

Appendix A: Estimated file sizes and recommended file-saving options

Estimated File SIZE (Gigabytes) at recommended GAIIx densities Double these numbers for Paired-End runs

	.bcl*	.cif*	Images (10% subset)**	Thumbnails**	.bro
51 cycles	21.0	153.0	144.5	14.0	0.106
76 cycles	30.0	228.0	215.3	20.8	0.157
101 cycles	40.0	303.0	286.1	27.7	0.209
125 cycles	50.0	375.0	354.1	34.2	0.258
151 cycles	60.0	453.0	427.7	41.3	0.312

* Note that bcl and cif file sizes will be dependent on cluster density (numbers above are estimated for 750k/mm²). GAIIE bcl and cif file sizes will be smaller.

** Images and thumbnails are fixed file sizes (GAIIE images are 60% smaller)

Note: The older GAI uses 100 tiles/lane instead of 120 tiles/lane

Recommended file saving options

COPY						Impact on Run Duration
	.bcl	.cif	Images (10% subset)*	Thumbnails*	.bro	
Option 1	X	X	—	—	—	Default
Option 2	X	X	—	X	—	Minimal (if network file system meets bandwidth requirements)
Option 3	—	X	—	—	—	Low impact; requires OLB for analysis
Option 4	X	—	X	—	—	May see slower performance (this option is not available on the Dell 690)
Option 5	X	—	—	—	X	This will add to overall analysis time

**If saving a subset of images, it is not recommended to save thumbnails and vice versa
Illumina cannot ensure system performance with configurations outside of these options*