ImagEVAL Graphs & Tables

TASK 1_1 Transformed Images

Global results

- Mean Average Precision

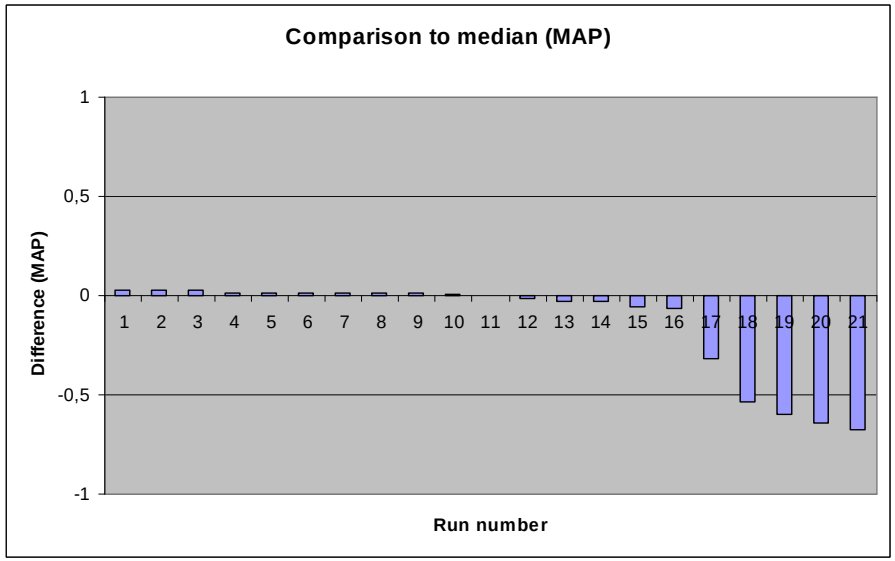
Run	MAP
Run1	0,995
Run2	0,9938
Run3	0,9928
Run4	0,9841
Run5	0,9835
Run6	0,9833
Run7 =	0,982
= Run8	0,982
Run9	0,9816
Run10	0,9717
Run11	0,9675
Run12	0,9513
Run13	0,9427
Run14	0,9397
Run15	0,9144
Run16	0,9023
Run17	0,6533
Run18	0,4348
Run19	0,3699
Run20	0,3296
Run21	0,2899

3 Best runs

1. Run1 = INRIA IMEDIA1
2. Run2 = INRIA IMEDIA3
3. Run3 = INRIA IMEDIA2

3 Best teams (best run)

1. INRIA IMEDIA (run1 : imedia1)
2. INRIA LEAR (run4 : lear1la)
3. ENSEA ETIS (run6 : etis02)



Processing times

Information provided by the participants:

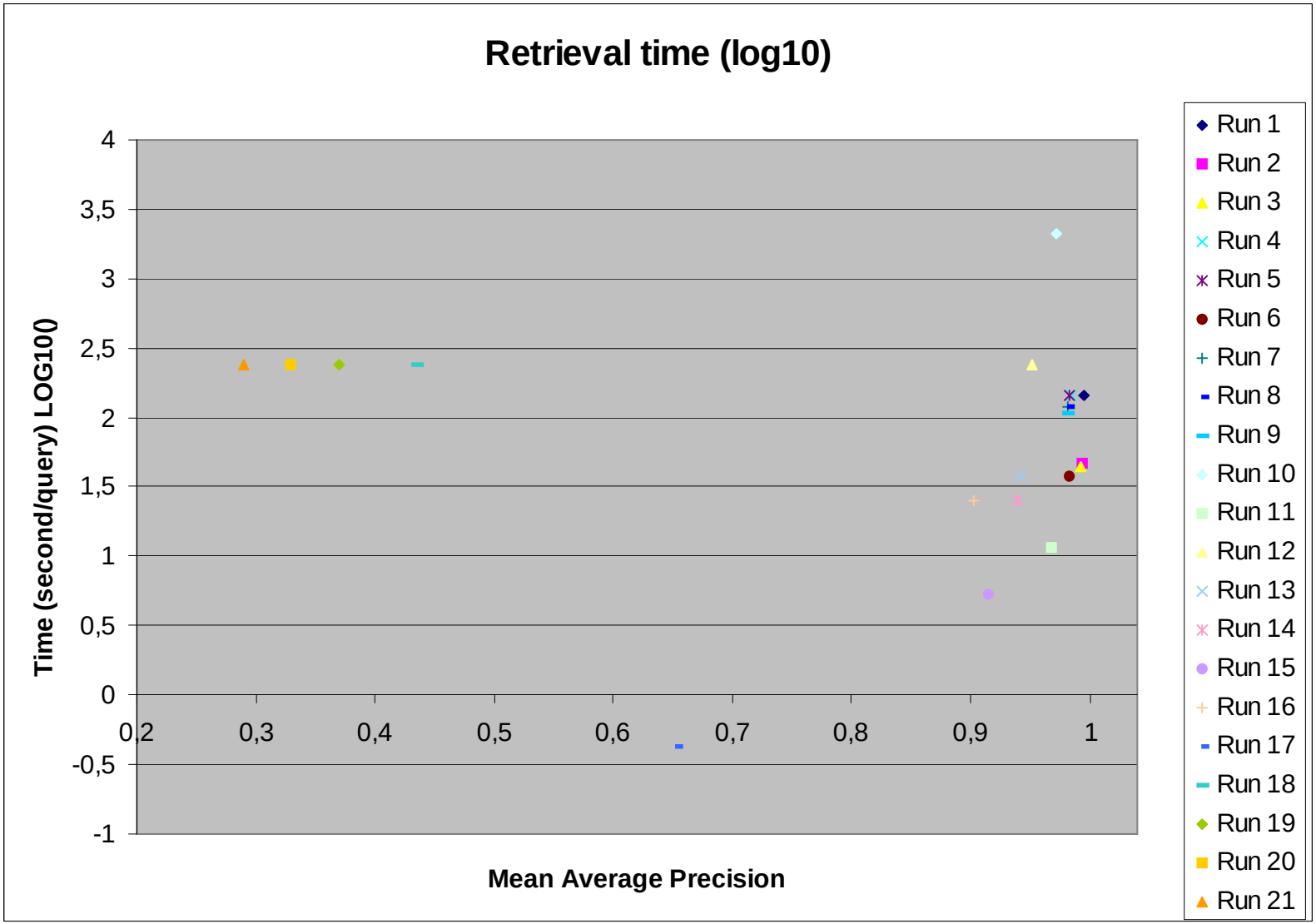
Run	Processing times	Computer characteristics
Run 1	Features extraction time: 4.12 s / image Retrieval time: 145.385010 s / query	Pentium4, 3,2 Ghz, 2Go, Linux
Run 2	Features extraction time: 4.12 s / image Retrieval time: 47.072220 s / query	Pentium4, 3,2 Ghz, 2Go, Linux
Run 3	Features extraction time: 8.46 s / image Retrieval time: 43.763145 s / query	Pentium4, 3,2 Ghz, 2Go, Linux
Run 4	Features extraction: 27 h Learning : 3:20 h Research (creation of the results) : 2 h Global processing : 33 h Extra time: ~ 40 min : disk i/o for datafiles passed between the different processing stages	Pentium4 3,4 Ghz, 4 Go, Linux
Run 5	Features extraction: 27 h Learning : 3:20 h Research (creation of the results) : 2 h Global processing : 33 h Extra time: ~ 40 min : disk i/o for datafiles passed between the different processing stages	Pentium4 3,4 Ghz, 4 Go, Linux
Run 6	(1)Features extraction : 0,8 s per image (2)Learning : 530 s for the entire base (3)Research / Classification (creation of the results) : 38 ± 24 s per query	Feature extraction: 2 processors i686 Pentium4, 3.06GHz, 1Gb RAM For reasearch / classification : 4 processors x86_64 Dual Core AMD Opteron Processor 275 (2.2 GHz), 8Gb RAM
Run 7	Features extraction: 27 h Learning : 3:20 h Research (creation of the results) : 2 h Global processing : 33 h Extra time: ~ 40 min : disk i/o for datafiles passed between the different processing stages	Pentium4 3,4 Ghz, 4 Go, Linux
Run 8	Features extraction: 27 h Learning : 3:20 h Research (creation of the results) : 1:40 h Global processing : 33 h Extra time: ~ 40 min : disk i/o for datafiles passed between the different processing	Pentium4 3,4 Ghz, 4 Go, Linux

	stages	
Run 9	Features extraction: 27 h Learning : 3:20 h Research (creation of the results) : 1h30 h Global processing : 33 h Extra time: ~ 40 min : disk i/o for datafiles passed between the different processing stages	Pentium4 3,4 Ghz, 4 Go, Linux
Run 10	Indexing / Features extraction : 35 seconds per image Research / Classification (creation of the results) : 2130 seconds per request Global processing : 19j 20h 35mn	6 dual processors intel Xeon H,T 3,0 Ghz, 4 Go, Linux
Run 11	Features extraction time: 4.12 s / image Retrieval time: 11.663367 s / query	Pentium4, 3,2 Ghz, 2Go, Linux
Run 12	Indexing / Features extraction : 0.66 second per image Research / Classification (creation of the results) : 240 seconds per request Global processing : 11h42mn	6 dual processors intel Xeon H,T 3,0 Ghz, 4 Go, Linux
Run 13	(1)Features extraction : 0,8 s/image (2)Learning : 530 s for the entire base (3)Research / Classification (creation of the results) : 38 ± 24 s per query	Feature extraction: 2 processors i686 Pentium4, 3.06GHz, 1Gb RAM For reasearch / classification : 4 processors x86_64 Dual Core AMD Opteron Processor 275 (2.2 GHz), 8Gb RAM
Run 14	(1)Features extraction : 0,8 s/image (2)Learning : 517 s for the entire base (3)Research / Classification (creation of the results) : 25 ± 16 s per query	Feature extraction: 2 processors i686 Pentium4, 3.06GHz, 1Gb RAM For reasearch / classification : 4 processors x86_64 Dual Core AMD Opteron Processor 275 (2.2 GHz), 8Gb RAM
Run 15	Features extraction time: 4.12 s / image Retrieval time: 5.292096 s / query	Pentium4, 3,2 Ghz, 2Go, Linux
Run 16	(1) Features extraction : 0,8 s/image (2) Learning : 517 s for the entire base (3) Research / Classification (creation of the results) : 25 ± 16 s per query	Feature extraction: 2 processors i686 Pentium4, 3.06GHz, 1Gb RAM For reasearch / classification : 4 processors x86_64 Dual Core AMD Opteron Processor 275 (2.2 GHz), 8Gb RAM
Run 17	Indexing/Features extraction : 1.1 Secondes / image Comparaison between two indexed images: 0.01 milliSecondes Research for a query over the 42500 indexed images: 42500 x 0.01 mS = 0.425 s	Pentium4 2,8 Ghz, 512 Mo, Linux
Run 18	Indexing / Features extraction : around 10s/image Research / Classification (creation of the results) : 4min/query	Pentium4, 2,26Ghz, 1Go, Windows + Matlab

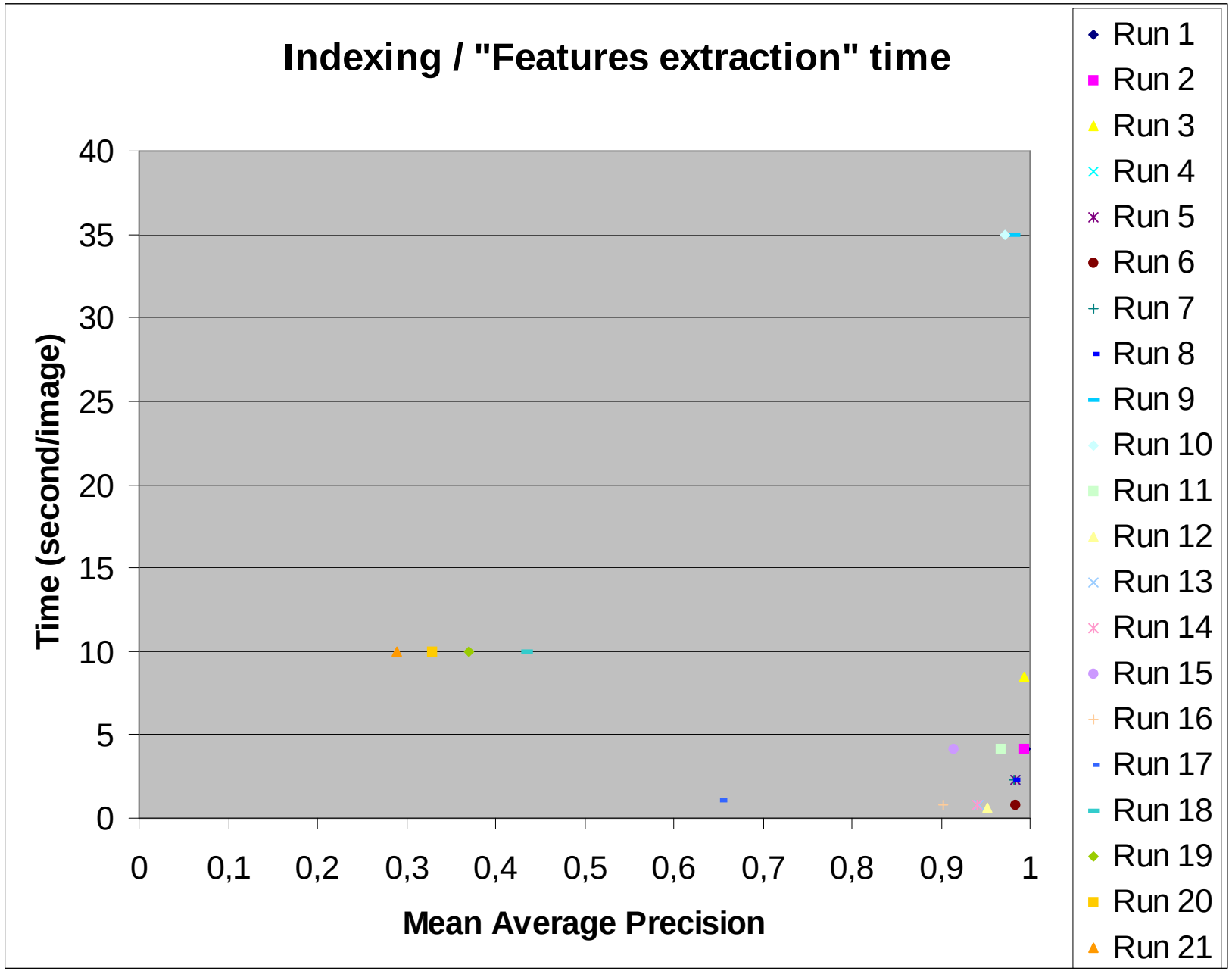
	Extra time : _load feature vector: 0.1s/image	
Run 19	Indexing / Features extraction : around 10s/image Research / Classification (creation of the results) : 4min/query Extra time: load feature vector: 0.1s/image	Pentium4, 2,26Ghz, 1Go, Windows + Matlab
Run 20	Indexing / Features extraction : around 10s/image Research / Classification (creation of the results) : 4min/query Extra time: load feature vector: 0.1s/image	Pentium4, 2,26Ghz, 1Go, Windows + Matlab
Run 21	Indexing / Features extraction : around 10s/image Research / Classification (creation of the results) : 4min/query Extea time: load feature vector: 0.1s/image	Pentium4, 2,26Ghz, 1Go, Windows + Matlab

- MAP + Processing times

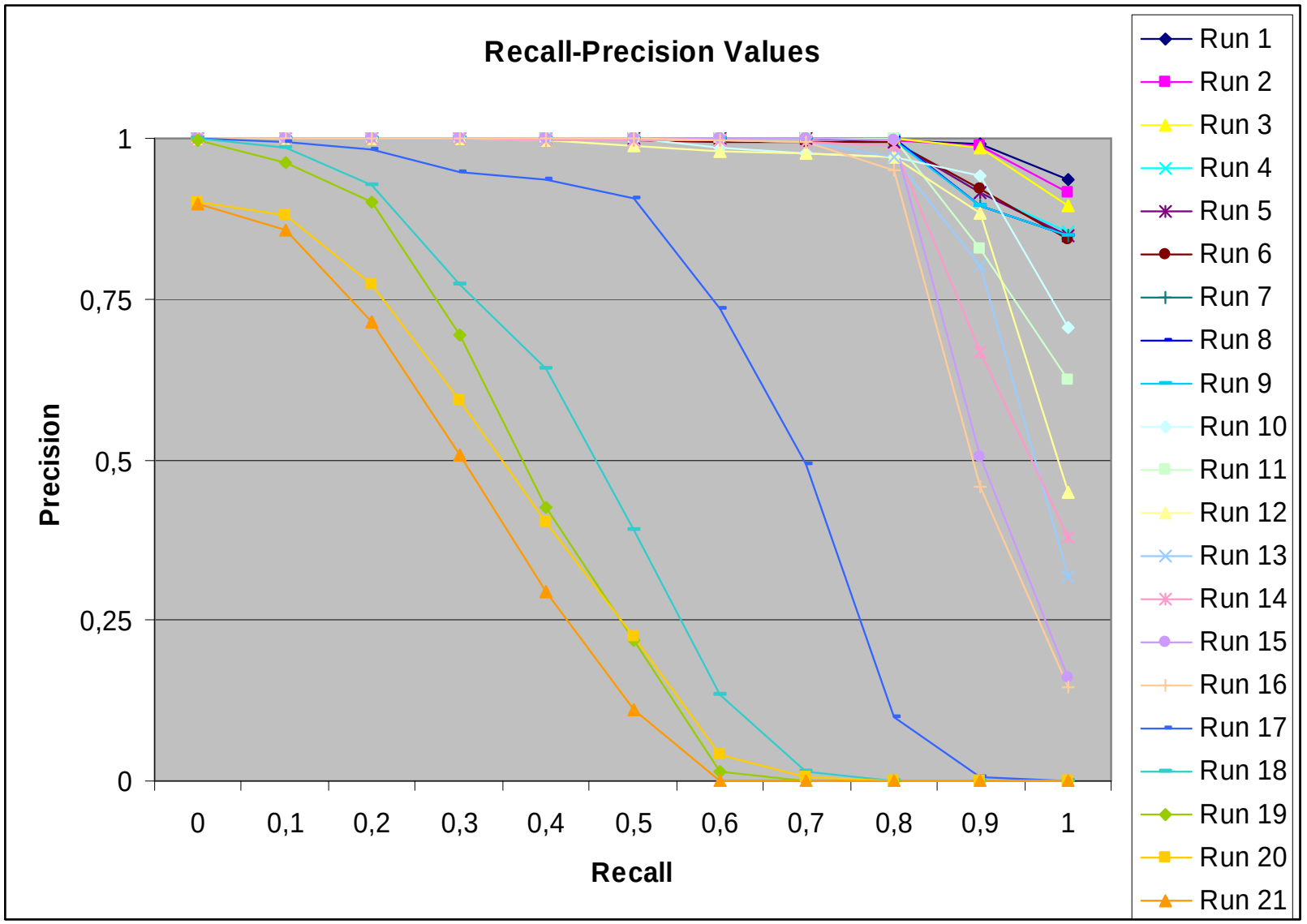
MAP + Retrieval time (second/query, log10 scale)



MAP + Indexing / Features extraction time (second/image)



- Recall / Precision



- % Global Recall = relevant_retrieved / relevant (50 answer/query)

Mean % over the runs, for each query

Query	1	2	3	4	5	6	7	8	9	10	11	12	13
%	86,27	84,31	83,96	85,15	86,55	87,96	86,47	86,83	90,20	85,24	85,43	76,72	85,15
Query	14	15	16	17	18	19	20	21	22	23	24	25	26
%	88,57	89,68	87,30	84,71	87,39	84,39	85,99	85,43	88,24	81,79	87,11	82,28	85,45
Query	27	28	29	30	31	32	33	34	35	36	37	38	39
%	86,51	80,95	86,72	85,19	85,46	87,22	87,57	85,19	90,98	84,03	86,27	82,38	86,51
Query	40	41	42	43	44	45	46	47	48	49	50		
%	90,48	87,83	86,83	79,10	86,83	89,08	81,79	88,10	89,72	86,27	86,83		

Mean % over the queries, for each run

Run	Run 1	Run 2	Run 3	Run 4	Run 5	Run 6	Run 7	Run 8	Run 9	Run 10	Run 11	Run 12	Run 13
%	99,78	99,66	99,66	98,54	98,54	99,21	98,31	98,31	98,31	97,86	97,08	96,18	94,94
Run	Run 14	Run 15	Run 16	Run 17	Run 18	Run 19	Run 20	Run 21					
%	94,94	91,56	90,89	71,43	50,84	43,53	45,44	39,48					

Average Precision (query, run)

	Run 1	Run 2	Run 3	Run 4	Run 5	Run 6	Run 7	Run 8	Run 9	Run 10	Run 11
1	1	1	1	1	1	1	1	1	1	1	1
2	1	1	1	1	1	1	1	1	1	1	1
3	1	1	1	0,9474	0,9474	0,9974	0,9474	0,9474	0,9474	1	1
4	1	1	1	1	1	0,9412	1	1	1	1	0,9757
5	1	1	0,9888	1	1	1	1	1	1	1	0,8824
6	1	1	1	1	1	1	1	1	1	1	1
7	1	1	1	1	1	1	1	1	1	1	0,8421
8	1	1	1	1	1	0,9423	0,9938	0,9938	1	0,9748	1
9	1	1	1	1	1	1	1	1	1	1	1
10	1	1	1	1	1	1	1	1	1	0,9786	0,95
11	1	1	1	1	1	1	1	1	1	0,92	1
12	0,9386	0,9386	0,9549	0,8333	0,8333	0,8827	0,8333	0,8333	0,8333	0,5799	0,8889
13	1	1	1	1	1	1	1	1	1	1	1
14	0,9457	0,9439	0,9418	0,9447	0,9151	0,8239	0,9591	0,9591	0,928	0,8545	0,9366
15	1	1	1	1	1	1	1	1	1	0,9444	1
16	1	1	1	1	1	1	1	1	1	1	1
17	0,9504	0,9548	0,9556	1	1	0,9278	0,9974	0,9974	1	1	0,9721
18	1	1	1	1	1	1	1	1	1	0,9812	1
19	1	1	0,9444	1	1	0,9654	1	1	1	1	0,9802
20	1	1	1	1	1	1	1	1	1	1	1
21	1	1	1	1	1	1	1	1	1	1	1
22	1	1	1	1	1	1	1	1	1	0,9412	1
23	1	1	1	1	1	1	1	1	1	1	0,8824
24	1	1	1	1	1	1	1	1	1	1	0,9412
25	1	1	1	1	1	1	1	1	1	1	1
26	1	1	1	1	1	1	1	1	1	1	1
27	1	1	1	1	1	1	1	1	1	1	1
28	1	1	1	0,8235	0,8235	1	0,8235	0,8235	0,8235	1	0,9412
29	1	1	1	1	1	1	1	1	1	1	0,9474
30	0,9766	0,9686	0,9861	1	1	0,9879	1	1	1	1	0,9793
31	1	1	1	1	1	1	1	1	1	0,9474	0,9474
32	1	1	1	1	1	0,9974	1	1	1	1	1
33	1	1	1	1	1	1	1	1	1	0,9444	1

34	1	1	1	0,9444	0,9444	1	0,8333	0,8333	0,8333	0,8712	1
35	1	1	1	1	1	1	1	1	1	1	1
36	1	1	1	1	1	1	1	1	1	1	1
37	1	1	1	1	1	0,9649	1	1	1	0,9412	0,9412
38	1	1	1	1	1	1	1	1	1	1	1
39	0,9444	0,9444	0,9444	1	1	0,9444	1	1	1	0,9444	0,9444
40	1	1	1	1	1	1	1	1	1	1	1
41	1	1	1	1	1	1	1	1	1	1	1
42	1	1	1	1	1	0,9938	1	1	1	1	1
43	1	1	1	0,8889	0,8889	1	0,8889	0,8889	0,8889	1	0,9444
44	1	1	1	1	1	1	1	1	1	0,9412	0,9412
45	1	1	1	0,9412	0,9412	0,9412	0,9412	0,9412	0,9412	1	1
46	1	1	1	0,8824	0,8824	0,8824	0,8824	0,8824	0,8824	0,9346	0,8824
47	0,9944	1	0,9444	1	1	0,9944	1	1	1	0,9444	0,8889
48	1	1	1	1	1	0,9769	1	1	1	1	1
49	1	0,9412	0,9782	1	1	1	1	1	1	0,9412	0,8824
50	1	1	1	1	1	1	1	1	1	1	0,8824

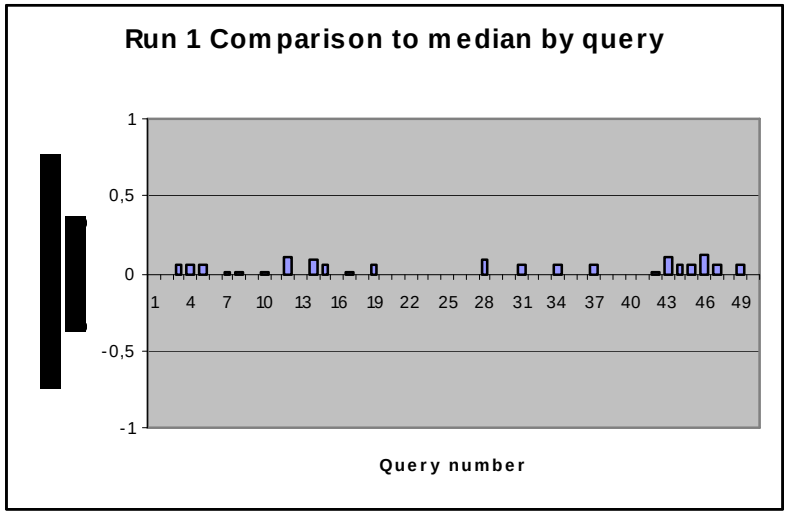
	Run 12	Run 13	Run 14	Run 15	Run 16	Run 17	Run 18	Run 19	Run 20	Run 21
1	0,9757	0,9412	1	1	0,9412	0,7059	0,3113	0,262	0,4219	0,3167
2	1	1	0,8824	0,8824	0,9251	0,6471	0,2941	0,2523	0,3284	0,2655
3	0,8947	1	0,8947	0,8947	0,8947	0,6596	0,2423	0,2106	0,225	0,1721
4	0,9412	0,9412	0,9377	0,9377	0,9412	0,5539	0,2414	0,1992	0,2528	0,2007
5	0,9085	0,9412	0,9346	0,8824	0,8824	0,4339	0,2404	0,2319	0,382	0,3696
6	1	0,9412	0,9967	0,9412	0,9377	0,725	0,483	0,3703	0,2563	0,1986
7	0,9474	0,9474	0,9928	0,8421	0,9421	0,5539	0,4244	0,4641	0,394	0,405
8	0,9912	1	0,9037	0,9412	0,9377	0,8235	0,4322	0,3735	0,1474	0,1251
9	1	1	0,9412	1	0,9724	0,8154	0,5268	0,4979	0,2815	0,2588
10	0,987	0,9	1	0,9	0,9	0,5954	0,45	0,318	0,4149	0,2773
11	0,9277	0,9412	0,9412	1	0,8824	0,659	0,4176	0,3333	0,0915	0,13
12	0,4662	0,8827	0,8595	0,8856	0,863	0,7004	0,5429	0,4869	0,0302	0,043
13	0,9734	0,9412	1	0,8824	0,9412	0,7059	0,4265	0,3137	0,3294	0,2157
14	0,8515	0,7435	0,8193	0,8745	0,7812	0,3542	0,3549	0,2637	0,47	0,4029
15	0,9444	0,9444	0,9444	0,8889	0,8889	0,7704	0,507	0,4116	0,5575	0,4879
16	1	0,8889	0,9921	1	0,8889	0,6144	0,4687	0,3915	0,3357	0,221
17	0,9501	0,8924	0,8826	0,9338	0,873	0,3801	0,4134	0,3079	0,2692	0,2442

18	0,9912	1	1	1	1	0,8406	0,5929	0,5505	0,0015	0,0042
19	0,9339	0,8725	0,8801	0,9386	0,7778	0,3182	0,5191	0,3611	0,3834	0,309
20	0,9967	0,9412	1	0,9412	0,9412	0,6971	0,3128	0,2941	0,3373	0,2914
21	1	1	0,9734	0,8824	0,9888	0,6471	0,382	0,3529	0,2493	0,2419
22	0,9412	1	1	1	1	0,7241	0,5187	0,4641	0,3781	0,3313
23	1	0,9412	0,9346	0,8235	0,8824	0,6905	0,1538	0,1021	0,2157	0,1529
24	1	1	1	0,9412	1	0,6739	0,2939	0,2337	0,3585	0,2937
25	1	1	1	0,9444	1	0,6111	0,123	0,1144	0,1496	0,088
26	0,9802	0,9444	0,9971	0,8333	0,9444	0,3729	0,427	0,3454	0,08	0,1677
27	0,9829	1	0,8333	0,9444	0,8545	0,7148	0,4082	0,3528	0,4611	0,4053
28	1	1	0,9148	0,9412	0,9272	0,6831	0,3166	0,3198	0,183	0,1232
29	1	0,9474	0,9474	0,9474	0,9158	0,6266	0,4684	0,3618	0,4904	0,4105
30	0,8651	0,9971	0,8333	0,8268	0,8333	0,7778	0,4459	0,4861	0,1638	0,2459
31	0,9474	0,8947	0,9398	0,8947	0,839	0,658	0,4816	0,3226	0,3429	0,3135
32	0,9474	0,8918	0,9421	1	0,839	0,6618	0,5228	0,3896	0,4966	0,3404
33	0,9444	0,9444	0,8889	1	0,8333	0,7615	0,5046	0,4757	0,4973	0,4333
34	0,8712	1	0,9886	0,9444	0,9886	0,6667	0,5106	0,4768	0,4149	0,4391
35	1	0,9474	1	0,9474	0,9474	0,6868	0,6805	0,6023	0,3767	0,2949
36	0,9412	0,9412	0,9866	0,8824	0,9294	0,6242	0,3051	0,2297	0,295	0,2024
37	0,9412	0,9083	0,8824	0,8824	0,8235	0,4706	0,6566	0,5351	0,1633	0,1516
38	0,95	0,95	0,9816	0,85	0,9432	0,6244	0,2502	0,1619	0,2093	0,1068
39	0,9444	0,8889	0,9444	0,8333	0,8889	0,814	0,6111	0,5	0,4174	0,4343
40	1	1	0,9967	0,8824	1	0,6824	0,493	0,4529	0,4616	0,45
41	1	0,9444	0,9971	0,9282	0,9444	0,7222	0,3935	0,3749	0,3674	0,3196
42	0,9412	0,9412	0,9412	0,9412	0,8824	0,5294	0,4988	0,4018	0,4349	0,3824
43	0,9861	0,9444	0,8889	0,8889	0,8333	0,4468	0,2559	0,2163	0,0926	0,0347
44	0,9412	1	0,8824	0,8824	0,8824	0,7484	0,4995	0,4641	0,4412	0,4489
45	1	0,9048	0,9412	0,9412	0,8824	0,808	0,6623	0,5829	0,3214	0,5324
46	0,934	0,7853	0,8824	0,8235	0,7647	0,7647	0,5617	0,3783	0,3918	0,3539
47	0,9444	0,9414	0,8889	0,8889	0,8333	0,7131	0,6503	0,5555	0,5411	0,4451
48	1	0,995	0,8918	0,8947	0,8947	0,8108	0,4542	0,4974	0,5501	0,5491
49	0,9412	0,9412	0,8824	0,8824	0,8235	0,6627	0,492	0,4822	0,4889	0,4465
50	0,9412	0,8824	1	0,8824	0,8824	0,7353	0,5187	0,3688	0,5376	0,4149

