

ARMS 34

RECORD TYPE: FEDERAL (NOTES MAIL)

CREATOR:Matthew Koch ( CN=Matthew Koch/OU=WHO/O=EOP [ WHO ] )

CREATION DATE/TIME: 8-APR-2003 18:33:49.00

SUBJECT.: Re: FYI: 20th CENTURY CLIMATE NOT SO HOT

TO:Phil Cooney ( CN=Phil Cooney/OU=CEQ/O=EOP@EOP [ CEQ ] )

READ:UNKNOWN

CC:tevi troy ( CN=tevi troy/OU=opd/O=eop@exchange@eop [ OPD ] )

READ:UNKNOWN

CC:debbie s. fiddelke ( CN=debbie s. fiddelke/OU=ceq/O=eop@eop [ CEQ ] )

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CC:kevin m. o'donovan ( CN=kevin m. o'donovan/OU=ovp/O=eop@eop [ OVP ] )

READ:UNKNOWN

CC:kameran l. onley ( CN=kameran l. onley/OU=ceq/O=eop@eop [ CEQ ] )

READ:UNKNOWN

TEXT:

What??!! I want to grow oranges in the Arctic!

Phil Cooney  
04/08/2003 06:11:03 PM  
Record Type: Record

To: See the distribution list at the bottom of this message  
cc:  
Subject: FYI: 20th CENTURY CLIMATE NOT SO HOT

----- Forwarded by Phil Cooney/CEQ/EOP on 04/08/2003  
06:10 PM -----

Kathie L. Olsen  
04/08/2003 06:05:21 PM  
Record Type: Record

To: Phil Cooney/CEQ/EOP@EOP  
cc:  
Subject: Fwd: Cfa: 20th CENTURY CLIMATE NOT SO HOT

FYI  
----- Forwarded by Kathie L. Olsen/OSTP/EOP on 04/08/2003  
06:05 PM -----

Anne Kinney <akinney@hq.nasa.gov>  
04/03/2003 07:37:57 AM

Record Type: Record

To: Kathie L. Olsen/OSTP/EOP@EOP  
cc:  
Subject: Fwd: Cfa: 20th CENTURY CLIMATE NOT SO HOT

>Hi Kathie! I hope you are doing well! I thought you would be  
>interested in this press release - especially the first sentence -  
>which relates so strongly to climate change.

warm regards, Anne

>Date: Tue, 1 Apr 2003 13:21:43 -0500  
>From: "STEPHEN P. MARAN" <hrsmaran@clair.gsfc.nasa.gov>  
>To: akinney@hq.nasa.gov  
>Subject: Cfa: 20th CENTURY CLIMATE NOT SO HOT  
>  
>THE FOLLOWING RELEASE WAS RECEIVED FROM THE HARVARD-SMITHSONIAN  
>CENTER FOR ASTROPHYSICS, IN CAMBRIDGE, MASSACHUSETTS, AND IS  
>FORWARDED FOR YOUR INFORMATION. (FORWARDING DOES NOT IMPLY  
>ENDORSEMENT BY THE AMERICAN ASTRONOMICAL SOCIETY.) Steve Maran,  
>American Astronomical Society  
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>Contacts:  
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>Release No: 03-10  
>For Immediate Release  
>  
>NOTE TO EDITORS: Photos of key climate indicators are available online at  
><http://cfa-www.harvard.edu/press/pr0310image.html>  
>  
>20th CENTURY CLIMATE NOT SO HOT  
>  
>Cambridge, MA -- A review of more than 200 climate studies led by  
>researchers at the Harvard-Smithsonian Center for Astrophysics has  
>determined that the 20th century is neither the warmest century nor  
>the century with the most extreme weather of the past 1000 years. The  
>review also confirmed that the Medieval Warm Period of 800 to 1300  
>A.D. and the Little Ice Age of 1300 to 1900 A.D. were worldwide  
>phenomena not limited to the European and North American continents.  
>While 20th century temperatures are much higher than in the Little  
>Ice Age period, many parts of the world show the medieval warmth to  
>be greater than that of the 20th century.  
>  
>Smithsonian astronomers Willie Soon and Sallie Baliunas, with  
>co-authors Craig Idso and Sherwood Idso (Center for the Study of  
>Carbon Dioxide and Global Change) and David Legates (Center for  
>Climatic Research, University of Delaware), compiled and examined

>results from more than 240 research papers published by thousands of  
>researchers over the past four decades. Their report, covering a  
>multitude of geophysical and biological climate indicators, provides  
>a detailed look at climate changes that occurred in different regions  
>around the world over the last 1000 years.

