

# Report

	ABySS	A_STAR	Flye	HipMer	marmgCAMI2	Megahit	metaSPAdes	Miniasm	OPERA_MS_inhouse	SPAdes
# contigs ( $\geq 0$ bp)	9812	114145	95	34616	60	40251	45360	10247	5512	43524
# contigs ( $\geq 1000$ bp)	1924	51827	89	27220	51	33442	37765	9395	4183	28032
# contigs ( $\geq 5000$ bp)	765	12879	87	9370	50	15692	16159	7272	3134	5321
# contigs ( $\geq 10000$ bp)	421	6961	87	5174	50	9665	9398	5233	2527	1896
# contigs ( $\geq 25000$ bp)	148	2876	28	2262	50	4555	4018	2508	1533	474
# contigs ( $\geq 50000$ bp)	53	1363	15	1165	50	2230	1868	1299	826	193
Total length ( $\geq 0$ bp)	23173213	427745115	2582492	334616321	171145864	514455649	501144934	277269920	164865904	161475633
Total length ( $\geq 1000$ bp)	18024727	384730960	2578602	329209239	171140007	509527572	495598671	276663036	163976134	150696822
Total length ( $\geq 5000$ bp)	15146910	305228038	2576177	287089759	171138620	465692801	442444940	271260733	161391217	100181788
Total length ( $\geq 10000$ bp)	12728825	263859272	2576177	257767155	171138620	423156730	394546553	255806096	156986459	76916464
Total length ( $\geq 25000$ bp)	8566104	200893088	1567210	213020733	171138620	343131391	310512693	212838046	140807343	56192170
Total length ( $\geq 50000$ bp)	5174466	148685790	1172418	174614106	171138620	260797717	235173771	170488532	115453387	46445052
# contigs	9897	114338	189	34639	60	40310	45374	10488	5514	43527
Largest contig	311947	1928926	124885	1524395	7215228	1396623	1667163	2428999	1165491	1902115
Total length	25081674	429042430	5148066	336527542	171145864	523745684	501240066	305654709	164912279	161490540
Reference length	113900	113900	113900	113900	113900	113900	113900	113900	113900	113900
N50	15463	20878	32688	57833	4134217	53087	43277	85015	103185	8743
N75	2252	3780	18886	11692	3052329	16360	12609	30050	41436	2873
L50	272	3455	37	1020	18	2115	2199	737	364	2308
L75	1326	16481	90	4514	29	6604	7736	2267	1006	10900
# misassemblies	0	2	0	0	0	3	0	0	0	0
# misassembled contigs	0	2	0	0	0	3	0	0	0	0
Misassembled contigs length	0	2148	0	0	0	5244	0	0	0	0
# local misassemblies	0	0	0	0	0	5	0	0	0	2
# scaffold gap ext. mis.	0	0	0	0	0	0	0	0	0	0
# scaffold gap loc. mis.	0	1	0	0	0	0	0	0	0	0
# unaligned mis. contigs	0	26	0	8	12	14	9	8	9	5
# unaligned contigs	9877 + 6 part	114184 + 125 part	185 + 4 part	34511 + 99 part	43 + 17 part	40090 + 159 part	45250 + 118 part	10446 + 42 part	5477 + 36 part	43474 + 42 part
Unaligned length	25025684	420754328	5136898	336239262	171032510	523458190	500887968	305538188	164804535	161284194
Genome fraction (%)	14.123	50.568	4.900	99.124	99.517	99.900	99.907	77.567	92.881	97.844
Duplication ratio	3.481	143.898	2.001	2.553	1.000	2.527	3.094	1.319	1.018	1.852
# N's per 100 kbp	124.19	1897.89	0.00	18.23	0.00	0.00	2.04	2.42	0.34	56.58
# mismatches per 100 kbp	0.00	368.07	0.00	2.66	0.00	1191.71	16.70	95.08	293.98	142.67
# indels per 100 kbp	6.22	24.31	107.51	7.97	0.00	47.46	3.52	237.69	179.60	20.64
Largest alignment	3437	3303	3184	6290	10622	6797	10622	9260	6734	9938
Total aligned length	23504	139706	11168	224613	113350	284201	341325	109166	110983	113264

All statistics are based on contigs of size  $\geq 500$  bp, unless otherwise noted (e.g., "# contigs ( $\geq 0$  bp)" and "Total length ( $\geq 0$  bp)" include all contigs).

## Misassemblies report

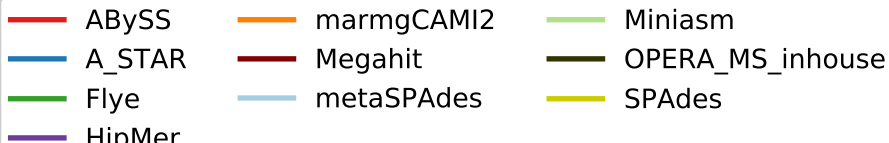
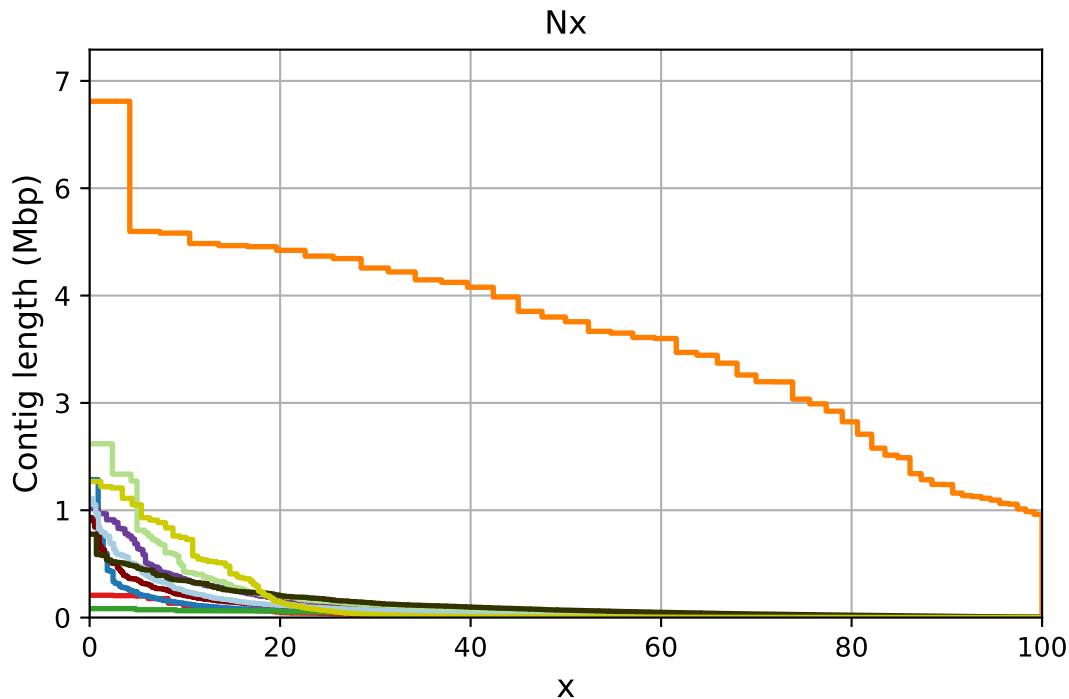
	ABYSS	A_STAR	Flye	HipMer	marmgCAMI2	Megahit	metaSPAdes	Miniasm	OPERA_MS_inhouse	SPAdes
# misassemblies	0	2	0	0	0	3	0	0	0	0
# contig misassemblies	0	2	0	0	0	3	0	0	0	0
# c. relocations	0	2	0	0	0	3	0	0	0	0
# c. translocations	0	0	0	0	0	0	0	0	0	0
# c. inversions	0	0	0	0	0	0	0	0	0	0
# c. interspecies translocations	0	0	0	0	0	0	0	0	0	0
# scaffold misassemblies	0	0	0	0	0	0	0	0	0	0
# s. relocations	0	0	0	0	0	0	0	0	0	0
# s. translocations	0	0	0	0	0	0	0	0	0	0
# s. inversions	0	0	0	0	0	0	0	0	0	0
# s. interspecies translocations	0	0	0	0	0	0	0	0	0	0
# misassembled contigs	0	2	0	0	0	3	0	0	0	0
Misassembled contigs length	0	2148	0	0	0	5244	0	0	0	0
# possibly misassembled contigs	6	99	4	91	5	145	109	34	27	37
# possible misassemblies	12	116	6	120	10	188	177	54	45	51
# local misassemblies	0	0	0	0	0	5	0	0	0	2
# scaffold gap ext. mis.	0	0	0	0	0	0	0	0	0	0
# scaffold gap loc. mis.	0	1	0	0	0	0	0	0	0	0
# unaligned mis. contigs	0	26	0	8	12	14	9	8	9	5
# mismatches	0	212	0	3	0	1356	19	84	311	159
# indels	1	14	6	9	0	54	4	210	190	23
# indels (<= 5 bp)	0	4	6	0	0	33	1	196	178	20
# indels (> 5 bp)	1	10	0	9	0	21	3	14	12	3
Indels length	7	694	6	514	0	1822	314	464	980	69

