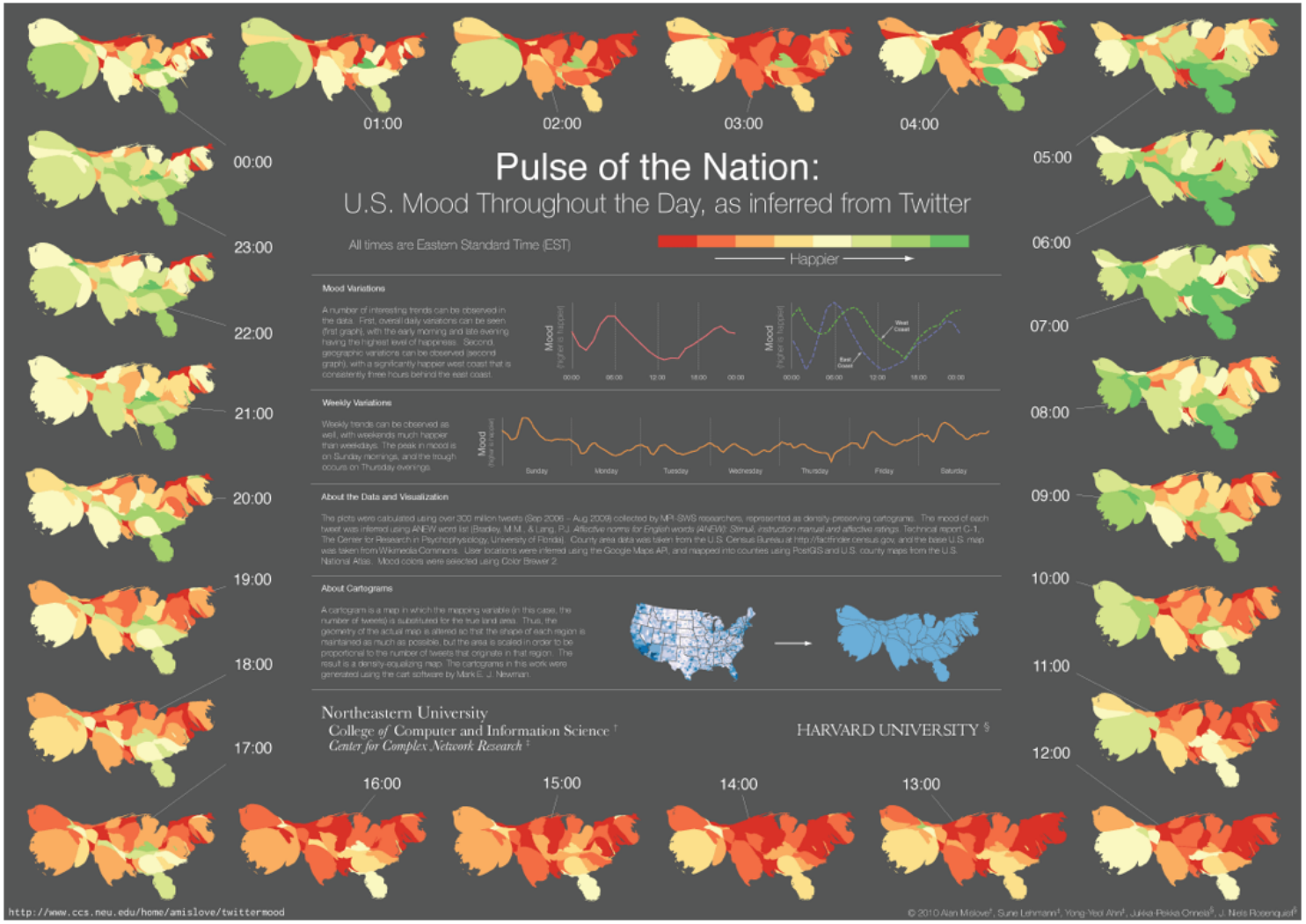
French Tweet Emotion Cycles

Diyang Tang
Jake Varley

Inspiration



Data Sources

- Tweets
  - Filtered using Python library guess_language

Possible Methods

- Pulse of the Nation: Bag of words using ANEW
- Filter on emoticons (Pak and Paroubek, 2010)
- Score adverbs (Benamara et. al, 2007)
- Livejournal entries (Leshed and Kaye, 2006)

Data Sources

- Tweets
  - Filtered using Python library guess_language
- Livejournal posts
  - Found by searching “interests” and schools in France
  - Blog post + tagged emotion

Example Post

- **Location: dans mon bain**
- **Mood: exhausted**
- **Music: no stress**

ALPHABITS
J'ai décidé de m'inspirer de plusieurs bloggeurs et de commencer une nouvelle série de blogs. Oui, oui! Moi qui me plaint tout le temps que mes posts sont inintéressants mais qui a pourtant envie de parler de tout plein de trucs, eh bien je me lance!

