Subject: Is there a fast Complex ATAN in IDL 5.5?
Posted by MKatz843 on Thu, 15 Aug 2002 23:57:38 GMT

I've avoided switching to IDL 5.5 for some time now because I use
ATAN() to produce the phase of complex data. In my simple tests with
IDL 5.4,

ATAN(x) runs over 30% faster than
ATAN(imaginary(x),float(x)).

I use ATAN() a great deal, and in real-time feedback applications with
512x512 arrays where time is important.

Does anyone know

(A) Is there a new, fast ATAN() available that can process my complex
data a la IDL 5.4?
(B) Is there a way to hack the IDL libraries to put the old ATAN
function into the newer IDL library to recover the old behavior?

Thanks,

M. Katz

Subject: Re: Is there a fast Complex ATAN in IDL 5.5?
Posted by the_cacc on Wed, 21 Aug 2002 00:43:23 GMT

Hey!

Complex support is patchy to say the least in IDL... as I've ranted
here before. They should just SORT IT OUT!!! If *I* can write
CALL_EXTERNAL commands to mimic IDL functions but also accept complex
args, then surely the comp. sci. experts at RSINC can!?!

Let's start with: SVDC and all the other matrix operations, all the
sparse array operations, CURVEFIT and other fitting routines.

As always,
Ciao.