



**U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
OAR Laboratories**

Pacific Marine Environmental Laboratory
NOAA Building Number 3
7600 Sand Point Way NE
Seattle, WA 98115

FINAL REPORT

Department of State application number and project name:

2007-081 ICEALOT: International Chemistry Experiment in the Arctic Lower Troposphere

Authorizations:

Coastal State	Authorization Document Number	National Participant(s)
Canada	DFAIT Letter No. IDR-0172	
St. Pierre/Miquelon	MFA Diplomatic Note No. 371/AME	
Norway	Permission to enter Norwegian Territorial Waters Letter, Ref. 2007042512-1; and Directorate of Fisheries Facsimile	
Greenland	Note Verbale JTF, File no. 55.Dan.9-8	
Iceland	MFA Diplomatic Note No. Ref: UTN07100210/34.R.611	
Denmark	Note Verbale JTF, File no. 55.Dan.9-8	

Scientist in charge of reporting:

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Brief description of scientific objective and results:

As part of POLARCAT, NOAA conducted a research cruise in an ice-free region of the Arctic during March and April of 2008. The study area included the Greenland, Norwegian, and Barents Seas. Scientific issues addressed included springtime sources and transport of pollutants to the Arctic, evolution of aerosols and gases into and within the Arctic, and climate impacts of haze and ozone in the Arctic.



Location of results*:

Metadata:	http://saga.pmel.noaa.gov/data/PrePlot.php?cruise=ICEALOT
Raw Data:	
Processed Data:	http://saga.pmel.noaa.gov/data/PrePlot.php?cruise=ICEALOT
Data Analysis:	See peer reviewed publications below
World Data Center - Accession number (if applicable):	
Peer reviewed publications:	<ol style="list-style-type: none"> 1. Frossard, A.A., P.M. Shaw, L.M. Russell, J.H. Kroll, M. Canagaratna, D. Worsnop, P.K. Quinn, and T.S. Bates, Springtime Arctic haze contributions of submicron organic particles from European and Asian combustion sources. <i>J. Geophys. Res.</i>, 116,D05205, doi:10.1029/2010JD015178, 2011. 2. Russell, L.M., L.N. Hawkins, A.A. Frossard, P.K. Quinn, and T.S. Bates, Carbohydrate-like composition of submicron atmospheric particles and their production from ocean bubble bursting, <i>Proceedings of the National Academy of Sciences</i>, 107 (15) 6652-6657, doi:10.1073/pnas.0908905107, 2010. 3. Lapina, K., C.L. Heald, D.V. Spracklen, S.R. Arnold, J.D. Allan, H. Coe, G. McFiggans, S.R. Zorn, F. Drewnick, T.S. Bates, L.N. Hawkins, L.M. Russell, A. Smirnov, C.D. O'Dowd, and A.J. Hind, Investigating organic aerosol loading in the remote marine environment, <i>Atmos. Chem. Phys.</i>, 11, 8847-8860, doi:10.5194/acp-11-8847-2011, 2011.

