

Discussion of Results

Throughout the five trials of our experiment the data we recorded stayed relatively normal. The first three runs especially had an error different of no more than 0.4%. And even in the last two runs the error difference was only 1.24% and the largest difference between any of the values we recorded. I believe that the data we received from this lab is accurate due to the patience and efficiency of our group. In each trial we let the initial pressure settle to a stable value before opening the needle valve to equalize the vessels. And each time we opened the needle valve we did so very slowly, in an attempt to make sure the pressure changes were isothermal. Also the lower temperature on the day of our experiment compared to the week before made the isothermal pressure drop much faster than it would have in the previous week. Overall I believe our data is reliable and accurate.