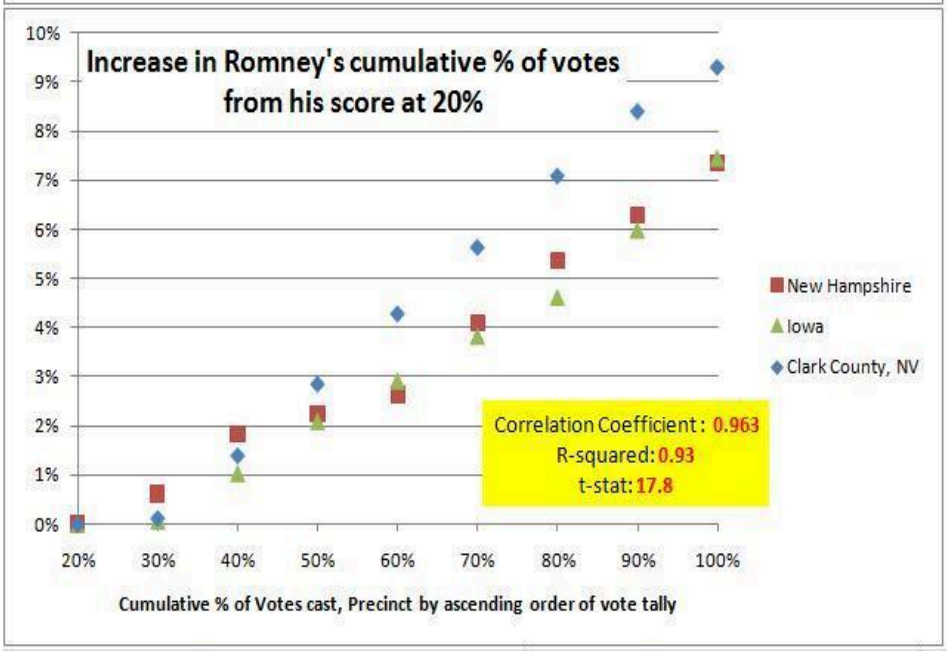
Now 2012. All candidates were bled for Romney this time around. Landslide time. No mercy...

Hear the central case: at mid-way, 50% of votes in, hundreds of precincts counted, I should have a pretty good estimate of the final score at 100% and dozens and dozens of counties graphed here confirm that. Let's take it as the working assumption. There is no reason for the candidates' lines to differ in volatility and t stat other than randomly.

Now a vote flipper kicks in and transfers an amount of votes from one guy to the other, proportionally to the cumulative % of votes cast. The original flatline becomes a slope, but very importantly, its value is now the sum of a natural line and a mathematical straight line. The mathematical impact of that is that slope will be much "straighter". The standard deviation around the linear fit of the slope segment will collapse. Straighter segment equates a higher R^2 in the slope segment than in flat liners. And it means a massive change in F factor and T stat. **A true mathematical fingerprint!** Because of the inclusion of of a zero-volatility linear component, F factors/t-stat jump 5 to 30 times vs the untampered line! It is what you see in Palm Beach above.



	Votes
NH	245,044
IA	59,088
Clark	16,996



	Clark County, NV				New Hampshire				Iowa			
Cumulative % of votes cast by ascending precinct size	Number of precincts	Avg. number of votes cast per precinct	Romney 's cumulative score	Romney 's cumulative score increase	Number of precincts	Avg. number of votes cast per precinct	Romney 's cumulative score	Romney 's cumulative score increase	Number of precincts	Average number of votes cast per precinct	Romney 's cumulative score	Romney 's cumulative score increase
10-20%	134	13	49%	0%	49	494	32%	0%	139	42	17%	0%
20-30%	100	17	49%	0%	36	686	33%	1%	101	59	17%	0%
30-40%	80	21	50%	1%	28	878	34%	2%	79	75	18%	1%
40-50%	68	25	52%	3%	21	1109	34%	2%	64	93	19%	2%
50-60%	57	30	53%	4%	17	1373	35%	3%	51	116	20%	3%
60-70%	48	35	54%	6%	16	1662	36%	4%	41	144	20%	4%
70-80%	39	44	56%	7%	11	2245	38%	5%	33	178	21%	5%
80-90%	32	53	57%	8%	6	3475	38%	6%	26	233	23%	6%
90-100%	18	94	58%	9%	5	5661	39%	7%	15	377	24%	7%

The top chart is about New Hampshire, Iowa and the good old county of Clark, NV.

Each point represents a decile (I took the 9 largest).
The X-axis is plotting the number of votes, as ever by ascending order of precinct vote tally. The Y-axis indicates Romney's score improvement over the 2nd decile (the 10-20% of cumulative votes counted). The 2nd decile is therefore plotted at 0 on the Y axis (score 2nd decile -score 2nd decile = 0). The plots go up as Romney improves his scores for each and every consecutive decile, as always when he climbs.

Now focus on New hampshire, the red dots. Wow, look at that, man! The more voters, the better the score. His campaign is really good in large districts. And look: the score improvement is so regular. What a wonderful candidate...

Hmmm, what's funny is that he is achieving the very same, equally spaced progess in Iowa. Wow. Well, he is just doing better in larger precincts you see, even though, even though... those Iowan precincts do not look so large and different when compared to NH... Hmm...

Hold on... Talking of bizarre... What are those blue spots doing shooting up vertically? They get the very same even spacing but, precinct population seems to be barely changed?...

Well they do change: Quintile 5 has an average of 25 voters vs only 21 for Quintile 4. Then the gap is 5 votes, then again 5, then 9 votes... And every single time, Romney's score goes up like clockwork. A thing of wonder. We said the bigger the district, the better the performance of Romney's campaign, no? Even if it means 5 voters bigger?? No.

The t-stat parameters in the yellow box confirm it: no correlation to speak of.

But now look at the magic alignment of the second chart. Oh boy, this is correlation made in Heaven. The improvement of Romney is a straight linear function of cumulative votes. Just more votes and my score automatically goes up! A politician's dream come true!

Of course what we are looking at is an algorithm that has decided to switch a percentage of the cumulative votes to Romney. You tell the software how much you want to improve the final score by. A 7% to 9% boost seems quite popular from what can be read on the chart. Then the algorithm calculates how many votes need to be flipped and it spreads the flip unto the precincts, **proportionally to their share of the final vote**. In Clark, it means spreading all the way down to precincts of 15 voters, in perfect proportion of what you do to the 20-men precinct.

Back to South Carolina...

Let me explain the column headers of the table below.

South Carolina	Romney's segment		Number of	Slope	Share of Cumulative Votes Slope				t stat			
County	starts at	ends at	observations	Std Dev.	Gingrich	Paul	Romney	Santorum	G	P	R	S
Richland	10%	100%	76	7%	0%	-9%	9%	-1%	4.7	34.6	29.1	10.1
Spartanburg	10%	100%	67	4%	-2%	-4%	4%	2%	10.5	23.7	14.5	17.7
Lexington	20%	100%	56	3%	-1%	-3%	4%	1%	9.8	54.9	26.5	5.6
Horry	30%	100%	52	7%	-8%	0%	9%	-2%	19.9	7.0	17.0	13.5
Beaufort	20%	100%	48	8%	-4%	-5%	12%	-3%	24.6	27.3	27.7	20.8
Charleston	50%	90%	46	5%	0%	-5%	6%	-1%	0.9	44.1	19.5	9.4
Dorchester	30%	100%	36	3%	-1%	-2%	4%	-1%	5.8	9.1	11.9	5.1
Aiken	30%	100%	35	4%	-4%	-1%	6%	-1%	11.9	12.2	17.7	16.6
Pickens	30%	100%	28	2%	3%	-2%	-2%	1%	17.9	14.8	6.6	9.4
York	50%	100%	27	3%	0%	-1%	5%	-4%	0.9	4.5	15.2	21.6
Sumter	20%	100%	27	4%	-3%	-4%	5%	1%	6.3	17.6	11.3	4.1
Florence	30%	100%	22	4%	-3%	-1%	6%	-2%	9.1	5.0	12.3	5.4
Orangeburg	30%	100%	22	2%	3%	-1%	0%	-2%	8.4	2.6	0.7	9.1
Anderson	15%	40%	20	9%	1%	-8%	12%	-5%	0.8	12.7	12.5	8.6
Berkeley	25%	90%	19	2%	-3%	1%	-1%	2%	6.5	6.4	1.7	6.6
Greenwood	30%	100%	19	2%	2%	-3%	2%	-1%	5.8	6.2	3.6	5.6
Williamsburg	10%	100%	18	2%	2%	-1%	1%	-2%	1.9	2.3	1.2	2.9
Greenville	20%	80%	17	5%	0%	-5%	7%	-2%	0.1	46.8	21.0	9.6
Kershaw	30%	100%	17	2%	-3%	-1%	2%	1%	5.5	1.7	2.4	4.8
Oconee	10%	100%	16	9%	-3%	-6%	14%	-5%	5.0	12.5	14.8	7.9
Laurens	30%	100%	16	4%	2%	-5%	4%	-1%	5.6	9.2	7.1	2.6
Union	10%	100%	16	1%	-1%	0%	2%	0%	1.8	0.0	2.4	0.6
Cherokee	30%	100%	15	1%	1%	-1%	0%	0%	1.9	4.4	0.3	2.0

In each county, I have looked at the chart searching for the part where Romney's line turns into a straight, smooth segment. As you can see, most of the time, it starts around 30% and goes all the way to 100%.

Then Number of Observations gives you how many data points are in the segments. The more, the merrier: the stats become more reliable. The table cuts off at 15 observations.

Then there is a statistical detector of vote flip: Slope Std Dev. This is the standard deviation of the slopes of the 4 candidate's line segments, matching to start and end point of Romney's. The 4 slope numbers are provided in the 4 next columns. If the detector's cell is blue, the chart lines are sloped. Vote flipping alert!

Let's take Richland. Romney goes straight and smooth as soon as 10%, all the way to 100%. 76 observations. Slope STd Dev. is big and blue: something fishy is going on. Wow: the slope of Romney's line is 9%.

