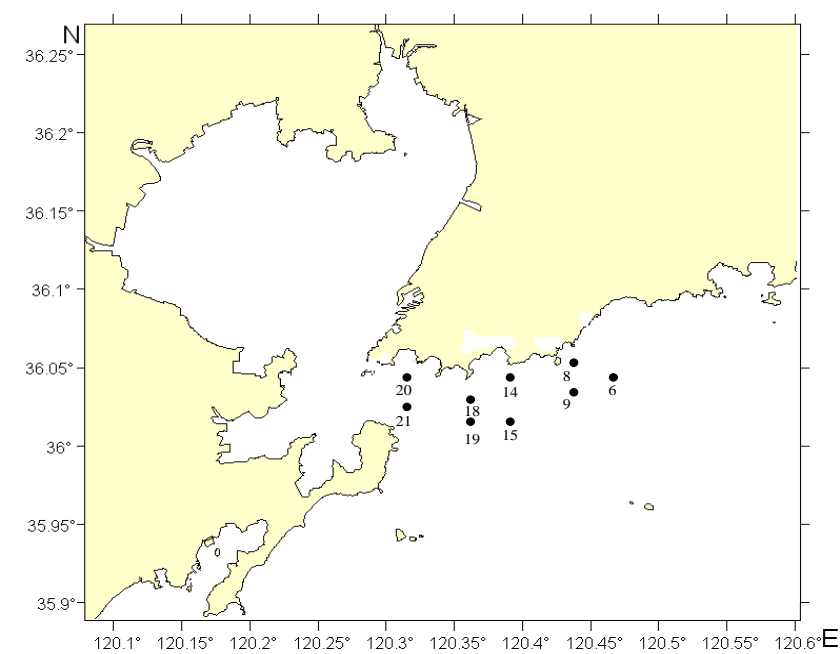
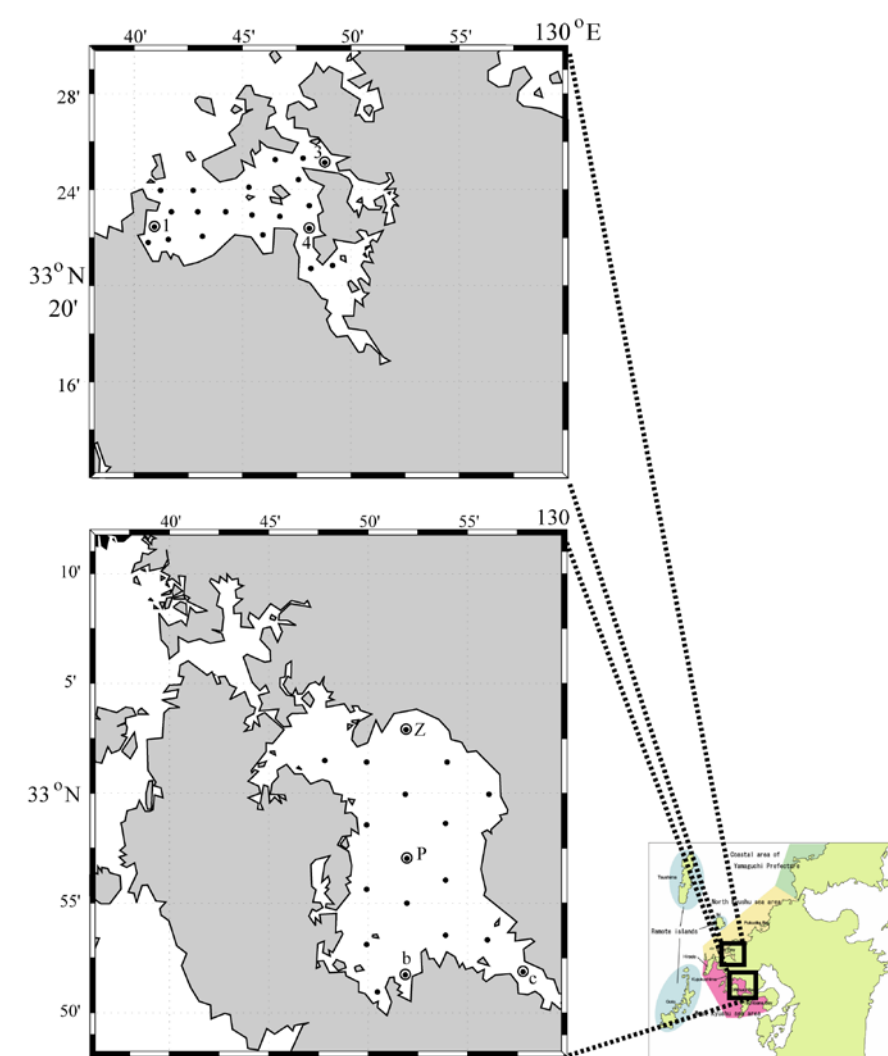
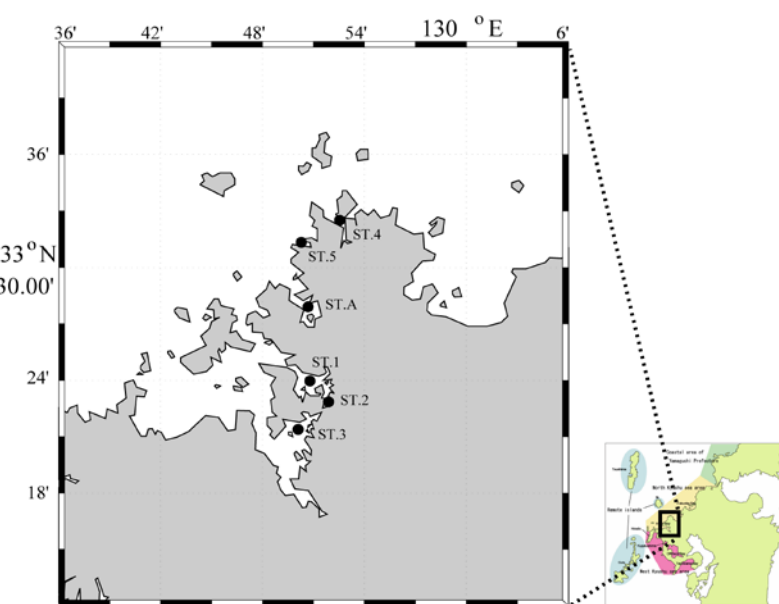


Prefectural code and Monitoring site of regular HAB monitoring in each member state

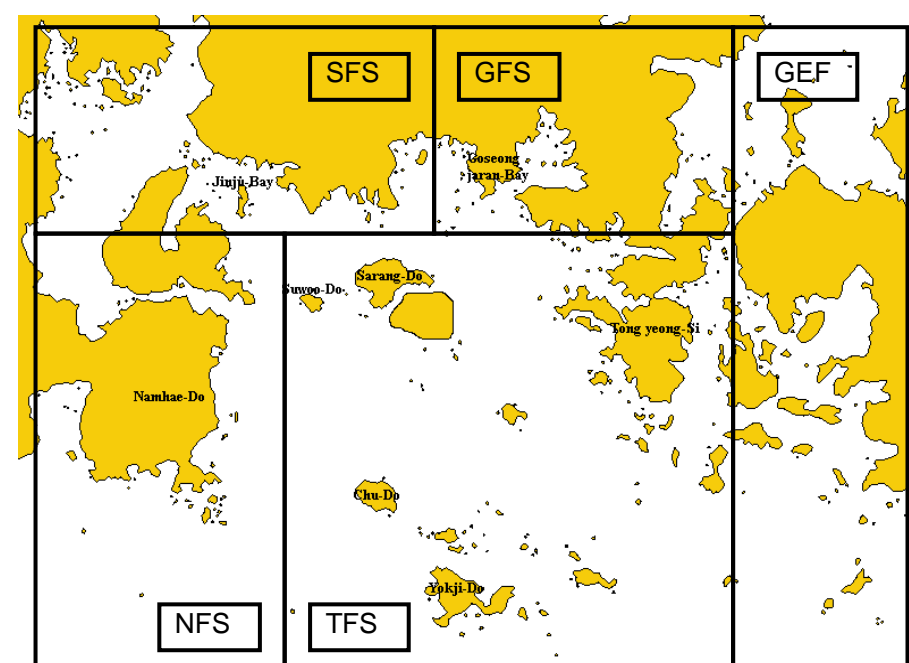
Country	Pref. Code	Location
China	DL	Dalian
	LN	Liaoning
	NY	North Yellow Sea
	QD	Qingdao
	SD	Shandong
Japan	FO	Fukuoka
	NS	Nagasaki
	SA	Saga
	YM	Yamaguchi
Korea	SE	South east of Korea
Russia	AB	Amurskii Bay



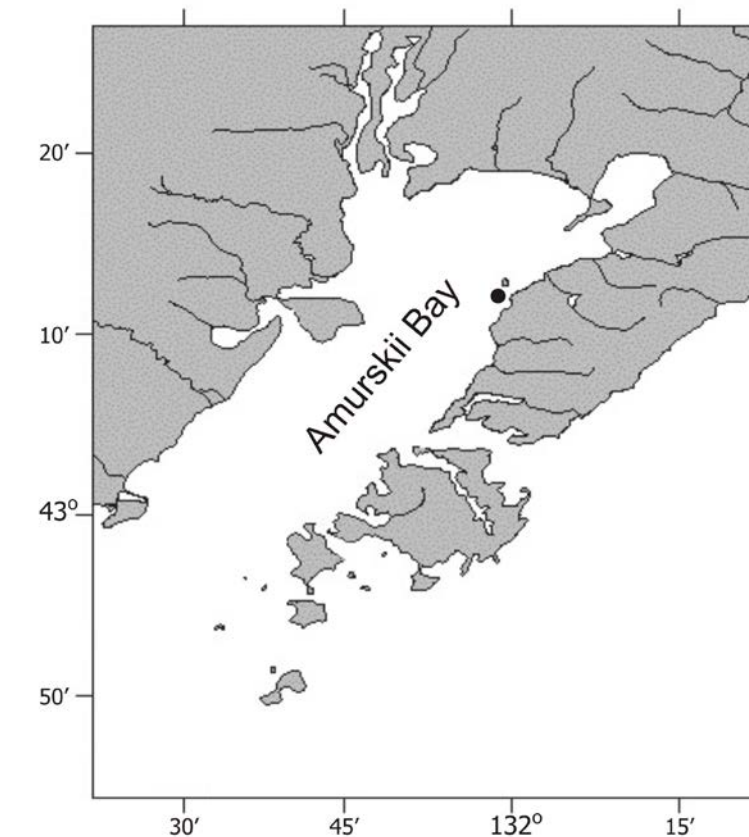
Monitoring sites in China



Monitoring site in Japan
Upper is monitoring site in Saga Pref. and lower is in Nagasaki Pref.



Monitoring area in Korea



Monitoring site in Russia

Common Format for Redtide events information

Country	Organization	Event No.			Duration (Start)			Duration (End)			Continuous days	Locatio of occurrence		Monitoring date		Causative species(*1)	Maximum density (cells·inds./mL)	Fishery damage				Environmental parameters (*2)			Size of bloom (km ²)
		Pref. Code	Year	No.	Year	Month	day	Year	Month	day		Sub-area	Spot	Date	Time			Fish/Shellfish species	Quantity	Economic loss (Chinese Yuan)	Shellfish poisoning	Temp. (°C)	Salinity	DO (mg/L)	
China		QD	2009	1	2009	5	7	2009	5	12	6	Qingdao	Rizhao			<i>Noctiluca scintillans</i>							580		
		QD	2009	2	2009	5	26	2009	6	1	7	Qingdao	Haiyang to Rushan			<i>Noctiluca scintillans</i>							550		
		BS	2009	3	2009	5	26	2009	6	1	7	Bohai Sea	Changli new openings			<i>Noctiluca scintillans</i>							460		
		BS	2009	4	2009	5	31	2009	6	13	14	Bohai Sea	Bohai Bay			<i>Heterosigma akashiwo</i>							4460		
		BS	2009	5	2009	8	1	2009	8	3	3	Bohai Sea	Tianjin Port to Hangu			<i>Skeletonema costatum</i>							150-300		
		CE	2009	6	2009	6	11					Chanjiang River Estuary	Nantong			unknown							350		
		CE	2009	7	2009	7	18	2009	7	23	6	Chanjiang River Estuary	Lianyungang			<i>Karenia mikimotoi</i>							210		
		BS	2010	1	2010	6	3	2010	6	12	10	Bohai Sea	Tianjin Port			<i>Noctiluca scintillans</i>							140		
		BS	2010	2	2010	6	24	2010	7	12	19	Bohai Sea	Coast of Suizhong to Qinhuanndao			unknown							3350		
		CE	2010	3	2010	4	15					Chanjiang River Estuary	Wanzhou Bay			unknown							120		
		CE	2010	4	2010	5	30	2010	6	7	9	Chanjiang River Estuary	Qidong			<i>Skeletonema costatum</i>							400		
		CE	2010	5	2010	7	5	2010	7	7	3	Chanjiang River Estuary	Haizhou Bay			<i>Gymnodinium catenatum</i>							100		
		DL	2011	1	2011	5	11	2011	5	23	13	Dalian	Yalu River to Changhai County			<i>Noctiluca scintillans</i>							4000		
		BS	2011	2	2011	6	17					Bohai Sea	Beidaihe Geziwo			<i>Picoflagellate</i>							180		
		CE	2011	3	2011	9	23	2011	9	26		Chanjiang River Estuary	Haizhou Bay			<i>Skeletonema costatum</i>							200		
		BS	2012	1	2012	5	18	2012	5	28		Bohai Sea	Qinhuangdao			unknown							16		
		BS	2012	2	2012	6	8	2012	8	20		Bohai Sea	Qinhuangdao			unknown							3400		
		BS	2013	1	2013	5	25	2013	8	31		Bohai Sea	Suizhong to Qinhuangdao			<i>Aureococcus anophagefferens</i>							1450		
		BS	2013	2	2013	7	16	2013	7	25		Bohai Sea	Hangu and Tianjin Port			<i>Noctiluca scintillans</i>							100		
		BS	2013	3	2013	7	5	2013	7	8		Bohai Sea	Harber Economic Area and Tianjin Port			<i>Skeletonema costatum</i>							154		
		CE	2013	4	2013	5	30	2013	6	1		Chanjiang River Estuary	Haizhou Bay			<i>Heterosigma akashiwo</i>							450		
		DL	2014	1	2014	5	30	2014	6	13	15	Dalian	Eastern sea area of Liaodong Bay			<i>Noctiluca scintillans</i>							110		
		BS	2014	2	2014	6	11	2014	6	15		Bohai Sea	Qinhuangdao			<i>Noctiluca scintillans</i> <i>Prorocentrum minimum</i>							228		
		BS	2014	3	2014	9	13	2014	9	17		Bohai Sea	Center of Bohai Sea			<i>Karenia mikimotoi</i>							400		
		BS	2014	4	2014	5	15	2014	8	7		Bohai Sea	Qinhuangdao			<i>Aureococcus anophagefferens</i> <i>Thalassiosira eccentrica</i>							2000		
		BS	2014	5	2014	8	26	2014	9	25		Bohai Sea	Tianjin			<i>Cochlodinium polykrioides</i> <i>Ceratium furca</i>							300		
		QD	2014	6	2014	9	21	2014	9	23	3	Qingdao	Changhai country			<i>Chattonella marina</i>							890		
		BS	2015	1	2015	5	20	2015	8	13		Bohai Sea				<i>Aureococcus anophagefferens</i>									
		BS	2015	2	2015	8	14	2015	8	16		Bohai Sea				<i>Noctiluca scintillans</i>									
		BS	2015	3	2015	8	21	2015	9	3		Bohai Sea				<i>Cochlodinium polykrioides</i>									
	BS	2016	1	2016	8	18	2016	10	24		Bohai Sea				<i>Cochlodinium polykrioides</i> <i>Ceratium furca</i> <i>Gymnodinium impudicum</i> <i>Thalassiosira pacifica</i>										
	BS	2017	1	2017	3	21	2017	4	12		Bohai Sea				<i>Rhizosolenia delicatula</i> <i>Euampia cornuta</i>										
	CE	2017	2	2017	5	17	2017	5	19		Chanjiang River Estuary				<i>Gymnodinium catenatum</i> <i>Skeletonema costatum</i>										
Country	Organization	Event No.			Duration(Start)			Duration(End)			Continuous days	Locatio of occurrence		Monitoring date		Causative species(*1)	Maximum density (cells·inds./mL)	Fishery damage				Environmental parameters			Size of bloom (km ²)
		Pref. Code	Year	No.	Year	Month	day	Year	Month	day		Sub-area	Spot	Date	Time			Fish/Shellfish species	Quantity	Economic loss (1,000 Yen)	Temp. (°C)	Salinity	DO (mg/L)		
		YM	2009	1	2009	3	18	2009	3	27	10	Coastal area of Yamaguchi	Coastline of Nagato City			<i>Noctiluca scintillans</i>	unknown								

