WEEKLY REPORT DE BENEDETTI MATTEO

WEEK 18: 13/01/2020 – 17/01/2020

SLAM INTEGRATION:

I started integrating the SpartanVO in the script that runs the GNC Architecture on a dataset recorded during a test campaign in Tenerife, Canary Islands, in July 2017.

At first, I managed to make it work using the VO on the bb2 camera, but the images are not very clear, therefore the VO was often unable to find more than a few temporal matches, resulting in very low performances.

Then I moved to use the bb3 camera, which shows much better images.
The VO has now a good number of matches, both temporal and spatial, but the estimate is still not working well.

GNC COMMISSIONING:

After discussing with my supervisor the work done in the previous week, we decided to better define the procedure by adding pre-test and post-test operations and including which tests serve as a prerequisite for others.

A word document containing the table can be found at: https://github.com/MatteoDeBenedetti/ESA-Thesis/blob/master/GNC%20Commissioning/gnc_commissioning_table.docx

MASTER THESIS:

I wrote a draft of the table of contents of my Master Thesis and started working on the first Chapter containing an introduction about ESA and the lab, the Mars Sample Return mission and the Sample Fetch Rover and more specifically the thesis objectives.

The thesis, both source and compiled, is available at:
https://www.overleaf.com/9369988924ynjjwzzprxbg

FUTURE OBJECTIVES:

Next week I plan on talking with my Internal Supervisor to decide how to proceed with the GNC Commissioning project.

I will continue working on the SLAM integration, trying to improve the VO on the bb3.