

merci au réveilleur

leveilleur.com

Youtube : Le Réveilleur

Source:

4^{ème} rapport du GIEC (2007), chapitre 3

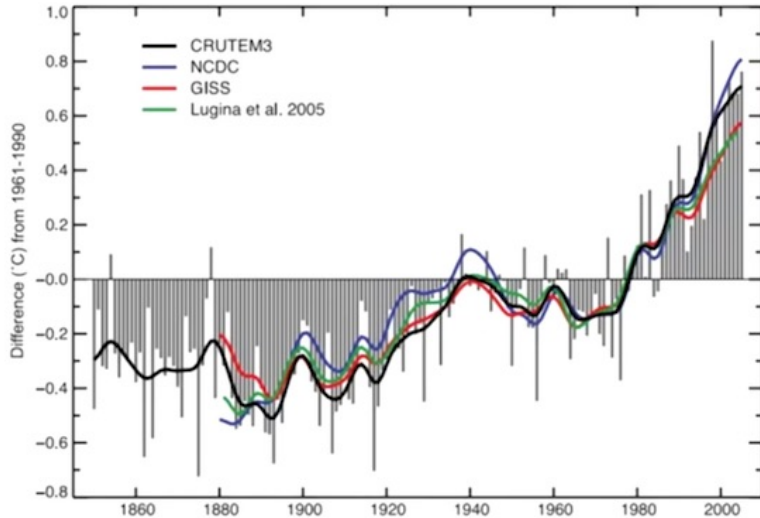


Figure 3.1. Annual anomalies of global land-surface air temperature (°C), 1850 to 2005, relative to the 1961 to 1990 mean for CRUTEM3 updated from Brohan et al. (2006). The smooth curves show decadal variations (see Appendix 3.A). The black curve from CRUTEM3 is compared with those from NCDC (Smith and Reynolds, 2005; blue), GISS (Hansen et al., 2001; red) and Lugina et al. (2005; green).

Source:

5^{ème} rapport du GIEC (2014), chapitre 2

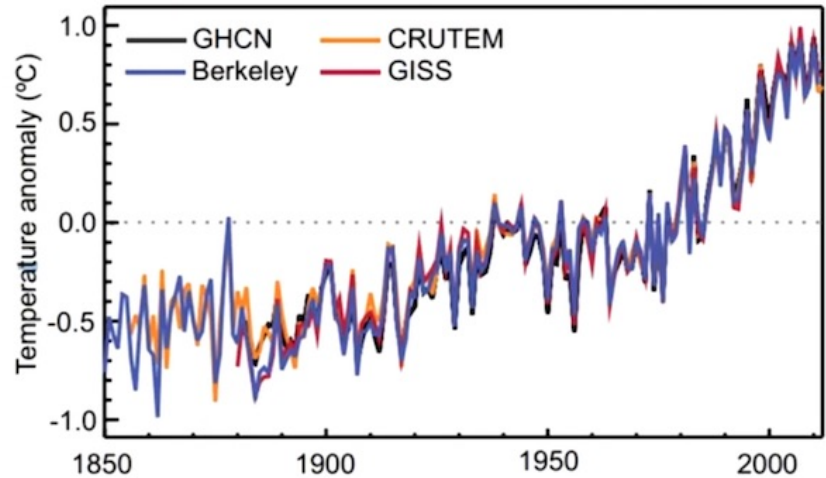


Figure 2.14 | Global annual average land-surface air temperature (LSAT) anomalies relative to a 1961–1990 climatology from the latest versions of four different data sets (Berkeley, CRUTEM, GHCN and GISS).

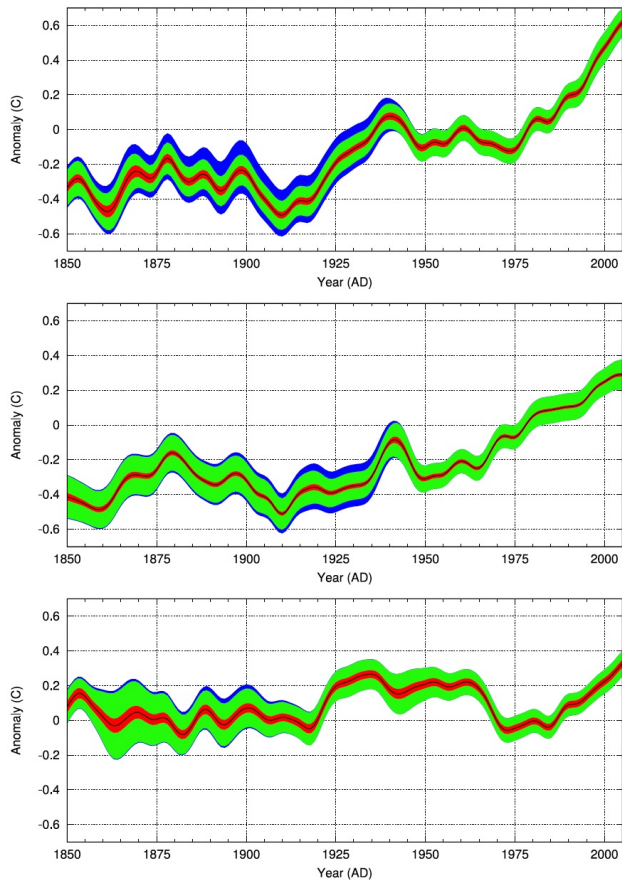


Figure 11. HadCRUT3 hemisphere temperature anomaly time series ($^{\circ}\text{C}$): (top) Northern Hemisphere (NH), (middle) Southern Hemisphere (SH), and (bottom) difference (NH – SH). The black line is the best estimate value; the red band gives the 95% uncertainty range caused by station, sampling, and measurement errors; the green band adds the 95% error range due to limited coverage; and the blue band adds the 95% error range due to bias errors.

