

celera Matches

HP base \ HP length	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
A	8266460	3097760	1128372	492925	215277	82702	26304	4552	651	79	38	24	15	12	16	5	1	1	3	0	0	1
C	7527051	1547142	217848	43078	6786	876	113	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NA
G	7443144	1495949	212552	41896	6191	882	147	20	0	0	0	0	0	0	0	0	0	0	0	0	0	NA
T	8322275	3084911	1146793	502731	224735	89882	29349	5634	423	55	32	25	48	12	11	8	6	2	2	1	0	NA

Total HP matches: 45265873

Total match positions: 66248219

celera Substitutions

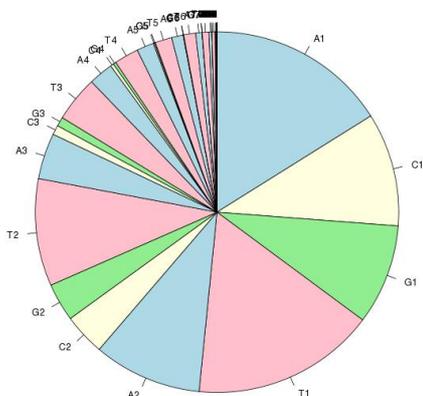
	A	C	G	T
A	0 (0 %)	314368 (9.48 %)	298435 (9 %)	454647 (13.71 %)
C	215248 (6.49 %)	0 (0 %)	155494 (4.69 %)	220471 (6.65 %)
G	214762 (6.48 %)	155015 (4.67 %)	0 (0 %)	214063 (6.46 %)
T	449989 (13.57 %)	310634 (9.37 %)	312819 (9.43 %)	0 (0 %)

Total substitutions: 3315945

celera Insertion

Insertion per context

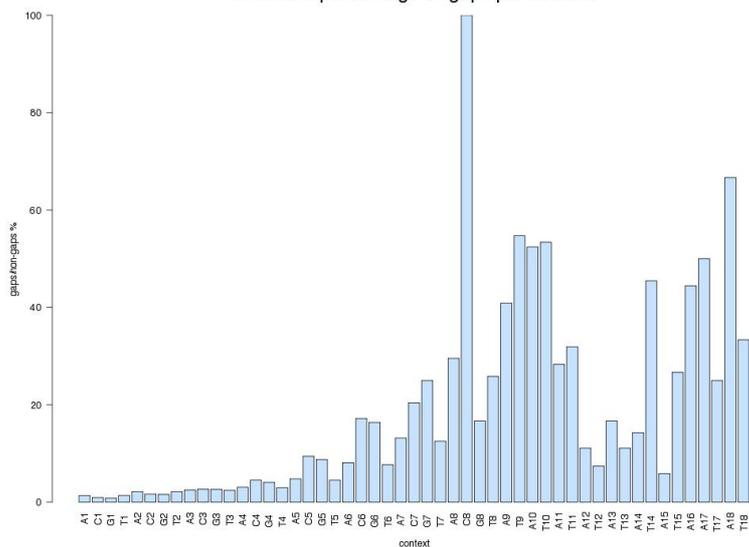
Insertion: number of gaps per context



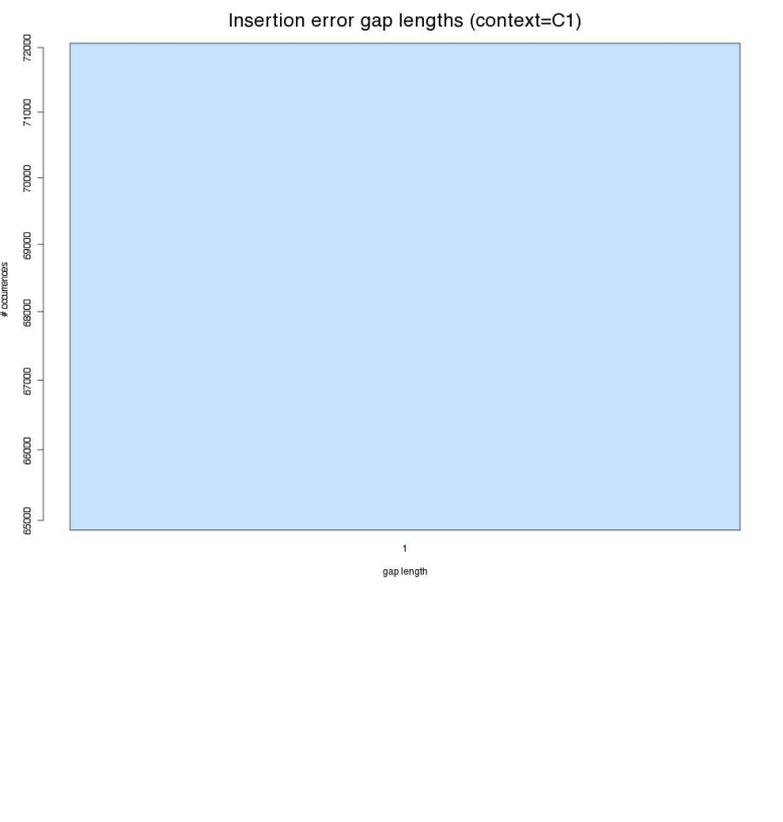
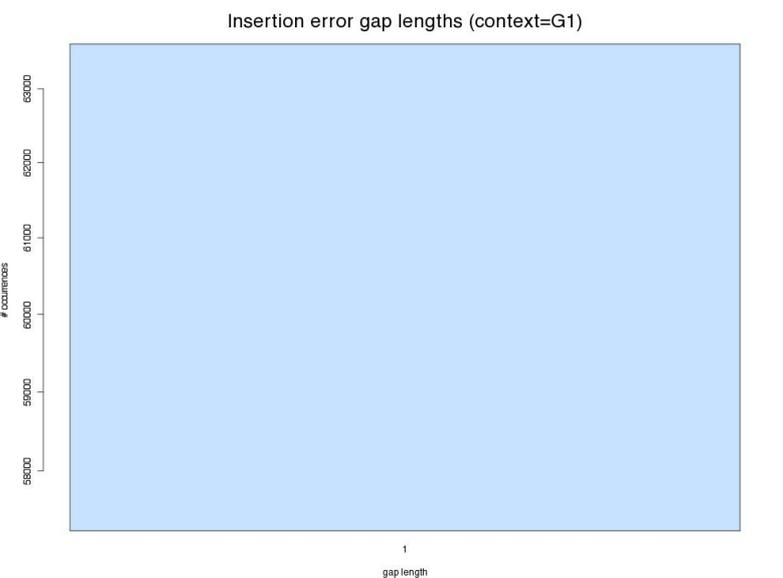
Total: 708741

Insertion per context

Insertion: percentage of gaps per context



Context	#Data	Gap lengths	Zipfian fit	Geom fit
*	708741	<p>Insertion error gap lengths (context=any)</p>	<p>s = 4.65175134225846 $X^2 = 674.385812543933$ p-value = 1.69470235413899e-143</p>	<p>beta = 0.0530208184409083 $X^2 = 12804.3549351305$ p-value = 0</p>
A1	113772	<p>Insertion error gap lengths (context=A1)</p>	INVALID/Error	INVALID/Error

C1	72069	<p style="text-align: center;">Insertion error gap lengths (context=C1)</p> 	INVALID/ERROR	INVALID/ERROR
G1	63614	<p style="text-align: center;">Insertion error gap lengths (context=G1)</p> 	INVALID/ERROR	INVALID/ERROR
T1	116096		INVALID/ERROR	INVALID/ERROR

A2	68446		INVALID/ERROR	INVALID/ERROR
C2	26389		INVALID/ERROR	INVALID/ERROR

G2	24184		INVALID/ERROR	INVALID/ERROR
T2	68146		INVALID/ERROR	INVALID/ERROR
A3	29213		<p> $s = 3.06237840832514$ $X^2 = 61.671294560715$ $p\text{-value} = 4.05854092363824e-15$ </p>	<p> $\beta = 0.138767688679245$ $X^2 = 104.589672335044$ $p\text{-value} = 1.50237857823962e-24$ </p>

C3	6007	<p>Insertion error gap lengths (context=C3)</p>	<p>s = 1.93399959970195 $X^2 = 2.1480204135818$ p-value = 0.142753845472073</p>	<p>beta = 0.26519877675841 $X^2 = 113.508507577056$ p-value = 1.66963420626503e-26</p>
G3	5805	<p>Insertion error gap lengths (context=G3)</p>	<p>s = 2.04713324252887 $X^2 = 1.12952914792824$ p-value = 0.28787579475601</p>	<p>beta = 0.250967741935484 $X^2 = 100.664699511723$ p-value = 1.08950108883066e-23</p>
T3	28987	<p>Insertion error gap lengths (context=T3)</p>	<p>s = 3.12791393067888 $X^2 = 291.525619548521$ p-value = 2.31281332334304e-65</p>	<p>beta = 0.130876709042936 $X^2 = 11.1617662576153$ p-value = 0.000835003877040266</p>

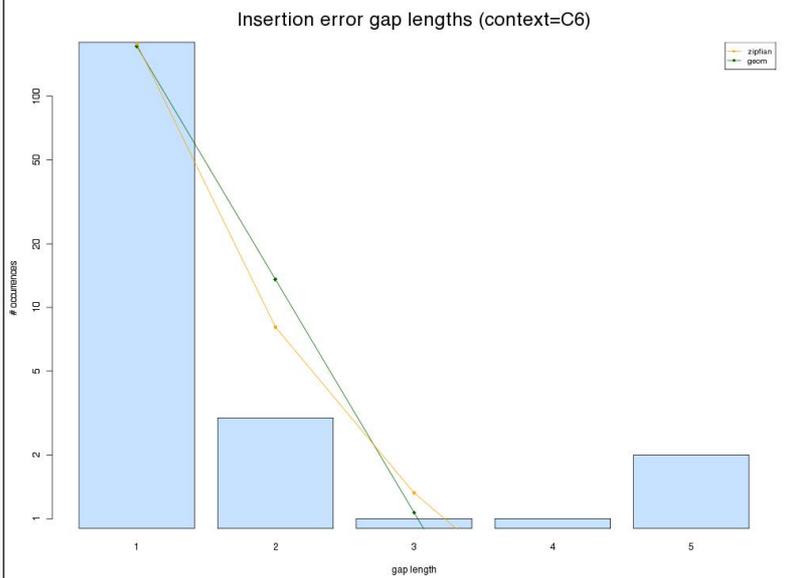
A4	15518	<p>Insertion error gap lengths (context=A4)</p>	<p>s = 3.2224395792105 $X^2 = 53.2356871606835$ p-value = 2.75433913544143e-12</p>	<p>beta = 0.150257365020261 $X^2 = 674.475514779563$ p-value = 3.46340178298326e-147</p>
C4	2035	<p>Insertion error gap lengths (context=C4)</p>	<p>s = 1.88205039535727 $X^2 = 157.599674325211$ p-value = 5.99329348865111e-35</p>	<p>beta = 0.341849935316947 $X^2 = 265.503174860792$ p-value = 2.22186728843846e-58</p>
G4	1790	<p>Insertion error gap lengths (context=G4)</p>	<p>s = 2.00917566951851 $X^2 = 188.053213499704$ p-value = 1.46138126866772e-41</p>	<p>beta = 0.320940819423369 $X^2 = 281.551127402893$ p-value = 7.27695178872066e-62</p>

T4	15430	<p style="text-align: center;">Insertion error gap lengths (context=T4)</p>	<p> $s = 3.28034822018251$ $X^2 = 72.6997252667011$ $p\text{-value} = 1.63476465902417e-16$ </p>	<p> $\beta = 0.142253599421869$ $X^2 = 460.690303241429$ $p\text{-value} = 9.17005030140118e-101$ </p>
A5	10842	<p style="text-align: center;">Insertion error gap lengths (context=A5)</p>	<p> $s = 3.77476284629817$ $X^2 = 111.837818667721$ $p\text{-value} = 4.41360141639958e-24$ </p>	<p> $\beta = 0.112330112985099$ $X^2 = 1747.64936377591$ $p\text{-value} = 0$ </p>
C5	708		<p> $s = 4.45616172991951$ $X^2 = 28.5552989337661$ $p\text{-value} = 2.77689349096759e-06$ </p>	<p> $\beta = 0.072083879423329$ $X^2 = 616.653919890878$ $p\text{-value} = 2.4715309546673e-133$ </p>

		<p>Insertion error gap lengths (context=C5)</p>		
G5	597	<p>Insertion error gap lengths (context=G5)</p>	<p>s = 4.430144643528 $X^2 = 15.7950257056116$ p-value = 0.00124915403237366</p>	<p>beta = 0.0715396578538103 $X^2 = 358.769367985303$ p-value = 1.88267273876526e-77</p>
T5	10593	<p>Insertion error gap lengths (context=T5)</p>	<p>s = 3.85523658278546 $X^2 = 62.1534232073567$ p-value = 2.03729708512252e-13</p>	<p>beta = 0.103048264182896 $X^2 = 1065.64902268110$ p-value = 1.03135701472478e-230</p>
A6	7311	<p>Insertion error gap lengths (context=A6)</p>	<p>s = 4.44310277230933 $X^2 = 131.050922936449$ p-value = 2.32082052151719e-27</p>	<p>beta = 0.0718547670432905 $X^2 = 16713.6120500416$ p-value = 0</p>

C6

187

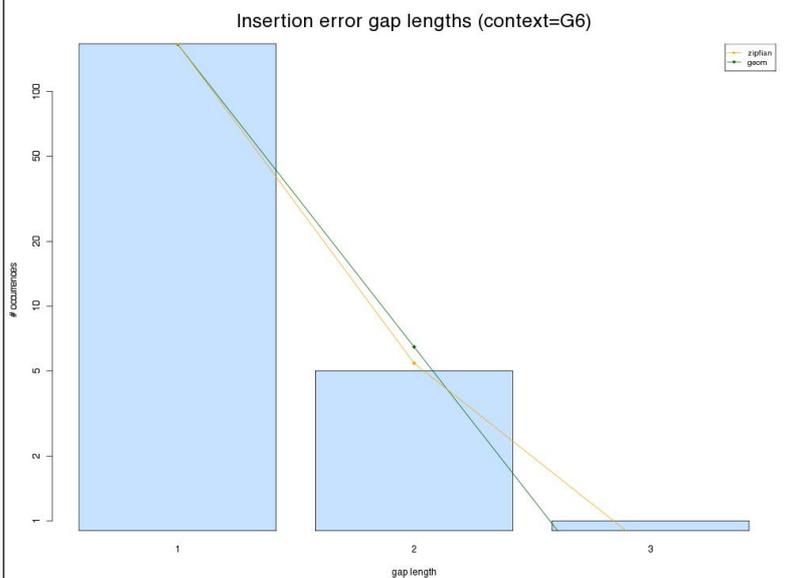


s = 4.45512825633852
 $X^2 = 29.9039486651916$
 p-value = 1.44577384723127e-06

beta = 0.0788177339901477
 $X^2 = 616.235321544838$
 p-value = 3.04590638807809e-133

G6

173

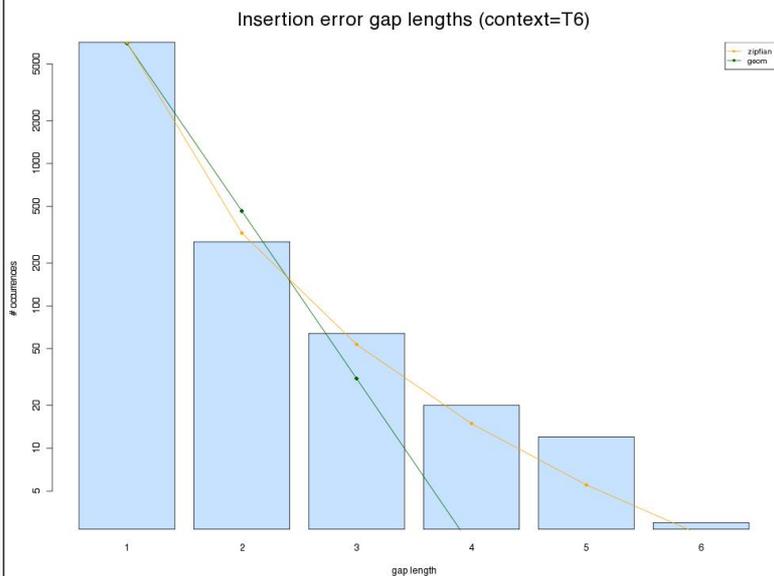


s = 4.94251324927962
 $X^2 = 0.132239959010237$
 p-value = 0.716120784842232

beta = 0.0388888888888889
 $X^2 = 2.56384023901651$
 p-value = 0.109332711894606

T6

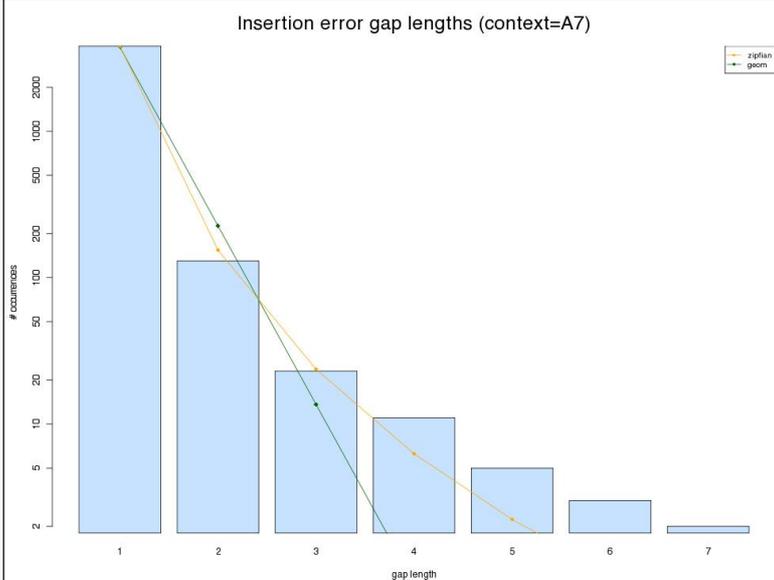
7491



s = 4.44661966316207 beta =
 $X^2 = 0.0664257228315055$
 $X^2 = 17.2388587721820$
 $X^2 = 2289.34317502254$
p-value = 0.00173691550252098 p-value = 0

A7

3992



s = 4.6230496813618 beta =
 $X^2 = 0.0602636534839925$
 $X^2 = 20.2102571511940$
 $X^2 = 25938.605550418$
p-value = 0.00114112090348972 p-value = 0

C7

29

s = 3.34180521073645 beta =
 $X^2 = 0.121212121212121$
 $X^2 = 0.298006762708835$
 $X^2 = 1.43951042553098$
p-value = 0.585134708143864 p-value = 0.230218580655573

		<p>Insertion error gap lengths (context=C7)</p>		
G7	49	<p>Insertion error gap lengths (context=G7)</p>	INVALID/ERROR	INVALID/ERROR
T7	4207	<p>Insertion error gap lengths (context=T7)</p>	<p>s = 4.67034879362842 $\chi^2 = 33.8752150944833$ p-value = 2.52114795902883e-06</p>	<p>beta = 0.0582046115961496 $\chi^2 = 28230.3327213344$ p-value = 0</p>
A8	1915		<p>s = 4.44753422931875 $\chi^2 = 32.4318849806104$ p-value =</p>	<p>beta = 0.068579766536965 $\chi^2 = 9308.99831740176$</p>

		<p>Insertion error gap lengths (context=A8)</p>	1.56112062253713e-06	p-value = 0
C8	8	<p>Insertion error gap lengths (context=C8)</p>	INVALID/ERROR	INVALID/ERROR
G8	4	<p>Insertion error gap lengths (context=G8)</p>	INVALID/ERROR	INVALID/ERROR
T8	1963		<p>s = 4.92716876436796 $X^2 = 21.6197380242169$ p-value = 7.82615666992692e-05</p>	<p>beta = 0.0466245750364255 $X^2 = 1904.36463633256$ p-value = 0</p>

