Visualizing 3D data

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1 Visualizing GPM radar data

Your task is to visualize the 3D precipitation data from GPM dual-frequency precipitation radar (DPR). This satellite mission measures precipitations (rain, snow, graupel, hail) in three-dimensions.

The data has been pre-processed for you and is contained in the following files:

precipitation.npy A 3D array containing the precipitation data. The first two axees of the array correspond to the Earth surface, while the third corresponds to altitude.

elevation.npy A 2D array containing the surface elevation corresponding to the first two-dimensions in the precipitation data.

texture.npy A 3D array containing the surface image in RGB format. As is common in numpy the third axis corresponds to the color channels.

Following the instructions in the lecture slides, you should now be able to recreate the figure shown on the second-to-last slide.