

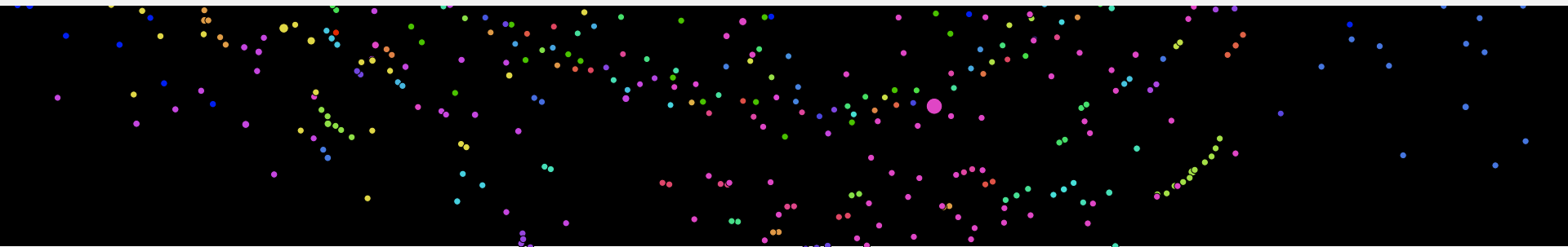


SMART2 Dashboard (Social Media Analytic and Research Testbed 2)

Su Yeon Han and Ming-Hsiang Tsou
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**Spatiotemporal Modeling of Human Dynamics Across Social Media and Social Networks
Interdisciplinary Behavioral and Social Science Research, National Science Foundation**





SMART2 Dashboard

- Web based GIS application
- Purpose: collect and visualize Twitter messages containing particular keywords in real time.
- Update new data every 10 minutes: especially helpful in the situation that requires immediate responses
 - Earth quake, Wildfire, Flooding Terrorist Attack and Shooting
- Provides highly user interactive and friendly user-interface



SMART1 VS SMART2

Functions	SMART1	SMART2
User Defined Keywords	X	O
Real Time Monitoring	X	O
User Defined Study Area	X	O
User Defined Data Collection Period	X	O
User's Control for Filtering out Inappropriate Contents	X	O
Top Media	O	O
Top URL	O	O
Word Cloud	O	O
Top Retweets	O	O
Top Hashtags	O	O
Map Visualization of Study Area	O	O
Selective Visualization of Each Different Keywords	O	O
Data Download	O	O



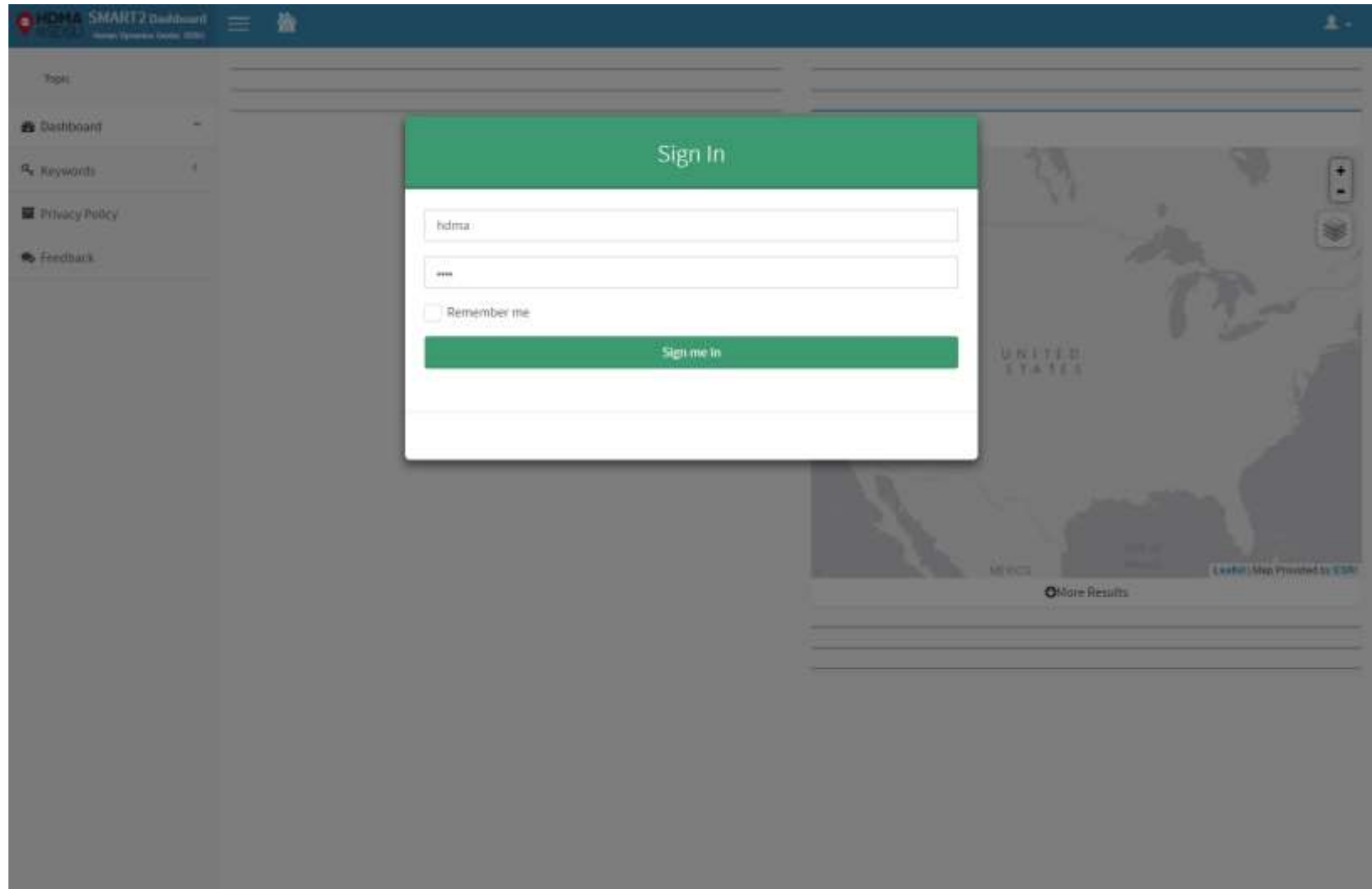
SMART2 Dashboard (Social Media Analytic and Research Testbed 2)

Tutorials

URL: <http://vision.sdsu.edu/ec2/smart2/>

1. Log in

Each user can have their own account



2. Register a new Topic by using the button at the left bottom corner.

- (2) filter noises (such as removing redundant retweets and using machine learning methods to improve precisions)
- (3) integration of geo-coded, geo-tagged, and non-geocoded tweets.
- (4) visualize social media data in various aspects (such as top URLs, top retweets, top mentions, or top hashtags).

