



HOKKAIDO UNIVERSITY

Title	Application of chemical tracers to an estimate of benthic denitrification in the Okhotsk Sea
Author(s)	Ito, Masanori; Watanabe, Yutaka W.; Shigemitsu, Masahito et al.
Description	Published online: 24 August 2014
Citation	Journal of oceanography, 70(5), 415-424 https://doi.org/10.1007/s10872-014-0241-9
Issue Date	2014-10-01
Doc URL	https://hdl.handle.net/2115/59719
Rights	The final publication is available at Springer via http://dx.doi.org/10.1007/s10872-014-0241-9 , © The Oceanographic Society of Japan and Springer Japan 2014
Type	journal article
File Information	Ito_J02014table.pdf



Table 1. Correlation coefficients between explanatory variables and tolerance values used for the analysis.

	J_{den}	J_{air}	J_{cool}	<i>Tolerance</i>
J_{den}	1	0.39	0.39	0.82
J_{air}		1	0.66	0.54
J_{cool}			1	0.54

Table 2. Multiple correlation coefficient (R), number of parameters (k), maximized log-likelihood (L_M), Akaike Information Criterion (AIC), standard partial regression coefficients (a_i' ($i = 0$ to 3)) and partial regression coefficients (a_i ($i = 0$ to 3)) from seven models used in this study. The standard partial regression coefficients were calculated using partial regression coefficients from each standardized dataset.

<i>For estimating standard partial regression coefficients</i>								
Model	a_0'	$a_1'(J_{\text{den}})$	$a_2'(J_{\text{air}})$	a_3' (J_{cool})	R	k	L_M	AIC
Model1	0.00	-0.51	-0.27	—	0.66	4	-50.4	108.7
Model2	0.00	-0.52	0.07	-0.31	0.66	5	-50.3	110.5
Model3	0.00	-0.61	—	—	0.61	3	-52.7	111.4
Model4	0.00	0.62	—	-0.12	0.62	4	-52.3	112.5
Model5	0.00	—	-0.47	—	0.47	3	-57.8	121.6
Model6	0.00	—	-0.43	-0.05	0.47	4	-57.8	123.5
Model7	0.00	—	—	-0.34	0.35	3	-60.6	127.2
<i>For estimating partial regression coefficients</i>								
Model	a_0	$a_1(J_{\text{den}})$	$a_2(J_{\text{air}})$	$a_3(J_{\text{cool}})$	R	k	L_M	AIC
Model1	-0.34	-1.09	-2.38	—	0.66	4	-46.4	247.2
Model2	-0.71	-1.11	-2.73	0.20	0.66	5	-46.4	249.0
Model3	-0.67	-1.31	—	—	0.61	3	-49.1	249.8
Model4	0.10	-1.21	—	-0.36	0.62	4	-48.4	250.9
Model5	4.64	—	-4.12	—	0.47	3	-53.5	260.0
Model6	4.86	—	-3.81	-0.16	0.47	4	-53.4	261.9
Model7	6.78	—	—	-1.02	0.35	3	-56.4	265.6