

111TH CONGRESS
2D SESSION

S. 4015

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

DECEMBER 8, 2010

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 official
2 dataset on the historical temperature record.

3 (b) REQUIREMENTS FOR DATASET.—

4 (1) UTILIZATION OF RAW DATA.—In estab-
5 lishing the dataset required by this section, the Ad-
6 ministrator shall utilize the raw data relating to
7 temperature collected by each applicable station and
8 vessel and shall, for that purpose, reexamine applica-
9 ble records collected by such stations and vessels and
10 accurately quantify the statistical uncertainty (in-
11 cluding estimates of random and bias errors) of each
12 temperature observation and any subsequent prod-
13 ucts based on such observation.

14 (2) CLEAR AND FULL IDENTIFICATION OF GAPS
15 IN DATA.—In establishing the dataset, the Adminis-
16 trator shall clearly and fully identify each gap that
17 exists in temperature station data and temperature
18 reading data.

19 (3) FILL-IN DATA.—If in establishing the
20 dataset the Administrator supplies or fills in data to
21 address a gap in temperature station data or tem-
22 perature reading data, or for any other reason, the
23 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).

3 (B) For the validation, personnel with ex-
4 pertise in statistics and meteorology.

5 (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
11 of identifying and eliminating bias.

12 (4) PUBLICATION.—Any algorithms utilized,
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.**

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
22 is funded in whole or in part with funds from the Federal
23 Government shall utilize a dataset as the source of data
24 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.**

7 (a) DATA PROCESSING.—

8 (1) RELEASE TO PUBLIC.—The applicable Fed-
9 eral official shall publish on the Internet Web site of
10 the agency concerned that is available to the public
11 any coding or other algorithm utilized by such offi-
12 cial in processing data for purposes of complying
13 with the requirements of section 2 or 4, as the case
14 may be, together with a notice of the availability of
15 the review and correction of such coding or algo-
16 rithm for quality, objectivity, utility, and integrity by
17 such agency pursuant to the administrative mecha-
18 nisms applicable to such agency under section
19 515(b)(2)(B) of the Information Quality Act.

20 (2) REVIEW.—Any request for the correction of
21 coding or other algorithm under paragraph (1) shall
22 be processed in accordance with the guidelines of the
23 Information Quality Act applicable to the agency
24 concerned not later than 30 days after receipt of
25 such request by such agency.

1 (b) DATA ADJUSTMENT.—

2 (1) METHODS TO COMPLY WITH INFORMATION
3 QUALITY ACT.—The applicable Federal official may
4 not utilize a method for the adjustment of data for
5 purposes of complying with the requirements of sec-
6 tion 2 or 4, as the case may be, unless such official
7 ensures and certifies that such method complies with
8 the guidelines of the Information Quality Act, in-
9 cluding, but not limited to, requirements as follows:

10 (A) To make available to the public (in-
11 cluding through the Internet Web site of the
12 agency concerned that is available to the public)
13 the computer coding and a detailed explanation
14 of the processes utilized in such adjustment of
15 data.

16 (B) To make available to the public (in-
17 cluding through such Internet Web site) all
18 peer review comments relating to the data being
19 adjusted and the processes and algorithms used
20 in such adjustment of data.

21 (C) To make available to the public (in-
22 cluding through such Internet Web site) a de-
23 scription of any previous changes in the data
24 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.

23 (c) DEFINITIONS.—In this section:

24 (1) The term “applicable Federal official”
25 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)).

○