Compare graphs and activity between datasets

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UPMC

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Overview

General stats

	Graphe Oursin						Graphe Cascade			Vrai graphe	
	Wcano	Russian (rtu)	Russian (rtid)	Weibo	Tdn10	Tdn11	Wcano	Russian	Weibo	Tdn	Weibo
Nb nodes	2 412 920	123 255	119 291	1 340 816	100 854	65 391	2 412 920	119 291	1 340 816	90 908	
Nb edges	12 486 209	775 273	937 750	26 294 030	120 577	76 869	11 682 323	1 133 308	32 457 803	443 399	
Mean degree	10,35	12,58	15,72	39,22	2,39	2,35	9,68	19	48,41	9,75	
Nb events	27 916 100	1 945 365	1 945 365	33 540 167	3 999 128	1 952 832	27 916 100	1 945 365	33 540 167	X	X
Mean nb events /u	11,57	15,78	16,31	25,01	39,65	29,86	11,57	16,31	25,01	X	X
% retweets	0,52	0,65	0,63	0,99	0,23	0,29	0,52	0,63	0,99	X	X
Mean nb tweets /u	3,32	3,7	3,95	0,17	20,55	14,64	3,32	3,95	0,17	X	X
Mean nb retweets /u	3,62	6,98	6,76	24,84	6,06	5,97	3,62	6,76	24,84	X	X
Mean WCC size	76,28	74,29	105,1	35 284,60	33,92	35,87	76,28	105,1	35 284,60	66,36	

Overview

Degrees stats

|	Graphe Oursin						Graphe Cascade			Vrai graphe	
	Wcano	Russian (rtu)	Russian (rtid)	Weibo	Tdn10	Tdn11	Wcano	Russian	Weibo	Tdn	Weibo
Mean	10.35	12,56	15,72	39,22	2,39	2,35	9,68	19	48,41	9,75	
Med	4	1	2	15	1	1	6	2	34	6	
Min	1	1	1	1	1	1	1	1	1	1	
Max	15 184	10 480	8 125	455 506	8 141	7 922	167	2 687	3 626	230	
25%	2	1	1	5	1	1	3	2	12	2	
75%	8	4	5	29	1	1	13	8	70	12	
90%	18	17	21	46	2	2	22	34	112	22	
95%	31	38	53	60	3	3	29	81	142	32	
99%	105	155	272	108	22	22	48	316	216	66	

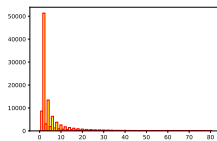# Degrees distribution
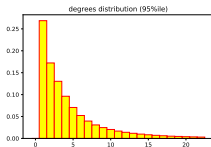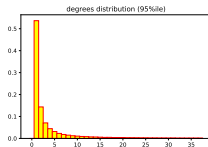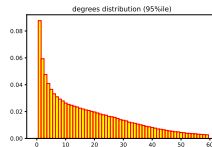
(a) WCano
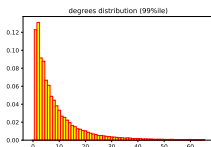
(b) Russian
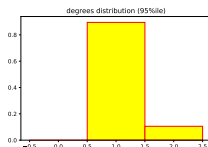
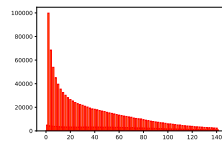(c) Weibo
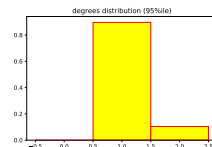
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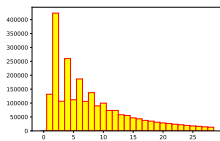
(e) TDN(i10)

(f) TDN(i11)

(g) WCano$_c$

(h) Russian$_c$

(i) Weibo$_c$

Degrees distribution (log)

(a) WCano

(b) Russian

(c) Weibo

(d) TDN(T)

(e) TDN(i10)

(f) TDN(i11)

