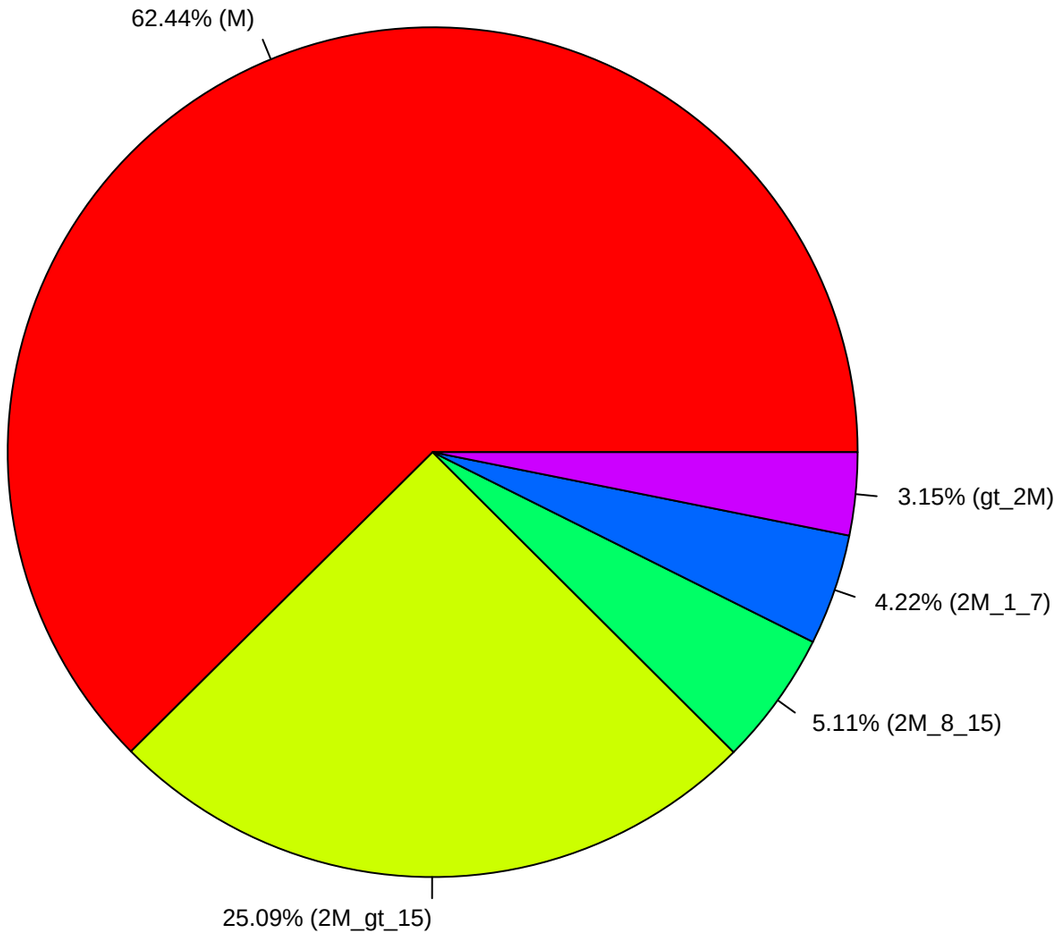
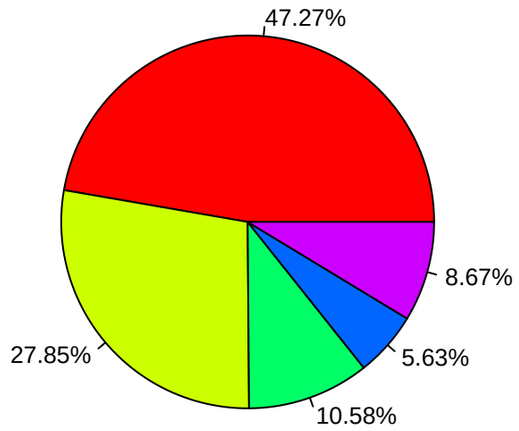
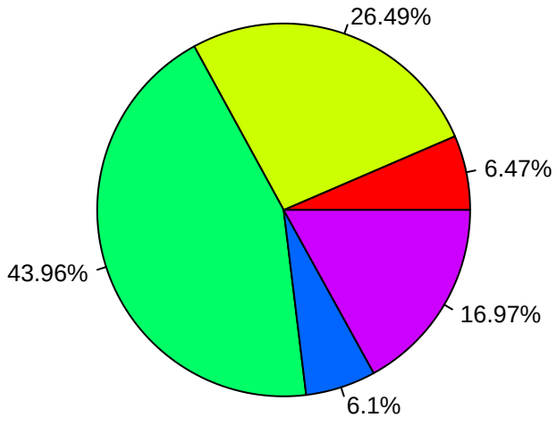
Reads



