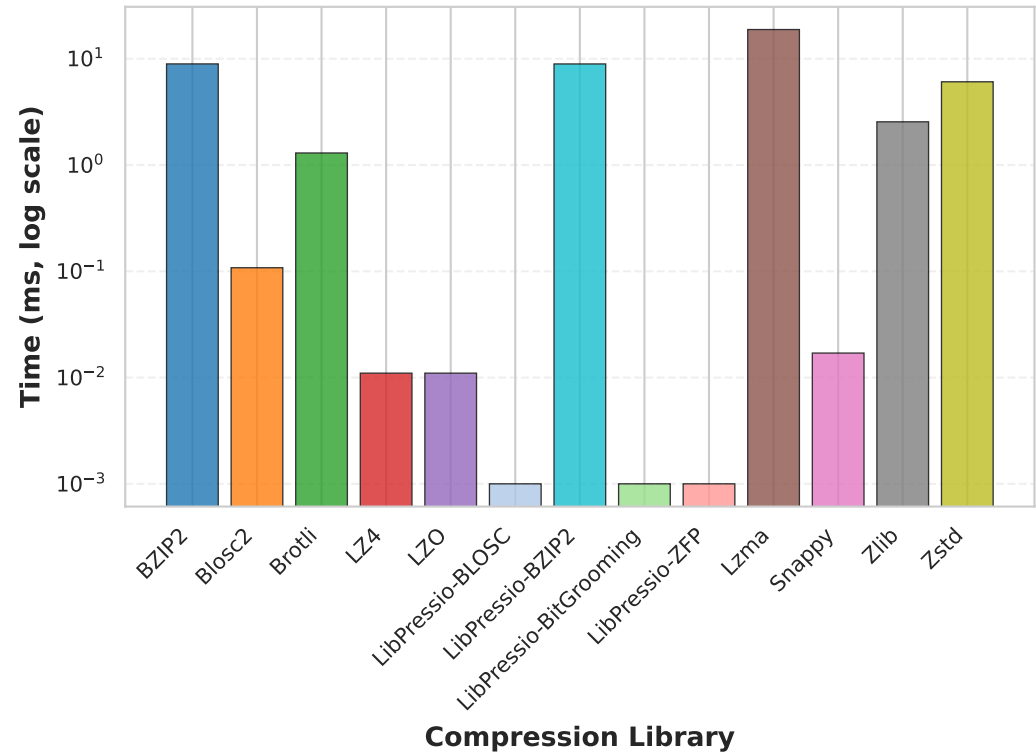
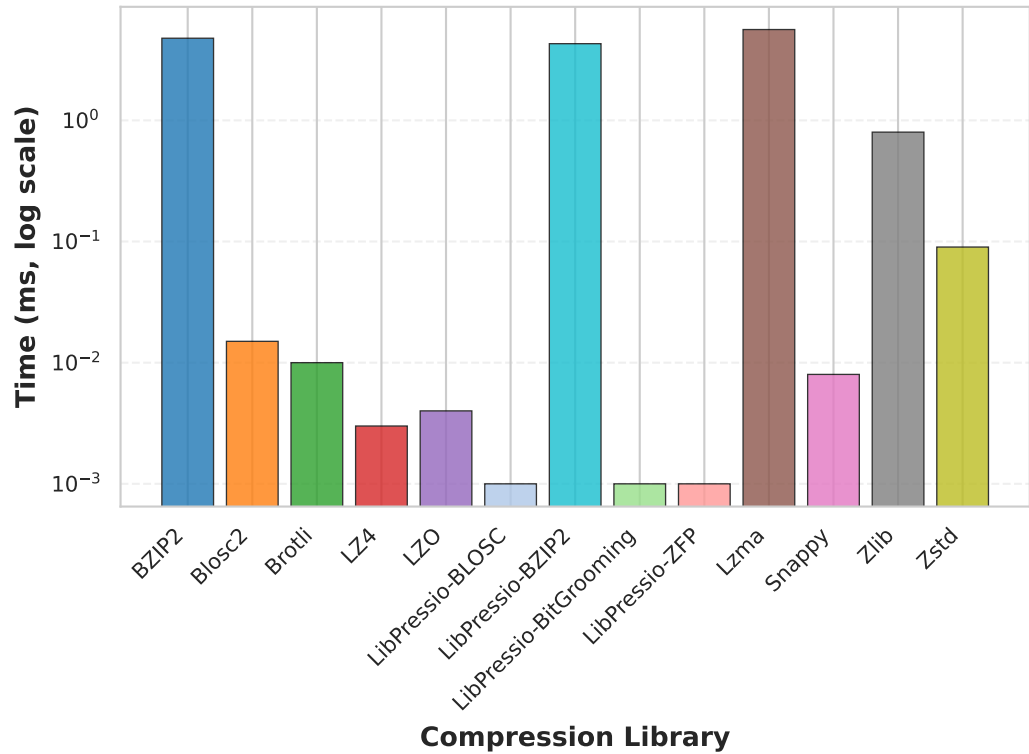


Parameter Study: exponential\_high  
Char Data Type, 64KB Chunk Size

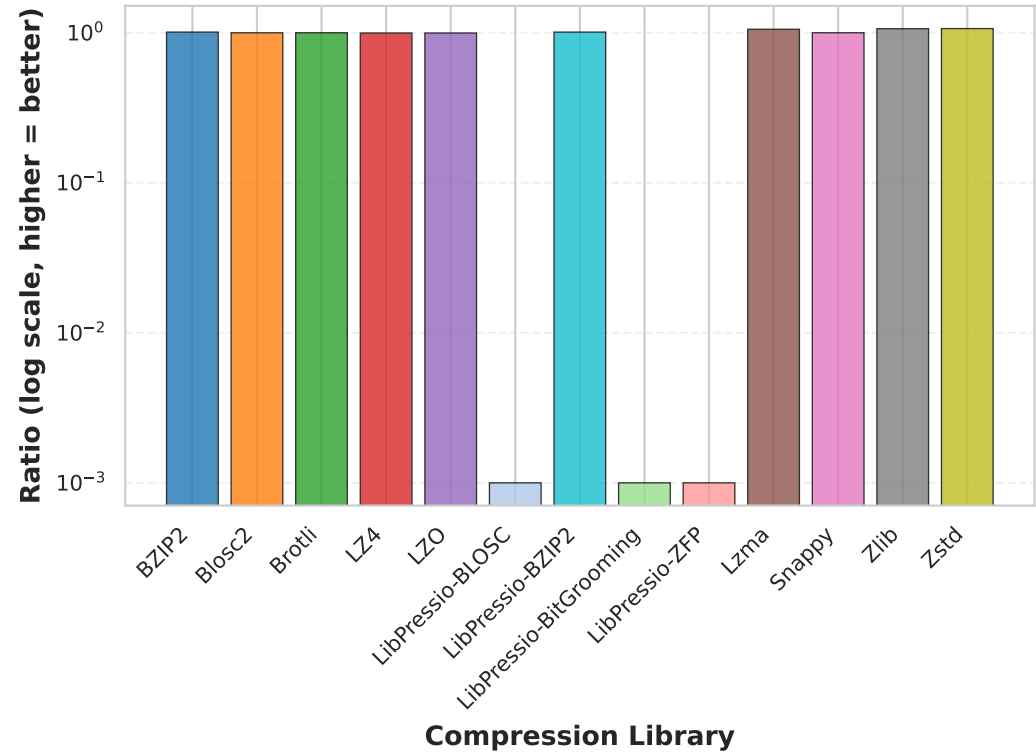
Compression Time



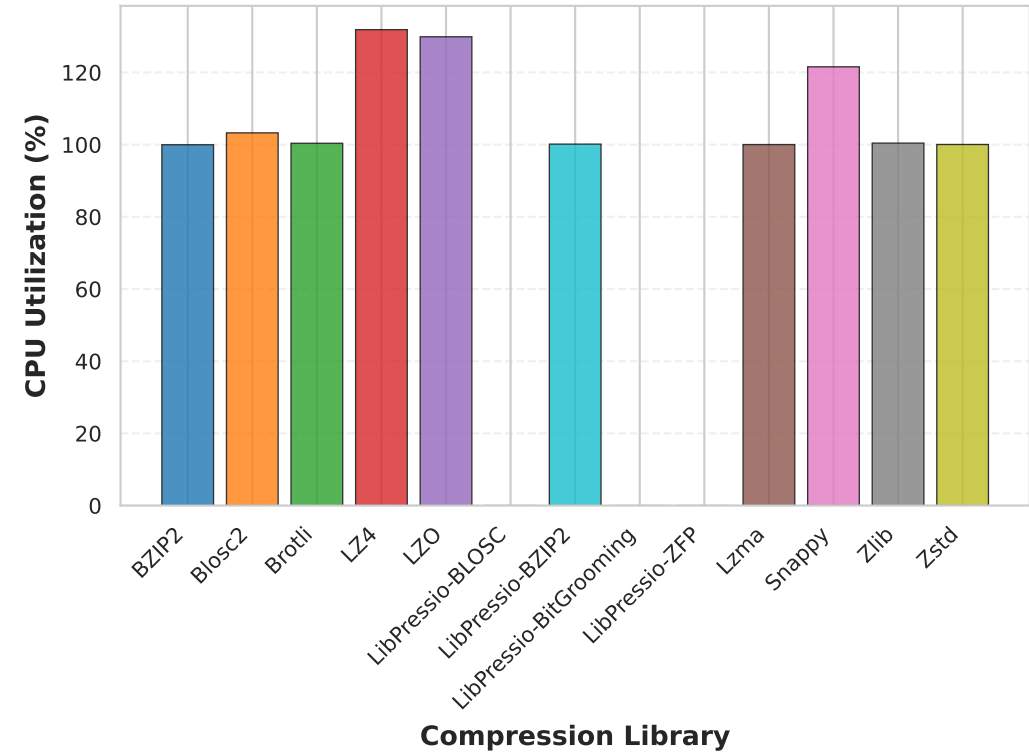
Decompression Time



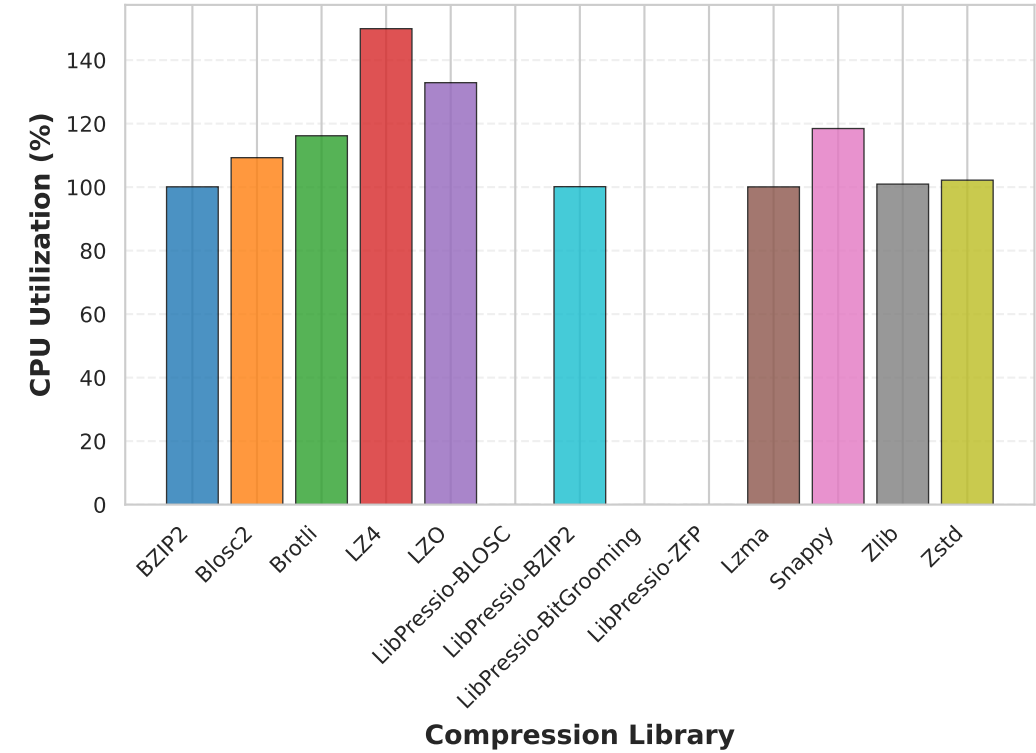
Compression Ratio



Compression CPU Usage



Decompression CPU Usage

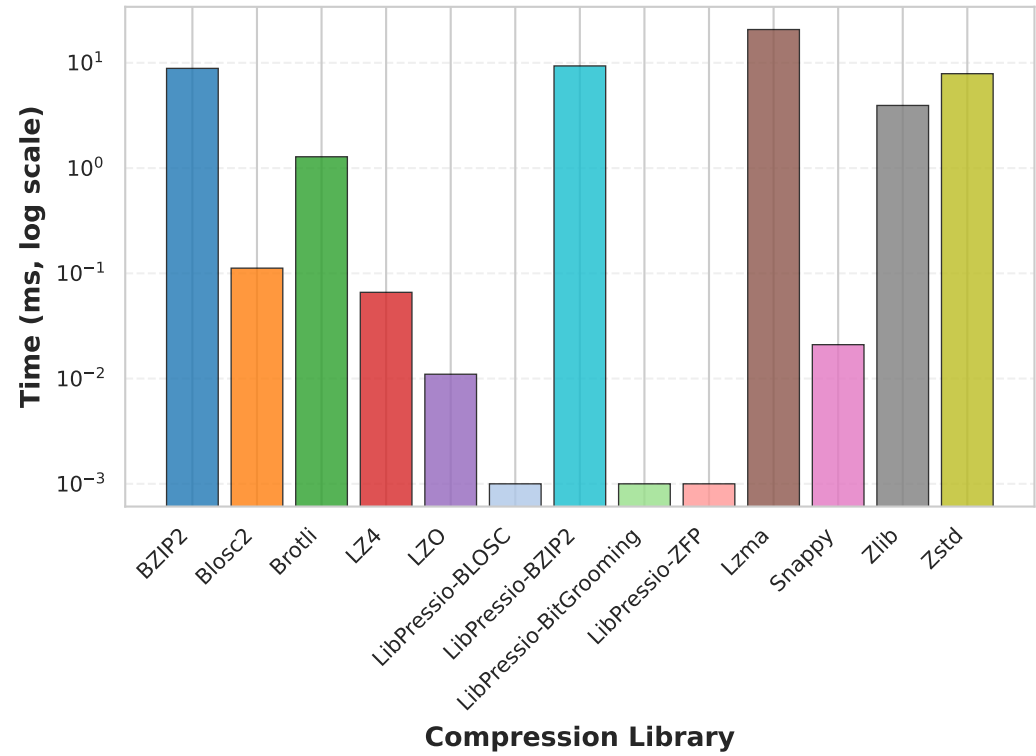


Performance Summary (64KB chunks)  
Sorted by Compression Ratio

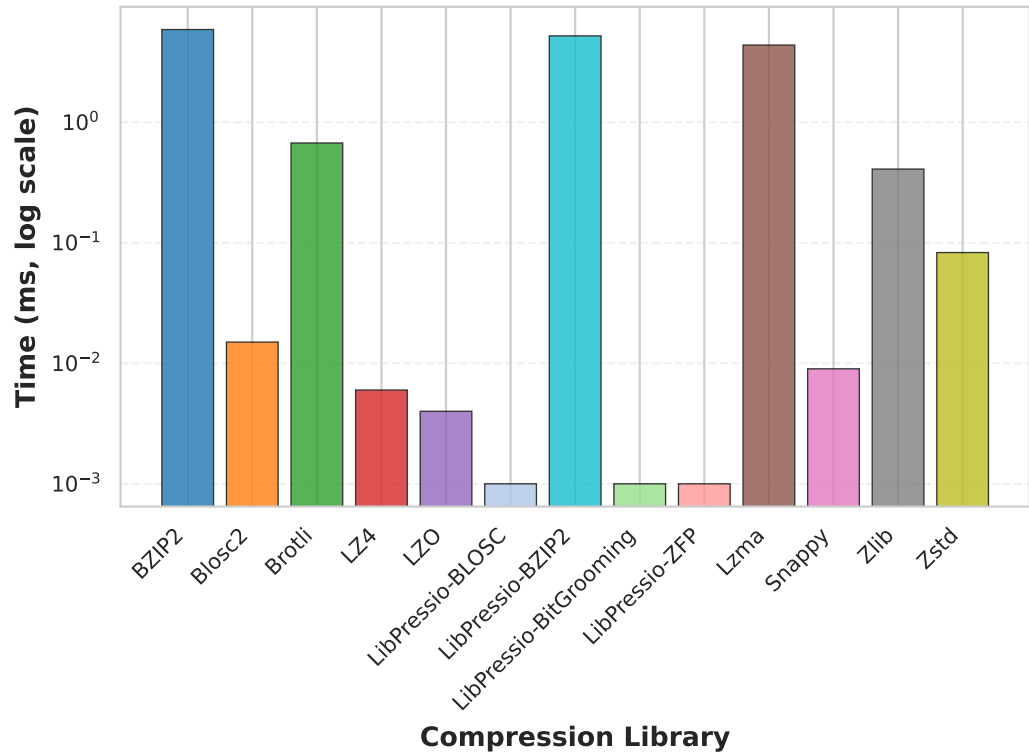
Library	Ratio	Time (ms)	CPU%
Zstd	1.07x	6.1	100%
Zlib	1.06x	2.5	100%
Lzma	1.05x	18.8	100%
BZIP2	1.01x	8.9	100%
LibPressio-BZIP2	1.01x	8.9	100%
Snappy	1.00x	0.0	122%
Brotli	1.00x	1.3	100%
Blosc2	1.00x	0.1	103%
LZ4	1.00x	0.0	132%

Parameter Study: exponential\_incomp  
Char Data Type, 64KB Chunk Size

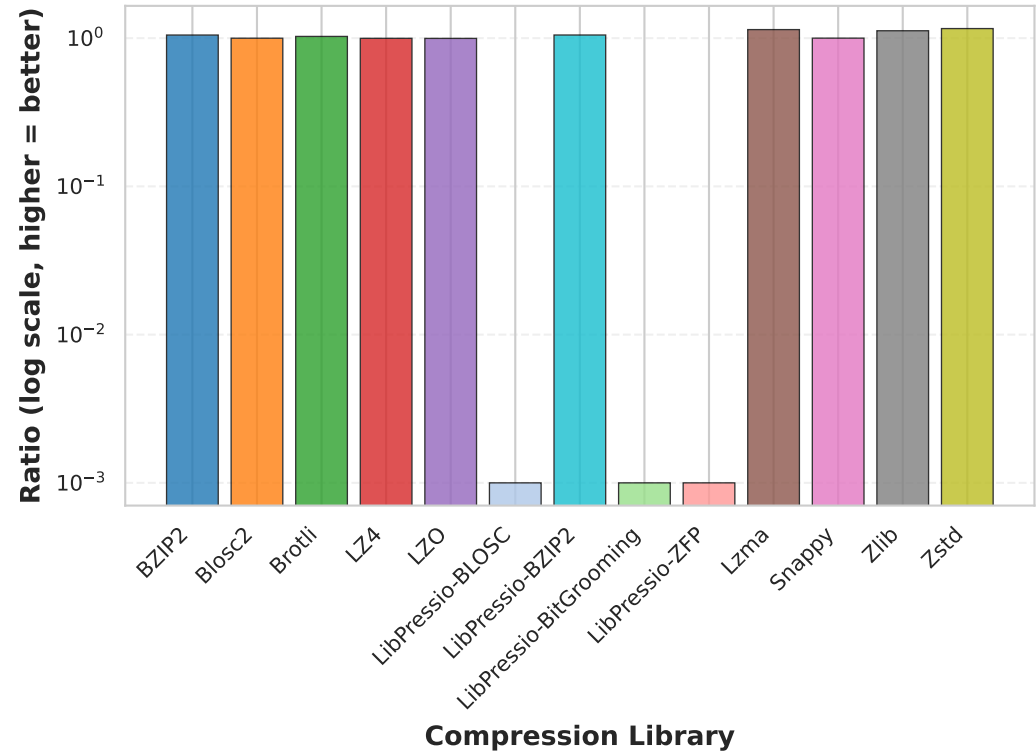
Compression Time



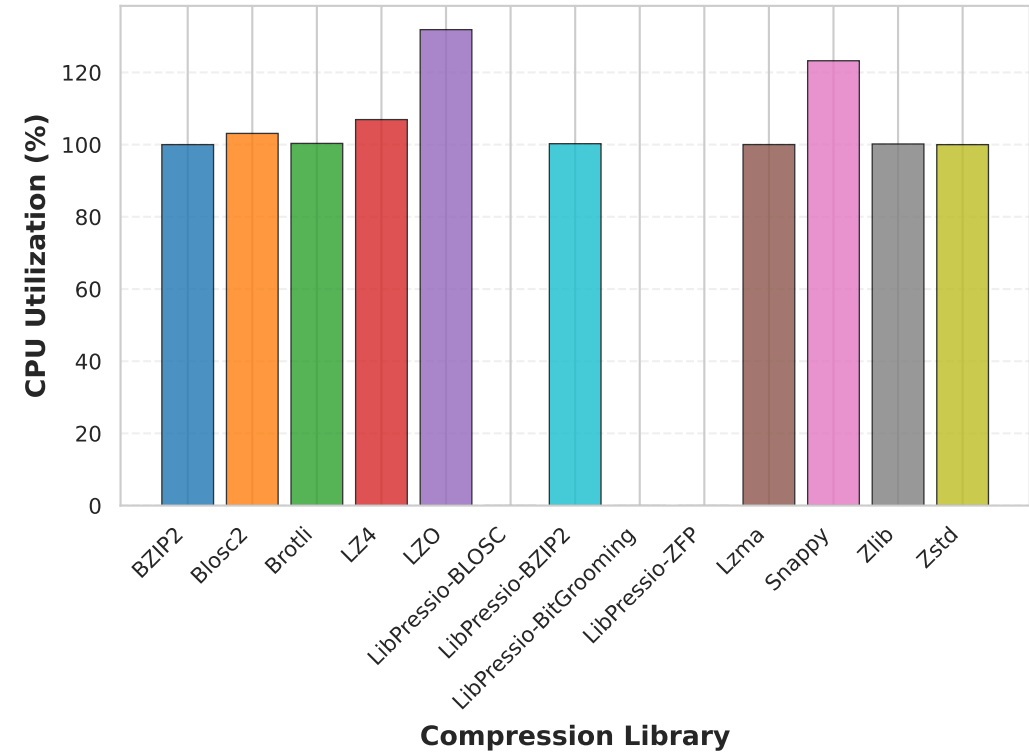
Decompression Time



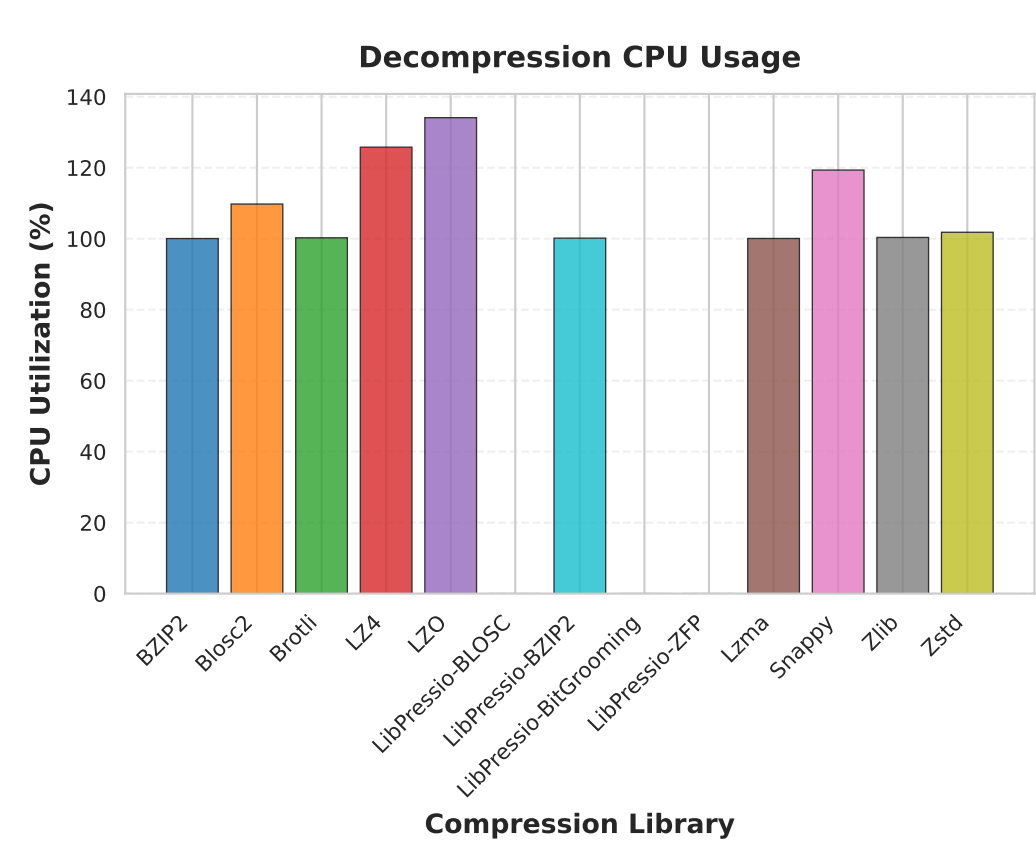
Compression Ratio



Compression CPU Usage



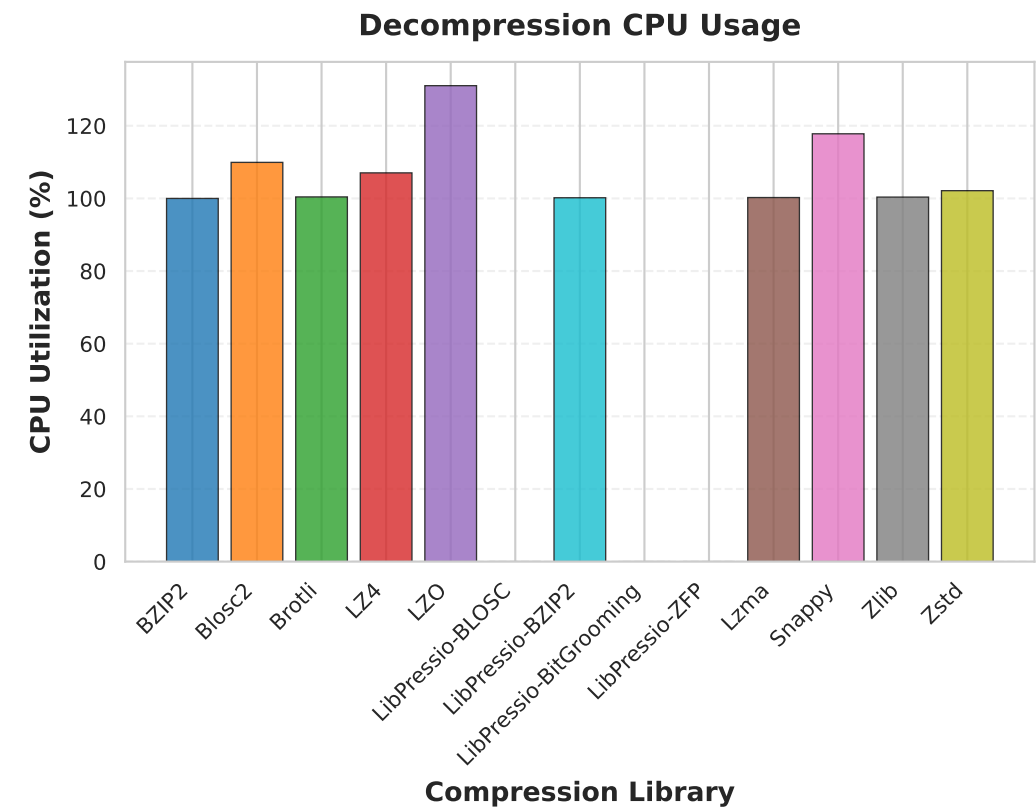
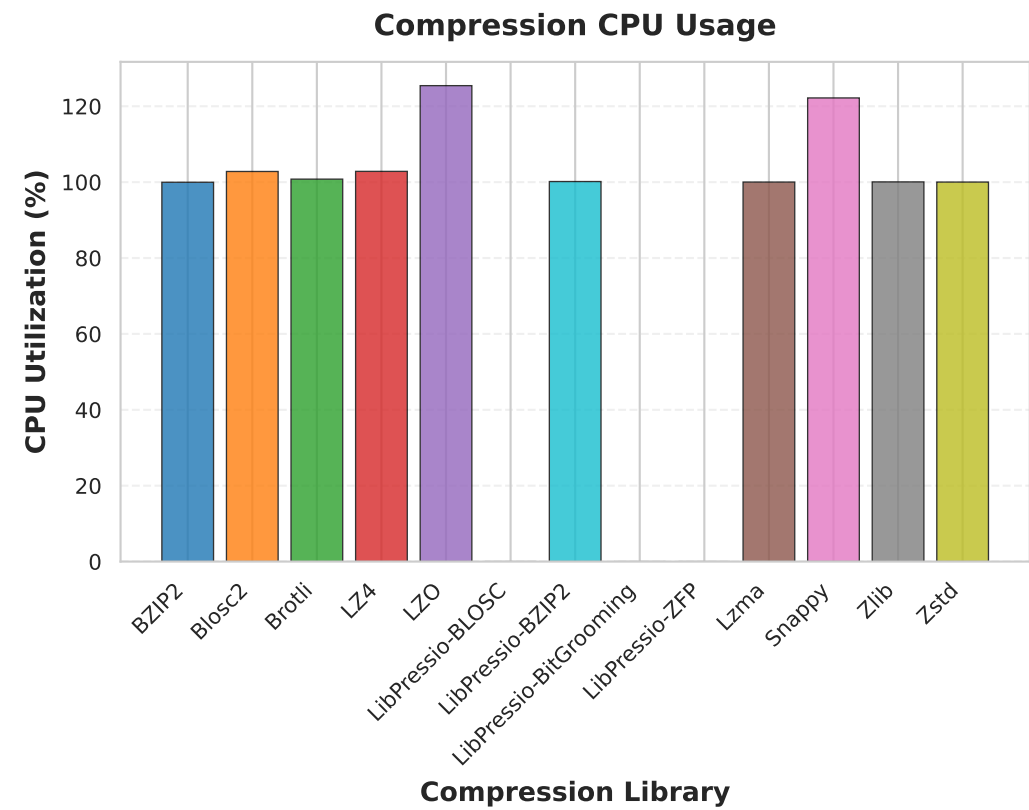
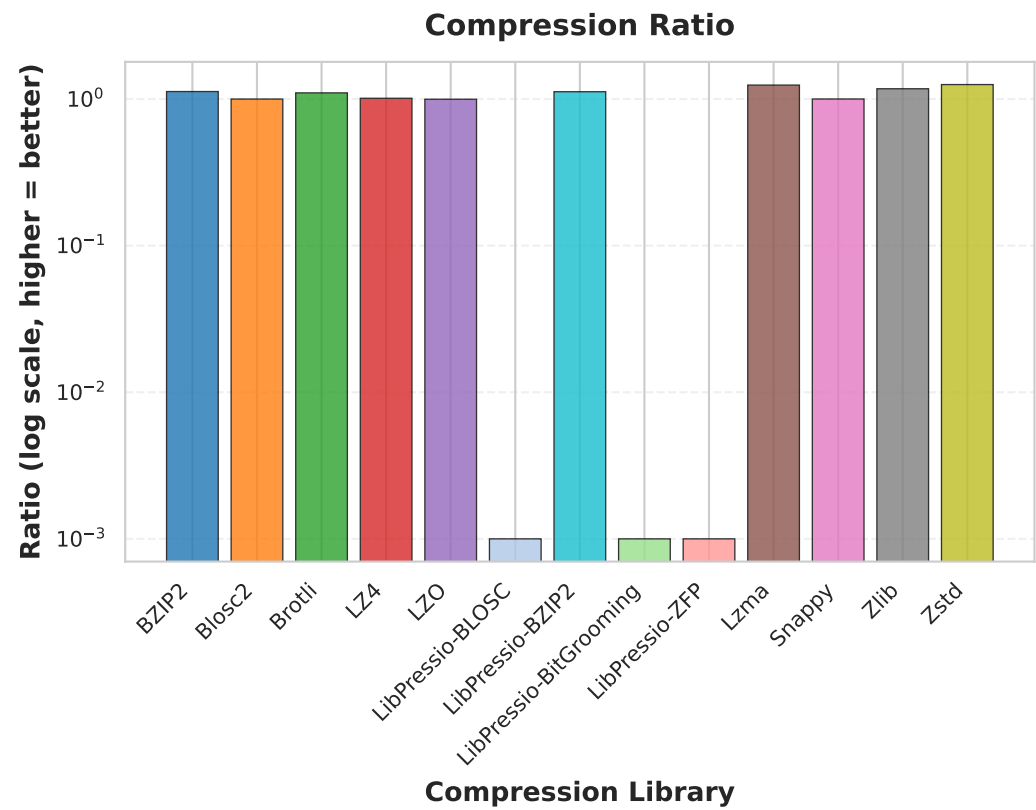
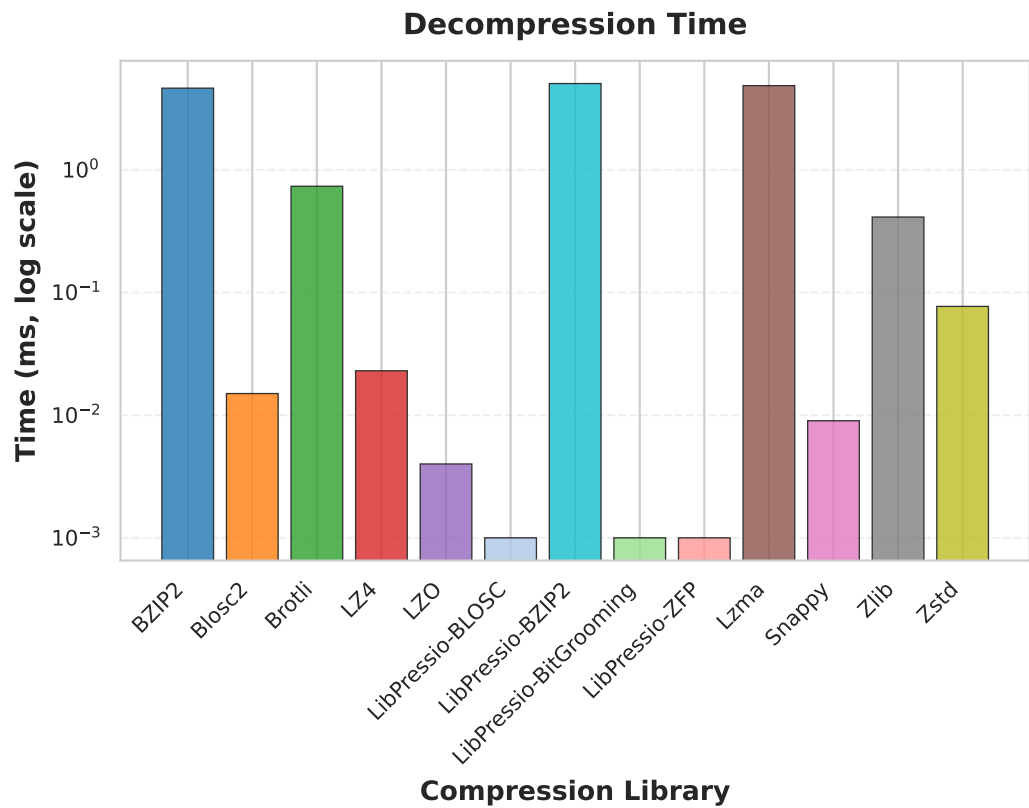
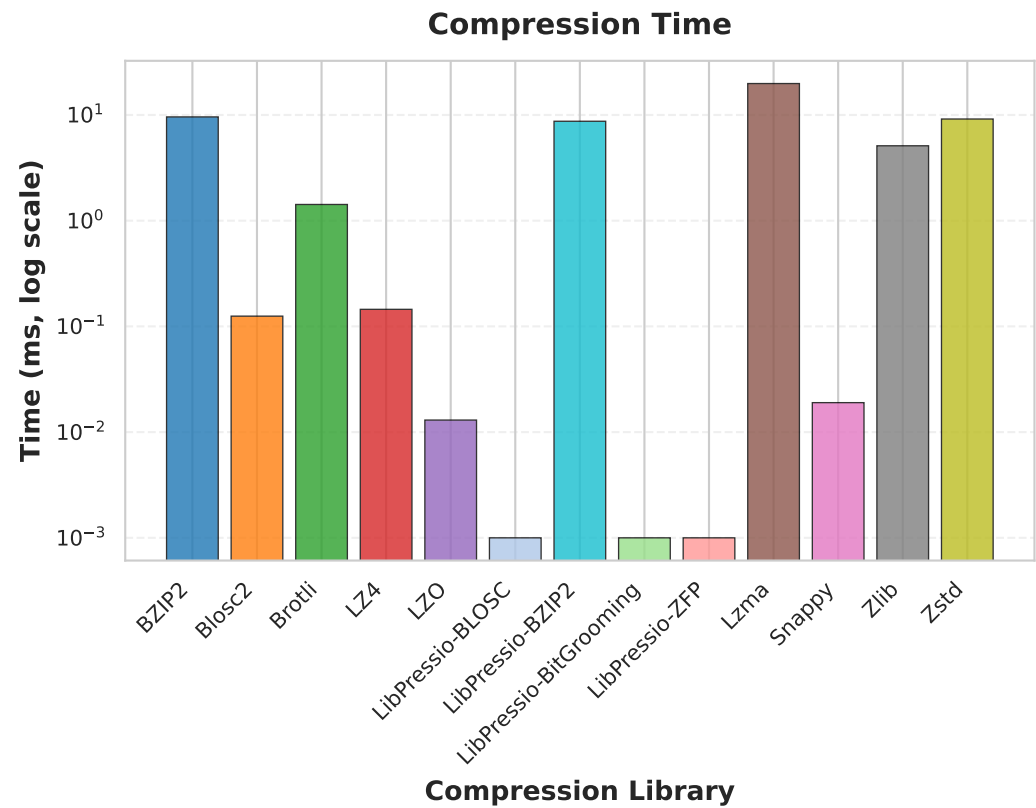
Decompression CPU Usage