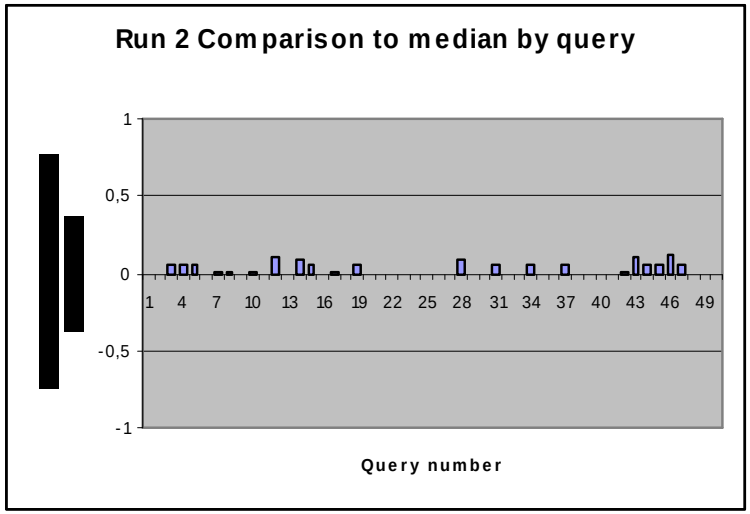
Comparison to median by query

X = Query number, Y = Difference to the average precision median

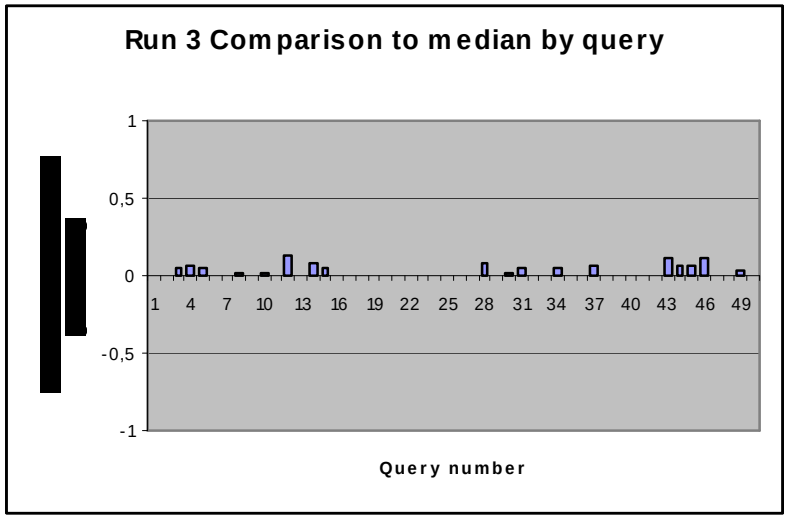
Run 1



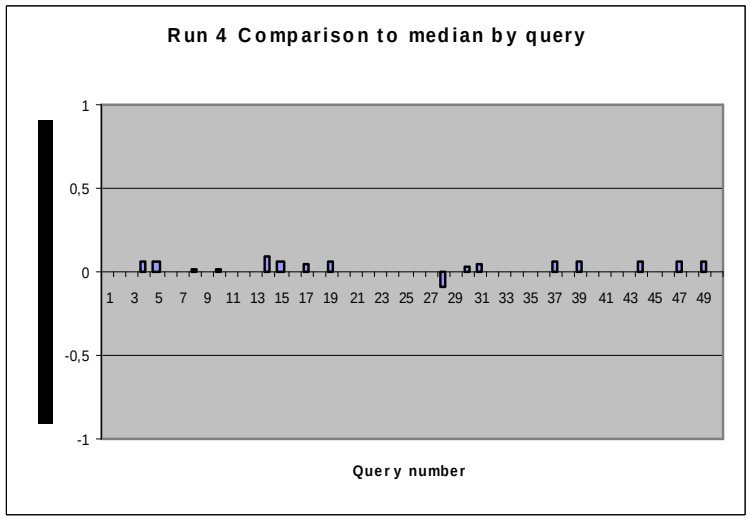
Run 2



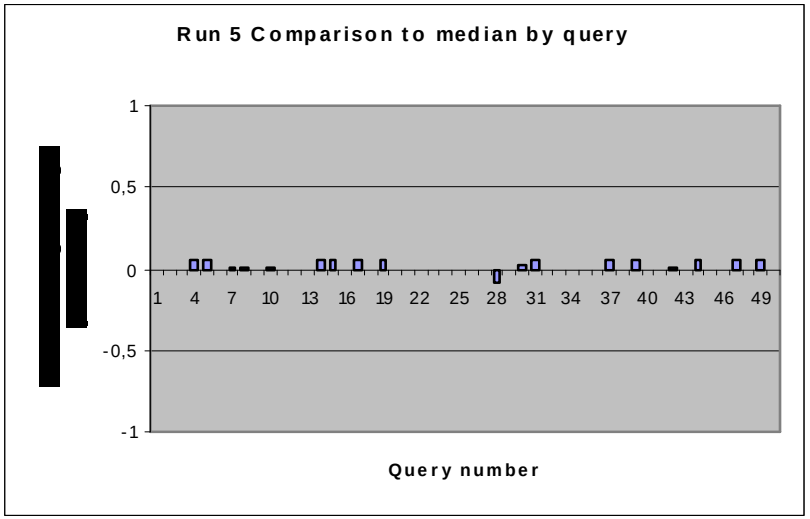
Run 3



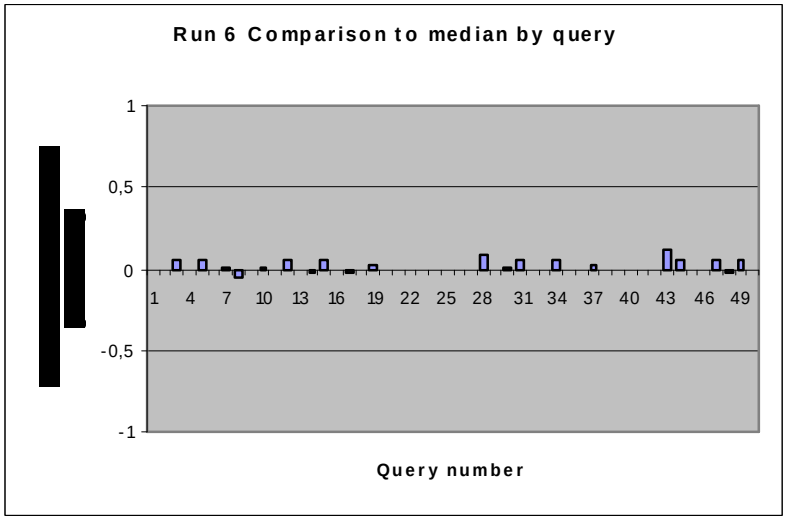
Run 4



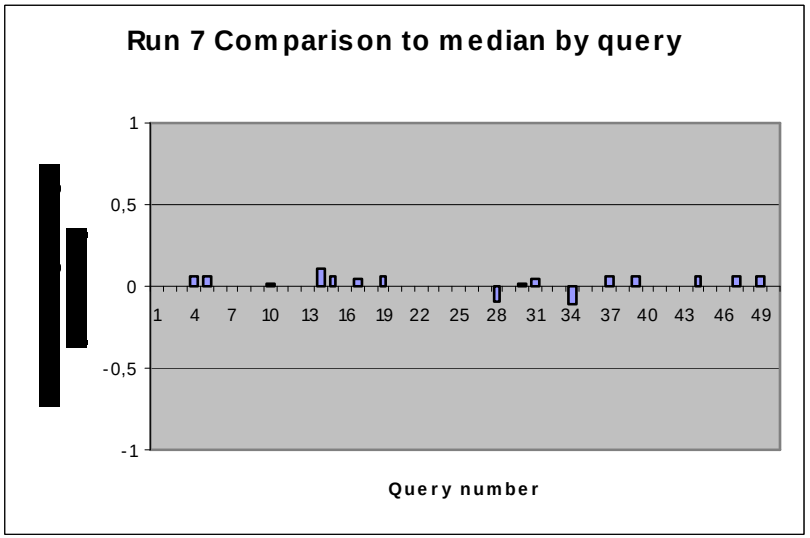
Run 5



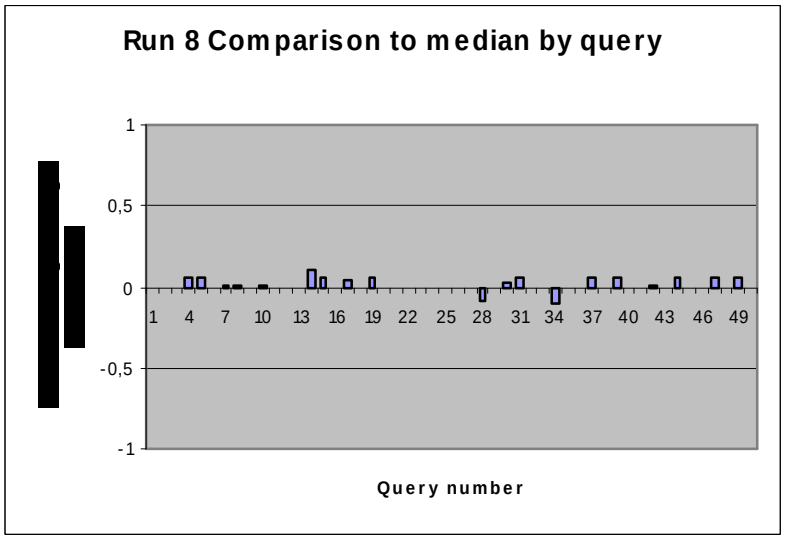
Run 6



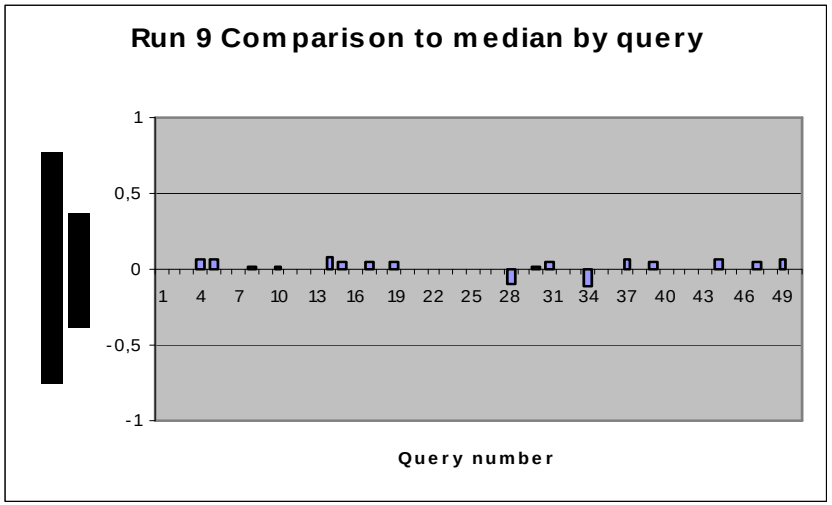
Run 7



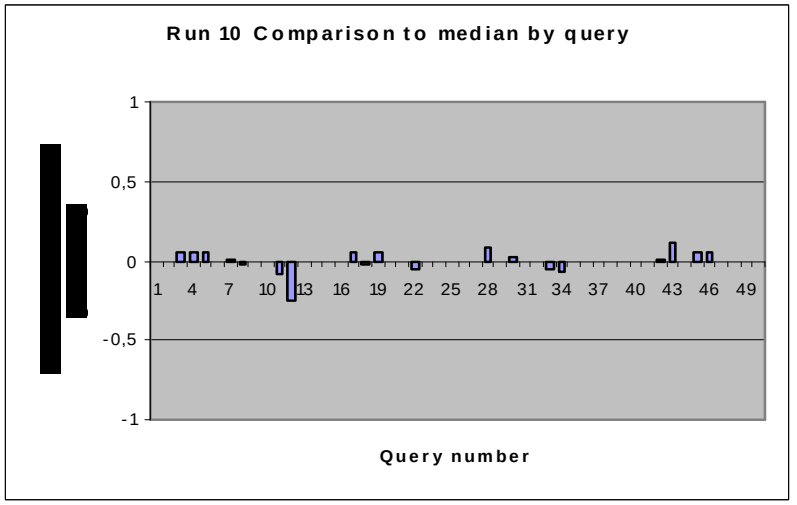
Run 8



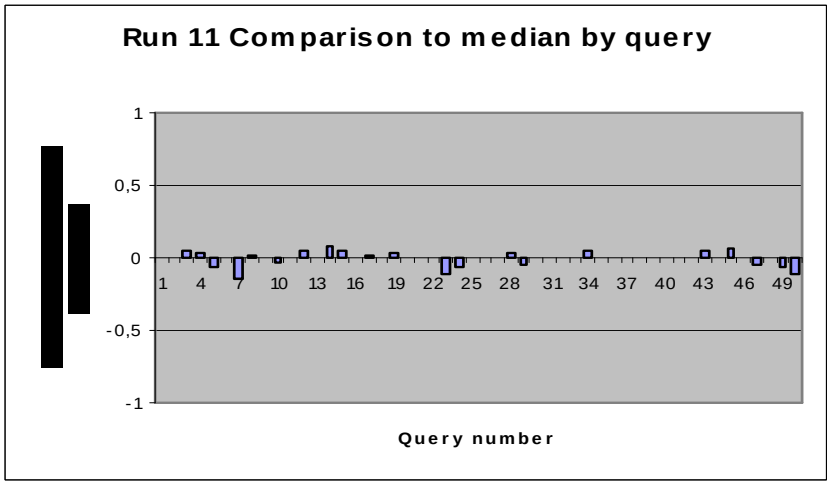
Run 9



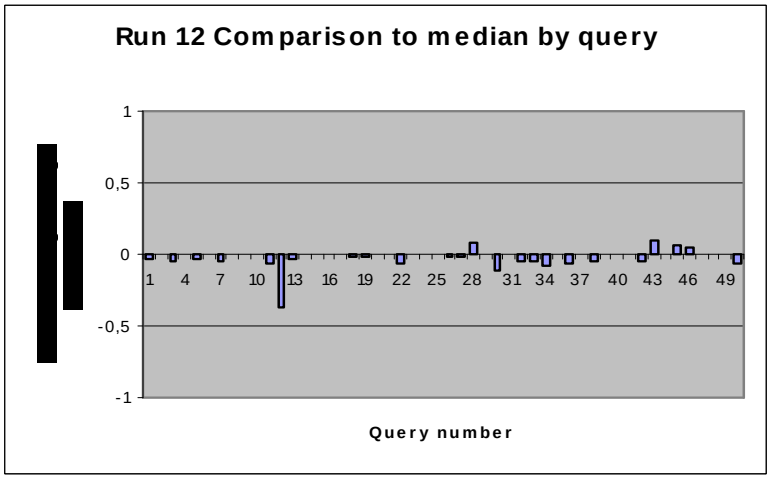
Run 10



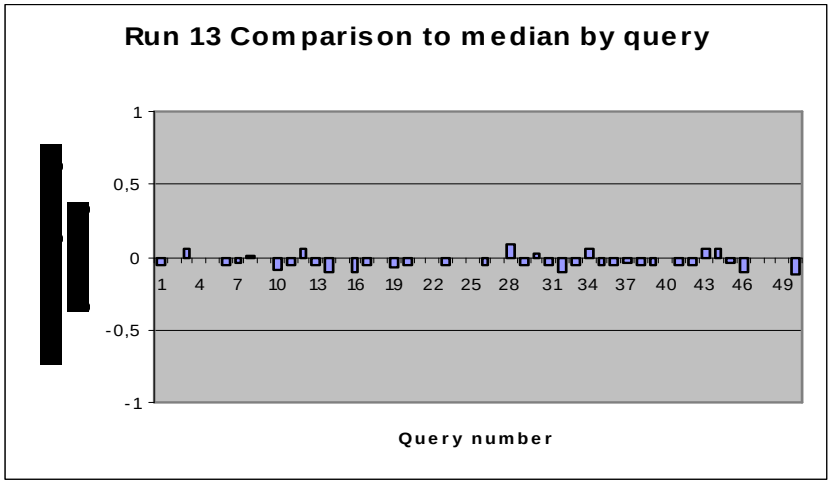
Run 11



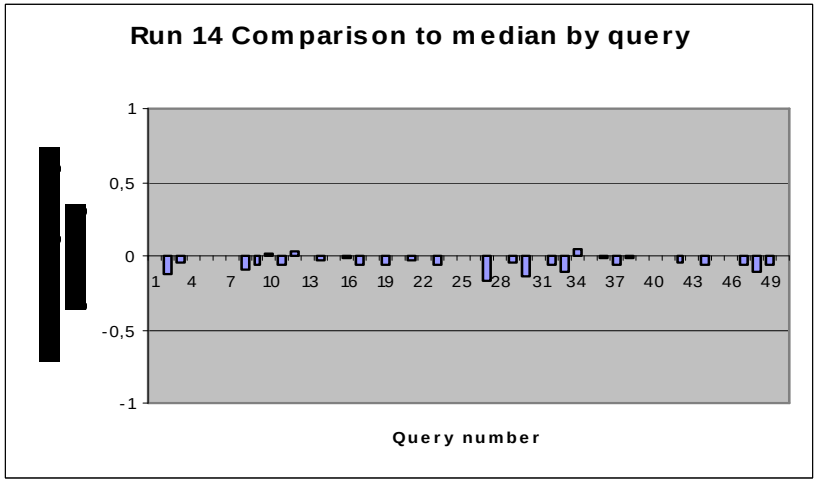
Run 12



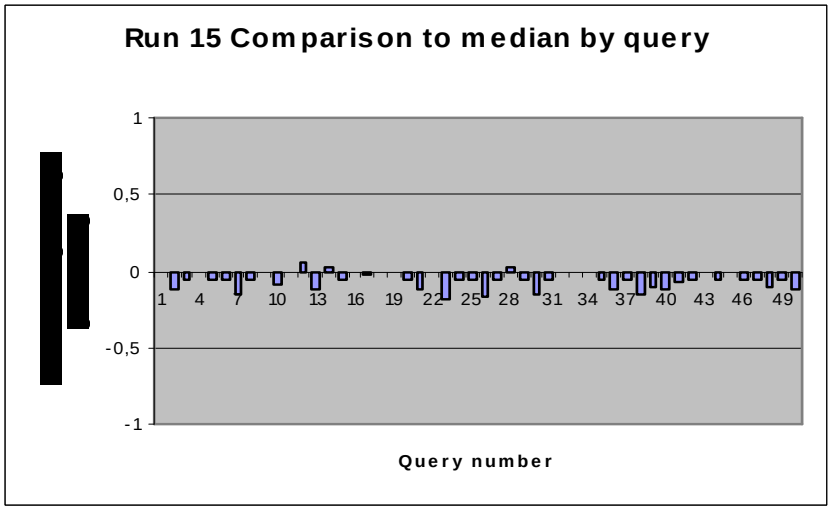
Run 13



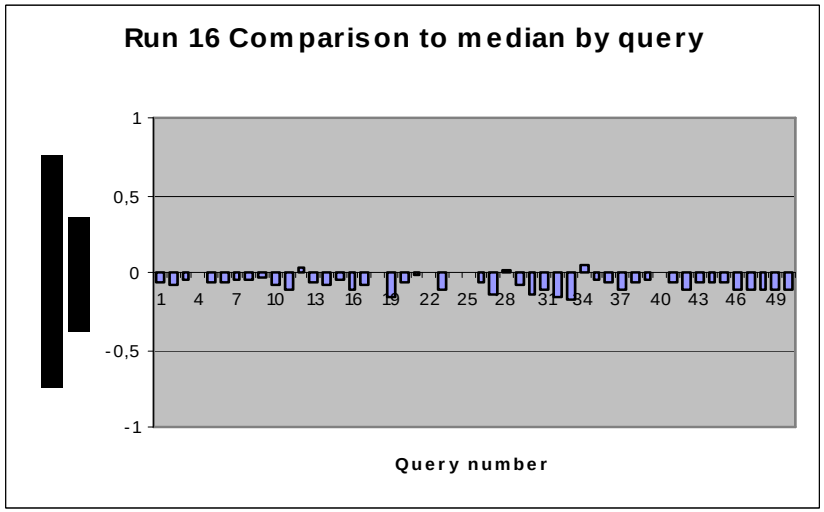
Run 14



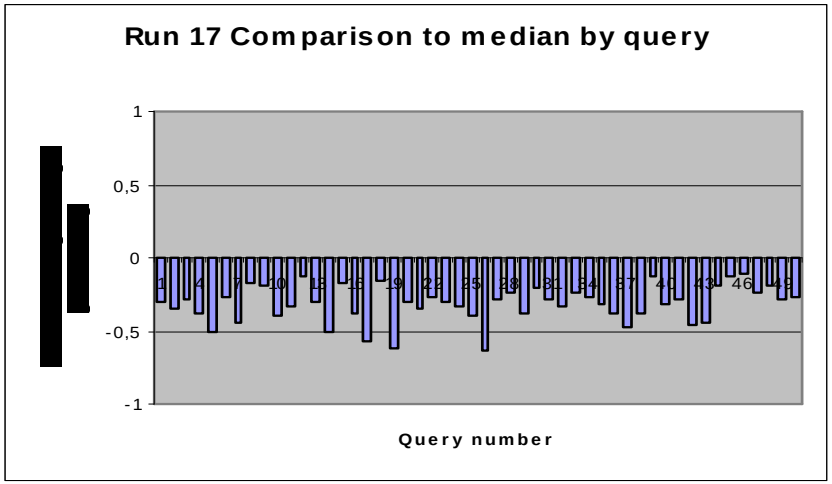
Run 15



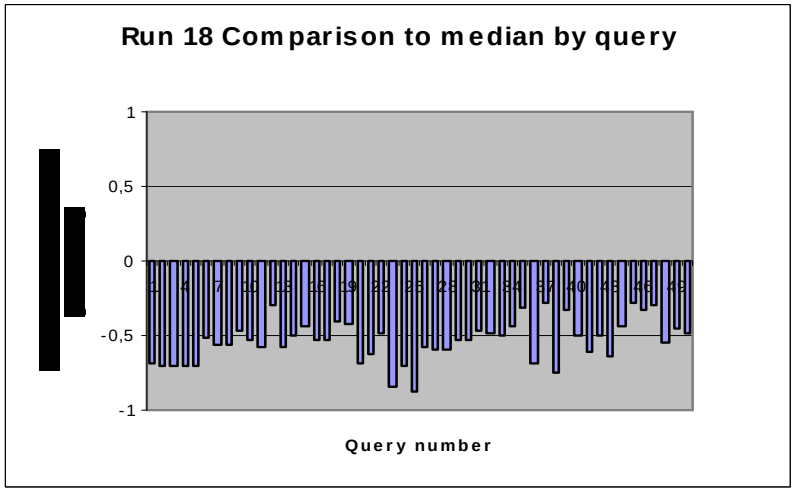
Run 16



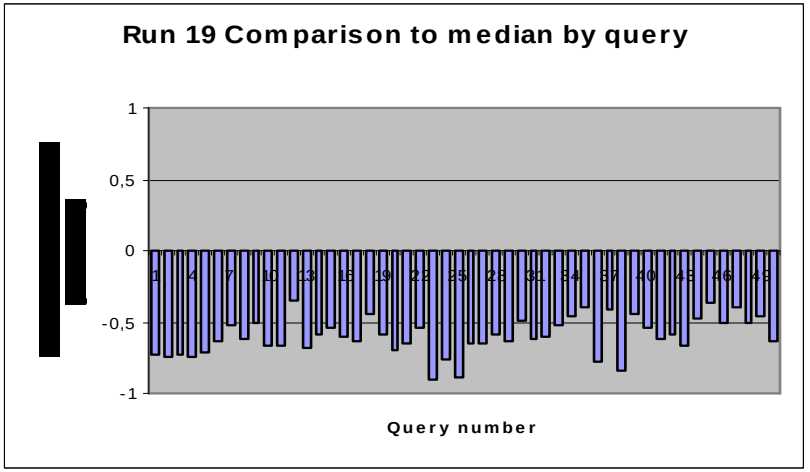
Run 17



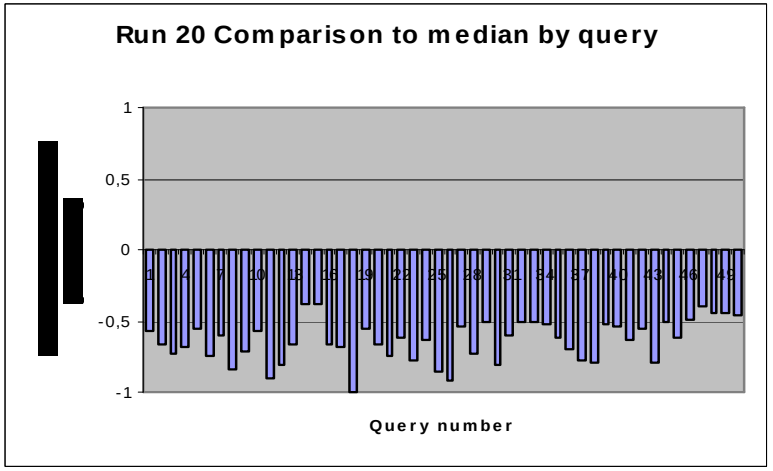
Run 18



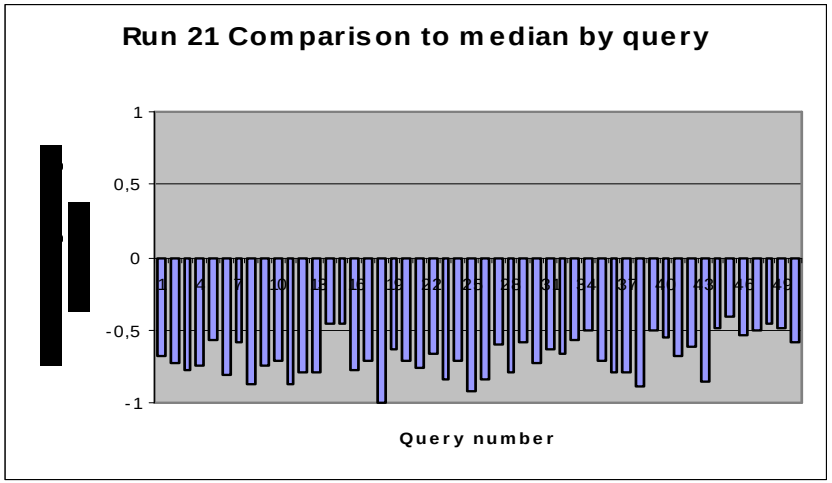
Run 19



Run 20



Run 21



% Global Recall = relevant_retrieved/relevant (50 answers/query)

	Run 1	Run 2	Run 3	Run 4	Run 5	Run 6	Run 7	Run 8	Run 9	Run 10	Run 11
1	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00
2	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00
3	100,00	100,00	100,00	94,74	94,74	100,00	94,74	94,74	94,74	100,00	100,00
4	100,00	100,00	100,00	100,00	100,00	94,12	100,00	100,00	100,00	100,00	100,00
5	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	88,24
6	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00
7	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	84,21
8	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00
9	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00
10	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	95,00
11	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	94,12	100,00
12	94,44	94,44	100,00	83,33	83,33	88,89	83,33	83,33	83,33	66,67	88,89
13	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00
14	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00
15	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	94,44	100,00
16	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00
17	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00
18	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00
19	100,00	100,00	94,44	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00
20	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00
21	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00
22	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	94,12	100,00
23	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	88,24
24	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	94,12
25	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00
26	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00
27	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00
28	100,00	100,00	100,00	82,35	82,35	100,00	82,35	82,35	82,35	100,00	94,12
29	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	94,74
30	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00
31	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	94,74	94,74
32	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00

33	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	94,44	100,00
34	100,00	100,00	100,00	94,44	94,44	100,00	83,33	83,33	83,33	88,89	100,00
35	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00
36	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00
37	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	94,12	94,12
38	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00
39	94,44	94,44	94,44	100,00	100,00	94,44	100,00	100,00	100,00	94,44	94,44
40	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00
41	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00
42	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00
43	100,00	100,00	100,00	88,89	88,89	100,00	88,89	88,89	88,89	100,00	94,44
44	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	94,12	94,12
45	100,00	100,00	100,00	94,12	94,12	94,12	94,12	94,12	94,12	100,00	100,00
46	100,00	100,00	100,00	88,24	88,24	88,24	88,24	88,24	88,24	94,12	88,24
47	100,00	100,00	94,44	100,00	100,00	100,00	100,00	100,00	100,00	94,44	88,89
48	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00
49	100,00	94,12	100,00	100,00	100,00	100,00	100,00	100,00	100,00	94,12	88,24
50	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	88,24

	Run 12	Run 13	Run 14	Run 15	Run 16	Run 17	Run 18	Run 19	Run 20	Run 21
1	100,00	94,12	100,00	100,00	94,12	70,59	41,18	29,41	47,06	35,29
2	100,00	100,00	88,24	88,24	94,12	70,59	29,41	35,29	35,29	29,41
3	89,47	100,00	89,47	89,47	89,47	78,95	36,84	36,84	42,11	36,84
4	94,12	94,12	94,12	94,12	94,12	58,82	41,18	41,18	41,18	41,18
5	94,12	94,12	94,12	88,24	88,24	70,59	52,94	47,06	52,94	47,06
6	100,00	94,12	100,00	94,12	94,12	76,47	52,94	41,18	52,94	41,18
7	94,74	94,74	100,00	84,21	94,74	57,89	57,89	47,37	52,63	47,37
8	100,00	100,00	94,12	94,12	94,12	82,35	47,06	41,18	35,29	35,29
9	100,00	100,00	94,12	100,00	100,00	82,35	58,82	58,82	52,94	47,06
10	100,00	90,00	100,00	90,00	90,00	65,00	45,00	40,00	45,00	30,00
11	94,12	94,12	94,12	100,00	88,24	70,59	47,06	35,29	35,29	41,18
12	55,56	88,89	88,89	88,89	88,89	77,78	61,11	55,56	27,78	27,78
13	100,00	94,12	100,00	88,24	94,12	70,59	47,06	35,29	35,29	23,53
14	100,00	90,00	100,00	90,00	90,00	65,00	55,00	45,00	70,00	55,00
15	94,44	94,44	94,44	88,89	88,89	83,33	66,67	55,56	66,67	55,56

16	100,00	88,89	100,00	100,00	88,89	72,22	61,11	44,44	44,44	33,33
17	100,00	94,74	94,74	94,74	89,47	52,63	47,37	36,84	36,84	31,58
18	100,00	100,00	100,00	100,00	100,00	94,12	64,71	58,82	5,88	11,76
19	94,44	88,89	88,89	94,44	77,78	50,00	55,56	38,89	50,00	38,89
20	100,00	94,12	100,00	94,12	94,12	76,47	41,18	29,41	41,18	35,29
21	100,00	100,00	100,00	88,24	100,00	64,71	41,18	35,29	29,41	35,29
22	94,12	100,00	100,00	100,00	100,00	76,47	52,94	47,06	47,06	41,18
23	100,00	94,12	94,12	82,35	88,24	76,47	29,41	23,53	23,53	17,65
24	100,00	100,00	100,00	94,12	100,00	76,47	35,29	29,41	52,94	47,06
25	100,00	100,00	100,00	94,44	100,00	61,11	16,67	16,67	22,22	16,67
26	100,00	94,44	100,00	83,33	94,44	61,11	50,00	38,89	33,33	38,89
27	100,00	100,00	83,33	94,44	88,89	72,22	44,44	38,89	50,00	44,44
28	100,00	100,00	94,12	94,12	94,12	76,47	47,06	47,06	23,53	17,65
29	100,00	94,74	94,74	94,74	94,74	68,42	47,37	36,84	52,63	42,11
30	88,89	100,00	83,33	83,33	83,33	77,78	55,56	50,00	33,33	33,33
31	94,74	89,47	94,74	89,47	84,21	73,68	52,63	36,84	52,63	36,84
32	94,74	89,47	94,74	100,00	84,21	73,68	57,89	47,37	52,63	36,84
33	94,44	94,44	88,89	100,00	83,33	77,78	55,56	50,00	55,56	44,44
34	88,89	100,00	100,00	94,44	100,00	66,67	55,56	50,00	55,56	50,00
35	100,00	94,74	100,00	94,74	94,74	73,68	68,42	63,16	63,16	57,89
36	94,12	94,12	100,00	88,24	94,12	64,71	35,29	29,41	35,29	29,41
37	94,12	94,12	88,24	88,24	82,35	47,06	70,59	58,82	52,94	47,06
38	95,00	95,00	100,00	85,00	95,00	65,00	30,00	25,00	25,00	15,00
39	94,44	88,89	94,44	83,33	88,89	83,33	61,11	50,00	50,00	55,56
40	100,00	100,00	100,00	88,24	100,00	76,47	64,71	58,82	58,82	52,94
41	100,00	94,44	100,00	94,44	94,44	72,22	50,00	44,44	50,00	44,44
42	94,12	94,12	94,12	94,12	88,24	52,94	58,82	47,06	52,94	47,06
43	100,00	94,44	88,89	88,89	83,33	66,67	38,89	33,33	16,67	11,11
44	94,12	100,00	88,24	88,24	88,24	76,47	52,94	47,06	47,06	52,94
45	100,00	94,12	94,12	94,12	88,24	82,35	70,59	58,82	64,71	58,82
46	94,12	82,35	88,24	82,35	76,47	76,47	64,71	47,06	52,94	41,18
47	94,44	94,44	88,89	88,89	83,33	77,78	66,67	61,11	61,11	55,56
48	100,00	100,00	89,47	89,47	89,47	84,21	52,63	57,89	63,16	57,89
49	94,12	94,12	88,24	88,24	82,35	70,59	52,94	52,94	58,82	52,94
50	94,12	88,24	100,00	88,24	88,24	76,47	52,94	41,18	58,82	47,06

