
Subject: Re: read/write standard envi

Posted by [Vincent Schut](#) on Tue, 05 Mar 2002 11:27:54 GMT

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Klaus Scipal wrote:

> Hi

>

> I am sure anyone out there has already done this:

>

> I need to read/write a standard ENVI file in IDL. Is there any code
> available or am I the first one with this problem.

> T'x for any help

>

> Klaus

>

>

I suppose you have ENVI?

You can simply use the envi-routines for this. Check out the ENVI programmers guide that came with your ENVI program, or the online help (not the online help of idl, but of envi), search for the section for programmers. The appropriate function is called `envi_open_file`. You can search your envi online help file for this.

BTW, also without envi it is quite simple to read/write a standard envi file. A very short explanation:

First open the belonging header file, this contains information about the # of bands, samples, lines, data format and storage format. Storage format can be `bsq`, `bil` or `bip`, which mean data is stored band after band (`bsq`), byte interleaved by line (`bil`: line1 band1, line1 band2, l1b3, l2b1, etc) or `bip`: byte interleaved by pixel: p1b1, p1b2, p1b3, p2b1, etc. The header file is in human readable text format.

From the data type you can calculate how many bytes each pixel takes, e.g. is the data type integer, each pixel is 2 bytes.

Then you can just open and read the file. It is not compressed, just read the values pixel after pixel.

You can check your calculation by checking if `#samples * #lines * #bands * #bytesppixel = filesize`.

Using the appropriate envi-routine is much easier, though.

For more info, if you have an envi manual, read the programmers section. Otherwise, ask more questions if you don't succeed.

good luck!

Vincent.

Subject: Re: read/write standard envi
Posted by [Klaus Scipal](#) on Tue, 05 Mar 2002 13:37:08 GMT
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T'x for your assistemce, indeed it was easier than expected

Klaus

"Vincent Schut" <schut@gissrv.iend.wau.nl> wrote in message
news:3C84ABBA.60202@gissrv.iend.wau.nl...

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> file. A very short explanation:

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> the # of bands, samples, lines, data format and storage format. Storage
> format can be bsq, bil or bip, which mean data is stored band after band
> (bsq), byte interleaved by line (bil: line1 band1, line1 band2, l1b3,
> l2b1, etc) or bip: byte interleaved by pixel: p1b1, p1b2, p1b3, p2b1,
> etc. The header file is in human readable text format.

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> You can check your calculation by checking if `#samples * #lines * #bands`
> `* #bytesppixel = filesize`.

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> Vincent.
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