Le concept est simple et vous allez le comprendre assez rapidement.

De plus, à défaut de pouvoir faire de nouveaux vidéos, je vais uploader des vieux vidéos qui traînent dans mon ordi dans les prochains jours. Je ne les posterai pas tous ici parce qu'il y en a beaucoup trop, mais bon... Le lien est à gauche!
Tags: alphabits, oldies

Source:
http://improviste.livejournal.com/29527.html

Method

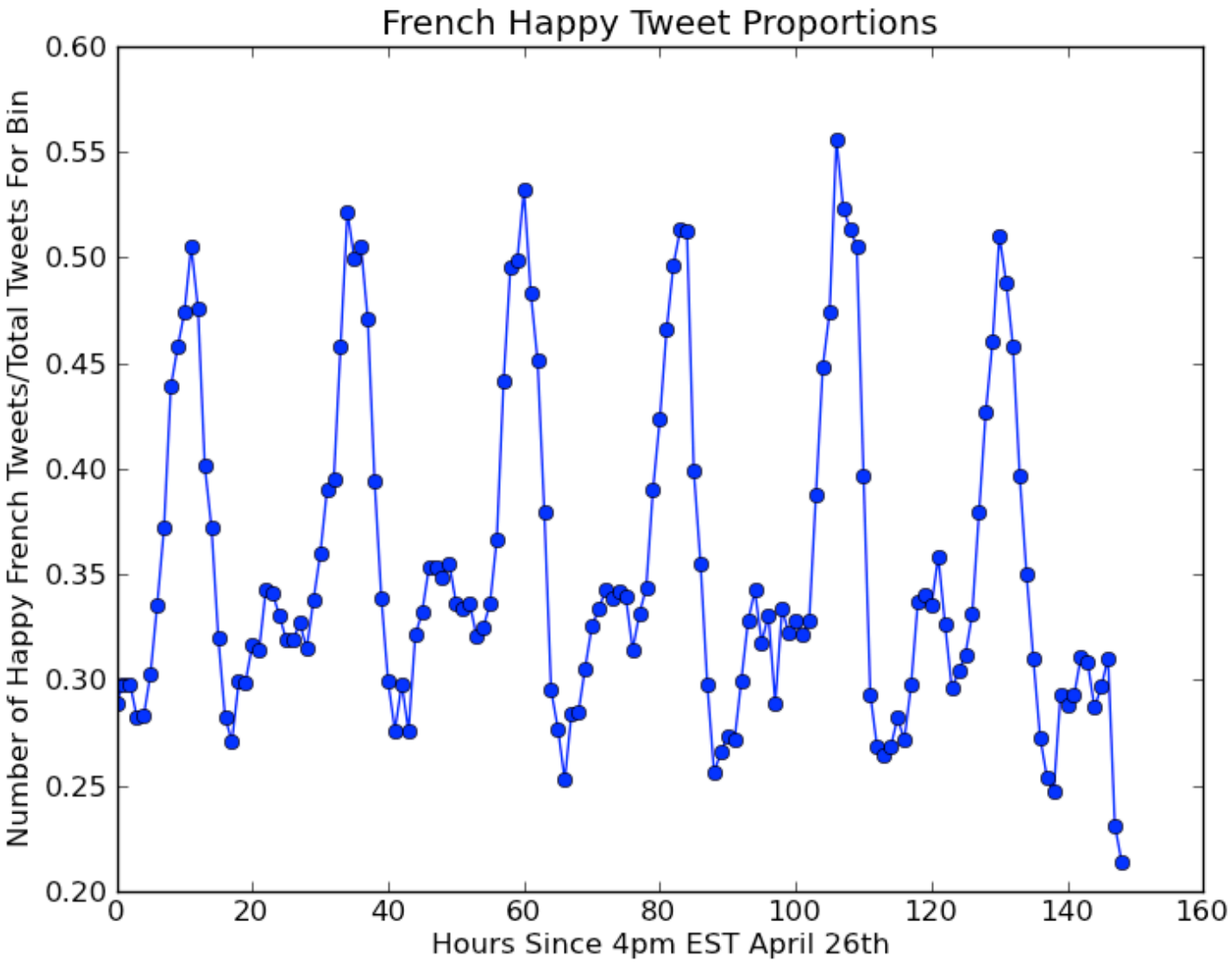
- Group tagged emotions into a few categories
- Naive Bayes, trained on French Livejournal posts + grouped emotions
- Plot % of tweets for each emotion

