What do you think the results of your experiment will be?

The aim of the experiment is to compare the parameters aboard of the ISS when astronauts are or are not present in the module. We expect that these parameters change when the astronauts are not in the module for energy saving issue. We will plot the acquired data to analyze the trend of the parameters and observe possible changes due to ISS energy saving policy.

Moreover the location data combined with the UTC time will allow us to draw the path of the ISS and compare our data with those of the official tracker.

As for the memory occupation, we estimate that temperature, humidity, pressure and real time position of the ISS saved every second for 3 hours will approximately occupy 10 Mbyte space disk. Finally. thanks to 3D printing, we were able to assemble the parts of the case of the Raspberry and built it in order to test the influence of the case on the performance of the sensors (see website). All data collected, will help us to learn and understand how do the astronauts live on the ISS, and to compare the space data with those on the earth.