Shetland Bulletin on the status of harmful & toxic algae Week 14, 30th Mar - 5th Apr 2026

Biotoxin report:

ASP toxins: Four samples were analysed this week. Toxins were not detected.

AZA toxins: Four samples were analysed this week. Toxins were not detected.

DSP toxins: Four samples were analysed this week. Toxins were not detected.

PSP toxins: Four samples were analysed this week. Toxins were found in low concentrations in Hamar Voe.

YTX toxins: Four samples were analysed this week. Toxins were not detected.

Harmful algae report:

Alexandrium: Eleven samples were analysed this week. *Alexandrium* was detected at warning level in Scarvar Ayre.

Dinophysis: Eleven samples were analysed this week. *Dinophysis* was not detected.

Karenia mikimotoi: Eleven samples were analysed this week. *Karenia* was not detected.

Prorocentrum lima: Eleven samples were analysed this week. *P. lima* was detected in low numbers in East of Linga and North Flotta.

Pseudo-nitzschia delicatissima: Eleven samples were analysed this week. *P. delicatissima* was found in low numbers at all sites.

Pseudo-nitzschia seriata: Eleven samples were analysed this week. *P. seriata* was detected in low numbers at East of Linga.

Shetland: trends and forecast

***Alexandrium*/PSP:** *Alexandrium* was detected at warning level in one site. And toxins were found in low concentrations in another. However, given the time of year, it is unlikely there will be a toxic bloom this week.

***Dinophysis*/DSP:** Given the time of year, it is unlikely there will be a toxic bloom this week.

***Pseudo-nitzschia*/ASP:** *P. delicatissima* was detected in low numbers in eleven sites and *P. seriata* was detected in low numbers in one site. Given the time of year, it is extremely unlikely that 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 for **PSP: Low**

Risk for **DSP: Low**

Risk for **ASP: Low**

Risk for **YTX: Low**

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

SAMS

SeafoodShetland

Toxin concentrations provided courtesy of the Centre for Environment, Fisheries and Aquaculture Science Cefas

Funding for these bulletins is kindly provided by Seafood Shetland

Primary data for biotoxins and biotoxin producing phytoplankton available at: http://www.food.gov.uk/enforcement/monitoring/shellfish/algaltoxin/#.UY0TkcqTQ6O

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

ASP: 20 mg/kg

Lipophilic toxins (tested by LC-MS):

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

YTXs: 3.75 milligram of yessotoxin equivalent/kilogram

AZAs: 160 micrograms of azaspiracids equivalents/kilogram

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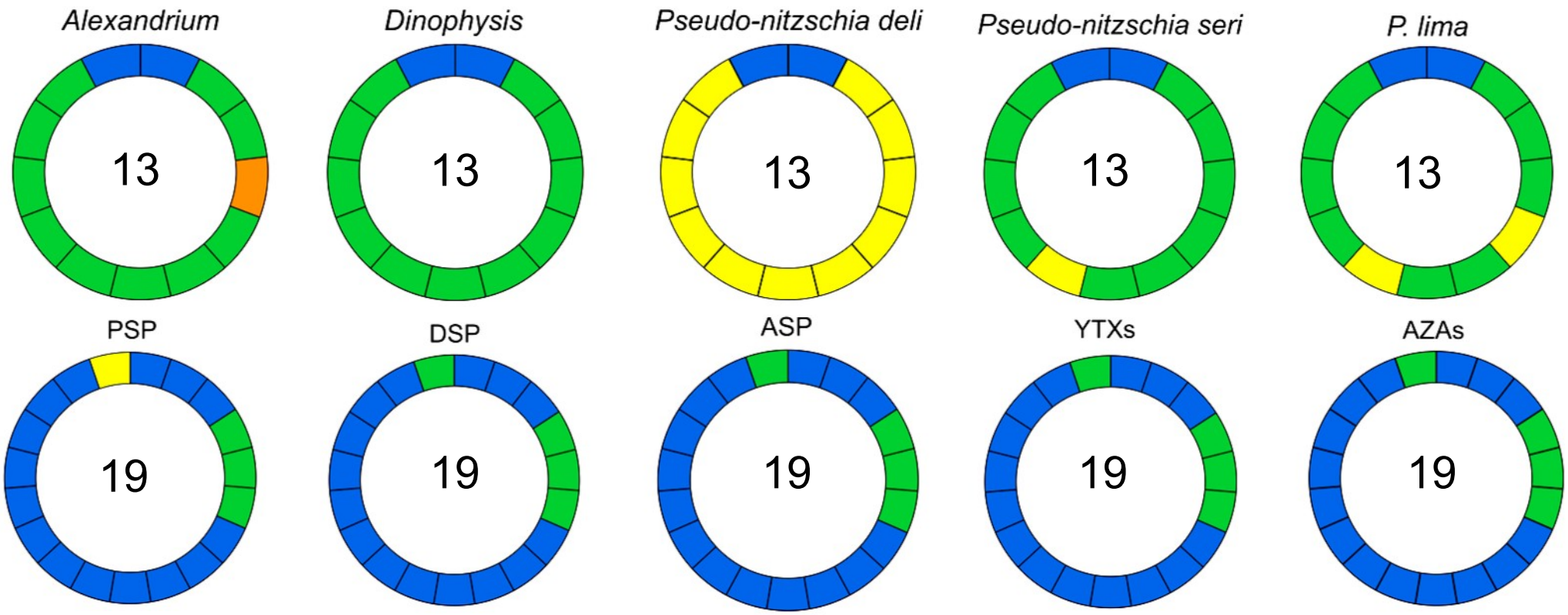
Status of biotoxins & harmful algae present in Shetland



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					
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

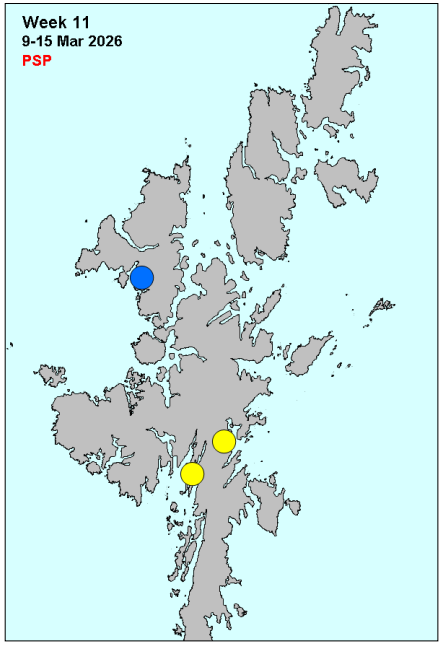
Shetland Bulletin on the status of harmful & toxic algae Week 14, 30th Mar - 5th Apr 2026

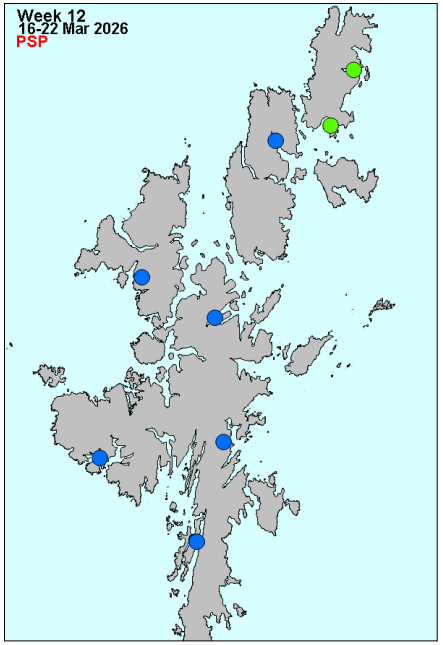
Paralytic shellfish poisoning toxins & causative phytoplankton