Categories

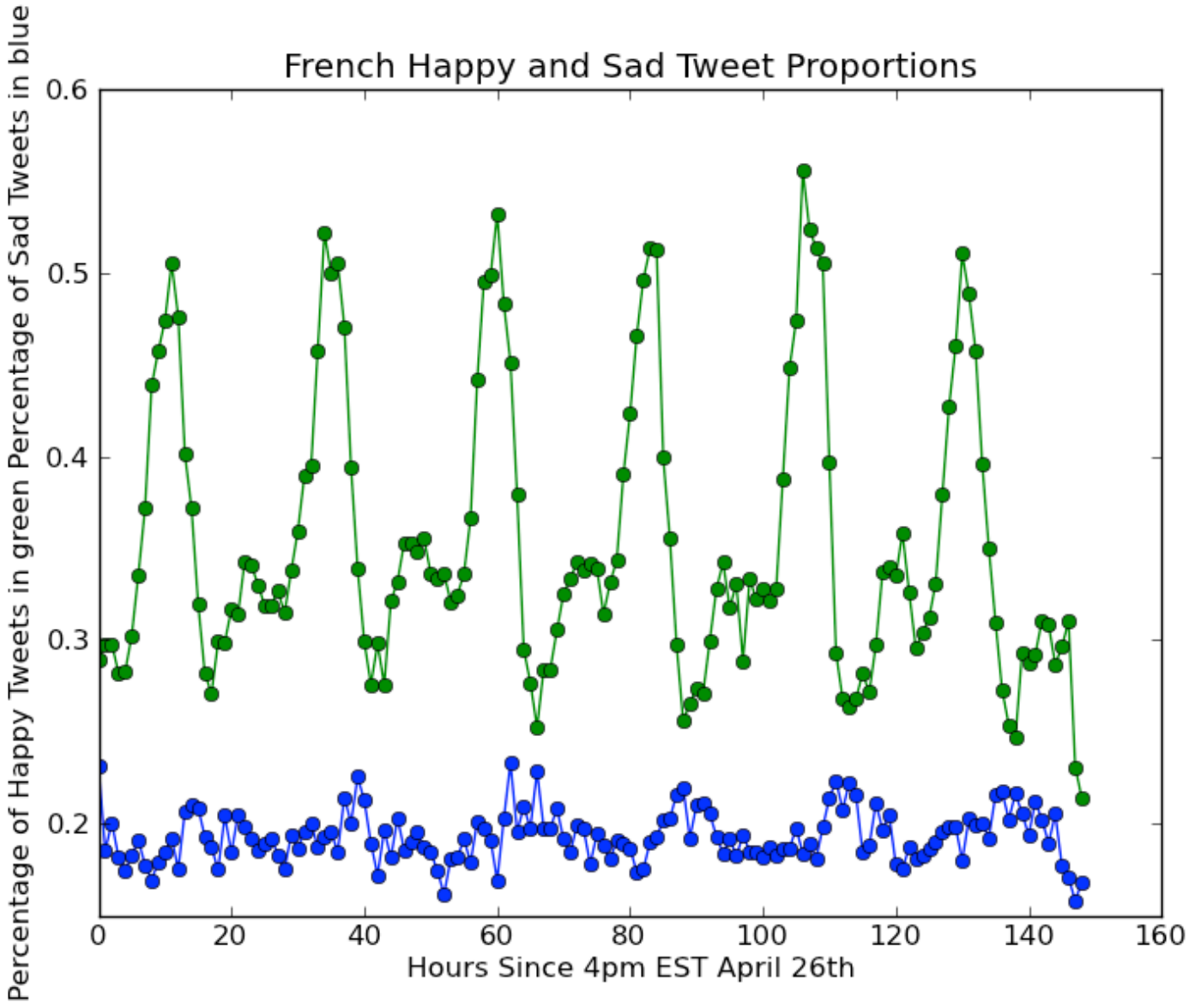
10 Most Frequent French Live Journal Emotions:
(59, 'happy') (39, 'calm') (31, 'accomplished') (30, 'tired') (24, 'contemplative') (22, 'pensive') (22, 'cheerful') (21, 'amused') (19, 'sad') (19, 'okay')

