The People Have Spoken

Conflicting Brazilian Protests on Twitter

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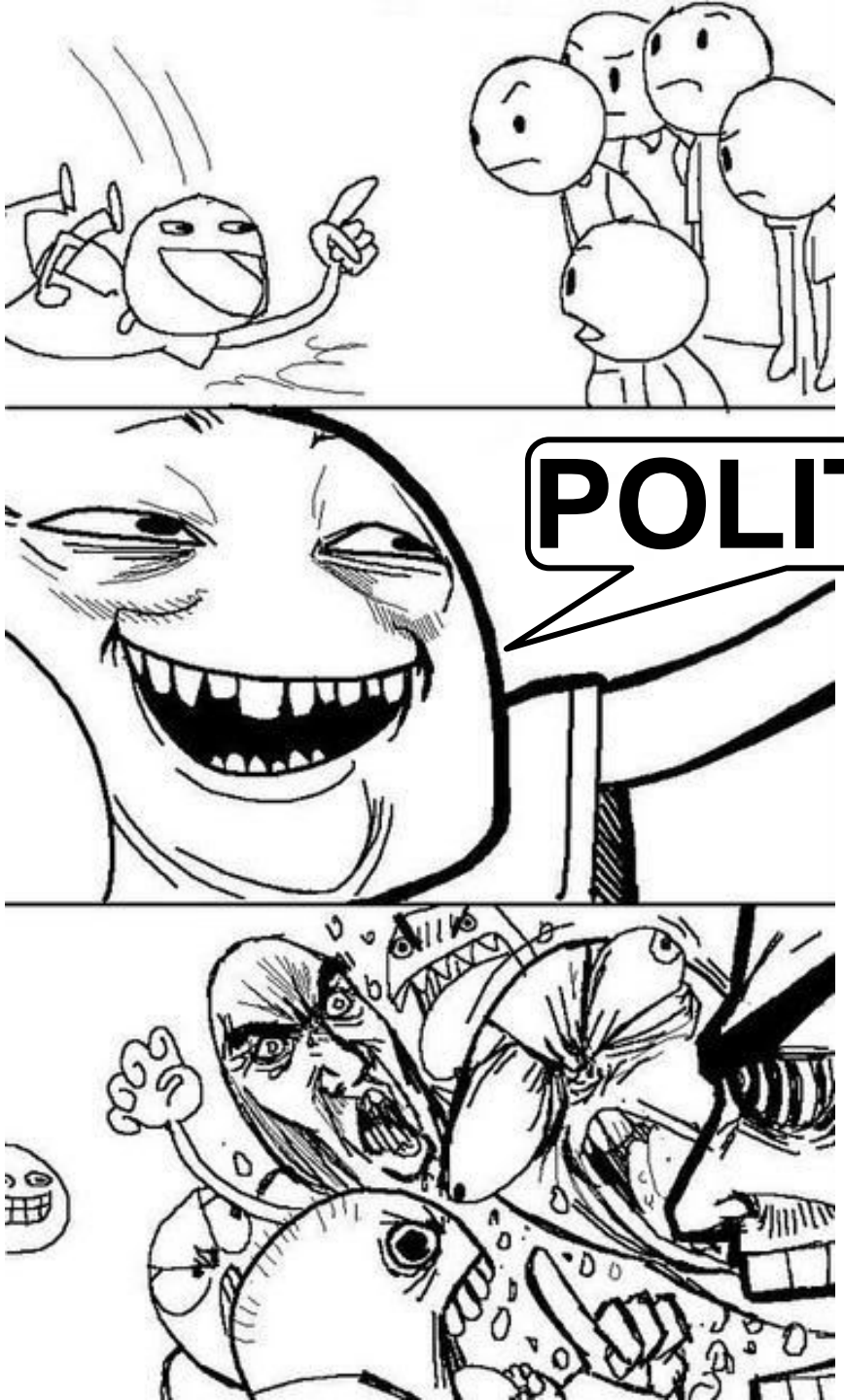
Universidade Federal do ABC
NUVEM Research Strategic Unit


POLITICS!