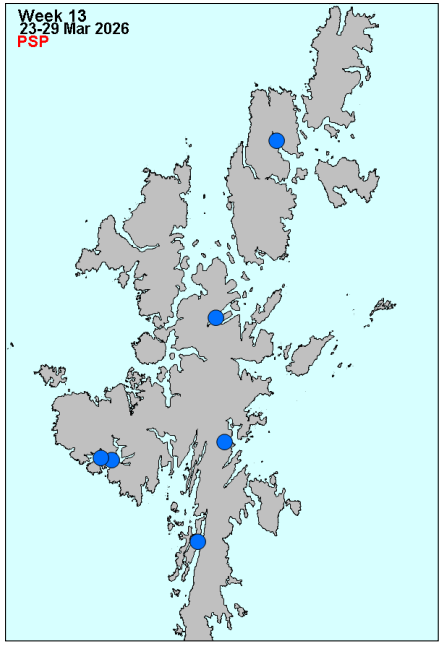
PSP

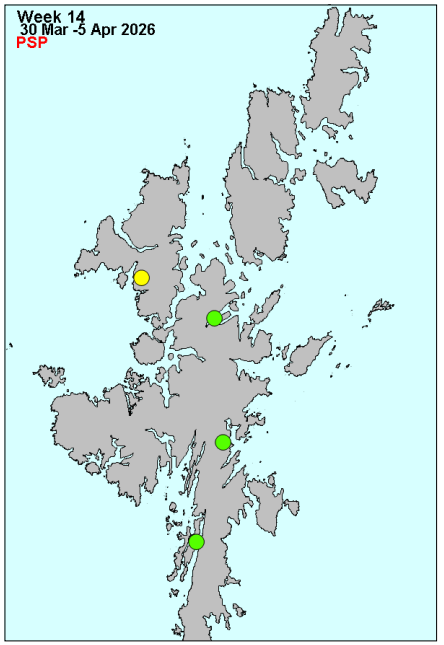
µg STX eq/kg

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





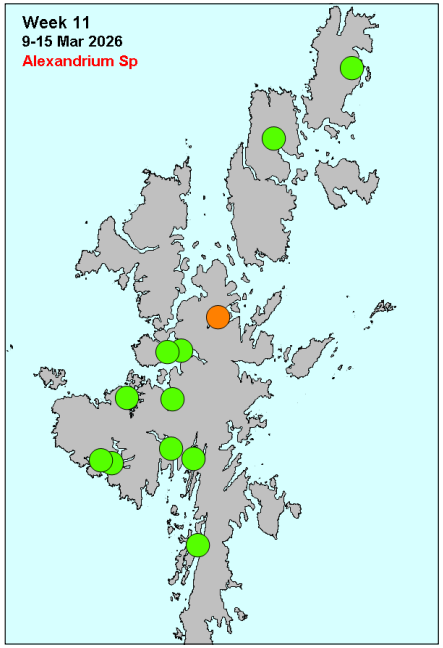


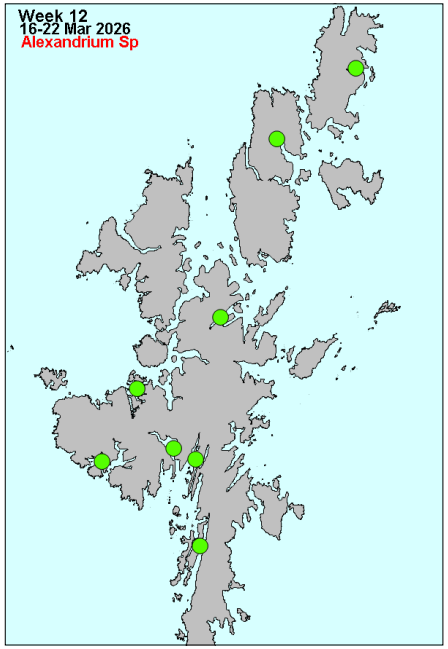


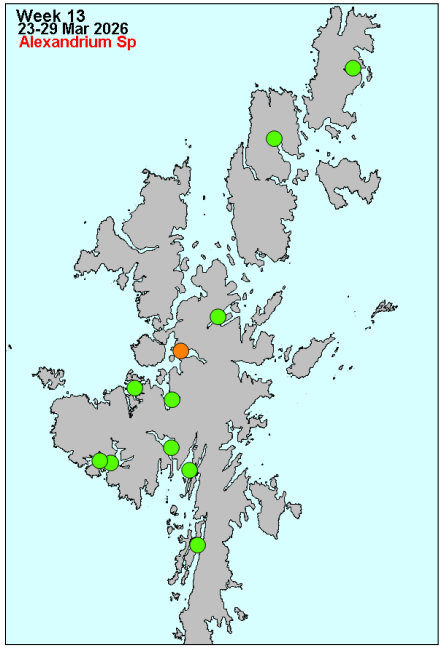
Alexandrium Sp.

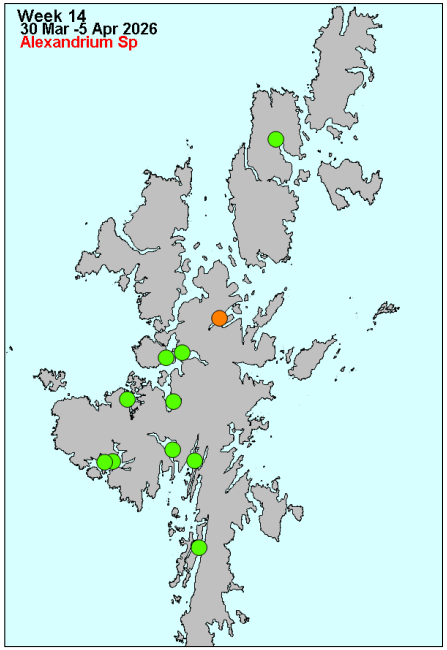
cells\l

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









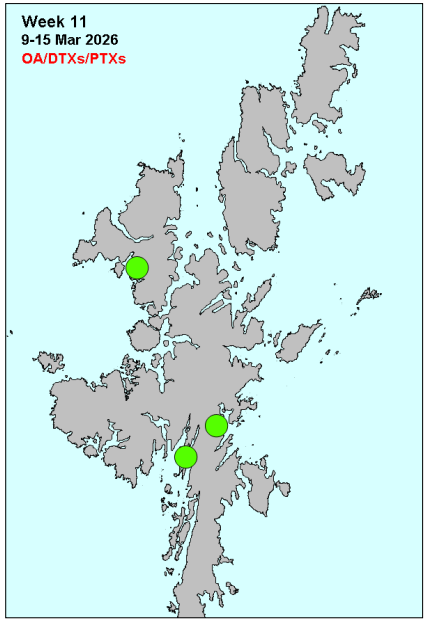
Shetland Bulletin on the status of harmful & toxic algae Week 14, 30th Mar - 5th Apr 2026

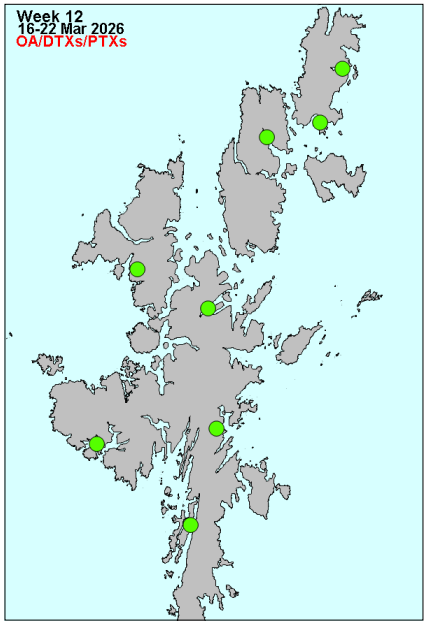
Diarrhetic shellfish poisoning toxins & causative phytoplankton

