Subject: two issues with julian dates
Posted by Josh on Wed, 11 Jul 2007 21:51:17 GMT

I've got date and time strings that I've parsed into their respective
hour/minute/etc and month/day/etc form and I'm using the julday()
function to turn them into julian dates. I've come across two
problems that hopefully somebody can help me with.

First off, according to NASA (http://ssd.jpl.nasa.gov/tc.cgi#top), the
returned value of julday() is incorrect. When I use 11/18/2003 at
16:14:43, I get 2452955.2 from IDL and 2452962.1768866 from NASA.
Thoughts?

Second, the fact that julday() only returns a value with ONE digit
after the decimal is not cool. If it returns a double floating point
value, shouldn't I be able to get 14 sig figs? The time scales in my
data set are such that I need that resolution. Thoughts?

Thanks for any advice,
-Josh