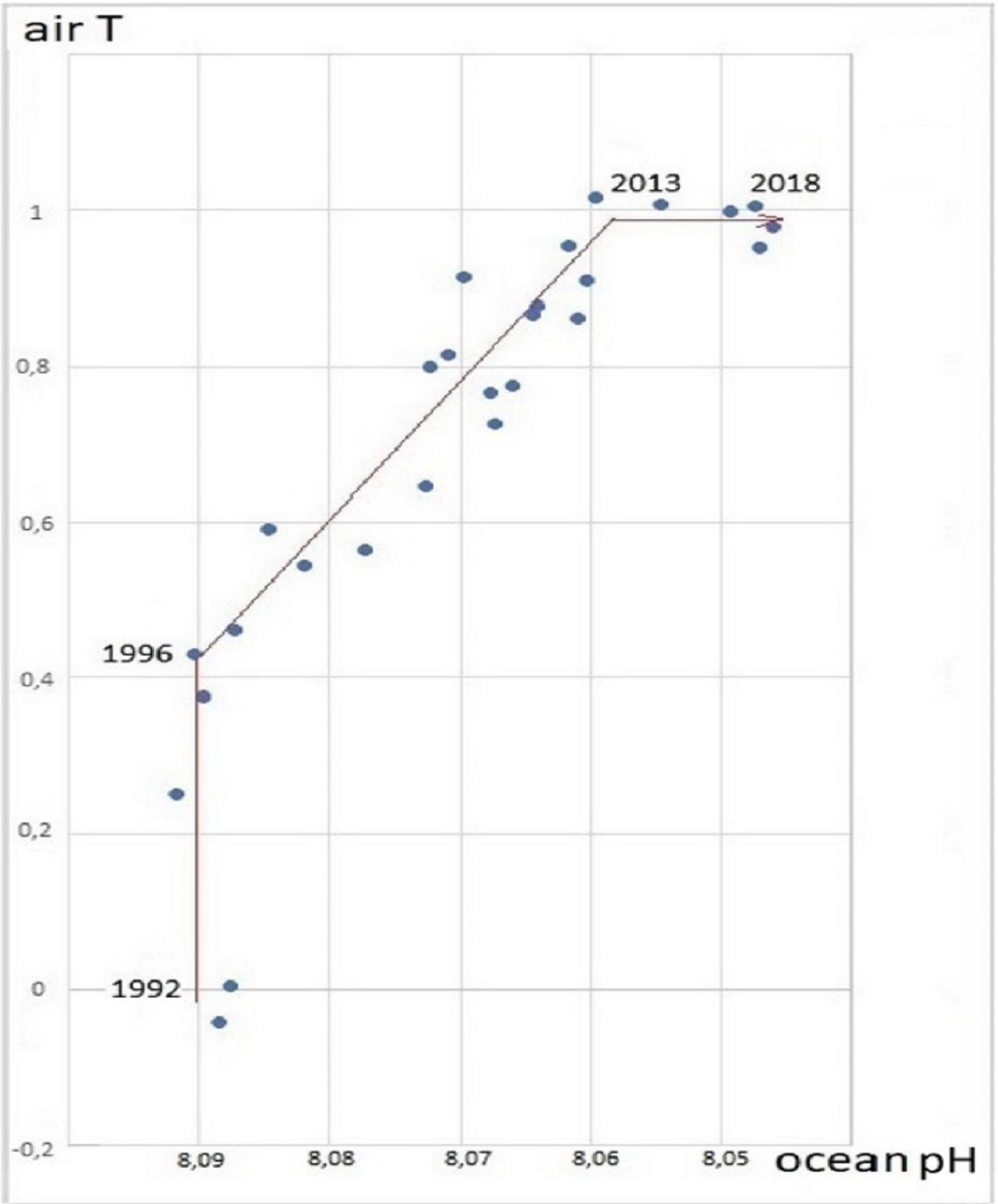
Climate change - Ocean acidification



Matti Moilanen

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Dedication

I dedicate this book to my wife Liisa Moilanen, with whom we have discussed the matters included in this book. Liisa is a researcher and I have got priceless help to carry out this book.

Introduction

The climate model is often referred to while talking about climate change. I thought I would find out what it consists of. What I did find on the internet was that the carbon dioxide in the climate rises the climate temperature. Another thing was that the climate change models are so large that supercomputers were needed to calculate the million lines large models. I have not seen any presentation meant for the public describing the climate change model of the climate researchers. I wanted to figure out climate change with mathematical models and calculations. I have fortunately the university education to do modelling research and several years of experience modelling industrial processes.
It was quite easy to find data of climate temperature, carbon dioxide concentration, ocean acidity, polar ice cap extent etc. I am used to the way of working that all processes can be described with relatively simple models, which can be detailed if needed. It is always a better way to start the simple way to get a closer look at the problem before proceeding to more complex models. I decided to use Excel as my basic tool for modelling.
While calculating preliminary data correlations I found a very surprising dependence, the one-year old ocean acidity value gives a slightly better correlation than the climate carbon dioxide to the climate temperature. This finding promised an interesting examination.

The starting point for my examination was the doubt that the climate change models give false predictions for global warming. The long-term measurements were available on the internet as well as the Excel calculating programs. The dependencies between the variables could be calculated

and analysed with those tools. The global energy change model was the result. Besides:

1. The interaction between the climate and oceans appeared to be the most ruling factor. The oceans act as a chemical storage in such a powerful way that the climate temperature does not rise the way it was estimated to do earlier. The reason for this behaviour lies in the chemical reaction in which the carbon dioxide dissolves to the oceans forming carbon acid and absorbs heat from the surroundings and acidifies the oceans.
2. The acidification of the oceans is also the reason why El Niño and La Niña phenomena get stronger because the energy accumulated in the oceans is higher and it is taking part in that phenomenon. During the El Niño phenomenon the chemical process reverses causing more heat to be released in the surroundings.
3. **The acidification of the oceans is a greater global threat than climate warming**.

The calculations and data, which have led to the conclusions above, are presented in this book.
It is time now to correct the understanding about climate change and proceed to the actions according to the more detailed understanding of climate change. The means are fortunately the same regardless of the objective: to prevent climate change or acidification. All groups: the state, municipalities, companies as well as the citizens have to take part in the fight against the global energy change. With good examples and right commercial limitations in foreign trade we may get other countries to fight against the carbon dioxide increase in the climate.

The interaction between the climate and oceans in the global energy change

The most important factor in the global energy change is the acidification of oceans and the chemical reactions, which bind and release heat. The importance of which was revealed with the calculations and changed my judgement about climate change completely. I would like to change the concept “climate change” to “global energy change”.

It is important to notice that the chemical energy storing of the oceans overpowers the destructive evolution, which will lead to biota destruction and intensifying of the El Niño phenomenon. That for one will lead to extreme weather behaviour.

I will go through the evidence material of the global energy change as detailed as possible using the data collected scientifically for calculations. I will publish the original and calculated data accurately. I will start with the basic model of climate change, which I suppose to be the basic model of the climate researchers.