
Subject: Re: what does hyperspectral mean?
Posted by [8015](#) on Tue, 17 May 1994 15:02:23 GMT
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In article <2railb\$mmm@usenet.ins.cwru.edu>,
Mirko Vukovic <at913@cleveland.Freenet.Edu> wrote:

>
> The subject says it all. Answers, references, examples are welcome
>

It commonly refers to the number of bands in a data set. For instance, the LandSat Thematic Mapper data is multi-spectral because it has seven bands of data in the visual and infra-red bands of light (electromagnetic spectrum for those really into technical terms). "Multi" typically refers to a number from 4 to about 12 bands. "Hyper" typically refers to a number of bands greater than that. There are hyper-spectral scanners generating up to a couple hundred bands these days. I don't know if they've gone commercial, though. Assuming the spectral coverage of a multi- and hyper- scanner is the same, each hyper- band is much narrower in spectrum coverage than a multi-spectral band, so you end up with a data set which provides much more discrimination, which is particularly applicable for material classification. If there are "hard" numbers for where the terms multi and hyper pertain to, I'm not aware of them.

Hopefully, that's an accurate answer, and if you stretch your imagination, there is an example in there. Sorry, I don't have any references.

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Subject: Re: what does hyperspectral mean?
Posted by [ian](#) on Tue, 17 May 1994 15:54:06 GMT
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Word has it that at913@cleveland.Freenet.Edu (Mirko Vukovic) may have said:
>
> The subject says it all. Answers, references, examples are welcome

Hyperspectral means having a lot of frequencies, like AVIRIS (224), while multispectral means having more than one frequency, like Landsat (6?).

+--Ian Novack (Particle Man and Comatose Reader)-----+ian@gomez.jpl.nasa.gov--+
| "...I was convinced that the public consisted | Jet Propulsion Lab |
| entirely of raging idiots." -- Dave Barry | Pasadena, CA |

+--Disclaimer: Had this been an actual opinion, it would still be mine.-----+
