Single-Axis Data

Filename	Input Size (bytes)
TX-01338_8266_1673371909.raw	65536
TX-01052_5716_1677760203.raw	65536
TX-01140_6482_1673395208.raw	25600
TX-01140_6484_1673395270.raw	8000
TX-01333_8209_1673371806.raw	65536
TX-01333_8210_1673371840.raw	65536
TX-01333_8212_1673371662.raw	65536
TX-01333_8213_1673371940.raw	65536
TX-01338_8265_1673371876.raw	65536

Averages for the above-listed files

Name of the Algorithm	Mean Compression Ratio
Heatshrink (w/o delta)	1.39
Heatshrink (w/ delta)	1.38
GZIP (w/o delta)	3.19
GZIP (w/ delta)	3.04
ZSTD (w/o delta)	2.93
ZSTD (w/ delta)	2.79
LZ4 (w/o delta)	1.46

Three-Axis Data

Filename	Input Size (bytes)
VM4P-00018-1734523888880.raw	107140
VM4P-00018-1734523900321.raw	12400
VM4P-00018-1734524409286.raw	458
VM4P-00018-1735459535129.raw	107138
VM4P-00077-1739063183645.raw	107128

Averages for the above-listed files

Each of the following files have been split into three channels, and compressed separately. So the final compression ratio will capture the effect of the compression on 5*3=15 raw files.

Name of the Algorithm	Mean Compression Ratio
Heatshrink (w/o delta)	1.13
Heatshrink (w/ delta)	0.93
GZIP (w/o delta)	1.51
GZIP (w/ delta)	1.11
ZSTD (w/o delta)	1.47
ZSTD (w/ delta)	1.11
LZ4 (w/o delta)	1.12

Now, we try it without splitting the data into three channels, so the ratio captures the effect of the compression on the 5 raw files.

Name of the Algorithm	Mean Compression Ratio
Heatshrink (w/o delta)	1.10
Heatshrink (w/ delta)	0.92

GZIP (w/o delta)	1.65
GZIP (w/ delta)	1.21
ZSTD (w/o delta)	1.59
ZSTD (w/ delta)	1.20
LZ4 (w/o delta)	1.14