Shetland Bulletin on the status of harmful & toxic algae Week 45, 2nd-8th November 2026

SHETLAND BULLETIN ON THE STATUS OF HARMFUL & TOXIC ALGAE

BIOTOXIN REPORT:

Auto-resizing | Edit Text

ASP toxins: Thirteen sites were analysed this week. No toxins were detected.

AZA toxins: Thirteen sites were analysed this week. No toxins were detected.

DSP toxins: Thirteen sites were analysed this week. Toxins were detected at low levels in Stream Sound and Hamar Voe.

PSP toxins: Thirteen sites were analysed this week. No toxins were detected.

YTX toxins: Thirteen sites were analysed this week. No toxins were detected.

HARMFUL ALGAE REPORT:

Auto-resizing | Edit Text

Alexandrium: One sample was analysed this week. Alexandrium was not detected.

Dinophysis: One sample was analysed this week. Dinophysis was detected at low levels in East of Linga.

Karenia mikimotoi: One sample was analysed this week. Karenia was not detected.

Prorocentrum lima: One sample was analysed this week. P.lima was detected at low levels in East of Linga.

Pseudo-nitzschia delicatissima: One sample was analysed this week. P. delicatissima was detected in East of Linga.

Pseudo-nitzschia seriata: One sample was analysed this week. P seriata was not detected.

SHETLAND: TRENDS AND FORECAST

Auto-resizing | Edit Text

Alexandrium/PSP: *Alexandrium was not detected this week. Toxins were not detected. It is very unlikely there will be a toxic bloom this week.*

Dinophysis/DSP: *Dinophysis was detected at one site this week. Toxins were detected at low concentrations at two sites. It is very unlikely there will be a toxic bloom this week.*

Pseudo-nitzschia/ASP: *P. delicatissima was detected at low concentrations at one site. P.serriata was not detected. Toxins were not detected. It is very unlikely there will be a toxic bloom this week.*

AZA and YTX: *No toxins were detected. It is extremely 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)	Warning 20 cells/l Threshold 40 cells/l	***Pseudo nitzschia*** (ASP causative)	Warning: 40,000 cells/l Threshold: 50,000 cells/l
Dinophysis (DSP causative)	Warning : 80 cells/l Threshold:100 cells/l	***Prorocentrum lima*** (DSP causative)	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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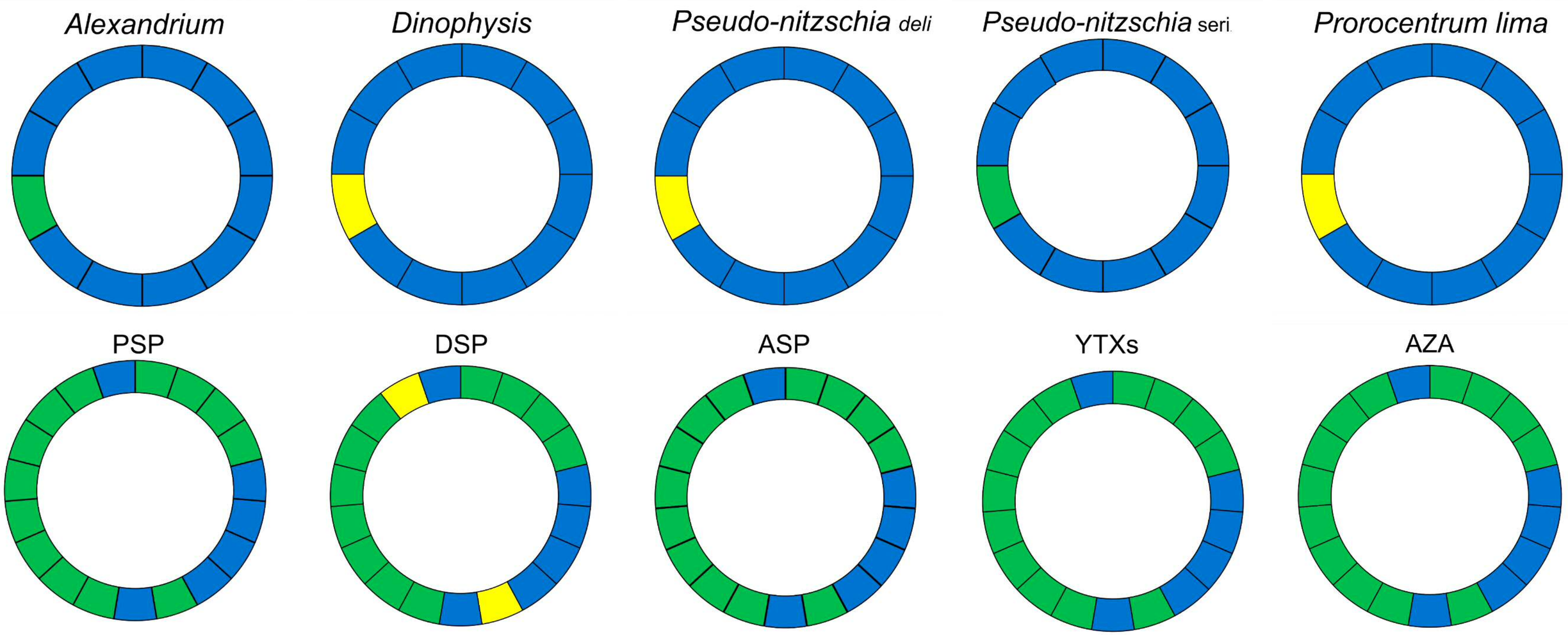
STATUS OF BIOTOXINS & HARMFUL ALGAE PRESENT IN SHETLAND



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

Shetland Bulletin on the status of harmful & toxic algae Week 45, 2nd-8th November 2026

