
Subject: Re: adjusting brightness of an image
Posted by [fireman](#) on Mon, 19 Oct 1998 07:00:00 GMT
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Anil Kochhar (anilk@mtolympus.ari.net) wrote:

: tvscl<Number1>Number2

: To my understanding this will make all pixels with values LESS
: than Number1, equal to Number1 and make all pixels w/ values GREATER than
: Number2
: equal to Number2, while adjusting all other pixels with values in between
: Number1 and Number 2 accordingly.

Almost. You are performing three operations: limiting the array,
scaling the array and displaying it. Let's look at limiting the array
by itself.

First, define an array:

```
IDL> a=lindgen(500,500) & print,min(a),max(a)
      0      249999
```

Now try to limit the arrays with the < and > operators.

```
IDL> b=10000L<a>200000L & print,min(b),max(b)
      200000      200000
```

Oops! Not what you were expecting. Try it the other way:

```
IDL> b=10000L>a<200000L & print,min(b),max(b)
      10000      200000
```

Ahh, that's better.

The ">" operator always takes the greater of two values - order is
unimportant. But statements of equal precedence are parsed left to
right.

The first statement should be viewed at (10000L < A) > 200000L. It is
first evaluated as 10000L < A giving you values of A of 10000
_or_less_. The result is compared with 200000, which was greater than
every value of the new A.

The TVSCL should work right when called as:

```
tvsc, Number1 > image < Number2
```

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