Bugs: dmregrid

Bugs

1. ***Incorrect physical and world coordinates in the output***

   If the lower limits in the <u>bin</u> parameter are set to anything other than 1 – i.e.
   `xlo:xhi:xbin,ylo:yhi:ybin` where `xlo` and/or `ylo` do not equal 1 – `dmregrid` fails to
   update the physical–to–logical coordinate system, which causes both physical and world coordinates
   to be incorrect in the output file.

2. ***Tool does not fail with bad bin syntax*** *(29 Jan 2007)*

   If you put column names into the dmregrid "bin" parameter, it creates a large output file instead of
   failing, e.g.

   ```
   unix% dmregrid infile="acis_evt2.fits[bin x=4000:4200:4,y=4000:4200:4]" \
        outfile="test.fits" bin="x=4000:4200:0.5,y=4000:4200:0.5"

   unix% dmlist test.fits blocks


   --------------------------------------------------------------------
   Dataset: bug_test.fits
   --------------------------------------------------------------------

       Block Name                         Type         Dimensions
   --------------------------------------------------------------------
   Block    1: bug_test.fits              Image        Real4(8408x8408)
   ```

   The correct bin syntax for this example is:

   ```
   bin="4000:4200:0.5,4000:4200:0.5"
   ```

3. ***Negative values are not preserved with "npts!=0"*** 🆕 *(10 Oct 2007)*

   In approximation mode, i.e. "npts!=0", `dmregrid` skips pixels with negative values. With npts == 0
   (exact mode), the negative values are preserved.