Shetland Bulletin on the status of harmful & toxic algae Week 43, 19th - 25th Oct 2026

SHETLAND BULLETIN ON THE STATUS OF HARMFUL & TOXIC ALGAE

BIOTOXIN REPORT:

Auto-resizing | Edit Text

ASP toxins: No sites were analysed this week.

AZA toxins: Fourteen sites were sampled this week. Toxins were not detected.

DSP toxins: Fourteen sites were analysed this week. Toxins were detected in low concentrations in four sites.

PSP toxins: Two sites were sampled this week. Toxins were not detected.

YTX toxins: Fourteen sites were sampled this week. Toxins were not detected.

HARMFUL ALGAE REPORT:

Auto-resizing | Edit Text

Alexandrium: Twelve sites were sampled this week. Alexandrium was not detected.

Dinophysis: Twelve sites were sampled this week. Dinophysis was detected in low numbers in six sites.

Karenia mikimotoi: Twelve sites were sampled this week. Karenia was not detected.

Prorocentrum lima: Twelve sites were sampled this week. P. lima was detected in low numbers in two sites.

Pseudo-nitzschia delicatissima: Twelve sites were sampled. P. delicatissima was detected in low numbers in all sites.

Pseudo-nitzschia seriata: Twelve sites were sampled. P. seriata was detected in low numbers in all sites except one.

SHETLAND: TRENDS AND FORECAST

Auto-resizing | Edit Text

Alexandrium/PSP: *It is very unlikely that there will be a toxic bloom of Alexandrium this week.*

Dinophysis/DSP: *While low numbers of Dinophysis are present in some sites. It is very unlikely that there will be a toxic bloom of Dinophysis this week.*

Pseudo-nitzschia/ASP: *While most sites have low numbers of Pseudo nitzschia present, it is very unlikely that there will be a toxic bloom this week.*

AZA and YTX: *It is very unlikely that there will be a toxic bloom this week.*

Risk PSP: **LOW**	Risk DSP: **LOW**	Risk ASP: **LOW**
Risk YTX: **LOW**	Risk AZA: **LOW**	

ADDITIONAL TEXT & OVERALL COMMENTARY:

Overall low risk across all aquaculture sites. Hydrographic conditions, tidal flushing, and offshore wind regimes suggest minimal advective risk of harmful algal transport into coastal voes over the upcoming week.

While this bulletin is based on our expert opinion, SAMS cannot accept responsibility for harvesting or husbandry decisions. These remain the responsibility of the industry

WARNING/THRESHOLD LEVELS

Alexandrium (PSP causative)		***Pseudo nitzschia*** (ASP causative)	
	Warning 20 cells/l Threshold 40 cells/l		Warning: 40,000 cells/l Threshold: 50,000 cells/l
Dinophysis (DSP causative)		***Prorocentrum lima*** (DSP causative)	
	Warning : 80 cells/l Threshold:100 cells/l		Warning: 80 cells/l Threshold: 100 cells/l

The maximum permitted levels of biotoxins in shellfish are:

PSP: 800 µg/kg

LIPOPHILIC TOXINS (TESTED BY LC-MS):

OA/DTXs/PTXs: 160 ug/kg of Okadaic acid equivalents

AZAs: 160 micrograms of azaspiracids equivalents/kilogram

ASP: 20 mg/kg

YTXs: 3.75 milligram of yessotoxin equivalent/kilogram

SAMS MARINE SCIENCE

SeafoodShetland

FUNDING FOR THESE BULLETINS IS KINDLY PROVIDED BY SEAFOOD SHETLAND

Cefas Executive Agency

Toxin concentrations provided courtesy of Cefas

PRIMARY DATA FOR BIOTOXINS AVAILABLE AT:
http://www.food.gov.uk/enforcement/shellfish/algaltoxin/

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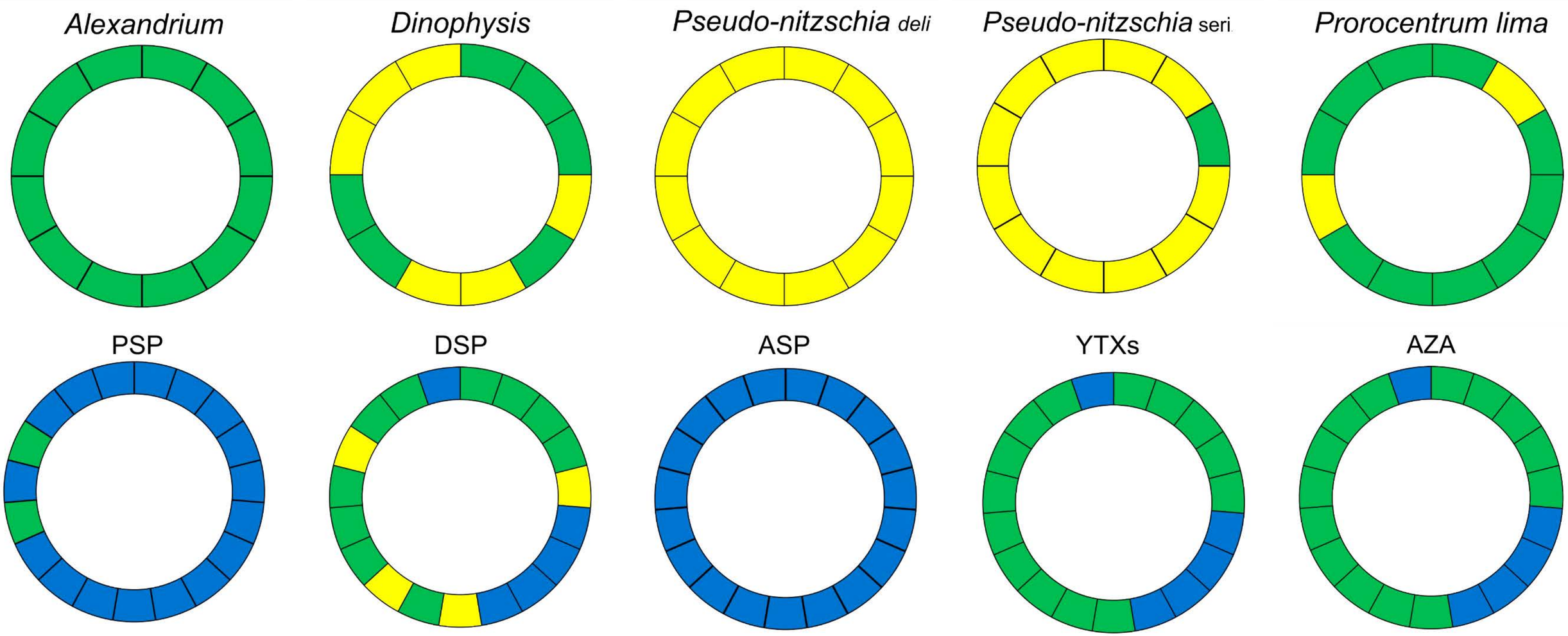
STATUS OF BIOTOXINS & HARMFUL ALGAE PRESENT IN SHETLAND



Segments - no of individual sites, Colours: Green, red, amber and yellow as per key. Blue - not analysed. Coloured segment indicates approximate position of site in Shetland

BIOTOXIN & SPECIES	<RL	RL - 399 µg/kg	400 - 800 µg/kg	>800 µg/kg	Not analysed
PSP	<RL	RL - 399 µg/kg	400 - 800 µg/kg	>800 µg/kg	Not analysed
OA/DTX/PTX	<RL	1 - 79 µg/kg	80 - 160 µg/kg	>160 µg/kg	Not analysed
ASP	<LOQ	LOQ - 9.9 mg/kg	10 - 20 mg/kg	>20 mg/kg	Not analysed
YTX	<RL	1 - 1.7 mg/kg	1.8 - 3.75 mg/kg	>3.75 mg/kg	Not analysed
AZA	<RL	1 - 79 µg/kg	80 -160 µg/kg	>160 µg/kg	Not analysed
Alexandrium	<20 cells/l	n/a	20 cells/l	≥ 40 cells/l	Not sampled
Dinophysis	<20 cells/l	20 - 79 cells/l	80 - 99 cells/l	≥100 cells/l	Not sampled
Pseudo nitzschia	<20 cells/l	20 - 39,999 cells/l	40,000 - 49,999 cells/l	≥50,000 cells/l	Not sampled
Prorocentrum lima	<20 cells/l	20 - 79 cells/l	80 - 99 cells/l	≥100 cells/l	Not sampled

NOTE:

This page is intended as a quick overview of the situation in the Shetland Islands. If the status for a particular species or biotoxin is amber or red please check the relevant pages in the bulletin for more details and specific locations.