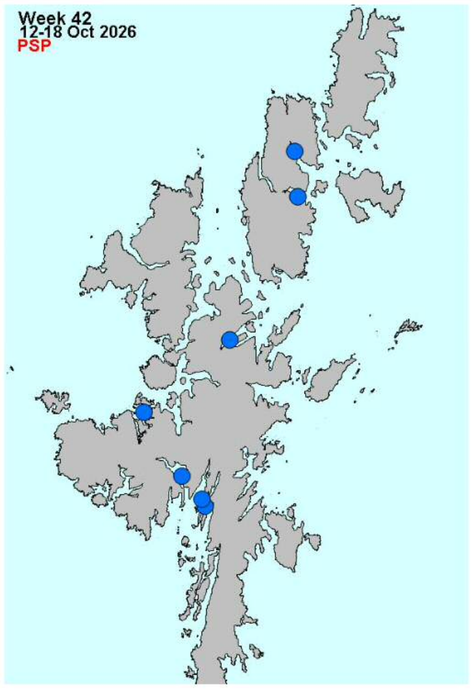
PARALYTIC SHELLFISH POISONING TOXINS & CAUSATIVE PHYTOPLANKTON

PSP

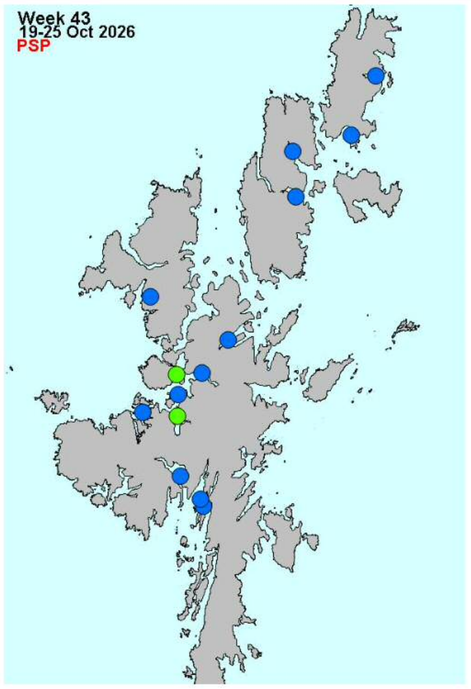
µg STX eq/kg

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

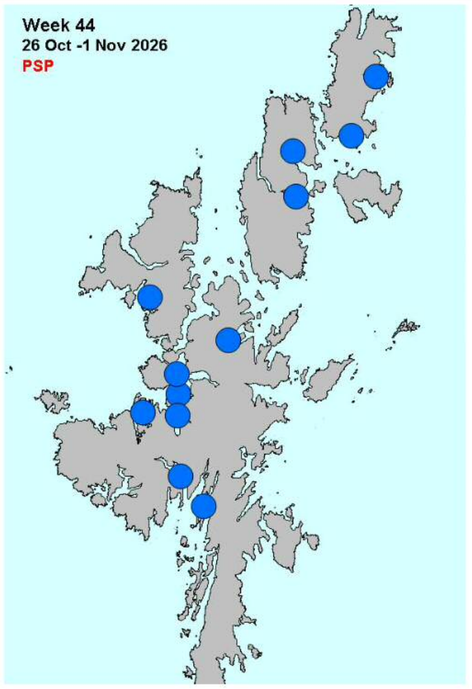
Week 42
12-18 Oct 2026



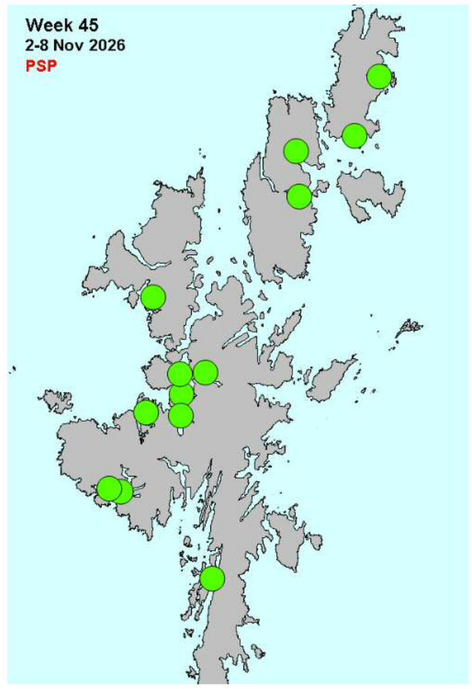
Week 43
19-25 Oct 2026



Week 44
26-1 Nov 2026



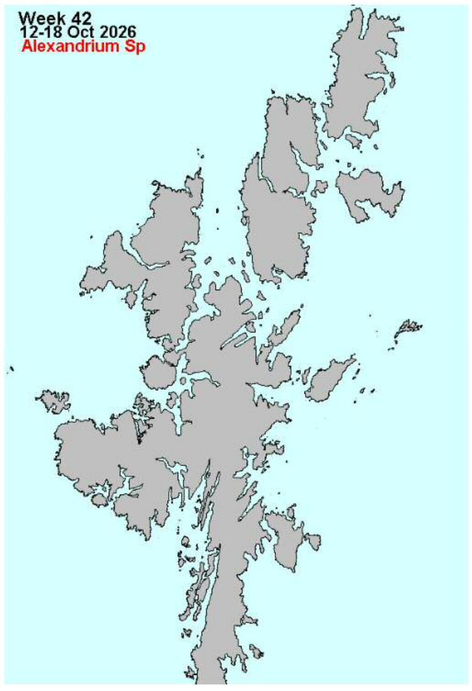
Week 45 CURRENT
2-8 Nov 2026

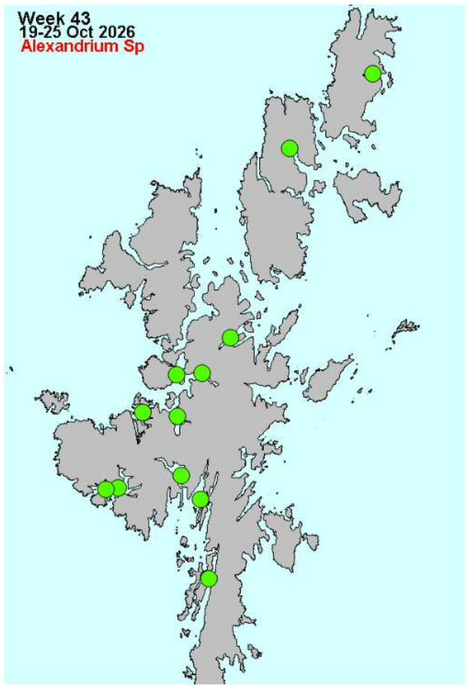


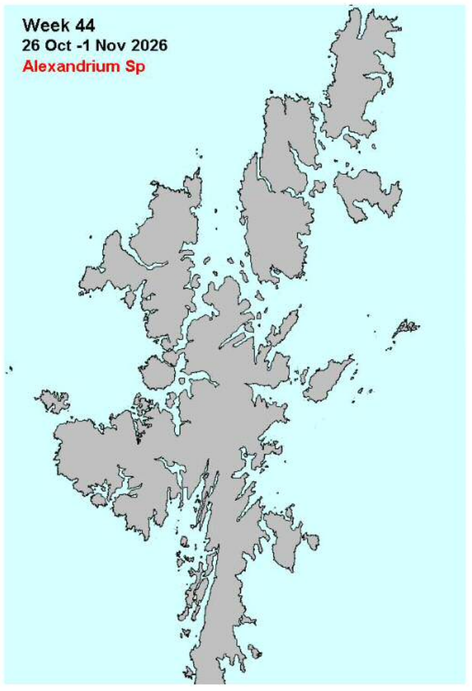
ALEXANDRIUM SP.

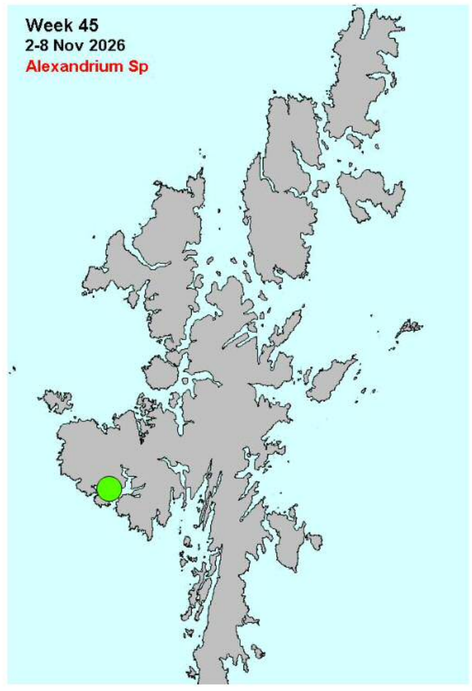
cells\l

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









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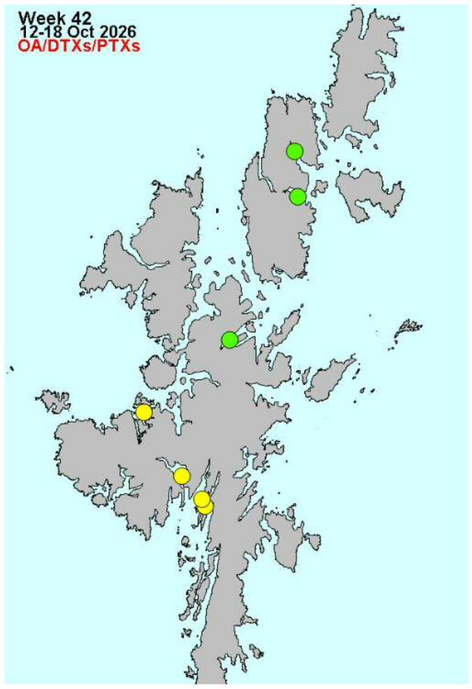
DIARRHETIC SHELLFISH POISONING TOXINS & CAUSATIVE PHYTOPLANKTON

