PennFuture
Energy Center
for Enterprise
and the Environment

Pennsylvania and the Clean Power Plan

Rob Altenburg
Director, PennFuture Energy Center

the Environment

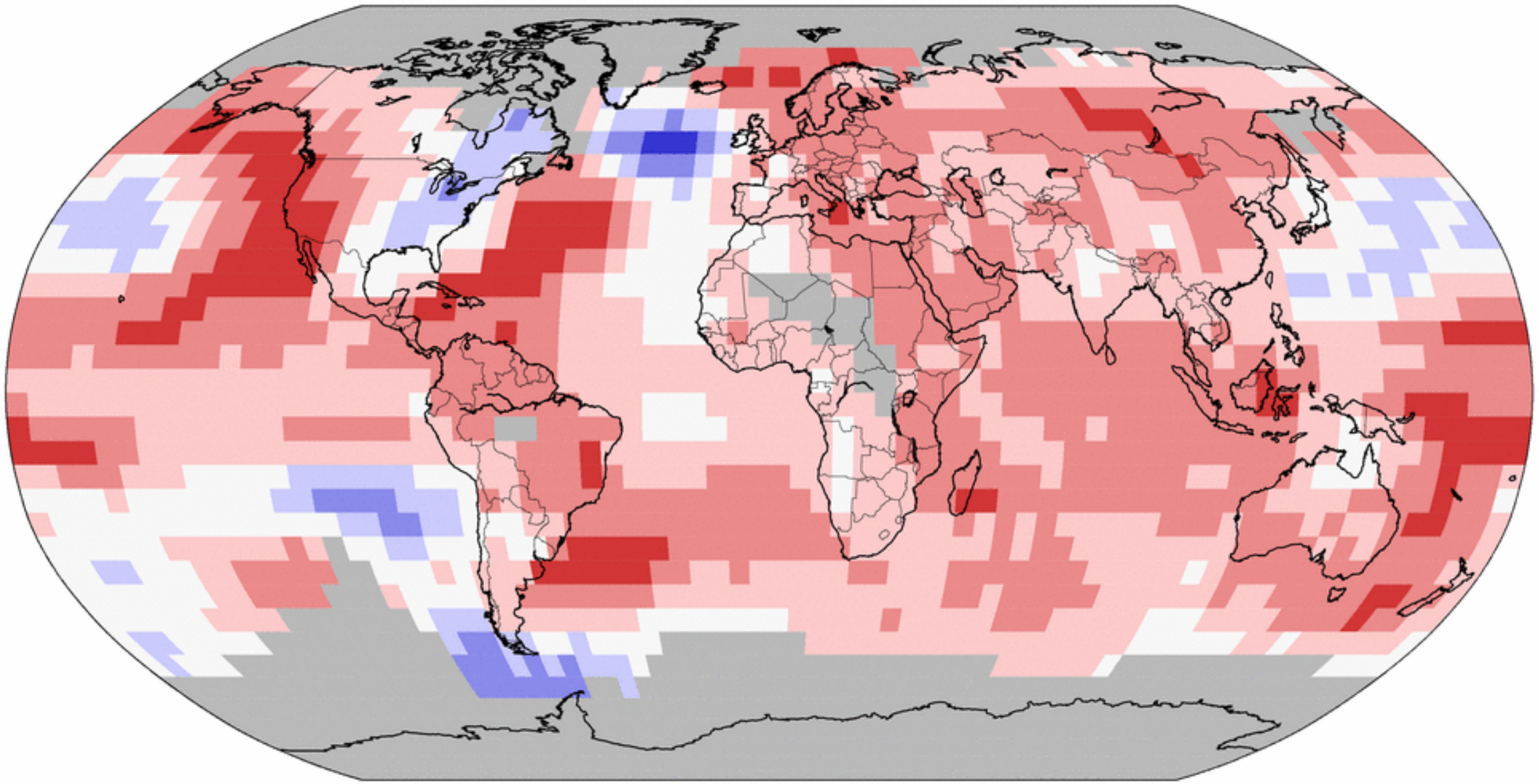
This?

Or
This?

