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Subject: Re: Posix Time Functions

Posted by [Ben Tupper](#) on Thu, 11 Nov 1999 08:00:00 GMT

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In article <942358684.298839@clam-55>, "Mark says...

>

> Ben Tupper <Ben\_member@newsguy.com> wrote in message

> news:80f3b3\$2tm1@edrn.newsguy.com...

>> ... I just happened to need something like this recently

>> when working with instrument data. Each measurement was stamped with

> Julian

>> seconds elapsed since October 15, 1582.

>

> How do people come up with these strange time origins!

>

Even stranger is that the metadata makes no mention of this date (It took some group noodling to figure out.)

Ben Tupper

PemaquidRiver@tidewater.net

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Subject: Re: Posix Time Functions

Posted by [davidf](#) on Thu, 11 Nov 1999 08:00:00 GMT

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Mark Hadfield (m.hadfield@niwa.cri.nz) writes:

> How do people come up with these strange time origins!

You obviously haven't been doing the required reading in our recent math tutorial. Come on, Mark, get with it! :-)

Cheers,

David

--

David Fanning, Ph.D.

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Coyote's Guide to IDL Programming: <http://www.dfanning.com/>

Toll-Free IDL Book Orders: 1-888-461-0155

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Subject: Re: Posix Time Functions

Posted by [Ben Tupper](#) on Thu, 11 Nov 1999 08:00:00 GMT

In article <382A51B0.44D1CB18@mindspring.com>, Eric says...

>  
> I posted this a while ago but didn't hear anything so I thought I'd  
> take one more shot. Does anyone know of / have any POSIX time functions  
> for IDL? That is a function which takes seconds since Jan, 1 1970 and  
> returns a nice date structure (year, month, day, etc..). Such beasts  
> are plentiful in Java, C etc so I figure one should be in IDL also.  
>  
>

Try something like this... I just happened to need something like this recently when working with instrument data. Each measurement was stamped with Julian seconds elapsed since October 15, 1582.

FUNCTION POSIX\_TIME, Seconds

```
;convert seconds since 1-1-1970 to a comparable Julian Days elapsed
ElapsedJulianDays = Seconds/(60.*60.*24.)
```

```
; get the Julian day number for the benchtime
BenchTimeJulianDay = JulDay(1,1,1970)
```

```
; add the number of days elapsed to the BenchTime less one
TargetDayJulian = ElapsedJulianDays + BenchTimeJulianDay - 1.
```

```
; convert back to familiar calendar date
CalDat, TargetDayJulian, Month, Day, Year
```

```
Return, {Month:Month, Day:Day, Year:Year}
```

End

Ben Tupper  
PemaquidRiver@tidewater.net

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Subject: Re: Posix Time Functions  
Posted by [Liam Gumley](#) on Thu, 11 Nov 1999 08:00:00 GMT  
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Eric Kihn wrote:

> I posted this a while ago but didn't hear anything so I thought I'd  
> take one more shot. Does anyone know of / have any POSIX time functions  
> for IDL? That is a function which takes seconds since Jan, 1 1970 and

> returns a nice date structure (year, month, day,etc..). Such beasts  
> are plentiful in Java, C etc so I figure one should be in IDL also.

How about this:

```
IDL> julian = systime(/julian)
IDL> caldat, julian, month, day, year, hour, minute, second
IDL> print, julian, month, day, year, hour, minute, second
      2451493.9      11      11      1999
8      35      19.999981
```

Note that my Unix host is set to US Central Standard Time.

Cheers,  
Liam.

--

Liam E. Gumley  
Space Science and Engineering Center, UW-Madison  
<http://cimss.ssec.wisc.edu/~gumley>

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Subject: Re: Posix Time Functions  
Posted by [Mark Hadfield](#) on Fri, 12 Nov 1999 08:00:00 GMT  
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Ben Tupper <Ben\_member@newsguy.com> wrote in message  
news:80f3b3\$2tm1@edrn.newsguy.com...  
> ... I just happened to need something like this recently  
> when working with instrument data. Each measurement was stamped with  
Julian  
> seconds elapsed since October 15, 1582.

How do people come up with these strange time origins!

---

Mark Hadfield  
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