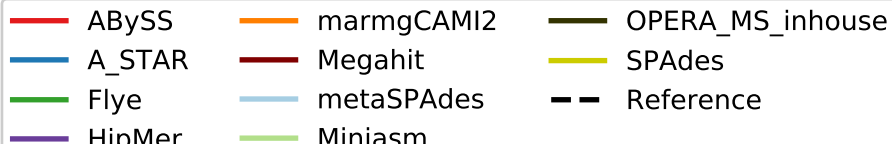
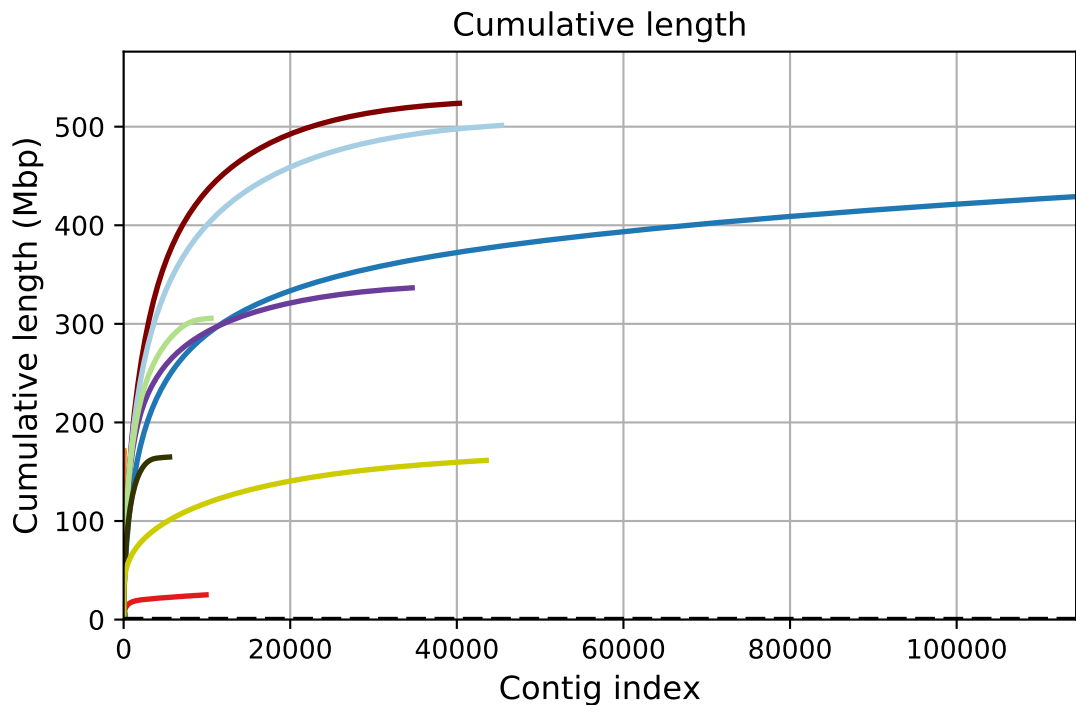
All statistics are based on contigs of size  $\geq 500$  bp, unless otherwise noted (e.g., "# contigs ( $\geq 0$  bp)" and "Total length ( $\geq 0$  bp)" include all contigs).

## Unaligned report

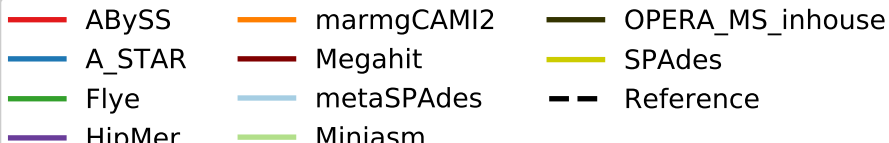
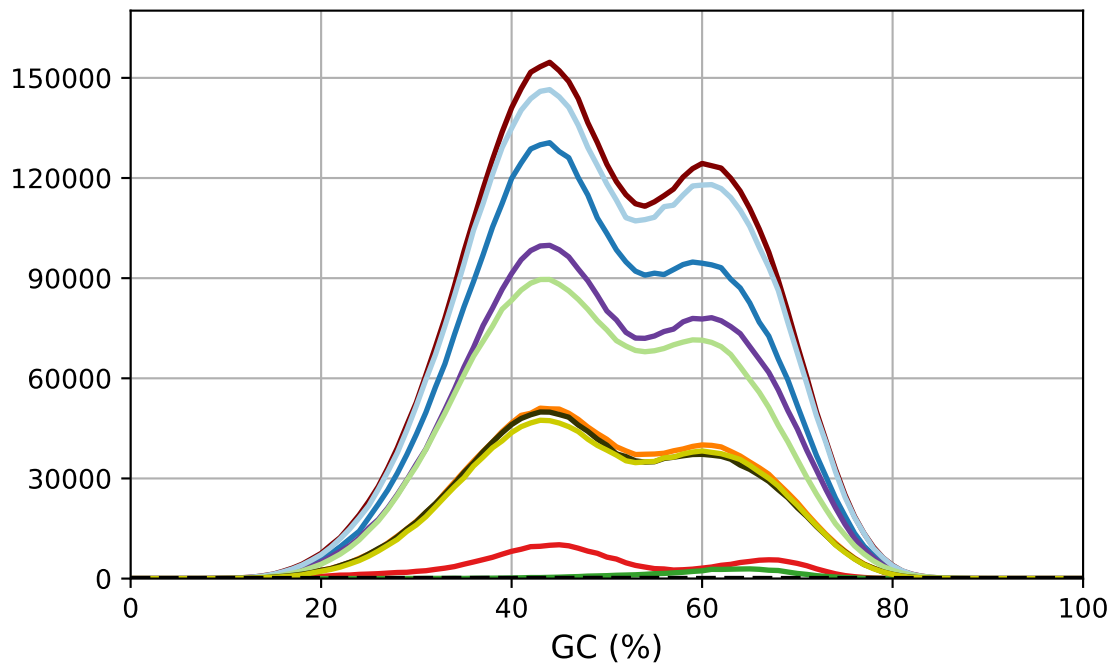
	ABYSS	A_STAR	Flye	HipMer	marmgCAMI2	Megahit	metaSPAdes	Miniasm	OPERA_MS_inhouse	SPAdes
# fully unaligned contigs	9877	114184	185	34511	43	40090	45250	10446	5477	43474
Fully unaligned length	24539564	413674886	5061630	324587488	108757097	511576255	482666014	293863211	158256977	153417814
# partially unaligned contigs	6	125	4	99	17	159	118	42	36	42
Partially unaligned length	486120	7079442	75268	11651774	62275413	11881935	18221954	11674977	6547558	7866380
# N's	31150	8142753	0	61352	4	0	10204	7385	557	91369

