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Flow Visualization
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Group Delta Project 2

This image was taken in the ITL lab using an aquarium, water, and dry ice. Our group also experimented with dropping food coloring into water. From the images taken, I feel that the dry ice was the most dynamic.

Lit from behind, we illuminated a translucent piece of white plexiglass using a clamp light and 2 other portable lights with Tungsten bulbs. This was the backdrop for the 10 gallon tank which was filled halfway. The effect was created dropping 3, 1.5 inch pieces of dry ice into the tank. Once in the water, the ice began to quickly release carbon dioxide to the surface of the water, causing an undulation. The camera was placed about 4 inches from the glass of the aquarium and shooting upward toward the surface of the water.

The settings used in this image are 1/160 at f/5.6 using a Canon Rebel Xti. The film speed was set at 1600 with the lens set at 135mm on a 28–135 image stabilized lens. The field of view is approximately 5 inches. The 10 megapixel image was adjusted in photoshop by increasing the contrast, and removing distracting marks from the image background.

From the series of experiments we tried, I was most impressed with the simple mixture of dry ice and water. The resulting image was dramatic in tonal variation and shape, which was highlighted by its monochromatic look. In contrast to the food coloring, I am find the dynamic shapes created and simple color scheme give a more dramatic view to a simple interaction of gas and liquid.