# Simultaneous compression of multiple error-corrected short-read sets for faster data transmission and better de novo assemblies

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## 1 Details of datasets

Table S1: Details of dataset-33 (33 files, 102.39GB)

Name	Read number	Retrieved from
SRR017498.fastq	2197691	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR017/SRR017498/SRR017498.fastq.gz
SRR017499.fastq	2185062	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR017/SRR017499/SRR017499.fastq.gz
SRR017500.fastq	2067941	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR017/SRR017500/SRR017500.fastq.gz
SRR017501.fastq	9304954	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR017/SRR017501/SRR017501.fastq.gz
SRR350414.fastq	13873841	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR350/SRR350414/SRR350414.fastq.gz
SRR350416.fastq	13800627	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR350/SRR350416/SRR350416.fastq.gz
SRR350417.fastq	13971754	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR350/SRR350417/SRR350417.fastq.gz
SRR364390.fastq	12429076	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR364/SRR364390/SRR364390.fastq.gz
SRR364391.fastq	13524457	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR364/SRR364391/SRR364391.fastq.gz
SRR364392.fastq	13327151	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR364/SRR364392/SRR364392.fastq.gz
SRR364393.fastq	14013116	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR364/SRR364393/SRR364393.fastq.gz
SRR364394.fastq	13776778	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR364/SRR364394/SRR364394.fastq.gz
SRR391480.fastq	23074156	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR391/SRR391480/SRR391480.fastq.gz
SRR391482.fastq	24012306	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR391/SRR391482/SRR391482.fastq.gz
SRR391483.fastq	27413485	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR391/SRR391483/SRR391483.fastq.gz
SRR391484.fastq	26501216	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR391/SRR391484/SRR391484.fastq.gz
SRR404183.fastq	4259218	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR404/SRR404183/SRR404183.fastq.gz
SRR404184.fastq	7816147	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR404/SRR404184/SRR404184.fastq.gz
SRR404185.fastq	4946871	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR404/SRR404185/SRR404185.fastq.gz
SRR404186.fastq	6803145	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR404/SRR404186/SRR404186.fastq.gz
SRR404187.fastq	17124858	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR404/SRR404187/SRR404187.fastq.gz
SRR404188.fastq	14145375	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR404/SRR404188/SRR404188.fastq.gz
SRR449375.fastq	13031496	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR449/SRR449375/SRR449375.fastq.gz
SRR449376.fastq	13197078	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR449/SRR449376/SRR449376.fastq.gz
SRR449377.fastq	13479636	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR449/SRR449377/SRR449377.fastq.gz
SRR449378.fastq	10366702	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR449/SRR449378/SRR449378.fastq.gz
SRR449379.fastq	13147649	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR449/SRR449379/SRR449379.fastq.gz
SRR513465.fastq	13437700	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR513/SRR513465/SRR513465.fastq.gz
SRR547561.fastq	13242851	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR547/SRR547561/SRR547561.fastq.gz
SRR547562.fastq	12911326	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR547/SRR547562/SRR547562.fastq.gz
SRR547563.fastq	15882034	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR547/SRR547563/SRR547563.fastq.gz

Table S2: Details of dataset-47 (47 files, 208.97GB)