I say wow because **the segment's slope is a straight read across for the rate at which the percentage of cumulative votes is flipped.**

(And remember: if the cumulative flips 9%, the non cumulative is flipping 1.5 to 2 times more...)

Now Richland is spectacular because all the flip comes from Paul. Yep: 9% flip rate. The votes are flipped from 10% to 100% deciles, so 9% x (100%-10%) = 8% of the county ballot was transferred right here.

Look at Horry: all the flip from Gingrich. York : all from Santorum.

How Romney can take all his extra share of votes from a sole candidate in a county is already hard to rationalize. But have binary switches on/off like that county after county??

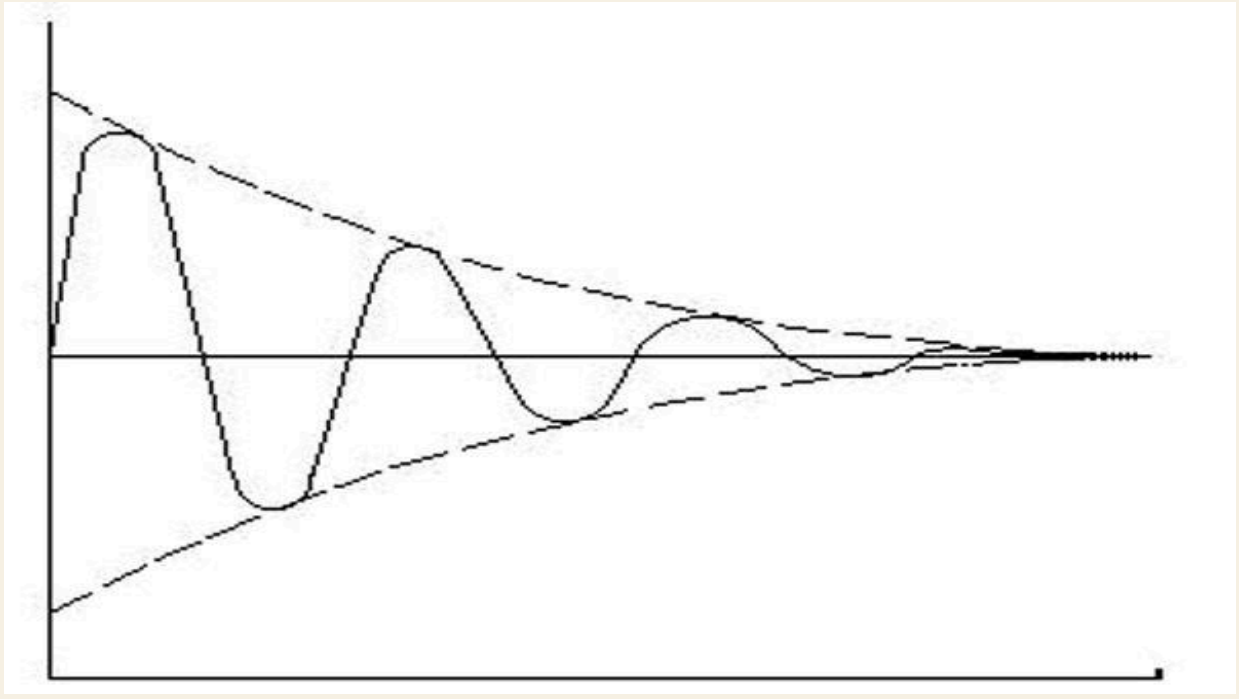
You might have noticed by now that only Romney gets green squares (positive slopes).

Now what the last 4 columns are about: how smooth and straight are the segments? As discussed before, it illustrates than something happens to the "white noise" once the numbers are processed by the algorithm.
2-25-2012

Hypergeometric Distribution

Counting votes in a ballot is like taking marbles from an urn until you've got them all out. Take an urn with 10 marbles, 5 reds 5 blues. You draw the 1st: probability if it being red? 50% Let' say it is red. Pick the second. Probability of being red? 4 reds left in there, so you know it is now 4 chances out of 9.

Now put a 10,000 marbles in there, 1/2 reds 1/2 blues. Pick one. Now make a chart of the cumulative % of the drawn balls that are red. Your first data point on the chart will be 0% or 100%. Draw the second ball. The 2nd data point will be 100% (drawn 2 reds), 50% (1 red, 1 blue) or 0% (no reds). As you know that your final result is 50%, the line will oscillate up and down randomly but rapidly converge towards 50%, something like this:

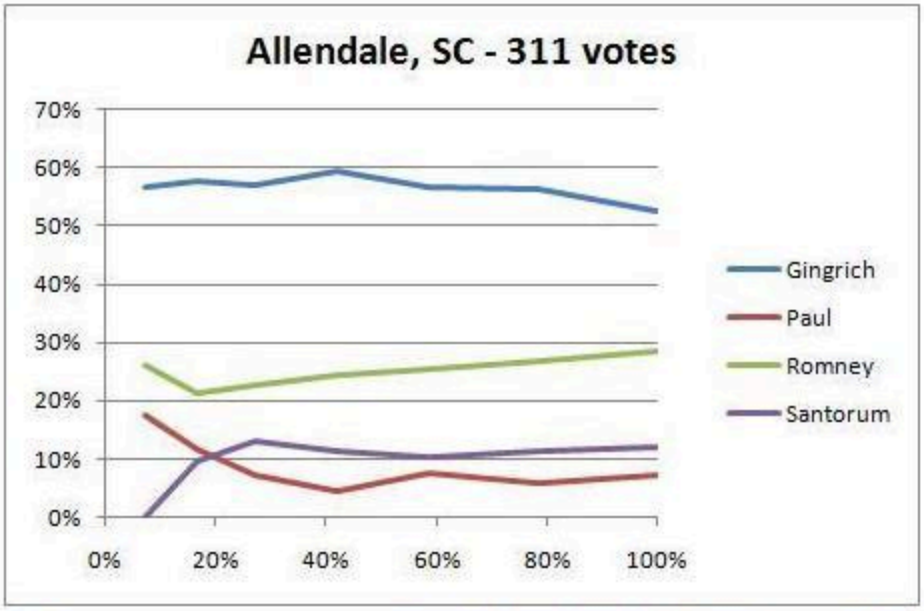


Hypergeometric distribution describes in particular the statistics of partial ballot counting! If you tell me that Romney has got 50% of the votes in an election, I can tell you that he needs to be real close to that 50% by the time we have counted 90% of the votes, a bit less close at 80%, etc... Poll science shows that 10/20% might suffice for the oscillator to turn into a complete flat line. But maths allow another nice trick as well. If you tell me after 25% of the votes counted what Romney's score is, I can actually tell you the probability that he will get to a score of 50% at the end of the vote tally. Isn't hypergeometry nifty?

As we have seen, Romney's lines do not converge flatly towards the final result. The fact that it does not diverge every time is relevant to the final outcome. His score starts by oscillating and flattening but then shoots up in a straight line in dozens of counties. That is mathematically impossible.

Let's look at the numbers of Allendale County, SC. 311 votes.

Here is a chart you are now familiar with: Candidate score vs Cumulative votes sorted by ascending vote tally



	Votes					Votes Cumulated					% Votes Cumulated				
Precinct	Gingrich	Paul	Romney	Santorum	Total	G	P	R	S	Total	G	P	R	S	Total
Fairfax No.1	13	4	6	0	23	13	4	6	0	23	57%	17%	26%	0%	7%
Martin	17	2	5	5	29	30	6	11	5	52	58%	12%	21%	10%	17%
Ulmer	18	0	8	6	32	48	6	19	11	84	57%	7%	23%	13%	27%
Woods	30	0	13	4	47	78	6	32	15	131	60%	5%	24%	11%	42%
Sycamore	25	8	14	4	51	103	14	46	19	182	57%	8%	25%	10%	59%
Fairfax No. 2	34	0	19	9	62	137	14	65	28	244	56%	6%	27%	11%	78%
Allendale No.1	26	8	24	9	67	163	22	89	37	311	52%	7%	29%	12%	100%
Total	163	22	89	37	311										

Normal patterns, nothing special apparently. Now the hypergeometric distribution allows me to caluclate the following probabilities:

Probability of getting the actual cumulated votes at most				
Precinct	Gingrich	Paul	Romney	Santorum
Fairfax No.1	73%	98%	50%	5%
Martin	84%	95%	13%	39%
Ulmer	87%	62%	10%	73%
Woods	99%	11%	10%	49%
Sycamore	97%	77%	8%	22%
Fairfax No. 2	99.6%	7%	9%	40%
Allendale No.1	100%	100%	100%	100%

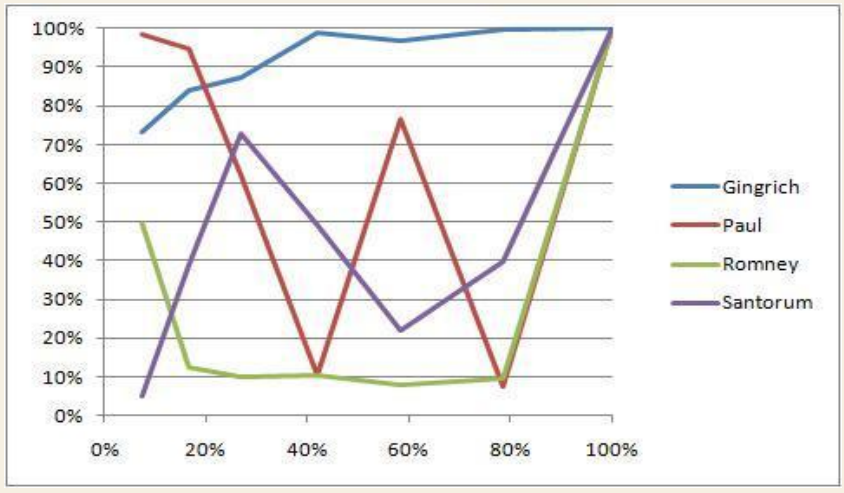
What does it say? Take Santorum. His final score is 12%. Don't forget: this is not an estimate, it is actual. His cumulative score MUST get there. People in Fairfax No 1 give Santorum only 23 votes. Santorum has only 311-23 votes left to go from his current 0% to 12%. Probabilitity of him getting 0% out of 23 votes cast? Hypergeometry says 5%. But he does very well in the Martin precinct. His cumulated share of votes goes back to 10%, close

to his final score of 12%. The oscillator has sent him close to the final target and the probability of that is high: now 39%. Etc... Gingrich does well early, so he then needs very little to reach his final 52%. The number reflect that. Paul was looking good all the way but is trashed in Fairfax No 2. His odds from reaching the final 7% fall suddenly from 77% to 7%. Romney needed a big last precinct to end up 29%, which he got.

