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Subject: Re: reading ascii in array merging with strsplit  
Posted by [Brian Larsen](#) on Tue, 06 Feb 2007 14:46:33 GMT  
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I just did this yesterday. Depending on what idl libraries you have installed this becomes trivial. Using the solarsoft library ([http://www.lmsal.com/solarsoft/ssw\\_install.html](http://www.lmsal.com/solarsoft/ssw_install.html)) there is a function that makes this really easy. Unless you do solar physics, you should only need the binaries check box (any maybe not ever that) making it relatively small to download and install.

```
print, anytim2jd('6-2-1998 17:00')  
{ 2455765 0.20833333}
```

I have gotten so used to solarsoft that I can no longer remember what is solarsoft and what is standard idl as there are a heck of a lot of routines for all sorts of things in solarsoft.

Brian

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Brian A. Larsen  
Dept. of Physics  
Space Science and Engineering Lab (SSEL)  
Montana State University - Bozeman  
Bozeman, MT 59717

On Feb 6, 6:46 am, "leatherback" <jelle.ferwe...@rmit.edu.au> wrote:

```
> Hi All,  
>  
> I use a template to read_ascii data of the following format:  
>  
> D9 6-2-1998 17:00 37,59 0,59 36,5  
>  
> Which returns a structure of arrays.  
>  
> However, the date (6-2-1998) and time (17:00) I need to convert to  
> julian time, which takes  
>  
> JULDAY(Month, Day, Year, Hour, Minute, Second)
```

>  
> I -could- for each entry in the list do a strsplit:  
>  
>   daysarr = STRTRIM(strsplit(data.date[ThisLine], '-', /extract), 2)  
>   timearr = STRTRIM(strsplit(data.time[ThisLine], ':', /extract), 2)  
>  
> and create the julian day:  
>  
>   Jul\_Day = julday(daysarr[1],daysarr[0],daysarr[0],timearr[0],  
> timearr[1], 0)  
>  
> This seems very elaborate if you repeat this hundreds of thousands of  
> times. Is there a better solution to this? Can I somehow specify a  
> template with multiple field separators?  
>  
> Thanks,  
>  
> Jelle.

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Subject: Re: reading ascii in array merging with strsplit  
Posted by [leatherback](#) on Tue, 06 Feb 2007 14:51:33 GMT  
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Hey Brian,

Thanks for your reply. Before I start installing all sort of material  
I do not need.. Does this solarsoft accept ARRAYS of dates too?

Cheers,

jelle.

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Subject: Re: reading ascii in array merging with strsplit  
Posted by [Brian Larsen](#) on Tue, 06 Feb 2007 16:02:41 GMT  
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Yes it does (I had to check)

```
IDL> print, anytim2jd(['6-2-1998 17:00', '6-3-1998 17:00'])  
{ 2455765 0.20833333}{ 2455793 0.20833333}
```

The return is a little annoying but can be mitigated by simply adding  
them together.

```
IDL> help, anytim2jd(['6-2-1998 17:00', '6-3-1998 17:00'], /str
```

```
** Structure <84bd97c>, 2 tags, length=12, data length=12, refs=1:
  INT      LONG      2455765
  FRAC     DOUBLE    0.20833333
IDL> jd = anytim2jd(['6-2-1998 17:00', '6-3-1998 17:00'])
IDL> jd = jd.int+jd.frac
IDL> help, jd
JD      DOUBLE  = Array[2]
```

I am sure you can write something easy as well but I always hate to reinvent the wheel more than I have to.

Brian

---

Brian A. Larsen  
Dept. of Physics  
Space Science and Engineering Lab (SSEL)  
Montana State University - Bozeman  
Bozeman, MT 59717

On Feb 6, 7:51 am, "leatherback" <jelle.ferwe...@rmit.edu.au> wrote:

```
> Hey Brian,
>
> Thanks for your reply. Before I start installing all sort of material
> I do not need.. Does this solarsoft accept ARRAYS of dates too?
>
> Cheers,
>
> jelle.
```

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Subject: Re: reading ascii in array merging with strsplit  
Posted by [leatherback](#) on Tue, 06 Feb 2007 16:34:17 GMT  
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Hi Brian,

Thank you for that. One step closer to an efficient & working code.

Jelle.

Animal Behavior Research Group  
Department of Zoology / University of Oxford

South Parks Road / Oxford / OX13PS  
United Kingdom

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Subject: Re: reading ascii in array merging with strsplit  
Posted by [Andrea Pitacco](#) on Thu, 08 Feb 2007 09:39:02 GMT  
[View Forum Message](#) <> [Reply to Message](#)

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On 6 Feb 2007 05:46:39 -0800, "leatherback"  
<jelle.ferwerda@rmit.edu.au> wrote:

> Hi All,  
>  
> I use a template to read\_ascii data of the following format:  
>  
> D9 6-2-1998 17:00 37,59 0,59 36,5  
>  
> Which returns a structure of arrays.  
>  
> However, the date (6-2-1998) and time (17:00) I need to convert to  
> julian time, which takes  
>  
> JULDAY(Month, Day, Year, Hour, Minute, Second)  
>  
> I -could- for each entry in the list do a strsplit:  
>  
> daysarr = STRTRIM(strsplit(data.date[ThisLine], '-', /extract), 2)  
> timearr = STRTRIM(strsplit(data.time[ThisLine], ':', /extract), 2)

Dear Jelle,  
if you are heading to Julian time and your date&time timestamp is a  
single string tag of an array of structures, you may conveniently read  
and transform the whole vector using just using the native ReadS  
instruction and an appropriate FORMAT.

As the online help "synthetically" writes, ReadS can act on a vector.  
What is essential, is to provide it with a properly dimensioned  
double-precision destination array:

```
jtime = DblArr(N_Elements(data))  
ReadS, data.timestamp, jtime, FORMAT =  
'(C(CYI,X,CMOI,X,CDI,X,CHI,X,CMI,X,CSI))'
```

Regards, Andrea

Andrea Pitacco  
Dept. of Environmental Agronomy, University of Padova, Italy

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