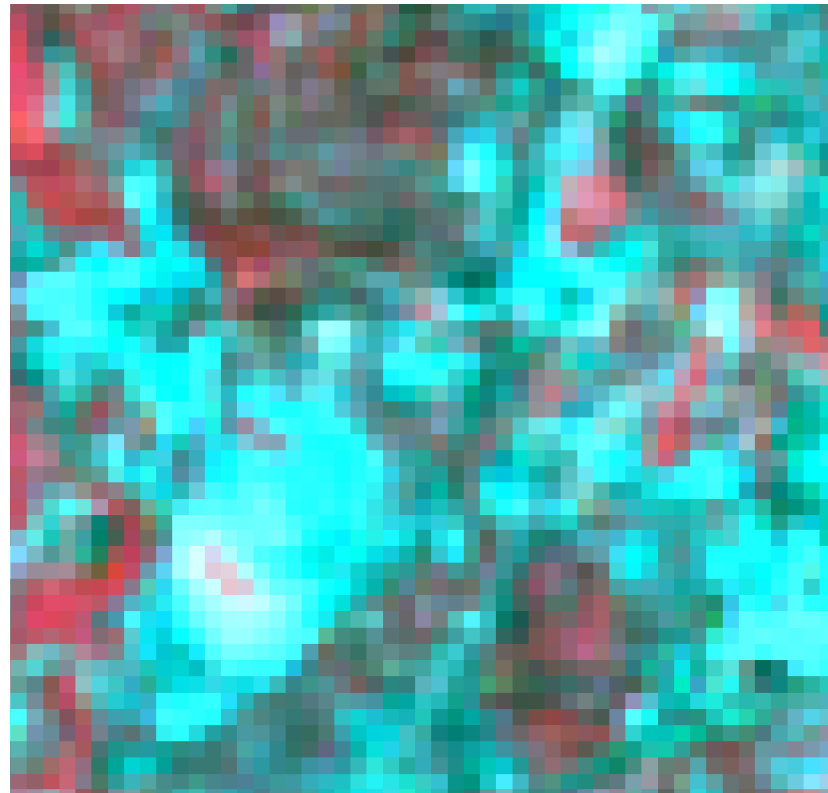


# Image Comparison of UVA in Charlottesville

Below is a comparison of three image sources over the same area. Two of the images were collected by satellites and one by a camera in an aircraft. The size of the smallest area on the ground that is measured by a single picture element (pixel) in a digital image is referred to as the spatial resolution of the image/sensor. Since pixels are usually square, the length of one side of the square is used when referencing an image's spatial resolution. In the examples below, the spatial resolution changes from 30 to 10 to 1 meter from left to right, which results in an increase in feature details.



Landsat satellite image, which has a spatial resolution of 30 meters, from May 8, 2005 shown with band combination (432). Notice with this band combination, urban areas are a light blue or cyan color, and vegetation are shades of red (areas with more vegetation are brighter red).



A black and white (also referred to as panchromatic) SPOT satellite image, which has a spatial resolution of 10 meters. The image was acquired on Oct 23, 2000.



An aerial photograph acquired in March of 2002 as part of the Virginia Base Mapping Project (VBMP). This image is part of a statewide image archive that has a spatial resolution of 1 meter.

Notice the UVA stadium is visible in all three images. The turf in the stadium shows up as pink in the Landsat image, dark in the SPOT image, and green in the VBMP image. These differences in color are due to differences in the bands either available or displayed for each image.