Performance Summary (64KB chunks)  
Sorted by Compression Ratio

Library	Ratio	Time (ms)	CPU%
Zstd	1.16x	7.9	100%
Lzma	1.14x	20.7	100%
Zlib	1.12x	3.9	100%
LibPressio-BZIP2	1.05x	9.3	100%
BZIP2	1.05x	8.9	100%
Brotli	1.03x	1.3	100%
Snappy	1.00x	0.0	123%
Blosc2	1.00x	0.1	103%
LZ4	1.00x	0.1	107%

Parameter Study: exponential\_light  
Char Data Type, 64KB Chunk Size

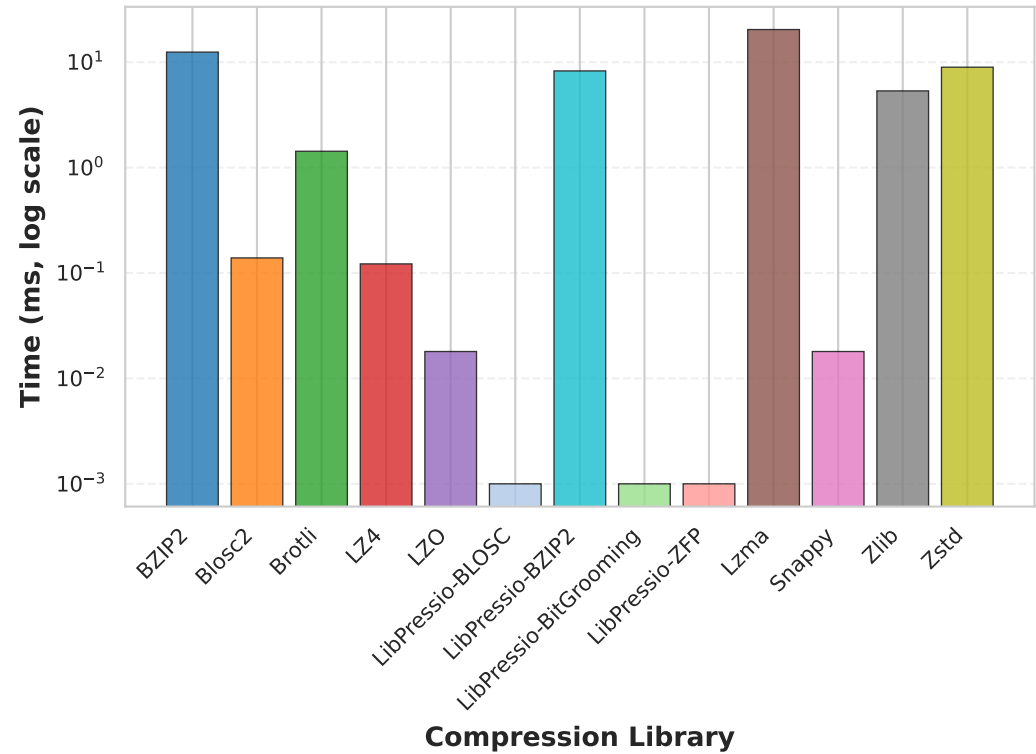


**Performance Summary (64KB chunks)  
Sorted by Compression Ratio**

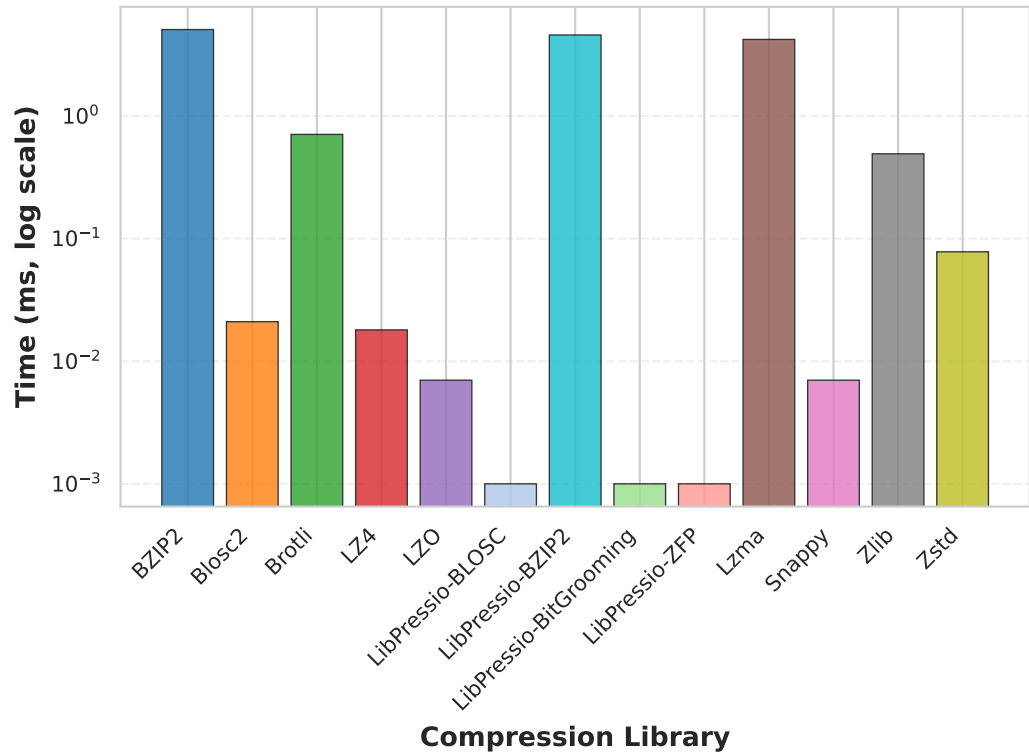
Library	Ratio	Time (ms)	CPU%
Zstd	1.25x	9.2	100%
Lzma	1.24x	19.8	100%
Zlib	1.17x	5.1	100%
BZIP2	1.12x	9.6	100%
LibPressio-BZIP2	1.12x	8.7	100%
Brotli	1.10x	1.4	101%
LZ4	1.01x	0.1	103%
Snappy	1.00x	0.0	122%
Blosc2	1.00x	0.1	103%

Parameter Study: exponential\_medium  
Char Data Type, 64KB Chunk Size

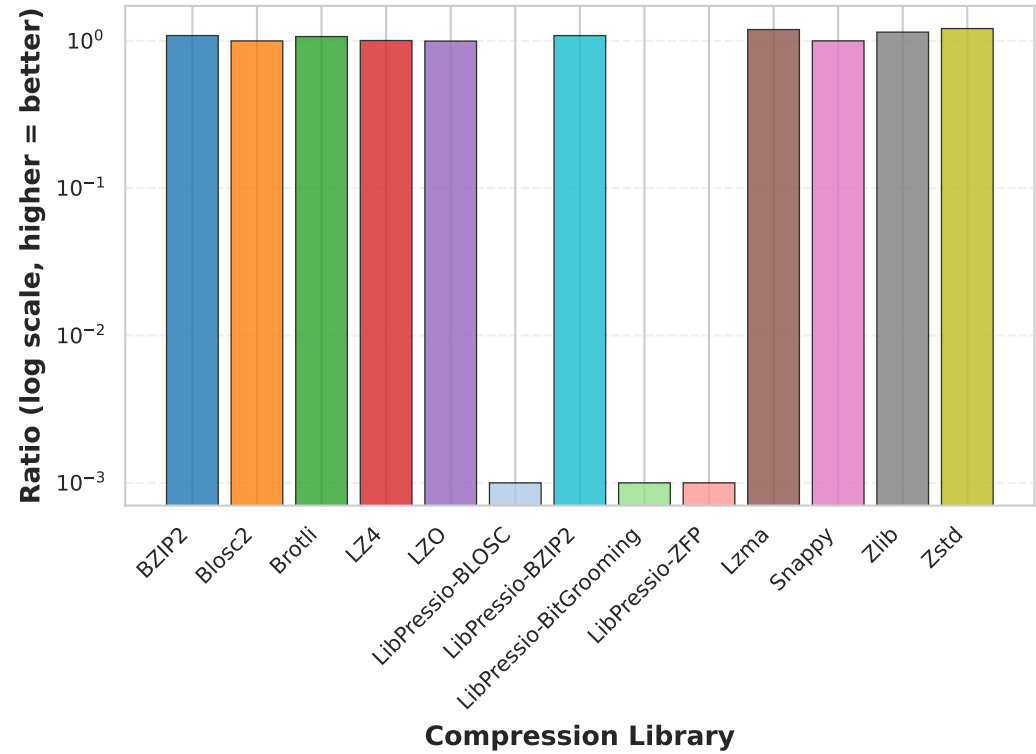
Compression Time



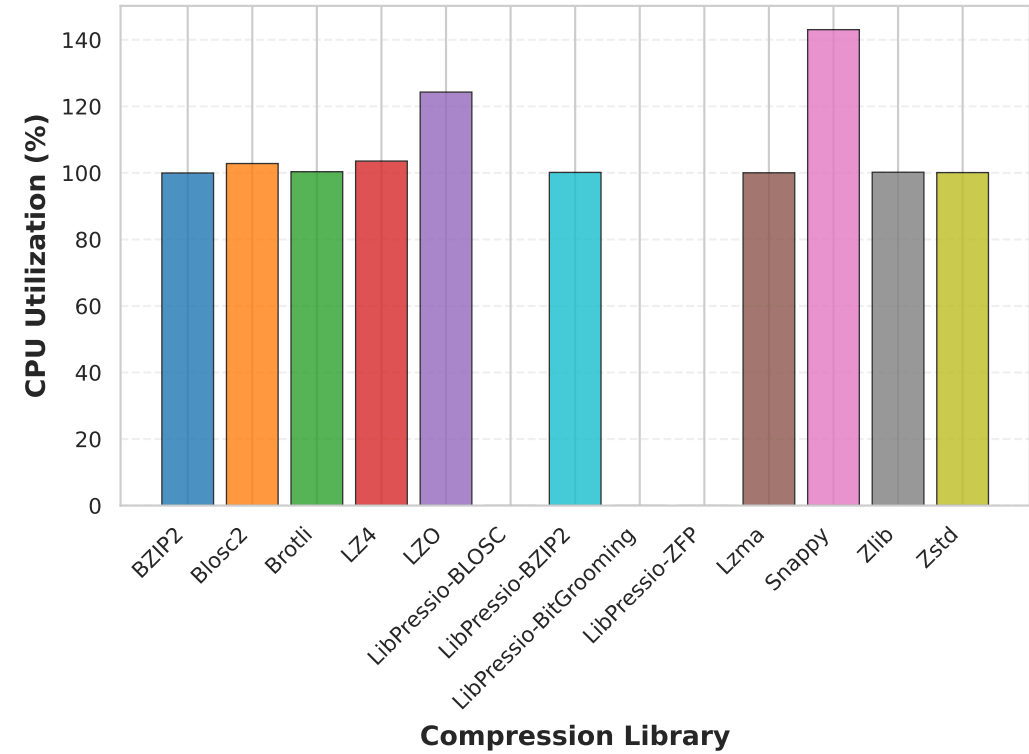
Decompression Time



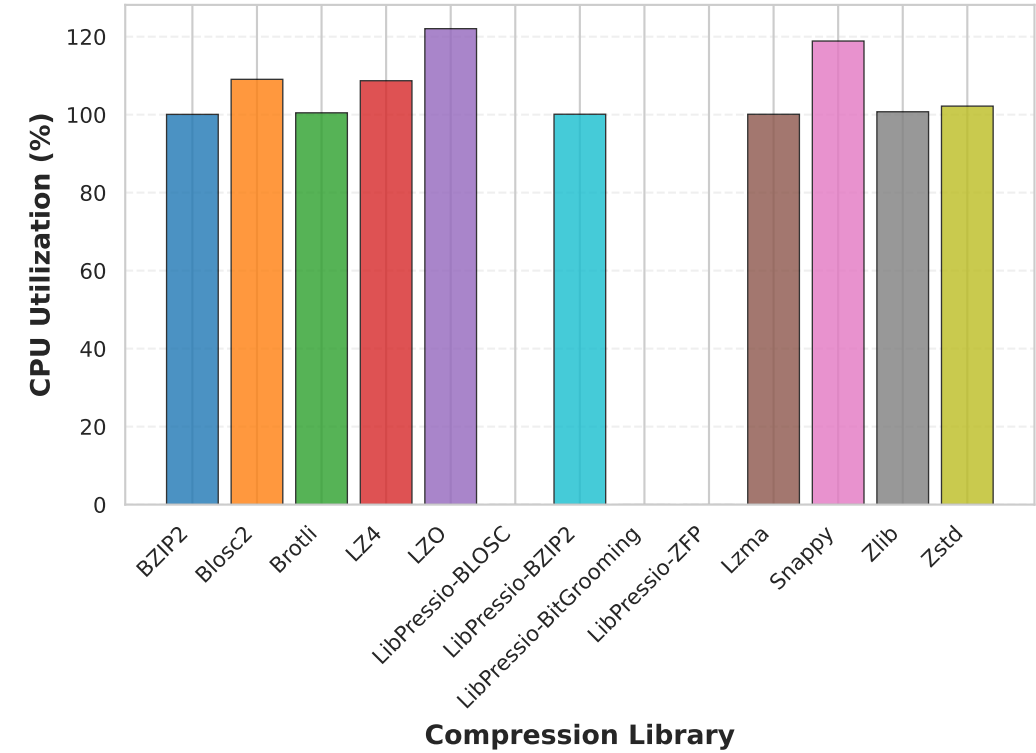
Compression Ratio



Compression CPU Usage



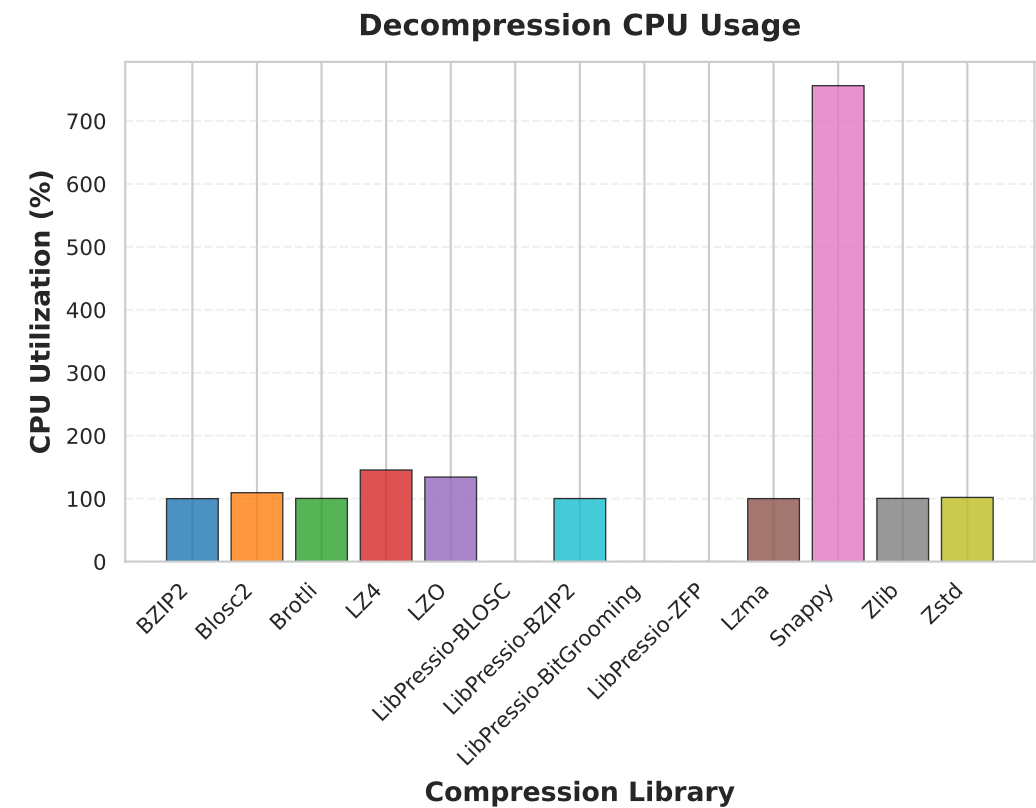
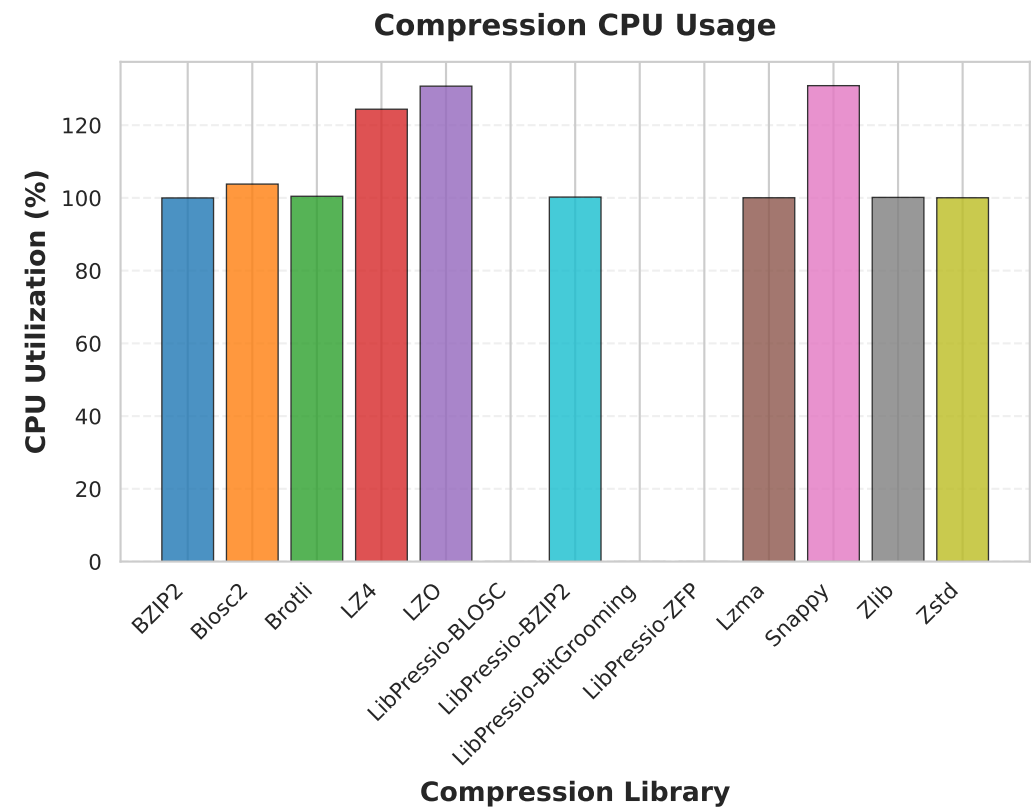
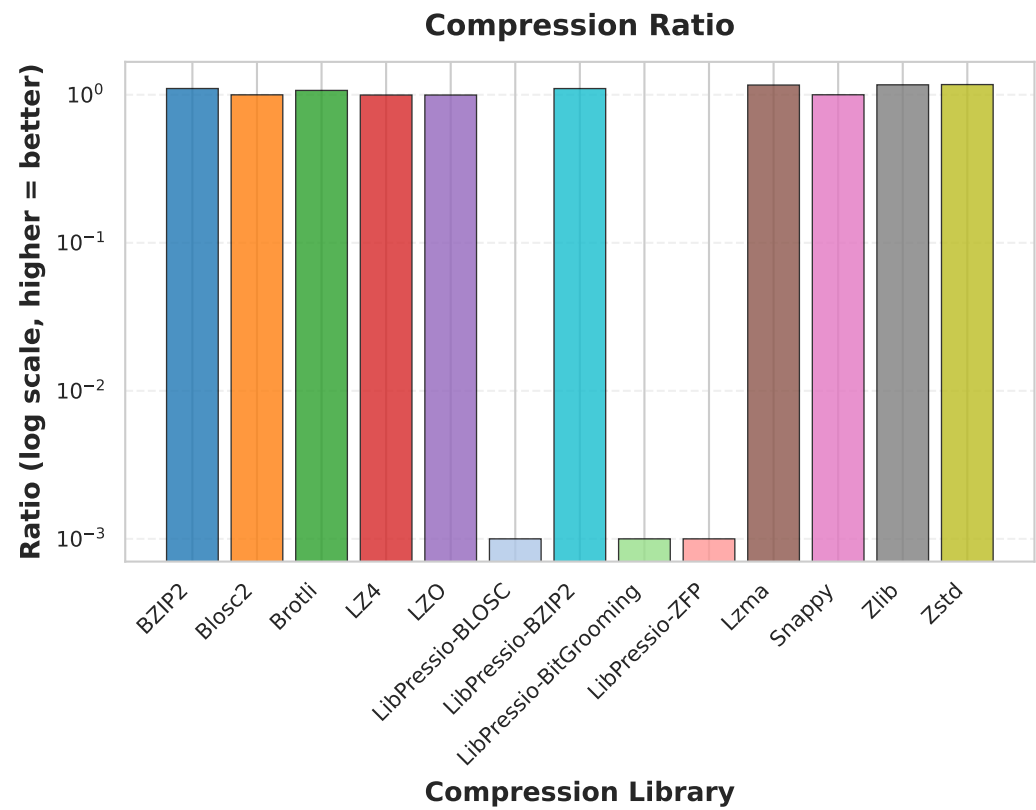
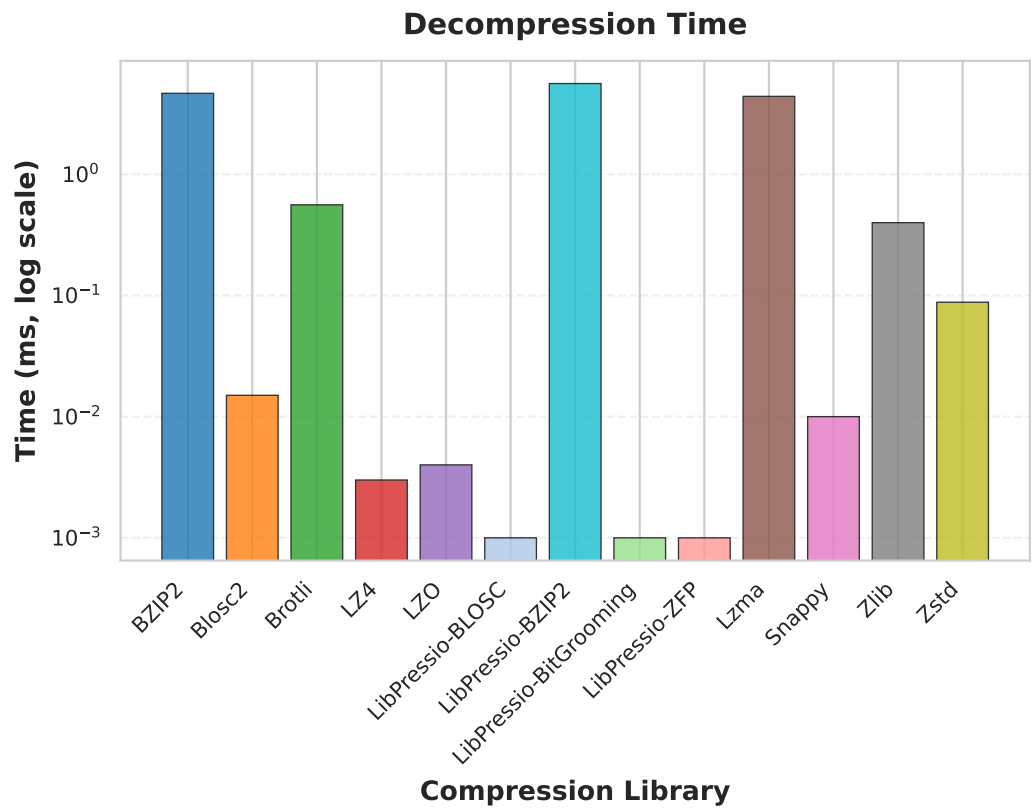
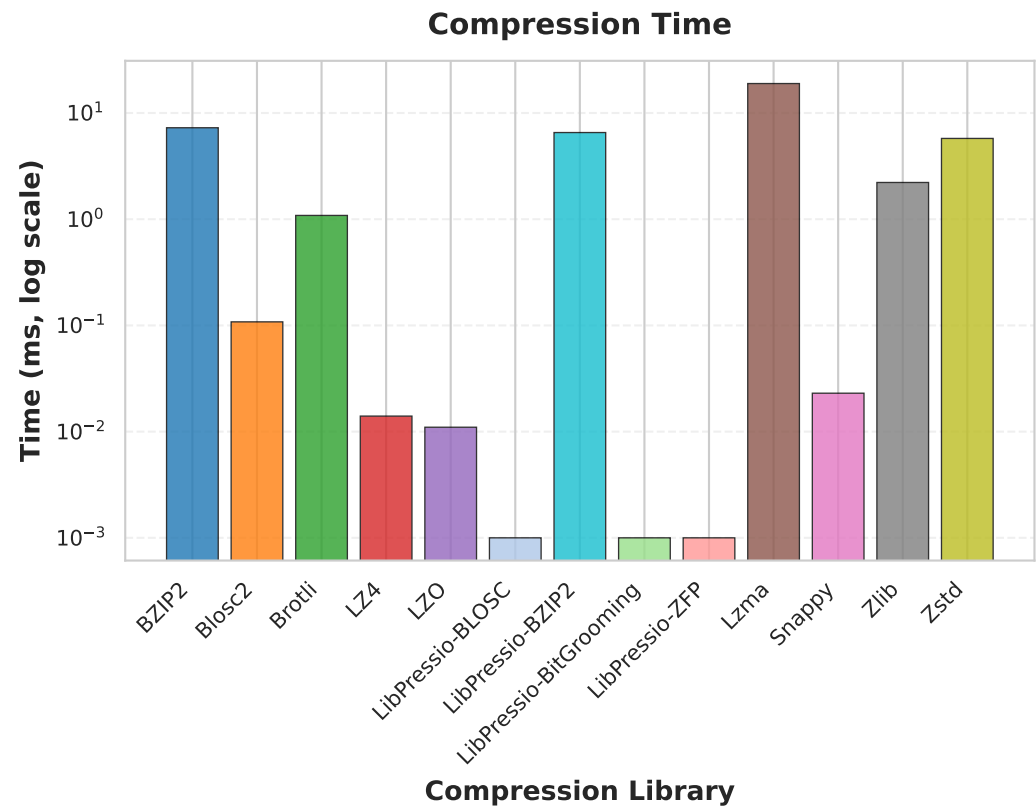
Decompression CPU Usage



Performance Summary (64KB chunks)  
Sorted by Compression Ratio

Library	Ratio	Time (ms)	CPU%
Zstd	1.21x	9.0	100%
Lzma	1.19x	20.4	100%
Zlib	1.15x	5.3	100%
BZIP2	1.09x	12.5	100%
LibPressio-BZIP2	1.09x	8.3	100%
Brotli	1.07x	1.4	100%
LZ4	1.00x	0.1	104%
Snappy	1.00x	0.0	143%
Blosc2	1.00x	0.1	103%

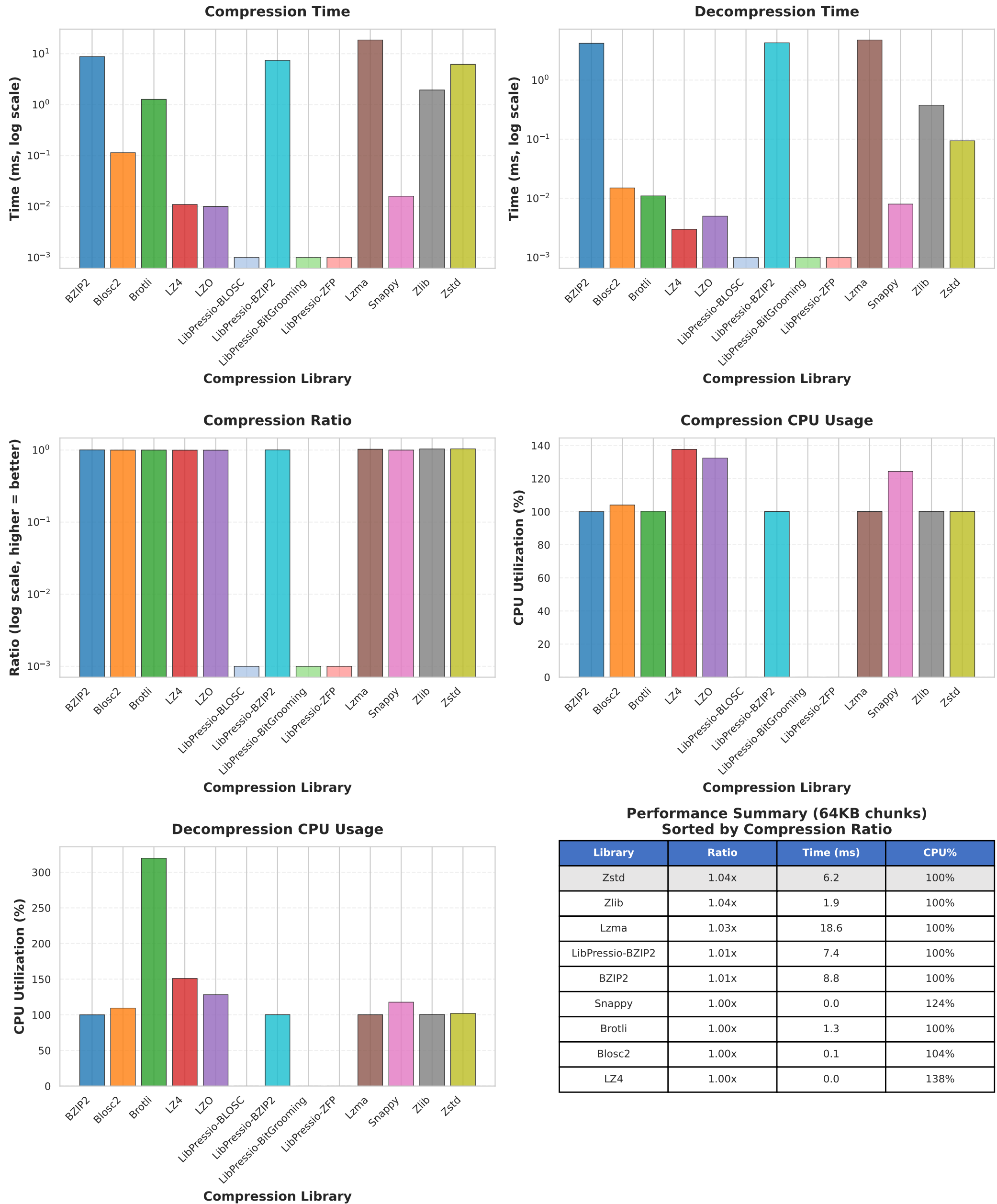
Parameter Study: gamma\_high  
Char Data Type, 64KB Chunk Size