Figure 2: 10 Most Frequent Emotion Tags

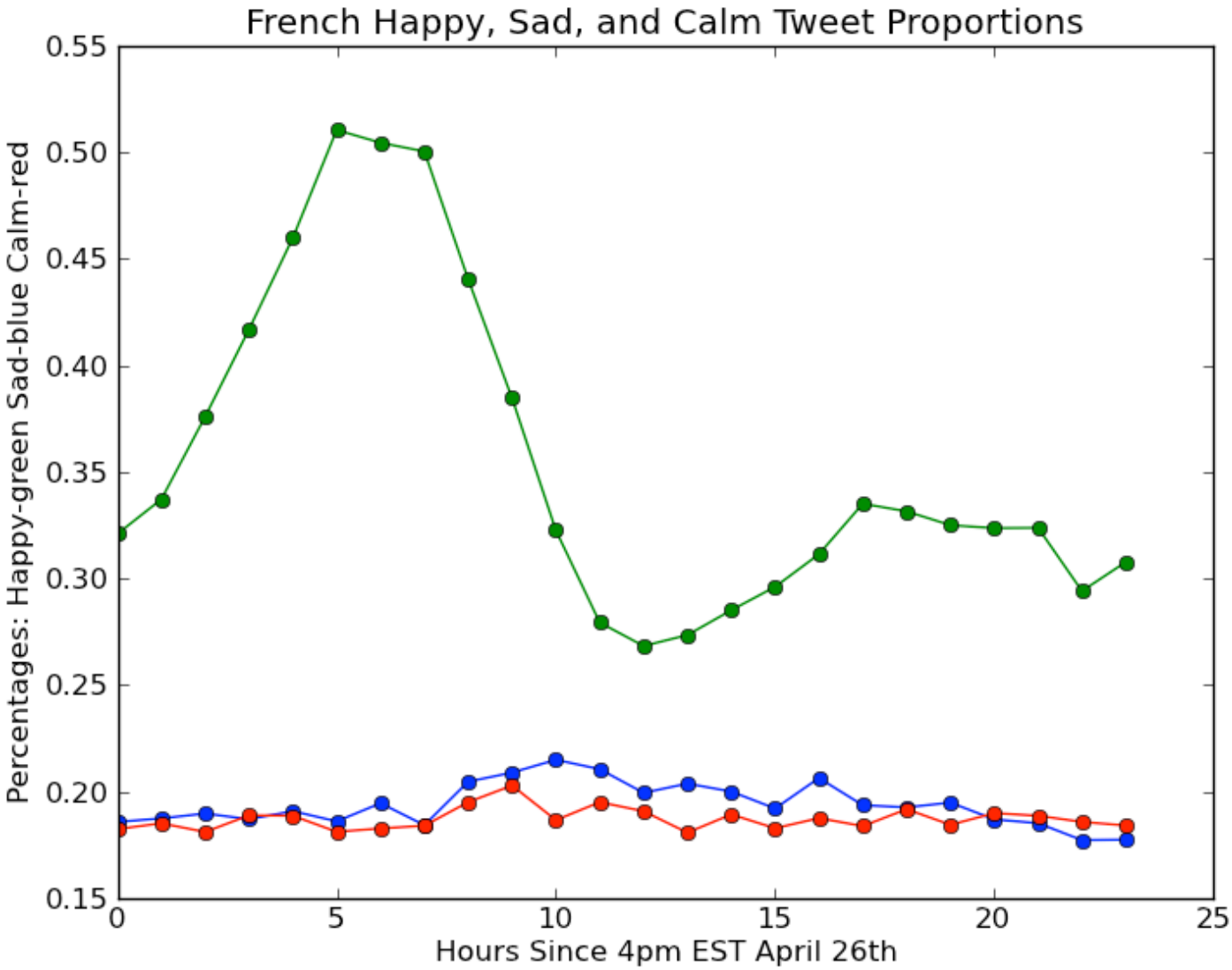
Results


French Happy Tweet Proportions
Number of Happy French Tweets/Total Tweets For Bin
0.60
0.55
0.50
0.45
0.40
0.35
0.30
0.25
0.20
0
20
40
60
80
100
120
140
160
Hours Since 4pm EST April 26th

