

An affiliation cap was introduced to the QS methodology in 2015 exclusively to screen out papers with more than a given number of institutional affiliations from all bibliometric analysis. The cap is variable and calculated individually for each subject, ensuring no more than 0.1% of research is excluded in a given field. Since 2016 we have used this variable cap method for different subjects and overall rankings.

The following is a typical affiliation cap table. `aff_cap` in the table is the maximum number of affiliations for papers we accept in the certain subject. If the number of affiliations on a paper exceeds the threshold (`aff_cap`), we will exclude them from bibliometric analysis.

	subj_id	abbreviation	name	fa_id	aff_cap	cum_percentage	papers_excluded
	1	ACC01	NULL	NULL	7	0.9993731717509402	85
	2	AGR01	NULL	NULL	20	0.999092390720915	1143
	3	ANA01	NULL	NULL	21	0.9990749639596348	181
	4	ANT01	NULL	NULL	11	0.9990090943122013	62
	5	ARC01	NULL	NULL	15	0.9991448275862069	43
	6	ARC02	NULL	NULL	8	0.9993483623725816	209

Examples of how we calculate the affiliation cap threshold for Agriculture and Anthropology are demonstrated in the following:

- 1) For Agriculture (AGR01), all papers with more than 20 institutions co-authoring are excluded, a total of 1143;
- 2) For Anthropology (ANT01), all papers with more than 11 institutions co-authoring are excluded, a total of just 62.

Both exclusion account for 0.1% of papers in that specific subject.

The following are tables with numbers of affiliations and their corresponding papers count as well as cumulative percentage of paper count in Agriculture (AGR01). As shown in the table, the percentage of total count of papers accumulate as the number of affiliations per paper increase. Papers with equal or less than 20 affiliations make up 99.909% amongst all.

Subject abbreviation	# of affiliations per paper	Count of papers	cum-percentage (Cumulating percentage)
AGR01	1	418143	0.37097797339631294
AGR01	2	336692	0.6696923266648154
AGR01	3	193767	0.8416031059223502
AGR01	4	92556	0.9237191219878329
AGR01	5	41644	0.9606658285550026

Subject abbreviation	# of affiliations per paper	Count of papers	cum-percentage (Cumulating percentage)
AGR01	6	19339	0.977823458905173
AGR01	7	9511	0.9862616523102338
AGR01	8	5104	0.9907899394660986
AGR01	9	2953	0.9934098516861748
AGR01	10	1879	0.9950769072437512
AGR01	11	1201	0.9961424387629898
AGR01	12	851	0.9968974490234994
AGR01	13	697	0.9975158299301682
AGR01	14	480	0.9979416876564251
AGR01	15	355	0.9982566449331359
AGR01	16	286	0.9985103851616973
AGR01	17	199	0.9986869386773746
AGR01	18	178	0.9988448609175282
AGR01	19	159	0.9989859262893508
AGR01	20	120	0.999092390720915
AGR01	21	131	0.9992086143920393
AGR01	22	101	0.9992982219552725
AGR01	23	77	0.9993665366321929
AGR01	24	68	0.999426866476746
AGR01	25	55	0.9994756626745462
AGR01	26	48	0.9995182484471719
AGR01	27	48	0.9995608342197976
AGR01	28	37	0.9995936607528633
AGR01	29	36	0.9996256000823325
AGR01	30	34	0.9996557650046091
AGR01	31	31	0.9996832683160964
AGR01	32	29	0.9997089972203911

Subject abbreviation	# of affiliations per paper	Count of papers	cum-percentage (Cumulating percentage)
AGR01	33	14	0.9997214180707403
AGR01	34	20	0.9997391621426677
AGR01	35	23	0.9997595678253841
AGR01	36	15	0.9997728758793296
AGR01	37	17	0.999787958340468
AGR01	38	23	0.9998083640231844
AGR01	39	12	0.9998190104663408
AGR01	40	17	0.999834092927479
AGR01	41	13	0.9998456265742319
AGR01	42	12	0.9998562730173883
AGR01	43	7	0.9998624834425629
AGR01	44	8	0.9998695810713338
AGR01	45	3	0.9998722426821229
AGR01	46	12	0.9998828891252793
AGR01	47	6	0.9998882123468575
AGR01	48	4	0.999891761161243
AGR01	49	2	0.9998935355684357
AGR01	50	6	0.999898858790014
AGR01	51	8	0.999905956418785
AGR01	52	3	0.9999086180295741
AGR01	53	5	0.9999130540475559
AGR01	54	6	0.9999183772691341
AGR01	55	5	0.999922813287116
AGR01	56	3	0.9999254748979051
AGR01	57	1	0.9999263621015014
AGR01	58	3	0.9999290237122905
AGR01	59	6	0.9999343469338687

