## Subject: Visualize a Radar image with ENVI Posted by d.poreh on Tue, 03 May 2016 11:01:05 GMT

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Folks,

Hi,

I have a radar image with complex numbers for each pixel. I want to visualize this image as amplitude like A=sqrt(im^2+re^2) in envi (or with other possible ways).

Can someone please help?

Thanks for any kind of help in advance:)

Cheers,

Dave

Subject: Re: Visualize a Radar image with ENVI Posted by Helder Marchetto on Tue, 03 May 2016 12:32:44 GMT View Forum Message <> Reply to Message

On Tuesday, May 3, 2016 at 12:01:07 PM UTC+1, dave poreh wrote:

- > Folks,
- > Hi.
- > I have a radar image with complex numbers for each pixel. I want to visualize this image as amplitude like A=sqrt(im^2+re^2) in envi (or with other possible ways).
- > Can someone please help?
- > Thanks for any kind of help in advance:)
- > Cheers.
- > Dave

Could IDL's abs() function be of any help?

Have a look here:

http://www.harrisgeospatial.com/docs/ABS.html

Cheers,

Helder

Subject: Re: Visualize a Radar image with ENVI Posted by PMan on Tue, 03 May 2016 13:31:53 GMT

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On Tuesday, May 3, 2016 at 7:01:07 AM UTC-4, dave poreh wrote:

- > Folks,
- > Hi.
- > I have a radar image with complex numbers for each pixel. I want to visualize this image as amplitude like A=sqrt(im^2+re^2) in envi (or with other possible ways).
- > Can someone please help?
- > Thanks for any kind of help in advance:)

- > Cheers,
- > Dave

Helder's approach will work if your data type is complex. You implement this in band math 'abs(b1)'. Also, I think you can set how complex data is presented in ENVI (amplitude, intensity, real, or imaginary) or at least there was a way in old 'Classic' viewer.

But in my experience, the real and imag parts split into two image bands. Then, in band math 'sqrt(b1^2 + b2^2)' will work

Subject: Re: Visualize a Radar image with ENVI Posted by PMan on Tue, 03 May 2016 13:38:56 GMT

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On Tuesday, May 3, 2016 at 7:01:07 AM UTC-4, dave poreh wrote:

- > Folks,
- > Hi.
- > I have a radar image with complex numbers for each pixel. I want to visualize this image as amplitude like A=sqrt(im^2+re^2) in envi (or with other possible ways).
- > Can someone please help?
- > Thanks for any kind of help in advance:)
- > Cheers.
- > Dave

You can implement Helder's approach in 'Band Math.' Also, under the 'Raster management' toolbox, there is a function to convert complex data.

https://www.harrisgeospatial.com/docs/managerasterdata.html# Convert

Subject: Re: Visualize a Radar image with ENVI Posted by d.poreh on Wed, 04 May 2016 06:44:44 GMT

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On Tuesday, May 3, 2016 at 1:01:07 PM UTC+2, dave poreh wrote:

- > Folks,
- > Hi.
- > I have a radar image with complex numbers for each pixel. I want to visualize this image as amplitude like A=sqrt(im^2+re^2) in envi (or with other possible ways).
- > Can someone please help?
- > Thanks for any kind of help in advance:)
- > Cheers.
- > Dave

Thanks I manage to work with BAND math:)

Cheers,

Dave