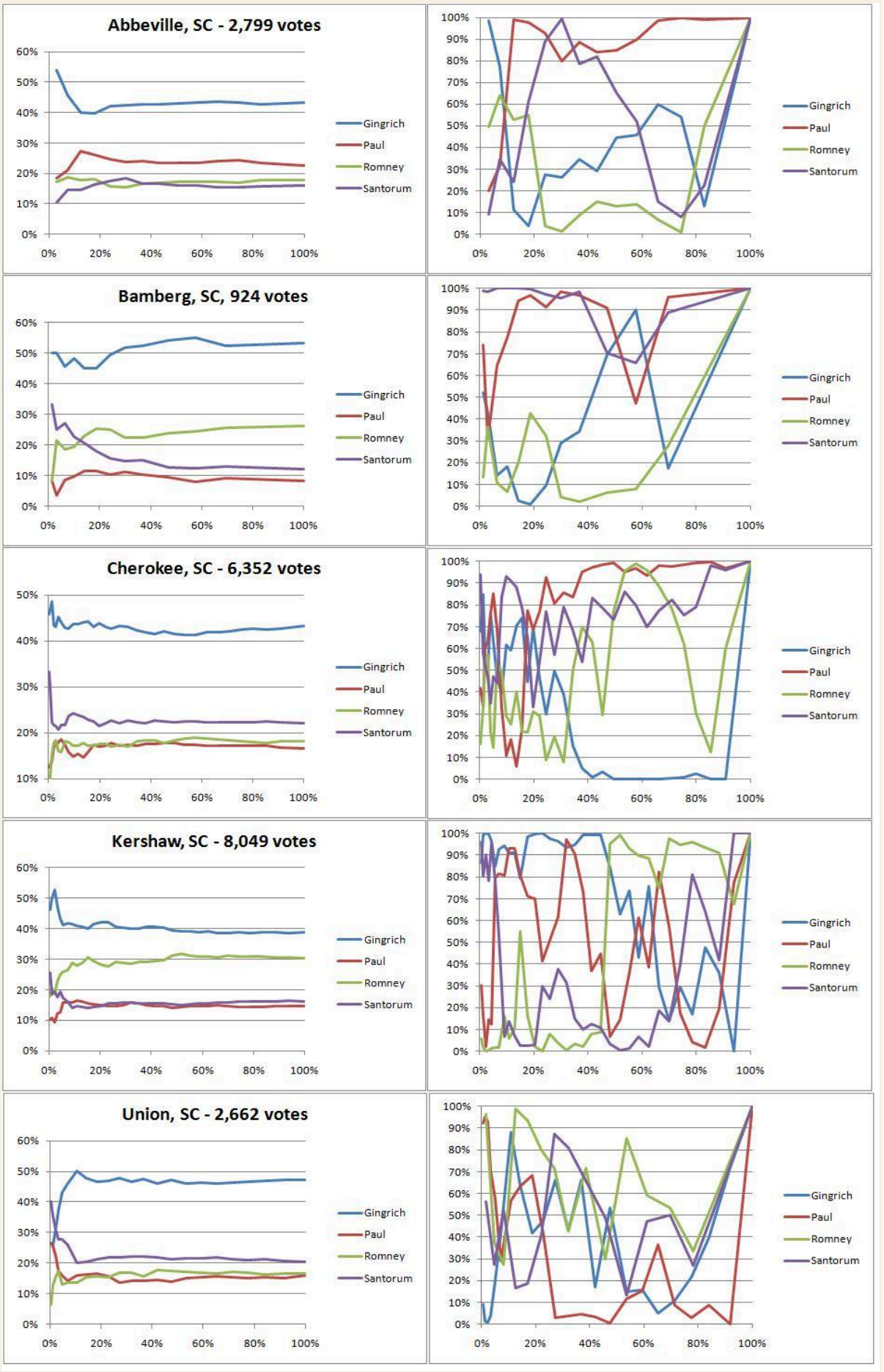
So expect big volatility in the numbers as candidates outperform/underperform locally and oscillate before reaching their final score.

If we plot the last table, we obtain that cute doodle:

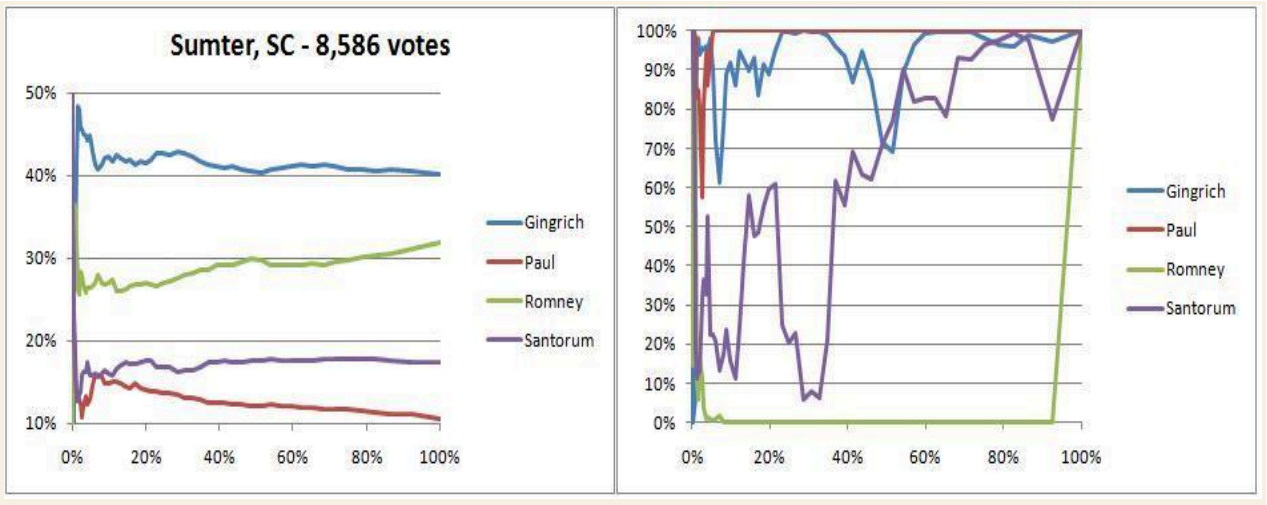
X axis cumulative vote, Y axis Probability of having the score X or lower.



When a Y value is at 50%, it mean that the oscillator is currently aligned with the final score. So expect to go across that line frequently. In a real world.
Ok, more examples of untampered counties:


Abbeville, SC - 2,799 votes
Gingrich
Paul
Romney
Santorum
Bamberg, SC, 924 votes
Gingrich
Paul
Romney
Santorum
Cherokee, SC - 6,352 votes
Gingrich
Paul
Romney
Santorum
Kershaw, SC - 8,049 votes
Gingrich
Paul
Romney
Santorum
Union, SC - 2,662 votes
Gingrich
Paul
Romney
Santorum

Now, what does it mean to be at 0%? It means that the interim cumulative score is so low that there is essentially no chance to get back up to the final result. On the charts which will follow, 0% is always something like 0.4%, or 0.002%, or 0.00000000000000000001%. Take this one.

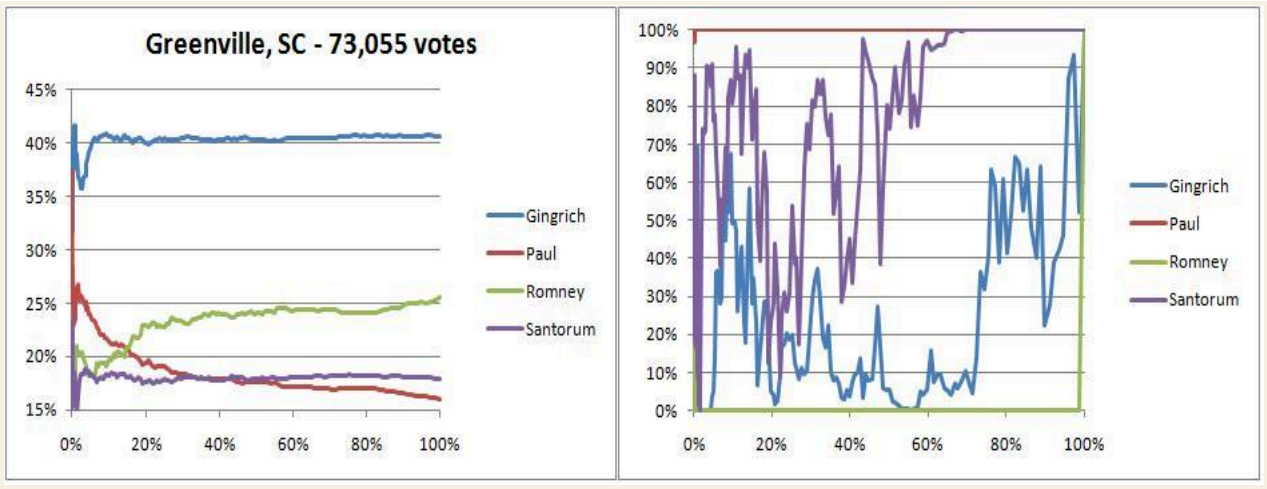


VOTE FLIPPER ON ALERT !!!

How do I know? Notice a difference with the previous charts? I guessed so. What are the odds when Romney is at 27% with 23% of the votes counted to end up where he did, at 32%? Hypergeometry, a law of the universe, says: 1 out of 267,385,153.