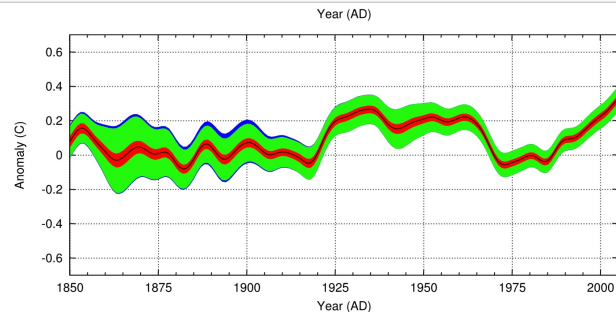


Figure 11. HadCRUT3 hemisphere temperature anomaly time series ($^{\circ}\text{C}$): (top) Northern Hemisphere (NH), (middle) Southern Hemisphere (SH), and (bottom) difference (NH – SH). The black line is the best estimate value; the red band gives the 95% uncertainty range caused by station, sampling, and measurement errors; the green band adds the 95% error range due to limited coverage; and the blue band adds the 95% error range due to bias errors.

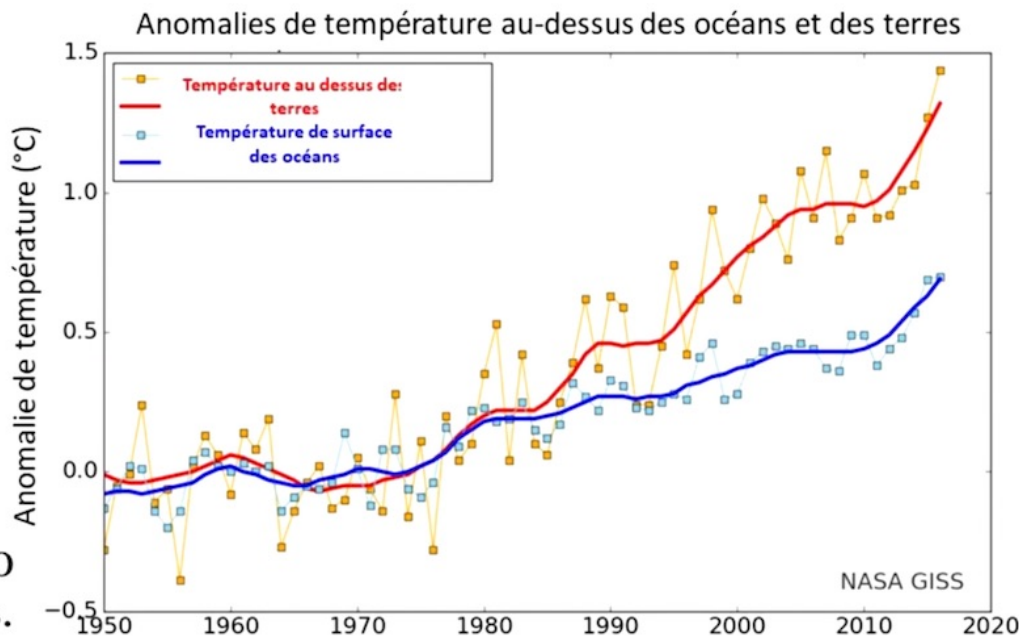
[75] There are much larger uncertainties in the land data because the surface air temperature over land is much more variable than the SST. SSTs change slowly and are highly correlated in space; but the land air temperature at a given station has a lower correlation with regional and global temperatures than a point SST measurement, because land air temperature (LAT) anomalies can change rapidly in both time and space. This

means that one SST measurement is more informative about large-scale temperature averages than one LAT measurement. This difference also shows in the hemispheric differences (Figure 11): The Southern Hemisphere (SH) series has a similar uncertainty to the Northern Hemisphere (NH) series despite there being many more observations in the NH. This is because a larger fraction of the SH is sea, so fewer observations are needed.

