112TH CONGRESS 1ST SESSION

S. 116

To provide for the establishment, on-going validation, and utilization of an official set of data on the historical temperature record, and for other purposes.

IN THE SENATE OF THE UNITED STATES

January 25 (legislative day, January 5), 2011

Mr. VITTER (for himself and Mr. BARRASSO) introduced the following bill; which was read twice and referred to the Committee on Commerce, Science, and Transportation

A BILL

- To provide for the establishment, on-going validation, and utilization of an official set of data on the historical temperature record, and for other purposes.
 - 1 Be it enacted by the Senate and House of Representa-
 - 2 tives of the United States of America in Congress assembled,
 - 3 SECTION 1. SHORT TITLE.
 - 4 This Act may be cited as the "Public Access to His-
 - 5 torical Records Act".
 - 6 SEC. 2. OFFICIAL DATASET ON HISTORICAL TEMPERATURE
 - 7 RECORD.
 - 8 (a) Establishment of Official Dataset by
- 9 NASA.—The Administrator of the National Aeronautics

1 and Space Administration shall establish an official2 dataset on the historical temperature record.

(b) Requirements for Dataset.—

- (1) Utilization of RAW data.—In establishing the dataset required by this section, the Administrator shall utilize the raw data relating to temperature collected by each applicable station and vessel and shall, for that purpose, reexamine applicable records collected by such stations and vessels and accurately quantify the statistical uncertainty (including estimates of random and bias errors) of each temperature observation and any subsequent products based on such observation.
- (2) CLEAR AND FULL IDENTIFICATION OF GAPS IN DATA.—In establishing the dataset, the Administrator shall clearly and fully identify each gap that exists in temperature station data and temperature reading data.
- (3) FILL-IN DATA.—If in establishing the dataset the Administrator supplies or fills in data to address a gap in temperature station data or temperature reading data, or for any other reason, the Administrator shall—
- 24 (A) clearly and fully identify the data so 25 supplied or filled in as fill-in data; and

1	(B) clearly and fully explain the rationale
2	for supplying or filling in such data.
3	(c) Panel on Utilization of Data for Estab-
4	LISHMENT OF DATASET.—
5	(1) In General.—The Administrator shall es-
6	tablish a panel to assist the Administrator in the es-
7	tablishment of the dataset required by this section.
8	(2) Members.—The panel shall consist of
9	seven individuals appointed by the Administrator
10	from among individuals in the private sector with ac-
11	knowledged expertise in meteorology and statistics
12	who—
13	(A) do not have a significant financial in-
14	terest in taking a position on the matter of
15	global climate change; and
16	(B) have not received funding from any de-
17	partment, agency, or entity of the Federal Gov-
18	ernment for activities relating to global climate
19	research within the past five years.
20	(3) Duties.—The panel shall assist the Admin-
21	istrator in establishing the dataset required by this
22	section by—
23	(A) determining which land surface, sea
24	surface, and satellite records shall be utilized in
25	the establishment of the dataset.

1	(B) establishing standards and criteria for
2	determining confidence levels for the interpola-
3	tion and extrapolation of historical average
4	global temperatures over successive 25-year pe-
5	riods in the past; and
6	(C) establishing a rationale for an average
7	historical global temperature and a means of
8	analysis for assessing the accuracy of such av-
9	erage.
10	(d) Independent Verification and Validation
11	OF DATASET.—
12	(1) In general.—Not less often than once
13	every three years, the Administrator shall enter into
14	a contract with an appropriate entity that is inde-
15	pendent of the Federal Government to perform a
16	verification and validation of the dataset established
17	under this section.
18	(2) APPROPRIATE ENTITIES.—An entity with
19	which the Administrator enters into a contract
20	under this subsection shall be an entity with per-
21	sonnel having the skills and expertise appropriate for
22	the verification or validation (as the case may be) of
23	the dataset, including the following:
24	(A) For the verification, personnel with
25	skills and expertise relating to computer pro-

- 1 gramming and computer software development 2 (including error handling).
- (B) For the validation, personnel with ex-3 4 pertise in statistics and meteorology.
- (3) Responsibilities.—In carrying out the 6 verification or validation of the dataset under a con-7 tract under this subsection, an entity shall carry out 8 such activities with respect to the dataset as the Ad-9 ministrator shall specify in the contract, including a 10 review of any data interpolation codes for purposes of identifying and eliminating bias.
- PUBLICATION.—Any algorithms utilized, 12 13 and any determinations made, in the verification and 14 validation of the dataset pursuant to this subsection 15 shall be made available to the public.

16 SEC. 3. UTILIZATION OF DATASET IN GLOBAL CLIMATE RE-

17 SEARCH.

11

- 18 (a) Utilization as Sole Source of Data.—Upon
- 19 the completion of the establishment of the dataset on the
- 20 historical temperature record required by section 2, any
- 21 person or entity engaged in global climate research that
- is funded in whole or in part with funds from the Federal
- 23 Government shall utilize a dataset as the source of data
- on the historical temperature record.