>  
>"Many true research advances in reconstructing ancient climates have  
>occurred over the past two decades," Soon says, "so we felt it was  
>time to pull together a large sample of recent studies from the last  
>5-10 years and look for patterns of variability and change. In fact,  
>clear patterns did emerge showing that regions worldwide experienced  
>the highs of the Medieval Warm Period and lows of the Little Ice Age,  
>and that 20th century temperatures are generally cooler than during  
>the medieval warmth."

>  
>Soon and his colleagues concluded that the 20th century is neither  
>the warmest century over the last 1000 years, nor is it the most  
>extreme. Their findings about the pattern of historical climate  
>variations will help make computer climate models simulate both  
>natural and man-made changes more accurately, and lead to better  
>climate forecasts especially on local and regional levels. This is  
>especially true in simulations on timescales ranging from several  
>decades to a century.

>  
>--Historical Cold, Warm Periods Verified--

>  
>Studying climate change is challenging for a number of reasons, not  
>the least of which is the bewildering variety of climate indicators -  
>all sensitive to different climatic variables, and each operating on  
>slightly overlapping yet distinct scales of space and time. For  
>example, tree ring studies can yield yearly records of temperature  
>and precipitation trends, while glacier ice cores record those  
>variables over longer time scales of several decades to a century.

>  
>Soon, Baliunas and colleagues analyzed numerous climate indicators  
>including: borehole data; cultural data; glacier advances or  
>retreats; geomorphology; isotopic analysis from lake sediments or ice  
>cores, tree or peat celluloses (carbohydrates), corals, stalagmite or  
>biological fossils; net ice accumulation rate, including dust or  
>chemical counts; lake fossils and sediments; river sediments; melt  
>layers in ice cores; phenological (recurring natural phenomena in  
>relation to climate) and paleontological fossils; pollen; seafloor  
>sediments; luminescent analysis; tree ring growth, including either  
>ring width or maximum late-wood density; and shifting tree line  
>positions plus tree stumps in lakes, marshes and streams.

>  
>"Like forensic detectives, we assembled these series of clues in  
>order to answer a specific question about local and regional climate  
>change: Is there evidence for notable climatic anomalies during  
>particular time periods over the past 1000 years?" Soon says. "The  
>cumulative evidence showed that such anomalies did exist."

>  
>The worldwide range of climate records confirmed two significant  
>climate periods in the last thousand years, the Little Ice Age and  
>the Medieval Warm Period. The climatic notion of a Little Ice Age  
>interval from 1300 to 1900 A.D. and a Medieval Warm Period from 800 to  
>1300 A.D. appears to be rather well-confirmed and wide-spread,  
>despite some differences from one region to another as measured by  
>other climatic variables like precipitation, drought cycles, or  
>glacier advances and retreats.

>  
 >"For a long time, researchers have possessed anecdotal evidence  
 >supporting the existence of these climate extremes," Baliunas says.  
 >"For example, the Vikings established colonies in Greenland at the  
 >beginning of the second millennium that died out several hundred  
 >years later when the climate turned colder. And in England, vineyards  
 >had flourished during the medieval warmth. Now, we have an  
 >accumulation of objective data to back up these cultural indicators."

>  
 >The different indicators provided clear evidence for a warm period in  
 >the Middle Ages. Tree ring summer temperatures showed a warm interval  
 >from 950 A.D. to 1100 A.D. in the northern high latitude zones, which  
 >corresponds to the "Medieval Warm Period." Another database of tree  
 >growth from 14 different locations over 30-70 degrees north latitude  
 >showed a similar early warm period. Many parts of the world show the  
 >medieval warmth to be greater than that of the 20th century.

>  
 >The study -- funded by NASA, the Air Force Office of Scientific  
 >Research, the National Oceanic and Atmospheric Administration, and  
 >the American Petroleum Institute -- will be published in the Energy  
 >and Environment journal. A shorter paper by Soon and Baliunas  
 >appeared in the January 31, 2003 issue of the Climate Research  
 >journal.

>  
 >Headquartered in Cambridge, Massachusetts, the Harvard-Smithsonian  
 >Center for Astrophysics (CfA) is a joint collaboration between the  
 >Smithsonian Astrophysical Observatory and the Harvard College  
 >Observatory. CfA scientists organized into six research divisions  
 >study the origin, evolution, and ultimate fate of the universe.

>  
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 >should be sent to the same address.

--  
 Anne L. Kinney  
 Director, Astronomy and Physics Division  
 Office of Space Science  
 NASA Headquarters

For appointments, call Jane Davis at 202-358-2150

Message Sent

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