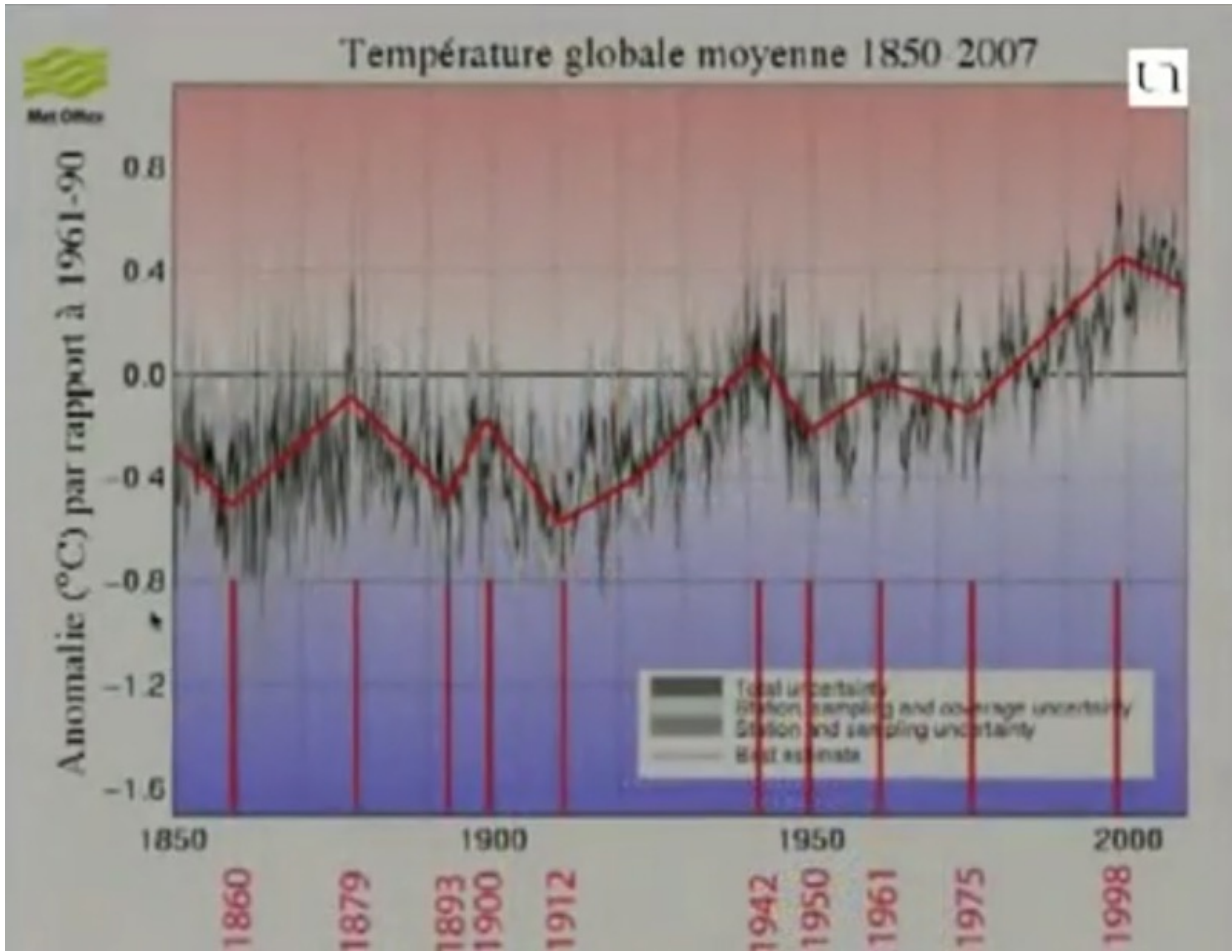
7:30

Il faut 3300 fois plus d'énergie pour élever un mètre cube d'eau d'1°C que pour élever un mètre cube d'air d'1°C.

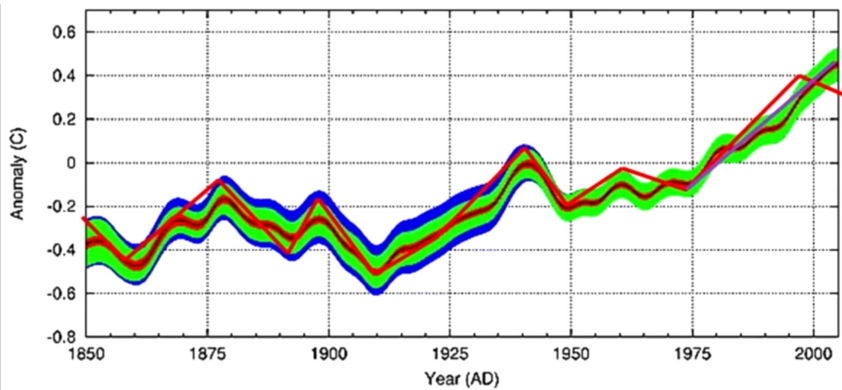
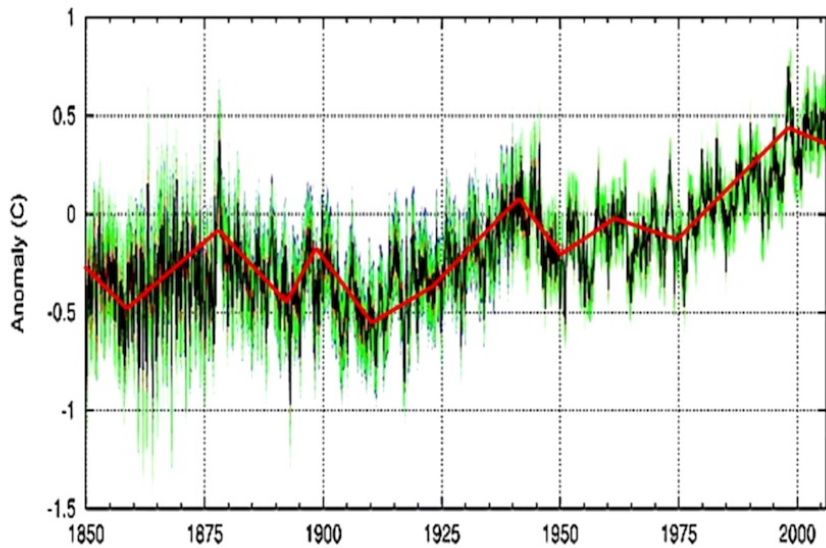
Les scientifiques estiment que 90% de l'énergie supplémentaire stockée sur Terre entre 1970 et 2010 a été absorbé par les océans.



