Subject: Re: TIME2JD
Posted by Jim Pendleton on Tue, 09 Feb 2016 05:31:09 GMT
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On Monday, February 8, 2016 at 10:19:56 PM UTC-7, Sapna Mishra wrote:
> Yeah Mike,
> I am actually interested in the fractional part. I am dealing with fits file of the same date having different UT, actually I want to extract UT of each file and calculate JD, which I was expecting to be different for each files(talking about fractional part). But all the routines in IDL (including julday.pro) are giving me JD upto one decimal place which is almost similar for each file.
> Can any one suggest me any routine which can provide me JD upto high precision (like upto 4-5 decimal place)
> Also I want to ask can anyone tell how to deal with float variables in unix shell scripts???

Are you confusing the printed output format with the actual precision of the data? The JULDAY() function returns a double-precision number. If you're simply looking at the output from PRINT, that's only going to display 8 digits. But if you use a better FORMAT statement with PRINT, or you use implied print, you'll see many more digits.

```
IDL> print, julday()
      2457427.4
IDL> help, julday()
<Expression>    DOUBLE    =       2457427.4
IDL> julday()
      2457427.4363425933
```

And a little later in elapsed time...

```
IDL> print, julday(), format = '(d)'
 2457427.4374884265000000
```

Jim P.