User ID : hdma

Please select a topic

Shark ↻

Registered at: 2017-05-01 09:37
Last tweeted: 2017-05-03 22:53
Tweet count: 7,110

Edit topic ... ✎

shootingSD ↻

Registered at: 2017-05-01 12:28
Last tweeted: 2017-05-03 22:53
Tweet count: 6,302

Edit topic ... ✎

SDSU ↻

Registered at: 2017-05-01 12:39
Last tweeted: 2017-05-07 19:42
Tweet count: 5,935

Edit topic ... ✎

Storm ↻

Registered at: 2017-05-07 20:03
Last tweeted: 2017-05-08 00:46
Tweet count: 1,655

Edit topic ... ✎

Trump1 ↻

Registered at: 2017-05-13 14:27
Last tweeted: 2017-05-16 14:23
Tweet count: 26,692

Edit topic ... ✎

HPV ↻

Registered at: 2017-05-17 12:41
Last tweeted: 2017-05-31 07:29
Tweet count: 16

Edit topic ... ✎

HPV-Vaccine ↻

Registered at: 2017-05-19 07:05
Last tweeted: 2017-06-12 13:59
Tweet count: 406

Edit topic ... ✎

Brian_Anger ↻

Registered at: 2017-05-19 17:21
Last tweeted: 2017-06-02 17:13
Tweet count: 18,418

Edit topic ... ✎

If you want to register a new topic, please click below button

Register a new Topic

3. Enter a name of new Topic and Keywords upto 10. You can also choose the data collection period. After fill out everything, click the submit button.

Register a new Topic

Create your Topic ID and enter keywords.

Topic ID:

* please do not include space in topic ID.

Keywords:

<input type="text" value="brush fire"/>	<input type="text" value="wildfire"/>
<input type="text" value="fire"/>	<input type="text" value="fire evacuations"/>
<input type="text" value="fire evacuation"/>	<input type="text" value="fire evacuate"/>
<input type="text" value="fire jamul"/>	<input type="text" value="wildfire jamul"/>
<input type="text" value="vegetation fire"/>	<input type="text" value="Keyword 10"/>

Search area:
Modify below as you need.

name	<input type="text" value="San_Diego"/>	population (optional)	<input type="text" value="3223096"/>	utc offset (?)	<input type="text" value="-7"/>
center coordinates (lon)	<input type="text" value="-116.839"/>	lat	<input type="text" value="33.020"/>	the length of radius (miles)	<input type="text" value="52"/>

Periods:

- 2 weeks from now
- 1 week from now
- 3 days from now

Search area is the area where tweets are collected.

The default search area is the circled area that covers San Diego county. But the users can change the search area by changing each of field below.

Search area:

Modify below as you need.

name	<input type="text" value="San_Diego"/>	population (optional)	<input type="text" value="3223096"/>	utc offset (?)	<input type="text" value="-7"/>
center coordinates (?) :	lon <input type="text" value="-116.839"/>	lat <input type="text" value="33.020"/>	the length of radius (miles)	<input type="text" value="52"/>	

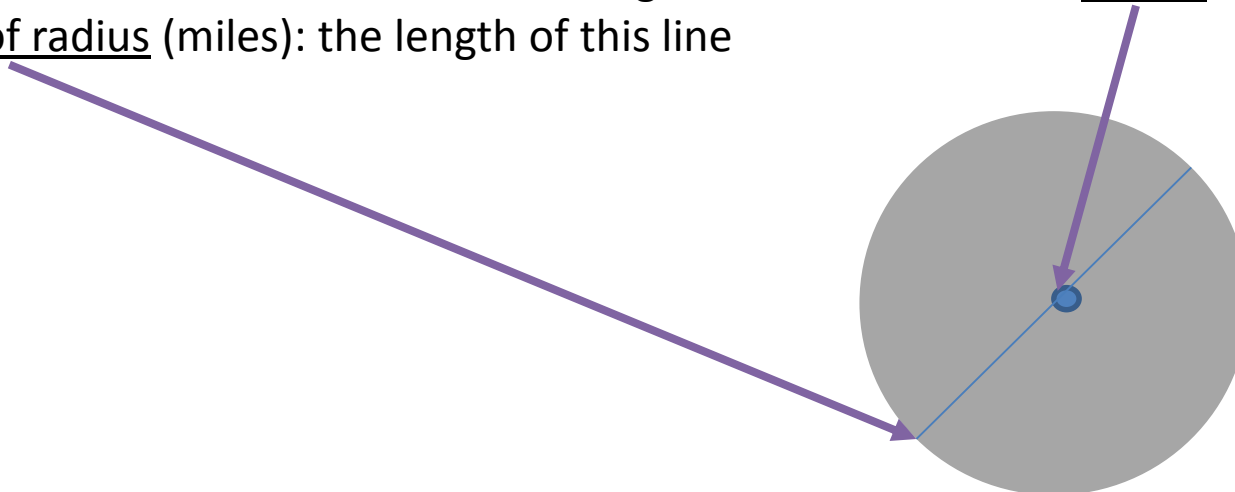
Name: users can enter the area name (whatever they want)

Population: It is the population of the search area. If you don't know, you can leave it empty

utc offset: users can figure out what to enter by clicking the hyperlink

Center coordinates: lon and lat in decimal degrees. It should be the center of the study area