OA/DTXS/PTXS

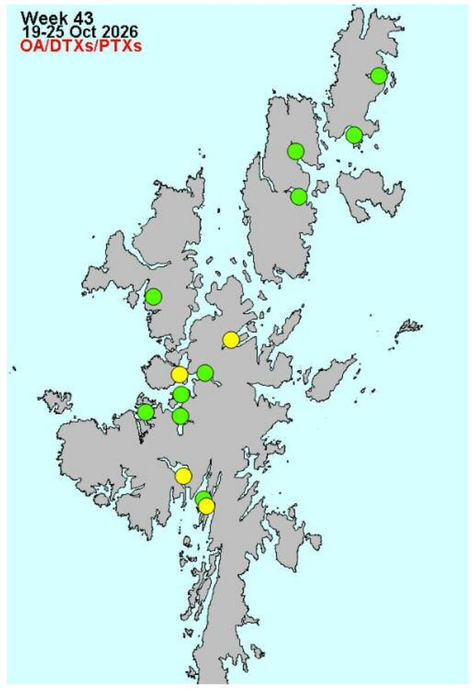
µg OA eq/kg

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

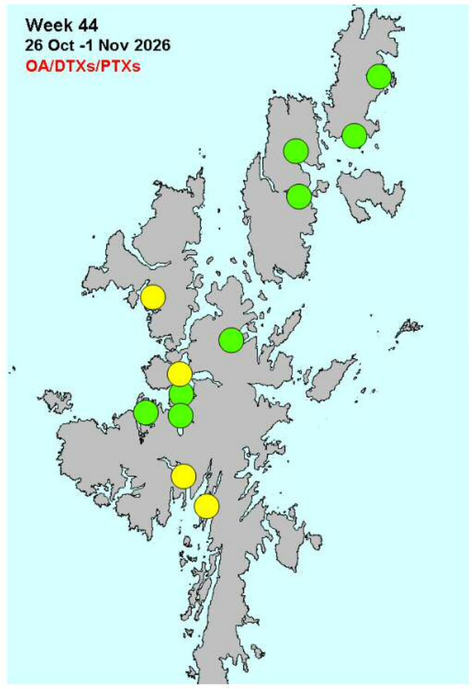
Week 42
12-18 Oct 2026



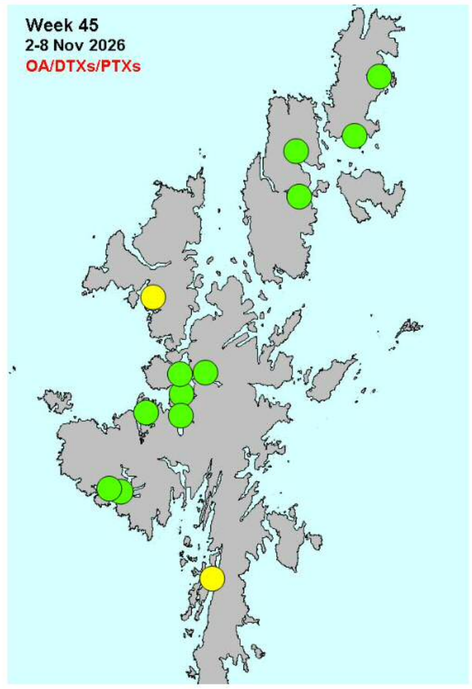
Week 43
19-25 Oct 2026



Week 44
26 Oct -1 Nov 2026



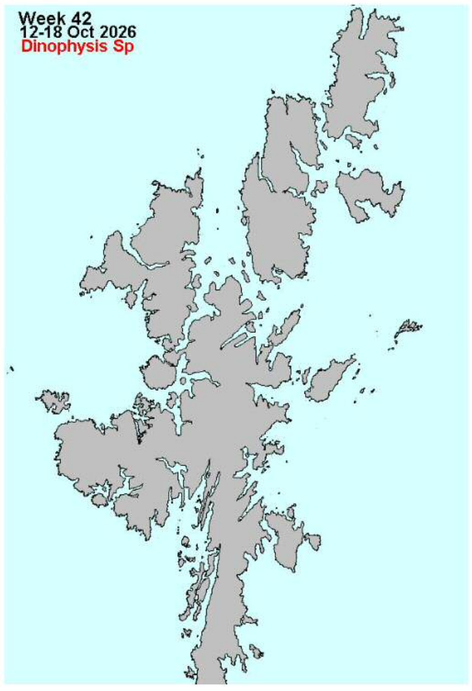
Week 45 CURRENT
2-8 Nov 2026

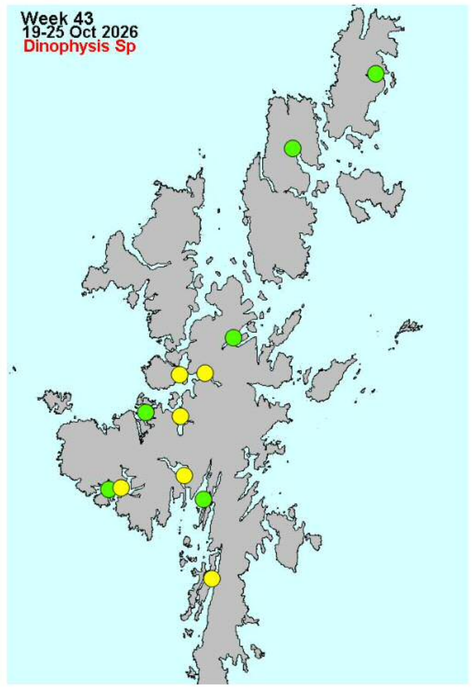


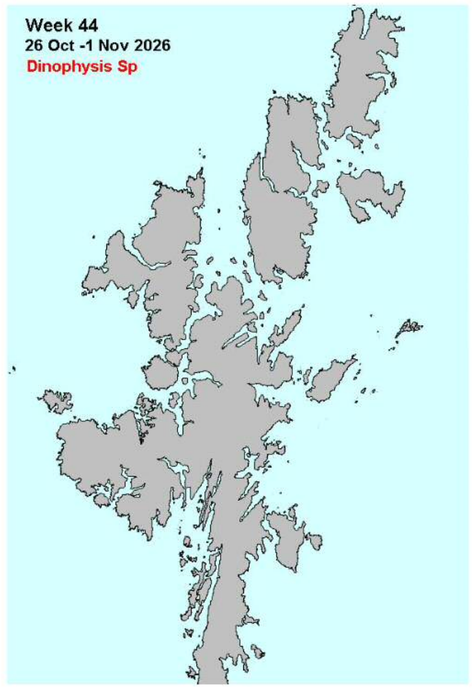
DINOPHYSIS SP.

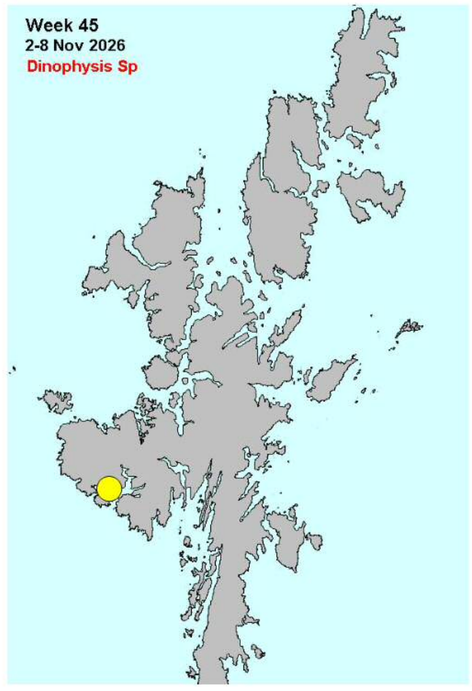
cells\l

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









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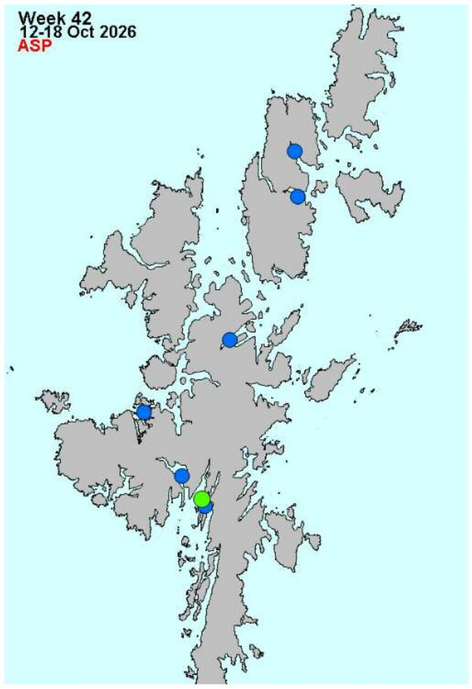
AMNESIC SHELLFISH POISONING & CAUSATIVE PHYTOPLANKTON