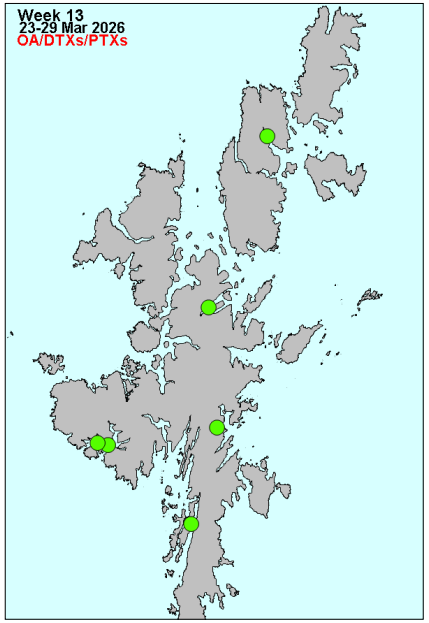
OA/DTXs/PTXs

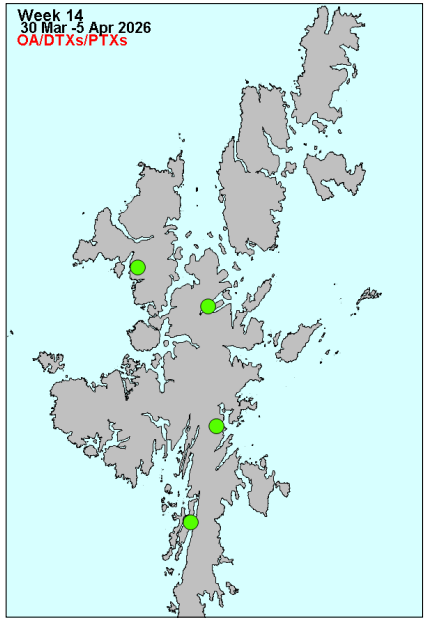
µg OA eq/kg

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





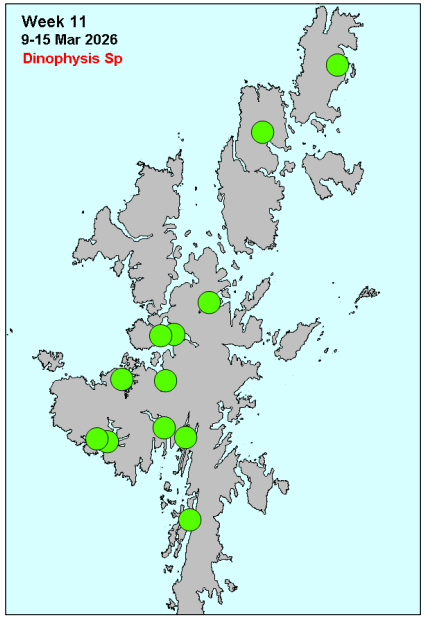


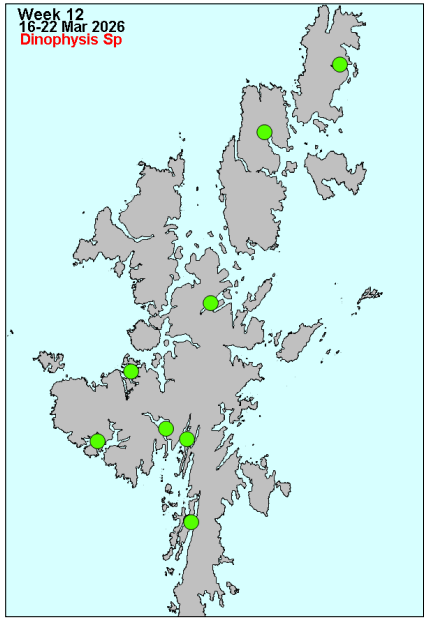


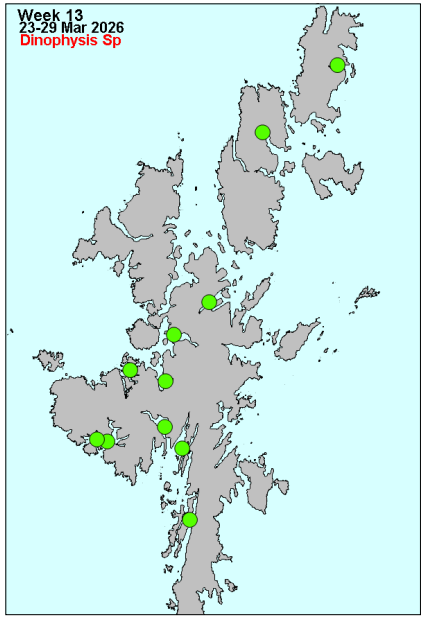
Dinophysis Sp.

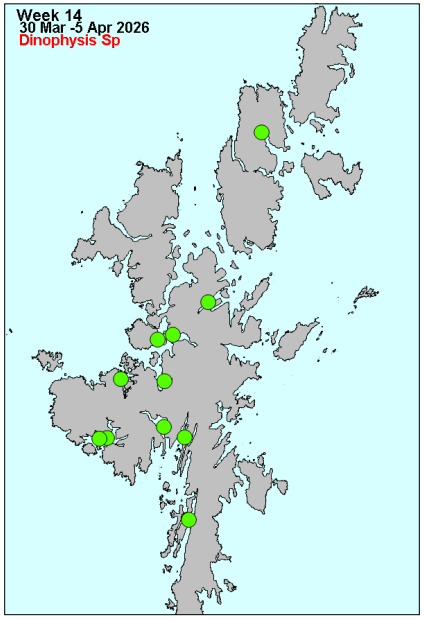
cells\l

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









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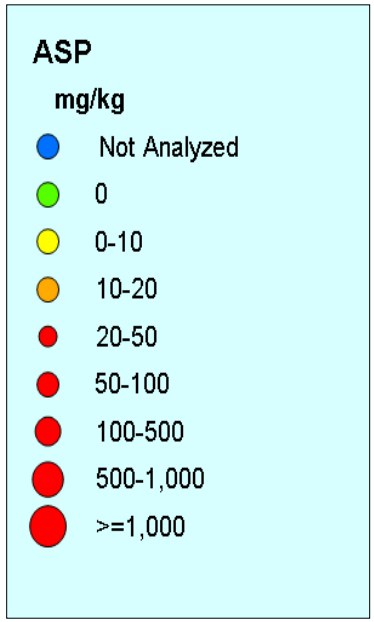
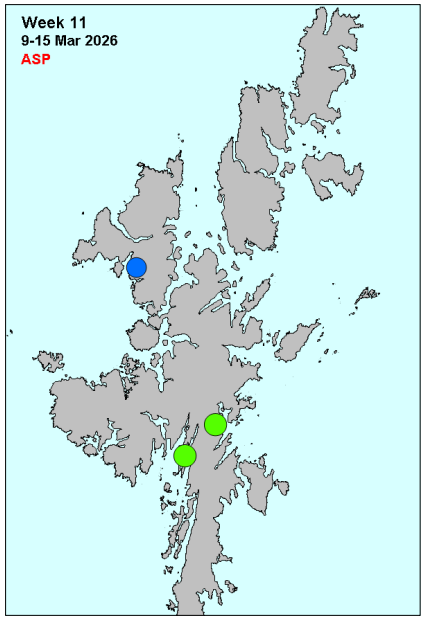
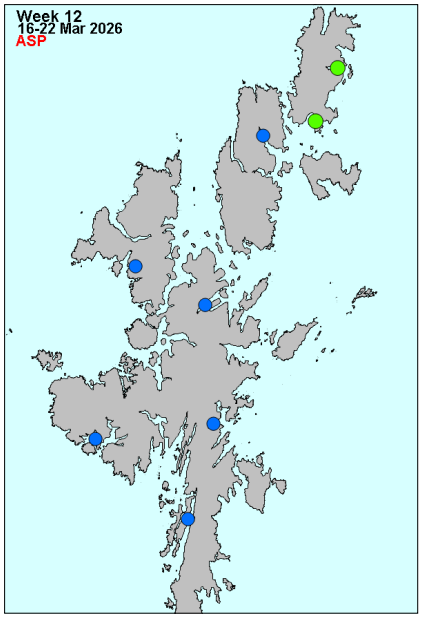
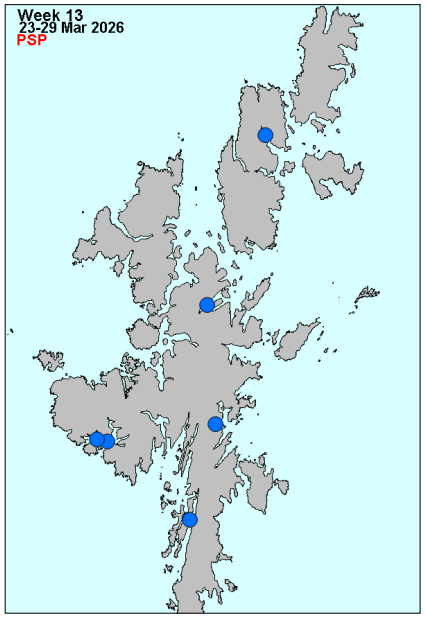
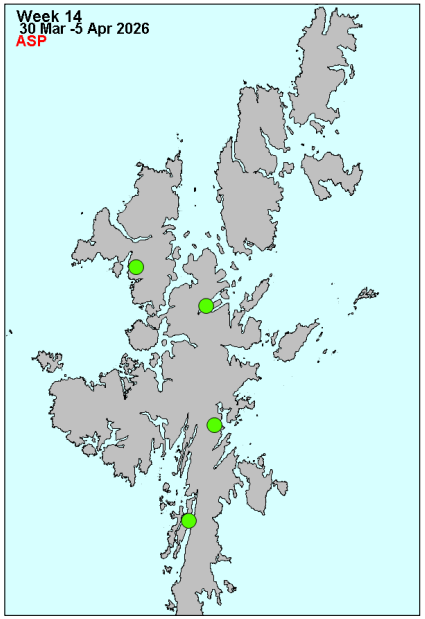
Amnesic Shellfish Poisoning & causative phytoplankton