RL- reporting limit;
LOQ – Limit of quantification

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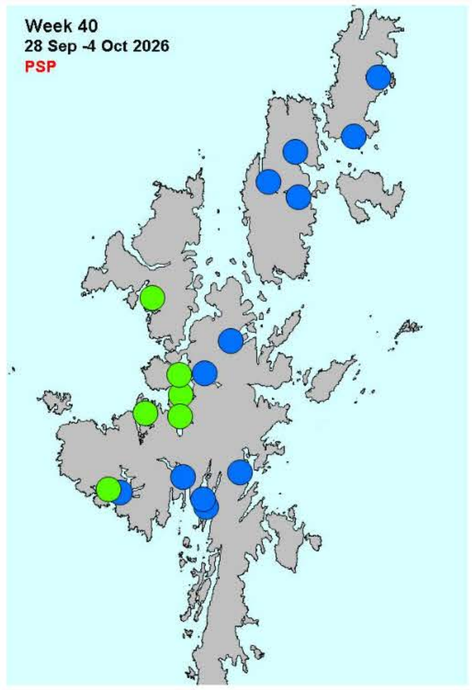
PARALYTIC SHELLFISH POISONING TOXINS & CAUSATIVE PHYTOPLANKTON

PSP

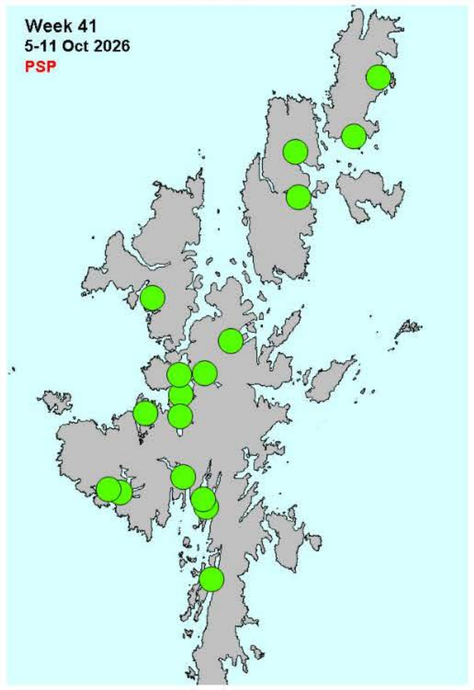
µg STX eq/kg

- Not Analyzed
- 0
- 0-400
- 400-800
- 800-1,600
- 1,600-2,000
- 2,000-3,000
- 3,000-4,000
- >=4,000

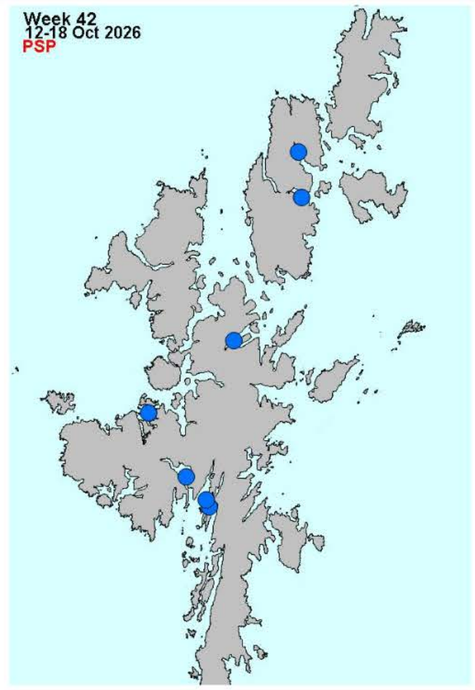
Week 40
28-4 Oct 2026



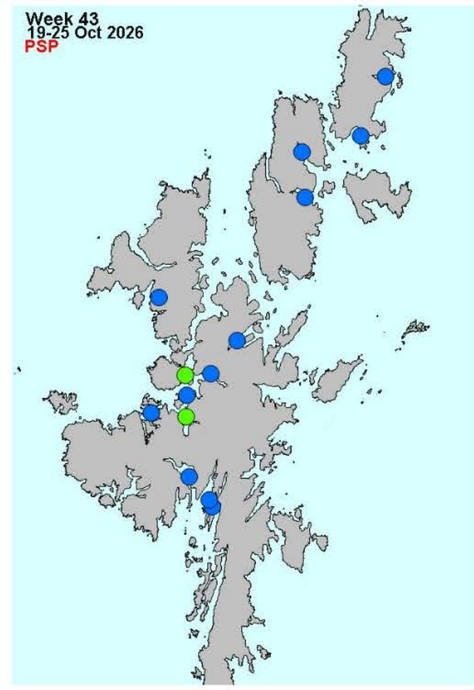
Week 41
5-11 Oct 2026



Week 42
12-18 Oct 2026



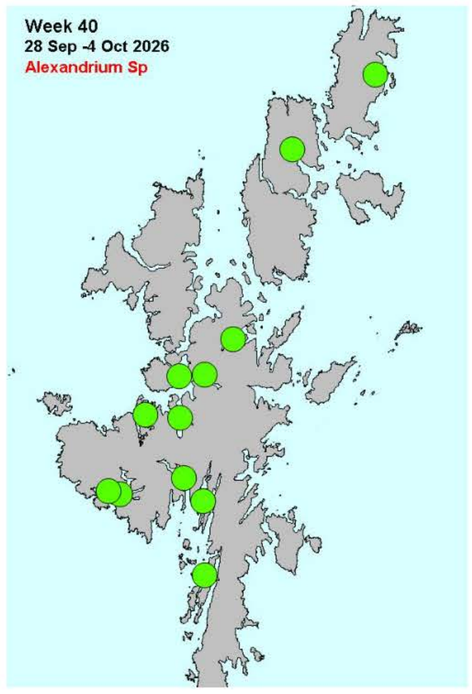
Week 43 CURRENT
19-25 Oct 2026

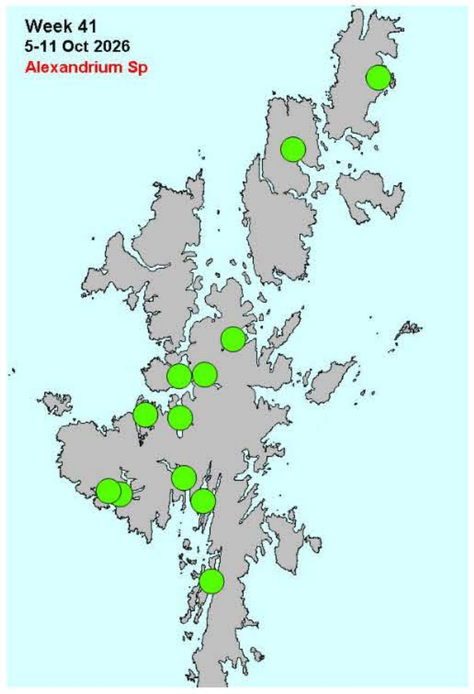


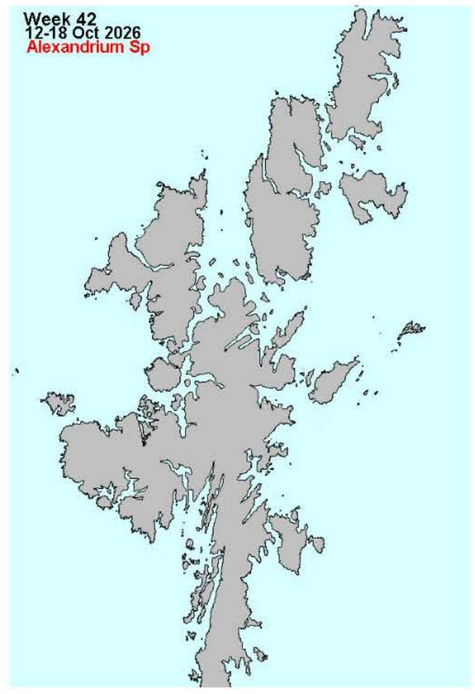
ALEXANDRIUM SP.

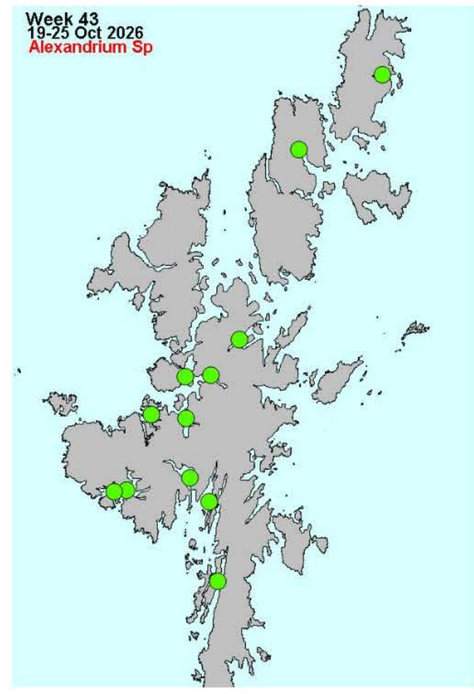
cells\l

- 0
- 1-20
- 20-500
- 500-2,000
- 2,000-5,000
- 5,000-20,000
- >=20,000









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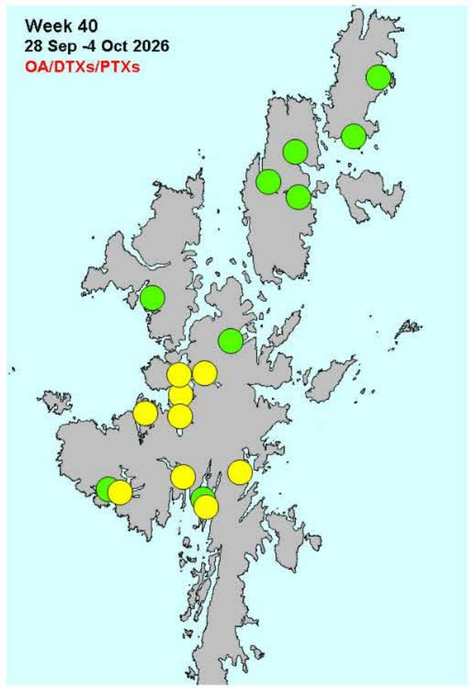
DIARRHETIC SHELLFISH POISONING TOXINS & CAUSATIVE PHYTOPLANKTON

