
Subject: Re: IDL reader for matlab .mat files

Posted by [Nigel Wade](#) on Tue, 25 May 2004 08:55:04 GMT

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Paul Van Delst wrote:

> Hello,
>
> I realise this question has come up previously, but does anyone know
> where one can get their hands on a IDL software to read matlab ".mat"
> files. I've seen posts for v4 matlab files, but thats a pretty old
> matlab version (I think v6 is the current one.)
>
> Thanks,
>
> paulv
>

MATLAB itself is up to version 6 (and has been for a while) but the data formats are either V4 or V5. MATLAB 6 can use both.

The original version (commonly called V4) was used up to and including MATLAB 4. This was a nice simple format for storing 2-D matrices.

The new version (usually called V5) was introduced in MATLAB 5 to store the new, more complicated data types which MATLAB 5 could use such as cells and structures. This is way more complicated to read since cells can contain structures which can contain structures which can contain cells... i.e it requires a recursive reading ability.

MATLAB can still use the old format data if you only want to store simple 2-D matrices of floating point data. When creating the data file you simple add the -V4 flag to the output command.

I have code which can load V4 data into IDL, so if you can store your data in this format you might be ok. It's very simple and won't take care of endianness (but that could be fixed) but it loads 2-d matrices.

I also have C code which can read V5 data files (and an interface to load the data into Python) but nothing to load it into IDL. All it requires is wrapping in a DLM...

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