

Graph construction report for graph5

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Computational resources

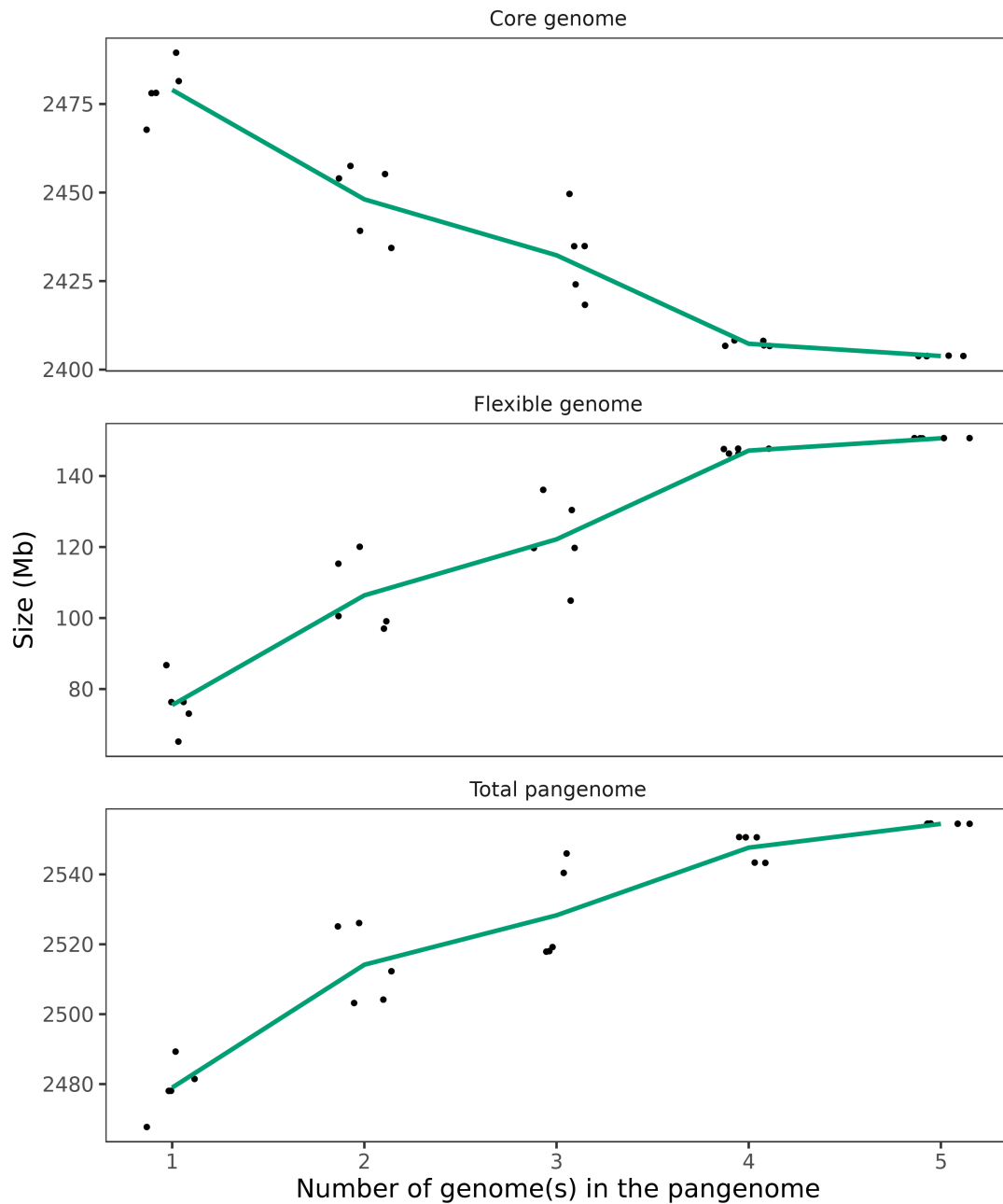
Statistics	Val(Mb/sec)	Val(GB/mins)
CPU time	10844.93	180.75
max mem	90396	88.28
average mem	42898.73	41.89
Run time	978	16.30

