Filter description for LZ4 compression in HDF5 (michael.rissi@dectris.com, borisch.eric@mayo.edu)

H5Z_FILTER_LZ4 == 32004

| Section | Field | Offset (Bytes) | Size (Bytes) | Туре | Description |
|------------|-------------|--------------------------------------|--------------|--------------|-------------------------------|
| Header | orig_size | 0 | 8 | BE Signed 64 | Total decompressed size |
| | _block_size | 8 | 4 | BE Signed 32 | Decompressed bytes per block |
| Block 0 | lz4_size_0 | 12 | 4 | BE Signed 32 | Compressed length of block 0 |
| | _lz4_data_0 | 16 | lz4_size_0 | Byte stream | lz4 representation of block 0 |
| Block 1N-1 | | | | | |
| Block N | lz4_size_N | &lz4_size_(N-1) + lz4_size_(N-1) + 4 | 4 | BE Signed 32 | Compressed length of block N |
| | _lz4_data_N | &lz4_size_(N-1) + lz4_size_(N-1) + 8 | lz4_size_N | Byte stream | lz4 representation of block N |

Blocked to enable future growth: very large chunks and/or parallel compression/decompression

Only the blocks required to produce/consume orig_size ((orig_size + block_size - 1)/block_size) are produced/processed

Arguments passed during filter addition:

cd_values[0] block_size : implementations shall support cd_values[1] nthreads : implementations may support USE IMPLEMENTATION DEFAULTS IF NOT SUPPLIED OR <=0