

InTech - Open Access Publisher

[InTechWeb.org](http://www.intechopen.com)

- [Home](#)
- [Books](#)
- [Journals](#)

Search

Search by ISBN, ISSN, /

Book Title <input style="width: 80%;" type="text"/> Chapter Title <input style="width: 80%;" type="text"/> Author Name <input style="width: 80%;" type="text"/> Editor Name <input style="width: 80%;" type="text"/>
Abstract <input style="width: 80%;" type="text"/> Subject Choose one <input style="width: 80%;" type="text"/> ISBN/ISSN <input style="width: 80%;" type="text"/> Keywords <input style="width: 80%;" type="text"/>
From Choose one <input style="width: 80%;" type="text"/> To Choose one <input style="width: 80%;" type="text"/> <input type="button" value="Search"/> Close Advanced Search Close me

Browse by Subject

- [Physical Sciences, Engineering and Technology \(670\)](#)
 - [Robotics \(67\)](#)
 - [Nanotechnology and Nanomaterials \(27\)](#)
 - [Computer and Information Science \(185\)](#)
 - [Engineering \(316\)](#)
 - [Biomedical Engineering \(21\)](#)
 - [Chemical Engineering \(8\)](#)
 - [Civil Engineering \(4\)](#)
 - [Control Engineering \(29\)](#)
 - [Electrical and Electronic Engineering \(115\)](#)
 - [Energy Engineering \(48\)](#)
 - [Environmental Engineering \(26\)](#)
 - [Industrial Engineering and Management \(25\)](#)
 - [Mechanical Engineering \(42\)](#)
 - [Vehicle Engineering \(14\)](#)
 - [Technology \(28\)](#)
 - [Materials Science \(55\)](#)
 - [Chemistry \(4\)](#)
 - [Mathematics \(2\)](#)
 - [Physics \(8\)](#)
 - [Earth and Planetary Sciences \(40\)](#)
- [Life Sciences \(81\)](#)
- [Health Sciences \(287\)](#)
- [Social Sciences and Humanities \(5\)](#)

Source

Edited by:
Dr. Elias G.
Carayannis, George
Washington
University, School of
Business

Climate Change in the Mediterranean over the Last Five Hundred Years Dario Camuffo, Chiara Bertolin, Antonio della Valle, Claudio Cocheo, Nazzareno Diodato, Silvia Enzi, Mirca Sghedoni, Mariano Barriendos, Roberto Rodriguez, Fernando Dominguez-Castro, Emmanuel Garnier, Maria Joao Alcoforado and Maria Fatima Nunes

Chapter Actions

- [Bookmark and Share](#)
- [How to Reference](#)
- [How to Link](#)
- [Related Articles](#)

Source: [Planet Earth 2011 - Global Warming Challenges and Opportunities for Policy and Practice](#)

ISBN 978-953-307-733-8

Edited by: Dr. Elias G. Carayannis, George Washington University, School of Business

Publisher: [InTech](#), October 2011

Usage: 230 views, 65 downloads



[Download PDF](#)

Climate Change in the Mediterranean over the Last Five Hundred Years

Dario Camuffo et al.^{*}

National Research Council of Italy (CNR)

Institute of Atmospheric Sciences and Climate (ISAC), Padua

Italy

1. Introduction

Global Warming (GW) is expected to affect the Mediterranean area with three major challenges, i.e. increase in temperature, decrease in precipitation and sea level rise that will likely submerge the coastal areas, including Venice. Aim of this Chapter is to discuss the expected changes under the light of long-term observations. Documentary proxies and instrumental readings in Portugal, Spain, France and Italy have been recovered and analysed. These observations cover the last five centuries from the Little Ice Age (LIA) to the present-day GW.

