

Hello, my name is Jacob Harris. And I've survived the 2012 Election



Originally, I was going to do this talk by hitting every state and telling you something weird about their elections.

But I'm not a cattle auctioneer, and that approach was boring and also, stupid. I'm going to focus on fewer states instead



I know that's not exactly what you voted for, but this is America.

Sometimes, the people you vote for will do something completely different than you expected. So, I'm just continuing in this glorious tradition of democracy, with all its complexities and confusions.

So, let me talk about a few of the weird things we saw in 2012

class StateRace < ActiveRecord::Base has\_many :state\_results

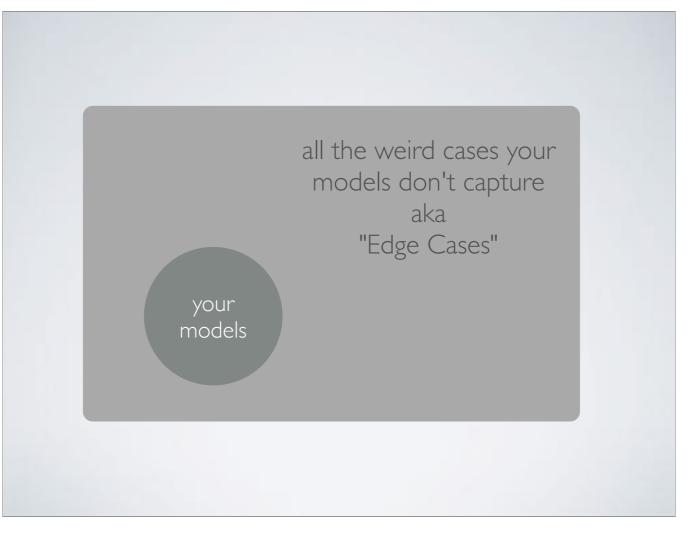
class StateResult < ActiveRecord::Base belongs\_to :state\_race belongs\_to :candidate

class Candidate < ActiveRecord::Base has\_many :state\_results has\_many :county\_results has\_many :state\_delegate\_counts has\_one :national\_delegate\_count

We think of elections as complex

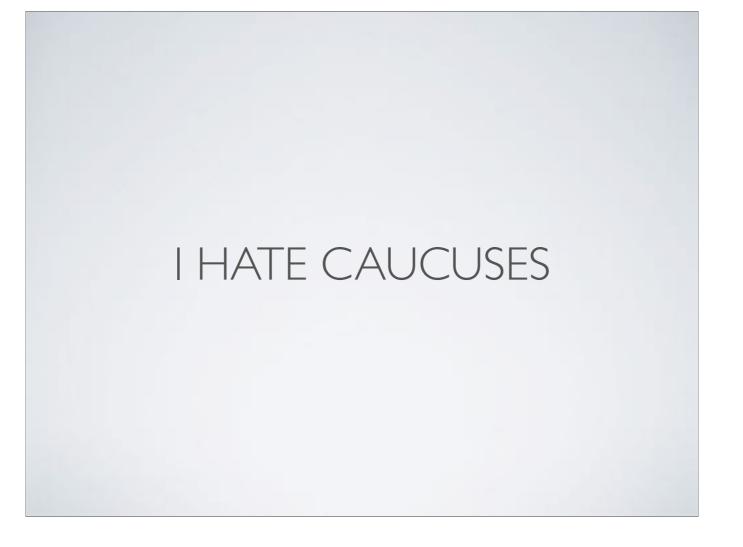
They're actually pretty easy to model in a database. Most of get our results from the AP. They define three tables to represent election. At the Times, we separate state-level from county-level results, but that doesn't add too much complexity.

The problem though is not putting stuff in the model. It's making sense of cases where reality is a little different from the model.