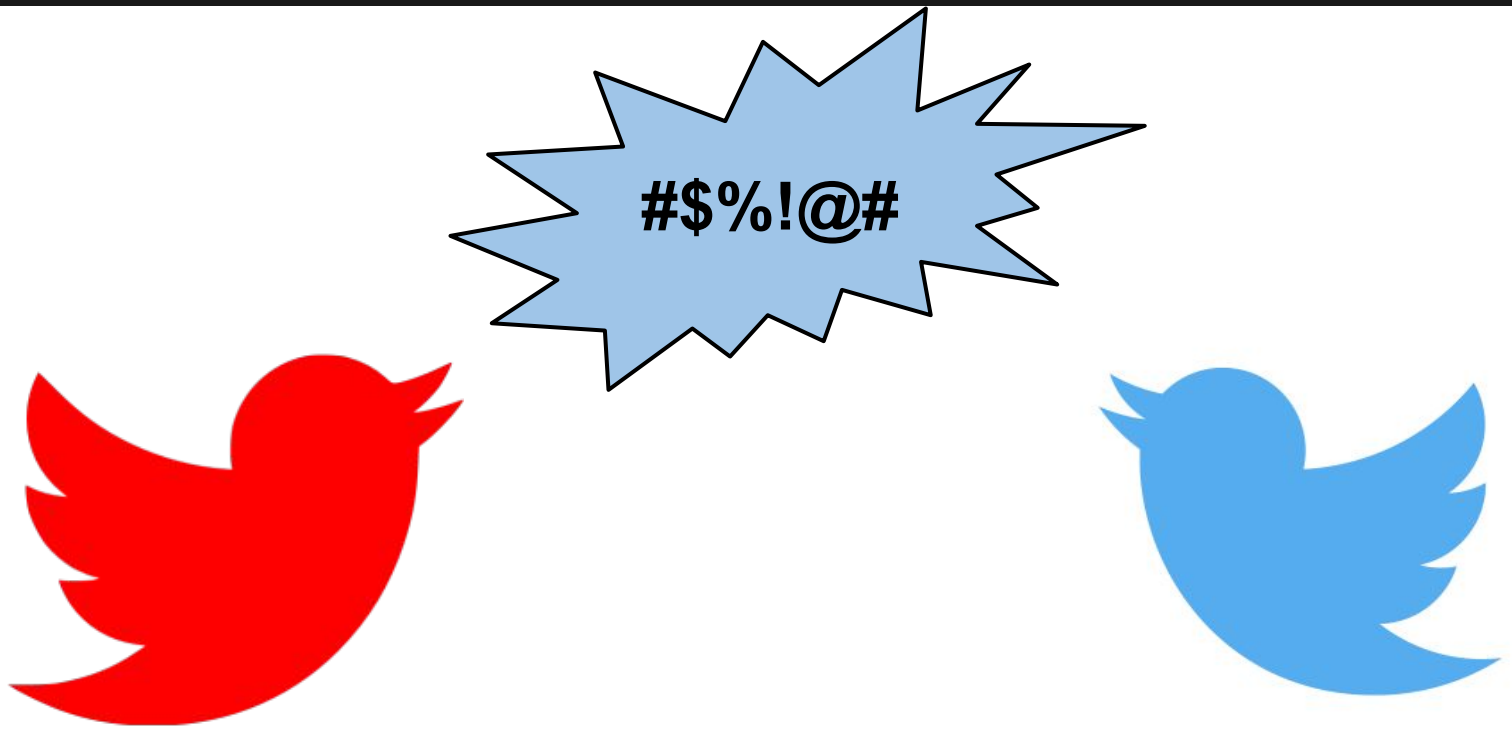
Presidential Election Results - 2014

Discussion and Protests revolving the results

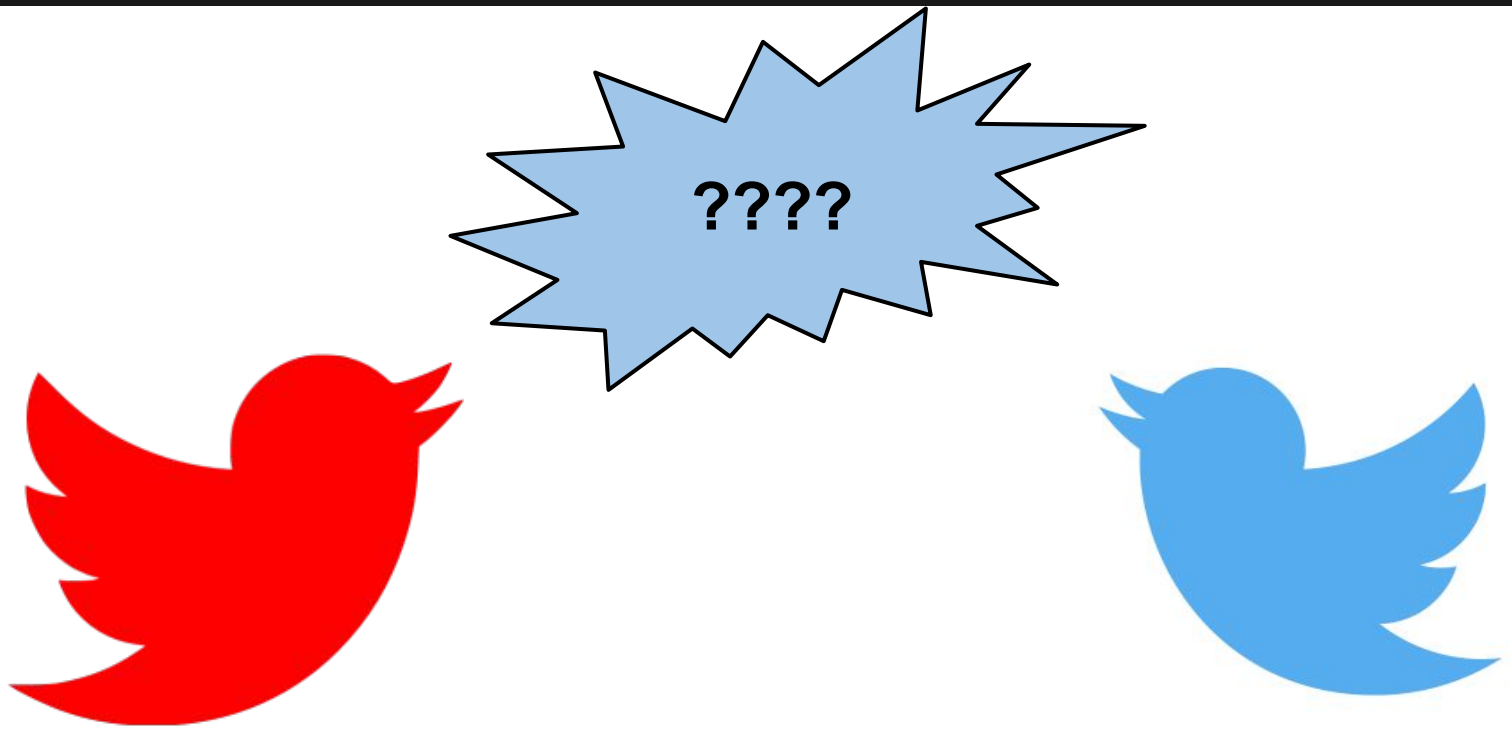
13 March
Pro-govern

15 March
Con-govern

The protests were also online...

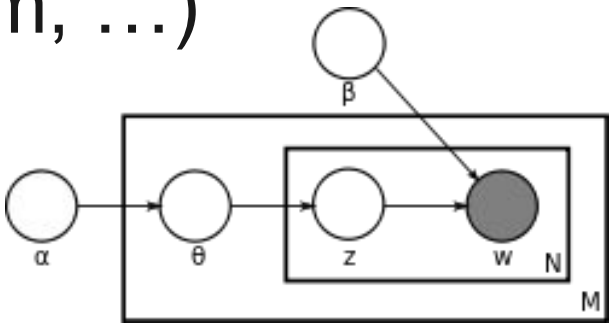


But what did the people say?



Topic Modelling

- Extract the topic of a text document based on a corpus
- Topics are represented as a set of tokens (word, n-gram, …)



Methodology

1. Collect tweets during the day of protests:

#13Marco, #PetrobrasEhBrasil13, #SouPetrobras, #TodosContraOGolpe, #br45ilnocorrupt, #globogolpista

#AcordaBrasil, #DilmaNaoMeRepresenta, #DilmaVaiada, #ForaDilma, #ForaPT, #ImpeachmentDilma, #VamosVaiarDilmaNaTV, #VemPraRua15DeMarco

#PronunciamentoDaDilma, #protestos

Methodology

2. Apply Topic Modelling Algorithms:

- pLSI
- LDA

Methodology

3. Exploratory Analysis:

- Frequency of Topics
- Hourly activity analysis
- Top Users
- and some others...

Tweet Collection

TABLE II. SUMMARY OF STUDIED DATASETS.

Dataset	# of Tweets	Unique words
PROGOV	84, 821	36, 070
CONGOV	189, 824	60, 684

Topics

	PROGOV	CONGOV
1	globogolpista (0.293)	foradilma (0.366)
2	dia13diadeluta (0.246)	dilma (0.295)
3	domingoeunaovouporque (0.184)	vemprarua (0.241)
4	dilma (0.171)	globogolpista (0.224)
5	foradilma (0.144)	tchau (0.219)
6	povo (0.138)	povo (0.218)
7	vemprarua15demarco (0.138)	forapt (0.188)
8	pt (0.136)	pt (0.181)
9	globoquergolpe (0.135)	impeachmentdilma (0.177)
10	vamos (0.129)	menosodiomaisdemocracia (0.15)