(g) WCano$_c$

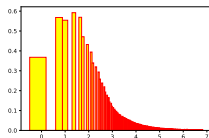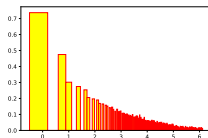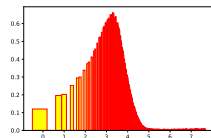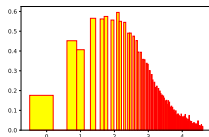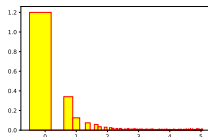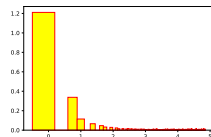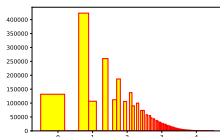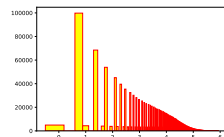(h) Russian$_c$

(i) Weibo$_c$

Overview

In-Degrees stats

|	Graphe Oursin						Graphe Cascade			Vrai graphe	
	Wcano	Russian (rtu)	Russian (rtid)	Weibo	Tdn10	Tdn11	Wcano	Russian	Weibo	Tdn	Weibo
Mean	5.17	6,29	7,86	19,61	1,2	1,18	4,84	9,5	24,21	4,88	
Med	3	1	1	14	0	0	3	1	17	3	
Min	0	0	0	0	0	0	0	0	0	0	
Max	113	554	817	291	1 736	395	77	1 292	453	101	
25%	1	1	1	5	0	0	1	1	6	1	
75%	6	4	4	29	0	1	6	4	35	6	
90%	12	13	15	44	1	1	11	17	56	11	
95%	17	28	34	56	2	2	14	40	71	17	
99%	30	91	125	83	17	16	24	159	108	33	

In-Degrees distribution
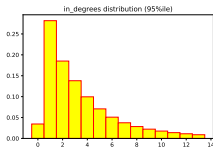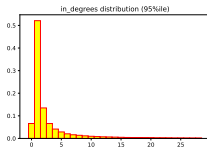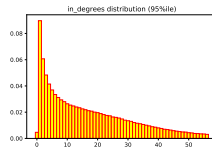
(a) WCano

(b) Russian

(c) Weibo

(d) TDN(T)

(e) TDN(i10)

(f) TDN(i11)

(g) WCano$_c$

(h) Russian$_c$

(i) Weibo$_c$

In-Degrees distribution (log)
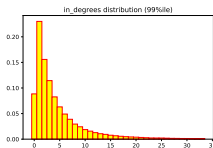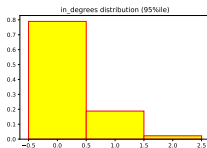

(a) WCano
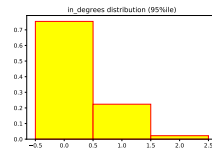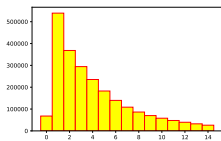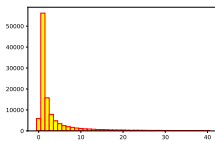
(b) Russian

(c) Weibo

(d) TDN(T)

(e) TDN(i10)

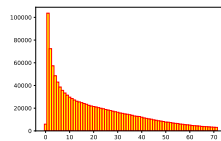(f) TDN(i11)

(g) WCano$_c$

(h) Russian$_c$

(i) Weibo$_c$

Overview

Out-Degrees stats

	Graphe Oursin						Graphe Cascade			Vrai graphe	
	Wcano	Russian (rtu)	Russian (rtid)	Weibo	Tdn10	Tdn11	Wcano	Russian	Weibo	Tdn	Weibo
Mean	5.17	6,29	7,86	19,61	1,2	1,18	4,84	9,5	24,21	4,88	
Med	0	0	0	0	1	1	3	1	17	3	
Min	0	0	0	0	0	0	0	0	0	0	
Max	15 174	10 472	8 080	455 504	8 141	7 922	101	1 395	3 626	224	
25%	0	0	0	0	1	1	1	1	6	1	
75%	1	0	0	0	1	1	6	4	35	6	
90%	6	1	2	0	1	1	11	17	56	12	
95%	15	5	11	0	2	2	15	41	71	17	
99%	87	73	168,1	46	4	4	24	158	108	36	