The length of radius (miles): the length of this line

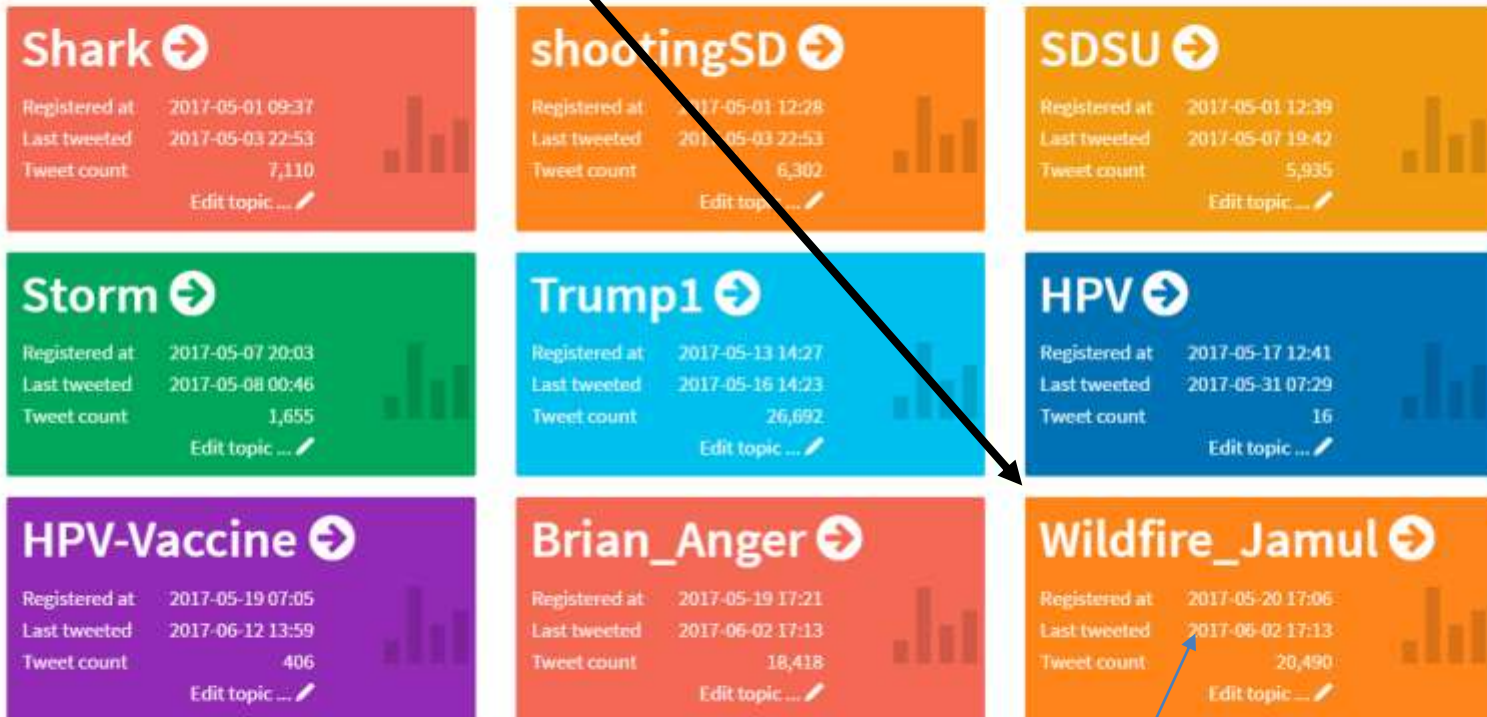


The new Topic (Wildfire_Jamul) has created.

- (2) filter noises (such as removing redundant retweets and using machine learning methods to improve precisions)
- (3) integration of geo-coded, geo-tagged, and non-geocoded tweets.
- (4) visualize social media data in various aspects (such as top URLs, top retweets, top mentions, or top hashtags).

User ID : hdma

Please select a topic



If you want to register a new topic, please click below button

Register a new Topic

At first, you will see N/A here. Once you can see the number instead of N/A, then it is ready to view.

You can selectively visualize tweets including each different keywords by checking and unchecking check boxes. Every time you make a change, you need to refresh it to see the change by clicking the “refresh” button.

HDMA SMART2 Dashboard
 Home Dashboard Content - SMART2

WILDFIRE JAMUL Topic

Dashboard

- Index
- Word Cloud
- Trend
- Top URL
- Top Hashtags
- Top Mentions
- Top Retweet
- Top Media
- Geocode Status
- Keywords** (9)

Check All Uncheck All Refresh

- brush fire May 20, 2017
- wildfire May 20, 2017
- fire May 20, 2017
- fire evacuations May 20, 2017
- fire evacuation May 20, 2017
- fire evacuate May 20, 2017
- fire jamul May 20, 2017
- wildfire jamul May 20, 2017
- vegetation fire May 20, 2017

Download Privacy Policy Feedback

6 Since 10 min ago on 2017-06-02
 17:00-17:09 4
 17:10-17:13

28 Since 1 hour ago on 2017-06-02
 16:00-16:59 22
 17:00-17:13 6

920 Since yesterday
 2017-06-01 521
 2017-06-02 399

20,490 Since beginning
 From 2017-05-11
 To 2017-06-02 17:13


Trend Tweets Filtered 10 min 1 hour Daily Weekly

11 15:50
 21 16:00

Top Media All 2017-05-11- A week ago 2017-05-26- Yesterday 2017-06-01- Today 2017-06-02

16 15

Top URL (The Most Referred Web Pages)

#	Content	Count
1	 https://twitter.com/thesundevils/status/867521519479599104	82
2	https://sixthleafcoveystore.com/collections/wolves	59

Word Cloud All 2017-05-11- A week ago 2017-05-26- Yesterday 2017-06-01- Today 2017-06-02

fire realize actual @freddyamazin @califiresandiego

For example, try uncheck “fire” to see the tweets only about the wildfire. And click “Refresh”

