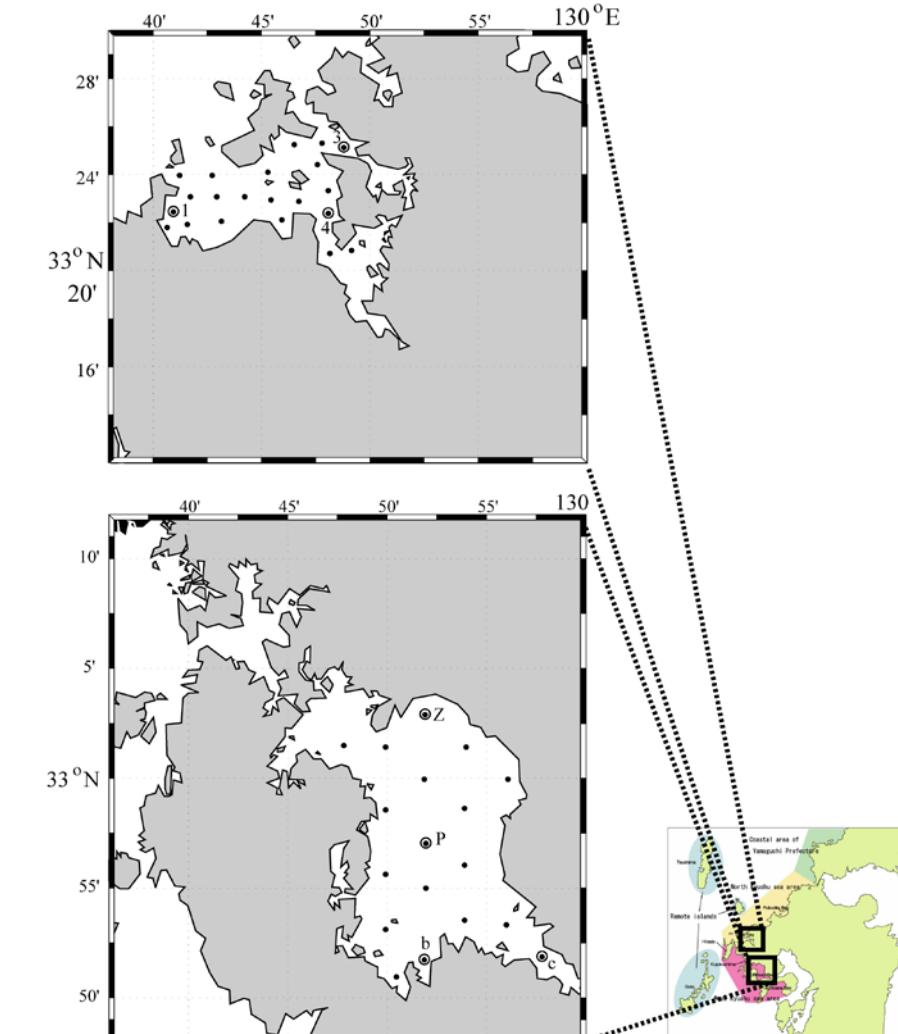
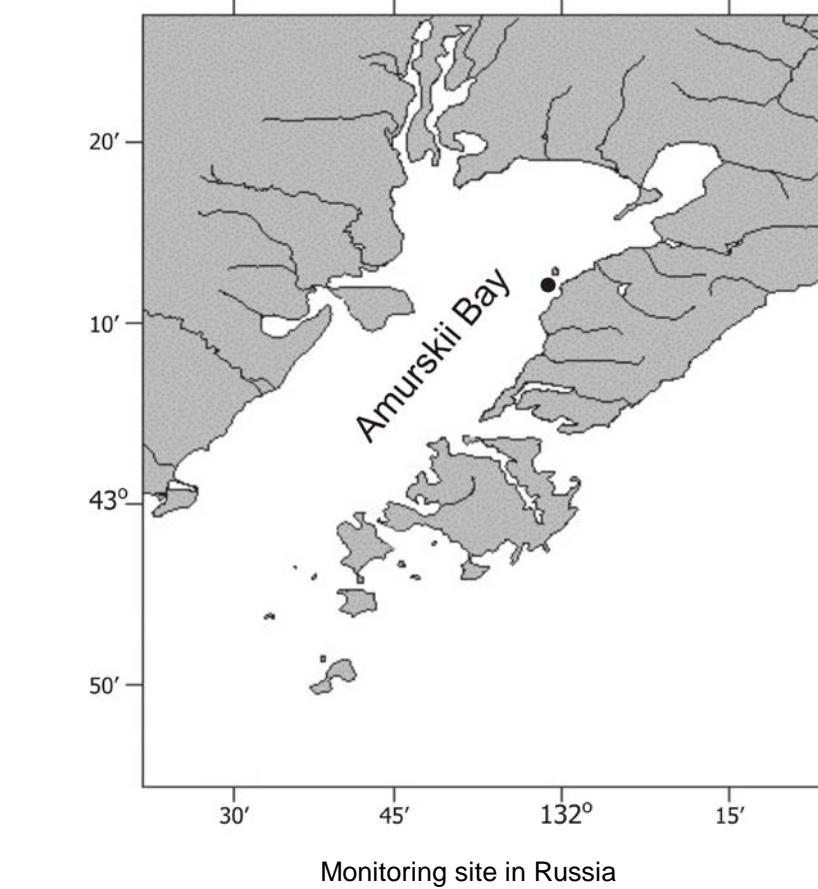
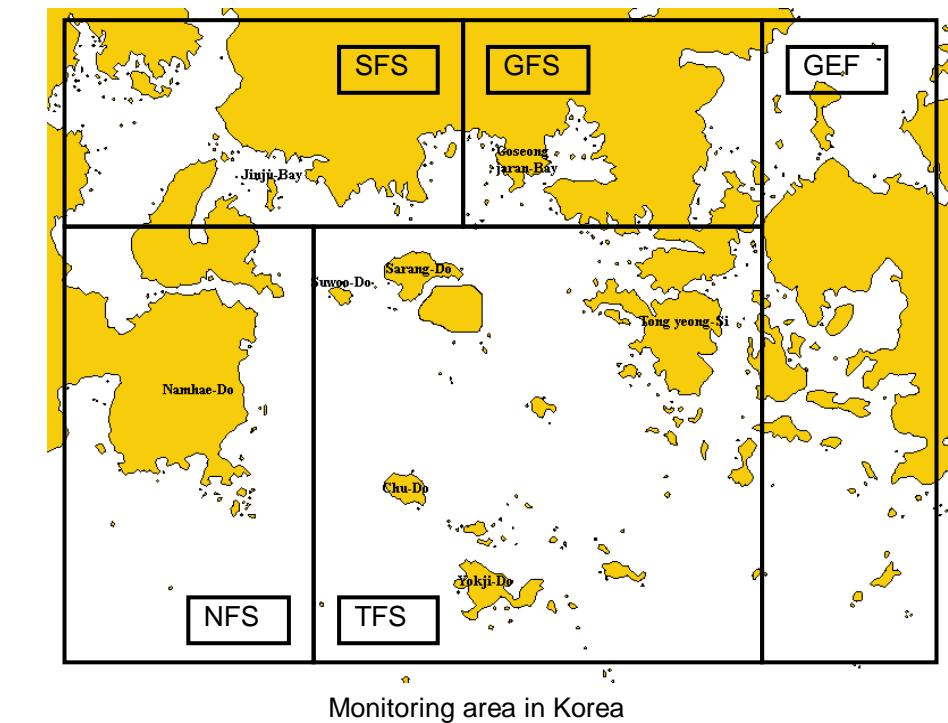
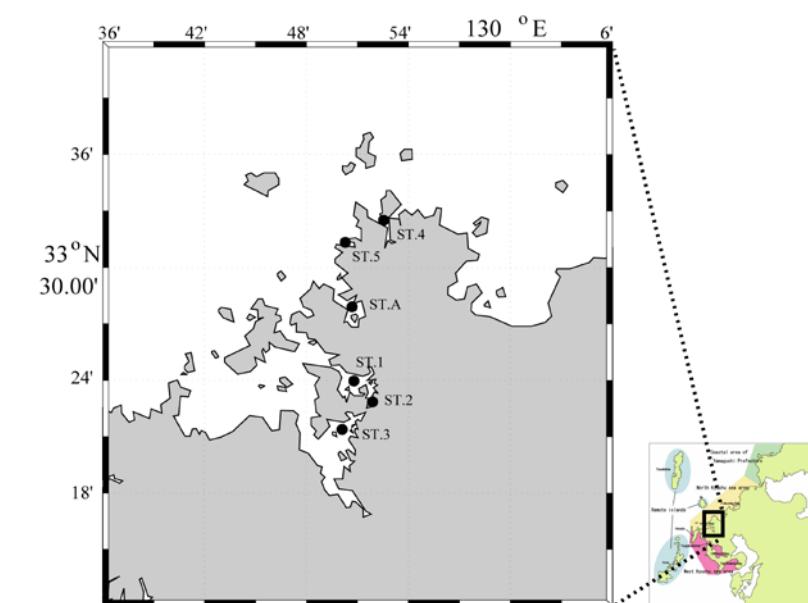
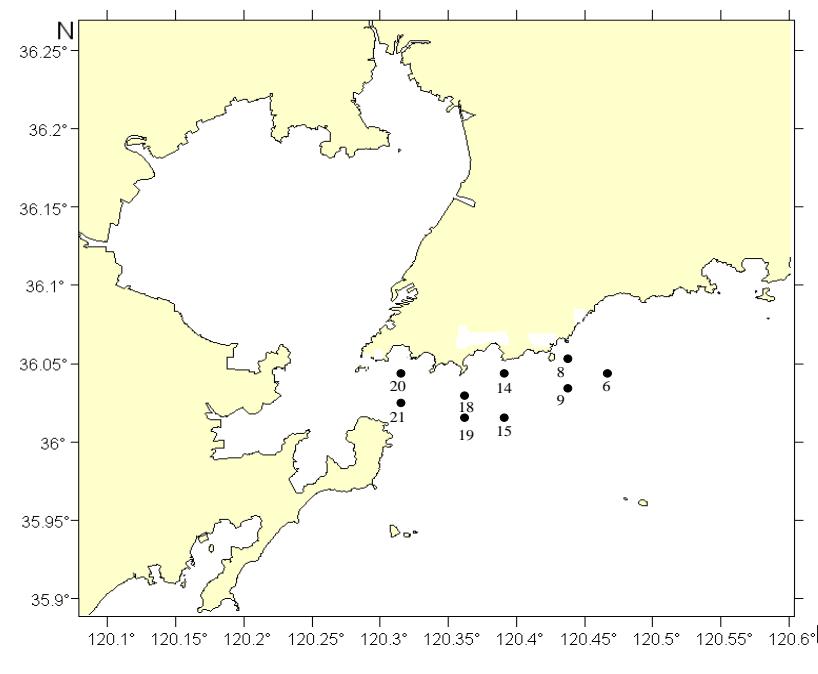


Prefectural code and Monitoring site of regular HAB monitoring in each member state