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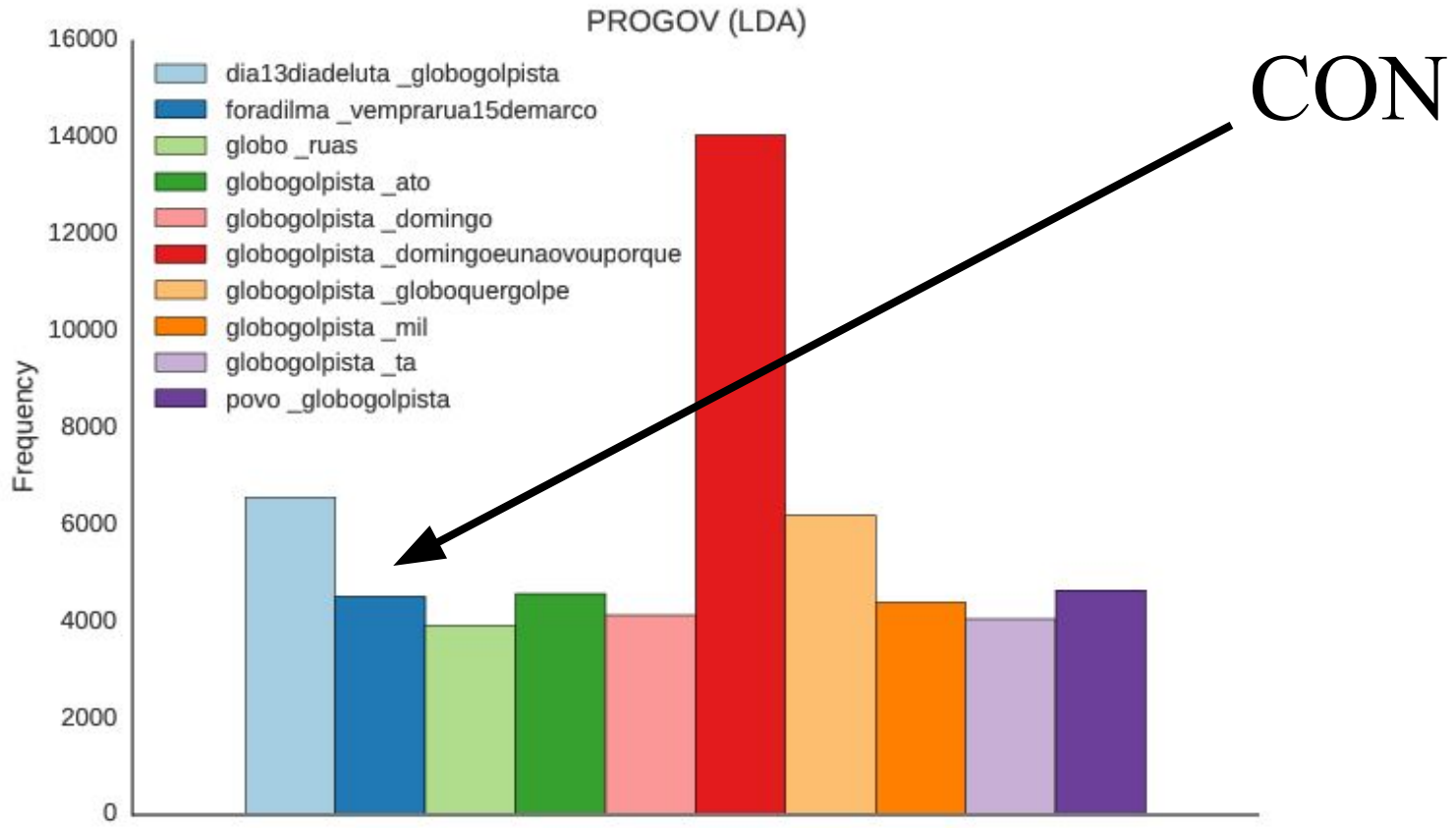
Topic Frequency