HDMA SMART2 Dashboard
Human Dynamics Center SDSU

WILDFIRE JAMUL Topic

6 Since 10 min ago on 2017-06-02
17:00-17:09: 4
17:10-17:13: 2

28 Since 1 hour ago on 2017-06-02
16:00-16:59: 22
17:00-17:13: 6


920 Since yesterday
2017-06-01: 521
2017-06-02: 399

20,490 Since beginning
From: 2017-05-11
To: 2017-06-02 17:13

Trend — Tweets — Filtered — 10 min — 1 hour — Daily — Weekly

Top Media All — 2017-05-11- — A week ago — Yesterday — Today

Top URL (The Most Referred Web Pages)

#	Content	Count
1	 https://twitter.com/thesundevels/status/867521519479599104	82
2	https://sixthleafcloverstore.com/collections/wolves	59

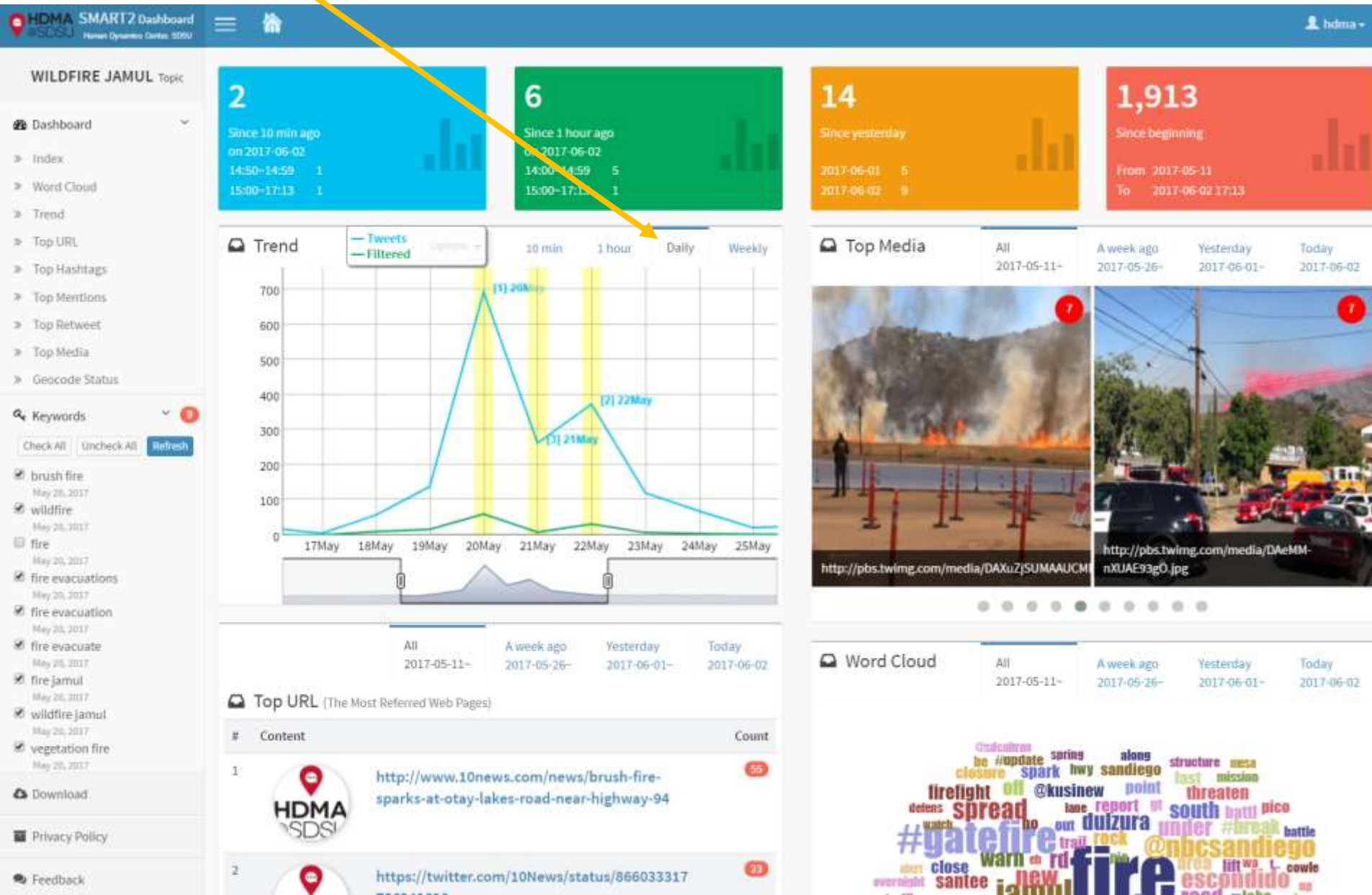
Word Cloud All — 2017-05-11- — A week ago — Yesterday — Today

fire, realize, actual, gatefire, @fireddiamazin, @calfiresandiego, update, perform, spread, social, surprise, today, maybe

Keywords Check All Uncheck All Refresh

- brush fire
- wildfire
- fire
- fire evacuations
- fire evacuation
- fire evacuate
- fire jamul
- wildfire jamul
- vegetation fire



Hourly, Daily, or weekly visualization is also available. Each of them shows the frequency of the tweets including each keyword. In this case, the keyword, "fire" was excluded.



Every 10 minute temporal visualization of the frequency of tweet. Especially helpful for monitoring people's response about disaster events such as Wildfire, Flooding and Earthquake.