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



Common Format for Redtide events information

Yamaguchi Prefectural Fisheries Research Center	YM	2009	2	2009	4	8	2009	4	14	7	Coastal area of Yamaguchi	Coastline of Nagato City			<i>Noctiluca scintillans</i>	980								
	YM	2009	3	2009	4	8	2009	4	14	7	Coastal area of Yamaguchi	Coastline of Hagi City			<i>Noctiluca scintillans</i>	unknown								
	YM	2009	4	2009	5	1	2009	5	3	3	Coastal area of Yamaguchi	Coastline of Hagi City			<i>Noctiluca scintillans</i>	355								
	YM	2009	5	2009	5	1	2009	5	4	4	Coastal area of Yamaguchi	Coastline of Nagato City			<i>Noctiluca scintillans</i>	unknown								
	YM	2009	6	2009	5	11	2009	5	16	6	Coastal area of Yamaguchi	Coastline of Abu Town			<i>Noctiluca scintillans</i>	unknown								
	YM	2009	7	2009	7	17	2009	7	18	2	Coastal area of Yamaguchi	Coastline of Hagi City			<i>Mesodinium rubrum</i>	273								
Fukuoka Fisheries and Marine Technology Research Center	FO	2009	1	2009	4	13	2009	4	15	3	North Kyushu	Coastline of Fukuoka Pref.			<i>Noctiluca scintillans</i>	2000								
	FO	2009	2	2009	5	25	2009	7	6	43	North Kyushu	Fukuoka Bay			<i>Nitzschia sp.</i>	47,200								
	FO	2009	3	2009	7	7	2009	7	30	24	North Kyushu	Fukuoka Bay			<i>Skeletonema sp.</i>	29,000								
	FO	2009	4	2009	7	31	2009	8	9	10	North Kyushu	Fukuoka Bay			<i>Prorocentrum minimum</i>	13800								
	FO	2009	5	2009	8	4	2009	8	16	13	North Kyushu	Dokai Bay			<i>Thalassiosira sp.</i>	1,150,000								
	FO	2009	6	2009	9	24	2009	10	13	20	North Kyushu	Fukuoka Bay			<i>Prorocentrum sigmoides</i>	4,000								
	FO2	2009	1	2009	7	22	2009	8	10	20	West Kyushu	Ariake			<i>Chattonella antiqua</i> <i>Chattonella marina</i>	620 10								
	FO2	2009	2	2009	7	30	2009	9	4	37	West Kyushu	Ariake			<i>Skeletonema costatum</i>	10,360								
	FO2	2009	3	2009	9	28	2009	10	5	8	West Kyushu	Ariake			<i>Skeletonema costatum</i> <i>Chaetoceros spp.</i> <i>Akashiwo sanguinea</i>	9,020 1,950 232							171	
Saga Prefectural Genkai Fisheries Promotion Center	SA	2009	1	2009	3	16	2009	3	20	5	North Kyushu	Madara Island			<i>Noctiluca scintillans</i>	880								
	SA	2009	2	2009	4	9	2009	4	21	13	North Kyushu	Madara Island, Kakara Island			<i>Noctiluca scintillans</i>	320								
	SA	2009	3	2009	7	7	2009	7	14	8	North Kyushu	Imari Bay			<i>Karenia mikimotoi</i> <i>Prorocentrum spp.</i>	5,800 22,400								
	SA	2009	4	2009	7	29	2009	7	29	1	North Kyushu	Imari Bay				30,000								
	SA	2009	5	2009	8	4	2009	8	7	4	North Kyushu	Nagoya Ura			<i>Thalassiosira spp.</i> <i>Chaetoceros spp.</i> <i>Skeletonema costatum</i>	8,350 4,920 1,520								
	SA	2009	6	2009	8	5	2009	8	5	1	North Kyushu	Imari Bay			<i>Noctiluca scintillans</i>	2,028								
	SA	2009	7	2009	8	17	2009	8	20	4	North Kyushu	Madara Island, Kakara Island			<i>Noctiluca scintillans</i>	4,480								
	SA	2009	8	2009	8	17	2009	8	18	2	North Kyushu	Imari Bay			<i>Prorocentrum dentatum</i>	44,300								
	SA	2009	9	2009	9	27	2009	10	4	8	North Kyushu	Imari Bay			<i>Chattonella marina</i> <i>Prorocentrum dentatum</i>	5,800 70,860								
	SA2	2009	1	2009	1	9	2009	4	7	89	West Kyushu	Ariake			<i>Thalassiosira spp.</i> <i>Skeletonema costatum</i> <i>Eucampia spp.</i> <i>Asterionella kariana</i>	4,510 11,700 1,288 5,340	laver							
	SA2	2009	2	2009	4	24	2009	4	26	3	West Kyushu	Ariake			<i>Skeletonema costatum</i>	6,190								
	SA2	2009	3	2009	5	26	2009	5	31	6	West Kyushu	Ariake			<i>Skeletonema costatum</i> <i>Asterionella kariana</i> <i>Thalassiosira spp.</i> <i>Prorocentrum minimum</i>	3,500 1,490 1,620 1,220								
	SA2	2009	4	2009	6	15	2009	6	23	9	West Kyushu	Ariake			<i>Skeletonema costatum</i>	8,480								
	SA2	2009	5	2009	7	7	2009	7	13	7	West Kyushu	Ariake			<i>Skeletonema costatum</i> <i>Thalassiosira spp.</i> <i>Chaetoceros spp.</i>	48,200 11,300 4,600								
	SA2	2009	6	2009	7	14	2009	7	15	2	West Kyushu	Ariake			<i>Microalgae</i>	8,700								
	SA2	2009	7	2009	7	16	2009	7	26	11	West Kyushu	Ariake			<i>Thalassiosira spp.</i> <i>Skeletonema costatum</i> <i>Chaetoceros spp.</i> <i>Leptocylindrus spp.</i>	11,720 5,480 6,960 2,660								
	SA2	2009	8	2009	7	22	2009	8	13	23	West Kyushu	Ariake			<i>Chattonella antiqua</i> <i>Chattonella spp.</i> <i>Prorocentrum triestinum</i>	3,840 90 3,400								
	SA2	2009	9	2009	7	29	2009	8	5	8	West Kyushu	Ariake			<i>Skeletonema costatum</i> <i>Thalassiosira spp.</i> <i>Chaetoceros spp.</i>	22,850 8,700 2,100								
	SA2	2009	10	2009	8	13	2009	9	8	27	West Kyushu	Ariake			<i>Skeletonema costatum</i> <i>Thalassiosira spp.</i> <i>Chaetoceros spp.</i>	22,700 7,200 20,400								
	SA2	2009	11	2009	8	27	2009	9	1	6	West Kyushu	Ariake			<i>Akashiwo sanquinea</i>	530								

	Event No.	Duration(Start)	Duration(End)		Locatio of occurrence	Monitoring date	Maximum	Fishery damage	Environmental parameters	Size of										
Saga Prefectural Genkai Fisheries Promotion Center	SA	2010	2	2010	7	2	2010	7	9	8	North Kyushu	Kariya Bay	<i>Procentrum dentatum</i> <i>Ceratium furca</i>	370 290						
	SA	2010	3	2010	7	22	2010	8	2	12	North Kyushu	Karatsu Bay	<i>Procentrum spp.</i> <i>Karenia mikimotoi</i>	1,770 7,080	Yellowtail amberjack	5	23			
	SA	2010	4	2010	8	10	2010	8	26	17	North Kyushu	Imari Bay	<i>Chattonella marina</i>	14,700						
	SA	2010	5	2010	9	11	2010	9	15	5	North Kyushu	Karatsu Bay	<i>Thalassiosira spp.</i>	9,020						
	SA	2010	6	2010	9	29	2010	9	30	2	North Kyushu	Karatsu Bay	<i>Thalassiosira spp.</i>	6,774						
	SA	2010	7	2010	10	13	2010	10	15	3	North Kyushu	Imari Bay	<i>Procentrum triestinum</i>	26,000						
	SA2	2010	1	2009	12	25	2010	1	7	14	West Kyushu	Ariake	<i>Asterionella kariana</i>	31,150	laver					
	SA2	2010	2	2010	1	21	2010	2	28	8	West Kyushu	Ariake	<i>Asterionella kariana</i> <i>Skeletonema spp.</i> <i>Thalassionema nitzschiooides</i>	6,270 8,260 620	laver					
	SA2	2010	3	2010	5	7	2010	5	9	3	West Kyushu	Ariake	<i>Heterosigma akashiwo</i>	97,333						
	SA2	2010	4	2010	5	21	2010	6	10	21	West Kyushu	Ariake	<i>Heterosigma akashiwo</i> <i>Skeletonema spp.</i> <i>Chaetoceros spp.</i> <i>Thalassiosira spp.</i>	62,000 12,575 2,140 2,856						
	SA2	2010	5	2010	6	9	2010	6	10	3	West Kyushu	Ariake	<i>Eutreptia pertyi</i> <i>Eutreptiella sp.</i>	5,350						
	SA2	2010	6	2010	6	11	2010	6	17	7	West Kyushu	Ariake	<i>Akashiwo sanguinea</i>	474						
	SA2	2010	7	2010	6	25	2010	7	1	7	West Kyushu	Ariake	<i>Skeletonema spp.</i>	7,800						
	SA2	2010	8	2010	7	2	2010	7	4	3	West Kyushu	Ariake	<i>Heterosigma akashiwo</i>	77,333						
	SA2	2010	9	2010	7	2	2010	7	15	14	West Kyushu	Ariake	<i>Akashiwo sanguinea</i>	264						
	SA2	2010	10	2010	7	20	2010	8	9	20	West Kyushu	Ariake	<i>Procentrum triestinum</i> <i>Chattonella antiqua</i> <i>Chattonella spp.</i> <i>Skeletonema spp.</i>	2,750 3,600 2,600 11,150						
	SA2	2010	11	2010	8	2	2010	8	4	3	West Kyushu	Ariake	<i>Skeletonema spp.</i>	102,000						
	SA2	2010	12	2010	8	10	2010	8	12	3	West Kyushu	Ariake	<i>Chaetoceros spp.</i>	82,000						
	SA2	2010	13	2010	8	17	2010	9	9	24	West Kyushu	Ariake	<i>Thalassiosira spp.</i>	4,750						
	SA2	2010	14	2010	9	1	2010	9	21	21	West Kyushu	Ariake	<i>Skeletonema spp.</i>	66,000						
	SA2	2010	15	2010	10	1	2010	10	27	27	West Kyushu	Ariake	<i>Chattonella antiqua</i> <i>Chattonella spp.</i>	1,060						
	SA2	2010	16	2010	10	7	2010	10	14	8	West Kyushu	Ariake	<i>Ceratium furca</i>	510						
	SA2	2010	17	2010	11	22	2010	12	6	14	West Kyushu	Ariake	<i>Thalassiosira spp.</i>	20,250						
	NS2	2010	1	2010	5	12	2010	5	22	11	West Kyushu (remote island)	Goto	<i>Heterosigma akashiwo</i>	14,200						
Nagasaki Prefectural Institute of Fisheries	NS2	2010	2	2010	5	26	2010	5	31	6	West Kyushu	Ariake	<i>Heterosigma akashiwo</i>	89,000						
	NS2	2010	3	2010	6	14	2010	6	21	8	West Kyushu		<i>Procentrum dentatum</i>	15,000						
	NS2	2010	4	2010	6	23	2010	6	24	2	West Kyushu (remote island)	Kujukushima	<i>Ceratium fusus</i>	1,000						
	NS2	2010	5	2010	6	29	2010	7	6	8	North Kyushu	Imari Bay	<i>Procentrum dentatum</i>	3,300						
	NS2	2010	6	2010	7	2	2010	7	3	2	West Kyushu	Tachibana Bay	<i>Myrionecta rubra</i>	3,650						
	NS2	2010	7	2010	7	2	2010	7	6	5	West Kyushu	Ariake	<i>Procentrum spp.</i>	23,000						
	NS2	2010	8	2010	7	2	2010	7	6	5	West Kyushu	Ariake	<i>Akashiwo sanguinea</i>	142						
	NS2	2010	9	2010	7	3	2010	8	16	14	West Kyushu	Ariake	<i>Chattonella antiqua</i> <i>Chattonella marina</i> <i>Skeletonema spp.</i>	12,100 9,950 145,000	Yellowtail, Yellowtail amberjack, Striped jack Red seabream	6,800 200 100 9,100	79,691 800 300 5,635			
	NS2	2010	10	2010	7	5	2010	7	9	5	West Kyushu (remote island)	Kujukushima	<i>Karenia mikimotoi</i>	7,240						
	NS2	2010	11	2010	7	7	2010	7	8	2	West Kyushu (remote island)	Kujukushima	<i>Chattonella antiqua</i> <i>Myrionecta rubra</i>	1,190 15,000	Yellowtail Striped jack Tiger puffer	10 539 80	65 384 80			
	NS2	2010	12	2010	7	12	2010	7	14	3	West Kyushu	Hirado City	<i>Myrionecta rubra</i>	770						
	NS2	2010	13	2010	7	15	2010	8	5	22	West Kyushu	Omura Bay	<i>Noctiluca scintillans</i> <i>Chattonella globosa</i>	2,700 3,080						
	NS	2010	2	2010	8	2	2010	8	3	2	North Kyushu	Imari Bay	<i>Noctiluca scintillans</i>	85						
	NS2	2010	14	2010	7	26	2010	8	24	30	West Kyushu	Omura Bay	<i>Chattonella antiqua</i> <i>Cochlodinium polykrikoides</i> <i>Fibrocapsa japonica</i>	1,580 2,020 7,500	Yellowtail Yellowtail amberjack	10,000 15,200	23,600 48,575			
	NS2	2010	15	2010	9	21	2010	9	22	2	West Kyushu	Tachibana Bay	<i>Myrionecta rubra</i>	3,861						
	NS	2010	3	2010	9	30	2010	10	1	2	North Kyushu	Imari Bay	<i>Skeletonema sp.</i>	8,000						
	NS2	2010	16	2010	10	14	2010	10	15	2	West Kyushu (remote island)	Kujukushima	<i>Procentrum triestinum</i>	1,600						
	NS2	2010	17	2010	11	11	2010	11	23	13	West Kyushu (remote island)	Kujukushima	<i>Myrionecta rubra</i>	1,200						