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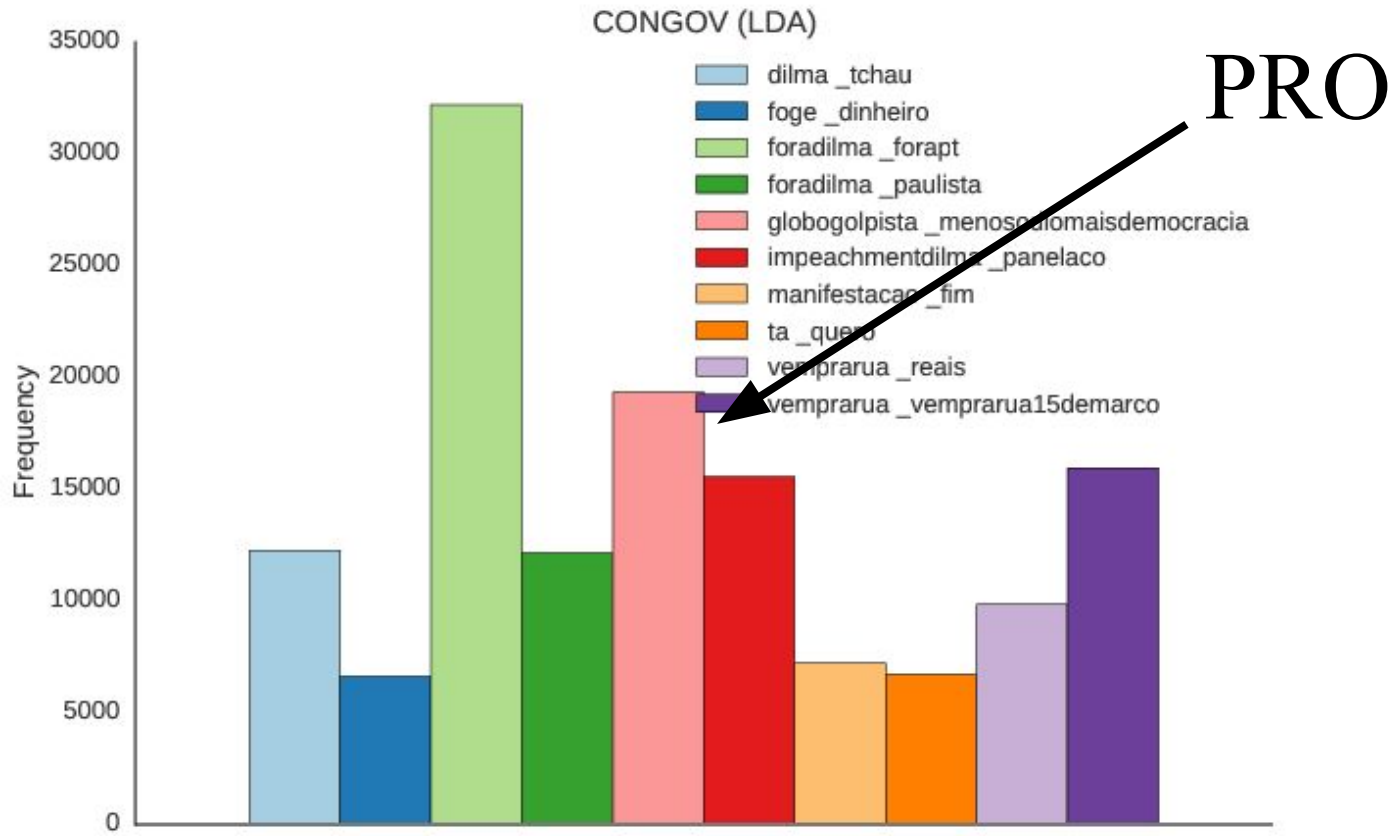