The screenshot displays the HDMA SMART2 Dashboard for the topic "WILDFIRE JAMUL". The dashboard is divided into several sections:

- Summary Cards:** Four cards at the top show tweet counts for different time intervals:
 - 2 tweets since 10 min ago on 2017-06-02 (14:50-14:59: 1, 15:00-17:13: 1).
 - 6 tweets since 1 hour ago on 2017-06-02 (14:00-14:59: 5, 15:00-17:13: 1).
 - 14 tweets since yesterday (2017-06-01: 5, 2017-06-02: 9).
 - 1,913 tweets since beginning (From 2017-05-11 to 2017-06-02 17:13).
- Trend Graph:** A line graph showing tweet frequency over time. The x-axis represents time from 06:00 on 21 May to 06:00 on 22 May. The y-axis represents the count of tweets (0 to 25). A red line represents "Tweets" and a green line represents "Filtered" tweets. A yellow highlight is placed over a significant spike in tweets between 12:00 and 18:00 on 21 May. Specific data points are labeled: [1] 12:00, [2] 14:20, and [3] 16:10.
- Top Media:** Two media thumbnails are shown. The first shows a large plume of smoke with a red circle containing the number 5. The second shows a highway with traffic and a red circle containing the number 5. Both have URLs starting with "http://pbs.twimg.com/media/DA...".
- Top URL:** A table listing the most referred web pages:

#	Content	Count
1.	 http://www.10news.com/news/brush-fire-sparks-at-otay-lakes-road-near-highway-94	53
2.	 https://twitter.com/10News/status/866033317	23
- Word Cloud:** A word cloud at the bottom right featuring terms like "fire", "gatefire", "spread", "warn", "santee", "jamul", "fire", "escondido", "threaten", "structure", "mission", "point", "report", "lane", "watch", "trail", "rock", "lane", "report", "lane", "watch", "trail", "rock", "lane", "report", "lane", "watch", "trail", "rock".

You can examine the content of Twitter messages by clicking the line graph. After you click this point, you will see the messages in the next page.

The dashboard displays the following components:

- WILDFIRE JAMUL Topic** sidebar with navigation options like Dashboard, Index, Word Cloud, Trend, Top URL, Top Hashtags, Top Mentions, Top Retweet, Top Media, Geocode Status, Keywords, and Download.
- Summary Cards:**
 - 2:** Since 10 min ago on 2017-06-02 (14:50-14:59: 1, 15:00-17:13: 1)
 - 6:** Since 1 hour ago on 2017-06-02 (14:00-14:59: 5, 15:00-17:13: 1)
 - 14:** Since yesterday (2017-06-01: 5, 2017-06-02: 9)
 - 1,913:** Since beginning (From 2017-05-11, To 2017-06-02 17:13)
- Trend:** Line graph showing 'Tweets' (red) and 'Filtered' (green) over time. A yellow highlight is on the 17:00-18:00 range on May 21st. A yellow arrow points to a peak at 17:10.
- Top Media:** Two image thumbnails with URLs: <http://pbs.twimg.com/media/DAd-zGoXoAEoAm6.jpg> and <http://pbs.twimg.com/media/DAdiOefKcA...>
- Top URL:** (The Most Referred Web Pages) table:

#	Content	Count
1	http://www.10news.com/news/brush-fire-sparks-at-otay-lakes-road-near-highway-94	53
2	https://twitter.com/10News/status/866033317736340606	23
- Word Cloud:** Visual representation of terms, with 'fire', 'gatefire', 'jamul', 'santee', 'spread', and 'warn' being prominent.

You can also download the tweets in csv by clicking “Download” button.

Tweets on 2017-05-20 12:00 (~ 10 min) about Wildfire_Jamul

Showing 1 to 24 of 27 entries

[Download](#)

#	▲	created_at_local	username	text
1		2017-05-20 12:09:59	jeff/Dlees	RT @fox5sandiego: @CALFIRESANDIEGO now confirms that the brush fire near Hwy 94 and Otay Lakes Road has burned 100 acres and is spreading f...
2		2017-05-20 12:08:44	Alex Presha	RT @nbcсандiego: Update: Fast-spreading #GateFire off SR-94 south of Jamul grows to 100 acres: https://t.co/18deAfyE9s
3		2017-05-20 12:08:30	Malik Earnest	RT @fox5sandiego: #BREAKINGNEWS - @CALFIRESANDIEGO crews are battling a 10-acre brush fire near Hwy 94 and Otay Lakes Road, south of Jamul.
4		2017-05-20 12:08:29	Steve Downey	RT @sdut: Fire south of Jamul at 100 acres, spreading at "dangerous rate," says @CALFIRESANDIEGO https://t.co/aosAVs3j7P
5		2017-05-20 12:08:23	#NBC7 San Diego	Update: Fast-spreading #GateFire off SR-94 south of Jamul grows to 100 acres: https://t.co/18deAfyE9s
6		2017-05-20 12:08:15	saucy1	RT @KUSINews: #BREAKING: A 10-acre brush fire off SR-94 near Jamul is being battled by firefighters.
7		2017-05-20 12:08:03	Maria Villanueva	RT @CALFIRESANDIEGO: @CALFIRESANDIEGO at scene of a vegetation fire Hwy 94 south of Jamul. IC reports 10 ac and rapid rate of spread. #Gate...
8		2017-05-20 12:07:23	San Diego Informer	Firefighters battle brush fire south of Jamul https://t.co/EW0TBcMWr https://t.co/HNjtsa09M
9		2017-05-20 12:07:06	Melissa Hutchinson	RT @sdut: Fire south of Jamul at 100 acres, spreading at "dangerous rate," says @CALFIRESANDIEGO https://t.co/aosAVs3j7P
10		2017-05-20 12:06:45	FOX 5 San Diego	@CALFIRESANDIEGO now confirms that the brush fire near Hwy 94 and Otay Lakes Road has burned 100 acres and is spreading fast.
11		2017-05-20 12:06:29	The Union-Tribune	Fire south of Jamul at 100 acres, spreading at "dangerous rate," says @CALFIRESANDIEGO https://t.co/aosAVs3j7P
12		2017-05-20 12:06:08	CBS News 8	Firefighters battle brush fire south of Jamul https://t.co/Vz72Hbl1i8 https://t.co/a4YceBtYwh
13		2017-05-20 12:06:07	AM 760 KFMB	Firefighters battle brush fire south of Jamul https://t.co/DuwoqB8NKj https://t.co/wlj0pdyeHF
14		2017-05-20 12:06:04	News 8 San Diego CBS	Firefighters battle brush fire south of Jamul https://t.co/FPEJKqFLY https://t.co/DztuqHeTHI
15		2017-05-20 12:05:22	Sir Milo	RT @KUSINews: #BREAKING: A 10-acre brush fire off SR-94 near Jamul is being battled by firefighters.
16		2017-05-20 12:05:04	San Diego Now	Firefighters battle 10-acre brush fire at Highway 94 south of Jamul. https://t.co/QMn3gTibbN
17		2017-05-20 12:04:15	Stan	RT @CBS8: #BREAKING: Firefighters battle 10-acre brush fire at Highway 94 south of Jamul. https://t.co/hncnYdsw7B
18		2017-05-20 12:03:36	Brittany Silverstein	#BREAKING brush fire near Hwy 94 south of Jamul has increased to at least 100 acres in less than an hour. Follow... https://t.co/jY0nfkOTb
19		2017-05-20 12:03:33	Alexis	RT @CALFIRESANDIEGO: @CALFIRESANDIEGO at scene of a vegetation fire Hwy 94 south of Jamul. IC reports 10 ac and rapid rate of spread. #Gate...
20		2017-05-20 12:03:17	UpdateSanDiego	RT @CBS8: #BREAKING: Firefighters battle 10-acre brush fire at Highway 94 south of Jamul. https://t.co/hncnYdsw7B