OA/DTXS/PTXS

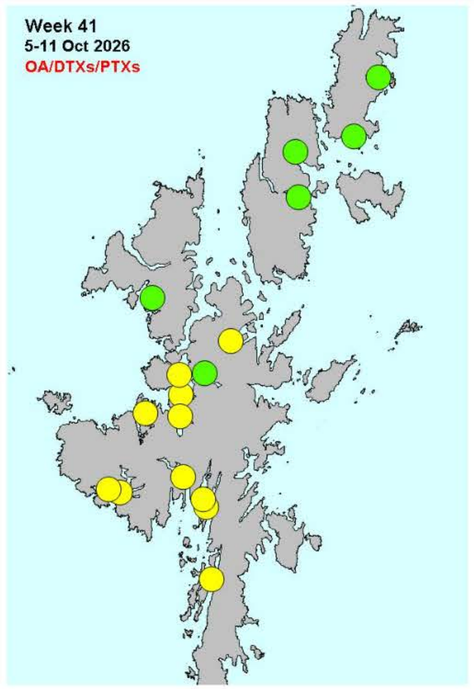
µg OA eq/kg

- Not Analyzed
- 0
- 0-80
- 80-160
- 160-500
- 500-1,000
- 1,000-2,000
- 2,000-5,000
- >=5,000

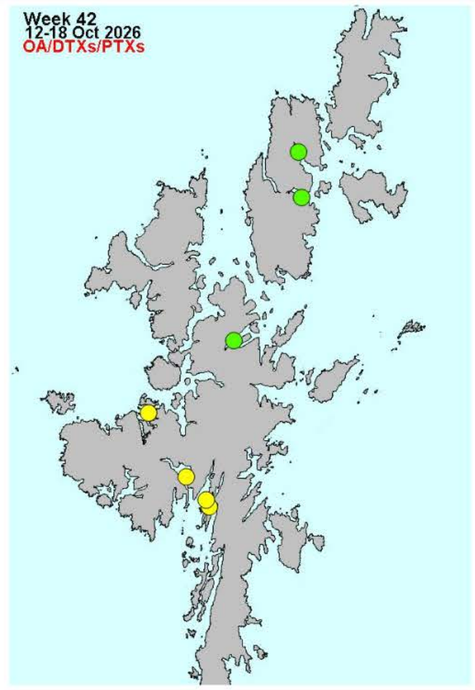
Week 40
28-4 Oct 2026



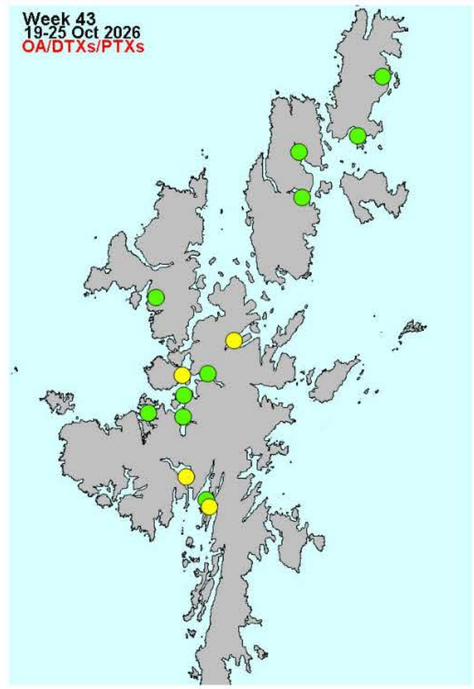
Week 41
5-11 Oct 2026



Week 42
12-18 Oct 2026



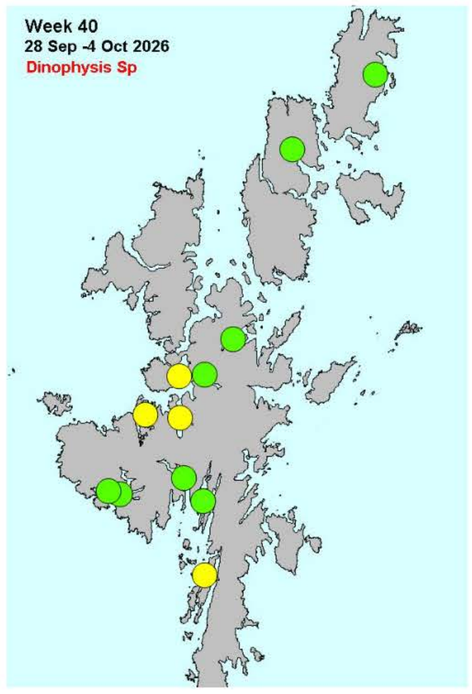
Week 43 CURRENT
19-25 Oct 2026

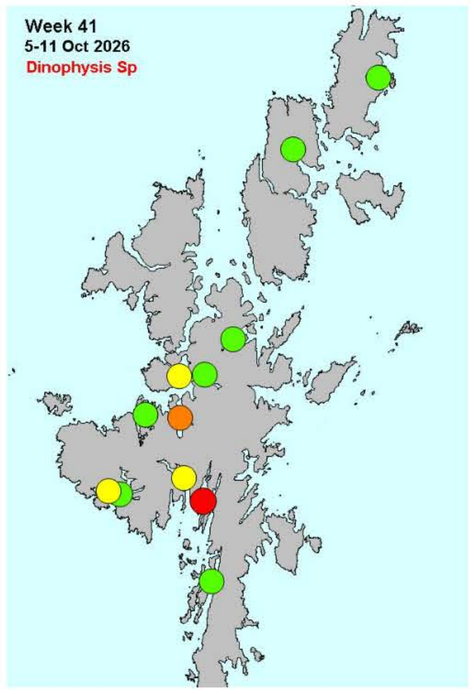


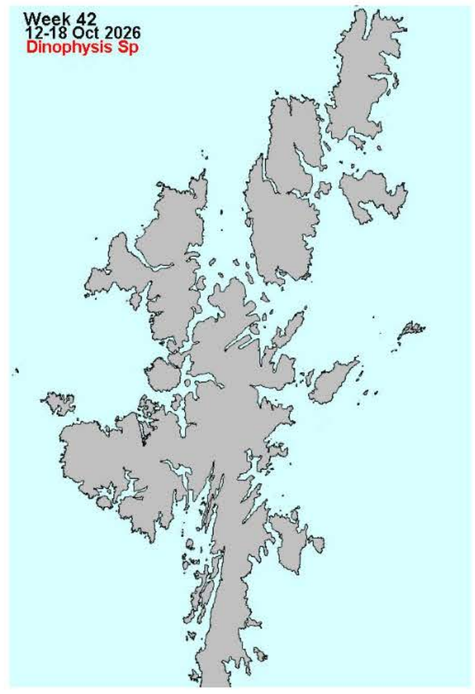
DINOPHYSIS SP.

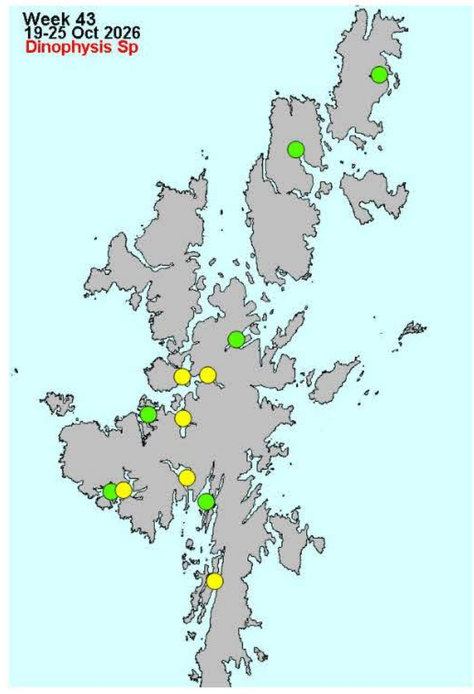
cells\l

- 0
- 0-80
- 80-100
- 100-400
- 400-1,000
- 1,000-2,000
- 2,000-5,000
- >=5,000









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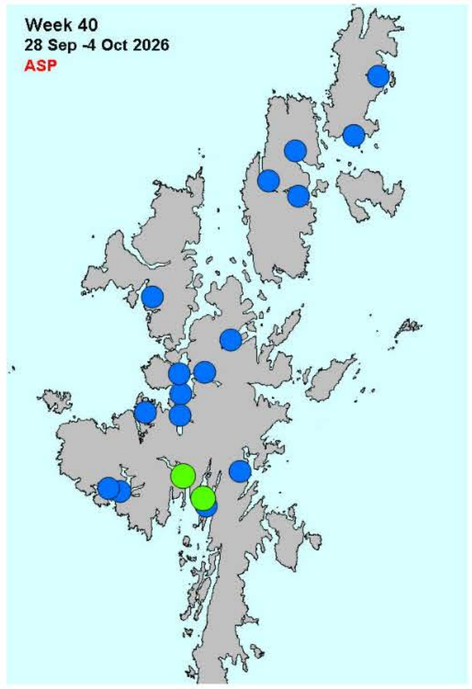
AMNESIC SHELLFISH POISONING & CAUSATIVE PHYTOPLANKTON