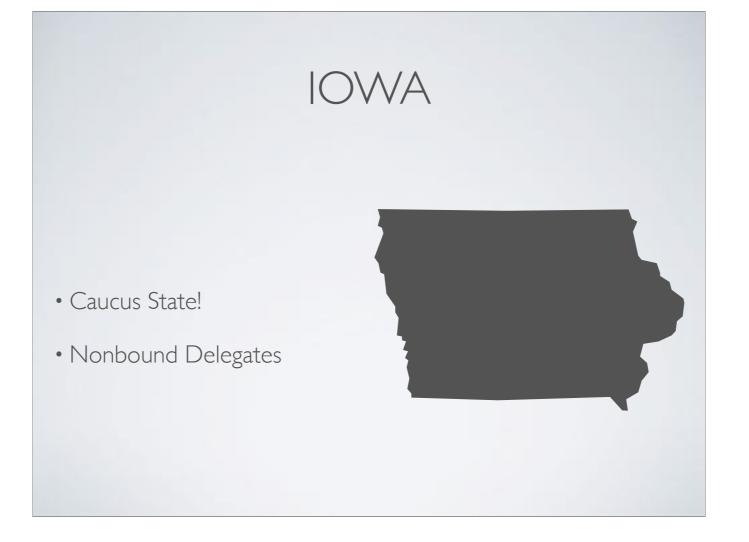


The problem with elections is all the extra stuff that happens outside of what your models capture.

These edge cases often mean you have to write special code just for them. And you have to test for them, even if the likelihood is low.



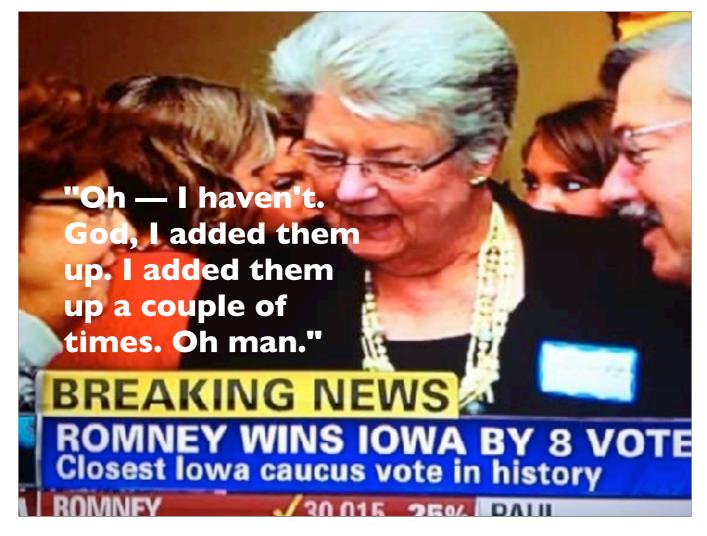
Let's start with caucuses



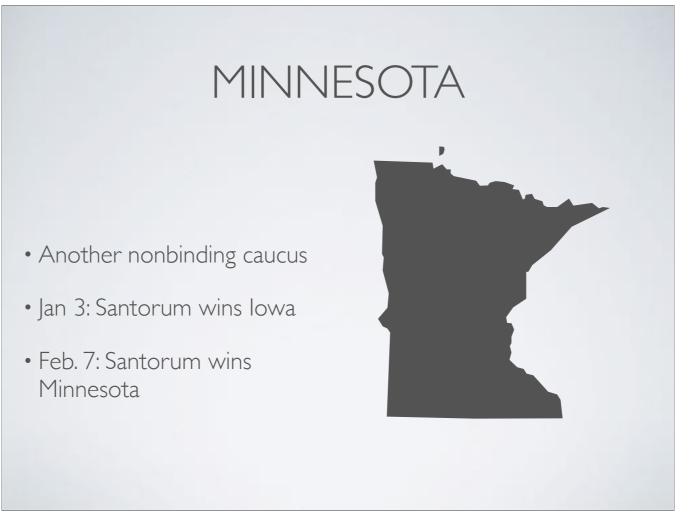
It all starts with Iowa.

I've never participated in a caucus. I'm sure they're lovely events that embody the spirit of democracy.

But in terms of data, they're a hot mess. This is true whatever the party.



Because stuff like this happens. You have data, but it might be wrong, and the person who added it up went to bed because it's not like the whole nation is watching or anything.



One other thing I also dislike about early caucuses is that the delegates are unbound. So, things like this happen. Santorum wins Iowa! Santorum wins Minnesota! He's picking up delegates!

