## Subject: How can make a simple movie from .txt files Posted by ece on Fri, 16 Sep 2011 13:28:26 GMT

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Hi,

I have 100 spectra in .txt files. Each file has wavelength and flux values. I want to make a movie showing each spectra as a function of time. Does anyone have a suggestion about how to start?

Subject: Re: How can make a simple movie from .txt files Posted by Matt Francis on Sun, 18 Sep 2011 22:37:24 GMT View Forum Message <> Reply to Message

On Sep 16, 11:28 pm, ece <ecekile...@gmail.com> wrote:

- > Hi,
- >
- > I have 100 spectra in .txt files. Each file has wavelength and flux
- > values. I want to make a movie showing each spectra as a function of
- > time. Does anyone have a suggestion about how to start?

The simplest way to display a spectrum would be to simply plot the flux vs wavelength using PLOT.

The simplest way to make a 'movie' would be to use WRITE\_GIF,/MULTIPLE to make an animaited GIF by looping over each of your 100 spectra and plotting them. This makes for a very inefficent movie in terms of file size, but may be suitable for your purposes.

Subject: Re: How can make a simple movie from .txt files Posted by Russell[1] on Wed, 21 Sep 2011 20:24:32 GMT View Forum Message <> Reply to Message

On Sep 16, 9:28 am, ece <ecekile...@gmail.com> wrote:

- > Hi.
- >
- > I have 100 spectra in .txt files. Each file has wavelength and flux
- > values. I want to make a movie showing each spectra as a function of
- > time. Does anyone have a suggestion about how to start?

Hi Ece, I've done something like this for some galaxy spectra I had. What I did was to use the MPEG tools (mpeg\_open.pro, mpeg\_put.pro, mpeg\_close.pro, and mpeg\_save.pro) that come with IDL. So the algorithm is pretty simple:

- (1) read the first spectrum
- (2) create a window with the pixmap option set
- (3) plot the spectrum
- (4) use tvrd() to get the data which you just plotted. this will be a 3xm x n array.
- (5) use the mpeg\_\* utilities to put this into the file
- (6) destroy the window
- (7) goto (1) with a new spectrum

Now, you can add things along the way to deal with frame rate, colors, etc. And there maybe a better way than the creating/destroying all those windows, but this did work for me.

-Russell