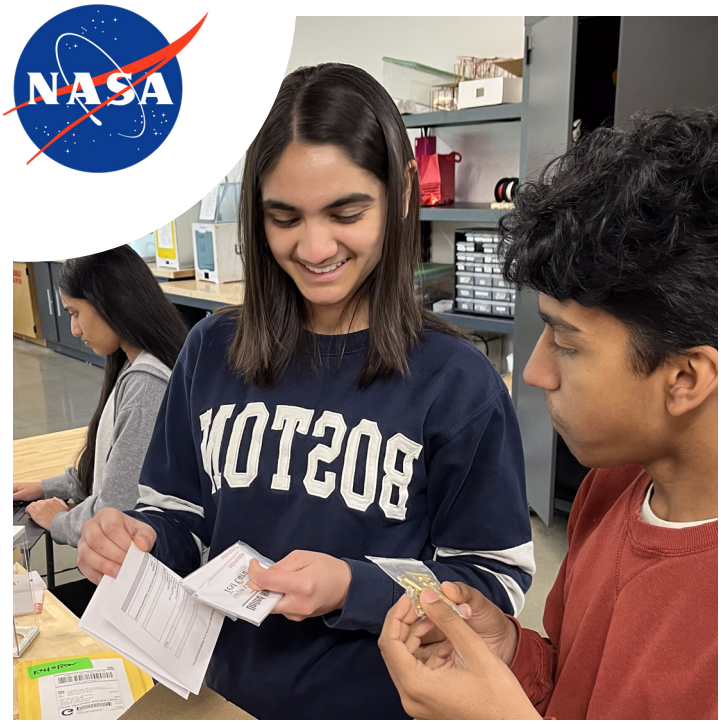

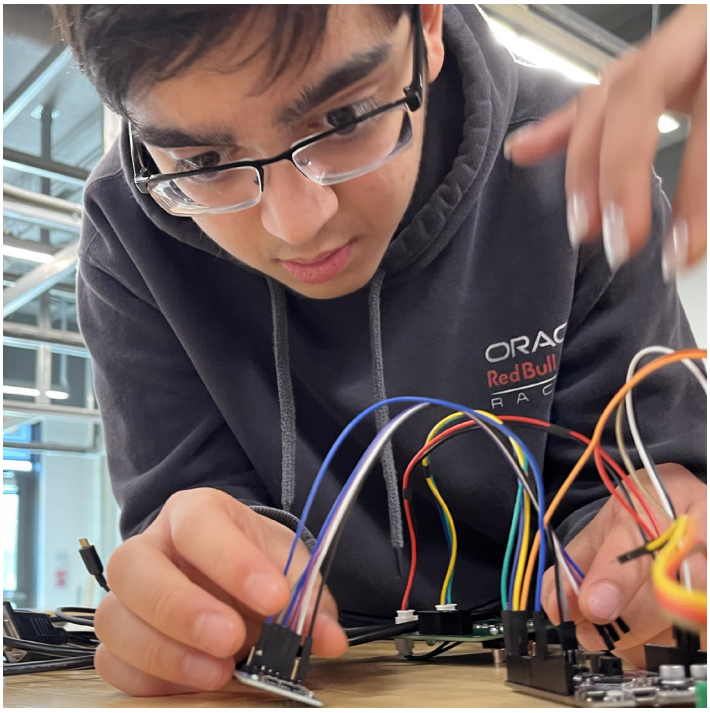

CORRELATION BETWEEN FLUCTUATIONS IN THE EARTH'S MAGNETIC FIELD AND SOLAR RADIATION

NASA TECHRISE STUDENT CHALLENGE

SCHOOL: ACADEMIES OF LOUDOUN

LOCATION: LEESBURG, VA

FLIGHT PROVIDER: WORLD VIEW

GRADES: HIGH SCHOOL

STUDENT EXPERIMENT DESCRIPTION

Our experiment aims to measure the correlation between magnetic fluctuations and levels of radiation in the Earth's atmosphere. We hypothesize that higher fluctuations in the magnetic field will correlate with higher levels of radiation in the atmosphere due as altitude increases. As climate change worsens the conditions of our atmosphere, we were inspired to determine the effects of a thinner atmosphere on radiation levels that reach the Earth and how that could potentially affect space travel.