

Fpack and Funpack Utilities for FITS Image Compression and Uncompression

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compression and uncompression speed than gzip.

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than 2.7 correspond to the "bias" CCD images that have zero exposure time and very low count levels. The intermediate set of points, with compression ratios in the range 2.1 to 2.7 and noise values in the range 5 to about 28, correspond to short exposures of 10 to 30 seconds in duration taken mainly to

required to compress and uncompress the images. Hcompress is mainly useful for performing lossy compression of the image, where much higher compress ratios can be achieved by not exactly preserving the pixel values.

Image compression using the Rice algorithm is 3 to 6 times faster than either Hcompress or Gzip. Note that the timing difference between the host-level GZIP and the implementation of this same


```
integer_value = (floating_point_value - ZERO_POINT ) / SCALE_FACTOR
```


is compressed with a lossy algorithm, then the user will be prompted to confirm whether to delete the input file. These confirmation prompts can be suppressed by specifying the "-Y" flag.

Compression algorithm: select 1 of the following options:

-r

measured noise level. This can be done by specifying the negative of the desired value. The -T option can be used to calculate the noise level in the image.

-n <noise>

-S output the compressed FITS file to the STDOUT stream (to be piped to another task)

Other miscellaneous parameters:

-V