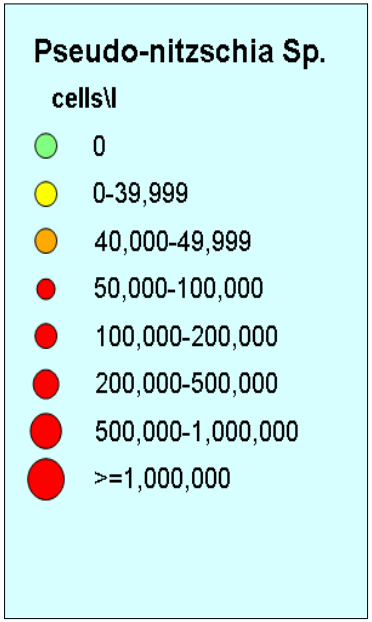


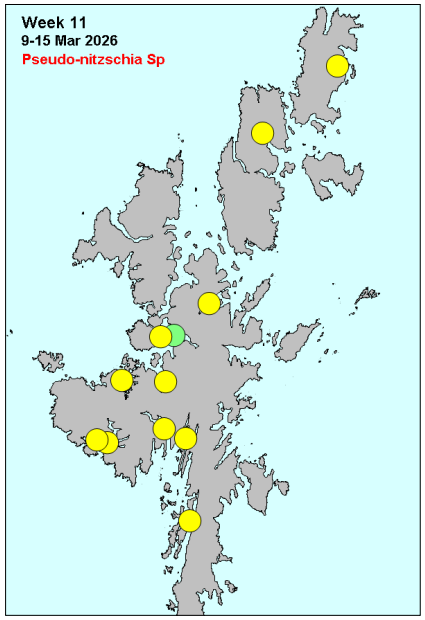


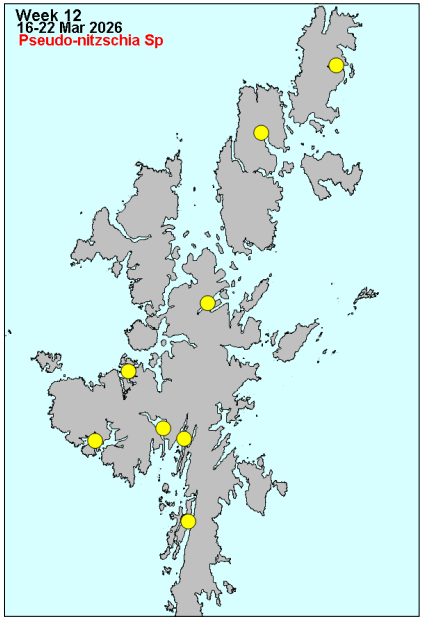


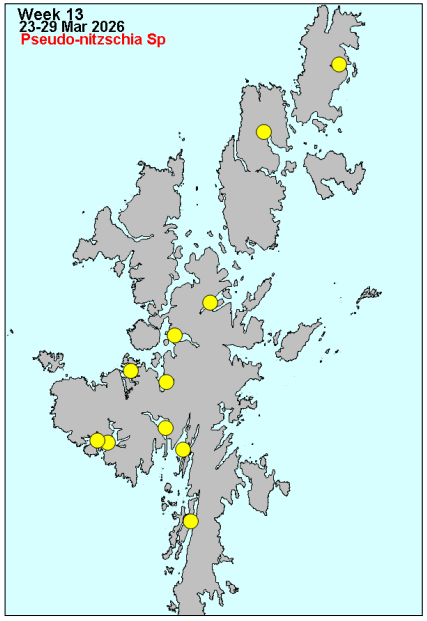


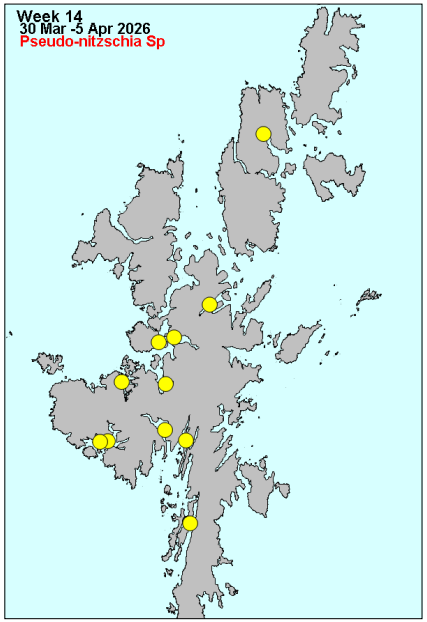












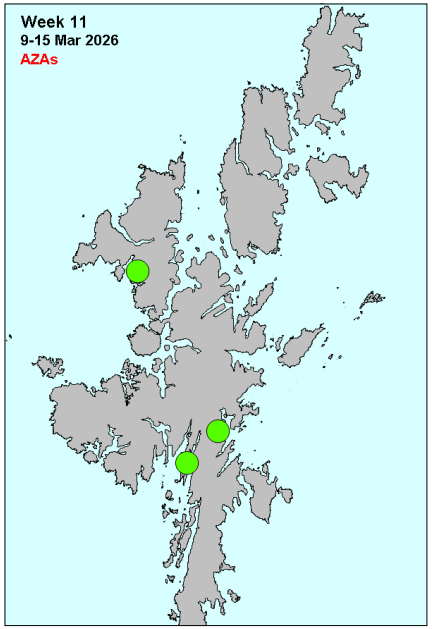
Shetland Bulletin on the status of harmful & toxic algae Week 14, 30th Mar - 5th Apr 2026

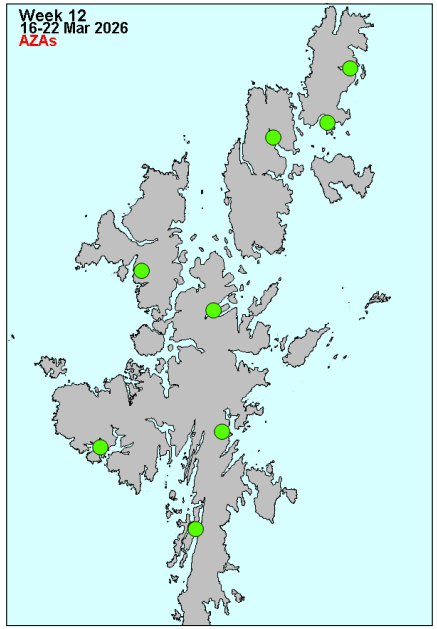
Azaspiracid & Yessotoxin shellfish poisoning toxins