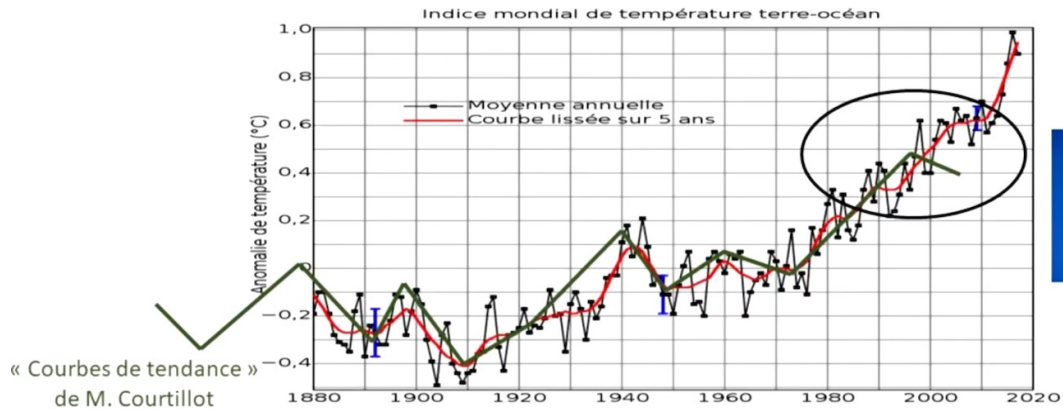
7:30

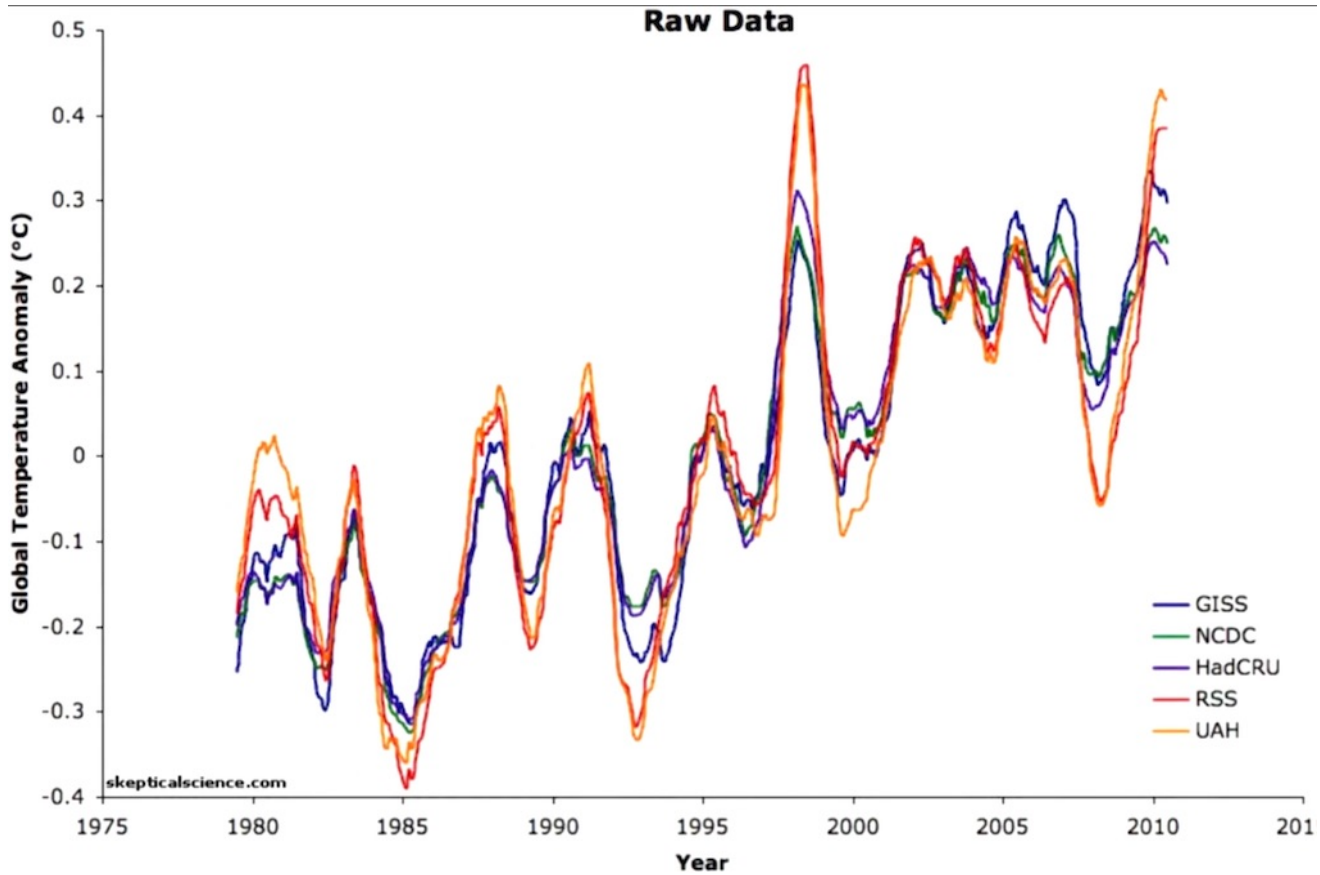


No: 40



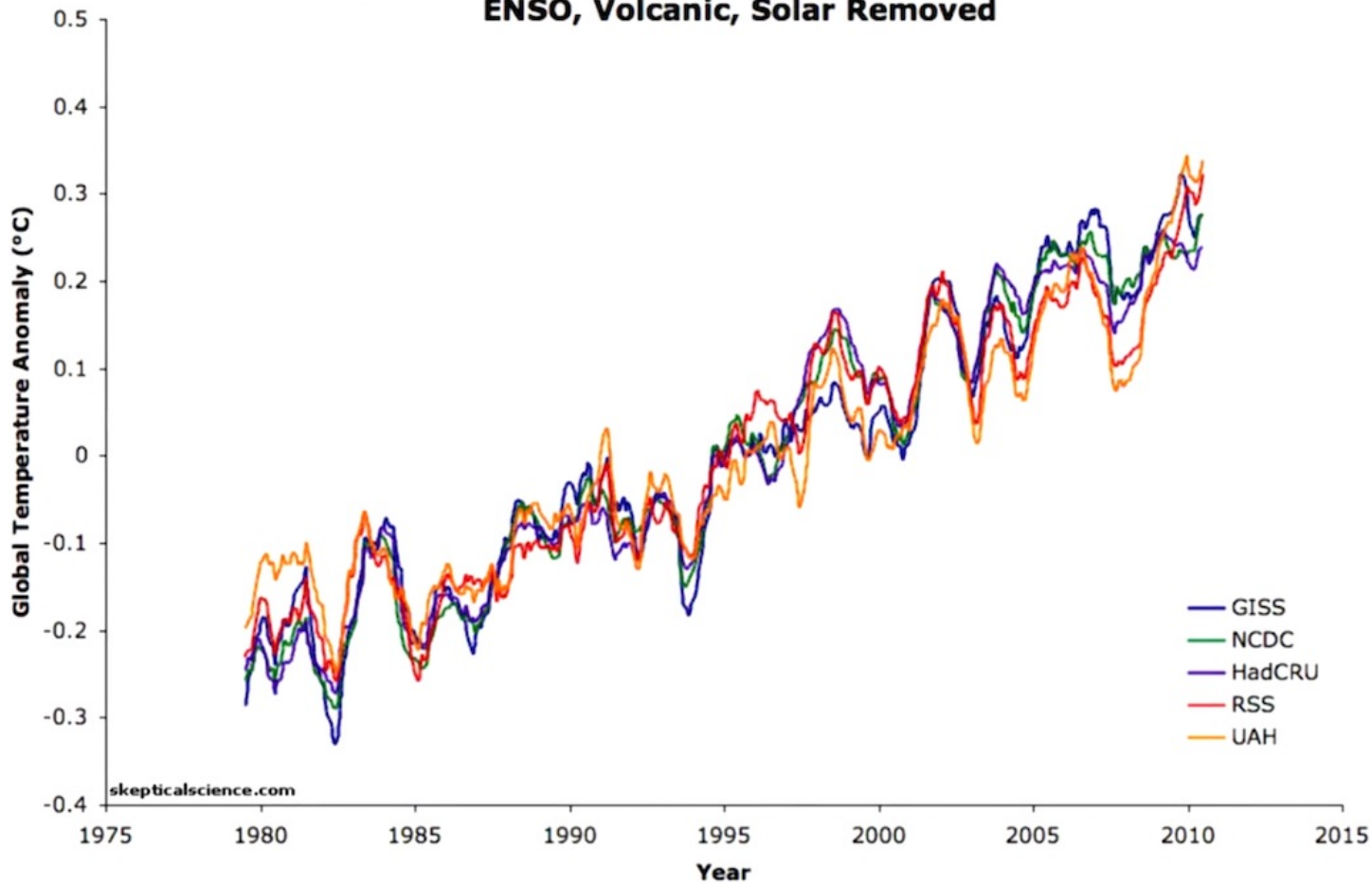
No: 40





M:20

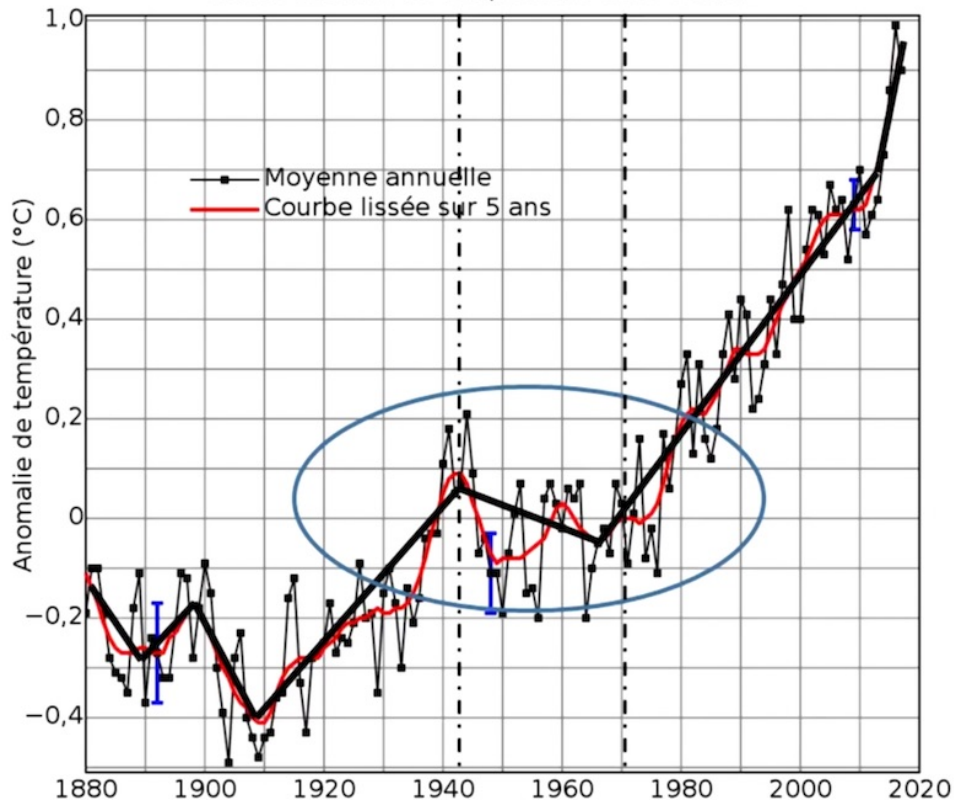
ENSO, Volcanic, Solar Removed



skepticalscience.com

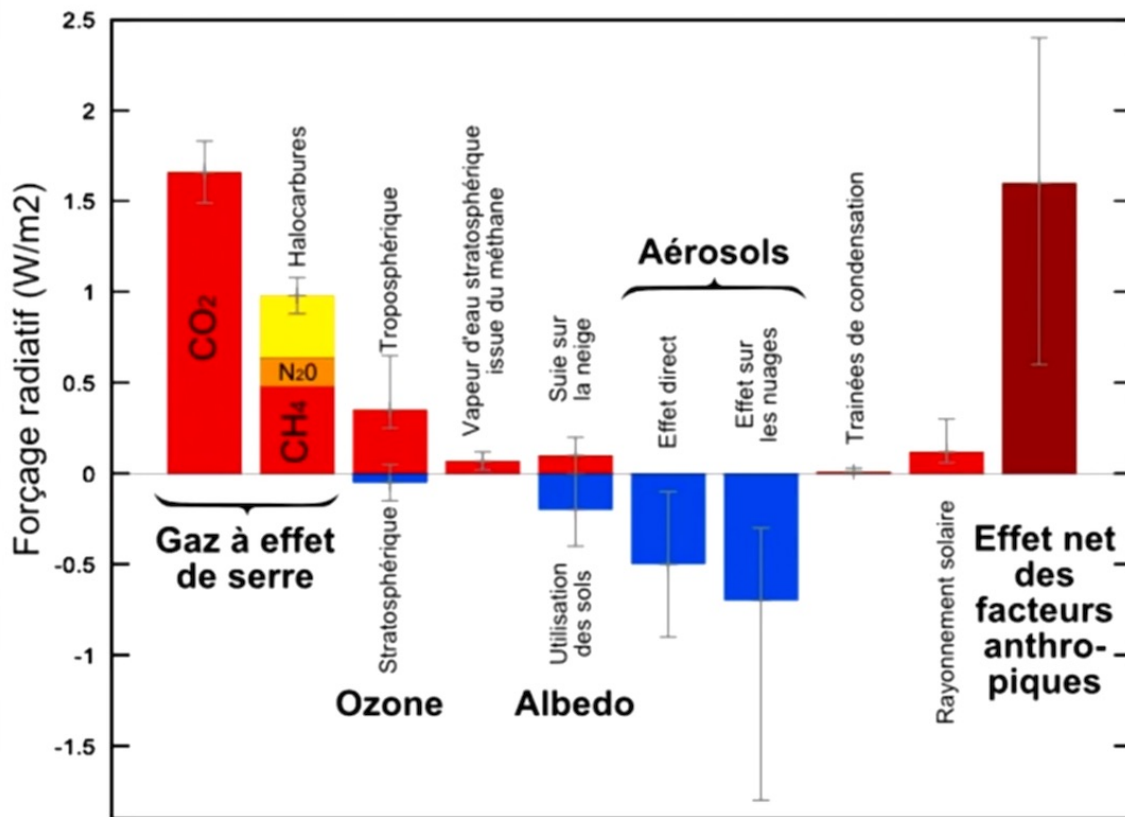
M'20

Indice mondial de température terre-océan