All statistics are based on contigs of size  $\geq 500$  bp, unless otherwise noted (e.g., "# contigs ( $\geq 0$  bp)" and "Total length ( $\geq 0$  bp)" include all contigs).

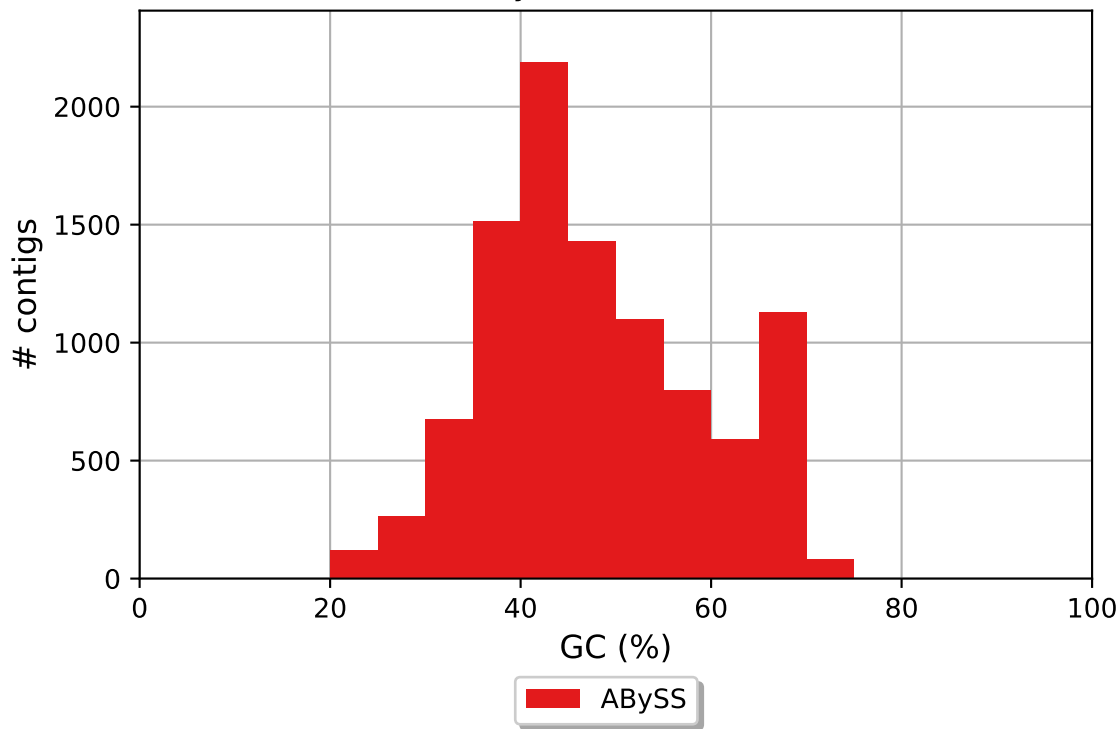