Saga Prefectural Genkai Fisheries Promotion Center	SA	2010	2	2010	7	2	2010	7	9	8	North Kyushu	Kariya Bay		<i>Prorocentrum dentatum</i>	370					
	SA	2010	3	2010	7	22	2010	8	2	12	North Kyushu	Karatsu Bay		<i>Ceratium furca</i>	290					
	SA	2010	4	2010	8	10	2010	8	26	17	North Kyushu	Imari Bay		<i>Prorocentrum spp.</i>	1,770	Yellowtail		5	23	
	SA	2010	5	2010	9	11	2010	9	15	5	North Kyushu	Karatsu Bay		<i>Karenia mikimotoi</i>	7,080	amberjack				
	SA	2010	6	2010	9	29	2010	9	30	2	North Kyushu	Karatsu Bay		<i>Chattonella marina</i>	14,700					
	SA	2010	7	2010	10	13	2010	10	15	3	North Kyushu	Imari Bay		<i>Thalassiosira spp.</i>	9,020					
	SA2	2010	1	2009	12	25	2010	1	7	14	West Kyushu	Ariake		<i>Thalassiosira spp.</i>	6,774					
	SA2	2010	2	2010	1	21	2010	2	28	8	West Kyushu	Ariake		<i>Prorocentrum triestinum</i>	26,000					
	SA2	2010	3	2010	5	7	2010	5	9	3	West Kyushu	Ariake		<i>Asterionella kariana</i>	31,150	laver				
	SA2	2010	4	2010	5	21	2010	6	10	21	West Kyushu	Ariake		<i>Skeletonema spp.</i>	6,270	laver				
	SA2	2010	5	2010	6	9	2010	6	10	3	West Kyushu	Ariake		<i>Thalassionema nitzschoides</i>	8,260					
	SA2	2010	6	2010	6	11	2010	6	17	7	West Kyushu	Ariake		<i>Heterosigma akashiwo</i>	620					
	SA2	2010	7	2010	6	25	2010	7	1	7	West Kyushu	Ariake		<i>Heterosigma akashiwo</i>	97,333					
	SA2	2010	8	2010	7	2	2010	7	4	3	West Kyushu	Ariake		<i>Skeletonema spp.</i>	62,000					
	SA2	2010	9	2010	7	2	2010	7	15	14	West Kyushu	Ariake		<i>Skeletonema spp.</i>	12,575					
	SA2	2010	10	2010	7	20	2010	8	9	20	West Kyushu	Ariake		<i>Chaetoceros spp.</i>	2,140					
	SA2	2010	11	2010	8	2	2010	8	4	3	West Kyushu	Ariake		<i>Thalassiosira spp.</i>	2,856					
SA2	2010	12	2010	8	10	2010	8	12	3	West Kyushu	Ariake		<i>Eutreptia pertyi</i>	5,350						
SA2	2010	13	2010	8	17	2010	9	9	24	West Kyushu	Ariake		<i>Eutreptiella sp.</i>	4,750						
SA2	2010	14	2010	9	1	2010	9	21	21	West Kyushu	Ariake		<i>Akashiwo sanguinea</i>	66,000						
SA2	2010	15	2010	10	1	2010	10	27	27	West Kyushu	Ariake		<i>Skeletonema spp.</i>	102,000						
SA2	2010	16	2010	10	7	2010	10	14	8	West Kyushu	Ariake		<i>Chaetoceros spp.</i>	82,000						
SA2	2010	17	2010	11	22	2010	12	6	14	West Kyushu	Ariake		<i>Thalassiosira spp.</i>	4,750						
Nagasaki Prefectural Institute of Fisheries	NS2	2010	1	2010	5	12	2010	5	22	11	West Kyushu (remote island)	Goto		<i>Chattonella antiqua</i>	1,060					
	NS2	2010	2	2010	5	26	2010	5	31	6	West Kyushu	Ariake		<i>Chattonella spp.</i>	20					
	NS2	2010	3	2010	6	14	2010	6	21	8	West Kyushu	Ariake		<i>Ceratium furca</i>	510					
	NS2	2010	4	2010	6	23	2010	6	24	2	West Kyushu (remote island)	Kujyukushima		<i>Thalassiosira spp.</i>	20,250					
	NS	2010	1	2010	6	29	2010	7	6	8	North Kyushu	Imari Bay		<i>Skeletonema spp.</i>	14,650					
	NS2	2010	5	2010	7	2	2010	7	3	2	West Kyushu	Tachibana Bay		<i>Chaetoceros spp.</i>	12,000					
	NS2	2010	6	2010	7	2	2010	7	6	5	West Kyushu	Ariake		<i>Akashiwo sanguinea</i>	1,570					
	NS2	2010	7	2010	7	2	2010	7	6	5	West Kyushu	Ariake		<i>Chaetoceros spp.</i>	59,000					
	NS2	2010	8	2010	7	3	2010	8	16	14	West Kyushu	Ariake		<i>Thalassiosira spp.</i>	16,250	Yellowtail,				
	NS2	2010	9	2010	7	5	2010	7	9	5	West Kyushu (remote island)	Kujyukushima		<i>Skeletonema spp.</i>	5,000	Yellowtail,	6,800	79,691		
	NS2	2010	10	2010	7	6	2010	8	20	46	West Kyushu	Tachibana Bay		<i>Chattonella antiqua</i>	12,100	Yellowtail	200	800		
	NS2	2010	11	2010	7	7	2010	7	8	2	West Kyushu (remote island)	Kujyukushima		<i>Chattonella marina</i>	9,950	amberjack,	100	300		
	NS2	2010	12	2010	7	12	2010	7	14	3	West Kyushu	Hirado City		<i>Skeletonema spp.</i>	145,000	Striped jack	9,100	5,635		
	NS2	2010	13	2010	7	15	2010	8	5	22	West Kyushu	Omura Bay		<i>Karenia mikimotoi</i>	7,240	Red seabream				
	NS	2010	2	2010	8	2	2010	8	3	2	North Kyushu	Imari Bay		<i>Chattonella antiqua</i>	1,190	Yellowtail	10	65		
	NS2	2010	14	2010	7	26	2010	8	24	30	West Kyushu	Omura Bay		<i>Myrionecta rubra</i>	15,000	Striped jack	539	384		
NS2	2010	15	2010	9	21	2010	9	22	2	West Kyushu	Tachibana Bay		<i>Myrionecta rubra</i>	770	Tiger puffer	80	80			
NS	2010	3	2010	9	30	2010	10	1	2	North Kyushu	Imari Bay		<i>Noctiluca scintillans</i>	2,700						
NS2	2010	16	2010	10	14	2010	10	15	2	West Kyushu (remote island)	Kujyukushima		<i>Chattonella globosa</i>	3,080						
NS2	2010	17	2010	11	11	2010	11	23	13	West Kyushu (remote island)	Kujyukushima		<i>Noctiluca scintillans</i>	85						
													<i>Chattonella antiqua</i>	1,580	Yellowtail					
													<i>Cochlodinium polykrikoides</i>	2,020	Yellowtail	10,000	23,600			
													<i>Fibrocapsa japonica</i>	7,500	amberjack	15,200	48,575			
													<i>Myrionecta rubra</i>	3,861						
													<i>Skeletonema sp.</i>	8,000						
													<i>Prorocentrum triestinum</i>	1,600						
													<i>Myrionecta rubra</i>	1,200						

Event No.	Duration(Start)	Duration(End)	Locatio of occurrence	Monitoring date	Maximum	Fishery damage	Environmental parameters	Size of
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Organization	Pref. Code	Year	No.	Year	Month	day	Year	Month	day	Continuous days	Sub-area	Spot	Date	Time	Causative species(*1)	density (cells·inds./mL)	Fish/Shellfish species	Quantity	Economic loss (1,000 Yen)	Temp. (°C)	Salinity	DO (mg/L)	bloom (km²)
Yamaguchi Prefectural Fisheries Research Center	YM	2011	1	2011	3	13	2011	4	25	43	Coastal area of Yamaguchi	Coastline of Nagato City			<i>Noctiluca scintillans</i>	208	Tiger puffer		-	-	-	-	
	YM	2011	2	2011	3	27	2011	4	25	30	Coastal area of Yamaguchi	Coastline of Shimonoseki City			<i>Noctiluca scintillans</i>	450			-	-	-	-	
	YM	2011	3	2011	5	8	2011	5	10	3	Coastal area of Yamaguchi	Coastline of Abu Town			<i>Noctiluca scintillans</i>				-	-	-	-	
Fukuoka Fisheries and Marine Technology Research Center	FO	2011	1	2011	4	1	2011	4	6	6	North Kyushu	Kitakyushu City			<i>Noctiluca scintillans</i>	1,000			-	-	-	-	
	FO	2011	2	2011	4	4	2011	4	15	12	North Kyushu	Fukuoka Bay			<i>Rhizosolenia</i> sp.	15,000			-	-	-	-	
	FO	2011	3	2011	4	14	2011	4	15	2	North Kyushu	Fukuoka Bay			<i>Noctiluca scintillans</i>	1,000			-	-	-	-	
	FO	2011	4	2011	5	19	2011	5	25	7	North Kyushu	Fukuoka Bay			<i>Chaetoceros</i> sp.	26,400			-	-	-	-	
	FO	2011	5	2011	6	2	2011	6	7	6	North Kyushu	Karatsu Bay			<i>Skeletonema</i> sp.	10,000			-	-	-	-	
															<i>Skeletonema</i> sp.	30,000			-	-	-	-	
															<i>Chaetoceros</i> sp.	10,000			-	-	-	-	
															<i>Heterosigma akashiwo</i>	3,500			-	-	-	-	
															<i>Heterosigma akashiwo</i>	14,800			-	-	-	-	
															<i>Prorocentrum minimum</i>	3,500			-	-	-	-	
															<i>Skeletonema</i> sp.	10,000			-	-	-	-	
															<i>Chaetoceros</i> sp.	2,000			-	-	-	-	
															<i>Noctiluca scintillans</i>	700			-	-	-	-	
															<i>Thalassionema</i> sp.	4,000			-	-	-	-	
														<i>Thalassiosira</i> sp.	3,000			-	-	-	-		
														<i>Chaetoceros</i> sp.	16,200			-	-	-	-		
														<i>Chaetoceros</i> sp.	4,000			-	-	-	-		
														<i>Skeletonema</i> sp.	7,000			-	-	-	-		
														<i>Rhizosolenia setigera</i>	100			-	-	-	-		
														<i>Heterosigma akashiwo</i>	28,800			-	-	-	-		
														<i>Skeletonema</i> spp.	64,000			-	-	-	-		
														<i>Thalassiosira</i> spp.	11,200			-	-	-	-		
														<i>Prorocentrum</i> spp.	45,400			-	-	-	-		
														<i>Heterosigma akashiwo</i>	1,600			-	-	-	-		
														<i>Skeletonema</i> spp.	49,300			-	-	-	-		
														<i>Nitzschia</i> spp.	4,000			-	-	-	-		
														<i>Leptocylindrus</i> spp.	3,700			-	-	-	-		
														<i>Chaetoceros</i> spp.	1,400			-	-	-	-		
														<i>Heterosigma akashiwo</i>	4,400			-	-	-	-		
														<i>Noctiluca scintillans</i>	60			-	-	-	-		
														<i>Chaetoceros</i> spp.	36,800			-	-	-	-		
														<i>Skeletonema</i> spp.	5,100			-	-	-	-		
														<i>Nitzschia</i> spp.	3,100			-	-	-	-		
														<i>Skeletonema</i> spp.	17,490			-	-	-	-		
														<i>Nitzschia</i> spp.	3,710			-	-	-	-		
														<i>Chaetoceros</i> spp.	2,650			-	-	-	-		
	SA2	2011	1	2011	1	11	2011	2	3	24	West Kyushu	Ariake			<i>Asteroplanus karianus</i>	32,850	laver	unknown	-	-	-	-	
	SA2	2011	2	2011	2	25	2011	3	1	5	West Kyushu	Ariake			<i>Asteroplanus karianus</i>	4,950			-	-	-	-	
	SA2	2011	3	2011	5	16	2011	5	24	9	West Kyushu	Ariake			<i>Myrionecta rubra</i>	21,300			-	-	-	-	
	SA2	2011	4	2011	5	30	2011	6	22	24	West Kyushu	Ariake			<i>Heterosigma akashiwo</i>	233,333			-	-	-	-	
														<i>Skeletonema</i> spp.	49,666			-	-	-	-		
														<i>Thalassiosira</i> spp.	20,333			-	-	-	-		
														<i>Chaetoceros</i> spp.	13,300			-	-	-	-		
														<i>Heterocapsa rotundata</i>	27,000			-	-	-	-		
														<i>Heterosigma akashiwo</i>	88,000			-	-	-	-		
	SA2	2011	6	2011	9	6	2011	9	11	6	West Kyushu	Ariake			<i>Chaetoceros</i> spp.	12,000			-	-	-	-	
														<i>Chaetoceros</i> spp.	6,850			-	-	-	-		
	SA2	2011	7	2011	9	14	2011	9	26	13	West Kyushu	Ariake			<i>Pseudo-nitzschia</i> spp.	2,300			-	-	-	-	
														<i>Skeletonema</i> spp.	2,200			-	-	-	-		
	SA2	2011	8	2011	11	4	2011	11	7	4	West Kyushu	Ariake			<i>Akashiwo sanguinea</i>	410			-	-	-	-	
	NS2	2011	1	2011	3	2	2011	3	17	16	West Kyushu	Seihi			<i>Akashiwo sanguinea</i>	27,700			-	-	-	-	
	NS2	2011	2	2011	4	6	2011	4	9	4	West Kyushu	Seihi			<i>Noctiluca scintillans</i>	384			-	-	-	-	
	NS2	2011	3	2011	5	7	2011	5	11	5	West Kyushu	Seihi			<i>Noctiluca scintillans</i>	27			-	-	-	-	
	NS2	2011	4	2011	5	13	2011	5	15	3	West Kyushu (remote island)	Kujyukushima			<i>Noctiluca scintillans</i>	700			-	-	-	-	
	NS2	2011	5	2011	5	31	2011	6	15	16	West Kyushu	Ariake			<i>Heterosigma akashiwo</i>	243,000			-	-	-	-	
														<i>Skeletonema</i> spp.	18,928			-	-	-	-		
	NS2	2011	6	2011	6	3	2011	6	22	20	West Kyushu	Omura Bay			<i>Heterosigma akashiwo</i>	161,300			-	-	-	-	
	NS2	2011	7	2011	6	16	2011	6	22	7	West Kyushu	Omura Bay			<i>Heterosigma akashiwo</i>	13,120			-	-	-	-	
	NS	2011	1	2011	6	18	2011	6	26	9	North Kyushu	Imari Bay			<i>Heterosigma akashiwo</i>	30,000			-	-	-	0.0004	
	NS2	2011	8	2011	6	21	2011	7	5	15	West Kyushu	Ariake			<i>Skeletonema</i> spp.	228,900			-	-	-	-	
	NS2	2011	9	2011	7	4	2011	7	27	24	West Kyushu (remote island)	Kujyukushima			<i>Karenia mikimotoi</i>	5,830	Tiger puffer	10,000	2,000	-	-	-	-
															<i>Karenia mikimotoi</i>	21,400	Tiger puffer	2,000	360	-	-	-	-
																	Yellowtail	3,400	4,350	-	-	-	-
																	Yellowtail	70	450	-	-	-	-
																	amberjack	50	100	-	-	-	-
																	Striped jack			-	-	-	-
	NS2	2011	10	2011	7	15	2011	7	16	2	West Kyushu	Seihi			<i>Noctiluca scintillans</i>	518			-	-	-	-	
	NS2	2011	11	2011	7	22	2011	7	25	4	West Kyushu	Omura Bay			<i>Skeletonema</i> spp.	24,700			-	-	-	-	
	NS2	2011	12	2011	7	22	2011	7	26	5	West Kyushu	Tachibana Bay			<i>Myrionecta rubra</i>	1,500			-	-	-	-	
	NS	2011	3	2011	7	26	2011	8	9	15	North Kyushu	Imari Bay			<i>Karenia mikimotoi</i>	3,060			-	-	-	-	
	NS2	2011	13	2011	8	12	2011	8	29	18	West Kyushu	Ariake			<i>Heterosigma akashiwo</i>	55,700			-	-	-	-	
Nagasaki Prefectural Institute of Fisheries	NS2	2011	14	2011	8	22	2011	8	24	3	West Kyushu (remote island)	Goto			<i>Cochlodinium polykrikoides</i>	130			-	-	-	-	

