Subject: Precision Problem
Posted by DMac on Mon, 24 Jul 2006 16:51:40 GMT
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Hello All,
Using IDL version 6.2 on a Windows XP machine I am reading in a set of coordinates from a binary file (it is LiDAR data stored in LAS Version 1.0 format) stored in UTM NAD83 Zone 11 and these points are stored as 4 byte long integers in the binary file . The coordinates are stored in the binary file with an offset such that they need to be divided by 100 to obtain the actual coordinates. The binary file is read into a heap variable (Data below). The X and Y coordinates are than written from the heap variable into a double precision array as follows:

```
x = dblarr(Num_pts)
x = TEMPORARY(data.x*1.000e-002)

y = dblarr(Num_pts)
y = TEMPORARY(data.y*1.000e-002)
```

Eventually these points are output to an ESRI shapefile. My problem is that the y coordinates are rounded to the nearest integer value in the shapefile. The X coordinates are fine. The X coordinates are 6 digits to the left of the decimal place while the Y coordinates are 7 digits to the left of the decimal place

Can anyone shed any light on what is going on here or what I might be doing wrong?

Thanks.

Derek M.