/N Sets the background level to 64 (= NaN).

/O Overwrites the source wave with the output.

/R=*roiSpec* Specifies a region of interest (ROI). The ROI is defined by a wave of type unsigned byte (/b/u). The ROI wave must have the same number of rows and columns as the image wave. The ROI itself is defined by the entries/pixels whose values are 0. Pixels outside the ROI can take any nonzero value. The ROI does not have to be contiguous and can take any arbitrary shape. See **ImageGenerateROIMask** for more information on creating ROI waves.

In general, the *roiSpec* has the form {*roiWaveName*, *roiFlag*}, where *roiFlag* can take the following values:

roiFlag=0: Set pixels outside the ROI to 0.

roiFlag=1: Set pixels outside the ROI as in original image.

roiFlag=2: Set pixels outside the ROI to NaN (=64).

By default *roiFlag* is set to 1 and it is then possible to use the /R flag using the abbreviated form /R=*roiWave*.

/S= *seWave* Specifies your own structure element.

seWave must be of type unsigned byte with pixels that belong to the structure element set to 1 and background pixels set to 0.

There are no limitations on the size of the structure element and you can use the /X and /Y flags to specify the origin of your structure element.

/W= *whiteVal* Sets the white value in the binary image if it is different than 255. The black level is assumed to be zero.

/X= *xOrigin* Specifies the X-origin of a user-defined structure element starting at 0. If you do not use this flag Igor sets the origin to the center of the specified structure element.

/Y= *yOrigin* Specifies the Y-origin of a user defined structure element starting at 0. If you do not use this flag Igor sets the origin to the center of the specified structure element.

/Z= *zOrigin* Specifies the Z-origin of the element for 3D structure elements. If you do not use this flag Igor sets the origin to the center of the specified structure element.

Examples

If you would like to apply a morphological operation to a wave whose data type is not an unsigned byte and you wish to retain the wave's dynamic range, you can use the following approach:

```
Function ScaledErosion(inWave)
   Wave inWave

   WaveStats/Q inWave
   Variable nor=255/(V_max-V_min)
   MatrixOp/O tmp=nor*(inWave-V_min)
   Redimension/B/U tmp
   ImageMorphology/E=5 Erosion tmp
   Wave M_ImageMorph
   MatrixOp/O inWave=(M_ImageMorph/nor)+V_min
   KillWaves/Z tmp,M_ImageMorph
End
```

See Also

The **ImageGenerateROIMask** operation for creating ROIs. For details and usage examples see **Morphological Operations** on page III-368 and **Particle Analysis** on page III-375.

ImageNameList

ImageNameList(*graphNameStr*, *separatorStr*)

The ImageNameList function returns a string containing a list of image names in the graph window or subwindow identified by *graphNameStr*.