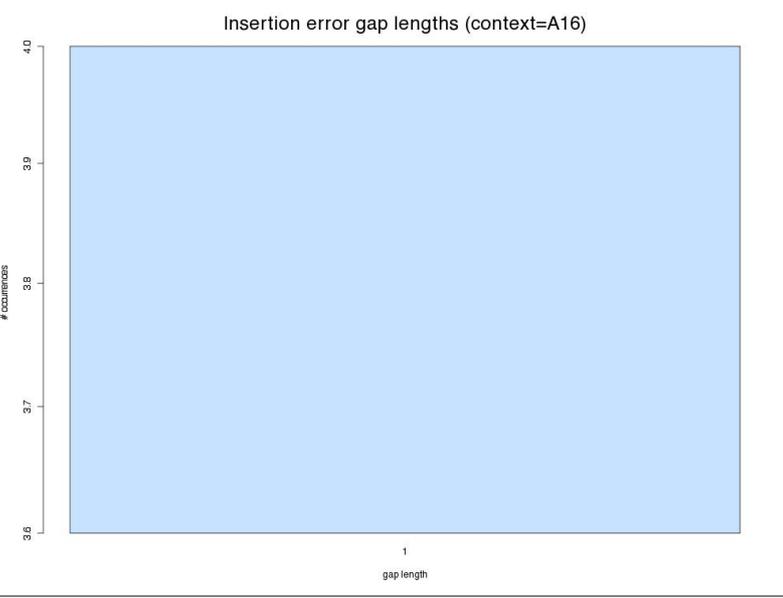
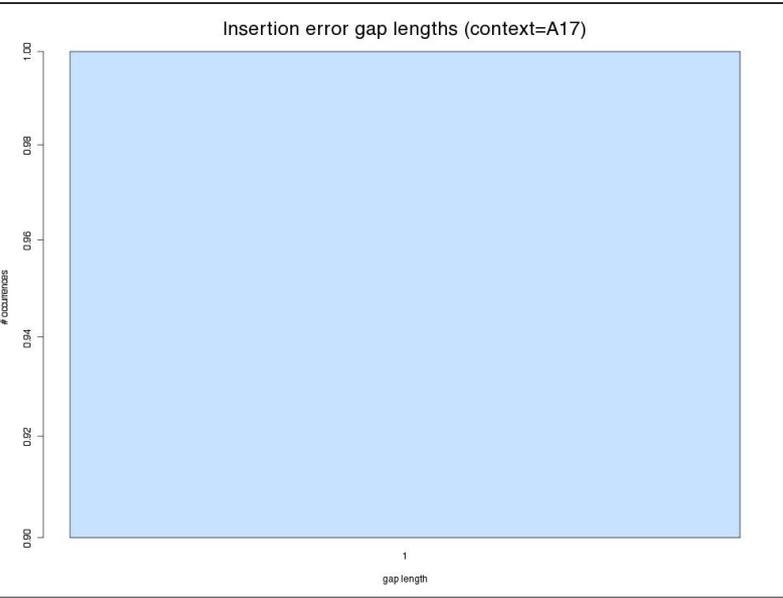
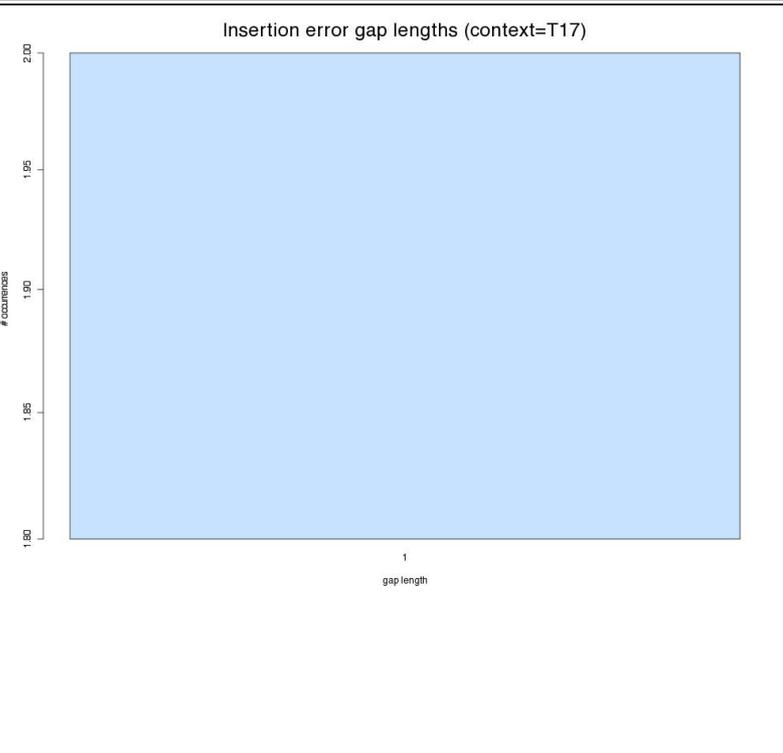
		<p>Insertion error gap lengths (context=T8)</p>		
A9	455	<p>Insertion error gap lengths (context=A9)</p>	<p>s = 3.28965023224829 $X^2 = 11.3449805940114$ p-value = 0.00999947376720258</p>	<p>beta = 0.144736842105263 $X^2 = 20.8501623746965$ p-value = 0.000113094844877843</p>
T9	511	<p>Insertion error gap lengths (context=T9)</p>	<p>s = 3.42958185392897 $X^2 = 9.01779567543008$ p-value = 0.0606562096394217</p>	<p>beta = 0.139730639730640 $X^2 = 172.814008955156$ p-value = 2.60292104286128e-36</p>
			<p>s = 2.60414587794029</p>	<p>beta = 0.179245283018868</p>

A10	87	<p>Insertion error gap lengths (context=A10)</p>	<p>$X^2 =$ 1.99983304510768 $p\text{-value} =$ 0.157316534191975</p>	<p>$X^2 =$ 0.443845019349308 $p\text{-value} =$ 0.50527244279888</p>
T10	63	<p>Insertion error gap lengths (context=T10)</p>	<p>$s = 1.78575676709675$ $X^2 =$ 9.8635245654481 $p\text{-value} =$ 0.00168587821988241</p>	<p>$\beta =$ 0.267441860465116 $X^2 =$ 8.25107870865707 $p\text{-value} =$ 0.00407277911147701</p>
A11	15	<p>Insertion error gap lengths (context=A11)</p>	<p>INVALID/ERROR</p>	<p>INVALID/ERROR</p>
T11	15		<p>$s = 1.55940140162786$ $X^2 =$ 0.0653636910769776</p>	<p>$\beta =$ 0.318181818181818 $X^2 =$ 0.923522686810764</p>

			<p>p-value = 0.798210884026135</p>	<p>p-value = 0.336551726558229</p>
A12	3		INVALID/ERROR	INVALID/ERROR
T12	2		INVALID/ERROR	INVALID/ERROR
A13	3		INVALID/ERROR	INVALID/ERROR

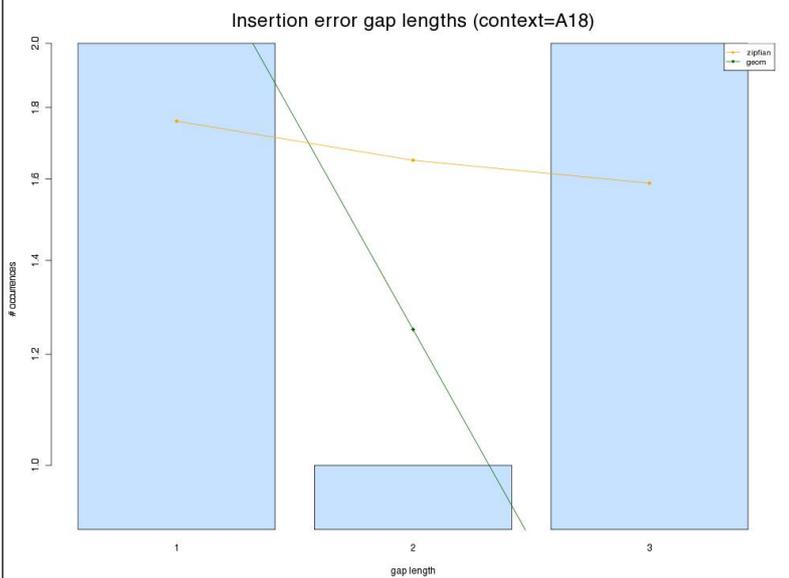
		<p>Insertion error gap lengths (context=A13)</p>		
T13	6	<p>Insertion error gap lengths (context=T13)</p>	INVALID/ERROR	INVALID/ERROR
A14	4	<p>Insertion error gap lengths (context=A14)</p>	INVALID/ERROR	INVALID/ERROR

T14	13	<p>Insertion error gap lengths (context=T14)</p>	<p>s = 1.96211565844555 $\chi^2 = 1.61472193705244$ p-value = 0.203829311490968</p>	<p>beta = 0.277777777777778 $\chi^2 = 3.27710452837233$ p-value = 0.0702527686666703</p>
A15	1	<p>Insertion error gap lengths (context=A15)</p>	INVALID/ERROR	INVALID/ERROR
T15	7	<p>Insertion error gap lengths (context=T15)</p>	INVALID/ERROR	INVALID/ERROR

<p>A16</p> <p>4</p>		<p>Insertion error gap lengths (context=A16)</p> 	<p>INVALID/ERROR</p>	<p>INVALID/ERROR</p>
<p>A17</p> <p>1</p>		<p>Insertion error gap lengths (context=A17)</p> 	<p>INVALID/ERROR</p>	<p>INVALID/ERROR</p>
<p>T17</p> <p>2</p>		<p>Insertion error gap lengths (context=T17)</p> 	<p>INVALID/ERROR</p>	<p>INVALID/ERROR</p>

