

Source: Sloan, L., Jessop, C., Al Baghal, T., & Williams, M. (2019) Linking Survey & Twitter Data: Informed Consent, Disclosure, Security and Archiving. In Journal of Empirical Research into Human Research Ethics. <https://doi.org/10.1177/1556264619853447>

Table 1: Analysis of Disclosure Risk by Twitter JSON Attributes

Relating to:	Attribute:	Description:	Nature of Risk:	Risk of Identifying an Individual:
Tweet	text	The actual text of the tweet		
Tweet	retweet_count	The number of times a tweet has been retweeted		
Tweet	favorite_count	The approximate number of times a tweet has been liked by other users		
Tweet	favorited	Indicates whether a user has favourited the tweet		
Tweet	truncated	Whether a tweet text has been truncated (greater than 140 characters)		
Tweet	id_str	The numeric (string) version of the unique identifier for this tweet		
Tweet	in_reply_to_screen_name	If the tweet is a reply to another tweet, this is the name of the original tweet's author		
Tweet	source	The utility used to post the tweet (e.g. Tweets posted from the Twitter website have a source of 'web')		
Tweet	retweeted	Indicates whether the tweet has been retweeted by the user		
Tweet	created_at	Creation date and time of the tweet to the second (in UTC) e.g. Tue Nov 23 12:46:54 +0000 2018		
Tweet	in_reply_to_status_id_str	If the tweet is a reply to another tweet, this is the ID of the original tweet		
Tweet	in_reply_to_user_id_str	If the tweet is a reply to another tweet, this is the ID of the original tweet's author		

Tweet	lang	The language of the tweet text (machine-detected)
Tweet	expanded_url	Full (expanded) version of a URL included in the tweet
Tweet	url	Wrapped URL corresponding to the value directly embedded into the raw tweet text
User	listed_count	The number of public lists that the user is a member of
User	verified	Whether account has been verified (account of 'public interest')
User	location	The location defined by the user
User	user_id_str	The numeric (string) version of the unique identifier for this user
User	description	User-defined description of their account, often used as a 'bio'
User	geo_enabled	User has enabled the possibility of geotagging their tweets
User	user_created_at	Creation date and time of the user account to the second (in UTC) e.g. Tue Nov 23 12:46:54 +0000 2018
User	statuses_count	The number of tweets and retweets posted by the user
User	followers_count	The number of followers the user account currently has
User	favourites_count	The number of tweets the user has favourited since the account was created
User	protected	Whether account is protected (tweets only visible to followers)
User	user_url	A URL given by the user, normally a link to a personal/organisational website
User	name	The self-defined name of the user
User	time_zone	The time zone of the user
User	user_lang	The user's choice of interface language

User	utc_offset	The difference in hours and minutes between user time zone and UTC
User	friends_count	The number of accounts this user is following
User	screen_name	The screen name (aka handle) of a user
Geo	country_code	Two letter code of the country a tweet was issued from, or is about
Geo	country	Name of the country a tweet was issued from or is about
Geo	place_type	The nature of the location the tweet was issued in, or is about, such as a city or POI
Geo	full_name	Full name (string) of place e.g. 'San Francisco, CA'
Geo	place_name	Short name (string) of place e.g. 'San Francisco'
Geo	place_id	Unique ID (string) of place
Geo	place_lat	Centre point of the location the tweet was issued in, or is about (latitude)
Geo	place_lon	Centre point of the location the tweet was issued in, or is about (longitude)
Geo	lat	Latitude of tweet location
Geo	lon	Longitude of tweet location