Computer Science at BGS

Mr Osborne, Subject Lead for Computer Science

This year a number of our students took part in the European Astro Pi Challenge 'Mission Space Lab' (https://astro-pi.org/mission-space-lab):

> *'In Mission Space Lab teams are invited to write computer programs that solve a scientific task in space: to gather data to calculate the speed at which the International Space Station (ISS) is travelling as accurately as possible.*
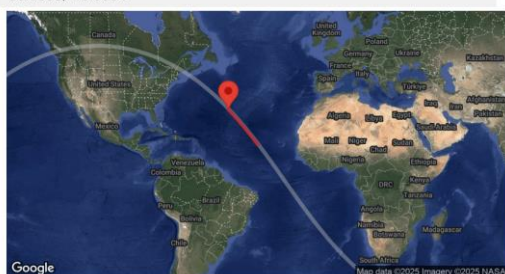>
> *To achieve this, teams write a Python program to first use the Astro Pi computers' sensors or camera and gather data about the orientation and motion of the ISS as it orbits the Earth, and then calculate the speed of the ISS based on the gathered data.'*

Our team 'AbiHarsh', consisting of mentor Atiksh Agnihotri (Y13) and his KS3 team members, Abigail Lakin and Harshil Varin Kadre (both in Y8) spent a significant number of weeks, each Thursday lunchtime, working on code. Their code was submitted and we had clarification last week that the code had been eligible and therefore used upon the International Space Station.

As you can see from the following images, the code was run whilst over the Atlantic Ocean, leading to a selection of photos that showed wispy cloud and deep blue water:

The team was subsequently invited to a livestream with an astronaut, where a number of questions regarding career trajectory, life as an astronaut and the wonders of seeing the earth from space were discussed.

As such, for a number of our students this will have been an experience that won't be easily forgotten and they can be immensely proud that their work has been utilised by the ISS, gathering and using data based upon the code they had written.