The first plot shows the time it takes for the EDL system to descend to the surface of Mars. As the parachute size increases, the time it takes to reach the surface also increases. This makes sense because the larger size makes the system slower. The time increases significantly at around 16 meter diameter. The second plot shows the landing speeds as the parachute size increases. The speed decreases as the diameter increases. At about 16.5 meter the velocity is significantly lower. The final plot shows if the results of the simulation and if the rover successfully lands on the surface or not. 1 indicates success while 0 indicates a failure. Our recommendation is to select a parachute that minimizes time but guarantees a success in the mission. This value is closest to 16.6 meters in diameter.