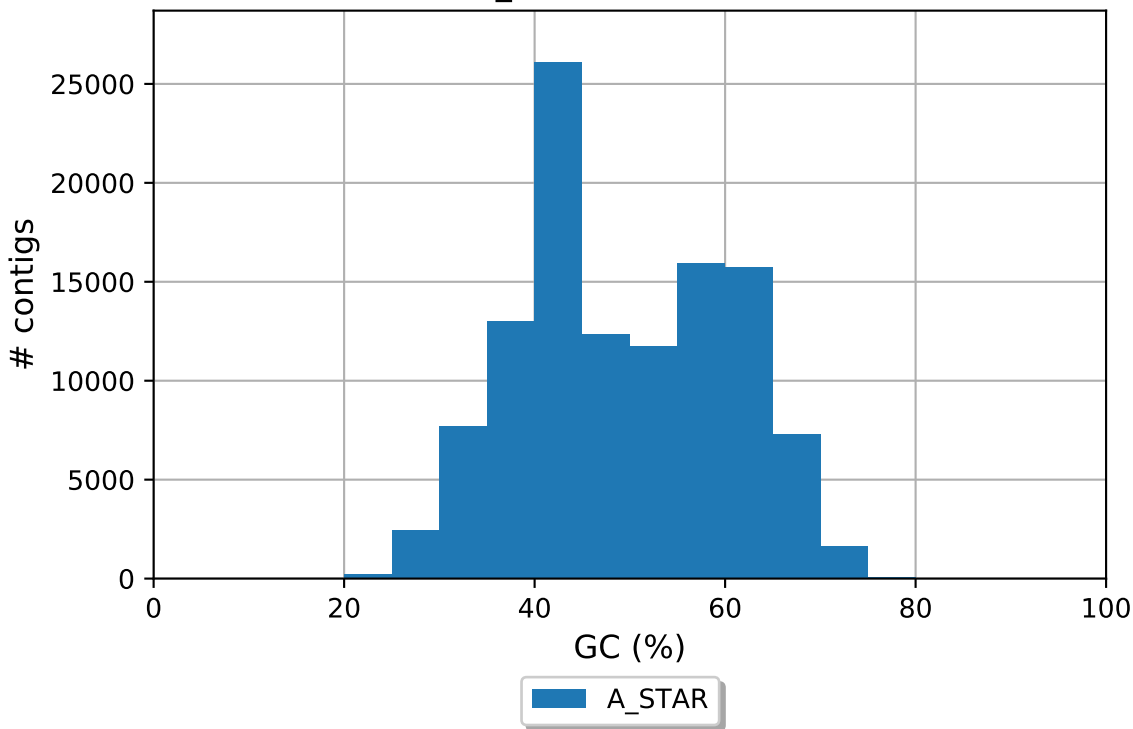
## GC content



ABySS GC content

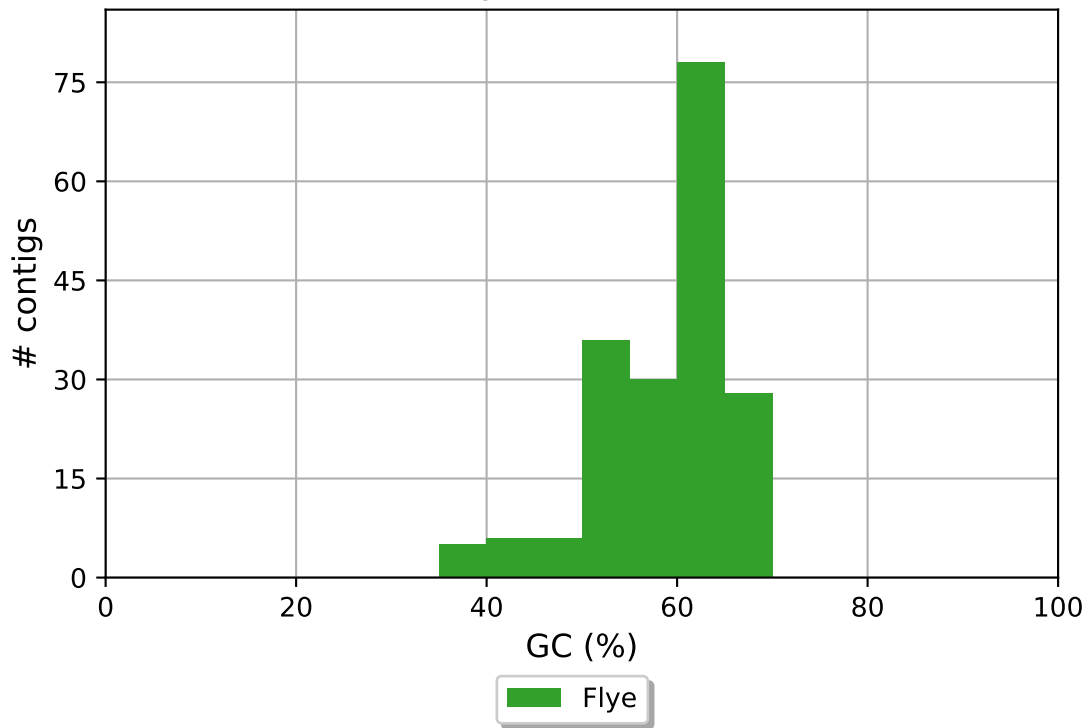


A\_STAR GC content

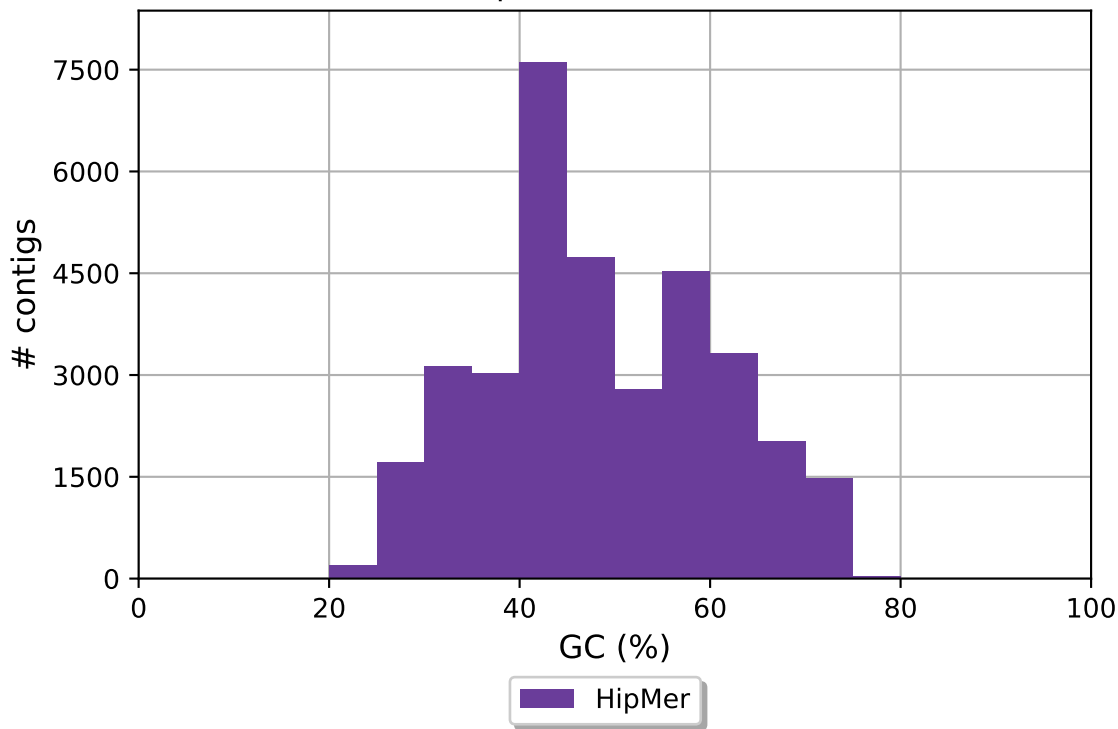




