**Document review of all files contained in the folders created by the previous MSci/Msc students**

*16/01/2021*

Firstly, the INMS data, which was first downloaded by Ayushman Seth in summer 2018 using *automate.py*. This data was downloaded directly from a dropbox which contained a folder called *download\_INMS\_data*. This folder contains the original INMS data stored in .dat format. This python file was then later updated by Ali Ozkidir in the following year. The changes he made to the *automate.py* file was so that the raw INMS data could be accessed without the need of the dropbox.

The INMS data was first analysed by Anna Apsit in 2018, who compared INMS data to CMAT2 density values. She manually created the variables, such as temperature, density, INMS counts, CubeSat location etc. She stored these variables in a MATLAB workspace. Therefore, the file *PlottingINMSData* can be run and will give you 6 subplots.

Ali Ozkidir, firstly, extracted INMS counts using the python scripts mentioned before and stored this INMS as text files. The files were then used in MATLAB during his analysis. To create his MSISE and IRI density plots, Ali uses an inbuilt function. Because he extracts the INMS files into text files, we do not need to use the python script and the *download\_INMS\_data* file. Ali saves his figures from IRI and MSIS in his folder. The *inmsauto.m* file is supposed to create the figures and plots that Ali saves, however a folder/file is missing from his directory as this file is called in the code as *TLE\_data*. This file is missing so far.

*Update – 23/05/2021*

It was later found out, as confirmed by Dhiren, that we do not actually know the author of the textfiles. All we know is that Ali and Ayushman worked on the raw data and contributed to these files but we do not exactly know if the MSSL produced or verified them. PhD student Sachin Reddy and Prof Gethyn Lewis are currently working on to verify the location and time data entries of the textfiles.