Close

2 <https://twitter.com/10News/status/868033317>

Each image in Top Media is clickable to examine tweets containing the photos

HDMA SMART2 Dashboard (Human Dynamics Analytics, Center for SDSU)

WILDFIRE JAMUL Topic

- Dashboard
 - Index
 - Word Cloud
 - Trend
 - Top URL
 - Top Hashtags
 - Top Mentions
 - Top Retweet
 - Top Media
 - Geocode Status
- Keywords
- Download
- Privacy Policy
- Feedback

6

Since 10 min ago on 2017-06-02

17:00-17:09 4
17:10-17:13 2

28

Since 1 hour ago on 2017-06-02

16:00-16:59 22
17:00-17:13 6

920

Since yesterday

2017-06-01 521

20,490

Since beginning

From 2017-05-11
To 2017-06-02 17:13

Trend | Tweets | Filtered | 10 min | 1 hour | Daily | Weekly

Timeline: 18:00, 24May, 06:00, 12:00, 18:00, 25May, 06:00, 12:00

Word Cloud

Top URL (The Most Referred Web Pages)

#	Content	Count
1	https://twitter.com/thesundevils/status/867521519479599104	82
2	https://sixthleafdoverstore.com/collections/wolves	50

Top Media

41

http://pbs.twimg.com/media/DAWcLWWWoAA_St

38

<http://pbs.twimg.com/media/DAJ1TtW0A8AinJp>

Word Cloud

All | A week ago | Yesterday | Today

2017-05-11- | 2017-05-26- | 2017-06-01- | 2017-06-02

Each image is clickable!

Top URL is the frequency of the URL included in the tweets you have collected. Word cloud, Vocabulary Frequency Table will allow you to identify the frequently used words in the Twitter messages that you have collected.

The screenshot displays the HDMA SMART2 dashboard for the topic 'WILDFIRE JAMUL'. It features three main data visualization components:

- Top URL (The Most Referred Web Pages):** A table listing the most frequent URLs found in tweets. Each entry includes a rank, a content snippet, and a count in a red circle.
- Word Cloud:** A visualization where the size of each word represents its frequency in the tweets. The most prominent words are 'fire', 'gate', 'fire', 'acre', 'brush', and 'near'.
- Vocabulary Frequency Table:** A bar chart showing the frequency of various words. The x-axis lists words like 'acre', 'evacu', 'update', 'spread', 'st', and 'rd'. The y-axis represents frequency, ranging from 0 to 2,000.

Yellow callout boxes highlight that each number in the Top URL table, each word in the Word Cloud, and each bar in the Vocabulary Frequency Table is clickable.

#	Content	Count
1	http://www.10news.com/news/brush-fire-sparks-at-otay-lakes-road-near-highway-94	56
2	https://twitter.com/10News/status/86603331773634969	23
3	http://bit.ly/2qEJtGo	20
4	http://www.10news.com/news/fire-erupts-near-mission-trails-park-and-cowles-mountain	18
5	http://via.kswbtv.com/Y3Ujm	17
6	http://www.cbs8.com/story/35490914/breaking-brush-fire-reported-near-cowles-mountain	13
7	http://www.10news.com/news/gate-fire-jamul-dulzura-sunday-grows	12
8	http://on.nbc7.com/V2ntMJF	11
9	http://on.nbc7.com/pmWQumN	11

Word	Frequency
acre	~1550
evacu	~750
update	~600
spread	~450
st	~350
rd	~300

Top Retweets shows the tweets that has the highest number of retweets on the top. Top Mentions shows the user who mentions the keywords (the user defined) most frequently on the top. Top Hashtag shows the hashtag including the highest frequency of the user-defined keywords on the top

WILDFIRE JAMUL Topic

Top Retweets

All 2017-05-11- | A week ago 2017-05-26- | Yesterday 2017-06-01

Content

1

FREDDY @FreddyAmazin
when you realize the song you always skip is actually fire.
3:45 PM - 24 May 2017
5,791 retweets 14,153 likes

2

50's & 60's @50sAnd60s

Top Mentions

All 2017-05-11- | A week ago 2017-05-26-

Content

#	Content	Count
1	FreddyAmazin	5208
2	CALFIRESANDIEGO	3066
3	50sAnd60s	183
4	BTS_twt	683
5	JNottoday	645
6	AppleMusic	603
7	BBMAs	600
8	nbcсандiego	377
9	10News	369
10	foxsandiego	181

Top Hashtags

All 2017-05-11- | A week ago 2017-05-26-

Content

#	Content	Count
1	GateFire	1182

Each number is clickable!

This is the are where tweets are collected

Each number is clickable!

Each number is clickable!

You can add more keywords by clicking [Edit topic](#) at the bottom of each box.

(2) filter noises (such as removing redundant retweets and using machine learning methods to improve precisions)
(3) integration of geo-coded, geo-tagged, and non-geocoded tweets.
(4) visualize social media data in various aspects (such as top URLs, top retweets, top mentions, or top hashtags).