TASK 1_2 Transformed Images

Global results

- Mean Reciprocal Rank (MRR)

Run	MMR	3 Best runs
Run1	1	1. ENSEA ETIS etis03, etis04
Run2	1	1. INRIA IMEDIA imedia01, imedia02, imedia03
Run3	1	1. INRIA LEAR lear0la
Run4	1	**3 Best teams (best run)**
Run5	1	1. ENSEA ETIS
Run6	1	1. INRIA IMEDIA
Run7	0.988889	1. INRIA LEAR
Run8	0.9875	
Run9 =	0.983333	
= Run10	0.983333	
Run11	0.979167	
Run12	0.759306	

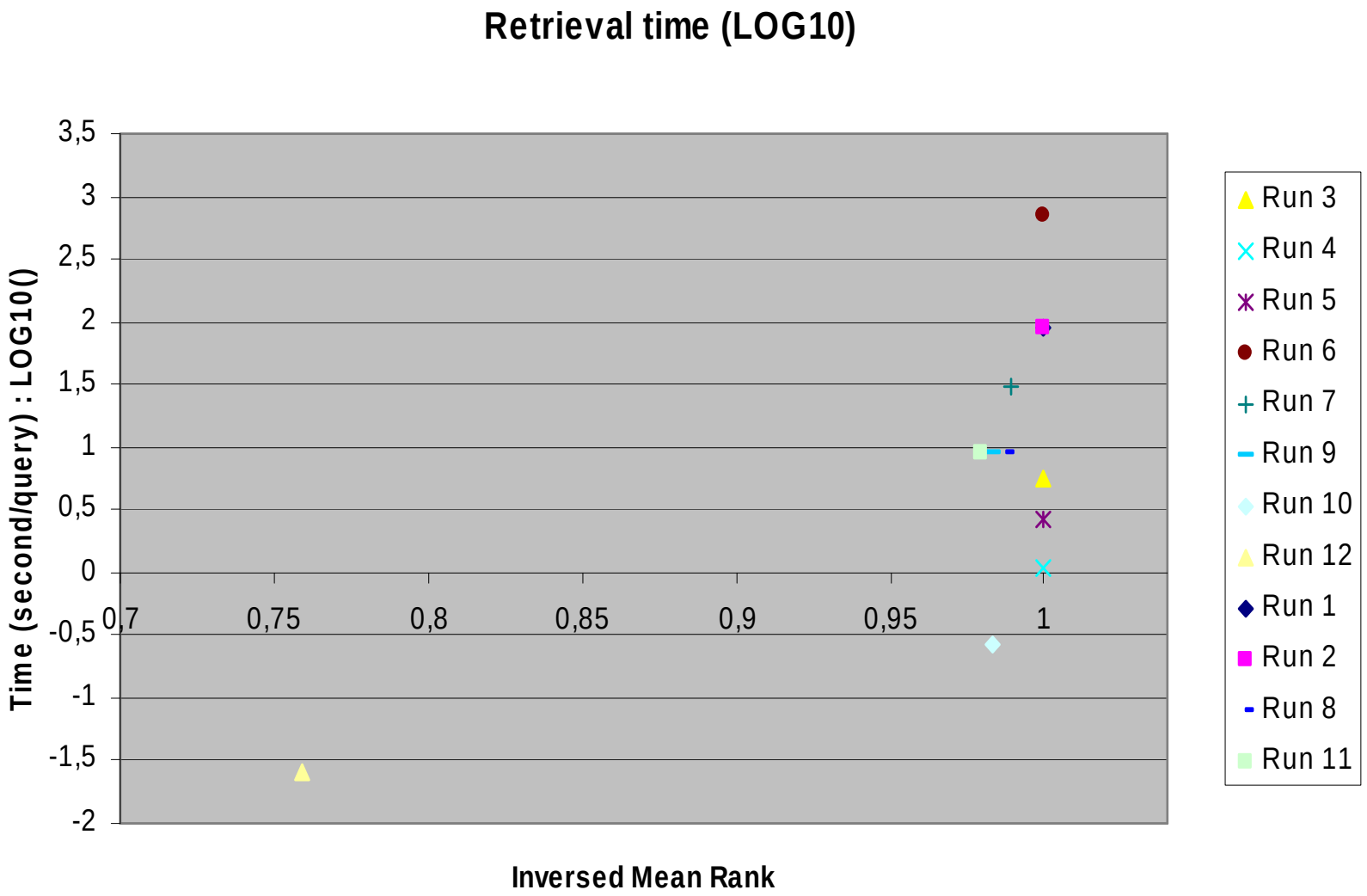
Processing times

Information provided by the participants

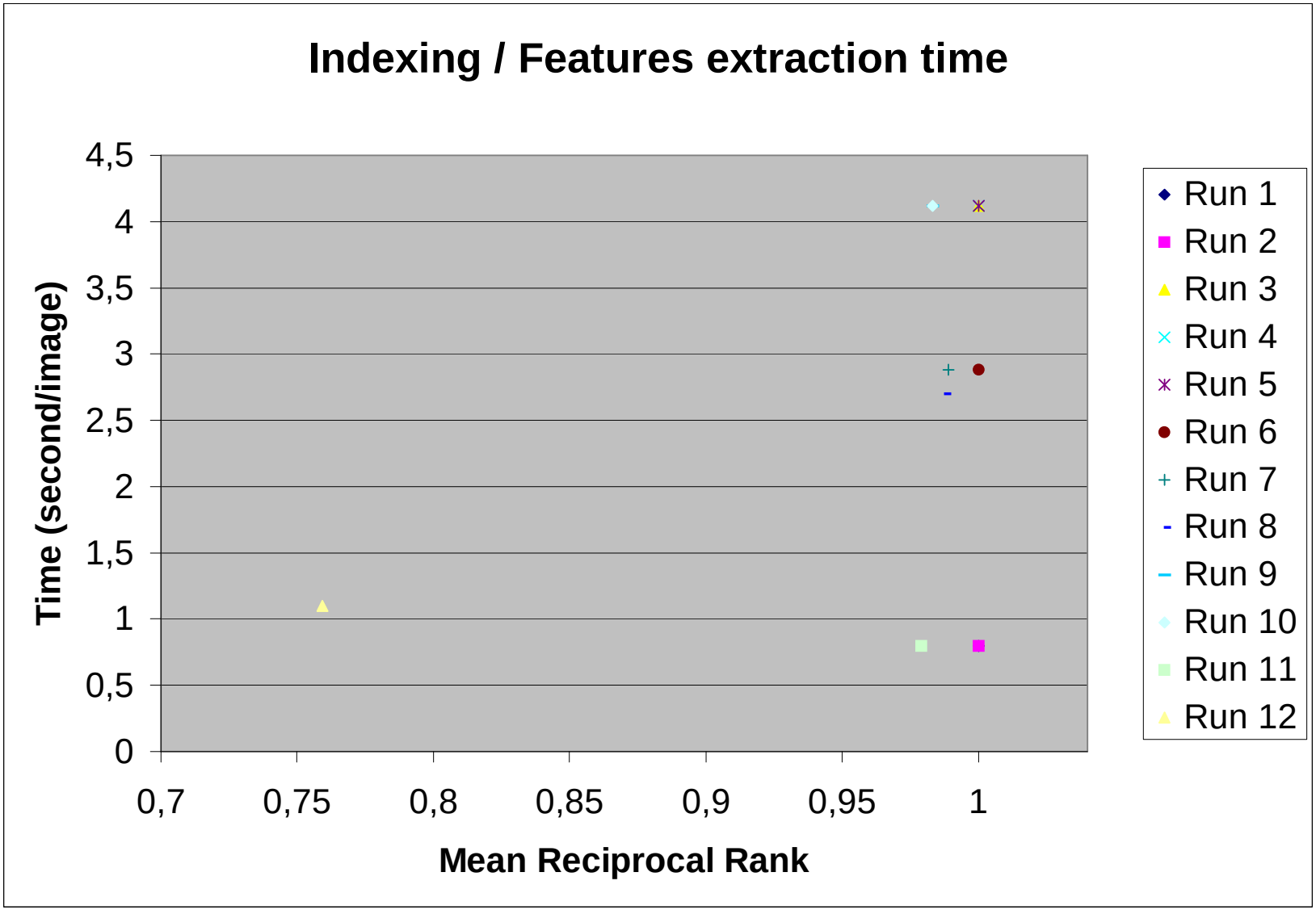
Run	Processing times	Computers characteristics
Run 1	Features extraction : 0,8 s per image Learning : 89 s for the entire base Research / Classification (creation of the results) : 88± 66 s per query	For feature extraction : 2 processors i686 Pentium4, 3.06GHz, 1Gb RAM For reasearch / classification : 4 processors x86_64 Dual Core AMD Opteron 275 (2.2 GHz), 8Gb RAM
Run 2	Features extraction : 0,8 s/image Learning : 89 s for the entire base Research / Classification (creation of the results) : 88± 66 s per query	For feature extraction : 2 processors i686 Pentium4, 3.06GHz, 1Gb RAM For reasearch / classification : 4 processors x86_64 Dual Core AMD Opteron 275 (2.2 GHz), 8Gb RAM
Run 3	Features extraction: 4.12 s / image Retrieval: 5.600215 s / requête	Pentium4, 3.2 GHz, 2Go, Linux
Run 4	Features extraction: 4.12 s / image Retrieval: 1.071904 s / requête	Pentium4, 3.2 GHz, 2Go, Linux
Run 5	Features extraction: 4.12 s / image Retrieval: 2.654080 s / requête	Pentium4, 3.2 GHz, 2Go, Linux
Run 6	Features extraction: 2h Learning : 25 min Research : 12 h Extra time: ~10 min: disk i/o for datafiles passed between the different processing stages	Pentium4, 3.4 GHz, 4Go, Linux
Run 7	Features extraction: 2h Learning : 25 min Research : 30 min Extra time: ~10 min: disk i/o for datafiles passed between the different processing stages	Pentium4, 3.4 GHz, 4Go, Linux
Run 8	Features extraction : 0,8 s / image Learning : 19 s for the entire base Research / Classification (creation of the results) : 9 ± 6 s per query	For feature extraction : 2 processors i686 Pentium4, 3.06GHz, 1Gb RAM For reasearch / classification : 4 processors x86_64 Dual Core AMD Opteron 275 (2.2 GHz), 8Gb RAM
Run 9	Indexing / Features extraction: 2.7 second/ image Research / Classification (creation of the results) : 8.9 seconds / query	Intel Xeon H.T, 3.0 GHz, 4 Go,
Run 10	Features extraction: 4.12 s / image Retrieval: 0.264360 s / requête	Pentium4, 3.2 GHz, 2Go, Linux
Run 11	Features extraction : 0,8 s per image Learning : 19 s for the entire base Research / Classification (creation of the results) : 9 ± 6 s per query	For feature extraction : 2 processors i686 Pentium4, 3.06GHz, 1Gb RAM For reasearch / classification : 4 processors x86_64 Dual Core AMD Opteron 275 (2.2 GHz), 8Gb RAM
Run 12	Indexing / features extraction :1.1 Secondes Comparison between two indexed images : 0.01 milliSecondes Research for a query over the 2500 indexed images = 0.025 s	Pentium4, 2.8 GHz, 512 Mo, Linux

- MRR + Processing times

Mean Reciprocal Rank + Retrieval time (second/image, log10 scale)



Mean Reciprocal Rank + Features extraction time (second/image)



Detailed results

- Mean Reciprocal Rank (for each run, for each query)

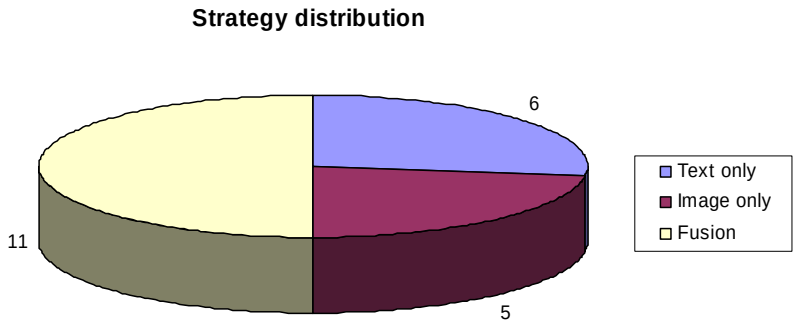
	Run 1	Run 2	Run 3	Run 4	Run 5	Run 6	Run 7	Run 8	Run 9	Run 10	Run 11	Run 12
1	1	1	1	1	1	1	0.3333	1	1	0	1	0
2	1	1	1	1	1	1	1	1	1	1	1	0
3	1	1	1	1	1	1	1	1	1	1	1	1
4	1	1	1	1	1	1	1	1	1	1	1	1
5	1	1	1	1	1	1	1	1	1	1	1	1
6	1	1	1	1	1	1	1	1	1	1	1	1
7	1	1	1	1	1	1	1	1	1	1	1	1
8	1	1	1	1	1	1	1	1	1	1	1	1
9	1	1	1	1	1	1	1	1	1	1	1	1
10	1	1	1	1	1	1	1	1	1	1	1	1
11	1	1	1	1	1	1	1	1	1	1	1	0.2
12	1	1	1	1	1	1	1	1	1	1	1	0
13	1	1	1	1	1	1	1	1	1	1	1	1
14	1	1	1	1	1	1	1	1	1	1	1	1
15	1	1	1	1	1	1	1	0.25	1	1	1	1
16	1	1	1	1	1	1	1	1	1	1	1	1
17	1	1	1	1	1	1	1	1	1	1	1	0
18	1	1	1	1	1	1	1	1	1	1	1	1
19	1	1	1	1	1	1	1	1	1	1	1	1
20	1	1	1	1	1	1	1	1	1	1	1	1
21	1	1	1	1	1	1	1	1	1	1	1	1
22	1	1	1	1	1	1	1	1	1	1	1	1
23	1	1	1	1	1	1	1	1	1	1	1	0
24	1	1	1	1	1	1	1	1	1	1	1	1
25	1	1	1	1	1	1	1	1	1	1	1	1
26	1	1	1	1	1	1	1	1	1	1	1	0
27	1	1	1	1	1	1	1	1	1	1	1	1
28	1	1	1	1	1	1	1	1	1	1	1	0
29	1	1	1	1	1	1	1	1	1	1	1	1
30	1	1	1	1	1	1	1	1	1	1	1	1
31	1	1	1	1	1	1	1	1	1	1	1	1
32	1	1	1	1	1	1	1	1	1	1	0.5	1
33	1	1	1	1	1	1	1	1	1	1	1	1
34	1	1	1	1	1	1	1	1	1	1	1	1
35	1	1	1	1	1	1	1	1	1	1	1	1
36	1	1	1	1	1	1	1	1	1	1	1	1
37	1	1	1	1	1	1	1	1	1	1	0.25	1
38	1	1	1	1	1	1	1	1	1	1	1	1
39	1	1	1	1	1	1	1	1	1	1	1	0
40	1	1	1	1	1	1	1	1	1	1	1	1
41	1	1	1	1	1	1	1	1	1	1	1	1
42	1	1	1	1	1	1	1	1	1	1	1	0
43	1	1	1	1	1	1	1	1	1	1	1	1
44	1	1	1	1	1	1	1	1	1	1	1	1
45	1	1	1	1	1	1	1	1	1	1	1	1
46	1	1	1	1	1	1	1	1	1	1	1	0.025

47	1	1	1	1	1	1	1	1	1	1	1	1
48	1	1	1	1	1	1	1	1	1	1	1	1
49	1	1	1	1	1	1	1	1	0	1	1	1
50	1	1	1	1	1	1	1	1	1	1	1	1
51	1	1	1	1	1	1	1	1	1	1	1	1
52	1	1	1	1	1	1	1	1	1	1	1	0.33
53	1	1	1	1	1	1	1	1	1	1	1	0
54	1	1	1	1	1	1	1	1	1	1	1	1
55	1	1	1	1	1	1	1	1	1	1	1	0
56	1	1	1	1	1	1	1	1	1	1	1	1
57	1	1	1	1	1	1	1	1	1	1	1	1
58	1	1	1	1	1	1	1	1	1	1	1	1
59	1	1	1	1	1	1	1	1	1	1	1	1
60	1	1	1	1	1	1	1	1	1	1	1	1

TASK 2 Web based image retrieval

Information about the runs

Run	Text only	Image only	Fusion Text/Image
Run1			
Run2			
Run3			
Run4			
Run5			
Run6			
Run7			
Run8			
Run9			
Run10			
Run11			
Run12			
Run13			
Run14			
Run15			
Run16			
Run17			
Run18			
Run19			
Run20			
Run21			
Run22			



Global results

- Mean Average Precision

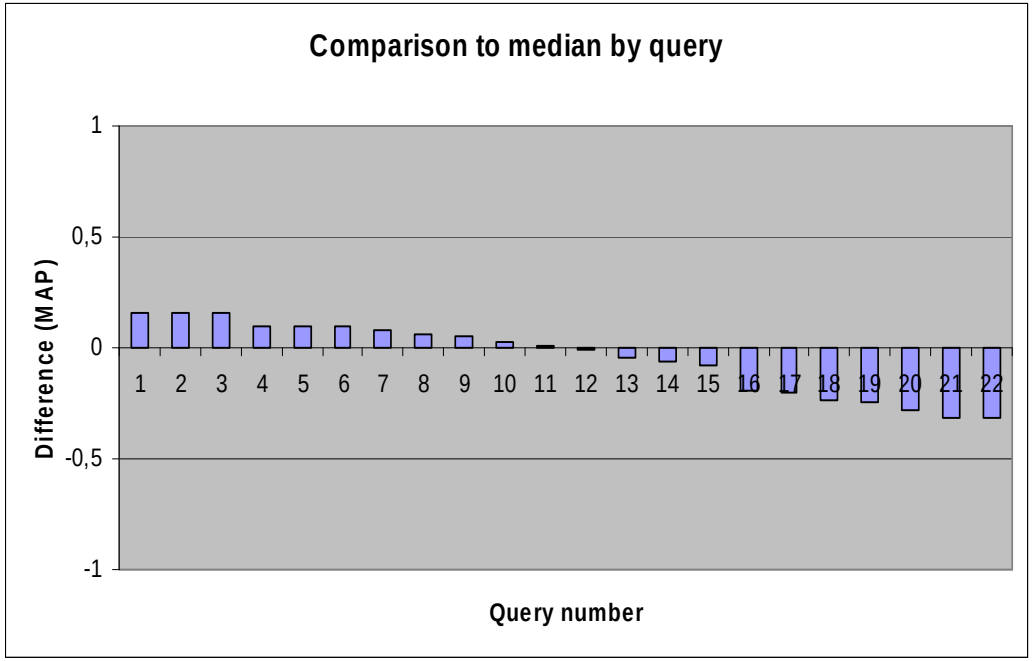
Run	MAP
Run1	0.6163
Run2 = = Run3	0.6153
Run4	0.5589
Run5	0.5587
Run6	0.5551
Run7	0.5361
Run8	0.5173
Run9	0.5127
Run10	0.4846
Run11	0.4634
Run12	0.4554
Run13	0.4142
Run14	0.3944
Run15	0.3824
Run16	0.2710
Run17	0.2611
Run18	0.2259
Run19	0.2171
Run20	0.1806
Run21	0.1466
Run22	0.1408

3 Best runs

1. Run1 = XEROX XRCE xrce04ditxt
2. Run2 = XEROX XRCE xrce06ditxt
3. Run3 = XEROX XRCE xrce09diprftxt

3 Best teams (best run)

1. XEROX XRCE (run1 : xrce04ditxt)
2. LSIS (run7 : LSISfusionTEXTIMAGE)
3. CEA List (run8 : CEAfusion)



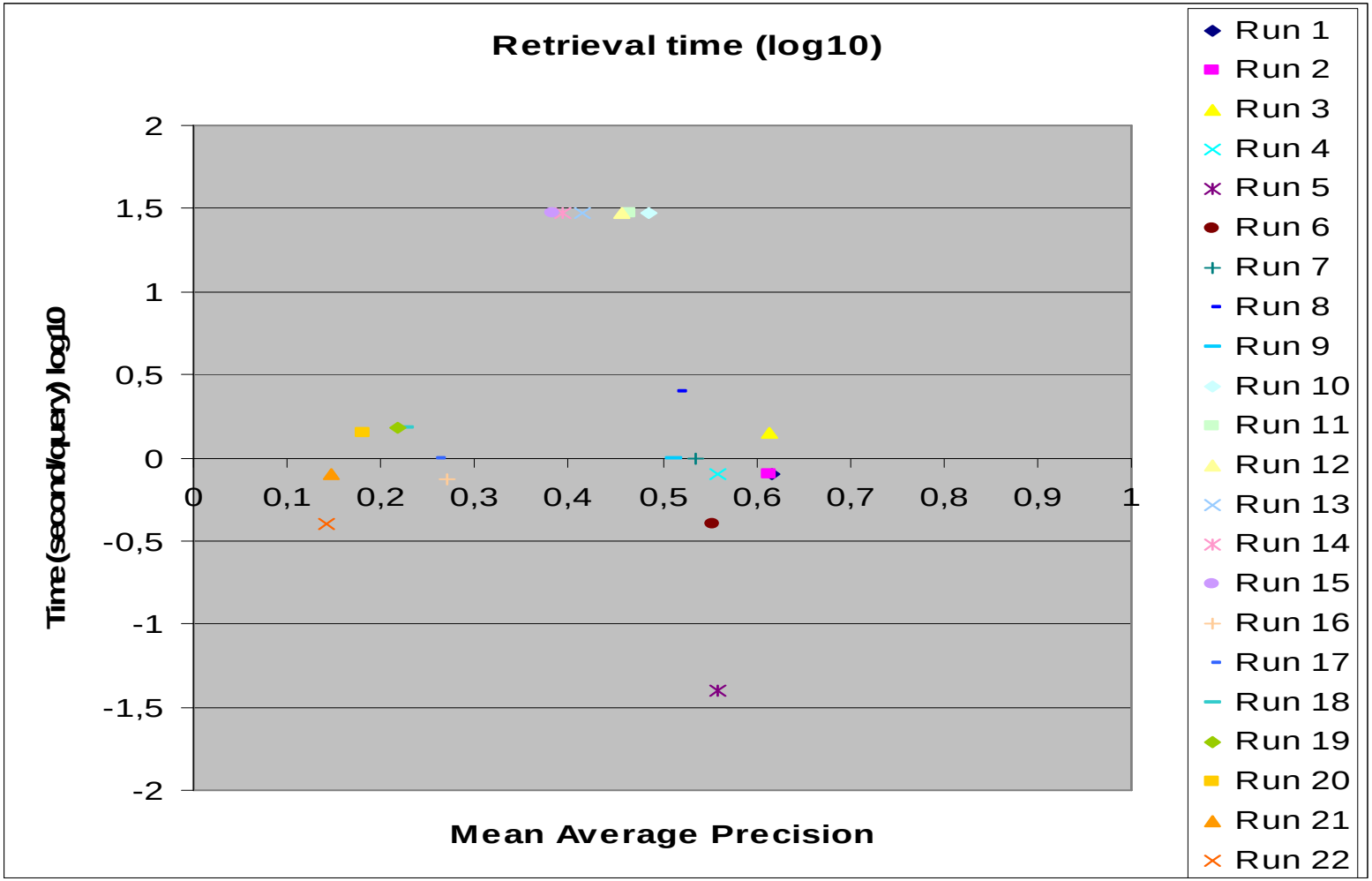
Processing times

Information provided by the participants

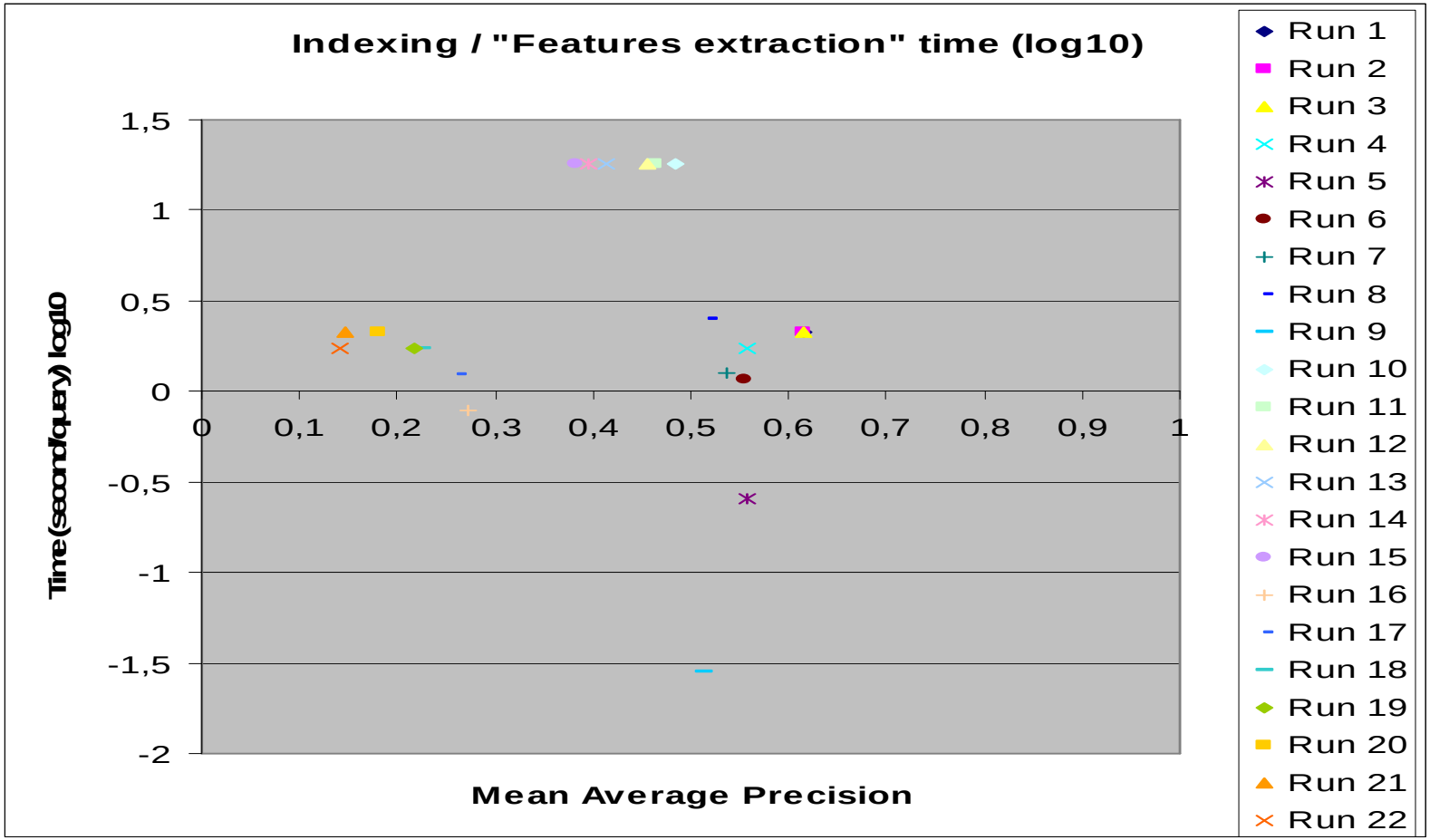
Run	Ptocessing times	Computers characteristics
Run 1	Indexing / Features extraction: ~ 15-20 min for the whole corpus. An additional cost of 5 min for indexing features. Total ~25 min Learning : shared across different methods, but can be negligible compared to feature extraction Research / Classification (creation of the results) : 20 sec for all the queries Global processing : ~25 min	(1) Pentium4, 2.53Ghz, 628 Mo (2) Sun V40z, quadric Opteron, 2.5Ghz, 8Go
Run 2	Indexing / Features extraction: ~ 15-20 min for the whole corpus. An additional cost of 5 min for indexing features. Total ~25 min Learning : shared across different methods, but can be negligible compared to feature extraction Research / Classification (creation of the results) : 20 sec for all the queries Global processing : ~25 min	(1) Pentium4, 2.53Ghz, 628 Mo (2) Sun V40z, quadric Opteron, 2.5Ghz, 8Go
Run 3	Indexing / Features extraction: ~ 15-20 min for the whole corpus. An additional cost of 5 min for indexing features. Total ~25 min Learning : shared across different methods, but can be negligible compared to feature extraction Research / Classification (creation of the results) : 35 sec for all the queries Global processing : ~25 min	(1) Pentium4, 2.53Ghz, 628 Mo (2) Sun V40z, quadric Opteron, 2.5Ghz, 8Go
Run 4	Indexing / Features extraction : ~ 15-20 min for the whole corpus Learning : shared across different methods, but can be negligible compared to feature extraction Research / Classification (creation of the results) :10 sec for all the queries, (computing image similarities) Global processing : ~20 min Extra time : Conversion Data 5 min	(1) Pentium4, 2.53Ghz, 628 Mo (2) Sun V40z, quadric Opteron, 2.5Ghz, 8Go
Run 5	Indexing / Features extraction : 3 min to index the total collection of text Research / Classification (creation of the results) :1 sec for all the queries Global processing : ~ 3 min	Pentium4, 2.53Ghz, 628 Mo
Run 6	Indexing / Features extraction : ~ 15-20 min for the whole corpus Learning : shared across different methods, but can be negligible compared to feature extraction Research / Classification (creation of the results) :10 sec for all the queries, (computing image similarities) Global processing : ~20 min Extra time : Conversion Data 5 min	(1) Pentium4, 2.53Ghz, 628 Mo (2) Sun V40z, quadric Opteron, 2.5Ghz, 8Go
Run 7	Indexing / Features extraction : visual extraction and indexing : 869 secondes for 5153 images ; textual extraction : 20 secondes (Note : some images were not processed (giff/tiff))	Bi-Xéon, 3GHz, 4 Go
Run 8	Features extraction : 1750 s	Pentium4, 2,4 GHz, 512 Mo

