Subject: Re: Question about the TOTAL function.
Posted by rexford.newbould on Fri, 15 Apr 2005 16:05:47 GMT
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(Your question is actually pretty simple, so even I can field it.)

```
I think you're asking if you can sum along a single dimension in a matrix, e.g.:

for i = 0, n-1 do $
```

```
for i = 0, n-1 do $
SUMX = TOTAL(matrix[i,*])
```

If so, check the help for total. You can pass an optional argument which is the dimension along which to sum.

```
SUMX = TOTAL(matrix,0)
SUMY = TOTAL(matrix,1)
```

Cheers,

Rex

>

Nuno Oliveira wrote:

- > I have a question that somebody that works with IDL many had faced before.
- > Imagine I have a matrix(X,Y), no matter the type of variable, and if want na

```
> array with the projection along de x axis, something like
```

```
> The function returns the total of the matrix for the every position
of SUMX.
> Is there a way that I can do it quicker?
>
 Thanks in advance,
>
>
 Greeting,
>
> Nuno.
```

Subject: Re: Question about the TOTAL function. Posted by James Kuyper on Fri, 15 Apr 2005 16:08:15 GMT View Forum Message <> Reply to Message

```
Nuno Oliveira wrote:
```

```
> I have a question that somebody that works with IDL many had faced before.
> Imagine I have a matrix(X,Y), no matter the type of variable, and if want na
  array with the projection along de x axis, something like
>
         for i = 0, n-1 do $
>
  SUMX = TOTAL(i, *)
; I presume you mean
sumx[i] = TOTAL(matrix[i,*])
> How can I do it without the FOR cicle.
sumx = TOTAL(matrix, 2)
; Similarly, if you want to calculate
sumy[j] = TOTAL(matrix[*,j])
; you can just use:
sumy = TOTAL(matrix,1)
```

Subject: Re: Question about the TOTAL function.

Have a look at the "dimension" parameter of the TOTAL function. You need to do

```
SUMX = TOTAL(matrix, 2)
```

or maybe 1 instead of 2 -- I didn't really understand which dimension you want to sum over.

Benjamin

```
Nuno Oliveira wrote:
> I have a question that somebody that works with IDL many had faced before.
> Imagine I have a matrix(X,Y), no matter the type of variable, and if want na
> array with the projection along de x axis, something like
>
>
>
          for i = 0, n-1 do $
>
  SUMX = TOTAL(i, *)
>
>
  How can I do it without the FOR cicle.
>
>
  If I try
>
>
>
>
          SUMX[ 0:N-1 ] = TOTAL( 0:N-1, * )
>
>
>
>
  The function returns the total of the matrix for the every position of SUMX.
  Is there a way that I can do it quicker?
>
>
>
  Thanks in advance,
>
>
> Greeting,
```