
Subject: ANSI C standard time
Posted by [Lazzar](#) on Tue, 02 Mar 1999 08:00:00 GMT
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Is anyone aware of a means of converting ANSI C standard time (the number of seconds since 00:00:00 1/1/70) to a real time and date in IDL?

Thanks,

Brian

Subject: Re: ANSI C standard time
Posted by [J.D. Smith](#) on Mon, 08 Mar 1999 08:00:00 GMT
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Lazzar wrote:

>
> Is anyone aware of a means of converting ANSI C standard time (the
> number of seconds since 00:00:00 1/1/70) to a real time and date in IDL?
>
> Thanks,
>
> Brian

I coded something up for this which uses the daycnv nasa astro routine.
It's attached.

Good Luck,

JD

--
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;+
; NAME: st2date
;
; PURPOSE: Convert systime(1) type elapsed seconds to calendar dates.
;
; CALLING SEQUENCE: st2date, st, yr,mn,day,hr,min,sec,WDAY=wday,MON=mon,
; FORM=form
;
; INPUTS:
; st: The double number of seconds since Jan 1,1970 (as returned
; by systime(1)).

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;
; OPTIONAL OUTPUTS: (all outputs optional)
; yr: The year
; mn: The month
; day: The day of the month
; hr: The hour of the day
; min: The minute
; sec: The second, including fractional part.
; KEYWORDS:
; WDAY=wday: The day of the week, abbreviated as a string of length 3
; MON=mon: The month, abbreviated as a string of length 3
; FORM=form: The entire date formatted as in systime(0)
;
; MODIFICATION HISTORY:
; 9/19/98: Written, JDS
;
; PROCEDURES: DAYCNV (from the NASA Astro package.)
;
; NOTES: The date returned by systime(1) may or may not be in UT,
; depending on the operating system.
;-

```

```

pro st2date, st, yr, mn, day, hr, min, sec, WDAY=wday, MON=mon, FORM=form
  on_error, 2
  if size(st, /TYPE) ne 5 then begin
    message, 'Input systime must be of type double.'
    return
  endif
  days=st/86400.0D      ;convert seconds to days.
  jd=days+2440587.5D   ;add julian date of Jan. 1, 1970, 0.0h
  daycnv, jd, yr, mn, day, hr
  min=(hr-floor(hr))*60.0D
  sec=(min-floor(min))*60.0D
  hr=floor(hr)
  min=floor(min)

  ;; find the calendar day -- midnight-midnight, not noon-noon (add .5)
  wday=(['Sun', 'Mon', 'Tue', 'Wed', 'Thu', 'Fri', 'Sat'])[floor((jd +1.5) mod 7)]
  mon=(['Jan', 'Feb', 'Mar', 'Apr', 'May', 'Jun', 'Jul', 'Aug', 'Sep', 'Oct', 'Nov', '$
    'Dec'])[mn-1]

  if arg_present(form) then $
    form=string(FORMAT='(A3, " ", A3, " ", I2, " ", 2(I2.2, ":"), I2.2, " ", I4)', $
      wday, mon, day, hr, min, floor(sec), yr)
end

```

File Attachments

1) [st2date.pro](#), downloaded 111 times