**Performance Summary (64KB chunks)**  
**Sorted by Compression Ratio**

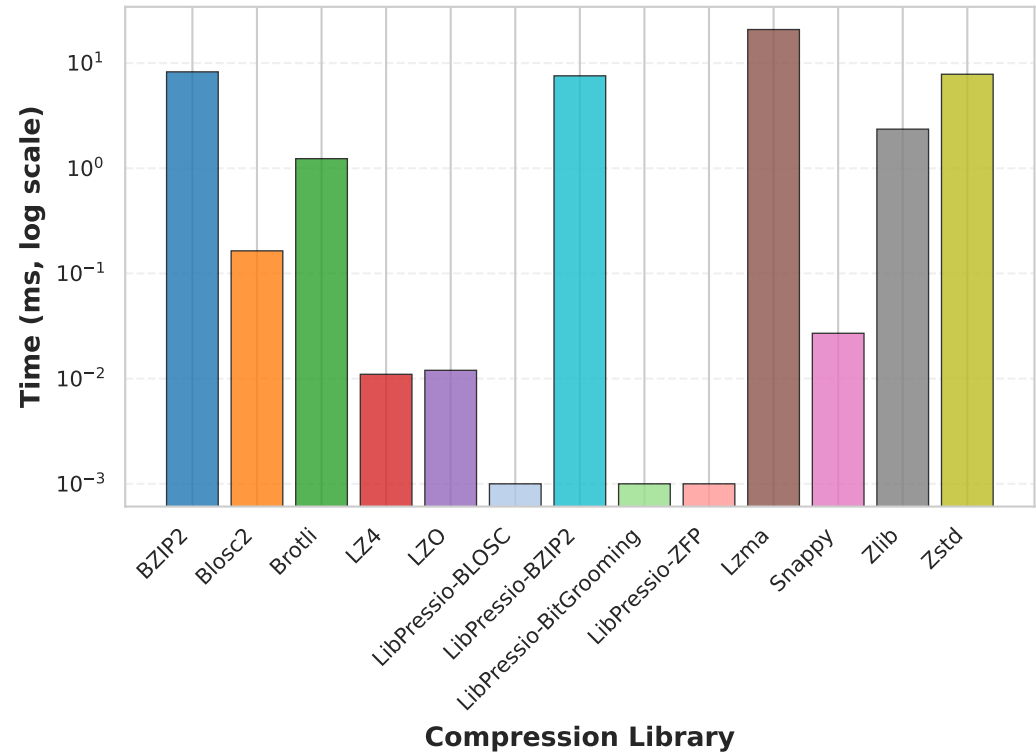
Library	Ratio	Time (ms)	CPU%
Zstd	1.17x	5.8	100%
Zlib	1.17x	2.2	100%
Lzma	1.16x	18.9	100%
BZIP2	1.10x	7.3	100%
LibPressio-BZIP2	1.10x	6.5	100%
Brotli	1.07x	1.1	100%
Snappy	1.00x	0.0	131%
Blosc2	1.00x	0.1	104%
LZ4	1.00x	0.0	124%

Parameter Study: gamma\_incomp  
Char Data Type, 64KB Chunk Size

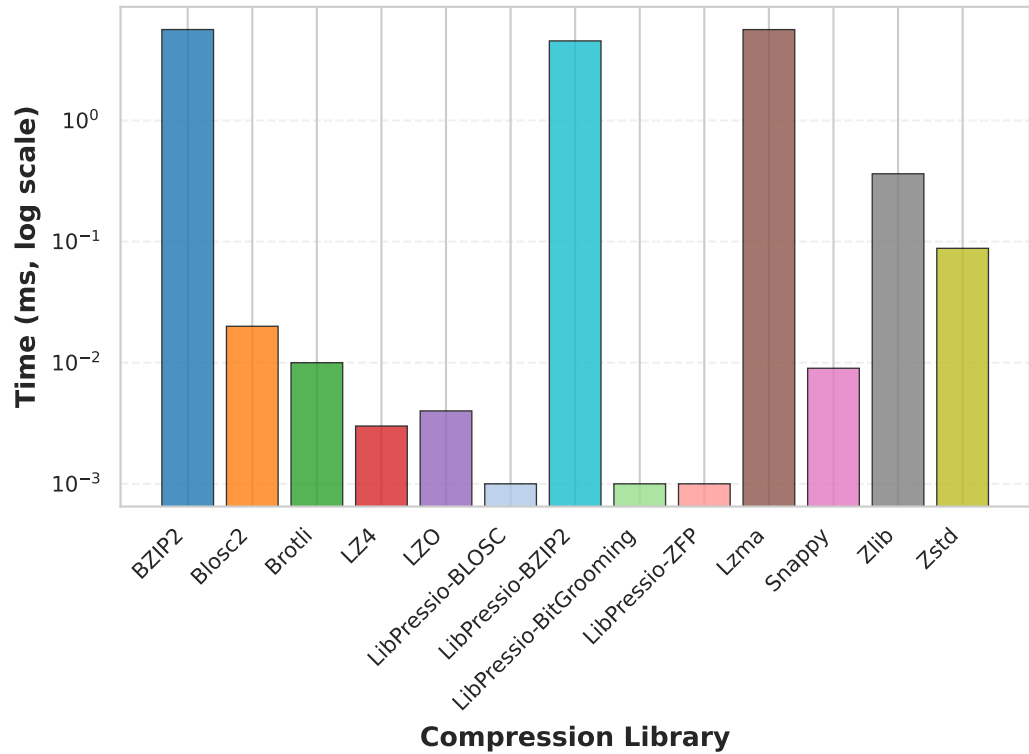


Parameter Study: gamma\_light  
Char Data Type, 64KB Chunk Size

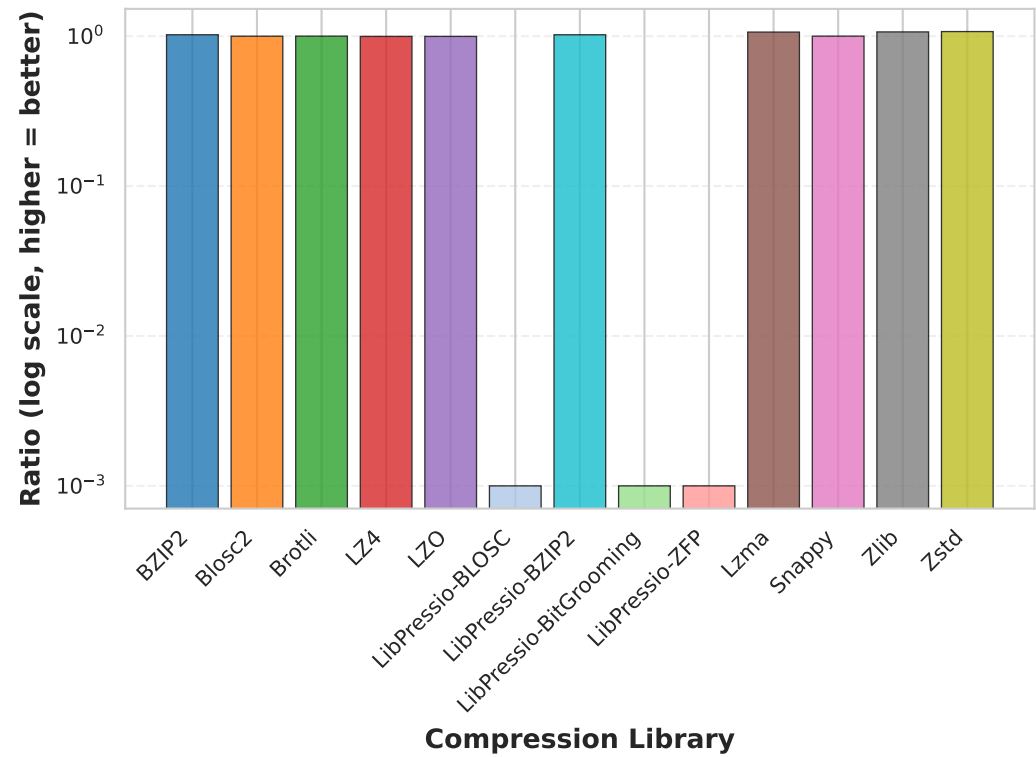
Compression Time



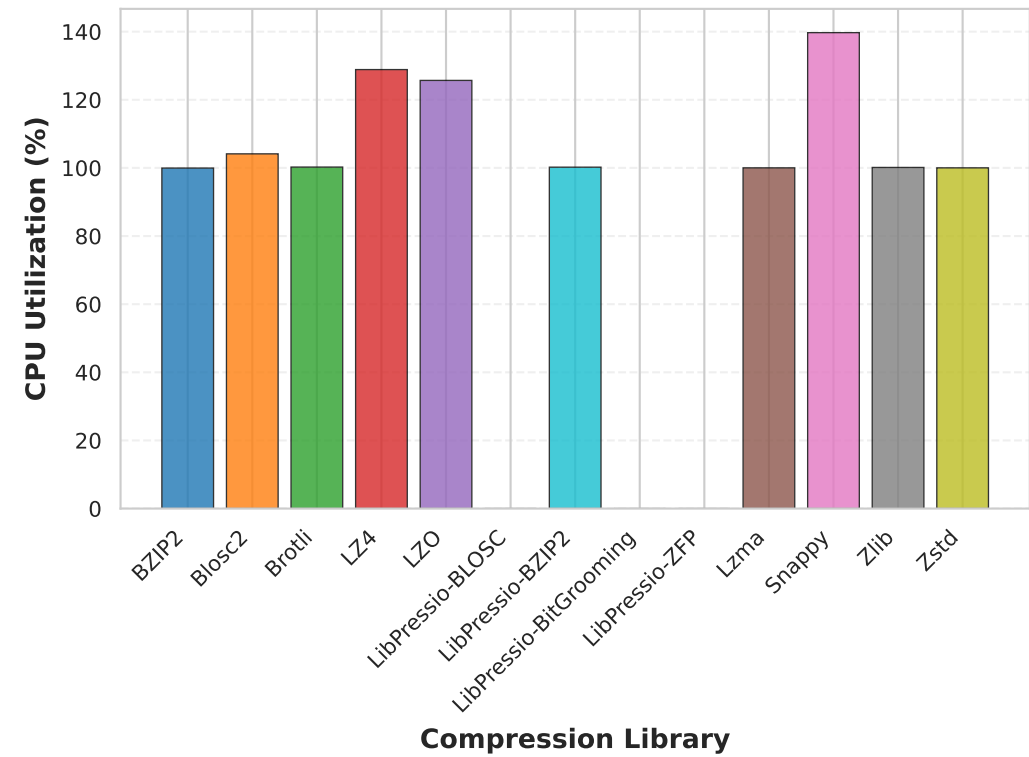
Decompression Time



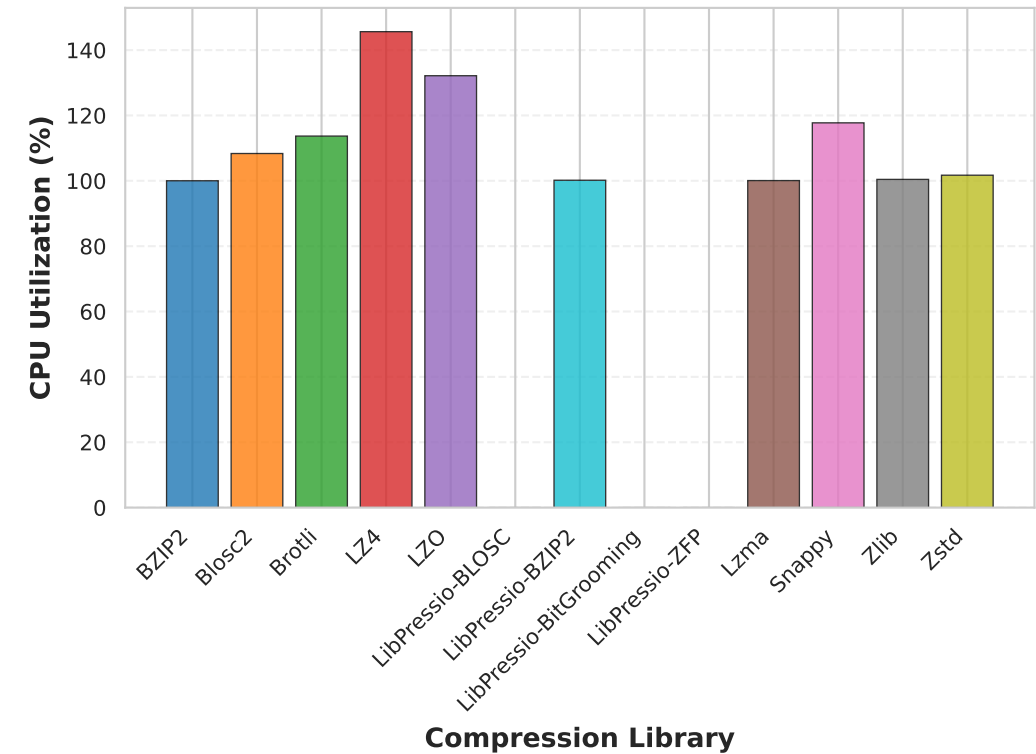
Compression Ratio



Compression CPU Usage



Decompression CPU Usage

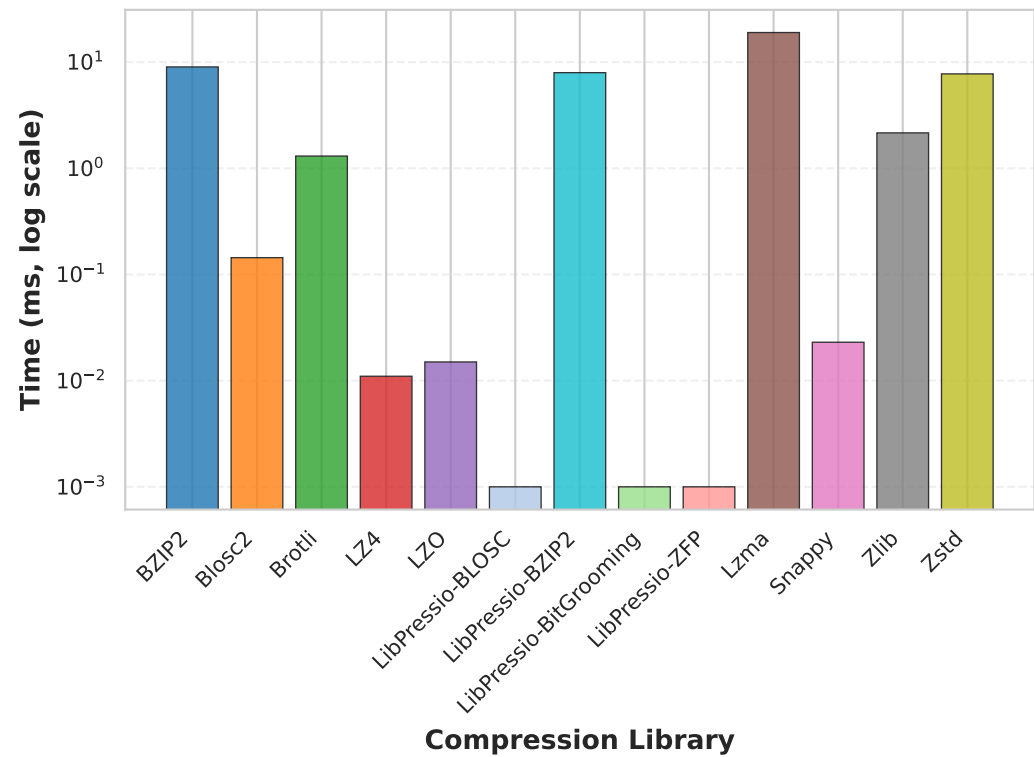


Performance Summary (64KB chunks)  
Sorted by Compression Ratio

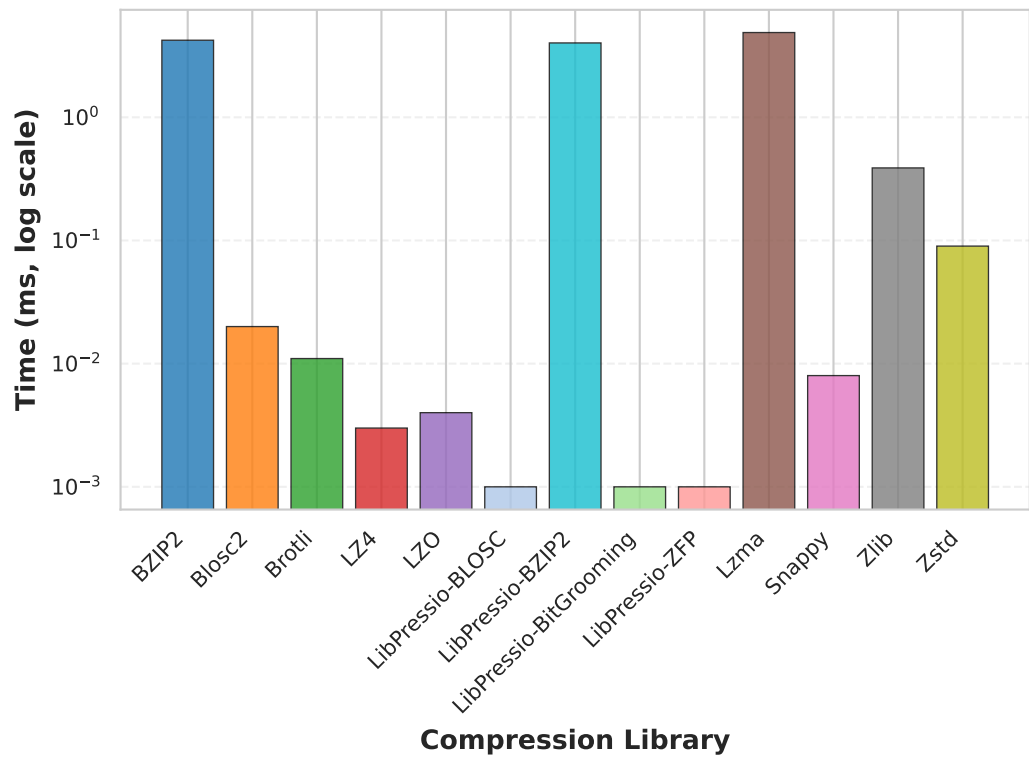
Library	Ratio	Time (ms)	CPU%
Zstd	1.07x	7.8	100%
Zlib	1.07x	2.4	100%
Lzma	1.06x	20.8	100%
BZIP2	1.02x	8.3	100%
LibPressio-BZIP2	1.02x	7.6	100%
Snappy	1.00x	0.0	140%
Brotli	1.00x	1.2	100%
Blosc2	1.00x	0.2	104%
LZ4	1.00x	0.0	129%

Parameter Study: gamma\_medium  
Char Data Type, 64KB Chunk Size

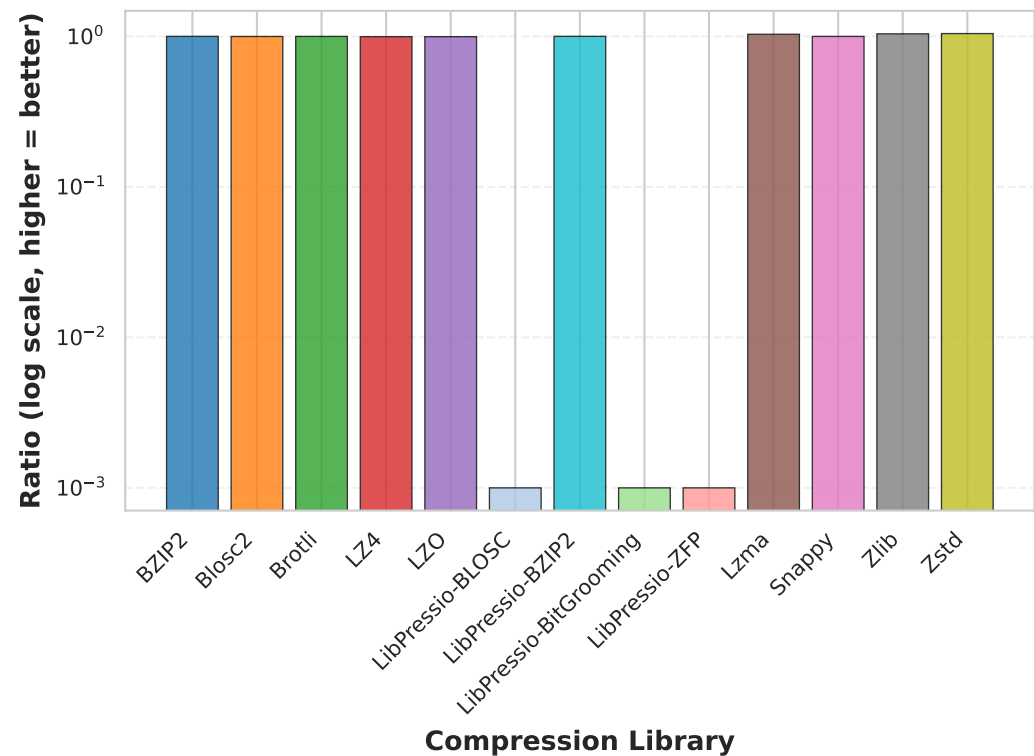
Compression Time



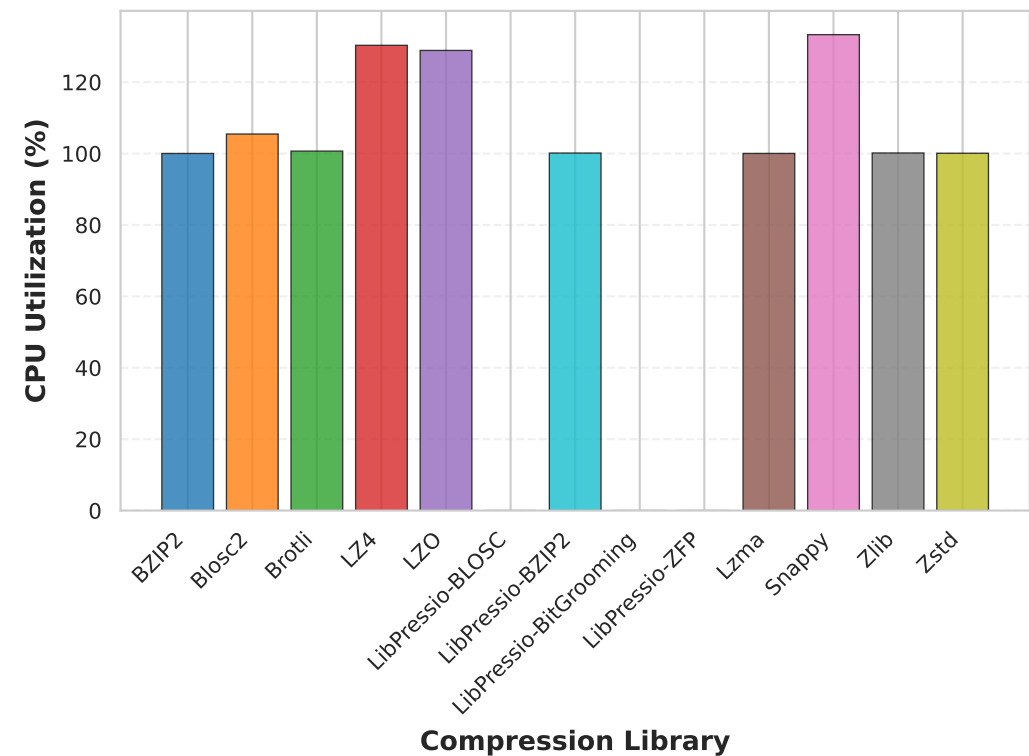
Decompression Time



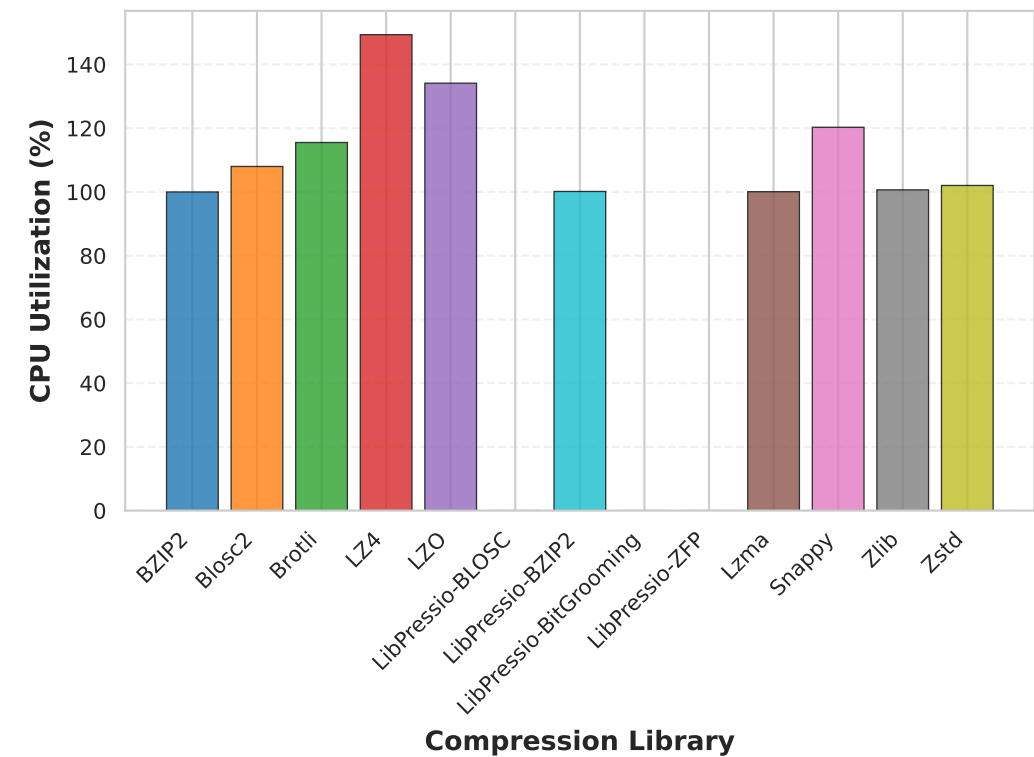
Compression Ratio



Compression CPU Usage



Decompression CPU Usage

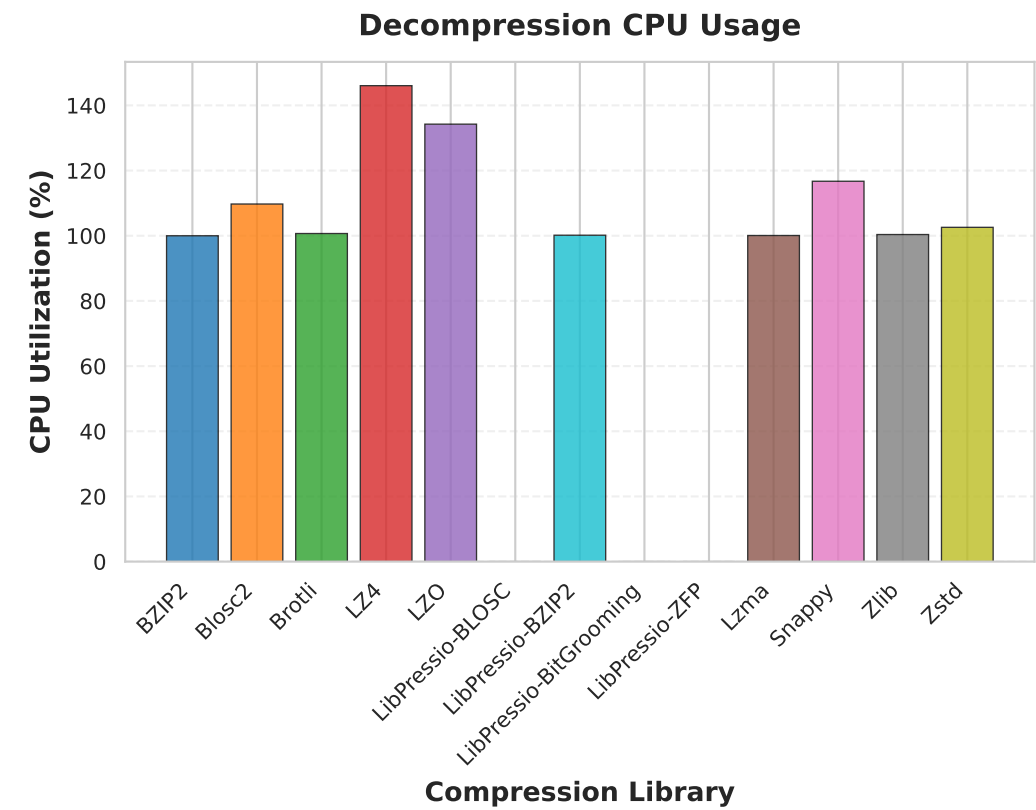
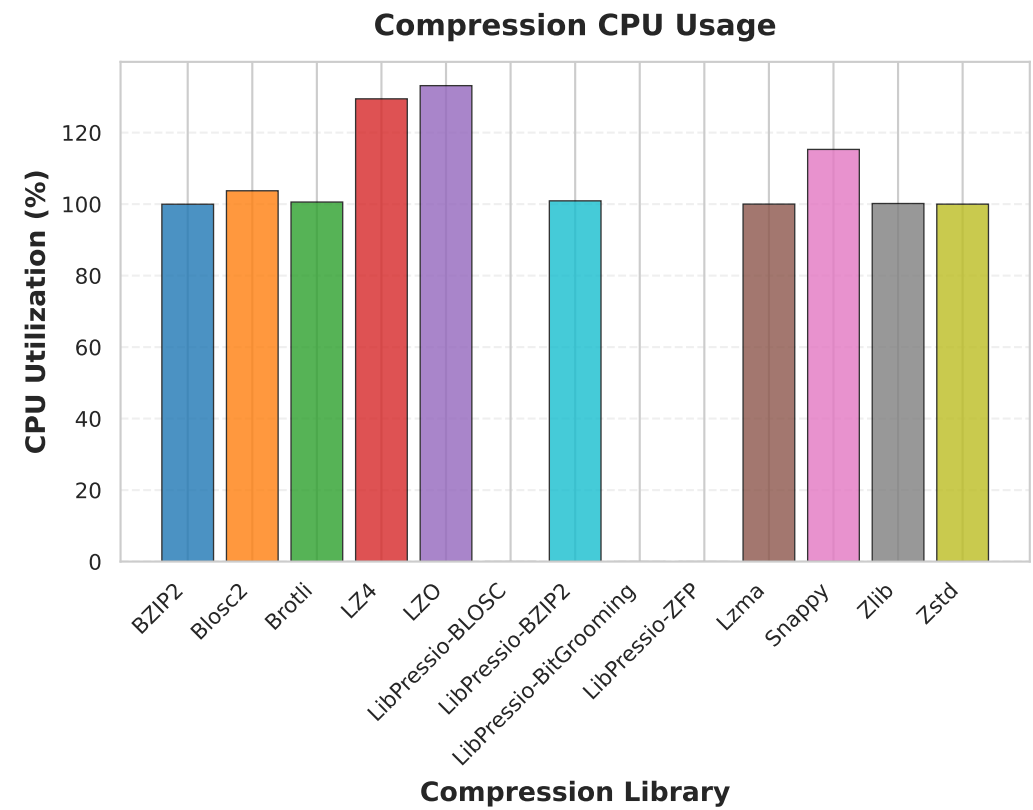
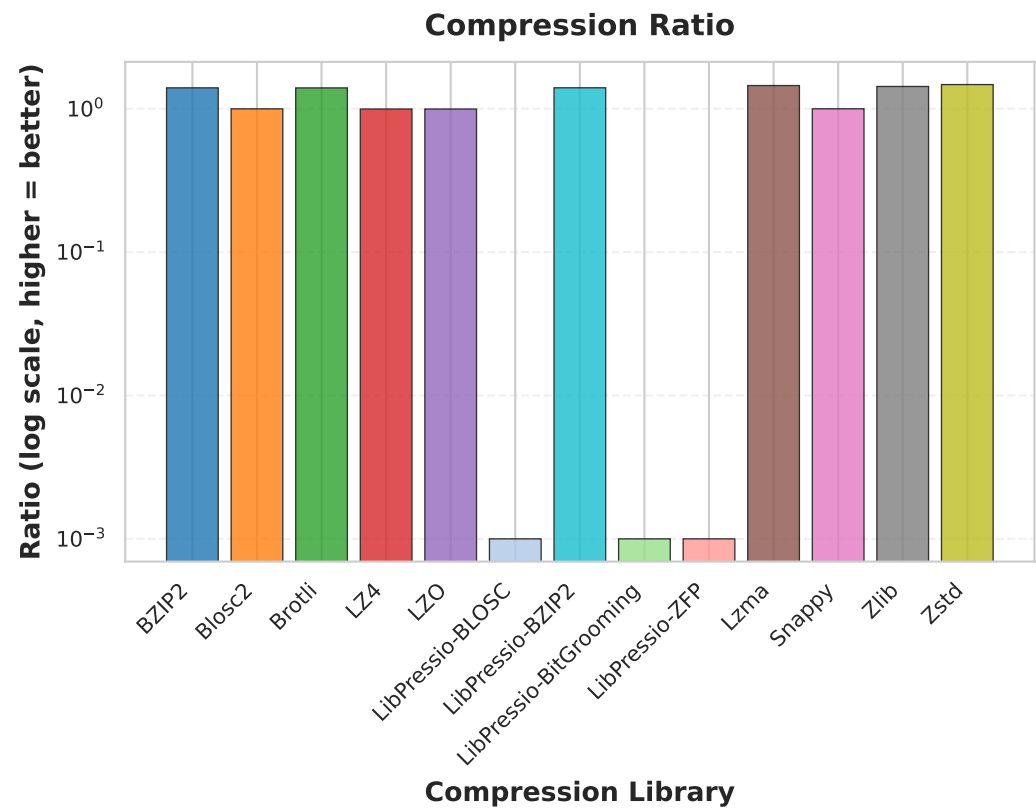
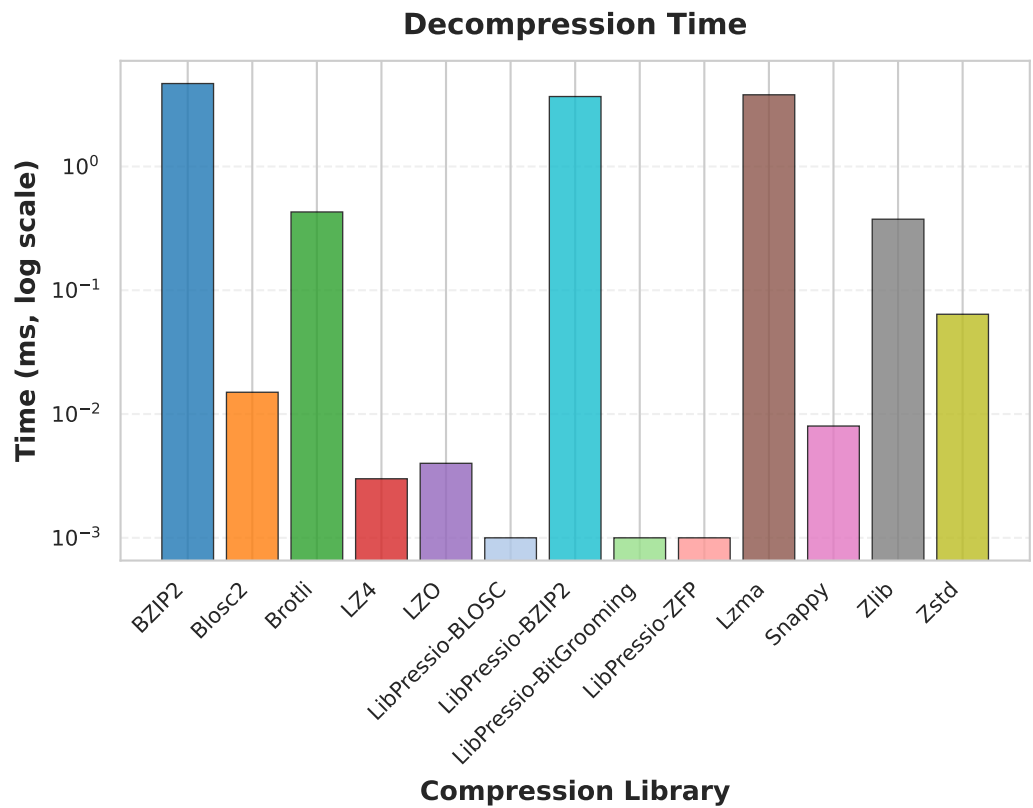
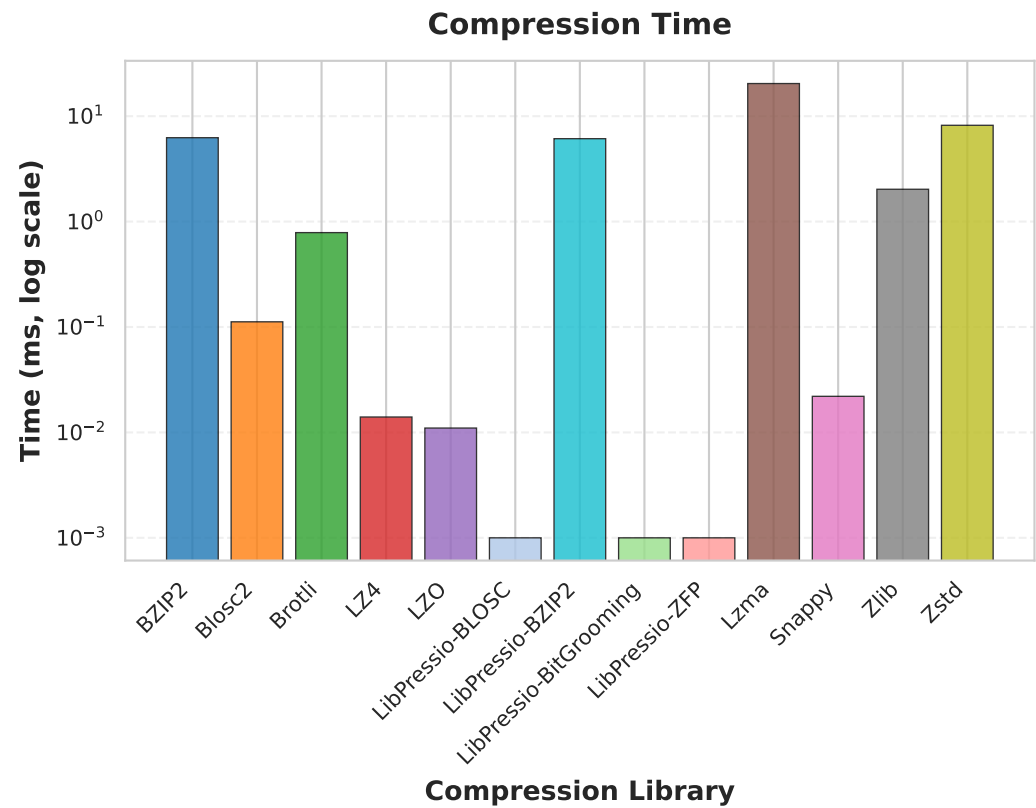