User ID : hdma
Please select a topic

Topic	Registered at	Last tweeted	Tweet count	Edit topic
Shark	2017-05-01 09:37	2017-05-03 22:53	7,110	Edit topic ...
shootingSD	2017-05-01 12:28	2017-05-03 22:53	6,302	Edit topic ...
SDSU	2017-05-01 12:39	2017-05-07 19:42	5,935	Edit topic ...
Storm	2017-05-07 20:03	2017-05-08 00:46	1,655	Edit topic ...
Trump1	2017-05-13 14:27	2017-05-16 14:23	26,692	Edit topic ...
HPV	2017-05-17 12:41	2017-05-31 07:29	16	Edit topic ...
HPV-Vaccine	2017-05-19 07:05	2017-06-12 13:59	406	Edit topic ...
Brian_Anger	2017-05-19 17:21	2017-06-02 17:13	18,418	Edit topic ...
Wildfire_Jamul	2017-05-20 17:06	2017-06-02 17:13	20,490	Edit topic ...

If you want to register a new topic, please click below button

[Register a new Topic](#)

You can add more keywords to the same topic. But you cannot modify the existing keywords. After add more keywords, Click “Update”. You can also delete topic using “Delete” button.

- (2) filter noises (such as removing redundant retweets and using machine learning methods to improve precisions)
- (3) integration of geo-coded, geo-tagged, and non-geocoded tweets.
- (4) visualize social media data in various aspects (such as top URLs, top retweets, top mentions, or top hashtags).

User ID : hdma
Please select a topic.

Shark ↻

Registered at 2017-05-01 09:37
Last tweeted 2017-05-03 22:53
Tweet count 7,110
Edit topic ... ↗

Storm ↻

Registered at 2017-05-07 20:03
Last tweeted 2017-05-08 00:46
Tweet count 1,655
Edit topic ... ↗

HPV-Vaccine ↻

Registered at 2017-05-19 07:05
Last tweeted 2017-06-12 13:59
Tweet count 406
Edit topic ... ↗

If you want to register a new topic, pl

Register a new Topic

Edit your Topic

Add additional keywords or edit data collection period.

Topic ID:

Wildfire_Jamul

Keywords:

brush fire

wildfire

fire

fire evacuations

fire-eyacuation

fire evacuate

fire jamul

wildfire jamul

vegetation fire

Keyword 10

Period:

- The data will be (or were) collected until 2017-06-03 17:06
- Stop right now

Update

Delete

Close

SMART2 visualizes data every 10 minute. In every 10 minute, the browser will be automatically refreshed, and you will see the update in every panel, Trend, Top Media, Top URL, World Cloud, Top Retweets, Top Mentions, Top Hashtags, and Geocode Status.

If you don't want your browser refreshed automatically, you can disable it by clicking "Stop Auto Refresh" button on the top of the browser. In this case, the data will be updated only when the user refresh the browser.

HDMA SMART Dashboard2
Human Dynamics Center, SDSU

Stop Auto Refresh 09:46

WILDFIRE JAMUL Topic

- Dashboard
- Index
- Word Cloud
- Trend
- Top URL
- Top Hashtags
- Top Mentions
- Top Retweet
- Top Media
- Geocode Status
- Keywords
- Download
- Privacy Policy
- Feedback

6
Since 10 min ago on 2017-06-02
17:00-17:09 4
17:10-17:13 2

28
Since 1 hour ago on 2017-06-02
16:00-16:59 22
17:00-17:13 6

920
Since yesterday
2017-06-01 521
2017-06-02 399

20,490
Since beginning
From 2017-05-11
To 2017-06-02 17:13

Trend (Tweets, Filtered) | 10 min | 1 hour | Daily | Weekly

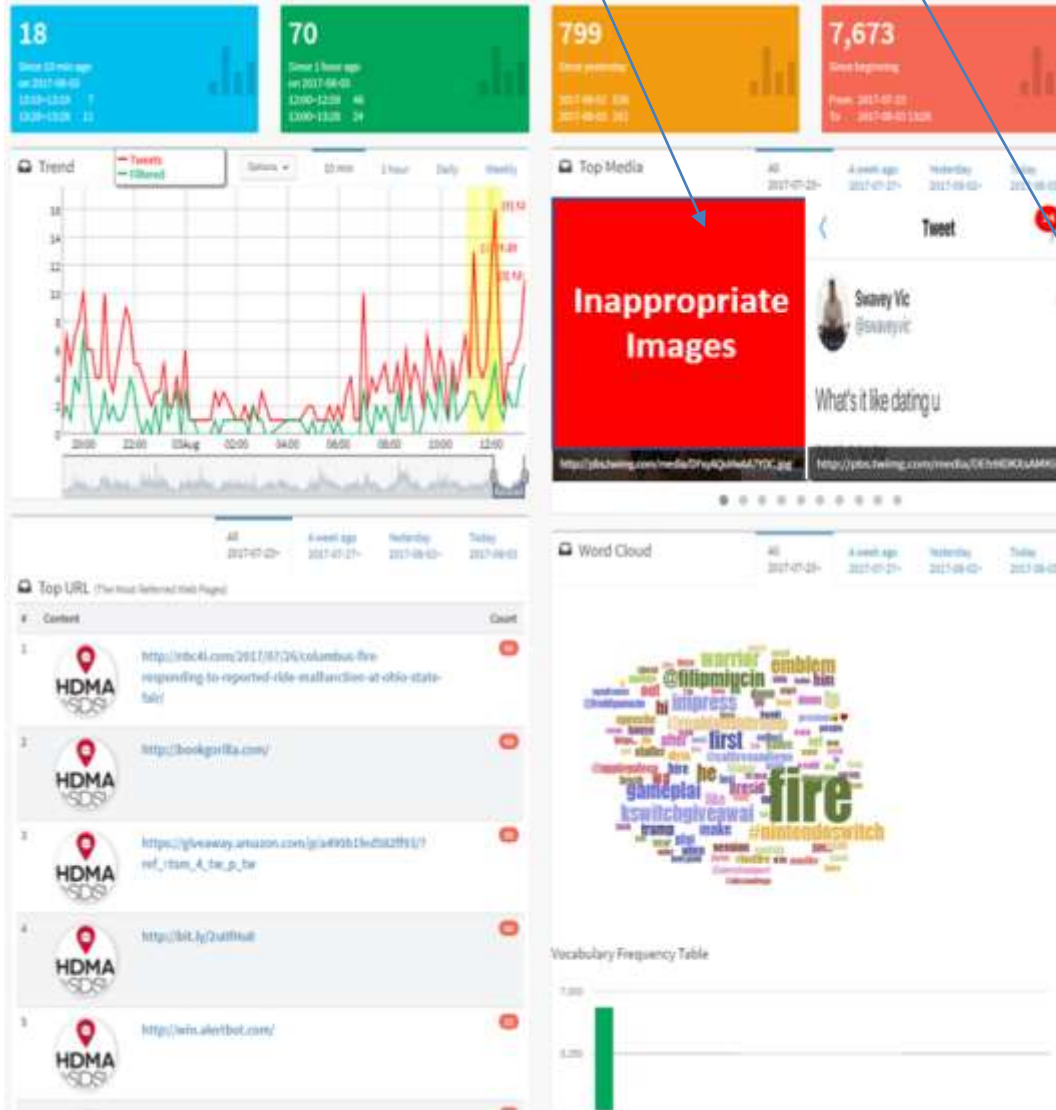
Top Media | All | A week ago | Yesterday | Today