ASP

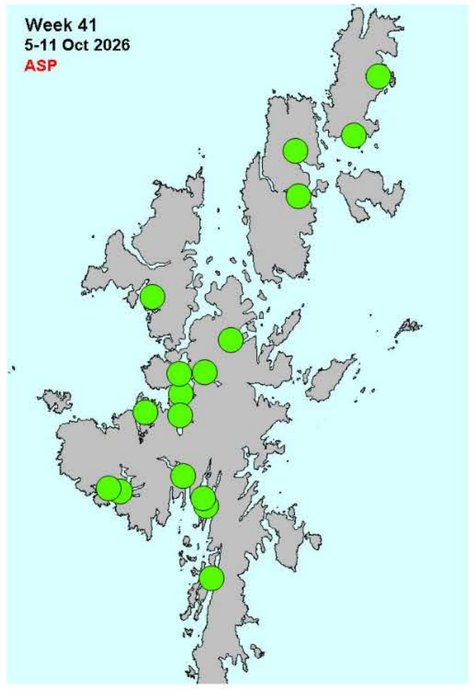
mg/kg

- Not Analyzed
- 0
- 0-10
- 10-20
- 20-50
- 50-100
- 100-500
- 500-1,000
- >=1,000

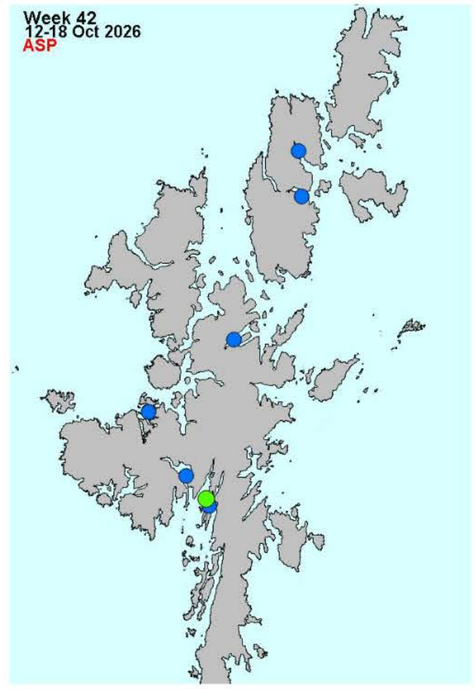
Week 40
28-4 Oct 2026



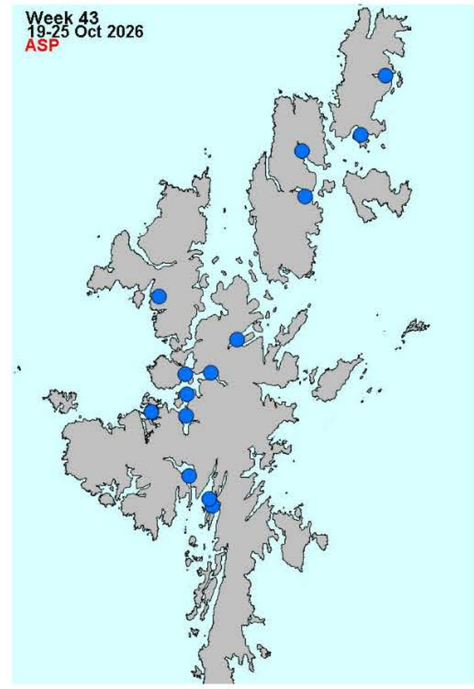
Week 41
5-11 Oct 2026



Week 42
12-18 Oct 2026



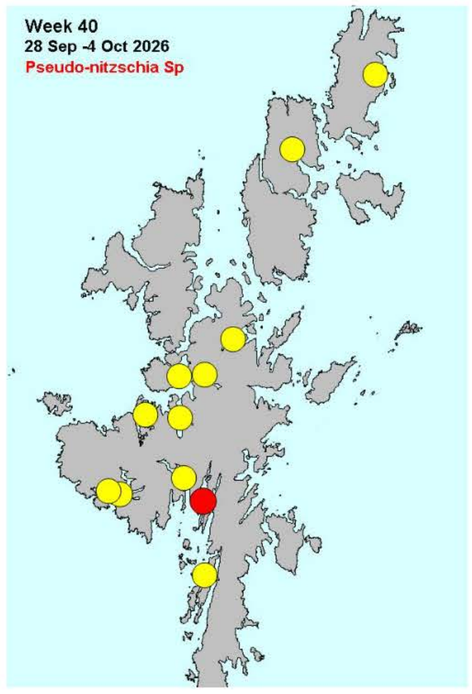
Week 43 CURRENT
19-25 Oct 2026

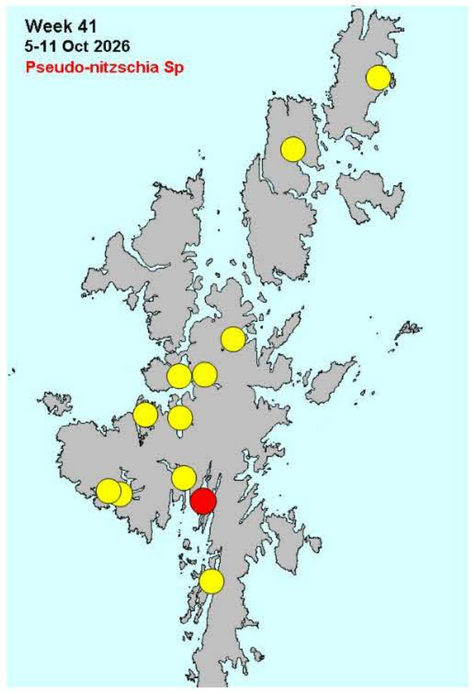


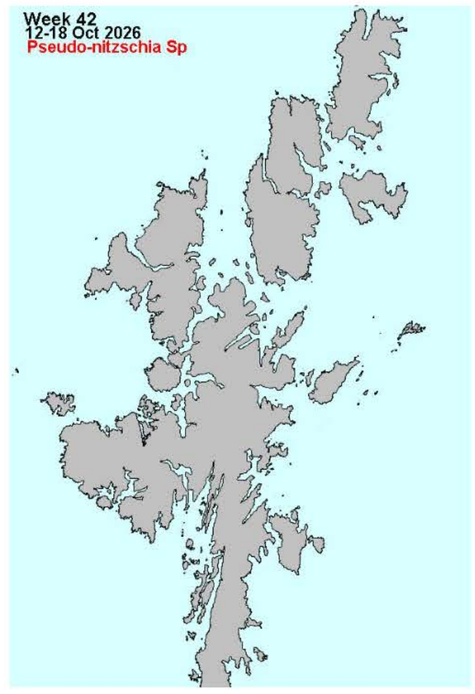
PSEUDO-NITZSCHIA SP.

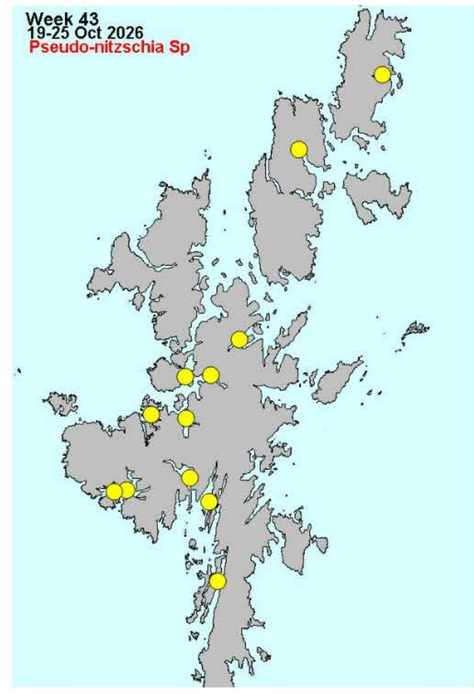
cells\l

- 0
- 0-39,999
- 40,000-49,999
- 50,000-100,000
- 100,000-200,000
- 200,000-500,000
- 500,000-1,000,000
- >=1,000,000









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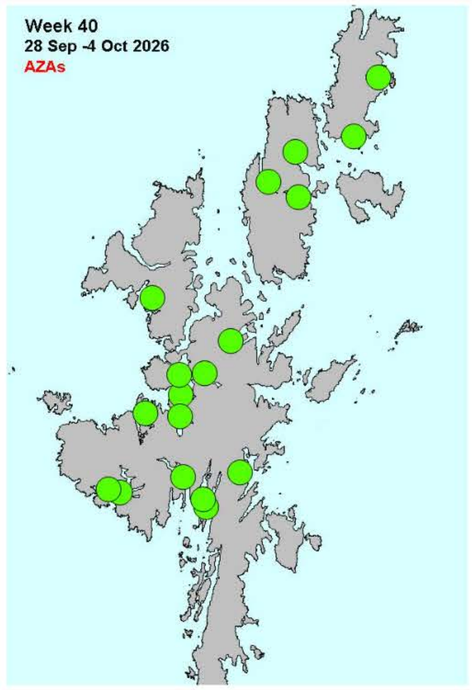
AZASPIRACID & YESSOTOXIN SHELLFISH POISONING TOXINS