	Retrieval : 2.5 second/query	
Run 9	Indexing / Features extraction : textual extraction : 20 secondes	Bi-Xéon, 3GHz, 4 Go
Run 10	Indexing / Features extraction : 3h30 **(downloading time included)** Research / Classification (creation of the results) : ~12.5 min	Intel Celeron, 2,4 Ghz, 1Go
Run 11	Indexing / Features extraction : 3h30 **(downloading time included)** Research / Classification (creation of the results) : ~12.5 min	Intel Celeron, 2,4 Ghz, 1Go
Run 12	Indexing / Features extraction : 3h30 **(downloading time included)** Research / Classification (creation of the results) : ~12.5 min	Intel Celeron, 2,4 Ghz, 1Go
Run 13	Indexing / Features extraction : 3h30 **(downloading time included)** Research / Classification (creation of the results) : ~21.5 min	Intel Celeron, 2,4 Ghz, 1Go
Run 14	Indexing / Features extraction : 3h30 **(downloading time included)** Research / Classification (creation of the results) : ~21.5 min	Intel Celeron, 2,4 Ghz, 1Go
Run 15	Indexing / Features extraction : 3h30 **(downloading time included)** Research / Classification (creation of the results) : ~21.5 min	Intel Celeron, 2,4 Ghz, 1Go
Run 16	Features extraction : 550 s Retrieval : 0.75 second/query	Pentium4, 2,4 GHz, 512 Mo
Run 17	Indexing / Features extraction : visual extraction and indexing : 869 seconds for 5153 images Note : some images were not processed (giff/tiff)	Bi-Xéon, 3GHz, 4 Go
Run 18	Features extraction : 1200 s Retrieval : 1.5 second/query	P4entium, 2,4 GHz, 512 Mo
Run 19	Features extraction : 1200 s Retrieval : 1.5 second/query	Pentium4, 2,4 GHz, 512 Mo
Run 20	Indexing / Features extraction: ~ 15-20 min for the whole corpus. An additional cost of 5 min for indexing features. Total ~25 min Learning : shared across different methods, but can be negligible compared to feature extraction Research / Classification (creation of the results) : 35 sec for all the queries Global processing : ~25 min	(1) Pentium4, 2.53Ghz, 628 Mo (2) Sun V40z, quadric Opteron, 2.5Ghz, 8Go
Run 21	Indexing / Features extraction: ~ 15-20 min for the whole corpus. An additional cost of 5 min for indexing features. Total ~25 min Learning : shared across different methods, but can be negligible compared to feature extraction Research / Classification (creation of the results) : 20 sec for all the queries Global processing : ~25 min	(1) Pentium4, 2.53Ghz, 628 Mo (2) Sun V40z, quadric Opteron, 2.5Ghz, 8Go
Run 22	Indexing / Features extraction : ~ 15-20 min for the whole corpus Learning : shared across different methods, but can be negligible compared to feature extraction Research / Classification (creation of the results) :10 sec for all the queries (computing image similarities) Global processing : ~20 min Extra time: Conversion Data : 5 min	(1) P4, 2.53Ghz, 628 Mo (2) Sun V40z, quadric Opteron, 2.5Ghz, 8Go

MAP + Retrieval (second/query) log10 scale

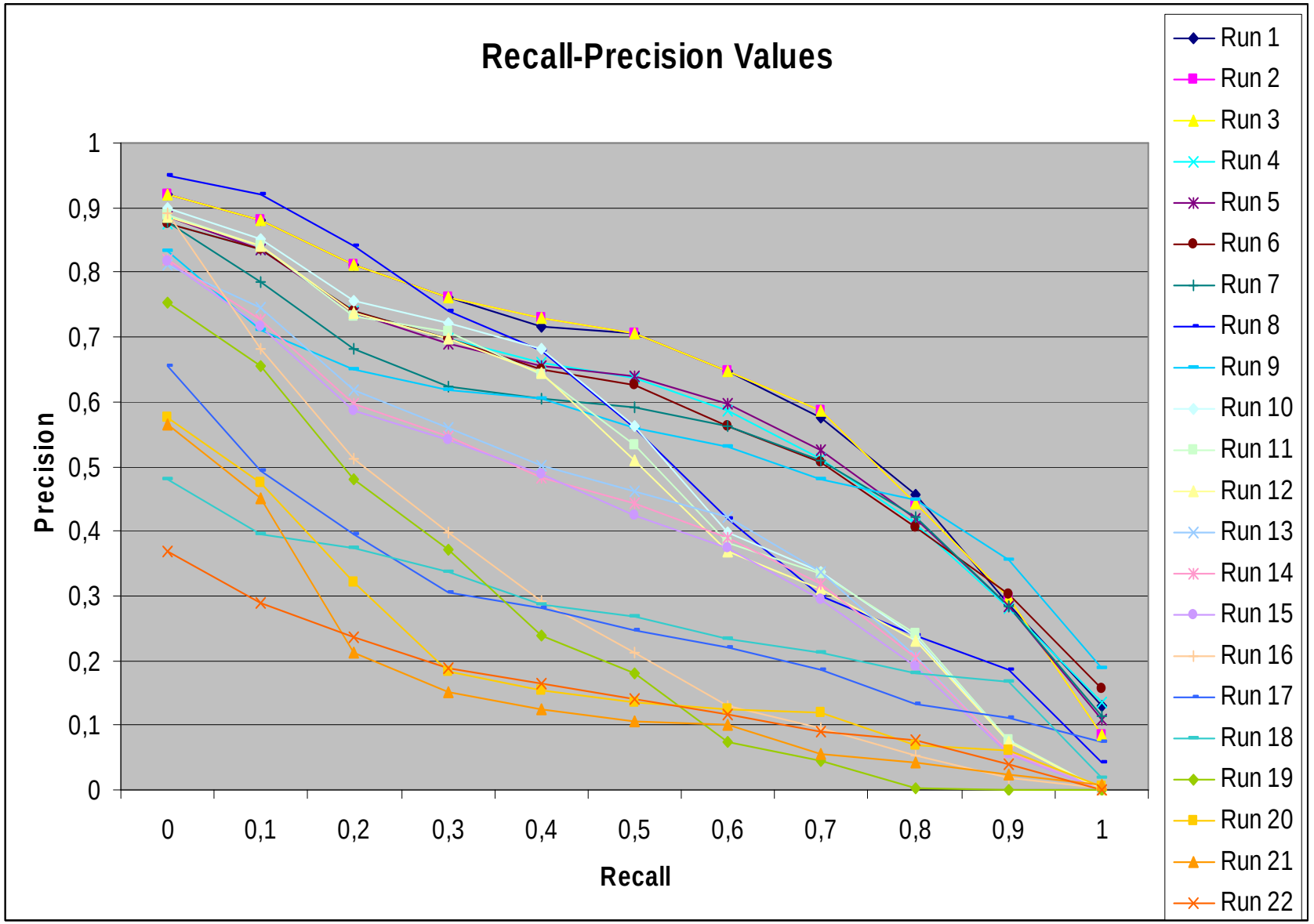


MAP + Indexing / “Features extraction"

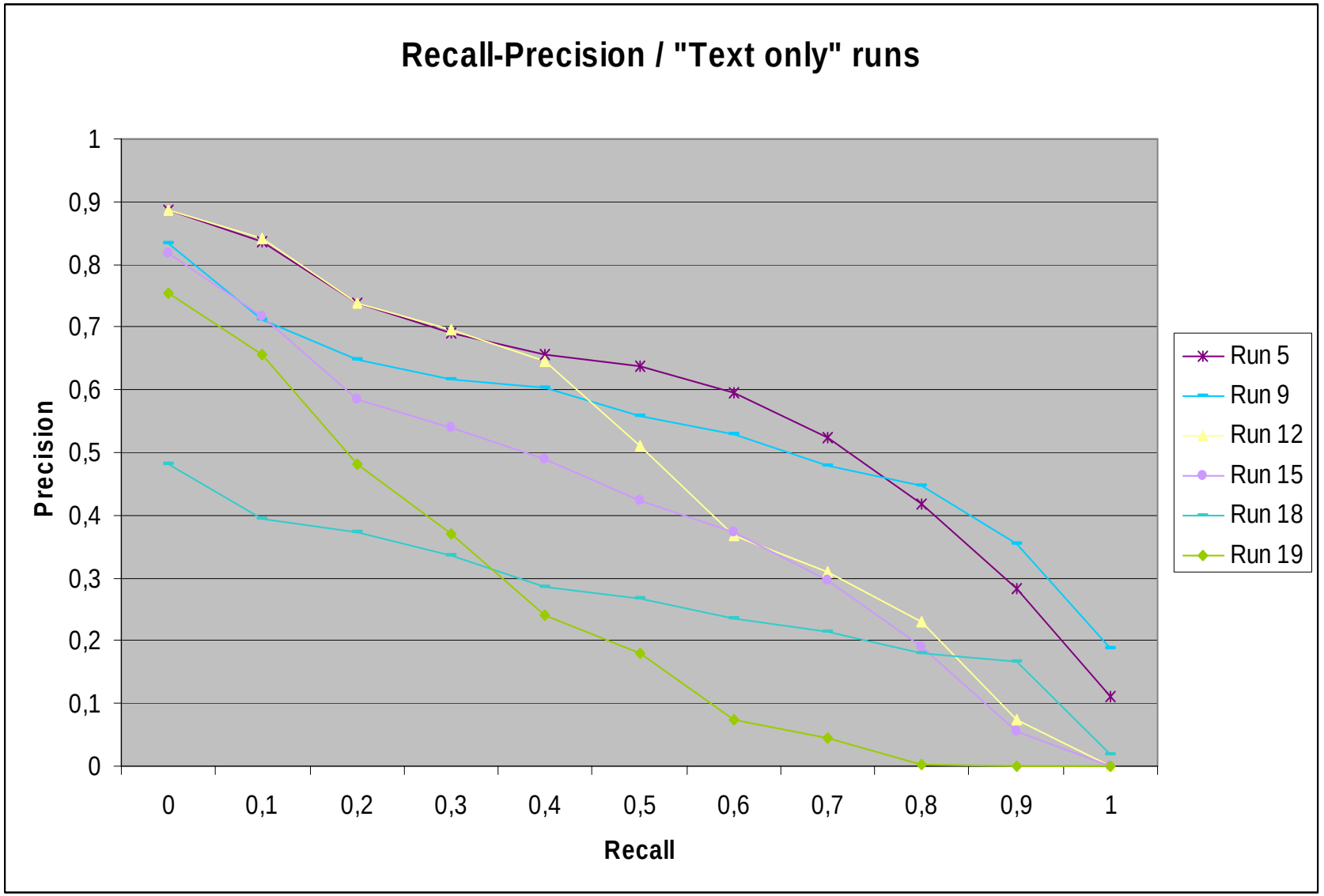


NB : run 10, 11, 12, 13, 14, 15 downloading time included

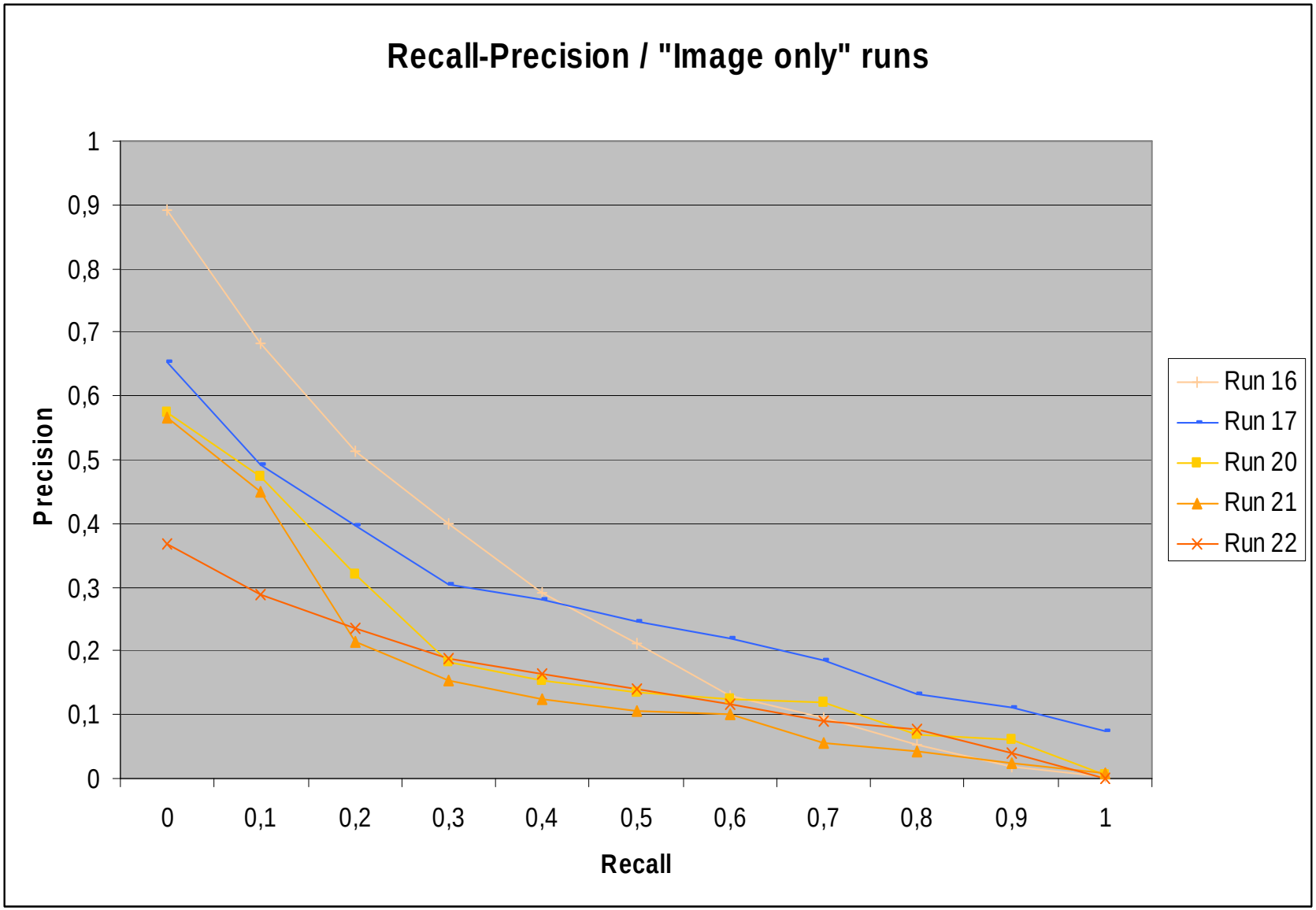
Recall / Precision (all runs)



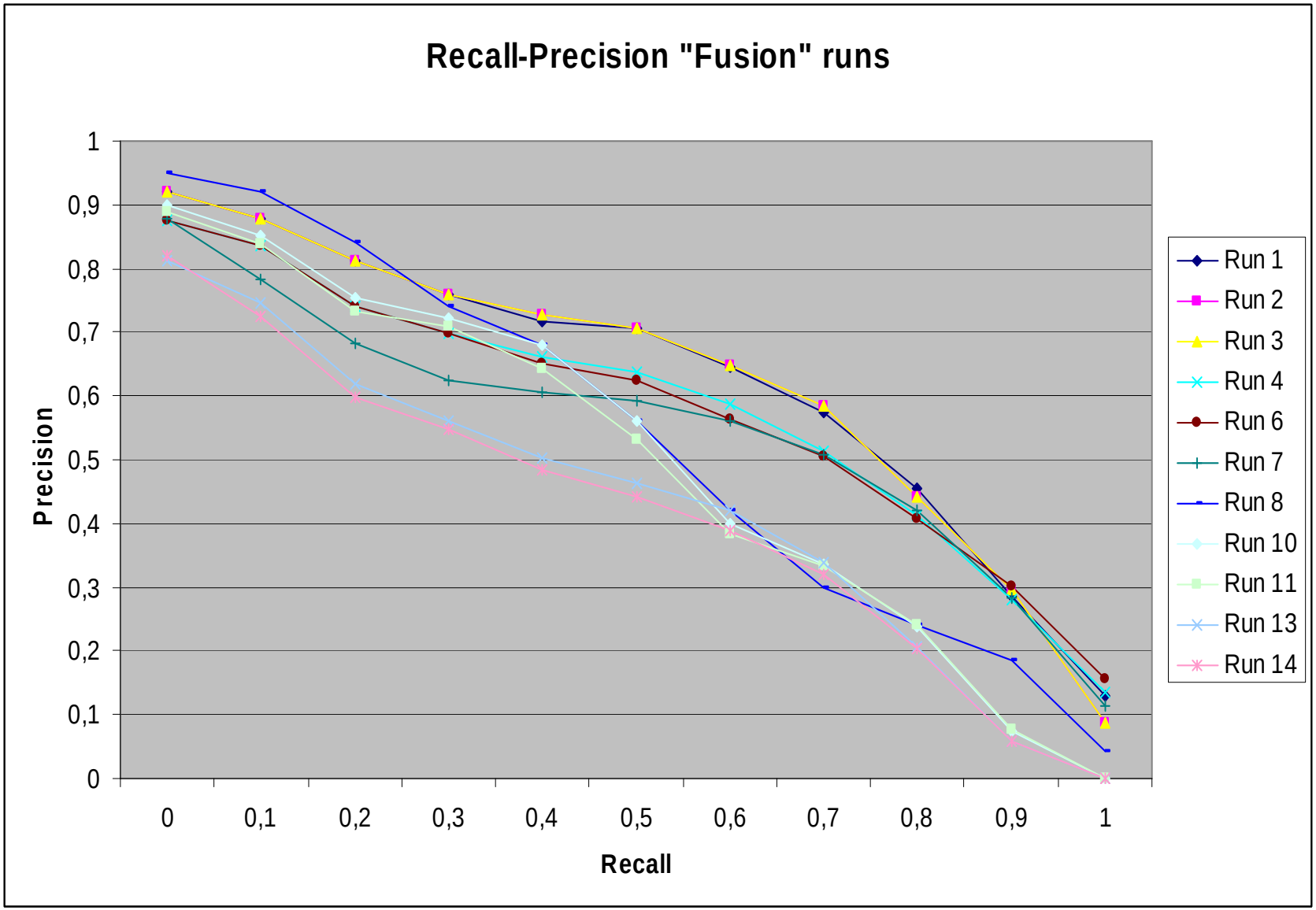
- Recall – Precision. Text only



- Recall – Precision. Image only



- Recall – Precision. Fusion



- % Global recall = relevant_retrieved / relevant (300 answers/query)

Mean % over the runs, for each query

Query	1	2	3	4	5	6	7	8	9	10	11	12	13
%	83,22	67,02	65,00	79,59	72,49	76,92	77,13	77,27	87,99	44,35	90,08	59,76	75.07
Query	14	15	16	17	18	19	20	21	22	23	24	25	
%	69,07	74,24	71,36	82,15	80,45	65,35	69,70	70,94	80,30	81,14	71,29	77,84	

Mean % over the queries, over the runs

Run	1	2	3	4	5	6	7	8	9	10	11	12	13
%	88,80	90,47	90,47	88,27	88,04	88,82	93,55	87,15	96,96	69,95	69,95	69,95	75,36
Run	14	15	16	17	18	19	20	21	22				
%	75,10	75,10	57,87	75,52	83,94	48,55	36,54	31,53	45,88				

Detailed results

- Average Precision (query, run)

	Run1	Run2	Run3	Run4	Run5	Run6	Run7	Run8	Run9	Run10	Run11	Run12
1	0,6435	0,6276	0,6276	0,5964	0,5902	0,5964	0,526	0,5176	0,666	0,6541	0,6604	0,6612
2	0,5387	0,5377	0,5377	0,5895	0,5849	0,5895	0,2044	0,3924	0,2048	0,392	0,3734	0,3696
3	0,5034	0,4995	0,4995	0,41	0,402	0,41	0,143	0,336	0,1513	0,2061	0,2051	0,1931
4	0,9777	0,9739	0,9739	0,9267	0,9264	0,9265	0,96	0,4853	0,9695	0,8853	0,875	0,844
5	0,4966	0,4961	0,4961	0,7284	0,6744	0,7284	0,1439	0,6493	0,117	0,345	0,3189	0,3269
6	0,0831	0,0941	0,0941	0,0284	0,0238	0,0339	0,1731	0,5501	0,0502	0,4615	0,4615	0,4615
7	0,1356	0,1497	0,1497	0,1058	0,0859	0,1155	0,1772	0,3754	0,1183	0,2537	0,2666	0,259
8	0,4808	0,4545	0,4545	0,3521	0,5081	0,1555	0,3355	0,6636	0,5775	0,5879	0,4925	0,4857
9	0,765	0,8371	0,8371	0,5379	0,5366	0,6323	0,7585	0,7897	0,5551	0,7046	0,7218	0,6269
10	0,238	0,2677	0,2677	0,2346	0,2271	0,2628	0,3838	0,1181	0,3901	0,1564	0,1588	0,1637
11	0,7408	0,7491	0,7491	0,5838	0,5803	0,5876	0,3359	0,7282	0,2341	0,6771	0,659	0,6001
12	0,7353	0,6944	0,6944	0,6183	0,6256	0,6153	0,4796	0,379	0,4764	0,3594	0,3614	0,3504
13	0,5745	0,5418	0,5418	0,4931	0,4906	0,4931	0,701	0,5886	0,7423	0,5182	0,5112	0,5087
14	0,6896	0,6847	0,6847	0,6415	0,6609	0,6426	0,5972	0,9138	0,537	0,474	0,4718	0,4537
15	0,683	0,6744	0,6744	0,6954	0,691	0,7088	0,8231	0,3542	0,7074	0,6694	0,5191	0,5612
16	0,587	0,5894	0,5894	0,4703	0,4707	0,4621	0,7041	0,392	0,5664	0,2597	0,2508	0,2493
17	0,6728	0,6578	0,6578	0,6264	0,6044	0,6267	0,8327	0,6231	0,7504	0,6443	0,6594	0,6516
18	0,9261	0,9261	0,9261	0,9226	0,9261	0,8999	0,8906	0,7048	0,9173	0,3906	0,3885	0,3919
19	0,6041	0,5999	0,5999	0,4617	0,5145	0,4246	0,3844	0,3832	0,4214	0,4276	0,4097	0,4074
20	0,7387	0,7387	0,7387	0,6035	0,6354	0,6022	0,5047	0,64	0,4896	0,4381	0,4038	0,3967
21	0,5839	0,6099	0,6099	0,5715	0,5756	0,5835	0,7631	0,5872	0,63	0,4156	0,4107	0,4044
22	0,7954	0,7859	0,7859	0,7826	0,7024	0,7826	0,906	0,429	0,9283	0,4181	0,3454	0,3672
23	0,8494	0,8265	0,8265	0,7917	0,779	0,7963	0,8232	0,7033	0,8461	0,9375	0,9378	0,8942
24	0,7358	0,7358	0,7358	0,6371	0,6607	0,6371	0,6913	0,3242	0,6262	0,3448	0,2608	0,2721
25	0,6293	0,6293	0,6293	0,5638	0,4901	0,5638	0,1598	0,3054	0,1448	0,4935	0,4606	0,4838

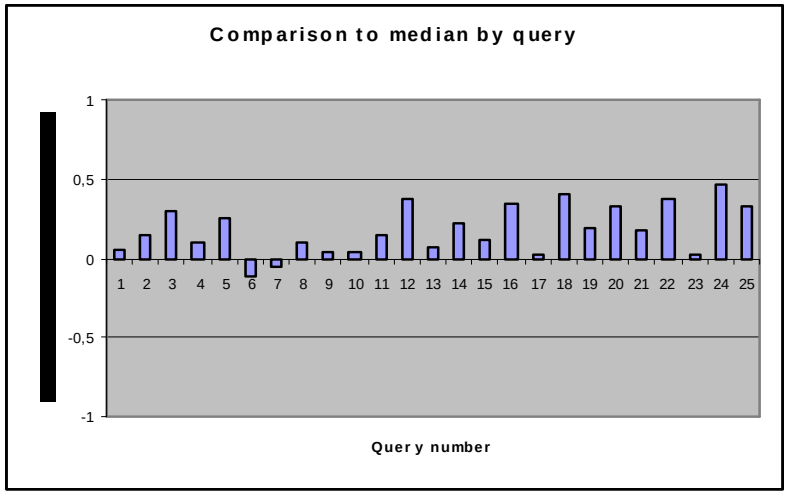
	Run13	Run14	Run15	Run16	Run17	Run18	Run19	Run20	Run21	Run22
1	0,6541	0,6604	0,6612	0,2418	0,2735	0,2216	0,3336	0,123	0,1291	0,0709
2	0,4817	0,4571	0,4443	0,2469	0,0321	0,0723	0,2411	0,0164	0,0056	0,0382
3	0,2168	0,1944	0,1869	0,2503	0,0471	0,1625	0,3231	0,0574	0,029	0,0113
4	0,8853	0,875	0,844	0,1577	0,5432	0,2087	0,0712	0,0251	0,0024	0,0483
5	0,2135	0,2016	0,2186	0,2475	0,069	0,1421	0,2025	0	0	0,0005

6	0,2787	0,2421	0,1901	0,8319	0,7709	0,1951	0,0858	0,5763	0,397	0,1145
7	0,1489	0,1845	0,1745	0,702	0,4117	0,1181	0,2687	0,4463	0,4618	0,4177
8	0,4649	0,3827	0,3843	0,3021	0,2189	0,2424	0,1605	0,2325	0,1668	0,134
9	0,7046	0,7218	0,6269	0,5061	0,7345	0,1746	0,216	0,8198	0,7617	0,8655
10	0,2039	0,2206	0,199	0,1152	0,1714	0,0734	0,1292	0,2288	0,0228	0,0216
11	0,6746	0,6539	0,5959	0,6086	0,393	0,2277	0,3501	0,8158	0,5871	0,5556
12	0,1899	0,1969	0,1891	0,0822	0,0419	0,2589	0,1023	0,0526	0,0639	0,058
13	0,5351	0,5671	0,5576	0,1372	0,1578	0,3035	0,3091	0,0724	0,007	0,0127
14	0,1949	0,1857	0,1874	0,0969	0,2919	0,8561	0,1064	0,0054	0,0284	0,0201
15	0,6337	0,4058	0,4361	0,033	0,0547	0,3003	0,1879	0,002	0,0038	0,018
16	0,1228	0,1226	0,1179	0,2222	0,1295	0,1588	0,1394	0,0979	0,0194	0,0388
17	0,6443	0,6594	0,6516	0,2167	0,2977	0,3212	0,2738	0,189	0,2808	0,0641
18	0,3906	0,3885	0,3919	0,1874	0,5225	0,2031	0,0555	0,2276	0,2004	0,6665
19	0,423	0,3999	0,4011	0,1435	0,0033	0,2448	0,1519	0,0112	0,0088	0,0018
20	0,3081	0,2945	0,2904	0,2716	0,1149	0,1169	0,2365	0,1103	0,0627	0,0368
21	0,4101	0,4011	0,3958	0,1924	0,2832	0,3549	0,3257	0,0113	0,0726	0,1287
22	0,4181	0,3454	0,3672	0,288	0,0262	0,1829	0,1402	0,1333	0,1111	0,1183
23	0,9375	0,9378	0,8942	0,2766	0,5874	0,3396	0,3347	0,0049	0,001	0,0027
24	0,1452	0,1064	0,0953	0,2047	0,0515	0,0695	0,2647	0,2179	0,1802	0,0648
25	0,0761	0,0548	0,0576	0,2116	0,3002	0,0994	0,4175	0,037	0,0625	0,0105