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 sp.</i>	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 sp.</i>	26,400				-	-	-	-	-	-
	FO	2011	5	2011	6	2	2011	6	7	6	North Kyushu	Karatsu Bay			<i>Skeletonema sp.</i>	10,000				-	-	-	-	-	-
	FO	2011	6	2011	6	7	2011	6	10	4	North Kyushu	Fukuoka Bay			<i>Skeletonema sp.</i>	30,000				-	-	-	-	-	-
	FO	2011	7	2011	6	17	2011	6	22	6	North Kyushu	Fukuoka Bay			<i>Chaetoceros sp.</i>	10,000				-	-	-	-	-	-
	FO	2011	8	2011	7	11	2011	7	26	16	North Kyushu	Fukuoka Bay			<i>Heterosigma akashiwo</i>	3,500				-	-	-	-	-	-
	FO	2011	9	2011	8	1	2011	8	5	5	North Kyushu	Fukuoka Bay			<i>Heterosigma akashiwo</i>	14,800				-	-	-	-	-	-
	FO	2011	10	2011	9	6	2011	9	9	4	North Kyushu	Fukuoka Bay			<i>Procentrum minimum</i>	3,500				-	-	-	-	-	-
	FO	2011	11	2011	9	8	2011	9	16	9	North Kyushu	Dokai Bay			<i>Skeletonema sp.</i>	10,000				-	-	-	-	-	-
	FO	2011	12	2011	10	12	2011	10	15	4	North Kyushu	Fukuoka Bay			<i>Chaetoceros sp.</i>	2,000				-	-	-	-	-	-
	FO	2011	13	2011	11	8	2011	11	16	9	North Kyushu	Fukuoka Bay			<i>Noctiluca scintillans</i>	700				-	-	-	-	-	-
	FO	2011	14	2011	3	3	2011	3	14	12	West Kyushu	Ariake			<i>Thalassiosira sp.</i>	4,000				-	-	-	-	-	-
	FO	2011	2	2011	6	7	2011	6	13	7	West Kyushu	Ariake			<i>Thalassiosira sp.</i>	3,000				-	-	-	-	-	-
	FO	2011	3	2011	6	23	2011	7	15	23	West Kyushu	Ariake			<i>Chaetoceros sp.</i>	16,200				-	-	-	-	-	-
	FO	2011	4	2011	7	25	2011	8	1	8	West Kyushu	Ariake			<i>Heterosigma akashiwo</i>	4,000				-	-	-	-	-	-
Saga Prefectural Genkai Fisheries Promotion Center	SA	2011	1	2011	6	16	2011	6	30	15	North Kyushu	Imari Bay			<i>Prorocentrum spp.</i>	45,400				-	-	-	-	-	-
	SA	2011	2	2011	6	20	2011	6	29	10	North Kyushu	Kariya Bay			<i>Heterosigma akashiwo</i>	1,600				-	-	-	-	-	-
	SA	2011	3	2011	6	24	2011	6	24	1	North Kyushu	Karatsuy City			<i>Skeletonema spp.</i>	49,300				-	-	-	-	-	-
	SA	2011	4	2011	8	12	2011	8	15	4	North Kyushu	Karatsu City			<i>Nitzschia spp.</i>	4,000				-	-	-	-	-	-
	SA	2011	5	2011	8	26	2011	9	5	11	North Kyushu	Kariya Bay			<i>Leptocylindrus spp.</i>	3,700				-	-	-	-	-	-
	SA	2011	6	2011	9	7	2011	9	8	2	North Kyushu	Katatsu Bay			<i>Chaetoceros spp.</i>	3,100				-	-	-	-	-	-
	SA2	2011	1	2011	1	11	2011	2	3	24	West Kyushu	Ariake			<i>Heterosigma akashiwo</i>	17,490				-	-	-	-	-	-
	SA2	2011	2	2011	2	25	2011	3	1	5	West Kyushu	Ariake			<i>Asteroplanus karianus</i>	32,850	laver	unknown	-	-	-	-	-	-	
	SA2	2011	3	2011	5	16	2011	5	24	9	West Kyushu	Ariake			<i>Asteroplanus karianus</i>	4,950			-	-	-	-	-	-	
	SA2	2011	4	2011	5	30	2011	6	22	24	West Kyushu	Ariake			<i>Myrionecta rubra</i>	21,300			-	-	-	-	-	-	
	SA2	2011	5	2011	6	20	2011	8	30	72	West Kyushu	Ariake			<i>Heterocapsa rotundata</i>	27,000			-	-	-	-	-	-	
	SA2	2011	6	2011	9	6	2011	9	11	6	West Kyushu	Ariake			<i>Heterosigma akashiwo</i>	88,000			-	-	-	-	-	-	
	SA2	2011	7	2011	9	14	2011	9	26	13	West Kyushu	Ariake			<i>Chaetoceros spp.</i>	12,000			-	-	-	-	-	-	
	SA2	2011	8	2011	11	4	2011	11	7	4	West Kyushu	Ariake			<i>Pseudo-nitzschia spp.</i>	6,850			-	-	-	-	-	-	
	SA2	2011	9	2011	11	4	2011	11	7	4	West Kyushu	Ariake			<i>Skeletonema spp.</i>	2,300			-	-	-	-	-	-	
	SA2	2011	10	2011	11	4	2011	11	7	4	West Kyushu	Ariake			<i>Akashiwo sanguinea</i>	2,200			-	-	-	-	-	-	
Nagasaki Prefectural Institute of	NS2	2011	1	2011	3	2	2011	3	17	16	West Kyushu	Seihi			<i>Akashiwo sanguinea</i>	410			-	-	-	-	-	-	
	NS2	2011	2	2011	4	6	2011	4	9	4	West Kyushu	Seihi			<i>Noctiluca scintillans</i>	27,700			-	-	-	-	-	-	
	NS2	2011	3	2011	5	7	2011	5	11	5	West Kyushu	Seihi			<i>Noctiluca scintillans</i>	384			-	-	-	-	-	-	
	NS2	2011	4	2011	5	13	2011	5	15	3	West Kyushu (remote island)	Kujukushima			<i>Noctiluca scintillans</i>	27			-	-	-	-	-	-	
	NS2	2011	5	2011	6	31	2011	6	15																

Fisneries	NS2	2011	15	2011	9	20	2011	10	11	22	West Kyushu	Omura Bay			<i>Heterocapsa circularisquama</i>	22,000									
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)			
Yamaguchi Prefectural Fisheries Research Center	YM	2012	1	2012	4	13	2012	4	13	1	Coastal area of Yamaguchi	Coastal area of Hagi City			<i>Noctiluca scintillans</i>	-									
	YM	2012	2	2012	4	16	2012	4	16	1	Coastal area of Yamaguchi	Coastal area of Nagato City			<i>Noctiluca scintillans</i>	-									
	YM	2012	3	2012	7	9	2012	7	24	15	Coastal area of Yamaguchi	Coastal area of Shimonoseki City			<i>Chattonera antiqua</i>	15									
Fukuoka Fisheries and Marine Technology Research Center	FO	2012	1	2012	5	29	2012	6	4	7	North Kyushu	East part of Karatsu Bay			<i>Noctiluca scintillans</i>	900									
	FO	2012	2	2012	6	8	2012	6	24	17	North Kyushu	Fukuoka Bay			<i>Heterosigma akashiwo</i>	91,200									
	FO	2012	3	2012	7	5	2012	7	12	8	North Kyushu	Fukuoka Bay			<i>Nitzschia sp.</i>	7,000									
	FO	2012	4	2012	7	17	2012	9	13	59	North Kyushu	Fukuoka Bay			<i>Pseudo-nitzschia sp.</i>	4,890									
	FO	2012	5	2012	8	10	2012	8	28	19	North Kyushu	Dokai Bay			<i>Skeletonema sp.</i>	11,500									
	FO	2012	6	2012	9	10	2012	10	3	24	North Kyushu	Fukuoka Bay			<i>Thalassiosira sp.</i>	7,500									
	FO2	2012	1	2012	2	20	2012	2	24	5	West Kyushu	Ariake			<i>Chatoceros sp.</i>	3,500									
	FO2	2012	2	2012	2	20	2012	4	16	57	West Kyushu	Ariake			<i>Skeletonema sp.</i>	1,500									
	FO2	2012	3	2012	7	12	2012	7	25	14	West Kyushu	Ariake			<i>Chatoceros sp.</i>	1,200									
	FO2	2012	4	2012	7	27	2012	8	21	26	West Kyushu	Ariake			<i>Thalassiosira spp.</i>	2,290									
	FO2	2012	5	2012	9	10	2012	9	18	9	West Kyushu	Ariake			<i>Eucampia zodiacus</i>	1,360									
SA	SA	2012	1	2012	1	19	2012	1	22	4	North Kyushu	Karatsu Bay			<i>Skeletonema spp.</i>	1,200									
	SA	2012	2	2012	6	25	2012	8	8	45	North Kyushu	Imari Bay			<i>Chaetoceros spp.</i>	750									
	SA	2012	3	2012	6	28	2012	7	1	4	North Kyushu	Karatsu Bay			<i>Akashiwo sanguinea</i>	3,197									
	SA	2012	4	2012	6	29	2012	7	3	5	North Kyushu	Kariya Bay			<i>Skeletonema spp.</i>	5,300									
	SA	2012	5	2012	7	18	2012	8	2	16	North Kyushu	Kariya Bay			<i>Ceratium furca</i>	250									
	SA	2012	6	2012	7	23	2012	8	8	17	North Kyushu	Coastal area of Karatsu City			<i>Akashiwo sanguinea</i>	150									
	SA	2012	7	2012	8	30	2012	9	9	11	North Kyushu	Imari Bay			<i>Skeletonema spp.</i>	10,190									
	SA	2012	8	2012	9	10	2012	9	25	16	North Kyushu	Imari Bay			<i>Thalassiosira spp.</i>	19,600									
	SA2	2012	1	2011	12	30	2012	1	6	8	West Kyushu	Ariake			<i>Chattonella antiqua</i>	1,540									
	SA2	2012	2	2012	1	23	2012	3	8	45	West Kyushu	Ariake			<i>Chattonella marina</i>	9									
	SA2	2012	3	2012	2	22	2012	4	12	50	West Kyushu	Ariake			<i>Skeletonema spp.</i>	4,700									
	SA2	2012	4	2012	4	20	2012	4	26	6	West Kyushu	Ariake			<i>Akashiwo sanguinea</i>	420									
	SA2	2012	5	2012	4	23	2012	4	26	3	West Kyushu	Ariake			<i>Sletonema spp.</i>	21,000									
	SA2	2012	6	2012	6	11	2012	6	28	17	West Kyushu	Ariake			<i>Akashiwo sanguinea</i>	596									
	SA	2012	2	2012	6	25	2012	8	8	45	North Kyushu	Imari Bay			<i>Prorocentrum dentatum</i>	8,350	Tiger puffer								
	SA	2012	3	2012	6	28	2012	7	1	4	North Kyushu	Karatsu Bay			<i>Karenia mikimotoi</i>	104,200	amberjack		59,195						
	SA	2012	4	2012	6	29	2012	7	3	5	North Kyushu	Kariya Bay			<i>Leptocylindrus spp.</i>	28,200	Oyster etc.								
	SA	2012	5	2012	7	18	2012	8	2	16	North Kyushu	Kariya Bay			<i>Skeletonema spp.</i>	9,600									
	SA	2012	6	2012	7	23	2012	8	8	17	North Kyushu	Coastal area of Karatsu City			<i>Chaetoceros spp.</i>	31,500									
	SA	2012	7	2012	8	30	2012	9	9	11	North Kyushu	Imari Bay			<i>microalgae</i>	71,000									
	SA	2012	8	2012	9	10	2012	9	25	16	North Kyushu	Imari Bay			<i>Chaetoceros spp.</i>	180,000	Japanese Pearl Oyster								
	SA	2012	6	2012	7	23	2012	8	8	17	North														

Saga Prefectural Genkai Fisheries Promotion Center	SA2	2012	7	2012	6	29	2012	7	16	17	West Kyushu	Ariake			<i>Skeletonema spp.</i>	48,000						
	SA2	2012	8	2012	7	20	2012	8	5	16	West Kyushu	Ariake			<i>Thalassiosira spp.</i>	18,752						
	SA2	2012	9	2012	7	26	2012	8	5	10	West Kyushu	Ariake			<i>Chaetoceros spp.</i>	8,000						
	SA2	2012	10	2012	8	9	2012	8	16	7	West Kyushu	Ariake			<i>Skeletonema spp.</i>	81,500						
														<i>Chaetoceros spp.</i>	10,500							
														<i>microalgae</i>	12,000							
														<i>microalgae</i>	59,500							
														<i>Heterosigma akashiwo</i>	2,850							
														<i>Skeletonema spp.</i>	10,250							
														<i>Thalassiosira spp.</i>	26,750							
														<i>Chaetoceros spp.</i>	12,250							
														<i>Pseudo-nitzchia spp.</i>	1,600							
														<i>Chattonella antiqua</i>	11,100							
														<i>Chattonella marina</i>	800							
														<i>microalgae</i>	3,750							
														<i>Heterocapsa rotundata</i>	7,500							
														<i>Chattonella antiqua</i>	6,250							
														<i>Ahuttonella marina</i>	100							
														<i>Skeletonema spp.</i>	17,000							
														<i>Thalassiosira spp.</i>	2,402							
														<i>Leptocylindrus spp.</i>	4,900							
														<i>Akashiwo sanguinea</i>	420							
														<i>Skeletonema spp.</i>	15,150							
														<i>microalgae</i>	11,750							
	SA2	2012	16	2012	9	24	2012	9	30	6	West Kyushu	Ariake			<i>Akashiwo sanguinea</i>	420						
	SA2	2012	17	2012	10	10	2012	10	14	4	West Kyushu	Ariake			<i>Skeletonema spp.</i>	15,150						
	SA2	2012	18	2012	10	10	2012	10	14	4	West Kyushu	Ariake			<i>Thalassiosira spp.</i>	12,770						
	SA2	2012	19	2012	10	26	2012	10	29	3	West Kyushu	Ariake			<i>Chaetoceros spp.</i>	1,920						
														<i>Akashiwo sanguinea</i>	1,200							
														<i>Akashiwo sanguinea</i>	494							
Nagasaki Prefectural Institute of Fisheries	NS	2012	1	2012	4	26	2012	4	28	3	Remote island	Tsushima			<i>Noctiluca scintillans</i>	40						
	NS	2012	2	2012	6	27	2012	6	28	2	North Kyushu	Imari Bay			<i>Procentrum dentatum</i>	5,050						
	NS	2012	3	2012	7	16	2012	8	1	17	North Kyushu	Imari Bay			<i>Karenia mikimotoi</i>	15,300						
	NS	2012	4	2012	9	14	2012	9	25	12	North Kyushu	Hurue Bay			<i>Cochlodinium polykrikoides</i>	449						
	NS	2012	5	2012	9	24	2012	9	28	5	Remote island	Tsushima			<i>Nitzschia spp.</i>	5,110						
	NS	2012	6	2012	10	10	2012	10	13	4	Remote island	Tsushima			<i>Chaetoceros spp.</i>	1,620						
	NS	2012	7	2012	11	2	2012	11	8	7	North Kyushu	Hurue Bay			<i>Myrionecta rubra</i>	5,600						
	NS2	2012	1	2012	2	14	2012	2	22	9	West Kyushu (remote island)	Goto			<i>Akashiwo sanguinea</i>	16,000						
	NS2	2012	2	2012	3	5	2012	4	10	37	West Kyushu	Ariake			<i>Eucampia zodiacus</i>	4,178						
	NS2	2012	3	2012	4	8	2012	4	27	20	West Kyushu	Nagasaki City			<i>Noctiluca scintillans</i>	35						
	NS2	2012	4	2012	4	16	2012	4	23	8	West Kyushu (remote island)	Goto			<i>Noctiluca scintillans</i>	350						
	NS2	2012	5	2012	4	16	2012	4	20	5	West Kyushu	Ariake			<i>Noctiluca scintillans</i>	1,790						
	NS2	2012	6	2012	4	17	2012	5	8	22	West Kyushu (remote island)	Goto			<i>Noctiluca scintillans</i>	1,900						
	NS2	2012	7	2012	4	20	2012	4	22	3	West Kyushu (remote island)	Goto			<i>Myrionecta rubra</i>	1,850						
	NS2	2012	8	2012	4	27	2012	5	1	5	West Kyushu	Ariake			<i>Noctiluca scintillans</i>	336						
	NS2	2012	9	2012	5	2	2012	5	7	6	West Kyushu (remote island)	Goto			<i>Heterosigma akashiwo</i>	8,000						
	NS2	2012	10	2012	5	14	2012	5	16	3	West Kyushu	Ariake			<i>Heterosigma akashiwo</i>	7,800						
	NS2	2012	11	2012	5	23	2012	5	24	2	West Kyushu	Ariake			<i>Heterosigma akashiwo</i>	81,300						
	NS2	2012	12	2012	6	11	2012	6	29	19	West Kyushu (remote island)	Kujukushima			<i>Karenia mikimotoi</i>	17,500						
	NS2	2012	13	2012	6	18	2012	7	5	18	West Kyushu (remote island)	Kujukushima			<i>Prorocentrum dentatum</i>	4,200						
	NS2	2012	14	2012	6	20	2012	6	26	7	West Kyushu	Ariake			<i>Karenia mikimotoi</i>	7,400						
	NS2	2012	15	2012	6	27	2012	7	4	8	West Kyushu	Omura Bay			<i>Teleolax spp.</i>	10,450						
	NS2	2012	16	2012	6	29	2012	7	20	22	West Kyushu	Ariake			<i>Dicty</i>							

