**Language:** Processing(Java for art)

**Controls:** GUI for data\_visualization folder program

**About this project:**

There are two versions of this project, one is a tool that you can use to decompose a jpg or png into the RGB channels of the image and the other is an animation that automatically goes through them while rotating the image. This project was inspired by a talk I had with a professor about how feature extraction and filters work in machine learning programs. Although RGB channels are a very simple dimensional reduction of an image, the idea of filtering out different parts of an image to recognize patterns for identification of certain things remains the same. I found the blue channel of the windows XP background to be a good example of how a program might identify what is in the sky and what's in the landscape.