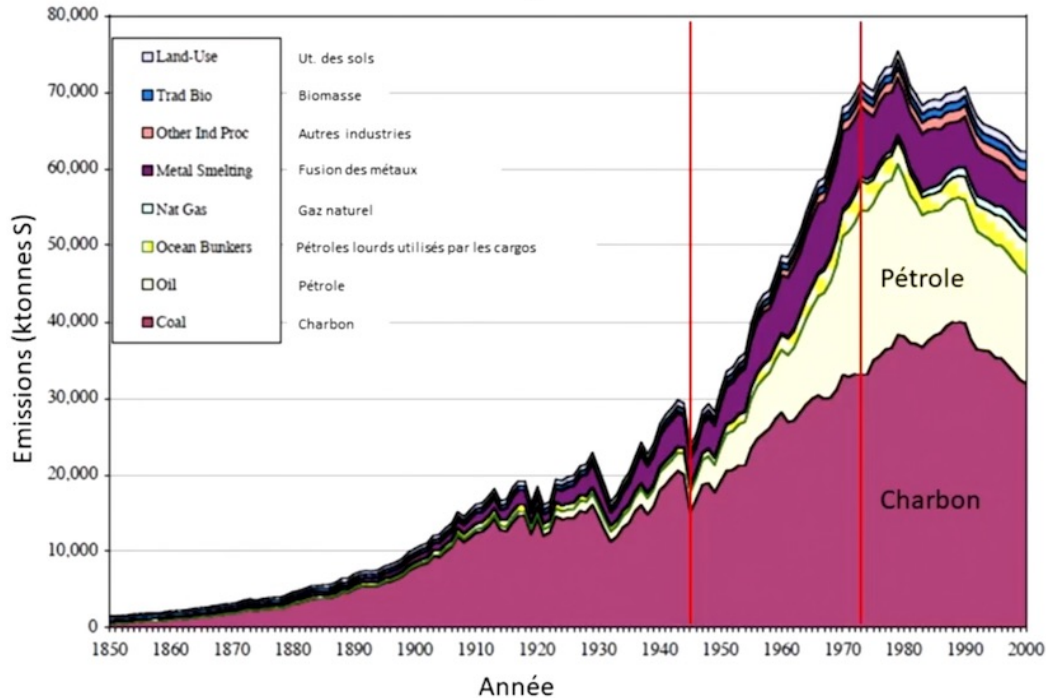


M'37

Composantes du forçage radiatif



Emissions globales de soufre



La période de léger refroidissement des températures correspond très bien à la forte augmentation des émissions d'aérosols soufrés.

Source:
Historical Sulfur Dioxide Emissions
1850-2000: Methods and Results