NS2	2012	25	2012	8	30	2012	9	3	5	West Kyushu (remote island)	Goto			<i>Skeletonema spp.</i>	9,176									
	2012	26	2012	9	13	2012	9	21	9	West Kyushu (remote island)	Goto			<i>Cochlodinium polykrikoides</i>	74									
	2012	27	2012	9	24	2012	9	28	5	West Kyushu (remote island)	Goto			<i>Cochlodinium sp.</i>	1,200									
	2012	28	2012	10	2	2012	10	11	10	West Kyushu	Omura Bay			<i>Heterocapsa</i>	18,600									
	2012	29	2012	10	26	2012	10	27	2	West Kyushu (remote island)	Goto			<i>Myrionecta rubra</i>	2,000									
	2012	30	2012	11	5	2012	11	9	5	West Kyushu (remote island)	Kujukushima			<i>Karenia digitata</i>	2,250									
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)		
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 spp.</i>	37,000								
	FO	2014	7	2014	8	7	2014	8	25	19	North Kyushu	Fukuoka Bay			<i>Skeletonema spp.</i>	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 spp.</i>	37,000								
	FO2	2014	2	2014	5	20	2014	5	29	10	West Kyushu	Ariake			<i>Skeletonema spp.</i>	29,000								
	FO2	2014	3	2014	7	17	2014	7	29	13	West Kyushu	Ariake			<i>Heterosigma akashiwo</i>	2,800								
	FO2	2014	4	2014	8	5	2014	8	12	8	West Kyushu	Ariake			<i>Prorocentrum spp.</i>	66,000								
	FO2	2014	5	2014	8	25	2014	9	25	32	West Kyushu	Ariake			<i>Chaetoceros spp.</i>	5,500								
	FO2	2014	6	2014	9	2	2014	9	25	24	West Kyushu	Ariake			<i>Rhizosolenia spp.</i>	1,530								
	FO2	2014	7	2014	10	20	2014	11	10	5	West Kyushu	Ariake			<i>Eucampia zodiacus</i>	50								
	SA	2014	1	2014	6	11	2014	6	24	14	North Kyushu	Genkai			<i>Heterosigma akashiwo</i>	9,000								
Saga Prefectural Genkai Fisheries Promotion Center	SA	2014	2	2014	6	13	2014	6	15	3	North Kyushu	Karatsu			<i>Heterocapsa rotundata</i>	11,000								
	SA	2014	3	2014	7	11	2014	8	31	52	North Kyushu	Imari Bay			<i>microalgae</i>	1,800								
	SA	2014	4	2014	7	15	2014	7	27	13	North Kyushu	Karatsu Bay			<i>Heterosigma akashiwo</i>	11,780								
	SA	2014	5	2014	7	28	2014	10	2	67	North Kyushu	Kariya Bay			<i>Karenia mikimotoi</i>	28,600	macharel etc.	1,594	3,315					
	SA	2014	6	2014	8	26	2014	9	4	10	North Kyushu	Karatsu			<i>Chattonella antiqua</i>	31,200								
	SA	2014	7	2014	9	9	2014	9	21	13	North Kyushu	Imari Bay			<i>Chattonella spp.</i>	3,650								
	SA	2014	8	2014	10	31	2014	1	13	7	West Kyushu	Ariake			<i>Karenia mikimotoi</i>	5,500								
	SA2	2014	1	2014	1	6	2014	1	13	7	West Kyushu	Ariake			<i>Karenia mikimotoi</i>	7,600	Abalone	3,100	336					
	SA2	2014	2	2014	1	16	2014	3	2	45	West Kyushu	Ariake			<i>Heterocapsa</i>	2,120								
	SA2	2014	3	2014	2	6	2014	3	30	52	West Kyushu	Ariake			<i>Eucampia zodiacus</i>	1,300								
	SA2	2014	4	2014	5	15	2014	5	28	13	West Kyushu	Ariake			<i>Heterosigma akashiwo</i>	52,000								
	SA2	2014	5	2014	6	20	2014	6	26	6	West Kyushu	Ariake			<i>Skeletonema spp.</i>	12,650								
	SA2	2014	6	2014	6	30	2014	7	3	4	West Kyushu	Ariake			<i>Microalgae</i>	14,000								
	SA2	2014	7	2014	7	14	2014	8	11	28	West Kyushu	Ariake			<i>microalgae</i>	17,000								
	SA2	2014	8	2014	7	14	2014	7	17	3	West Kyushu	Ariake			<i>microalgae</i>	49,000								
	SA2	2014	9	2014	7	18	2014	7	24	6	West Kyushu	Ariake			<i>microalgae</i>	5,000								
	SA2	2014	10	2014	7	18	2014	7	24	6	West Kyushu	Ariake			<i>Ceratium furca</i>	770								
	SA2	2014	11	2014	7																			

Nagasaki Prefectural Institute of Fisheries	NS2	2014	2	2014	2	26	2014	2	28	2	West Kyushu (remote island)	Goto			<i>Myrionecta rubra</i>	1,300							
	NS2	2014	3	2014	4	10	2014	4	11	1	West Kyushu (remote island)	Goto			<i>Noctiluca scintillans</i>	108							
	NS2	2014	4	2014	4	11	2014	4	12	1	West Kyushu (remote island)	Goto			<i>Noctiluca scintillans</i>	160							
	NS2	2014	5	2014	4	21	2014	5	7	16	West Kyushu (remote island)	Goto			<i>Heterosigma akashiwo</i>	20,000							
	NS2	2014	6	2014	4	21	2014	5	7	16	West Kyushu (remote island)	Goto			<i>Noctiluca scintillans</i>	340							
	NS2	2014	7	2014	4	29	2014	5	20	21	West Kyushu	Ariake			<i>Heterosigma akashiwo</i>	30,950	Dotted gizzard shad	32kg					
	NS2	2014	8	2014	4	30	2014	5	15	15	West Kyushu (remote island)	Goto			<i>Noctiluca scintillans</i>	368							
	NS2	2014	9	2014	5	10	2014	5	15	5	West Kyushu (remote island)	Goto			<i>Dictyocha spp.</i>	162	tuna	288	35,000				
	NS2	2014	10	2014	5	27	2014	6	16	20	West Kyushu	Omura Bay			<i>Heterosigma akashiwo</i>	9,700							
	NS2	2014	11	2014	5	28	2014	6	16	19	West Kyushu (remote island)	Goto			<i>Procentrum dentatum</i>	51,600							
	NS2	2014	12	2014	6	5	2014	6	17	12	West Kyushu (remote island)	Kujukushima			<i>Karenia mikimotoi</i>	6,250							
	NS2	2014	13	2014	6	9	2014	6	16	7	West Kyushu	Ariake			<i>Heterosigma akashiwo</i>	24,167							
	NS2	2014	14	2014	6	16	2014	7	14	28	West Kyushu	Ariake			<i>Karenia mikimotoi</i>	1,060							
	NS2	2014	15	2014	6	17	2014	7	1	14	West Kyushu	Tachibana Bay			<i>Procentrum dentatum</i>	31,300							
	NS2	2014	16	2014	6	26	2014	7	24	28	West Kyushu	Nagasaki Port			<i>Karenia mikimotoi</i>	17,700							
	NS2	2014	17	2014	7	2	2014	8	1	30	West Kyushu	Omura Bay			<i>Chattonella spp.</i>	16,100							
	NS2	2014	18	2014	7	8	2014	7	22	14	West Kyushu	Ariake			<i>Heterosigma akashiwo</i>	3,120	Yellowtail	285	1,192				
	NS2	2014	19	2014	7	7	2014	7	17	10	West Kyushu (remote island)	Kujukushima			<i>microalgae</i>	5,900							
	NS2	2014	20	2014	7	12	2014	7	14	2	West Kyushu (remote island)	Kujukushima			<i>Karenia mikimotoi</i>	22,800							
	NS2	2014	21	2014	7	21	2014	7	28	7	West Kyushu (remote island)	Kujukushima			<i>Procentrum dentatum</i>	24,700							
	NS2	2014	22	2014	7	22	2014	7	25	3	West Kyushu	Ariake			<i>Cochlidinium polykrikoides</i>	3,500							
	NS2	2014	23	2014	8	6	2014	8	18	12	West Kyushu	Omura Bay			<i>Myrionecta rubra</i>	9,200							
	NS2	2014	24	2014	8	23	2014	8	28	5	West Kyushu (remote island)	Goto			<i>Skeletonema spp.</i>	6,600							
	NS2	2014	25	2014	8	27	2014	9	4	8	West Kyushu	Ariake			<i>Ceratium furca</i>	1,000							
	NS2	2014	26	2014	9	11	2014	9	30	19	West Kyushu	Ariake			<i>Gonyaulax sp.</i>	150							
	NS2	2014	26	2014	9	11	2014	9	30	19	West Kyushu	Ariake			<i>Akashiwo sanguinea</i>	152							
Organization	Event No.				Duration(Start)			Duration(End)			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	Continuous days	Sub-area	Spot	Date	Time			Fish/Shellfish species	Quantity	Economic loss (1,000 Yen)	Temp. (°C)	Salinity	DO (mg/L)	
Yamaguchi Prefectural Fisheries Research	YM	2015	1	2015	6	3	2015	6	24	21	Coastal area of Yamaguchi	Coastal area of Shimonoseki City			<i>Karenia digitata</i>	28,500							
	YM	2015	2	2015	7	31	2015	8	27	28	Coastal area of Yamaguchi	Coastal area of Shimonoseki City			<i>Karenia mikimotoi</i>	13,333	Abalone						
Fukuoka Fisheries and Marine Technology Research Center	FO	2015	1	2015	3	23	2015	4	4	12	North Kyushu	Fukuoka Bay			<i>Dactylosolen fragilissimus</i>	4,500							
	FO	2015	2	2015	5	7	2015	5	16	9	North Kyushu	Fukuoka Bay			<i>Leptocylindrus danicus</i>	10,650							
	FO	2015	3	2015	5	21	2015	5	25	4	North Kyushu	Fukuoka Bay			<i>Heterosigma akashiwo</i>	70,000							
	FO	2015	4	2015	5	25	2015	5	30	5	North Kyushu	Coastal area of Coastal area of Kitakyushu			<i>Eutreptiella sp.</i>	26,750							
	FO	2015	5	2015	5	25	2015	7	20	57	North Kyushu	Kitakyushu			<i>Karenia mikimotoi</i>	866							
	FO	2015	6	2015	5	28	2015	6	5	8	North Kyushu	Fukuoka Bay			<i>Pseudo-nitzschia sp.</i>	45,650							
	FO	2015	7	2015	6	2	2015	7	11	40	North Kyushu	Fukuoka Bay			<i>Skeletonema sp.</i>	169,750							
	FO	2015	8	2015	6	2	2015	6	7	5	North Kyushu	Fukuoka Bay			<i>Procentrum sp.</i>	13,150							
	FO	2015	9	2015	7	6	2015	7	20	14	North Kyushu	Karatsu Bay			<i>Karenia mikimotoi</i>	3,975							
	FO	2015	10	2015	7	21	2015	8	11	21	North Kyushu	Genkai			<i>Karenia mikimotoi</i>	4,500							
	FO	2015	11	2015	7	23	2015	7	26	3	North Kyushu	Fukuoka Bay			<i>Skeletonema spp.</i>	16,300							
	FO	2015	12	2015	11	20	2015	11	27	7	North Kyushu	Genkai			<i>Nitzschia sp.</i>	5,450							
	FO	2015	1	2015	2	19	2015	4	6	46	West Kyushu	Ariake			<i>Pseudo-nitzschia sp.</i>	2,325							

