

CLIMATE CHANGE SCIENCE PROGRAM FY 2007 BUDGET TABLES

The Climate Change Science Program (CCSP) integrates federally supported research on global change and climate change, as conducted by 13 U.S. Government departments and agencies:

- Department of Agriculture (USDA)
- Department of Commerce / National Oceanic and Atmospheric Administration (DOC/NOAA)
- Department of Defense (DOD)
- Department of Energy (DOE)
- Department of Health and Human Services (HHS)
- Department of the Interior / U.S. Geological Survey (DOI/USGS)
- Department of State (DOS)
- Department of Transportation (DOT)
- Agency for International Development (USAID)
- Environmental Protection Agency (EPA)
- National Aeronautics and Space Administration (NASA)
- National Science Foundation (NSF)
- Smithsonian Institution (SI).



The CCSP incorporates and integrates the U.S. Global Change Research Program (USGCRP) with the Administration's U.S. Climate Change Research Initiative (CCRI). CCSP budget requests are coordinated through interagency research working groups and other mechanisms, but ultimate budget accountability resides with the participating departments and agencies. As a result of its interagency composition, activities of CCSP participating agencies are funded by Congress through nine of the 13 annual Appropriations bills.

The following tables summarize the CCSP budget:

- Tables 1 and 2 show the CCSP FY 2005-2007 budget aligned by CCSP goal.
- Table 3 shows the CCSP FY 2005-2007 budget by agency, with USGCRP and CCRI budgets listed separately and also combined in a single CCSP total.
- Table 4 shows the USGCRP FY 2005-2007 budget by CCSP research element.
- Table 5 shows the FY 2005-2007 CCRI budget.
- Subsequent tables show, for each CCSP participating agency, the FY 2005-2007 budget for both USGCRP and CCRI activities.

FY 2007 Budget Tables

**TABLE 1. FY 2005–2007 CLIMATE CHANGE SCIENCE PROGRAM
BUDGET BY GOAL AND FOCUS AREA**

Focus Area	Description ¹	Budgets (\$M) ²			Agencies
		FY 2005	FY 2006 Estimate	FY 2007 Request	
Goal 1	Improve knowledge of the Earth's past and present climate and environment, including its natural variability, and improve understanding of the causes of observed variability and changes				
Focus 1.1	Better understand natural long-term cycles in climate [e.g., Pacific Decadal Variability (PDV), North Atlantic Oscillation (NAO)]	35.7	37.9	40.2	NOAA, DOE, USGS, NASA, NSF
Focus 1.2	Improve and harness the capability to forecast El Niño-La Niña and other seasonal-to-interannual cycles of variability	24.2	22.4	21.8	DOE, USGS, NASA, NSF
Focus 1.3	Sharpen understanding of climate extremes through improved observations, analysis, and modeling, and determine whether any changes in their frequency or intensity lie outside the range of natural variability	37.4	38.1	38.4	NOAA, DOE, USGS, NASA, NSF
Focus 1.4	Increase confidence in the understanding of how and why climate has changed	43.2	43.3	44.5	DOE, USGS, NASA, NSF, SI
Focus 1.5	Expand observations and data/information system capabilities	67.0	71.4	95.4	NOAA, DOE, USGS, EPA, NASA, NSF, SI
GOAL 1 TOTAL		207.5	213.0	240.6	
Goal 2	Improve quantification of the forces bringing about changes in the Earth's climate and related systems				
Focus 2.1	Reduce uncertainties about the sources and sinks of greenhouse gases, emissions of aerosols and their precursors, and their climate effects	102.3	101.1	98.9	NOAA, DOE, DOT, NASA, NSF
Focus 2.2	Monitor the recovery of the ozone layer and improve the understanding of the interactions of climate change, ozone depletion, tropospheric pollution, and other atmospheric issues	33.3	31.6	27.0	USDA, DOE, NASA, NSF, SI
Focus 2.3	Increase knowledge of the interactions among emissions, long-range atmospheric transport, and transformations of atmospheric pollutants, and their response to air quality management strategies	39.8	36.6	36.7	USDA, NASA, NSF

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TABLE 1 (CONTINUED)