ASP

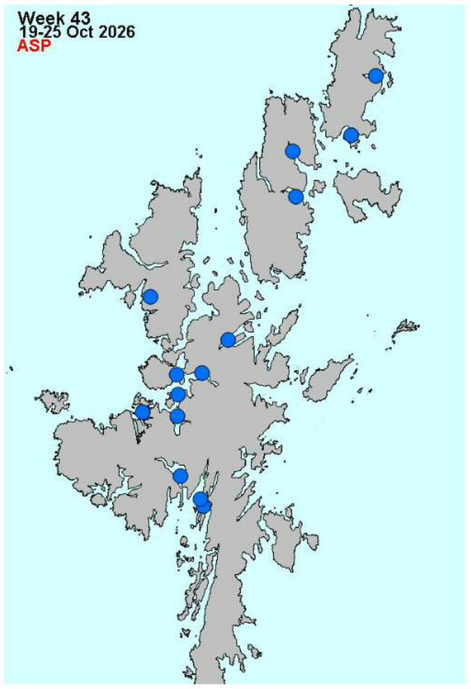
mg/kg

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

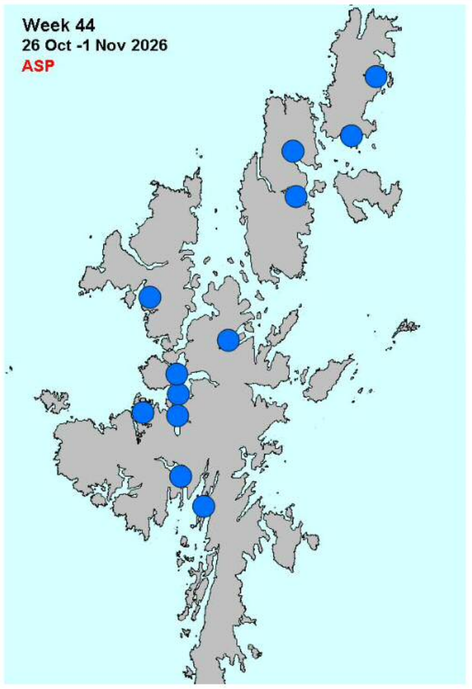
Week 42
12-18 Oct 2026



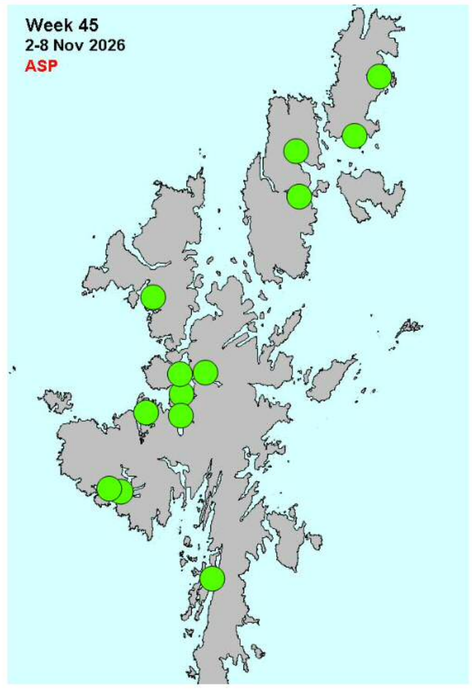
Week 43
19-25 Oct 2026



Week 44
26-1 Nov 2026



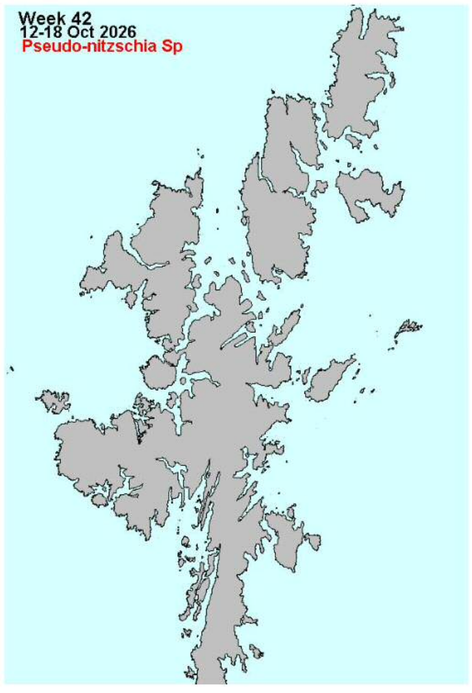
Week 45 CURRENT
2-8 Nov 2026

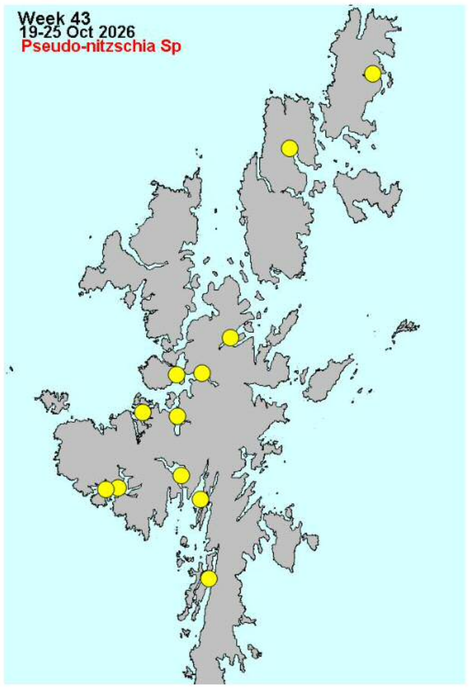


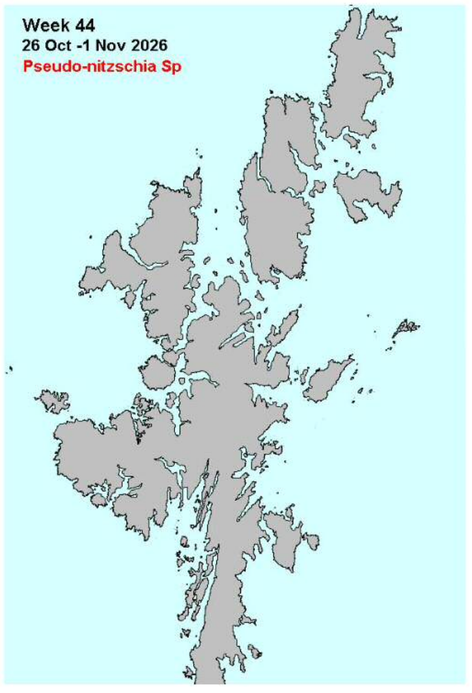
PSEUDO-NITZSCHIA SP.

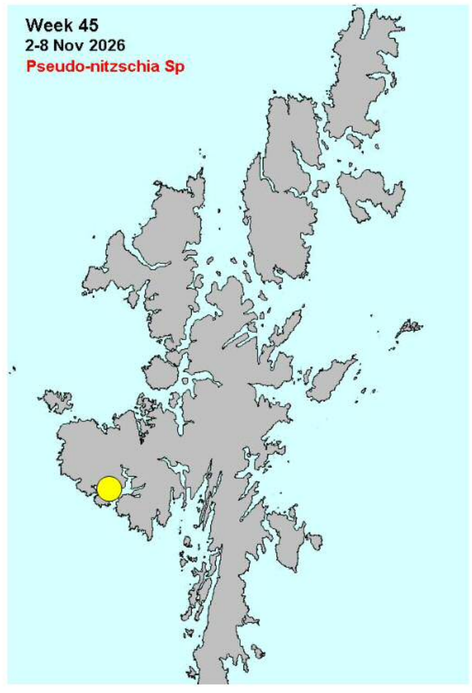
cells\l

- 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









Shetland Bulletin on the status of harmful & toxic algae Week 45, 2nd-8th November 2026