Performance Summary (64KB chunks)  
Sorted by Compression Ratio

Library	Ratio	Time (ms)	CPU%
Zstd	1.04x	7.7	100%
Zlib	1.04x	2.2	100%
Lzma	1.03x	19.0	100%
LibPressio-BZIP2	1.00x	8.0	100%
BZIP2	1.00x	9.0	100%
Snappy	1.00x	0.0	133%
Brotli	1.00x	1.3	101%
Blosc2	1.00x	0.1	105%
LZ4	1.00x	0.0	130%



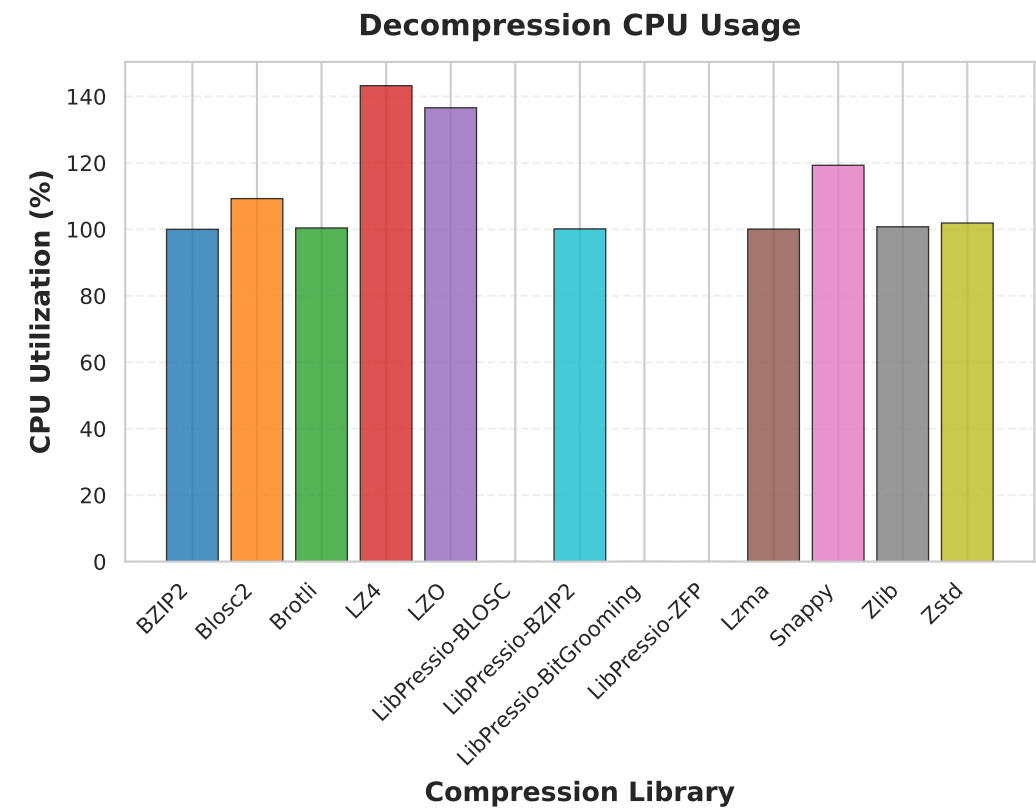
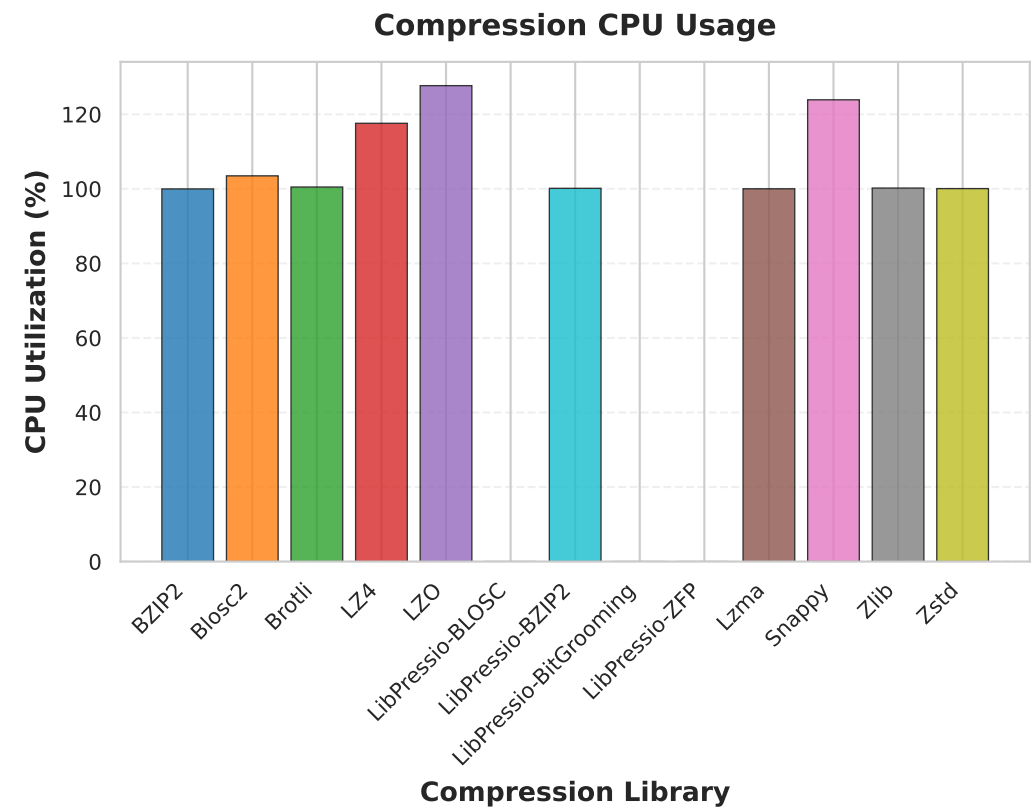
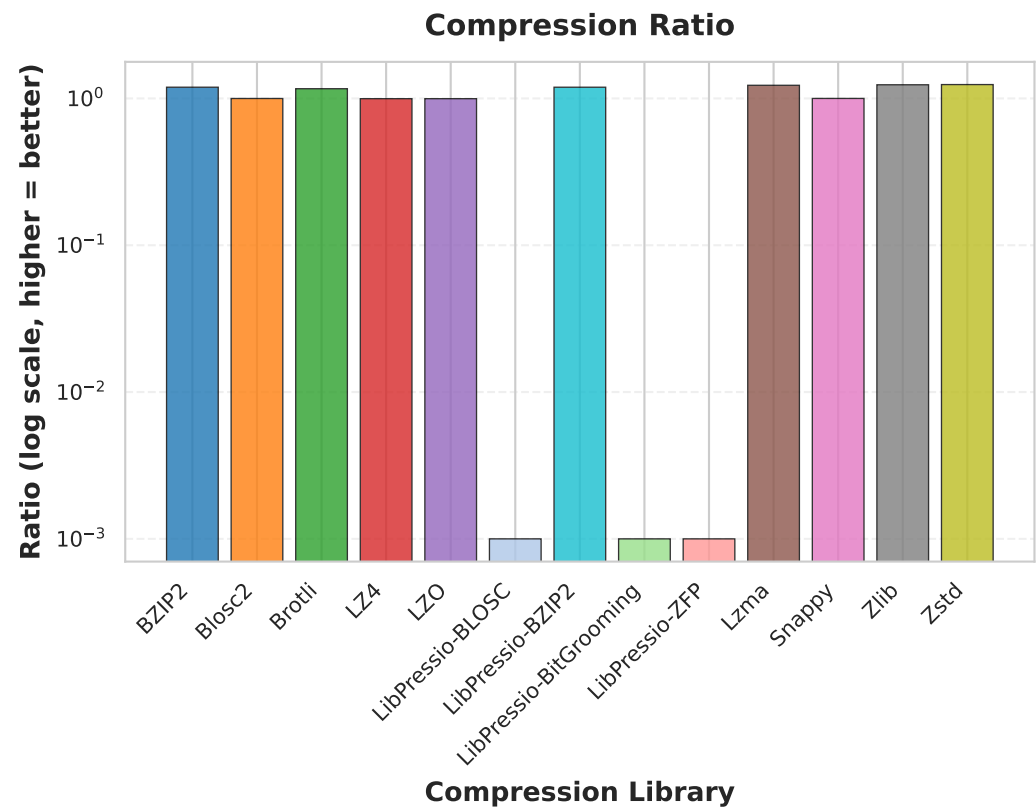
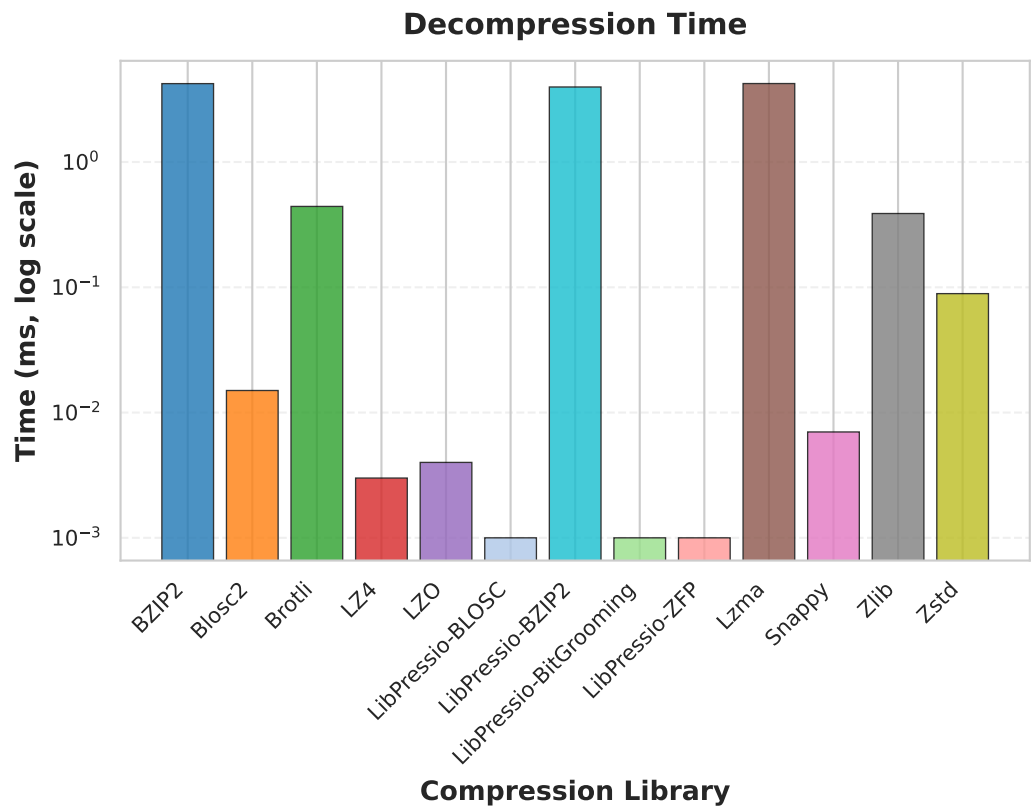
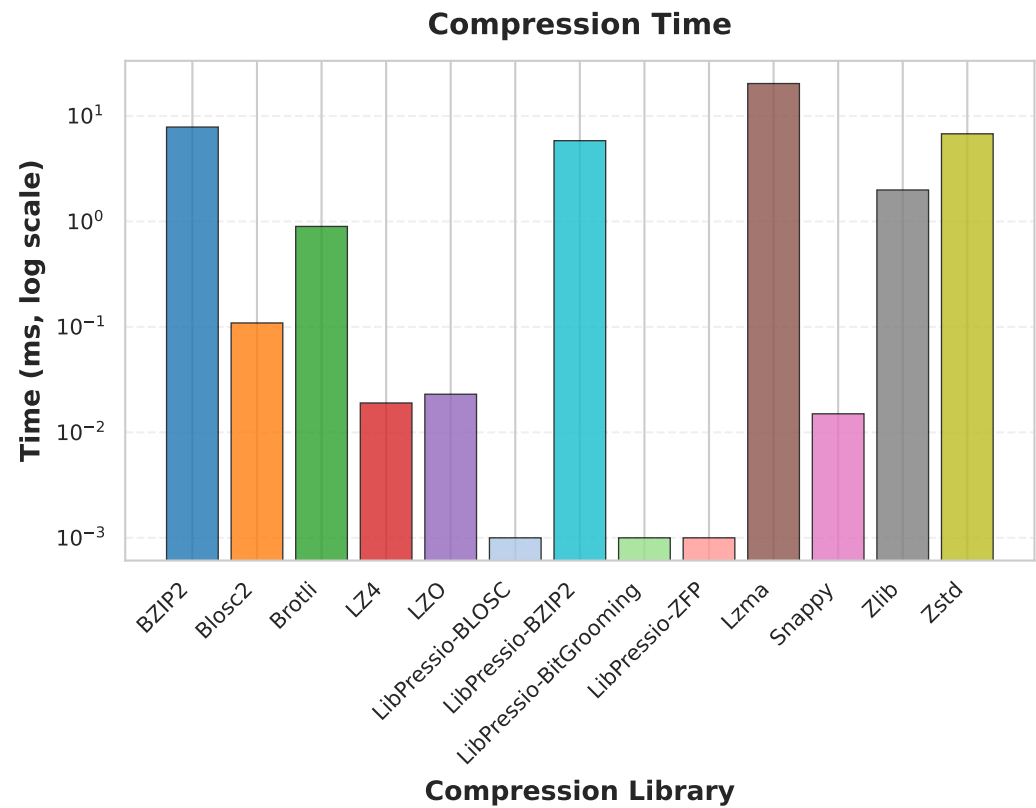
Parameter Study: normal\_10  
Char Data Type, 64KB Chunk Size



**Performance Summary (64KB chunks)**  
**Sorted by Compression Ratio**

Library	Ratio	Time (ms)	CPU%
Zstd	1.48x	8.2	100%
Lzma	1.45x	20.4	100%
Zlib	1.43x	2.0	100%
LibPressio-BZIP2	1.40x	6.1	101%
BZIP2	1.40x	6.2	100%
Brotli	1.40x	0.8	101%
Snappy	1.00x	0.0	115%
Blosc2	1.00x	0.1	104%
LZ4	1.00x	0.0	129%

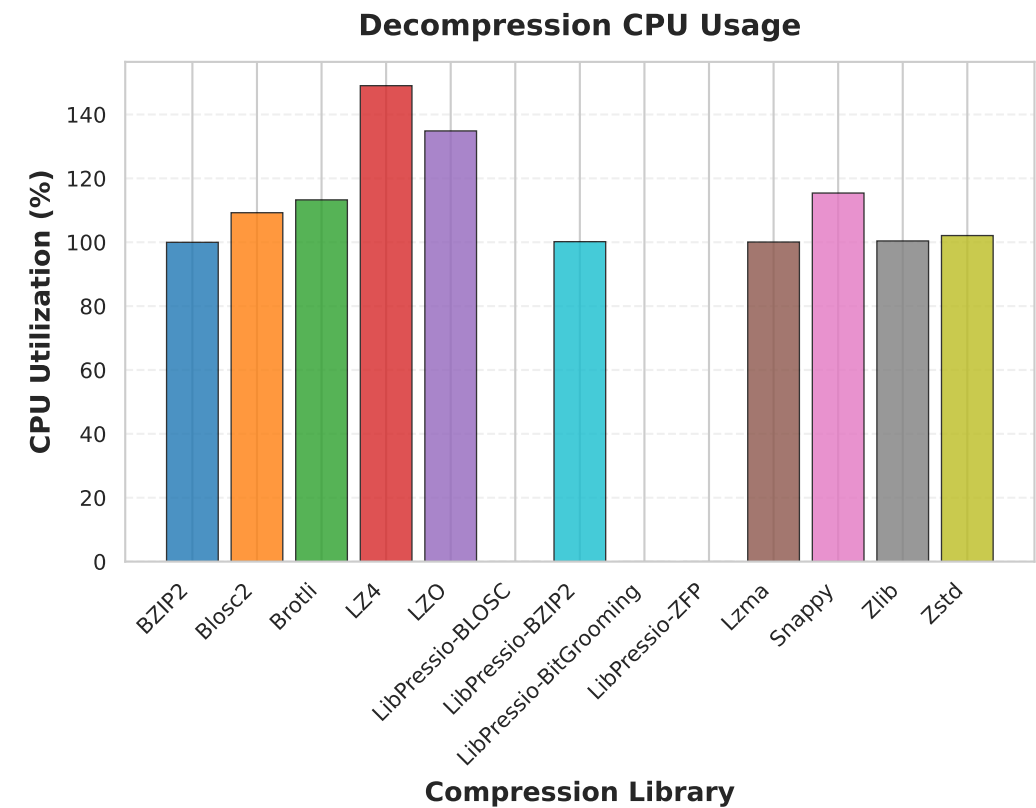
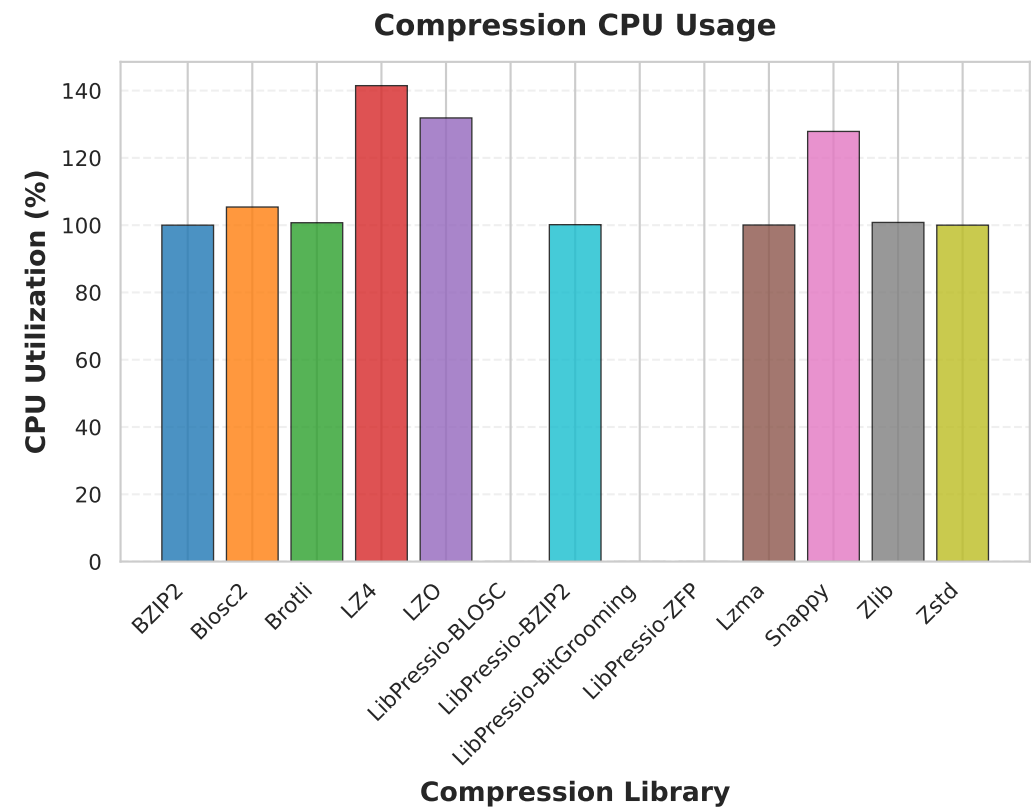
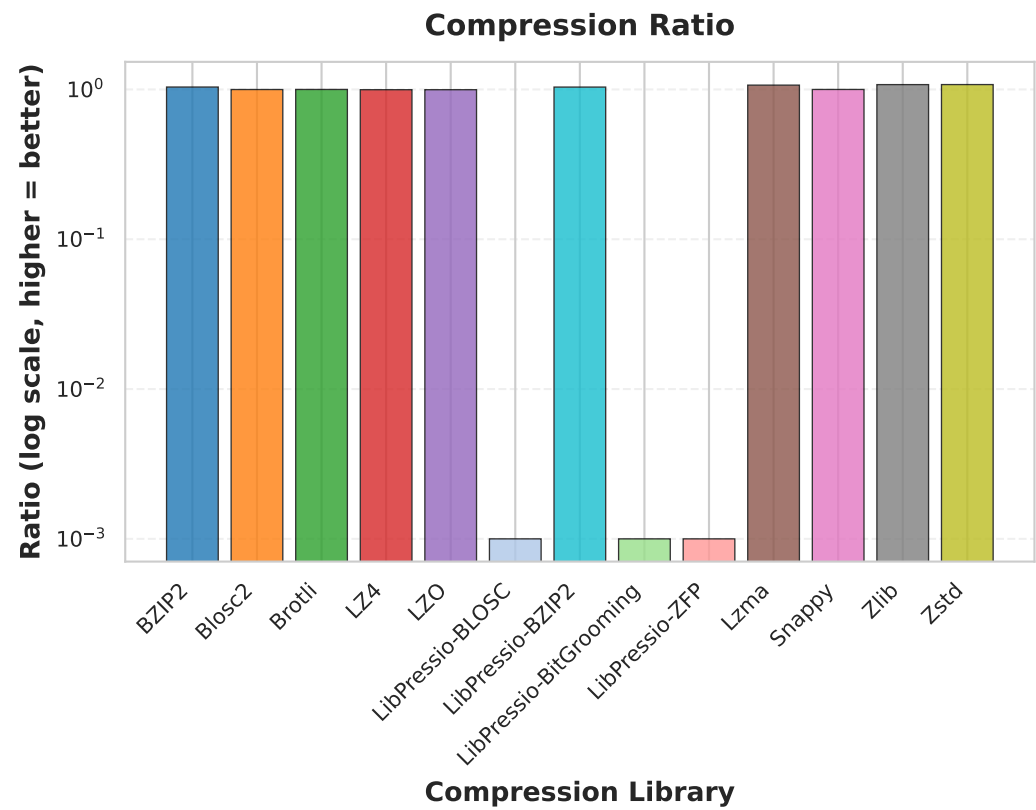
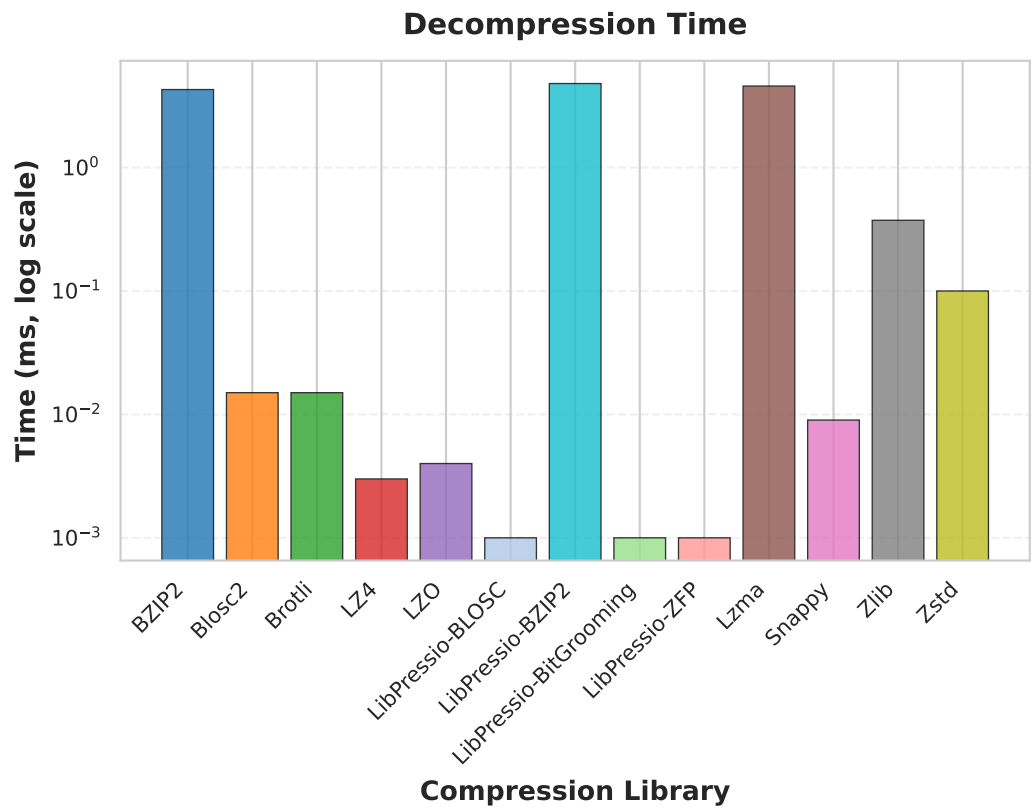
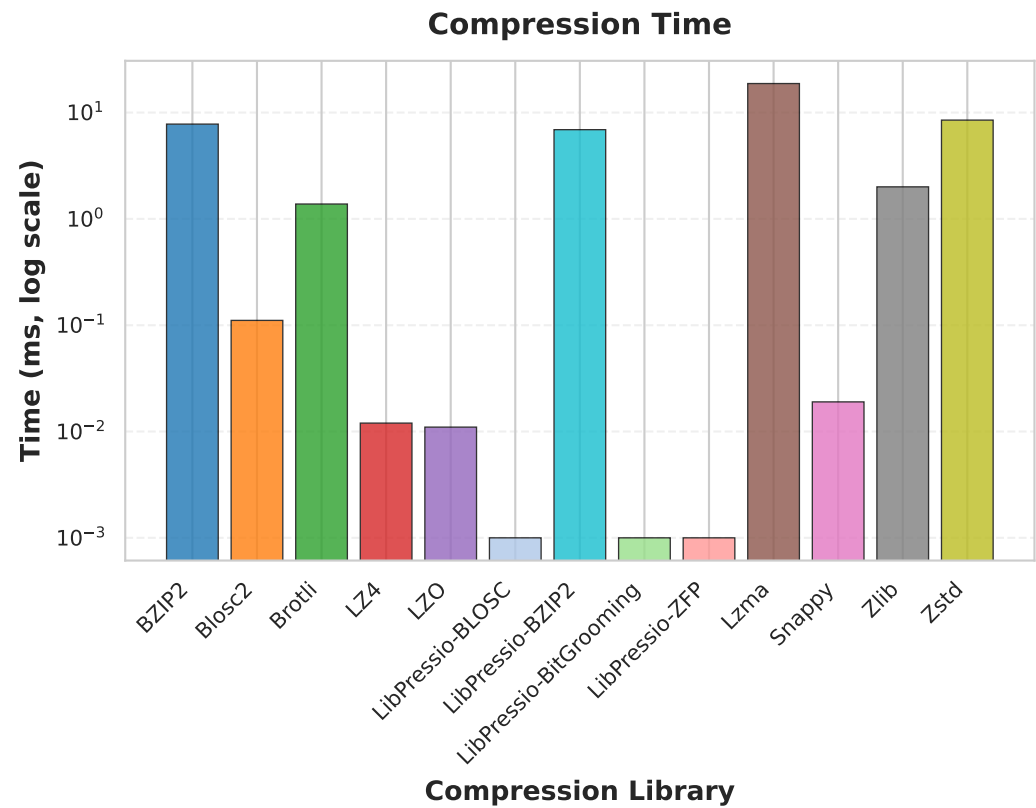
Parameter Study: normal\_20  
Char Data Type, 64KB Chunk Size



**Performance Summary (64KB chunks)**  
**Sorted by Compression Ratio**

Library	Ratio	Time (ms)	CPU%
Zstd	1.24x	6.8	100%
Zlib	1.24x	2.0	100%
Lzma	1.23x	20.3	100%
BZIP2	1.19x	7.9	100%
LibPressio-BZIP2	1.19x	5.8	100%
Brotli	1.16x	0.9	100%
Snappy	1.00x	0.0	124%
Blosc2	1.00x	0.1	103%
LZ4	1.00x	0.0	118%