So, Romney's midway score is impossibly low and leave no statistical chance to reach his final score. But another guy's oscillator is broken! Paul has already accumulated so many votes that he has a 100% chance to beat his final score. Well, midway, it is a 99.99996% chance. And in the end he did not.

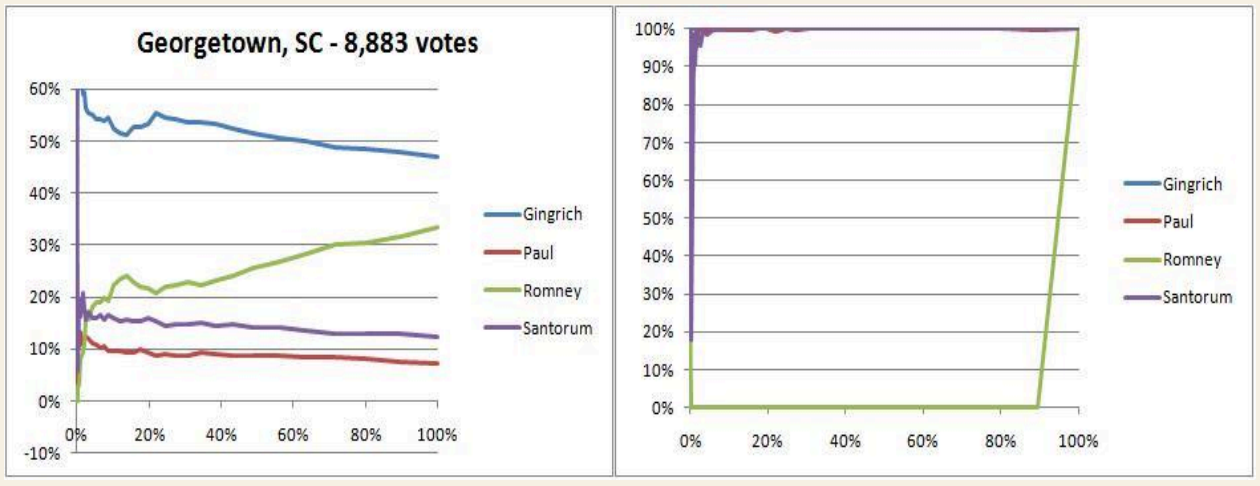
A beautiful example with many more data points:



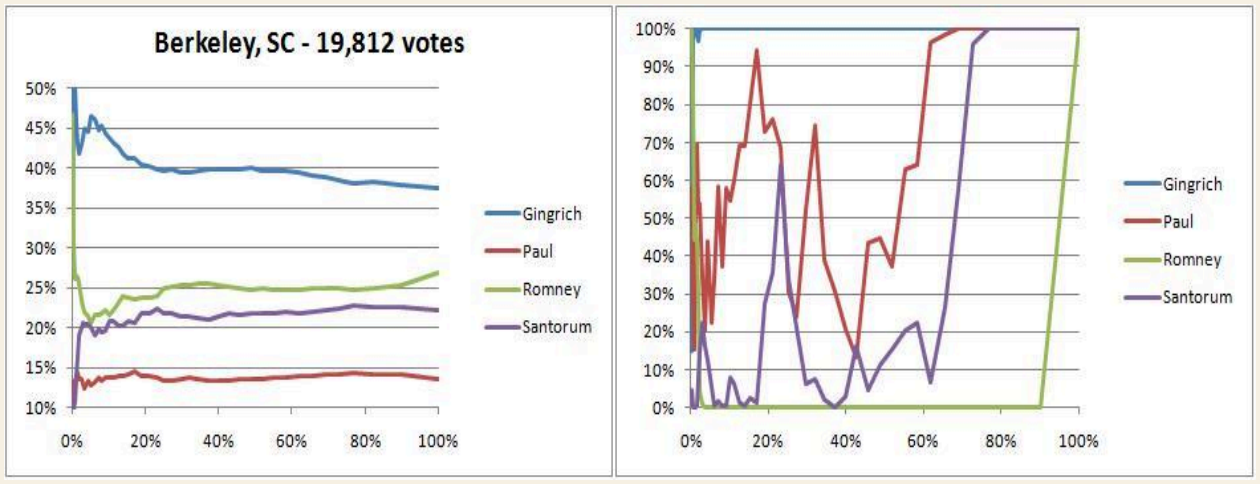
Romney's score vampirizes Paul's all the way, but notice that Santorum loses his oscillator between 60 and 70%. Yep. The vote flipper has just added him. Or you might still want to

speculate about underlying demographics at play?

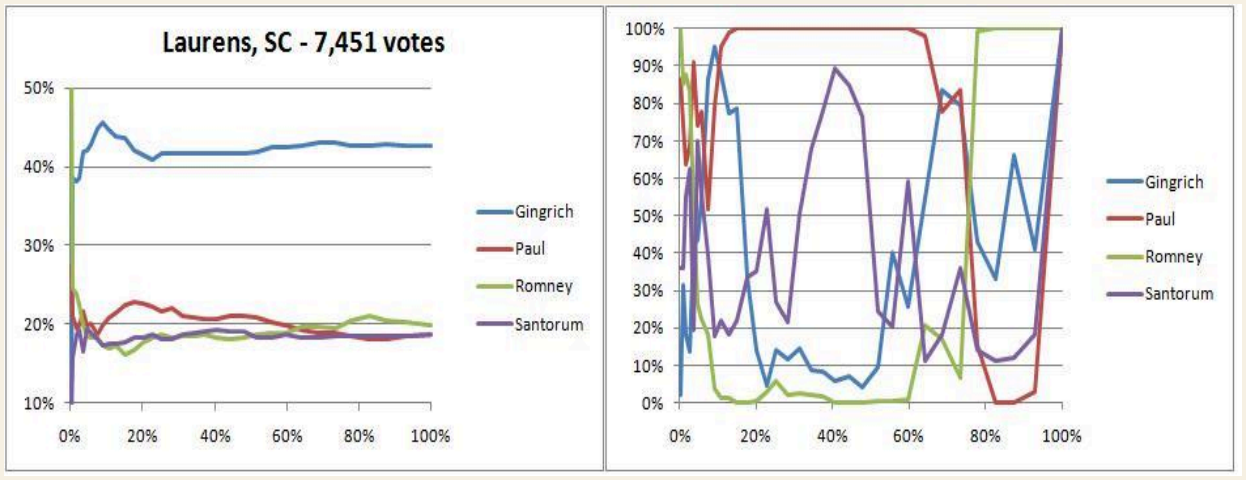
In some places its is more brutal...



And the ones where everyone loses his oscillator in the end...



Tactical intervention. Laurens does not look too hot for Romney. An early boost between 20% and 60%, then Paul is left free to oscillate again.



Flipper early on/off, late on/off, 1 victim, 2, 3. It's called covering tracks. Epic fail.

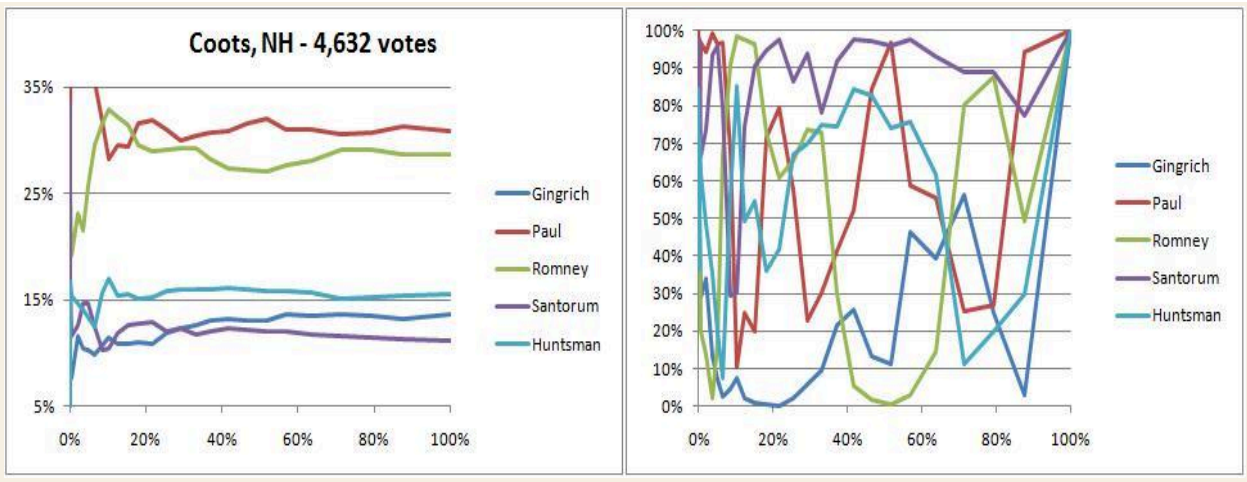
This concludes my mathematical proof series.

May I humbly dedicate this work to the man who inspired it all, Ron Paul, for whom I have boundless admiration, and all men of integrity and goodwill, past and present. May they prevail.

God bless you all. *Liberty1789 2-27-12*

An example of expected behavior, Coots, NH:
Someone mentioned in a post that he wanted to see the table where I have shown the layman's probability of Romney's score to be "natural" in various SC counties for other candidates. Smart, fair and instructive, so wish granted.

Let's start with Coots, NH. On all my analysis, it has never exhibited any anomaly. Here is the oscillation doodle.

