CLIMATE CHANGE

According to a recent report by the International Panel on Climate Change (IPCC), Earth’s temperatures have risen 1.4\_ F over the past century and this rise is projected to continue into the future. Rising global temperatures have been accompanied by changes in weather and climate. Many places have seen changes in rainfall, resulting in more floods, droughts, or intense rain, as well as more frequent and severe heat waves. The planet’s oceans and glaciers have also experienced some big changes - oceans are warming and becoming more acidic, ice caps are melting, and sea levels are rising. As these and other changes become more pronounced in the coming

decades, they will likely present challenges to our society and our environment.

Over the past century, human activities have released large amounts of carbon dioxide (CO2) and other greenhouse gases into the atmosphere. The majority of greenhouse gases come from burning fossil fuels to produce energy, although deforestation, industrial processes, and some agricultural practices also emit gases into the atmosphere. Greenhouse gases act like a blanket around Earth, trapping energy in the atmosphere and causing it to warm. This phenomenon is called the greenhouse effect and is natural and necessary to support life on Earth. However, the buildup of greenhouse gases can change Earth’s climate and result in dangerous effects to human

health and welfare and to ecosystems.

The dataset Climate.txt contains measurements of the global level of CO2 in the atmosphere as well as the global temperature anomaly (the deviation from some reference point). In order to combat climate change, we must understand the relationship between CO2 and global temperatures.