Graph statistics

Graph parameters	Count	Length (bp)
All nodes	176,037	2,554,462,759
Reference nodes	119,284	2,489,385,779
Non-reference nodes	56,753	65,076,980
Added from Angus	8,515	12,997,145
Added from Highland	4,695	7,175,045
Added from Brahman	12,820	12,326,594
Added from Yak	30,723	32,578,196
Edge RefRef	136,305	0
Edge RefNonref	109,044	0
Edge NonrefNonref	3,201	0

Core - flexible genome analysis

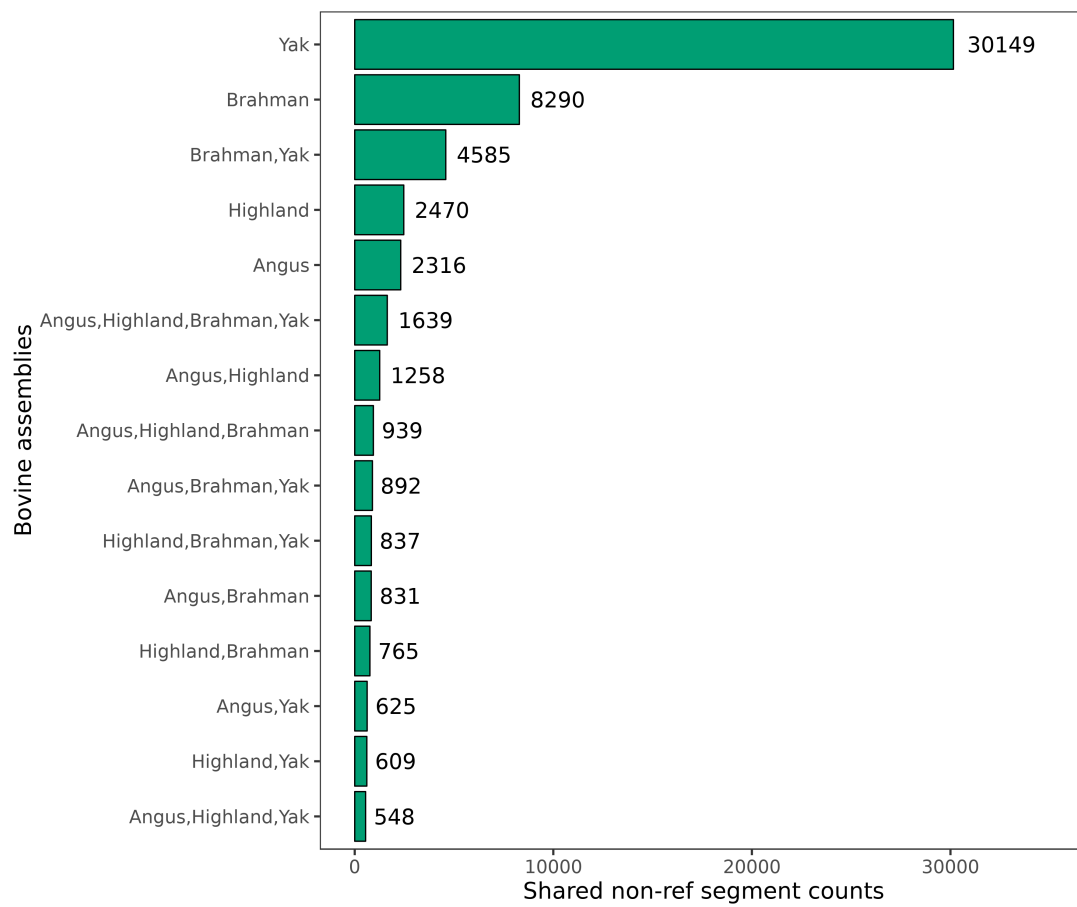
Pangenome component	Length	Proportion
core	2,403,833,363	94.10%
flexible	150,629,396	5.90%
flexible_shared	91,923,908	3.60%
private	58,705,488	2.30%