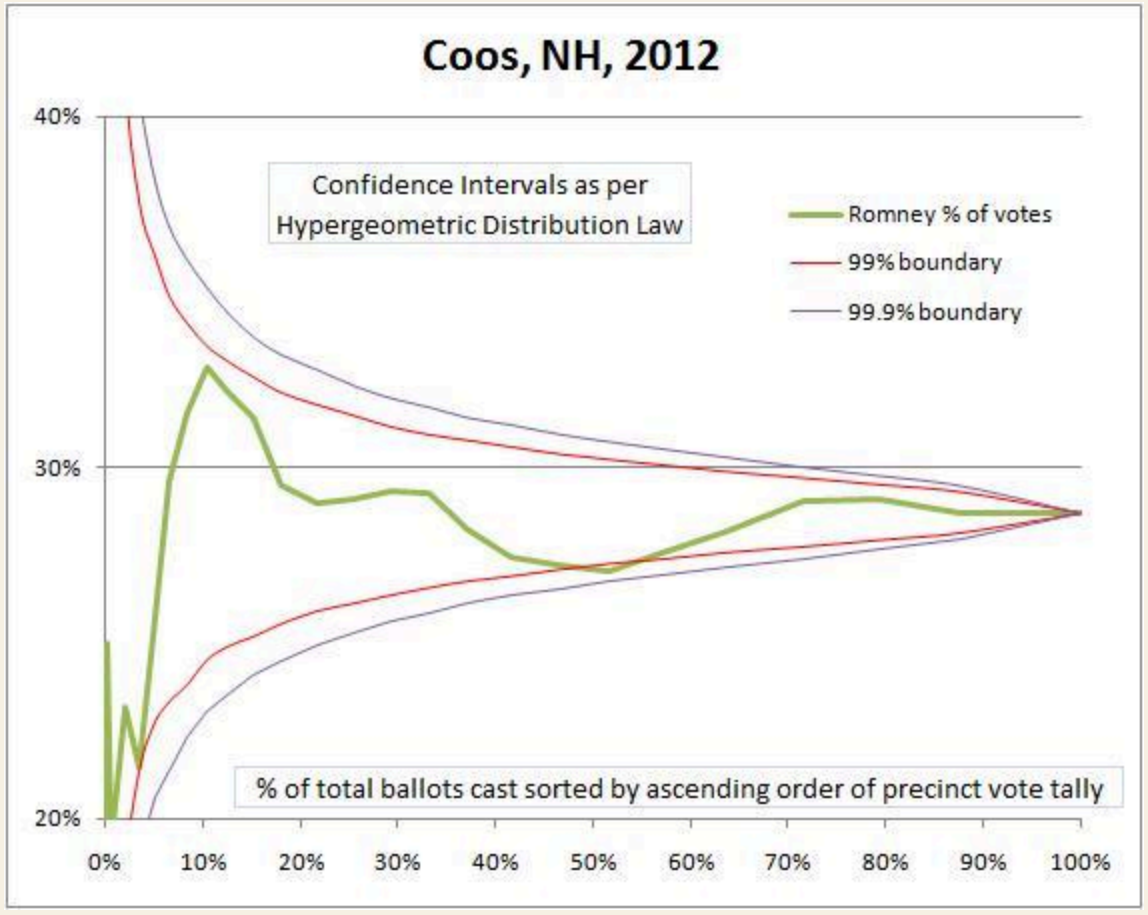


Remember, if the score of the candidate converges naturally towards the final score as you count more and more ballots, it will zig-zag above and under the 50% line all the time. Boy, Coots illustrates that very well: lots of criss-crossing. Now nifty maths give me the following table:

	Given how far behind or ahead of his final score the candidate stands when at the % of total votes cast in 1st column, probability that he will converge back to it.				
%of Total Votes	Gingrich	Paul	Romney	Santorum	Huntsman
1%	1/3	1/31	1/5	1/3	1/3
2%	1/3	1/18	1/7	1/4	1/2
4%	1/7	1/121	1/48	1/16	1/3
5%	1/14	1/28	1/6	1/24	1/5
7%	1/39	1/32	1/3	1/5	1/13
8%	1/22	1/3	1/11	1/3	1/2
10%	1/13	1/10	1/63	1/3	1/7
12%	1/47	1/4	1/44	1/4	1/2
15%	1/90	1/5	1/27	1/11	1/2
18%	1/144	1/4	1/4	1/19	1/3
22%	1/535	1/5	1/3	1/44	1/2
25%	1/45	1/2	1/3	1/7	1/3
29%	1/17	1/4	1/4	1/16	1/3
33%	1/10	1/3	1/4	1/5	1/4
37%	1/5	1/2	1/3	1/13	1/4
42%	1/4	1/2	1/18	1/42	1/6
47%	1/7	1/6	1/55	1/34	1/6
52%	1/9	1/30	1/174	1/25	1/4
57%	1/2	1/2	1/35	1/39	1/4
64%	1/3	1/2	1/7	1/15	1/3
71%	1/2	1/4	1/5	1/9	1/9
79%	1/4	1/4	1/8	1/9	1/5
88%	1/36	1/18	1/2	1/4	1/3
100%	1	1	1	1	1

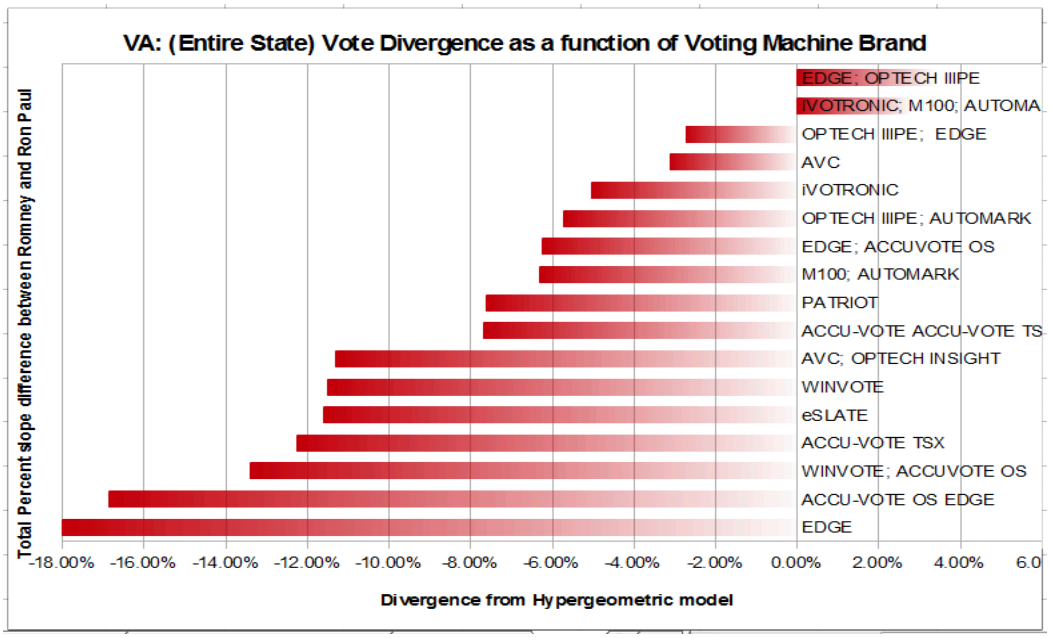
The number in the table are a tabular form of the doodle chart. See how everyone's probability to reach his final score looks normal? Gingrich is drifting a bit low at 22%, but comes back immediately.

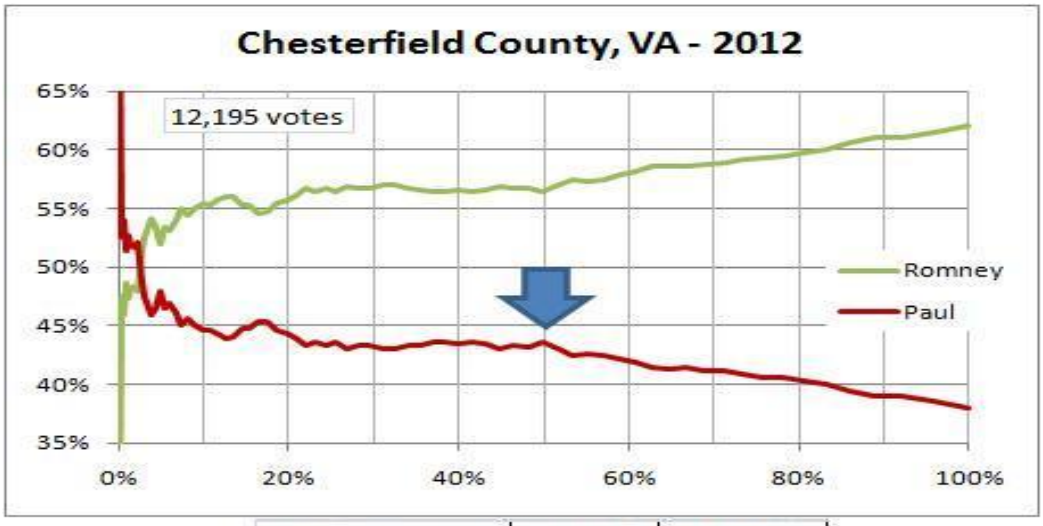
Here are the boundaries of the 99% and 99.9% interval confidence as per hypergeometric distribution law for Romney in Coos, NH, 2012.