Organization	Event No.			Duration(Start)			Duration(End)			Continuous days	Locatio of occurrence		Monitoring date		Causative species(*1)	Maximum density (cells·inds./mL)	Fishery damage			Environmental parameters			Size of bloom (km ²)
	Pref. Code	Year	No.	Year	Month	day	Year	Month	day		Sub-area	Spot	Date	Time			Fish/Shellfish species	Quantity	Economic loss (1,000 Yen)	Temp. (°C)	Salinity	DO (mg/L)	
	NS2	2012	25	2012	8	30	2012	9	3	5	West Kyushu (remote island)	Goto			<i>Skeletonema</i> spp.	9,176							
	NS2	2012	26	2012	9	13	2012	9	21	9	West Kyushu (remote island)	Goto			<i>Cochlodinium polykrikoides</i>	74							
	NS2	2012	27	2012	9	24	2012	9	28	5	West Kyushu (remote island)	Goto			<i>Cochlodinium</i> sp.	1,200							
	NS2	2012	28	2012	10	2	2012	10	11	10	West Kyushu	Omura Bay			<i>Heterocapsa</i>	18,600							
	NS2	2012	29	2012	10	26	2012	10	27	2	West Kyushu (remote island)	Goto			<i>Myrionecta rubra</i>	2,000							
	NS2	2012	30	2012	11	5	2012	11	9	5	West Kyushu (remote island)	Kuiyukushima			<i>Karenia digitata</i>	2,250							
Yamaguchi Prefectural Fisheries Research	YM	2014	1	2014	7	30	2014	8	28	29	Coastal area of Yamaguchi	Shimonoseki City			<i>Karenia mikimotoi</i>	1,360	Horned turban	260kg					
	YM	2014	2	2014	9	27	2014	10	16	19	Coastal area of Yamaguchi	Hagi and Nagato City			<i>Cochlodinium polykrikoides</i>	1,532	Abalone Horned turban	13kg 100kg					
Fukuoka Fisheries and Marine Technology Research Center	FO	2014	1	2014	3	27	2014	3	27	1	North Kyushu	Onga			<i>Noctiluca scintillans</i>	1,035							
	FO	2014	2	2014	5	9	2014	5	15	7	North Kyushu	Dokai Bay			<i>Prorocentrum minimum</i>	28,900							
	FO	2014	3	2014	5	13	2014	5	20	8	North Kyushu	Hakata Port			<i>Heterosigma akashiwo</i>	41,500							
	FO	2014	4	2014	6	11	2014	6	15	5	North Kyushu	Hakata Port			<i>Prorocentrum triestinum</i>	376,000							
	FO	2014	5	2014	7	17	2014	7	22	6	North Kyushu	Hakata Port			<i>Prorocentrum minimum</i>	19,600							
	FO	2014	6	2014	7	31	2014	8	18	19	North Kyushu	Dokai Bay			<i>Chaetoceros</i> spp.	37,000							
	FO	2014	7	2014	8	7	2014	8	25	19	North Kyushu	Fukuoka Bay			<i>Skeletonema</i> spp.	29,000							
	FO	2014	8	2014	9	8	2014	9	15	8	North Kyushu	Fukuoka Bay			<i>Karenia mikimotoi</i>	2,357							
	FO2	2014	1	2014	1	30	2014	3	31	61	West Kyushu	Ariake			<i>Chaetoceros</i> spp.	37,000							
	FO2	2014	2	2014	5	20	2014	5	29	10	West Kyushu	Ariake			<i>Skeletonema</i> spp.	29,000							
	FO2	2014	3	2014	7	17	2014	7	29	13	West Kyushu	Ariake			<i>Heterosigma akashiwo</i>	10,300							
	FO2	2014	4	2014	8	5	2014	8	12	8	West Kyushu	Ariake			<i>Ceratium furca</i>	295							
	FO2	2014	5	2014	8	25	2014	9	25	32	West Kyushu	Ariake			<i>Ceratium furca</i>	153							
	FO2	2014	6	2014	9	2	2014	9	25	24	West Kyushu	Ariake			<i>Chaetoceros</i> spp.	640							
FO2	2014	7	2014	10	20	2014	11	10	5	West Kyushu	Ariake			<i>Skeletonema</i> spp.	340								
Saga Prefectural Genkai Fisheries Promotion Center	SA	2014	1	2014	6	11	2014	6	24	14	North Kyushu	Genkai			<i>Ceratium furca</i>	43							
	SA	2014	2	2014	6	13	2014	6	15	3	North Kyushu	Karatsu			<i>Akashiwo sanguinea</i>	542							
	SA	2014	3	2014	7	11	2014	8	31	52	North Kyushu	Imari Bay			<i>Heterosigma akashiwo</i>	11,780							
	SA	2014	4	2014	7	15	2014	7	27	13	North Kyushu	Karatsu Bay			<i>Heterosigma akashiwo</i>	9,000							
	SA	2014	5	2014	7	28	2014	10	2	67	North Kyushu	Kariya Bay			<i>Heterocapsa rotundata</i>	11,000							
	SA	2014	6	2014	8	26	2014	9	4	10	North Kyushu	Karatsu			microalgae	1,800							
	SA	2014	7	2014	9	9	2014	9	21	13	North Kyushu	Imari Bay			<i>Karenia mikimotoi</i>	28,600							
	SA	2014	8	2014	10	31	2014	1	13	7	North Kyushu	Imari Bay			<i>Chattonella antiqua</i>	31,200							
	SA2	2014	1	2014	1	6	2014	1	13	7	West Kyushu	Ariake			<i>Chattonella</i> spp.	3,650							
	SA2	2014	2	2014	1	16	2014	3	2	45	West Kyushu	Ariake			<i>Karenia mikimotoi</i>	5,500							
	SA2	2014	3	2014	2	6	2014	3	30	52	West Kyushu	Ariake			<i>Karenia mikimotoi</i>	7,600							
	SA2	2014	4	2014	5	15	2014	5	28	13	West Kyushu	Ariake			<i>Heterocapsa</i>	2,120							
	SA2	2014	5	2014	6	20	2014	6	26	6	West Kyushu	Ariake			<i>Heterocapsa</i>	1,300							
	SA2	2014	6	2014	6	30	2014	7	3	4	West Kyushu	Ariake			<i>Asteroplanus karianus</i>	24,550							
	SA2	2014	7	2014	7	14	2014	8	11	28	West Kyushu	Ariake			<i>Skeletonema</i> spp.	43,250							
SA2	2014	8	2014	7	14	2014	7	17	3	West Kyushu	Ariake			<i>Thalassiosira</i> spp.	1,510								
SA2	2014	9	2014	7	18	2014	7	24	6	West Kyushu	Ariake			<i>Eucampia zodiacus</i>	2,780								
SA2	2014	10	2014	7	18	2014	7	24	6	West Kyushu	Ariake			<i>Heterosigma akashiwo</i>	52,000								
SA2	2014	11	2014	7	24	2014	7	24	1	West Kyushu	Ariake			<i>Skeletonema</i> spp.	12,650								
SA2	2014	12	2014	8	25	2014	9	8	14	West Kyushu	Ariake			Microalgae	14,000								
SA2	2014	13	2014	9	16	2014	10	14	28	West Kyushu	Ariake			microalgae	17,000								
SA2	2014	14	2014	10	21	2014	11	6	16	West Kyushu	Ariake			microalgae	49,000								
SA2	2014	15	2014	11	20	2014	11	24	4	West Kyushu	Ariake			microalgae	5,000								
NS	NS	2014	1	2014	7	4	2014	7	18	14	North Kyushu	Furue Bay			<i>Karenia mikimotoi</i>	21,100	Yellowtail amberjack	18,920	92,374				
	NS	2014	2	2014	7	23	2014	8	26	34	North Kyushu	Imari Bay			<i>Karenia mikimotoi</i>	19,300	macherel etc.						
	NS	2014	3	2014	9	24	2014	9	29	6	Remote island	Tsushima			<i>Prorocentrum dentatum</i>	36,100							
	NS2	2014	1	2014	2	25	2014	2	28	3	West Kyushu (remote island)	Goto			<i>Myrionecta rubra</i>	2,700							

		AB	1997	1	1997	5	4	1997	6	4	32	Amurskii Bay	Amurskii Bay			<i>Chaetoceros contortus</i>	1,300					11.0- 12.0	29.0- 30.0
		AB	1997	4	1997	7	29	?	?	?	<7	Amurskii Bay	Amurskii Bay			<i>Thalassiosira mala</i>	3,000					23.0	24.0
		AB	1997	5	1997	8	19	1997	8	28	10	Amurskii Bay	Amurskii Bay			<i>Protoceratium reticulatum</i>	0.4					20.0- 23.0	24.0- 28.0
		AB	1997	7	1997	10	17	1997	11	3	18	Amurskii Bay	Amurskii Bay			<i>Karenia mikimotoi</i>	7.2					5.0- 11.0	33.0- 35.0
		AB	1998	1	1998	1	26	1998	2	17	23	Amurskii Bay	Amurskii Bay			<i>Thalassiosira nordenskioeldii</i>	1,100					-2.0 - -0.5	34.0- 35.0
		AB	1998	2	1998	3	5	1998	3	12	8	Amurskii Bay	Amurskii Bay			<i>Plagioselmis sp.</i>	1,100					-1.0 - -0.8	33.0
		ANB	2001	1	2001	8	13					Aniva Bay	Aniva Bay			<i>Heterosigma akashiwo</i>	7						
		VB	2001	1	2001	8	16	2001			>12	Vostok Bay	Vostok Bay			<i>Skeletonema costatum</i>	5,250					22.4-23.5	28.6
		VB	2001	4	2001	9	30	2001			?	Vostok Bay	Vostok Bay			<i>Asterionellopsis glacialis</i>	1,191					14.7	33.6
		VB	2002	2	2002	7	14	2002			?	Vostok Bay	Vostok Bay			<i>Chatonella globosa</i>	0.6					16.4	32.1
		VB	2003	1	2003	4	23	2003			?	Vostok Bay	Vostok Bay			<i>Heterocapsa rotundata</i>	1,426					6.2	33.4
		AB	2004	1	2004	11	17	?	?	?	<7	Amurskii Bay	Amurskii Bay			<i>Chaetoceros salsugineus</i>	1,600					5.0	33.0
		AB	2005	1	2005	7	12	?	?	?	<7	Amurskii Bay	Amurskii Bay			<i>Euglena pascheri</i>	1,500					-1.7	35.0
		AB	2005	6	2005	10	20	?	?	?	<5	Amurskii Bay	Amurskii Bay			<i>Prorocentrum minimum</i>	100					12.0	33.0
		VB	2005	1	2005	9	1	2005			?	Vostok Bay	Vostok Bay			<i>Heterosigma akashiwo</i>	161					20.3	
		AB	2006	2	2006	6	5	2006	7	3	29	Amurskii Bay	Amurskii Bay			<i>Thalassiosira nitzschoides</i>	2,000					13.0- 20.0	20.0- 29.0
		AB	2006	5	2006	7	3	?	?	?	<5	Amurskii Bay	Amurskii Bay			<i>Karenia mikimotoi</i>	18					20.0	20.0
		AB	2006	6	2006	7	3	?	?	?	<5	Amurskii Bay	Amurskii Bay			<i>Chaetoceros salsugineus</i>	1,600					5.0	33.0
		VB	2006	2	2006	8	4	2006			?	Vostok Bay	Vostok Bay			<i>Heterosigma akashiwo</i>	38					22.6	30.6
		VB	2006	3	2006	8	20	2006			?	Vostok Bay	Vostok Bay			<i>Skeletonema costatum</i>	8,229						
		AB	2007	1	2007	7	11	2007	7	25	14	Amurskii Bay	Amurskii Bay			<i>Dinophysis acuminata</i>	1					18.0-22.0	26.0-26.7
		AB	2007	2	2007	7	25	2007	8	20	25	Amurskii Bay	Amurskii Bay			<i>Skeletonema costatum</i>	8,697					20.0-23.0	26.8-28.0
		AB	2007	3	2007	7	25	2007	7	25	1	Amurskii Bay	Amurskii Bay			<i>Heterosigma akashiwo</i>	0.3					22.0	26.8
		AB	2007	4	2007	8	6	2007	9	17	42	Amurskii Bay	Amurskii Bay			<i>Pseudo-nitzschia delicatissima</i>	83					20.0-22.0	26.8-32.7
		AB	2007	5	2007	8	20	2007	8	20	1	Amurskii Bay	Amurskii Bay			<i>Heterosigma akashiwo</i>	8					23.2	26.8
		AB	2007	6	2007	9	5	2007	9	17	12	Amurskii Bay	Amurskii Bay			<i>Pseudo-nitzschia calliantha</i>	173					20.0-22.0	30.2-32.7
		AB	2007	7	2007	10	30	2007	10	30	1	Amurskii Bay	Amurskii Bay			<i>Heterosigma akashiwo</i>	10					6.5	31.2
		AB	2007	8	2007	7	25	2007	7	25	1	Amurskii Bay	Amurskii Bay			<i>Pseudo-nitzschia pungens</i>	59					23.0	26.7
		VB	2007	1	2007	8	8	2007				Vostok Bay	Vostok Bay			<i>Heterosigma akashiwo</i>	19						
		AB	2008	1	2008	3	4	2008	4	7	34	Amurskii Bay	Amurskii Bay			<i>Dinobryon balticum</i>	1,054					0-5.5	30.6-33.6
		AB	2008	2	2008	7	14	2008	7	28	14	Amurskii Bay	Amurskii Bay			<i>Skeletonema costatum</i>	5,526					23.3-23.5	22.5-26.0
		AB	2008	3	2008	6	7	2008	6	7	1	Amurskii Bay	Amurskii Bay			<i>Heterosigma akashiwo</i>	1					16.2	18.8
		AB	2008	4	2008	6	7	2008	7	14	37	Amurskii Bay	Amurskii Bay			<i>Dinophysis acuminata</i>	4					16.0-23.3	18.8-26.0
		AB	2008	5	2008	8	29	2008			7	Amurskii Bay	Amurskii Bay			<i>Prorocentrum minimum</i>	0.9					20.5	28.17
		AB	2008	6	2008	9	15	2008			7	Amurskii Bay	Amurskii Bay			<i>Protoceratium reticulatum</i>	0.3					20.9	29.78
		AB	2009	1	2009	1	11	2009			7	Amurskii Bay	Amurskii Bay			<i>Protoceratium reticulatum</i>	0.3					-1.8	33.31
		AB	2009	4	2009	6	8	2009			7	Amurskii Bay	Amurskii Bay			<i>Protoceratium reticulatum</i>	0.4					14.1	30
		AB	2009	7	2009	8	2	2009			76	Amurskii Bay	Amurskii Bay			<i>Prorocentrum triestinum</i>	508.8					10.5-23.0	20
		AB	2009	8	2009	9	9	2009			7	Amurskii Bay	Amurskii Bay			<i>Prorocentrum minimum</i>	0.3					19.0	25
		VB	2009	1	2009	7	4	2009				Vostok Bay	Vostok Bay			<i>Nitzschia hybrida f. hyalina</i>	8,121.6					15.4	28.27
		AB	2010	3	2010	3	30	2010			7	Amurskii Bay	Amurskii Bay			<i>Heterosigma akashiwo</i>	6,041.6					-1.0	30.55
		AB	2010	5	2010	7	30	2010			7	Amurskii Bay	Amurskii Bay			<i>Dactylosolen fragilissimus</i>	1,860.0					23.0	22.59
		AB	2011	1	2011	7	1				1	Amurskii Bay	Amurskii Bay			<i>Dinophysis acuminata</i>	4.8						
		AB	2013	1	2013	2	28	2013	4	10	43	Amurskii Bay	Amurskii Bay			?	?						
		AB	2015	1	2015	6	18				1	Amurskii Bay	Amurskii Bay			<i>Dinophysis acuminata</i>	264.0						
		AB	2015	2	2015	5	21	2015	6	10	21	Amurskii Bay	Amurskii Bay			<i>Noctiluca scintillans</i>	37.0						
		UB	2015	1	2015	10	15				1	Ussury Bay	Ussury Bay			<i>Pseudo-nitzschia calliantha</i>	498						
																<i>Pseudo-nitzschia multistriata</i>	381						