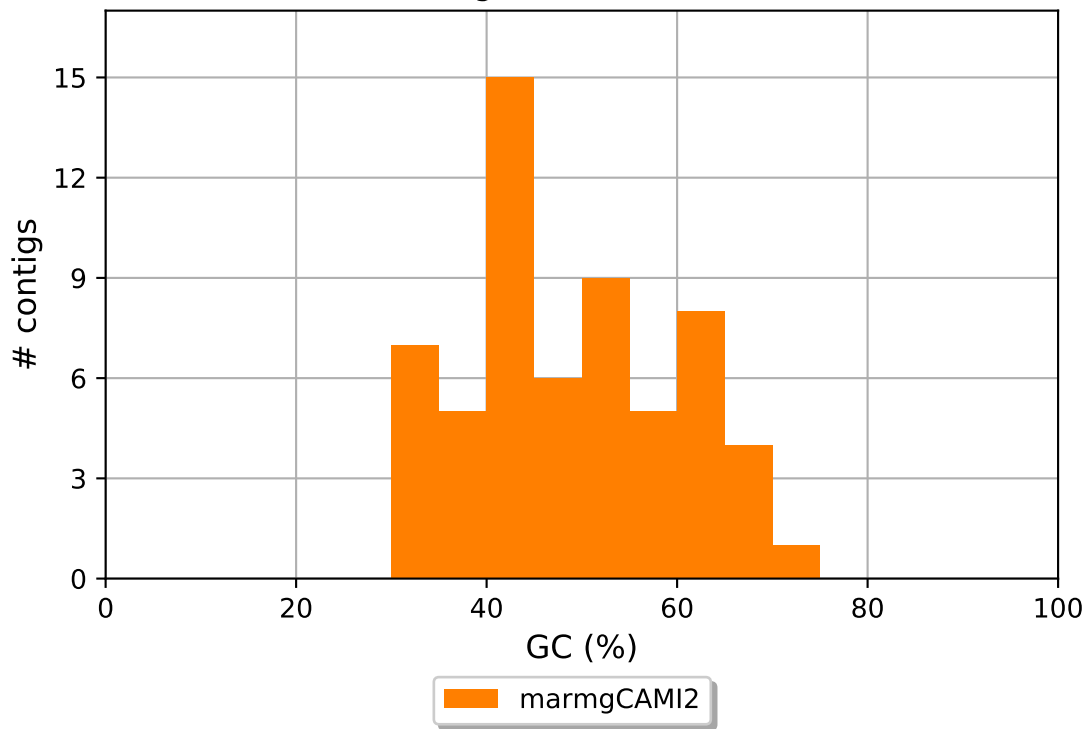
Flye GC content



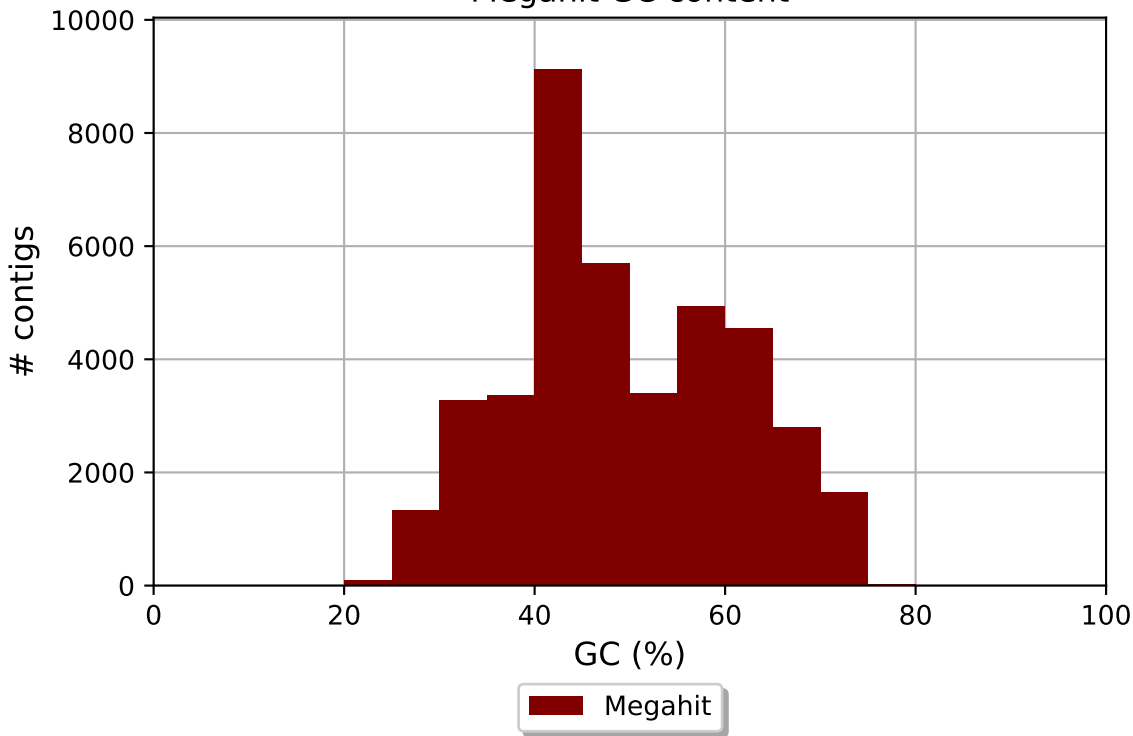
HipMer GC content



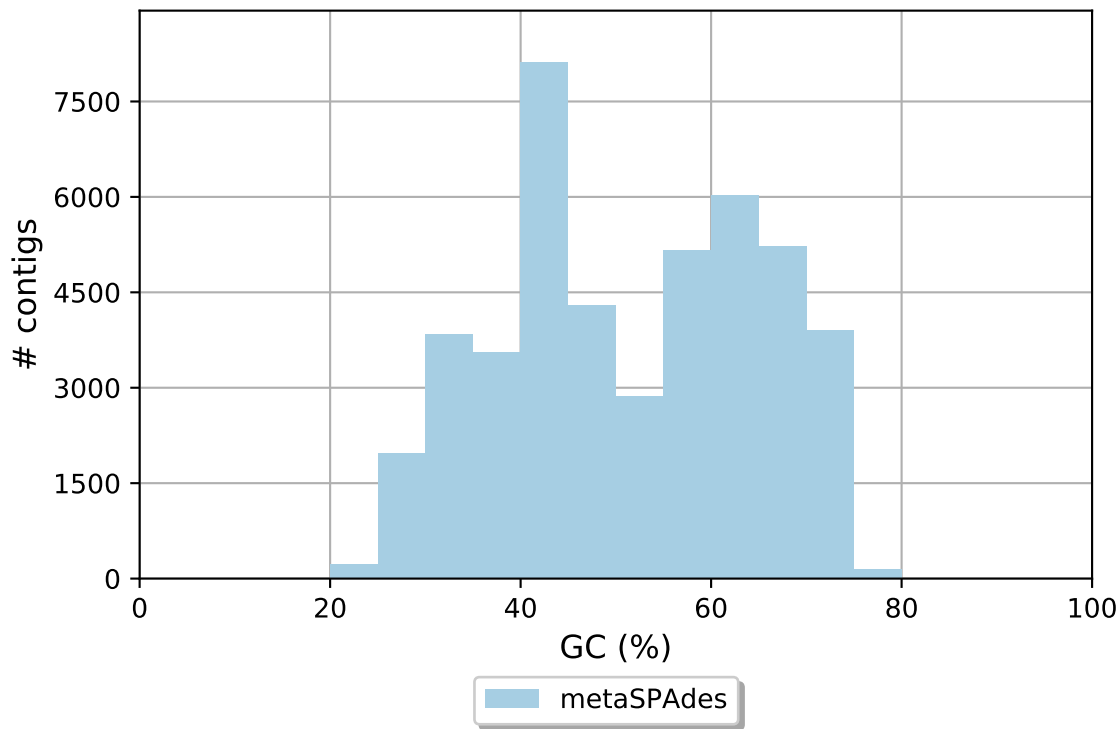
marmgCAMI2 GC content



