Subject: Re: reading ascii in array merging with strsplit Posted by Brian Larsen on Tue, 06 Feb 2007 14:46:33 GMT View Forum Message <> Reply to Message

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) 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 sin solarsoft.

Brian

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" <ielle.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.
```

Subject: Re: reading ascii in array merging with strsplit Posted by leatherback on Tue, 06 Feb 2007 14:51:33 GMT View Forum Message <> Reply to Message

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.

Subject: Re: reading ascii in array merging with strsplit Posted by Brian Larsen on Tue, 06 Feb 2007 16:02:41 GMT View Forum Message <> Reply to Message

```
Yes it does (I had to check)
```

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.

Subject: Re: reading ascii in array merging with strsplit Posted by leatherback on Tue, 06 Feb 2007 16:34:17 GMT View Forum Message <> Reply to Message

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 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

```
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