

## APPENDIX B

## UCS Climate Scientist Survey Text and Responses (NCAR)

Following is the text of the survey UCS mailed to 119 climate scientists at the National Center for Atmospheric Research (NCAR), along with response data for the 29 scientists who returned completed surveys. Two numbers are listed for each response option in the survey—the number of scientists who selected that response (listed in parentheses) and the percentage of scientists answering the question who marked that response option. (See Appendix A for survey text and response data for federal climate scientists, and Appendix C for a detailed analysis of select survey questions.)

For some questions the aggregate number of responses to a given question is less than 29 because not all scientists answered the question, and for other questions the aggregate number is greater because scientists were allowed to choose more than one response to the given question. It is important to note that the percentages listed in this appendix (and in the report text) are calculated in reference to *the number of scientists answering the question,*

rather than the total number of returned surveys or the aggregate number of responses to each question. Percentages listed for a given question may not total 100 percent due to rounding or multiple responses to a question by a scientist.

The text of the NCAR survey closely follows that of the survey sent to federal climate scientists; however, because NCAR scientists are not federal employees the language of some questions was changed to clarify the intent of the question. Questions 10–18, 23–25, 29, 34–36, and 39 substituted the word “NCAR” for “my agency” or “my office” to clarify that the question was asking about the scientists’ experiences at NCAR rather than their perceptions of the work environment at federal agencies. Question 15, which originally addressed scientific openness policies at federal agencies, was replaced with a broader question about communication policies at NCAR. Questions 5 through 8, which ask general questions about the state of federal government climate research, were left unchanged.

## 2006 UCS Scientific Integrity Program SURVEY OF CLIMATE SCIENTISTS

The Union of Concerned Scientists (UCS) is the leading science-based nonprofit working for a healthy environment and a safer world. UCS combines independent scientific research and citizen action to develop innovative, practical solutions and to secure responsible changes in government policy, corporate practices, and consumer choices. This survey is produced by the UCS Scientific Integrity Program.

We are interested in comparing your experiences at NCAR with those of federal agency climate scientists. Please fill out this survey and mail it in the enclosed postage-paid envelope as soon as possible, but before July 30, 2006. All responses will be kept anonymous and confidential. Please feel free to write comments on page 4 or a separate sheet of paper. Please do not write in the margins or edit the wording of questions—we cannot tabulate responses to questions that are edited. For more information on UCS and our previous surveys of scientists at federal agencies, please see [www.ucsusa.org/scientific\\_integrity](http://www.ucsusa.org/scientific_integrity).

### RESEARCH AND TRAINING (circle one)

#### 1. My major field of training is:

climatology 10% (3)	meteorology 34% (10)	engineering 3% (1)	geology 0% (0)
physics 28% (8)	chemistry 7% (2)	biology 3% (1)	other 38% (11)

optional: list field of specialization \_\_\_\_\_

#### 2. My climate science-related work primarily involves:

basic science 3% (1)	observation/measurement 38% (11)	modeling 48% (14)
impacts 3% (1)	management/policy 3% (1)	other: _____ 7% (2)

#### 3. The percentage of my work having to do with climate-related topics is approximately:

0-25%	26-50%	51-75%	76-100%
21% (6)	7% (2)	39% (11)	32% (9)

#### 4. I generally seek to publish my research findings in peer-reviewed literature.

yes	no	not applicable
93% (26)	4% (1)	4% (1)

### FEDERAL CLIMATE SCIENCE (circle one)

#### 5. U.S. federal government climate research is of generally excellent quality.

strongly agree	agree	no opinion	disagree	strongly disagree
36% (10)	57% (16)	7% (2)	0% (0)	0% (0)

**6. The U.S. government has done a good job funding climate research.**

strongly agree	agree	no opinion	disagree	strongly disagree
10% (3)	45% (13)	3% (1)	34% (10)	7% (2)

**7. U.S. federal government climate research is independent and impartial.**

strongly agree	agree	no opinion	disagree	strongly disagree
29% (8)	50% (14)	14% (4)	7% (2)	0% (0)

**8. Today's environment for federal government climate science is (better, worse, same) compared with:**

• 1 year ago	better	worse	same	no opinion
	3% (1)	28% (8)	52% (15)	17% (5)
• 5 years ago	better	worse	same	no opinion
	3% (1)	59% (17)	21% (6)	17% (5)
• 10 years ago	better	worse	same	no opinion
	17% (5)	66% (19)	0% (0)	17% (5)

**9. My climate science-related work touches on issues that could be considered sensitive or controversial.**

always	frequently	occasionally	seldom	never
3% (1)	17% (5)	38% (11)	31% (9)	10% (3)

**CLIMATE SCIENCE AT NCAR** (circle one)**10. Climate science at NCAR is moving in the right direction.**

strongly agree	agree	no opinion	disagree	strongly disagree
10% (3)	76% (22)	10% (3)	3% (1)	0% (0)

