
Subject: Re: Radar dB values

Posted by [Vincent Schut](#) on Thu, 14 Feb 2002 08:58:10 GMT

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Ronald Greeley wrote:

> I have been trying to synthesize AIRSAR images in the form where I can
> get the dB value for individual pixels off of the image.
>
>
> When I generate a dB image, it gives me values between 0 and 1.
>
> Can anyone provide advice on how to generate an AIRSAR image off of
> which I can get the dB values ??
>
> Thanks!
>
> Kevin Williams
> kkw@asu.edu
>

Usually when you get an output of only 0's and 1's, there is a integer somewhere in your calculation where it should have been floating point. Check your formulas and variables; if any of them in your calculation is integer, the result will be integer too...

I assume you use something like $db=10*\log_{10}(rawvalue)$? Try putting a point zero behind the '10', which makes it a floating point constant instead of a integer: $db=10.0 * \log_{10}(rawvalue)$

Cheers,
Vincent.

Subject: Re: Radar dB values

Posted by [Pavel A. Romashkin](#) on Thu, 14 Feb 2002 16:40:04 GMT

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Pretty close, but for the result to be integer, all components of an expression need to be integer. If any one is "higher", the entire result is promoted.
So that

```
help, 10*log10(45)
<Expression> Float = 16.5321
```

because ALOG returns floating point value no matter what you pass in.

Cheers,
Pavel

Vincent Schut wrote:

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> somewhere in your calculation where it should have been floating point.
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> Cheers,
> Vincent.

Subject: Re: Radar dB values

Posted by [Vincent Schut](#) on Mon, 18 Feb 2002 08:25:10 GMT

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Right :-)

So the problem should be that somewhere in the beginning of the calculations, one of the var's or expressions might be integer, which maybe does not prevent the result from being float, but does result in a, in the end, rounded result: float(0) or float(1). Or, indeed, somewhere in a expression all the elements are int.

OK, it's a bit hard to explain on a new monday morning just after 9 o clock. But just 0's and 1's however rang the integer bell somewhere in my head, kind of reflex maybe...

Thanks for the correction. Only just started with IDL programming :)

Cheers,
Vincent.

Pavel A. Romashkin wrote:

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> expression need to be integer. If any one is "higher", the entire result
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>>
