

Quarterly Progress Report Form - Oil Spill Recovery Institute

This report may be submitted by mail, fax or e-mail

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Deadline for this report: All grants shall submit this report within 30 days of the end of the quarter.

Today's date: January 30, 2006

Name of awardee/grantee: James C. McWilliams, UCLA

OSRI Contract Number: #05-10-02

Project title: Alaska Ocean Observing System

This report covers	<u>XX</u> Oct.-Dec.	1 st quarter
	<u> </u> Jan.-March	2 nd quarter
	<u> </u> April-June	3 rd quarter
	<u> </u> July-Sept.	4 th quarter

PART I - Progress Report on Activities

In a short paragraph (3-10 sentences), please describe project activities since your last report.

Our main effort is still aimed at implementing the river run-off, which is the major issue for the PWS oceanic model (considering the importance of freshwater inputs in the Sound). We are currently testing different versions of the implementation. We are also testing improved open boundary conditions recently developed by Blayo and Debreu (2005). Better radiation properties should allow for cleaner boundary behavior especially at the western edges of parent and child grids where the flow is mostly outward. This testing involves a comparison with previous runs to evaluate the improvement.

Describe any existing or potential problems with the project. If a change in budget or scope of work is required, please explain.

Current Issues

The bathymetry datasets currently at our disposal (Etopo2 or Gebco) are very unsatisfactory. Because this is critical to begin the validation of the PWS solutions beyond qualitative measures, we are hoping that the high-resolution bathymetry currently being assembled at University of Fairbanks will be available shortly. Another important need for the project on a slightly longer term is obtaining accurate data of the run-off in PWS (at least monthly mean).

Reference

Blayo, E., and L. Debreu, 2005: Revisiting open boundary conditions from the point of view of characteristic variables. *Ocean Modelling*, **9**, 231-252.

Part II - Budget Report

<u>Budget Category</u>	<u>Budget</u>	<u>Quarter Expenses</u>	<u>Cumulative Expenses</u>	<u>Balance Remaining</u>
Direct Costs				
Personnel	37,098	11,269.98	31,077.54	6,020.46
Travel	156	0.00	0.00	156.00
Contractual				
Commodities	1,770	16.00	149.66	1,620.34
Equipment				
Subtotal Direct Costs	39,024	11,285.98	31,227.20	7,796.80
Indirect	20,976	6,150.82	16,980.95	3,995.05
Project Total	60,000	17,436.80	48,208.15	11,791.85