
Subject: Re: Multiplication changes array dimensions since a scalar and a 1x1 array are not the same

Posted by [swingnut](#) on Sun, 01 Apr 2007 04:13:10 GMT

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Haha. So, all those SIZE statements sunk in. Here's the workaround I came up with.

```
;SIZE of testVirtHeight =  
;      1      1      4      1
```

```
;SIZE of referenceHeight =  
;      0      4      1
```

```
deltaVirtHeight = testVirtHeight - referenceHeight
```

signOfDifference -> 1x1 array instead of a scalar.

```
adjustmentIncrement = adjustmentIncrement * signOfDifference
```

adjustmentIncrement -> 1x3 array before operation, 1x1 array afterwards

SOLUTION: Extract scalar from array element -> testVirtHeight = testVirtHeight[0,0]

Clearly my calculation of deltaVirtHeight assumed that you could treat a 1x1 scalar, while IDL is treating them as different types of variables during array multiplications. Now, why a scalar and a 1x1 array are different escapes me, but at least I've found this workaround and can continue on. And hopefully knowing about this might help someone else.