Land & Ocean Temperature Percentiles Dec 2014–Feb 2015

NOAA's National Climatic Data Center

Data Source: GHCN–M version 3.2.2 & ERSST version 3b



Record Coldest

Much Cooler than Average

Cooler than Average

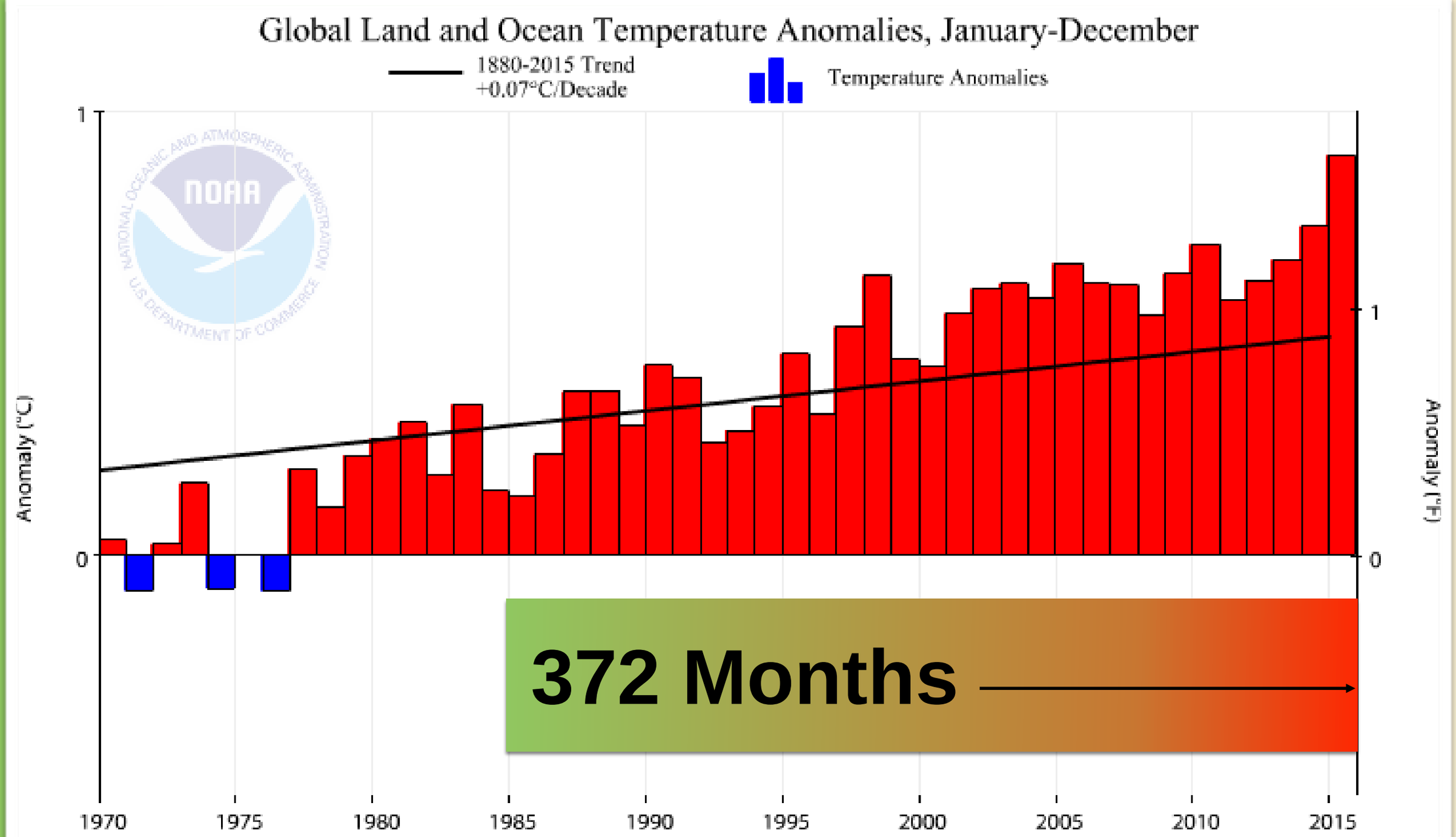
Near Average

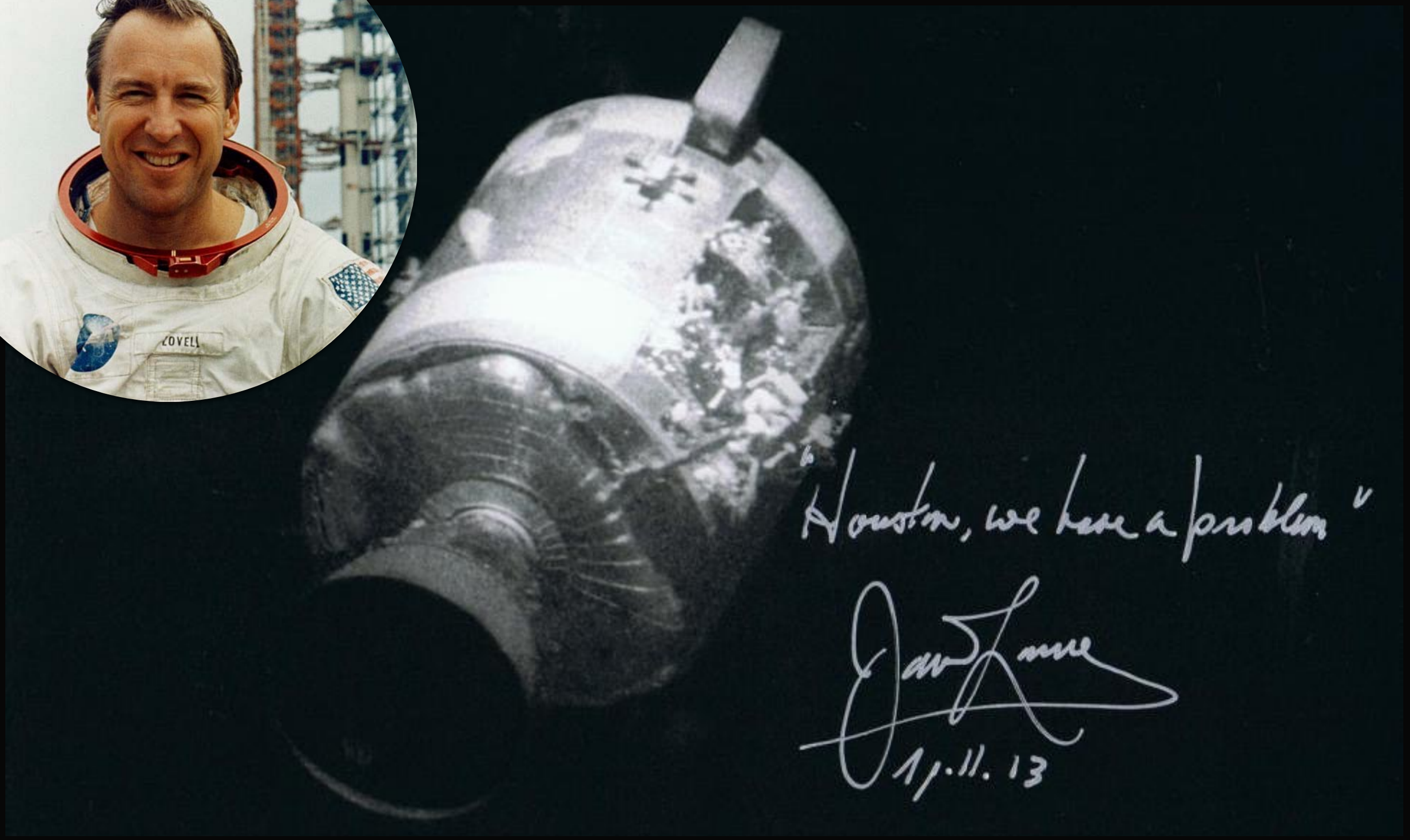
Warmer than Average

Much Warmer than Average

Record Warmest

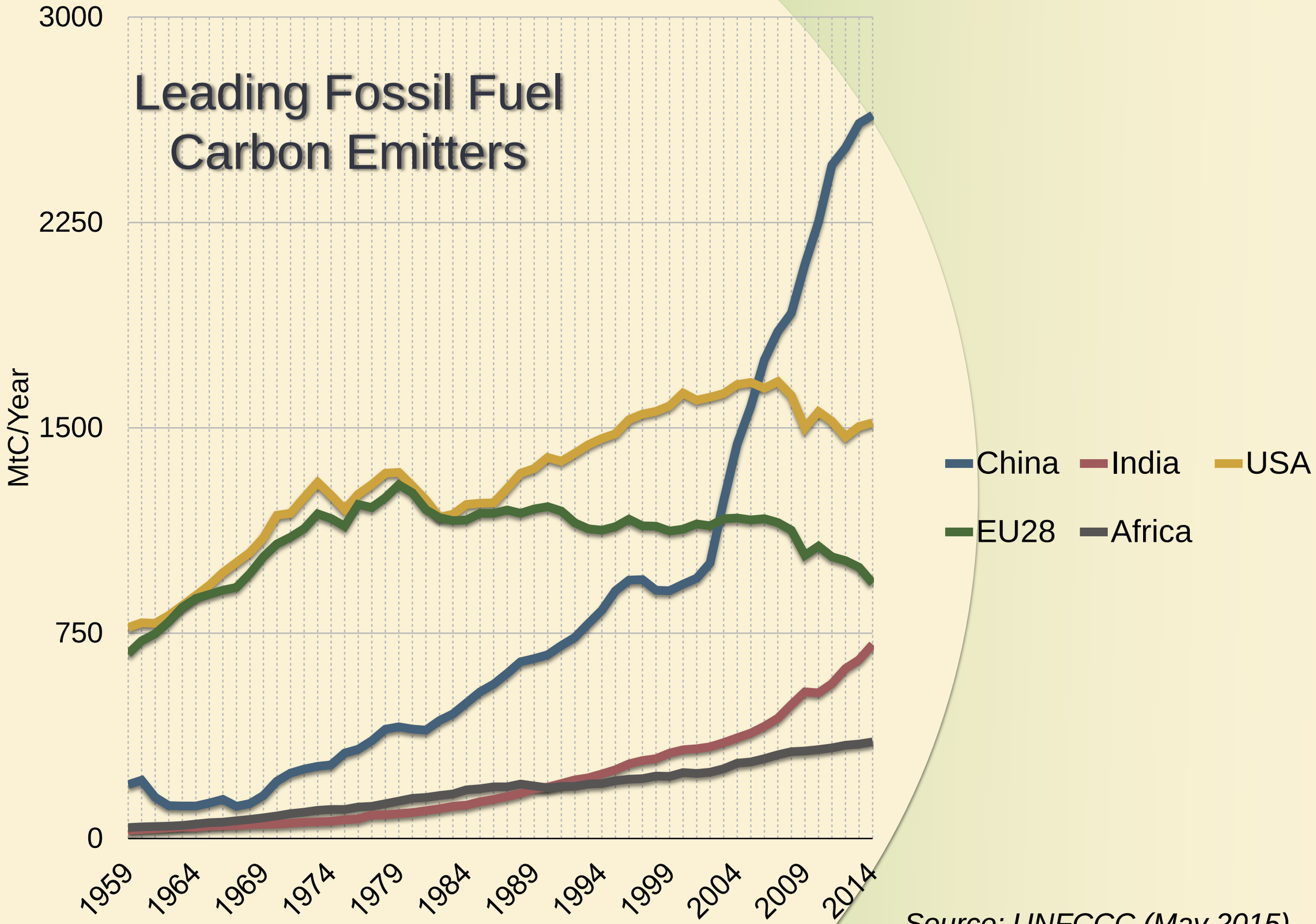
Mon Mar 16 19:53:13 EDT 201


Global Land and Ocean Temperature Anomalies, January-December
1880-2015 Trend
+0.07°C/Decade
Temperature Anomalies
Anomaly (°C)
Anomaly (°F)
1
0
1
0
1970
1975
1980
1985
1990
1995
2000
2005
2010
2015
372 Months