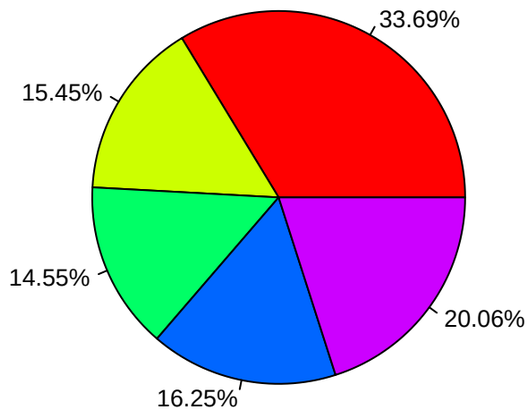
Relative runtime by STAR



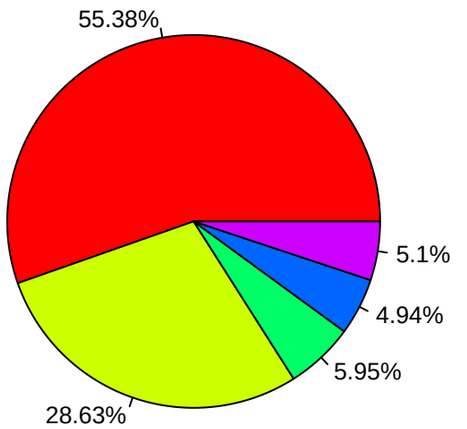
Relative runtime by OLego



Relative runtime by GSNAP



Relative runtime by HISATx1