Focus Area	Description ¹	Budgets (\$M) ²			Agencies
		FY 2005	FY 2006 Estimate	FY 2007 Request	
Goal 2 (continued)					
Focus 2.4	Develop information on the carbon cycle, land cover and use, and biological/ecological processes by helping to quantify net emissions of carbon dioxide, methane, and other greenhouse gases, thereby improving the evaluation of carbon sequestration strategies and alternative response options	145.4	139.0	135.4	USDA, NOAA, DOE, USGS, NASA, NSF, SI
Focus 2.5	Improve capabilities to develop and apply emissions and related scenarios for conducting “If..., then...” analyses in cooperation with CCTP	4.8	4.9	6.8	DOE
GOAL 2 TOTAL		325.6	313.3	304.8	
Goal 3 Reduce uncertainty in projections of how the Earth’s climate and related systems may change in the future					
Focus 3.1	Improve characterization of the circulation of the atmosphere and oceans and their interactions through fluxes of energy and materials	47.8	48.8	48.2	NOAA, DOE, NASA, NSF
Focus 3.2	Improve understanding of key “feedbacks” including changes in the amount and distribution of water vapor, extent of ice and the Earth’s reflectivity, cloud properties, and biological and ecological systems	83.0	85.1	79.5	DOE, USGS, NASA, NSF
Focus 3.3	Increase understanding of the conditions that could give rise to events such as rapid changes in ocean circulation due to changes in temperature and salinity gradients	7.7	7.7	8.6	USGS, NASA, NSF
Focus 3.4	Accelerate incorporation of improved knowledge of processes and feedbacks into climate models to reduce uncertainty in projections of climate sensitivity, changes in climate, and related conditions such as sea level	88.7	99.9	103.1	NOAA, DOE, NASA, NSF
Focus 3.5	Improve national capacity to develop and apply climate models	46.8	43.8	43.9	NOAA, DOE, NASA, NSF
GOAL 3 TOTAL		274.0	285.2	283.2	

¹ See Chapter 2 of the *Strategic Plan for the U.S. Climate Change Science Program* for a detailed discussion.

² Any minor discrepancies within this table and between this table and others are due to rounding. Refer to Table 3 Notes for more detail.

FY 2007 Budget Tables

TABLE 1 (CONTINUED)

Focus Area	Description ¹	Budgets (\$M) ²			Agencies
		FY 2005	FY 2006 Estimate	FY 2007 Request	
Goal 4 Understand the sensitivity and adaptability of different natural and managed ecosystems and human systems to climate and related global changes					
Focus 4.1	Improve knowledge of the sensitivity of ecosystems and economic sectors to global climate variability and change	67.8	61.0	60.7	USDA, DOE, USGS, EPA, NASA, NSF, SI
Focus 4.2	Identify and provide scientific inputs for evaluating adaptation options, in cooperation with mission-oriented agencies and other resource managers	64.6	65.0	65.2	HHS, DOT, EPA, NSF, SI
Focus 4.3	Improve understanding of how changes in ecosystems (including managed ecosystems such as croplands) and human infrastructure interact over long time periods	43.6	45.5	34.3	USDA, DOE, NASA, NSF, SI
GOAL 4 TOTAL		176.0	171.5	160.1	
Goal 5 Explore the uses and identify the limits of evolving knowledge to manage risks and opportunities related to climate variability and change					
Focus 5.1	Support informed public discussion of issues of particular importance to U.S. decisions by conducting research and providing scientific synthesis and assessment reports	92.3	101.3	69.4	USDA, DOE, USGS, EPA, NASA, NSF, SI
Focus 5.2	Support adaptive management and planning for resources and physical infrastructure sensitive to climate variability and change; build new partnerships with public and private sector entities that can benefit both research and decisionmaking	54.7	63.2	69.5	USDA, NOAA, USGS, USAID, EPA, NASA, NSF
Focus 5.3	Support policymaking by conducting comparative analyses and evaluations of the socioeconomic and environmental consequences of response options	12.5	9.6	11.8	USDA, NASA, SI
GOAL 5 TOTAL		159.5	174.1	150.7	
CCSP PROGRAM TOTAL		1,142.5	1,157.1	1,139.5	

O U R C H A N G I N G P L A N E T

TABLE 2. FY 2005-2007 CLIMATE CHANGE SCIENCE PROGRAM BUDGET BY GOAL AND PARTICIPATING AGENCY/DEPARTMENT

[DISCRETIONARY BUDGET AUTHORITY IN \$M]

