

February 21, 2024

**Results of ALPS Treated Water Marine Monitoring:
Marine biota survey (tritium in fish) (October, 2023)**

1. Outline of survey

(1) Date of sampling

October 18, 2023

(2) Sampling points

3 sampling points on coastal waters in the Fukushima Prefecture

(3) Detail of the survey

- The measurements of radioactive material concentration (tritium) in marine biota (fish).

TFWT: Analysis with target lower limit of detection of 0.1 Bq/L.

OBT: Analysis with target lower limit of detection of 0.5 Bq/L.

*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.

2. Outline of results

(1) Marine biota survey (3 sampling points (8 samples))

Concentrations of TFWT in the marine biota (fish) range from 0.84 Bq/L to 1.6 Bq/L.

Concentrations of OBT in marine biota (fish) range from below the lower limit of detection to 0.73 Bq/L.

* In this survey, only two samples (usually three) were collected at some of the stations with small quantities, and some of the samples collected in small quantities were mixed with multiple fish species (usually one fish species per sample).

(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	2023/10/18	Mixed fishes A	-	H-3(TFWT)	1.1	±	0.06	Bq/L
					0.89	±	0.044	Bq/kg-fresh
				H-3(OBT)	0.43	±	0.12	Bq/L
					0.055	±	0.015	Bq/kg-fresh
E-SF1	2023/10/18	Mixed fishes B	-	H-3(TFWT)	1.4	±	0.06	Bq/L
					1.0	±	0.04	Bq/kg-fresh
				H-3(OBT)	0.73	±	0.076	Bq/L
					0.11	±	0.012	Bq/kg-fresh
E-SF2	2023/10/18	<i>Paralichthys olivaceus</i>	-	H-3(TFWT)	0.98	±	0.051	Bq/L
					0.73	±	0.038	Bq/kg-fresh
				H-3(OBT)	< 0.4			Bq/L
					< 0.06			Bq/kg-fresh
E-SF2	2023/10/18	<i>Pagrus major</i>	-	H-3(TFWT)	0.95	±	0.041	Bq/L
					0.72	±	0.031	Bq/kg-fresh
				H-3(OBT)	0.30	±	0.071	Bq/L
					0.048	±	0.011	Bq/kg-fresh
E-SF2	2023/10/18	<i>Triakis scyllium</i>	-	H-3(TFWT)	0.84	±	0.037	Bq/L
					0.65	±	0.029	Bq/kg-fresh
				H-3(OBT)	0.54	±	0.074	Bq/L
					0.080	±	0.011	Bq/kg-fresh
E-SF3	2023/10/18	<i>Paralichthys olivaceus</i>	-	H-3(TFWT)	1.2	±	0.06	Bq/L
					0.91	±	0.046	Bq/kg-fresh
				H-3(OBT)	0.49	±	0.12	Bq/L
					0.066	±	0.016	Bq/kg-fresh
E-SF3	2023/10/18	<i>Okamejei schmidtii</i>	-	H-3(TFWT)	1.6	±	0.07	Bq/L
					1.3	±	0.06	Bq/kg-fresh
				H-3(OBT)	0.61	±	0.12	Bq/L
					0.070	±	0.014	Bq/kg-fresh
E-SF3	2023/10/18	<i>Squatina japonica</i>	-	H-3(TFWT)	1.3	±	0.06	Bq/L
					1.0	±	0.05	Bq/kg-fresh
				H-3(OBT)	0.53	±	0.12	Bq/L
					0.067	±	0.015	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)

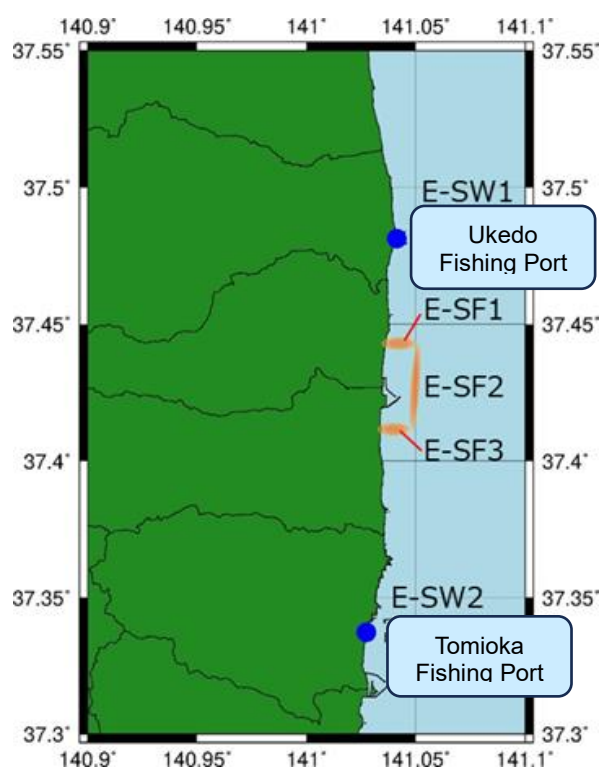


Fig. 1 Sampling points of marine biota (fish and seaweed)