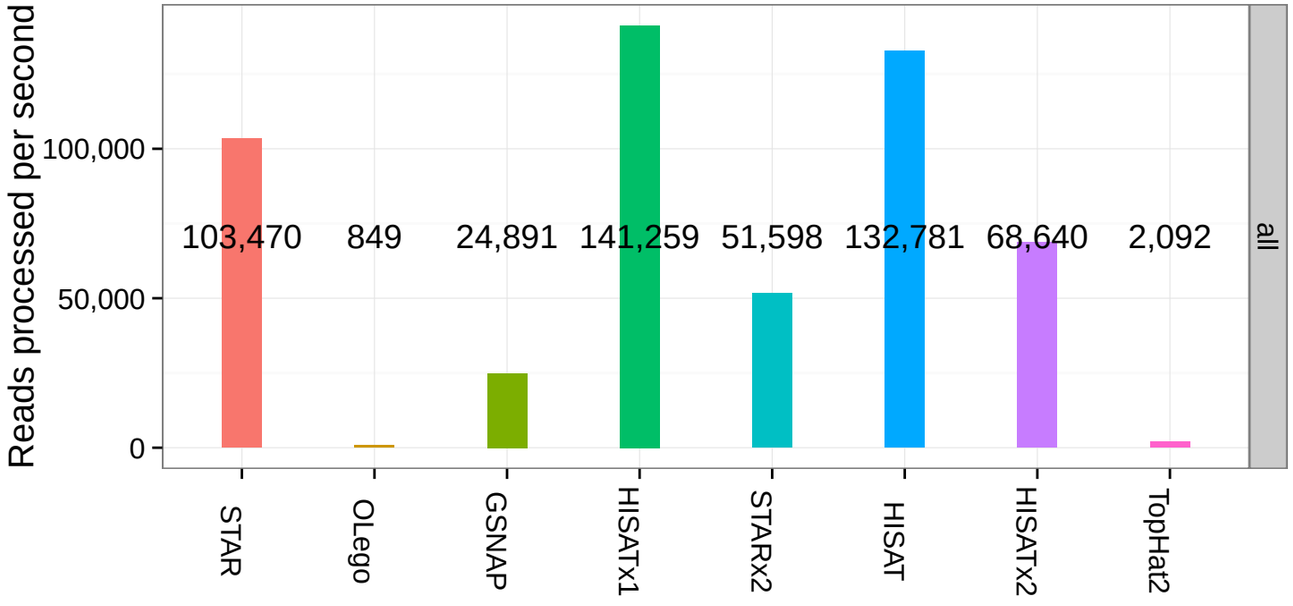


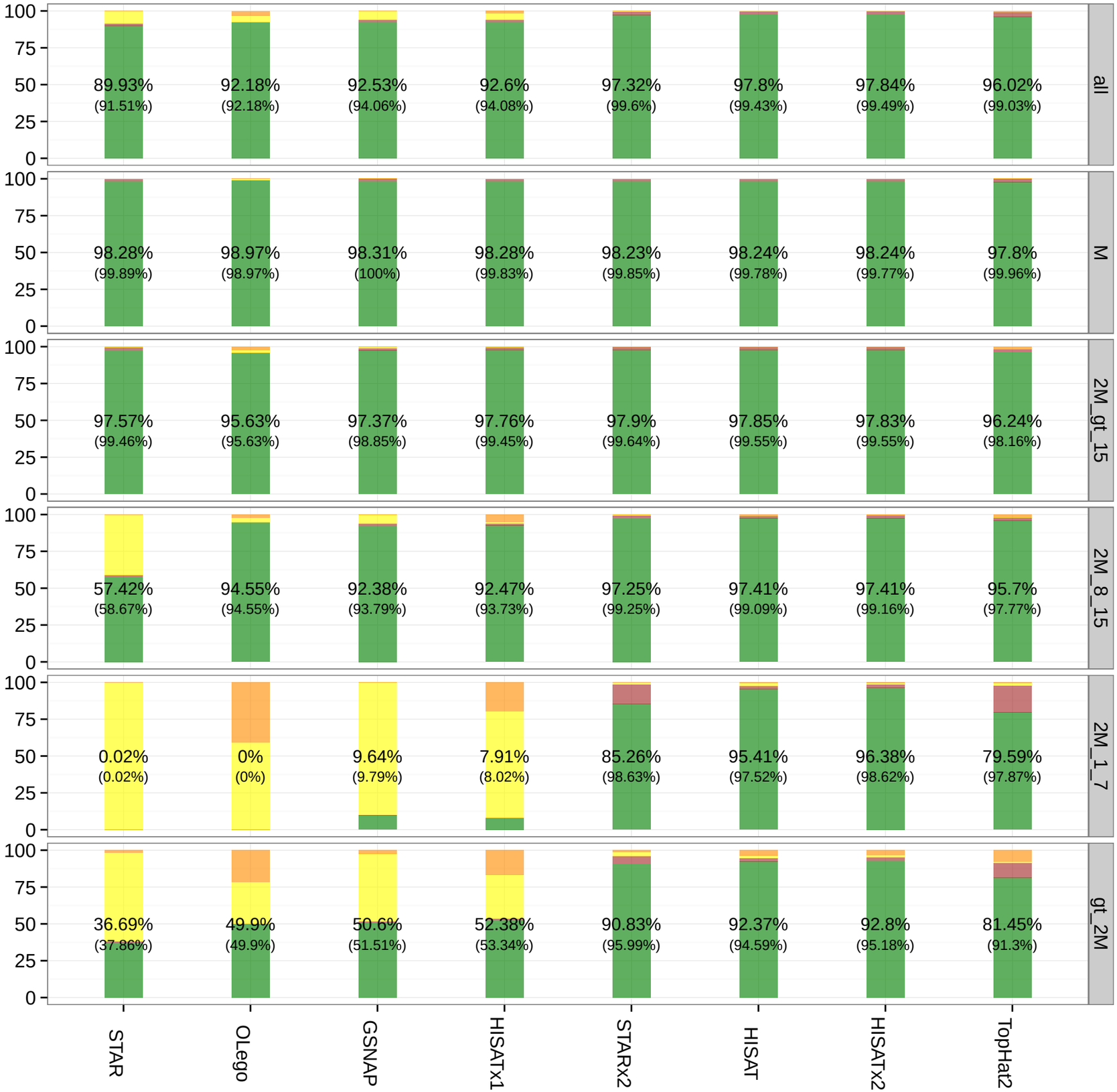
Reads processed per second

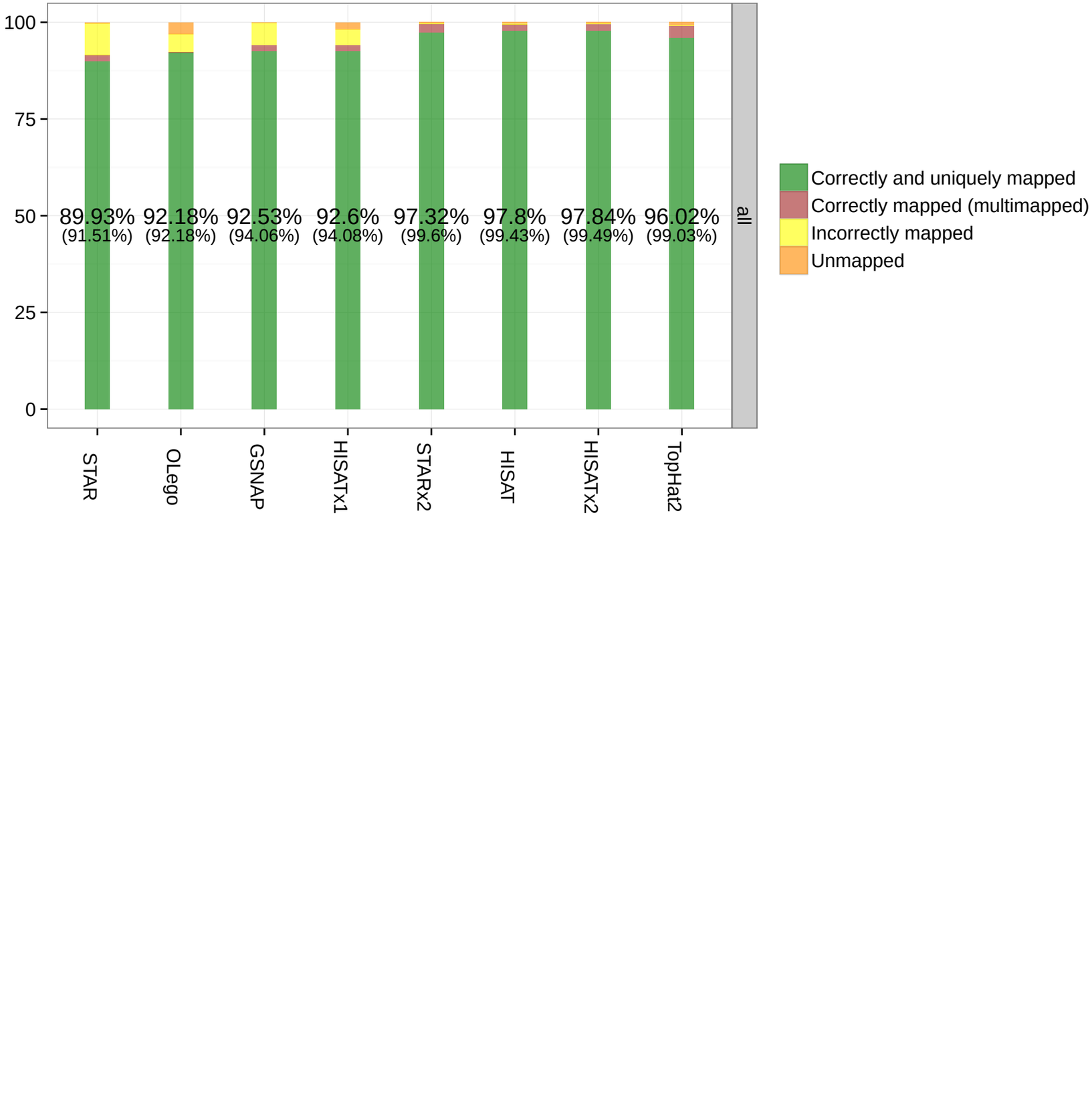
	STAR	OLego	GSNAP	HISATx1	STARx2	HISAT	HISATx2	TopHat2
all	103,470	849	24,891	141,259	51,598	132,781	68,640	2,092
M	121,100	8,280	50,488	159,325				
2M_gt_15	82,595	813	44,234	123,815				
2M_8_15	44,275	100	9,569	121,445				
2M_1_7	68,753	594	7,074	120,621				
gt_2M	33,278	159	4,273	87,208				