	Research											Res Subtotal	Obs ¹ Subtotal	TOTAL		
	USDA	NOAA	DOE	HHS	USGS	DOT	USAID	EPA	NASA	NSF	SI					
FY 2007 Request																
Goal 1	0.0	71.5	15.0	0.0	12.6	0.0	0.0	0.0	98.2	42.2	1.1	240.6	206.8	447.4		
Goal 2	18.8	39.8	38.7	0.0	2.9	0.3	0.0	0.0	143.8	60.1	0.4	304.8	156.2	461.0		
Goal 3	0.0	45.7	59.1	0.0	1.3	0.0	0.0	0.0	121.0	56.1	0.0	283.2	170.8	454.0		
Goal 4	14.6	2.0	13.2	57.0	7.2	1.0	0.0	4.7	19.8	37.5	3.2	160.1	41.8	201.9		
Goal 5	27.0	13.7	0.2	0.0	2.4	0.0	14.0	12.8	70.2	9.3	1.0	150.7	0.0	150.7		
TOTAL	60.4	172.7	126.2	57.0	26.4	1.3	14.0	17.5	453.0	205.3	5.7	1,139.5	575.5	1,715.0		
FY 2006 Estimate																
Goal 1	0.0	58.1	14.8	0.0	12.6	0.0	0.0	0.8	86.0	39.7	1.1	213.0	192.0	405.0		
Goal 2	18.6	38.1	39.2	0.0	2.9	0.3	0.0	0.0	156.6	57.2	0.4	313.3	154.1	467.4		
Goal 3	0.0	43.1	61.0	0.0	2.1	0.0	0.0	0.0	125.5	53.6	0.0	285.2	164.1	449.3		
Goal 4	17.8	3.0	14.6	57.2	6.8	0.6	0.0	11.1	20.1	37.1	3.2	171.5	40.3	211.8		
Goal 5	25.6	8.2	1.0	0.0	2.4	0.0	13.0	6.7	106.9	9.3	1.0	174.1	0.0	174.1		
TOTAL	61.9	150.5	130.6	57.2	26.8	0.9	13.0	18.6	495.0	196.9	5.7	1,157.1	550.5	1,707.6		
FY 2005																
Goal 1	0.0	50.4	14.8	0.0	12.2	0.0	0.0	0.0	87.4	41.6	1.1	207.5	205.1	412.6		
Goal 2	18.3	29.1	39.5	0.0	2.9	0.4	0.0	0.0	175.4	59.5	0.4	325.6	226.7	552.3		
Goal 3	0.0	32.5	57.6	0.0	2.6	0.0	0.0	0.0	133.0	48.3	0.0	274.0	231.4	505.4		
Goal 4	17.8	0.0	14.1	57.4	7.2	0.7	0.0	13.9	22.8	38.9	3.2	176.0	58.9	234.9		
Goal 5	25.5	7.9	1.0	0.0	2.1	0.0	6.0	6.1	100.2	9.6	1.0	159.4	0.0	159.4		
TOTAL	61.6	119.9	127.0	57.4	27.0	1.1	6.0	20.0	518.9	197.9	5.7	1,142.5	722.1	1,864.6		

¹NASA observing systems.

Note: Any minor discrepancies within this table and between this table and others are due to rounding. Refer to Table 3 Notes for more detail.

**TABLE 3. CLIMATE CHANGE SCIENCE PROGRAM:
FY 2005-2007 BUDGET BY AGENCY**

[DISCRETIONARY BUDGET AUTHORITY IN \$M]

Agency	FY 2005		FY 2006 Estimate		FY 2007 Request	
	USGCRP	CCRI	USGCRP	CCRI	USGCRP	CCRI
USDA	54	8	54	8	49	11
DOC / NOAA	74	46	117	34	127	46
DOE	102	25	105	25	102	24
HHS / NIH	57	0	57	0	57	0
DOI / USGS	27	0	27	0	26	0
DOT	0	1	0	1	0	1
USAID	0	6	0	13	0	14
EPA	20	0	19	0	18	0
NASA	476	43	448	47	416	37
NSF	173	25	172	25	180	25
SI	6	0	6	0	6	0
Scientific Research Total	989	154	1,005	153	981	158
NASA Space-Based Observations	671	51	500	50	527	49
CCSP Total	1,660	205	1,505	203	1,508	207
President's Request						1,715

Notes:

- 1) Starting in FY 2006, funding to NOAA's laboratories is included in the CCSP budget cross-cut. This is a result of the evolution of NOAA's role in CCSP.
- 2) Due to recent changes in USAID's CCSP/CCRI activities and priorities, additional ongoing activities in the Democracy, Conflict, and Humanitarian Assistance program are reported under CCSP and CCRI beginning in FY 2006.
- 3) NASA funding levels presented in this table do not reflect full-cost accounting. NASA data in the FY 2006 edition of *Our Changing Planet* did include full cost. The decrease in NASA's CCSP budget authority between FY 2006 and 2007 is due to changes in the agency's budget for space observing platforms – reflecting the natural development cycle of its satellites, as well as revisions to mission profiles. NASA's Earth science research and analysis budget also declined.
- 4) Operational observing systems and programs are not included in the CCSP budget cross-cut, but contribute to achieving CCSP goals. NASA space-based observing systems that contribute to CCSP research are, however, specifically identified in this table.
- 5) Because DOD research activities are conducted for defense-related missions, they are not included in the CCSP budget cross-cut. Related DOD research does contribute to CCSP goals, however.
- 6) In the FY 2004-2006 reports, the CCSP and CCRI totals erroneously included \$1M DOS funding for FY 2004 and 2005. DOS had zero CCSP and CCRI funding in those years. In FY 2003, DOS allocated \$1M of its contribution to the Intergovernmental Panel on Climate Change (IPCC) toward an earth observation project that was also part of the CCRI. This was a one-time contribution, thus the DOS line has been deleted from this table.
- 7) Any minor discrepancies within this table and between this table and others are due to rounding.