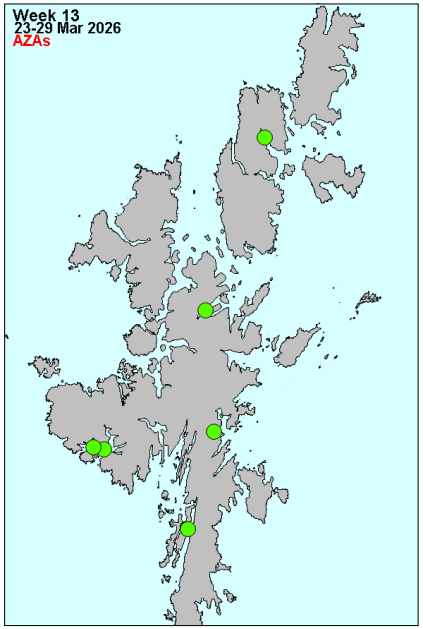
AZAs

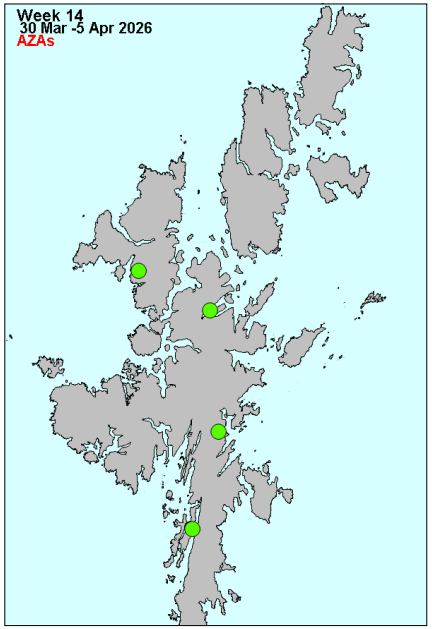
µg AZA1 eq/kg

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





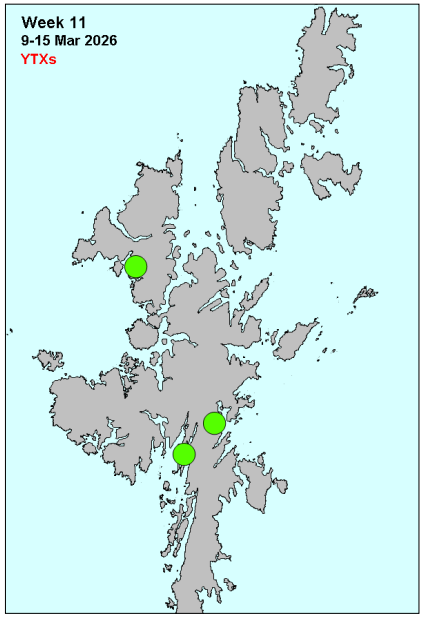


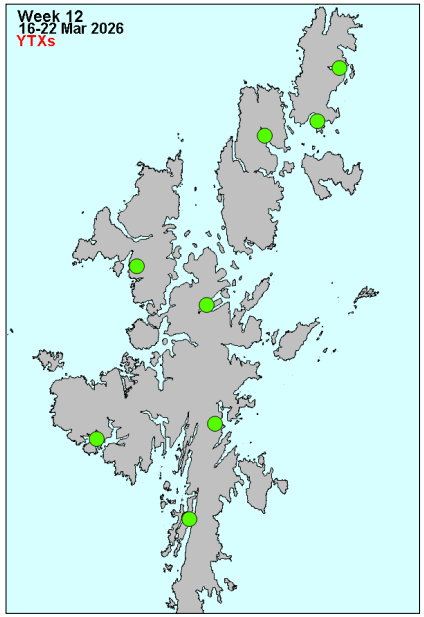


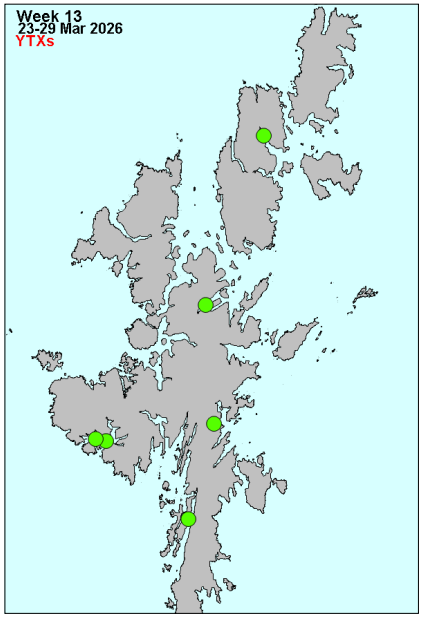
YTXs

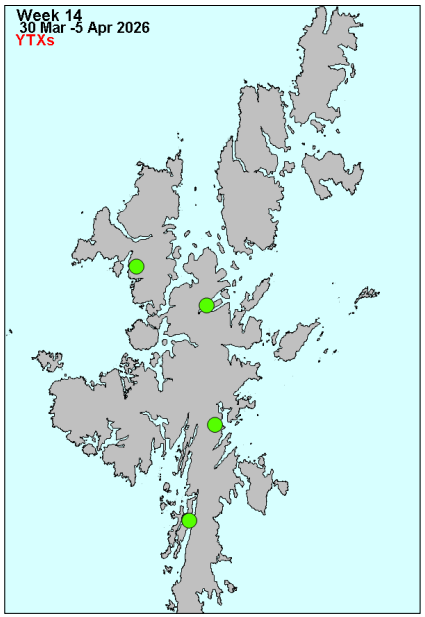
mg YTX eq/kg

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









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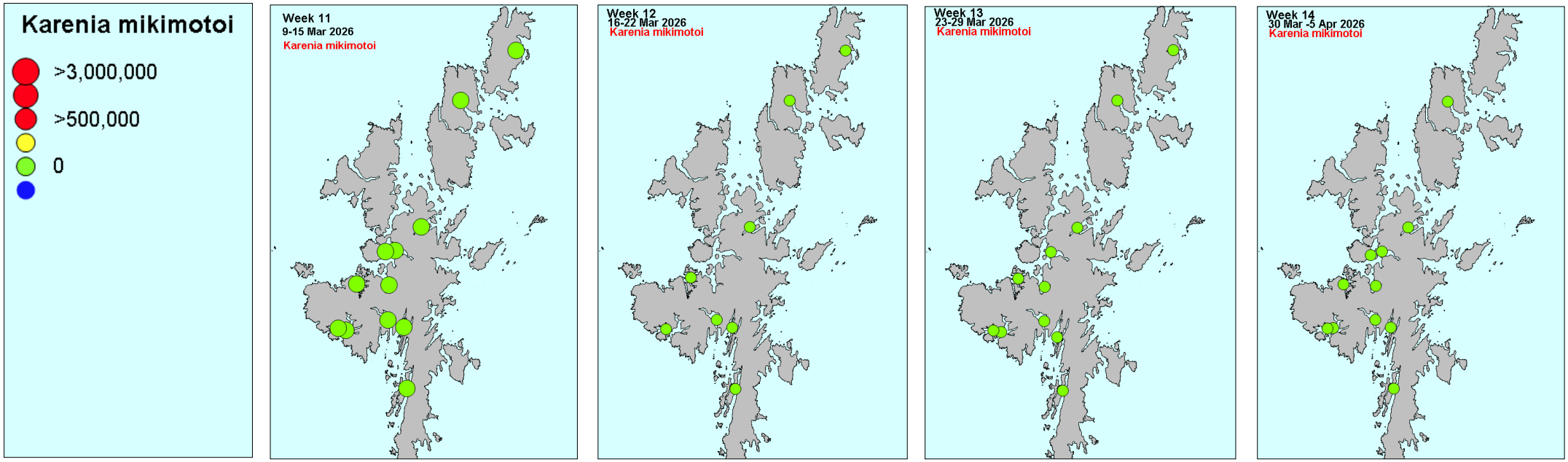
Karenia mikimotoi



Chain forming Phytoplankton

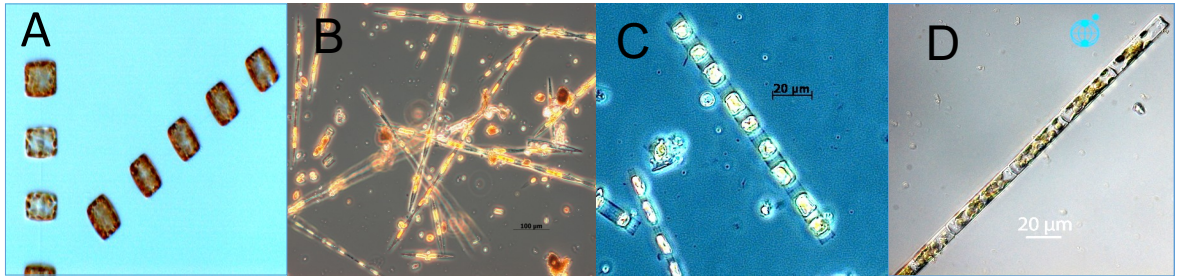
High densities of chain forming diatoms including, but not limited to the genus, *Chaetoceros, Skeletonema, Leptocylindrus , Rhizosolenia, Thalassiosira, Corethron* and *Pseudo-nitzschia,* the centric species *Coscinodiscus wailesii,* and species with long spines such as *Ceratium (Tripos)* can cause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

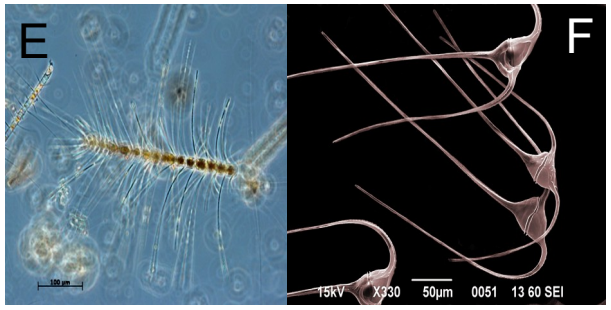
Status

Eleven samples were analysed this week, *Karenia* was not detected.

