Subject: Re: Conversion floating point to byte or integer
Posted by M. Katz on Thu, 11 Oct 2007 21:04:11 GMT

You have to guard against byte values going below zero.
Here is what I would recommend.
1) Immediately convert the raw data into float, before any processing.
2) Subtract the background array but "crop" any negative values at
zero.
   image1 = (raw_data - background) > 0.
3) Then apply your calibration
   image2 = image1 * calibration
   If instead you have to divide by the calibration array, watch out
for zeros.
   image2 = image1 / (calibration > 1.) might be a format you should
consider.
   (The 1. here is just an example. It depends on your actual data.)

Of course be careful about spikes or zeros in the calibration
file or background file. Those can cause problems.

MKatz