Subject: Re: hor2eq mystery - disagreeing output from same input?
Posted by Jean H. on Wed, 17 Jun 2009 14:10:31 GMT
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Hi,

just a though...

what do you get if you declare a0 and d0 as double before calling
hor2eq? ... in he first case, you are using a float, while in the second
one, you are using a double (a and d)

Jean

MichaelT wrote:
> I have run into a problem using the hor2eq. It output different
> results when using single values from an array as input (correct
> output) compared to using the same array as a whole (wrong output).
> The example below shows what I mean:
>
>   alt = [0, 5, 10, 15]
>   az = Replicate(295, 4)
>   a = DblArr(4)
>   d = DblArr(4)
>
>   lat = 52.5
>   lon = 10.0
>
>   jd = 2454999.38928241d
>
>   Print, alt, az
>
>   For i = 0, N_Elements(alt) - 1 Do Begin
>   hor2eq, alt[i], az[i], jd, a0, d0, LAT= lat, LON=lon
>   a[i] = a0
>   d[i] = d0
>   EndFor
>   Print, a, d
>
>   hor2eq, alt, az, jd, a, d, LAT= lat, LON=lon
>   Print, a, d
> end
>
> OutPut:
>
>   124.64645   127.89450   131.10259   134.47664
>   14.470190   18.890924   22.987733   26.978259
>

```
>      124.64645     128.02987     131.24057     134.61690
>      14.470190     18.858534     22.953070     26.941322
>
```
> Clearly, the ra and dec values are *not* the same, except for the
> first value. The loop result is listed first and is correct. The other
> is not.
>
> The same applies to using eq2hor.
>
> FYI: And I have just downloaded the current versions of both programs.
>
> How can this be? Anybody run into this problem before? Am I doing
> something wrong?
>
> Michael