

Chromatic Aberrations

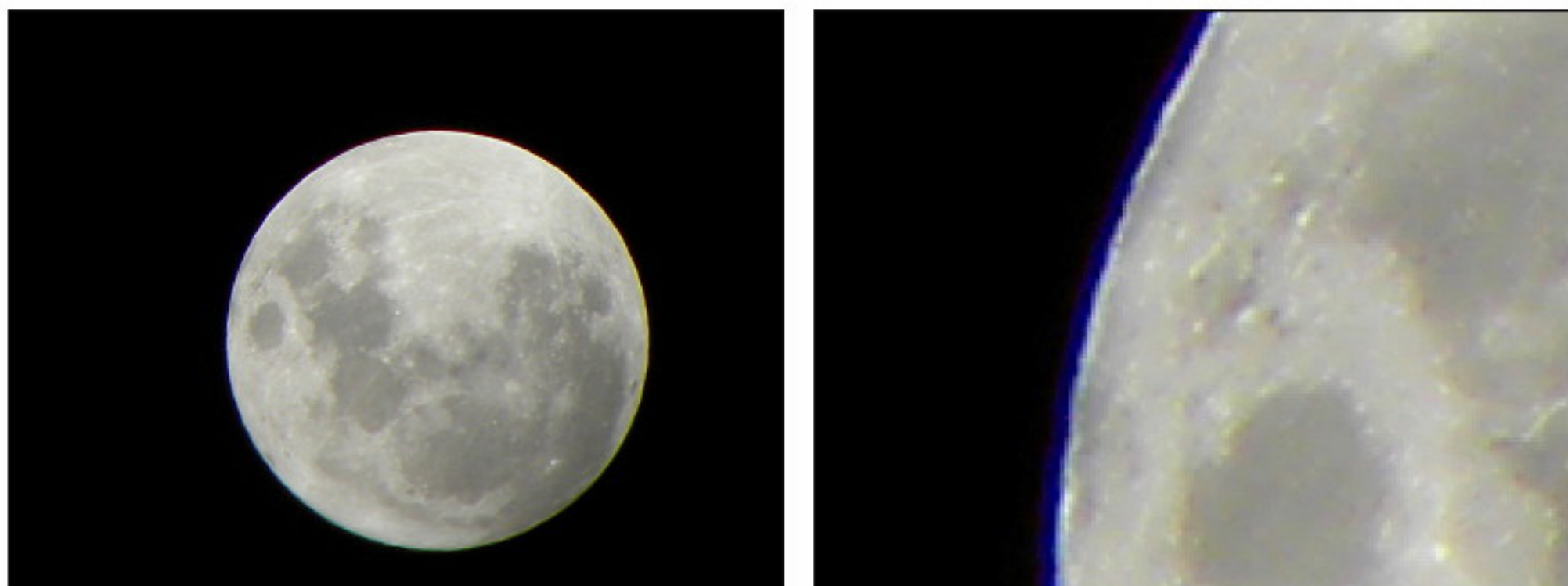
In this lesson, we'll be taking a look at
Chromatic Aberrations.

Estimated Completion Time: 5 minutes.

Chromatic Aberrations

Chromatic Aberration is a term that describes color fringing along the edge of subjects, most noticeable where a light subject appears on a dark background, or vice versa.

There are very technical reasons why it can happen - relating to light wavelengths, etc. but the important thing is that it can happen.