Out-Degrees distribution
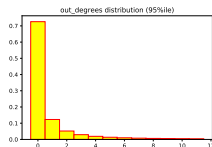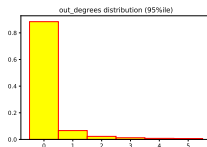
(a) WCano

(b) Russian

(c) Weibo

(d) TDN(T)

(e) TDN(i10)

(f) TDN(i11)

(g) WCano$_c$

(h) Russian$_c$

(i) Weibo$_c$

Out-Degrees distribution (log)
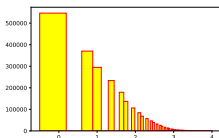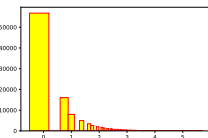
(a) WCano

(b) Russian
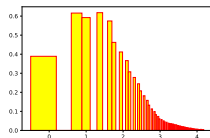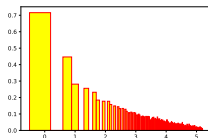
(c) Weibo

(d) TDN(T)

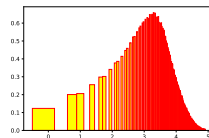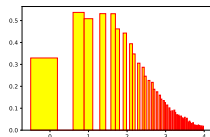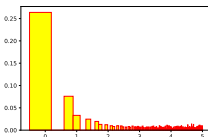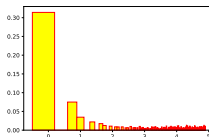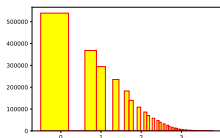(e) TDN(i10)

(f) TDN(i11)
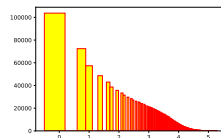
(g) WCano$_c$

(h) Russian$_c$

(i) Weibo$_c$

Overview

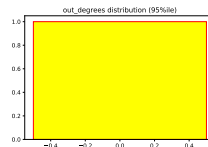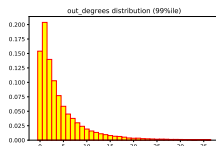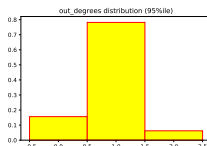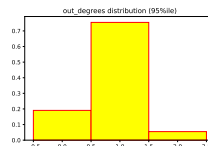|	Graphe Oursin						Graphe Cascade			Vrai graphe	
	Wcano	Russian (rtu)	Russian (rtid)	Weibo	Tdn10	Tdn11	Wcano	Russian	Weibo	Tdn	Weibo
Number	31 631	1 659	1 135	38	2 973	1 823	31 631	1 135	38	1 370	
Mean size	76,28	74,29	105,1	35 285	33,92	35,87	76,28	105,1	35 285	66,36	
Med size	2	2	2	1	2	2	2	2	1	2	
Min size	1	1	1	1	1	1	1	1	1	1	
Max size	2 309 181	119 251	116 371	1 340 768	94 094	61 076	2 309 181	116 371	1 340 768	87 349	
25%	2	2	2	1	2	2	2	2	1	2	
75%	3	2	2	2	2	2	3	2	2	3	
90%	5	3	4	2	3	3	5	4	2	4	
95%	7	5	5	2,15	3,4	4	7	5	2,15	5	
99%	20	11	10,66	844 685	7	9	20	10,66	844 685	9,31	