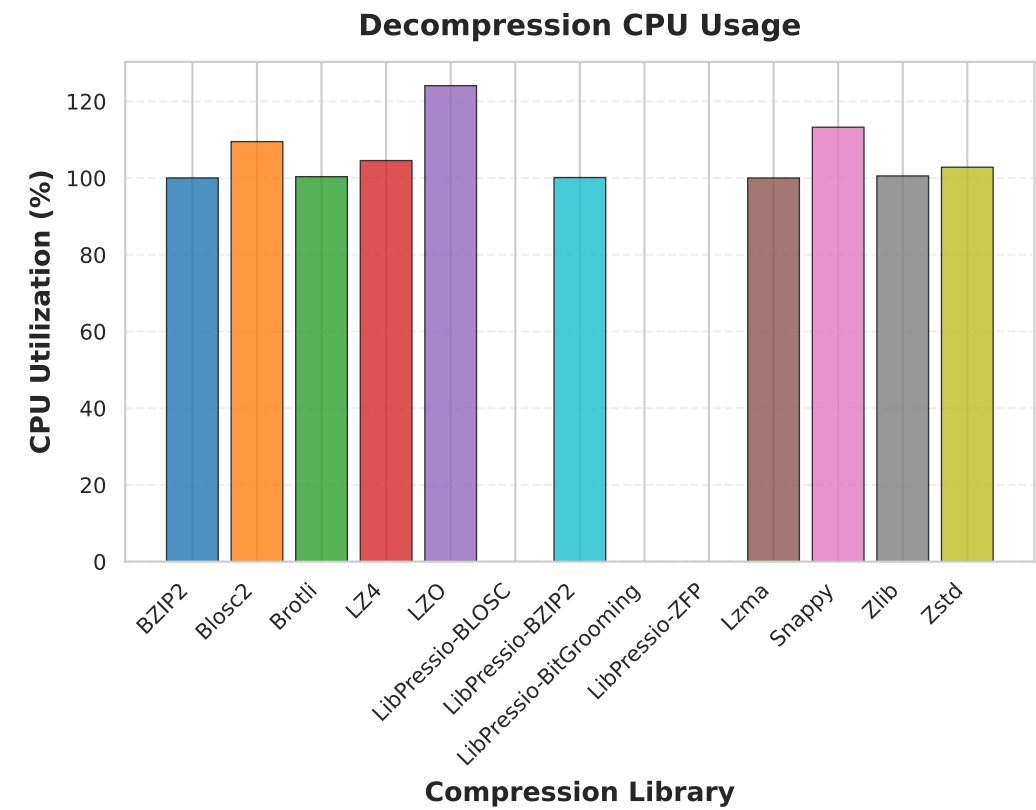
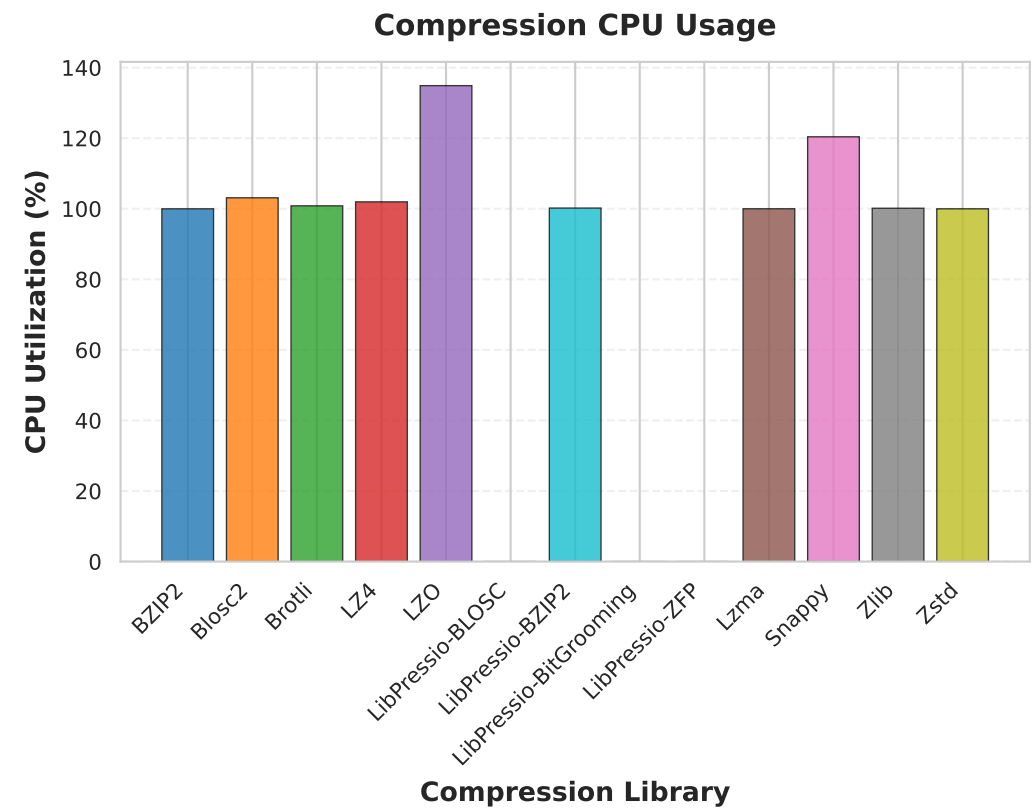
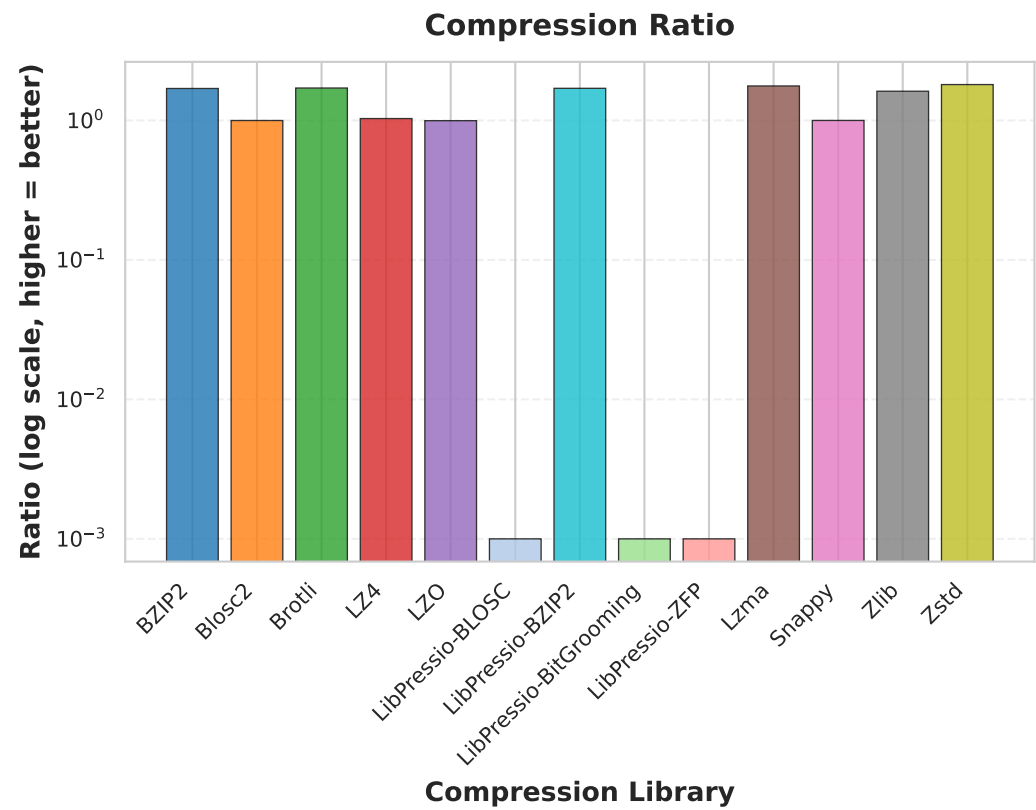
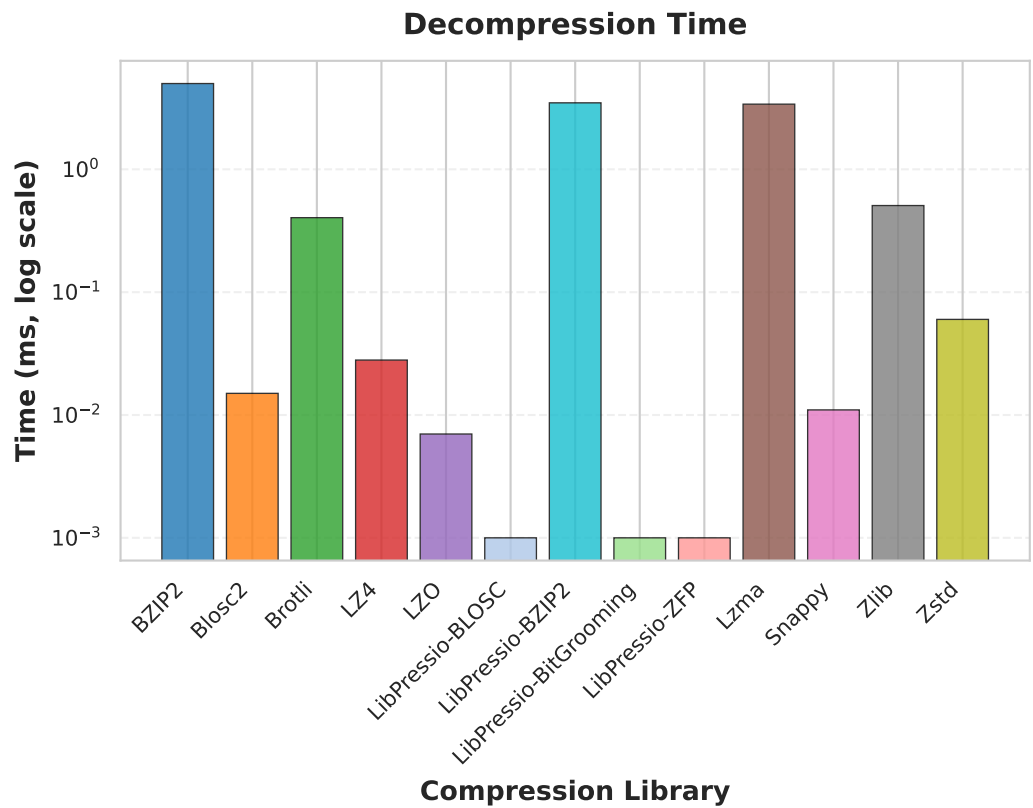
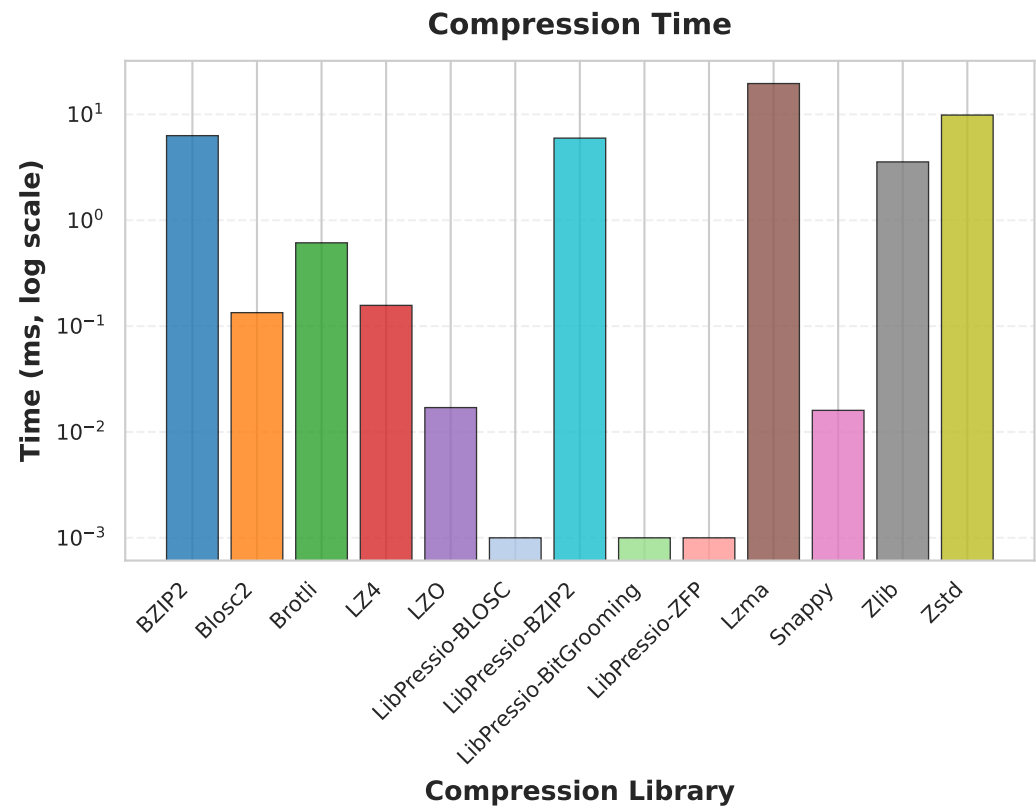
Parameter Study: normal\_40  
Char Data Type, 64KB Chunk Size



**Performance Summary (64KB chunks)**  
**Sorted by Compression Ratio**

Library	Ratio	Time (ms)	CPU%
Zstd	1.08x	8.5	100%
Zlib	1.08x	2.0	101%
Lzma	1.07x	18.8	100%
BZIP2	1.04x	7.8	100%
LibPressio-BZIP2	1.04x	6.9	100%
Snappy	1.00x	0.0	128%
Brotli	1.00x	1.4	101%
Blosc2	1.00x	0.1	105%
LZ4	1.00x	0.0	141%

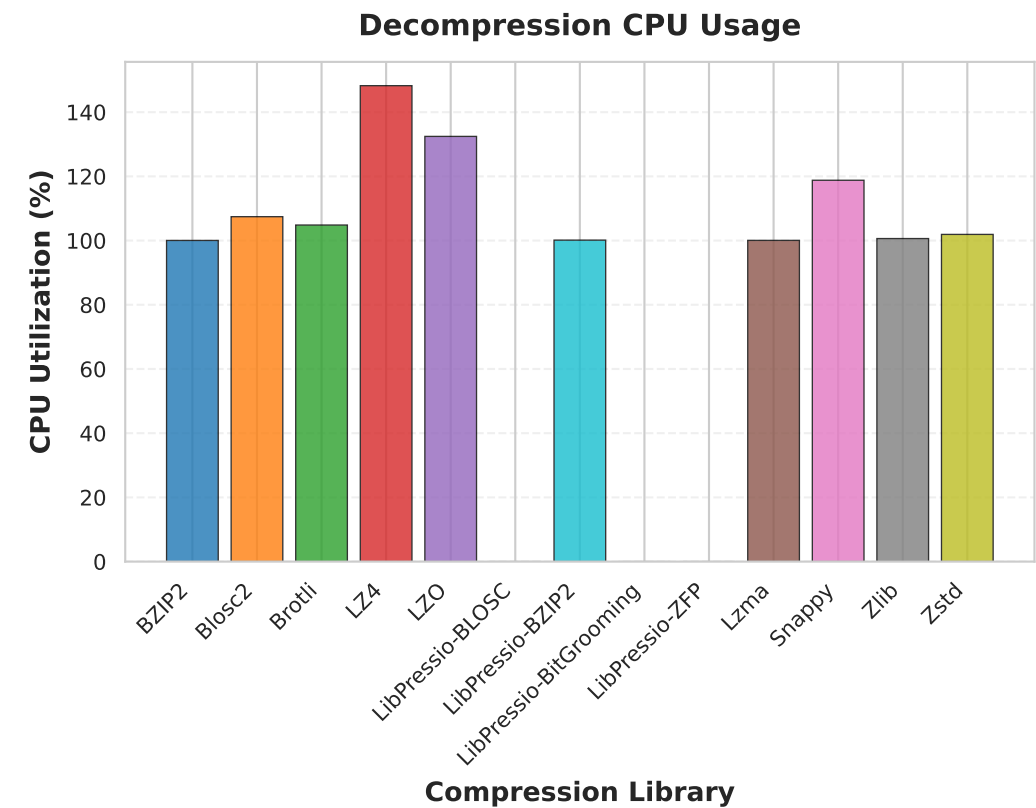
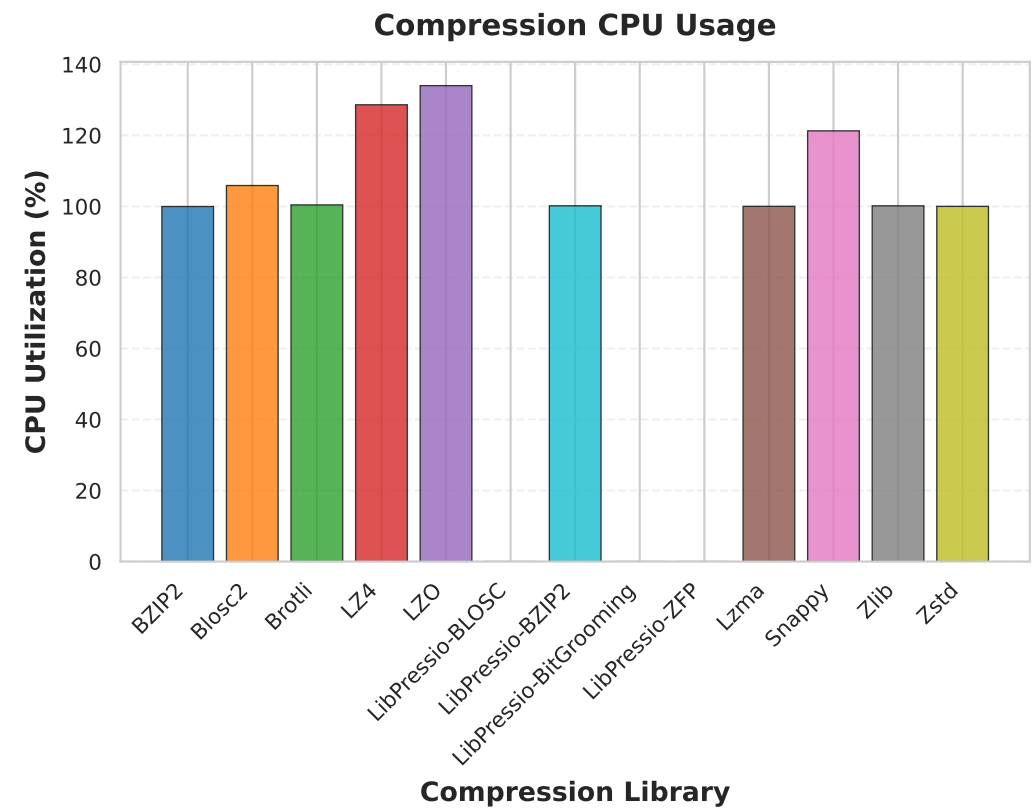
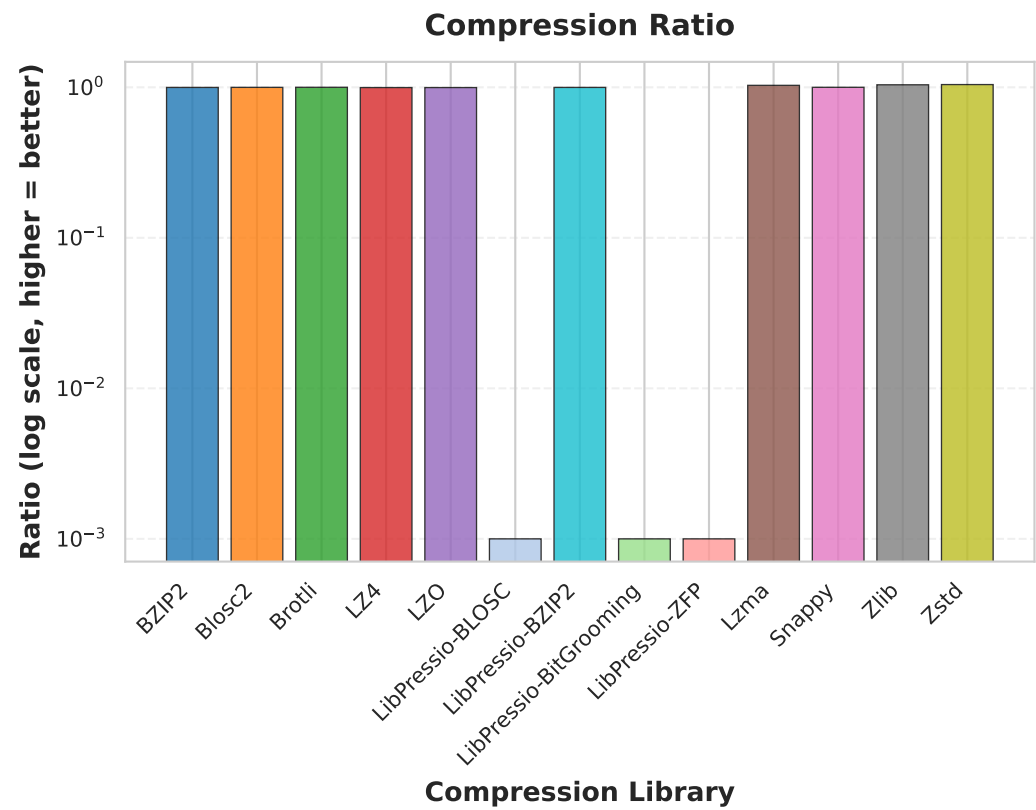
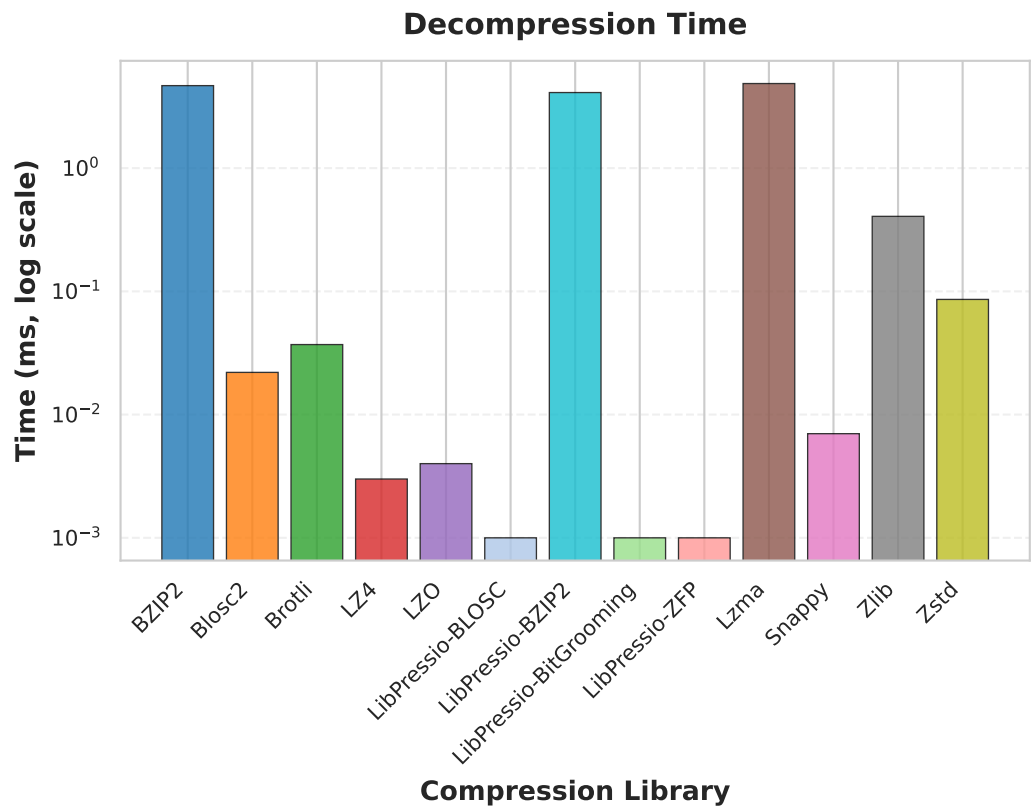
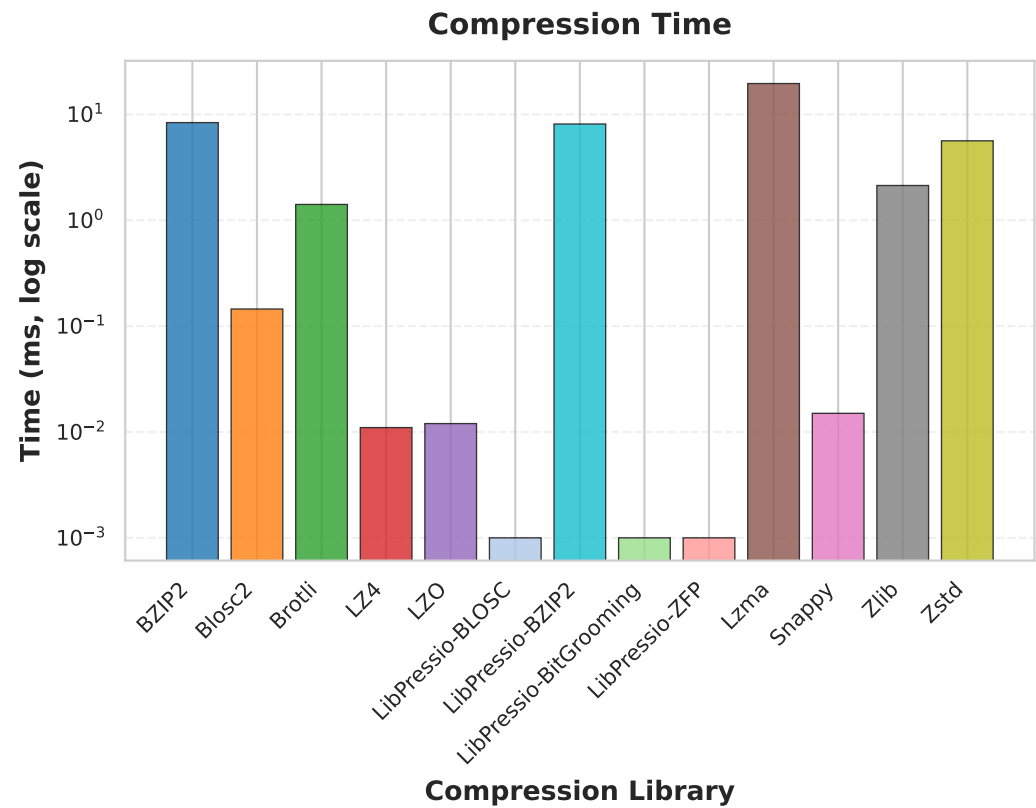
Parameter Study: normal\_5  
Char Data Type, 64KB Chunk Size



**Performance Summary (64KB chunks)**  
**Sorted by Compression Ratio**

Library	Ratio	Time (ms)	CPU%
Zstd	1.81x	9.9	100%
Lzma	1.77x	19.6	100%
Brotli	1.71x	0.6	101%
LibPressio-BZIP2	1.70x	6.0	100%
BZIP2	1.70x	6.3	100%
Zlib	1.62x	3.6	100%
LZ4	1.03x	0.2	102%
Snappy	1.00x	0.0	120%
Blosc2	1.00x	0.1	103%

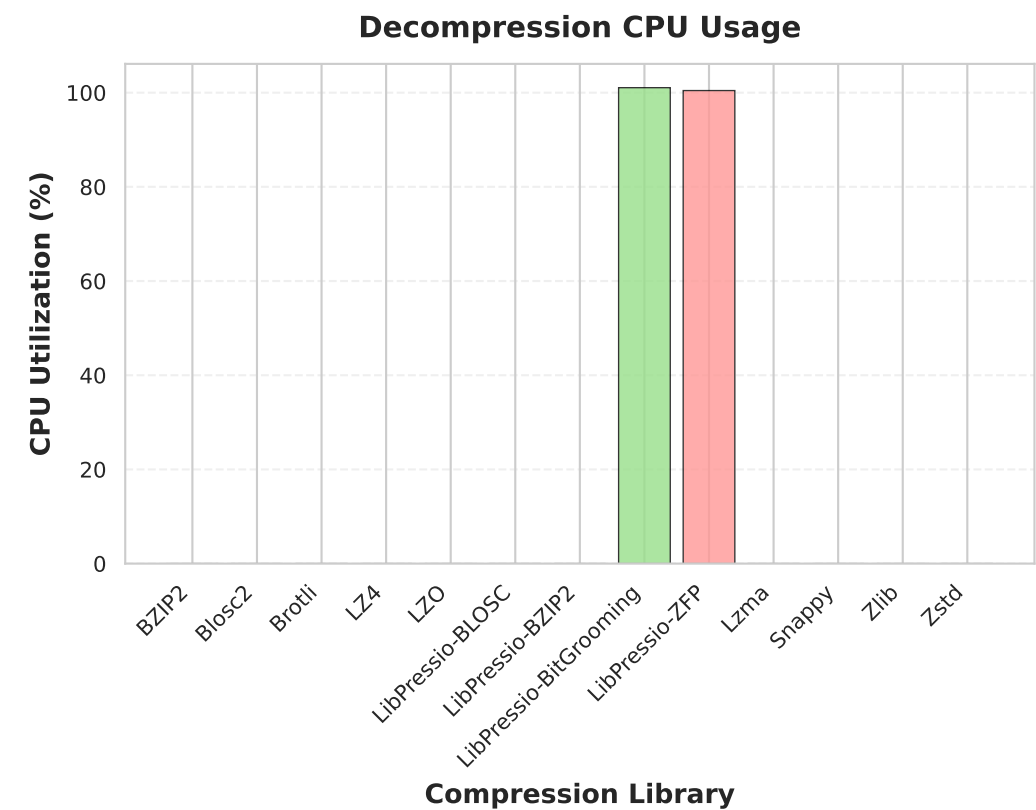
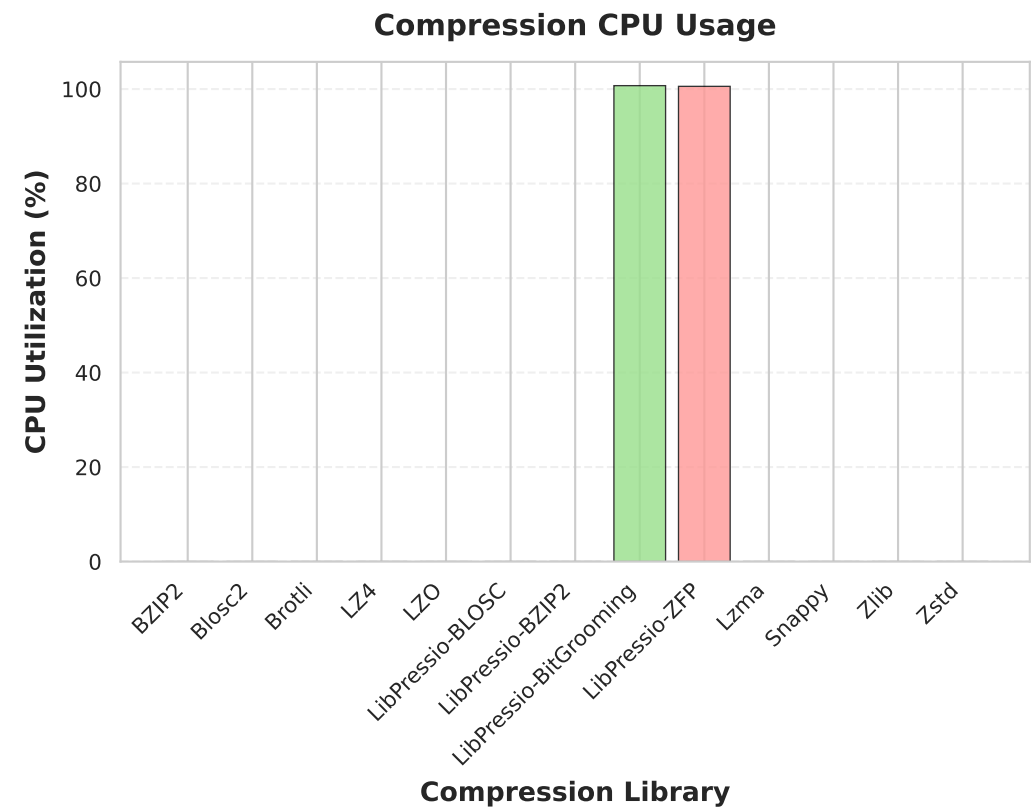
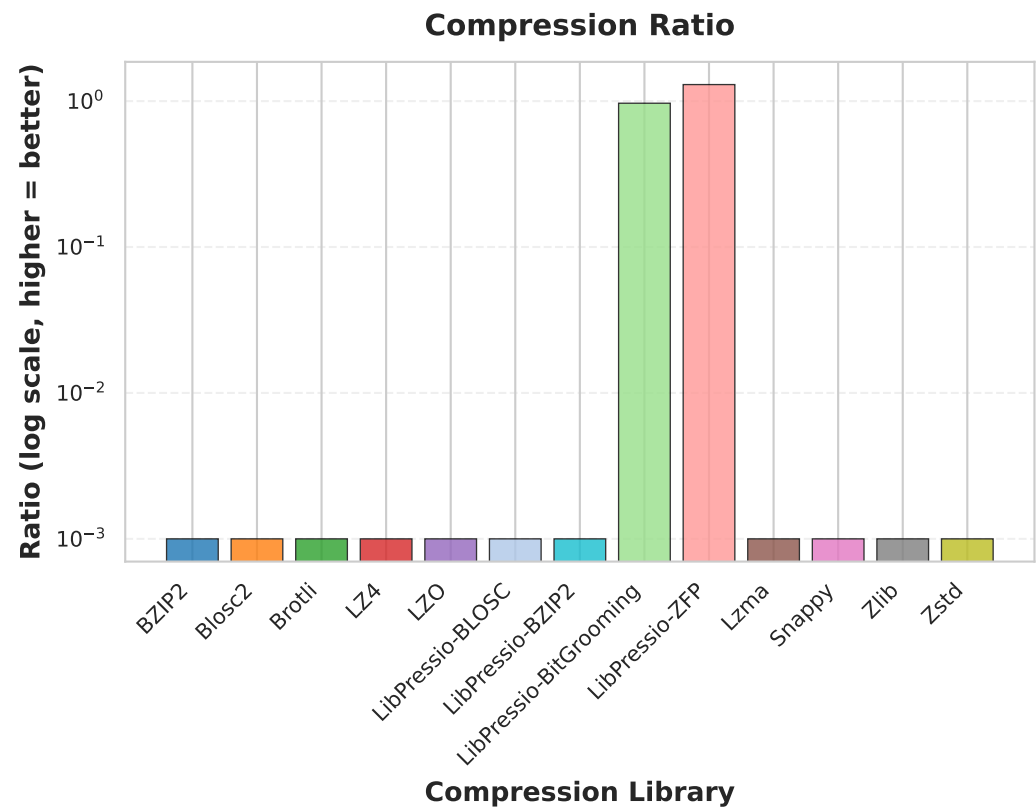
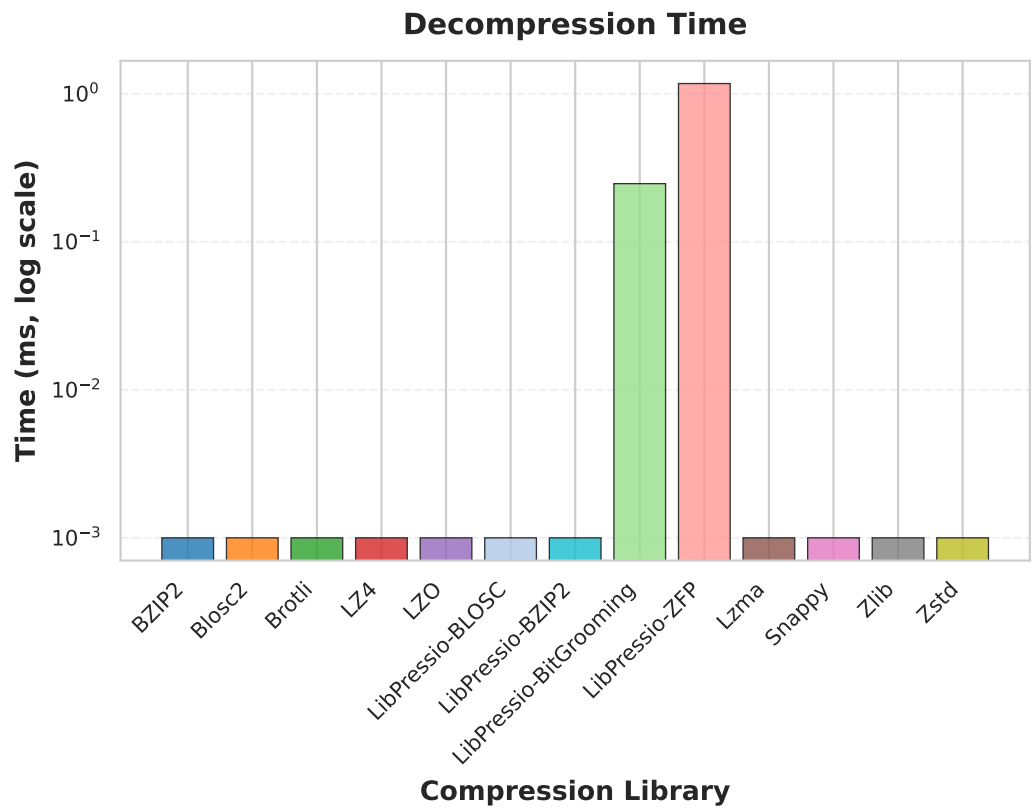
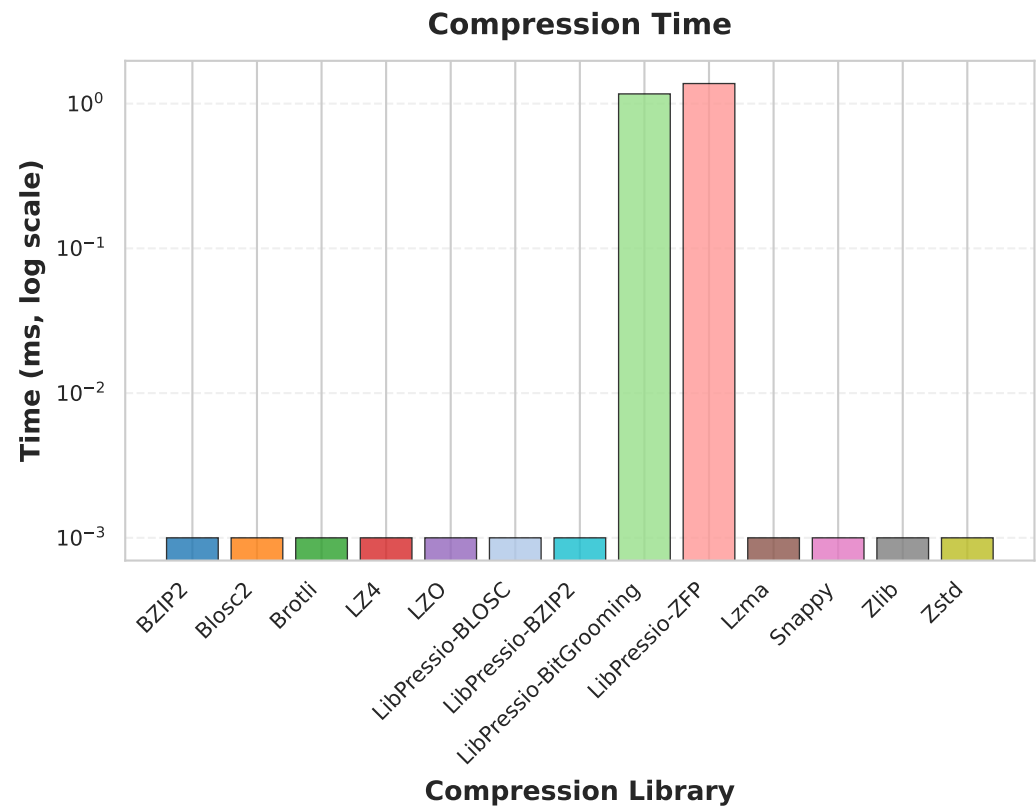
Parameter Study: normal\_80  
Char Data Type, 64KB Chunk Size



