Subject: Re: what does hyperspectral mean?
Posted by 8015 on Tue, 17 May 1994 15:02:23 GMT
View Forum Message <> Reply to Message

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.

Mike Schienle Hughes Santa Barbara Research Center
mgs@sbjse0.sbrc.hac.com 75 Coromar Drive, M/S B28/87
Voice: (805)562-7466 Fax: (805)562-7881 Goleta, CA 93117