The IFCB at Cole Deep is detecting chains of *Skeletonema* and also *Chaetoceros, Pseudo-nitzschia* and small flagellates. The one at Scalloway is detecting lots of *Skeletonema*, as well as *Thalassiosira, Dytilum* and *Chaetoceros.*

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





A - *Thalassiosira sp.*

B - *Pseudo-nitzschia sp.*

C - *Skeletonema sp.*

D - *Leptocylindrus sp.*

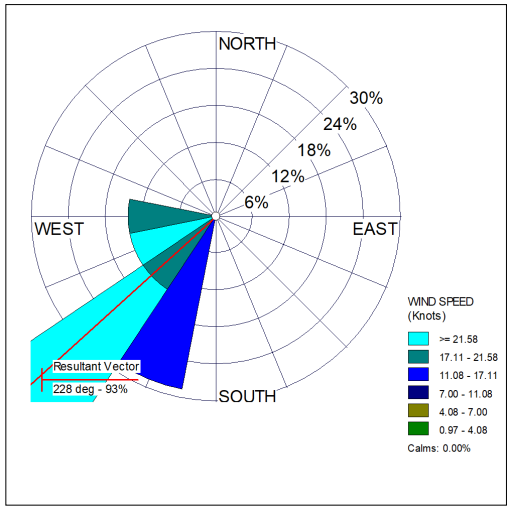
E - Chaetoceros sp.

F—*Ceratium/Tripos* sp.

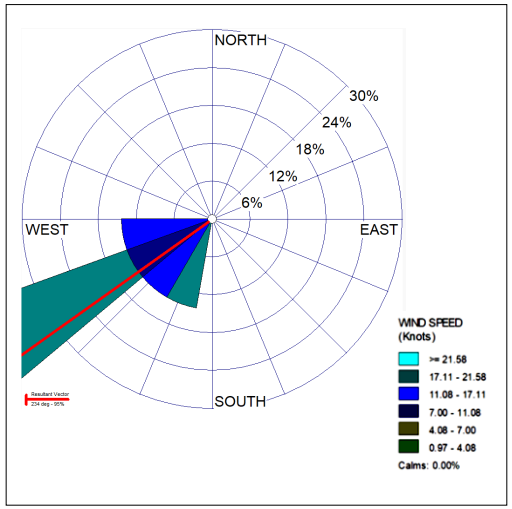
Shetland Bulletin on the status of harmful & toxic algae Week 14, 30th Mar - 5th Apr 2026

Mean wind direction observed in Shetland for current and three preceding weeks

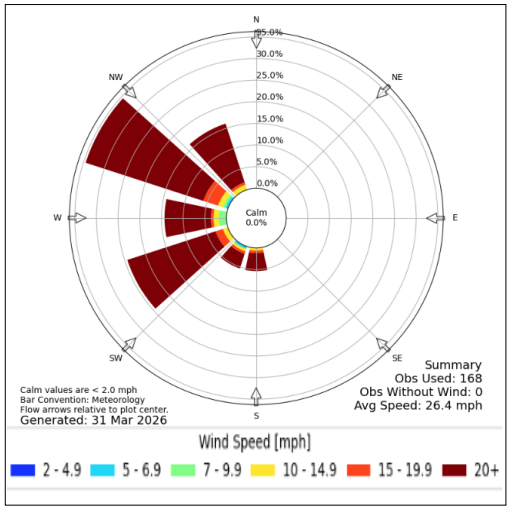
Week 11



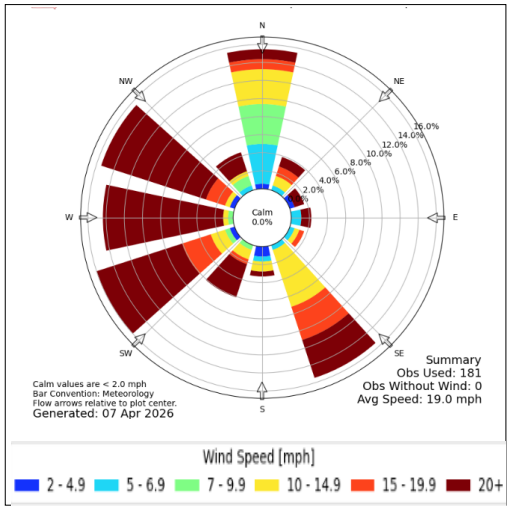
Week 12



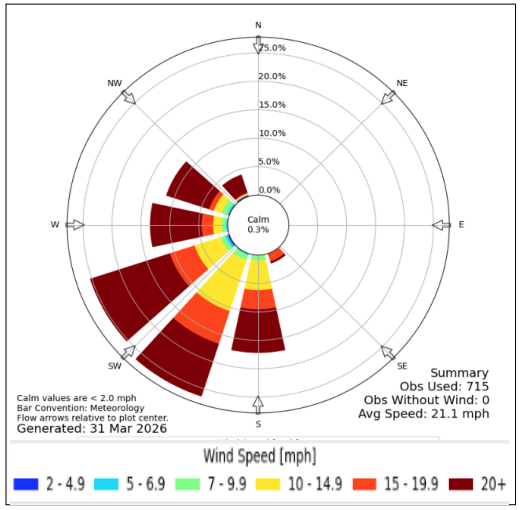
Week 13



Week 14



March



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 west.

Predictions:

The risk of wind blown *Dinophysis* blooms in Shetland is **low** 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 for the past week has been predominantly from the west. Given the time of year, it is unlikely that there will be an advected bloom of *Dinophysis* in the coming week.

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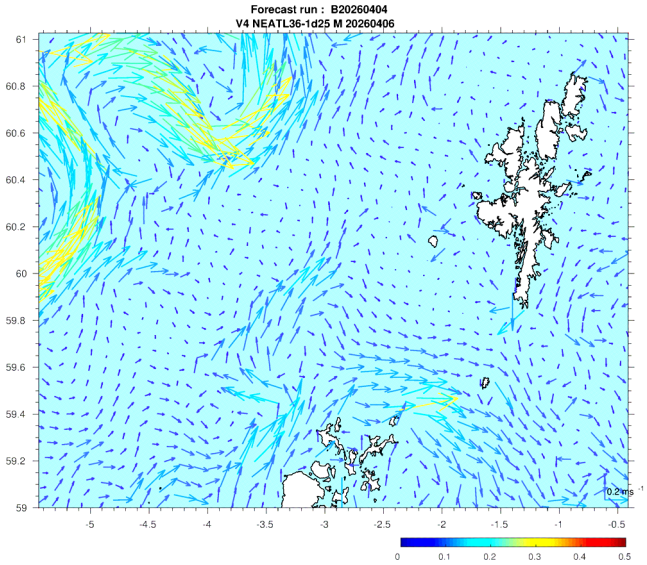
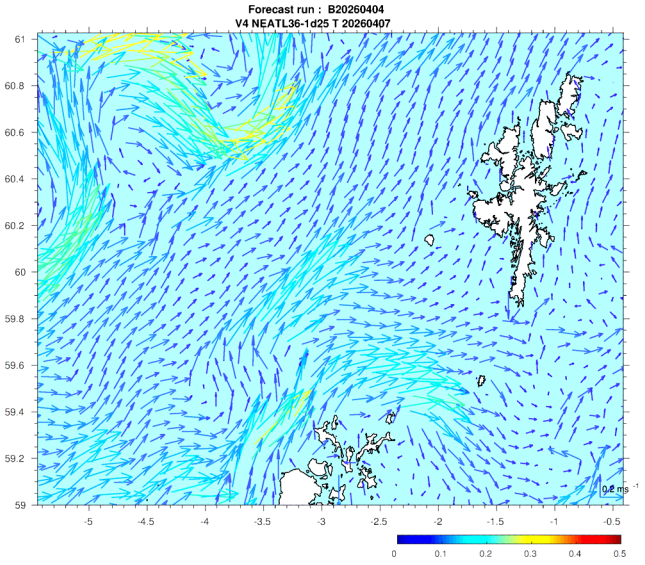
These diagrams show the predicted current directions around Shetland for the next couple of days. Greens to reds indicate stronger currents. In general strong currents run parallel to the deep water channel between the Faroes and Shetland. Problems can arise when these currents turn East-wards potentially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