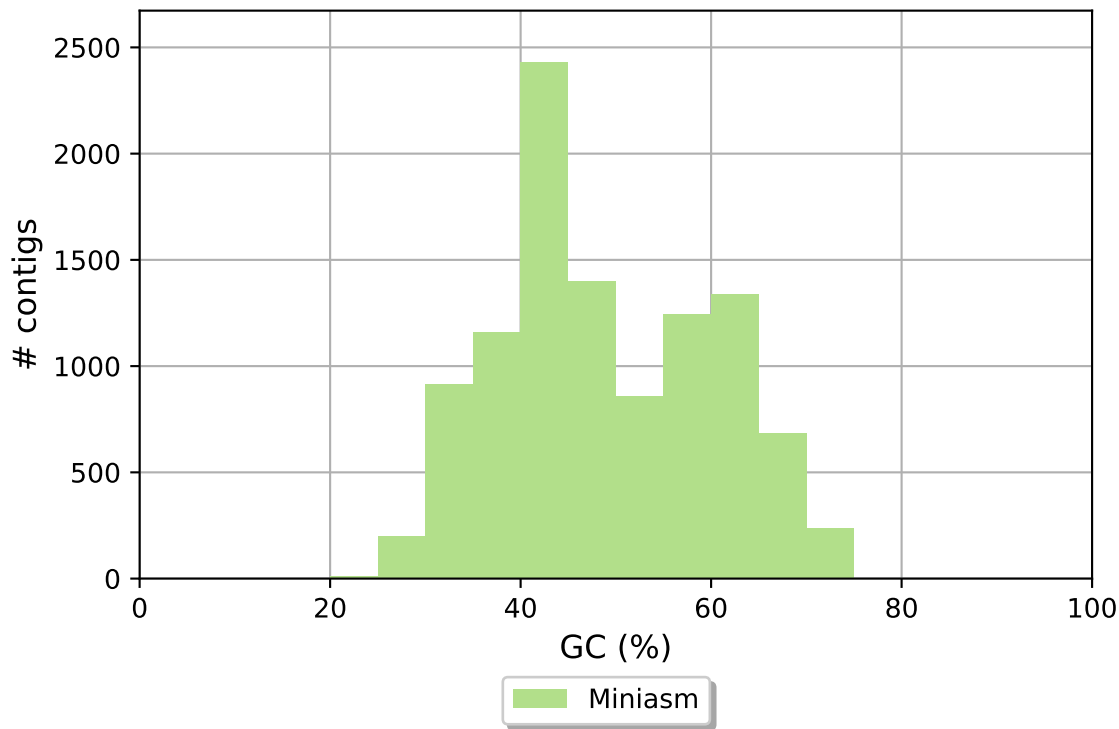
Megahit GC content



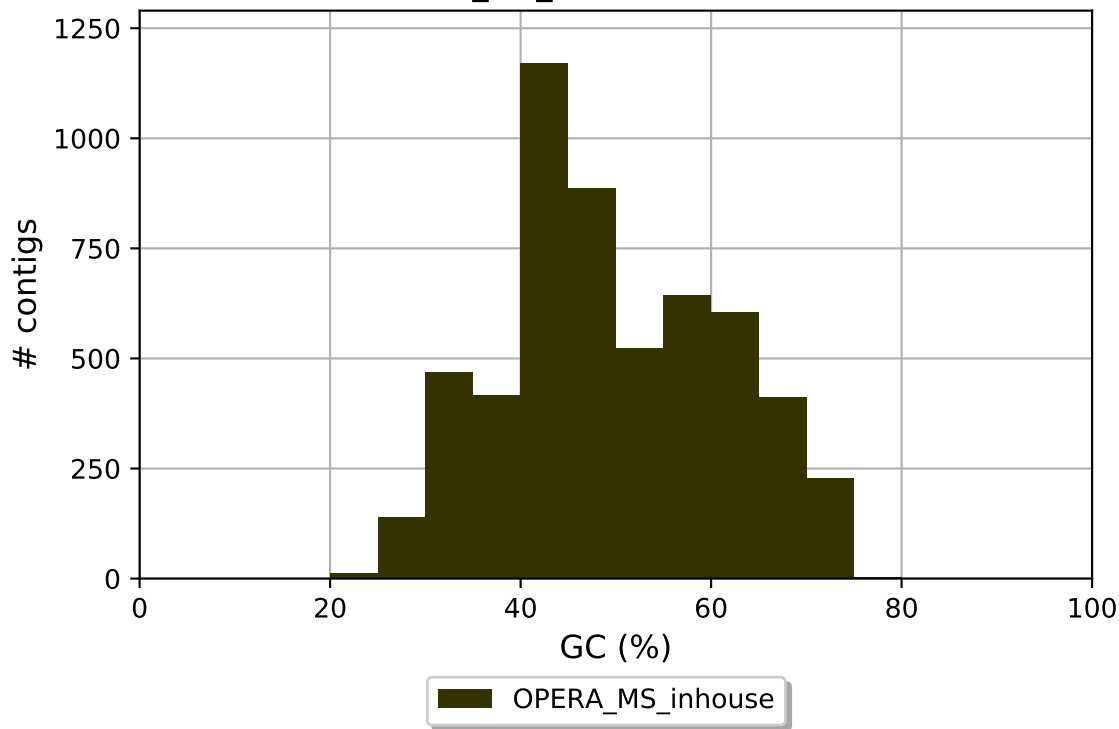
metaSPAdes GC content



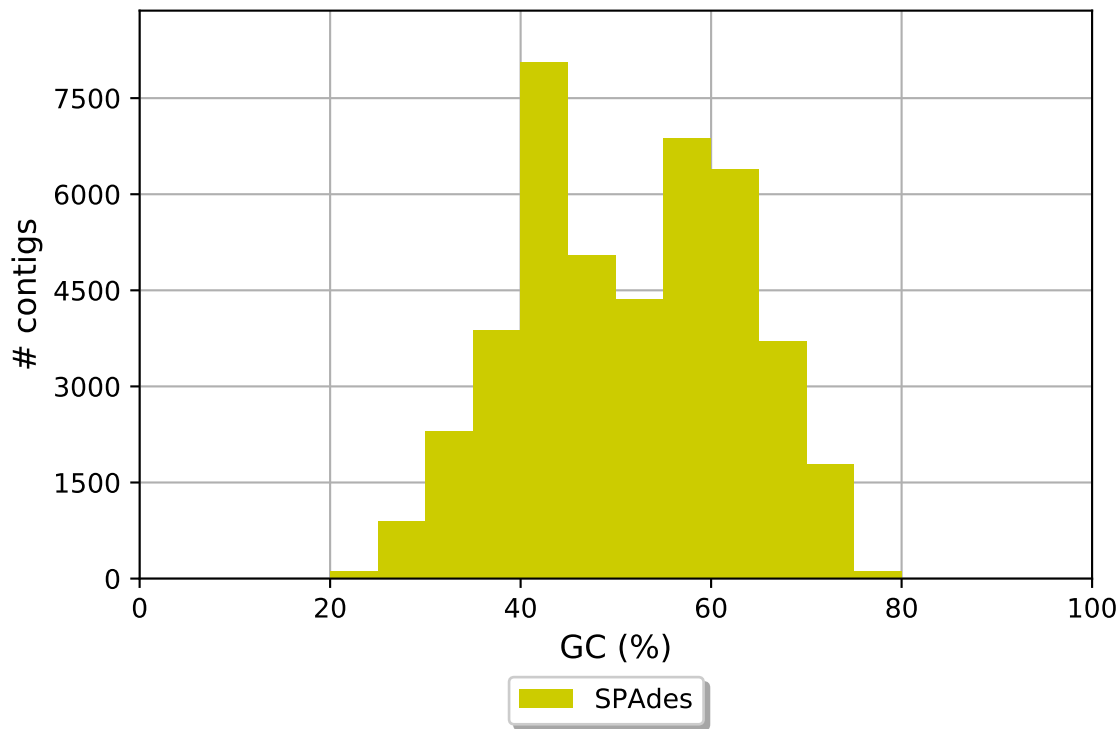
Miniasm GC content



OPERA\_MS\_inhouse GC content