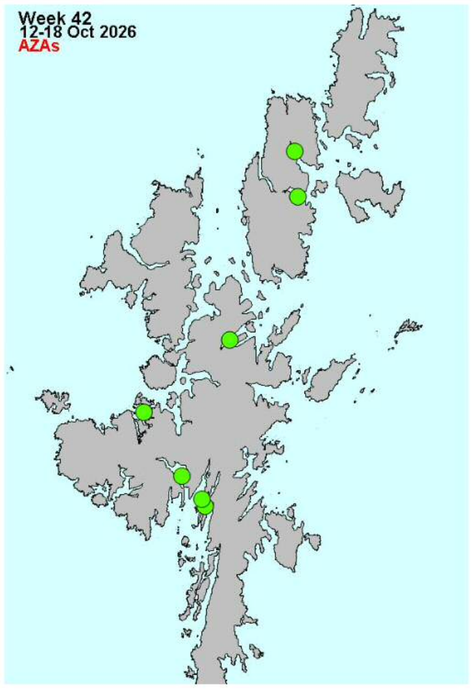
AZASPIRACID & YESSOTOXIN SHELLFISH POISONING TOXINS

AZAS

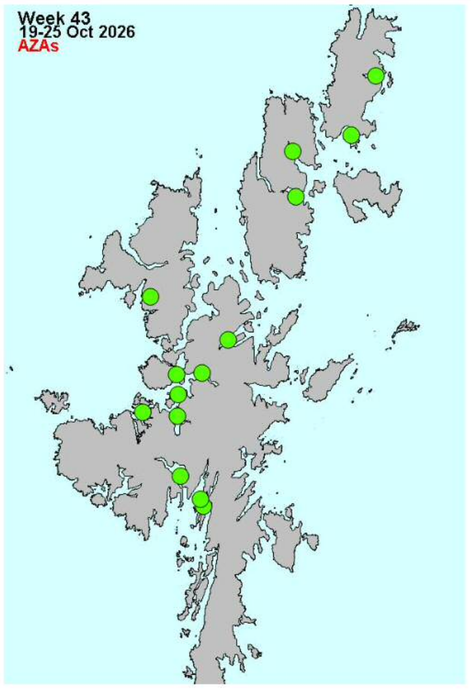
µg AZA1 eq/kg

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

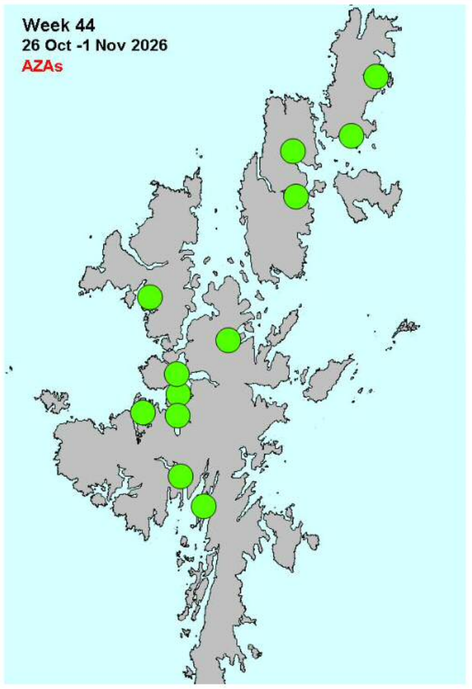
Week 42
12-18 Oct 2026



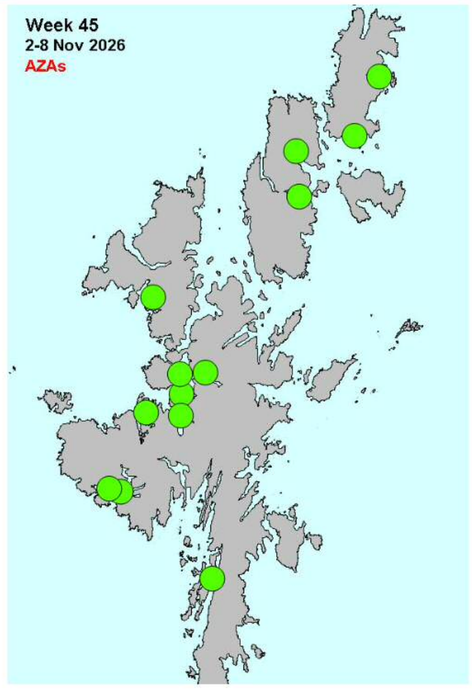
Week 43
19-25 Oct 2026



Week 44
26-1 Nov 2026



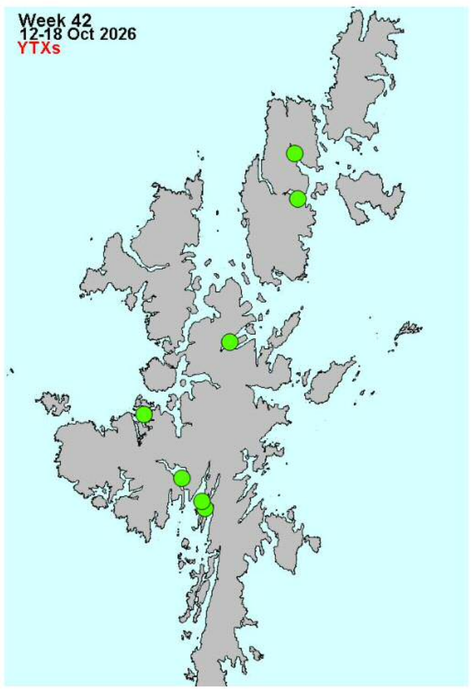
Week 45 CURRENT
2-8 Nov 2026

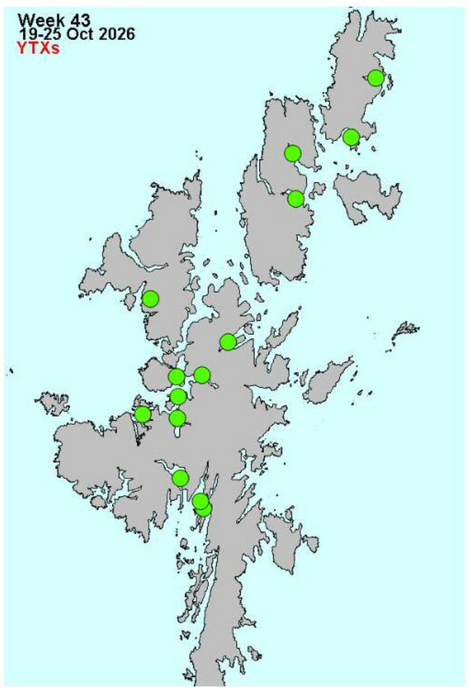


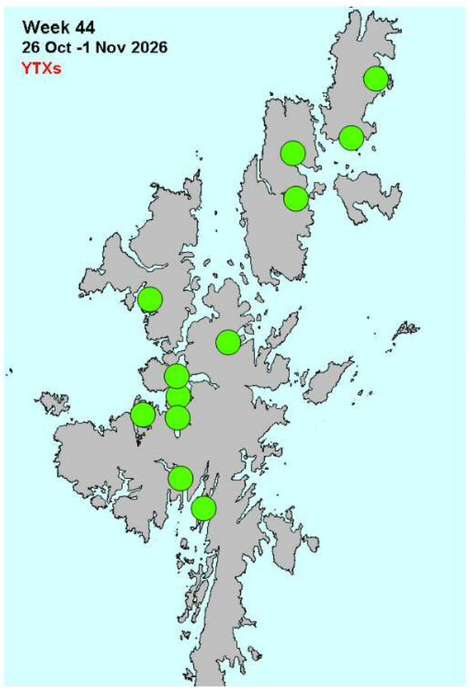
YTXS

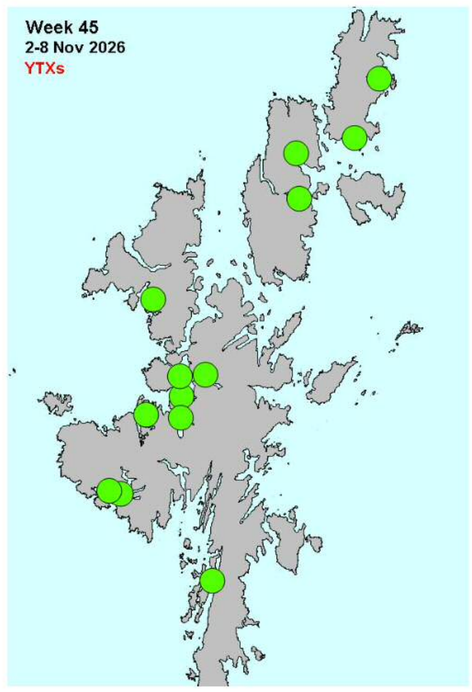
mg YTX eq/kg

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





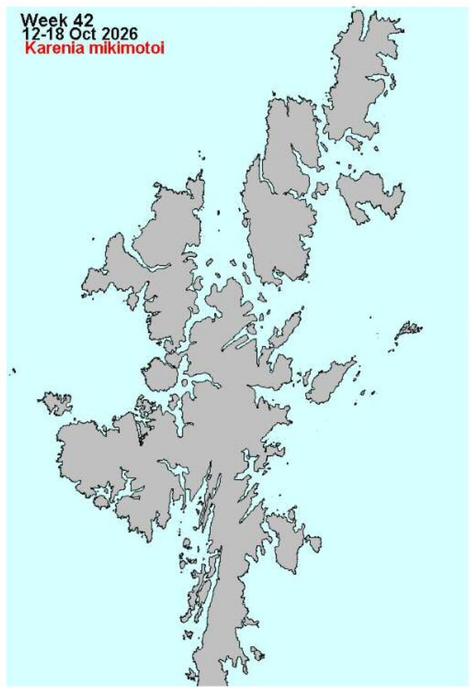


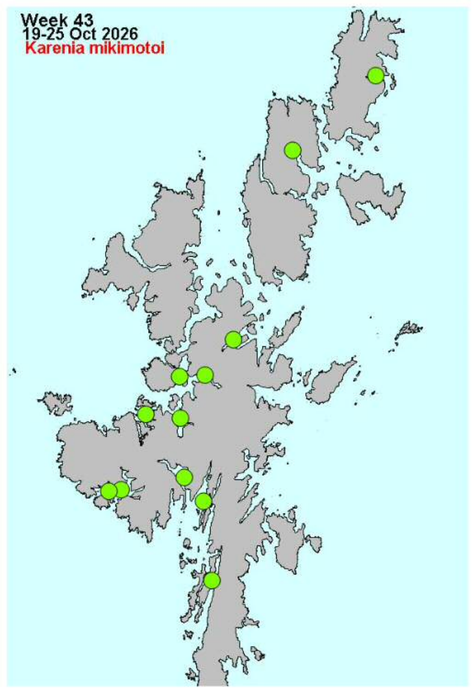


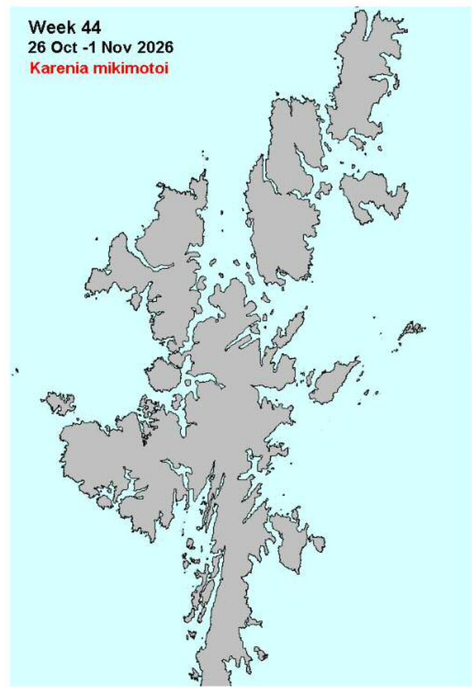
Shetland Bulletin on the status of harmful & toxic algae Week 45, 2nd-8th November 2026

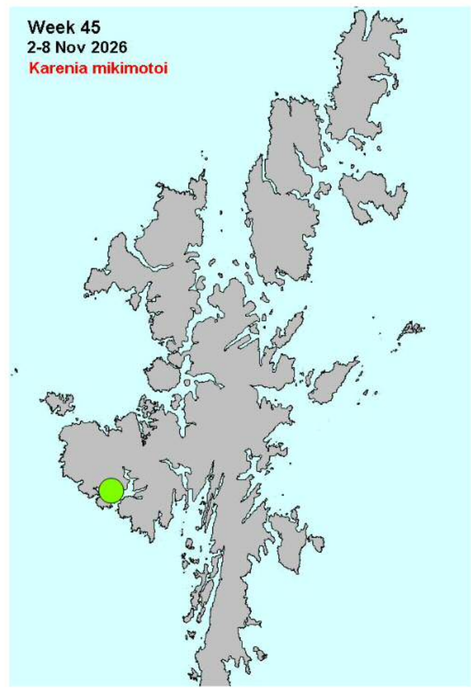
KARENIA MIKIMOTOI











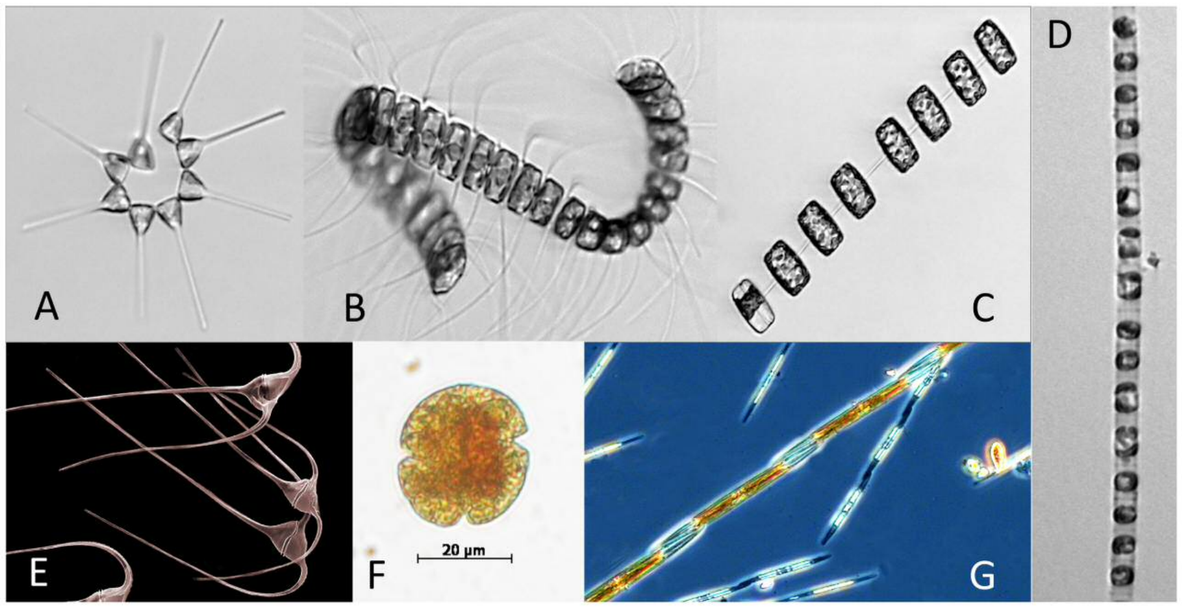
CHAIN FORMING PHYTOPLANKTON

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

1 site was 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

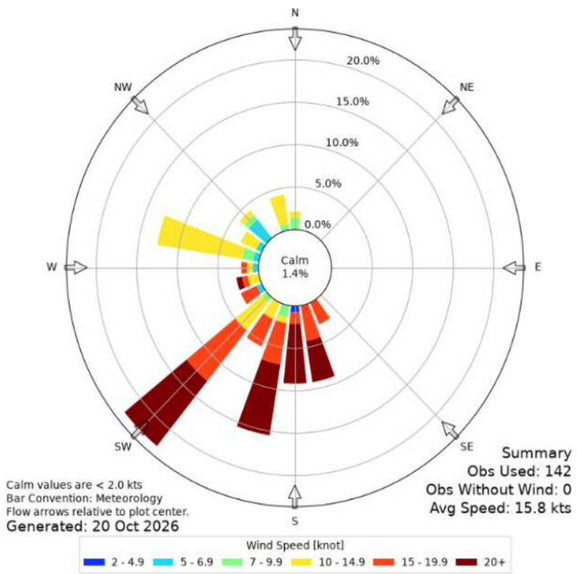


A. Asterionellopsis spp. B. Chaetoceros spp. C. Thalassiosira spp. D. Skeletonema spp. E. Ceratium Horridum F. Karenia mikimotoi G. Pseudo-nitzschia spp.

