
Subject: hor2eq mystery - disagreeing output from same input?

Posted by [MichaelT](#) on Wed, 17 Jun 2009 13:45:52 GMT

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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