*1 Scientific name is based on the Integrated Report on Harmful Algal Blooms (HABs) for the NOWPAP Region (NOWPAP CEARAC 2005).

*2 In case of China, the range of environmental parameters means the value which observed in some monitoring points during HAB event.

*3 In case of Korea, the range of environmental parameters means the value which observed in some monitoring points.

*4 In case of Russia, the range of environmental parameters means the value which observed during HAB event.

Common format for toxin-producing plankton bloom and shellfish poisoning

Country	Event No.			Duration (Start)			Duration (End)			Continuous days	Locatio of occurrence		Monitoring date		Causative species (*1)	Maximum density (cells·inds./L)	Fishery damage			Environmental parameters (*2)		
	Pref. Code	Year	No.	Year	Month	day	Year	Month	day		Sub-area	Spot	Date	Time			Fish/Shellfish species	Shellfish poisoning	Toxin level (MU/g)	Temp. (°C)	Salinity	DO (mg/L)
China	DL	1999	4	1999	7	?	?	?	?	?	Dalian	Dalian Bay			<i>Exuviaella marina</i>	8,100,000		DSP				
	DL	2004	7	2004	9	25	?	?	?	?	Dalian	Jinshatan			<i>Alexandrium catenella</i>							
Japan	YM	2007	1	2006	12	26	2007	2	21	58	Coastal area of Yamaguchi Pref.	Sensaki Bay			<i>Gymnodinium catenatum</i>	1,211	Japanese oyster	PSP	6.18- 12.2	9.1- 13.6	28.9- 34.3	
Japan	YM	2008	1	2008	11	14	2009	2	17	96	Coastal area of Yamaguchi Pref.	Sensaki Bay			<i>Gymnodinium catenatum</i>	34,380	Japanese oyster	PSP	5.25- 251	13.1- 20.1	-	-
	NA	2009	1	2009	2	12	2010	1	15	337	Remote Island	Tamanoura Bay			unknown		Japanese oyster	PSP	5.4			
	YM	2010	1	2010	1	13	2010	3	23	69	Coastal area of Yamaguchi Pref.	Sensaki Bay			<i>Alexandrium catenella</i>	29,000	Japanese oyster	PSP	28.6			
	SA	2010	1	2010	2	9	2011	2	17	374	North Kyushu	Kariya Bay			<i>Alexandrium catenella</i>	28,920	Japanese oyster	PSP	39.49			
	NA	2010																				
Korea																						
	AB	1992	1	1992	6	25	1992	7	10	16	Amurskii Bay	Amurskii Bay			<i>Pseudo-nitzschia pungens/multiseriis</i>	11,000,000				19.0- 23.0	27.0- 28.0	
	AB	1996	2	1996	6	19	?	?	?	<7	Amurskii Bay	Amurskii Bay			<i>Dinophysis acuta</i>	800				13.0	31.0	
	AB	1996	6	1996	7	29	?	?	?	<7	Amurskii Bay	Amurskii Bay			<i>Dinophysis fortii</i>	200				23.0	24.0	
	AB	1997	2	1997	6	4	?	?	?	<7	Amurskii Bay	Amurskii Bay			<i>Dinophysis norvegica</i>	60				12.0	31.0	
	AB	1997	3	1997	6	13	1997	7	22	50	Amurskii Bay	Amurskii Bay			<i>Dinophysis acuminata</i>	12,800				15.0- 20.0	28.0- 30.0	
	AB	1997	6	1997	9	4	1997	11	19	66	Amurskii Bay	Amurskii Bay			<i>Pseudo-nitzschia delicatissima</i>	2,700,000				1.0- 19.0	31.0- 35.0	
	AB	1997	8	1997	11	11	1997	11	19	9	Amurskii Bay	Amurskii Bay			<i>Pseudo-nitzschia calliantha</i>	500,000				1.0- 5.0	34.0- 35.0	
	AB	1998	3	1998	3	26	?	?	?	<7	Amurskii Bay	Amurskii Bay			<i>Dinophysis rotundata</i>	600				0.2	33.0	
	VB	2001	2	2001	8	29					Vostok Bay	Vostok Bay			<i>Alexandrium tamarense</i>	1600						
	VB	2001	3	2001	8	29					Vostok Bay	Vostok Bay			<i>Dinophysis fortii</i>	400						
	VB	2001	5	2001	9	30					Vostok Bay	Vostok Bay			<i>Pseudo-nitzschia pseudodelicatissima</i>	686000				14.7	33.6	
	VB	2002	1	2002	7	14					Vostok Bay	Vostok Bay			<i>Dinophysis acuminata</i>	500				16.4	32.1	
	VB	2002	3	2002	10	15					Vostok Bay	Vostok Bay			<i>Pseudo-nitzschia pungens</i>	2600				14.2	33.2	
	VB	2003	2	2003	6	30					Vostok Bay	Vostok Bay			<i>Dinophysis acuminata</i>	100				17.5	33.2	
	ANB	2004	1	2004	7	8	2004	12	25	171	Aniva Bay	Aniva Bay			<i>Alexandrium tamarense</i>		Mizuhopecten yessoensis	PSP	2.5-1-7.5			
	ANB	2004	2	2004	9	10	2004	9	12	3	Aniva Bay	Aniva Bay			<i>Pseudo-nitzschia spp.</i>		Mizuhopecten yessoensis	ASP	100-110			
	ANB	2004	3	2004	11	20	2004	11	30	11	Aniva Bay	Aniva Bay			<i>Pseudo-nitzschia spp.</i>		Mizuhopecten yessoensis	ASP	19-65			
	VB	2004	1	2004	8	1	2004				Vostok Bay	Vostok Bay			<i>Dinophysis acuminata</i>	200				23.2	28.5	
	ANB	2005	1	2005	4	20	2005	11	27	222	Aniva Bay	Aniva Bay			<i>Alexandrium tamarense</i>		Mizuhopecten yessoensis	PSP	2.5-80			
	AB	2005	1	2005	10	20	2005	10	28	9	Amurskii Bay	Amurskii Bay			<i>Pseudo-nitzschia calliantha</i>	200,000				6.0- 12.0	32.0- 33.0	
	AB	2005	2	2005	10	26	?	?	?	<7	Amurskii Bay	Amurskii Bay			<i>Pseudo-nitzschia fraudulenta</i>	38,000				8.0	34.0	

Russia	AB	2005	3	2005	10	5	2005	10	26	22	Amurskii Bay	Amurskii Bay			<i>Pseudo-nitzschia multistriata</i>	800,000				15.0	33.0	
	AB	2005	4	2005	12	5	2005	12	30	26	Amurskii Bay	Amurskii Bay			<i>Pseudo-nitzschia delicatissima</i>	80,000				-1.7- -1.8	33.0- 35.0	
	AB	2005	5	2005	12	5	2005	12	29	25	Amurskii Bay	Amurskii Bay			<i>Pseudo-nitzschia pungens</i>	60,000				-1.7	34.0- 35.0	
	AB	2005	7	2005	9	4	2005	9	10	7	Amurskii Bay	Amurskii Bay			<i>Pseudo-nitzschia seriata</i>	9,100				20.0	31.0	
	VB	2005	2	2005	11	1					Vostok Bay	Vostok Bay			<i>Pseudo-nitzschia pseudodelicatissima</i>	87,000				3.0	32.6	
	AB	2006	1	2006	3	1	?	?	?	<7		Amurskii Bay	Amurskii Bay			<i>Dinophysis rotundata</i>	500				-1.7	34.0
	AB	2006	3	2006	6	20	2006	7	3	14		Amurskii Bay	Amurskii Bay			<i>Dinophysis acuminata</i>	12,800				13.0- 22.0	17.0- 20.0
	AB	2006	4	2006	6	20	?	?	?	<7		Amurskii Bay	Amurskii Bay			<i>Dinophysis acuta</i>	500				13.0	17.0
	VB	2006	1	2006	8	4					Vostok Bay	Vostok Bay			<i>Alexandrium tamarense</i>	5,000				22.6	30.6	
	AB	2007	1	2007	7	11	2007	7	25	14		Amurskii Bay	Amurskii Bay			<i>Dinophysis acuminata</i>	686				18.0-22	26.0-26.7
	AB	2007	2	2007	7	11	2007	7	11	7		Amurskii Bay	Amurskii Bay			<i>Pseudo-nitzschia delicatissima</i>	686				18.0	26.0
	AB	2007	3	2007	11	9	2007	11	9	7		Amurskii Bay	Amurskii Bay			<i>Pseudo-nitzschia delicatissima</i>	340				6.8	31.9
	AB	2007	4	2007	8	6	2007	9	17	42		Amurskii Bay	Amurskii Bay			<i>Pseudo-nitzschia delicatissima</i>	83,385				20.0-22.0	26.8-32.7
	AB	2007	5	2007	7	11	2007	7	11	7		Amurskii Bay	Amurskii Bay			<i>Pseudo-nitzschia calliantha</i>	7,800				18.0	26.0
	AB	2007	6	2007	9	5	2007	9	17	12		Amurskii Bay	Amurskii Bay			<i>Pseudo-nitzschia calliantha</i>	173,400				20.0-22.0	30.2-32.7
	AB	2007	7	2007	10	30	2007	10	30	7		Amurskii Bay	Amurskii Bay			<i>Pseudo-nitzschia calliantha</i>	1,540				6.5	31.2
	AB	2007	8	2007	7	25	2007	7	25	7		Amurskii Bay	Amurskii Bay			<i>Pseudo-nitzschia pungens</i>	58,800				22.0	26.7
	AB	2007	9	2007	9	17	2007	10	9	22		Amurskii Bay	Amurskii Bay			<i>Pseudo-nitzschia pungens</i>	4,800				12.0-20.0	30.5-32.7
	AB	2007	10	2007	7	25	2007	7	25	7		Amurskii Bay	Amurskii Bay			<i>Pseudo-nitzschia fraudulenta</i>	3,600				22.0	26.7
	AB	2008	1	2008	3	4	2008	4	7	34		Amurskii Bay	Amurskii Bay			<i>Dinobryon balticum</i>	1,054,280				-1.8-5.5	30.6-33.6
	AB	2008	2	2008	9	15	2008	9	15	7		Amurskii Bay	Amurskii Bay			<i>Pseudo-nitzschia callianta</i>	2,640				20.9	29.7
	AB	2008	3	2008	7	28	2008	9	29	62		Amurskii Bay	Amurskii Bay			<i>Pseudo-nitzschia delicatissima</i>	8,800				15.2-23.5	22.5-30.5
	AB	2008	4	2008	3	4	2008	3	4	7		Amurskii Bay	Amurskii Bay			<i>Pseudo-nitzschia multistriata</i>	270				-1.8	32.6
	AB	2008		2008	4	9	2008	11	4	208		Amurskii Bay	Amurskii Bay			<i>Pseudo-nitzschia spp.</i>		Crenomytilus grayanus	ASP	0.01		
	AB	2008		2008	4	11	2008	4	11	1		Amurskii Bay	Amurskii Bay			<i>Pseudo-nitzschia spp.</i>		Modiolus modiolus	ASP	0.02	5.5	
	AB	2008	5	2008	7	28	2008	7	28	7		Amurskii Bay	Amurskii Bay			<i>Pseudo-nitzschia multistriata</i>	1,257				23.5	22.5
	AB	2008	6	2008	6	7	2008	6	7	7		Amurskii Bay	Amurskii Bay			<i>Pseudo-nitzschia pungens</i>	640				16.7	18.8
	AB	2008	7	2008	7	14	2008	7	14	7		Amurskii Bay	Amurskii Bay			<i>Pseudo-nitzschia pungens</i>	330				23.2	26.0
	AB	2008	8	2008	8	29	2008	9	15	18		Amurskii Bay	Amurskii Bay			<i>Pseudo-nitzschia pungens</i>	1,320				20.5-20.9	28.1-29.8
	AB	2008	9	2008	12	19	2008	12	19	7		Amurskii Bay	Amurskii Bay			<i>Pseudo-nitzschia pungens</i>	857				-1.6	33.4
	AB	2008	11	2008	6	7	2008	6	7	7		Amurskii Bay	Amurskii Bay			<i>Dinophysis acuminata</i>	3,200	Crassostrea giga	DSP	81.1	16.2	18.8
	AB	2008	12	2008	5	5	2008	7	14	70		Amurskii Bay	Amurskii Bay			<i>Dinophysis acuminata</i>	4,480	Modiola modiolu	DSP	125.9	9.0-23.3	18.8-28.6
AB	2008	13	2008	8	11	2008	8	11	7		Amurskii Bay	Amurskii Bay			<i>Dinophysis acuminata</i>	1,900	nomytilus grayar	DSP	155.1	22.7	26.7	
AB	2009	1	2009	3	12						Amurskii Bay	Amurskii Bay			<i>Dinophysis acuta</i>	100				0.5	33.08	

AB	2009	2	2009	6	8					Amurskii Bay	Amurskii Bay			<i>Pseudo-nitzschia pungens</i>	200				14.1	30.0
AB	2009	3	2009	6	8	2009	7	1	22	Amurskii Bay	Amurskii Bay			<i>Dinophysis acuminata</i>	1,400				14.1-17.2	30
AB	2009	4	2009	8	2	2009	8	25	23	Amurskii Bay	Amurskii Bay			<i>Dinophysis acuminata</i>	2,600				22.5-23.0	20.0-27.0
AB	2009	5	2009	10	26					Amurskii Bay	Amurskii Bay			<i>Pseudo-nitzschia cf. seriata</i>	1,800				10.5	30.55
AB	2009	6	2009	10	26					Amurskii Bay	Amurskii Bay			<i>Pseudo-nitzschia calliantha</i>	19,200				10.5	30.55
AB	2010	1	2010	1	28	2010	2	10	13	Amurskii Bay	Amurskii Bay			<i>Pseudo-nitzschia pungens</i>	500				-1.8	32.99
AB	2010	2	2010	1	28	2010	2	10	13	Amurskii Bay	Amurskii Bay			<i>Pseudo-nitzschia cf. seriata</i>	200				-1.8	32.99
AB	2010	3	2010	7	30					Amurskii Bay	Amurskii Bay			<i>Pseudo-nitzschia pungens</i>	2,000				22.5-23.5	22.59
AB	2010	4	2010	8	31					Amurskii Bay	Amurskii Bay			<i>Pseudo-nitzschia cf. delicatissim</i>	32,800				24.0	27.74
AB	2010	5	2010	8	31					Amurskii Bay	Amurskii Bay			<i>Pseudo-nitzschia cf. seriata</i>	800				24.0	27.74

*1 Scientific name is based on the Integrated Report on Harmful Algal Blooms (HABs) for the NOWPAP Region (NOWPAP CEARAC, 2005).

