

## Chapter II-16 — Image Plots

```
// Switch to floating point, image turns black  
Redimension/S matrgb
```

```
// Scale floating point to 0..65535 range  
matrgb *= 256
```

Because the appearance of a direct color image is completely determined by the image data, the Modify Image Appearance dialog has no effect on direct color images, and the dialog appears blank.

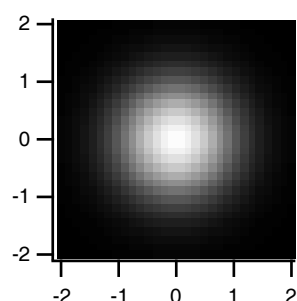
## Creating Color Legends

You can create a color legend using a color scale annotation. For background information, see **Legends** on page III-42 and **Color Scales** on page III-47 sections.

We will demonstrate with a simple image plot:

```
Make/O/N=(30,30) expmat  
SetScale/I x,-2,2,"" expmat; SetScale/I y,-2,2,"" expmat  
expmat= exp(-(x^2+y^2)) // data ranges from 0 to 1  
Display;AppendImage expmat // by default, left and bottom axes  
ModifyGraph width={Plan,1,bottom,left},mirror=0
```

This creates the following image, using the autoscaled Grays color table:



Choose Graph→Add Annotation to display the Add Annotation dialog.

Choose “ColorScale” from the Annotation pop-up menu.

Switch to the Frame tab and set the Color Bar Frame Thickness to 0 and the Annotation Frame to None.

Switch to the Position tab, check the Exterior checkbox, and set the Anchor to Right Center.

Click Do It. Igor executes:

```
ColorScale/C/N=text0/F=0/A=RC/E image=expmat,frame=0.00
```

This generates the following image plot:

