

March 24, 2023

**Results of ALPS Treated Water Marine Monitoring:
Marine biota survey (tritium in fish) (November–December, 2022)**

1. Outline of survey

(1) Date of sampling

November 9–December 16, 2022

(2) Sampling points

3 sampling points on coastal waters in the Fukushima Prefecture (within 3 km of the proposed location of the ALPS treated water discharge outlet)

(3) Detail of the survey

Measurements of radioactive material concentration (tritium) in marine biota (fish)

2. Outline of results

(1) Marine biota survey (3 sampling points [9 samples] in coastal waters in the Fukushima Prefecture)

Concentrations of TFWT in the marine biota (fish) (with a target lower limit of detection of 0.1 Bq/L) range from 0.044 Bq/L to 0.099 Bq/L (0.035 Bq/kg-fresh to 0.076 Bq/kg-fresh).

Concentrations of OBT in the marine biota (fish) (with a target lower limit of detection of 0.5 Bq/L) correspond to below the lower limit of detection in all samples.

*A target lower limit of detection means a value that is set for quality control to assure at least the detection up to the value when analysis is conducted. Each actual lower limit of detection differs according to samples, and is equal to or lower than a target lower limit of detection.

(Detailed are attached)

(Maps attached)

Analysis results for tritium in marine biota (fish)

Sampling point	Sampling date (yyyy/mm/dd)	Species	Sampling depth (m)	Nuclide	Radioactivity Concentration ^{*1,*2}			Unit
E-SF1	2022/12/16	<i>Paralichthys olivaceus</i>	-	H-3(TFWT)	0.056	±	0.016	Bq/L
					0.044	±	0.012	Bq/kg-fresh
				H-3(OBT)	<0.4			Bq/L
					<0.05			Bq/kg-fresh
E-SF1	2022/12/16	<i>Squatina japonica</i>	-	H-3(TFWT)	0.065	±	0.0090	Bq/L
					0.050	±	0.0070	Bq/kg-fresh
				H-3(OBT)	<0.3			Bq/L
					<0.05			Bq/kg-fresh
E-SF1	2022/12/16	<i>Hemitrygon akajei</i>	-	H-3(TFWT)	0.068	±	0.0090	Bq/L
					0.053	±	0.0070	Bq/kg-fresh
				H-3(OBT)	<0.3			Bq/L
					<0.04			Bq/kg-fresh
E-SF2	2022/12/16	<i>Paralichthys olivaceus</i>	-	H-3(TFWT)	0.044	±	0.011	Bq/L
					0.035	±	0.0089	Bq/kg-fresh
				H-3(OBT)	<0.4			Bq/L
					<0.05			Bq/kg-fresh
E-SF2	2022/12/16	<i>Squatina japonica</i>	-	H-3(TFWT)	0.059	±	0.0085	Bq/L
					0.045	±	0.0065	Bq/kg-fresh
				H-3(OBT)	<0.3			Bq/L
					<0.05			Bq/kg-fresh
E-SF2	2022/12/16	<i>Chelidonichthys spinosus</i>	-	H-3(TFWT)	0.076	±	0.0090	Bq/L
					0.059	±	0.0070	Bq/kg-fresh
				H-3(OBT)	<0.3			Bq/L
					<0.04			Bq/kg-fresh
E-SF3	2022/11/9	<i>Paralichthys olivaceus</i>	-	H-3(TFWT)	0.093	±	0.023	Bq/L
					0.070	±	0.018	Bq/kg-fresh
				H-3(OBT)	<0.4			Bq/L
					<0.06			Bq/kg-fresh
E-SF3	2022/11/09	<i>Okamejei schmidtii</i>	-	H-3(TFWT)	0.091	±	0.024	Bq/L
					0.070	±	0.018	Bq/kg-fresh
				H-3(OBT)	<0.4			Bq/L
					<0.05			Bq/kg-fresh
E-SF3	2022/11/09	<i>Squatina japonica</i>	-	H-3(TFWT)	0.099	±	0.024	Bq/L
					0.076	±	0.018	Bq/kg-fresh
				H-3(OBT)	<0.4			Bq/L
					<0.05			Bq/kg-fresh

*1 Radioactivity concentrations are presented as radioactivity concentration ± combined standard uncertainty.

*2 Values below detection limit are shown by lower limit of detection (e.g., “<10 Bq/L” indicates a value lower than 10 Bq/L).

(Attachment)

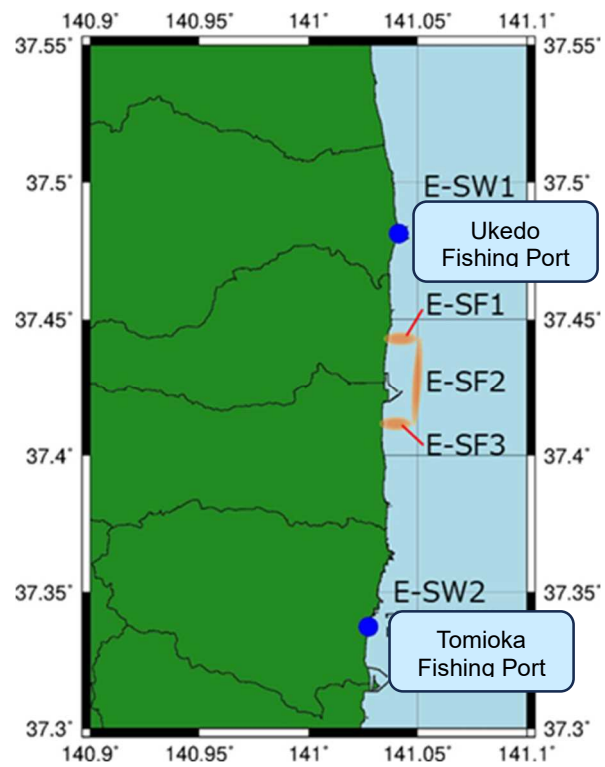


Fig. 1 Sampling points of marine biota (fish and seaweed)