*2 In case of Japan and Russia, the range of environmental parameters means the value which observed during event.

Common format for Water Quality Information

Country	Organization	Monitoring date				Location		Transparency (m)	SST (°C)	Salinity	DO (mg/L)	pH	DIN (µM)	NO3-N (µM) (*2)	NO2-N (µM)	NH4-N (µM)	DIP	PO4-P (µM)	SiO2-Si	SiO3-Si (µM)	Chl-a
		Year	Month	day	Time	Area	Monitoring point (*1)														
China (*1)	North China Sea Environmental Monitoring Centre	2007	8	20-23	Coastal area of Qingdao	6	-	22.7- 25.1	29.1- 29.6	6.66- 7.42	6.97- 8.05	-	5.1-14.1	2.3-2.8	1.3-5.5	-	0.07-0.20	-	12.1-16.8	-	
						8	-	22.7- 25.2	28.5- 29.5	6.90- 7.46	7.93- 8.09	-	6.0-18.6	2.1-3.0	1.7-14.3	-	0.04-0.12	-	8.6-15.4	-	
						9	-	23.0- 25.2	29.0- 29.5	6.99- 7.49	7.96- 8.14	-	6.0-12.2	1.9-2.3	1.0-5.9	-	0.03-0.12	-	11.0-16.0	-	
						14	-	23.6- 25.1	29.0- 29.3	6.91- 7.57	7.93- 8.20	-	6.7-9.4	1.9-2.1	1.7-3.8	-	0.03-0.16	-	10.4-11.0	-	
						15	-	23.5- 25.2	29.0- 29.3	7.04- 7.68	7.94- 8.19	-	4.0-9.9	1.9-2.3	1.7-5.0	-	0.04-0.17	-	10.1-13.5	-	
						18	-	24.1- 25.3	28.2- 29.2	7.15- 7.68	8.00- 8.16	-	8.7-18.9	2.2-3.2	2.3-4.3	-	0.07-0.16	-	9.0-11.6	-	
						19	-	23.9- 25.1	28.5- 29.2	7.17- 7.81	7.99- 8.19	-	4.1-13.2	1.8-2.6	1.2-4.3	-	0.07-0.15	-	8.6-11.6	-	
						20	-	24.2- 25.3	27.9- 28.7	7.22- 7.73	7.97- 8.16	-	12.4-15.9	2.3-2.8	2.4-3.8	-	0.06-0.17	-	9.7-11.6	-	
		21	-	24.2- 25.3	28.4- 28.6	7.20- 7.71	7.98- 8.15	-	7.9-19.8	2.4-3.2	0.5-3.8	-	0.07-0.13	-	8.8-11.4	-					
		2008	8	8	Coastal area of Qingdao	8	-	24.4	29.6	7.17	8.18	-	1.95	0.40	3.34	-	0.05	-	2.63	36.8	
						9	-	24.6	29.6	7.17	8.21	-	1.61	0.38	3.33	-	0.03	-	2.70	-	
						14	-	24.5	29.4	6.93	8.20	-	1.68	0.38	1.88	-	0.04	-	4.01	-	
						15	-	25.0	29.4	8.05	8.26	-	1.60	0.34	2.52	-	0.02	-	2.63	-	

Country	Organization	Monitoring date				Location		Transparency (m)	SST (°C)	Salinity	DO (mg/L)	pH	DIN (µM)	NO3-N (µM)	NO2-N (µM)	NH4-N (µM)	DIP	PO4-P (µM)	SiO2-Si	SiO3-Si	Chl-a (µg/L)	
		Year	Month	day	Time	Area	Monitoring point															
	Fukuoka Fisheries and Marine Technology Research Center	2006	4			Fukuoka Bay		-	14.6	27.9	-	-	19.46	-	-	-	-	0.32	-	-	-	
		2006	5					-	17.6	31.1	-	-	30.40	-	-	-	-	0.53	-	-	-	
		2006	6						-	21.7	31.3	-	-	19.60	-	-	-	-	0.09	-	-	-
		2006	7						-	23.8	31.6	-	-	10.90	-	-	-	-	0.46	-	-	-
		2006	8						-	30.1	29.9	-	-	10.90	-	-	-	-	0.10	-	-	-
		2006	9						-	24.4	29.9	-	-	16.10	-	-	-	-	0.57	-	-	-
		2006	10						-	22.5	31.6	-	-	11.40	-	-	-	-	0.12	-	-	-
		2006	11						-	17.6	32.3	-	-	13.30	-	-	-	-	0.22	-	-	-
		2006	12						-	14.3	32.2	-	-	36.30	-	-	-	-	0.65	-	-	-
	2006		5	1		Imari Bay	1	4.3	16.9	32.0	8.40	-	0.39	0.14	0.07	0.18	-	0.00	-	-	1.70	
							2	4.1	17.0	31.6	8.20	-	0.16	0.04	0.02	0.10	-	0.00	-	-	1.90	
							3	4.5	17.2	31.7	8.90	-	0.12	0.05	0.01	0.06	-	0.00	-	-	2.20	
			6	1		Imari Bay	1	5.7	21.5	31.7	7.90	-	0.18	0.10	0.00	0.07	-	0.00	-	-	1.20	
							2	3.9	21.9	31.4	8.10	-	0.15	0.05	0.00	0.10	-	0.00	-	-	4.10	
							3	4.7	21.4	31.4	8.40	-	0.13	0.06	0.01	0.06	-	0.00	-	-	1.20	
	7	3		Imari Bay	1	2.9	25.6	25.0	8.90	-	0.29	0.17	0.01	0.11	-	0.00	-	-	8.90			
					2	2.8	25.6	25.2	8.40	-	0.16	0.06	0.01	0.10	-	0.01	-	-	7.30			
					3	2.8	25.2	25.3	8.30	-	0.13	0.05	0.01	0.08	-	0.00	-	-	10.3			

Japan	Saga Prefectural Genkai Fisheries Promotion Center	2006	8	1	Imari Bay	1	4.8	29.9	26.3	7.80	-	0.09	0.09	0.00	0.00	-	0.00	-	-	2.10	
						2	4.5	29.9	26.6	7.80	-	0.06	0.05	0.00	0.00	-	0.00	-	-	1.90	
						3	3.9	29.7	27.0	8.10	-	0.04	0.04	0.00	0.00	-	0.00	-	-	1.50	
					1	7.3	26.8	30.1	6.90	-	0.29	0.09	0.00	0.20	-	0.00	-	-	3.90		
					2	6.6	26.9	29.2	6.50	-	0.34	0.12	0.01	0.22	-	0.01	-	-	1.50		
					3	7.8	28.5	29.6	6.30	-	0.46	0.31	0.00	0.15	-	0.01	-	-	1.30		
					1	4.7	23.4	30.9	6.30	-	0.20	0.13	0.01	0.07	-	0.01	-	-	5.90		
					2	3.8	23.3	30.9	6.00	-	0.09	4.14	0.01	0.04	-	0.01	-	-	7.10		
					3	4.2	23.1	30.1	6.90	-	0.38	0.10	0.01	0.27	-	0.00	-	-	2.80		
					A	7.5	16.9	32.2	8.00	-	0.46	0.16	0.04	0.27	-	0.00	-	-	3.30		
					A	4.8	20.3	32.7	9.10	-	0.34	0.22	0.01	0.12	-	0.00	-	-	7.30		
					A	6.0	23.7	24.7	8.30	-	1.68	1.50	0.02	0.16	-	0.00	-	-	6.90		
					A	8.5	29.1	28.8	8.20	-	0.54	0.51	0.01	0.02	-	0.00	-	-	2.80		
					A	2.7	27.2	26.5	9.10	-	0.84	0.53	0.01	0.31	-	0.00	-	-	7.90		
					A	5.2	23.0	31.2	5.70	-	0.49	0.16	0.02	0.30	-	0.00	-	-	9.20		
					4	8.6	16.8	31.6	8.20	-	0.76	0.58	0.04	0.14	-	0.01	-	-	1.00		
					4	6.2	19.4	33.7	9.20	-	0.42	0.09	0.01	0.33	-	0.01	-	-	1.60		
					4	7.9	23.0	31.0	7.20	-	0.88	0.67	0.02	0.19	-	0.01	-	-	2.60		
					4	7.5	26.7	29.0	8.40	-	0.50	0.42	0.01	0.06	-	0.00	-	-	2.90		
					4	10.6	25.1	31.6	6.40	-	0.26	0.10	0.01	0.15	-	0.01	-	-	0.60		
					4	6.7	23.1	31.7	6.10	-	0.38	0.26	0.02	0.10	-	0.00	-	-	5.20		
				5	6.0	16.9	32.8	9.00	-	0.16	0.07	0.02	0.07	-	0.01	-	-	3.10			
				5	5.5	20.8	33.4	8.60	-	0.11	0.04	0.01	0.07	-	0.00	-	-	3.70			
				5	3.9	24.0	39.1	8.50	-	1.76	1.45	0.02	0.29	-	0.00	-	-	4.30			
				5	6.2	28.0	31.8	9.10	-	0.24	0.16	0.01	0.06	-	0.00	-	-	2.20			
				5	4.3	26.4	31.2	7.30	-	0.28	0.18	0.01	0.10	-	0.00	-	-	2.70			
				5	5.1	23.3	31.0	7.10	-	0.50	0.40	0.02	0.09	-	0.01	-	-	3.60			
		Nagasaki Prefectural Institute of Fisheries	2006	6	21	Imari Bay	1	9.0	22.0	33.4	5.00	-	0.66	0.25	0.01	0.40	-	0.01	-	-	0.90
					3		5.0	23.5	32.7	5.00	-	0.26	0.04	0.03	0.19	-	0.06	-	-	1.50	
					4		6.0	23.5	32.7	5.20	-	0.41	0.05	0.06	0.30	-	0.02	-	-	1.60	
					1	8.0	24.1	32.7	5.20	-	-	-	-	-	-	-	-	-	-	2.70	
					3	7.0	26.8	31.8	4.70	-	-	-	-	-	-	-	-	-	-	2.10	
				4	7.0	25.9	32.3	4.90	-	-	-	-	-	-	-	-	-	-	2.30		
				1	7.5	29.3	32.2	5.60	-	1.75	1.37	0.07	0.31	-	0.02	-	-	2.00			
				3	7.0	30.1	31.0	5.10	-	0.70	0.24	0.05	0.41	-	0.03	-	-	0.60			
				4	7.0	28.6	31.7	5.40	-	0.44	0.08	0.04	0.32	-	0.03	-	-	1.00			
				1	5.0	23.5	33.1	5.00	-	0.96	0.23	0.06	0.67	-	0.07	-	-	4.80			
				3	3.5	22.9	32.8	4.70	-	0.37	0.05	0.04	0.28	-	0.13	-	-	6.30			
			4	4.5	22.7	32.9	4.80	-	0.95	0.67	0.06	0.22	-	0.07	-	-	4.00				
			b	2.5	28.0	30.1	4.50	-	0.52	0.19	0.04	0.29	-	0.05	-	-	3.90				

Saga Prefectural Genkai Fisheries Promotion Center	2006	8	29		Ohmura Bay	c	3.0	28.5	30.0	4.20	-	1.65	0.17	0.07	1.41	-	0.04	-	2.70
						P	3.0	30.2	29.6	5.30	-	1.41	0.10	0.07	1.24	-	0.07	-	3.10
						Z	3.0	29.5	29.7	4.90	-	0.44	0.04	0.07	0.33	-	0.12	-	3.00
	2006	9	20		Ohmura Bay	b	3.5	25.6	29.5	5.00	-	4.65	3.98	0.34	0.33	-	0.07	-	18.7
						c	3.5	26.5	31.0	5.00	-	0.73	0.23	0.05	0.45	-	0.06	-	3.70
						P	5.0	26.5	31.6	4.50	-	0.99	0.39	0.12	0.48	-	0.17	-	3.90
						Z	4.5	26.5	31.6	4.60	-	1.24	0.42	0.24	0.58	-	0.22	-	9.50
	2007	5	1	9:35	Imari Bay	1	6.5	18.3	31.0	7.60	-	0.30	0.11	0.01	0.18	-	0.00	-	1.54
				9:46		2	5.2	18.1	31.9	7.30	-	0.11	0.03	0.01	0.07	-	0.00	-	2.21
				10:05		3	4.0	18.4	31.7	8.30	-	0.16	0.06	0.01	0.09	-	0.00	-	1.82
	2007	6	4	9:27	Imari Bay	1	5.5	21.8	34.0	6.80	-	0.15	0.14	0.00	0.01	-	0.04	-	0.47
				9:40		2	4.2	21.7	34.1	6.40	-	0.08	0.06	0.00	0.02	-	0.06	-	0.94
			9:52	3		4.8	22.0	33.6	6.80	-	0.10	0.08	0.00	0.01	-	0.05	-	0.70	
2007	7	2	9:20	Imari Bay	1	0.4	26.1	34.0	6.40	-	0.38	0.12	0.01	0.25	-	0.00	-	3.50	
			9:30		2	3.9	25.4	33.6	6.20	-	0.17	0.06	0.01	0.10	-	0.01	-	6.60	
			9:40		3	3.5	25.2	33.2	6.20	-	0.14	0.08	0.01	0.06	-	0.01	-	6.2	
2007	8	1	9:20	Imari Bay	1	3.7	28.2	29.6	7.90	-	1.35	0.27	0.01	1.08	-	0.00	-	2.40	
			9:32		2	3.3	27.9	29.7	7.00	-	0.22	0.06	0.01	0.15	-	0.01	-	4.10	
			9:45		3	4.1	28.2	29.5	6.70	-	0.41	0.18	0.01	0.22	-	0.01	-	1.60	
2007	9	3	9:15	Imari Bay	1	2.7	28.5	32.2	6.40	-	0.33	0.19	0.03	0.11	-	0.01	-	12.00	
			9:25		2	1.8	28.5	32.5	5.70	-	0.10	0.05	0.01	0.03	-	0.01	-	14.90	
			9:40		3	2.1	27.5	30.0	6.90	-	0.63	0.38	0.05	0.20	-	0.01	-	16.20	
2007	10	1	9:30	Imari Bay	1	3.9	26.0	30.6	7.30	-	0.68	0.11	0.01	0.56	-	0.01	-	7.20	
			9:40		2	3.1	26.1	30.6	6.70	-	0.26	0.07	0.05	0.14	-	0.02	-	10.10	
			9:36		3	3.9	26.0	32.7	6.30	-	1.31	0.19	0.10	1.01	-	0.03	-	8.60	
2007	5	2	10:02	Kariya Bay	A	6.5	18.0	32.8	8.60	-	0.38	0.09	0.01	0.28	-	0.01	-	3.70	
2007	6	5	10:03	Kariya Bay	A	6.1	22.6	33.4	7.90	-	0.18	0.17	0.01	0.01	-	0.21	-	2.40	
2007	7	3	10:25	Kariya Bay	A	2.1	25.3	28.5	7.00	-	0.72	0.55	0.02	0.15	-	0.00	-	7.20	
2007	8	2	10:05	Kariya Bay	A	4.6	27.4	32.1	8.10	-	0.35	0.15	0.02	0.18	-	0.00	-	7.60	
2007	9	4	9:54	Kariya Bay	A	3.9	28.0	32.0	6.10	-	0.47	0.28	0.02	0.18	-	0.01	-	11.60	
2007	10	2	10:49	Kariya Bay	A	4.9	25.4	33.0	7.40	-	0.27	0.10	0.01	0.17	-	0.00	-	6.20	
2007	5	1	11:55	Nagoyaura	4	7.5	18.0	32.4	7.10	-	0.34	0.19	0.01	0.14	-	0.01	-	1.30	
2007	6	4	11:40	Nagoyaura	4	7.0	20.8	32.5	7.20	-	0.08	0.07	0.00	0.01	-	0.04	-	1.60	
2007	7	3	11:25	Nagoyaura	4	6.2	23.4	34.1	6.20	-	0.64	0.30	0.01	0.33	-	0.01	-	2.00	
2007	8	1	11:45	Nagoyaura	4	3.7	26.1	29.7	7.30	-	0.21	0.09	0.01	0.10	-	0.01	-	3.40	
2007	9	3	11:07	Nagoyaura	4	4.7	27.5	32.0	5.80	-	1.11	0.81	0.04	0.26	-	0.01	-	4.20	
2007	10	1	12:05	Nagoyaura	4	8.2	25.3	33.0	7.30	-	0.38	0.14	0.01	0.23	-	0.01	-	8.00	
2007	5	2	10:32	Sototsu	5	10.9	18.1	32.6	8.70	-	0.28	0.13	0.01	0.13	-	0.01	-	2.00	
2007	6	5	10:33	Sototsu	5	4.3	21.8	33.8	8.50	-	0.17	0.16	0.00	0.01	-	0.04	-	2.40	
2007	7	3	10:50	Sototsu	5	2.3	24.9	29.6	6.40	-	1.09	0.80	0.02	0.27	-	0.01	-	3.30	