This Chapter is based on documentary proxies and instrumental series collected over the Mediterranean area, i.e. Portugal, Spain, France and Italy (Fig.1) within the EU funded ADVICE, IMPROVE, MILLENNIUM, and Climate for Culture projects. A huge effort was made to seek for written sources and original logs with early and less recent instrumental readings. The next steps were to recover, correct, adjust to modern standards, homogenize and analyse the earliest data and most of the longest European series. The detailed study of the history of the series (e.g. instrument type, calibration, observational methodology, sampling time, exposure, location) and the recovery of any related metadata were fundamental to apply and perform the due corrections to the series. The methodology was presented in previous papers (Camuffo and Jones, 2002, Camuffo et al. 2010a)

^{*}Chiara Bertolin¹, Antonio della Valle^{1,2}, Claudio Cocheo³, Nazzeno Diodato⁴, Silvia Enzi⁵, Mirca Sghedoni⁶, Mariano Barriendos⁶, Roberto Rodriguez⁶, Fernando Dominguez-Castro⁷, Emmanuel Garnier⁸, Maria Joao Alcoforado⁹ and Maria Fatima Nunes¹⁰

¹National Research Council of Italy (CNR), Institute of Atmospheric Sciences and Climate (ISAC), Padua, Italy

²Now: Department of Astronomy, University of Bologna, Italy

³Salvatore Mangani Foundation IRCCS, Padua, Italy

⁴Monte Pino Met Research Observatory, Benevento, Italy

⁵Kleio, Padua, Italy

⁶Department of Modern History, University of Barcelona, Spain

⁷Department of Physics, University of Extremadura, Badajoz, Spain

⁸Laboratory of Climate and Environmental Sciences, UMR CEA-CNRS, Saclay

Research Centre of Quantitative History, University of Caen, France

⁹Centre of Geographic Studies, University of Lisbon, Portugal

¹⁰History and Philosophy of Science Research Unit, University of Évora, Portugal

Bookmark and Share



0



Like 1


[Top of page](#)

How to Reference

To reference this article in your paper, please copy and paste the following text:

Dario Camuffo, Chiara Bertolin, Antonio della Valle, Claudio Cocheo, Nazzareno Diodato, Silvia Enzi, Mirca Sghedoni, Mariano Barriandos, Roberto Rodriguez, Fernando Dominguez-Castro, Emmanuel Garnier, Maria Joao Alcoforado and Maria Fatima Nunes (2011). Climate Change in the Mediterranean over the Last Five Hundred Years, Planet Earth 2011 - Global Warming Challenges and Opportunities for Policy and Practice, Dr. Elias G. Carayannis, George Washington University, School of Business (Ed.), ISBN: 978-953-307-733-8, InTech, Available from: <http://www.intechopen.com/articles>

[Top of page](#)

How to Link

To place a link on your website or a blog, please copy and paste the following HTML code:

```
<a href="http://www.intechopen.com/articles/show/title/climate-change-in-the-mediterranean-over-the-last-five-hundred-years" title="Climate Change in the Mediterranean over the Last Five Hundred Years">Climate Change in the Mediterranean over the Last Five Hundred Years</a>
```

[Top of page](#)

Related Articles

- [Curbing Climate Change through a National Development of Climate Change Policy](#)
- [Regional Climate Change and Impact Assessment for the Federal State Hesse, Germany, and Implicati...](#)
- [The Infrastructure Imperative of Climate Change: Risk-Based Climate Adaptation of Infrastructure](#)
- [Evaluation of Erosion Intensity and Some of Its Consequences in Vineyards from Two Hilly Environm...](#)
- [Climate Change and Transportation](#)
- [Climate Change: Wildfire Impact](#)
- [The Climate Change and the Power Industry](#)
- [Detecting of a Global and Caribbean Climate Change](#)
- [Climate Change: Impacts on Fisheries and Aquaculture](#)
- [Climate Change Detection and Modeling in Hydrology](#)
- [Climate Change Impacts on Czech Agriculture](#)
- [Effects of Climate Change in Amphibians and Reptiles](#)

[Top of page](#)

About InTechOpen

- [About InTech](#)
- [Link to us](#)
- [Contact](#)

Open Access

- [About Open Access](#)
- [How to reference](#)
- [For Libraries](#)
- [OAI-PMH](#)
- [InTechOpen Copyright Policy](#)

Connect with us

- [Blog](#)
- [Twitter](#)
- [YouTube](#)
- [Browse Our Authors](#)

© 2004 - 2011 InTech - Open Access Publisher