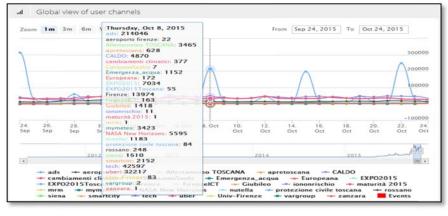
http://www.disit.org/tv

itter Vigilance

Twitter Vigilance, TV is a multi-user tool for Twitter analysis, developed by the DISIT Lab of the University of Florence. According to our view, a *Twitter Channel* consists of a set of simple and complex queries performed on Twitter platform. The simplest Twitter Channel monitored can control tweets referred to a single user, to a single hashtag, or to a single keyword. Complex Channels consist of tens of complex queries according to Twitter syntax combined with keywords, users, hashtags, etc. The single query is not only a tool to search, but also a key to analysis. The Twitter Vigilance ensures the collection of 98% of tweets/retweets referred to events by providing the yield and precision evidence to the user. Twitter Vigilance is capable to monitor and analyse slow and explosive events on Twitter with same efficiency and precision. A fast or explosive event occurs with several hundred thousands of tweets per day/per hour. Slow events can occur with very few tweets per day or week or their absence. Twitter Vigilance provides adaptive algorithms to allow effectively cope with slow events that become explosive without losses, acquiring all tweets and retweets.

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The **Twitter Vigilance** tool is active since April 2015. Active Channels on Twitter vigilance as: EXPO 2015, CNR EXPO2015, Firenze, ApreToscana, ConsumoSuolo, weather, pharmacovigilance, laudatesi, maturity ECLAP and Europeana, Tuscany weather alert, civil protection, etc. A part of these analyses are available and tracked on public examples on http://www.disit.org/tv.



Distributed Systems and Internet Technologies Lab Distributed Data Intelligence and Technologies Lab Department of Information Engineering (DINFO)

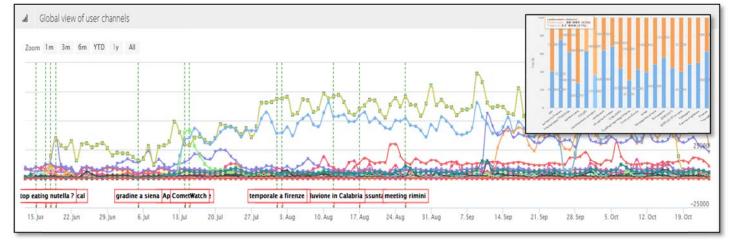
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http://www.disit.dinfo.unifi.it

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Other Twitter Channels are reserved by researchers and analysts or for

entities that are working on Twitter Vigilance according to contract agreement signed with the DISIT Lab. These operators can set their channels and queries, associate labels analysis trends for marking events and situations, can download data, get special draws, print charts in various formats.



The Twitter Vigilance user is an operator that can define one or more channels based on one or more queries. Among Twitter Vigilance users that contributed to validation: LAMMA CNR IBIMET, NEUROFARBA research group, and DISIT groups. The Twitter Vigilance tool is used also in national and European projects to monitor citizens answers in real time, like: national smart city project Sii-Mobility (<u>http://www.sii-mobility.org</u>), RESOLUTE H2020 (<u>http://www.resolute-eu.org</u>), REPLICATE H2020. In such cases, the tool is used for monitoring, evaluating and detecting: critical events and conditions, user behaviour and opinions of the city's response to events, advertising impact, the appreciation of actors and stories, technologies impact, population response to stimuli, and political assessments.

The following picture shows the trend of Tweets for Expo2015 channel with his research terms, a corresponding predictive model of attendance, and the evaluation of users/influencers.



The **Twitter Vigilance** tool performs analysis:

- for tweets and retweets (T/RT) to characterize the event;
- citations by others to understand what are influencers, pusher, emerging, etc.;
- hashtags to understand which are the most used or emerging, or reply to those used;
- keywords, verbs, and adjectives to understand which are the most widely used, emerging, or reply to those used;
- positive/negative impact, known as sentiment analysis.

The **Twitter Vigilance** tool can be used to perform analysis for marketing and communication purposes, participatory assessment of citizens, etc., and in particular to:

- Discover and evaluate trends;
- Discover and evaluate who influence communication, community and how;
- Discover new trends and new occurrences in real time;
- Perform competitor analysis;
- Perform complex queries and the collection of geographical Tweet/ReTweet;
- Carry out evaluations of appreciation or not of people, products and advertisements;
- Perform predictive assessments, attendance, audience acceptance levels, etc.;
- Indirect measurement on the basis of the perception of the population.

For more information, and if you are interested in becoming a Twitter user Vigilance is advised to contact the Coordinator: Prof. Paolo Nesi, <u>paolo.nesi@unifi.it</u>