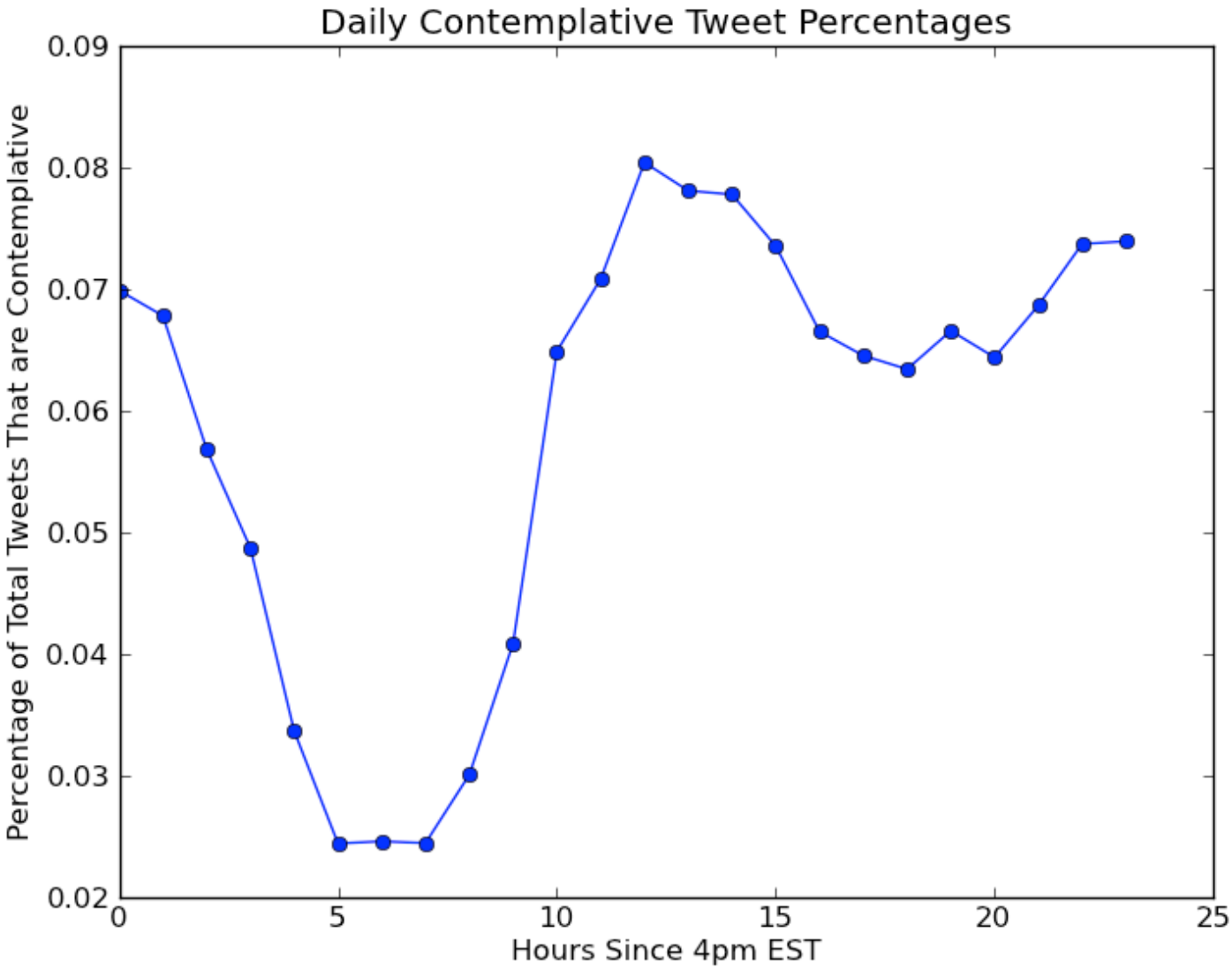
Results


French Happy and Sad Tweet Proportions
Percentage of Happy Tweets in green Percentage of Sad Tweets in blue
0.6
0.5
0.4
0.3
0.2
0
20
40
60
80
100
120
140
160
Hours Since 4pm EST April 26th