Name	Read number	Retrieved from
ERR532390_1.fastq	17018488	$http://ftp.sra.ebi.ac.uk/vol1/fastq/ERR532/ERR532390/ERR532390\_1.fastq.gz$
$ERR532394\_1.fastq$	30746428	$http://ftp.sra.ebi.ac.uk/vol1/fastq/ERR532/ERR532390/ERR532390\_1.fastq.gz$
$SRR062634\_1.fastq$	24476109	$http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR062/SRR062634/SRR062634\_1.fastq.gz$
$SRR062635\_1.fastq$	24479905	$http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR062/SRR062635/SRR062635\_1.fastq.gz$
$SRR062641\_1.fastq$	24958448	$http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR062/SRR062641/SRR062641\_1.fastq.gz$
$SRR062644\_1.fastq$	24051140	$http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR062/SRR062644/SRR062644\_1.fastq.gz$
$SRR062646\_1.fastq$	24136249	$http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR062/SRR062646/SRR062646\_1.fastq.gz$
$SRR062655\_1.fastq$	22997965	$http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR062/SRR062655/SRR062655\_1.fastq.gz$
${\rm SRR067591.fastq}$	2387280	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR067/SRR067591/SRR067591.fastq.gz
${\rm SRR354180.fastq}$	6152228	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR354/SRR354180/SRR354180.fastq.gz
${\rm SRR354181.fastq}$	4907117	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR354/SRR354181/SRR354181.fastq.gz
${\bf SRR354182.fastq}$	3578549	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR354/SRR354182/SRR354182.fastq.gz
${\bf SRR354183.fastq}$	5575465	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR354/SRR354183/SRR354183.fastq.gz
${\bf SRR361240.fastq}$	4651469	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR361/SRR361240/SRR361240.fastq.gz
${\bf SRR361241.fastq}$	5137558	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR361/SRR361241/SRR361241.fastq.gz
${\bf SRR361242.fastq}$	5385821	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR361/SRR361242/SRR361242.fastq.gz
${\bf SRR361243.fastq}$	5437878	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR361/SRR361243/SRR361243.fastq.gz
${\bf SRR361244.fastq}$	4951700	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR361/SRR361244/SRR361244.fastq.gz
${\bf SRR361245.fastq}$	3998188	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR361/SRR361245/SRR361245.fastq.gz
${\bf SRR387477.fastq}$	3759745	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR387/SRR387477/SRR387477.fastq.gz
${\bf SRR387478.fastq}$	3890863	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR387/SRR387478/SRR387478.fastq.gz
${\bf SRR387479.fastq}$	3050218	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR387/SRR387479/SRR387479.fastq.gz
${\bf SRR387480.fastq}$	4470576	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR387/SRR387480/SRR387480.fastq.gz
${\bf SRR387481.fastq}$	570358	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR387/SRR387481/SRR387481.fastq.gz
${\bf SRR387482.fastq}$	3171526	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR387/SRR387482/SRR387482.fastq.gz
${\bf SRR401414.fastq}$	11745032	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR401/SRR401414/SRR401414.fastq.gz
SRR401415.fastq	20578433	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR401/SRR401415/SRR401415.fastq.gz
${\bf SRR401416.fastq}$	20515752	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR401/SRR401416/SRR401416.fastq.gz
SRR401417.fastq	14646834	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR401/SRR401417/SRR401417.fastq.gz
$SRR445612\_1.fastq$	22691950	$http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR445/SRR445612/SRR445612\_1.fastq.gz$
$SRR445635\_1.fastq$	19586556	$http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR445/SRR445635/SRR445635\_1.fastq.gz$
SRR445718.fastq	32943665	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR445/SRR445718/SRR445718.fastq.gz
SRR445719.fastq	30690825	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR445/SRR445719/SRR445719.fastq.gz
SRR445724.fastq	50896528	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR445/SRR445724/SRR445724.fastq.gz
SRR490961.fastq	49127668	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR490/SRR490961/SRR490961.fastq.gz
SRR490962.fastq	45583212	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR490/SRR490962/SRR490962.fastq.gz
${\bf SRR490976.fastq}$	33261944	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR490/SRR490976/SRR490976.fastq.gz
SRR504462.fastq	21246896	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR504/SRR504462/SRR504462.fastq.gz

${\bf SRR504463.fastq}$	26425413	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR504/SRR504463/SRR504463.fastq.gz
${\rm SRR}504464.{\rm fastq}$	26186672	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR504/SRR504464/SRR504464.fastq.gz
${\bf SRR504465.fastq}$	26350142	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR504/SRR504465/SRR504465.fastq.gz
${\rm SRR}504466.{\rm fastq}$	24871839	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR504/SRR504466/SRR504466.fastq.gz
${\rm SRR}504468.{\rm fastq}$	22474516	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR504/SRR504468/SRR504468.fastq.gz
${\bf SRR518633.fastq}$	21896197	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR518/SRR518633/SRR518633.fastq.gz
${\bf SRR518634.fastq}$	24974345	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR518/SRR518634/SRR518634.fastq.gz
${\bf SRR518635.fastq}$	23529206	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR518/SRR518635/SRR518635.fastq.gz
${\bf SRR518636.fastq}$	15501764	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR518/SRR518636/SRR518636.fastq.gz

Table S3: Details of dataset-50 (50 files, 71.04GB)

