

National Oceanic and Atmospheric Administration

NOAA Research Scientific Computing Support
(Exhibit 300 UPI Code: 006-48-01-13-3504-00)

Operational Analysis

FY10 Quarterly Updates (Q4)
November 20, 2010



OAR Research for Climate Chart as of 4th Quarter FY2010



Relevant Performance Measures

GPRA: U.S. Temperature	24	18	24	18
GPRA: Reduce uncertainty in North American carbon uptake	N/A	N/A	0.40 GtC/yr	0.45 GtC/yr
GPRA: Reduce uncertainty in model simulations of the influence of aerosols on climate	N/A	N/A	15%	18% (Estimate)
GPRA: Reduce error in measurement of global SST	N/A	0.50C	0.53C	0.50C
GPRA: Number of regionally focused climate impacts and adaptation studies	31	31	41	41



Schedule (FY 2010)

Activity	1st	2nd	3rd	4th
1. Update the NOAA Annual Greenhouse Gas Index (AGGI).				◆
2. Initiate second suite of decadal prediction hindcasts and predictions				◆
3. Submit AM3/CM3 description and discussion paper that meets the				◆
4. Design, construct and deploy two new ARGO gas floats to measure				◆
5. Sponsor a workshop on coastal habitat conservation in a changing				◆
6. Create an Ocean Acidification project office.				◆
7. Improve confidence in the monitoring & detection of Alaska climate				◆
8. Complete US-Russia collaborative Arctic climate cruise to Bering				◆
9. Publish a paper assessing satellite-based flux products using OCS				◆
10. Support the design of the GCOS Reference Upper Air Network				◆



Key Issues/Risks

Issues/Risks: None

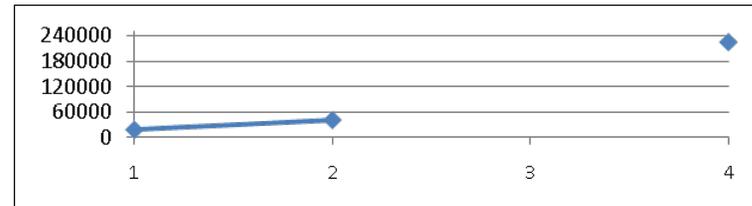
The Climate program missed two of its GPRA measure end of year targets. Explanations are provided in the notes section. These deviations are not serious and the programs are making progress toward improving the performance.

Climate Goal Q4 Accomplishments:

All but one milestone was completed: the design and deployment of ARGO



Budget/Funding (FY 2010)



Climate Research	1 st	2 nd	3 rd	4 th
FY2010 Planned				\$225,135M
FY2010 Actual	\$18,289M	\$41,132M		



OAR Oceans, Coasts, and Great Lakes Research
as of 4th Quarter 2010



Performance Measures

Performance Measure	4 th Qtr plann	4 th Qtr	FY10 Target	FY10 Actual
Annual number of coastal, marine, and Great Lakes ecological characterizations that meet management needs.	38	38	50	45
Number of coastal, marine, and Great Lakes issue-based forecast capabilities developed and used for management.	1	1	1	1
Number of tools, technologies, and information services that are used by NOAA partners/customers to improve ecosystem-based management.	36	36	38	38



Key Issues/Risks

Issue: Sea Grant's Aleutian Islands regional research and information plans was delayed due to larger than expected volume of stakeholder input..

Risks: Low

Mitigation: This report will be released in Q1 of 2011. The result will be a better plan with greater involvement credibility in the community as the region prioritizes and responds to unexpectedly high public involvement.

Issue: Sea Grant's salmon genetic databases have been delayed to FY 2011 Q3 due to graduate student's time spent student teaching for 2 quarters.

Risks: Low

Mitigation: This database will be finished in Q3 FY 2011. The PI has since finished the project: they requested additional time



Schedule FY2010

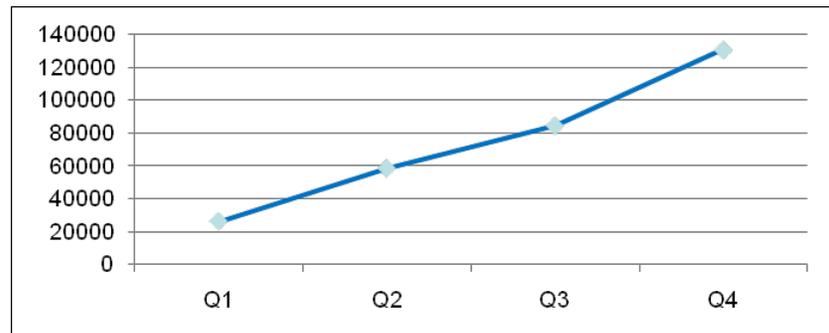
Q4 Milestones Planned = 11 | Q4 Milestones Met = 9

