Subject: Leap Seconds and JULDAY()
Posted by MarioIncandenza on Wed, 08 Jul 2015 22:23:33 GMT

Hello IDL wizards!

I have data timestamped with "seconds-since-epoch," in this case the epoch is 1/1/1993 00:00.

My results had been 8 seconds off, which I never noticed, but then last week, I started to have problems, and found my results were 9 seconds off.

My method is this:

EPOCH=JULDAY(1,1,1993,0,0,0)
SECONDS_IN_A_DAY = DOUBLE(24l*60*60)
TIMESTAMP_UTC = EPOCH + (EPOCH_SECONDS/SECONDS_IN_A_DAY)

This gives the wrong answer, because JULDAY() doesn't have epoch seconds. This makes me sad, though there may be some detailed reason why it shouldn't.

--Edward H.