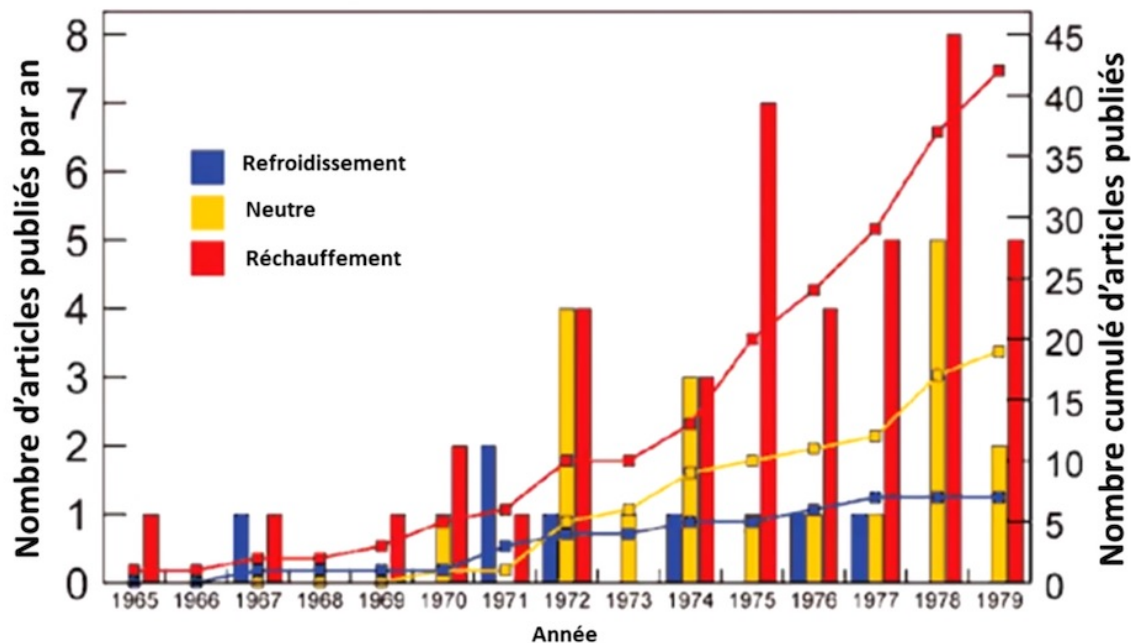
https://www.pnnl.gov/main/publications/external/technical_reports/PNNL-14537.pdf

M'37



M'50

Nombre d'articles scientifiques prédisant un refroidissement (bleu) ou un réchauffement (rouge).
 Aucune année n'a comporté plus de papiers scientifiques parlant de refroidissement que de réchauffement.



