

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

**1. Outline of survey**

- (1) Date of sampling  
February 10, 2023
- (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 [6 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 0.077 Bq/L to 0.12 Bq/L.

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.

\*Marine biota samples were collected with small quantities in this survey due to seasonal influences. So only two samples (usually three) were collected at each station, and some samples were mixed with multiple fish species (usually one sample per species).

\*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 <sup>*1,*2</sup>	Unit
E-SF1	2023/02/10	<i>Eopsetta grigorjewi</i>	-	H-3(TFWT)	0.077 ± 0.025	Bq/L
					0.060 ± 0.020	Bq/kg-fresh
				H-3(OBT)	< 0.4	Bq/L
					< 0.05	Bq/kg-fresh
E-SF1	2023/02/10	<i>Squatina japonica</i>	-	H-3(TFWT)	0.084 ± 0.023	Bq/L
					0.063 ± 0.017	Bq/kg-fresh
				H-3(OBT)	< 0.4	Bq/L
					< 0.06	Bq/kg-fresh
E-SF2	2023/02/10	Mixed fishes	-	H-3(TFWT)	0.12 ± 0.023	Bq/L
					0.096 ± 0.018	Bq/kg-fresh
				H-3(OBT)	< 0.4	Bq/L
					< 0.05	Bq/kg-fresh
E-SF2	2023/02/10	<i>Squatina japonica</i>	-	H-3(TFWT)	0.094 ± 0.023	Bq/L
					0.072 ± 0.017	Bq/kg-fresh
				H-3(OBT)	< 0.4	Bq/L
					< 0.05	Bq/kg-fresh
E-SF3	2023/02/10	<i>Squatina japonica</i>	-	H-3(TFWT)	0.12 ± 0.023	Bq/L
					0.094 ± 0.018	Bq/kg-fresh
				H-3(OBT)	< 0.4	Bq/L
					< 0.05	Bq/kg-fresh
E-SF3	2023/02/10	Mixed fishes	-	H-3(TFWT)	0.10 ± 0.023	Bq/L
					0.080 ± 0.018	Bq/kg-fresh
				H-3(OBT)	< 0.4	Bq/L
					< 0.04	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)

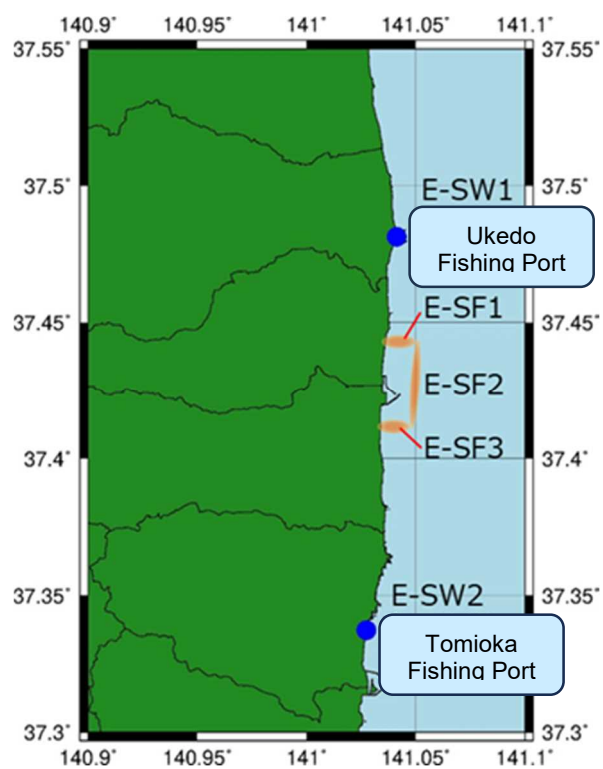


Fig. 1 Sampling points of marine biota (fish and seaweed)