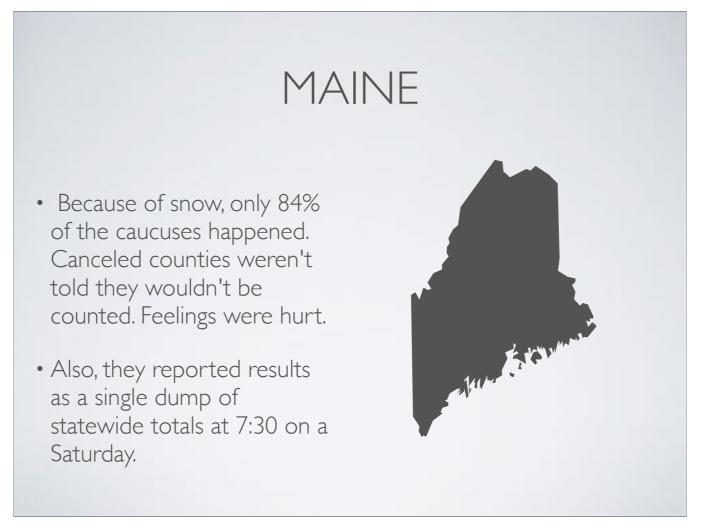
lowa			
CANDIDATE	VOTES	PERCENT	DELEGATES*
Rick Santorum	29,839	24.6%	 —
Mitt Romney	29,805	24.5	 5
Ron Paul	26,036	21.4	 22
Newl Gingrich	16,163	13.3	 _
Minnesota			
CANDIDATE	VOTES	PERCENT	DELEGATES*
Rick Santorum	21,932	44.9%	 3
Ron Paul	13,228	27.1	 30
Mitt Romney	8,222	16.9	 3
Newl Gingrich	5,272	10.8	 _

But later that summer, wat?

Where'd his delegates go?

Delegates aren't like points. They don't accrue neatly.

But we all show graphs that make them seem that way. So, it's really confusing when those projections collapse because states hold their party conventions and actually assign their delegates.



Sometimes, the data you want from a caucus, you're not going to get. For instance, Maine decided to only release a statewide count. Which meant we had to add some special logic to our election results map at the last minute.

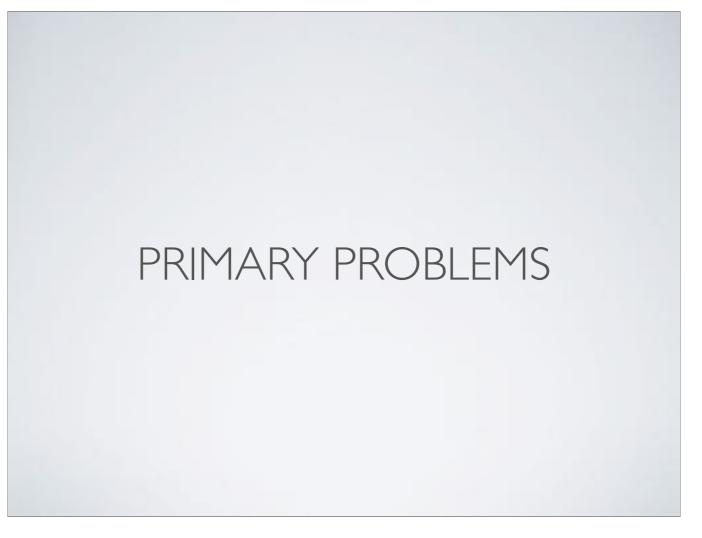
# WYOMING

#### • Another caucus!

- On caucus night, eleven counties pair off and select a single delegate for the both of them (Laramie gets one)
- Big Horn / Sheridan: I vote
- Carbon / Sweet Water: I



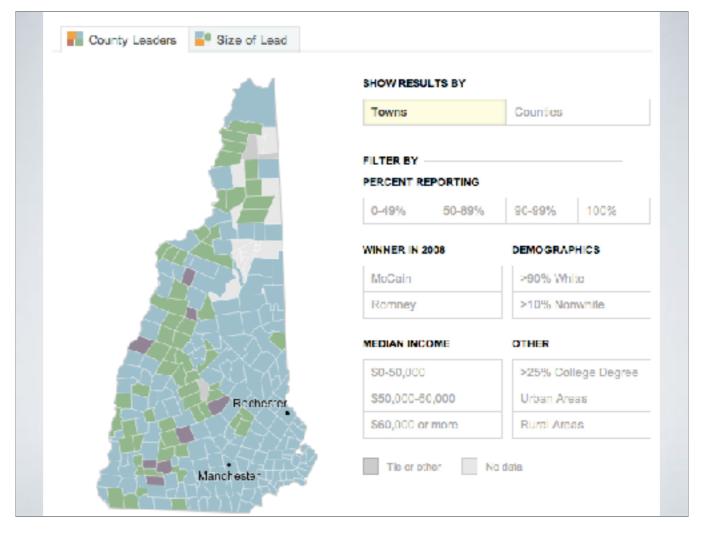
Even stranger things can happen. I'm still angry at Wyoming