Saga Prefectural Genkai Fisheries Promotion Center	SA	2015	3	2015	7	23	2015	8	26	35	North Kyushu	Kariya Bay			<i>Karenia mikimotoi</i>	940						
	SA	2015	4	2015	8	11	2015	8	25	14	North Kyushu	Imari Bay			<i>Karenia papilionacea</i>	3,040						
	SA	2015	5	2015	8	26	2015	11	1	68	North Kyushu	Imari Bay			<i>Karenia mikimotoi</i>	3,300						
														<i>Heterocapsa circularisquama</i>	6,400							
														<i>Karenia mikimotoi</i>	2,120							
	SA	2015	6	2015	10	5	2015	11	3	30	North Kyushu	Kariya Bay			<i>Heterocapsa circularisquama</i>	6,200						
														<i>Karenia mikimotoi</i>	640							
	SA	2015	7	2015	10	6	2015	10	12	7	North Kyushu	Genkai			<i>Heterosigma akashiwo</i>	15,000						
	SA2	2015	1	2014	12	30	2015	3	12	71	West Kyushu	Ariake			<i>Asteroplanus karianus</i>	3,900						
	SA2	2015	2	2015	3	6	2015	4	26	51	West Kyushu	Ariake			<i>Skeletonema spp.</i>	20,400	laver					
	SA2	2015	3	2015	4	27	2015	6	9	44	West Kyushu	Ariake			<i>Thalassiosira spp.</i>	18,300						
	SA2	2015	4	2015	4	27	2015	5	17	20	West Kyushu	Ariake			<i>Eucampia zodiacus</i>	2,254						
	SA2	2015	5	2015	6	10	2015	7	1	21	West Kyushu	Ariake			<i>Skeletonema spp.</i>	21,300						
	SA2	2015	6	2015	6	16	2015	6	23	7	West Kyushu	Ariake			<i>microalgae</i>	26,000						
	SA2	2015	7	2015	6	24	2015	7	1	7	West Kyushu	Ariake			<i>Heterosigma akashiwo</i>	6,900						
	SA2	2015	8	2015	6	24	2015	7	1	7	West Kyushu	Ariake			<i>Heterocapsa rotundata</i>	39,000						
	SA2	2015	9	2015	7	9	2015	7	14	5	West Kyushu	Ariake			<i>Heterosigma akashiwo</i>	25,750						
	SA2	2015	10	2015	7	31	2015	8	12	13	West Kyushu	Ariake			<i>microalgae</i>	15,750						
	SA2	2015	11	2015	8	24	2015	9	13	20	West Kyushu	Ariake			<i>Gyrodinium dominans</i>	2,300						
	SA2	2015	12	2015	8	31	2015	9	10	11	West Kyushu	Ariake			<i>Ceratium furca</i>	436						
	SA2	2015	13	2015	9	14	2015	9	27	13	West Kyushu	Ariake			<i>Skeletonema spp.</i>	28,700						
	SA2	2015	14	2015	9	28	2015	10	4	6	West Kyushu	Ariake			<i>Heterosigma akashiwo</i>	51,000						
	SA2	2015	15	2015	10	5	2015	10	12	7	West Kyushu	Ariake			<i>Skeletonema spp.</i>	19,700						
	SA2	2015	16	2015	10	21	2015	10	25	4	West Kyushu	Ariake			<i>Ceratium furca</i>	5,500						
	NS	2015	1	2015	1	20	2015	1	21	2	Remote island	Tsushima			<i>Myrionecta rubra</i>	2,600						
	NS	2015	2	2015	4	25	2015	4	26	2	Remote island	Tsushima			<i>Noctiluca scintillans</i>	483						
	NS	2015	3	2015	7	1	2015	7	7	7	Remote island	Tsushima			<i>Ceratium furca</i>	538						
	NS	2015	4	2015	7	7	2015	7	29	23	North Kyushu	Furue Bay			<i>Karenia mikimotoi</i>	33,000	Yellowtail amberjack tiger puffer tuna	29,147	12,895			
	NS	2015	5	2015	8	11	2015	8	28	18	North Kyushu	Imari Bay			<i>Karenia mikimotoi</i>	674						
	NS	2015	6	2015	9	2	2015	9	18	17	Remote island	Tsushima			<i>Cochlodinium polykrikoides</i>	1,436						
	NS	2015	7	2015	9	11	2015	9	18	8	Remote island	Tsushima			<i>Cochlodinium polykrikoides</i>	795	tuna	1,823	114,057			
	NS	2015	8	2015	9	30	2015	10	2	3	Remote island	Tsushima			<i>Noctiluca scintillans</i>	1,460						
	NS	2015	9	2015	10	12	2015	10	16	5	Remote island	Tsushima			<i>Myrionecta rubra</i>	4,050						
	NS	2015	10	2015	11	5	2015	11	6	2	Remote island	Tsushima			<i>Myrionecta rubra</i>	320						
	NS2	2015	1	2015	4	21	2015	4	24	4	West Kyushu (remote island)	Goto			<i>Ceratium furca</i>	284						
	NS2	2015	2	2015	5	7	2015	5	13	7	West Kyushu (remote island)	Goto			<i>Heterosigma akashiwo</i>	4,850						
	NS2	2015	3	2015	5	21	2015	5	23	3	West Kyushu	Omura Bay			<i>Heterosigma akashiwo</i>	21,850						
	NS2	2015	4	2015	6	1	2015	6	22	22	West Kyushu	Omura Bay			<i>Karenia mikimotoi</i>	860						
	NS2	2015	5	2015	6	10	2015	6	29	20	West Kyushu	Coastal area of Soihi			<i>Prorocentrum dentatum</i>	590						
	NS2	2015	6	2015	6	10	2015	6	29	20	West Kyushu	Ariake			<i>Chattonella spp.</i>	6						
	NS2	2015	7	2015	6	10	2015	7	1	22	West Kyushu (remote island)	Kujukushima			<i>Heterosigma akashiwo</i>	4,160						
	NS2	2015	8	2015	6	12	2015	7	30	49	West Kyushu (remote island)	Kujukushima			<i>Heterosigma akashiwo</i>	142,800						
	NS2	2015	9	2015	6	17	2015	8	28	73	West Kyushu	Tachibana Bay			<i>microalgae</i>	20,400						
	NS2	2015	10	2015	6	24	2015	8	28	66	West Kyushu	Tachibana Bay			<i>Karenia mikimotoi</i>	25,000						
	NS2	2015	11	2015	6	26	2015	6	28	3	West Kyushu (remote island)	Goto			<i>Prorocentrum dentatum</i>	20,200						
	NS2	2015	12	2015	6	27	2015	7	30	34	West Kyushu (remote island)	Kujukushima			<i>Gonyaulax polygramma</i>	142,200						
	NS2	2015	13	2015	6	30	2015	8	11	43	West Kyushu	Ariake			<i>Karenia mikimotoi</i>	85,400						
	NS2	2015</td																				

	NS2	2015	23	2015	9	18	2015	11	5	49	West Kyushu	Ariake			<i>Skeletonema spp.</i>	13,000						
	NS2	2015	24	2015	9	30	2015	10	8	9	West Kyushu (remote island)	Kujukushima			<i>Cochlodinium polykrikoides</i>	459						
	NS2	2015	25	2015	10	3	2015	10	28	26	West Kyushu (remote island)	Goto			<i>Cochlodinium polykrikoides</i>	406	Tuna	13	1,560			
	NS2	2015	26	2015	10	9	2015	11	19	42	West Kyushu (remote island)	Goto			<i>Cochlodinium sp. Type Kasasa</i>	1,500	Tuna	1,140	20,000			
	NS2	2015	27	2015	10	16	2015	10	19	4	West Kyushu	Omura Bay			<i>Heterosigma akashiwo</i>	17,300						
	NS2	2015	28	2015	10	19	2015	11	2	25	West Kyushu	Sasebo			<i>Cochlodinium polykrikoides</i>	300						
	NS2	2015	29	2015	11	17					West Kyushu	Ariake			<i>Karenia mikimotoi</i>	4,433						
Organization	Event No.			Duration(Start)			Duration(End)			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		Continuous days	Sub-area			Spot	Date	Time	Fish/Shellfish species	Quantity	Economic loss (1,000 Yen)		Temp. (°C)
Yamaguchi Prefectural Fisheries Research	YG	2016	1	2016	6	2	2016	6	29		Coastal area of Yamaguchi	Hagi City			<i>Heterosigma akashiwo</i>	45,660						
	YG	2016	2	2016	7	6	2016	7	21		Coastal area of Yamaguchi	Shimonoseki City			<i>Karenia mikimotoi</i>	896	Abalone	15				
Fukuoka Fisheries and Marine Technology Research Center	FO	2016	1	2016	1	4	2016	1	7		West Kyushu	Ariake			<i>Eutreptia spp.</i>	450						
	FO	2016	2	2016	3	7	2016	4	8		West Kyushu	Ariake			<i>Thalassiosira rotula</i>	590						
	FO	2016	3	2016	4	25	2016	5	6		West Kyushu	Ariake			<i>Chaetoceros spp.</i>	1885						
	FO	2016	4	2016	5	11	2016	5	24		North Kyushu	Fukuoka Bay			<i>Skeletonema spp.</i>	2655						
	FO	2016	5	2016	5	13	2016	5	24		West Kyushu	Ariake			<i>Myrionecta rubra</i>	4,800						
	FO	2016	6	2016	5	24	2016	6	22		West Kyushu	Ariake			<i>Heterosigma akashiwo</i>	351,000						
	FO	2016	7	2016	6	1	2016	6	27		North Kyushu	Fukuoka Bay			<i>Gonyaulax sp.</i>	875						
	FO	2016	8	2016	6	16	2016	6	27		North Kyushu	Fukuoka Bay			<i>Skeletonema spp.</i>	63000						
	FO	2016	9	2016	6	27	2016	7	20		West Kyushu	Ariake			<i>Chaetoceros spp.</i>	16800						
	FO	2016	10	2016	7	8	2016	7	10		North Kyushu	Fukuoka Bay			<i>Prorocentrum micans</i>	33,550						
	FO	2016	11	2016	7	28	2016	8	3		West Kyushu	Ariake			<i>Microalgae</i>	7,300						
	FO	2016	12	2016	8	8	2016	8	10		North Kyushu	Fukuoka Bay			<i>Myrionecta rubra</i>	5,550						
	FO	2016	13	2016	8	8	2016	8	15		North Kyushu	Fukuoka Bay			<i>Heterosigma akashiwo</i>	5,600						
	FO	2016	14	2016	8	10	2016	8	19		West Kyushu	Ariake			<i>Karenia mikimotoi</i>	664	Horned turban	150kg	75			
	FO	2016	15	2016	8	19	2016	8	20		North Kyushu	Fukuoka Bay			<i>Prorocentrum hillischi</i> sp.	23,000						
	FO	2016	16	2016	8	19	2016	8	20		North Kyushu	Fukuoka Bay			<i>Skeletonema spp.</i>	16,275						
	FO	2016	17	2016	8	22	2016	8	27		North Kyushu	Fukuoka Bay			<i>Heterocapsa sp.</i>	5,100						
	FO	2016	18	2016	10	3	2016	10	18		West Kyushu	Ariake			<i>Thalassiosira sp.</i>	1,460						
	FO	2016	19	2016	10	26					West Kyushu	Ariake			<i>Pseudo-nitzschia sp.</i>	638						
	FO	2016	20	2016	12	12	2016	12	17		North Kyushu	Fukuoka Bay			<i>Microalgae</i>	7,350						
Saga Prefectural Genkai Fisheries Promotion Center	SA	2016	1	2016	1	7	2016	1	21		West Kyushu	Ariake			<i>Skeletonema spp.</i>	19,950						
	SA	2016	2	2016	1	28	2016	3	9		West Kyushu	Ariake			<i>Skeletonema spp.</i>	22,200						
	SA	2016	3	2016	3	24	2016	4	21		West Kyushu	Ariake			<i>Skeletonema spp.</i>	12,880						
	SA	2016	4	2016	5	6	2016	5	22		West Kyushu	Ariake			<i>Heterosigma akashiwo</i>	33,000						
	SA	2016	5	2016	5	23	2016	6	5		West Kyushu	Ariake			<i>Skeletonema spp.</i>	42,450						
	SA	2016	6	2016	6	13	2016	7	19		West Kyushu	Ariake			<i>Microalgae</i>	28,750						
	SA	2016	7	2016	7	26	2016	8	2		West Kyushu	Ariake			<i>Myrionecta rubra</i>	568						
	SA	2016	8	2016	8	3	2016	8	17		West Kyushu	Ariake			<i>Chaetoceros spp.</i>	88,250						
	SA	2016	9	2016	8	17	2016	8	24		West Kyushu	Ariake			<i>Chattonella spp.</i>	11,800						
	SA	2016	10	2016	8	25	2016	9	1		Wes Kyushu	Ariake			<i>Skeletonema spp.</i>	6,590						
	SA	2016	11	2016	9	9	2016	9	15		West Kyushu	Ariake			<i>Heterosigma akashiwo</i>	8360						
	SA	2016	12	2016	9	9	2016	9	22		Wes Kyushu	Ariake			<i>Heterocapsa rotundata</i>	10800						
	SA	2016	13	2016	9	16	2016	9	22		West Kyushu	Ariake			<i>Skeletonema spp.</i>	4800						
	SA	2016	14	2016	10	7	2016	10	20		West Kyushu	Ariake			<i>Ceratium furca</i>	18450						
	SA	2016	15	2016	10	28					West Kyushu	Ariake			<i>Skeletonema spp.</i>	1,790						
	SA	2016	16	2016	12	22					West Kyushu	Ariake			<i>Akashiwo sanguinea</i>	19,350						
Nagasaki Prefectural Institute of Fisheries	NS	2016																				