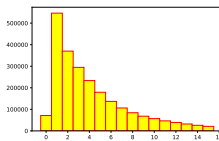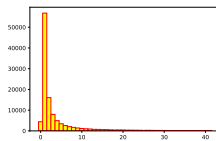# Weakly CC: sizes distribution
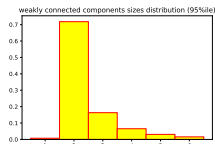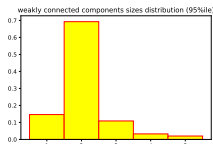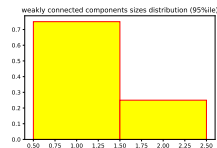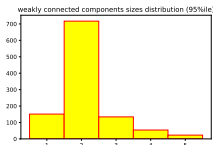
(a) WCano

(b) Russian

(c) Weibo

(d) TDN(T)

(e) TDN(i10)

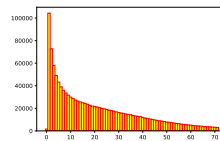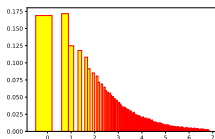(f) TDN(i11)

(g) WCano$_c$

(h) Russian$_c$
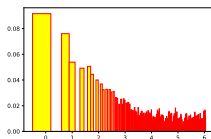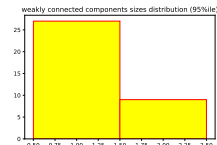
(i) Weibo$_c$

Overview

Strongly connected components: stats

	Graphe Oursin						Graphe Cascade			Vrai graphe	
	Wcano	Russian (rtu)	Russian (rtid)	Weibo	Tdn10	Tdn11	Wcano	Russian	Weibo	Tdn	Weibo
Number	2 412 920	119 038	108 484	1 325 415	99 945	64 692	2 412 920	14 064	8 067	26 822	
Mean size	1	1,06	1,1	1,01	1,01	1,01	1	8,48	166	3,39	
Med size	1	1	1	1	1	1	1	1	1	1	
Min size	1	1	1	1	1	1	1	1	1	1	
Max size	1	7 081	10 706	14 785	43	77	1	105 001	1 332 742	59 440	
25%	1	1	1	1	1	1	1	1	1	1	
75%	1	1	1	1	1	1	1	1	1	1	
90%	1	1	1	1	1	1	1	1	1	2	
95%	1	1	1	1	1	1	1	1	1	2	
99%	1	1	1	1	1	1	1	1	1	4	

Strongly CC: sizes distribution

(a) WCano

(b) Russian

(c) Weibo

(d) TDN(T)

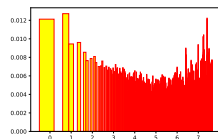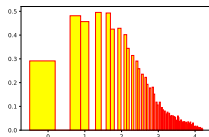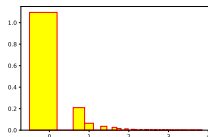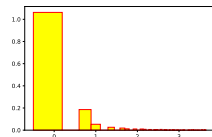(e) TDN(i10)
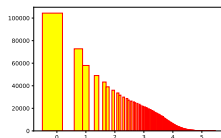
(f) TDN(i11)

(g) WCano$_c$

(h) Russian$_c$

(i) Weibo$_c$

Overview

Tweets stats

|	Graphe Oursin						Graphe Cascade		
	Wcano	Russian (rtu)	Russian (rtid)	Weibo	Tdn10	Tdn11	Wcano	Russian	Weibo
Total number	13 352 638	674 292	718 088	232 978	3 088 408	1 386 888	13 352 638	718 088	232 978
Mean /u	3,32	3,7	3,95	0,17	20,55	14,64	3,32	3,95	0,17
Med /u	2	1	1	0	0	0	2	1	0
Min /u	0	0	0	0	0	0	0	0	0
Max /u	534	4 834	4 834	3 718	3 200	3 200	534	4 834	3 718
25%	1	0	0	0	0	0	1	0	0
75%	3	2	2	0	1	1	3	2	0
90%	7	6	6	0	3	3	7	6	0
95%	11	12	13	0	8	7	11	13	0
99%	28	55	59	2	557	358,8	28	59	2
% users with 1+	0,88	0,54	0,57	0,04	0,47	0,45	0,88	0,57	0,04
% users with 0	0,12	0,46	0,43	0,96	0,53	0,55	0,12	0,43	0,96
nb users with 1+	3 557 120	98 091	104 296	47 555	71 327	42 398	3 557 120	104 296	47 555
nb users with 0	469 338	83 123	77 325	1 293 261	78 976	52 323	469 338	77 325	1 293 261