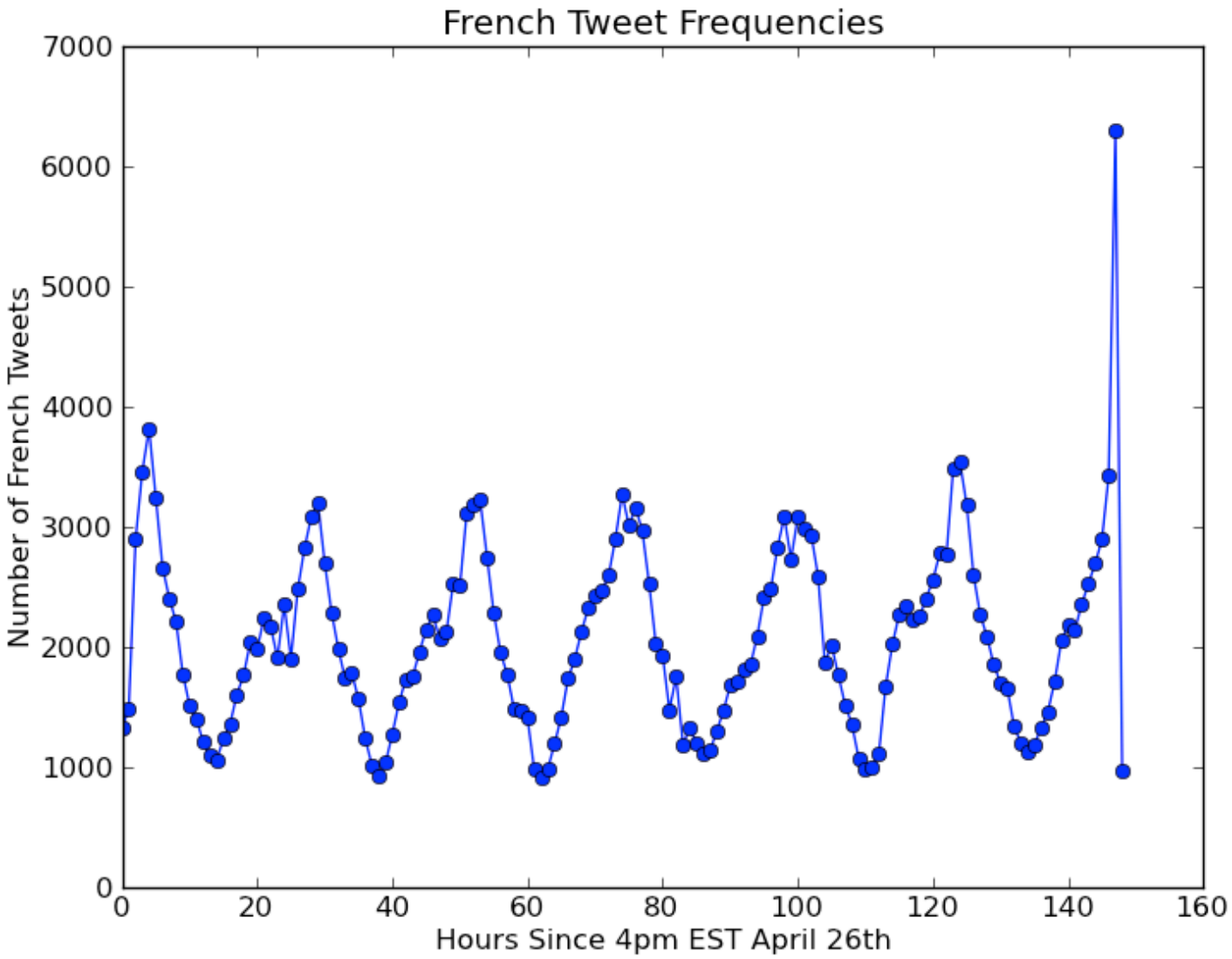
Results


French Happy, Sad, and Calm Tweet Proportions
Percentages: Happy-green Sad-blue Calm-red
0.55
0.50
0.45
0.40
0.35
0.30
0.25
0.20
0.15
0
5
10
15
20
25
Hours Since 4pm EST April 26th

Results


Daily Contemplative Tweet Percentages
Percentage of Total Tweets That are Contemplative
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0
5
10
15
20
25
Hours Since 4pm EST

Results


French Tweet Frequencies
Number of French Tweets
Hours Since 4pm EST April 26th
0
1000
2000
3000
4000
5000
6000
7000
0
20
40
60
80
100
120
140
160

Findings

- Strong daily pattern
  - Unhappiest around 10am Paris time
  - Tweet least around 2pm Paris time
- Weak weekly pattern
  - Percentages seem to hold steady
- Happy and Contemplative seem to be complimentary

Further work

- Better filtering -- use more of the tweet metadata
- Take into account volume more
- Limit feature space
- Threshold