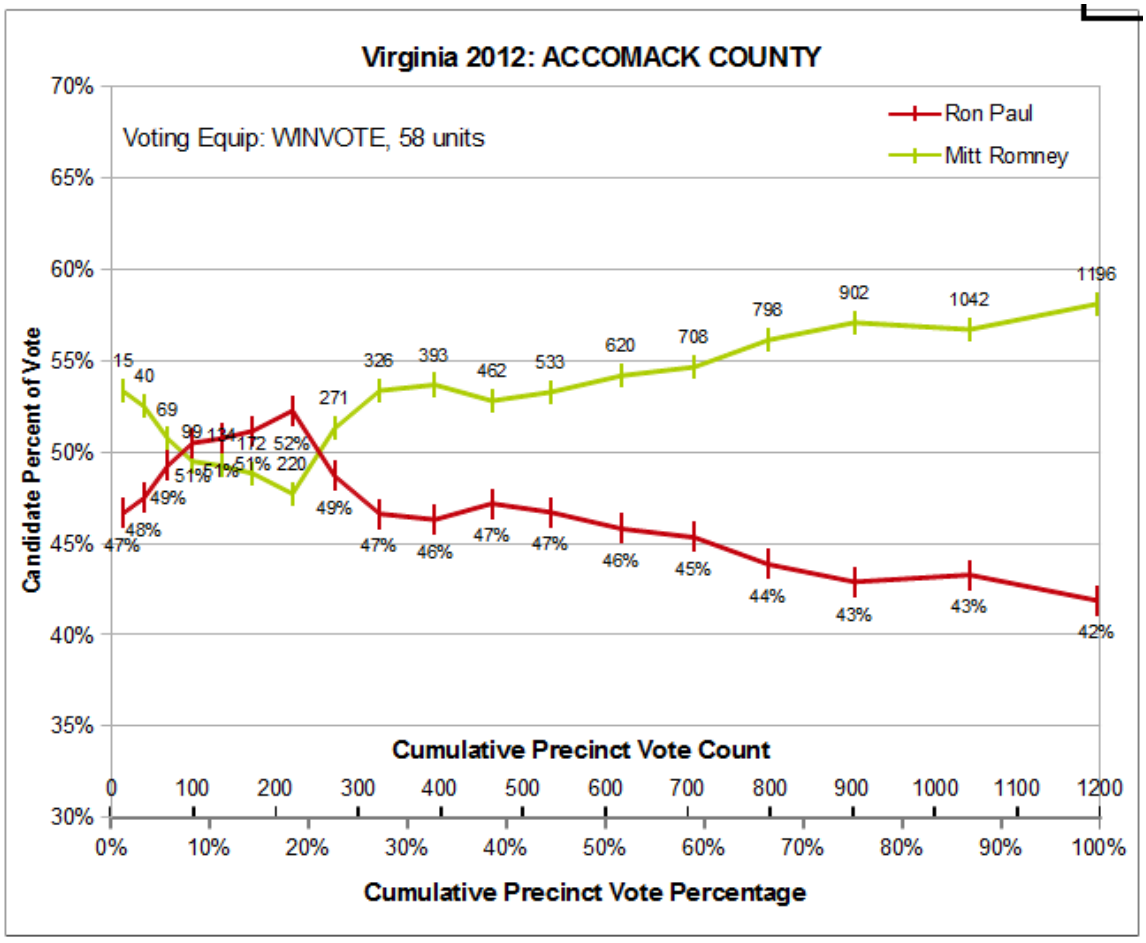
It fits nicely into the probablity "cone". *Liberty1789; 03-13-2012*

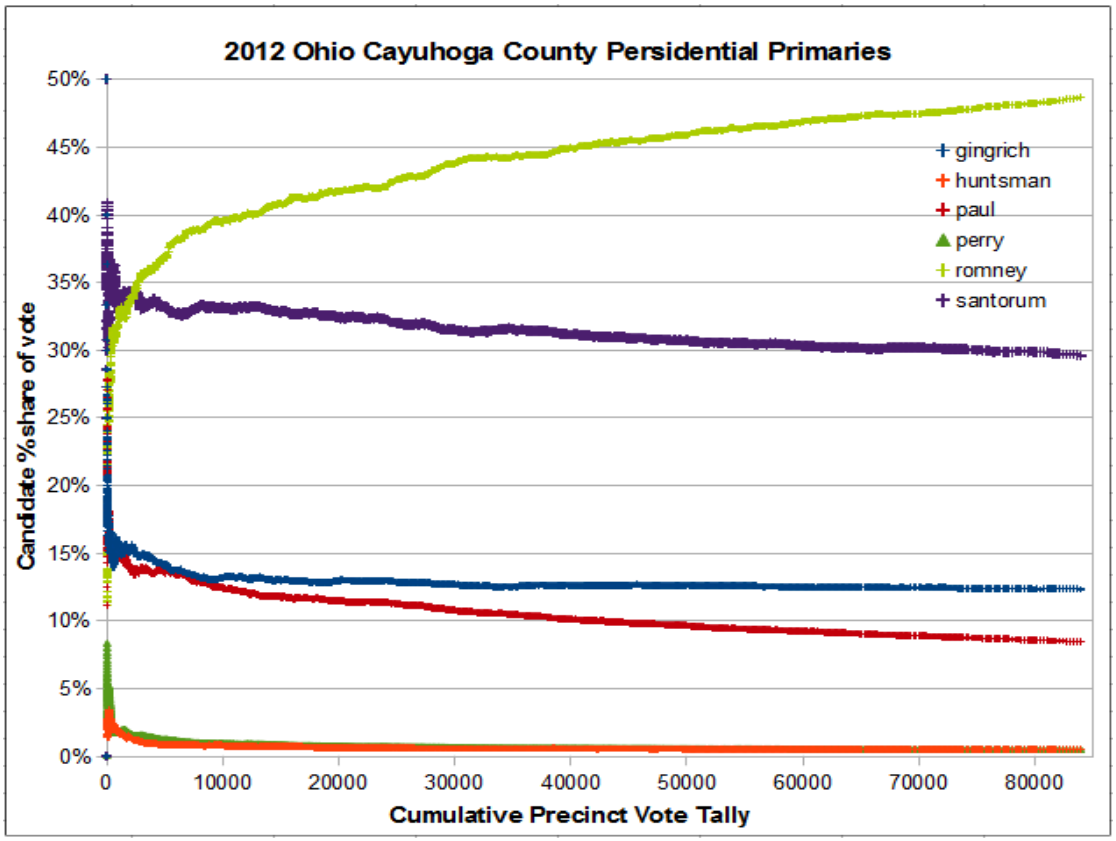
More Data



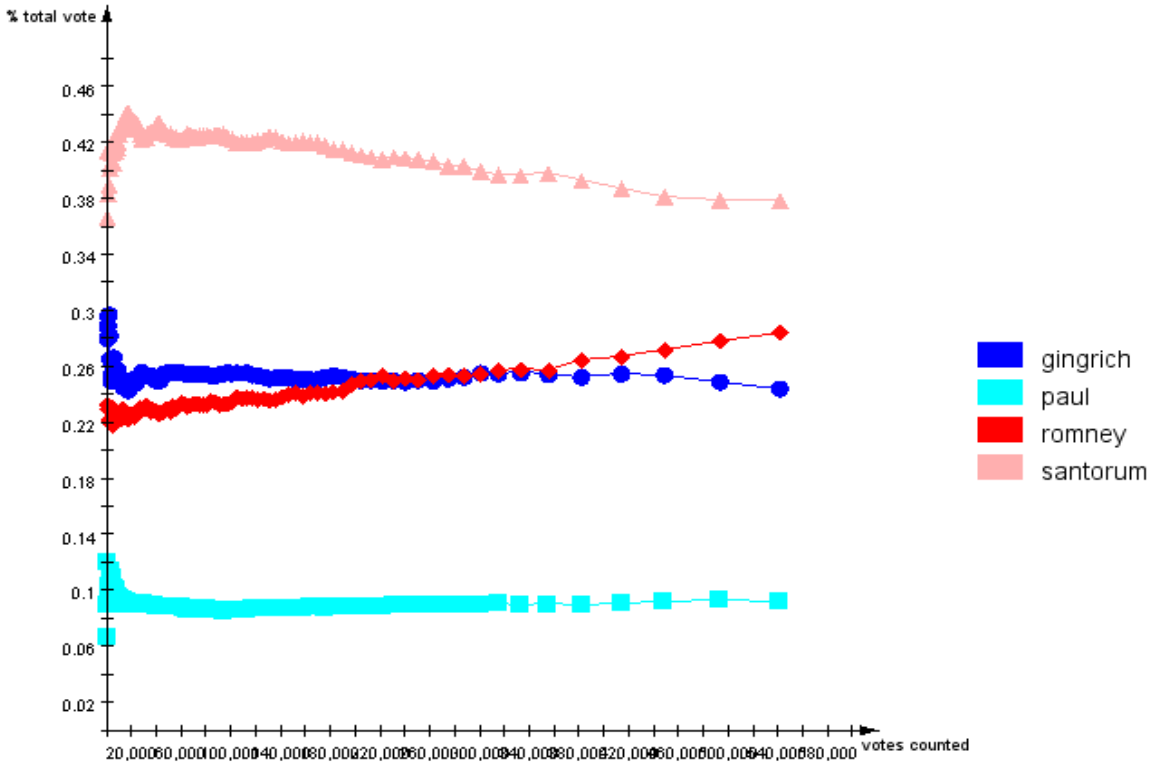


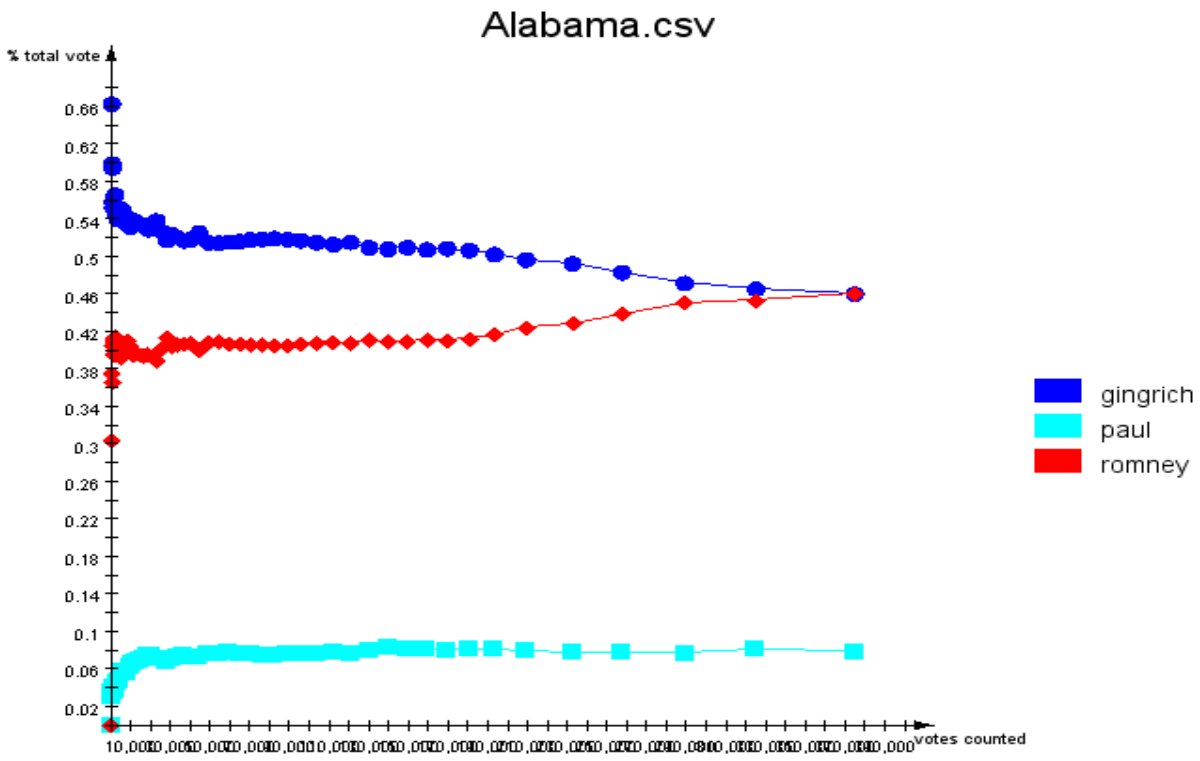
X-value segment	20-50%	50-100%
# precincts	22	21
Slope	-0.8%	10.1%
St. Dev. Slope	0.7%	0.3%
R^2	0.08	0.98
F test	1.6	1096.8
t stat	-1	33