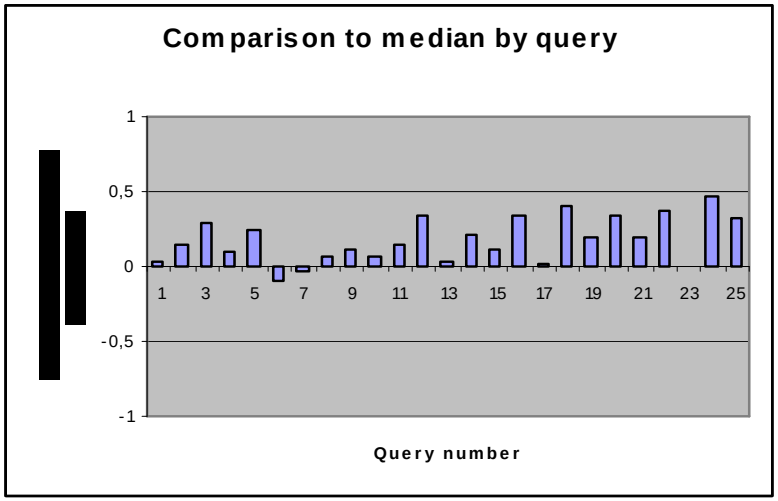
- Comparison to median by query

X = Query number, Y = Difference to the average precision median

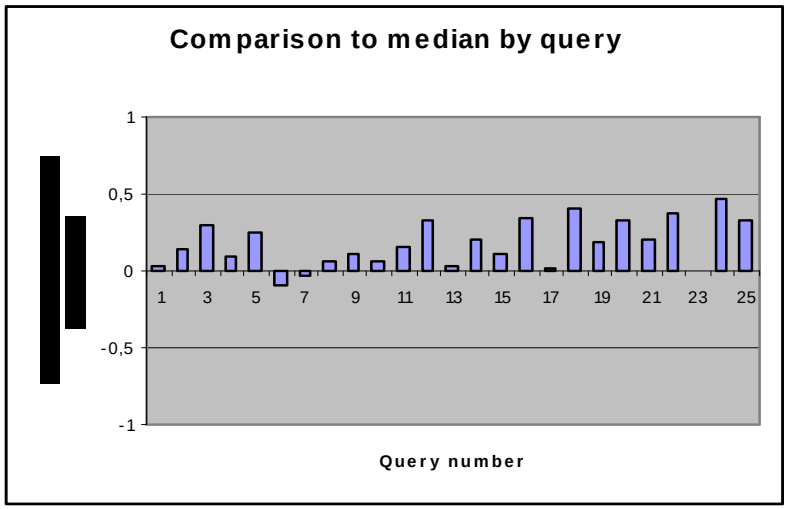
Run 1



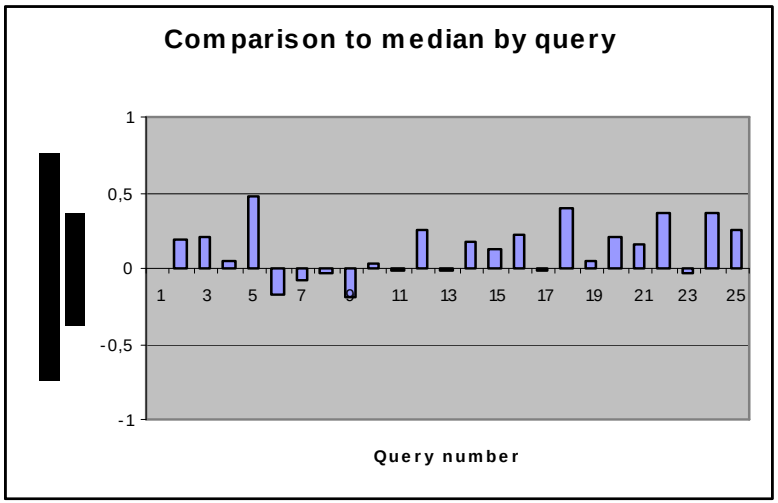
Run 2



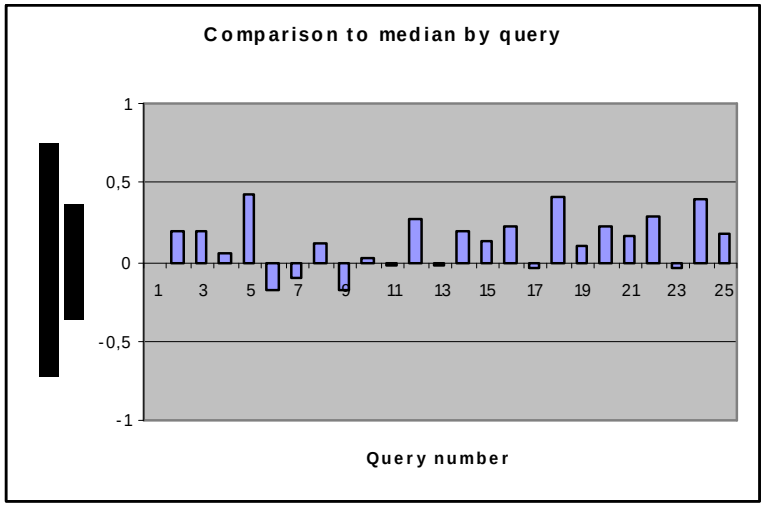
Run 3



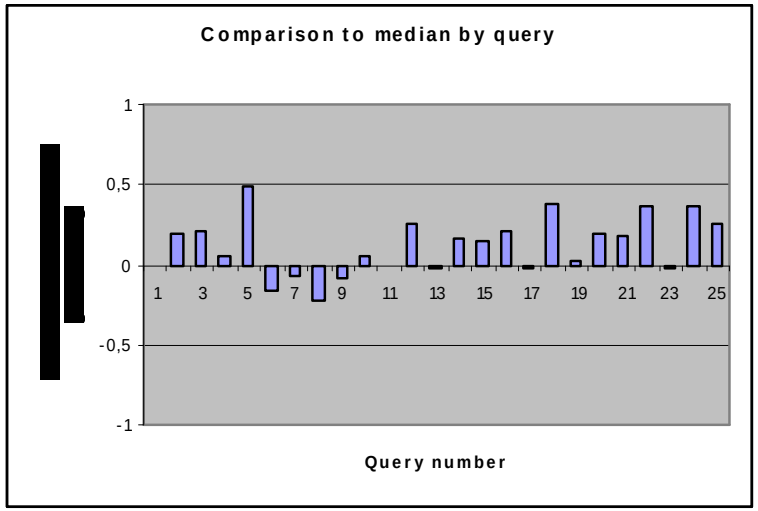
Run 4



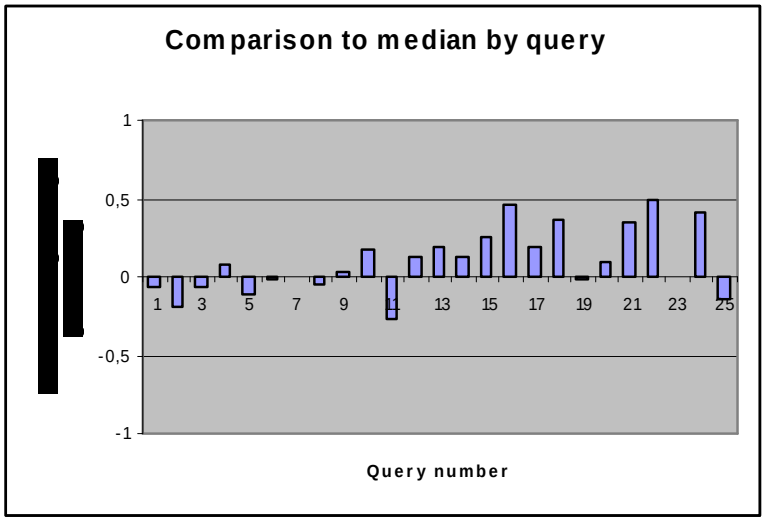
Run 5



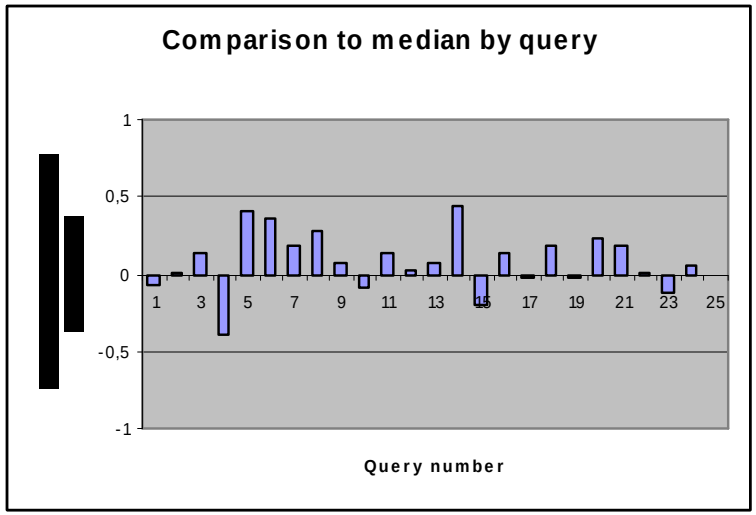
Run 6



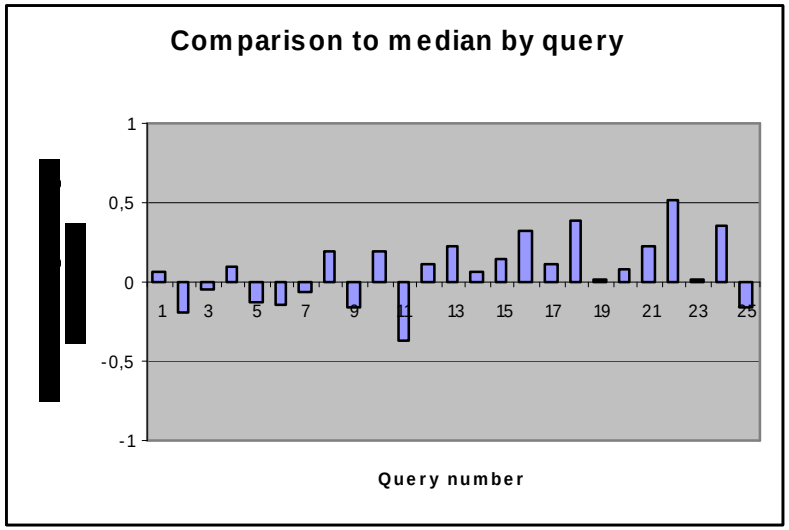
Run 7



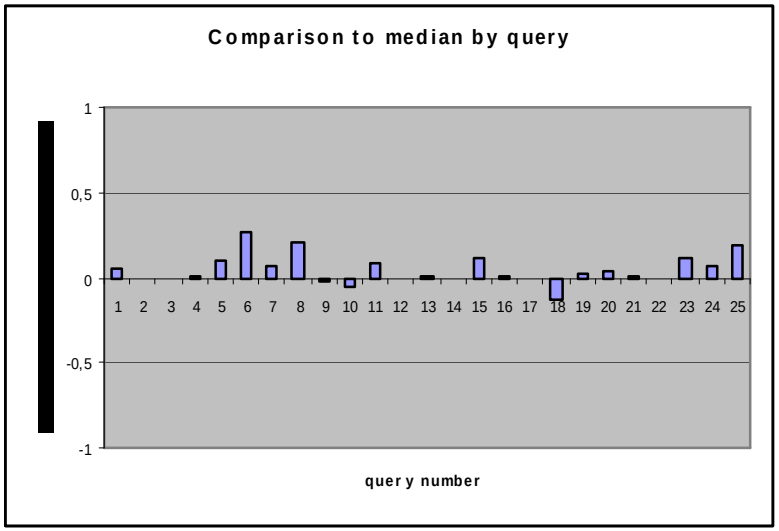
Run 8



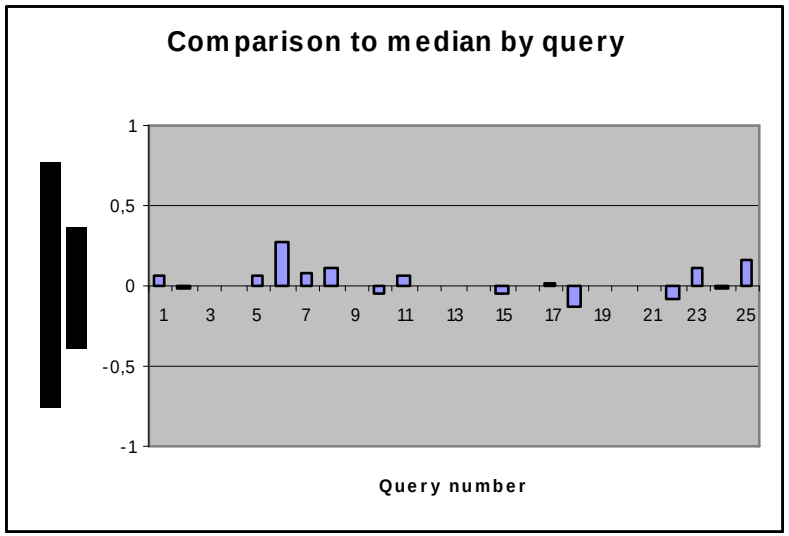
Run 9



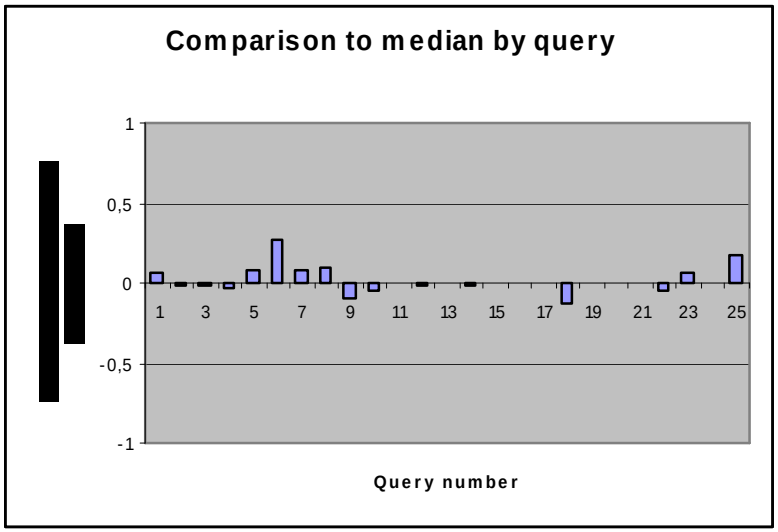
Run 10



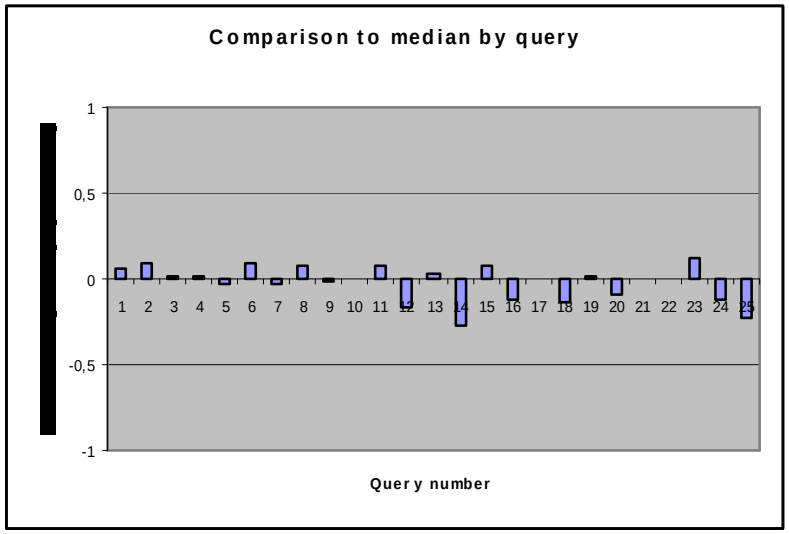
Run 11



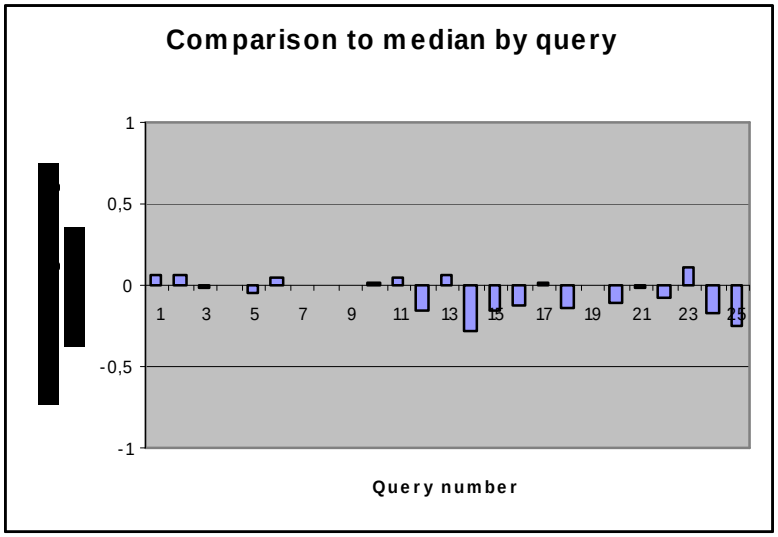
Run 12



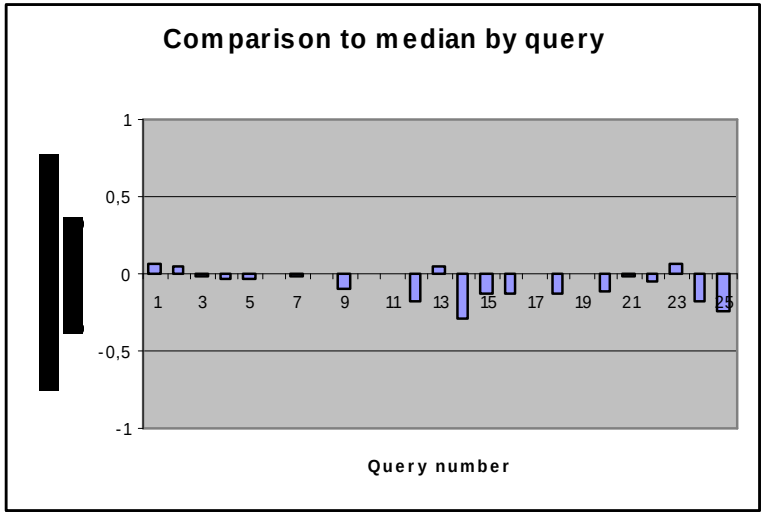
Run13



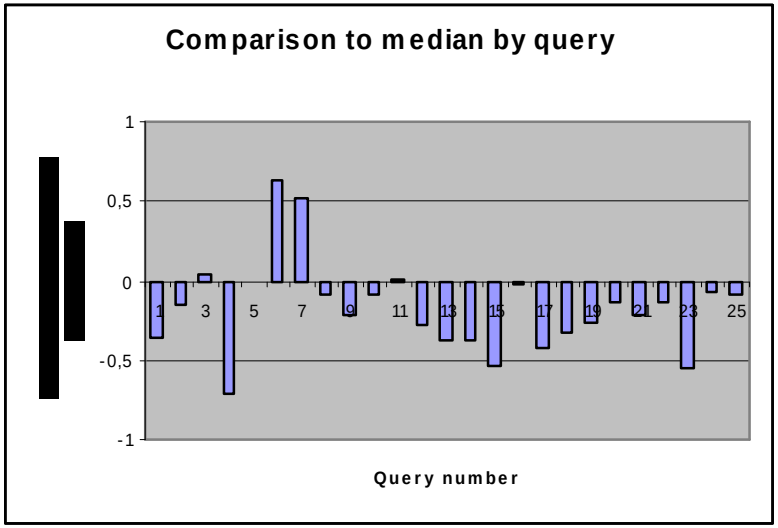
Run14



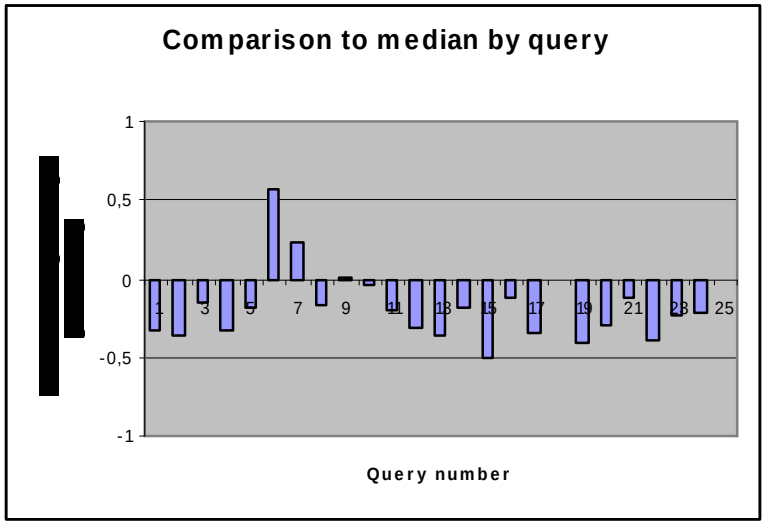
Run15



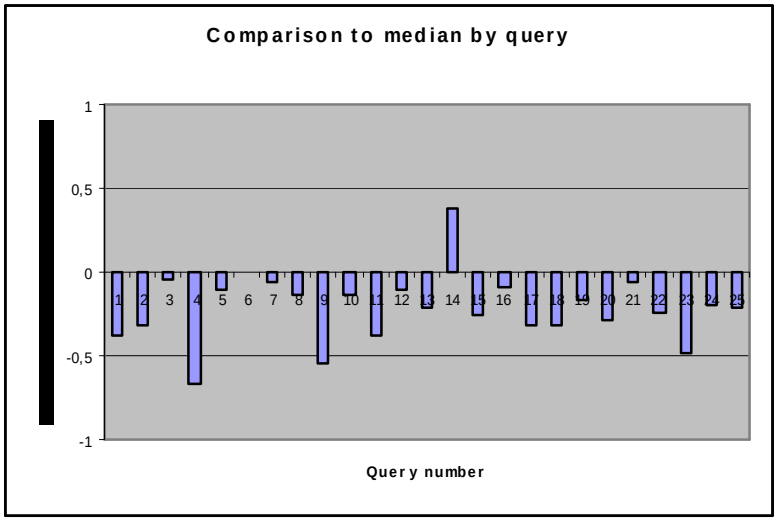
Run16



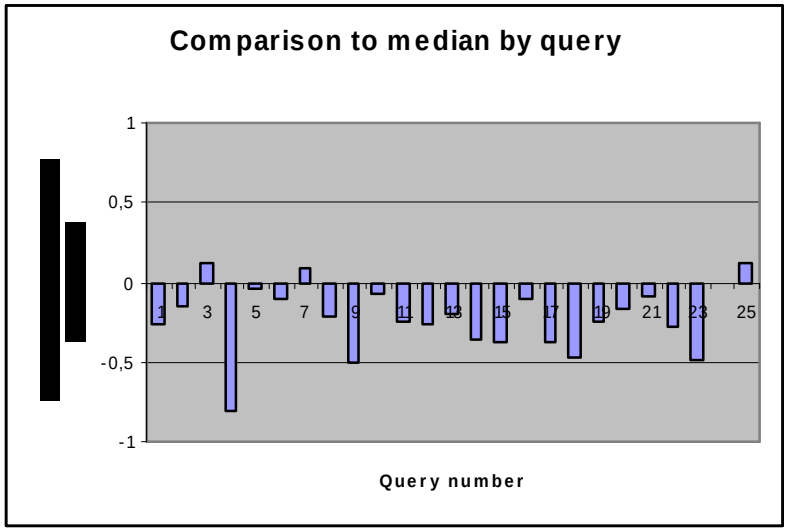
Run17



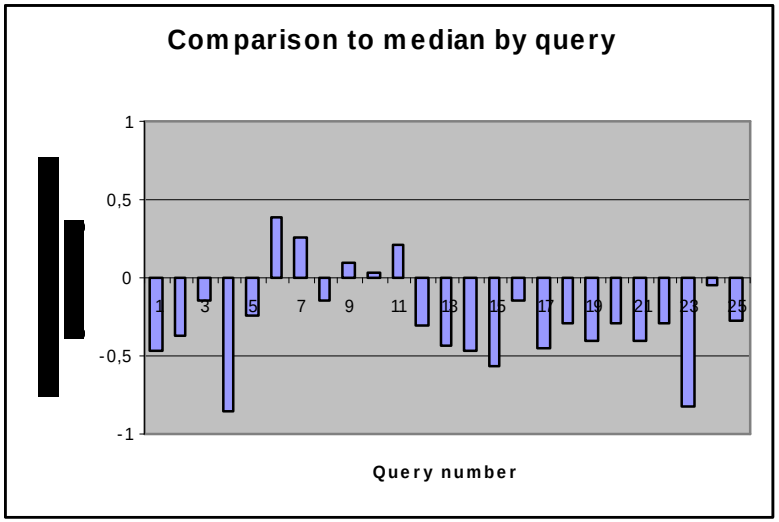
Run18



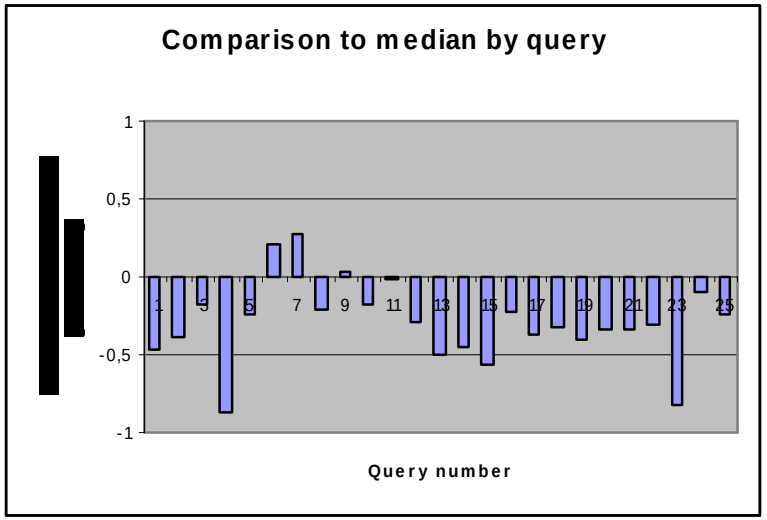
Run19



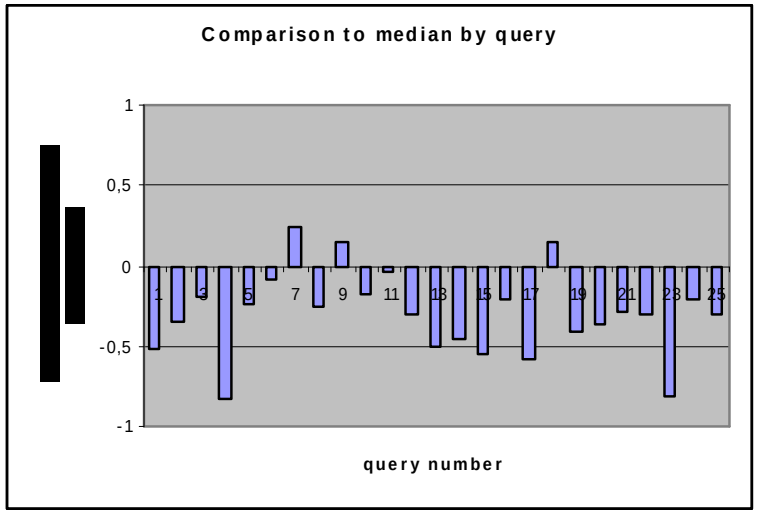
Run20



Run21


Comparison to median by query
1
0,5
0
-0,5
-1
1
3
5
7
9
11
13
15
17
19
21
23
25
Query number

Run22


Comparison to median by query
1
0,5
0
-0,5
-1
1
3
5
7
9
11
13
15
17
19
21
23
25
query number

% Global recall (ratio relevant_retrieved/relevant) NB: 300 answers/query

	Run1	Run2	Run3	Run4	Run5	Run6	Run7	Run8	Run9	Run10	Run11	Run12
1	100,00	97,44	97,44	100,00	100,00	100,00	100,00	97,44	100,00	89,74	89,74	89,74
2	92,31	92,31	92,31	92,31	92,31	92,31	89,74	74,36	97,44	46,15	46,15	46,15
3	85,00	85,00	85,00	85,00	85,00	85,00	90,00	85,00	95,00	50,00	50,00	50,00
4	100,00	100,00	100,00	100,00	100,00	100,00	100,00	98,94	100,00	89,36	89,36	89,36
5	100,00	100,00	100,00	100,00	100,00	100,00	100,00	94,74	100,00	57,89	57,89	57,89
6	69,23	92,31	92,31	69,23	69,23	84,62	92,31	92,31	84,62	46,15	46,15	46,15
7	87,10	100,00	100,00	87,10	87,10	96,77	93,55	58,06	93,55	51,61	51,61	51,61
8	84,21	78,95	78,95	84,21	84,21	31,58	100,00	100,00	100,00	94,74	94,74	94,74
9	85,71	100,00	100,00	78,57	78,57	100,00	100,00	100,00	100,00	78,57	78,57	78,57
10	39,39	48,48	48,48	36,36	34,85	53,03	84,85	60,61	95,45	18,18	18,18	18,18
11	90,91	100,00	100,00	90,91	90,91	100,00	100,00	90,91	100,00	81,82	81,82	81,82
12	88,64	80,68	80,68	88,64	88,64	87,50	79,55	70,45	85,23	55,68	55,68	55,68
13	100,00	90,91	90,91	100,00	100,00	100,00	90,91	90,91	100,00	69,70	69,70	69,70
14	76,47	74,51	74,51	76,47	76,47	78,43	96,08	98,04	100,00	84,31	84,31	84,31
15	87,88	84,85	84,85	84,85	84,85	90,91	90,91	96,97	100,00	93,94	93,94	93,94
16	95,00	95,00	95,00	95,00	95,00	90,00	92,50	90,00	100,00	55,00	55,00	55,00
17	100,00	95,12	95,12	100,00	97,56	100,00	100,00	100,00	100,00	78,05	78,05	78,05
18	93,33	93,33	93,33	93,33	93,33	93,33	93,33	93,33	93,33	83,33	83,33	83,33
19	96,23	94,34	94,34	96,23	96,23	73,58	88,68	41,51	92,45	75,47	75,47	75,47
20	88,89	88,89	88,89	88,89	88,89	88,89	94,44	94,44	100,00	50,00	50,00	50,00
21	64,71	74,51	74,51	64,71	62,75	74,51	92,16	82,35	92,16	82,35	82,35	82,35
22	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	88,89	88,89	88,89
23	95,00	95,00	95,00	95,00	95,00	100,00	100,00	100,00	100,00	95,00	95,00	95,00
24	100,00	100,00	100,00	100,00	100,00	100,00	94,74	68,42	94,74	57,89	57,89	57,89
25	100,00	100,00	100,00	100,00	100,00	100,00	75,00	100,00	100,00	75,00	75,00	75,00

	Run13	Run14	Run15	Run16	Run17	Run18	Run19	Run20	Run21	Run22
1	89,74	89,74	89,74	46,15	100,00	94,87	71,79	28,21	28,21	30,77
2	74,36	71,79	71,79	48,72	38,46	66,67	76,92	10,26	12,82	48,72
3	60,00	60,00	60,00	50,00	55,00	95,00	45,00	25,00	25,00	25,00
4	89,36	89,36	89,36	40,43	100,00	97,87	15,96	19,15	5,32	37,23
5	63,16	63,16	63,16	68,42	100,00	94,74	68,42	0,00	0,00	5,26
6	84,62	84,62	84,62	100,00	92,31	53,85	38,46	92,31	92,31	84,62
7	70,97	70,97	70,97	83,87	70,97	54,84	38,71	90,32	90,32	96,77
8	94,74	94,74	94,74	73,68	100,00	94,74	36,84	26,32	26,32	31,58
9	78,57	78,57	78,57	85,71	100,00	92,86	50,00	100,00	100,00	92,86
10	39,39	39,39	39,39	40,91	74,24	36,36	50,00	54,55	19,70	25,76
11	81,82	81,82	81,82	90,91	100,00	90,91	81,82	90,91	81,82	90,91
12	44,32	46,59	46,59	34,09	34,09	68,18	25,00	25,00	28,41	45,45
13	87,88	81,82	81,82	54,55	51,52	90,91	69,70	18,18	12,12	30,30
14	74,51	74,51	74,51	33,33	88,24	98,04	11,76	11,76	15,69	33,33
15	96,97	96,97	96,97	30,30	39,39	96,97	30,30	9,09	15,15	33,33
16	67,50	67,50	67,50	57,50	65,00	72,50	50,00	47,50	15,00	47,50

17	78,05	78,05	78,05	58,54	100,00	100,00	51,22	39,02	48,78	53,66
18	83,33	83,33	83,33	60,00	93,33	90,00	16,67	43,33	43,33	83,33
19	75,47	75,47	75,47	39,62	11,32	92,45	39,62	9,43	7,55	11,32
20	50,00	50,00	50,00	61,11	77,78	94,44	72,22	33,33	22,22	50,00
21	82,35	82,35	82,35	47,06	92,16	74,51	62,75	17,65	27,45	62,75
22	88,89	88,89	88,89	66,67	55,56	100,00	33,33	22,22	11,11	44,44
23	95,00	95,00	95,00	60,00	100,00	90,00	55,00	15,00	5,00	15,00
24	57,89	57,89	57,89	52,63	73,68	57,89	47,37	47,37	42,11	42,11
25	75,00	75,00	75,00	62,50	75,00	100,00	75,00	37,50	12,50	25,00

TASK 3 Text Area Detection

Global results

- Jolion & Wolf metric* and ICDAR 2003 Metric

Run	J&W Metric (Tr=0.4 ; Tp = 0.6)		3 Best runs
	Ponctual (Hmean)	Integration (Hmean)	
Run 1	0.605313	Overall recall = 64.9 Overall precision = 50.7 Final single performance value = **56.9**	Run1 = CMM cmm04 Run2 = CMM cmm03 Run3 = CMM cmm02
Run 2	0.584094	Overall recall = 63.5 Overall precision = 49.2 Final single performance value = **55.5**	
Run 3	0.582745	Overall recall = 63.0 Overall precision = 49.5 Final single performance value = **55.4**	
Run 4	0.575404	Overall recall = 60.4 Overall precision = 49.8 Final single performance value = **54.6**	**3 Best teams**
Run 5	0.209277	Overall recall = 23.3 Overall precision = 21.1 Final single performance value = **22.2**	1. CMM (cmm04) 2. CEA (cea01)

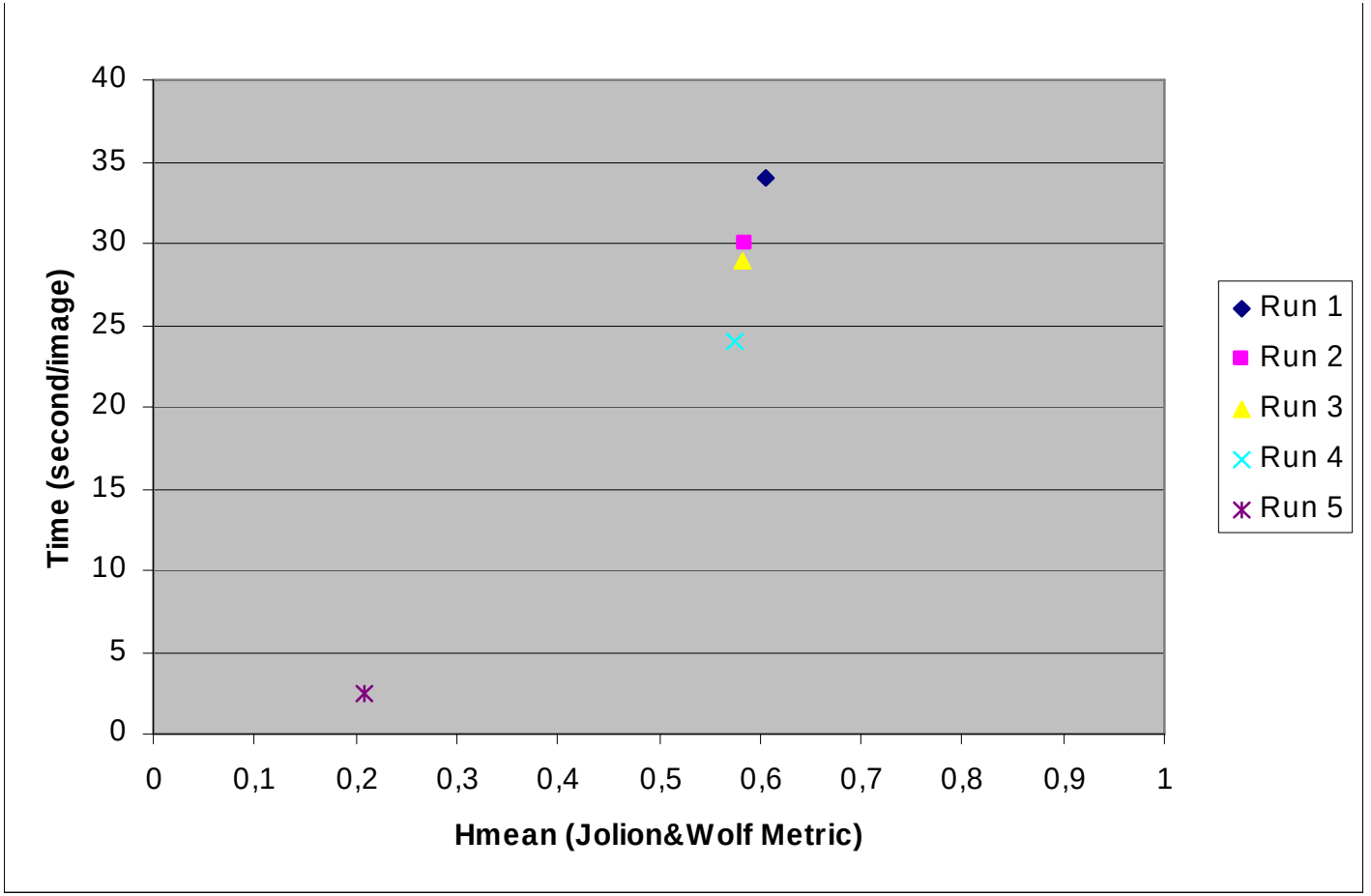
Run	ICDAR 2003 (HMean)
Run 1	0.571342
Run 2	0.559986