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 (km ²)		
Yamaguchi Prefectural Fisheries Research Center	YM	2017	1	2017	6	22	2017	7	3	1	Coastal area of Yamaguchi	Coastal area of Hagi City			Heterosigma akashiwo	11,250										
Fukuoka Fisheries and Marine Technology Research Center	FO	2017	1	2017	4	26	2017	5	10		West Kyushu	Ariake			Heterocapsa sp.	6,550										
	FO	2017	2	2017	5	18	2017	5	22	5	North Kyushu	Coastal area of Fukuoka City			Noctiluca scintillans	1,755										
	FO	2017	3	2017	5	19	2017	5	26		West Kyushu	Ariake			Skeletonema spp. Thalassiosira sp.	26,600 14,000										
	FO	2017	4	2017	6	15	2017	6	19	5	North Kyushu	Fukuoka Bay			Heterosigma akashiwo Skeletonema spp. Chaetoceros spp.	12,875 4,200 3,125										
	FO	2017	5	2017	6	16	2017	6	23		West Kyushu	Ariake			Mesodinium rubrum	4,500										
	FO	2017	6	2017	7	3	2017	7	12	10	North Kyushu	Dokai Bay			microalgae	63,700										
	FO	2017	7	2017	7	7	2017	7	31		West Kyushu	Ariake			Ceratium furca	1,240										
	FO	2017	8	2017	7	13	2017	7	24	12	West Kyushu	Ariake			Skeletonema spp.	45,450										
	FO	2017	9	2017	7	25	2017	8	10	10	North Kyushu	Coastal area of Kitakyushu			Karenia mikimotoi	1,575										
	FO	2017	10	2017	7	31	2017	9	13	45	West Kyushu	Ariake			Skeletonema spp. Chaetoceros spp.	11,980 6,325										
	FO	2017	11	2017	9	13	2017	9	20	8	West Kyushu	Ariake			Chattonella spp.	340										
	FO	2017	12	2017	11	9	2017	11	11	3	North Kyushu	Fukuoka Bay			Heterosigma akashiwo	13,550	Abalone									
	FO	2017	13	2017	11	12	2017	12	1		West Kyushu	Ariake			Akashiwo sanguinea	208										
Saga Prefectural Genkai Fisheries Promotion Center	SA	2017	1	2017	1	30	2017	2	13	14	West Kyushu	Ariake			Skeletonema spp.	7,970	Laver									
	SA	2017	2	2017	2	20	2017	4	11	51	West Kyushu	Ariake			Skeletonema spp.	16,860	Laver									
	SA	2017	3	2017	4	26	2017	5	11	16	West Kyushu	Ariake			Skeletonema spp.	10,380										
	SA	2017	4	2017	4	26	2017	5	11	16	West Kyushu	Ariake			Skeletonema spp.	6,080										
	SA	2017	5	2017	6	1	2017	6	9	9	West Kyushu	Ariake			Heterocapsa rotundata	1,240										
	SA	2017	6	2017	6	16	2017	7	10	25	West Kyushu	Ariake			Skeletonema spp.	13,830										
	SA	2017	7	2017	7	10	2017	7	19	10	West Kyushu	Ariake			microalgae	17,100										
	SA	2017	8	2017	7	12	2017	9	5	56	North Kyushu	Imari Bay			microalgae	56,800										
	SA	2017	9	2017	7	31	2017	8	9	10	West Kyushu	Ariake			Skeletonema spp.	30,150										
	SA	2017	10	2017	8	2	2017	8	30	29	North Kyushu	Kariya Bay			Ceratium furca	510										
	SA	2017	11	2017	8	16	2017	9	7	23	West Kyushu	Ariake			Karenia mikimotoi	13,050										
	SA	2017	12	2017	9	4	2017	9	20	17	West Kyushu	Ariake			Skeletonema spp.	12,190										
	SA	2017	13	2017	9	13	2017	9	20	8	West Kyushu	Ariake			Chaetoceros spp.	6,960										
	SA	2017	14	2017	9	20	2017	11	2	44	West Kyushu	Ariake			Thalassiosira spp.	4,650										
	SA	2017	15	2017	9	20	2017	10	6	17	West Kyushu	Ariake			Karenia mikimotoi	1,350										
	SA	2017	16	2017	10	13	2017	10	19	7	West Kyushu	Ariake			Skeletonema spp.	20,770										
	SA	2017	17	2017	10	26	2017	11	2	7	West Kyushu	Ariake			Chattonella spp.	17,430										
	SA	2017	18	2017	10	27	2017	11	2	6	West Kyushu	Ariake			Thalassiosira spp.	7,380										
	SA	2017	19	2017	11	9	2017	11	27	19	West Kyushu	Ariake			Chattonella spp.	998										
	SA	2017	20	2017	12	4	2018	2	23		West Kyushu	Ariake			Cochlodinium polykrikoides	6,020										
Nagasaki Prefectural Institute of Fisheries	NS	2017	1	2017	4	7	2017	4	9	3	West Kyushu	Coastal area of Soihi			Karenia mikimotoi	1,480										
	NS	2017	2	2017	4	20	2017	4	27	8	West Kyushu (remote island)	Goto			Akashiwo sanguinea	632										
	NS	2017	3	2017	5	22	2017	8	15	86	West Kyushu	Omura Bay			microalgae	19,200										
	NS	2017	4	2017	6	1	2017	6	5	5	West Kyushu (remote island)	Goto			Skeletonema spp.	32,650										
	NS	2017	5	2017	6	26	2017	7	3	8	West Kyushu (remote island)	Goto			Thalassiosira spp.	2,510										
	NS	2017	6	2017	6	29	2017	7	18	20	West Kyushu	Ariake			Skeletonema spp.	6,790										
	NS	2017	7	2017	7	10	2017	7	17	8	West Kyushu	Coastal area of Soihi			Thalassiosira spp.	6,660										
	NS	2017	8	2017	7	10	2017	7	19	10	North Kyushu	Furue Bay			Mesodinium rubrum	18,000										
	NS	2017	9	2017	7	13	2017	8	25	44	North Kyushu	Imari Bay			microalgae	6,290		</td								

	NS	2017	14	2017	9	20	2017	10	3	14	North Kyushu	Imari Bay			<i>Heterocapsa</i>	1,100							
	NS	2017	15	2017	9	25	2017	10	25	31	West Kyushu (remote island)	Goto			<i>Cochlodinium sp. Kasasa</i>	984							
	NS	2017	16	2017	11	2	2017	11	22		West Kyushu (remote island)	Tsushima			<i>Mesodinium rubrum</i>	3,540							
	NS	2017	17	2017	11	7	2017	11	22		North Kyushu	Furue Bay			<i>Mesodinium rubrum</i>	11,200							
	NS	2017	18	2017	11	10	2017	11	28		West Kyushu	Ariake			<i>Akashiwo sanguinea</i>	208							
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)	
Yamaguchi Prefectural Fisheries Research Center	YG	2018	1	2018	12	25	2019	1	4	11	North Kyushu	Nagato City			<i>Karenia digitata</i>	21667	Chicken grunt						
Fukuoka Fisheries and Marine Technology Research Center	FO	2018	1	2018	2	13	2018	3	26	42	West Kyushu	Ariake			<i>Skeletonema spp.</i>	6,565							
	FO	2018	2	2018	4	3	2018	4	16	14	West Kyushu	Ariake			<i>Chaetoceros spp.</i>	1,220							
	FO	2018	3	2018	5	17	2018	5	21	5	West Kyushu	Ariake			<i>Skeletonema spp.</i>	3,580							
	FO	2018	4	2018	6	1	2018	6	18	17	North Kyushu	Fukuoka Bay			<i>Thalassiosira spp.</i>	2,540							
	FO	2018	5	2018	7	11	2018	7	17	6	North Kyushu	Fukuoka Bay			<i>Gonyaulax sp.</i>	3,000							
	FO	2018	6	2018	7	12	2018	7	31	20	West Kyushu	Ariake			<i>Procentrum triestinum</i>	45,800							
	FO	2018	7	2018	8	21	2018	8	30	10	West Kyushu	Ariake			<i>Thalassiosira spp.</i>	41,000							
	FO	2018	8	2018	11	8	2018	11	12	5	West Kyushu	Ariake			<i>Skeletonema spp.</i>	62,120							
	FO	2018	7	2018	11	26	2018	12	13		West Kyushu	Ariake			<i>Akashiwo sanguinea</i>	540							
Saga Prefectural Genkai Fisheries Promotion Center	SA	2018	1	2018	3	15	2018	3	23	9	West Kyushu	Ariake			<i>Skeletonema spp.</i>	16,520							
	SA	2018	2	2018	3	30	2018	4	16	18	West Kyushu	Ariake			<i>Microalgae</i>	11,230							
	SA	2018	3	2018	4	27	2018	6	14	49	West Kyushu	Ariake			<i>Skeletonema spp.</i>	16,310							
	SA	2018	4	2018	6	12	2018	9	11	92	North Kyushu	Imari Bay			<i>Microalgae</i>	6,120							
	SA	2018	5	2018	6	14	2018	6	22	9	West Kyushu	Ariake			<i>Skeletonema spp.</i>	21,330							
	SA	2018	6	2018	6	22	2018	6	29	8	West Kyushu	Ariake			<i>Tiger puffer</i>	8550							
	SA	2018	7	2018	6	29	2018	7	12	14	West Kyushu	Ariake			<i>Red sea bream</i>	8,600							
	SA	2018	8	2018	7	12	2018	8	10	30	West Kyushu	Ariake			<i>microalgae</i>	9,850							
	SA	2018	9	2018	7	20	2018	8	7	19	North Kyushu	Karatsu Bay			<i>Skeletonema spp.</i>	7,090							
	SA	2018	10	2018	7	24	2018	8	20	28	West Kyushu	Ariake			<i>Ceratium furca</i>	238							
	SA	2018	11	2018	8	10	2018	8	20	11	West Kyushu	Ariake			<i>Akashiwo sanguinea</i>	42							
	SA	2018	12	2018	8	16	2018	8	20	5	West Kyushu	Ariake			<i>Skeletonema spp.</i>	167,600							
	SA	2018	13	2018	8	20	2018	9	25	37	West Kyushu	Ariake			<i>Thalassiosira spp.</i>	1,480							
	SA	2018	14	2018	10	16	2018	10	23	8	West Kyushu	Ariake			<i>Chaetoceros spp.</i>	4,490							
	SA	2018	15	2018	11	10	2018	11	14	5	West Kyushu	Ariake			<i>Noctiluca scintillans</i>	2,180							
	SA	2018	16	2018	11	16	2018	11	22	7	West Kyushu	Ariake			<i>Chatonella spp.</i>	2,906							
	SA	2018	17	2018	11	29	2018	12	7		West Kyushu	Ariake			<i>Ceratium furca</i>	576							
	SA	2018	18	2018	12	17	2018	12	25		West Kyushu	Ariake			<i>Akashiwo sanguinea</i>	572							
Nagasaki Prefectural Institute of Fisheries	NS	2018	1	2018	3	14	2018	3	23	10	Remote island	Tsushima			<i>Dictyocha spp.</i>	470							
	NS	2018	2	2018	5	9	2018	5	13	5	West Kyushu	Coastal area of Seihi			<i>Heterosigma akashiwo</i>	15,500							
	NS	2018	3	2018	5	16	2018	5	22	7	West Kyushu	Omura Bay			<i>Procentrum triestinum</i>	21,500							
	NS	2018	4	2018	5	17	2018	5	24	8	West Kyushu	Ariake			<i>Heterosigma akashiwo</i>	30,000							
	NS	2018	5	2018	5	18	2018	6	18	32	West Kyushu	Omura Bay			<i>Karenia mikimotoi</i>	752							
	NS	2018	6	2018	6	6	2018	8	3	59	North Kyushu	Imari Bay			<i>Karenia mikimotoi</i>	17,300							
	NS	2018	7	2018	6	25	2018	7	1	7	West Kyushu (remote island)	Kujukushima			<i>Karenia mikimotoi</i>	31,400	macharel abalone	29418	5,579				
	NS	2018	8	2018	7	5	2018	7	9	5	West Kyushu (remote island)	Kujukushima			<i>Karenia mikimotoi</i>	1,600							
	NS	2018	9	2018	7	6	2018	8	2	28	Remote Island	Tsushima			<i>Ceratium furca</i>	1,680							
	NS	2018	10	2018	7	23	2018	8	31	40	West Kyushu	Ariake			<i>Chattonella spp.</i>	23,460	Yellowtail	20	119				
	NS	2018	11	2018	7	30	2018	8	1	3	West Kyushu	Omura Bay			<i>Karenia mikimotoi</i>	1,100							
	NS	2018	12	2018	8	8	2018	8	10	3	West Kyushu (remote island)	Kujukushima			<i>Karenia mikimotoi</i>	830		</					