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**TABLE 4. CLIMATE CHANGE SCIENCE PROGRAM:
FY 2005–2007 USGCRP SCIENTIFIC RESEARCH BUDGET BY CCSP RESEARCH ELEMENT**
[DISCRETIONARY BUDGET AUTHORITY IN \$M]

Agency	Atmospheric Composition	Climate Variability	Carbon Cycle	Water Cycle	Ecosystems	Land Use	Human Contributions ¹	TOTAL
FY 2007 USGCRP Research Elements								
USDA	19.4	–	12.1	4.9	12.7	0.1	–	49.2
DOC / NOAA	24.2	69.4	6.2	17.0	2.0	–	8.1	127.0
DOE	12.6	57.4	12.3	–	16.9	–	3.2	102.4
HHS	–	–	–	–	–	–	57.0	57.0
DOI / USGS	1.8	5.4	1.2	4.3	5.9	7.3	0.5	26.4
EPA	6.1	–	–	–	5.1	–	6.3	17.5
NASA	77.3	87.7	58.7	90.8	41.0	24.8	35.8	416.0
NSF	20.7	78.4	30.9	16.4	20.5	2.1	11.2	180.3
SI	–	1.3	0.3	–	3.3	0.8	–	5.7
TOTAL	162.1	299.6	121.7	133.4	107.4	35.2	122.1	981.4
FY 2006 USGCRP Research Elements								
USDA	20.5	–	12.4	5.5	15.8	0.1	–	54.3
DOC / NOAA	23.5	60.5	5.2	17.0	3.0	–	7.2	116.4
DOE	12.6	58.8	10.9	–	18.7	–	4.3	105.3
HHS	–	–	–	–	–	–	57.2	57.2
DOI / USGS	1.8	5.0	1.3	4.3	6.2	7.7	0.5	26.8
EPA	7.2	–	–	–	6.5	–	4.9	18.6
NASA	85.0	87.0	57.4	93.1	41.2	21.8	62.3	447.8
NSF	19.5	74.3	25.7	18.0	21.1	2.1	11.2	171.9
SI	–	1.3	0.3	–	3.3	0.8	–	5.7
TOTAL	170.1	286.9	113.2	137.9	115.8	32.5	147.6	1,003.9
FY 2005 USGCRP Research Elements								
USDA	20.2	–	12.4	5.5	15.9	0.1	–	54.1
DOC/NOAA	6.9	35.4	8.1	16.8	–	–	6.9	74.1
DOE	13.1	55.2	10.8	–	19.6	–	3.6	102.3
HHS	–	–	–	–	–	–	57.4	57.4
USGS	1.8	5.0	1.6	4.5	6.0	7.6	0.5	27.0
EPA	7.3	–	–	–	8.1	–	4.6	20.0
NASA	95.1	91.2	64.9	97.5	45.3	24.1	57.5	475.6
NSF	19.9	72.2	26.4	18.9	21.5	2.4	11.6	172.9
SI	–	1.3	0.3	–	3.3	0.8	–	5.7
TOTAL	164.3	260.3	124.5	143.3	119.7	34.9	142.1	989.0

¹ In previous years, NASA linked the Applied Sciences and the Education and Outreach programs to USGCRP Focus Areas, but not to CCSP research elements; the current table identifies these programs as contributing to the CCSP Human Contributions and Responses element for the three fiscal years addressed. Note: Any minor discrepancies within this table and between this table and others are due to rounding. Refer to Table 3 Notes for more detail.