Forecasted Sea Surface currents

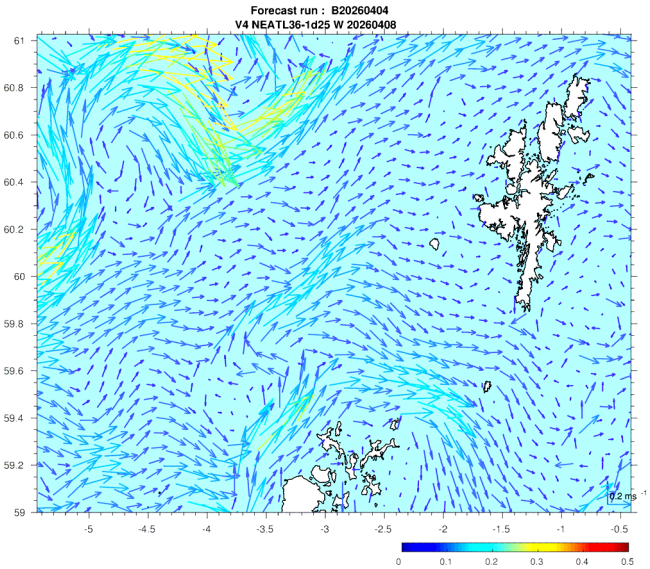
6 Apr 2026



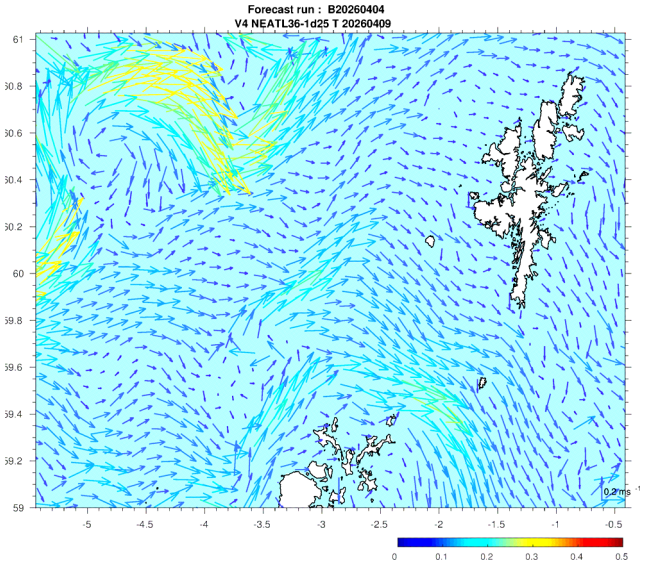
7 Apr 2026

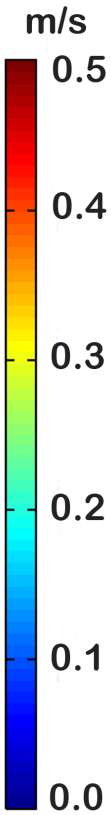


8 Apr 2026



9 Apr 2026





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

Mercator Ocean
Ocean Forecasters

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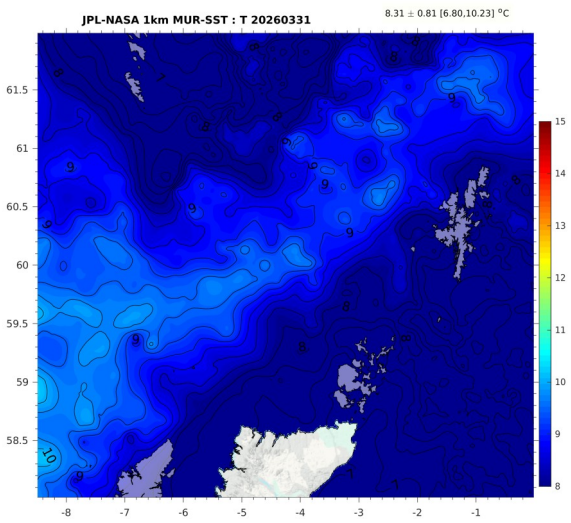
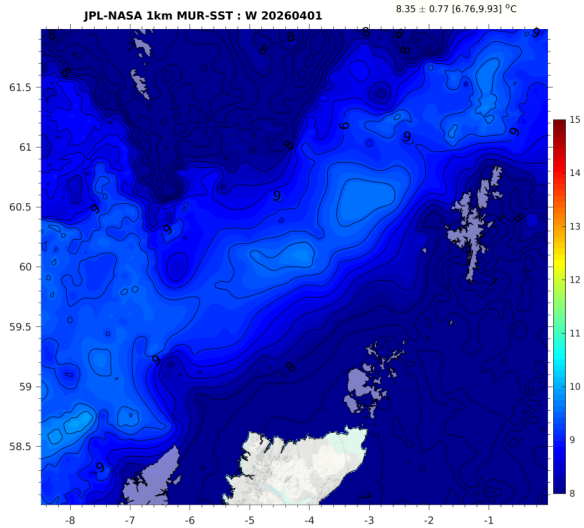
Sea Surface temperature (°C) in preceding 6 days in the Shetland Islands

