Subject: Re: Faster way to convert a string array of dates to julian dates
Posted by henrygroe on Mon, 24 Sep 2007 15:10:30 GMT
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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 ))