FY 2007 Budget Tables

TABLE 5. FY 2005-2007 BUDGET FOR THE CLIMATE CHANGE RESEARCH INITIATIVE (CCRI)

Agency	Program Title	FY 2005	FY 2006 Estimate	FY 2007 Request
USDA	Agricultural Research Service Carbon Cycle Research	0.6	0.6	1.3
	Forest Service Carbon Cycle Research	3.3	3.3	3.6
	Carbon Inventory and Analysis, Carbon Management Research	2.7	2.7	3.1
	Regional and Sectoral Impacts of Climate Change	0.9	1.0	3.3
U.S. Department of Agriculture CCRI Total		7.6	7.6	11.2
DOC /	Aerosols Climate Interactions	5.2	3.6	3.6
NOAA	Carbon Cycle and Monitoring	8.9	5.8	5.8
	Climate Modeling Center	5.3	3.3	3.3
	Global Climate Atmospheric Observing System	3.9	0.4	0.4
	Climate Variability and Predictability (CLIVAR)	6.6	6.6	6.6
	Global Ocean Observing System	14.9	13.4	18.4
	Explaining Climate Conditions and Enhancing Climate Forecasts	0.0	0.0	2.0
	Coping with Drought	0.0	0.0	4.0
	Regional Integrated Sciences and Assessments	1.0	1.0	1.6
Department of Commerce CCRI Total		45.8	34.1	45.7
DOE	Atmospheric Radiation Measurement Program	4.1	5.7	5.7
	Climate Modeling	16.3	14.3	12.1
	Carbon Cycle	2.3	3.4	3.0
	Integrated Assessment Research	2.0	1.9	3.0
Department of Energy CCRI Total		24.7	25.3	23.8
DOT	Partnership for Air Transportation Noise and Emissions Reduction	0.4	0.3	0.3
	DOT-Wide Climate Change Center	0.7	0.6	1.0
Department of Transportation CCRI Total		1.1	0.9	1.3
USAID	Famine Early Warning System Network	6.0	13.0	14.0
U.S. Agency for International Development CCRI Total		6.0	13.0	14.0
NASA	Ecosystems	0.7	0.5	0.6
Science	Land-Cover/Land-Use Change	0.7	0.5	0.6
	Carbon Cycle	0.7	0.5	0.6
	Water Cycle	0.7	0.5	0.6
	Climate Variability	8.0	9.0	9.5
	Atmospheric Composition	11.1	11.4	11.9
	Human Contributions and Responses ¹	21.8	25.1	13.5
NASA	Climate Variability	25.5	25.1	24.4
Space	Atmospheric Composition	25.5	25.1	24.4
National Aeronautics and Space Administration CCRI Total		94.3	97.5	85.8
NSF	Carbon Fluxes and Cycle	10.0	10.0	10.0
	Human Dimensions of Climate Change	5.0	5.0	5.0
	Modeling	10.0	10.0	10.0
National Science Foundation CCRI Total		25.0	25.0	25.0
Total Climate Change Research Initiative President's Request		204.5	203.4	206.9

¹ In previous years, NASA linked the Applied Sciences and the Education and Outreach programs to USGCRP Focus Areas, but not to CCSP research elements; the current table identifies these programs as contributing to the CCSP Human Contributions and Responses element for the three fiscal years addressed. Note: Any minor discrepancies within this table and between this table and others are due to rounding. Refer to Table 3 Notes for more detail.

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U.S. DEPARTMENT OF AGRICULTURE

USDA	Program Title	FY 2005	FY 2006 Estimate	FY 2007 Request
USGCRP				
	Global Carbon Cycle	11.9	11.9	11.6
	Agricultural Research Service	2.6	2.6	2.3
	Cooperative State Research, Education, and Extension Service	2.0	2.0	2.0
	Economic Research Service	0.1	0.1	0.1
	Forest Service	7.2	7.2	7.3
	Water Cycle	5.5	5.5	4.9
	Agricultural Research Service	4.1	4.0	3.4
	Forest Service	1.4	1.4	1.5
	Land-Use / Land-Cover Change	0.1	0.1	0.1
	Cooperative State Research, Education, and Extension Service	0.1	0.1	0.1
	Understanding Atmospheric Composition and Chemistry	18.2	18.3	17.0
	Agricultural Research Service	18.2	18.3	17.0
	Understanding Ecosystems Changes	15.9	15.8	12.7
	Agricultural Research Service	11.8	11.8	8.6
	Cooperative State Research, Education, and Extension Service	0.5	0.5	0.5
	Forest Service	3.5	3.5	3.6
	Support the UV-B Monitoring Network	2.0	2.2	2.4
	Cooperative State Research, Education, and Extension Service	2.0	2.2	2.4
	Other National Research Initiative	0.5	0.5	0.5
	Cooperative State Research, Education, and Extension Service	0.5	0.5	0.5
USGCRP TOTAL		54.1	54.3	49.2
CCRI				
	Carbon Cycle Research (Agricultural Research Service)	0.6	0.6	1.3
	Carbon Cycle Research (Forest Service)	3.3	3.3	3.6
	Carbon Inventory and Analysis, Carbon Management Research (Forest Service)	2.7	2.7	3.1
	Regional and Sectoral Impacts of Climate Change (Agricultural Research Service)	0.9	1.0	3.3
CCRI TOTAL		7.6	7.6	11.2
Department of Agriculture Total President's Request		61.6	61.9	60.4



