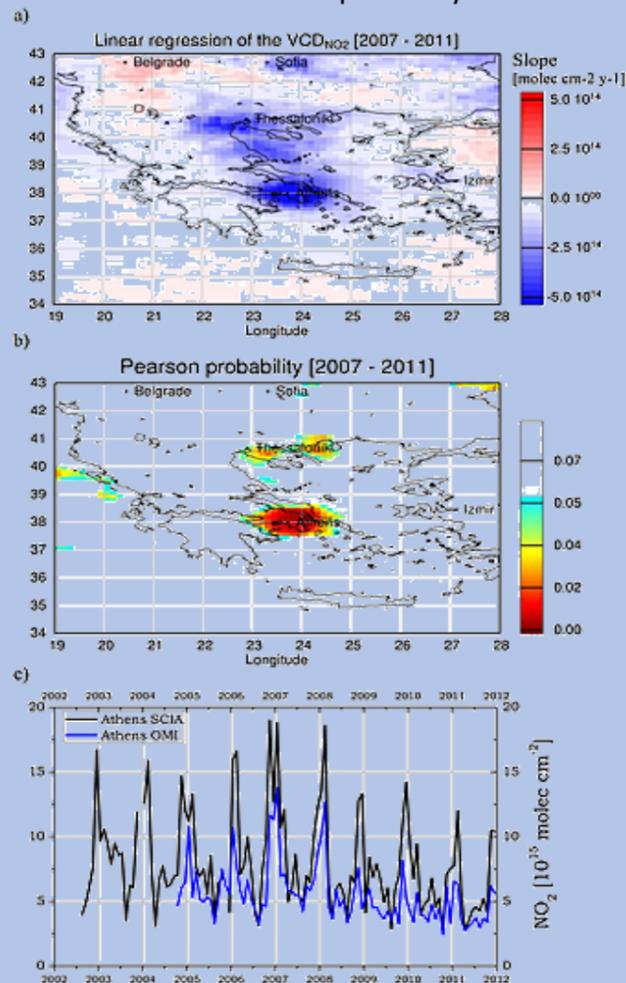


The Climate Change Impact on Greece

Introduction: Economic Drivers

In the aftermath of the global economic crisis of 2007-08 Greece was particularly affected by the ongoing consequences of such a global phenomenon. It stands to reason that their environment had subsequent knock on effects. Within the governmental set-up financial aid for potential natural disasters was restricted, however increases in commonly used resources meant that in some ways the environment was positively affected.



How and why the environment was impacted by the economy is demonstrated under "Impacts" below.

Impact

Greek society has been or can be calculated to be impacted in various areas. Over all, the economic crisis led to a significant decrease in available funding for environmental projects, such as efforts against illegal logging and limiting the devastation of forest fires. Also, the shrinking household budgets and higher fuel taxes (which forced households to look for substitutes), has been reported to lead to an increase in illegal logging. Together this risk contributing to heightened deforestation (Lekakis and Kousis 2013).

Moreover, the figure to the left (Vrekoussis et al., 2013) demonstrates 3 additional things that occurred during the period 2007-2011: 1. The top image maps the changes in Nitrogen Dioxide over the 4-year period – red for increase, blue decrease. 2.

The middle denotes significant correlations in statistical regressions. 3. Bottom displays the monthly mean densities of apparently

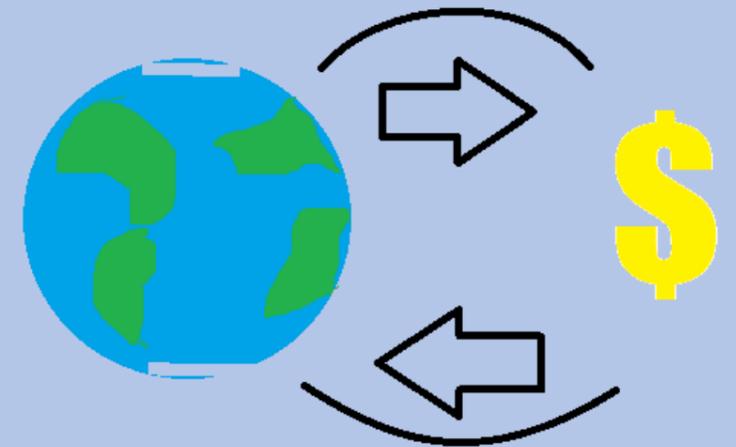
dropping NO₂. NO₂ and CO₂ emissions over Athens. These appear to be related to the rising oil prices and subsequent reduction in the use of personal cars (Vrekoussis et al., 2013).

Thus pollution went down in certain areas, however they have also reportedly gone up in others. It was for instance reported that the increased burning of household substitutes resulted in greater air pollution during the winter. A lot of the materials burnt were leftover materials - such as painted planks. When this material is burnt to produce heat, it releases poisonous compounds into the air, causing health issues for animals and humans that directly breath it in (Saffari et al. 2013). Governmental strategies to combat the economic crisis (such as mining and oil extraction) further risk threatening not only the air, but also water and land, as such measures are known for causing ongoing environmental hazards. Logging, pollutants and other activities are hereby likely to affect the appearance of the Greek landscape (Lekakis and Kousis 2013). Thus the appearance of Greece, its income sources and sustainability are likely to be severely impacted by present day responses to the economical crisis.

Conclusions and Future

The world is in a delicate economic and atmospheric balance, just like Greece. More economic crises are possible and similar consequences could occur for every nation on the planet. As we explained earlier, not only can economic impacts affect the climate, but the climate can also in turn affect the economy, in a disastrous cycle.

To avoid this occurrence, or any future



repetitions, we must maintain a careful and stable equilibrium. Economies should be regularly monitored, with careful avoidance of any drastic imbalances. Otherwise, the environment risk repeatedly ending up at the bottom of state priorities. In Greece's case the crisis has led to a decreased focus on environmental effects, as the economical state makes other aspects of life apparently more important.

References: Saffari, A., Daher, N., Samara, C. et al. (2013) "Increased Biomass Burning Due to the Economic Crisis in Greece and its Adverse Impact on Wintertime Air Quality in Thessaloniki", in American Chemical Society Publications; Environ. Sci. Technol., 47, pp.13313-13320 Lekakis, J.N., Kousis, M. (2013) "Economic Crisis: Troika and the Environment in Greece, in South European Society and Politics, 18:3, pp.305-331. Vrekoussis, M., Richter, A., Hilboll, A., Burrows, J.P., Gerasopoulos, E., Lelieveld, J., Barrie, L., Zerefos, C. and Mihalopoulos, N., 2013. Economic crisis detected from space: Air quality observations over Athens/Greece. *Geophysical Research Letters*, 40(2), pp.458-463.