A18

5

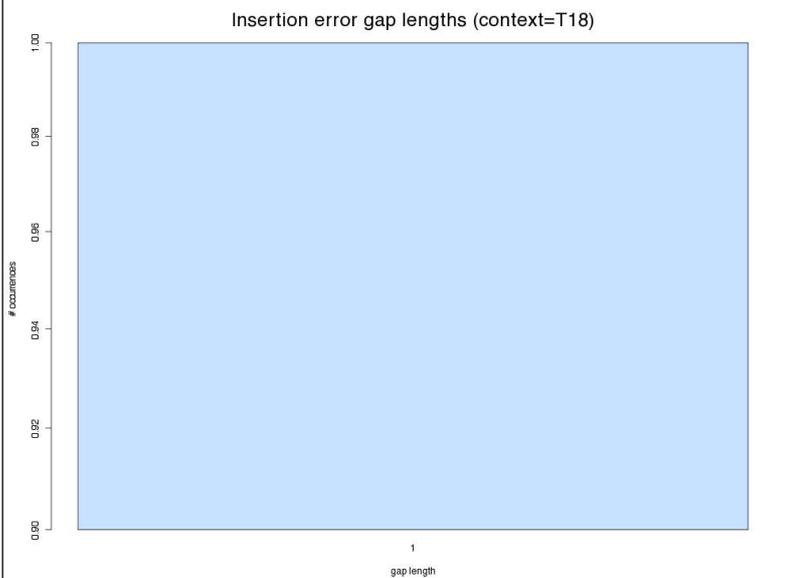


s =
 0.0926542887493549
 $X^2 =$
 0.395050902693468
 p-value =
 0.52965630969129

beta = 0.5
 $X^2 = 3.175$
 p-value =
 0.0747732118999497

T18

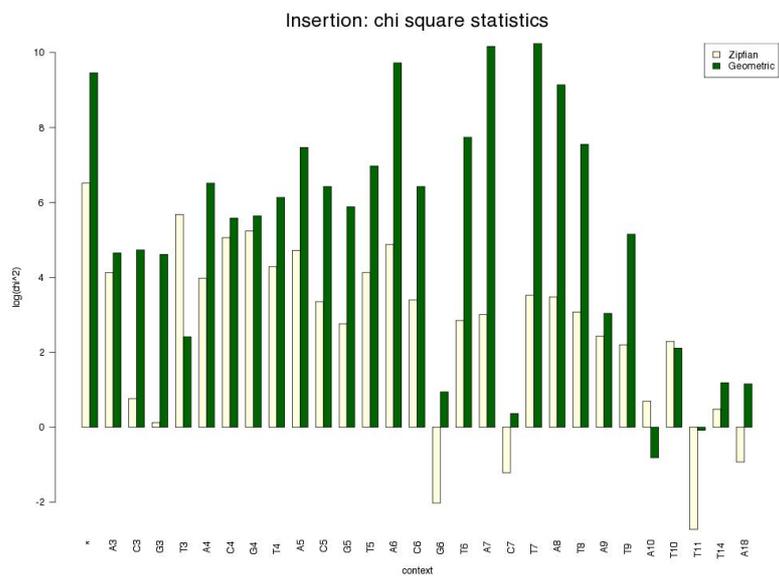
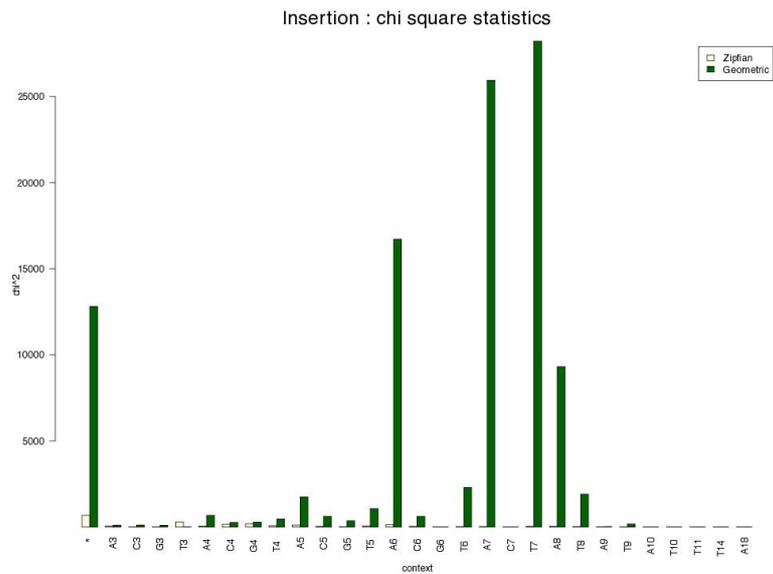
1



INVALID/ERROR

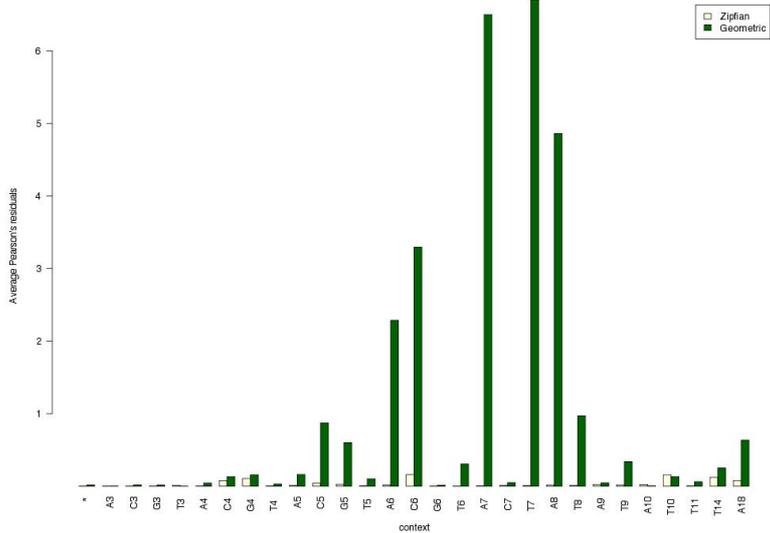
INVALID/ERROR

Chi square statistics

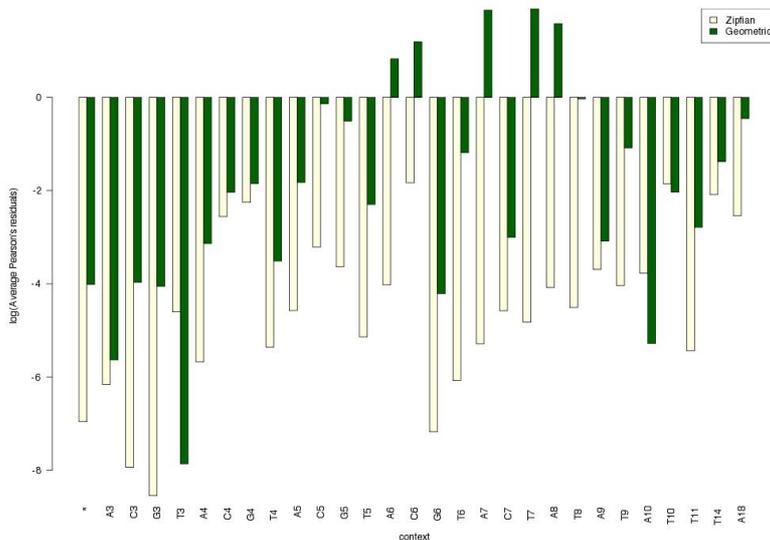


Average Pearson's residuals

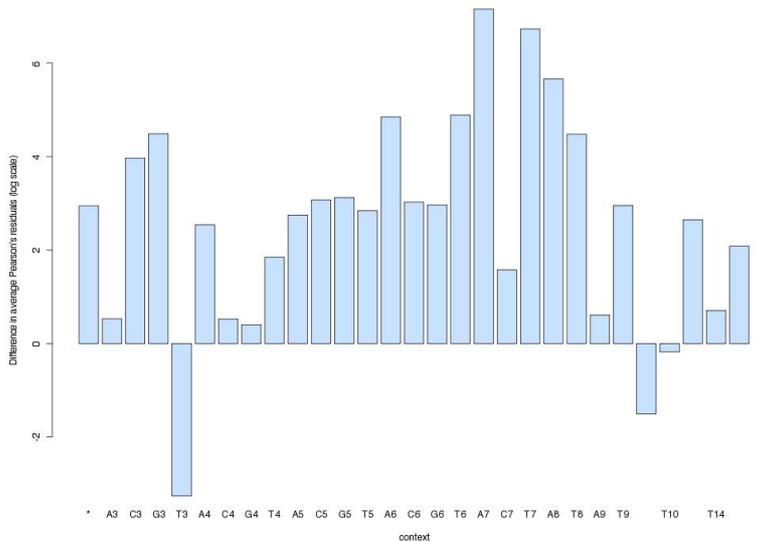
Insertion: Average Pearson residuals



Insertion : Average Pearson residuals

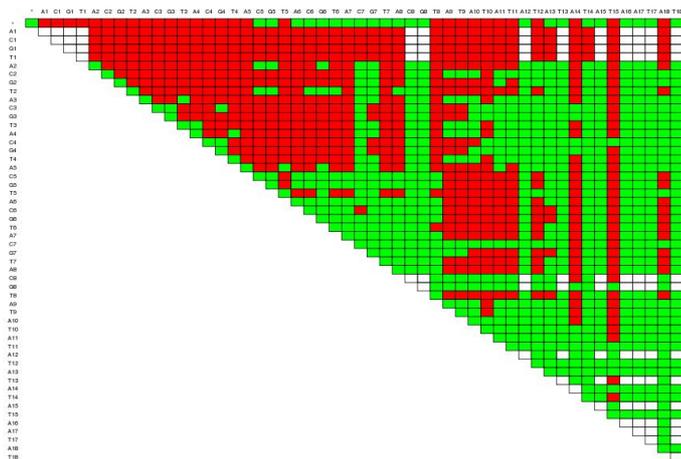


Insertion: Difference between average Pearson residuals



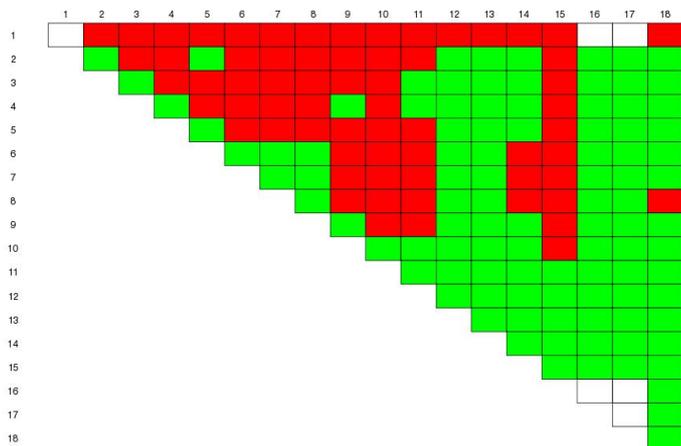
Mann U Tests

Insertion : Mann-Whitney tests by context



Mann U Tests by context length

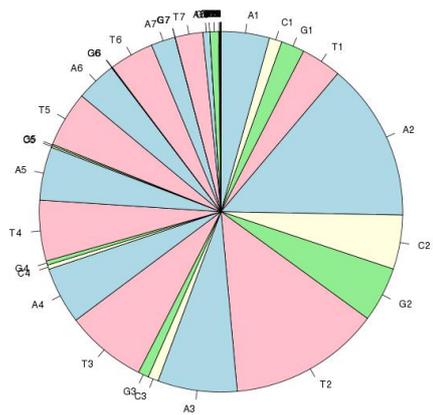
Insertion : Mann-Whitney tests by context length