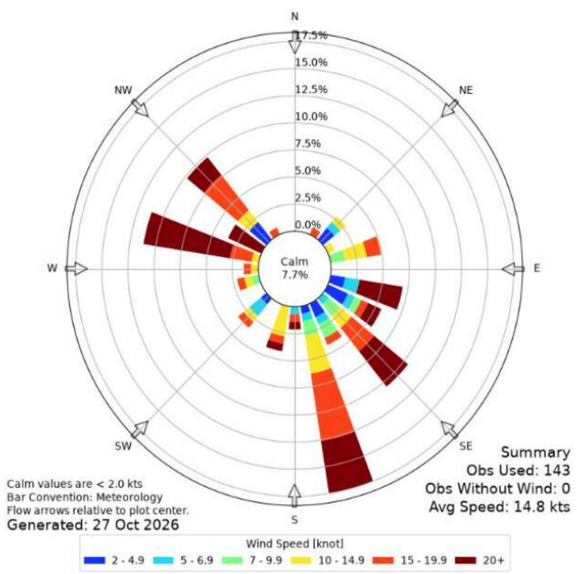
Shetland Bulletin on the status of harmful & toxic algae Week 45, 2nd-8th November 2026

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

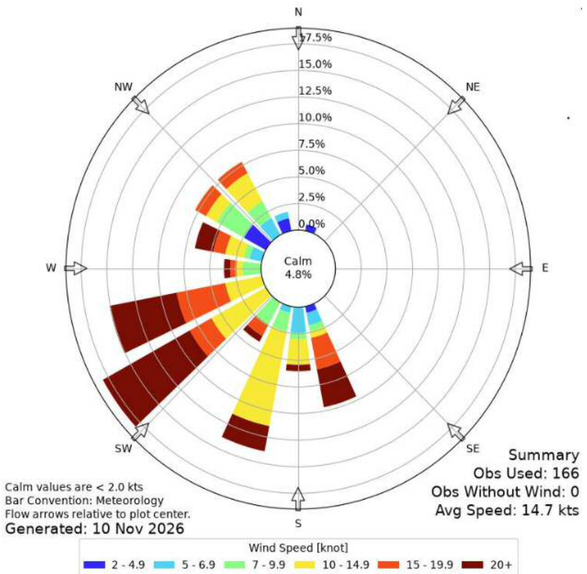
Week 42



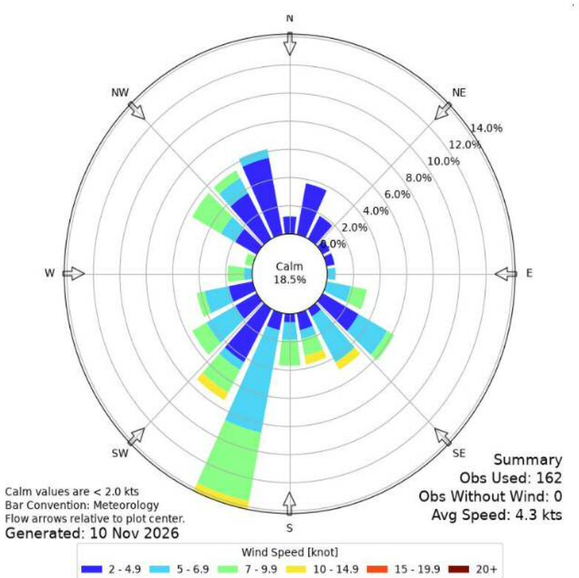
Week 43



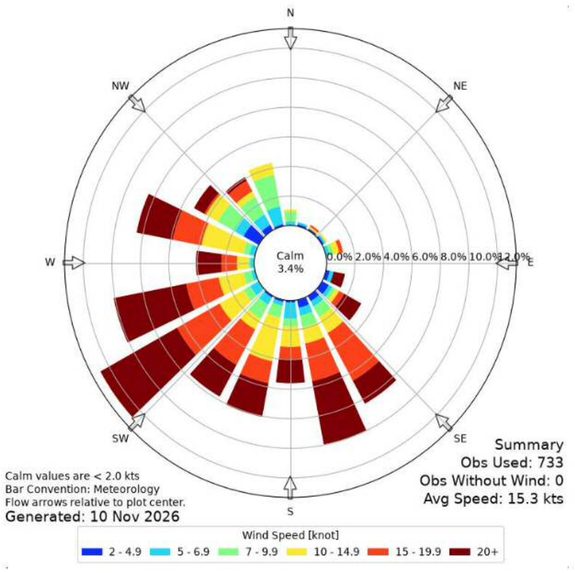
Week 44



Week 45



October



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.

STATUS:

Over the past week the average wind direction has been from the south south west.

PREDICTIONS:

The risk of wind blown *Dinophysis* blooms in Shetland is <u>LOW</u> this week.

WHY DO WE THINK THIS?

During the summer Dinophysis can bloom out at sea and at shelf fronts found off the West of Shetland. Westerly winds can then blow these blooms into shore. Westerly winds may also retain Dinophysis cells in Westerly facing voes and inlets where their numbers may increase. Wind from the past week had been predominantly from the south south west.

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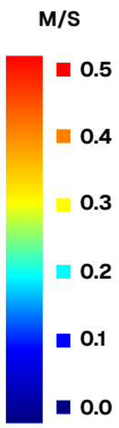
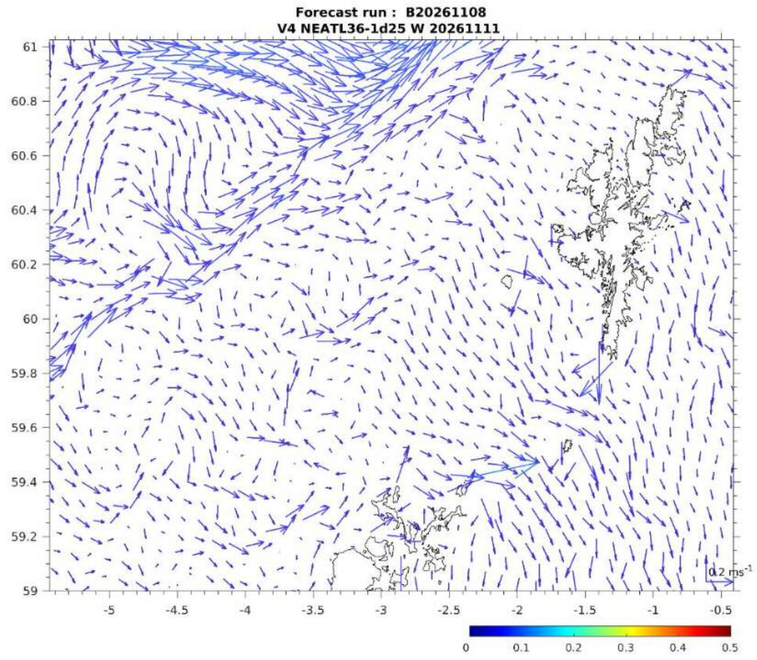
These diagrams show the predicted current directions around Shetland for the next couple of days. Greens to reds indicate stronger currents. In general strong currents run parallel to the deep water channel between the Faroes and Shetland. Problems can arise when these currents turn Eastwards potentially carrying Dinophysis and Karenia mikimotoi blooms, from the shelf edge, into shore.