**Performance Summary (64KB chunks)**  
**Sorted by Compression Ratio**

Library	Ratio	Time (ms)	CPU%
Zstd	1.04x	5.6	100%
Zlib	1.04x	2.1	100%
Lzma	1.03x	19.6	100%
Brotli	1.00x	1.4	100%
Snappy	1.00x	0.0	121%
Blosc2	1.00x	0.1	106%
LibPressio-BZIP2	1.00x	8.1	100%
BZIP2	1.00x	8.4	100%
LZ4	1.00x	0.0	129%

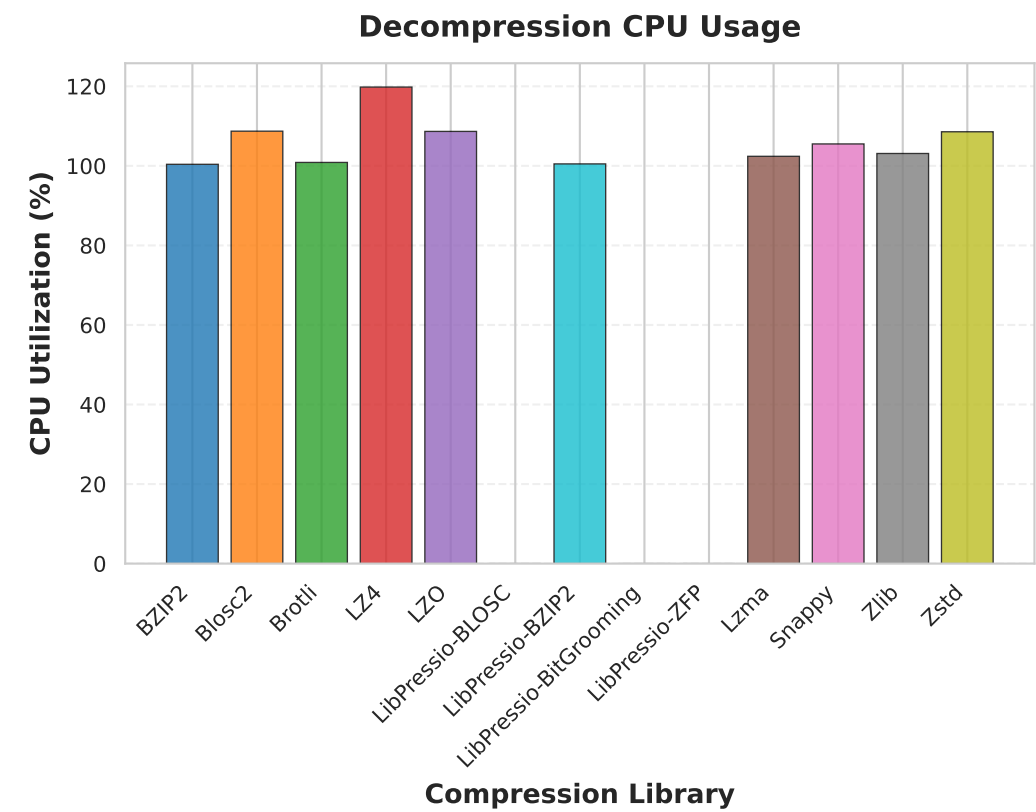
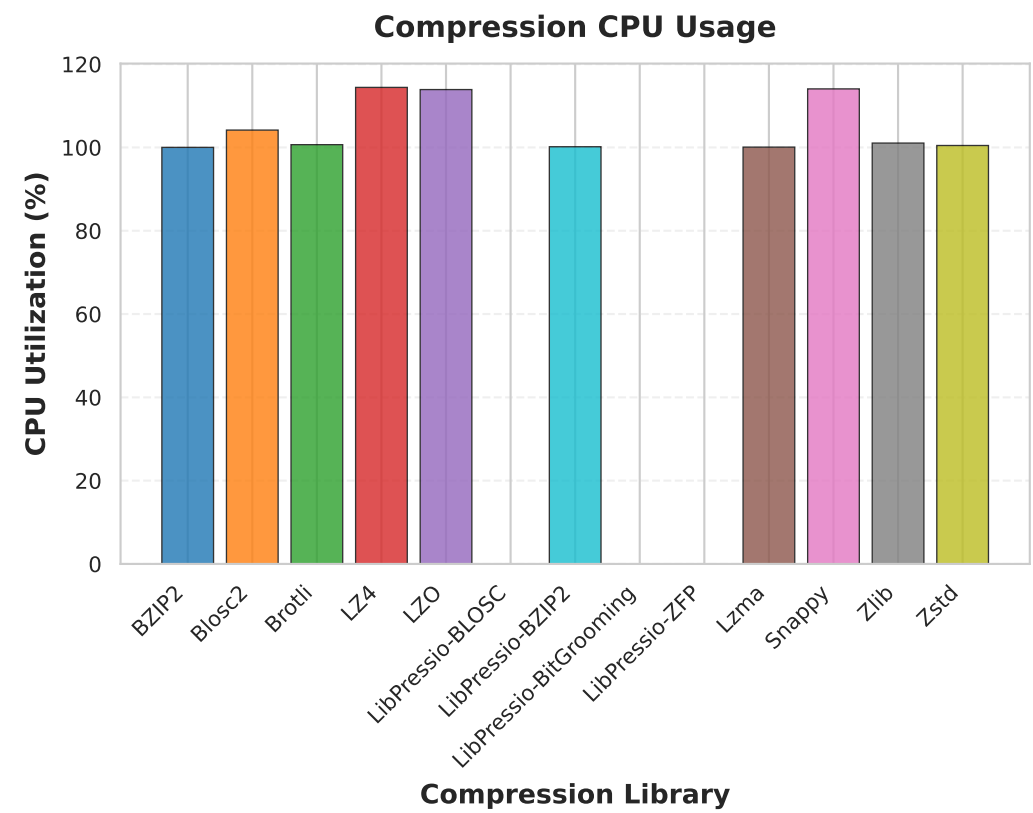
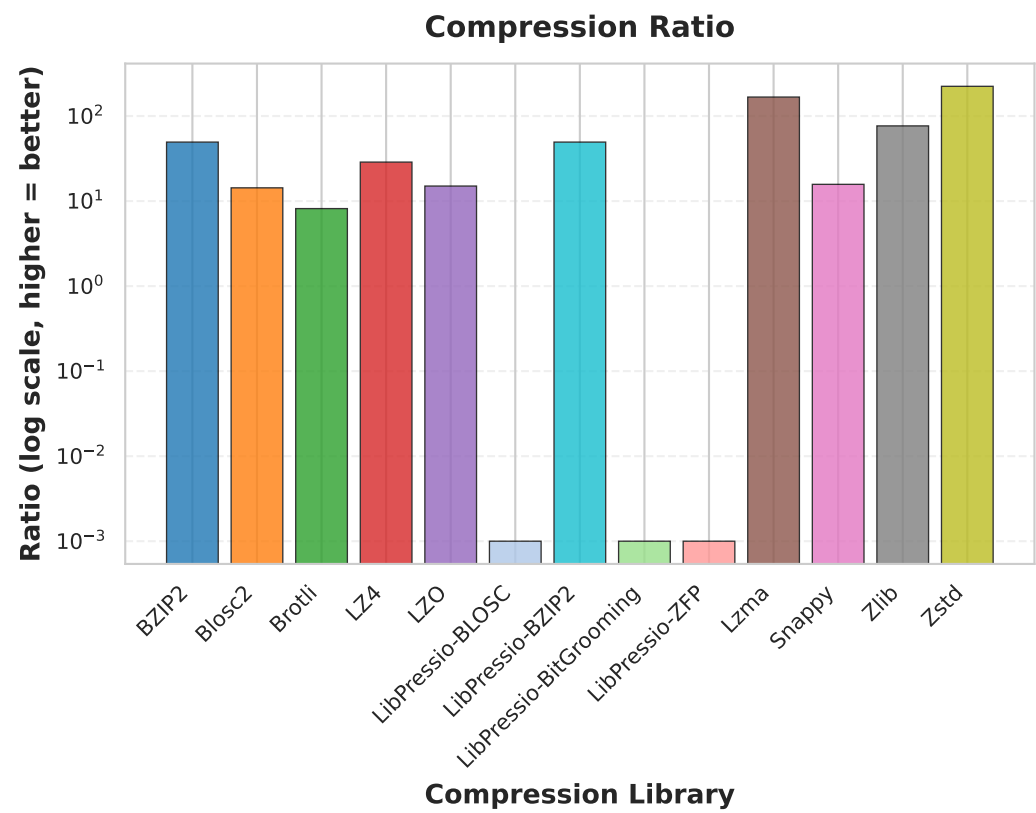
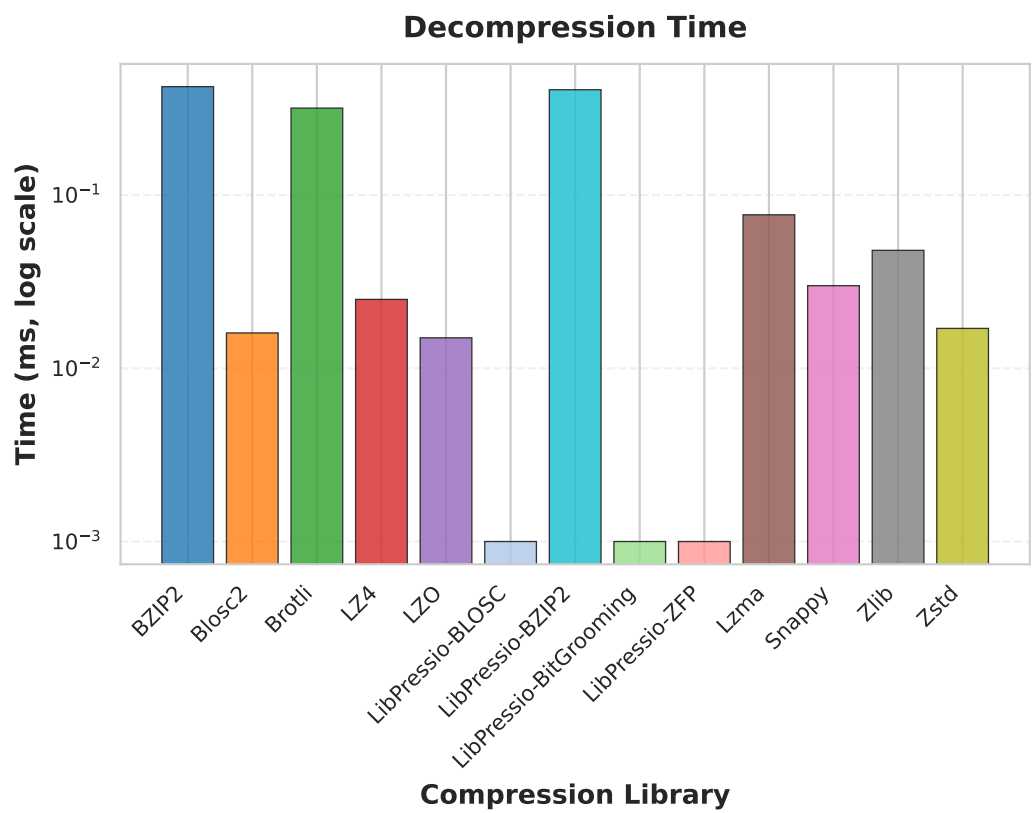
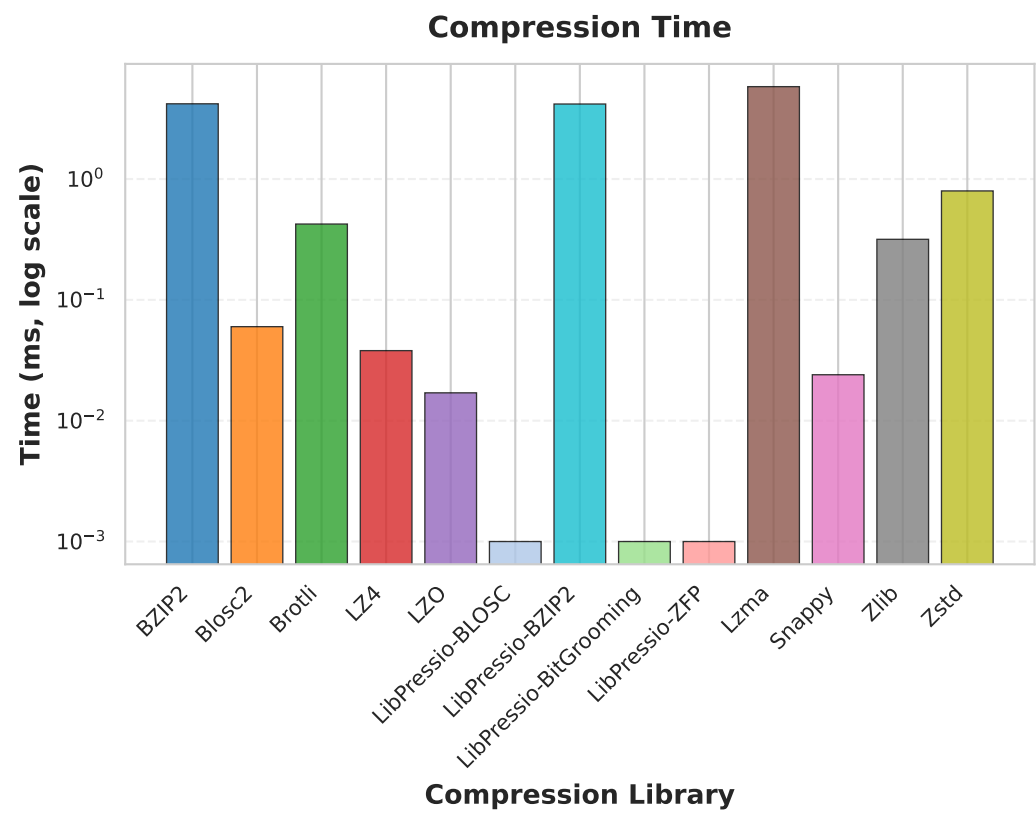
Parameter Study: normal\_float  
Char Data Type, 64KB Chunk Size



Performance Summary (64KB chunks)  
Sorted by Compression Ratio

Library	Ratio	Time (ms)	CPU%
LibPressio-ZFP	1.30x	1.4	101%
LibPressio-BitGroomin	0.97x	1.2	101%

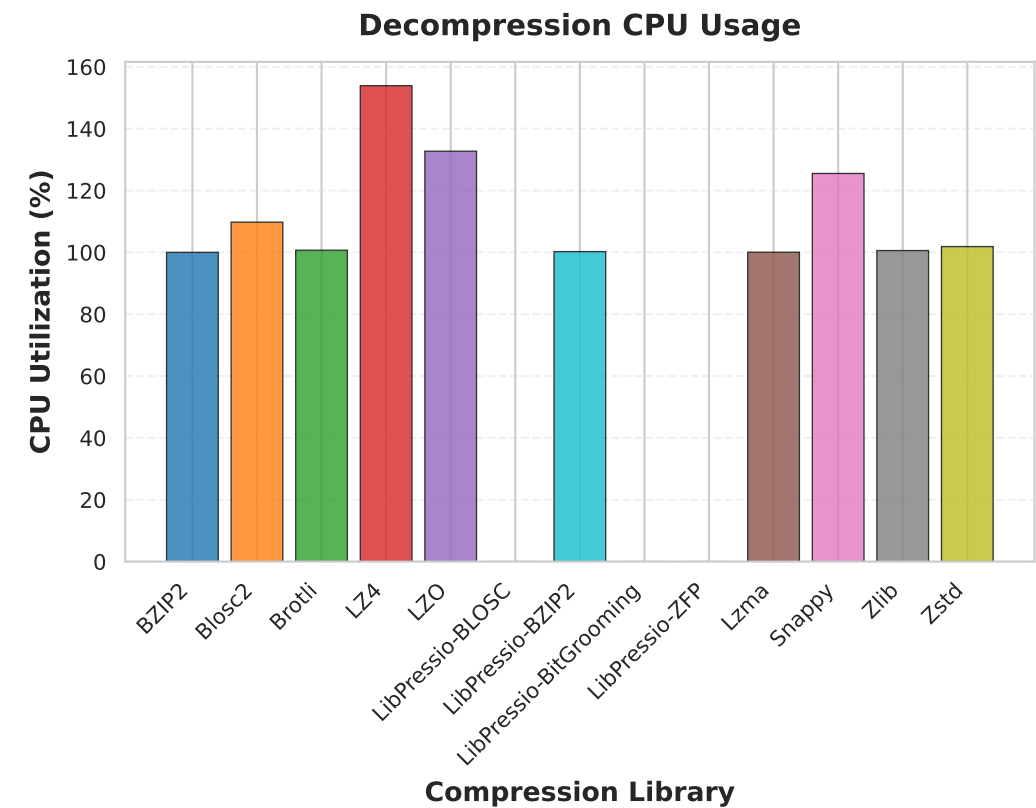
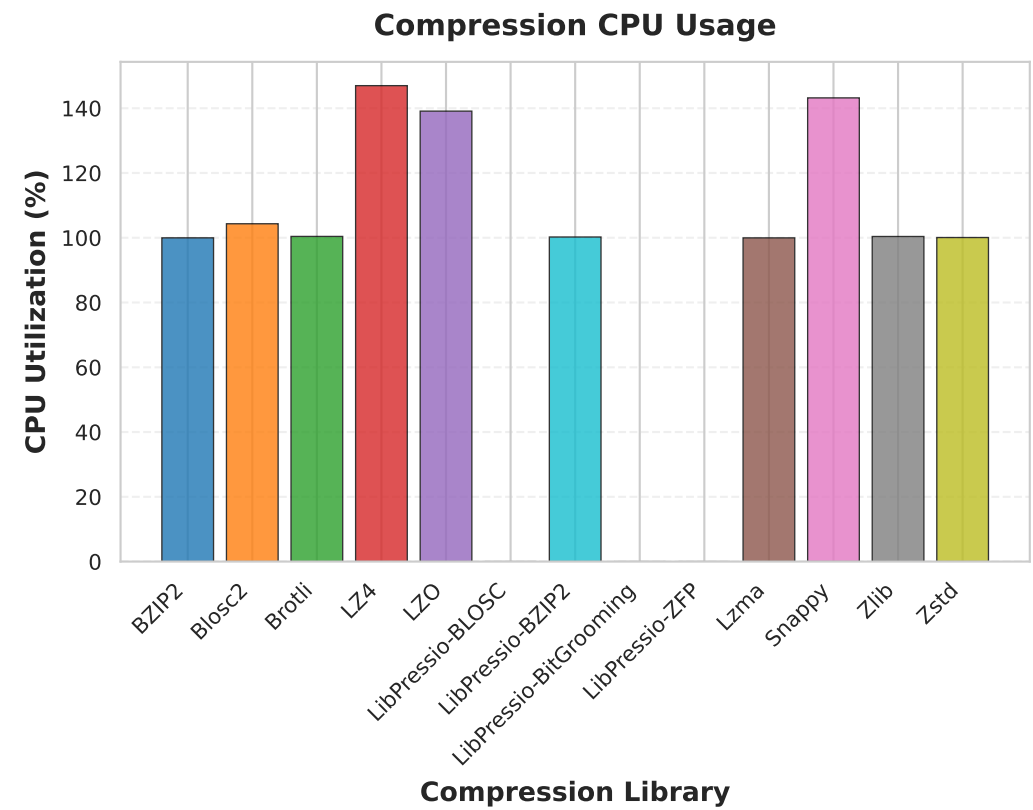
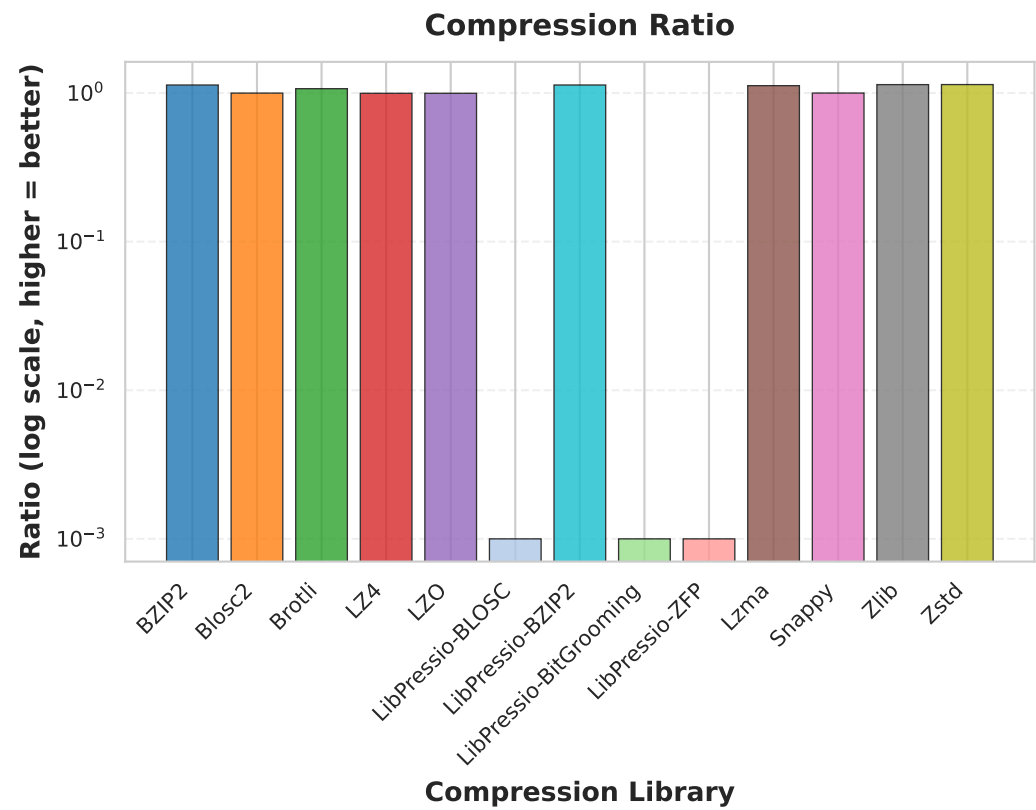
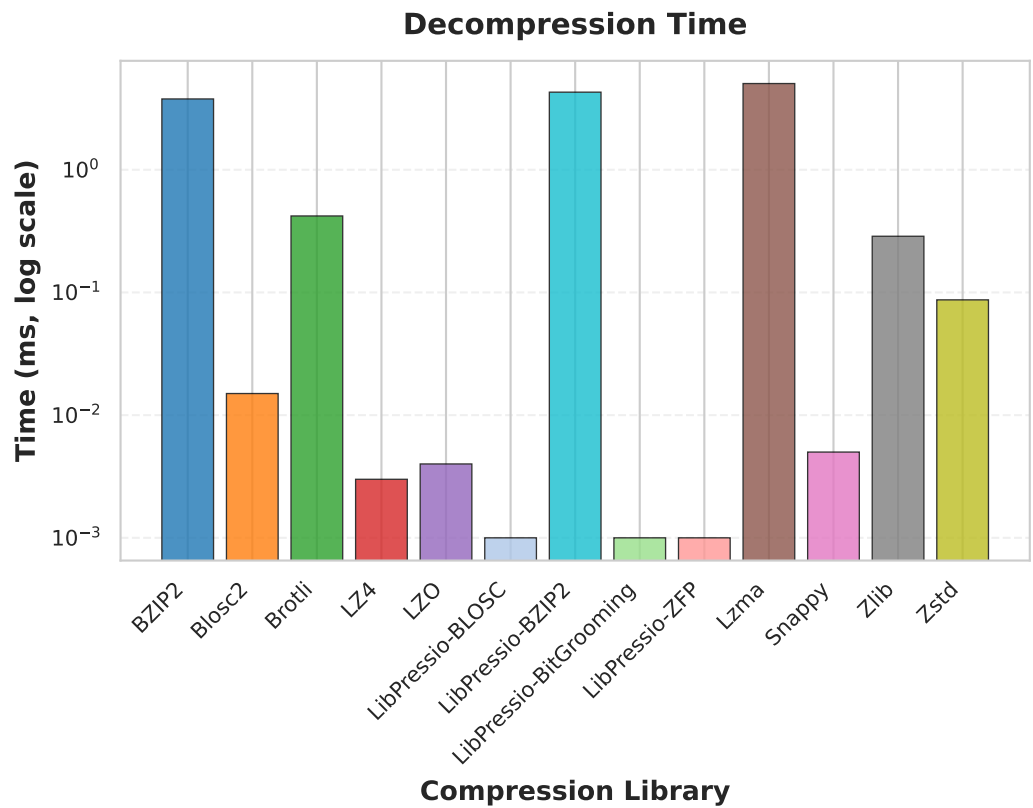
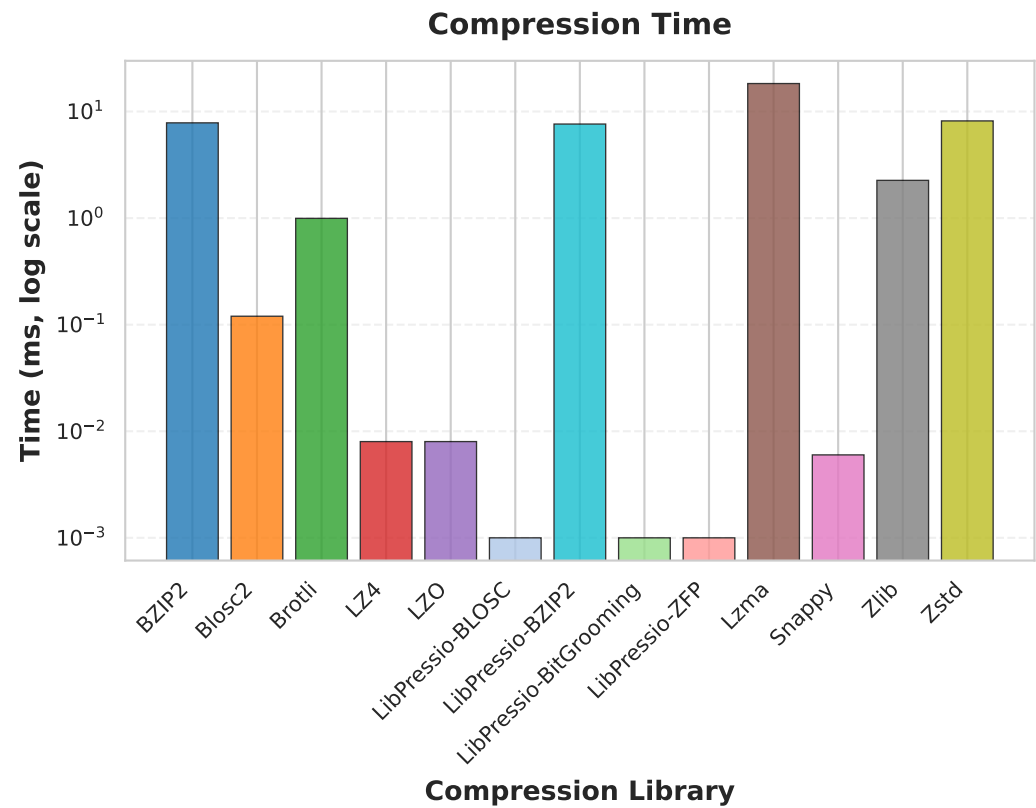
Parameter Study: repeating  
Char Data Type, 64KB Chunk Size



**Performance Summary (64KB chunks)  
Sorted by Compression Ratio**

Library	Ratio	Time (ms)	CPU%
Zstd	223.67x	0.8	100%
Lzma	167.18x	5.8	100%
Zlib	76.56x	0.3	101%
BZIP2	49.39x	4.2	100%
LibPressio-BZIP2	49.39x	4.2	100%
LZ4	28.73x	0.0	114%
Snappy	15.73x	0.0	114%
LZO	15.02x	0.0	114%
Blosc2	14.31x	0.1	104%