**11. NCAR's leadership aspires to and expects a high level of integrity and professionalism.**

strongly agree	agree	no opinion	disagree	strongly disagree
52% (15)	45% (13)	0% (0)	3% (1)	0% (0)

**12. NCAR's management stands behind scientific staff or managers who put forth scientifically defensible positions that may be politically controversial.**

strongly agree	agree	no opinion	disagree	strongly disagree
52% (15)	34% (10)	10% (3)	3% (1)	0% (0)

**13. NCAR offers opportunity for advancement based on scientific expertise, not just on administrative and supervisory expertise.**

strongly agree	agree	no opinion	disagree	strongly disagree
45% (13)	45% (13)	10% (3)	0% (0)	0% (0)

**14. NCAR has a clear policy on scientific communication with the public and the media.**

strongly agree	agree	no opinion	disagree	strongly disagree	don't know
10% (3)	72% (21)	3% (1)	10% (3)	0% (0)	3% (1)

**15. Policies at NCAR pertaining to communication accurately convey climate research to the public and the media.**

strongly agree	agree	no opinion	disagree	strongly disagree	not applicable
24% (7)	52% (15)	14% (4)	7% (2)	0% (0)	3% (1)

**16. Documents, reports, and recommendations from NCAR rely upon the best available science.**

always	frequently	occasionally	seldom	never
59% (16)	41% (11)	0% (0)	0% (0)	0% (0)

**17. NCAR helps me effectively communicate relevant research findings to the public.**

always	frequently	occasionally	seldom	never	not applicable
28% (8)	24% (7)	24% (7)	0% (0)	0% (0)	24% (7)

**18. NCAR requires public affairs officials to monitor scientists' communications with the media.**

always	frequently	occasionally	seldom	never	don't know
0% (0)	7% (2)	7% (2)	14% (4)	41% (12)	31% (9)

**CLIMATE SCIENCE WORK ENVIRONMENT** (Please check all that apply)

**I have perceived in others and/or personally experienced the following types of activities affecting climate science:**

	<i>Perceived</i>	<i>Experienced</i>	<i>Neither</i>	
19.	21% (6)	0% (0)	79% (23)	Changes/edits during review that change the meaning of scientific findings.
20.	28% (8)	7% (2)	66% (19)	Pressure to eliminate the word(s) "climate change" and/or "global warming," and/or similar terms.
21.	14% (4)	7% (2)	83% (24)	Requests to present opposing views for "balance" even when such views would not be scientifically credible.
22.	7% (2)	7% (2)	86% (25)	Disappearance/unusual delay in the release of websites, press releases, reports, or other science-based materials.
23.	0% (0)	3% (1)	97% (28)	Self-induced pressure to change research or reporting in order to align findings with NCAR policy or to avoid controversy.
24.	0% (0)	0% (0)	100% (29)	Fear of retaliation for openly expressing concerns about climate change inside NCAR.

25.	14% (4)	7% (2)	83% (24)	Fear of retaliation for openly expressing concerns about climate change outside NCAR.
26.	3% (1)	0% (0)	97% (28)	Requests by officials for scientists to provide incomplete, inaccurate, or misleading information to the public.
27.	7% (2)	3% (1)	93% (27)	Implicit expectation by officials for scientists to provide incomplete, inaccurate, or misleading information to the public.
28.	7% (2)	17% (5)	79% (23)	New or unusual administrative requirements or procedures that impair climate-related work.
29.	4% (1)	0% (0)	96% (27)	Statements by officials at NCAR that misrepresent scientists' findings.
30.	10% (3)	0% (0)	90% (26)	Situations in which scientists have actively objected to, resigned from, or removed themselves from a project because of pressure to change scientific findings.
31.	0% (0)	0% (0)	100% (7)	Other (please elaborate below in essay question #40.)

**32. Number of instances of any activities listed above perceived in others in the past five years:**

0	1-5	6-10	11-20	More than 20
61% (17)	29% (8)	11% (3)	0% (0)	0% (0)

**33. Number of instances of any activities listed above personally experienced in the past five years:**

0	1-5	6-10	11-20	More than 20
78% (21)	19% (5)	4% (1)	0% (0)	0% (0)

**JOB SATISFACTION** (circle one)

**34. I would recommend that scientists consider a career at NCAR related to climate science.**

strongly agree	agree	no opinion	disagree	strongly disagree
48% (14)	48% (14)	3% (1)	0% (0)	0% (0)

**35. Morale within NCAR is:**

excellent	good	fair	poor	extremely poor	no opinion
17% (5)	52% (15)	24% (7)	7% (2)	0% (0)	0% (0)

36. Over the past few years my personal job satisfaction at NCAR has:

increased	decreased	stayed the same	no opinion
25% (7)	39% (11)	32% (9)	4% (1)