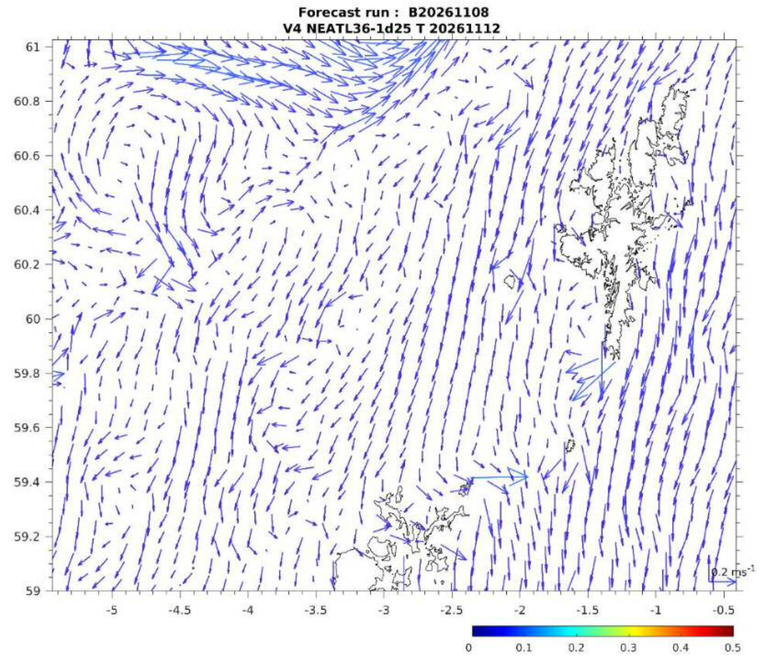


FORECASTED SEA SURFACE CURRENTS

11 Nov 2026



12 Nov 2026



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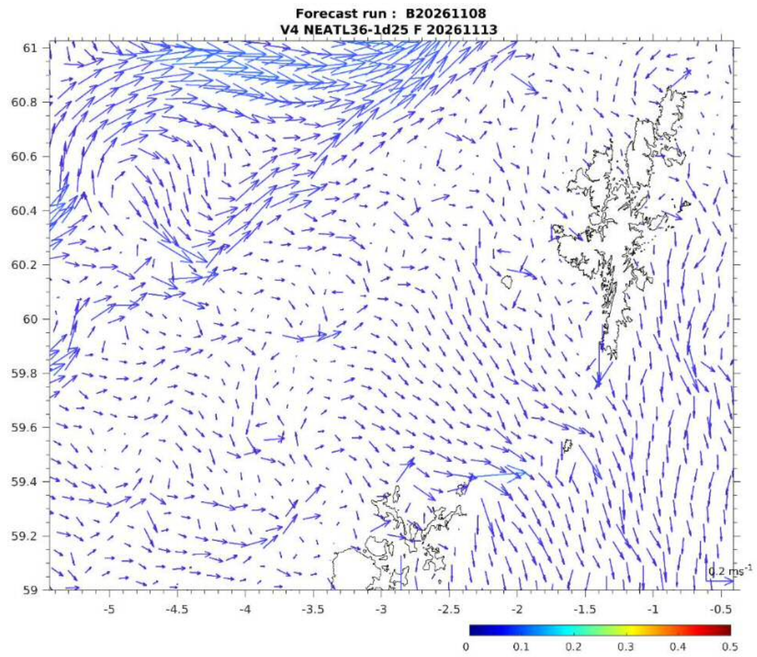
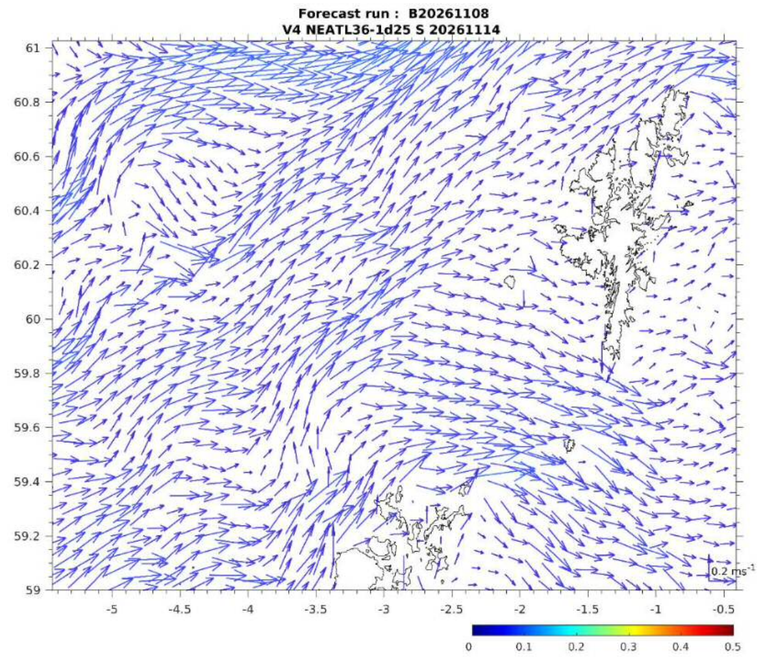


14 Nov 2026



Forecast provided by the model-NEATL-PHY-1/36°-AF-D-PGS (IBI36QV4R1-PGS) courtesy of Mercator.

POWERED BY Mercator Ocean

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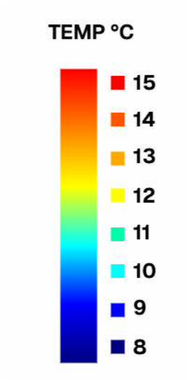
SEA SURFACE TEMPERATURE (°C) IN PRECEDING 6 DAYS IN THE SHETLAND ISLANDS



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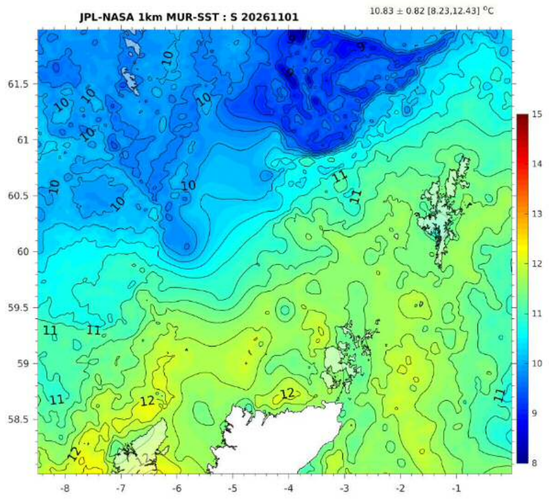

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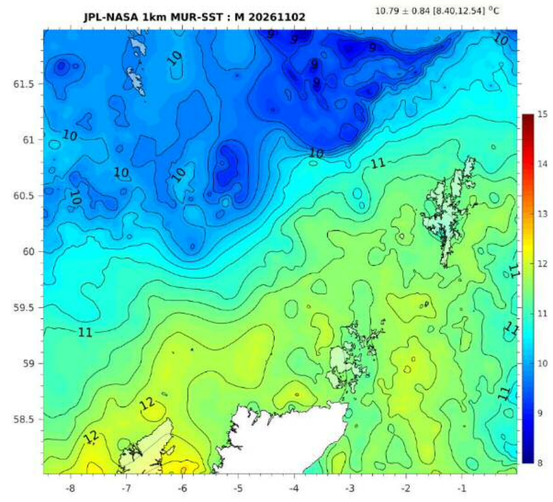

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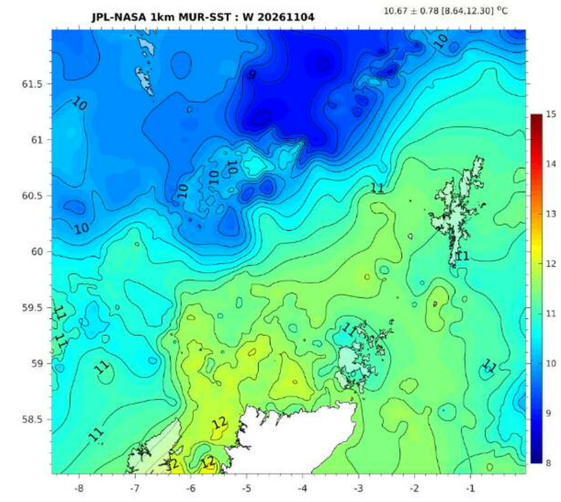

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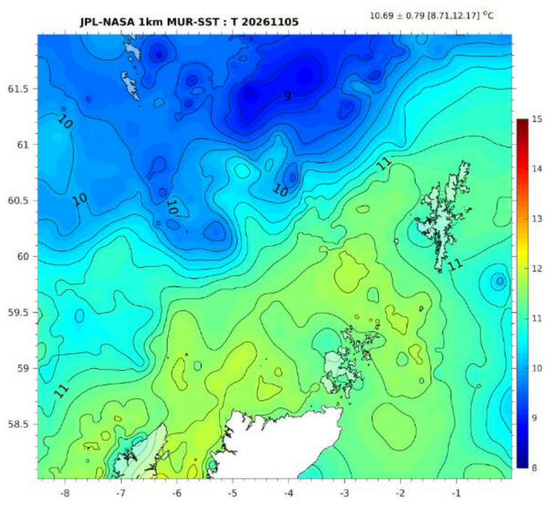

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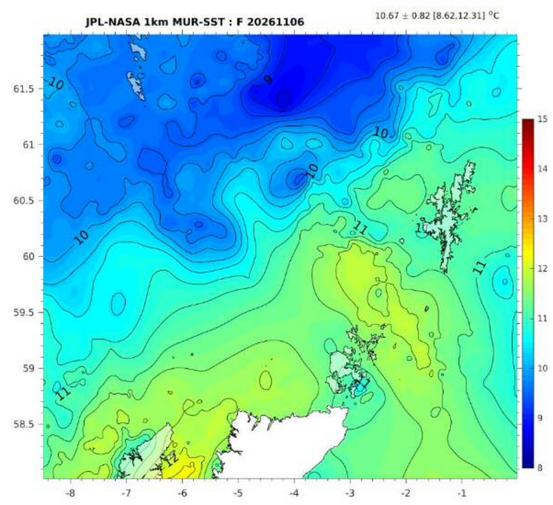
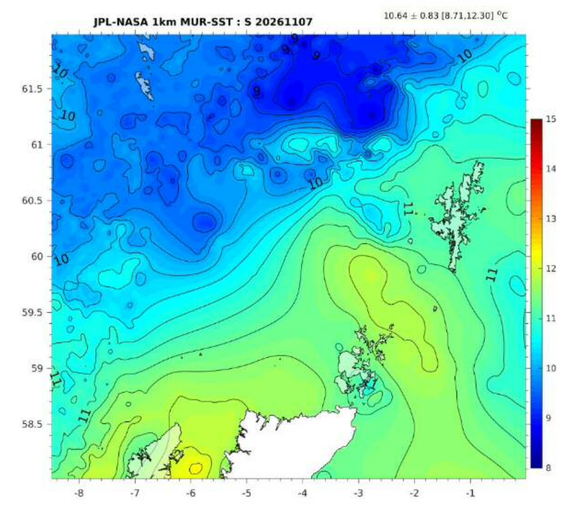


