
Subject: Systime function works!

Posted by [andy](#) on Thu, 14 Apr 1994 14:19:45 GMT

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Hi!

Does the systime function in IDL *REALLY* return the number of seconds since January 1, 1970? I needed to know, so I thought I would compute the quantity myself using output from the Unix command shown below. I then compared my result to the output from IDL (taken at the same time and on the same computer).

```
> date '+DAY:%j TIME:%T DATE:%D'
DAY:104 TIME:09:28:42 DATE:04/14/94
```

24 complete years have passed since 1/1/70 (1970-1993), 18 of these had 365 days, and 6 had 366 days. How many seconds is that?

18 years * 365 days * 86400 sec/day = 567648000 seconds

6 years * 366 days * 86400 sec/day = 189734400 seconds

757382400 seconds STEP #1

Today is day 104 of year 1994, time is 9:28:42. 103 complete days have passed.

103 days * 86400 seconds/day = 8899200 seconds

9 hours * 3600 seconds/hr = 32400 seconds

28 minutes * 60 sec/min = 1680 seconds

42 seconds = 42 seconds

8933322 seconds STEP #2

Time since Jan. 1, 1970 = STEP#1 + STEP#2 = 766315722 seconds.

Does this all seem straightforward? I thought so, but IDL returns:

```
IDL> print, systime(1), format='(e15.8)'
7.66330122e+08
```

Why are these numbers different by 14400 seconds (exactly 4.0 hours)!?

The IDL function must use the time at Greenwich England, so systime works! I thought I'd pass that along to anyone else who is interested.

Andy

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