AZAS

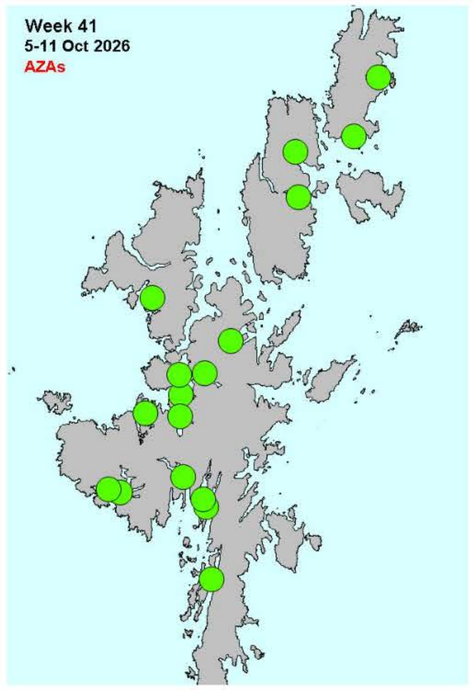
µg AZA1 eq/kg

- Not Analyzed
- 0
- 0-100
- 100-160
- 160-500
- 500-1,000
- 1,000-2,000
- 2,000-5,000
- >=5,000