	2007	8	2	10:40	Sototsu	5	4.8	25.8	33.9	7.40	-	0.11	0.04	0.01	0.06	-	0.00	-	-	4.80
	2007	9	4	10:25	Sototsu	5	5.3	27.9	32.9	7.00	-	0.52	0.25	0.01	0.26	-	0.01	-	-	3.50
	2007	10	2	11:18	Sototsu	5	4.0	25.2	33.2	7.20	-	0.21	0.09	0.01	0.11	-	0.00	-	-	6.20
Nagasaki Prefectural Institute of Fisheries	2007	6	19	11:31	Imari Bay	1	7.5	22.3	34.0	4.80	-	0.67	0.24	0.05	0.39	-	0.11	-	-	0.90
				10:40		3	6.0	21.8	33.9	4.70	-	0.68	0.33	0.06	0.30	-	0.15	-	-	1.10
				10:54		4	9.0	21.6	34.0	4.80	-	1.03	0.50	0.04	0.50	-	0.42	-	-	2.20
	2007	8	28	8:44	Imari Bay	1	10.5	28.6	33.2	4.40	-	1.03	0.54	0.09	0.41	-	0.12	-	-	0.80
				10:17		3	5.5	29.9	33.2	4.60	-	0.60	0.21	0.07	0.32	-	0.09	-	-	2.00
				9:56		4	8.5	29.6	33.2	4.60	-	0.68	0.19	0.06	0.43	-	0.09	-	-	0.70
	2007	7	31	14:00	Ohmura Bay	b	3.0	31.3	30.6	4.90	-	0.94	0.24	0.10	0.60	-	0.08	-	-	0.40
				13:26		c	3.0	31.6	30.2	5.10	-	0.63	0.31	0.06	0.27	-	0.09	-	-	1.50
				10:29		P	4.0	29.1	30.8	4.80	-	2.13	1.00	0.07	1.06	-	0.08	-	-	1.20
				11:42		Z	3.8	28.9	30.8	4.90	-	0.53	0.16	0.07	0.30	-	0.07	-	-	2.10
	2007	10	11	14:00	Ohmura Bay	b	3.0	31.3	30.6	4.90	-	0.25	0.15	0.04	0.05	-	0.08	-	-	4.9
				13:26		c	3.0	31.6	30.2	5.10	-	1.57	0.52	0.28	0.76	-	0.40	-	-	1.30
				10:29		P	4.0	29.1	30.8	4.80	-	0.40	0.26	0.05	0.09	-	0.24	-	-	0.70
				11:42		Z	3.8	28.9	30.8	4.90	-	1.51	0.66	0.11	0.75	-	0.34	-	-	0.70
	2008	4	22	9:48	Ariake Sea	1	1.2	16.2	30.1	7.55	-	12.79	-	-	-	-	0.67	-	-	-
	2008	4	22	9:00	Ariake Sea	2	1.4	15.6	31.1	7.70	-	8.62	-	-	-	-	0.45	-	-	-
2008	4	22	8:50	Ariake Sea	3	1.4	15.7	28.9	7.80	-	12.66	-	-	-	-	0.50	-	-	-	
2008	4	22	9:32	Ariake Sea	4	1.6	15.8	31.3	7.79	-	6.67	-	-	-	-	0.32	-	-	-	
2008	5	22	9:12	Ariake Sea	1	0.5	20.7	30.6	7.21	-	3.81	-	-	-	-	0.38	-	-	-	
2008	5	22	8:55	Ariake Sea	2	1.3	19.9	30.9	7.37	-	2.14	-	-	-	-	0.31	-	-	-	
2008	5	22	8:44	Ariake Sea	3	1.2	20.0	30.3	7.53	-	2.75	-	-	-	-	0.44	-	-	-	
2008	5	22	9:35	Ariake Sea	4	1.4	19.9	31.8	7.42	-	1.44	-	-	-	-	0.25	-	-	-	
2008	6	23	11:01	Ariake Sea	1	1.2	23.0	22.6	6.57	-	14.72	-	-	-	-	0.66	-	-	-	
2008	6	23	10:27	Ariake Sea	2	2.4	23.0	26.1	6.64	-	13.35	-	-	-	-	0.45	-	-	-	
2008	6	23	10:15	Ariake Sea	3	1.8	23.0	21.0	7.03	-	26.15	-	-	-	-	0.85	-	-	-	
2008	6	23	10:43	Ariake Sea	4	1.8	22.7	26.0	6.85	-	12.93	-	-	-	-	0.54	-	-	-	
2008	7	28	15:06	Ariake Sea	1	0.9	32.0	26.9	8.04	-	0.00	-	-	-	-	0.70	-	-	-	
2008	7	28	14:32	Ariake Sea	2	1.3	32.2	27.6	8.33	-	0.26	-	-	-	-	0.40	-	-	-	
2008	7	28	14:20	Ariake Sea	3	1.1	31.8	26.7	8.92	-	0.02	-	-	-	-	0.55	-	-	-	
2008	7	28	14:47	Ariake Sea	4	1.3	30.0	28.6	7.42	-	1.15	-	-	-	-	0.29	-	-	-	
2008	8	11	15:15	Ariake Sea	1	1.3	31.2	26.1	12.10	-	0.59	-	-	-	-	0.57	-	-	-	
2008	8	11	13:55	Ariake Sea	2	1.2	31.2	26.5	10.95	-	0.92	-	-	-	-	0.57	-	-	-	
2008	8	11	13:43	Ariake Sea	3	1.4	31.0	24.4	13.02	-	0.38	-	-	-	-	0.55	-	-	-	
2008	8	11	14:37	Ariake Sea	4	1.6	30.3	29.8	10.51	-	0.14	-	-	-	-	0.38	-	-	-	
2008	8	26	14:29	Ariake Sea	1	1.4	27.5	28.8	5.27	-	16.28	-	-	-	-	1.25	-	-	-	
2008	8	26	13:54	Ariake Sea	2	1.9	28.0	28.0	6.13	-	14.88	-	-	-	-	1.19	-	-	-	
2008	8	26	13:44	Ariake Sea	3	1.6	28.2	26.4	9.46	-	0.05	-	-	-	-	0.47	-	-	-	

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2008	8	26	14:09	Ariake Sea	4	3.2	27.3	30.0	5.43	-	9.87	-	-	-	-	1.01	-	-	-
2008	9	24	15:23	Ariake Sea	1	1.2	28.4	25.0	14.16	-	0.22	-	-	-	-	0.20	-	-	-
2008	9	24	14:45	Ariake Sea	2	1.4	29.2	25.3	15.00	-	0.00	-	-	-	-	0.11	-	-	-
2008	9	24	14:32	Ariake Sea	3	1.6	28.7	24.0	15.33	-	0.01	-	-	-	-	0.12	-	-	-
2008	9	24	15:02	Ariake Sea	4	1.8	28.2	29.9	11.64	-	0.00	-	-	-	-	0.13	-	-	-
2008	10	23	16:15	Ariake Sea	1	1.3	23.1	28.9	6.67	-	19.90	-	-	-	-	1.55	-	-	-
2008	10	23	15:27	Ariake Sea	2	1.3	23.2	30.5	6.15	-	19.09	-	-	-	-	1.24	-	-	-
2008	10	23	15:14	Ariake Sea	3	1.3	23.2	30.1	6.57	-	15.41	-	-	-	-	1.40	-	-	-
2008	10	23	15:45	Ariake Sea	4	1.7	23.4	30.2	6.20	-	11.99	-	-	-	-	1.06	-	-	-
2008	11	19	13:58	Ariake Sea	1	0.9	16.5	30.3	8.21	-	14.05	-	-	-	-	1.08	-	-	-
2008	11	19	13:25	Ariake Sea	2	0.9	16.7	30.2	8.03	-	13.86	-	-	-	-	1.17	-	-	-
2008	11	19	13:16	Ariake Sea	3	0.6	15.7	29.3	8.43	-	16.26	-	-	-	-	1.37	-	-	-
2008	11	19	13:40	Ariake Sea	4	0.6	16.6	30.5	8.19	-	12.46	-	-	-	-	1.09	-	-	-
2008	12	15	11:29	Ariake Sea	1	1.3	13.5	29.9	8.84	-	15.64	-	-	-	-	1.06	-	-	-
2008	12	15	10:30	Ariake Sea	2	0.9	13.3	29.6	8.54	-	15.56	-	-	-	-	0.92	-	-	-
2008	12	15	10:18	Ariake Sea	3	0.9	13.0	28.5	8.92	-	19.87	-	-	-	-	1.09	-	-	-
2008	12	15	11:08	Ariake Sea	4	1.8	13.8	30.3	8.48	-	12.92	-	-	-	-	0.80	-	-	-
2009	1	14	11:24	Ariake Sea	1	1.1	9.2	29.7	9.86	-	12.31	-	-	-	-	0.64	-	-	-
2009	1	14	10:27	Ariake Sea	2	1.1	9.1	29.5	9.77	-	11.24	-	-	-	-	0.62	-	-	-
2009	1	14	10:17	Ariake Sea	3	0.8	8.7	28.7	10.04	-	15.07	-	-	-	-	0.71	-	-	-
2009	1	14	11:05	Ariake Sea	4	1.8	9.6	30.2	9.80	-	10.42	-	-	-	-	0.56	-	-	-
2009	2	24	9:54	Ariake Sea	1	1.8	11.4	27.4	9.85	-	13.03	-	-	-	-	1.14	-	-	-
2009	2	24	8:55	Ariake Sea	2	1.8	11.4	30.3	9.36	-	1.21	-	-	-	-	0.25	-	-	-
2009	2	24	8:44	Ariake Sea	3	1.8	11.2	27.9	9.48	-	8.46	-	-	-	-	0.70	-	-	-
2009	2	24	9:35	Ariake Sea	4	2.6	11.8	31.1	8.84	-	4.02	-	-	-	-	0.37	-	-	-
2009	3	12	10:34	Ariake Sea	1	1.7	11.9	30.4	9.21	-	4.41	-	-	-	-	0.40	-	-	-
2009	3	12	9:43	Ariake Sea	2	1.7	11.8	30.4	9.08	-	4.38	-	-	-	-	0.43	-	-	-
2009	3	12	9:23	Ariake Sea	3	1.1	11.8	29.6	9.08	-	6.81	-	-	-	-	0.49	-	-	-
2009	3	12	10:03	Ariake Sea	4	2.3	12.2	31.3	9.10	-	2.66	-	-	-	-	0.31	-	-	-
2008	5	1	9:36	Imari Bay	1	5.0	18.4	33.2	7.10	-	15.32	11.45	0.21	3.66	-	0.12	-	-	1.17
2008	5	1	9:29	Imari Bay	2	4.2	18.5	32.9	6.94	-	5.93	1.27	0.21	4.45	-	0.24	-	-	1.45
2008	6	2	9:47	Imari Bay	1	4.0	21.7	31.7	6.21	-	3.75	1.33	0.12	2.30	-	0.12	-	-	4.39
2008	6	2	9:35	Imari Bay	2	3.5	21.6	31.1	7.51	-	2.03	0.83	0.14	1.06	-	0.16	-	-	12.65
2008	7	1	9:40	Imari Bay	1	3.7	23.0	28.9	8.55	-	12.14	3.09	0.20	8.85	-	0.06	-	-	3.22
2008	7	1	9:30	Imari Bay	2	2.5	22.4	27.5	8.14	-	10.80	7.95	0.35	2.50	-	0.20	-	-	5.74
2008	8	6	9:46	Imari Bay	1	5.2	30.3	32.8	7.55	-	1.15	0.34	0.06	0.75	-	0.09	-	-	7.56
2008	8	6	9:24	Imari Bay	2	5.0	30.1	32.8	7.21	-	2.25	0.91	0.05	1.29	-	0.13	-	-	14.06
2008	9	2	9:52	Imari Bay	1	3.5	27.4	31.3	9.86	-	5.92	3.50	0.37	2.05	-	0.18	-	-	3.4
2008	9	2	9:32	Imari Bay	2	3.1	27.4	30.2	9.66	-	2.47	0.98	0.24	1.25	-	0.20	-	-	4.93
2008	10	2	10:55	Imari Bay	1	5.0	23.7	33.4	5.40	-	10.95	2.98	1.29	6.67	-	0.61	-	-	6.45