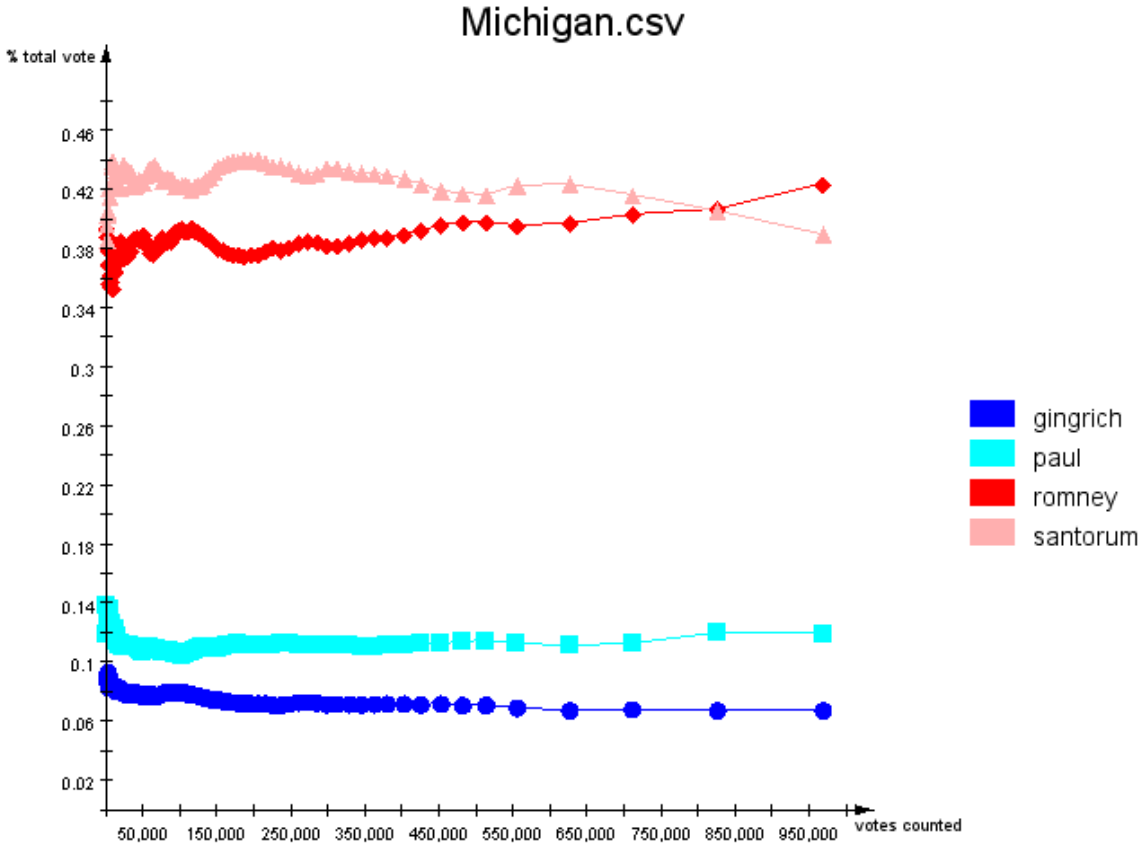


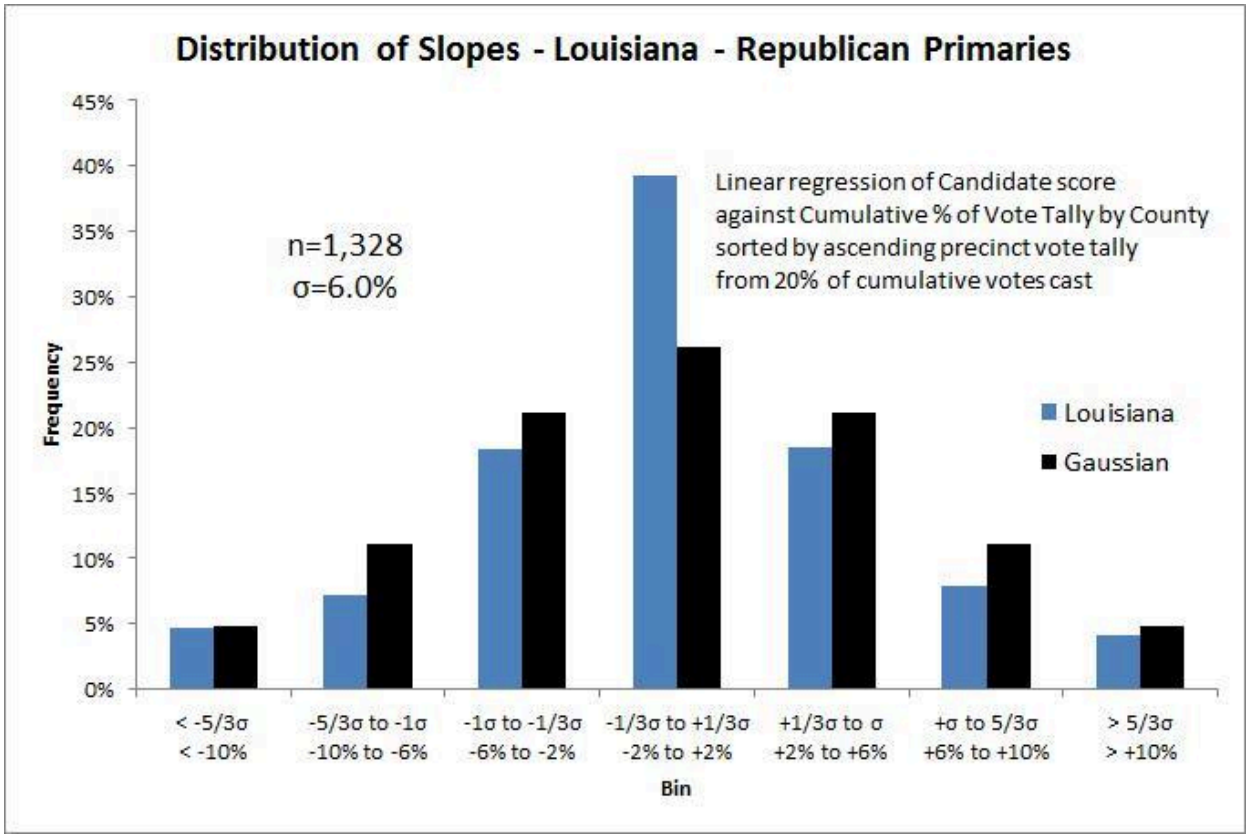


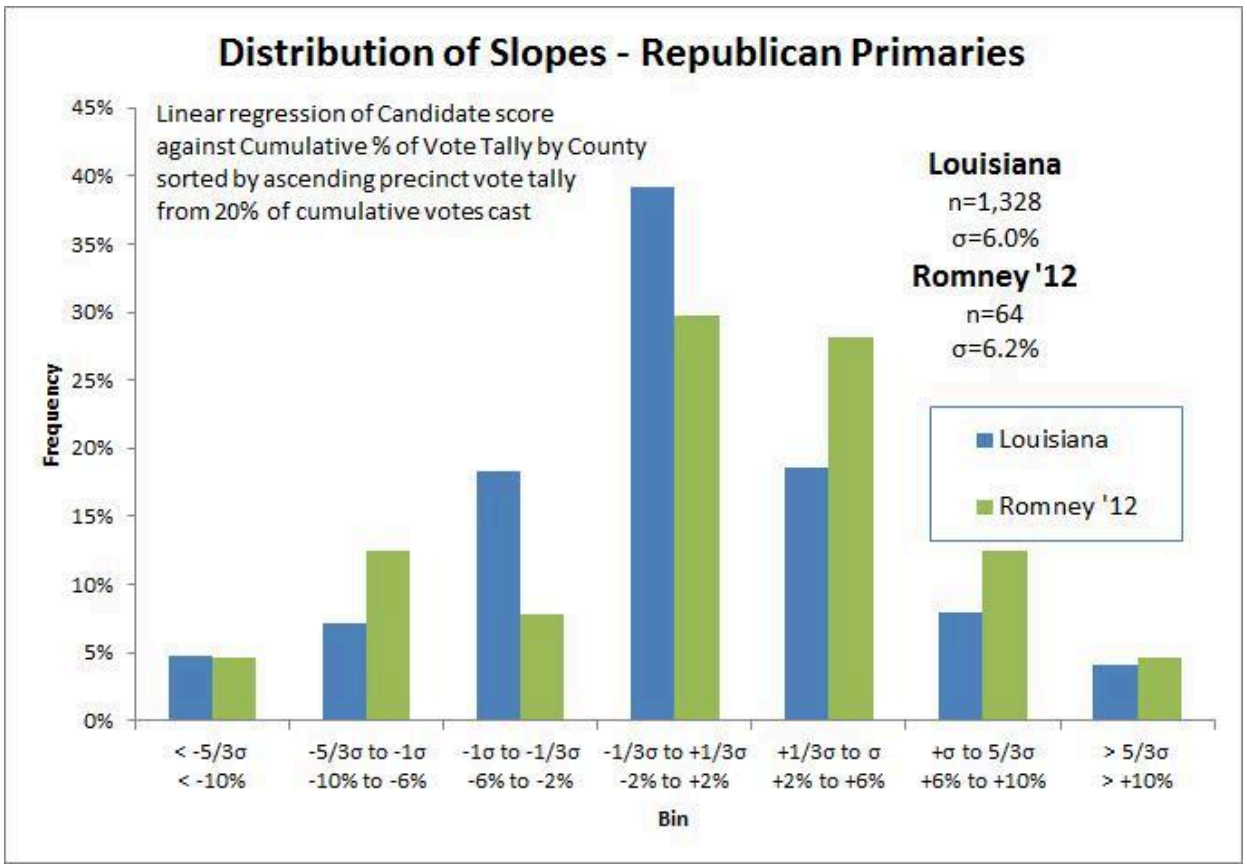
Tennessee.csv




Alabama.csv
% total vote
0.66
0.62
0.58
0.54
0.5
0.46
0.42
0.38
0.34
0.3
0.26
0.22
0.18
0.14
0.1
0.06
0.02
votes counted
gingrich
paul
romney