Subject abbreviation	# of affiliations per paper	Count of papers	cum-percentage (Cumulating percentage)
AGR01	60	4	0.9999378957482542
AGR01	61	2	0.9999396701554469
AGR01	62	3	0.999942331766236
AGR01	63	5	0.9999467677842179
AGR01	64	1	0.9999476549878142
AGR01	65	1	0.9999485421914106
AGR01	66	1	0.999949429395007
AGR01	67	3	0.9999520910057961
AGR01	68	1	0.9999529782093924
AGR01	69	5	0.9999574142273743
AGR01	72	2	0.999959188634567
AGR01	73	2	0.9999609630417597
AGR01	74	4	0.9999645118561452
AGR01	75	1	0.9999653990597416
AGR01	76	1	0.999966286263338
AGR01	77	3	0.9999689478741272
AGR01	79	2	0.9999707222813199
AGR01	82	1	0.9999716094849163
AGR01	85	2	0.999973383892109
AGR01	88	1	0.9999742710957054
AGR01	93	2	0.9999760455028981
AGR01	94	1	0.9999769327064945
AGR01	97	1	0.9999778199100908
AGR01	98	1	0.9999787071136872
AGR01	103	3	0.9999813687244763
AGR01	105	1	0.9999822559280727
AGR01	106	1	0.999983143131669

Subject abbreviation	# of affiliations per paper	Count of papers	cum-percentage (Cumulating percentage)
AGR01	109	1	0.9999840303352654
AGR01	111	1	0.9999849175388618
AGR01	112	1	0.9999858047424581
AGR01	113	1	0.9999866919460545
AGR01	115	1	0.9999875791496509
AGR01	116	2	0.9999893535568436
AGR01	120	1	0.99999024076044
AGR01	133	1	0.9999911279640363
AGR01	136	1	0.9999920151676327
AGR01	145	1	0.9999929023712291
AGR01	150	1	0.9999937895748254
AGR01	155	1	0.9999946767784218
AGR01	173	1	0.9999955639820182
AGR01	186	1	0.9999964511856145
AGR01	205	2	0.9999982255928073
AGR01	219	1	0.9999991127964036
AGR01	399	1	1

In the table of Anthropology (ANT01), all papers with more than 11 institutions co-authoring are excluded, which totals 62, counting less than 0.1%.

Subject abbreviation	# of affiliations per paper	Count of papers	cum-percentage (Cumulating percentage)
ANT01	1	32205	0.7091581705678991
ANT01	2	7881	0.8826987866910356
ANT01	3	2964	0.9479664413273732

Subject abbreviation	# of affiliations per paper	Count of papers	cum-percentage (Cumulating percentage)
ANT01	4	1237	0.9752053376786383
ANT01	5	534	0.9869640851738489
ANT01	6	240	0.992248915508775
ANT01	7	136	0.9952436526985665
ANT01	8	75	0.9968951621782309
ANT01	9	48	0.9979521282452162
ANT01	10	31	0.9986347521634774
ANT01	11	17	0.9990090943122013
ANT01	12	7	0.99916323519697
ANT01	13	10	0.9993834364609253
ANT01	14	4	0.9994715169665074
ANT01	15	2	0.9995155572192984
ANT01	16	5	0.9996256578512761
ANT01	18	2	0.9996696981040671
ANT01	19	2	0.9997137383568582
ANT01	20	4	0.9998018188624402
ANT01	21	1	0.9998238389888358
ANT01	22	1	0.9998458591152313
ANT01	26	1	0.9998678792416269
ANT01	27	1	0.9998898993680224
ANT01	28	1	0.9999119194944179
ANT01	41	1	0.9999339396208135
ANT01	51	1	0.999955959747209
ANT01	53	1	0.9999779798736045
ANT01	58	1	1