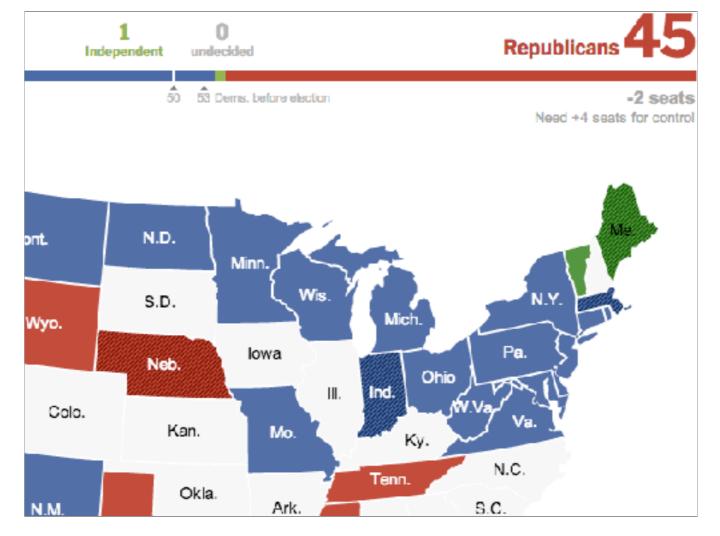
I pick on caucuses, but Primaries have their quirks too



For starters, the New England states. They report results only at the town level, which is interesting but also sometimes annoying.



But I also kinda wish that the rest of America followed their lead, because it's cool to be able to go down to that level of detail.



New England also has a fair number of independents. Who may or may not caucus with another party. So, you get cases like this where 2 independents won, but you need to count 1 of them as a democrat in your control of congress. More special code

					ARIZ	ONA
CAN	DIDATE		VOTES	PERCENT		DELEGATES
4	23	Mitt Romney	216,805	47.3%		29
	·P	Rick Santorum	122,088	26.6		-
	1	Newt Gingrich	74,110	16.2		-
	23	Ron Paul	38,753	8.4	_	-
	20	Rick Perry	1,871	0.4		-
	2	Sarah Gonzales	1,460	0.3		-
	T	Buddy Roemer	657	0.1		-
	2	Paul Sims	489	0.1		-
		Cesar Cisneros	398	0.1		-
		Mark Callahan	326	0.1		-
	2	Al Perry	288	0.1		-
		Donald Benjamin	207	0.0		-
		Michael Levinson	202	0.0		-
	2	Kip Dean	189	0.0		-
		Ronald Zack	142	0.0		_

Another fun thing about early primaries are all the fringe candidates you get to see. Here are some of the candidates in Arizona. New Hampshire had even more.

#### FRINGE CANDIDATES

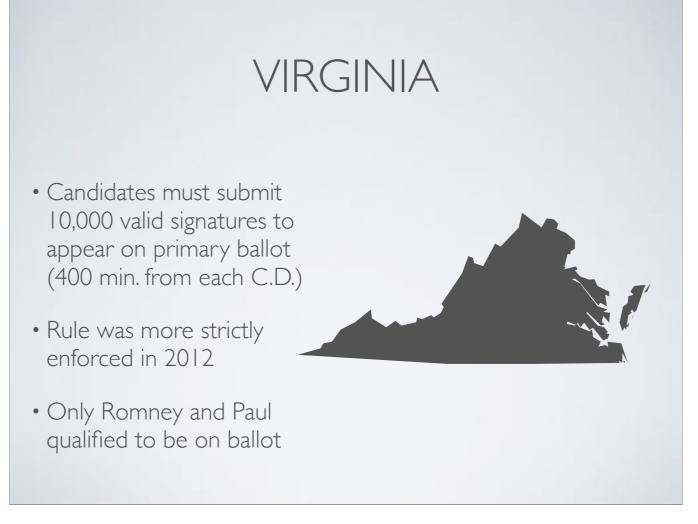
- Election model doesn't distinguish between "main" and fringe candidates.
- Necessary to add extra rules for sorting, filtering for the main guys.
- Some states also allow Write-ins or "None of the Above" for races.