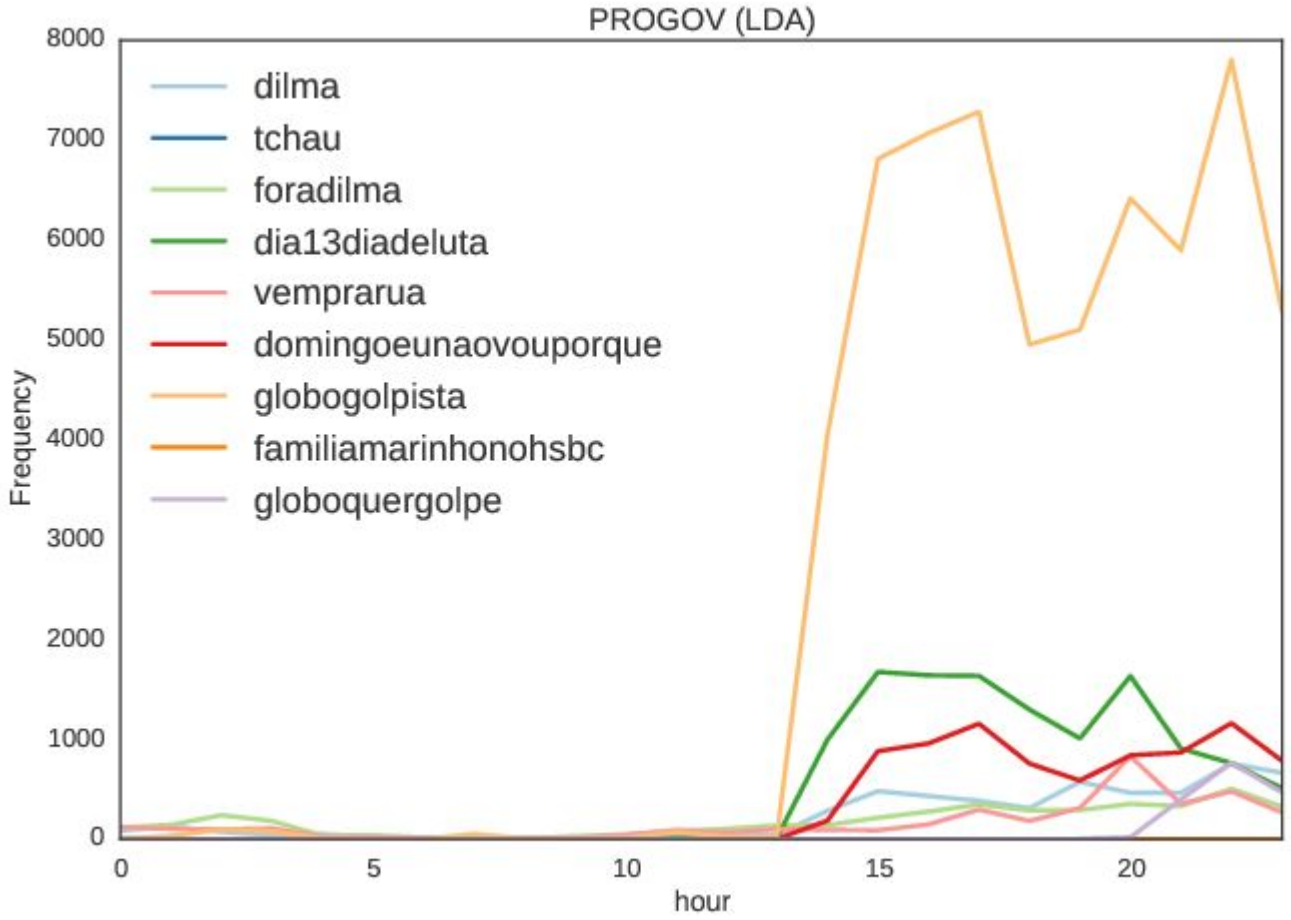
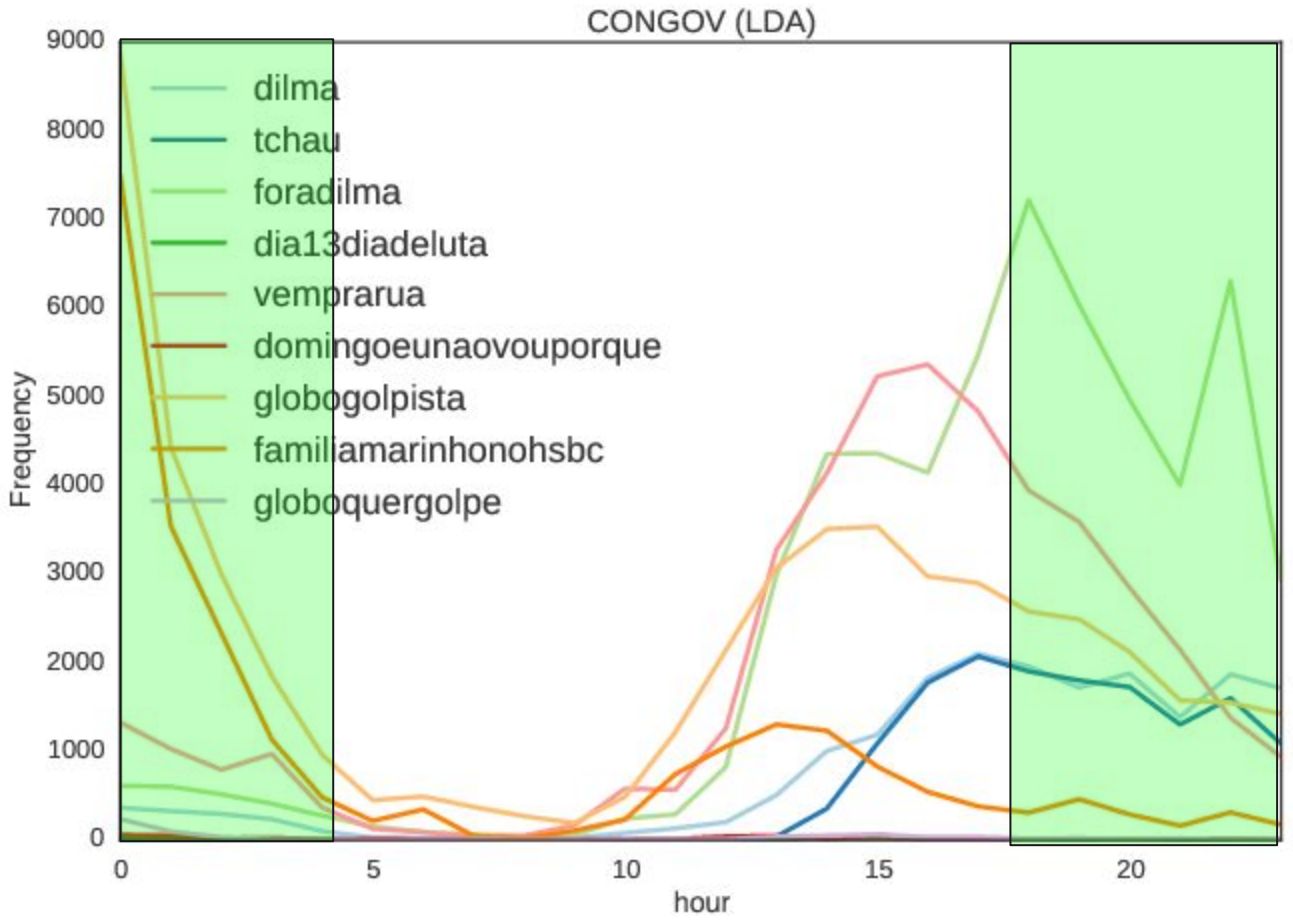