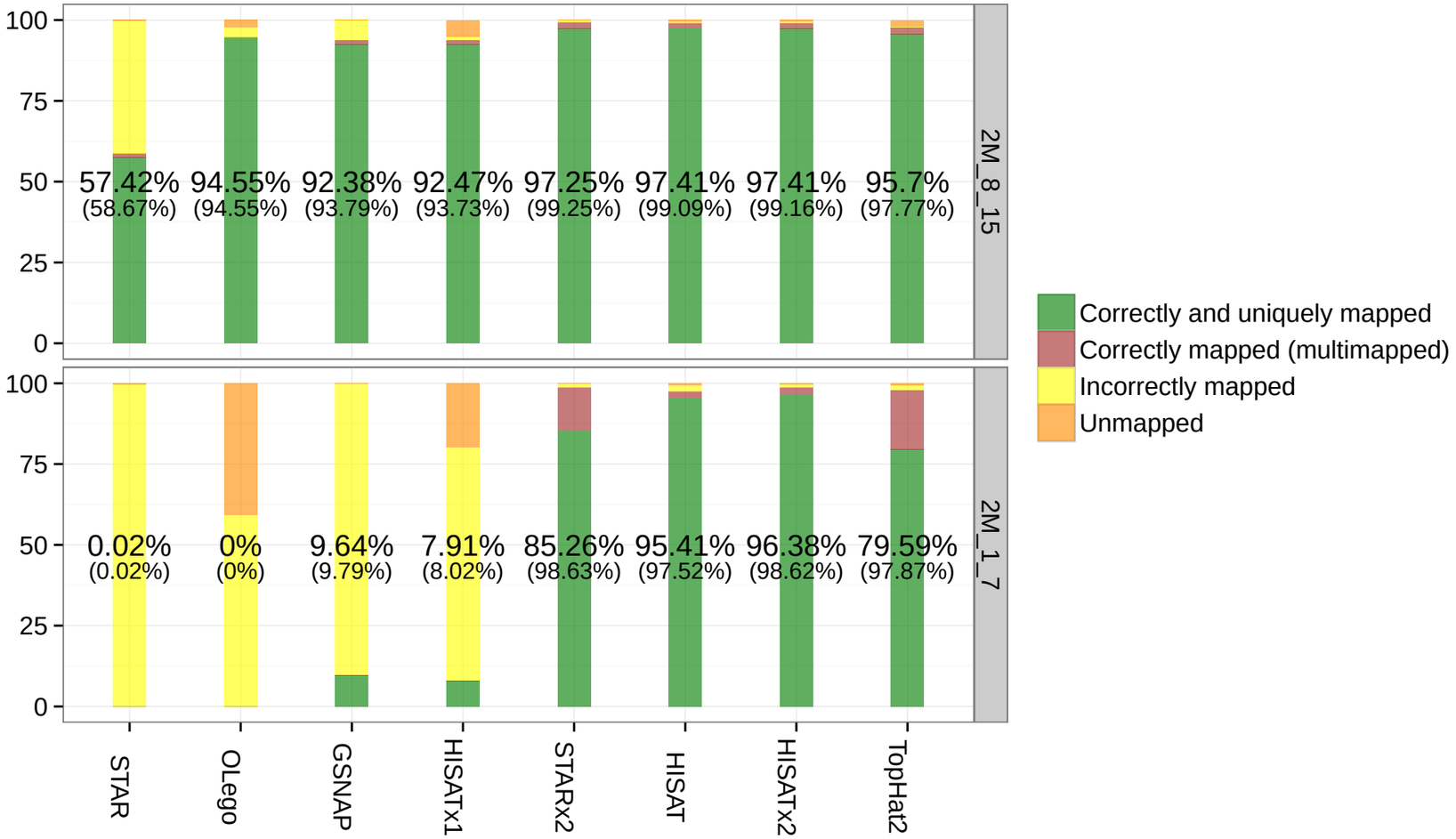
	STAR	OLego	GSNAP	HISATx1	STARx2	HISAT	HISATx2	TopHat2
all	89.93% (91.51%)	92.18% (92.18%)	92.53% (94.06%)	92.6% (94.08%)	97.32% (99.6%)	97.8% (99.43%)	97.84% (99.49%)	96.02% (99.03%)
M	98.28% (99.89%)	98.97% (98.97%)	98.31% (100%)	98.28% (99.83%)	98.23% (99.85%)	98.24% (99.78%)	98.24% (99.77%)	97.8% (99.96%)
2M_gt_15	97.57% (99.46%)	95.63% (95.63%)	97.37% (98.85%)	97.76% (99.45%)	97.9% (99.64%)	97.85% (99.55%)	97.83% (99.55%)	96.24% (98.16%)
2M_8_15	57.42% (58.67%)	94.55% (94.55%)	92.38% (93.79%)	92.47% (93.73%)	97.25% (99.25%)	97.41% (99.09%)	97.41% (99.16%)	95.7% (97.77%)
2M_1_7	0.02% (0.02%)	0% (0%)	9.64% (9.79%)	7.91% (8.02%)	85.26% (98.63%)	95.41% (97.52%)	96.38% (98.62%)	79.59% (97.87%)
gt_2M	36.69% (37.86%)	49.9% (49.9%)	50.6% (51.51%)	52.38% (53.34%)	90.83% (95.99%)	92.37% (94.59%)	92.8% (95.18%)	81.45% (91.3%)

