

109<sup>TH</sup> CONGRESS  
1<sup>ST</sup> SESSION

# S. 245

To provide for the development and coordination of a comprehensive and integrated United States research program that assists the people of the United States and the world to understand, assess, and predict human-induced and natural processes of abrupt climate change.

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## IN THE SENATE OF THE UNITED STATES

FEBRUARY 1, 2005

Ms. COLLINS (for herself, Ms. CANTWELL, Ms. SNOWE, Mrs. MURRAY, Mr. JEFFORDS, and Mr. DEWINE) introduced the following bill; which was read twice and referred to the Committee on Commerce, Science, and Transportation

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## A BILL

To provide for the development and coordination of a comprehensive and integrated United States research program that assists the people of the United States and the world to understand, assess, and predict human-induced and natural processes of abrupt climate change.

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 “Abrupt Climate  
5       Change Research Act of 2005”.

1 **SEC. 2. ABRUPT CLIMATE CHANGE RESEARCH PROGRAM.**

2 (a) ESTABLISHMENT OF PROGRAM.—The Secretary  
3 of Commerce shall establish within the Office of Oceanic  
4 and Atmospheric Research of the National Oceanic and  
5 Atmospheric Administration, and shall carry out, a pro-  
6 gram of scientific research on abrupt climate change.

7 (b) PURPOSES OF PROGRAM.—The purposes of the  
8 program are as follows:

9 (1) To develop a global array of terrestrial and  
10 oceanographic indicators of paleoclimate in order to  
11 sufficiently identify and describe past instances of  
12 abrupt climate change.

13 (2) To improve understanding of thresholds and  
14 nonlinearities in geophysical systems related to the  
15 mechanisms of abrupt climate change.

16 (3) To incorporate such mechanisms into ad-  
17 vanced geophysical models of climate change.

18 (4) To test the output of such models against  
19 an improved global array of records of past abrupt  
20 climate changes.

21 (c) ABRUPT CLIMATE CHANGE DEFINED.—In this  
22 section, the term “abrupt climate change” means a change  
23 in the climate that occurs so rapidly or unexpectedly that  
24 human or natural systems have difficulty adapting to the  
25 climate as changed.

1 **SEC. 3. AUTHORIZATION OF APPROPRIATIONS.**

2       There is authorized to be appropriated to the Depart-  
3 ment of Commerce for each of fiscal years 2006 through  
4 2011, to remain available until expended, \$10,000,000 to  
5 carry out the research program required under section 2.

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