Saga Prefectural Genkai Fisheries Promotion Center	2008	10	2	9:44	Imari Bay	2	3.3	23.8	33.0	4.89	-	8.19	3.25	1.55	3.39	-	0.98	-	-	6.06
	2008	5	2	10:35	Kariya Bay	A	6.0	17.9	33.6	6.36	-	11.98	3.85	0.26	7.87	-	0.18	-	-	2.01
	2008	6	3	9:50	Kariya Bay	A	3.9	20.0	33.0	5.12	-	7.95	3.20	0.10	4.65	-	0.14	-	-	6.22
	2008	7	2	9:47	Kariya Bay	A	4.5	21.5	28.7	6.19	-	36.46	32.71	0.70	3.05	-	0.28	-	-	7.29
	2008	8	5	9:38	Kariya Bay	A	3.3	29.2	30.6	6.86	-	8.91	4.32	0.24	4.35	-	0.18	-	-	12.57
	2008	9	1	10:30	Kariya Bay	A	3.9	26.1	31.5	6.70	-	9.70	6.58	0.12	3.00	-	0.70	-	-	6.90
	2008	10	3	10:20	Kariya Bay	A	1.8	23.8	31.4	9.08	-	33.42	27.34	0.63	5.45	-	0.07	-	-	18.80
	2008	5	1	11:36	Nagoyaura	4	6.8	17.1	34.1	7.73	-	16.99	9.36	0.20	7.43	-	0.11	-	-	2.25
	2008	6	2	11:27	Nagoyaura	4	5.0	20.5	32.7	5.72	-	4.37	2.56	0.17	1.64	-	0.22	-	-	6.79
	2008	7	2	10:57	Nagoyaura	4	3.4	22.4	28.1	6.50	-	30.24	25.19	0.61	4.44	-	0.53	-	-	2.79
	2008	8	6	11:34	Nagoyaura	4	8.5	27.4	32.8	7.05	-	19.94	2.07	0.05	17.82	-	0.21	-	-	6.15
	2008	9	1	11:14	Nagoyaura	4	3.5	24.5	32.9	6.54	-	14.70	8.76	1.03	4.91	-	0.14	-	-	9.72
	2008	10	3	11:34	Nagoyaura	4	5.0	23.1	32.8	5.29	-	13.12	9.45	0.68	2.99	-	0.51	-	-	2.54
	2008	5	2	11:10	Sototsu	5	5.0	18.3	34.1	6.75	-	4.27	1.06	0.17	3.04	-	0.12	-	-	2.27
	2008	6	3	10:30	Sototsu	5	4.3	19.9	33.2	6.18	-	2.72	1.76	0.11	0.85	-	0.19	-	-	2.80
	2008	7	2	10:21	Sototsu	5	3.1	21.3	30.6	6.06	-	37.37	32.86	0.50	4.01	-	0.53	-	-	2.45
	2008	8	5	10:07	Sototsu	5	5.2	28.4	31.9	6.95	-	7.12	5.68	0.17	1.27	-	0.16	-	-	3.89
	2008	9	2	11:37	Sototsu	5	3.0	25.6	33.0	8.50	-	8.46	6.25	0.30	1.91	-	0.21	-	-	6.85
	2008	10	2	12:25	Sototsu	5	2.8	24.0	34.5	5.90	-	10.18	3.27	0.81	6.10	-	0.54	-	-	6.60
		2008	7	4	-	Ariake Sea	1	-	14.6	-	-	-	3.39	-	-	-	-	0.44	-	-
	2008	7	4	-	Ariake Sea	2	-	14.4	-	-	-	2.91	-	-	-	-	0.40	-	-	-
	2008	7	4	-	Ariake Sea	3	-	13.7	-	-	-	2.05	-	-	-	-	0.28	-	-	-
	2008	7	4	-	Ariake Sea	4	-	13.3	-	-	-	1.33	-	-	-	-	0.22	-	-	-
	2008	7	4	-	Ariake Sea	5	-	13.3	-	-	-	2.03	-	-	-	-	0.28	-	-	-
	2008	7	4	-	Ariake Sea	6	-	14.1	-	-	-	3.93	-	-	-	-	0.42	-	-	-
	2008	7	4	-	Ariake Sea	7	-	14.0	-	-	-	2.19	-	-	-	-	0.31	-	-	-
	2008	7	4	-	Ariake Sea	8	-	13.8	-	-	-	3.91	-	-	-	-	0.46	-	-	-
	2008	8	1	-	Ariake Sea	9	-	14.7	-	-	-	4.30	-	-	-	-	0.53	-	-	-
	2008	8	1	-	Ariake Sea	10	-	14.7	-	-	-	6.84	-	-	-	-	0.74	-	-	-
	2008	8	1	-	Ariake Sea	11	-	13.4	-	-	-	2.15	-	-	-	-	0.27	-	-	-
	2008	8	1	-	Ariake Sea	1	-	19.1	-	-	-	1.81	-	-	-	-	0.53	-	-	-
	2008	8	1	-	Ariake Sea	2	-	17.9	-	-	-	3.97	-	-	-	-	0.53	-	-	-
	2008	8	1	-	Ariake Sea	3	-	17.6	-	-	-	2.74	-	-	-	-	0.32	-	-	-
	2008	8	1	-	Ariake Sea	4	-	17.5	-	-	-	1.43	-	-	-	-	0.20	-	-	-
	2008	8	1	-	Ariake Sea	5	-	17.6	-	-	-	1.87	-	-	-	-	0.22	-	-	-
	2008	8	1	-	Ariake Sea	6	-	18.9	-	-	-	5.46	-	-	-	-	0.66	-	-	-
	2008	8	1	-	Ariake Sea	7	-	17.9	-	-	-	3.48	-	-	-	-	0.42	-	-	-
	2008	8	1	-	Ariake Sea	8	-	18.7	-	-	-	4.40	-	-	-	-	0.63	-	-	-
	2008	9	1	-	Ariake Sea	9	-	19.9	-	-	-	4.83	-	-	-	-	0.77	-	-	-
	2008	9	1	-	Ariake Sea	10	-	20.0	-	-	-	5.25	-	-	-	-	0.80	-	-	-

2008	9	1	-	Ariake Sea	11	-	17.0	-	-	-	3.53	-	-	-	0.32	-	-	-
2008	9	1	-	Ariake Sea	1	-	23.6	-	-	-	10.50	-	-	-	1.12	-	-	-
2008	9	1	-	Ariake Sea	2	-	22.1	-	-	-	5.81	-	-	-	0.75	-	-	-
2008	9	1	-	Ariake Sea	3	-	21.4	-	-	-	0.34	-	-	-	0.21	-	-	-
2008	9	1	-	Ariake Sea	4	-	20.3	-	-	-	3.79	-	-	-	0.51	-	-	-
2008	9	1	-	Ariake Sea	5	-	20.6	-	-	-	8.01	-	-	-	0.76	-	-	-
2008	9	1	-	Ariake Sea	6	-	21.0	-	-	-	8.67	-	-	-	0.83	-	-	-
2008	9	1	-	Ariake Sea	7	-	21.0	-	-	-	5.94	-	-	-	0.73	-	-	-
2008	9	1	-	Ariake Sea	8	-	20.5	-	-	-	7.20	-	-	-	0.81	-	-	-
2008	9	29	-	Ariake Sea	9	-	21.8	-	-	-	5.01	-	-	-	0.66	-	-	-
2008	9	29	-	Ariake Sea	10	-	22.1	-	-	-	5.33	-	-	-	0.75	-	-	-
2008	9	29	-	Ariake Sea	11	-	20.5	-	-	-	2.93	-	-	-	0.34	-	-	-
2008	9	29	-	Ariake Sea	1	-	25.6	-	-	-	1.87	-	-	-	0.45	-	-	-
2008	9	29	-	Ariake Sea	2	-	24.1	-	-	-	6.04	-	-	-	0.77	-	-	-
2008	9	29	-	Ariake Sea	3	-	24.2	-	-	-	3.80	-	-	-	0.43	-	-	-
2008	9	29	-	Ariake Sea	4	-	24.0	-	-	-	0.96	-	-	-	0.06	-	-	-
2008	9	29	-	Ariake Sea	5	-	24.6	-	-	-	0.93	-	-	-	0.04	-	-	-
2008	9	29	-	Ariake Sea	6	-	24.6	-	-	-	14.77	-	-	-	1.04	-	-	-
2008	9	29	-	Ariake Sea	7	-	24.7	-	-	-	4.99	-	-	-	0.43	-	-	-
2008	9	29	-	Ariake Sea	8	-	24.8	-	-	-	21.79	-	-	-	1.90	-	-	-
2008	10	29	-	Ariake Sea	9	-	24.8	-	-	-	7.08	-	-	-	0.73	-	-	-
2008	10	29	-	Ariake Sea	10	-	25.5	-	-	-	11.03	-	-	-	1.39	-	-	-
2008	10	29	-	Ariake Sea	11	-	24.0	-	-	-	1.14	-	-	-	0.04	-	-	-
2008	10	29	-	Ariake Sea	1	-	30.7	-	-	-	0.74	-	-	-	1.47	-	-	-
2008	10	29	-	Ariake Sea	2	-	30.2	-	-	-	0.49	-	-	-	0.94	-	-	-
2008	10	29	-	Ariake Sea	3	-	29.6	-	-	-	0.78	-	-	-	0.34	-	-	-
2008	10	29	-	Ariake Sea	4	-	29.0	-	-	-	0.57	-	-	-	0.37	-	-	-
2008	10	29	-	Ariake Sea	5	-	29.7	-	-	-	0.71	-	-	-	0.50	-	-	-
2008	10	29	-	Ariake Sea	6	-	28.5	-	-	-	3.01	-	-	-	1.25	-	-	-
2008	10	29	-	Ariake Sea	7	-	29.2	-	-	-	0.67	-	-	-	0.95	-	-	-
2008	10	29	-	Ariake Sea	8	-	28.6	-	-	-	1.27	-	-	-	1.22	-	-	-
2008	11	27	-	Ariake Sea	9	-	29.5	-	-	-	0.61	-	-	-	1.65	-	-	-
2008	11	27	-	Ariake Sea	10	-	29.8	-	-	-	0.68	-	-	-	1.46	-	-	-
2008	11	27	-	Ariake Sea	11	-	28.7	-	-	-	0.65	-	-	-	0.38	-	-	-
2008	11	27	-	Ariake Sea	1	-	27.3	-	-	-	2.39	-	-	-	1.14	-	-	-
2008	11	27	-	Ariake Sea	2	-	27.0	-	-	-	2.52	-	-	-	0.96	-	-	-
2008	11	27	-	Ariake Sea	3	-	26.9	-	-	-	2.17	-	-	-	0.83	-	-	-
2008	11	27	-	Ariake Sea	4	-	26.7	-	-	-	5.13	-	-	-	1.08	-	-	-
2008	11	27	-	Ariake Sea	5	-	26.8	-	-	-	1.10	-	-	-	0.64	-	-	-
2008	11	27	-	Ariake Sea	6	-	27.4	-	-	-	13.41	-	-	-	2.09	-	-	-

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2008	11	27	-	Ariake Sea	7	-	26.9	-	-	-	8.61	-	-	-	1.64	-	-	-
2008	11	27	-	Ariake Sea	8	-	27.3	-	-	-	12.96	-	-	-	2.11	-	-	-
2008	12	25	-	Ariake Sea	9	-	27.1	-	-	-	7.95	-	-	-	1.78	-	-	-
2008	12	25	-	Ariake Sea	10	-	27.2	-	-	-	5.30	-	-	-	1.57	-	-	-
2008	12	25	-	Ariake Sea	11	-	26.7	-	-	-	8.57	-	-	-	1.20	-	-	-
2008	12	25	-	Ariake Sea	1	-	24.8	-	-	-	11.05	-	-	-	2.35	-	-	-
2008	12	25	-	Ariake Sea	2	-	25.2	-	-	-	7.71	-	-	-	1.56	-	-	-
2008	12	25	-	Ariake Sea	3	-	-	-	-	-	-	-	-	-	-	-	-	-
2008	12	25	-	Ariake Sea	4	-	-	-	-	-	-	-	-	-	-	-	-	-
2008	12	25	-	Ariake Sea	5	-	25.2	-	-	-	6.87	-	-	-	1.31	-	-	-
2008	12	25	-	Ariake Sea	6	-	24.5	-	-	-	10.53	-	-	-	1.59	-	-	-
2008	12	25	-	Ariake Sea	7	-	24.5	-	-	-	8.17	-	-	-	1.36	-	-	-
2008	12	25	-	Ariake Sea	8	-	24.3	-	-	-	12.08	-	-	-	1.79	-	-	-
2008	1	27	-	Ariake Sea	9	-	24.3	-	-	-	12.16	-	-	-	1.91	-	-	-
2008	1	27	-	Ariake Sea	10	-	24.1	-	-	-	12.87	-	-	-	2.18	-	-	-
2008	1	27	-	Ariake Sea	11	-	-	-	-	-	-	-	-	-	-	-	-	-
2008	1	27	-	Ariake Sea	1	-	20.6	-	-	-	23.58	-	-	-	2.20	-	-	-
2008	1	27	-	Ariake Sea	2	-	21.4	-	-	-	13.07	-	-	-	1.45	-	-	-
2008	1	27	-	Ariake Sea	3	-	22.1	-	-	-	11.08	-	-	-	1.27	-	-	-
2008	1	27	-	Ariake Sea	4	-	21.8	-	-	-	11.72	-	-	-	1.28	-	-	-
2008	1	27	-	Ariake Sea	5	-	21.6	-	-	-	12.53	-	-	-	1.39	-	-	-
2008	1	27	-	Ariake Sea	6	-	20.8	-	-	-	22.90	-	-	-	1.19	-	-	-
2008	1	27	-	Ariake Sea	7	-	20.9	-	-	-	19.06	-	-	-	1.90	-	-	-
2008	1	27	-	Ariake Sea	8	-	19.9	-	-	-	22.56	-	-	-	2.04	-	-	-
2008	2	24	-	Ariake Sea	9	-	20.6	-	-	-	22.66	-	-	-	2.13	-	-	-
2008	2	24	-	Ariake Sea	10	-	20.8	-	-	-	21.27	-	-	-	2.15	-	-	-
2008	2	24	-	Ariake Sea	11	-	22.0	-	-	-	21.27	-	-	-	1.15	-	-	-
2008	2	24	-	Ariake Sea	1	-	13.4	-	-	-	17.82	-	-	-	1.85	-	-	-
2008	2	24	-	Ariake Sea	2	-	14.7	-	-	-	14.72	-	-	-	1.54	-	-	-
2008	2	24	-	Ariake Sea	3	-	16.6	-	-	-	11.92	-	-	-	1.20	-	-	-
2008	2	24	-	Ariake Sea	4	-	16.3	-	-	-	12.91	-	-	-	1.34	-	-	-
2008	2	24	-	Ariake Sea	5	-	15.7	-	-	-	15.25	-	-	-	1.45	-	-	-
2008	2	24	-	Ariake Sea	6	-	14.6	-	-	-	18.72	-	-	-	1.71	-	-	-
2008	2	24	-	Ariake Sea	7	-	15.3	-	-	-	16.88	-	-	-	1.65	-	-	-
2008	2	24	-	Ariake Sea	8	-	14.5	-	-	-	20.49	-	-	-	1.80	-	-	-
2008	11	27	-	Ariake Sea	9	-	14.2	-	-	-	20.15	-	-	-	1.90	-	-	-
2008	11	27	-	Ariake Sea	10	-	13.8	-	-	-	19.85	-	-	-	1.84	-	-	-
2008	11	27	-	Ariake Sea	11	-	17.1	-	-	-	11.48	-	-	-	1.15	-	-	-
2008	12	25	-	Ariake Sea	1	-	10.3	-	-	-	25.08	-	-	-	1.67	-	-	-
2008	12	25	-	Ariake Sea	2	-	10.0	-	-	-	22.61	-	-	-	1.55	-	-	-