Nb tweets/user distribution
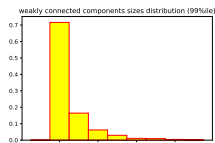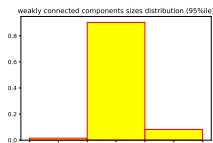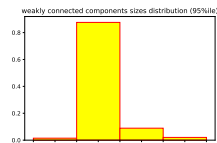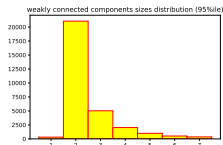

(a) WCano

(b) Russian

(c) Weibo

(d) TDN(i10)

(e) TDN(i11)

(f) WCano$_c$

(g) Russian$_c$

(h) Weibo$_c$

Overview

Retweets stats

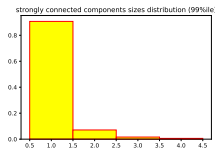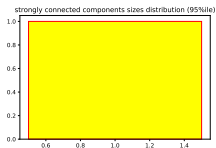|	Graphe Oursin						Graphe Cascade		
	Wcano	Russian (rtu)	Russian (rtid)	Weibo	Tdn10	Tdn11	Wcano	Russian	Weibo
Total number	14 563 462	1 271 073	1 227 277	33 307 189	910 720	565 944	14 563 462	1 227 277	33 307 189
Mean /u	3,62	6,98	6,76	24,84	6,06	5,97	3,62	6,76	24,84
Med /u	1	1	1	17	0	1	1	1	17
Min /u	0	0	0	0	0	0	0	0	0
Max /u	219	2 811	2 424	1 032	3 201	225 458	219	2 424	1 032
25%	0	0	0	6	0	0	0	0	6
75%	4	2	2	36	0	2	4	2	36
90%	10	10	9	57	1	5	10	9	57
95%	16	25	25	73	2	11	16	25	73
99%	34	133	129	114	46	38	34	129	114
% users with 1+	0,58	0,63	0,62	0,996	0,16	0,56	0,58	0,62	0,996
% users with 0	0,42	0,37	0,38	0,004	0,84	0,44	0,42	0,38	0,004
Nb users with 1+	2 344 955	115 571	113 405	1 334 887	23 638	53 222	2 344 955	113 405	1 334 887
Nb users with 0	1 681 503	66 507	68 216	5 929	126 665	41 499	1 681 503	68 216	5 929

Nb retweets/user distribution

(a) WCano

(b) Russian

(c) Weibo

(d) TDN(i10)

(e) TDN(i11)

(f) WCano$_c$

(g) Russian$_c$

(h) Weibo$_c$

Overview

Retweeted stats

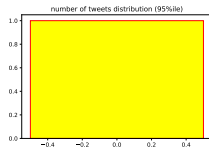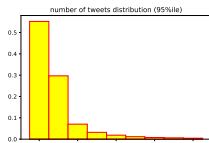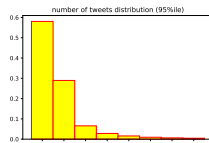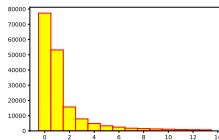|	Graphe Oursin						Graphe Cascade		
	Wcano	Russian (rtu)	Russian (rtid)	Weibo	Tdn10	Tdn11	Wcano	Russian	Weibo
Total number	14 563 462	1 271 073	1 227 277	33 307 189	910 720	565 944	14 563 462	1 227 277	33 07 189
Mean /u	3,62	6,98	6,76	24,84	6,06	5,97	3,62	6,76	24,84
Med /u	0	0	0	0	1	1	1	1	17
Min /u	0	0	0	0	0	0	0	0	0
Max /u	31 303	35 539	22 946	1 107 734	274 153	225 458	250	2 205	3 718
25%	0	0	0	0	0	0	0	0	6
75%	0	0	0	0	2	2	4	2	36
90%	3	1	1	0	6	5	10	10	57
95%	8	3	4	0	12	11	16	25	73
99%	57	48	102	55	42	38	34	128	114
% users with 1+	0,20	0,11	0,11	0,04	0,57	0,56	0,58	0,63	0,999
% users with 0	0,80	0,89	0,89	0,96	0,43	0,44	0,42	0,37	0,001
Nb users with 1+	806 600	19 435	19 623	47 554	85 571	53 000	2 341 726	114 879	1 339 190
Nb users with 0	3 219 858	162 589	161 998	1 293 262	64 732	41 499	1 684 732	66 742	1 626