Parameter Study: uniform\_127  
Char Data Type, 64KB Chunk Size

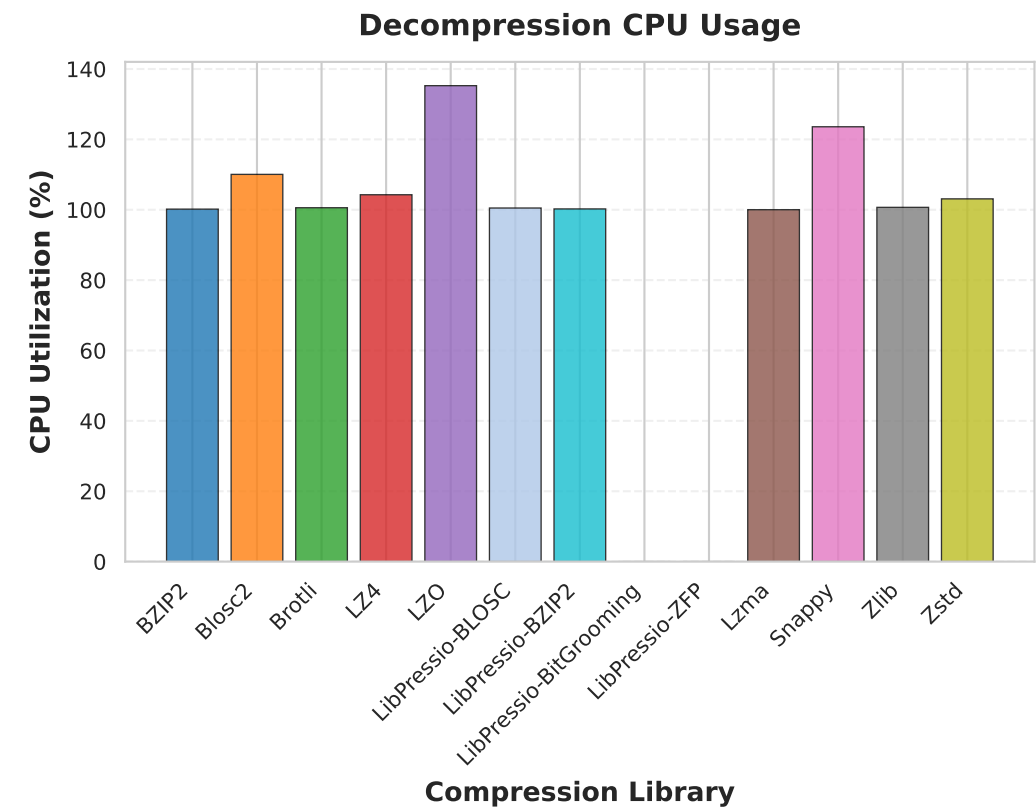
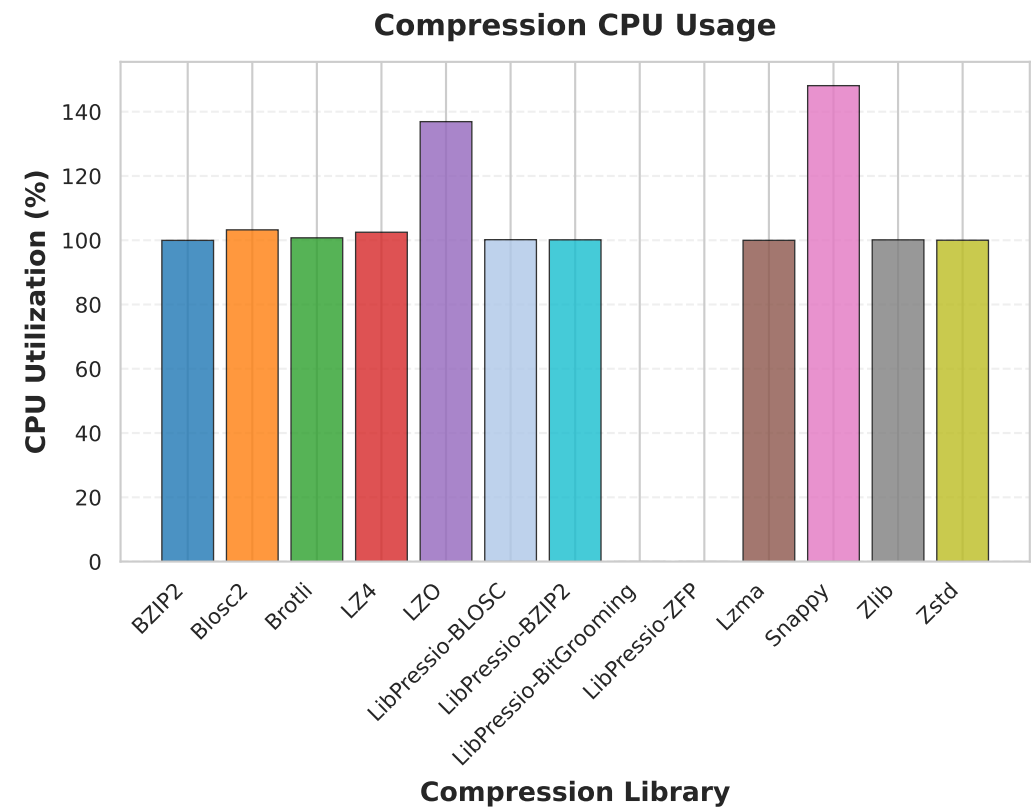
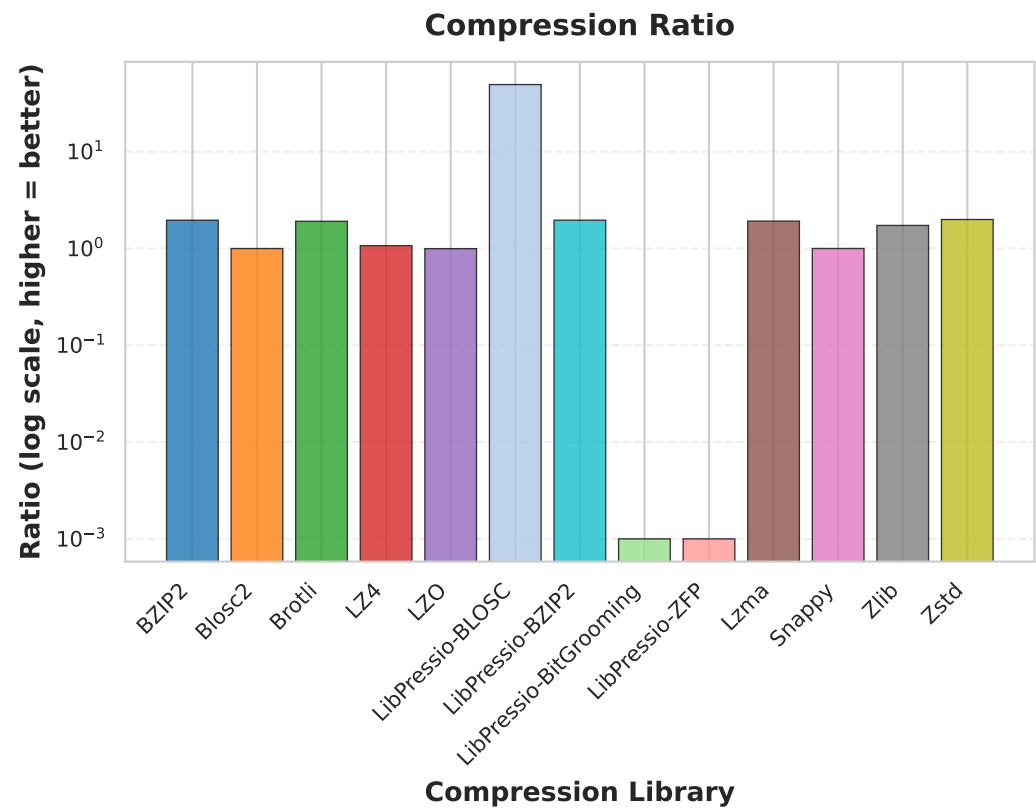
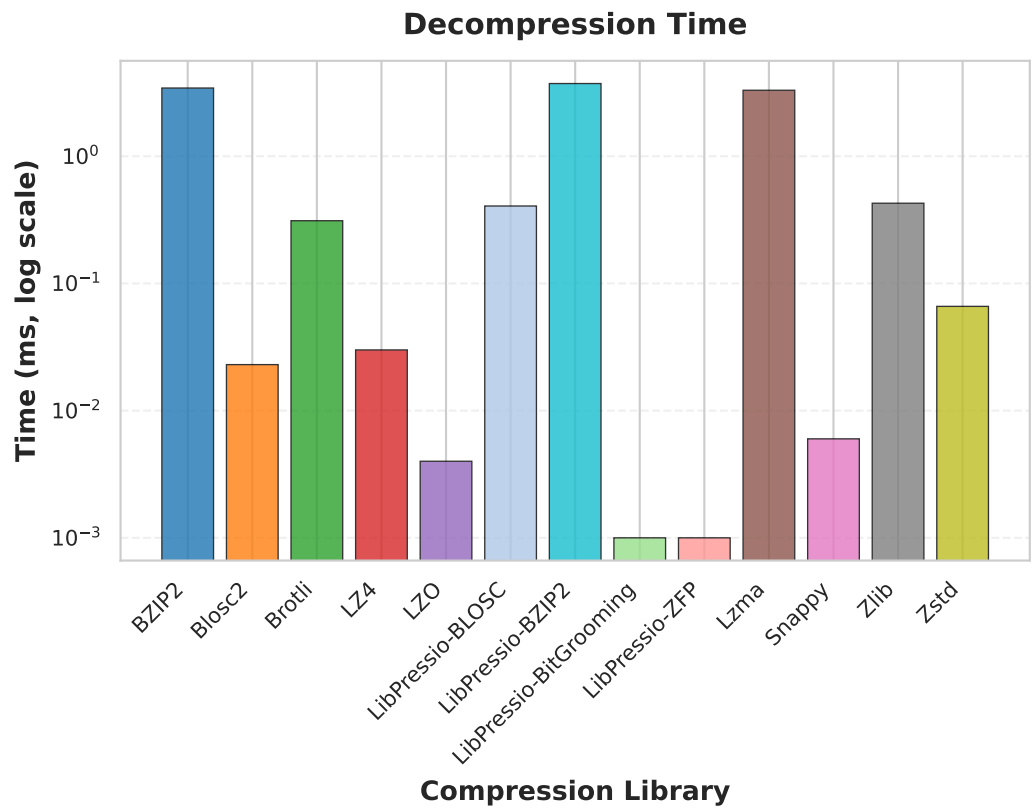
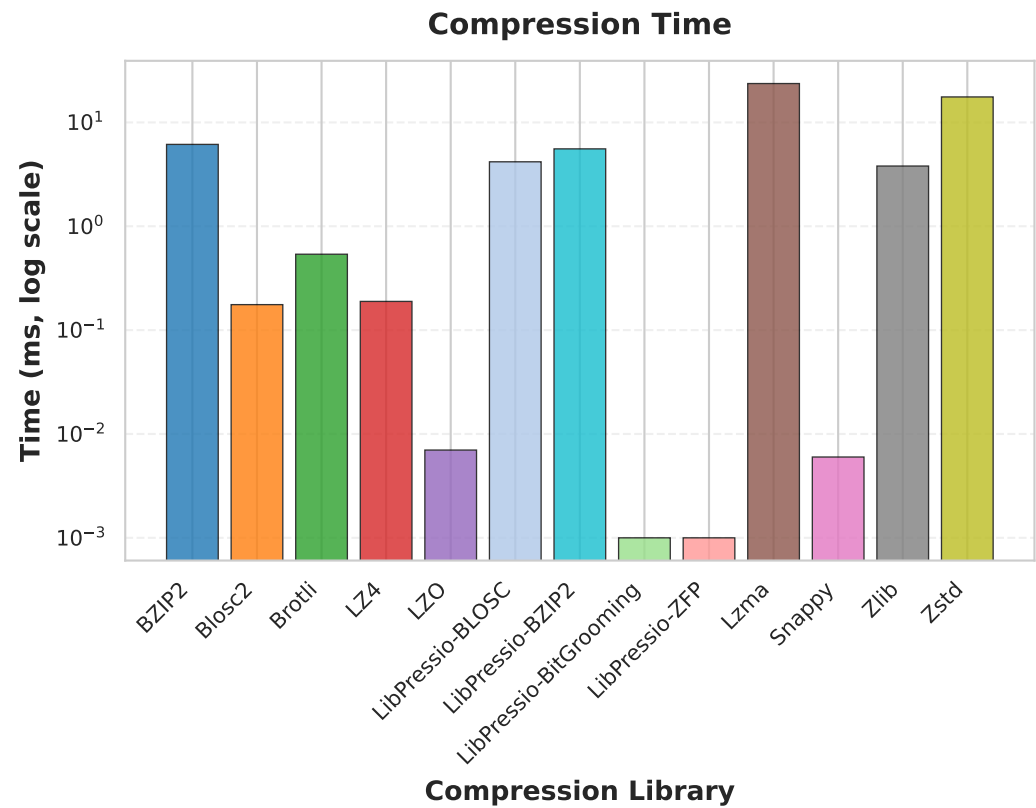


**Performance Summary (64KB chunks)**  
**Sorted by Compression Ratio**

Library	Ratio	Time (ms)	CPU%
Zstd	1.14x	8.2	100%
Zlib	1.14x	2.3	100%
LibPressio-BZIP2	1.13x	7.6	100%
BZIP2	1.13x	7.8	100%
Lzma	1.12x	18.3	100%
Brotli	1.07x	1.0	100%
Snappy	1.00x	0.0	143%
Blosc2	1.00x	0.1	104%
LZ4	1.00x	0.0	147%



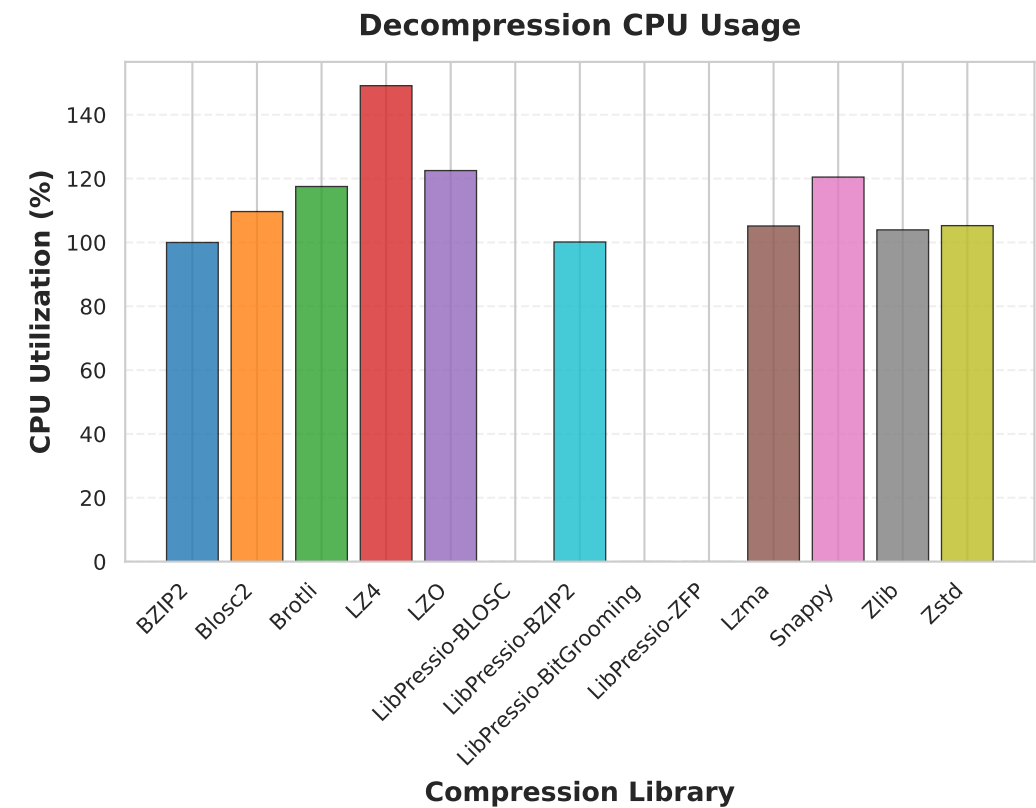
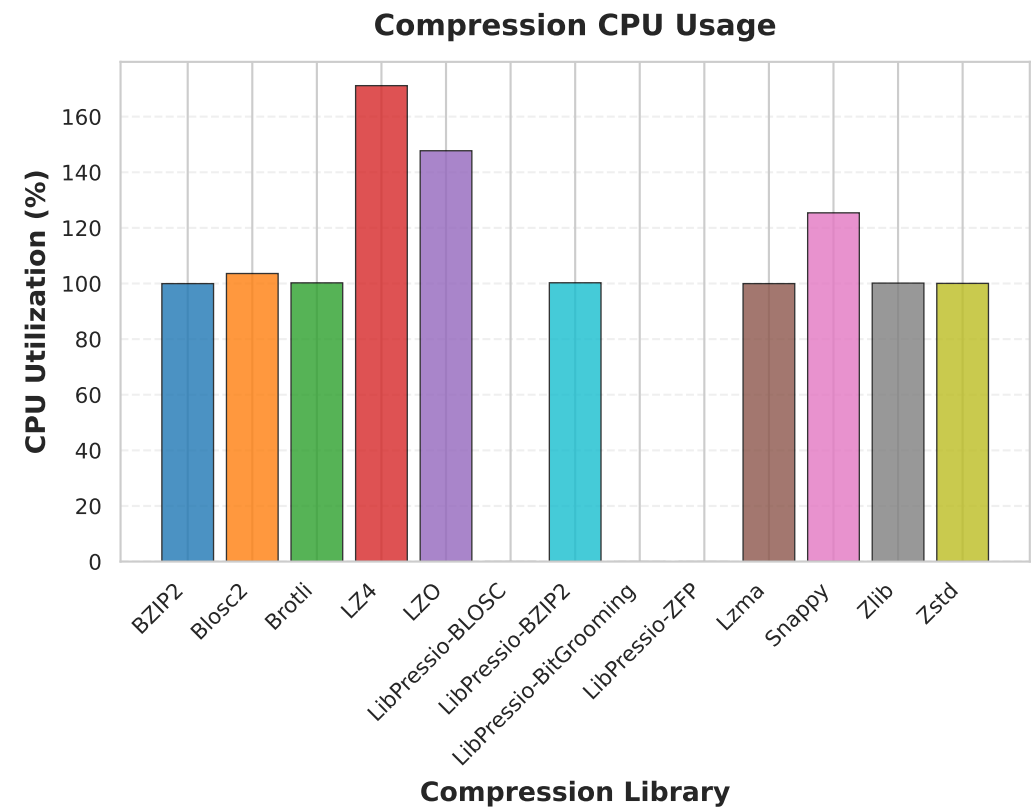
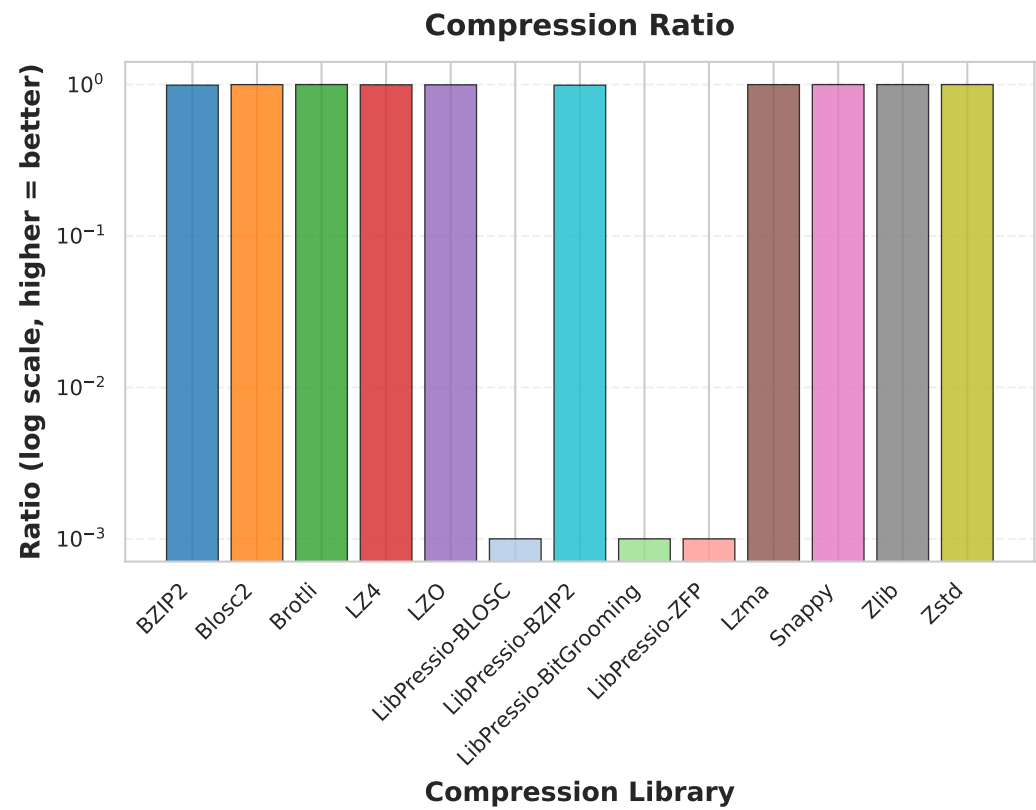
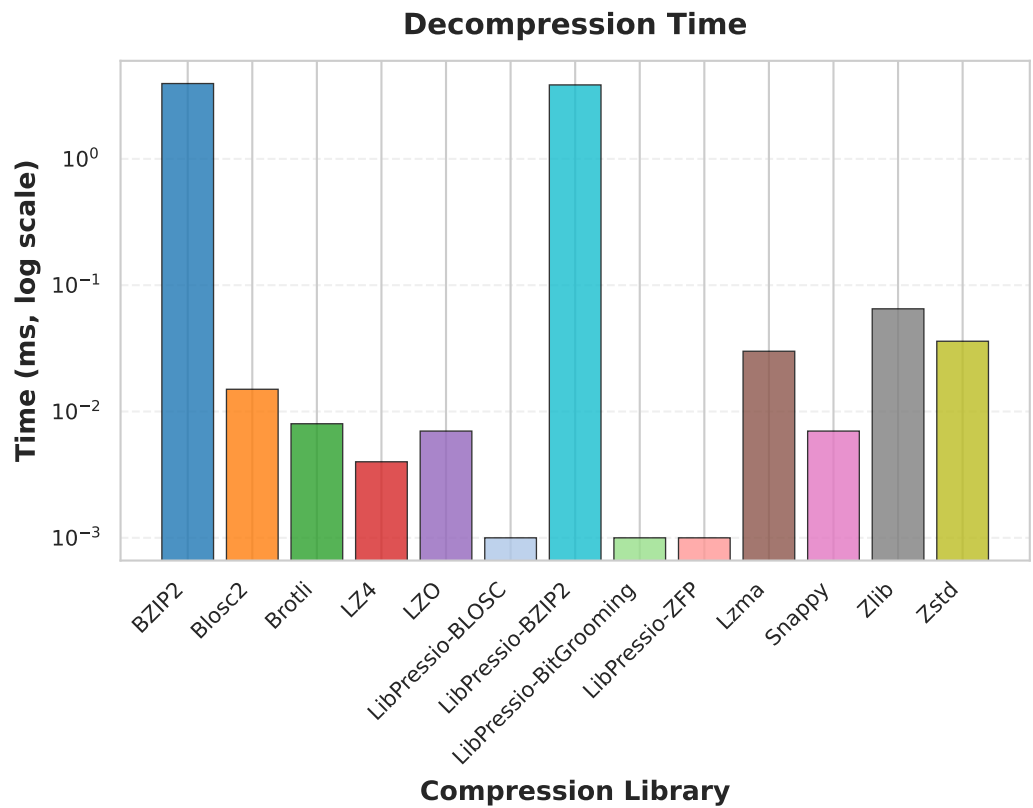
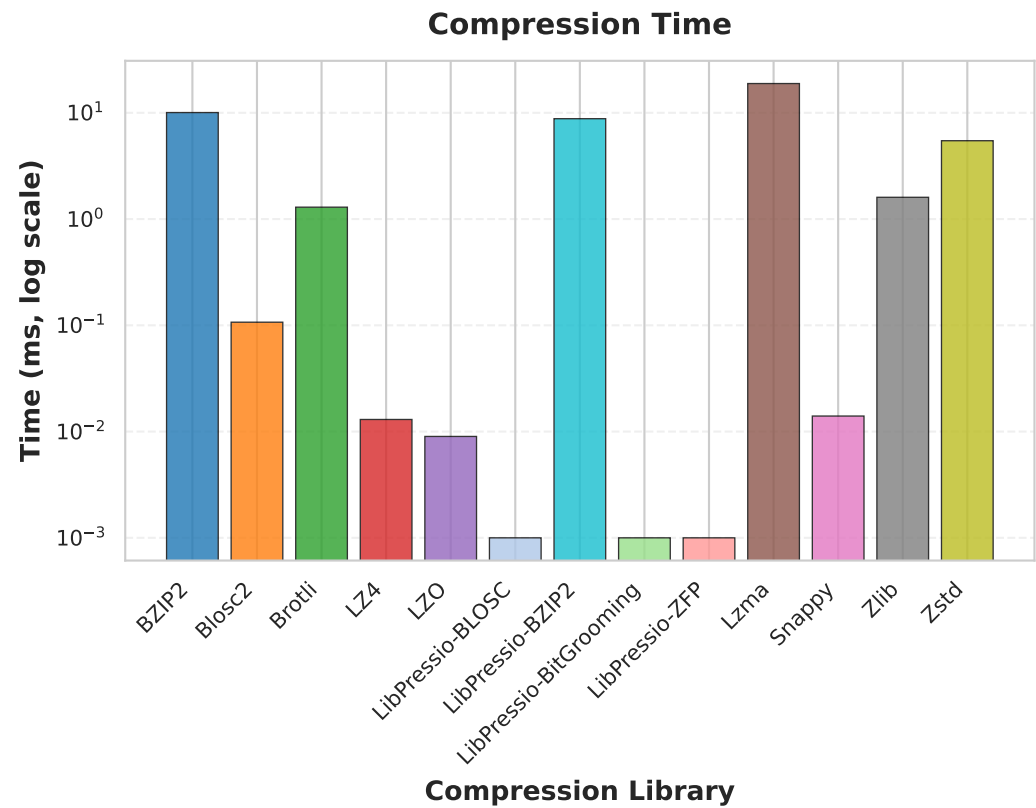
Parameter Study: uniform\_15  
Char Data Type, 64KB Chunk Size



**Performance Summary (64KB chunks)**  
**Sorted by Compression Ratio**

Library	Ratio	Time (ms)	CPU%
LibPressio-BLOSC	49.39x	4.2	100%
Zstd	1.99x	17.6	100%
LibPressio-BZIP2	1.96x	5.6	100%
BZIP2	1.96x	6.1	100%
Lzma	1.92x	23.7	100%
Brotli	1.91x	0.5	101%
Zlib	1.73x	3.8	100%
LZ4	1.07x	0.2	102%
Snappy	1.00x	0.0	148%

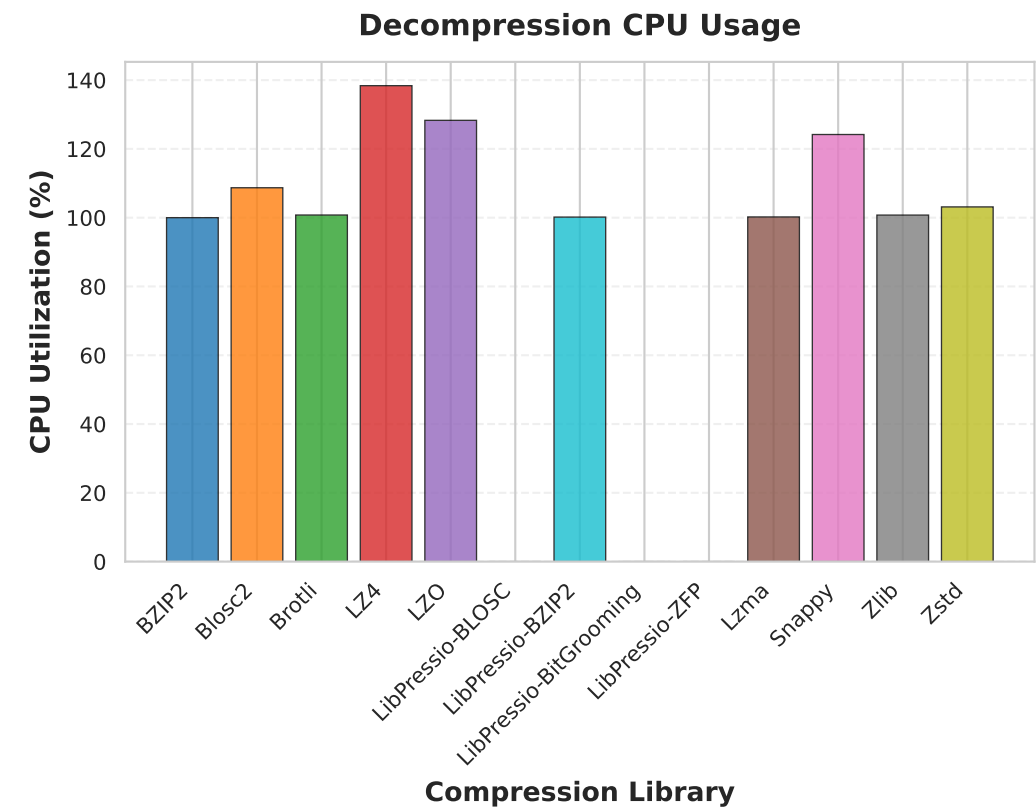
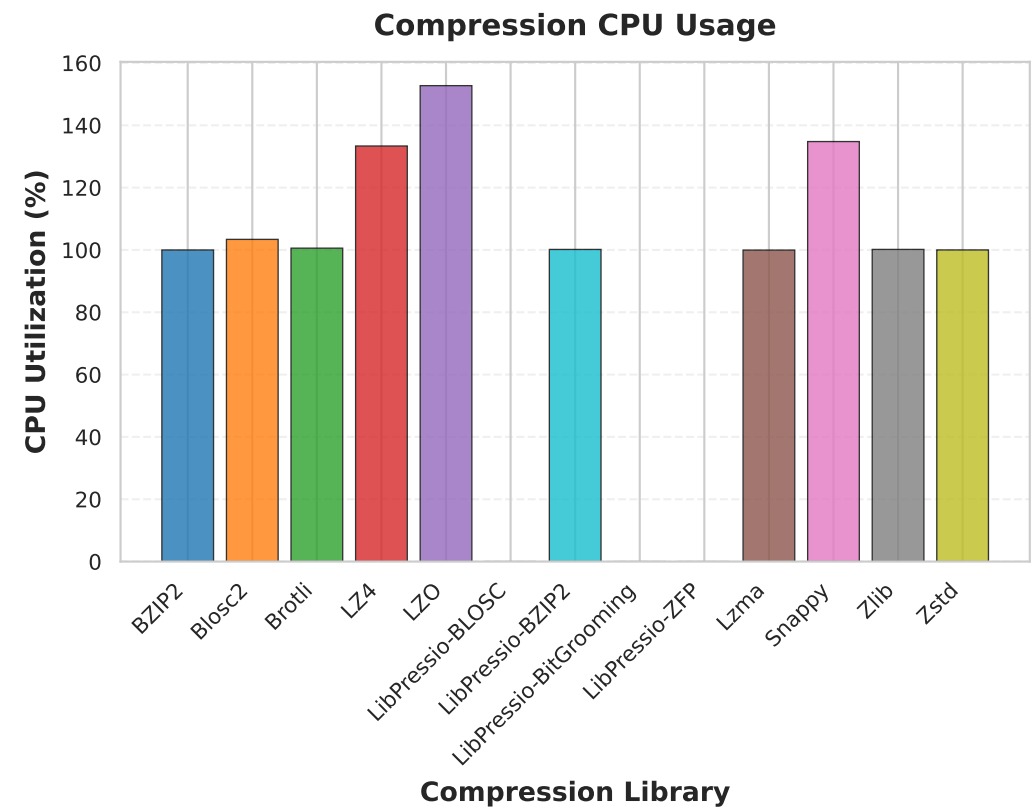
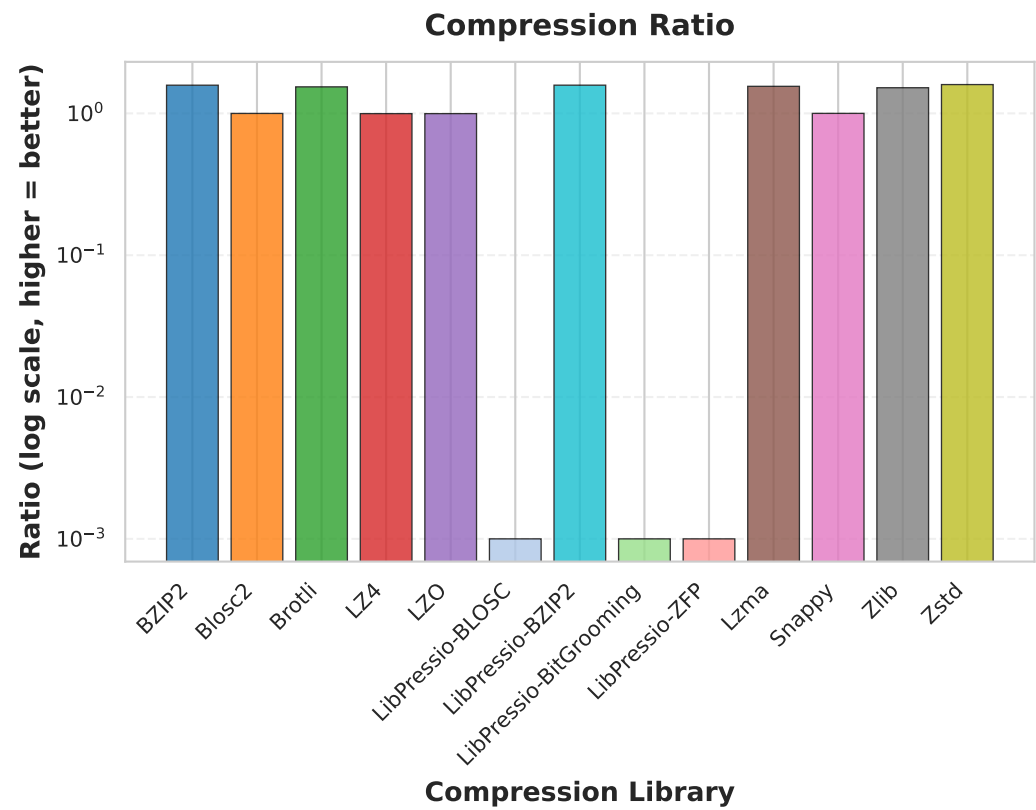
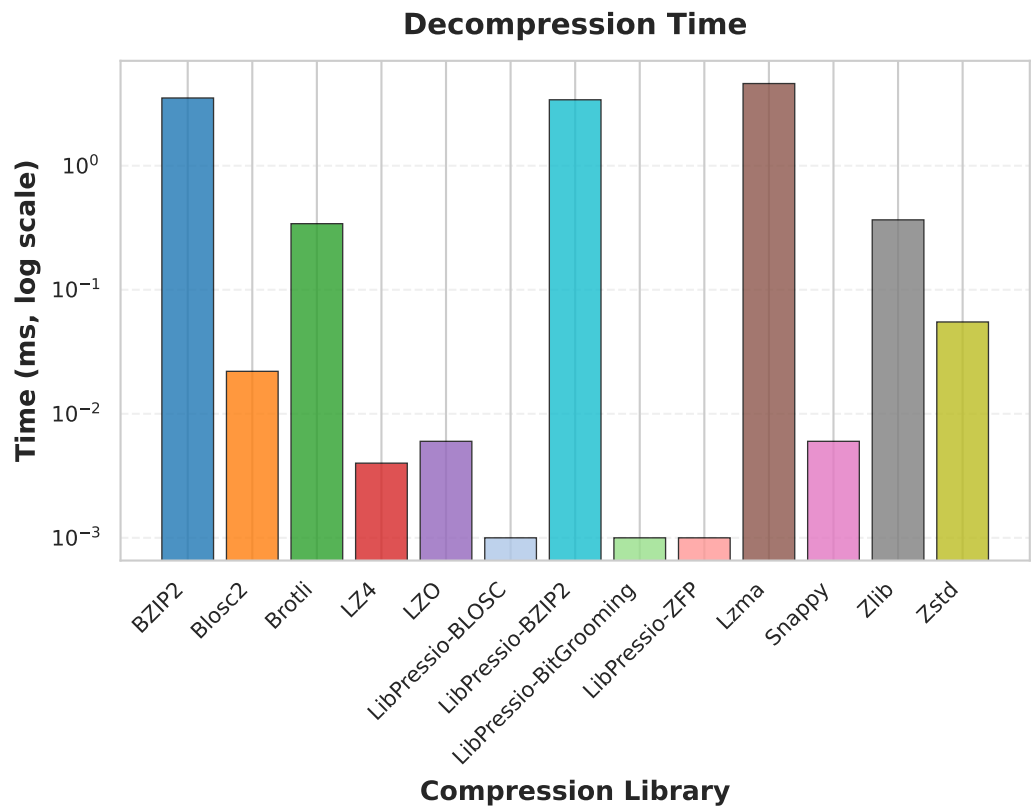
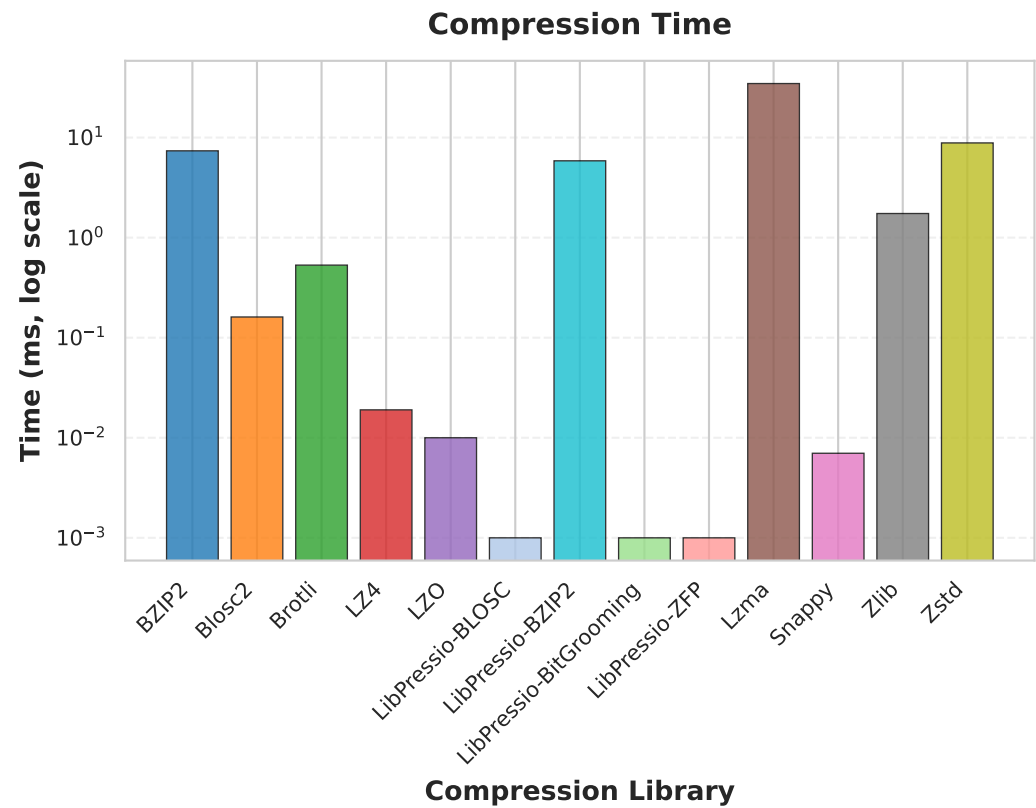
Parameter Study: uniform\_255  
Char Data Type, 64KB Chunk Size



