
Subject: Hymap NVDI

Posted by [gpeterso](#) on Tue, 04 Mar 2014 18:50:02 GMT

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I am wondering what are the best bands to use when doing an NVDI with hymap data. I know that NVDI is $\text{red-NIR}/\text{red} + \text{NIR}$. I have tried using bands 22 and 50 but I noticed the results were not perfect and some vegetation was not mapped as negative values. Is this just a result of using hyperspectral data?

Also I am assuming that I cant make a perfect true color image with with hyperspectral data, is this correct?

Subject: Re: Hymap NVDI

Posted by [Andy Sayer](#) on Tue, 04 Mar 2014 20:20:18 GMT

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This sounds like a sensor-specific rather than IDL-related question so you might get a better response elsewhere. I am not familiar with HyMap but based on general considerations about hyperspectral data, you may consider integrating several bands to reduce the effect of noise. If you're not attempting any kind of atmospheric correction, then you will also see (geometry- and atmospheric-composition-dependent) influences in your results (specifically the atmosphere tends to dampen contrast in NDVI).

Also, maybe it is different in your community, but in my prior experience NDVI is expressed the other way around ($[\text{NIR}-\text{red}]/[\text{NIR}+\text{red}]$) such that vegetation is generally associated with positive values.

If you're seeing isolated values of opposite sign to your expectations, it's also possible that there are e.g. surface water features you were unaware of.

In terms of a true-colour image, I'd argue that hyperspectral data is better than broader-channel imagers because you are less restricted in which bands you aggregate. :)

Hope this helps,

Andy

On Tuesday, March 4, 2014 1:50:02 PM UTC-5, [gpeter...@ucsc.edu](#) wrote:

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