Center	FO	2019	10	2019	10	7	2019	10	21	15	West Kyushu	Ariake			Skeletonema spp. Chaetoceros spp. Thalassiosira spp.	9210 7150 3810							
	FO	2019	11	2019	10	30	2019	11	1	3	North Kyushu	Fukuoka Bay			Heterosigma akashiwo	10,400							
	FO	2019	12	2019	11	5	2019	11	18	14	West Kyushu	Ariake			Chaetoceros spp.	17,000	laver						
Saga Prefectural Genkai Fisheries Promotion Center	SA	2019	1	2019	1	4	2019	2	20	48	West Kyushu	Ariake			Skeletonema spp. Chaetoceros spp.	40700 7120	laver						
	SA	2019	2	2019	2	20	2019	4	5	45	West Kyushu	Ariake			Eucampia zodiacus	896	laver						
	SA	2019	3	2019	6	11	2019	8	20	71	North Kyushu	Imari Bay			Karenia mikimotoi	66,000	Seabream etc		1,189				
	SA	2019	4	2019	6	18	2019	6	25	8	West Kyushu	Ariake			Microalgae	22100							
	SA	2019	5	2019	7	2	2019	7	17	16	West Kyushu	Ariake			Fibrocapsa japonica	1210							
	SA	2019	6	2019	7	11	2019	7	23	13	West Kyushu	Ariake			Microalgae	77,600							
	SA	2019	7	2019	7	23	2019	8	16	25	West Kyushu	Ariake			Akashiwo sanguinea	2,770							
	SA	2019	8	2019	8	5	2019	9	6	33	West Kyushu	Ariake			Skeletonema spp. Microalgae	32800 9350							
	SA	2019	9	2019	8	22	2019	9	13	23	West Kyushu	Ariake			Akashiwo sanguinea	4,970							
	SA	2019	10	2019	9	13	2019	9	30	18	West Kyushu	Ariake			Skeletonema spp. Chaetoceros spp.	60090 19400							
	SA	2019	11	2019	10	11	2019	10	17	7	West Kyushu	Ariake			Thalassiosira spp.	12760							
	SA	2019	12	2019	11	1	2019	11	15	15	West Kyushu	Ariake			Chaetoceros spp.	22,950							
	SA	2019	13	2019	12	9	2019	12	16	8	West Kyushu	Ariake			Detonula pumila	5,720	laver						
	SA	2019	14	2019	12	26					West Kyushu	Ariake			Skeletonema spp.	10,610							
Nagasaki Prefectural Institute of Fisheries	NS	2019	1	2019	5	8	2019	6	12	36	West Kyushu	Ohmura Bay			Karenia mikimotoi	8,950							
	NS	2019	2	2019	5	19	2019	5	31	13	West Kyushu	Nagasaki port			Heterosigma akashiwo	16,500							
	NS	2019	3	2019	5	23	2019	5	29	7	West Kyushu	(Remote)	Goto		Heterosigma akashiwo	40,000							
	NS	2019	4	2019	5	26	2019	6	17	23	West Kyushu	Ohmura Bay			Karenia mikimotoi	2,700							
	NS	2019	5	2019	5	29	2019	6	20	23	West Kyushu	Kujukushima			Karenia mikimotoi	1,050							
	NS	2019	6	2019	5	30	2019	7	4	36	West Kyushu	(Remote)	Kujukushima		Karenia mikimotoi	9,360							
	NS	2019	7	2019	6	11	2019	8	7	58	North Kyushu	Imari Bay			Karenia mikimotoi	210,500	Yellowtail etc		56,870				
	NS	2019	8	2019	6	20	2019	7	1	12	West Kyushu	Kujukushima			Cerium furca	7,400							
	NS	2019	9	2019	6	27	2019	7	24	28	West Kyushu	Tsushima			Karenia mikimotoi	7,450							
	NS	2019	10	2019	7	8	2019	7	12	5	West Kyushu	Ohmura Bay			Karenia mikimotoi	5,820							
	NS	2019	11	2019	7	16	2019	8	28	44	West Kyushu	Ariake			Akashiwo sanguinea	30,400							
	NS	2019	12	2019	7	24	2019	8	16	24	West Kyushu	Ariake			Skeletonema spp.	45,000							
	NS	2019	13	2019	8	21	2019	9	19	30	West Kyushu	Ariake			Chaetoceros spp.	392							
Country	Organization	Event No.		Duration(Start)			Duration(End)			Continuous days	Location of occurrence	Monitoring date			Causative species(*1)	Maximum density (cells·inds./mL)	Fishery damage			Environmental parameters (*3)			Size of bloom (km²)
		Pref. code	Year	No.	Year	Month	day	Year	Month			day	Sub-area	Spot			Date	Time	Fish/Shellfish species	Quantity (million ind.)	Economic loss (1,000 won)	Temp. (°C)	
SE		2007	1	2007	7	24	2007	7	30	7	Tongyeong	Tongyeong Dosan			Akashiwo sanguinea	500				22.4-24.5	32.0-33.2		
		2007	2	2007	8	6	2007	9	15	42	Namhae	Namhae Mizo			Cochlodinium polykrikoides	32,500	Red sea bream, Bass, Rockfish, Parrot fish	Rockfish 0.688 Red sea bream 0.389 Parrot fish 0.15 Bass 0.61 Sea bastes 0.149	3,664	23.3-29.4	28.3-32.0	50	
		2007	3	2007	8	9	2007	9	12	35	Tongyeong	Tongyeong Sarang Suyou-do			Cochlodinium polykrikoides	23,000	Rockfish, Parrot fish etc.	Rockfish 2 Parrot fish 1 etc. 1.9	7,337	24.0-27.6	30.2-34.0	70	
		2007	4	2007	8	11	2007	9	1	29	Tongyeong	Goseong Bay			Cochlodinium polykrikoides	4,000				26.0-29.5	30.3-32.3	3	
		2007	5	2007	8	16	2007	9	15	31	Gyeongbuk-Gangwon	Pohang-wooljin			Cochlodinium polykrikoides	6,500							
		2007	5	2007	9	3	2007	9	9	6	Tongyeong	Jinju Bay			Cochlodinium polykrikoides	2,000				22.1-25.6	30.1-32.8	2	
		2007	6	2007	10	19	2007	10	29	10	Tongyeong	Upper Sarang-do			Cochlodinium polykrikoides	2,130				22.5-23.8	32.8-33.2	2	
		2008	1	2008	8	4	2008	9	23	50	Namhae	Tongyeong Donsan			Cochlodinium polykrikoides	5,600				21.0-26.9	30.5-32.9	40	
		2008	2	2008	8	8	2008	9	22	45	Tongyeong	Namhae Mizo			Cochlodinium polykrikoides	2,650				22.2-27.0	29.0-32.3	60	
		2008	3	2008	9	16	2008	9	25	40	Tongyeong	Tongyeong Sarang Suyou-do			Cochlodinium polykrikoides	2,500				24.0-27.0	30.1-33.2	60	
		2008	4	2008	8	29	2008	9	5	7	Tongyeong	Goseong Bay			Cochlodinium polykrikoides	4,000				24.9-27.0	30.0-32.8	3	
		2008	5	2008	9	11	2008	9	20	9	Tongyeong	Jinju Bay			Cochlodinium polykrikoides	5,000				26.5-27.0	30.9-33.2	2	
		2009	1	2009	10	2																	

SE	2012	8	2012	8	10	2012	8	27	18	Jeonam	Jangheung-Wando coast-Deungnyang Bay			<i>Cochlodinium polykrikoides</i>	900								
	2012	9	2012	9	3	2012	9	17	15	Gyeongnam	Geoje Dadaepo-Hakdong coast			<i>Mesodinium rubrum</i>	2,200								
	2012	10	2012	9	10	2012	9	18	9	Chungnam	Taean-Boryeong-Seocheon-Jeonbuk Cunsan coast			<i>Cochlodinium polykrikoides</i>	1,587								
	2012	11	2012	10	2	2012	10	20	19	Gyeongnam	Namhae coast			<i>Cochlodinium polykrikoides</i>	1,500								
	2012	12	2012	10	4	2012	10	20	17	Gyeongnam	Tongyoung coast			<i>Cochlodinium polykrikoides</i>	5,360								
	2012	13	2012	10	5	2012	10	21	17	Jeonam	Yeosu-Goheung coast			<i>Cochlodinium polykrikoides</i>	6,570								
	2012	14	2012	10	5	2012	10	19	15	Jeju	Jocheon-sinheung			<i>Mesodinium rubrum</i>	16,202								
	2012	15	2012	10	6	2012	10	10	5	Busan	Haeundae Mipo Port			<i>Noctiluca scintillans</i>	500								
	2012	16								Gyeongnam	Geoje Gohyeon Bay, Jangmok Bay, Deokpo Bay			<i>Mesodinium rubrum</i>	2,200								
	2012	17	2012	10	26	2012	11	12	18	Gyeongbuk	Gyeongju-Pohang Homigot coast			<i>Mesodinium rubrum</i>	8,000								
	2013	1	2013	5	24	2013	5	31	8	Gyeongbuk	Pohang Yeongil Bay			<i>Noctiluca scintillans</i>	10,000								
	2013	2	2013	6	3	2013	6	17	15	Gyeongnam	Changwon Jinhae Bay-Haeugam Bay-Masan Bay			<i>Heterosigma akashiwo</i>	35,000								
	2013	3	2013	6	10	2013	6	16	7	Incheon	South Port-Eurwangri coast			<i>Heterosigma akashiwo</i>	6,480								
	2013	4	2013	6	28	2013	7	3	7	Jeonam	Yeosu Bodolbada			<i>Prorocentrum dentatum</i>	20,500								
	2013	5	2013	7	14	2013	9	4	53	Jeonam	Yeosu-Goheung coast			<i>Cochlodinium polykrikoides</i>	850								
	2013	6	2013	7	18	2013	8	23	37	Gyeongnam	Tongyoung coast			<i>Cochlodinium polykrikoides</i>	2,308								
	2013	7	2013	7	18	2013	8	26	40	Gyeongnam	Namhae coast			<i>Cochlodinium polykrikoides</i>	2,308								
	2013	8	2013	7	19	2013	8	23	36	Gyeongnam	Geoje coast			<i>Cochlodinium polykrikoides</i>	1,200								
	2013	9	2013	7	22	2013	8	21	31	Gyeongnam	Gosung-Sacheon coast			<i>Cochlodinium polykrikoides</i>	8,500								
	2013	10	2013	7	27	2013	8	27	32	Gyeongbuk	Gyeongju-Pohang coast			<i>Cochlodinium polykrikoides</i>	2,000								
	2013	11	2013	7	28	2013	8	27	31	Busan	Busan-Ulsan coast			<i>Cochlodinium polykrikoides</i>	3,000								
	2013	12	2013	8	7	2013	8	27	21	Gyeongbuk	Yeongdeok coast			<i>Cochlodinium polykrikoides</i>	10,000								
	2013	13	2013	8	11	2013	8	23	13	Gyeongbuk	Ulijn-Samcheok coast			<i>Cochlodinium polykrikoides</i>	10,000								
	2013	14	2013	8	19	2013	8	23	5	Gyeongbuk	Donghae-Gangwon Gangneung coast			<i>Cochlodinium polykrikoides</i>	950								
SE	2014	1	2014	7	31	2014	10	10	73	Gyeongnam	Gosung coast			<i>Cochlodinium polykrikoides</i>	850								
SE	2014	2	2014	8	4	2014	10	8	66	Gyeongnam	Tongyoung coast			<i>Cochlodinium polykrikoides</i>	920								
SE	2014	3	2014	8	5	2014	9	30	57	Gyeongnam	Geoje coast			<i>Cochlodinium polykrikoides</i>	150								
SE	2014	4	2014	8	13	2014	10	11	60	Gyeongnam	Namhae coast			<i>Cochlodinium polykrikoides</i>	450								
SE	2014	5	2014	8	25	2014	9	14	21	Jeonam	Yeosu-Goheung coast			<i>Cochlodinium polykrikoides</i>	1,150								
SE	2014	6	2014	8	28	2014	10	2	36	Jeonam	Deungyang Bay-Wando coast			<i>Cochlodinium polykrikoides</i>	300								
SE	2014	7	2014	9	7	2014	9	21	15	Busan	Busan-Ulsan coast			<i>Cochlodinium polykrikoides</i>	240								
SE	2014	8	2014	9	10	2014	10	23	44	Gyeongbuk	Gyeongju-Pohang-Yeongdeok-Ulijn coast			<i>Cochlodinium polykrikoides</i>	3,500								
SE	2015	1	2015	8	2	2015	9	10	40	Gyeongnam	Tongyoung, Namhae			<i>Cochlodinium polykrikoides</i>	21								
SE	2015	2	2015	8	5	2015	9	20	47	Jeonam	Yeosu, Wando			<i>Cochlodinium polykrikoides</i>	18								
SE	2015	3	2015	8	5	2015	9	2	29	Busan	Busan			<i>Cochlodinium polykrikoides</i>	9								
SE	2016	1	2016	8	16	2016	8	29	14	Jeonam	Yeosu			<i>Cochlodinium polykrikoides</i>	2								
Country	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 (*4)		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	Temp. (°C)	Salinity	DO (mg/L)	
AB	1991	1	1991	7	8	1991	8	12	36	Amurskii Bay	Amurskii Bay			<i>Prorocentrum minimum</i>	7,600								
	1993	1	1993	11	19	?	?	?	<7	Amurskii Bay	Amurskii Bay			<i>Chattonella sp.</i>	800								
	1996	1	1996	2	28	1996	3	28	29	Amurskii Bay	Amurskii Bay			<i>Heterosigma akashiwo</i>	1,000						-1.0- 1.0	33.0- 34.0	
	1996	3	1996	7	2	1996	7	16	15	Amurskii Bay	Amurskii Bay			<i>Noctiluca scintillans</i>	1.6						17.0- 20.0	28.0- 30.0	
	1996	4	1996	7	8	1996	8	30	31	Amurskii Bay	Amurskii Bay			<i>Chaetoceros affinis</i>	1,900						19.0- 23.0	27.0- 28.0	
	1996	5	1996	7	22	1996	8	30	40	Amurskii Bay	Amurskii Bay			<i>Skeletonema costatum</i>	12,700						20.0- 23.0	27.0- 30.0	
	1996	7	1996	8	5	1996	8	12	8	Amurskii Bay	Amurskii Bay			<i>Chaetoceros curvisetum</i>	1,500						20.0- 21.0	25.0- 27.0	
	1996	8																					

