Subject: Re: Q: Quantil calculation in IDL?
Posted by davidf on Fri, 15 Oct 1999 07:00:00 GMT
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Joerg Mosthaf (joerg.mosthaf@urz.uni-heidelberg.de) writes:

> I have been searching the help files and David Fannings great book, but I can't
> find a way to calculate 25%- and 75%-quantils. Unfortunately I don't know the
> english name for this so let me explain: A 75%-quantil is like the median, but
> with 75% instead of 50% i.e. the number in a data spread, that 75% of all
> data points are less or equal to. Is there a way to do this fast on an
> 256x256 array? I need it to cut off noise at a specific level and to get a
> reliable min/max value, not including data spikes. I am probably overlooking
> something very easy, but I just couldn't find it.

Well, I don't know the "IDL way" to do this (Stein
Vidar or someone else can fill us in on the details),
but the "get the thing done" way to do this goes something
like this:

  1. Calculate the HISTOGRAM of the pixel distribution.
  2. Do a "running sum" of the number of pixels in each
     bin of the histogram until you exceed your target
     amount. The value of that histogram bin will be
     your quantil.

Sorry I can't be more explicit, but aside from not wanting
to embarrass myself, I have a plane to catch in about a half
hour. :-)

See you guys (and Rose, good to hear from *you* again!) in
a couple of weeks.

Cheers,

David
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