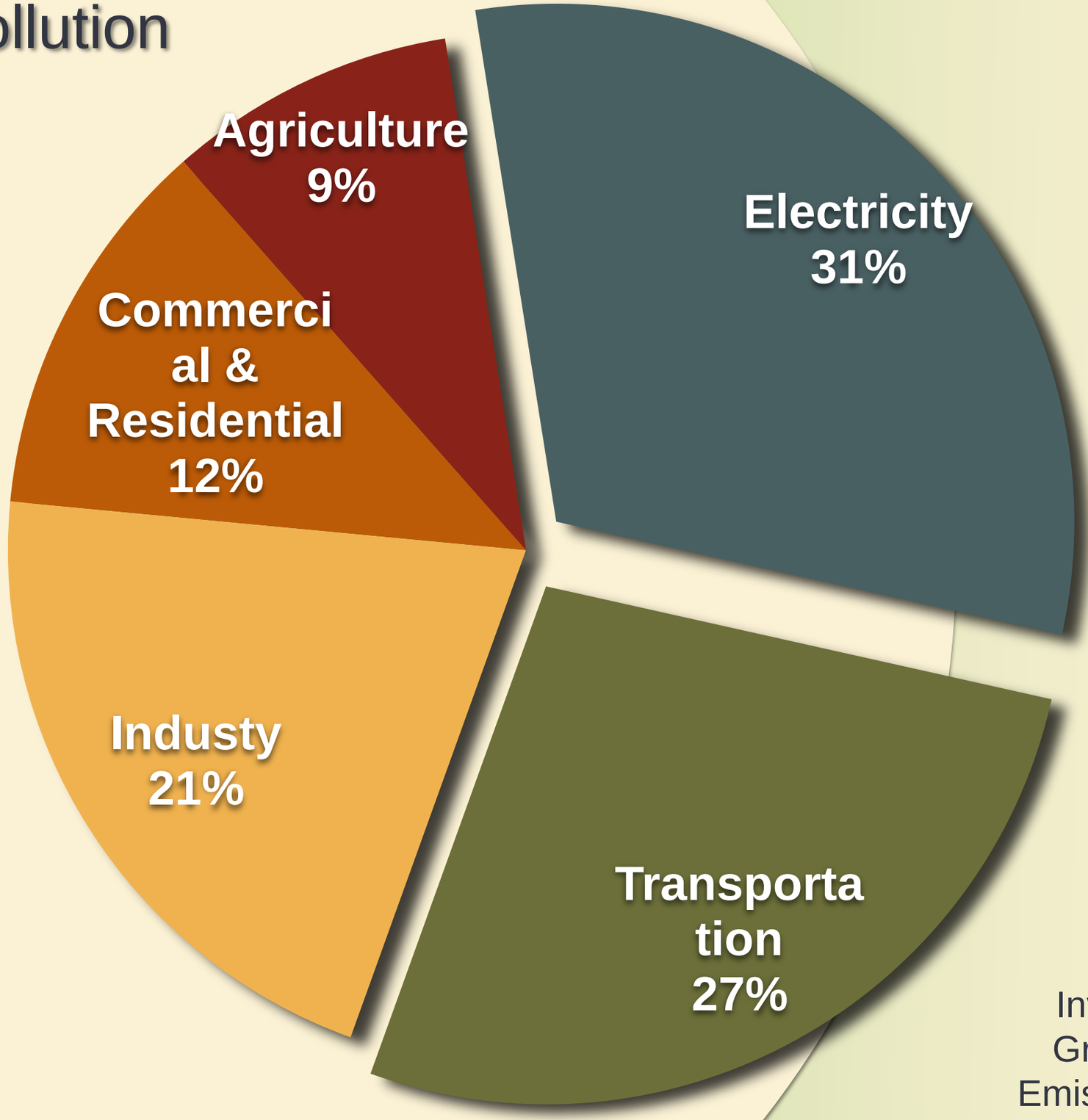
NASA image

Leading Fossil Fuel Carbon Emitters



Source: UNFCCC (May 2015)
Boden,TA, Marland, G, et. al.

Sources of U.S. Carbon Pollution



Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2013

“For everyone who thinks it’s warming, I can find someone who thinks it isn’t.”

Sen. Mitch McConnell

“We’ve had climate change forever.”

Rep. Paul Ryan

Not Scientists

The Clean Air Act

(1970 Extension)

William Ruckelshaus

Russell Train

The Clean Air Act

(1970 Extension)

§108

§202

§115

§111

EPA Administrator

Gina McCarthy

§111

If…

“…causes or contributes to **air pollution** which may **reasonably endanger public health or welfare**.”