There is nothing in a general election model that distinguishes between major candidates like Romney or Paul and my favorite here, Vermin Supreme.

So we have to write more special logic to put the major guys first when everybody has 0 votes and other such details.

Sometimes, there are also special candidates that represent things like total write-ins or such.



You also can't assume that all of the main candidates will be in every primary. This year, only 2 of the 10 original Republican contenders appeared on the Virginia ballot

## MISSOURI

- State Legislature decides to try an Early Primary
- RNC says they will take half their delegates away
- Too late to reschedule under state law, adds caucus
- \$7 million for a meaningless primary



Before 2012, I never thought a primary would be meaningless though. But that's what happened thanks to some deft legislative work by Missouri

## NORTH CAROLINA

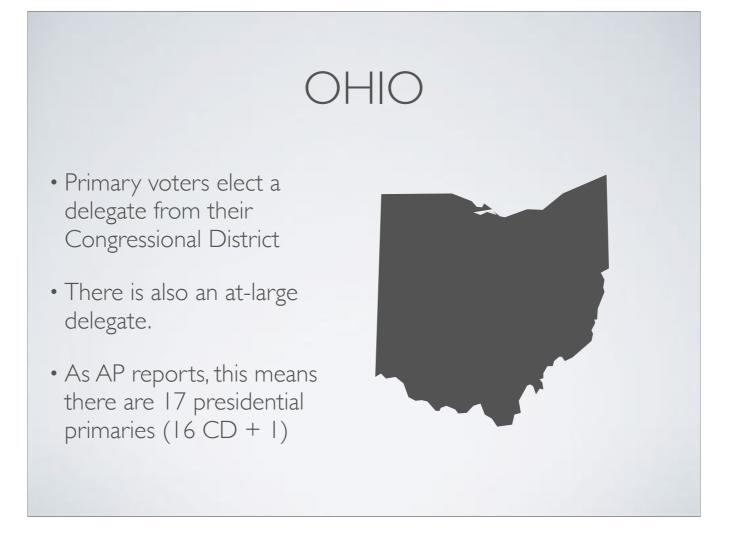
- A constitutional amendment to ban same-sex marriage in North Carolina was scheduled for the primary date rather than the general election.
- Resolutions and general elections don't just happen on election day.



During the primary season, North Carolina held a major ballot initiative. California had a few too. One common mistake is to assume that anything "general" will only be on the general election ballot in November.



California also swithed to Open Primaries this year, which required some different designs from our usual presentation of congressional primaries.



Ohio has its own quirk where people elect two delegates. The AP counts them as 17 races.

ate	Office	Туре	Seat Name	
-	Р	R	Delegate-at-Large	<ul> <li>oh_president_2012_primary_re</li> </ul>
ЭΗ	Р	R	Congressional District 1	
ОН	Р	R	Congressional District 2	
ОН	Р	R	Congressional District 3	
ОН	Р	R	Congressional District 4	
ОН	Р	R	Congressional District 5	
ОН	Р	R	Congressional District 6	
ОН	Р	R	Congressional District 7	
ОН	Р	R	Congressional District 8	
ОН	Р	R	Congressional District 9	
ОН	Р	R	Congressional District 10	
ОН	Р	R	Congressional District 11	
ОН	Р	R	Congressional District 12	
ОН	Р	R	Congressional District 13	
ОН	Р	R	Congressional District 14	
ОН	Р	R	Congressional District 15	
ОН	Р	R	Congressional District 16	

We already have a layer mapping NYT names to AP races, but I still thought I was loading the data wrong when I saw 17 races.