7 Nov 2026



Maps provided courtesy of the Jet Propulsion Laboratory, NASA

NASA JPL

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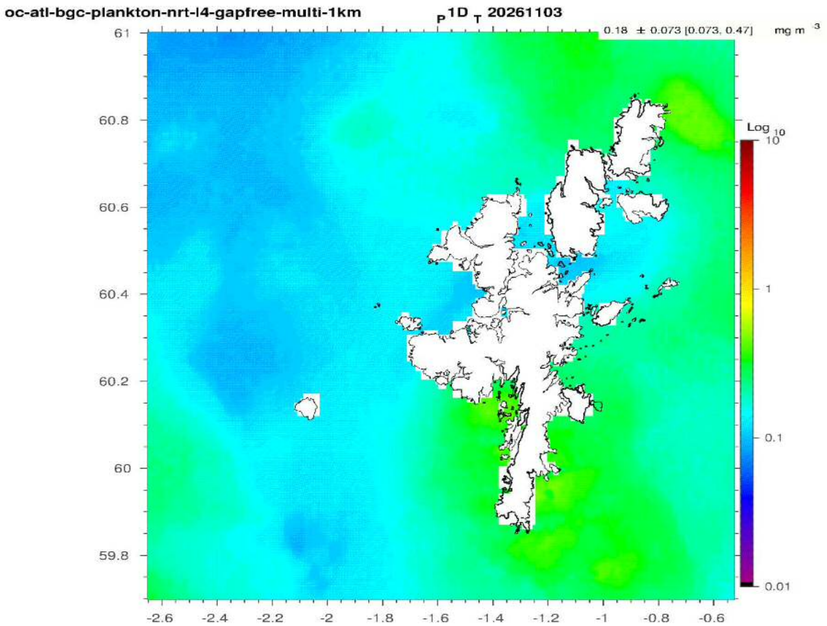
CHLOROPHYLL CONCENTRATIONS (MG/M³)

3 Nov 2026



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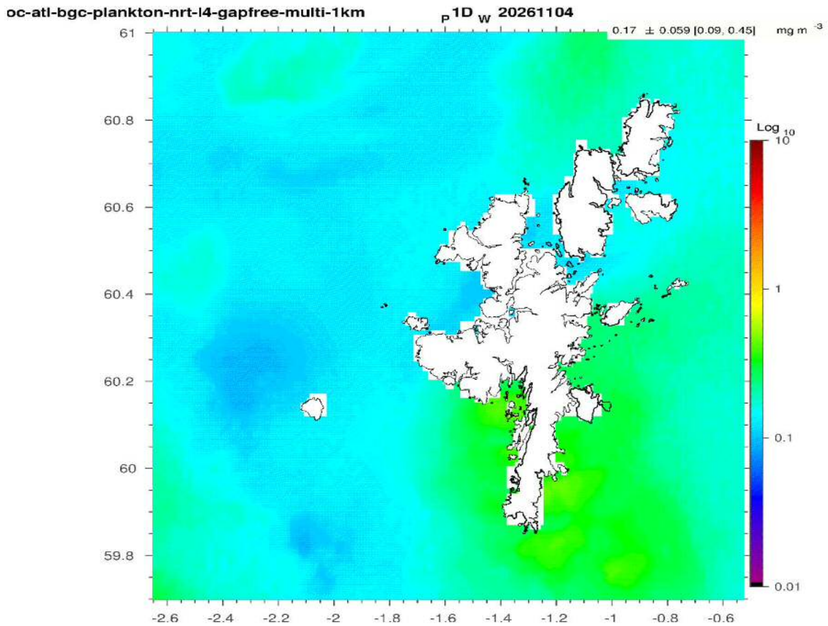

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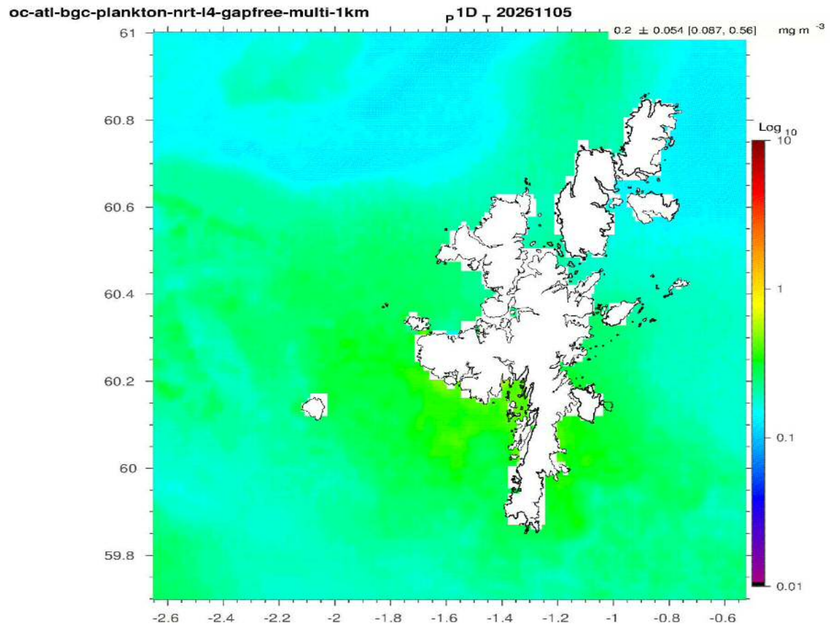

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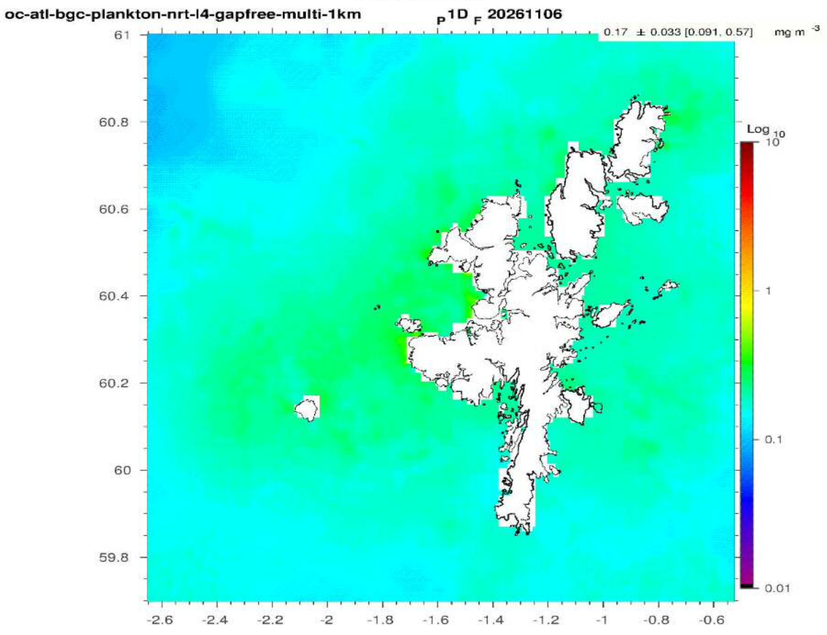
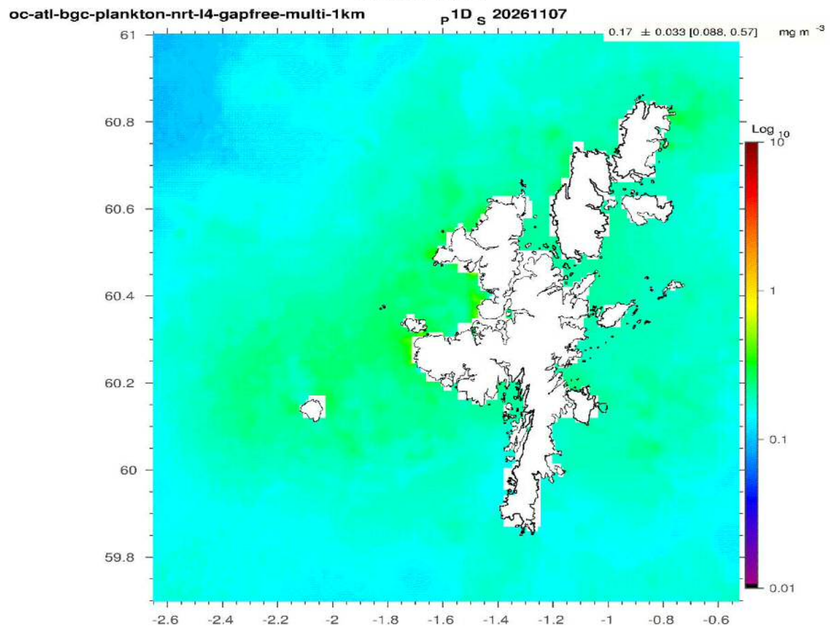


These diagrams show the mass concentration of chlorophyll-a around Shetland. Yellows to reds indicate higher concentrations. However it should be noted that turbidity and the presence of organic material deposited into near shore areas can give false positive readings making the concentrations appear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

7 Nov 2026



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