Then

EPA ***shall*** **establish standards of performance** for ***new*** sources

§111: New Source Performance Standards

Best system of emissions reductions…**adequately demonstrated**

(d)

existing sources

22 %

(2012 – 2030)*

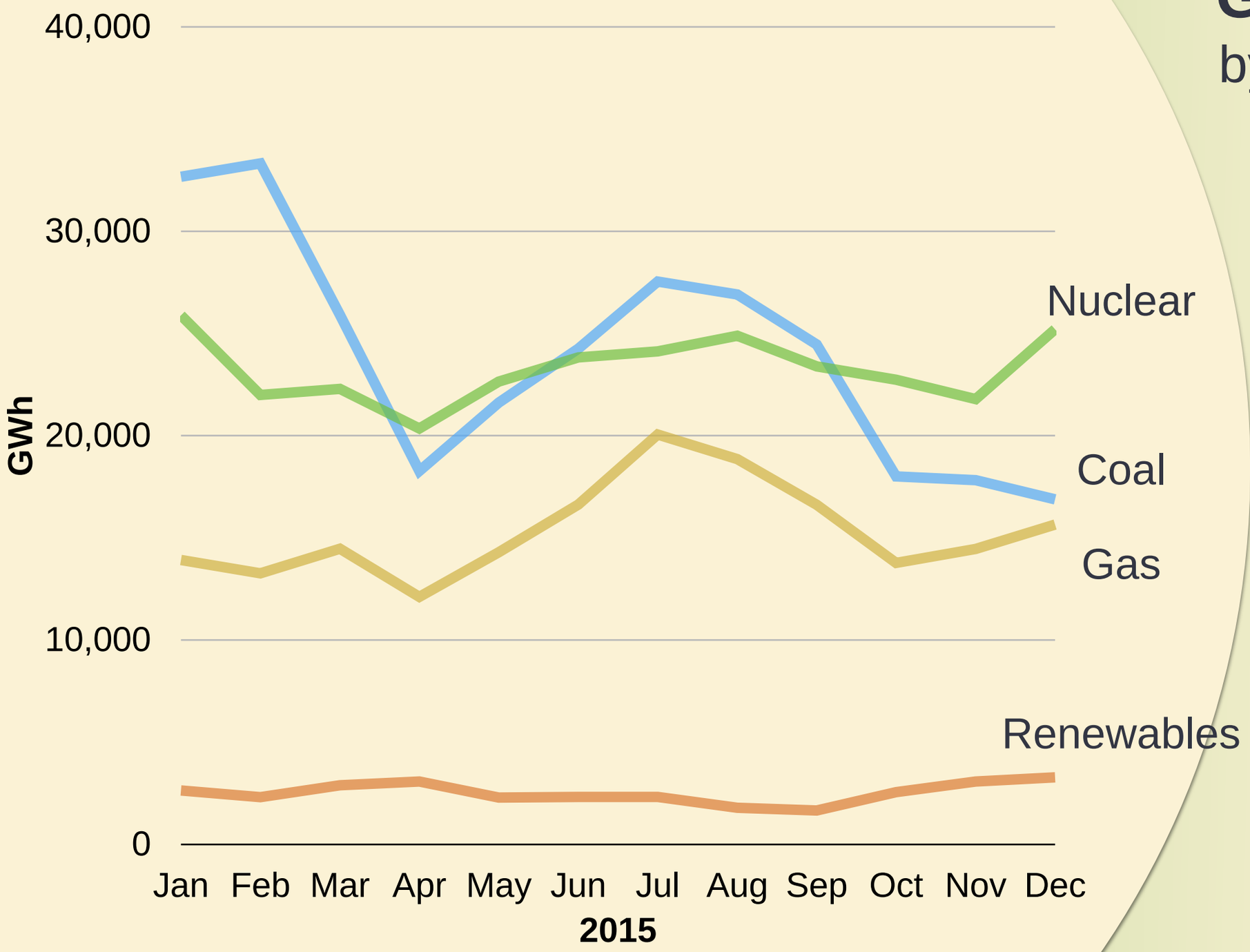
* Mass-based goals with new and existing sources

Name	Capacity	Retired	Age
Elrama	289MW	2012	57-59
Armstrong	343MW	2012	52-53
Titus	243MW	2013	58-61
Mitchell	359MW	2013	49-63
Hatfield’s Ferry	1.6GW	2013	41-43
Sunbury	382MW	2014	60-64
Portand	401MW	2014	49-53
Shawville	597MW	2015	51-58

PJM Monthly Generation

by fuel source

2015



Source: *State of the Market Report for PJM* (2015)

NGA Models

Public Hearings

EPA Guidance

DEP Staff

Advisory Committees

Stakeholder Meetings

DEP Secretary

John Quigley

Not So Fast!

Next Steps?

Pennsylvania will continue planning and engagement with stakeholders on the Clean Power Plan…

It’s all about People.

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Questions?

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