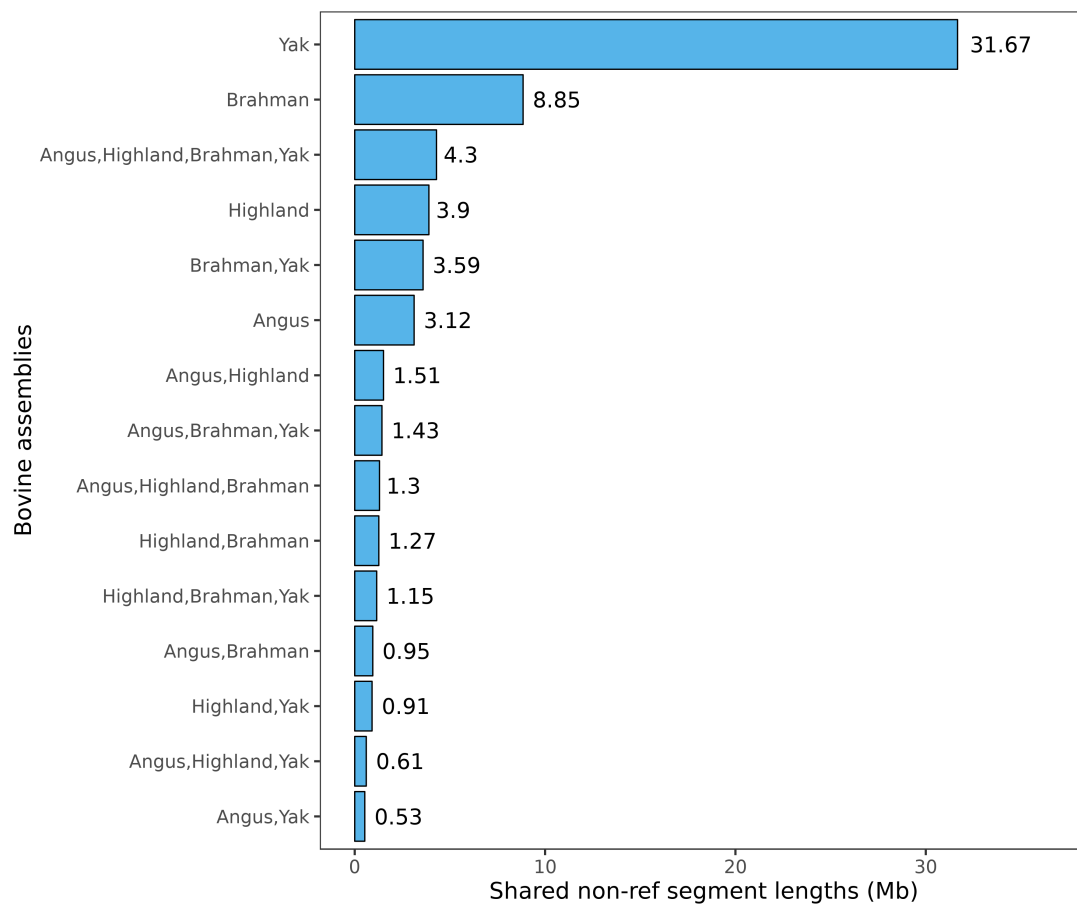
Pangenome size as sample increased

Non-reference sequences

Non-ref sequences	Node count	Total sequence length
Angus	9,048	13,744,385
Brahman	18,778	22,833,008
Highland	9,065	14,944,012
Yak	39,884	44,184,846



Pangenome nonref sharing count



Pangenome nonref sharing length

Structural variations analysis

Biallelic variations

Mutation type	SV count	SV total length	SV mean length
AltDel	12752	10,829,643	849
AltIns	14768	12,391,969	839
Deletion	14854	15,994,388	1077
Insertion	19343	20,788,858	1075

Multiallelic variations

Mutation type	SV count	SV total length	SV mean length
Deletions	4631	12,609,337	2723
Insertions	4306	10,327,422	2398