* Christian Wolf and Jean-Michel Jolion. *Object count/Area Graphs for the Evaluation of Object Detection and Segmentation Algorithms*, In International Journal on Document Analysis and Recognition , 8(4)2006, pp. 280-296

Run 3	0.561931
Run 4	0.554229
Run 5	0.268219

Processing times

Run number	Text detection (second/image)	Computer characteristics
Run1	35	Pentium4, 2.8 GHz, 1 Go, Windows
Run2	30	Pentium4, 2.8 GHz, 1 Go, Windows
Run3	29	Pentium4, 2.8 GHz, 1 Go, Windows
Run4	24	Pentium4, 2.8 GHz, 1 Go, Windows
Run5	2.4	Pentium4, 2.8 GHz, 512 Mo, Windows



Detailed results

- Top & down results

Distribution of the top and down results

Run	N°images : Hmean (Wolf) = 1 (A)	N°images : Hmean (ICDAR) > 0.8 (B)	Distribution (left : A; right : B)					
			Old Postcards		Color photographs		B&W Photographs	
Run 1	235	220	63	61	119	113	53	46
Run 2	227	212	60	58	115	110	52	44
Run 3	224	210	61	59	112	107	51	44
Run 4	213	199	62	61	108	102	43	36
Run 5	53	38	9	7	21	16	23	15

Number of images without text area detected

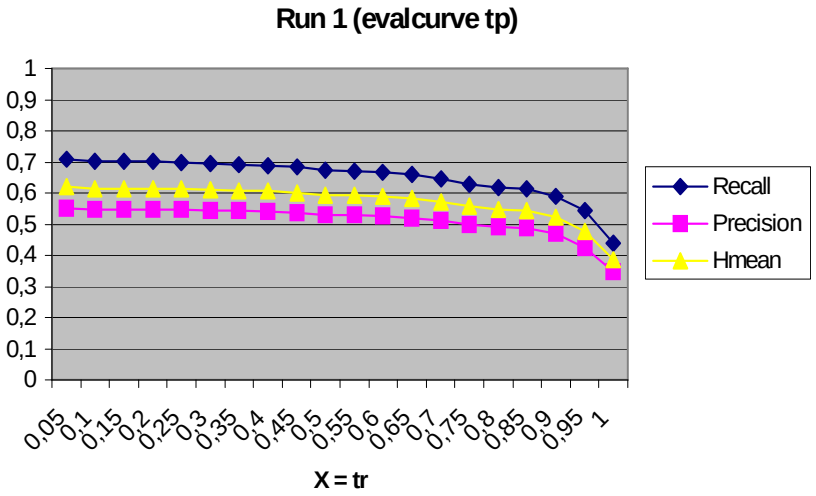
Run	Number of images without text detected
Run 1	65 (24 old postcards, 41 colour and black and white photographs)
Run 2	65 (24 old postcards, 41 colour and black and white photographs)
Run 3	65 (25 old postcards, 40 colour and black and white photographs)
Run 4	68 (25 old postcards, 43 colour and black and white photographs)
Run 5	10 (3 old postcards, 7 colours and black and white photographs)

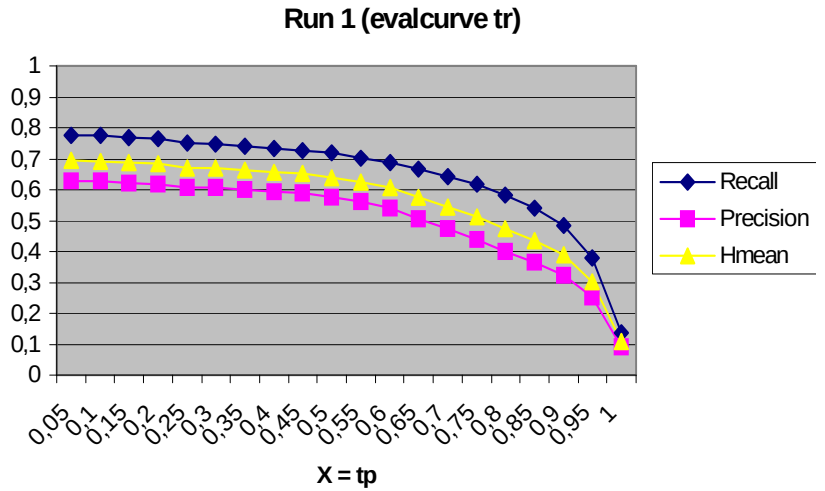
- Courbes

Note from DetEval

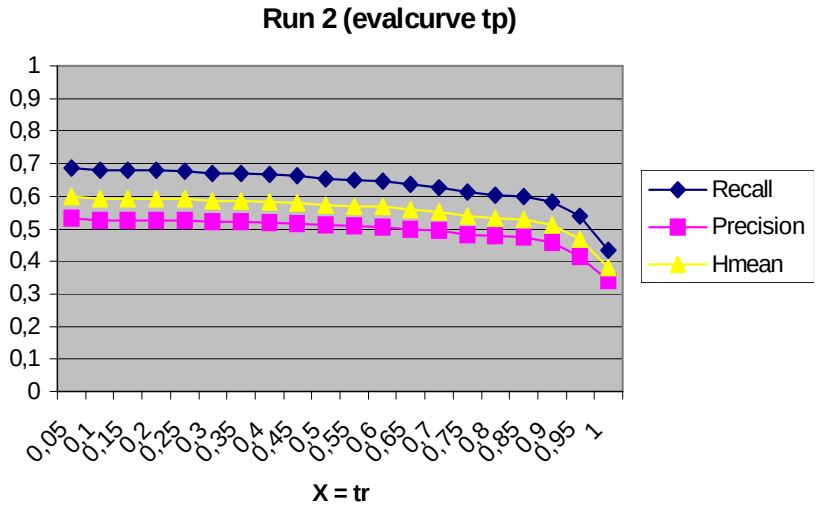
evalcurve-tr/Recall	Recall as a function of tr (text area recall)
evalcurve-tr/Precision	Precision as a function of tr (text area recall)
evalcurve-tr/Harmonic Mean	The harmonic mean of recall and precision as a function of tr (text area recall)
evalcurve-tp/Recall	Recall as a function of tp (text area precision)
evalcurve-tp/Precision	Precision as a function of tp (text area precision)
evalcurve-tp/Harmonic Mean	The harmonic mean of recall and precision as a function of tp (text area precision)

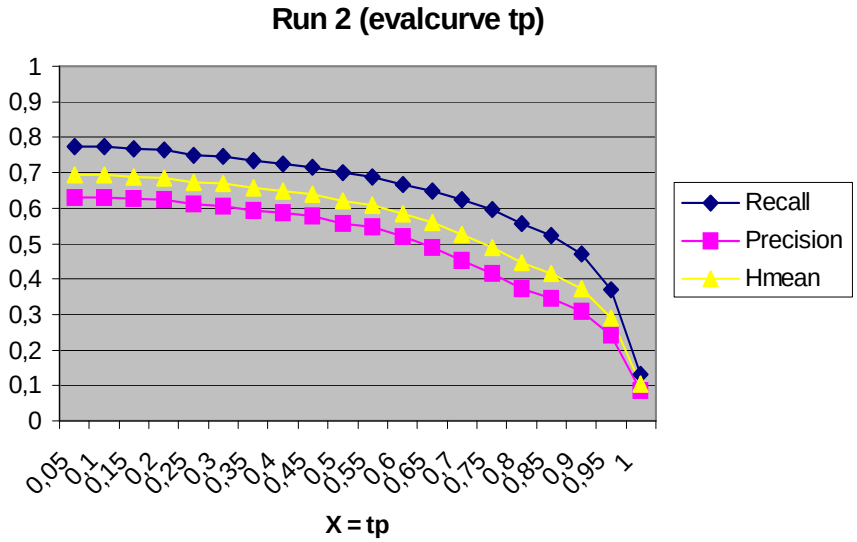
Run 1


Run 1 (evalcurve tp)
1
0,9
0,8
0,7
0,6
0,5
0,4
0,3
0,2
0,1
0
0,05 0,1 0,15 0,2 0,25 0,3 0,35 0,4 0,45 0,5 0,55 0,6 0,65 0,7 0,75 0,8 0,85 0,9 0,95 1
X = tr
Recall
Precision
Hmean

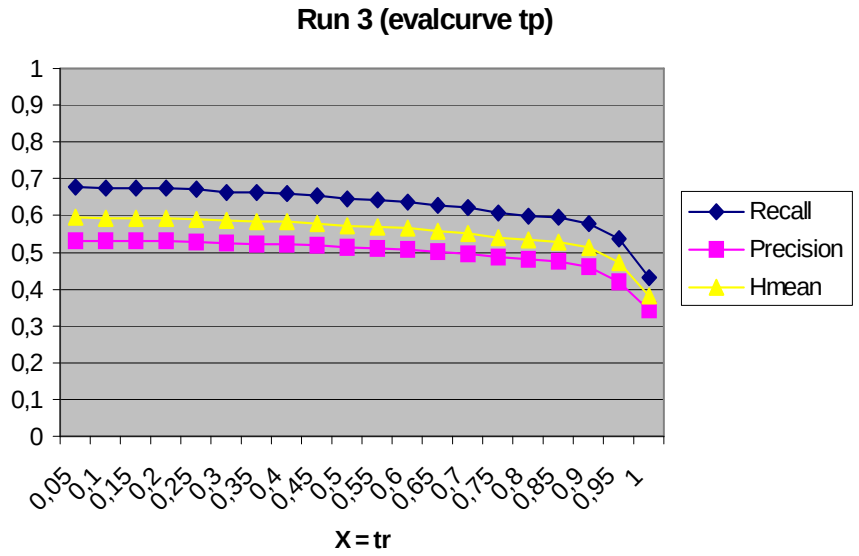

Run 1 (evalcurve tr)
1
0,9
0,8
0,7
0,6
0,5
0,4
0,3
0,2
0,1
0
0,05 0,1 0,15 0,2 0,25 0,3 0,35 0,4 0,45 0,5 0,55 0,6 0,65 0,7 0,75 0,8 0,85 0,9 0,95 1
X = tp
Recall
Precision
Hmean

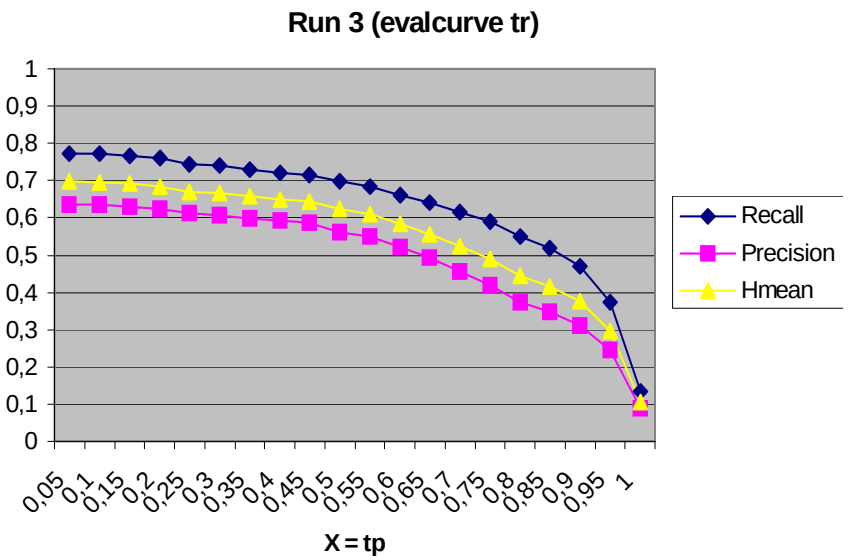
Run 2


Run 2 (evalcurve tp)
1
0,9
0,8
0,7
0,6
0,5
0,4
0,3
0,2
0,1
0
0,05 0,1 0,15 0,2 0,25 0,3 0,35 0,4 0,45 0,5 0,55 0,6 0,65 0,7 0,75 0,8 0,85 0,9 0,95 1
X = tr
Recall
Precision
Hmean

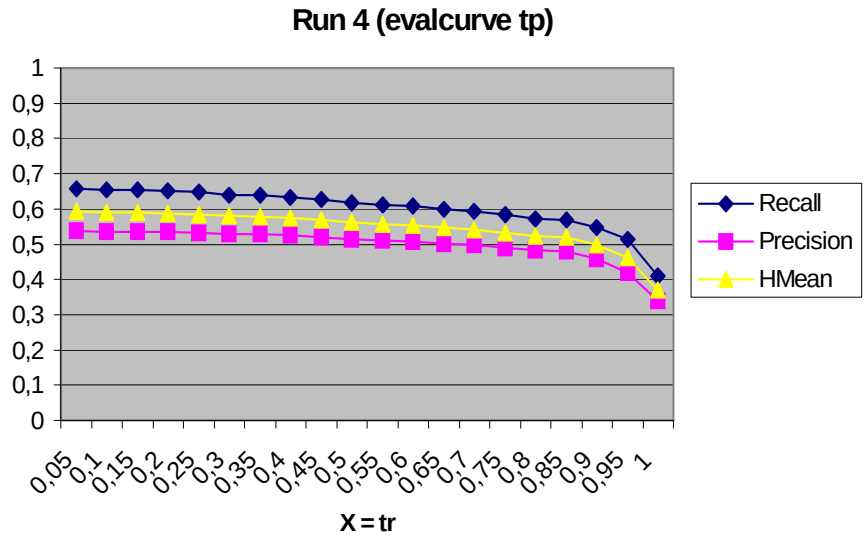

Run 2 (evalcurve tp)
1
0,9
0,8
0,7
0,6
0,5
0,4
0,3
0,2
0,1
0
0,05 0,1 0,15 0,2 0,25 0,3 0,35 0,4 0,45 0,5 0,55 0,6 0,65 0,7 0,75 0,8 0,85 0,9 0,95 1
X = tp
Recall
Precision
Hmean

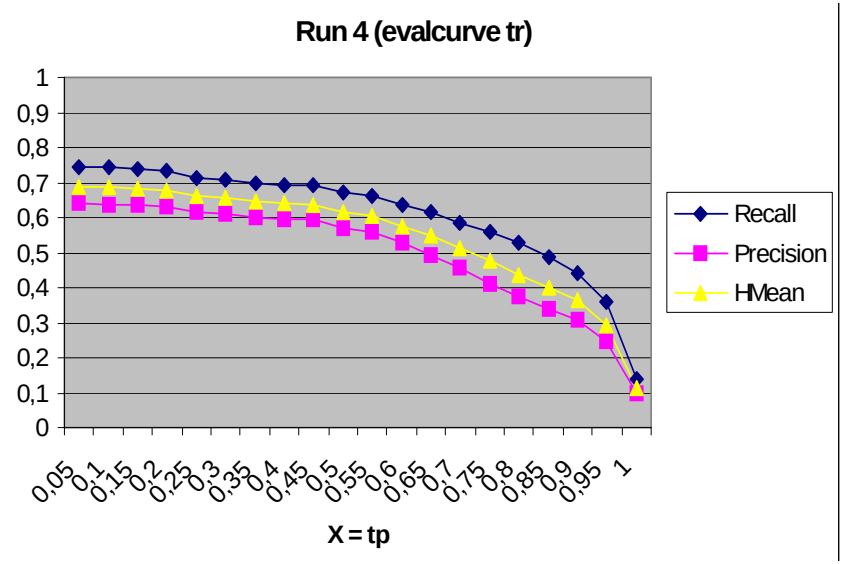
Run 3


Run 3 (evalcurve tp)
1
0,9
0,8
0,7
0,6
0,5
0,4
0,3
0,2
0,1
0
0,05 0,1 0,15 0,2 0,25 0,3 0,35 0,4 0,45 0,5 0,55 0,6 0,65 0,7 0,75 0,8 0,85 0,9 0,95 1
X = tr
Recall
Precision
Hmean

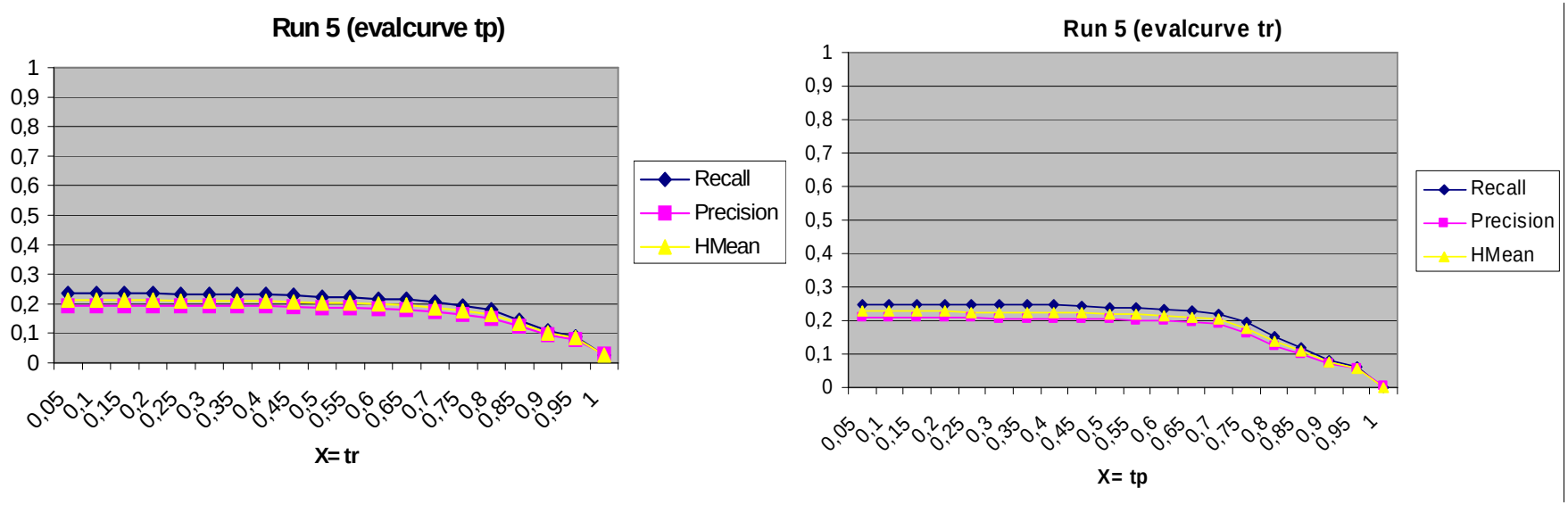

Run 3 (evalcurve tr)
1
0,9
0,8
0,7
0,6
0,5
0,4
0,3
0,2
0,1
0
0,05 0,1 0,15 0,2 0,25 0,3 0,35 0,4 0,45 0,5 0,55 0,6 0,65 0,7 0,75 0,8 0,85 0,9 0,95 1
X = tp
Recall
Precision
Hmean

Run 4


Run 4 (evalcurve tp)
1
0,9
0,8
0,7
0,6
0,5
0,4
0,3
0,2
0,1
0
0,05 0,1 0,15 0,2 0,25 0,3 0,35 0,4 0,45 0,5 0,55 0,6 0,65 0,7 0,75 0,8 0,85 0,9 0,95 1
X = tr
Recall
Precision
HMean


Run 4 (evalcurve tr)
1
0,9
0,8
0,7
0,6
0,5
0,4
0,3
0,2
0,1
0
0,05 0,1 0,15 0,2 0,25 0,3 0,35 0,4 0,45 0,5 0,55 0,6 0,65 0,7 0,75 0,8 0,85 0,9 0,95 1
X = tp
Recall
Precision
HMean

Run 5

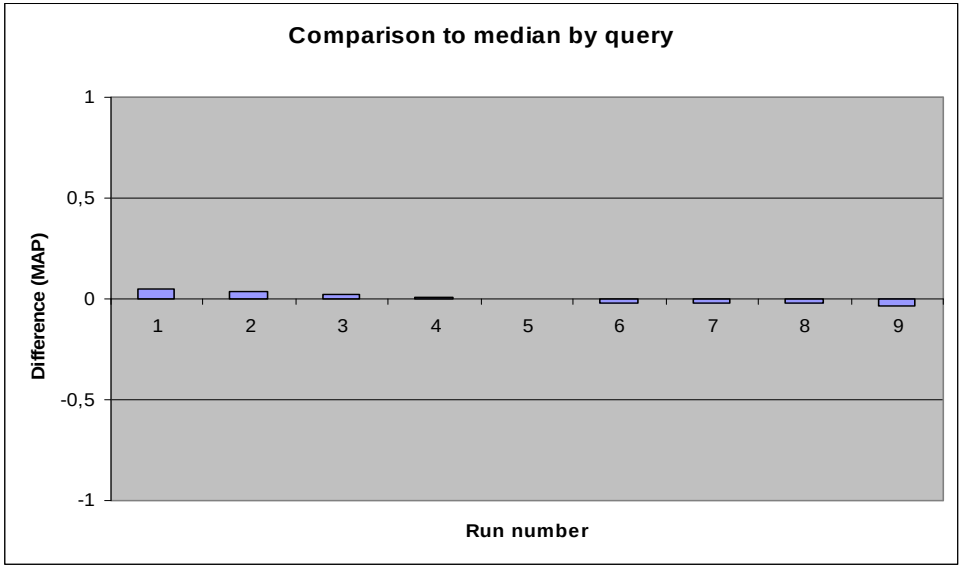

Run 5 (evalcurve tp)
1
0,9
0,8
0,7
0,6
0,5
0,4
0,3
0,2
0,1
0
0,05 0,1 0,15 0,2 0,25 0,3 0,35 0,4 0,45 0,5 0,55 0,6 0,65 0,7 0,75 0,8 0,85 0,9 0,95 1
X= tr
Recall
Precision
HMean
Run 5 (evalcurve tr)
1
0,9
0,8
0,7
0,6
0,5
0,4
0,3
0,2
0,1
0
0,05 0,1 0,15 0,2 0,25 0,3 0,35 0,4 0,45 0,5 0,55 0,6 0,65 0,7 0,75 0,8 0,85 0,9 0,95 1
X= tp
Recall
Precision
HMean

TASK 4 Object Detection

Global results

- Mean Average Precision

Run	MAP	3 Best runs
Run1	0,2242	Run1 = INRIA IMEDIA imedia05
Run2	0,2111	Run2 = INRIA IMEDIA imedia04
Run3	0,1974	Run3 = ENSEA ETIS etis01
Run4	0,1777	**3 Best teams**
Run5	0,1733	Run1 = INRIA IMEDIA (imedia05)
Run6	0,1545	Run3 = ENSEA ETIS (etis01)
Run7	0,1506	Run8 = CEA LIST (cea01)
Run8	0,1493	
Run9	0.14	



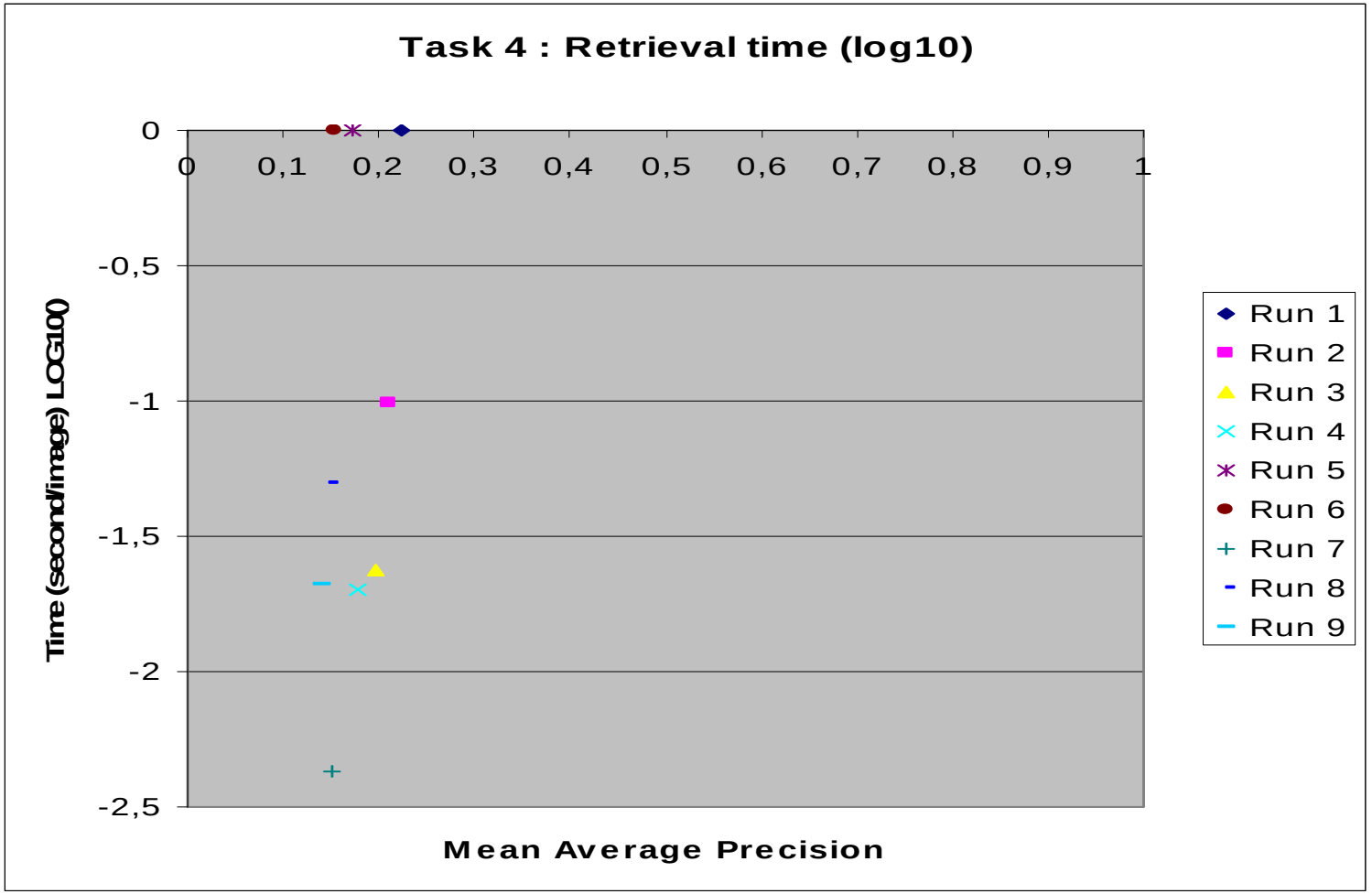
- Processing times

Information provided by the participants

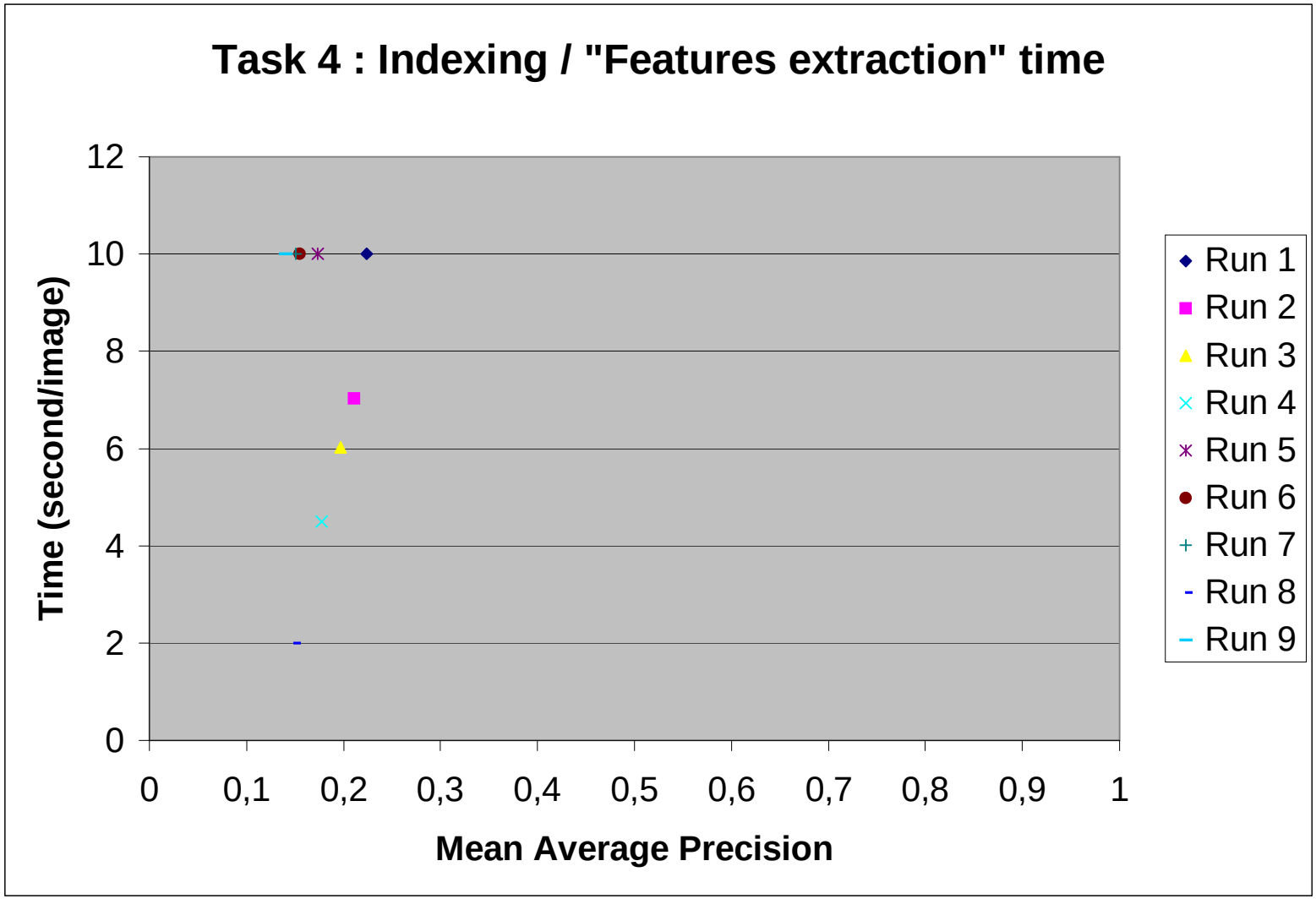
Run	Processing times	Computers characteristics
Run 1	Mix of other runs…	Pentium4, 2.8GHz, 2Go, Linux
Run 2	Features extraction: 7.03 s / image Learning: 15603 s i.e 1560.3 s / concept prediction: 13696 s i.e 1369.6 s / concept	Pentium4, 2.8GHz, 2Go, Linux
Run 3	Features extraction : 6,02 s / image Learning : ~ 10 min / objet Retrieval 333,02 s / query	Pentium4, 3.6GHz, 1Go, Linux
Run 4	low-level features extraction : 4.5 sec / picture model learning : 10 sec object detection : 0.02 sec / picture	Pentium4, 2.8GHz, 2Go, Linux
Run 5	low-level features extraction : 10 sec / picture model learning : 180 sec object detection : 1 sec / picture	Pentium4, 2.8GHz, 2Go, Linux
Run 6	low-level features extraction : 10 sec / picture model learning : 2000 sec object detection : 1 sec / picture	Pentium4, 2.8GHz, 2Go, Linux
Run 7	about 15min for each class (1) pre-processing: 1 or 2s / image (2) Features (color) extraction : 1s / image (3) Features (texture) extraction : 3/4s / image (4) Merging attributes : ~ 1h i.e 5s / image. Learning : ~ 1h Retrieval : max 1 min / query	Xeon, 3GHz, 2Go, Linux
Run 8	Features extraction : 2 s / image Model learning : 200 s Retrieval : 0,05 s / image	Pentium4, 2.4 GHz, 512Mo, Windows
Run 9	about 1h for each class (1) pre-processing: 1 or 2s / image. (2) Features (color) extraction : 1s / image (3) Features (texture) extraction : 3/4s / image (4) Merging attributes : ~ 1h i.e 5s / image. Learning : ~2 h (1+1) Retrieval : max 5min par requete.	Xeon, 3GHz, 2Go, Linux

