-Problem with air pollution in urban areas

            To study air pollution measurements can be made of in air constituents to gain a understanding of the level of pollution in an area. Ozone is considered one of these air constituents which can also act as an indicator air pollution. Stratospheric ozone which is located in Earth’s atmosphere and Ground-level ozone are exactly the same molecule, their presence in different parts of the atmosphere has very different consequences. Stratospheric ozone blocks harmful ultraviolet solar radiation, life on Earth has adapted to this filtered solar radiation **(2).** Ground-level ozone, in contrast, is a major health concern that can cause serious eye, nose and respiratory problems terrestrial animals **(2)**. The ground-level ozone is impacted by human affect such as nitrogen  bounding

It is produced at ground level through a reaction between sunlight and volatile organic compounds and nitrogen oxides (NO )

Southern California has a large population of located in dense urban centres, these centres emit high levels of pollution which can affect the presences of ozone in the atmosphere. Ozone partials have been studied and it has been shown that the presence of chlorofluorocarbons (CFCs) have been breaking up and binding with 03 molecules and depleting the ozone. Ozone depletion can lead to increased health risk as less of the suns harmful ultra-violet radiation is absorbed. These areas of ozone depletion have been shown in the past to be correlated to areas of high human activities and Southern  California fits this criteria.

Throughout this report the level of Ozone will be used from reading from different

1. Balcerak, E. (2013). Southern california ozone pollution declining and changing. Eos, Transactions American Geophysical Union, 94(29), 260-260. doi:10.1002/2013EO290017
2. Committee on Tropospheric Ozone, National Research Council, & National Research Council (U.S.). Committee on Tropospheric Ozone Formation and Measurement. (1991;1992;). Rethinking the ozone problem in urban and regional air pollution. Washington, D.C: National Academy Press.