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Subject: Re: Time conversion

Posted by [Alex Schuster](#) on Tue, 20 Mar 2001 14:04:42 GMT

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JD Smith wrote:

> Alex Schuster wrote:

>> I found such a thing in the Astro library, st2date, input is the  
>> seconds-since-1970, output is year, month, day etc., and even day and  
>> month in ASCII notation if one likes. Great. But I did not find  
>> something yet to convert to seconds-since-1970. I could write it myself,  
>> but I guess this already had be done some dozen times. Some big routine  
>> with many, many keywords to convert between all those formats would be  
>> nice :)  
>  
> Hmm... I doubt you found that in the Astro library, since I wrote it and  
> posted it to the newsgroup back in 1998. I did use daycnv from the  
> astro package to convert julian to calendar dates.

Umm, right. I found it in the folder where my copy of the Astro library resides.

> The recent  
> IDL-bundled "caldat" will work just as well for that now.

Hooray! I hope it also can output various time strings... but I'm still using IDL 5.2 :(

> In any case,  
> it is oh so trivial to convert date to systime, the inverse:  
>  
> st=(julday(month,day,year,hr,min,sec)-2440587.5D)\*86400.0D

Okay, right. Once you know that these Julian Days are, and if you don't think about leap seconds. I already did the same, but made the mistake of using julday(1,1,1970) instead of julday(1,1,1970,0,0,0), which gives half a day offset. Okay, my fault, but if IDL already had such a conversion routine, I wouldn't have to think about it, and I wouldn't be able to make such mistakes.

Another example, why can't systime() just also output julian days, give it one more keyword and that's it.

Reimar's link was a good tip and made things easier:

<http://fermi.jhuapl.edu/s1r/idl/s1r/lib/time/time.html>

Many many routines converting various time and/or date strings to other formats (of course no direct conversion to secs-since-1970).

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PGP Key available

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