**Performance Summary (64KB chunks)**  
**Sorted by Compression Ratio**

Library	Ratio	Time (ms)	CPU%
Brotli	1.00x	1.3	100%
Snappy	1.00x	0.0	125%
Zstd	1.00x	5.5	100%
Zlib	1.00x	1.6	100%
Blosc2	1.00x	0.1	104%
Lzma	1.00x	18.9	100%
LZ4	1.00x	0.0	171%
LZO	1.00x	0.0	148%
BZIP2	0.99x	10.1	100%

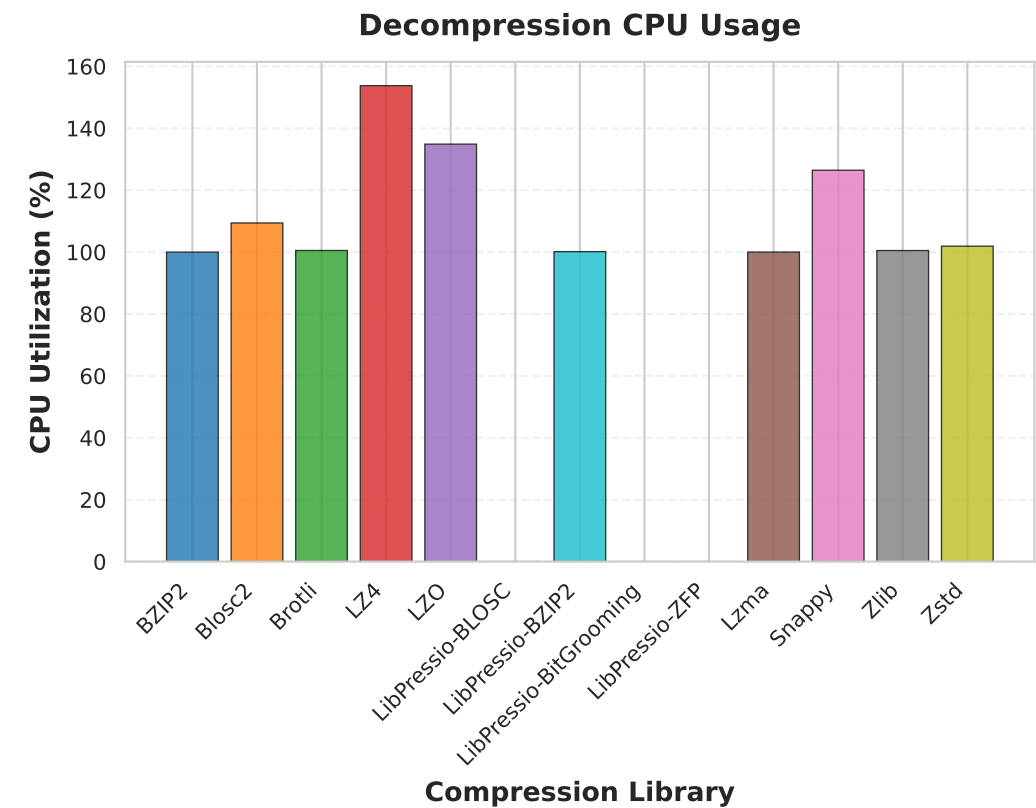
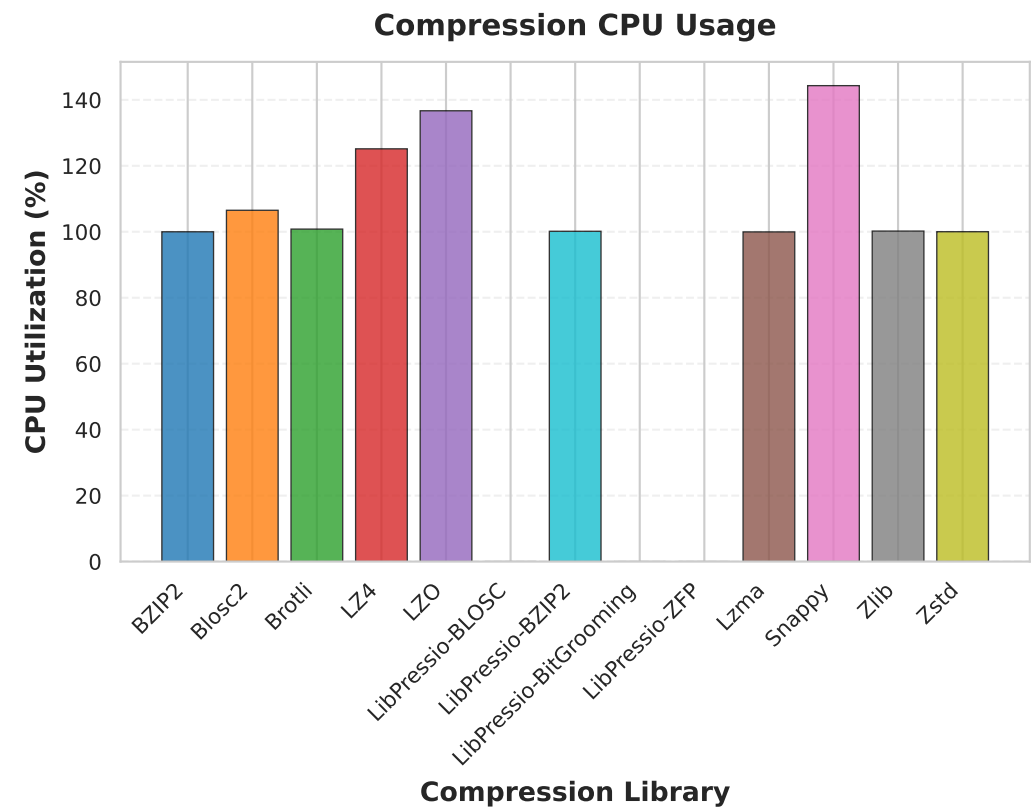
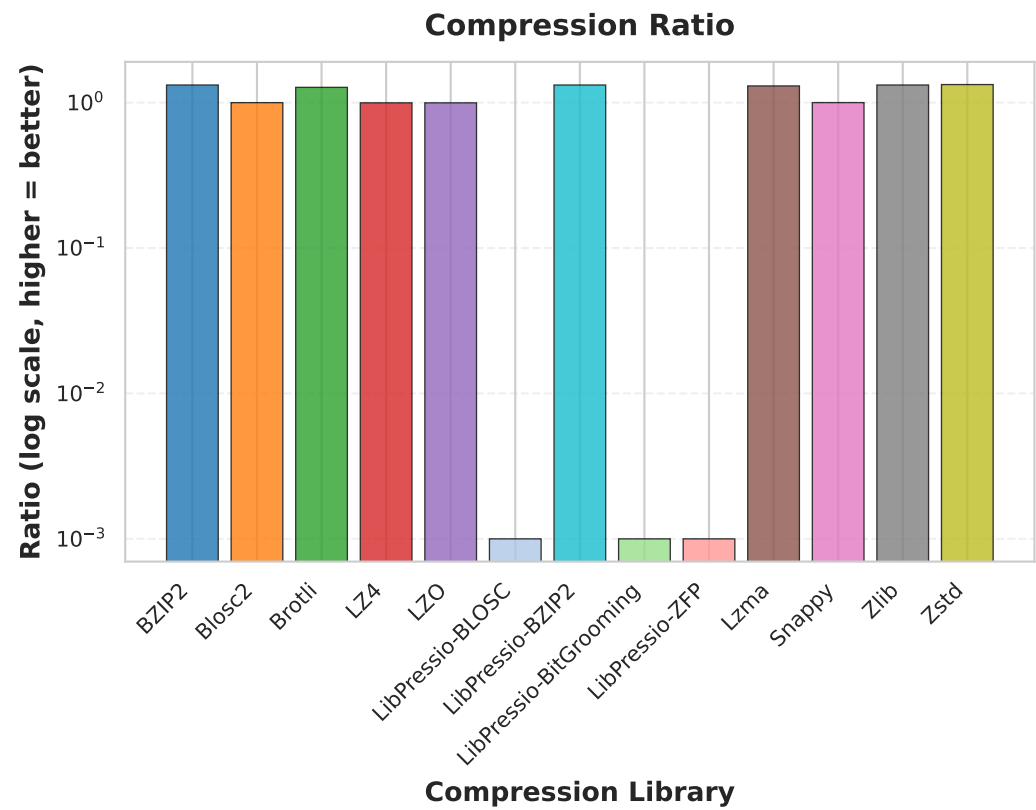
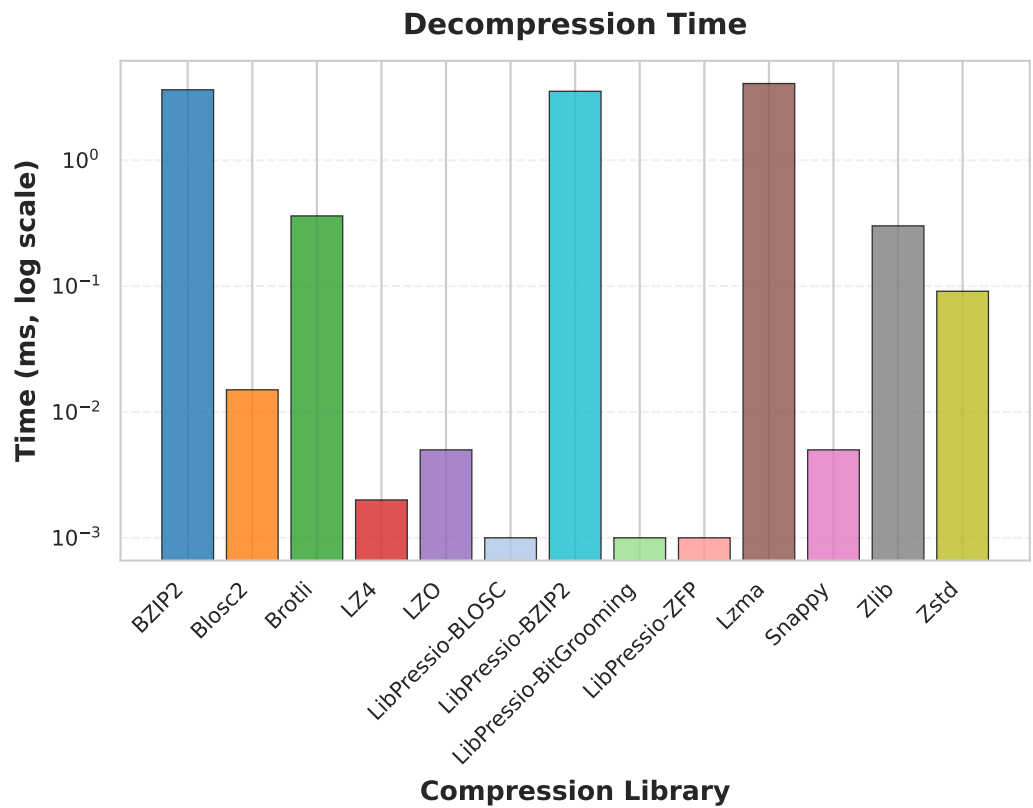
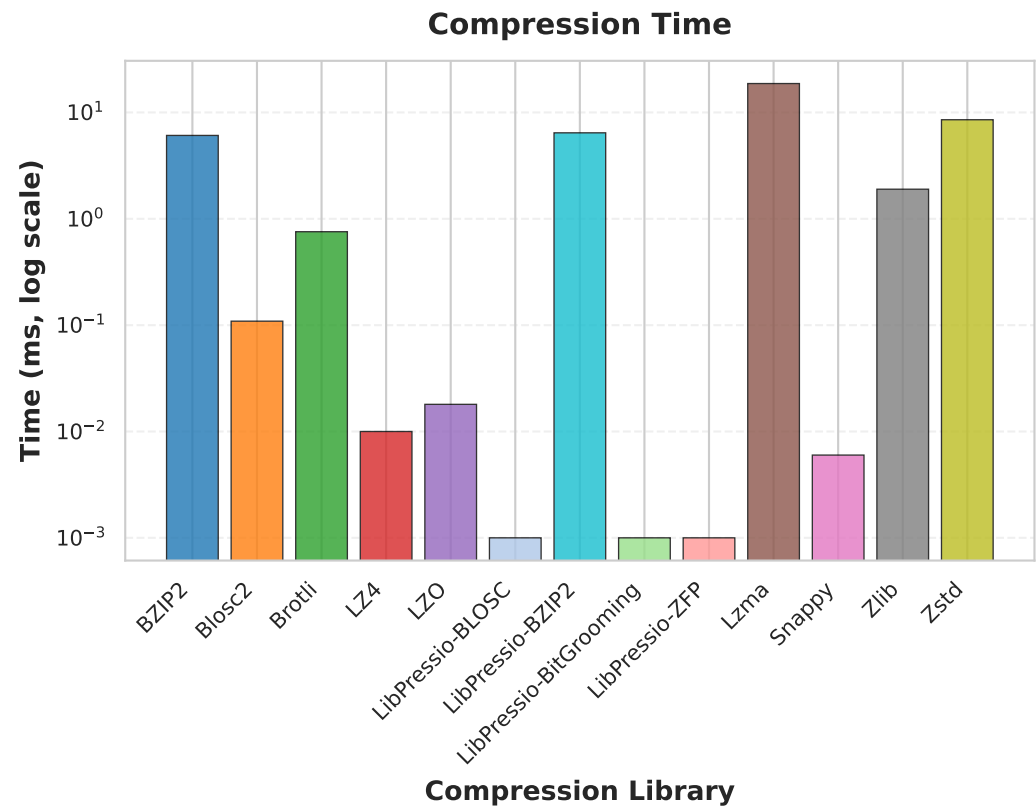
Parameter Study: uniform\_31  
Char Data Type, 64KB Chunk Size



**Performance Summary (64KB chunks)**  
**Sorted by Compression Ratio**

Library	Ratio	Time (ms)	CPU%
Zstd	1.60x	8.8	100%
LibPressio-BZIP2	1.58x	5.9	100%
BZIP2	1.58x	7.4	100%
Lzma	1.55x	34.6	100%
Brotli	1.54x	0.5	101%
Zlib	1.52x	1.7	100%
Snappy	1.00x	0.0	135%
Blosc2	1.00x	0.2	103%
LZ4	1.00x	0.0	133%

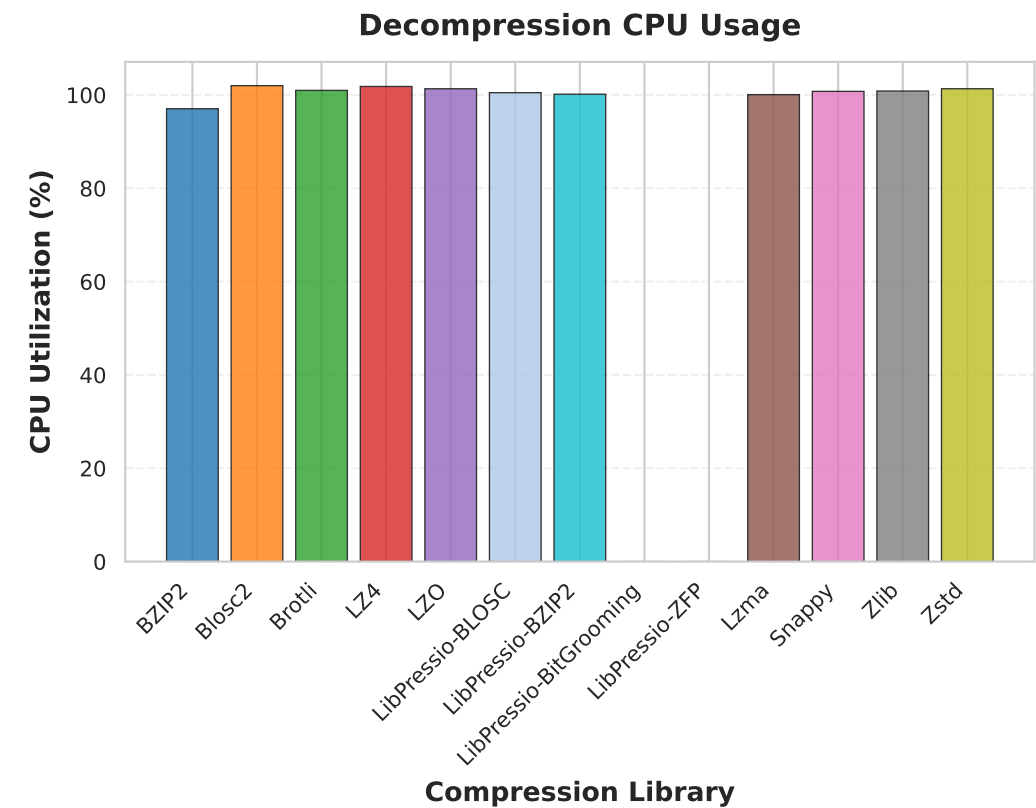
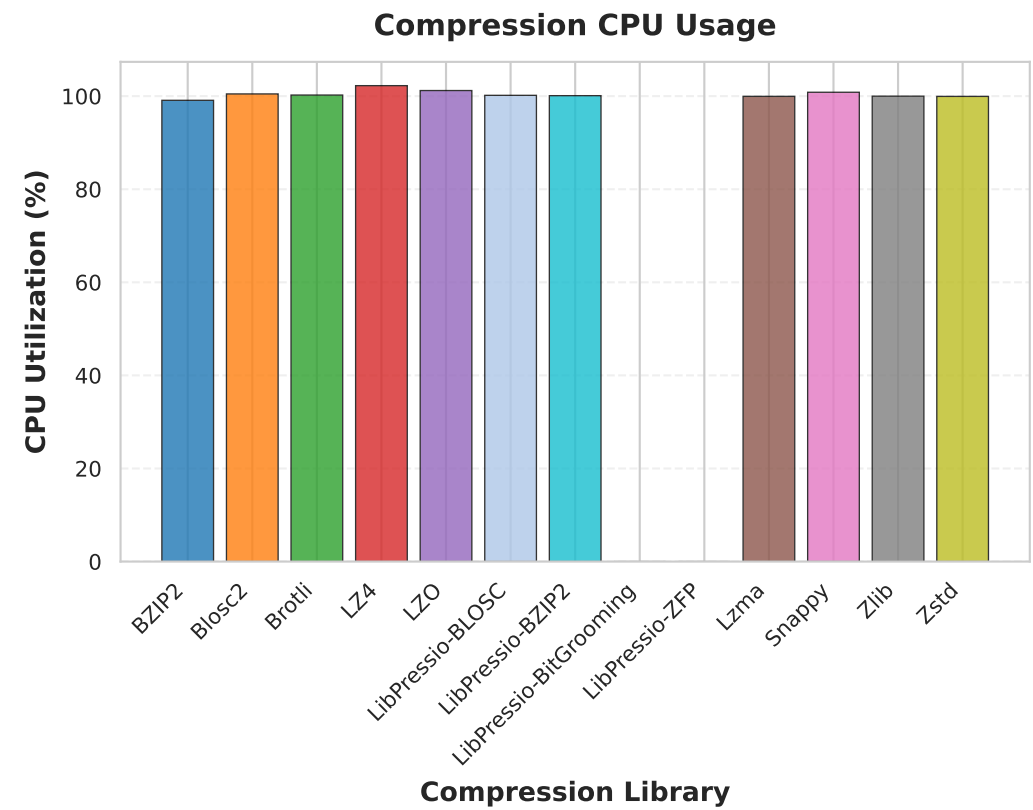
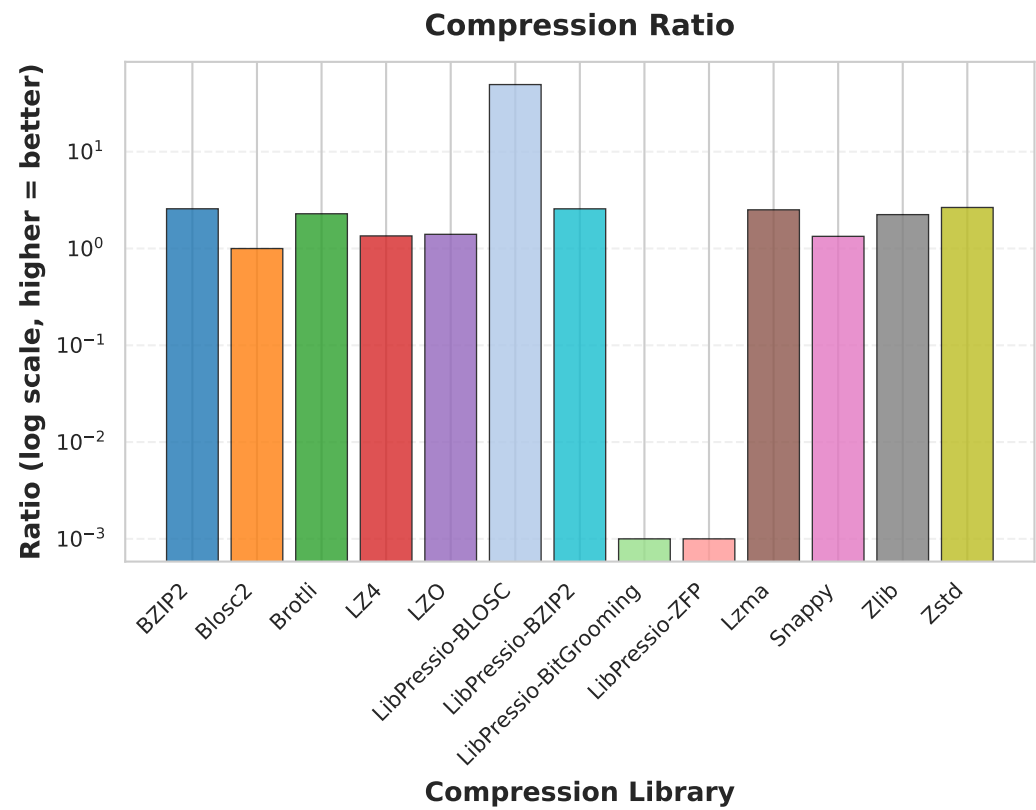
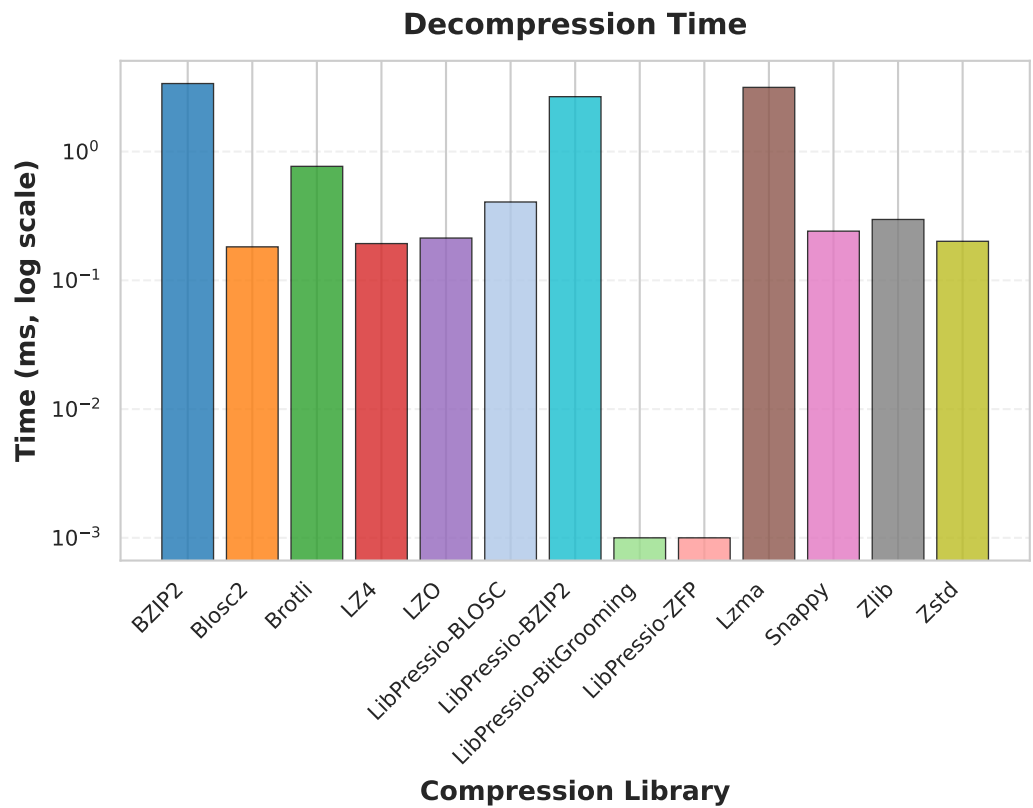
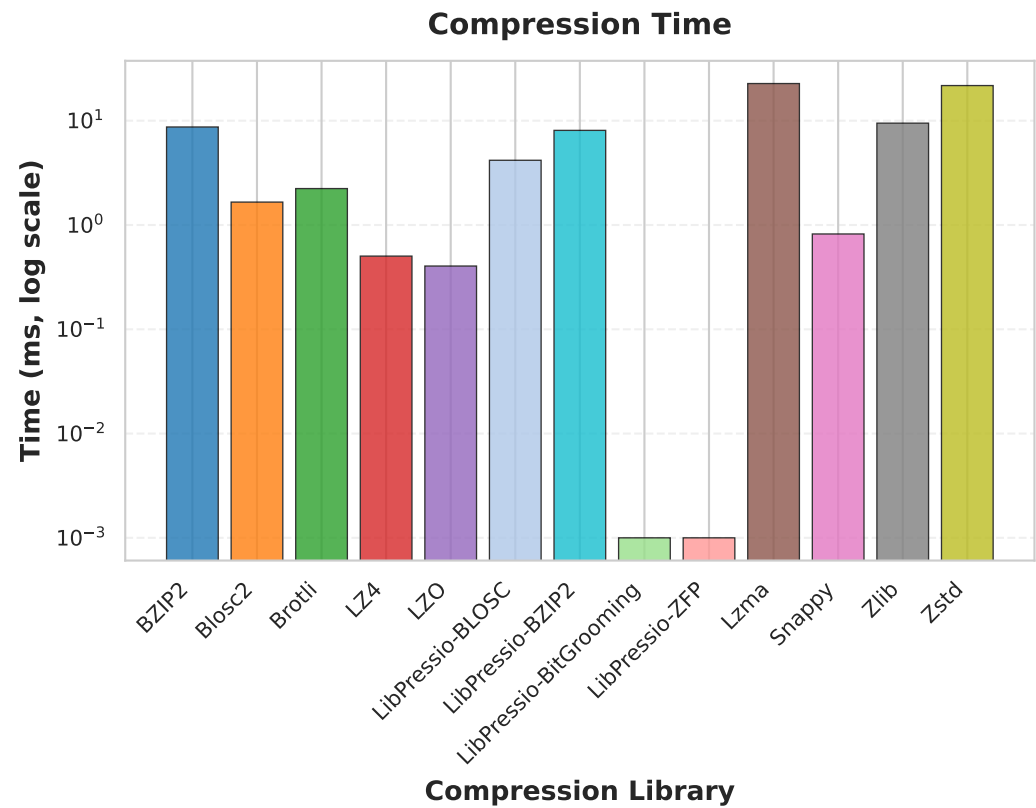
Parameter Study: uniform\_63  
Char Data Type, 64KB Chunk Size



**Performance Summary (64KB chunks)**  
**Sorted by Compression Ratio**

Library	Ratio	Time (ms)	CPU%
Zstd	1.33x	8.5	100%
BZIP2	1.32x	6.1	100%
Zlib	1.32x	1.9	100%
LibPressio-BZIP2	1.32x	6.4	100%
Lzma	1.30x	18.7	100%
Brotli	1.27x	0.8	101%
Snappy	1.00x	0.0	144%
Blosc2	1.00x	0.1	107%
LZ4	1.00x	0.0	125%

Parameter Study: uniform\_7  
Char Data Type, 64KB Chunk Size



**Performance Summary (64KB chunks)**  
**Sorted by Compression Ratio**

Library	Ratio	Time (ms)	CPU%
LibPressio-BLOSC	49.39x	4.2	100%
Zstd	2.65x	21.7	100%
BZIP2	2.57x	8.7	99%
LibPressio-BZIP2	2.57x	8.1	100%
Lzma	2.51x	22.7	100%
Brotli	2.28x	2.2	100%
Zlib	2.24x	9.5	100%
LZO	1.40x	0.4	101%
LZ4	1.35x	0.5	102%

Parameter Study: uniform\_float  
Char Data Type, 64KB Chunk Size