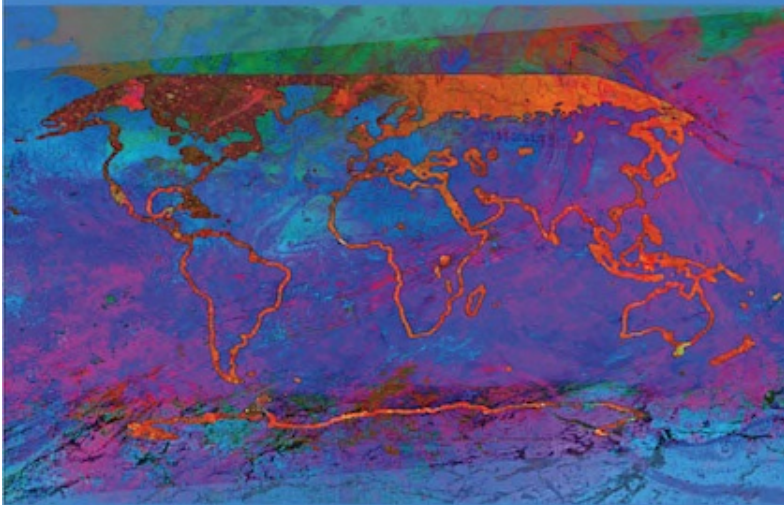
Source: Peterson 2008

THE MYTH OF THE 1970S GLOBAL COOLING SCIENTIFIC CONSENSUS

M'50

Climate Change 2021

The Physical Science Basis

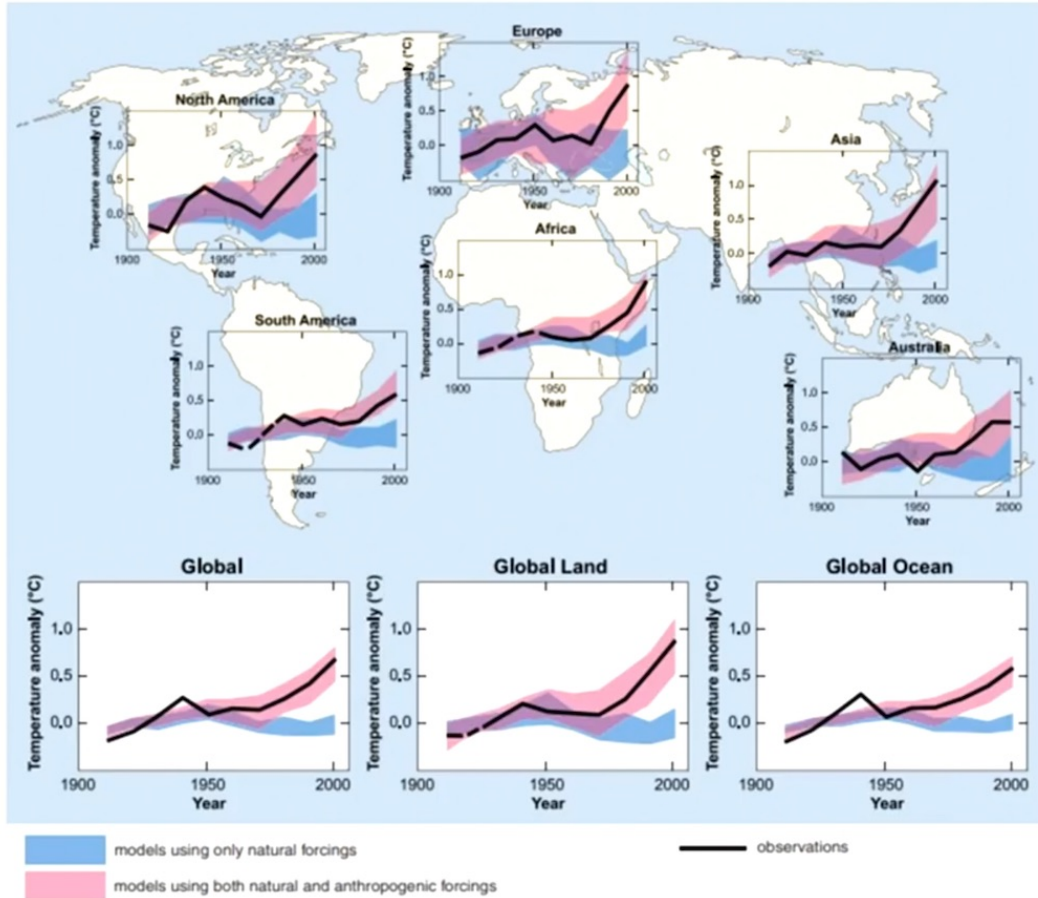


Contents

Front Matter	Foreword	v
	Preface	vii
	Dedication	xiii
SPM	Summary for Policymakers	3
TS	Technical Summary	35
Chapters	Chapter 1 Framing, Context, and Methods	147
	Chapter 2 Changing State of the Climate System	287
	Chapter 3 Human Influence on the Climate System	423
	Chapter 4 Future Global Climate: Scenario-based Projections and Near-term Information	553
	Chapter 5 Global Carbon and Other Biogeochemical Cycles and Feedbacks	673
	Chapter 6 Short-lived Climate Forcers	817
	Chapter 7 The Earth's Energy Budget, Climate Feedbacks and Climate Sensitivity	923
	Chapter 8 Water Cycle Changes	1055
	Chapter 9 Ocean, Cryosphere and Sea Level Change	1211
	Chapter 10 Linking Global to Regional Climate Change	1363
	Chapter 11 Weather and Climate Extreme Events in a Changing Climate	1513
	Chapter 12 Climate Change Information for Regional Impact and for Risk Assessment	1767
	Atlas	1927
Annexes	Annex I Observational Products	2061
	Annex II Models	2087
	Annex III Tables of Historical and Projected Well-mixed Greenhouse Gas Mixing Ratios and Effective Radiative Forcing of All Climate Forcers	2139
	Annex IV Modes of Variability	2153
	Annex V Monsoons	2193
	Annex VI Climatic Impact-driver and Extreme Indices	2205
	Annex VII Glossary	2215
	Annex VIII Acronyms	2257
	Annex IX Contributors to the IPCC WGI Sixth Assessment Report	2267
	Annex X Expert Reviewers of the IPCC Sixth Assessment Report	2287
	Index	2339