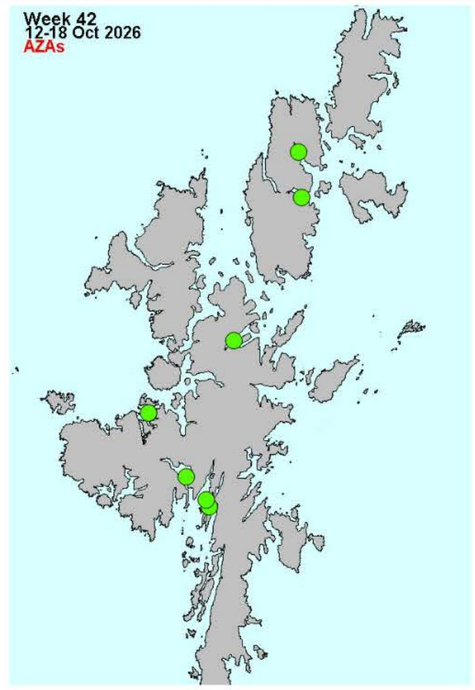
Week 40
28-4 Oct 2026



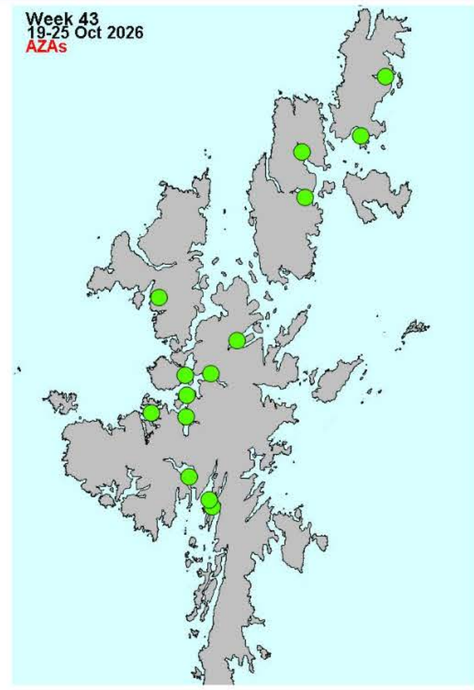
Week 41
5-11 Oct 2026



Week 42
12-18 Oct 2026



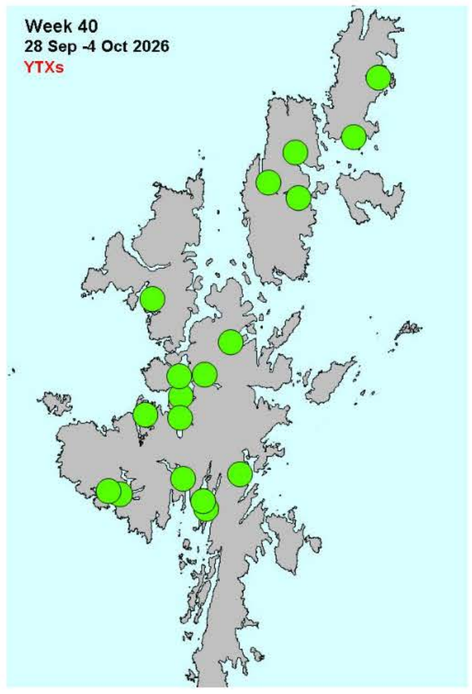
Week 43 CURRENT
19-25 Oct 2026

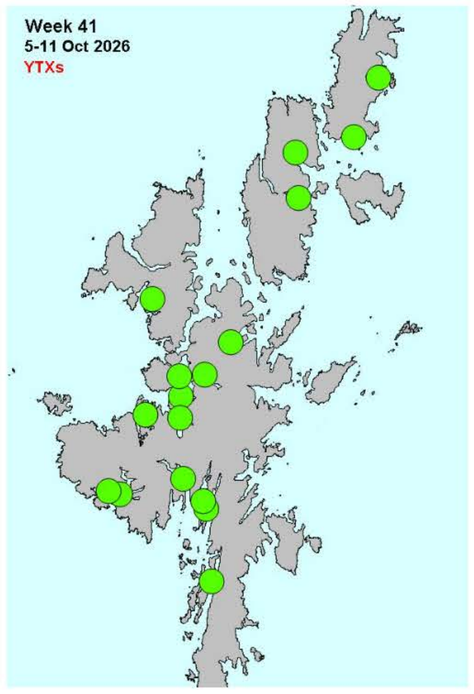


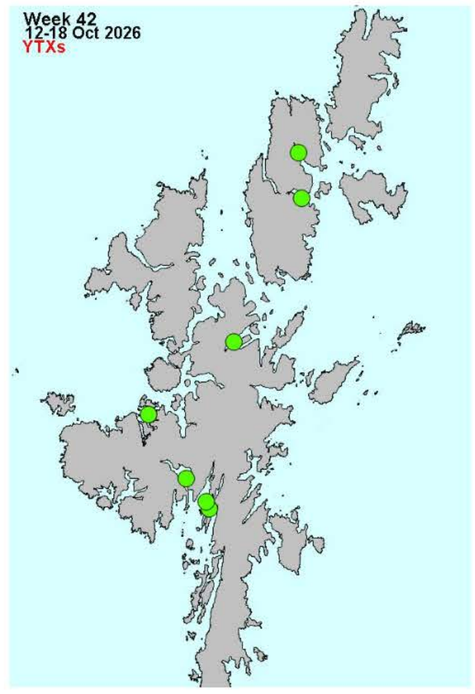
YTXS

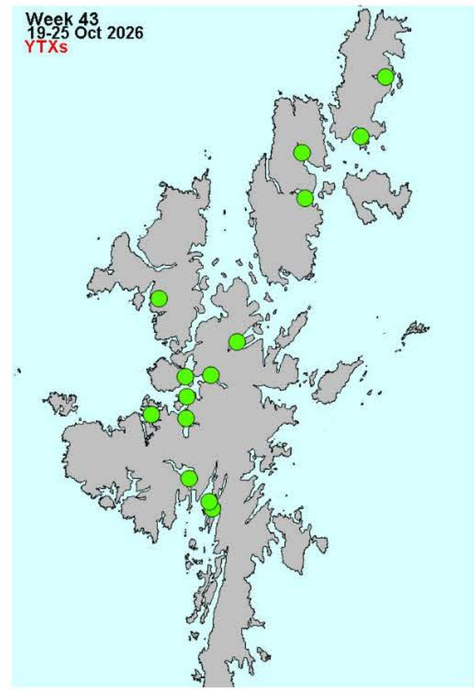
mg YTX eq/kg

- Not Analyzed
- 0
- 0-1.4
- 1.5-3.74
- >=3.75



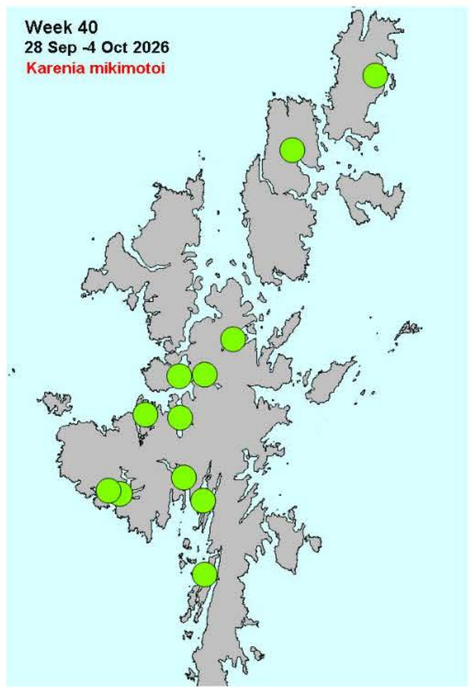


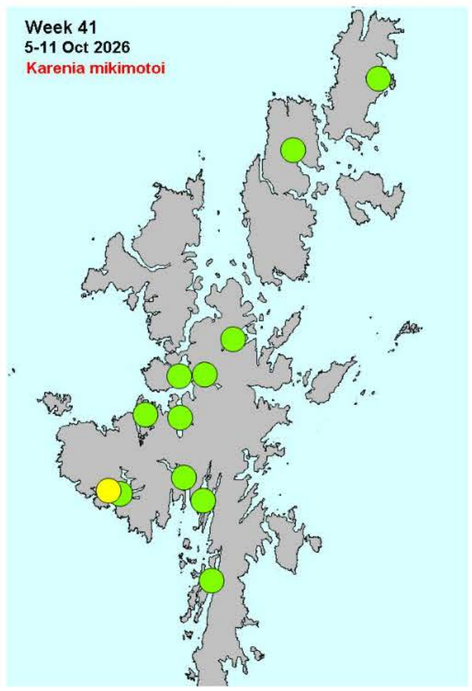


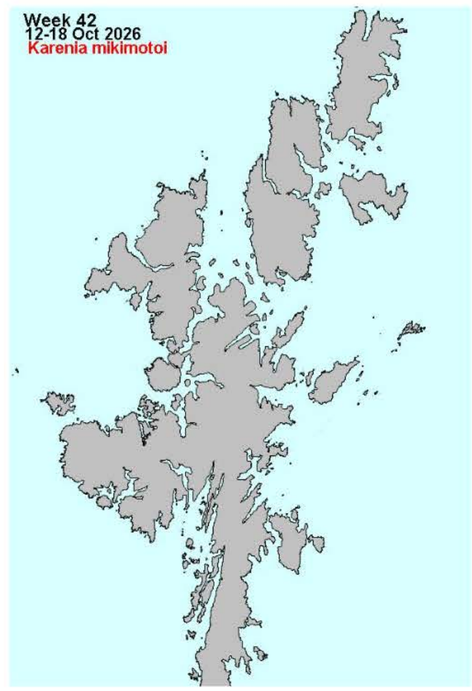


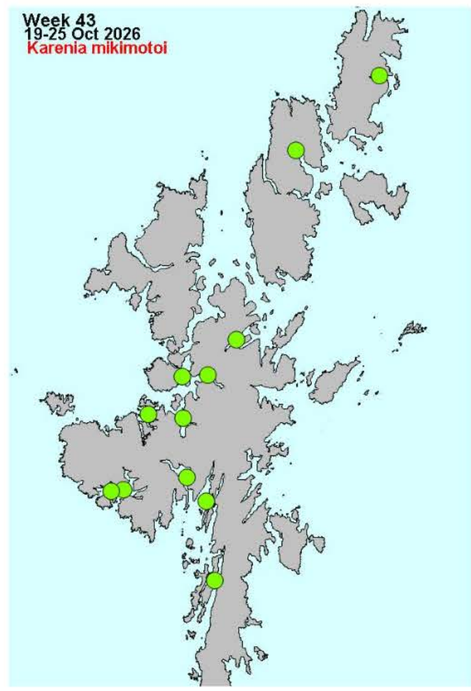
Shetland Bulletin on the status of harmful & toxic algae Week 43, 19th - 25th Oct 2026

KARENIA MIKIMOTOI









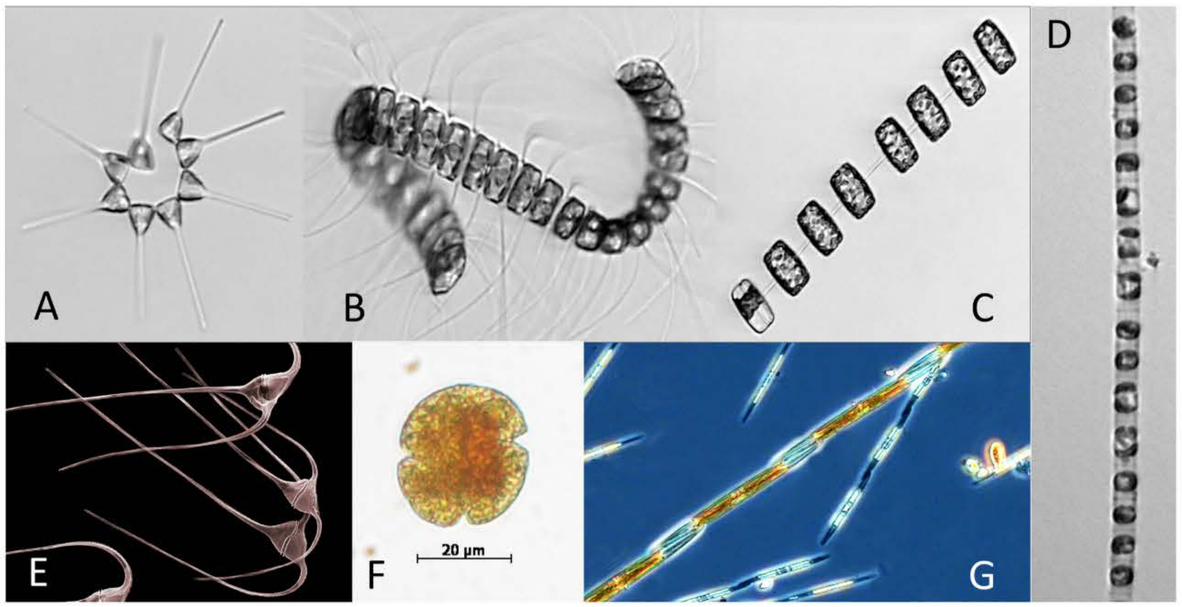
CHAIN FORMING PHYTOPLANKTON

High densities of chain forming diatoms including, but not limited to the genus, Chaetoceros, Skeletonema, Leptocylindrus , Rhizosolenia, Thalassiosira, Corethron and Pseudo-nitzschia, the centric species Coscinodiscus wailesii, and species with long spines such as Ceratium (Tripos) can cause debilitating damage to fish gills.

STATUS

Twelve sites were sampled this week. Karenia was not detected. The IFCB's at Cole Deep and Scalloway are offline for maintenance

https://www.habreports.org/ifcb-nafc.php

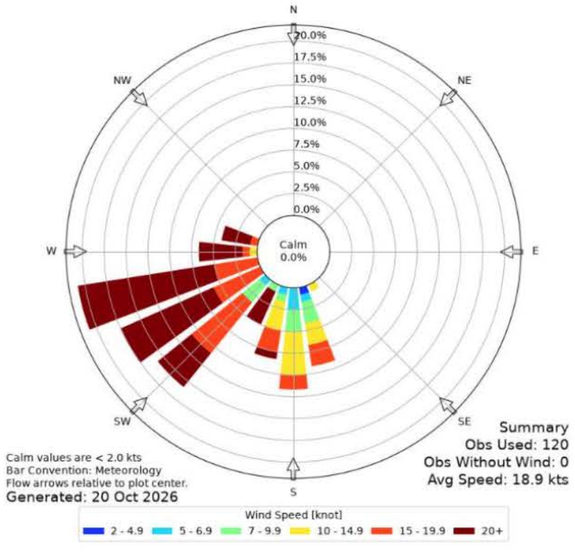


A. Asterionellopsis spp. B. Chaetoceros spp. C. Thalassiosira spp. D. Skeletonema spp. E. Ceratium Horridum F. Karenia mikimotoi G. Pseudo-nitzschia spp.

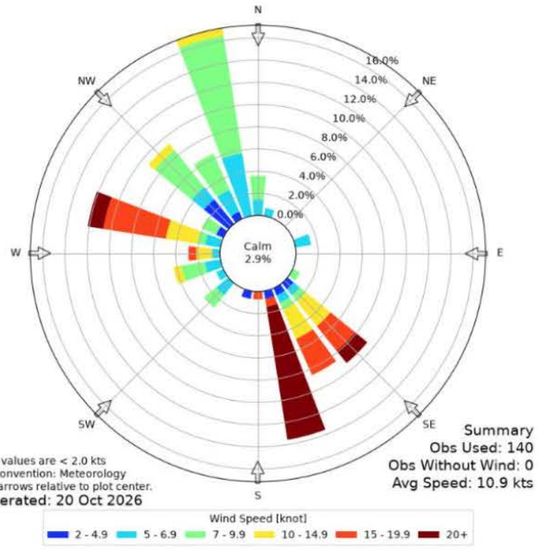
Shetland Bulletin on the status of harmful & toxic algae Week 43, 19th - 25th Oct 2026

