Subject: Crazy use of MAX function.
Posted by Grady Daub on Sun, 27 Jun 1999 07:00:00 GMT
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I have data to be plotted. I want to create YRANGE based on max/min of the data. The problem is that the maximum is always lower than "9999", which is used to indicate "bad" data.

Without having to replace all 9999's with, say, zero , using MAX to find the true maximum and then putting the 9999's back where they were...

How do I find a maximum/minumum value less/greater than a certain value?

MAX(data lt 9999) doesn't work. :-(

Ugh, I just thought of a way:

MAX(data(WHERE(data LT 9999)))

Is this the only way, or, does IDL already have something that does this task?

Subject: Re: Crazy use of MAX function.
Posted by Struan Gray on Mon, 28 Jun 1999 07:00:00 GMT
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Grady Daub, gadZOOKS8371@garnet.acns.fsuMMER.edu writes:

> How do I find a maximum/minumum value less/greater than a certain value?

device, decomposed=0

Oh no, that's the other question.
The answer to this one is:

dummy = HISTOGRAM(data, max=9998, omax=omax, omin=omin, binsize=9999)

The max keyword stops HISTOGRAM from considering your 9999 values, the large binsize avoids wasting too much time actually constructing a histogram. If you know your minimum value you can fine-tune binsize to ensure that there is only one bin. The numbers you want will be returned in omax and omin.

Struan

Subject: Re: Crazy use of MAX function.
Posted by R.Bauer on Mon, 28 Jun 1999 07:00:00 GMT
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Grady Daub wrote:

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> the data. The problem is that the maximum is always lower than "9999",
> which is used to indicate "bad" data.
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> Without having to replace all 9999's with, say, zero , using MAX to find
> the true maximum and then putting the 9999's back where they were...
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> How do I find a maximum/minumum value less/greater than a certain value?
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> MAX(data lt 9999) doesn't work. :-(
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> Ugh, I just thought of a way:
>
> MAX(data(WHERE(data LT 9999)))
>
> Is this the only way, or, does IDL already have something that does this
> task?

How about this:

```
PRO use_of_valid_example

  data_x=FINDGEN(100)
  data_x[[1,10,20]]=9999
  data_y=FINDGEN(100)
  data_y[[3,13,21]]=9999
  valid_x=WHERE(data_x NE 9999)
  valid_y=WHERE(data_y NE 9999)


  valid=MAKE_ARRAY(N_ELEMENTS(data_x),/LONG)


  IF valid_x[0] NE -1 THEN valid[valid_x]=1

  IF valid_y[0] NE -1 THEN valid[valid_y]=valid[valid_y]+1

  valid=TEMPORARY(WHERE(valid EQ 2,count))

  plot,data_x[valid],data_y[valid]
END
```

regards,