Hourly Activity



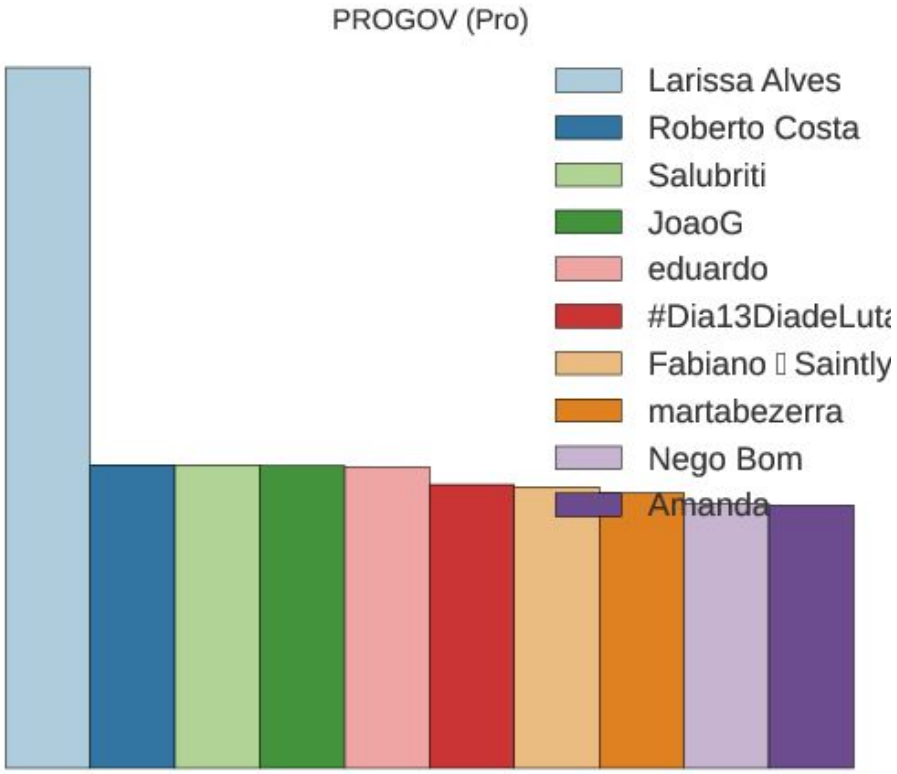
CON

Hourly Activity

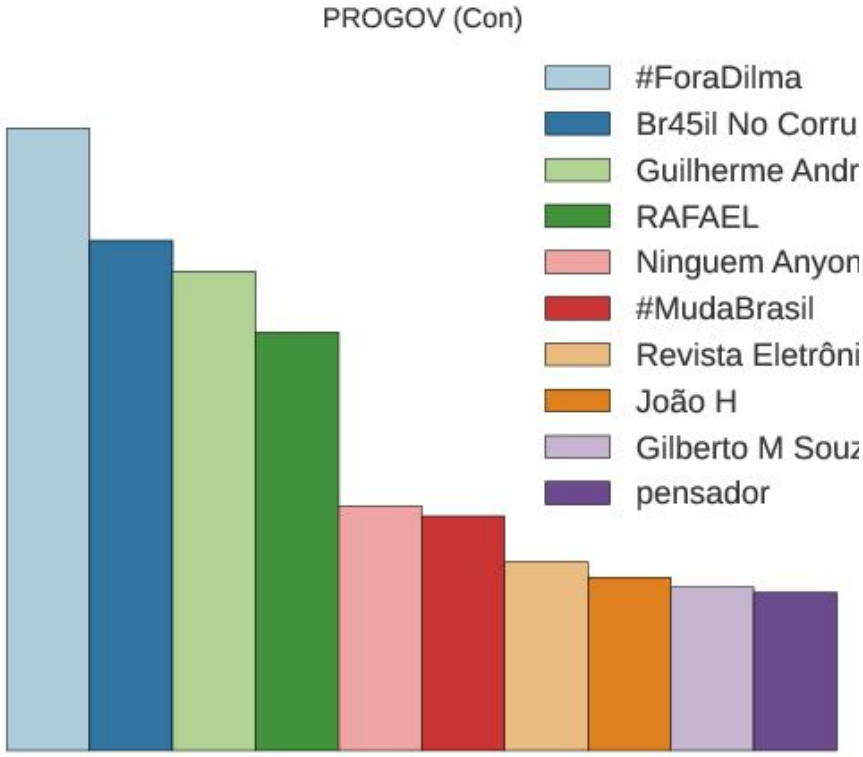


PRO

Top Users - PROGOV

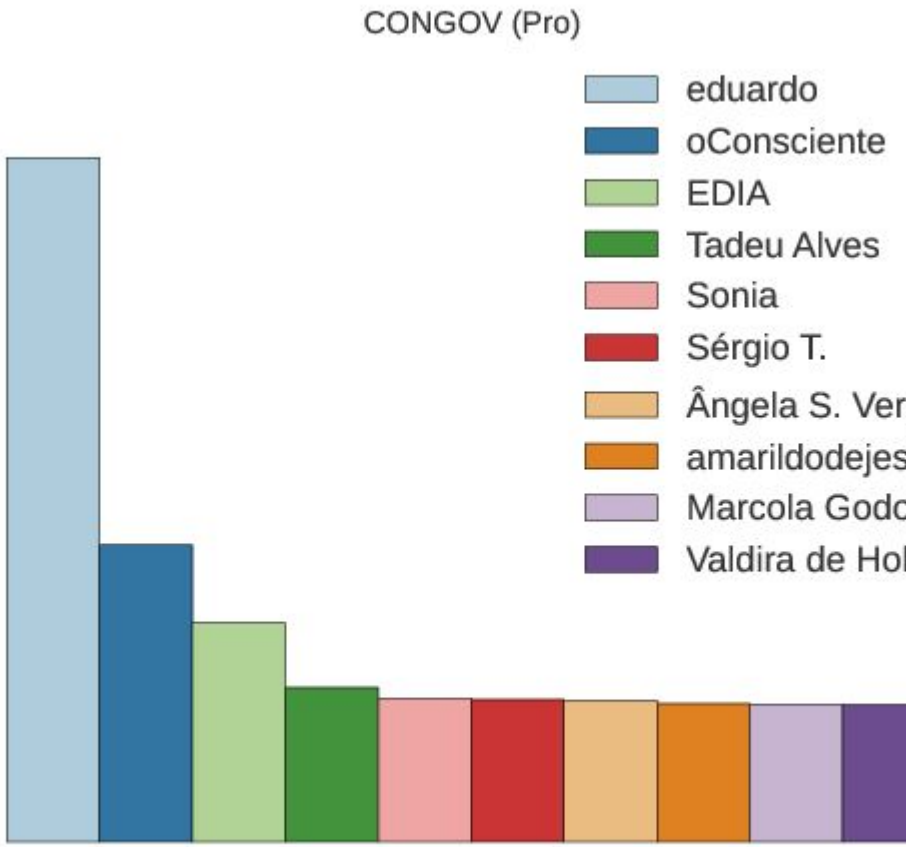


PRO

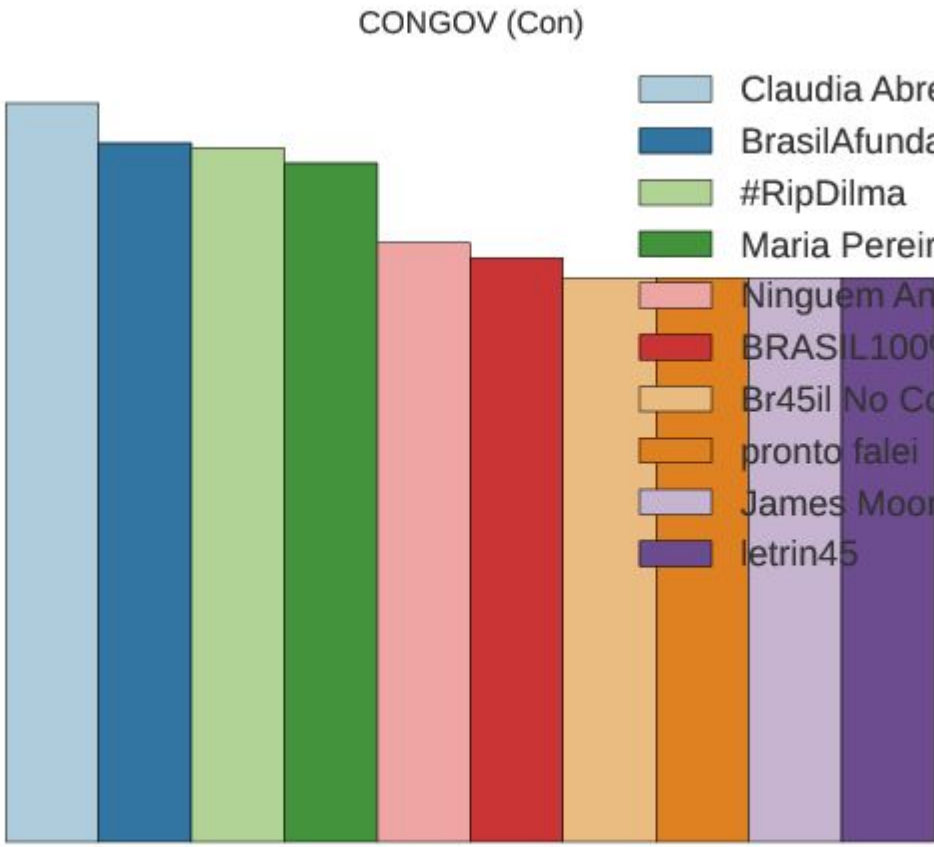


CON

Top Users - CONGOV



PRO



CON

Final Remarks

- The central theme was the winner party (PT) and the will of the people
- The opposing party wants the president to step down
- Motivated by crisis and corruption reports
- The people in favor of the govern was more active and organized…
- ...evidences of involving less of the "real people"

Questions

The data sets and source code are available at:

github.com/folivetti/POLITICS