

---

Subject: Re: Correlation between bands using IDL  
Posted by [d.poreh](#) on Tue, 03 Aug 2010 12:34:19 GMT  
[View Forum Message](#) <> [Reply to Message](#)

---

On Aug 3, 2:30 am, Lavanya <lavany...@gmail.com> wrote:

> Hi,  
>  
> I am pretty much new in using IDL. I have been trying to read  
> multiband image data using `envi_select` and `envi_file_query`, where i  
> get the information about the data im using.  
> Now how could i find the correlation between any two bands (here the  
> number of bands i have is 242)  
> Finally i need to generate a output correlation matrix of 242 \* 242.  
> Please help me how can i go about.  
>  
> Thanks

It does not make sense to find correlation matrix of 242 \* 242. I  
think what you need is using the Principal component analysis (PCA).  
With this you  
could find the maximum variance which presents the maximum variation.  
And you can decrease your number of bands to few factors. David has a  
very good article about that: [http://www.dfanning.com/code\\_tips/pca.html](http://www.dfanning.com/code_tips/pca.html)  
Cheers  
Dave

---