

Datenbankrecherche:

Fachgebiet (optional):



GO

[Home](#) [Über uns](#) [Media](#) [English](#)

**FACHGEBIETE**

**SONDERTHEMEN**

**FORSCHUNG**

**B2B BEREICH**

**JOB & KARRIERE**

**SERVICE**

[Ads by Google](#)

[Weather](#)

[Researcher](#)

[Climate](#)

[Map](#)

[Survey](#)

Home → Fachgebiete → Ökologie Umwelt- Naturschutz → Nachricht

## Scientifics have compiled temperature data of the 20th century in Spain as an evidence of the climatic change

14.04.2008

[» nächste Meldung »](#)

**This research work is the first step to confirm the existence of a temperature change. Their main goal has been "to detect the signs of the Climatic Change through the temperatures in Spain", explained to SINC the researcher of the department of Applied Physics of the University of Granada and main author, Matthias Staudt.**

Anzeige



The compilation of maximum and minimum temperature series of every month since the end of the 19th century until the beginning of the 21st century has not always been an easy task. The data, which have been collected in 45 Spanish observatories, were not "homogeneous" in every case. In climatology, a series of data (temporary series) is considered as homogeneous when its content reflects exclusively the climatic evolution (this is, when the different indexed factors are absent). Therefore, the researchers' work has mainly consisted in removing inhomogeneous "pollution" in data.

### SAS® Data Analysis

Predictive Modeling,  
Forecasting, Simulation  
& More! Trust SAS®  
Today  
[www.SAS.com](http://www.SAS.com)

According to the scientist, analysing the quality of the data –which were published in November in the International Journal of Climatology- becomes, the "best method to believe in the final results". "Technical preparation is essential to take the second step and do research into the rise of temperature at an unquestionable statistical level", he added.

### Online Qualitative

Itracks has quality data  
collection with high  
service standards.  
[www.itracks.com](http://www.itracks.com)

### Data homogeneity

Changing a thermometer which has been calibrated in a different way is one of the factors why temperature data usually present incoherencies. In addition, the different reading interpretations of a human being or the frequent location changes of the observatories (changes from a urban environment to an airport, altitude changes, etc.) are

problems with which the scientific team has had to deal with."

Moving a thermometer without recording this fact gives rise to a very strange result which can not be explained 50 years later", explained Staudt. Besides this, there are human typographical errors which present "non-homogeneous" data.

Scientists have been working for five years to find out, evaluate and repair the data series. "In order to make them as reliable as possible without converting them into a pretext for those reluctant to admit the existence of the Climatic Change", explained the researcher. Although he admits that he has not obtained absolute conclusions, he has managed to establish a "normality" criterion in the behaviour of temperatures. "With a high level of probability, a qualitative decrease of seven degrees from April to May is not normal, as there should be a rise in average", he

**B2B Suche**

GO

- ☒ Produkt / Dienstleistung
- ☐ Firma / Organisation

Anzeige

### Aktuell

Lärmreduzierung auch im Freizeitbereich bald ein Muss?  
14.04.2008 | Medizin Gesundheit

Ein Kombi-Rezeptor ermöglicht Insekten eine superempfindliche als auch schnelle Wahrnehmung von Duftstoffen in der Umwelt  
14.04.2008 | Biowissenschaften Chemie

Entgleisung im Dienste der Wissenschaft  
14.04.2008 | Verkehr Logistik



### Veranstaltungen

Spuren des Imperialen  
14.04.2008 | Veranstaltungsnachrichten

10. EUROFORUM-Jahrestagung: Arzneimittelvertrieb

said.

Due to the homogeneization problems specified in the analysed monthly series, the researchers have set themselves a very strict "detection of un-homogeneities" criterion. Despite this, the instrumental error in a temperature measurement is in the order of 0.1°C, and the error of a difference between data, previously treated with the homogeneization method, rises to the order of 0.4°C. This error is not negligible but anyway it is "considerably smaller than the gross data".

To come to conclusions that confirm climatic change in Spain, at a high level of reliability, this technical work involves a "necessary and obvious effort". Staudt said that "the results obtained about the Climatic Change are not new, but they will confirm what we (almost) already knew".

Antonio Marín Ruiz | Quelle: alphagalileo

Weitere Informationen:

[prensa.ugr.es/prensa/research/verNota/prensa.php?nota=515](http://prensa.ugr.es/prensa/research/verNota/prensa.php?nota=515)

> nächste Meldung >

#### Market Research Data

Find Providers of Market Research Data Collection Solutions.  
[www.business.com](http://www.business.com)

#### Fluid Dynamics Software

New, easy, low-cost CFD software Embedded in your MCAD environment  
[www.flomerics.com/products/EFD](http://www.flomerics.com/products/EFD)

#### Statistical Analysis

Supporting your scientific research with custom Statistical analysis  
[www.scienceops.com](http://www.scienceops.com)

#### Online Focus Groups

Cost-effective and quick, Itracks provides top-notch data collection.  
[www.itracks.com](http://www.itracks.com)

Top

Artikel versenden

drucken



14.04.2008 |  
Veranstaltungsnachrichten

Familienunternehmer wünschen  
"mehr Netto" für Arbeitnehmer

14.04.2008 |  
Veranstaltungsnachrichten

Live-Mitschnitte, Interviews und  
Hintergründe von den Meinungs-  
führern aus Politik und Wirtschaft  
jetzt auf [www.euroforum.tv](http://www.euroforum.tv)



**Jobware**  
Karriere-Portal für  
qualifizierte Fach- und  
Führungskräfte  
[www.jobware.de](http://www.jobware.de)