- MAP + Processing times

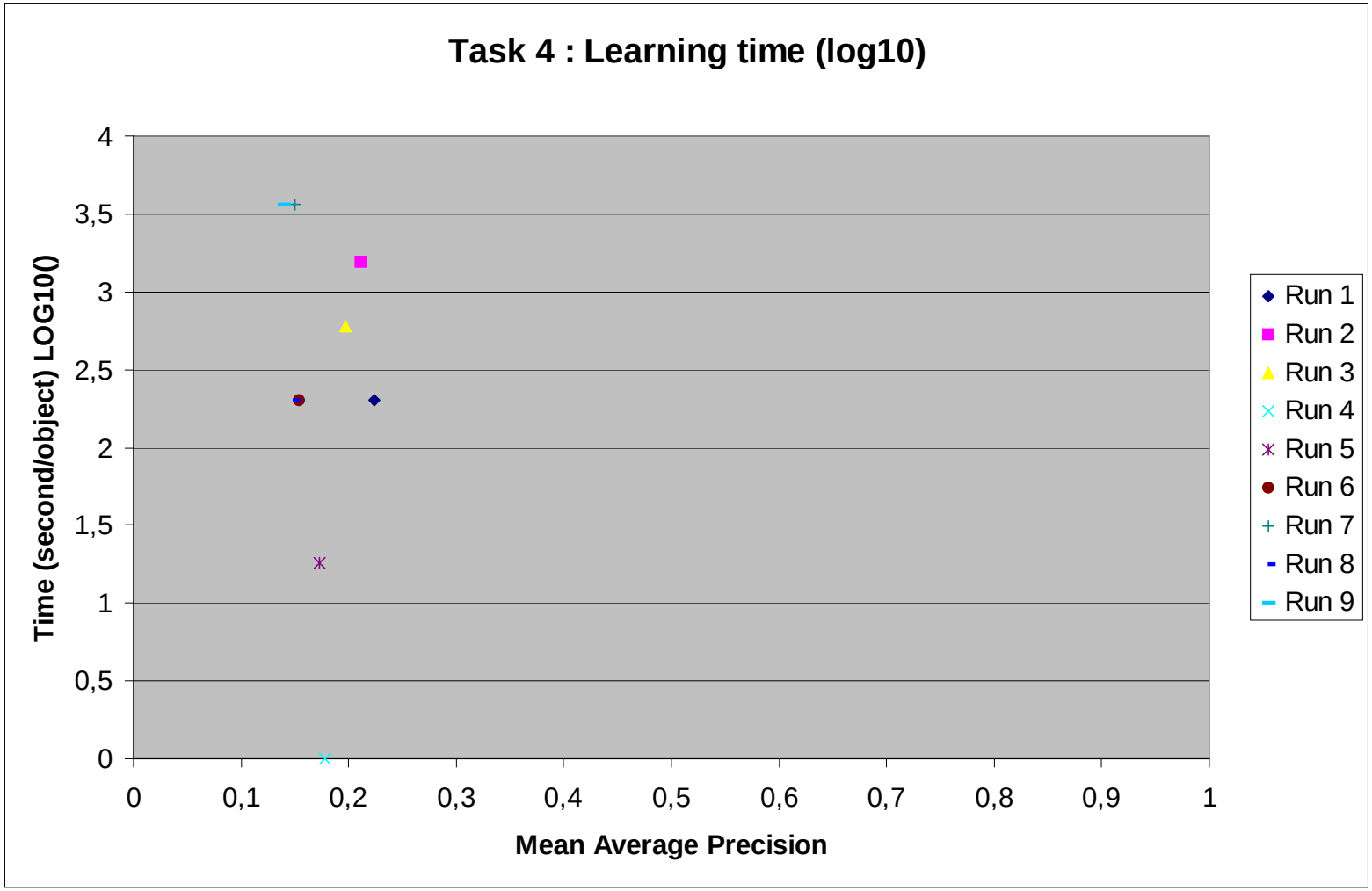
MAP + Retrieval time (second/image) log10 scale



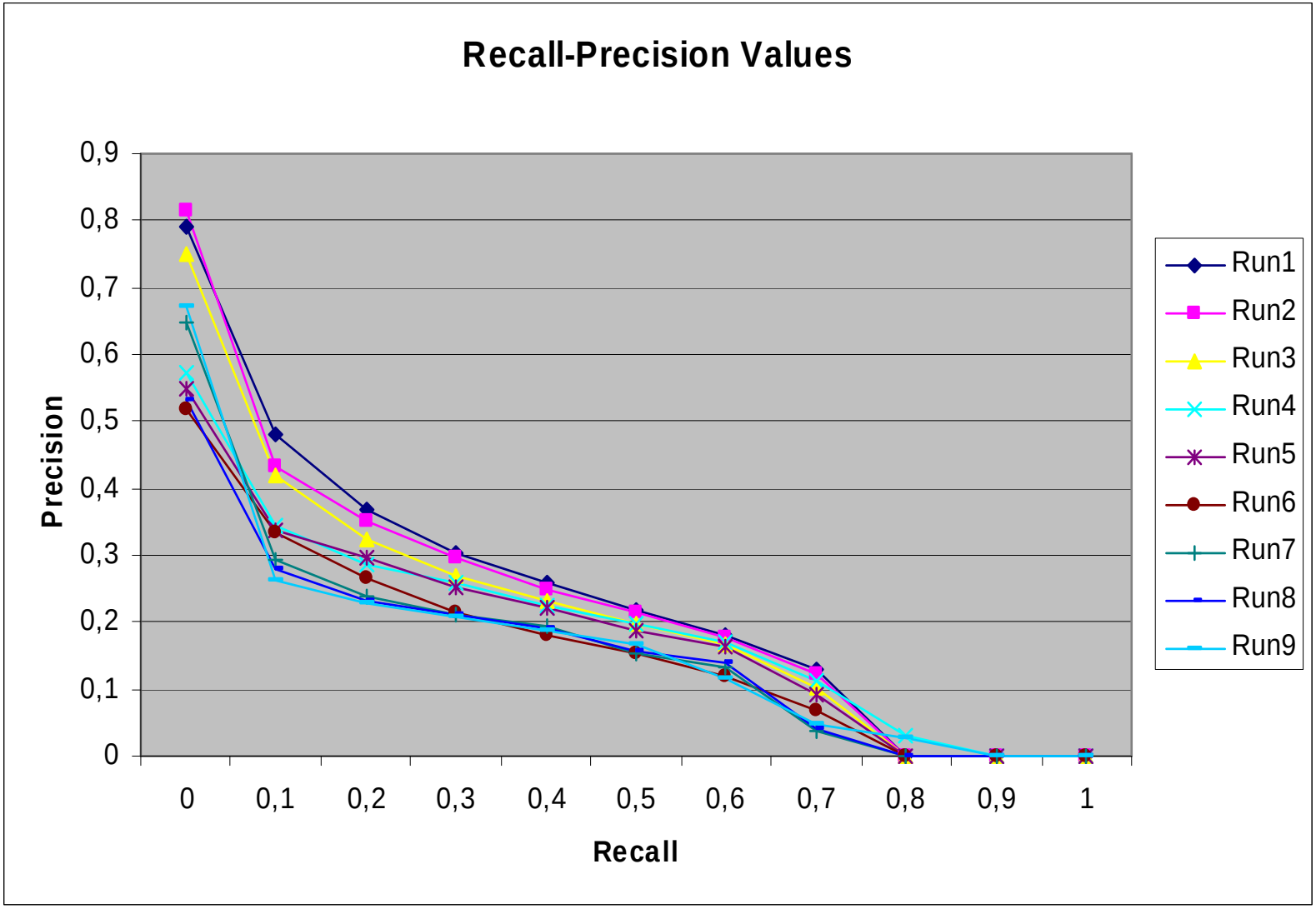
MAP + Features extractions time (second/image)



MAP + Model learning time (second/object) log10 scale



- Recall / Precision



- % Global recall(relevant_retrieved/retrieved) NB: 5000 answers/query

Mean % over the queries, for each run

Run	Run 1	Run 2	Run 3	Run 4	Run 5	Run 6	Run 7	Run 8	Run 9
%	71,77	70,19	65,55	66,26	64,96	57,21	63,27	63,35	62,78

Mean % over the runs, for each query

Query	1	2	3	4	5	6	7	8	9	10
%	72,71	68,84	63,55	67,39	69,93	76,93	38,51	57,23	70,72	64,57

Detailed results

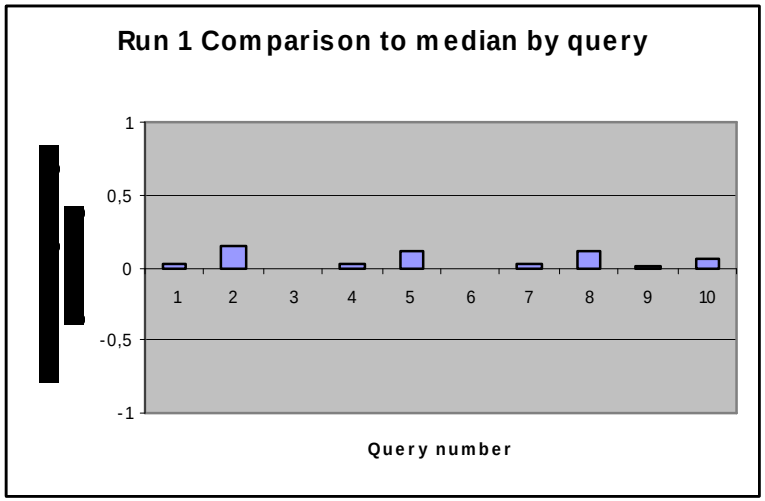
- Average Precision (query, run)

	Run 1	Run 2	Run 3	Run 4	Run 5	Run 6	Run 7	Run 8	Run 9
1	0,1646	0,1738	0,173	0,1255	0,1646	0,1326	0,1132	0,1256	0,1345
2	0,412	0,412	0,3174	0,2544	0,2621	0,2881	0,2164	0,2007	0,1485
3	0,0537	0,0395	0,1045	0,0439	0,03	0,0537	0,0683	0,0451	0,0693
4	0,0752	0,0483	0,0374	0,0824	0,0752	0,0543	0,0426	0,0289	0,0199
5	0,2491	0,2491	0,1643	0,0991	0,1751	0,0964	0,1338	0,1234	0,1146
6	0,4019	0,2893	0,4091	0,479	0,3248	0,4019	0,433	0,4313	0,3869
7	0,0368	0,0368	0,0073	0,0104	0,0021	0,0014	0,0086	0,0104	0,0082
8	0,2742	0,2742	0,165	0,1912	0,1875	0,0168	0,0903	0,121	0,1181
9	0,4707	0,4846	0,479	0,4398	0,4662	0,4707	0,3497	0,3605	0,3618
10	0,1034	0,1034	0,1166	0,0511	0,0452	0,0296	0,0501	0,0461	0,0387

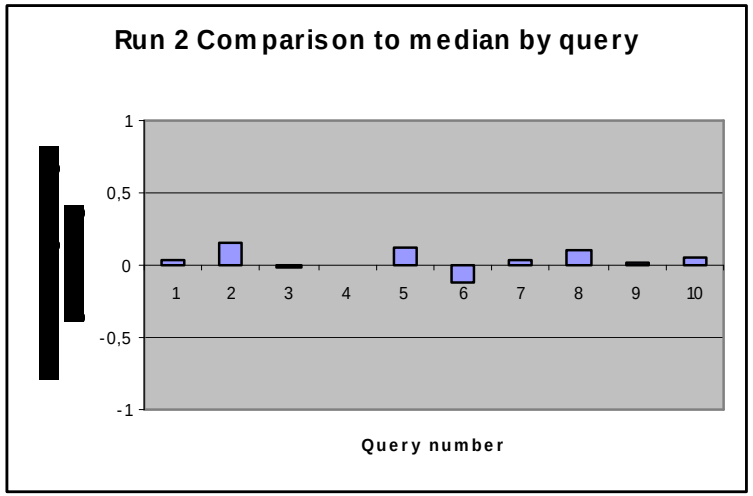
- Comparison to median by query

X = Query number, Y = Difference to the average precision median

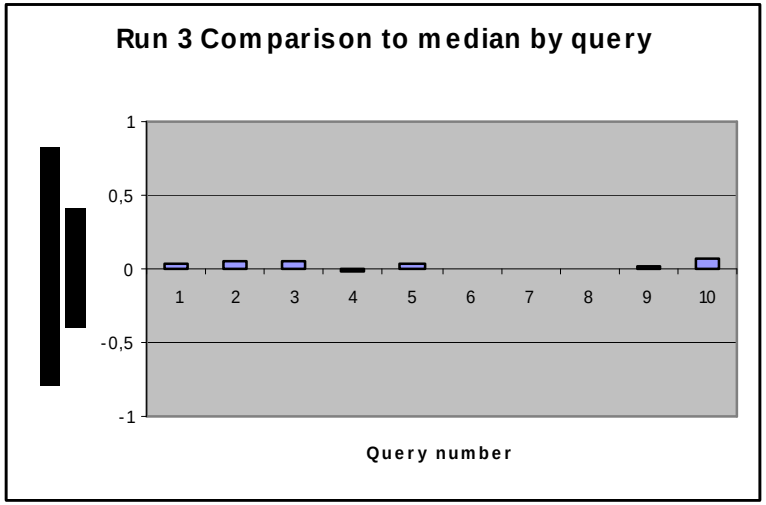
Run 1



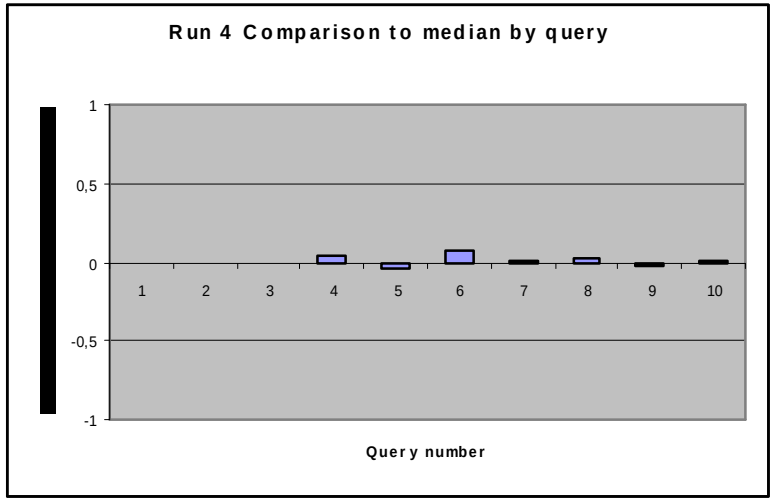
Run 2



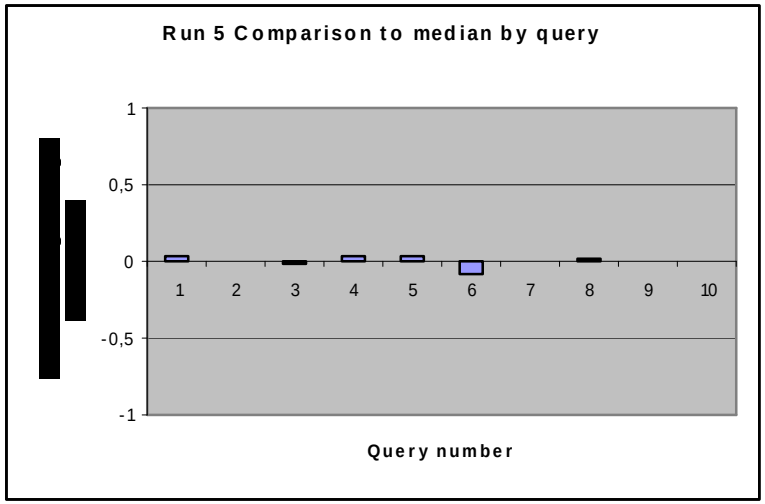
Run 3



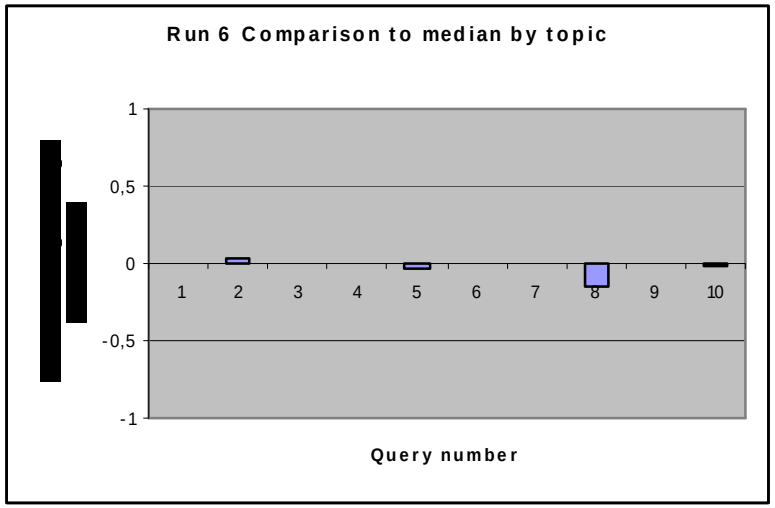
Run 4



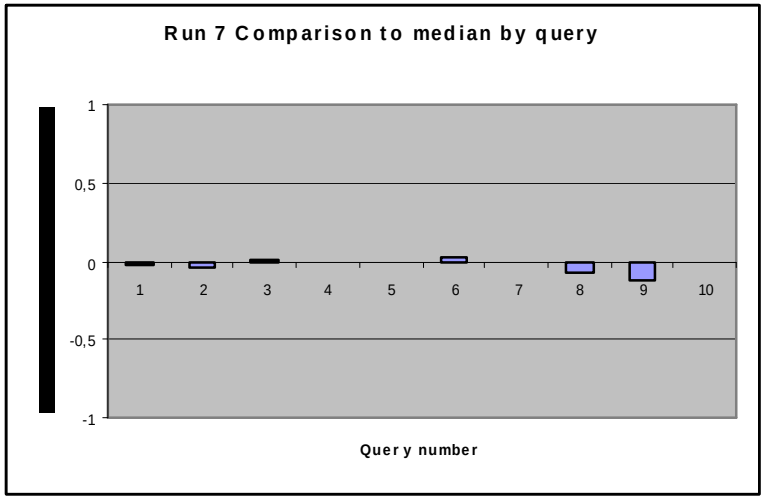
Run 5



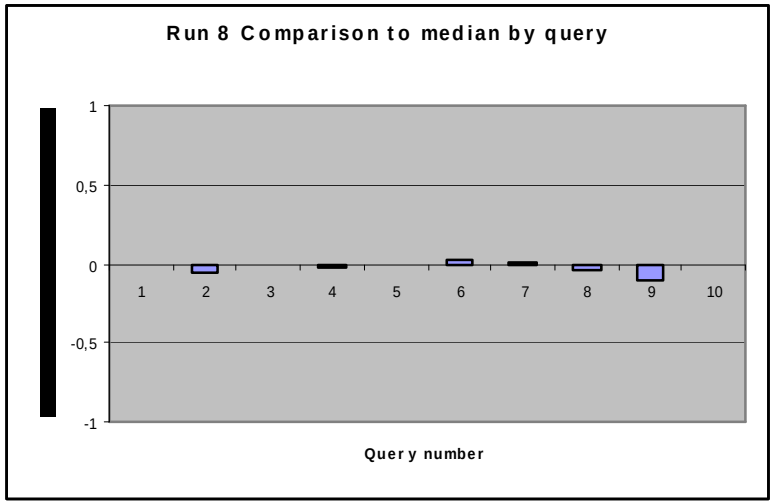
Run 6



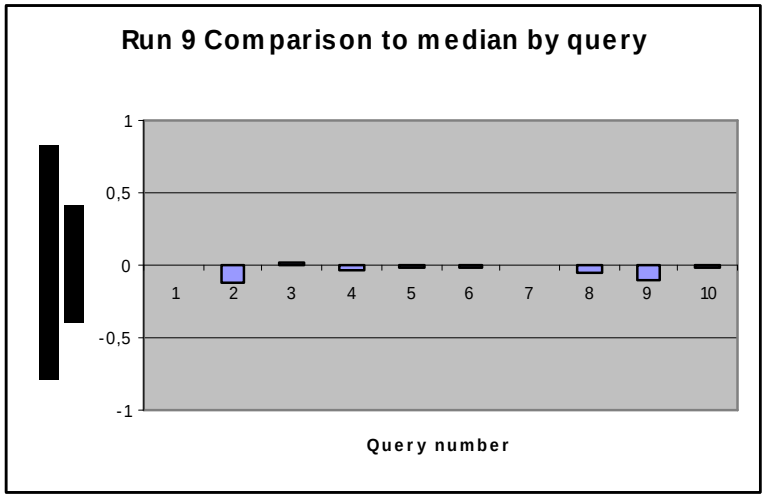
Run 7



Run 8



Run 9



- % Global recall(relevant retrieved – over 5000 answers)

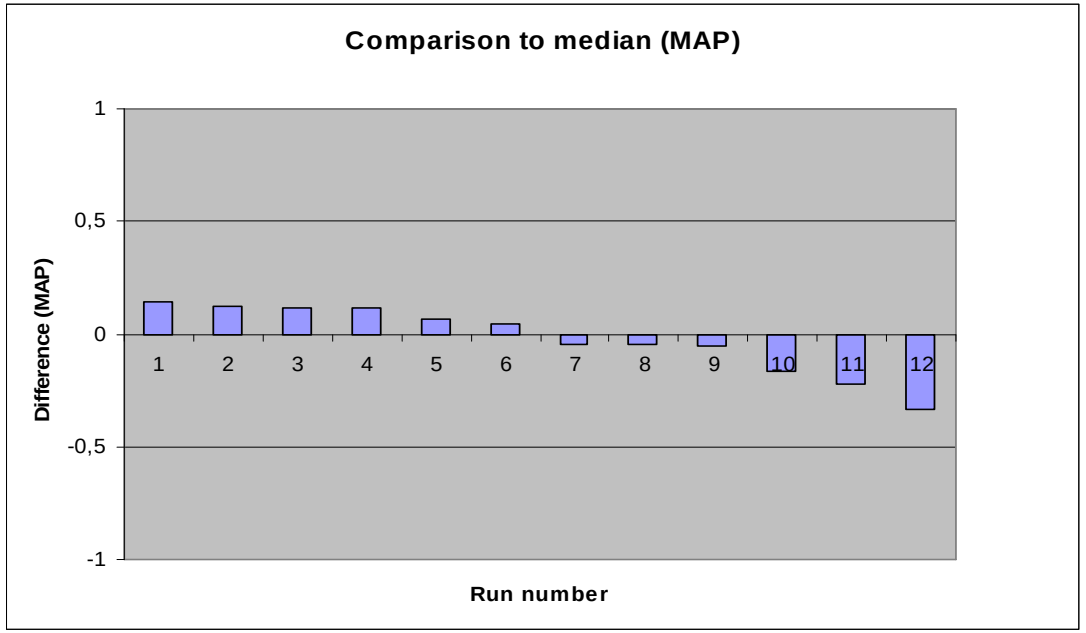
	Run 1	Run 2	Run 3	Run 4	Run 5	Run 6	Run 7	Run 8	Run 9	Run 10
1	75,07	71,64	69,59	76,71	75,07	69,18	69,45	72,31	75,34	75,07
2	78,68	78,68	70,75	70,02	68,99	65,84	64,99	63,84	57,78	78,68
3	62,33	67,67	66,00	60,00	62,00	62,33	61,67	61,93	68,00	62,33
4	74,67	62,67	62,67	68,00	74,67	66,67	72,00	64,55	60,67	74,67
5	78,00	78,00	72,92	62,31	74,15	58,46	68,92	68,46	68,15	78,00
6	75,18	71,24	75,06	82,65	73,59	75,18	79,41	79,41	80,71	75,18
7	55,91	55,91	35,43	42,91	22,05	18,50	41,34	44,65	29,92	55,91
8	69,49	69,49	65,22	66,39	66,58	24,74	47,80	48,32	56,99	69,49
9	72,98	71,22	72,36	70,45	71,99	72,98	66,58	69,70	68,24	72,98
10	75,44	75,44	65,50	63,16	60,53	58,19	60,53	60,33	61,99	75,44

TASK 5 Attributes Extraction

Global results

- Mean Average Precision

Run	MAP	3 Best runs
Run1	0.6784	Run1 = INRIA IMEDIA imadia04
Run2	0.6556	Run2 = INRIA IMEDIA imadia03
Run3	0.6532	Run3 = INRIA IMEDIA imadia02
Run4	0.6529	**3 Best teams (best run)**
Run5	0.5979	1. INRIA IMEDIA (run1 = imedia04)
Run6	0.5771	2. CEA LIST (run6 = cea01)
Run7	0.4912	3. ENSEA ETIS (run7 = etis01)
Run8	0.4907	
Run9	0.4831	
Run10	0.3676	
Run11	0.3141	
Run12	0.1985	



- Processing times

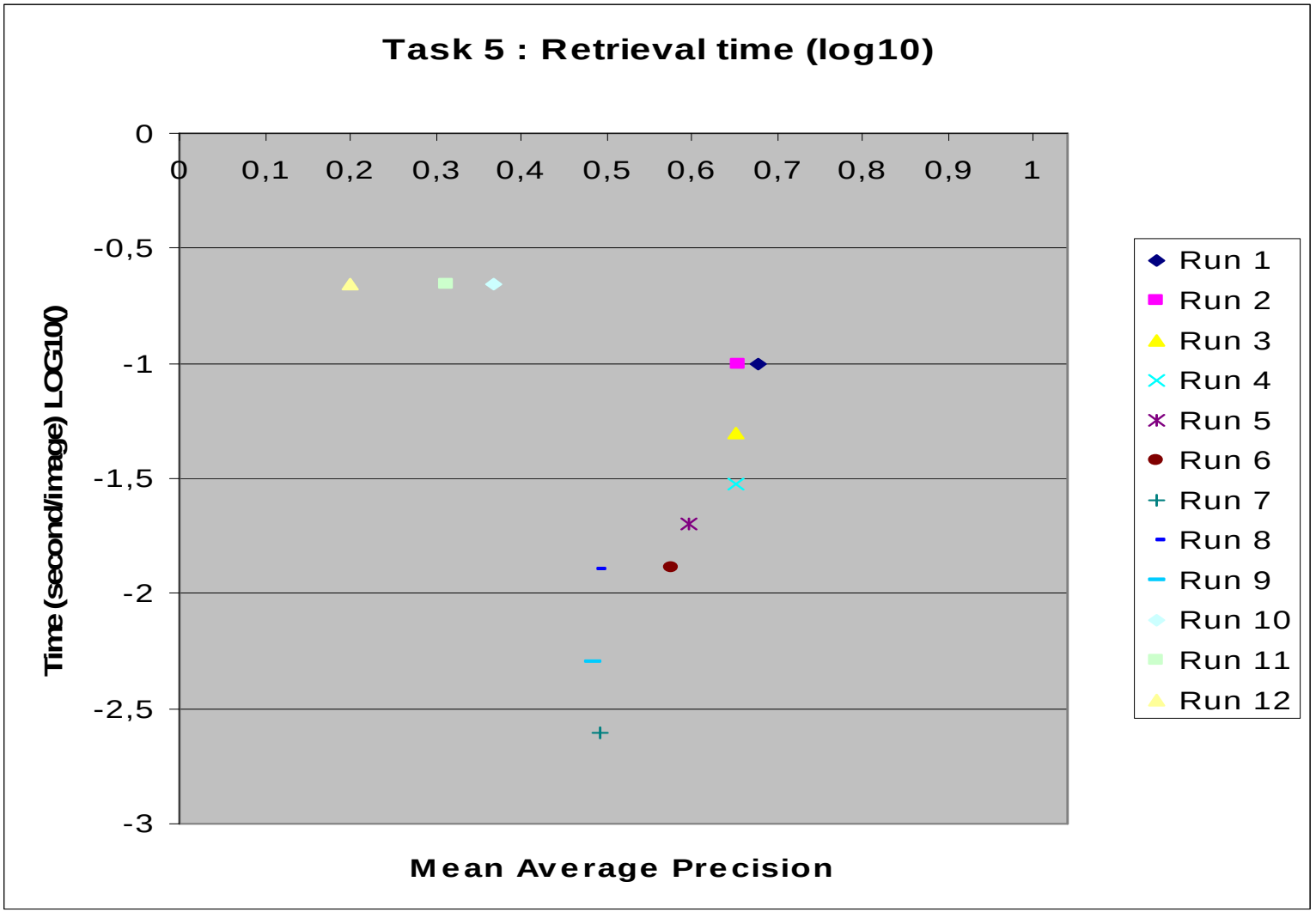
Information provided by the participants

Run	Processing times	Computers characteristics
Run 1	low-level features extraction : 6 sec / picture model learning : 832 sec semantic concepts prediction : 0.1 sec / picture	Pentium4, 2.8GHz, 2Go, Linux
Run 2	low-level features extraction : 6 sec / picture model learning : 372 sec semantic concepts prediction : 0.1 sec / picture	Pentium4, 2.8GHz, 2Go, Linux
Run 3	low-level features extraction : 6 sec / picture model learning : 176 sec semantic concepts prediction : 0.05 sec / picture	Pentium4, 2.8GHz, 2Go, Linux
Run 4	low-level features extraction : 6 sec / picture model learning : 104 sec semantic concepts prediction : 0.03 sec / picture	Pentium4, 2.8GHz, 2Go, Linux
Run 5	low-level features extraction : 6 sec / picture model learning : 577 sec semantic concepts prediction : 0.02 sec / picture	Pentium4, 2.8GHz, 2Go, Linux
Run 6	Features extraction : 0.33s/image Apprentissage : global 900 secondes Retrieval : 295 seconde / requête	Pentium4, 3.2GHz, 512Mo, Linux
Run 7	about 15min for each class (1) pre-processing: 1 or 2s / image. (2) Features (color) extraction : 1s / image (3) Features (texture) extraction : 3/4s / image (4) Merging attributes : ~ 1h i.e 5s / image. Learning : ~ 2 / 3h. Retrieval : ~ 1 min / query	Xeon 3Ghz, 2Go
Run 8	3h for supervised clustering, and about 5min for each class (1) pre-processing: 1 or 2s / image. (2) Features (color) extraction : 1s / image (3) Features (texture) extraction : 3/4s / image (4) Merging attributes : ~ 1h	Xeon 3Ghz, 2Go

