

Shetland Bulletin on the status of harmful & toxic algae Week 23, 1st - 7th June 2026

Biotoxin report:

- ASP toxins:** One sample was analysed this week. Toxins were not detected.
- AZA toxins:** Seventeen samples were analysed this week. Toxins were not detected.
- DSP toxins:** Seventeen samples were analysed this week. Toxins were not detected.
- PSP toxins:** Six samples were analysed this week. Toxins were not detected.
- YTX toxins:** Seventeen samples were analysed this week. Toxins were not detected.

Harmful algae report:

- Alexandrium:** Twelve samples were analysed this week. *Alexandrium* was detected at above trigger levels in Sandsound Voe and Stream Sound, and at warning levels in Scarvar Ayre.
- Dinophysis:** Twelve samples were analysed this week. *Dinophysis* was detected in low numbers in Braewick Voe.
- Karenia mikimotoi:** Twelve samples were analysed this week. *Karenia* was not detected.
- Prorocentrum lima:** Twelve samples were analysed this week. *P. lima* was detected above trigger levels at BaltaSound and Inner Site 1, and in low numbers in Scarvar Ayre and Seggi Bight .
- Pseudo-nitzschia delicatissima:** Twelve samples were analysed this week. *P. delicatissima* was found above trigger in Stream Sound and in low numbers in all other sites.
- Pseudo-nitzschia seriata:** Twelve samples were analysed this week. *P. seriata* was found detected in low numbers in Scarvar Ayre, Sandsound Voe and Seggi Bight.

Shetland: trends and forecast

Alexandrium/PSP: *Alexandrium* was detected at above trigger level in two sites and at warning level at one. No toxins were detected. It is unlikely there will be a toxic bloom this week.

Dinophysis/DSP: *Dinophysis* was detected at low numbers at one site and toxins were not detected at any site. It is unlikely there will be a toxic bloom this week.

Pseudo-nitzschia/ASP: *P. delicatissima* was detected above trigger in one site and in low numbers in all other sites *P. seriata* was detected in low numbers in three sites. 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.

P. lima was detected at above trigger level in two sites and in low numbers in two sites. However, it is unlikely that there will be a toxic bloom this week.

Risk for **PSP:** Low

Risk for **YTX:** Low

Risk for **DSP:** Low

Risk for **AZA:** Low

Risk for **ASP:** 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.



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



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/algaltxin/#.UY0TkqTQ6O>

Warning/Threshold Levels

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

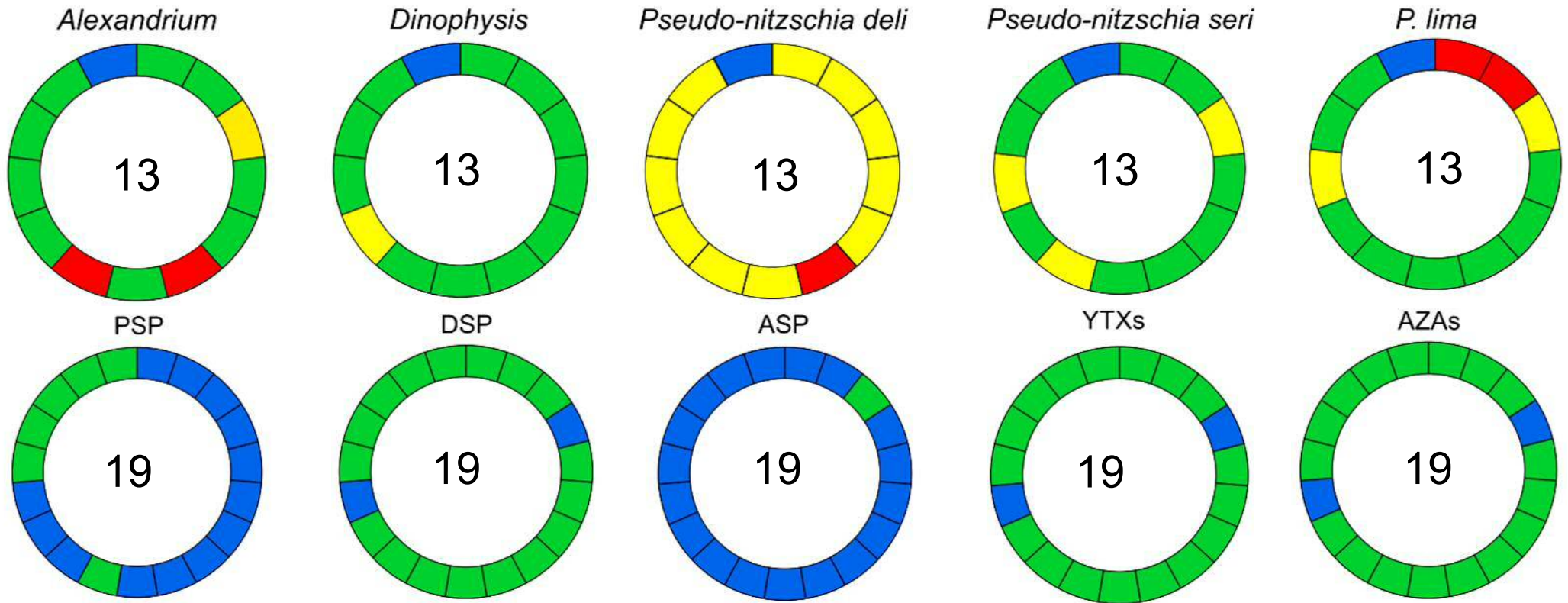
Lipophilic toxins (tested by LC-MS):