Mapping of Budget Request to Appropriations Legislation. In the Appropriations Committee reports, Department of Agriculture CCSP activities are funded under Title I—Agricultural Programs, within the ARS, CSREES Research and Education Activities, and ERS accounts; and under Title II—Conservation Programs, within the NRCS Conservation Operations account. Also in the Appropriations Committee reports, U.S. Department of Agriculture CCSP activities are funded in the USDA FS section under Title II—Related Agencies, within the FS Forest Research account.

FY 2007 Budget Tables

DEPARTMENT OF COMMERCE / NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

DOC	Program Title	FY 2005	FY 2006 Estimate	FY 2007 Request
USGCRP				
NOAA	Laboratories and Joint Institutes			
	LABORATORIES AND JOINT INSTITUTES	0.0	45.8	45.0
NOAA	Competitive Research Program			
	CLIMATE AND GLOBAL CHANGE	60.4	60.8	63.8
	<i>Atmospheric Composition and Climate Program</i>	6.9	6.9	6.9
	<i>Climate and Societal Interactions</i>	6.9	6.9	6.9
	<i>Climate Change Data and Detection (CCDD)</i>	6.3	6.3	6.3
	<i>Climate Dynamics and Experimental Prediction (CDEP)</i>	17.3	17.4	17.4
	<i>Climate Variability and Predictability (CLIVAR)</i>	7.9	8.2	8.2
	<i>Global Energy and Water Cycle (PACS/GAPP)</i>	9.9	9.9	9.9
	<i>Global Carbon Cycle</i>	5.2	5.2	5.2
	<i>Arctic Research</i>	n/a	n/a	3.0
	CLIMATE RESEARCH AND OBSERVATIONS (COSPO)	13.7	9.8	16.2
NOAA	Climate Regimes and Ecosystem Productivity	n/a	n/a	2.0
USGCRP TOTAL		74.1	116.4	127.0
CCRI				
NOAA	Competitive Research Program			
	Global Ocean Observing System	14.9	13.4	18.4
	Climate Variability and Predictability (CLIVAR): Ocean Observations	6.6	6.6	6.6
	Global Climate Atmospheric Observing System	3.9	0.4	0.4
	Aerosols-Climate Interactions, Clouds, and Climate Change	5.2	3.6	3.6
	Carbon Cycle and Monitoring	8.9	5.8	5.8
	Explaining Climate Conditions and Enhancing Climate Forecasts	0.0	0.0	2.0
	Coping with Drought (RISA)	0.0	0.0	4.0
	Climate Modeling Center	5.3	3.3	3.3
	Regional Integrated Sciences and Assessments	1.0	1.0	1.6
CCRI TOTAL		45.8	34.1	45.7
Department of Commerce Total		119.9	150.5	
President's Request				172.7

Note: Starting in FY 2007, NOAA simplified its reporting of USGCRP climate expenditures into the categories shown in **GREEN SMALL CAPS** within the above table. For tracking purposes, the previous FY budget line items have been mapped to the new structure, and highlighted in italics. NOAA has included its Arctic Research and Climate and Ecosystems programs as part of USGCRP activities. n/a = not applicable.



Mapping of Budget Request to Appropriations Legislation. In Appropriations Committee reports, funding for National Oceanic and Atmospheric Administration CCSP activities is specified in the Laboratories and Cooperative Institutes and Competitive Research Programs of the Oceanic and Atmospheric Research budget and in the Climate Regimes and Ecosystem Productivity of the National Marine Fisheries Service budget—all within NOAA's Operations, Research, and Facilities account.

