

Silo - Bug # 607: fix Silo's use of gzip/zlib compression for floating point data

Status:	Resolved	Priority:	Normal
Author:	Mark Miller	Category:	
Created:	02/14/2011	Assigned to:	Mark Miller
Updated:	11/15/2011	Due date:	
Likelihood:	3 - Occasional		
Severity:	2 - Minor Irritation		
Silo Found in Version:	4.8		
OS:	All		
Support Group:	Any		
Subject:	fix Silo's use of gzip/zlib compression for floating point data		
Description:	<p>Quincey explained to me that compression of floating point data is done by applying a couple of HDF5 filters together; shuffle followed by either zlib or gzip compression. Without having shuffle compressor first, you can't really do too good a job on floating point data compression.</p> <p>Alas, I don't think this was understood when Silo's compression features were added and I don't think we are doing anything of the sort. This issue needs to be corrected. We could <code>_assume_</code> that if <code>METHOD=gzip</code>, then for floating point data, we always stuff a shuffle filter ahead of gzip filter and for int data we don't.</p>		

History

02/14/2011 12:29 pm - Mark Miller

- Project changed from HPC-HDF5 to Silo

11/15/2011 06:10 pm - Mark Miller

- Status changed from New to Resolved

- Assigned to set to Mark Miller

- Target version set to 4.9

- % Done changed from 0 to 100

- Estimated time set to 4.00

It was fairly easy to add stuff to add shuffle filter prior to any calls to add compression filters. However, I did not add shuffle filter to Peter's hzip/fpzip filters because they are already dealing with that issue internally.