Name	Read number	Retrieved from
$SRR020684\_1.fastq$	10375605	$http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR020/SRR020684/SRR020684\_1.fastq.gz$
SRR020687_1.fastq	10394255	$http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR020/SRR020687/SRR020687\_1.fastq.gz$
SRR020688_1.fastq	8837322	$http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR020/SRR020688/SRR020688\_1.fastq.gz$
SRR020690_1.fastq	9534829	$http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR020/SRR020688/SRR020690\_1.fastq.gz$
SRR020692_1.fastq	9260242	$http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR020/SRR020692/SRR020692\_1.fastq.gz$
SRR020696_1.fastq	8961001	$http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR020/SRR020696/SRR020696\_1.fastq.gz$
SRR020697_1.fastq	9827620	$http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR020/SRR020697/SRR020697\_1.fastq.gz$
SRR020698_1.fastq	9658118	$http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR020/SRR020698/SRR020698\_1.fastq.gz$
SRR020699_1.fastq	9540494	$http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR020/SRR020699/SRR020699\_1.fastq.gz$
SRR033506_1.fastq	9668964	$http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR033/SRR033506/SRR033506\_1.fastq.gz$
SRR033508_1.fastq	9800692	$http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR033/SRR033508/SRR033508\_1.fastq.gz$
SRR033513_1.fastq	10103429	$http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR033/SRR033513/SRR033513\_1.fastq.gz$
SRR033516_1.fastq	10490546	$http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR033/SRR033516/SRR033516\_1.fastq.gz$
SRR033540_1.fastq	10022304	$http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR033/SRR033540/SRR033540\_1.fastq.gz$
SRR035578.fastq	17211229	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR035/SRR035578/SRR035578.fastq.gz
SRR035580.fastq	18183656	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR035/SRR035580/SRR035580.fastq.gz
SRR035581.fastq	17419085	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR035/SRR035581/SRR035581.fastq.gz
SRR035582.fastq	17661304	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR035/SRR035582/SRR035582.fastq.gz
SRR035583.fastq	17342832	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR035/SRR035583/SRR035583.fastq.gz
SRR035585.fastq	18387207	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR035/SRR035585/SRR035585.fastq.gz
SRR035586.fastq	19275633	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR035/SRR035578/SRR0355786.fastq.gz
SRR042754_1.fastq	12211192	$http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR042/SRR042754/SRR042754\_1.fastq.gz$
SRR042756_1.fastq	11931416	$http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR042/SRR042756/SRR042756\_1.fastq.gz$
SRR042758_1.fastq	11149360	$http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR042/SRR042758/SRR042758\_1.fastq.gz$
SRR042760_1.fastq	11350648	$http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR042/SRR042760/SRR042760\_1.fastq.gz$
SRR042762_1.fastq	11648481	$http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR042/SRR042762/SRR042762\_1.fastq.gz$
SRR042768_1.fastq	12045980	$http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR042/SRR042768/SRR042768\_1.fastq.gz$
SRR306333.fastq	1467267	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR306/SRR306333/SRR306333.fastq.gz
SRR306334.fastq	1324182	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR306/SRR306334/SRR306334.fastq.gz

SRR306335.fastq	1265603	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR306/SRR306335/SRR306335.fastq.gz
SRR306336.fastq	1695994	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR306/SRR306336/SRR306336.fastq.gz
SRR306337.fastq	1506514	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR306/SRR306337/SRR306337.fastq.gz
SRR306338.fastq	1171861	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR306/SRR306333/SRR306338.fastq.gz
SRR306339.fastq	820255	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR306/SRR306339/SRR306339.fastq.gz
SRR306340.fastq	791082	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR306/SRR306340/SRR306334fastq.gz
SRR306341.fastq	1102312	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR306/SRR306341/SRR306341.fastq.gz
SRR306342.fastq	985592	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR306/SRR306342/SRR306342.fastq.gz
SRR404352_1.fastq	9218083	$http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR404/SRR404352/SRR404352\_1.fastq.gz$
SRR404353_1.fastq	12132806	$http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR404/SRR404353/SRR404353\_1.fastq.gz$
SRR404354_1.fastq	10353791	$http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR404/SRR404354/SRR404354\_1.fastq.gz$
SRR404355_1.fastq	13407653	$http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR404/SRR404355/SRR404355\_1.fastq.gz$
SRR445237_1.fastq	4165017	$http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR445/SRR445237/SRR445237\_1.fastq.gz$
SRR445239_1.fastq	2763227	$http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR445/SRR445239/SRR445239\_1.fastq.gz$
SRR447746.fastq	12077910	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR447/SRR447746/SRR447746.fastq.gz
SRR447747.fastq	12077910	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR447/SRR447747/SRR447747.fastq.gz
SRR448375.fastq	8703586	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR448/SRR448375/SRR448375.fastq.gz
SRR448376.fastq	18597630	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR448/SRR448376/SRR448376.fastq.gz
SRR448378.fastq	2151255	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR448/SRR448378/SRR448378.fastq.gz
SRR448379.fastq	18619182	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR448/SRR448379/SRR448379.fastq.gz
SRR448380.fastq	20000000	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR448/SRR448380/SRR448380.fastq.gz

