Subject: Re: data comparison
Posted by Benjamin Hornberger on Wed, 01 Jun 2005 21:44:47 GMT
View Forum Message <> Reply to Message

angela wrote:

> I am trying to extract specific values from an array, datax (string
> array(1,300))

```
> array[1,300]).
> When I type the command
> print,datax GE 100
>
 it works fine and it gives me the correct answer. But when I type
>
 print,datax GE x
>
> where x has been defined in the program earlier as 100 and is an
> integer array[1]
> the result is -1 which is wrong since there are values in this array
> that are greater or equal than 100.
 Does anyone have an idea what is going on?
> Thank you,
> Angela
Why is your data array of string type? Try to convert one to the type of
the other before comparison:
print, datax GE string(x)
or
print, fix(datax) GE x
Good luck,
Benjamin
```

Subject: Re: data comparison
Posted by angela on Thu, 02 Jun 2005 02:25:46 GMT
View Forum Message <> Reply to Message

Thank you! I tried both and they still give me the same wrong answer -1.

Any other suggestions?

Thank you for the help, Angela

```
Benjamin Hornberger wrote:
> angela wrote:
>> I am trying to extract specific values from an array, datax (string
>> array[1,300]).
>> When I type the command
>>
>> print,datax GE 100
>>
>> it works fine and it gives me the correct answer. But when I type
>>
>> print,datax GE x
>>
>> where x has been defined in the program earlier as 100 and is an
>> integer array[1]
>> the result is -1 which is wrong since there are values in this array
>> that are greater or equal than 100.
>> Does anyone have an idea what is going on?
>>
>> Thank you,
>> Angela
>>
> Why is your data array of string type? Try to convert one to the type of
> the other before comparison:
>
 print, datax GE string(x)
> or
>
  print, fix(datax) GE x
>
> Good luck,
> Benjamin
```

Subject: Re: data comparison
Posted by Mark Hadfield on Thu, 02 Jun 2005 03:08:24 GMT
View Forum Message <> Reply to Message

angela wrote:

>

> I am trying to extract specific values from an array, datax (string

> array[1,300]).

> When I type the command

> print,datax GE 100

> it works fine and it gives me the correct answer. But when I type

>

> print,datax GE x

>

- > where x has been defined in the program earlier as 100 and is an
- > integer array[1]
- > the result is -1 which is wrong since there are values in this array
- > that are greater or equal than 100.
- > Does anyone have an idea what is going on?

You have been bitten by a common pitfall. The clue is that x is a single-element array, not a scalar. The result of an arithmetic or comparison operation between two arrays of different length is an array with the shorter length, eg

```
IDL> help, fltarr(10)+fltarr(5)
<Expression> FLOAT = Array[5]
```

So when you do

IDL> print,datax GE x

you are comparing the first elements of datax with the first element of x and discarding the rest. Try

IDL> print,datax GE x[0]

or

IDL> x = x[0]IDL> print,datax GE x

-

Mark Hadfield "Ka puwaha te tai nei, Hoea tatou" m.hadfield@niwa.co.nz
National Institute for Water and Atmospheric Research (NIWA)

Subject: Re: data comparison

Posted by angela on Thu, 02 Jun 2005 03:33:31 GMT

View Forum Message <> Reply to Message

It works!!!

Thank you so much for your help!

Angela