FINAL PROJECT

ME EN 275

INTRODUCTION

SpaceX is a private American aerospace company that designs and manufactures rockets and spacecraft. They are well-known for designing, building, and recovering the first fully-reusable first stage of an orbital rocket, known as the *Falcon 9*.

Using launch and payload mass data found here, I want to know if SpaceX increased its average payload mass of the Falcon 9 (Block 5) in 2020 compared to 2019. More formally, my null hypothesis is that there was no change in the average payload mass:

$$H_0: \bar{x}_{2020} - \bar{x}_{2019} = 0$$

where $\bar{x}_{2020}$ and $\bar{x}_{2019}$ are the average payload mass for 2020 and 2019, respectively. The alternate hypothesis is:

$$H_a: \bar{x}_{2020} - \bar{x}_{2019} > 0$$

METHODS

RESULTS

DISCUSSION