
Subject: Strange behavior of /cumulative keyword in total()

Posted by [Chris\[5\]](#) on Tue, 04 Nov 2008 10:10:59 GMT

[View Forum Message](#) <> [Reply to Message](#)

Can anybody explain this?

```
arr = fltarr( 500000) + .1
```

```
cumul = total(array, /cumulative)
```

```
print, (cumul - shift(cumul, 1)) [1 : 10]
```

```
print, (cumul - shift(cumul,1)) [499990:499999]
```

```
>  0.100000  0.100000  0.100000  0.100000  0.100000  0.100000
    0.100000  0.100000  0.100000  0.100000
```

```
>  0.101562  0.101562  0.101562  0.101562  0.101562  0.101562
    0.101562  0.101562  0.101562  0.101562
```

Plotting `cumul - shift(cumul,1)` is even weirder. I can understand the net error of `cumul` growing over time, as floating point precision errors accumulate. However, shouldn't the error between any two entries in a cumulative sum not accumulate over the array?

chris