MEAN WIND DIRECTION OBSERVED IN SHETLAND FOR CURRENT AND THREE PRECEDING WEEKS

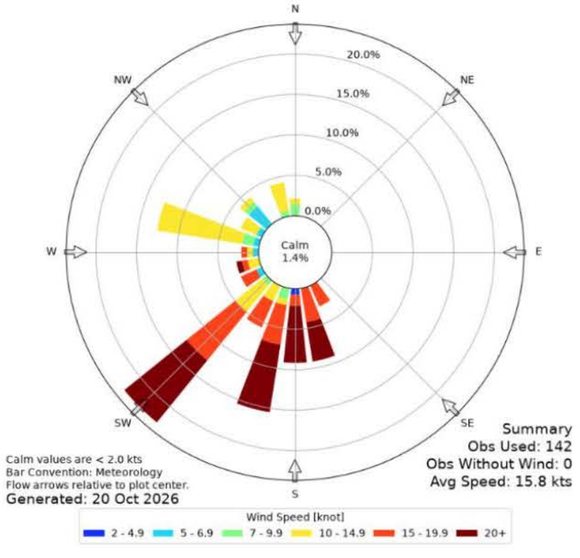
Week 40



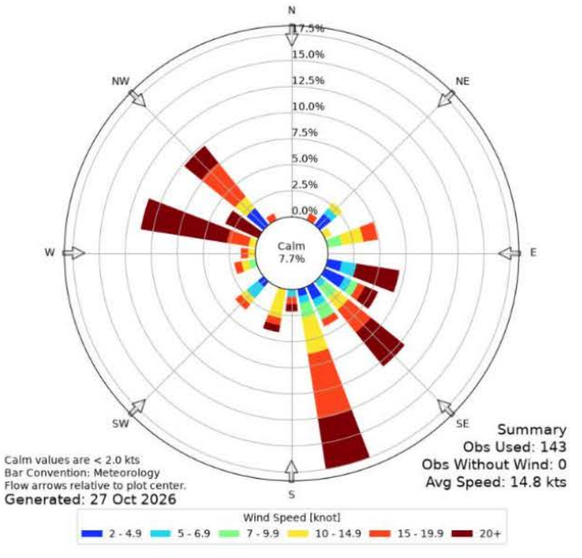
Week 41



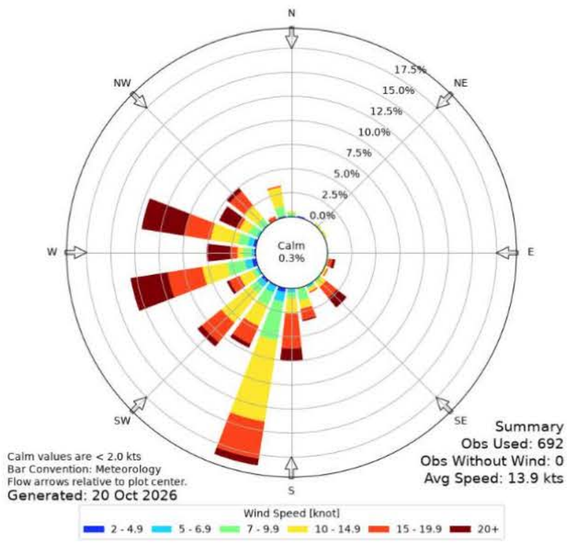
Week 42



Week 43



September



Mean wind direction and speed observed in Shetland over the past four weeks. Higher wind speeds are shown in lighter shades. The percentage of time the wind blew from any particular direction is shown by the length of the triangle. The resultant vector, represented by the red or blue line, shows the average wind direction for the week. It is based on wind direction only and includes periods of calm which are not indicated on the diagram. The data used is taken from the weather station at Sumburgh.

PREDICTIONS:

The risk of wind blown *Dinophysis* blooms in Shetland is LOW this week.

WHY DO WE THINK THIS?

Wind this week has been mainly from the south, south east and it is very unlikely that there will be an advected bloom of Dinophysis this week.

STATUS:

Wind this week has been mainly from the south, south east.

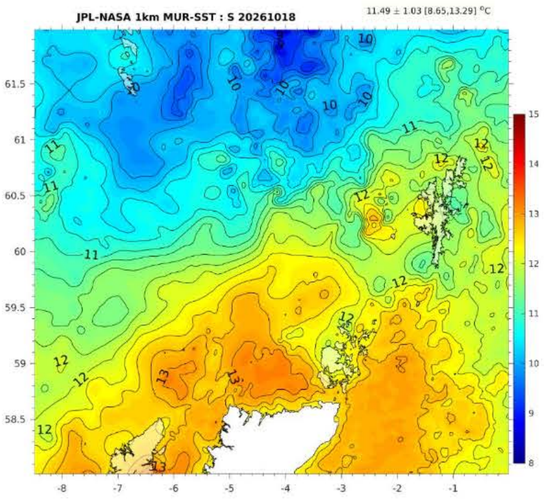
Shetland Bulletin on the status of harmful & toxic algae Week 43, 19th - 25th Oct 2026

SEA SURFACE TEMPERATURE (°C) IN PRECEDING 6 DAYS IN THE SHETLAND ISLANDS

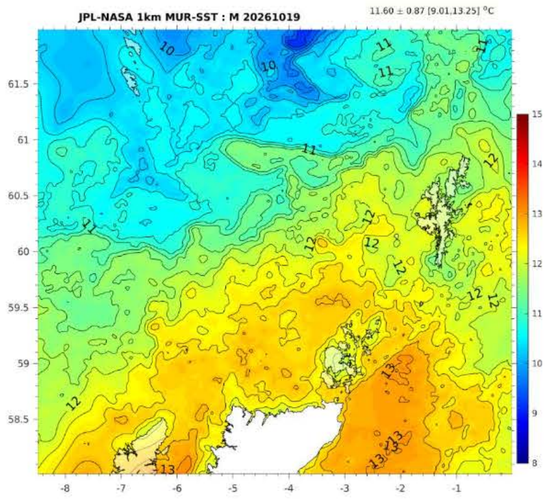
TEMP °C

15
14
13
12
11
10
9
8

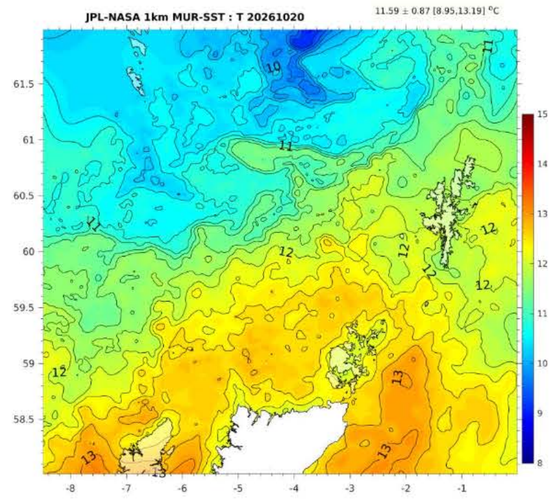
18 Oct 2026



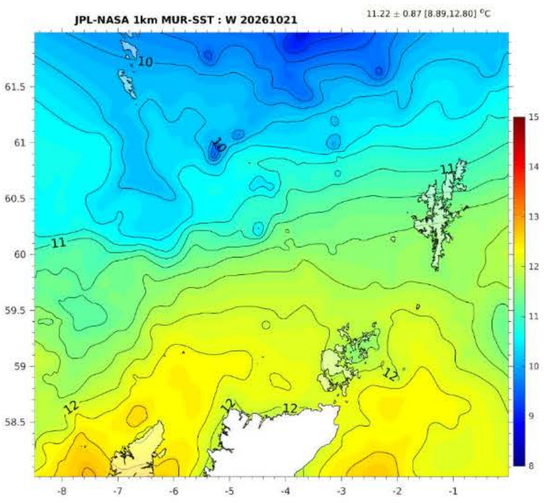
19 Oct 2026



20 Oct 2026



21 Oct 2026



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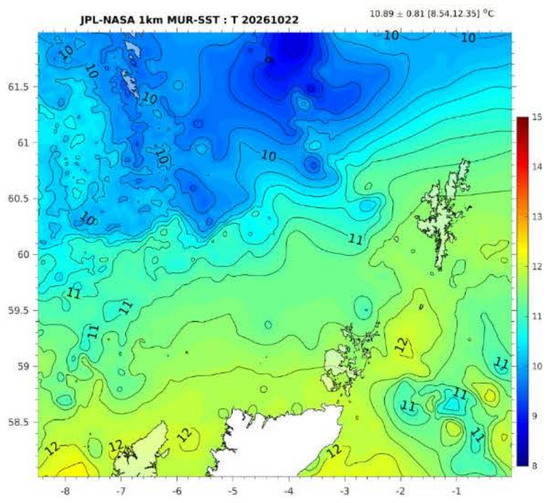

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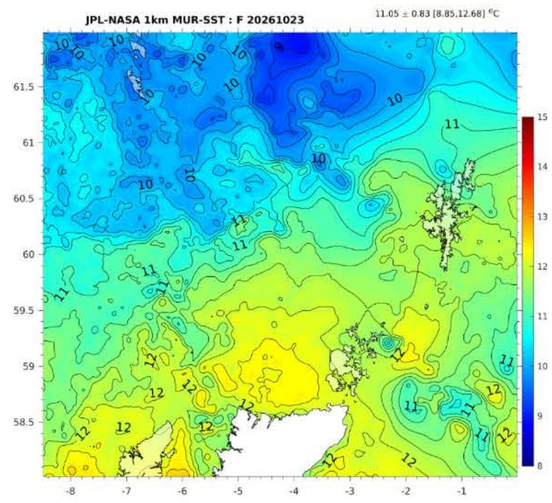