- 1 (b) Utilization Among Multiple Sources of
- 2 Data.—In publishing any findings or hypothesis on global
- 3 climate change, any person or entity engaged in global cli-
- 4 mate research that is funded in whole or in part with
- 5 funds from the Federal Government shall use the dataset
- 6 described in subsection (a) as the primary source, or at
- 7 least one of their primary sources, for historical global
- 8 temperatures if such person or entity elects to consider
- 9 multiple sources of such data.
- 10 SEC. 4. PUBLIC RELEASE OF TEMPERATURE STATION
- 11 **DATA.**
- 12 (a) Release of Raw Data Required.—The Sec-
- 13 retary of Commerce shall provide for the immediate re-
- 14 lease to the public, in unadjusted form, of all raw tempera-
- 15 ture station data from cooperative observers and auto-
- 16 mated stations collected by the National Climatic Data
- 17 Center as of the date of the enactment of this Act. The
- 18 data shall be released to the public in a digital electronic
- 19 format.
- 20 (b) Release of Certain Analyses.—The Sec-
- 21 retary shall provide for the immediate release to the public
- 22 of an analysis of the differences between the raw tempera-
- 23 ture datasets and the final temperature datasets collected
- 24 and administered by the National Climatic Data Center
- 25 as of the date of the enactment of this Act. The analysis

- 1 shall be released to the public in digital numerical tabular
- 2 form and in graphical form. One such graph shall show
- 3 the raw temperature dataset line overlain with the final
- 4 temperature dataset line over time.

5 SEC. 5. ACCURACY OF DATA PROCESSING AND DATA AD-

6 JUSTMENT.

(a) Data Processing.—

- eral official shall publish on the Internet website of the agency concerned that is available to the public any coding or other algorithm utilized by such official in processing data for purposes of complying with the requirements of section 2 or 4, as the case may be, together with a notice of the availability of the review and correction of such coding or algorithm for quality, objectivity, utility, and integrity by such agency pursuant to the administrative mechanisms applicable to such agency under section 515(b)(2)(B) of the Information Quality Act.
- (2) Review.—Any request for the correction of coding or other algorithm under paragraph (1) shall be processed in accordance with the guidelines of the Information Quality Act applicable to the agency concerned not later than 30 days after receipt of such request by such agency.

(b) Data Adjustment.—

- (1) METHODS TO COMPLY WITH INFORMATION QUALITY ACT.—The applicable Federal official may not utilize a method for the adjustment of data for purposes of complying with the requirements of section 2 or 4, as the case may be, unless such official ensures and certifies that such method complies with the guidelines of the Information Quality Act, including, but not limited to, requirements as follows:
 - (A) To make available to the public (including through the Internet website of the agency concerned that is available to the public) the computer coding and a detailed explanation of the processes utilized in such adjustment of data.
 - (B) To make available to the public (including through such Internet website) all peer review comments relating to the data being adjusted and the processes and algorithms used in such adjustment of data.
 - (C) To make available to the public (including through such Internet website) a description of any previous changes in the data being adjusted and of the effect of such changes

1	on trends, averages, and other statistical cat-
2	egories of such data.
3	(D) To cite all applicable studies, reports
4	and peer reviewed papers using the data being
5	adjusted or any earlier iterations of such data
6	(E) To utilize in such adjustment of data
7	only data and adjustment processes and algo-
8	rithms that are non-proprietary in nature.
9	(F) To require that any agents and con-
10	tractors relied upon in such adjustment of data
11	are subject to section 552 of title 5, United
12	States Code (commonly referred to as the
13	"Freedom of Information Act"), regarding their
14	activities in such adjustment of data.
15	(2) AVAILABILITY UPON REQUEST.—Not later
16	than 10 days after the date of receipt of a request
17	therefor, the applicable Federal official shall make
18	available the certification with respect to a method
19	for the adjustment of data under paragraph (1), to-
20	gether with a description of such method sufficient
21	to permit independent replication of the adjustment
22	made by such method.
	·

- (c) Definitions.—In this section:
- (1) The term "applicable Federal official"
 means the following:

1	(A) The Administrator of the National
2	Aeronautics and Space Administration for pur-
3	poses of actions under section 2.
4	(B) The Secretary of Commerce for pur-
5	poses of actions under section 4.
6	(2) The term "Information Quality Act" means
7	section 515 of the Treasury and General Govern-
8	ment Appropriations Act, 2001 (as enacted into law
9	by the Consolidated Appropriations Act, 2001 (Pub-
10	lic Law 106–554; 114 Stat. 2763A–153)).

 \circ