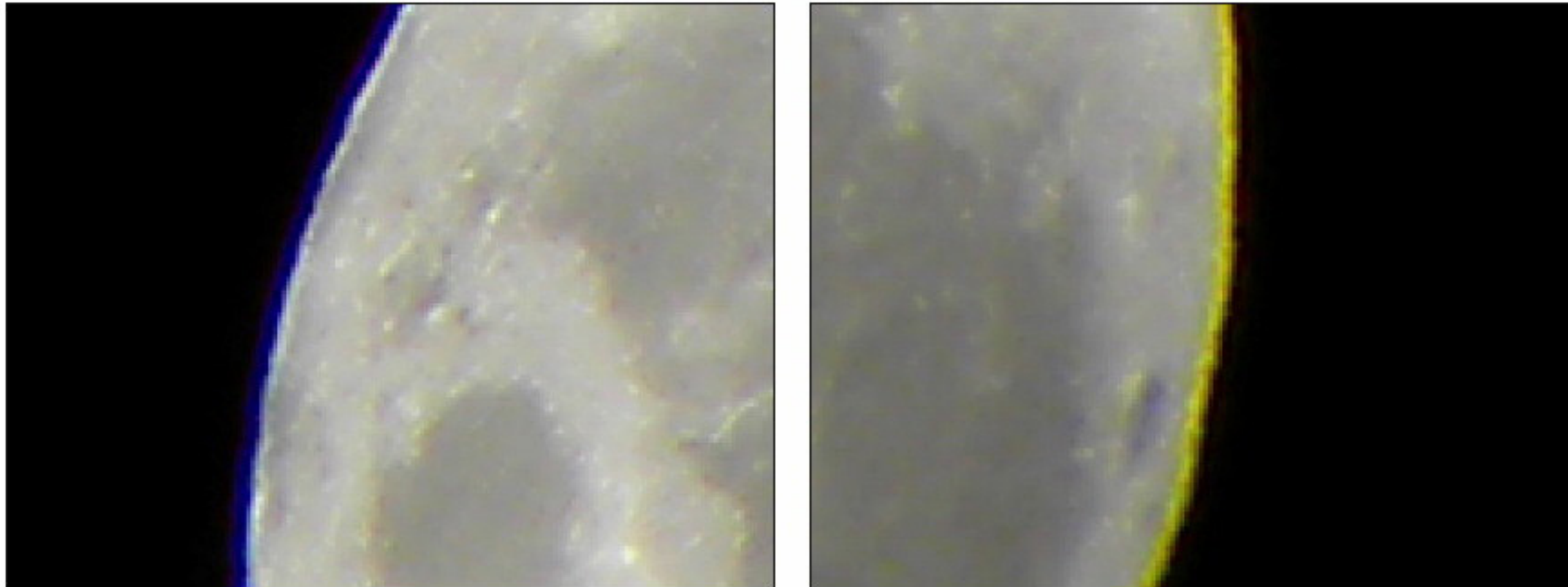


The image of the moon here has chromatic aberrations around the edge - very noticeable (when we zoom in, anyway), because of the high focal length (440mm), and the light moon on the dark sky.

Chromatic Aberrations

In this image, as you can see below on the zoomed in areas, on the left, we have some purple fringing, and on the right, we have some yellow fringing.

Many refer to chromatic aberration as *purple fringing*, as a purple fringe is the most common way this effect is noticed.



Here, chromatic aberrations are quite noticeable on both sides of the moon.

Chromatic Aberrations



Note the purple fringing down the left hand side of this pole.

Chromatic Aberrations

Some lenses, known as **achromatic** lenses, have special features that minimize any chromatic aberration. Some cameras also have some software tricks that will reduce or remove this anomaly as well.

Overexposed areas can be particularly prone to chromatic aberration. Sometimes, reducing the aperture can reduce or remove this effect. This effect has been around for as long as photography has. But the effect can be more apparent on digital photography.



Here, a Canon DSLR with a 500mm lens was used to capture this photograph. The photograph on the previous page was taken with a large zoom, but compact camera. The chromatic aberration using the Canon lens is almost non-existent.

Chromatic Aberrations

Many software techniques that allow you to remove chromatic aberrations, or purple fringing.

Below, you can see the result when we used **Corel Photo Paint Pro**, and use the **Chromatic Aberration Removal** tool.



We've managed to remove, or at least reduce dramatically, both the purple and yellow fringing on this image.

Chromatic Aberrations

You've now completed this lesson.

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