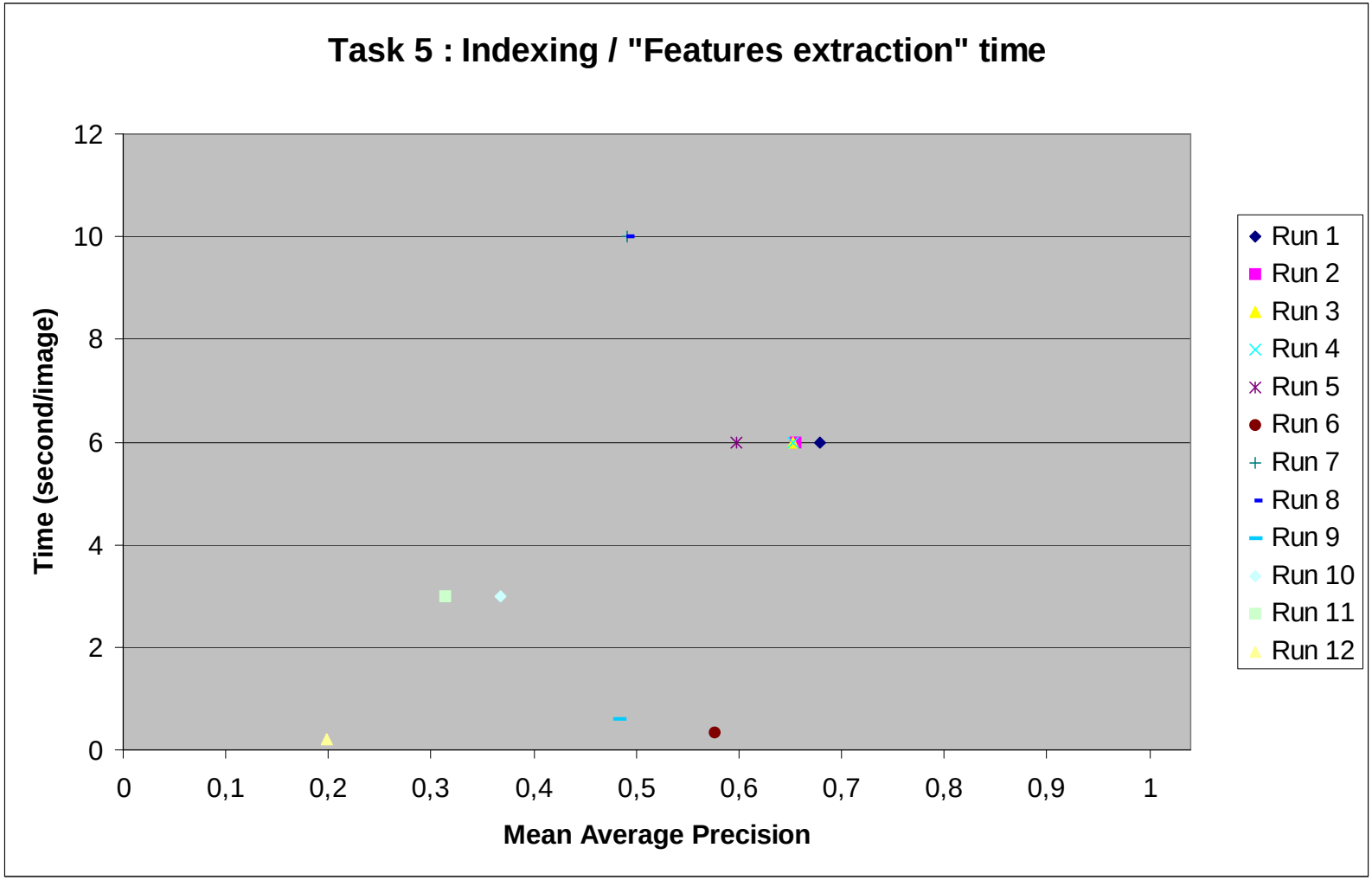
	i.e 5s / image. Learning : ~3h Retrieval : ~5 min / query	
Run 9	Features extraction :0.61 s/image Global learning : 11160 s Retrieval : 118 s/query	Pentium 4, 2.80 GHz, 512 Mo, Linux
Run 10	Indexing / Features extraction : 3 sec / image Learning : 20 min / training set (5000 images) Research / Classification (creation of the results) : 0.22 sec / image	Laptop, Pentium M, 1.60Ghz, 512Mo, Matlab, Win, Linux
Run 11	Indexing / Features extraction : 3 sec / image Learning : 20 min / training set (5000 images) Research / Classification (creation of the results) : 0.22 sec / image	Laptop, Pentium M, 1.60Ghz, 512Mo, Matlab, Win, Linux
Run 12	Indexing / Features extraction : Visual extraction and indexing : 1h40 for train + test images (no dev) Learning : 2 hours 10 minutes, training of an ANN with TORCH toolbox Research / Classification (creation of the results) : around 3 minutes for the ANN forward (~50 inputs, 70 nhu, 11 ouputs) Global processing : ~6h without parallel processing Extra time : fusion (intersection) for estimates of other 2 classes and formating results to Trec : 30 minutes for the final work.	Bi-Xéon 3GHz, 4Go, Linux + Matlab

- MAP + Processing times

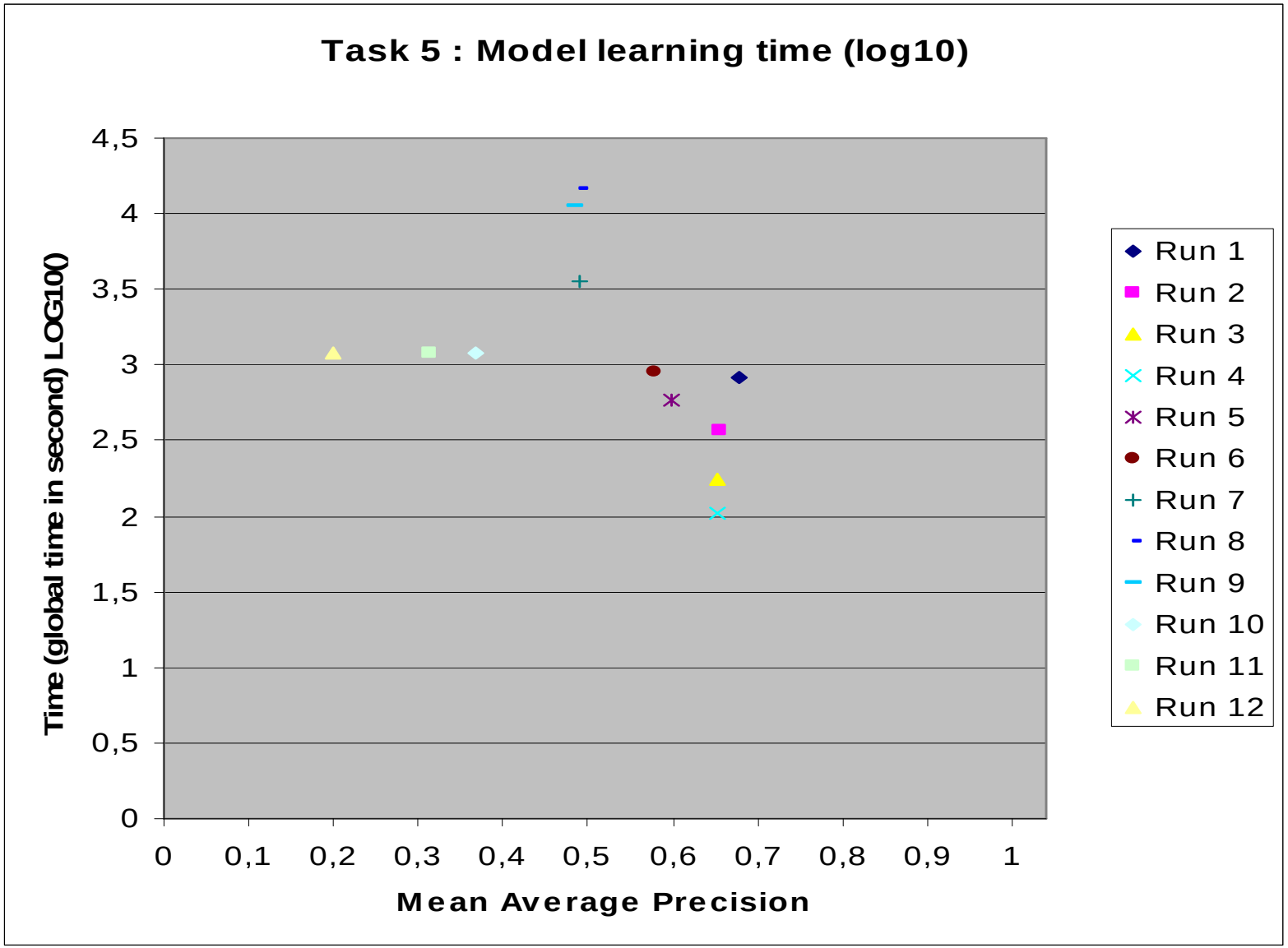
MAP + Retrieval time (second / concept) log10 scale



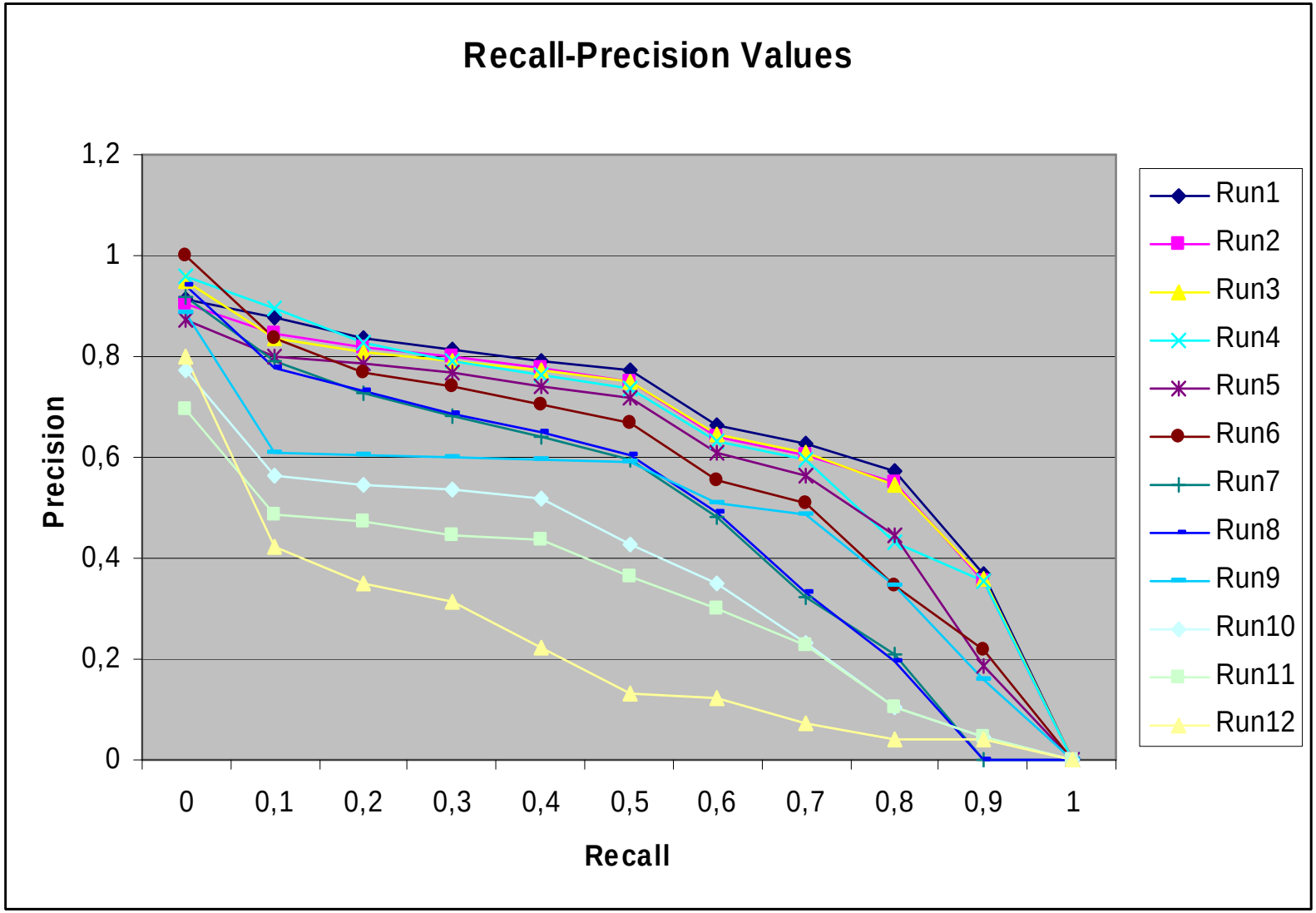
MAP + Features extraction time (second/image)



MAP + Model learning (global time for all the concepts)



- Recall / Precision



- % Global recall (ratio relevant_retrieved / relevant)

Mean % over the runs by query (5000 answers/query)

Query	1	2	3	4	5	6	7	8	9	10	11	12	13
%	76,59	85,37	93,84	90,01	72,12	51,81	66,31	88,08	83,63	71,73	85,99	73,48	74,17

Mean % over the queries by run

Run	Run 1	Run 2	Run 3	Run 4	Run 5	Run 6	Run 7	Run 8	Run 9	Run 10	Run 11	Run 12
%	83,35	82,39	82,20	81,11	78,39	78,16	71,94	71,73	78,16	64,96	57,43	49,09

Detailed results

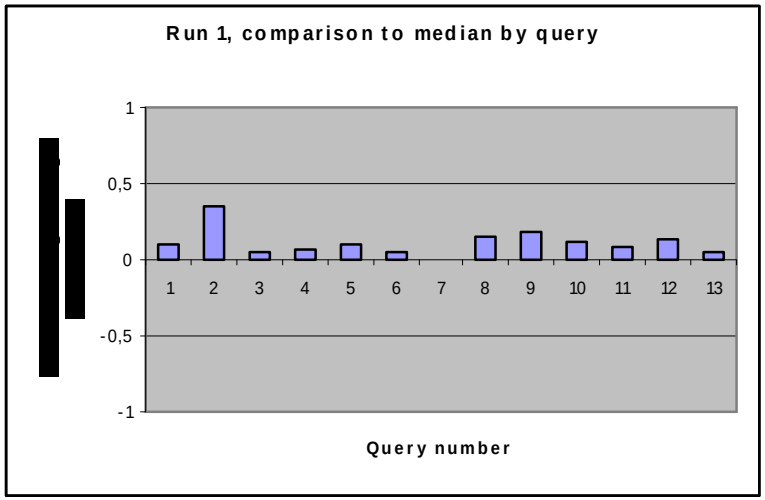
- Average Precision (query, run)

	Run 1	Run 2	Run 3	Run 4	Run 5	Run 6	Run 7	Run 8	Run 9	Run 10	Run 11	Run 12
1	0,9275	0,9271	0,9266	0,9271	0,853	0,7651	0,7055	0,7158	0,8217	0,4949	0,0748	0,1698
2	0,8682	0,8453	0,8676	0,8453	0,777	0,5154	0,4715	0,4675	0,4019	0,3037	0,2968	0,0068
3	0,8839	0,8619	0,8748	0,8675	0,8589	0,8274	0,7353	0,6814	0,7095	0,749	0,7623	0,5511
4	0,841	0,8124	0,8183	0,7749	0,7819	0,7695	0,6504	0,6386	0,6651	0,6281	0,6445	0,3343
5	0,7546	0,7411	0,7013	0,7012	0,7174	0,6602	0,5589	0,5707	0,6044	0,5018	0,4302	0,1642
6	0,5691	0,5547	0,5501	0,5285	0,5565	0,5203	0,5112	0,5089	0,4871	0,4186	0,3203	0,1908
7	0,0819	0,0729	0,0926	0,0878	0,0009	0,0719	0,0954	0,1114	0,0174	0,0105	0,0017	0,0928
8	0,811	0,7879	0,7847	0,7741	0,5958	0,7225	0,6434	0,6326	0,6652	0,5573	0,5793	0,3996
9	0,6109	0,5745	0,5977	0,5761	0,5276	0,4247	0,2036	0,1779	0,133	0,0769	0,0869	0,0049
10	0,7764	0,7296	0,7172	0,695	0,7281	0,6557	0,5469	0,5778	0,5959	0,4374	0,3111	0,189
11	0,8849	0,8705	0,8441	0,885	0,8296	0,7956	0,6639	0,6646	0,7054	0,5412	0,505	0,175
12	0,6499	0,6107	0,6129	0,6268	0,5139	0,6125	0,5228	0,516	0,4467	0,0268	0,0258	0,2239
13	0,1601	0,1337	0,1039	0,1983	0,0318	0,1612	0,077	0,1157	0,027	0,0329	0,044	0,0789

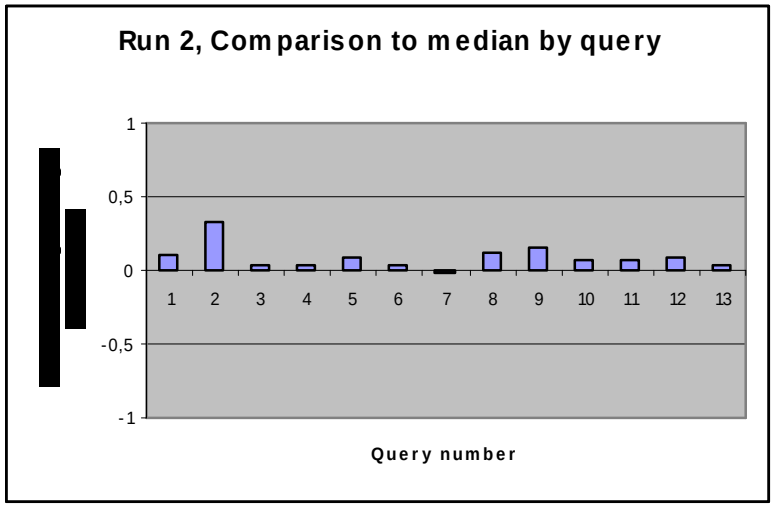
- Comparison to median by query

X = Query number, Y = Difference to the average precision median

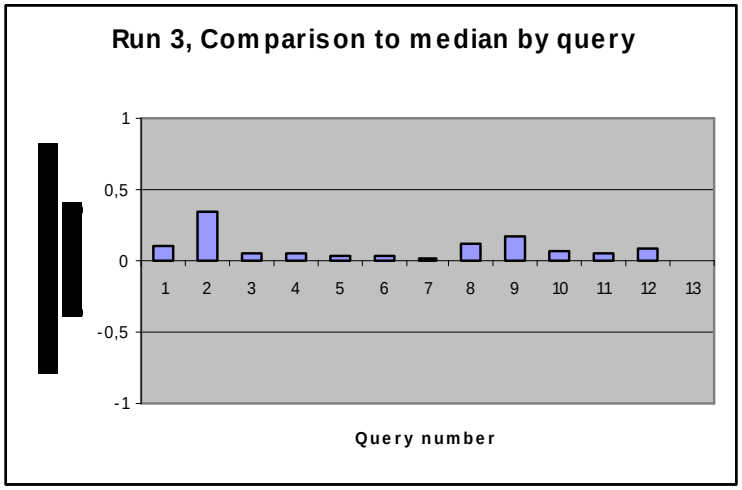
Run 1



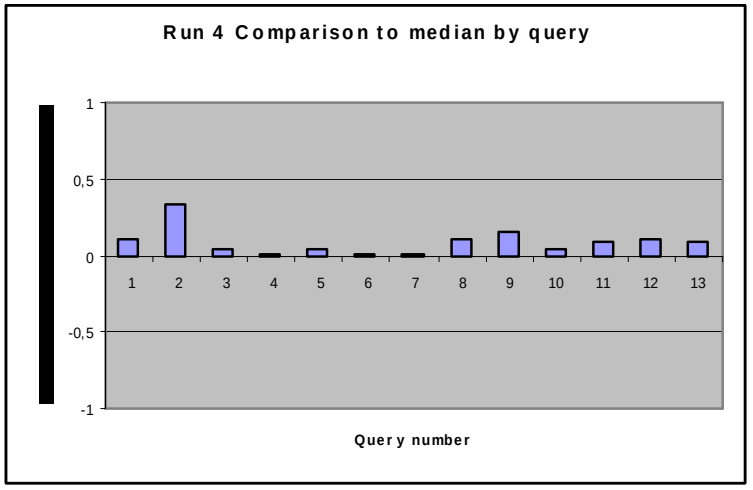
Run 2



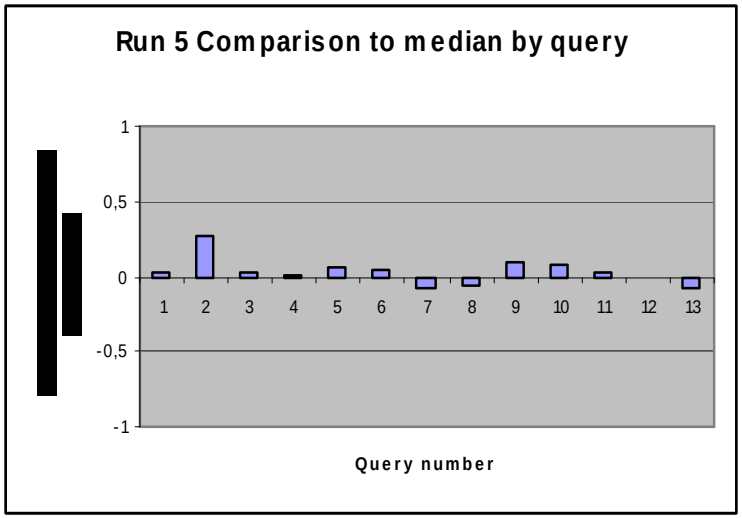
Run 3



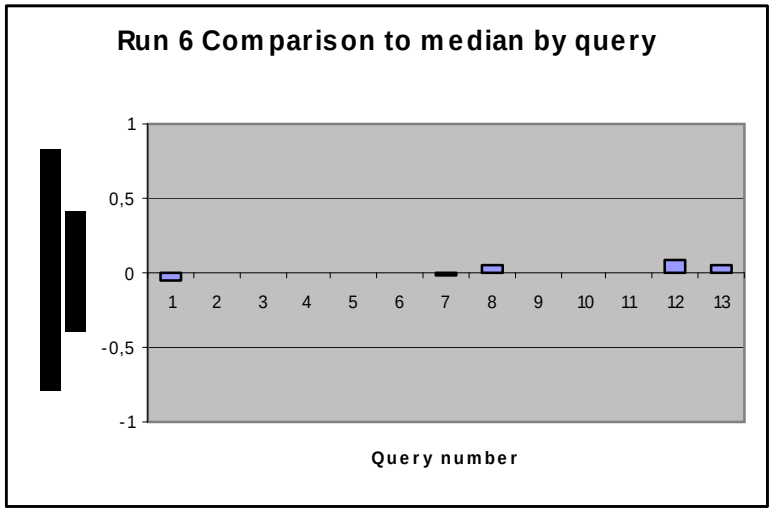
Run 4



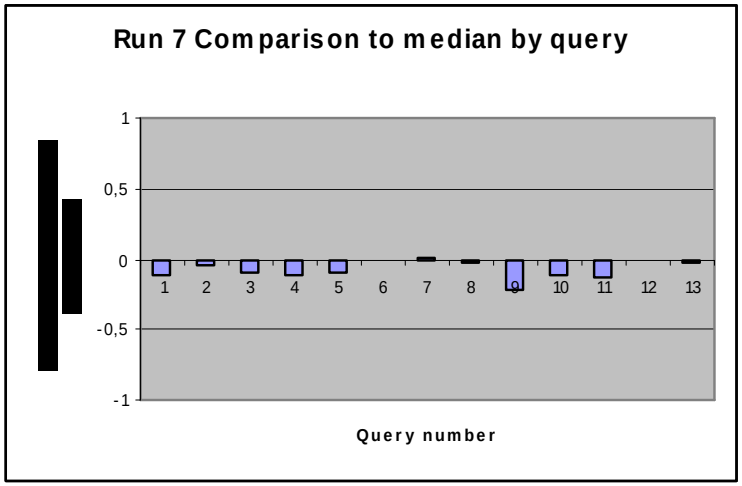
Run 5



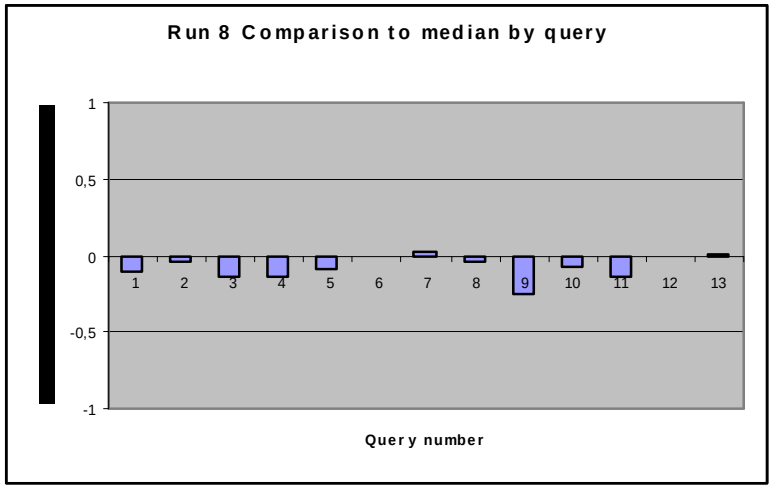
Run 6



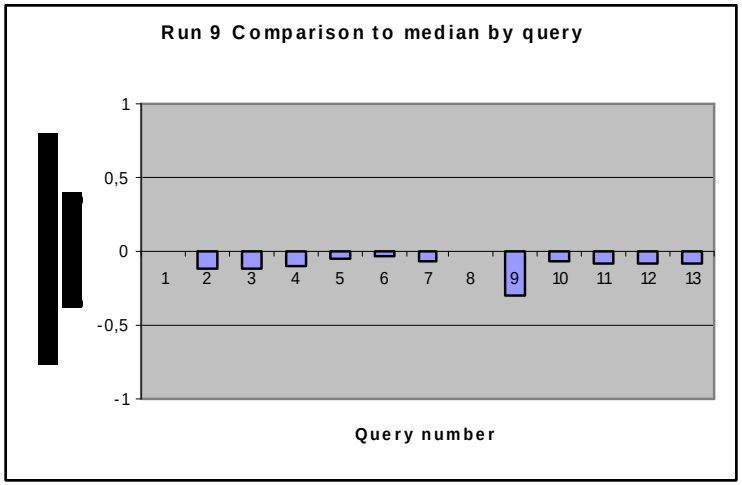
Run 7



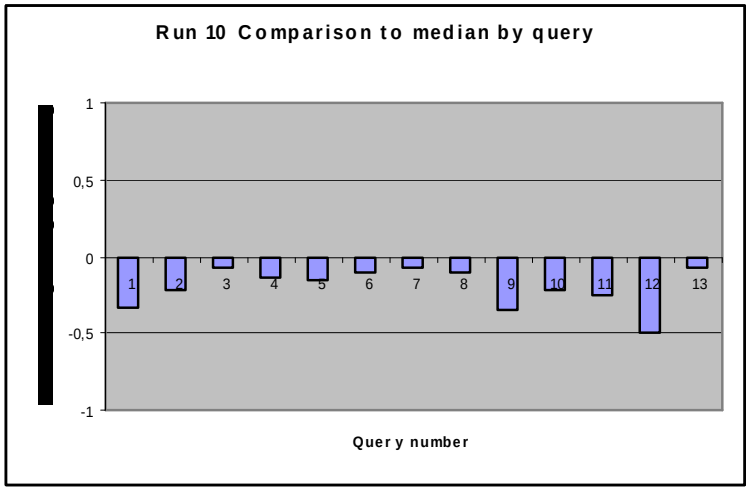
Run 8



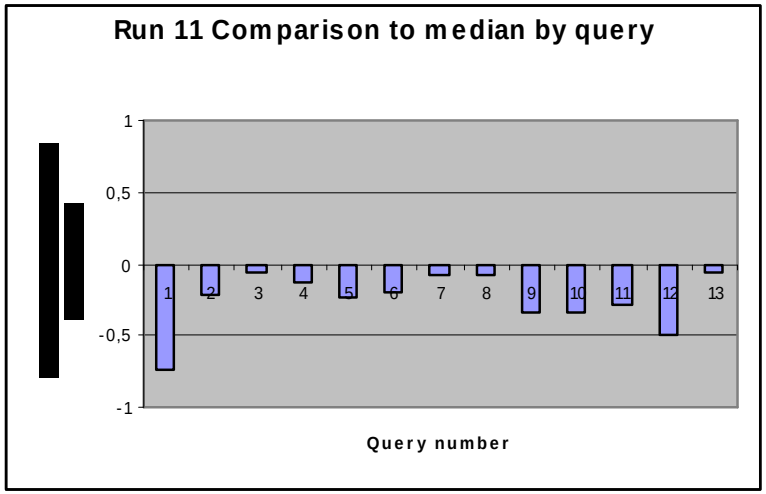
Run 9



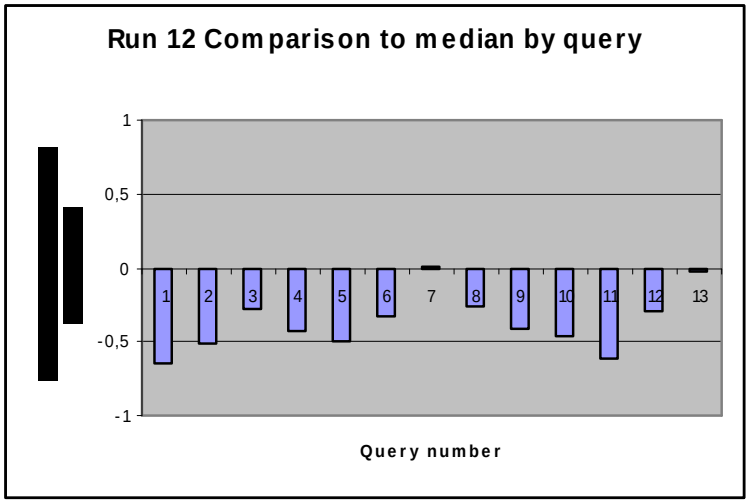
Run 10



Run 11



Run 12



- % Global recall(relevant retrieved – over 5000 answers)

	Run 1	Run 2	Run 3	Run 4	Run 5	Run 6	Run 7	Run 8	Run 9	Run 10	Run 11	Run 12
1	94,64	94,62	94,89	94,62	86,84	82,24	77,56	78,42	89,49	58,89	25,93	40,89
2	99,44	98,75	98,47	98,75	94,58	95,55	86,93	84,84	91,38	77,89	78,86	19,05
3	98,20	97,77	98,78	97,38	98,92	95,54	87,32	80,02	95,26	91,74	91,66	93,53
4	96,04	95,08	96,38	93,84	94,42	93,23	85,46	84,84	95,11	87,92	88,57	69,22
5	83,07	82,44	80,24	79,40	80,51	77,18	68,27	69,07	76,62	68,78	64,38	35,44
6	57,40	56,53	56,29	54,66	56,63	53,96	53,04	53,37	53,23	49,62	43,41	33,62
7	84,29	85,71	100,00	77,14	22,86	84,29	84,29	88,57	31,43	28,57	21,43	87,14
8	96,18	95,53	96,44	95,75	76,22	94,18	87,50	86,15	95,23	76,61	78,52	78,69
9	98,67	98,67	99,11	98,67	87,11	96,44	85,33	84,00	86,67	70,67	67,56	30,67
10	84,02	81,60	80,67	78,60	80,53	76,04	67,76	69,67	77,02	64,89	55,20	44,78
11	97,35	95,85	95,14	96,92	91,35	93,92	82,97	82,50	88,50	79,97	78,78	48,64
12	92,19	90,36	91,02	91,39	73,80	91,39	82,34	82,92	84,60	15,84	16,72	69,20
13	94,29	91,43	91,43	77,14	35,71	94,29	65,71	74,29	51,43	74,29	74,29	65,71