celera Deletion

Deletion per context

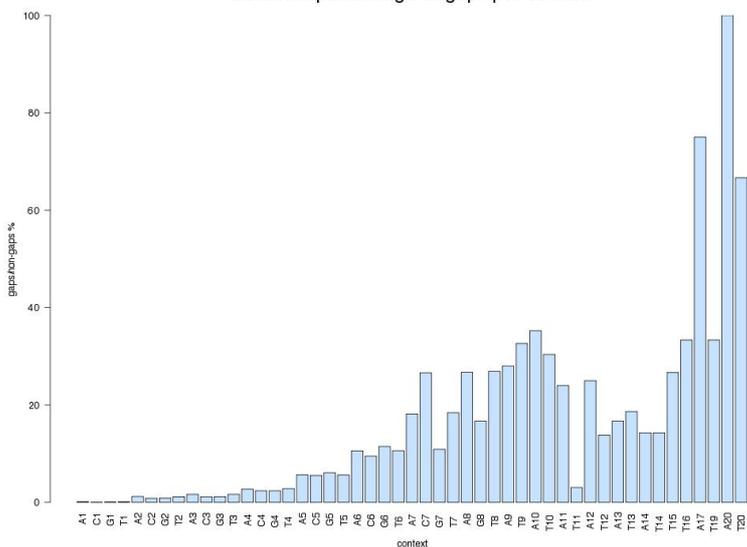
Deletion: number of gaps per context



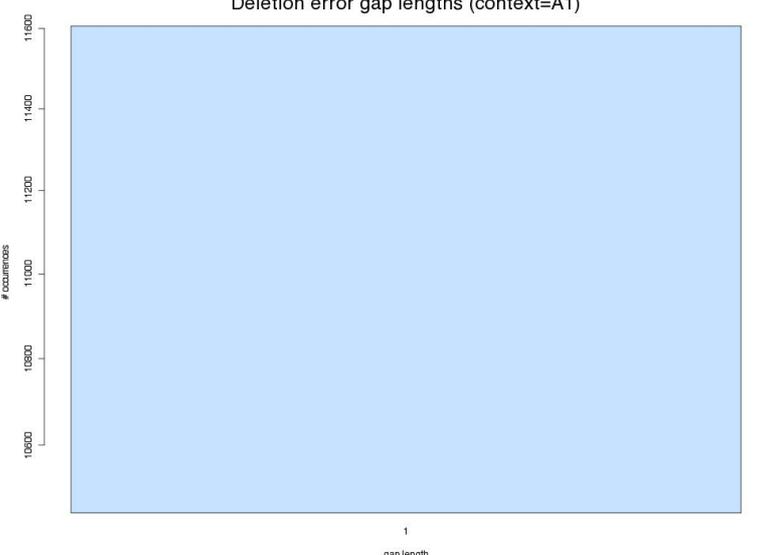
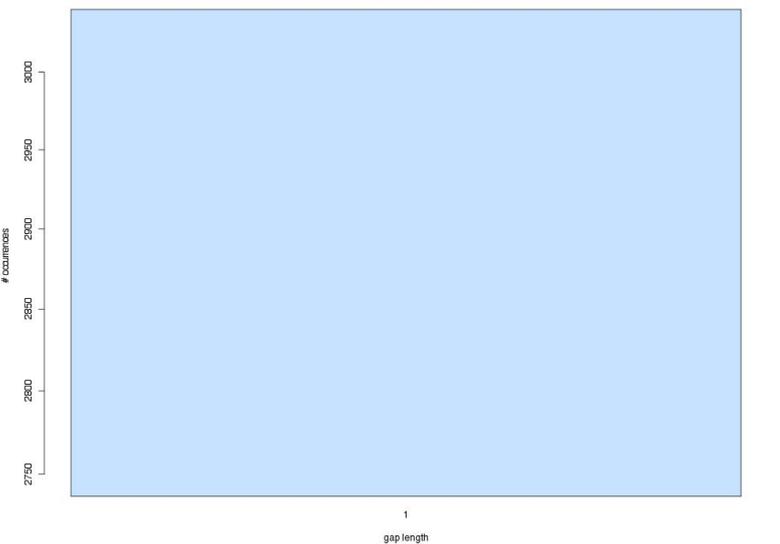
Total: 269326

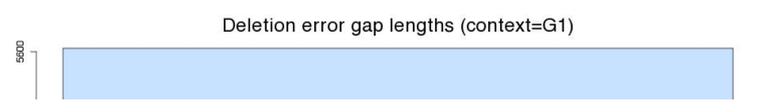
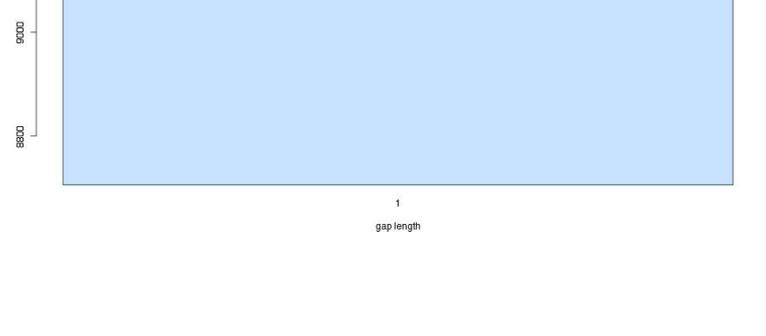
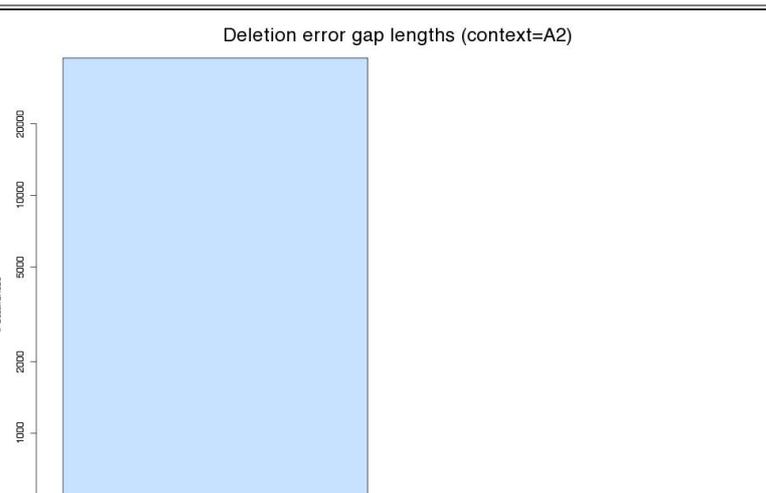
Deletion per context

Deletion: percentage of gaps per context



Context	#Data	Gap lengths	Zipfian fit	Geom fit
*	269326	<p>Deletion error gap lengths (context=any)</p>	<p>s = 4.13157135099768 $X^2 = 876.48171340316$ p-value = 2.07547219665432e-188</p>	<p>beta = 0.0786225488183696 $X^2 = 2425.60061768410$ p-value = 0</p>

A1	11606	<p style="text-align: center;">Deletion error gap lengths (context=A1)</p> 	INVALID/ERROR	INVALID/ERROR
C1	3041	<p style="text-align: center;">Deletion error gap lengths (context=C1)</p> 	INVALID/ERROR	INVALID/ERROR
G1	5604		INVALID/ERROR	INVALID/ERROR

		<p>Deletion error gap lengths (context=G1)</p> 		
T1	9675	<p>Deletion error gap lengths (context=T1)</p> 	INVALID/ERROR	INVALID/ERROR
A2	38216	<p>Deletion error gap lengths (context=A2)</p> 	INVALID/ERROR	INVALID/ERROR
C2	13068		INVALID/ERROR	INVALID/ERROR

G2	13276		INVALID/ERROR	INVALID/ERROR
T2	36333		INVALID/ERROR	INVALID/ERROR
A3	19009		$s = 2.24413574843526$ $X^2 = 2323.32907621064$ $p\text{-value} = 0$	$\text{beta} = 0.211342986350247$ $X^2 = 1674.19447134317$ $p\text{-value} = 0$

C3	2519	<p>Deletion error gap lengths (context=C3)</p>	<p> $s = 2.87834920639417$ $X^2 = 155.471383421793$ $p\text{-value} = 1.10454400621024e-35$ </p>	<p> $\beta = 0.147257955314827$ $X^2 = 86.0369680562996$ $p\text{-value} = 1.76603135663117e-20$ </p>
G3	2545	<p>Deletion error gap lengths (context=G3)</p>	<p> $s = 2.86066989641126$ $X^2 = 160.539419581068$ $p\text{-value} = 8.6256703808739e-37$ </p>	<p> $\beta = 0.148829431438127$ $X^2 = 89.6002642080527$ $p\text{-value} = 2.91485238963088e-21$ </p>

T3	19445	<p>Deletion error gap lengths (context=T3)</p>	<p>s = 2.1715068127237 $X^2 = 2591.6692420927$ p-value = 0</p>	<p>beta = 0.219452472703918 $X^2 = 1935.16470101859$ p-value = 0</p>
A4	13733	<p>Deletion error gap lengths (context=A4)</p>	<p>s = 2.88299141271325 $X^2 = 1029.62636915895$ p-value = 2.62708863775782e-224</p>	<p>beta = 0.18821304013714 $X^2 = 1687.72528790234$ p-value = 0</p>
C4	1045	<p>Deletion error gap lengths (context=C4)</p>	<p>s = 3.35282259148414 $X^2 = 27.1891937145432$ p-value = 1.84486960908434e-07</p>	<p>beta = 0.122586062132662 $X^2 = 87.0876823621803$ p-value = 1.03815101999855e-20</p>

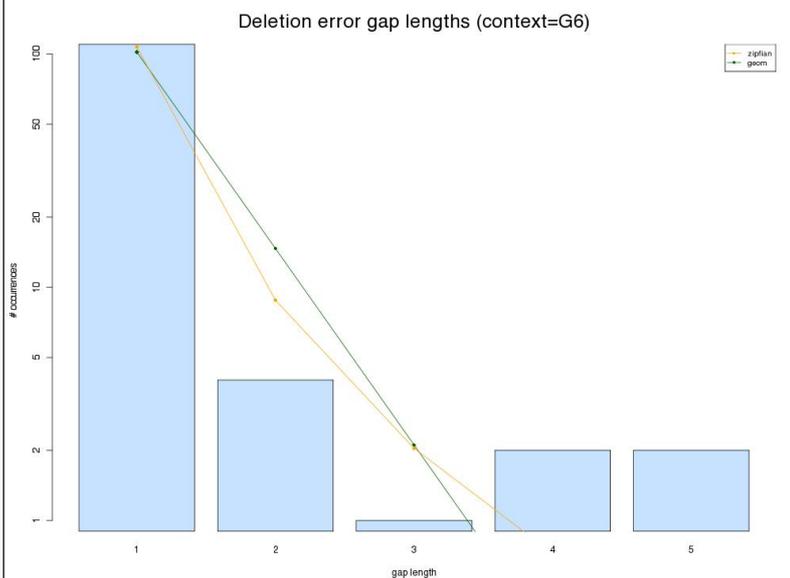
G4	1015	<p>Deletion error gap lengths (context=G4)</p>	<p>s = 3.08199505097195 $X^2 = 13.3740690593095$ p-value = 0.000255127233213948</p>	<p>beta = 0.143459915611814 $X^2 = 57.59257234837$ p-value = 3.22440911336048e-14</p>
T4	14640	<p>Deletion error gap lengths (context=T4)</p>	<p>s = 2.90145274416573 $X^2 = 1058.15945797622$ p-value = 1.67337475802733e-230</p>	<p>beta = 0.185852519185853 $X^2 = 1752.54435536755$ p-value = 0</p>
A5	12889	<p>Deletion error gap lengths (context=A5)</p>	<p>s = 4.35875597991466 $X^2 = 205.867336482474$ p-value = 1.97913710368347e-45</p>	<p>beta = 0.0693862815884476 $X^2 = 2040.7030351961$ p-value = 0</p>