Nb retweeted/user distribution

(a) WCano

(b) Russian

(c) Weibo

(d) TDN(i10)

(e) TDN(i11)
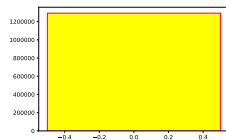
(f) WCano$_c$

(g) Russian$_c$

(h) Weibo$_c$

Overview

λ stats

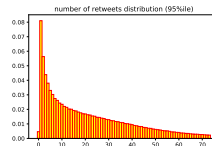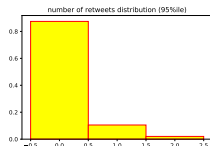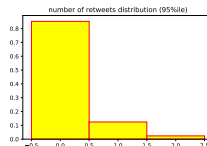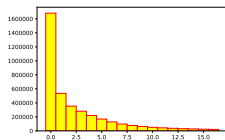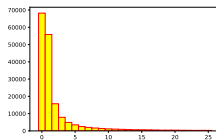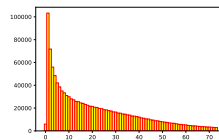|	Graphe Oursin						Graphe Cascade		
	Wcano	Russian (rtu)	Russian (rtid)	Weibo	Tdn10	Tdn11	Wcano	Russian	Weibo
Mean	5,21 e-07	7,57 e-07	8,08 e-07	1,65 e-09	8,13 e-07	1,65 e-06	5,21 e-07	8,08 e-07	1,65 e-09
Med	3,14 e-07	2,04 e-07	2,04 e-07	0	0	0	3,14 e-07	2,04 e-07	0
Min	0	0	0	0	0	0	0	0	0
Max	8,39 e-05	9,88 e-04	9,88 e-04	3,54 e-05	1,27 e-04	3,60 e-04	8,39 e-05	9,88 e-04	3,54 e-05
25%	1,57 e-07	0	0	0	0	0	1,57 e-07	0	0
75%	4,72 e-07	4,09 e-07	4,09 e-07	0	3,96 e-08	1,13 e-07	4,72 e-07	4,09 e-07	0
90%	1,10 e-06	1,23 e-06	1,23 e-06	0	1,19 e-07	3,38 -07	1,10 e-06	1,23 e-06	0
95%	1,73 e-06	2,45 e-06	2,66 e-06	0	3,17 e-07	7,89 e-07	1,73 e-06	2,66 e-06	0
99%	4,40 e-06	1,12 e-05	1,21 e-05	1,90 e-08	2,20 e-05	4,04 e-05	4,40 e-06	1,21 e-05	1,90 e-08
% users with >0	0,88	0,54	0,57	0,04	0,47	0,45	0,88	0,57	0,04
% users with 0	0,12	0,46	0,43	0,96	0,53	0,55	0,12	0,43	0,96
Nb users with >0	3 557 120	98 901	104 296	47 555	71 327	42 398	3 557 120	104 296	47 555
Nb users with 0	469 338	83 123	77 325	1 293 261	78 976	52 323	469 338	77 325	1 293 261