Russia	Institute of Marine Biology FEB RAS	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 nordenskiöldii</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 salsuginous</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>Thalassionema nitzschicoides</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 salsuginous</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>									

Common format for toxin-producing plankton bloom and shellfish poisoning

Country	Event No.			Duration (Start)			Duration (End)			Continuous days	Location 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	-	-	
Japan	NA	2009	1	2009	2	12	2010	1	15	337	Remote Island	Tamanoura Bay			unknown		Japanese oyster	PSP	5.4				
Japan	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				
Japan	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				
Korea																							
Korea	AB	1992	1	1992	6	25	1992	7	10	16	Amurskii Bay	Amurskii Bay			<i>Pseudo-nitzschia pungens/multiseries</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 tamarensense</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 calliantha</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 gigas	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	Nombytilus 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	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	-
							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	NO3-N (µM)	NO2-N (µM)	NH4-N (µM)	DIP	PO4-P (µM)	SiO2-Si	SiO3-Si (µM)	Chl-a (µg/L)
	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
		2006	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
		2006	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
		2006	9	1	Imari Bay	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
		2006	10	2	Imari Bay	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
		2006	5	8	Kariya Bay	A	7.5	16.9	32.2	8.00	-	0.46	0.16	0.04	0.27	-	0.00	-	-	3.30
		2006	6	2	Kariya Bay	A	4.8	20.3	32.7	9.10	-	0.34	0.22	0.01	0.12	-	0.00	-	-	7.30
		2006	7	4	Kariya Bay	A	6.0	23.7	24.7	8.30	-	1.68	1.50	0.02	0.16	-	0.00	-	-	6.90
		2006	8	2	Kariya Bay	A	8.5	29.1	28.8	8.20	-	0.54	0.51	0.01	0.02	-	0.00	-	-	2.80
		2006	9	4	Kariya Bay	A	2.7	27.2	26.5	9.10	-	0.84	0.53	0.01	0.31	-	0.00	-	-	7.90
		2006	10	3	Kariya Bay	A	5.2	23.0	31.2	5.70	-	0.49	0.16	0.02	0.30	-	0.00	-	-	9.20
		2006	5	15	Nagoyaura	4	8.6	16.8	31.6	8.20	-	0.76	0.58	0.04	0.14	-	0.01	-	-	1.00
		2006	6	1	Nagoyaura	4	6.2	19.4	33.7	9.20	-	0.42	0.09	0.01	0.33	-	0.01	-	-	1.60
		2006	7	3	Nagoyaura	4	7.9	23.0	31.0	7.20	-	0.88	0.67	0.02	0.19	-	0.01	-	-	2.60
		2006	8	1	Nagoyaura	4	7.5	26.7	29.0	8.40	-	0.50	0.42	0.01	0.06	-	0.00	-	-	2.90
		2006	9	1	Nagoyaura	4	10.6	25.1	31.6	6.40	-	0.26	0.10	0.01	0.15	-	0.01	-	-	0.60
		2006	10	2	Nagoyaura	4	6.7	23.1	31.7	6.10	-	0.38	0.26	0.02	0.10	-	0.00	-	-	5.20
		2006	5	1	Sototsu	5	6.0	16.9	32.8	9.00	-	0.16	0.07	0.02	0.07	-	0.01	-	-	3.10
		2006	6	1	Sototsu	5	5.5	20.8	33.4	8.60	-	0.11	0.04	0.01	0.07	-	0.00	-	-	3.70
		2006	7	3	Sototsu	5	3.9	24.0	39.1	8.50	-	1.76	1.45	0.02	0.29	-	0.00	-	-	4.30
		2006	8	2	Sototsu	5	6.2	28.0	31.8	9.10	-	0.24	0.16	0.01	0.06	-	0.00	-	-	2.20
		2006	9	4	Sototsu	5	4.3	26.4	31.2	7.30	-	0.28	0.18	0.01	0.10	-	0.00	-	-	2.70
		2006	10	3	Sototsu	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
		2006	7	18	Imari Bay	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
		2006	8	7	Imari Bay	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
	2006	10	18	Imari Bay	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	Imari Bay	1	6.5	18.3	31.0	7.60	-	0.30	0.11	0.01	0.18	-	0.00	-	-	1.54	
					2	5.2	18.1	31.9	7.30	-	0.11	0.03	0.01	0.07	-	0.00	-	-	2.21	
					3	4.0	18.4	31.7	8.30	-	0.16	0.06	0.01	0.09	-	0.00	-	-	1.82	
	2007	6	4	Imari Bay	1	5.5	21.8	34.0	6.80	-	0.15	0.14	0.00	0.01	-	0.04	-	-	0.47	
					2	4.2	21.7	34.1	6.40	-	0.08	0.06	0.00	0.02	-	0.06	-	-	0.94	
					3	4.8	22.0	33.6	6.80	-	0.10	0.08	0.00	0.01	-	0.05	-	-	0.70	
	2007	7	2	Imari Bay	1	0.4	26.1	34.0	6.40	-	0.38	0.12	0.01	0.25	-	0.00	-	-	3.50	
					2	3.9	25.4	33.6	6.20	-	0.17	0.06	0.01	0.10	-	0.01	-	-	6.60	
					3	3.5	25.2	33.2	6.20	-	0.14	0.08	0.01	0.06	-	0.01	-	-	6.2	
	2007	8	1	Imari Bay	1	3.7	28.2	29.6	7.90	-	1.35	0.27	0.01	1.08	-	0.00	-	-	2.40	
					2	3.3	27.9	29.7	7.00	-	0.22	0.06	0.01	0.15	-	0.01	-	-	4.10	
					3	4.1	28.2	29.5	6.70	-	0.41	0.18	0.01	0.22	-	0.01	-	-	1.60	
	2007	9	3	Imari Bay	1	2.7	28.5	32.2	6.40	-	0.33	0.19	0.03	0.11	-	0.01	-	-	12.00	
					2	1.8	28.5	32.5	5.70	-	0.10	0.05	0.01	0.03	-	0.01	-	-	14.90	
					3	2.1	27.5	30.0	6.90	-	0.63	0.38	0.05	0.20	-	0.01	-	-	16.20	
	2007	10	1	Imari Bay	1	3.9	26.0	30.6	7.30	-	0.68	0.11	0.01	0.56	-	0.01	-	-	7.20	
					2	3.1	26.1	30.6	6.70	-	0.26	0.07	0.05	0.14	-	0.02	-	-	10.10	
					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

Nagasaki Prefectural Institute of Fisheries	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
	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
		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
		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	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	-	-	-

Fukuoka Fisheries and Marine Technology Research Center	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	-	-	-

Saga Prefectural Ariake Fisheries Promotion Center	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	-	-	-
Nagasaki Prefectural Institute of Fisheries	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

		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
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														
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			

Country	Organization	Monitoring date				Location		Transparency	SST	Salinity	DO	pH	DIN	NO3-N	NO2-N	NH4-N	DIP	PO4-P	SiO2-Si	SiO3-Si	Chl-a	
		Year	Month	day	Time	Area	Monitoring point															
Korea	National Fisheries Research and Development Institute	2007	9	7		Jaran Bay		6	5.0	24.8	30.8	7.17	8.08	-	0.43	0.57	1.43	0.32	-	12.1	-	2.40
						Sachun		7	2.0	24.2	30.0	6.29	8.00	-	5.36	1.36	1.14	1.16	-	26.6	-	4.90
						Jinju Bay		8	1.2	24.2	26.6	6.52	8.00	-	22.00	2.21	2.14	1.13	-	49.6	-	8.20
								9	1.0	24.8	21.2	8.50	8.69	-	1.93	1.07	0.86	0.84	-	34.5	-	42.0
						Tongyeong off shore		10	6.5	24.8	30.5	6.16	8.15	-	0.57	0.64	0.86	0.16	-	8.36	-	4.00
								11	4.0	24.8	30.9	7.77	8.00	-	0.43	0.79	1.21	0.42	-	14.1	-	6.80
								12	3.0	24.4	30.5	8.10	8.11	-	0.71	1.29	0.71	0.16	-	12.0	-	16.3
								3	2.0	24.4	32.9	-	8.16	-	1.07	0.36	3.50	0.58	-	5.82	-	9.0
						Tongyeong		4	3.5	30.1	33.7	-	8.03	-	2.93	0.29	3.43	0.35	-	11.43	-	1.3
								5	3.5	28.7	32.6	-	7.94	-	2.64	0.36	3.14	1.13	-	28.2	-	1.7
								6	7.0	28.2	32.6	-	8.07	-	3.71	0.43	2.93	0.16	-	10.4	-	0.3
								7	5.0	25.5	32.8	-	8.15	-	1.57	0.50	0.57	0.39	-	9.9	-	1.2
						Geseong-Jaran Bay		8	3.5	25.5	32.8	-	8.15	-	3.07	0.50	4.21	0.16	-	4.1	-	2.1
								9	4.0	29.3	31.8	-	8.12	-	2.86	0.50	4.21	0.71	-	3.89	-	0.8
								10	10.0	24.7	33.0	-	8.20	-	3.00	0.43	1.50	0.39	-	7.89	-	0.0
								11	9.0	25.6	32.8	-	8.13	-	0.64	0.57	1.00	0.58	-	10.5	-	0.3
						Tongyeong off shore		12	3.5	22.3	33.4	-	8.02	-	0.93	0.50	3.36	0.32	-	3.57	-	2.5
								3	2.0	23.7	35.4	7.97	7.99	-	0.57	0.14	0.43	0.35	-	9.61	-	4.6
								4	5.5	29.3	33.1	8.97	8.09	-	0.93	0.36	1.43	1.06	-	3.07	-	1.6
								5	3.0	27.8	33.4	7.98	7.92	-	0.86	0.57	1.50	1.29	-	35.6	-	2.8
						Tongyeong		6	5.0	28.0	33.0	7.34	8.02	-	0.79	0.57	1.93	0.74	-	15.43	-	1.1
								7	5.0	22.3	33.3	8.20	8.16	-	1.43	0.36	2.14	0.39	-	7.21	-	2.5
								8	2.0	25.1	32.8	8.81	7.95	-	1.14	0.71	1.07	0.71	-	12.04	-	5.0
								9	2.0	26.3	32.8	9.21	8.04	-	0.86	0.57	0.79	0.16	-	3.57	-	3.8
						Geseong-Jaran Bay		10	5.0	23.6	33.2	8.65	8.21	-	0.36	0.36	1.21	0.29	-	6.21	-	1.0
								11	4.0	23.5	33.3	8.05	7.66	-	0.14	0.29	1.93	0.74	-	11.71	-	2.0
								12	3.0	21.6	33.8	7.71	8.03	-	1.64	0.57	1.36	0.71	-	4.46	-	3.8
								3	2.5	25.5	32.1	-	8.13	-	1.71	0.21	0.79	0.23	-	3.89	-	4.7
						Tongyeong		4	2.0	26.7	32.8	-	7.99	-	2.07	0.14	0.71	0.16	-	10.39	-	5.3
								5	1.5	27.2	33.0	-	7.97	-	3.71	0.07	0.43	0.32	-	3.89	-	2.4
								6	5.0	26.4	32.2	-	8.07	-	2.43	0.14	0.57	0.00	-	2.86	-	1.1
								7	6.0	25.8	32.2	-	8.13	-	2.64	0.29	0.50	0.16	-	2.29	-	1.2
						Jinju Bay		8	2.0	27.0	32.5	-	8.11	-	3.07	0.14	0.71	0.10	-	1.71	-	4.5
								9	2.0	26.5	32.4	-	8.08	-	3.21	0.14	0.57	0.23	-	1.25	-	2.3
								10	11.0	25.0	31.9	-	8.16	-	2.50	0.07	0.86	0.00	-	6.14	-	0.2
								11	4.5	25.6	32.2	-	8.10	-	2.36	0.14	0.57	0.10	-	2.14	-	2.9
						Tongyeong off shore		12	5.0	24.9	32.3	-	8.14	-	2.71	0.29	0.50	0.61	-	3.43	-	2.6

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	-	-	-	-	-	-	-	-	-
	Center of Monitoring of HABs & Biotoxins																	

*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)