C5	398	<p style="text-align: center;">Deletion error gap lengths (context=C5)</p> <table border="1"> <caption>Observed Deletion Error Gap Lengths for Context C5</caption> <thead> <tr> <th>gap length</th> <th># occurrences</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>~200</td> </tr> <tr> <td>2</td> <td>~80</td> </tr> <tr> <td>3</td> <td>~70</td> </tr> <tr> <td>4</td> <td>~10</td> </tr> </tbody> </table>	gap length	# occurrences	1	~200	2	~80	3	~70	4	~10	<p> $s = 4.23086502491977$ $X^2 = 15.0385702155633$ $p\text{-value} = 0.000542520270765359$ </p>	<p> $\beta = 0.0787037037037037$ $X^2 = 72.9902256491336$ $p\text{-value} = 1.41375412093137e-16$ </p>
gap length	# occurrences													
1	~200													
2	~80													
3	~70													
4	~10													
G5	401	<p style="text-align: center;">Deletion error gap lengths (context=G5)</p> <table border="1"> <caption>Observed Deletion Error Gap Lengths for Context G5</caption> <thead> <tr> <th>gap length</th> <th># occurrences</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>~200</td> </tr> <tr> <td>2</td> <td>~150</td> </tr> <tr> <td>3</td> <td>~60</td> </tr> <tr> <td>4</td> <td>~10</td> </tr> </tbody> </table>	gap length	# occurrences	1	~200	2	~150	3	~60	4	~10	<p> $s = 4.15850895201487$ $X^2 = 6.33235852506228$ $p\text{-value} = 0.0421643895996077$ </p>	<p> $\beta = 0.0802752293577982$ $X^2 = 55.3435408481379$ $p\text{-value} = 9.60069781460717e-13$ </p>
gap length	# occurrences													
1	~200													
2	~150													
3	~60													
4	~10													

T5	13408	<p>Deletion error gap lengths (context=T5)</p>	<p>s = 4.15637340105945 $X^2 = 496.502775669279$ p-value = 1.533882662343e-108</p>	<p>beta = 0.0833390305599234 $X^2 = 3522.86368954971$ p-value = 0</p>
A6	9772	<p>Deletion error gap lengths (context=A6)</p>	<p>s = 5.0920133118168 $X^2 = 195.401106363212$ p-value = 4.15717406593749e-42</p>	<p>beta = 0.0427115987460814 $X^2 = 12599.4554246289$ p-value = 0</p>
C6	92	<p>Deletion error gap lengths (context=C6)</p>	<p>INVALID/ERROR</p>	<p>INVALID/ERROR</p>

G6

119

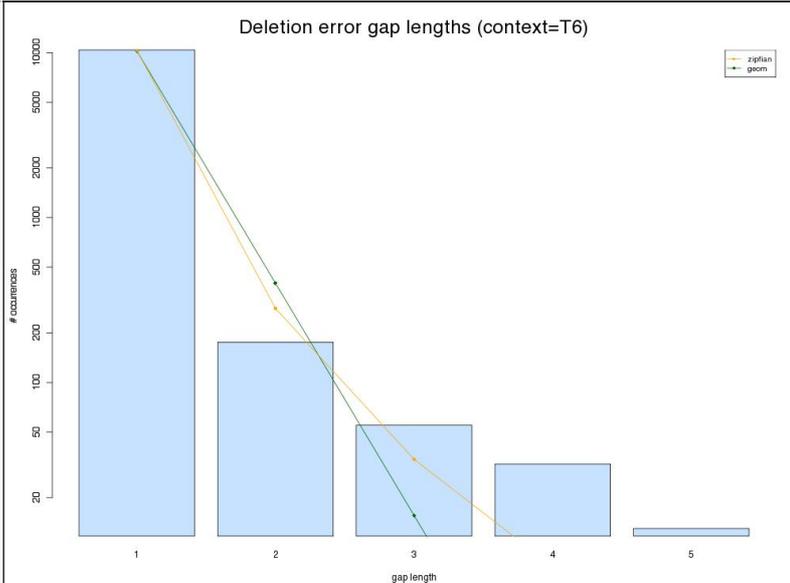


s = 3.60558117814859
 $\chi^2 = 14.1760177094006$
 p-value = 0.00267509414132328

beta = 0.143884892086331
 $\chi^2 = 106.113944017656$
 p-value = 7.52510381474963e-23

T6

10658



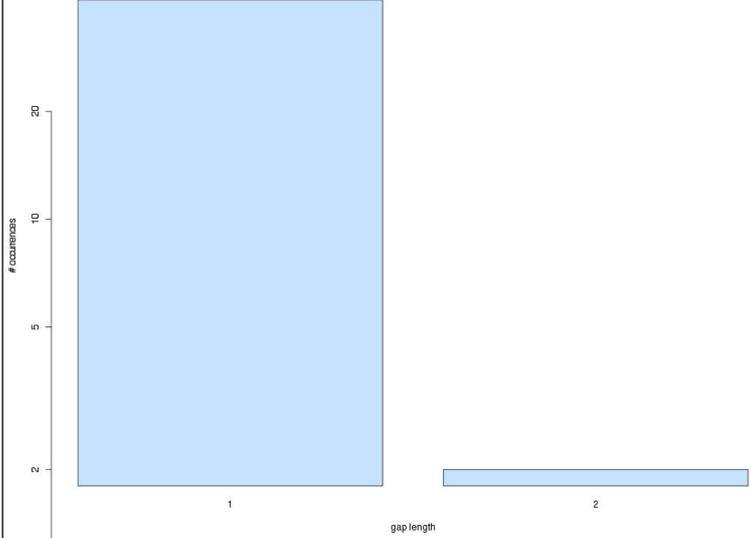
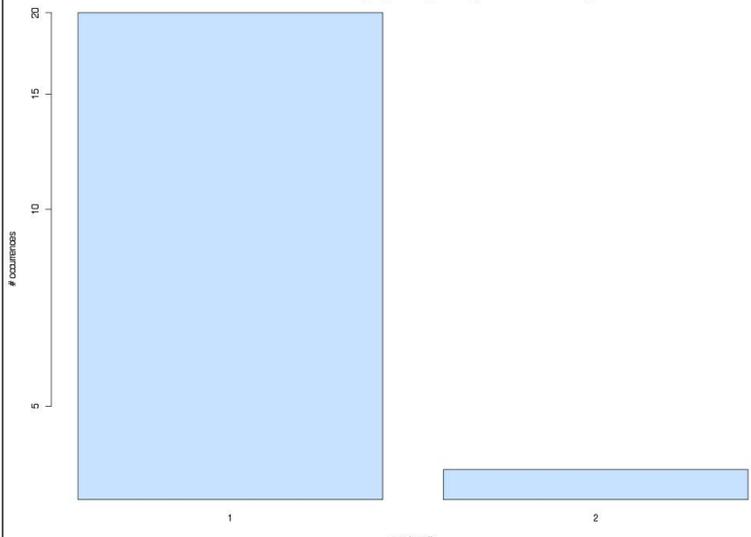
s = 5.19894811245341
 $\chi^2 = 177.283716591884$
 p-value = 3.40434745364146e-38

beta = 0.039040663601118
 $\chi^2 = 8921.56044567832$
 p-value = 0

<p>A7</p>	<p>5824</p>	<p>Deletion error gap lengths (context=A7)</p>	<p>s = 5.6024155163407 $X^2 =$ 80.838019148863 p-value = 1.15730248994697e-16</p>	<p>beta = 0.0285237698081734 $X^2 =$ 19897.8293578799 p-value = 0</p>
<p>C7</p>	<p>41</p>	<p>Deletion error gap lengths (context=C7)</p>	<p>s = 3.8157874138771 $X^2 =$ 0.497688405074037 p-value = 0.48051758162324</p>	<p>beta = 0.0888888888888889 $X^2 =$ 2.21945691783175 p-value = 0.136280990779991</p>
<p>G7</p>	<p>18</p>	<p>Deletion error gap lengths (context=G7)</p>	<p>INVALID/Error</p>	<p>INVALID/Error</p>

<p>T7</p>	<p>6622</p>	<p>Deletion error gap lengths (context=T7)</p>	<p>s = 5.42474147793132 $X^2 = 193.190455410606$ p-value = 1.0930856956806e-40</p>	<p>beta = 0.0338488473883863 $X^2 = 229758.024192909$ p-value = 0</p>
<p>A8</p>	<p>1660</p>	<p>Deletion error gap lengths (context=A8)</p>	<p>s = 4.87703260154272 $X^2 = 1.83029513787374$ p-value = 0.400457526638837</p>	<p>beta = 0.0421234852856318 $X^2 = 8.95218804597476$ p-value = 0.0113777677735931</p>
<p>G8</p>	<p>4</p>	<p>Deletion error gap lengths (context=G8)</p>	<p>INVALID/ERROR</p>	<p>INVALID/ERROR</p>