O U R C H A N G I N G P L A N E T

DEPARTMENT OF ENERGY

Program Title	FY 2005	FY 2006 Estimate	FY 2007 Request
USGCRP			
Climate Change Modeling	11.2	12.3	13.0
Climate Forcing	67.9	69.9	69.2
Climate Change Response	23.2	23.1	20.2
USGCRP TOTAL	102.3	105.3	102.4
CCRI			
Atmospheric Radiation Measurement Program	4.1	5.7	5.7
Climate Modeling	16.3	14.3	12.1
Carbon Cycle	2.3	3.4	3.0
Integrated Assessment Research	2.0	1.9	3.0
CCRI TOTAL	24.7	25.3	23.8
Department of Energy Total President's Request	127.0	130.6	126.2



Mapping of Budget Request to Appropriations Legislation. In the Appropriations Committee reports, Department of Energy CCSP activities are funded under Title III—Department of Energy, within the Energy Supply, Research, and Development Activities account. Also in these Appropriations Committee reports, funding for Department of Energy CCSP activities is included as part of the appropriation for Biological and Environmental Research.

DEPARTMENT OF HEALTH AND HUMAN SERVICES

HHS	Program Title	FY 2005	FY 2006 Estimate	FY 2007 Request
USGCRP				
NCI	Health Effects of UV Radiation	36.9	36.9	36.8
NEI	Health Effects of UV Radiation	6.0	5.9	5.9
NIEHS	Human Health Effects of Exposure	14.0	13.9	13.8
NIAMS	Health Effects of UV Radiation	0.5	0.5	0.5
USGCRP TOTAL		57.4	57.2	57.0
Department of Health and Human Services Total President's Request		57.4	57.2	57.0



Mapping of Budget Request to Appropriations Legislation. In the Appropriations Committee reports, Department of Health and Human Services CCSP activities are funded under the National Institutes of Health section of Title II—Department of Health and Human Services.

FY 2007 Budget Tables

DEPARTMENT OF THE INTERIOR / U.S. GEOLOGICAL SURVEY

DOI	Program Title	FY 2005	FY 2006 Estimate	FY 2007 Request
USGCRP				
USGS	Earth Surface Dynamics	4.7	4.5	4.4
USGS	Global Change Hydrology (Hydroclimatology)	5.0	5.0	5.4
USGS	Land Characterization Research and Applications	5.6	5.6	5.4
USGS	Satellite Data Management and Dissemination	6.9	6.9	6.6
USGS	Terrestrial and Coastal Ecosystem Changes	0.3	0.3	0.3
USGS	Water Energy and Biogeochemical Budgets (WEBB)	4.5	4.5	4.3
USGCRP TOTAL		27.0	26.8	26.4
Department of the Interior Total		27.0	26.8	
President's Request				26.4



Mapping of Budget Request to Appropriations Legislation. In the Appropriations Committee reports, Department of the Interior CCSP activities are funded under Title I—Department of the Interior. Funding for U.S. Geological Survey CCSP programs is included within the USGS Survey, Investigations, and Research account.

DEPARTMENT OF TRANSPORTATION

Program Title	FY 2005	FY 2006 Estimate	FY 2007 Request
CCRI			
Partnership for Air Transportation Noise and Emissions Reduction (PARTNER)	0.4	0.3	0.3
DOT-wide Climate Change Center	0.7	0.6	1.0
CCRI TOTAL	1.1	0.9	1.3
Department of Transportation Total	1.1	0.9	
President's Request			1.3



Mapping of Budget Request to Appropriations Legislation. Since 2000, the Department's climate change research has been funded by contributions from eight of DOT's operating administrations and the Office of the Secretary.

O U R C H A N G I N G P L A N E T

U.S. AGENCY FOR INTERNATIONAL DEVELOPMENT

Program Title	FY 2005	FY 2006 Estimate	FY 2007 Request
CCRI			
Famine Early Warning System Network (FEWS NET)	6.0	13.0	14.0
CCRI TOTAL	6.0	13.0	14.0
U.S. Agency for International Development Total	6.0	13.0	
President's Request			14.0



Mapping of Budget Request to Appropriations Legislation. In the Appropriations Committee reports, U.S. Agency for International Development CCSP activities are funded under Title II–Bilateral Economic Assistance: United States Agency for International Development.

ENVIRONMENTAL PROTECTION AGENCY

Program Title	FY 2005	FY 2006 Estimate	FY 2007 Request
USGCRP			
Air Quality Research and Assessment	7.3	7.2	6.1
Ecosystem Research and Assessment	7.3	6.1	4.7
Human Health Research and Assessment	0.2	0.2	1.5
Water Quality Research and Assessment	0.8	0.4	0.4
Research and Assessments of the Integrated Effects of Global Change	4.4	4.7	4.8
USGCRP TOTAL	20.0	18.6	17.5
Environmental Protection Agency Total	20.0	18.6	
President's Request			17.5



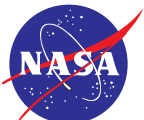
Mapping of Budget Request to Appropriations Legislation. In the Appropriations Committee reports, Environmental Protection Agency CCSP activities are funded under the EPA section of Title III–Independent Agencies, within the Science and Technology account. Appropriations Committee report language may specify more directly the funding for global change research.