Table S4: Details of dataset-100 (100 files,  $197.97\mathrm{GB}$  )

Name	Read number	Retrieved from
SRR013495.fastq	3971263	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR013/SRR013495/SRR013495.fastq.gz
SRR013496.fastq	5115896	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR013/SRR013496/SRR013496.fastq.gz
SRR013497.fastq	6504569	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR013/SRR013497/SRR013497.fastq.gz
SRR013499.fastq	5884129	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR013/SRR013499/SRR013499.fastq.gz
SRR013500.fastq	9159886	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR013/SRR013500/SRR013500.fastq.gz
SRR013501.fastq	5684218	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR013/SRR013501/SRR013501.fastq.gz
${\bf SRR013528.fastq}$	4028371	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR013/SRR013528/SRR013528.fastq.gz
${\bf SRR013529.fastq}$	4559407	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR013/SRR013529/SRR013529.fastq.gz
${\bf SRR013531.fastq}$	4781540	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR013/SRR013531/SRR013531.fastq.gz
${\bf SRR013532.fastq}$	6475821	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR013/SRR013532/SRR013532.fastq.gz
${\bf SRR013533.fastq}$	6257147	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR013/SRR013533/SRR013533.fastq.gz
${\bf SRR014480.fastq}$	9548334	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR014/SRR014480/SRR014480.fastq.gz
${\bf SRR014482.fastq}$	6934214	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR014/SRR014482/SRR014482.fastq.gz
SRR014483.fastq	10843095	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR014/SRR014483/SRR014483.fastq.gz
SRR014485.fastq	17748216	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR014/SRR014485/SRR014485.fastq.gz
SRR016657.fastq	5297302	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR016/SRR016657/SRR016657.fastq.gz
${\bf SRR016658.fastq}$	5649145	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR016/SRR016658/SRR016658.fastq.gz

SRR016659.fastq	5858682	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR016/SRR016659/SRR016659.fastq.gz
SRR016660.fastq	5520965	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR016/SRR016660/SRR016660.fastq.gz
SRR020725.fastq	13714225	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR020/SRR020725/SRR020725.fastq.gz
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SRR026735.fastq	32979341	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR020/SRR020735/SRR020735.fastq.gz
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SRR080711.fastq	14017947	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR080/SRR080711/SRR080711.fastq.gz
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SRR088652.fastq	21660781	http://ftp.sra.ebi.ac.uk/vol1/fastq/SRR088/SRR088652/SRR088652.fastq.gz
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#### Pseudo code 2

### Algorithm 1 Path graph construction

```
1: procedure Construct(Vertex set V, Distance matrix D)
         n \leftarrow \mathtt{vertex} \ \mathtt{number}
         W \leftarrow \text{Weight Matrix}, W[i][j] = e^{-D[i][j]}
 3:
         w \leftarrow \text{ elements array}, w[i] \leftarrow \text{the id of highest value in the} ith row of W
 4:
 5:
         p \leftarrow \text{vertex array}.
         W[a][b] \leftarrow \texttt{maximum} value in W
 6:
         W[a][b] \leftarrow -1, W[b][a] \leftarrow -1
 7:
         p[1] \leftarrow a, p[2] \leftarrow b
 8:
         for i = 2; i < n \text{ do } i++
 9:
              p[i+1] \leftarrow w[p[i]]
10:
              W[p[i]][p[i+1]] \leftarrow -1
11:
              W[p[i+1]][p[i]] \leftarrow -1
12:
13:
         return p
```

#### N50 score of files corrected by Karect with different parameter values 3

In the graphs in this section, empty bar indicates that the N50 score of corresponding value was not computed correctly.



sive values of Karect

Figure 1: N50 score of SRR354181 with different aggres-Figure 2: N50 score of SRR354182 with different aggressive values of Karect

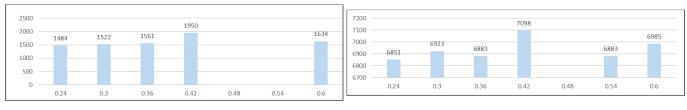
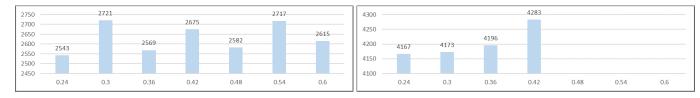