μ stats

	Graphe Oursin						Graphe Cascade		
	Wcano	Russian (rtu)	Russian (rtid)	Weibo	Tdn10	Tdn11	Wcano	Russian	Weibo
Mean	5,69 e-07	1,43 e-06	1,38 e-06	2,36 e-07	2,40 e-07	6,73 e-07	5,69 e-07	1,38 e-06	2,36 e-07
Med	1,57 e-07	2,04 e-07	2,04 e-07	1,62 e-07	0	0	1,57 e-07	2,04 e-07	1,62 e-07
Min	0	0	0	0	0	0	0	0	0
Max	3,44 e-05	5,74 e-04	4,95 e-04	9,82 e-06	1,27 e-04	3,56 e-04	3,44 e-05	4,95 e-04	9,82 e-06
25%	0	0	0	5,71 e-08	0	0	0	0	5,71 e-08
75%	6,29 e-07	4,09 e-07	4,09 e-07	3,43 e-07	0	0	6,29 e-07	4,09 e-07	3,43 e-07
90%	1,57 e-06	2,04 e-06	1,84 e-06	5,43 e-07	3,96 e-08	1,13 e-07	1,57 e-06	1,84 e-06	5,43 e-07
95%	2,52 e-06	5,11 e-06	5,11 e-06	6,95 e-07	7,92 e-08	2,25 e-07	2,52 e-06	5,11 e-06	6,95 e-07
99%	5,34 e-06	2,72 e-05	2,64 e-05	1,09 e-06	1,83 e-06	8,66 e-06	5,34 e-06	2,64 e-05	1,09 e-06
% users with >0	0,58	0,63	0,62	0,996	0,16	0,18	0,58	0,62	0,996
% users with 0	0,42	0,37	0,38	0,004	0,84	0,82	0,42	0,38	0,004
Nb users with >0	2 344 955	115 517	113 405	1 334 887	23 683	17 516	2 344 955	113 405	1 334 887
Nb users with 0	1 681 503	66 507	68 216	5 929	126 665	77 205	1 681 503	68 216	5 929

	Graphe Oursin						Graphe Cascade		
	Wcano	Russian (rtu)	Russian (rtid)	Weibo	Tdn10	Tdn11	Wcano	Russian	Weibo
Mean	5,69 e-07	1,43 e-06	1,38 e-06	2,36 e-07	3,40 e-07	6,73 e-07	5,69 e-07	1,38 e-06	2,36 e-07
Med	0	0	0	0	3,96 e-08	1,13 e-07	1,57 e-07	2,04 e-07	1,62 e-07
Min	0	0	0	0	0	0	0	0	0
Max	4,92 e-03	7,26 e-03	4,69 e-03	1,05 e-02	1,09 e-02	2,54 e-02	3,93 e-05	4,50 e-04	3,54 e-05
25%	0	0	0	0	0	0	0	0	5,71 e-08
75%	0	0	0	0	7,92 e-08	2,25 e-07	6,29 e-05	4,09 e-07	3,43 e-07
90%	4,72 e-07	2,04 e-07	2,04 e-07	0	2,38 e-07	5,64 e-07	1,57 e-06	2,04 e-06	5,43 e-07
95%	1,26 e-06	6,13 e-07	8,17 e-07	0	4,75 e-07	1,24 e-06	2,52 e-06	5,11 e-06	6,95 e-07
99%	8,96 e-06	9,81 e-06	2,08 e-05	5,24 e-07	1,66 e-06	4,28 e-06	5,34 e-06	2,62 e-05	1,09 e-06
% users with >0	0,20	0,11	0,11	0,04	0,57	0,56	0,58	0,63	0,999
% users with 0	0,80	0,89	0,89	0,96	0,43	0,44	0,42	0,37	0,001
Nb users with >0	806 600	19 435	19 623	47 554	85 571	53 222	2 341 726	114 879	1 339 190
Nb users with 0	3 219 858	162 589	161 998	1 293 262	64 732	41 499	1 684 732	66 742	1 626