- Correctly and uniquely mapped
- Correctly mapped (multimapped)
- Incorrectly mapped
- Unmapped


Reads processed per second
100,000
50,000
0
103,470
849
24,891
141,259
51,598
132,781
68,640
2,092
all
STAR
OLego
GSNAP
HISATx1
STARx2
HISAT
HISATx2
TopHat2


all
89.93% (91.51%)
92.18% (92.18%)
92.53% (94.06%)
92.6% (94.08%)
97.32% (99.6%)
97.8% (99.43%)
97.84% (99.49%)
96.02% (99.03%)
M
98.28% (99.89%)
98.97% (98.97%)
98.31% (100%)
98.28% (99.83%)
98.23% (99.85%)
98.24% (99.78%)
98.24% (99.77%)
97.8% (99.96%)
2M_gt_15
97.57% (99.46%)
95.63% (95.63%)
97.37% (98.85%)
97.76% (99.45%)
97.9% (99.64%)
97.85% (99.55%)
97.83% (99.55%)
96.24% (98.16%)
2M_8_15
57.42% (58.67%)
94.55% (94.55%)
92.38% (93.79%)
92.47% (93.73%)
97.25% (99.25%)
97.41% (99.09%)
97.41% (99.16%)
95.7% (97.77%)
2M_1_7
0.02% (0.02%)
0% (0%)
9.64% (9.79%)
7.91% (8.02%)
85.26% (98.63%)
95.41% (97.52%)
96.38% (98.62%)
79.59% (97.87%)
gt_2M
36.69% (37.86%)
49.9% (49.9%)
50.6% (51.51%)
52.38% (53.34%)
90.83% (95.99%)
92.37% (94.59%)
92.8% (95.18%)
81.45% (91.3%)
100
75
50
25
0
STAR
OLego
GSNAP
HISATx1
STARx2
HISAT
HISATx2
TopHat2


100
75
50
25
0
89.93%
(91.51%)
92.18%
(92.18%)
92.53%
(94.06%)
92.6%
(94.08%)
97.32%
(99.6%)
97.8%
(99.43%)
97.84%
(99.49%)
96.02%
(99.03%)
all
STAR
OLego
GSNAP
HISATx1
STARx2
HISAT
HISATx2
TopHat2
Correctly and uniquely mapped
Correctly mapped (multimapped)
Incorrectly mapped
Unmapped


100
75
50
25
0
2M_8_15
57.42% (58.67%)
94.55% (94.55%)
92.38% (93.79%)
92.47% (93.73%)
97.25% (99.25%)
97.41% (99.09%)
97.41% (99.16%)
95.7% (97.77%)
2M_1_7
0.02% (0.02%)
0% (0%)
9.64% (9.79%)
7.91% (8.02%)
85.26% (98.63%)
95.41% (97.52%)
96.38% (98.62%)
79.59% (97.87%)
Correctly and uniquely mapped
Correctly mapped (multimapped)
Incorrectly mapped
Unmapped
TopHat2
HISATx2
HISAT
STARx2
HISATx1
GSNAP
OLego
STAR

Sensitivity of Splice Sites (%)

Accuracy of Splice Sites (%)

	STAR	OLego	GSNAP	HISATx1	STARx2	HISAT	HISATx2	TopHat2
all	96.67%	94.06%	97.26%	97.52%	96.73%	97.56%	97.59%	90.73%
2M_gt_15	99.6%	95.73%	99.07%	99.61%	96.73%			
2M_8_15	87.83%	94.91%	96.31%	96.69%	96.73%			
2M_1_7	0.05%	0.01%	35.09%	33.52%	96.73%			
gt_2M	76.13%	77.98%	82.9%	81.76%	96.73%			

	STAR	OLego	GSNAP	HISATx1	STARx2	HISAT	HISATx2	TopHat2
all	94.43%	97.01%	95.25%	95.18%	95.12%	96.63%	96.63%	84.82%
2M_gt_15	96.45%	98.53%	97.19%	97.27%	95.12%			
2M_8_15	95.22%	98.16%	96.2%	96.95%	95.12%			
2M_1_7	47.54%	1.22%	95.1%	93.93%	95.12%			
gt_2M	94.06%	96.98%	94.53%	95.78%	95.12%			