

# Thresholding



**ImageJ  
Skill**

## What is thresholding?

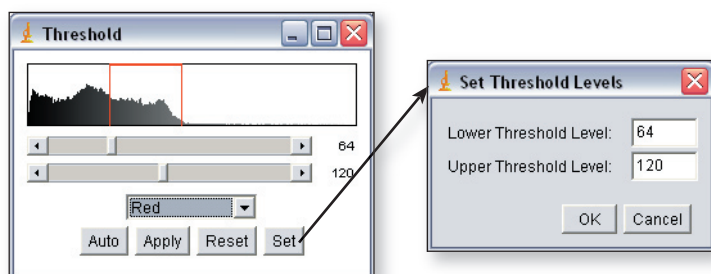
Thresholding allows you to highlight the pixels throughout an image whose values are in a specific range. For example, if pixel values represent elevation, you can select all of the pixels with values between 10 and 20 meters to represent a specific flooding region. Once thresholded, you can perform many functions on the highlighted pixels, such as measuring the area they cover.

## Turning Thresholding on and off

- To turn Thresholding on, choose **Image > Adjust > Threshold...**
- To turn Thresholding off, click the **Reset** button in the **Threshold** window.

## Adjusting the range of thresholded values

Drag the **Lower** and **Upper Level** slider controls in the **Threshold** window or click the **Set** button and enter the **Upper** and **Lower Threshold** levels manually.



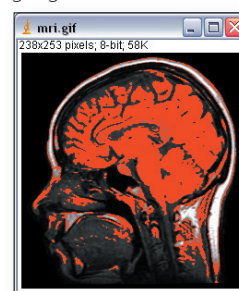
## Measuring only the thresholded pixels

- Choose **Analyze > Set Measurements...** and check the **Limit to Threshold** checkbox.
- Make measurements as described in the **Measuring** Skill Sheet.
- To measure all of the pixels in the image, either turn off Thresholding mode or choose **Analyze > Set Measurements...** and *uncheck* the **Limit to Threshold** checkbox.

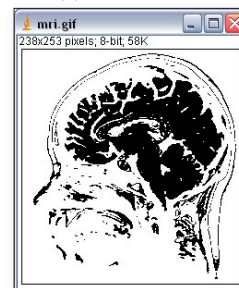
## Threshold display options

Thresholding offers three different display options:

- **Red** - pixels with values in the specified range of values are highlighted red.



- **Black & White** - pixels within the specified range appear black, and pixels outside the limits appear white.



- **Over/Under** - pixels with values below the specified range are highlighted blue, and pixels above the range are highlighted green. Pixels within the specified range are not highlighted.