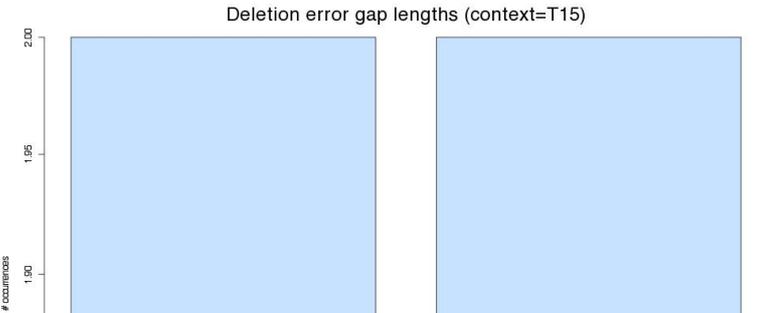
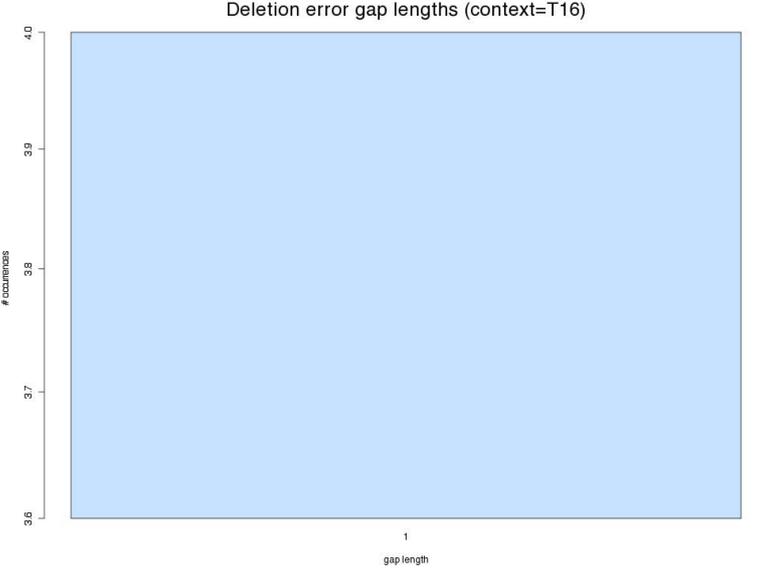
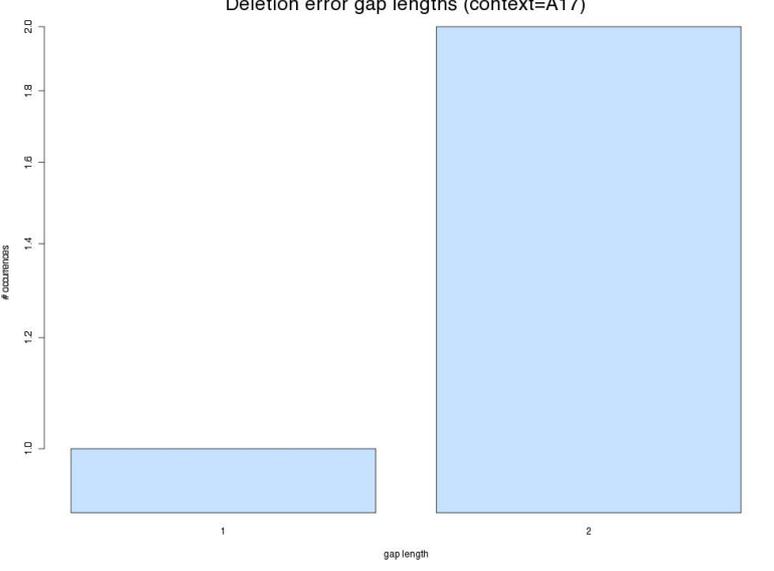
T8	2072	<p>Deletion error gap lengths (context=T8)</p>	<p>s = 4.68087274969306 $\chi^2 = 9.6202236050093$ p-value = 0.0220861854440816</p>	<p>beta = 0.053016453382084 $\chi^2 = 1041.93711952551$ p-value = 1.43716384369925e-225</p>
A9	253	<p>Deletion error gap lengths (context=A9)</p>	INVALID/ERROR	INVALID/ERROR
T9	205		INVALID/ERROR	INVALID/ERROR

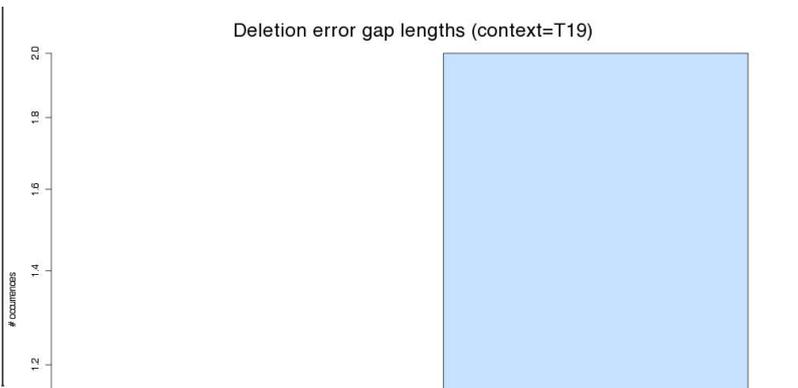
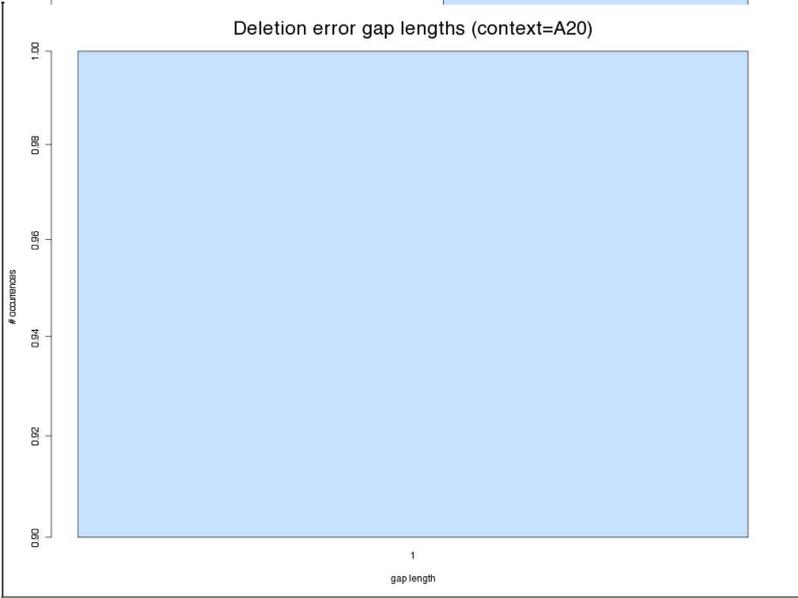
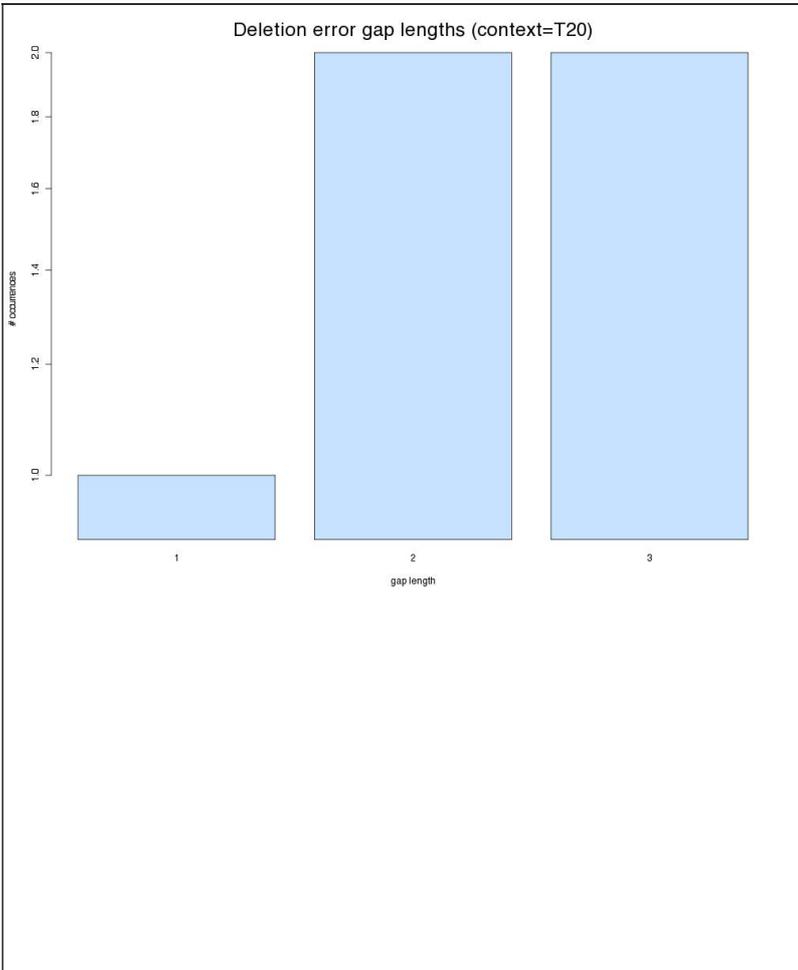
		<p>Deletion error gap lengths (context=T9)</p> 		
A10	43	<p>Deletion error gap lengths (context=A10)</p> 	INVALID/ERROR	INVALID/ERROR
T10	24	<p>Deletion error gap lengths (context=T10)</p> 	INVALID/ERROR	INVALID/ERROR

<p>A11</p> <p>12</p>		<p>s = 1.83572058717731 $X^2 = 1.49935934270401$ p-value = 0.220769963822161</p>	<p>beta = 0.294117647058824 $X^2 = 3.11746534138453$ p-value = 0.0774571807894458</p>
<p>T11</p> <p>3</p>		<p>INVALID/ERROR</p>	<p>INVALID/ERROR</p>
<p>A12</p> <p>8</p>		<p>s = 0.539275867770467 $X^2 = 1.54150279443063$ p-value = 0.214394255775441</p>	<p>beta = 0.428571428571429 $X^2 = 2.69665127955944$ p-value = 0.100559258834669</p>

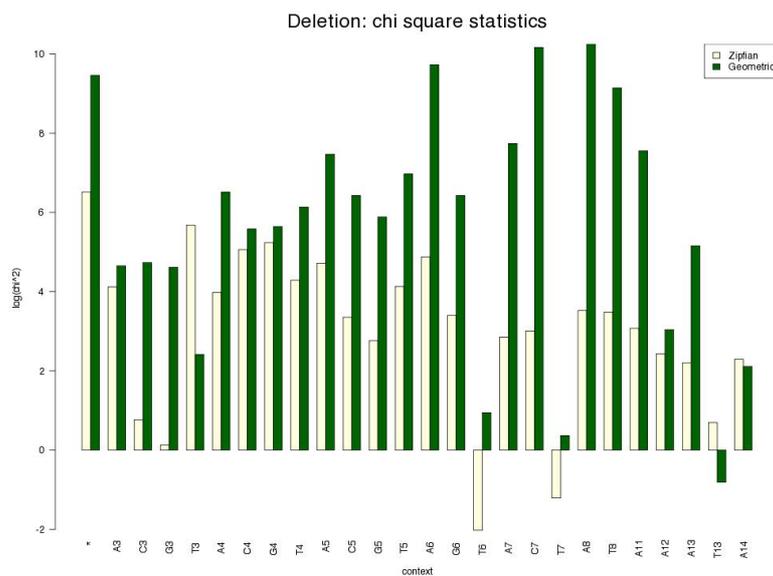
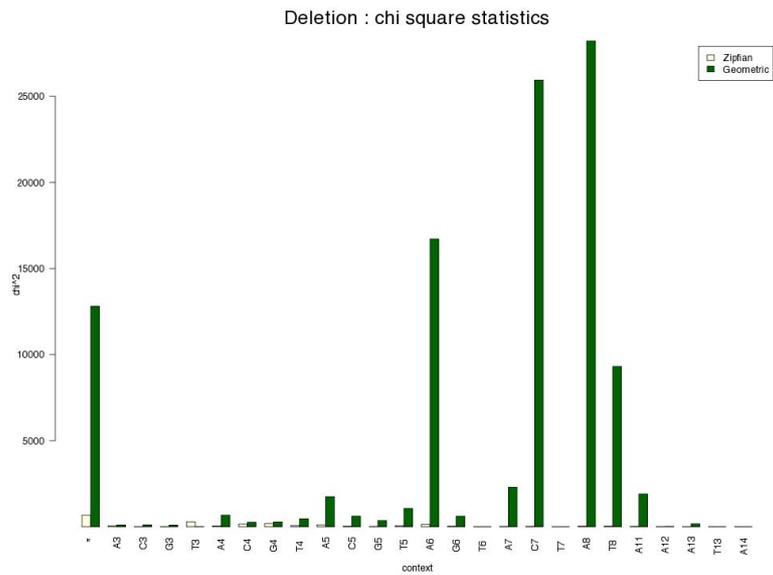
T12	4		INVALID/ERROR	INVALID/ERROR
A13	7		<p>s = 0.157507175229639 $X^2 = 0.399977628058061$ p-value = 0.81873991142764</p>	<p>beta = 0.588235294117647 $X^2 = 3.72952008256997$ p-value = 0.154933383040224</p>
T13	11		<p>s = 1.53701796251543 $X^2 = 0.196334998617163$ p-value = 0.657695536506828</p>	<p>beta = 0.3125 $X^2 = 0.305959533186983$ p-value = 0.580170226064407</p>

<p>A14</p>	<p>5</p>		<p>s = 0.0926542887493549 X² = 0.395050902693468 p-value = 0.52965630969129</p>	<p>beta = 0.5 X² = 3.175 p-value = 0.0747732118999497</p>
<p>T14</p>	<p>2</p>		<p>INVALID/ERROR</p>	<p>INVALID/ERROR</p>

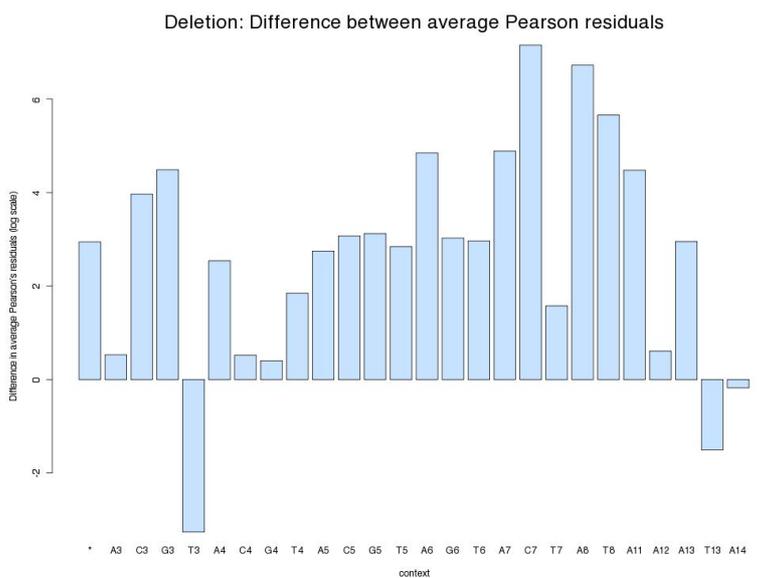
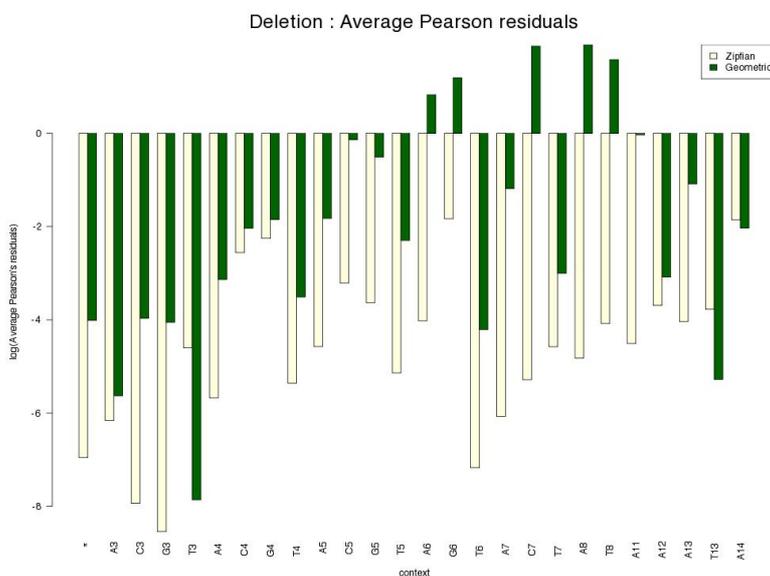
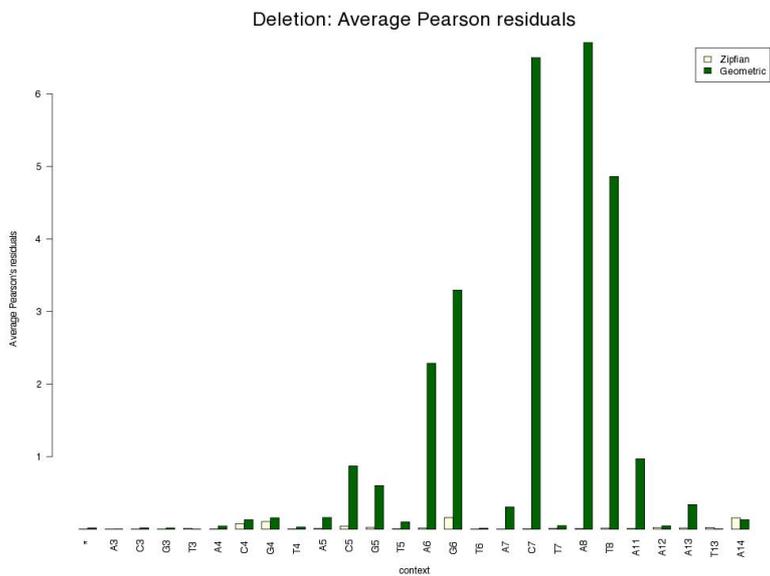
T15	4	<p>Deletion error gap lengths (context=T15)</p>  <table border="1"> <caption>Data for Deletion error gap lengths (context=T15)</caption> <thead> <tr> <th>gap length</th> <th># occurrences</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>2.00</td> </tr> <tr> <td>2</td> <td>2.00</td> </tr> </tbody> </table>	gap length	# occurrences	1	2.00	2	2.00	INVALID/ERROR	INVALID/ERROR
gap length	# occurrences									
1	2.00									
2	2.00									
T16	4	<p>Deletion error gap lengths (context=T16)</p>  <table border="1"> <caption>Data for Deletion error gap lengths (context=T16)</caption> <thead> <tr> <th>gap length</th> <th># occurrences</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>4.0</td> </tr> </tbody> </table>	gap length	# occurrences	1	4.0	INVALID/ERROR	INVALID/ERROR		
gap length	# occurrences									
1	4.0									
A17	3	<p>Deletion error gap lengths (context=A17)</p>  <table border="1"> <caption>Data for Deletion error gap lengths (context=A17)</caption> <thead> <tr> <th>gap length</th> <th># occurrences</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>1.0</td> </tr> <tr> <td>2</td> <td>2.0</td> </tr> </tbody> </table>	gap length	# occurrences	1	1.0	2	2.0	INVALID/ERROR	INVALID/ERROR
gap length	# occurrences									
1	1.0									
2	2.0									
T19	3		INVALID/ERROR	INVALID/ERROR						

		<p>Deletion error gap lengths (context=T19)</p>  <table border="1"> <caption>Deletion error gap lengths (context=T19)</caption> <thead> <tr> <th>gap length</th> <th># occurrences</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>~1.95</td> </tr> </tbody> </table>	gap length	# occurrences	1	~1.95						
gap length	# occurrences											
1	~1.95											
A20	1	<p>Deletion error gap lengths (context=A20)</p>  <table border="1"> <caption>Deletion error gap lengths (context=A20)</caption> <thead> <tr> <th>gap length</th> <th># occurrences</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>1.00</td> </tr> </tbody> </table>	gap length	# occurrences	1	1.00	INVALID/ERROR	INVALID/ERROR				
gap length	# occurrences											
1	1.00											
T20	5	<p>Deletion error gap lengths (context=T20)</p>  <table border="1"> <caption>Deletion error gap lengths (context=T20)</caption> <thead> <tr> <th>gap length</th> <th># occurrences</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>~1.0</td> </tr> <tr> <td>2</td> <td>~2.0</td> </tr> <tr> <td>3</td> <td>~2.0</td> </tr> </tbody> </table>	gap length	# occurrences	1	~1.0	2	~2.0	3	~2.0	INVALID/ERROR	INVALID/ERROR
gap length	# occurrences											
1	~1.0											
2	~2.0											
3	~2.0											

Chi square statistics

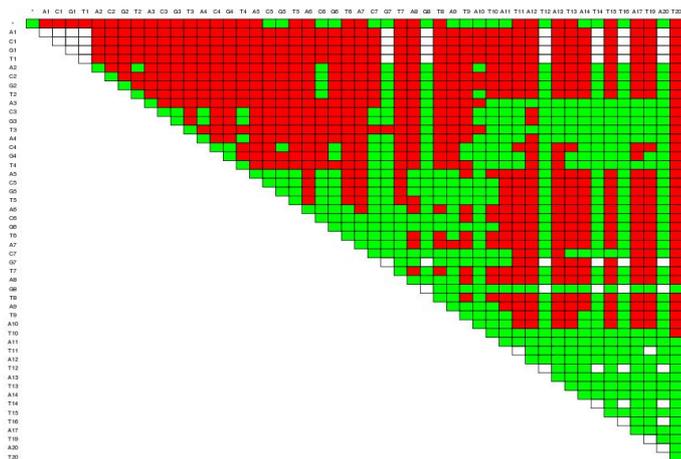


Average Pearson's residuals



Mann U Tests

Deletion : Mann-Whitney tests by context



Mann U Tests by context length

Deletion : Mann-Whitney tests by context length