Figure 3: N50 score of **SRR361240** with different **aggres**sive values of Karect

Figure 4: N50 score of SRR361241 with different aggressive values of Karect



sive values of Karect

Figure 5: N50 score of SRR361243 with different aggres- Figure 6: N50 score of SRR361245 with different aggressive values of Karect

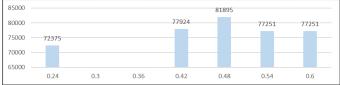
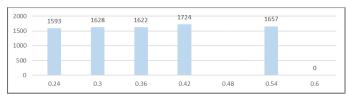
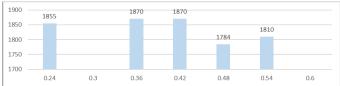




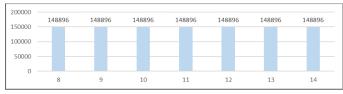
Figure 7: N50 score of SRR387479 with different aggres- Figure 8: N50 score of SRR387480 with different aggressive values of Karect

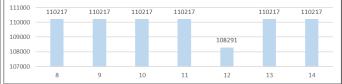




sive values of Karect

Figure 9: N50 score of SRR401414 with different aggres- Figure 10: N50 score of SRR401415 with different aggressive values of Karect





values of Karect

Figure 11: N50 score of SRR354181 with different kmer Figure 12: N50 score of SRR354182 with different kmer values of Karect



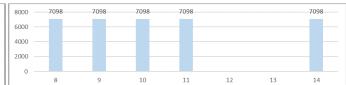
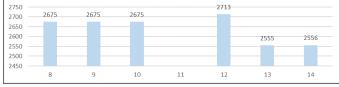
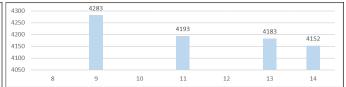


Figure 13: N50 score of SRR361240 with different kmer Figure 14: N50 score of SRR361241 with different kmer values of Karect

values of Karect





values of Karect

Figure 15: N50 score of SRR361243 with different kmer Figure 16: N50 score of SRR361245 with different kmer values of Karect



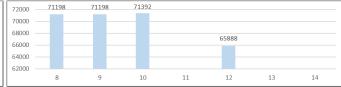
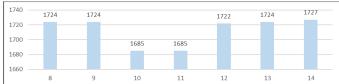


Figure 17: N50 score of SRR387479 with different kmer Figure 18: N50 score of SRR387480 with different kmer values of Karect

values of Karect



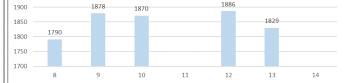


Figure 19: N50 score of **SRR401414** with different **kmer** Figure 20: N50 score of **SRR401415** with different **kmer** values of Karect

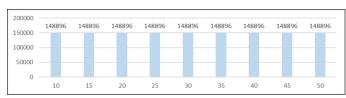
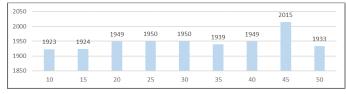




Figure 21: N50 score of **SRR354181** with different **kmer** Figure 22: N50 score of **SRR354182** with different **kmer** values of Karect



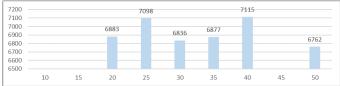
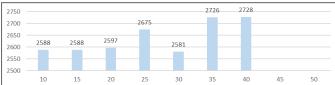


Figure 23: N50 score of **SRR361240** with different **kmer** Figure 24: N50 score of **SRR361241** with different **kmer** values of Karect



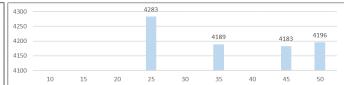


Figure 25: N50 score of **SRR361243** with different **kmer** Figure 26: N50 score of **SRR361245** with different **kmer** values of Karect



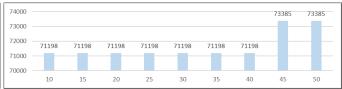
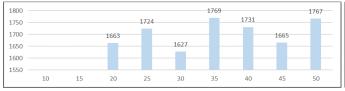


Figure 27: N50 score of **SRR387479** with different **kmer** Figure 28: N50 score of **SRR387480** with different **kmer** values of Karect



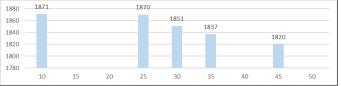


Figure 29: N50 score of **SRR401414** with different **kmer** Figure 30: N50 score of **SRR401415** with different **kmer** values of Karect