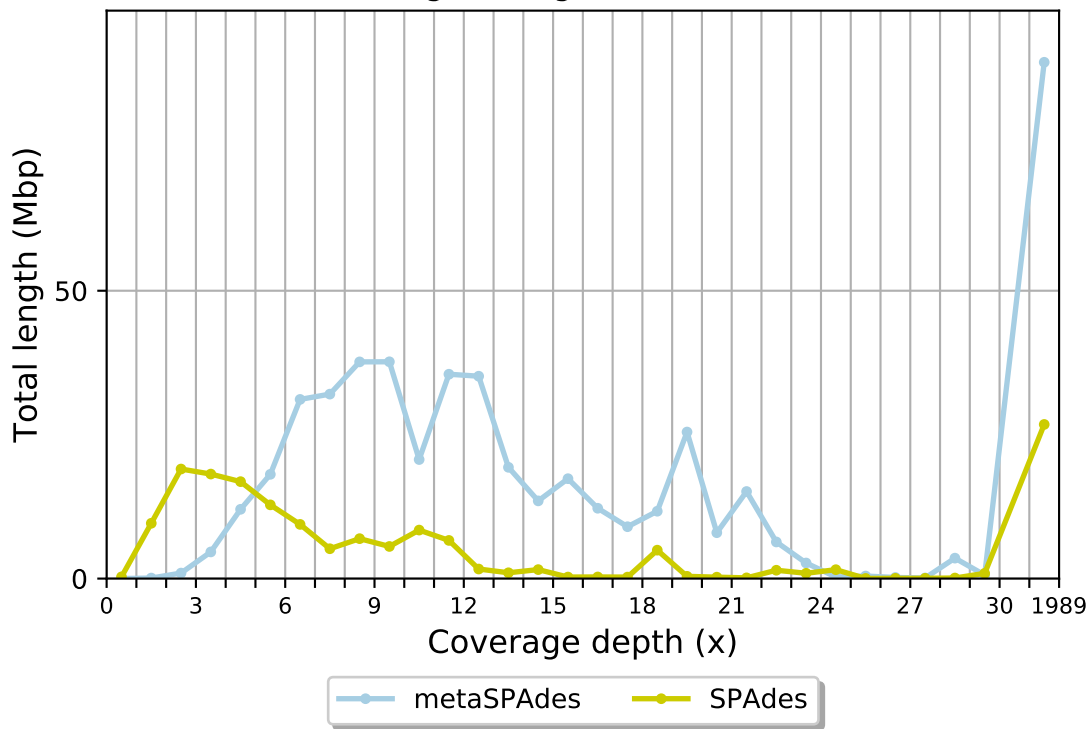


SPAdes GC content

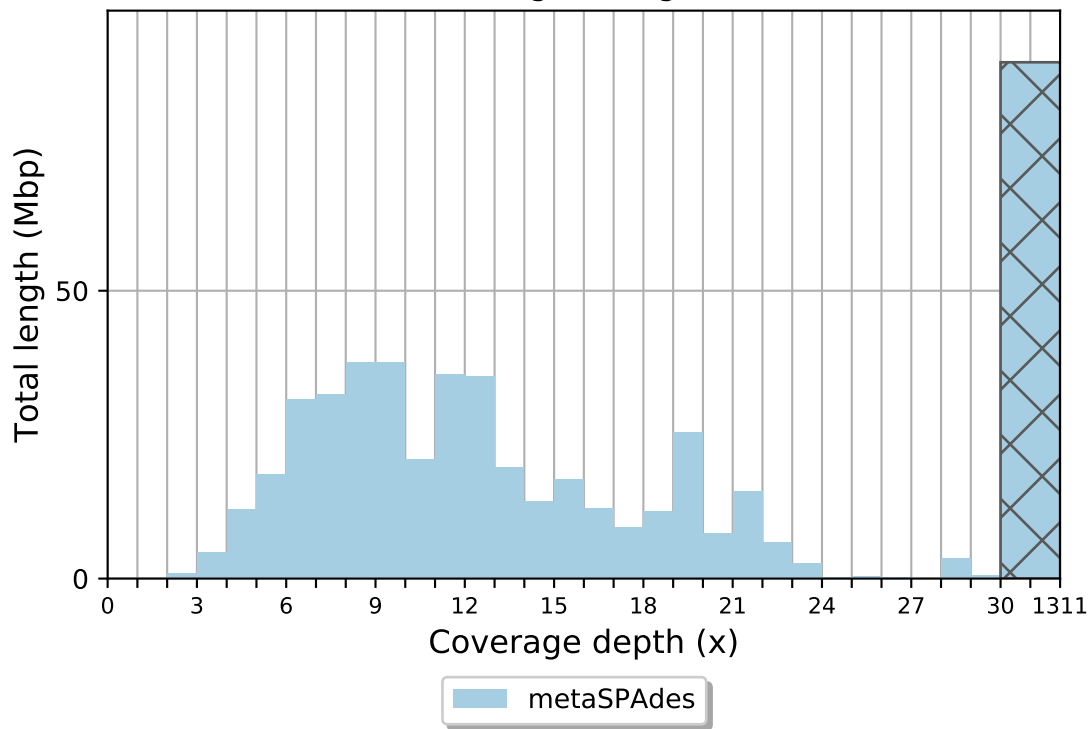




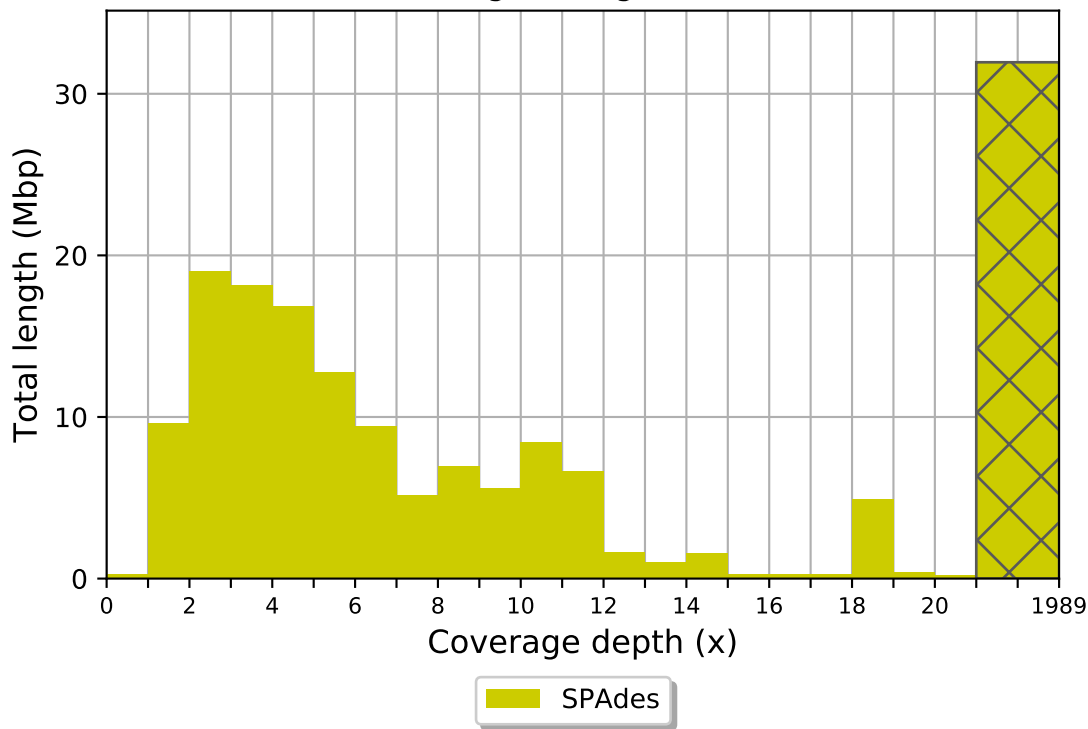
Coverage histogram (bin size: 1x)