Top URL (The Most Referred Web Pages)

#	Content	Count
1	https://twitter.com/thesundevils/status/8675215	92

Word Cloud | All | A week ago | Yesterday | Today

Once you find the inappropriate contents (especially images in section of “Top Media”), users can filter out the image and the tweet including the image



The screenshot shows the "Top Retweets" section for a tweet by **FILIP @filipiucin** about "NEW GAMEPLAY! FIRE EMBLEM WARRIORS + HANDED BY IMPRESSIONS". The tweet has 13 replies, 1,762 retweets, and 69 likes. A red box labeled "Inappropriate Images" is overlaid on the tweet content.

Below the tweet, another red box labeled "Inappropriate Images" is overlaid on the content of a tweet by **Naughty America @naughtyamerica** with the text "When fire meets ice. @Romi_Rain >>".

“Filter” Function

A function to filter out inappropriate images and messages has been added to SMART2. The Smart2 dashboard sometimes unintentionally contain inappropriate contents such as pornography. These inappropriate images are especially contained among tweets including curse words.

In order to remove these inappropriate contents from the SMART2, we added a “filter” function. This function is located at every task box.

SMART Dashboard 2, [The Center for Human Dynamics in the Mobile Age](#)

SMART Dashboard 2 is a Key-word-based search tool for Twitter messages to monitor the diffusion of information and social behavior changes in real time. It provides an automatic procedure to help researchers to:

- (1) analyze social media data from a spatiotemporal perspective (in real time, every 10 minutes, hourly, daily)
- (2) filter noises (such as removing redundant retweets and using machine learning methods to improve precisions)
- (3) integration of geo-coded, geo-tagged, and non-geocoded tweets.
- (4) visualize social media data in various aspects (such as top URLs, top retweets, top mentions, or top hash tags).

User ID : hdma
Please select a topic

Topic	Registered at	Last tweeted	Tweet count	Filter ...	Edit Topic ...
Shark	2017-05-01 09:37	2017-05-03 22:53	7,110	[Pencil icon]	[Pencil icon]
shootingSD	2017-05-01 12:28	2017-05-03 22:53	6,302	[Pencil icon]	[Pencil icon]
SDSU	2017-05-01 12:39	2017-05-07 19:42	6,017	[Pencil icon]	[Pencil icon]

To filter out the inappropriate image and tweets in the previous slides, you should enter the image url and retweet id in the window below. The image url and retweet id can be obtained in the main SMART2 page. The instruction is available in the next slides.

Filter out Twitter Messages

Topic ID: applied since: 2017-08-02 13:30

Filter by media URLs:	Filter by retweeted ids:	Filter by keywords:
<input type="text" value="URL 1"/>	<input type="text" value="Retweeted_id 1"/>	<input type="text" value="Keyword 1"/>
<input type="text" value="URL 2"/>	<input type="text" value="Retweeted_id 2"/>	<input type="text" value="Keyword 2"/>
<input type="text" value="URL 3"/>	<input type="text" value="Retweeted_id 3"/>	<input type="text" value="Keyword 3"/>
<input type="text" value="URL 4"/>	<input type="text" value="Retweeted_id 4"/>	<input type="text" value="Keyword 4"/>
<input type="text" value="URL 5"/>	<input type="text" value="Retweeted_id 5"/>	<input type="text" value="Keyword 5"/>
<input type="text" value="URL 6"/>	<input type="text" value="Retweeted_id 6"/>	<input type="text" value="Keyword 6"/>
<input type="text" value="URL 7"/>	<input type="text" value="Retweeted_id 7"/>	<input type="text" value="Keyword 7"/>
<input type="text" value="URL 8"/>	<input type="text" value="Retweeted_id 8"/>	<input type="text" value="Keyword 8"/>
<input type="text" value="URL 9"/>	<input type="text" value="Retweeted_id 9"/>	<input type="text" value="Keyword 9"/>
<input type="text" value="URL 10"/>	<input type="text" value="Retweeted_id 10"/>	<input type="text" value="Keyword 10"/>



Technology

- JADE and NODE JS
- Javascript Libraries: D3, Dygraphs, JQuery, Bootstrap, Leaflet
- Twitter Search API
- Python
- MongoDB



Conclusion and Contribution

- The system can be easily shared. User do not need to install anything. All you need to do is open up this website and USE IT
- Can be used as a Decision Support Tool
- Potential Users: Researchers and officials in disaster management and policy makers
- SMART2 can be used for not only emergency response and monitoring but also for many other researchers **who want to monitor social media about political issues and health related issues**
 - e.g., HPV Vaccines and Transgender Military



KENT STATE



Thank You!