

H5Z-SZ: Handling HDF5 with SZ filter

- Download and install HDF5
- Download SZ and install SZ
 - git clone <https://github.com/disheng222/SZ>
- Compile [SZ-package]/H5Z-SZ
 - Set SZPATH and HDF5PATH in Makefile
 - cd H5Z-SZ; make; make install
 - Add \$SZPATH/lib and \$HDF5PATH/lib in LD_LIBRARY_PATH
 - export HDF5_PLUGIN_PATH=\${SZ_INSTALL_PATH}/lib
- Test:
 - Use-case A with library:
 - (1) cd [SZ-package]/H5Z-SZ/test;
 - (2) Set SZPATH and HDF5PATH in Makefile
 - (3) make (Two executables will be generated: szToHDF5 and dszFromHDF5)
 - (4) szToHDF5 will load a 3d array and then write the compressed bytes in a HDF5 file. (See test_compress.sh for details)
 - (5) dszFromHDF5 will read the HDF5 file generated by test_compress.h and then decompress the data inside it. (See test_decompress.sh for details)
 - Use-case B with plugin:
 - (1) Put the sz.config configuration in the current directory. (Please see README in SZ to understand the configuration sz.config)
 - (2) h5repack.sh [input_hdf5_file] [compressed_hdf5_file] or
h5repack -f UD=32017,0 [input_hdf5_file] [compressed_hdf5_file]
 - (3) Read the compressed HDF5 file:
h5dump [compressed_hdf5_file] > data.txt
 - (4) Decompress the data and dump them to a HDF5 file.
h5repack -f NONE compressed.h5 decompressed.h5