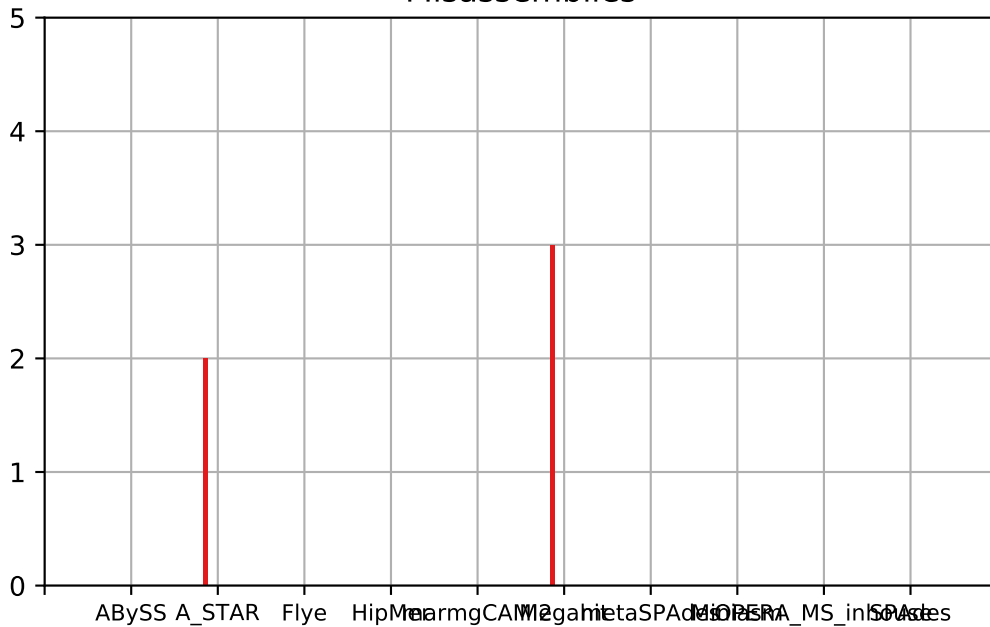
metaSPAdes coverage histogram (bin size: 1x)



SPAdes coverage histogram (bin size: 1x)

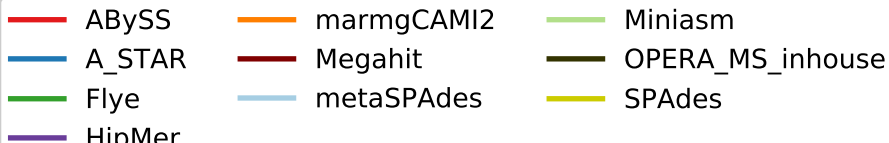
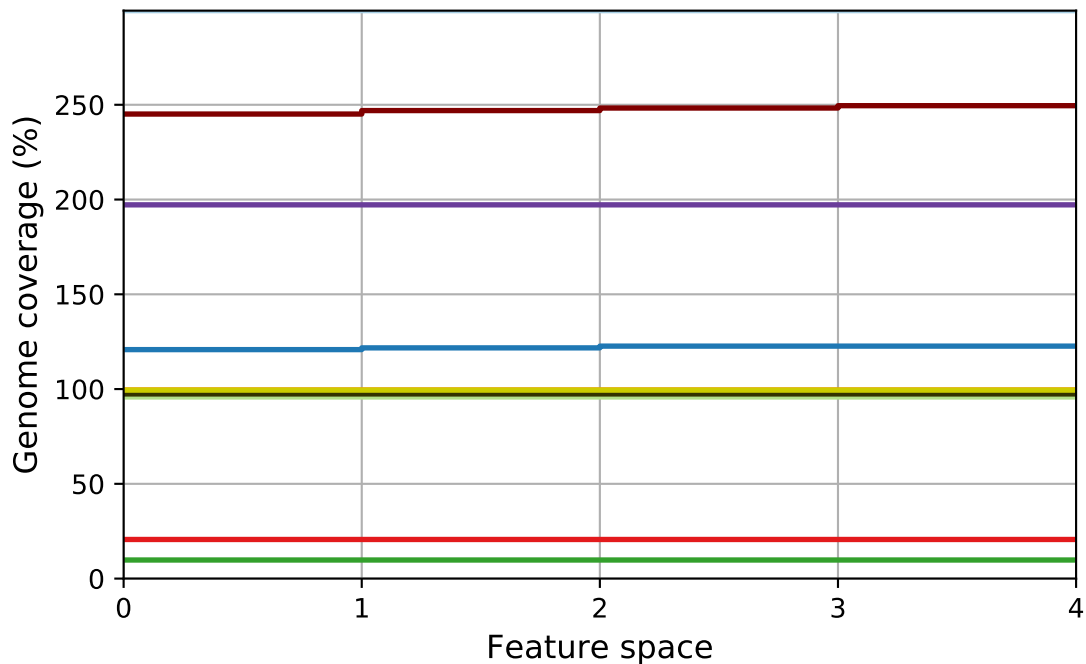


## Misassemblies

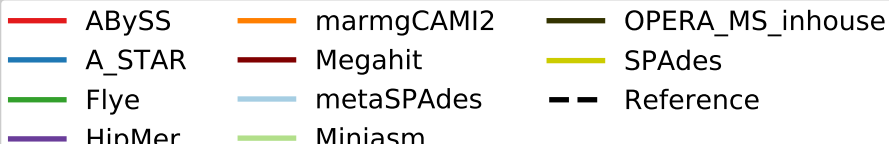
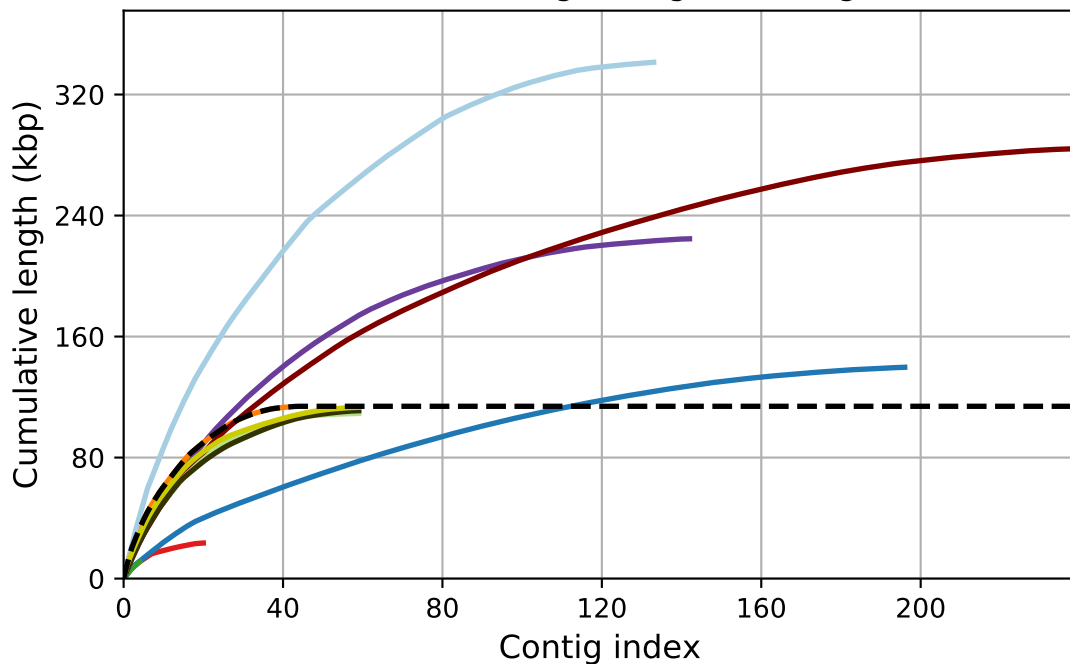


# relocations

# FRCurve (misassemblies)



Cumulative length (aligned contigs)



NAX

