Subject: Faster way to convert a string array of dates to julian dates Posted by rchughes on Mon, 24 Sep 2007 14:49:24 GMT

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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.