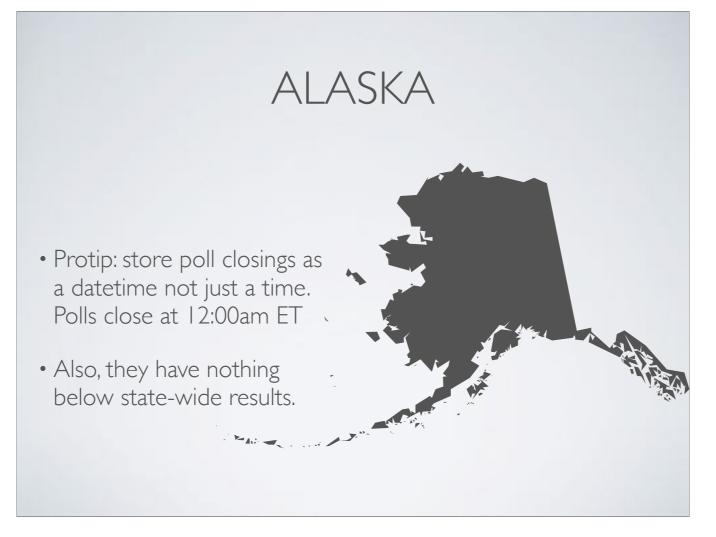
On to November!

#### NEW HAMPSHIRE

- State Law allows a town to close and report early if 100% of people have voted.
- Dixville Notch gets all 10 of its residents to report results at 12:01 am on Election Day.
- "I just loaded zeroes. Why are they votes in the data? WHYYYYYY!!!? "

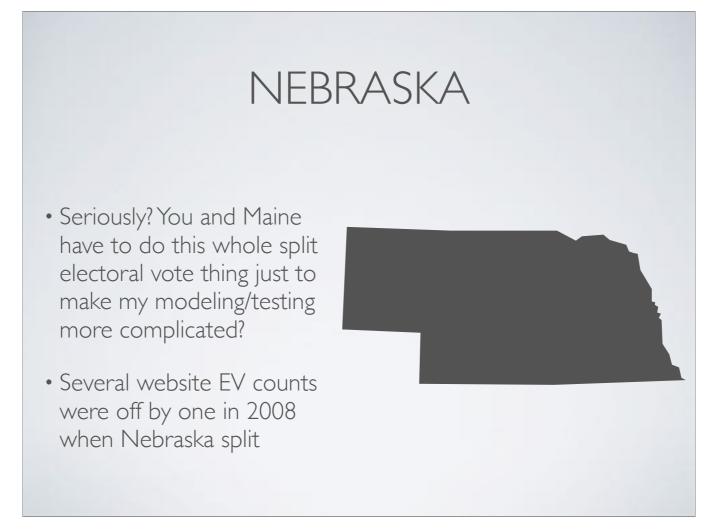


I really hate Dixville Notch.

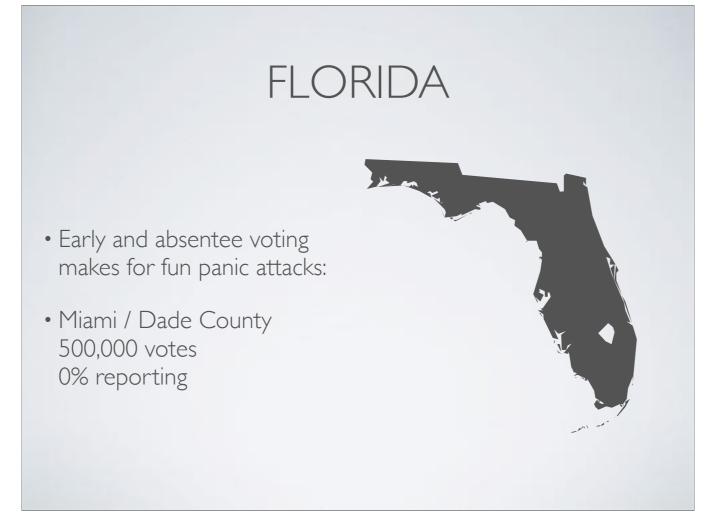


One mistake we've made a few times: thinking we could just store poll closings as times, since they're all on the same day. Bad idea if you're on the East Coast.

I'm not even talking about the caucuses in Guam



I'm not going to talk about all the annoyances from states that split their electoral votes



Early voting is also confusing. They usually get reported first, even before any precincts come in.

#### GEORGIA

- Every office from the US House or below automatically goes to a runoff if no candidate has a majority.
- Not sure if this has happened, but we had to test for it.



Finally, there are runoffs. Georgia, for instance has them.



Louisiana is even weirder. This year, one race with two Republicans went to runoff. We couldn't mark the race as won, but it would definitely be Republican in the control of congress. So we had to add more special code.



I don't really have a good conclusion here, so yeah! DEMOCRACY!

Thank you.