2008	12	25	-	Ariake Sea	3	-	12.6	-	-	-	13.89	-	-	-	-	1.27	-	-	-
2008	12	25	-	Ariake Sea	4	-	12.1	-	-	-	14.92	-	-	-	-	1.33	-	-	-
2008	12	25	-	Ariake Sea	5	-	10.6	-	-	-	17.66	-	-	-	-	1.42	-	-	-
2008	12	25	-	Ariake Sea	6	-	12.0	-	-	-	20.66	-	-	-	-	1.45	-	-	-
2008	12	25	-	Ariake Sea	7	-	10.9	-	-	-	32.07	-	-	-	-	1.75	-	-	-
2008	12	25	-	Ariake Sea	8	-	11.1	-	-	-	24.69	-	-	-	-	1.68	-	-	-
2008	12	25	-	Ariake Sea	9	-	10.8	-	-	-	23.95	-	-	-	-	1.64	-	-	-
2008	12	25	-	Ariake Sea	10	-	10.4	-	-	-	24.47	-	-	-	-	1.82	-	-	-
2008	12	25	-	Ariake Sea	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2008	1	27	-	Ariake Sea	1	-	8.5	-	-	-	5.23	-	-	-	-	0.36	-	-	-
2008	1	27	-	Ariake Sea	2	-	9.6	-	-	-	2.06	-	-	-	-	0.41	-	-	-
2008	1	27	-	Ariake Sea	3	-	10.5	-	-	-	6.33	-	-	-	-	0.69	-	-	-
2008	1	27	-	Ariake Sea	4	-	10.2	-	-	-	5.77	-	-	-	-	0.66	-	-	-
2008	1	27	-	Ariake Sea	5	-	9.5	-	-	-	5.25	-	-	-	-	0.61	-	-	-
2008	1	27	-	Ariake Sea	6	-	8.9	-	-	-	16.03	-	-	-	-	1.06	-	-	-
2008	1	27	-	Ariake Sea	7	-	9.4	-	-	-	7.15	-	-	-	-	0.82	-	-	-
2008	1	27	-	Ariake Sea	8	-	8.7	-	-	-	9.80	-	-	-	-	1.05	-	-	-
2008	1	27	-	Ariake Sea	9	-	8.4	-	-	-	8.28	-	-	-	-	1.07	-	-	-
2008	1	27	-	Ariake Sea	10	-	8.4	-	-	-	6.52	-	-	-	-	0.96	-	-	-
2008	1	27	-	Ariake Sea	11	-	11.1	-	-	-	7.80	-	-	-	-	0.79	-	-	-
2008	2	24	-	Ariake Sea	1	-	11.0	-	-	-	2.47	-	-	-	-	0.07	-	-	-
2008	2	24	-	Ariake Sea	2	-	11.0	-	-	-	2.39	-	-	-	-	0.18	-	-	-
2008	2	24	-	Ariake Sea	3	-	11.0	-	-	-	0.42	-	-	-	-	0.06	-	-	-
2008	2	24	-	Ariake Sea	4	-	11.3	-	-	-	0.53	-	-	-	-	0.13	-	-	-
2008	2	24	-	Ariake Sea	5	-	11.0	-	-	-	0.59	-	-	-	-	0.05	-	-	-
2008	2	24	-	Ariake Sea	6	-	11.3	-	-	-	5.81	-	-	-	-	0.43	-	-	-
2008	2	24	-	Ariake Sea	7	-	11.2	-	-	-	6.69	-	-	-	-	0.46	-	-	-
2008	2	24	-	Ariake Sea	8	-	10.9	-	-	-	4.39	-	-	-	-	0.40	-	-	-
2008	2	24	-	Ariake Sea	9	-	11.0	-	-	-	9.10	-	-	-	-	0.59	-	-	-
2008	2	24	-	Ariake Sea	10	-	10.8	-	-	-	6.30	-	-	-	-	1.65	-	-	-
2008	2	24	-	Ariake Sea	11	-	11.5	-	-	-	0.45	-	-	-	-	0.13	-	-	-
2008	8	6	11:04	imari Bay	1	8.4	28.8	32.3	4.37	-	0.50	0.06	0.05	0.38	-	0.04	-	-	0.90
2008	8	6	12:27	imari Bay	3	5.5	28.8	32.5	4.23	-	0.29	0.00	0.01	0.28	-	0.07	-	-	1.37
2008	8	6	13:22	imari Bay	4	8.0	29.7	32.4	4.17	-	0.43	0.07	0.06	0.31	-	0.07	-	-	0.78
2008	9	2	10:59	imari Bay	1	5.2	25.5	32.3	5.00	-	1.17	0.12	0.00	1.05	-	0.06	-	-	2.71
2008	9	2	12:23	imari Bay	3	4.3	26.7	31.6	5.06	-	1.13	0.08	0.00	1.05	-	0.04	-	-	2.16
2008	9	2	13:16	imari Bay	4	2.8	26.8	30.3	5.04	-	1.18	0.08	0.00	1.11	-	0.06	-	-	6.04
2008	7	15	14:44	Ohmura Bay	b	4.0	29.7	30.4	4.94	-	0.66	0.10	0.09	0.47	-	0.03	-	-	0.82
2008	7	15	14:05	Ohmura Bay	c	2.8	30.2	30.0	4.95	-	2.13	1.44	0.07	0.62	-	0.04	-	-	2.24
2008	7	15	12:54	Ohmura Bay	P	4.5	28.8	30.5	4.69	-	0.95	0.17	0.06	0.72	-	0.03	-	-	0.78

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Country	Organization	Monitoring date				Location		Transparency (m)	SST (°C)	Salinity	DO (mg/L)	pH	DIN	NO3-N (µM)	NO2-N (µM)	NH4-N (µM)	DIP (µM)	PO4-P	SiO2-Si (µM)	SiO3-Si	Chl-a (µg/L)
		Year	Month	day	Time	Area	Monitoring point														
		2008	7	15	11:29	Ohmura Bay	Z	3.5	28.1	30.4	4.97	-	1.02	0.12	0.07	0.83	-	0.03	-	-	3.76
		2008	9	4	9:54	Ohmura Bay	b	4.5	27.5	31.1	3.85	-	2.21	0.15	0.00	2.05	-	0.05	-	-	4.50
		2008	9	4	10:35	Ohmura Bay	c	4.3	28.3	31.0	4.07	-	1.85	0.16	0.00	1.69	-	0.13	-	-	4.56
		2008	9	4	11:46	Ohmura Bay	P	5.7	27.6	31.3	4.16	-	1.67	0.15	0.00	1.52	-	0.05	-	-	2.80
		2008	9	4	13:11	Ohmura Bay	Z	4.8	27.8	31.4	4.42	-	1.80	0.18	0.00	1.62	-	0.04	-	-	3.08
		2007	6	7		Tongyeong	3	3.0	20.5	33.4	6.69	8.06	-	1.50	0.43	4.21	1.71	-	6.50	-	9.30
							4	5.0	21.6	33.5	6.72	8.08	-	1.29	0.07	1.36	2.65	-	5.36	-	2.30
						Geseong-Jaran Bay	5	3.0	23.0	25.9	6.04	7.96	-	0.79	0.07	4.07	1.90	-	19.5	-	4.00
							6	5.0	22.8	33.5	5.57	7.95	-	0.79	0.07	1.29	2.03	-	34.8	-	1.90
						Sachun	7	4.0	21.5	33.5	7.76	8.05	-	1.14	0.14	0.93	1.65	-	14.8	-	5.30
						Jinju Bay	8	3.0	21.4	33.4	6.26	7.91	-	4.64	0.71	2.36	2.06	-	17.1	-	2.60
							9	3.0	23.6	33.3	7.56	7.94	-	1.14	0.14	2.21	2.03	-	9.04	-	7.10
						Tongyeong off shore	10	16.0	20.7	33.5	7.65	8.12	-	1.07	0.21	1.57	1.58	-	7.43	-	0.50
							11	5.0	20.7	33.7	7.73	8.08	-	1.14	1.07	1.14	1.87	-	14.4	-	3.40
							12	5.0	19.0	33.7	6.66	8.12	-	1.86	0.36	2.43	2.87	-	10.64	-	2.20
		2007	7	7		Tongyeong	3	2.0	24.6	32.5	8.92	8.12	-	5.07	0.14	1.14	0.13	-	2.36	-	14.0
							4	6.0	25.5	32.7	6.86	8.06	-	4.29	0.14	1.21	0.19	-	9.93	-	15.3
						Geseong-Jaran Bay	5	3.0	27.4	31.4	8.32	8.29	-	2.50	0.14	1.43	0.42	-	29.1	-	1.30
							6	6.0	26.3	31.8	7.73	8.10	-	2.57	0.14	1.29	1.23	-	1.86	-	12.8
						Sachun	7	3.0	24.1	32.3	8.39	8.11	-	3.86	0.29	1.29	0.23	-	3.39	-	1.70
						Jinju Bay	8	3.0	25.7	31.1	8.10	8.27	-	8.64	0.50	1.43	0.23	-	4.96	-	2.70
							9	2.0	26.3	31.1	7.23	8.27	-	4.71	0.14	1.43	0.00	-	0.68	-	0.70
						Tongyeong off shore	10	11.0	24.1	32.9	7.48	8.08	-	5.50	0.07	1.21	0.26	-	4.50	-	0.30
							11	9.0	24.8	32.5	7.40	8.06	-	2.86	0.21	1.43	0.45	-	1.93	-	0.20
							12	4.0	23.6	32.9	7.73	8.03	-	5.07	0.29	1.36	0.29	-	2.00	-	1.00
		2007	8	7		Tongyeong	3	3.0	22.7	32.8	7.77	8.01	-	2.71	0.07	0.71	0.32	-	0.54	-	12.6
							4	4.0	25.0	32.6	7.49	7.88	-	0.86	1.57	0.71	0.74	-	0.46	-	4.00
						Geseong-Jaran Bay	5	3.0	25.7	32.0	7.34	7.70	-	2.21	0.21	0.71	0.42	-	1.29	-	8.80
							6	6.0	24.0	32.1	9.03	7.93	-	1.86	0.00	0.57	0.23	-	0.82	-	5.20
						Sachun	7	4.0	23.5	32.2	7.41	7.96	-	2.71	0.14	0.64	0.81	-	2.96	-	6.00
						Jinju Bay	8	2.5	24.5	32.3	7.10	7.80	-	2.36	0.14	0.50	1.06	-	1.14	-	2.40
							9	3.0	26.1	31.3	7.52	8.00	-	2.86	0.79	0.86	2.00	-	1.68	-	4.30
						Tongyeong off shore	10	4.0	23.7	32.5	6.95	8.08	-	8.57	0.93	0.57	0.61	-	1.79	-	2.60
							11	5.0	24.1	32.6	8.10	7.97	-	3.00	0.00	0.43	0.29	-	0.54	-	2.20
							12	4.0	23.1	33.0	8.30	8.10	-	2.71	0.57	1.07	0.52	-	0.71	-	5.00
						Tongyeong	3	1.8	24.6	30.0	8.31	8.12	-	2.36	0.57	0.43	0.87	-	0.86	-	23.9
							4	4.0	24.8	30.9	6.60	8.06	-	2.43	0.21	0.71	0.23	-	0.64	-	7.80
						Geseong-	5	1.5	24.8	30.7	7.91	8.19	-	0.57	0.43	0.71	0.16	-	6.36	-	4.90

Russia	Institute of Marine Biology FEB RAS	2007	7	11	Amurskii Bay	4.67	18.00	25.00	-	-	-	-	-	-	-	-	-	-	-	
		2007	7	25	Amurskii Bay	3.67	22.00	26.74	-	-	-	-	-	-	-	-	-	-	-	-
		2007	8	6	Amurskii Bay	3.33	26.00	27.99	-	-	-	-	-	-	-	-	-	-	-	-
		2007	8	20	Amurskii Bay	2.5	23.20	26.85	-	-	-	-	-	-	-	-	-	-	-	-
		2007	9	5	Amurskii Bay	8.54	22.00	30.19	-	-	-	-	-	-	-	-	-	-	-	-
		2007	9	17	Amurskii Bay	2.54	20.00	32.74	-	-	-	-	-	-	-	-	-	-	-	-
		2007	10	3	Amurskii Bay	1.79	17.00	30.55	-	-	-	-	-	-	-	-	-	-	-	-
		2007	10	17	Amurskii Bay	5.04	12.00	31.8	-	-	-	-	-	-	-	-	-	-	-	-
		2007	10	30	Amurskii Bay	2.33	6.50	31.2	-	-	-	-	-	-	-	-	-	-	-	-
		2007	11	9	Amurskii Bay	0.62	6.80	31.96	-	-	-	-	-	-	-	-	-	-	-	-
		2007	11	23	Amurskii Bay	4.87	-1.70	32.03	-	-	-	-	-	-	-	-	-	-	-	-
		2007	12	4	Amurskii Bay	7.79	-1.70	32.57	-	-	-	-	-	-	-	-	-	-	-	-
		2007	12	19	Amurskii Bay	7.74	-1.70	32.97	-	-	-	-	-	-	-	-	-	-	-	-
		2008	1	4	Amurskii Bay	0.73	-1.70	32.86	-	-	-	-	-	-	-	-	-	-	-	-
		2008	1	22	Amurskii Bay	0.59	-1.80	32.39	-	-	-	-	-	-	-	-	-	-	-	-
		2008	2	6	Amurskii Bay	0.65	-1.80	33.75	-	-	-	-	-	-	-	-	-	-	-	-
	2008	2	20	Amurskii Bay	0.5	-1.80	33.1	-	-	-	-	-	-	-	-	-	-	-	-	
	2008	3	4	Amurskii Bay	0.73	-1.80	32.68	-	-	-	-	-	-	-	-	-	-	-	-	
	2008	3	21	Amurskii Bay	0.96	0.50	33.66	-	-	-	-	-	-	-	-	-	-	-	-	
	2008	4	7	Amurskii Bay	2.17	5.50	30.68	-	-	-	-	-	-	-	-	-	-	-	-	
	2008	5	5	Amurskii Bay	4.39	9.00	28.66	-	-	-	-	-	-	-	-	-	-	-	-	
	2008	6	7	Amurskii Bay	3.39	16.20	18.8	-	-	-	-	-	-	-	-	-	-	-	-	
	2008	6	26	Amurskii Bay	10.20	17.80	26.8	-	-	-	-	-	-	-	-	-	-	-	-	
	2008	7	17	Amurskii Bay	2.48	23.20	26.02	-	-	-	-	-	-	-	-	-	-	-	-	
	2008	7	28	Amurskii Bay	2.96	23.50	22.56	-	-	-	-	-	-	-	-	-	-	-	-	
	2008	8	11	Amurskii Bay	4.32	22.70	26.74	-	-	-	-	-	-	-	-	-	-	-	-	
	2008	8	29	Amurskii Bay	4.54	20.50	28.17	-	-	-	-	-	-	-	-	-	-	-	-	
	2008	9	15	Amurskii Bay	3.35	20.90	29.78	-	-	-	-	-	-	-	-	-	-	-	-	
	2008	9	29	Amurskii Bay	2.04	15.20	30.55	-	-	-	-	-	-	-	-	-	-	-	-	
	2008	10	13	Amurskii Bay	3.31	12.90	31.23	-	-	-	-	-	-	-	-	-	-	-	-	
	2008	11	5	Amurskii Bay	1.23	7.00	31.74	-	-	-	-	-	-	-	-	-	-	-	-	
	2008	11	20	Amurskii Bay	1.82	-1.00	34.25	-	-	-	-	-	-	-	-	-	-	-	-	
2008	12	3	Amurskii Bay	3.5	0.00	32.25	-	-	-	-	-	-	-	-	-	-	-	-		
2008	12	19	Amurskii Bay	1.54	-1.60	33.42	-	-	-	-	-	-	-	-	-	-	-	-		

*1 Monitoring points are shown in the map of another sheet (map of monitoring sites)

*2 The range of each parameter means the value observed between 20-23 August

*3 The concentration of nutrient is standardized into common unit (μM)