Michigan.csv
% total vote
0.46
0.42
0.38
0.34
0.3
0.26
0.22
0.18
0.14
0.1
0.06
0.02
50,000
150,000
250,000
350,000
450,000
550,000
650,000
750,000
850,000
950,000
votes counted
gingrich
paul
romney
santorum


Distribution of Slopes - Louisiana - Republican Primaries
45%
40%
35%
30%
25%
20%
15%
10%
5%
0%
Frequency
n=1,328
σ=6.0%
Linear regression of Candidate score against Cumulative % of Vote Tally by County sorted by ascending precinct vote tally from 20% of cumulative votes cast
Louisiana
Gaussian
< -5/3σ
< -10%
-5/3σ to -1σ
-10% to -6%
-1σ to -1/3σ
-6% to -2%
-1/3σ to +1/3σ
-2% to +2%
+1/3σ to σ
+2% to +6%
+σ to 5/3σ
+6% to +10%
> 5/3σ
> +10%
Bin


Distribution of Slopes - Republican Primaries
45%
40%
35%
30%
25%
20%
15%
10%
5%
0%
Frequency
Linear regression of Candidate score against Cumulative % of Vote Tally by County sorted by ascending precinct vote tally from 20% of cumulative votes cast
Louisiana
n=1,328
σ=6.0%
Romney '12
n=64
σ=6.2%
Louisiana
Romney '12
< -5/3σ
< -10%
-5/3σ to -1σ
-10% to -6%
-1σ to -1/3σ
-6% to -2%
-1/3σ to +1/3σ
-2% to +2%
+1/3σ to σ
+2% to +6%
+σ to 5/3σ
+6% to +10%
> 5/3σ
> +10%
Bin

Reproducibility

Excel method:

1. Get the number of votes per candidate in tabular form

County	Precinct	C # 1	C # 2	C # 3	Total
Zing	Prec 01	3	7	12	22
Zing	Prec 02	4	9	14	27
Zing	Prec 03	5	8	11	24
Zing	Prec 04	4	10	14	28

2. Sort by Precinct Vote Tally

County	Precinct	C # 1	C # 2	C # 3	Total
Zing	Prec 01	3	7	12	22
Zing	Prec 03	5	8	11	24
Zing	Prec 02	4	9	14	27
Zing	Prec 04	4	10	14	28

3. Create Cumulative vote counts

						Cumulative			
County	Precinct	C # 1	C # 2	C # 3	Total	C # 1	C # 2	C # 3	Total
Zing	Prec 01	3	7	12	22	3	7	12	22
Zing	Prec 03	5	8	11	24	8	15	23	46
Zing	Prec 02	4	9	14	27	12	24	37	73
Zing	Prec 04	4	10	14	28	16	34	51	101

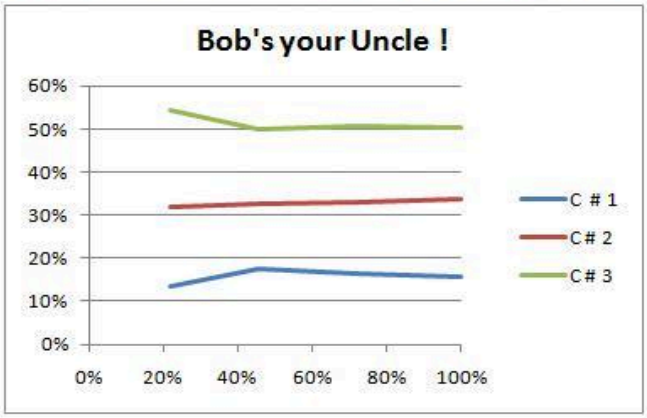
5. Create Cumulative % of Total Ballot

						Cumulative				ToT	
County	Precinct	C # 1	C # 2	C # 3	Total	C # 1	C # 2	C # 3	Total	Cum	
Zing	Prec 01	3	7	12	22	3	7	12	22	21.8%	21.8% = 22/101
Zing	Prec 03	5	8	11	24	8	15	23	46	45.5%	45.5%= 46/101, etc...
Zing	Prec 02	4	9	14	27	12	24	37	73	72.3%	
Zing	Prec 04	4	10	14	28	16	34	51	101	100.0%	

4. Create Candidates' cumulative vote shares

						Cumulative				ToT	Cumulative %			
County	Precinct	C # 1	C # 2	C # 3	Total	C # 1	C # 2	C # 3	Total	Cum	C # 1	C # 2	C # 3	
Zing	Prec 01	3	7	12	22	3	7	12	22	21.8%	13.6%	31.8%	54.5%	13.6% = 3 / 22, 31.8% = 7 / 22, ...
Zing	Prec 03	5	8	11	24	8	15	23	46	45.5%	17.4%	32.6%	50.0%	17.4% = 8/46, etc...
Zing	Prec 02	4	9	14	27	12	24	37	73	72.3%	16.4%	32.9%	50.7%	
Zing	Prec 04	4	10	14	28	16	34	51	101	100.0%	15.8%	33.7%	50.5%	

5. Plot Tot Cum as X-axis vs Candidates Cumulative % as Y-axis in a scatter chart



6. Celebrate with abandon and tell us what you see!

Java program: “VoteAnalyze” method:

You can download the current version of the Java program here:
http://sourceforge.net/projects/voteanalyze/?_test=b

Step by step process:

1) Pick a state/county you want to analyze. The easiest ones are were Primaries were held and where SOS voting equipment was used because the data is formatted in a way that's easy to use.

Let's try South Carolina.

2) Go to the Secretary of State website and find the elections results page. Select "Results by County:
http://www.enr-scvotes.org/SC/36831/...n/summary.html

3) I'm randomly picking Richland County. I've never heard of that county and it's smack in the middle of that state. I don't know what the results will be. With a name like that Romney should do well.

4) Richland County's results are all in: Precincts Completely Reported: 2117 of 2117; Precincts Percent Reported: 100.00 %

5) Click on Richland County and get the results
(http://www.enr-scvotes.org/SC/Richla...n/summary.html)

6) Select the "Reports" tab and download the "detailsxls.zip" file and extract the contents.

7) Here you have a choice:
a) You can produce a .csv file from the xls and use Program4Liberty's Java program to analyse. That's what I now use.
b) You can use the .xls file and process the data with Liberty's1796 method and make the chart.

8) First using Program4Liberty's Java program:
a) Open the .xls file and go to the last tab, in this case "2".
b) Remove unnecessary columns to produce this format:

	A	B	C	D	E
1	county	Gingrich	Paul	Romney	Santorum
2	Delta	92	77	190	471
3	Baca	20	6	12	64
4	Huerfano	19	12	15	44
5	Conejos	9	10	144	19
6	Arapahoe	717	643	2971	2267
7	Archuleta	54	64	91	114
8	Yuma	40	16	33	115
9	Custer	33	19	48	85
10	Gunnison	15	49	31	50
11	Alamosa	19	16	79	36

You should end up with a data sheet that looks like this for this specific county:
Precinct Michele Bachmann Herman Cain Newt Gingrich Jon Huntsman Gary Johnson Ron Paul Rick Perry Mitt Romney Rick Santorum
Ward #1 0 13 41 3 0 52 1 84 17
Ward #2 0 2 5 2 0 10 1 7 5
Ward #3 0 10 63 0 0 45 0 61 19
Ward #4 0 20 67 2 0 55 0 56 27
9) Remove the Totals line at the end.

10) Save this worksheet (only the worksheet you are working on) in ".csv" format and name it something meaningful like: 2012_SC_Richland.csv You may want to pull it up in a text editor like WordPad to see if it looks OK and that proper "," separators are there.

11) Move the "2012_SC_Richland.csv" file to the "votes2012" directory in VoteAnalyze's directory structure.

12) Run the Java VoteAnalyze program as per the instructions provided in the README.txt file and find the resulting charts in this directory: VoteAnalyze1.3\votes2012-output\charts

Have a look at your creation!

Program instructions included in the program's README file:
==========Using VoteAnalyze==========
To Use:

I have included pregenerated output information for everyone, but if you should wish to verify that these numbers and this program are correct, the program source code is included here, and you can re-generate the information yourself by double-clicking VotesAnaylze.bat and following the prompts. Use compile.bat to compile the program. Here is an example of generating the 2012 outputs:

VotesAnalyze.bat
Note: This program requires that no candidate's last name contain another candidate's last name - e.g. Joe Adams and Bill Adamson.
Enter the relative path and filename to the candidates text file: votes2012/candidates.txt
Note: This program requires that all data be provided in files with comma seperated values (.csv)
Enter the relative path to the folder containing the .csv files: votes2012
Generating data by state...
Generaling data for all states combined...
Outputting correlation table...
Generating chart images...
Program Finished.

That's it! "votes2012/candidates.txt" and then "votes2012" are the only things you need to enter to get the program to generate data for 2012.

Use 2008 and 2000 in place for those years.