Maps provided courtesy of the Jet Propulsion Laboratory, NASA

NASA JPL

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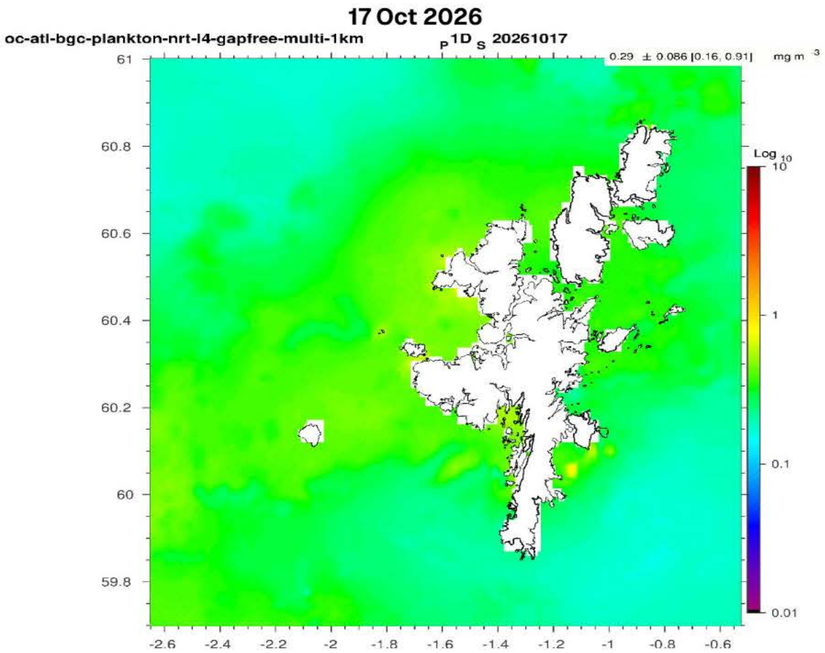
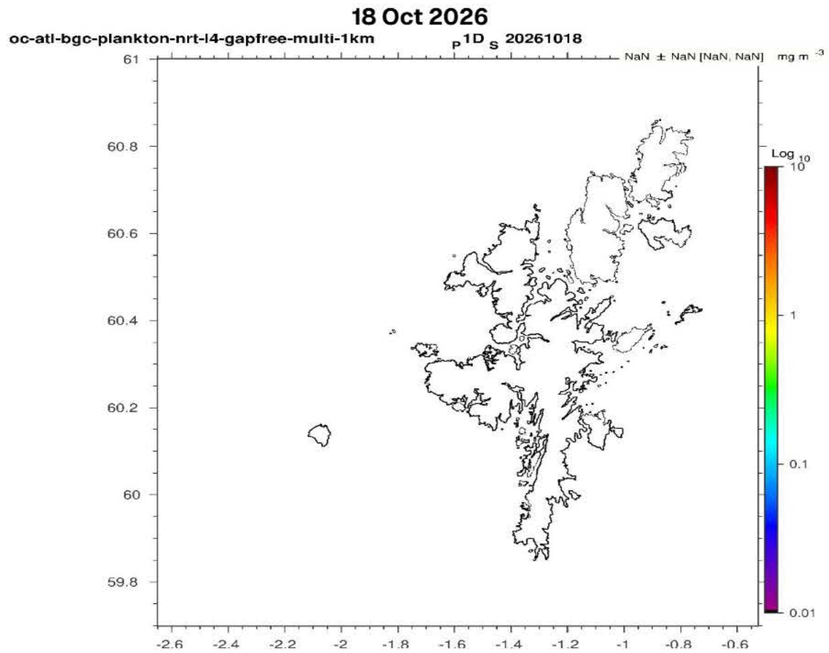
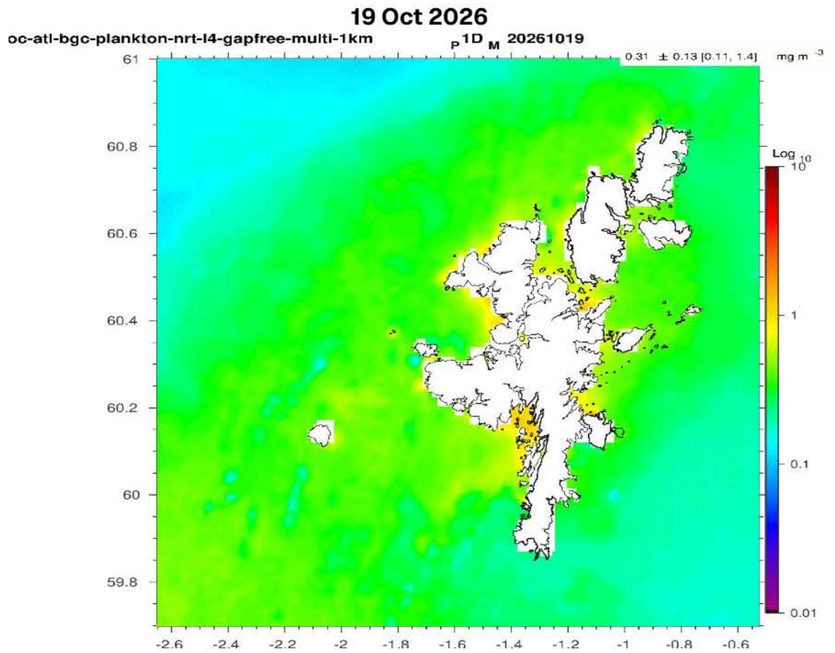
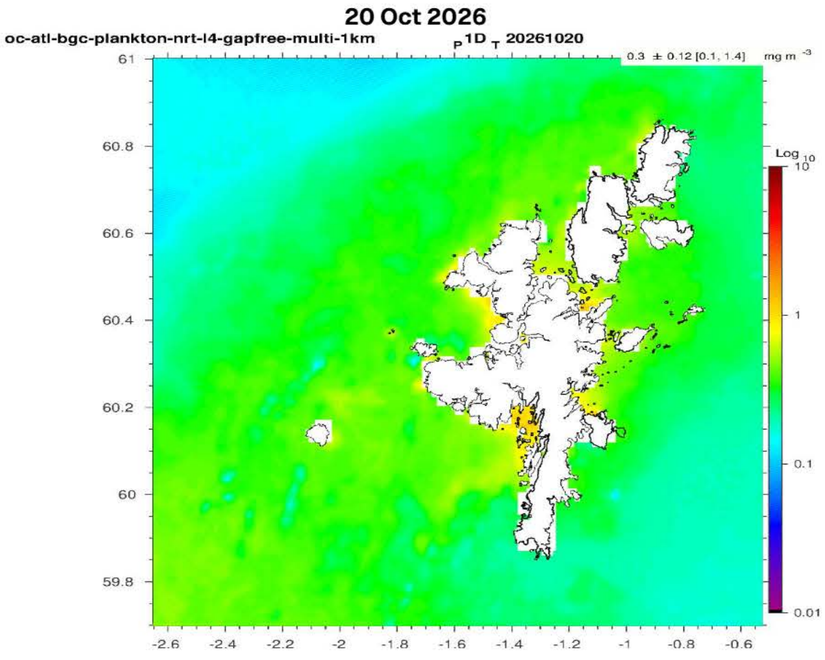
CHLOROPHYLL CONCENTRATIONS (MG/M³)

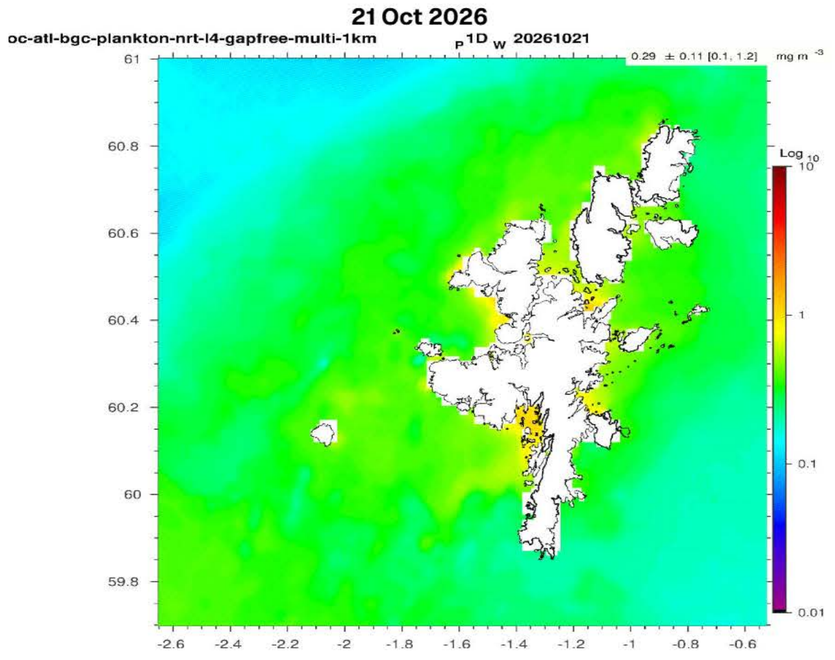








These diagrams show the mass concentration of chlorophyll-a around Shetland. Yellows to reds indicate higher concentrations. However it should be noted that turbidity and the presence of organic material deposited into near shore areas can give false positive readings making the concentrations appear much higher than in situ observations would indicate.



Images provided by the Ocean Colour atl-chl-L-L4 NRT-Observations-Copernicus