FY 2007 Budget Tables

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

Program Title	FY 2005	FY 2006 Estimate	FY 2007 Request
USGCRP			
Carbon Cycle	64.9	57.4	58.7
Ecosystems	45.3	41.2	41.0
Water Cycle	97.5	93.1	90.8
Climate Variability	91.2	87.0	87.7
Atmospheric Composition	95.1	85.0	77.3
Land-Cover/Land-Use Change	24.1	21.8	24.8
Human Contributions and Responses	57.5	62.8	35.8
USGCRP Scientific Research Sub-Total	475.5	447.7	416.0
Carbon Cycle	142.7	89.4	114.4
Ecosystems	55.6	49.0	46.4
Water Cycle	174.8	119.4	98.0
Climate Variability	165.9	136.9	166.8
Atmospheric Composition	76.3	62.9	59.7
Land-Cover/Land-Use Change	54.6	42.7	41.6
Human Contributions and Responses ¹	1.2	0.0	0.0
USGCRP Space-Based Observations Sub-Total	671.1	500.3	526.8
USGCRP TOTAL	1,146.7	948.1	942.9
CCRI			
Ecosystems	0.7	0.5	0.6
Land-Cover/Land-Use Change	0.7	0.5	0.6
Carbon Cycle	0.7	0.5	0.6
Water Cycle	0.7	0.5	0.6
Climate Variability	8.0	9.0	9.5
Atmospheric Composition	11.1	11.4	11.9
Human Contributions and Responses ¹	21.8	25.1	13.5
CCRI Scientific Research Sub-Total	43.4	47.3	37.0
Climate Variability	25.5	25.1	24.4
Atmospheric Composition	25.5	25.1	24.4
CCRI Space-Based Observations Sub-Total	51.0	50.2	48.8
CCRI TOTAL	94.3	97.5	85.8
National Aeronautics and Space Administration Total	1,241.0	1,045.5	
President's Request			1,028.7

¹In previous years, NASA linked the Applied Sciences and the Education and Outreach programs to USGCRP Focus Areas, but not to CCSP research elements; the current table identifies these programs as contributing to the CCSP Human Contributions and Responses element for the three fiscal years addressed.



Mapping of Budget Request to Appropriations Legislation. In the Appropriations Committee reports, National Aeronautics and Space Administration CCSP activities are funded under NASA Earth science and technology programs within Title III—Independent Agencies, as part of the Science, Aeronautics, and Technology account.

O U R C H A N G I N G P L A N E T

NATIONAL SCIENCE FOUNDATION

Program Title	FY 2005	FY 2006 Estimate	FY 2007 Request
USGCRP			
Atmospheric Composition	19.9	19.5	20.7
Climate Variability and Change	72.2	74.3	78.4
Carbon Cycle	26.4	25.7	30.9
Water Cycle	18.9	18.0	16.4
Terrestrial and Marine Ecosystems	21.5	21.1	20.5
Land Use / Land Cover	2.4	2.1	2.1
Human Dimensions of Climate Change	11.6	11.2	11.2
USGCRP TOTAL	172.9	171.9	180.3
CCRI			
Carbon Fluxes and Cycle	10.0	10.0	10.0
Human Dimensions of Climate Change	5.0	5.0	5.0
Modeling	10.0	10.0	10.0
CCRI TOTAL	25.0	25.0	25.0
National Science Foundation Total	197.9	196.9	
President's Request			205.3



Mapping of Budget Request to Appropriations Legislation. In the Appropriations Committee reports, National Science Foundation CCSP activities are supported under the NSF section of Title III—Independent Agencies within the NSF Research and Related Expenses account.

FY 2007 Budget Tables

SMITHSONIAN INSTITUTION

Program Title	FY 2005	FY 2006 Estimate	FY 2007 Request
USGCRP			
National Museum of Natural History	2.5	2.5	2.5
Smithsonian Environmental Research Center	0.5	0.5	0.5
Smithsonian Tropical Research Institute	1.6	1.6	1.6
National Zoological Park	1.1	1.1	1.1
USGCRP TOTAL	5.7	5.7	5.7
Smithsonian Institution Total	5.7	5.7	
President's Request			5.7



Mapping of Budget Request to Appropriations Legislation. In the Appropriations Committee reports, Smithsonian Institution CCSP activities are funded in the Smithsonian section of Title II—Related Agencies, within the Salaries and Expenses account. Appropriations Committee reports specify funding for a Sciences line item component of this account, which includes CCSP programs.