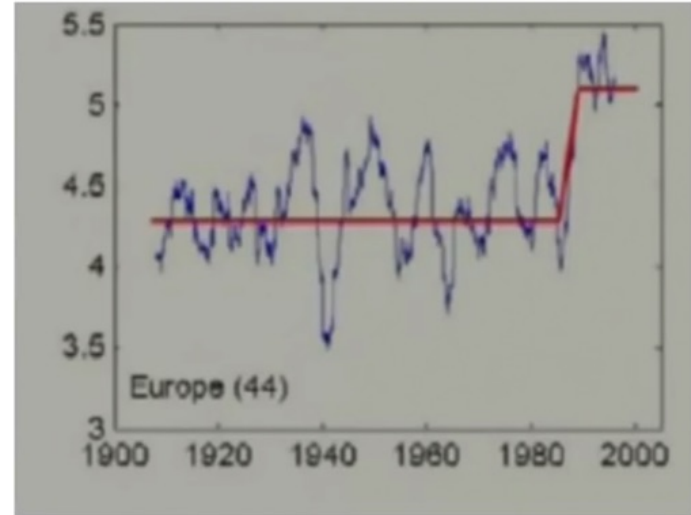
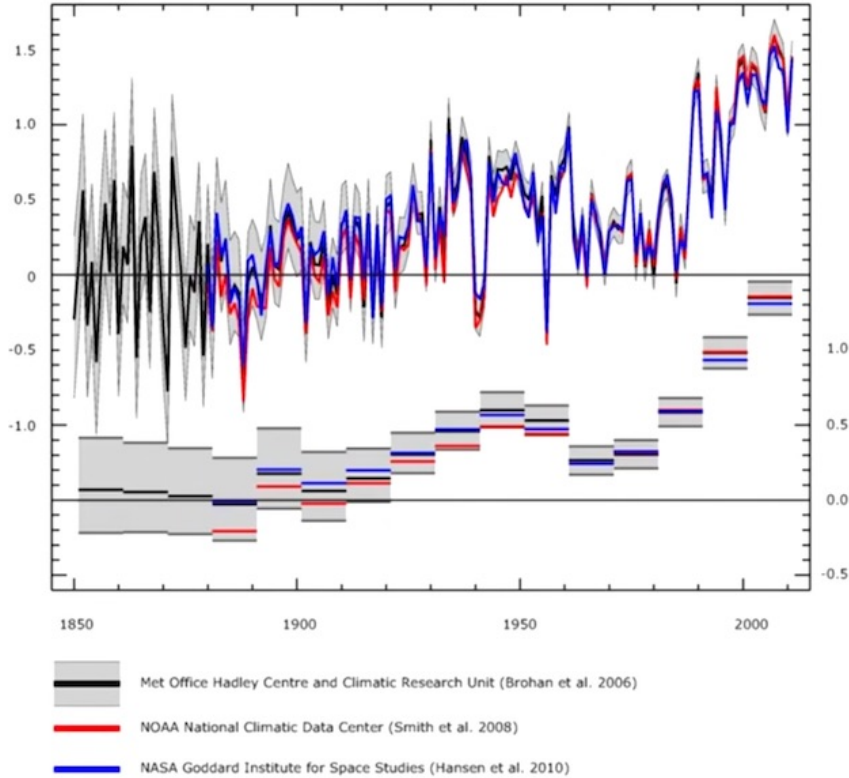
12/00

Global and continental temperature change



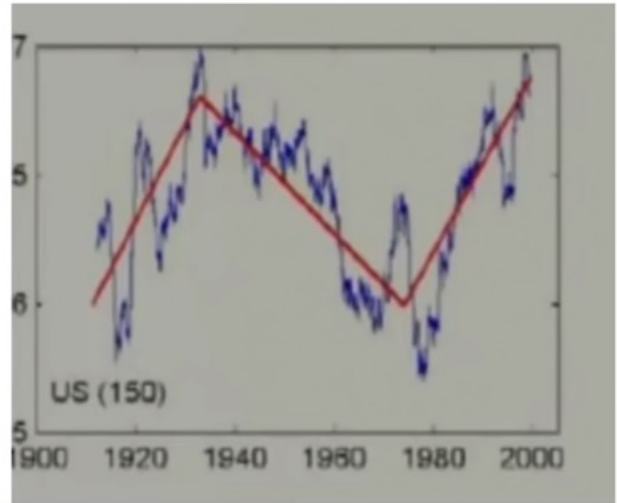
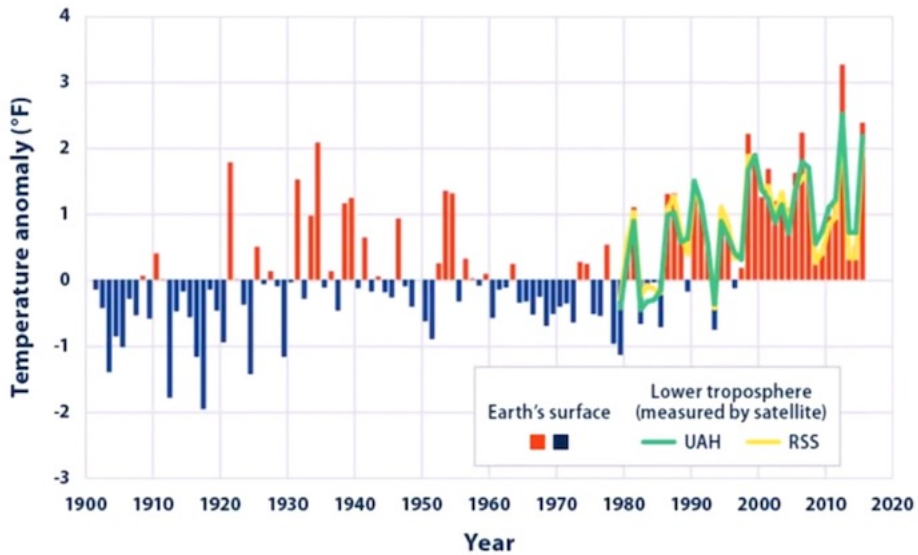
12'23

Europe average land temperature anomaly (°C) relative to pre-industrial



Source: <https://www.eea.europa.eu/data-and-maps/indicators/global-and-european-temperature/global-and-european-temperature-assessment-5>

1459



Source: <https://www.epa.gov/climate-indicators/climate-change-indicators-us-and-global-temperature>

17'19