FY2010	Q1			Q2			Q3			Q4		
	Oc	No	De	Ja	Fe	Mr	Ap	Ma	Ju	Jl	Au	Se
Complete analysis of the prevalence of S. aureus	█	█	█	█	█	█	█	█	█	█	█	█
Integrate data for development of ecological forecasts	█	█	█	█	█	█	█	█	█	█	█	█
Increase number or ecosystem delineated	█	█	█	█	█	█	█	█	█	█	█	█
Complete 2 Sea Grant regional research plans	█	█	█	█	█	█	█	█	█	█	█	█
Developed one forecasting capability	█	█	█	█	█	█	█	█	█	█	█	█
Complete survey of Arctic regions for ECS	█	█	█	█	█	█	█	█	█	█	█	█
Develop model for human health & beach monitoring	█	█	█	█	█	█	█	█	█	█	█	█
Perform site characterizations	█	█	█	█	█	█	█	█	█	█	█	█
Identify, map, & evaluate habitat	█	█	█	█	█	█	█	█	█	█	█	█
Salmon genetic database developed	█	█	█	█	█	█	█	█	█	█	█	█
Okeanos Explorer completes testing in Pacific	█	█	█	█	█	█	█	█	█	█	█	█

Legend: ● Not Met ◆ Met ◆ Planned



Budget/Funding FY2010



Oceans, Coasts, and Great Lakes Research	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter
FY2010 Planned (Cumulative)				\$130,606
FY2010 Actual (Cumulative)	\$26,199M	\$58,517M	\$84,373M	



OAR Weather & Air Quality Research
as of 4th Quarter 2010

Performance Measures



FY10
Target

Measure	Q4 Planned	Q4 Actual	FY10 Target
Storm-Based Tornado Warning Lead Time (min)	12	12	12
Hurricane Track Forecasts (48 Hours Forecast Error, RMS)	107	107	107
Hurricane Intensity Error (Knots)	13	13	13

Schedule FY 2010



Q4 Milestones Planned = 9

Q4 Milestones Met = 7

FY2010 Milestone	Q1			Q2			Q3			Q4	
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
Develop and deliver UAS Program Plan Analysis of Alternatives and Strategic	[Progress bar]										
Develop and test a high altitude UAS dropronde for Global Hawk	[Progress bar]										
Conduct joint high altitude UAS field	[Progress bar]										
Publish a paper assessing satellite-based flux products	[Progress bar]										
Analyze the spatial representativeness of balloon observations	[Progress bar]										
Characterize the influence of atmospheric teleconnections	[Progress bar]										
Demonstrate experimental hurricane forecast products	[Progress bar]										
Assimilate PAR data into model	[Progress bar]										
Conduct field demonstration of low altitude UAS for marine monitoring	[Progress bar]										

Planned Completion [Blue diamond] Actual Completion [Green diamond] Met [Red diamond]



Key Issues/Risks

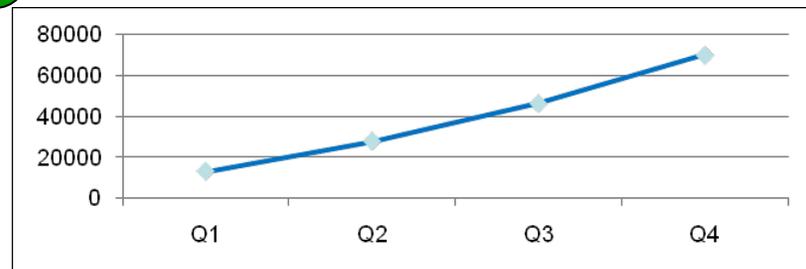
Issues: FAA has canceled FY11 funding for NEVS but there is no NWS commitment to fund continued NEVS development and transition to NWS in FY11-13

Issues: No resources have been identified for Multi-Radar Multi-Sensor to continue with full transition of system to operations. NWS is evaluating to determine cost/benefit of transition and how to pay for initial hardware expenses and O&M. NWS considering a cost-sharing model between several HQ offices (NCEP, OHD, OST) to find funding.

Issues: No GPS-Met transition funding. OAR and NESDIS provided FY10 resources to sustain GPS-Met. Team currently exploring multiple funding sources (NWS, NESDIS, and



Budget/Funding FY 2010



Weather & Air Quality Research	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
FY2010 Planned (Cumulative)				\$69,997M
FY2010 Actual (Cumulative)	\$13,120M	\$27,850M	\$46,340M	