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Subject: Re: Q: Quantil calculation in IDL?

Posted by [joerg.mosthaf](#) on Mon, 18 Oct 1999 07:00:00 GMT

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J.D. Smith <jdsmith@astro.cornell.edu> wrote:

: You can of course fully sort the data and then select element  $p(N-1)$  of  
: the sorted array where  $p$  is your quantile percentage and  $N$  is the number  
: of elements in your array.

: However, if you're really looking for speed, you may need to consider a  
: \*selection\* routine (not provided with IDL). The advantage of selection  
: over sorting is that you don't care if everything is in order, just that  
: everything less than the  $n$ th largest is to the left of it, everything  
: greater is to the right, in any order. You gain as the  $\log(N)$  over an  
: optimized full sort. Numerical Recipes provides a nice selection  
: routine, but it probably would be slower than sorting if translated to  
: IDL. Compiling in C or Fortran and linking into IDL would provide the  
: speed-up.

Well, I will first try the suggestion from Mr. Romashkin, and if it is lacking  
in speed, then I'll look into a selection routine in C.

Thank you for the answers,

Joerg Mosthaf

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