
Subject: Re: Faster way to convert a string array of dates to julian dates

Posted by [henrygroe](#) on Tue, 25 Sep 2007 18:31:57 GMT

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On Sep 24, 8:10 am, henryg...@gmail.com wrote:

> On Sep 24, 7:49 am, "Ryan." <rchug...@gmail.com> wrote:

>

>

>

>> Hi All,

>

>> I want to convert an string array of dates to julian numbers in the
>> most efficient way in IDL. The only way I can come up with doing it
>> is using a FOR loop but I'm hoping that some of you could help me to
>> utilize IDL's super-duper array manipulation strengths. This is what
>> I have:

>

>> date format: YYYY-MM-DD HH:MM:SS.FFFF+TT

>> F->fractions of a second

>> T->time zone specification (e.g. -05 for Eastern Standard Time, etc.)

>

>> I don't care much about the time zone because all the dates are given
>> in UTC. It doesn't need to be included in the conversion.

>

>> Given a string array like this:> dates = ['2007-09-21 12:15:00.0000+00', '2007-09-22
23:25:15.9999+00', ...]

>

>> I can convert it using this code:

>

>> juls = DBLARR(N_ELEMENTS(dates))

>> FOR i=0, N_ELEMENTS(dates)-1 DO BEGIN

>> splitdate = STRSPLIT(dates[i], ' :+-' , /EXTRACT)

>> juls[i] = JULDAY(splitdate[1], splitdate[2], splitdate[0],

>> splitdate[3], splitdate[4], splitdate[5])

>> ENDFOR

>

>> This works, but would like to know a more efficient way of converting
>> it because I do this quite often.

>

>> Thanks,

>> Ryan.

>

> If the format of your input strings are never changing (which you're
> pretty much implicitly assuming with strsplit anyway), then:

> juls = julday(strmid(dates,0,4),strmid(dates,5,2),strmid(dates,

> 8,2),strmid(dates,11,2),strmid(dates,14,2),strmid(dates,17,7))

WHOOOPS! I didn't read the IDL help entry for julday closely enough.

For some reason they do Month, Day, Year, Hour, Minute, Second.
(Which makes little sense to me. I just assumed it was Year, Month,
Day....)