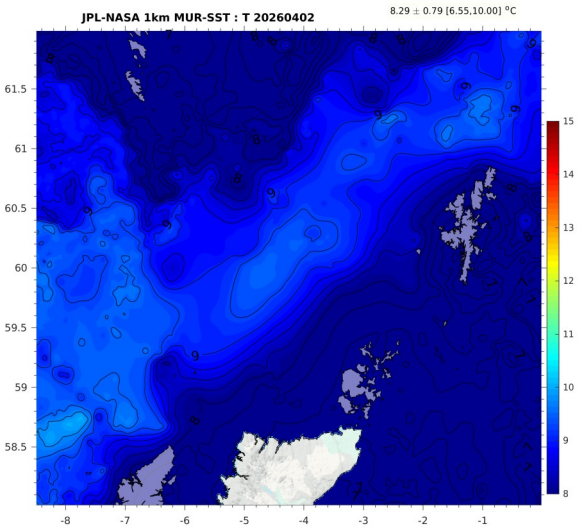
31 Mar 2026



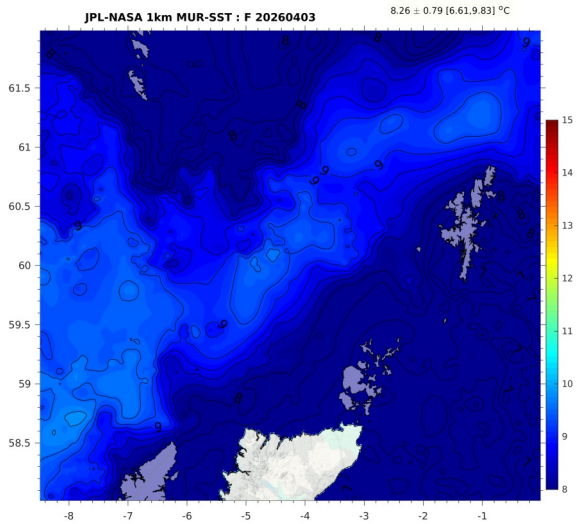
1 Apr 2026



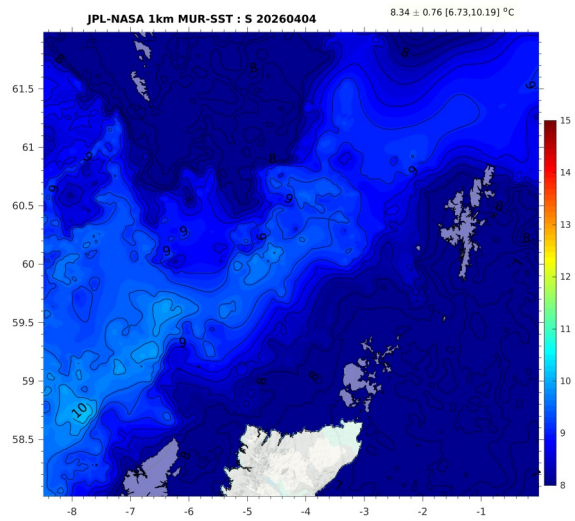
2 Apr 2026



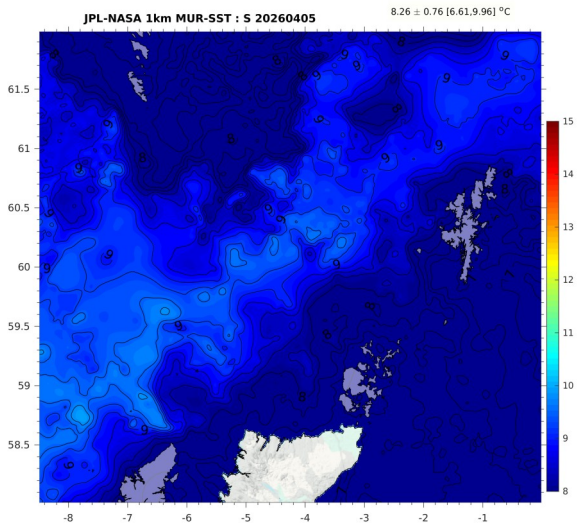
3 Apr 2026



4 Apr 2026



5 Apr 2026



Maps provided courtesy of the Jet Propulsion Laboratory, NASA

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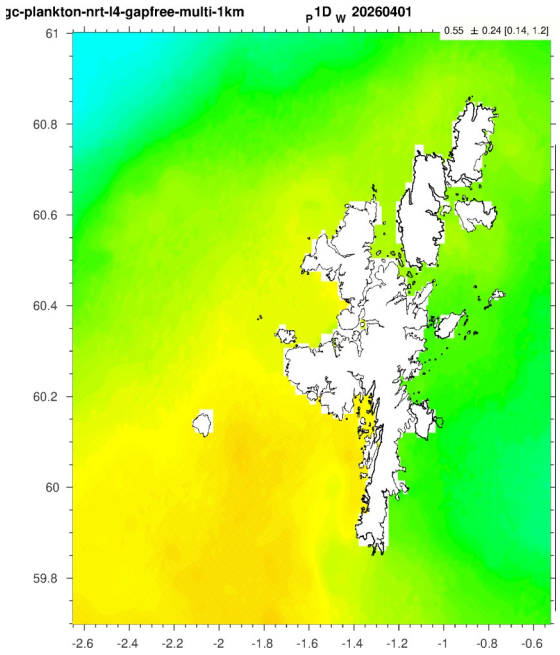
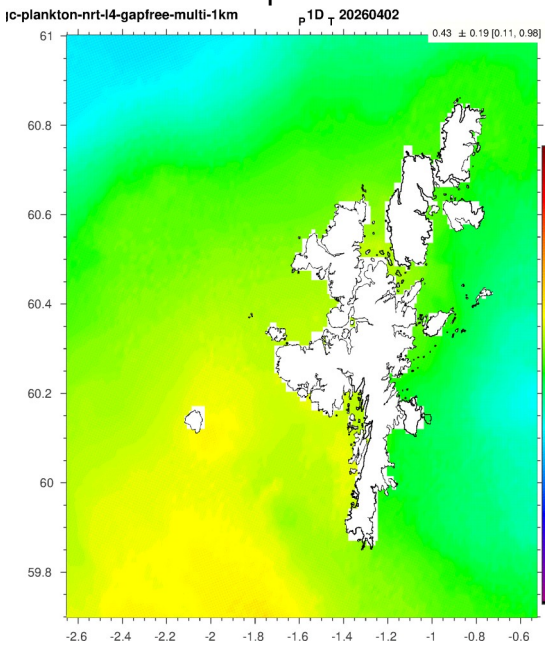
Chlorophyll concentrations (mg/m^3)

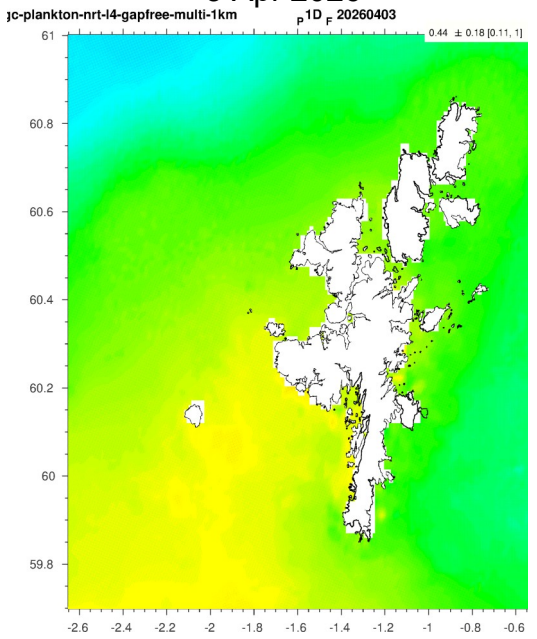
1 Apr 2026



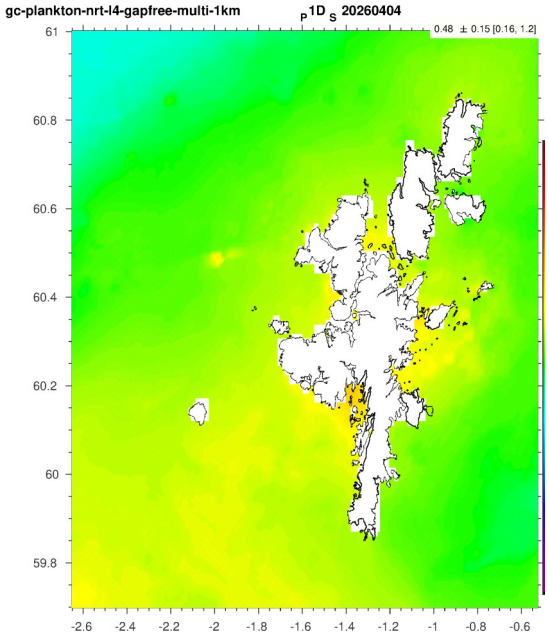
2 Apr 2026



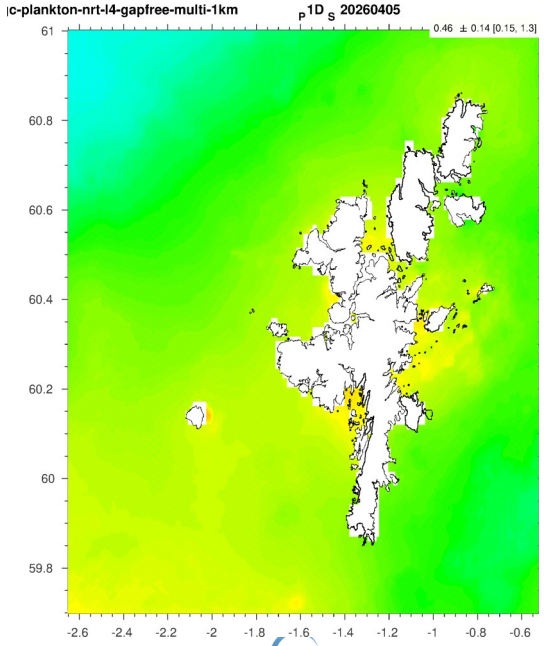
3 Apr 2026



4 Apr 2026



5 Apr 2026



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. Blank areas or areas bounded by straight lines on the map are usually the result of data loss due, for example, to persistent cloud cover in which case the data has been interpolated and may not accurately depict the actual concentrations present.

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

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Wind and rain forecast for next three days in Shetland