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

YTXs: 3.75 milligram of yessotoxin equivalent/kilogram

AZAs: 160 micrograms of azaspiracids equivalents/kilogram

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

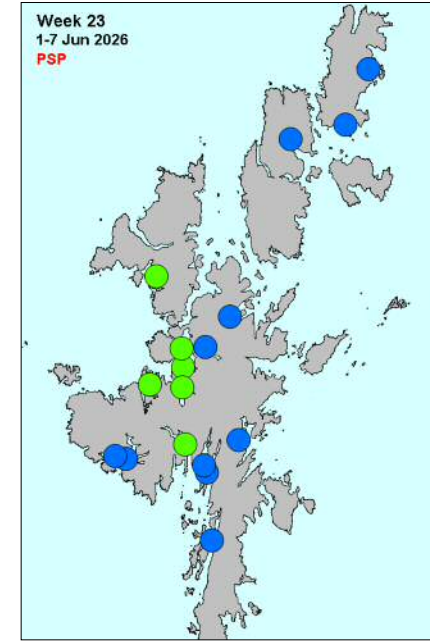
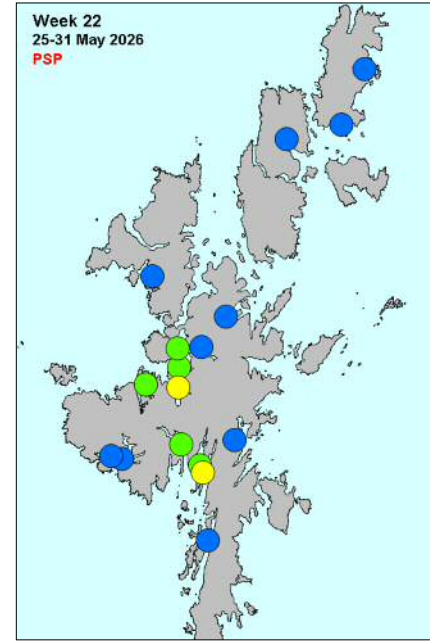
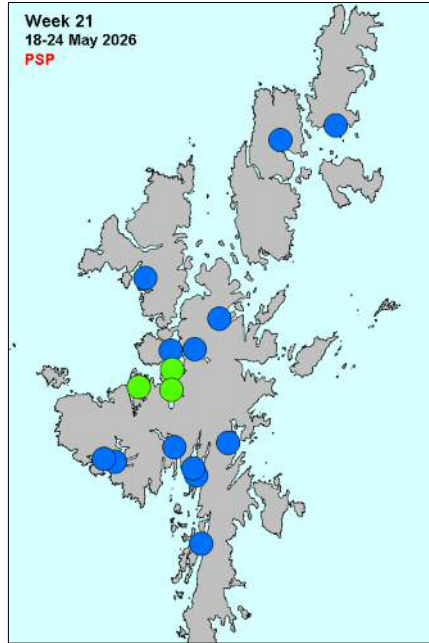
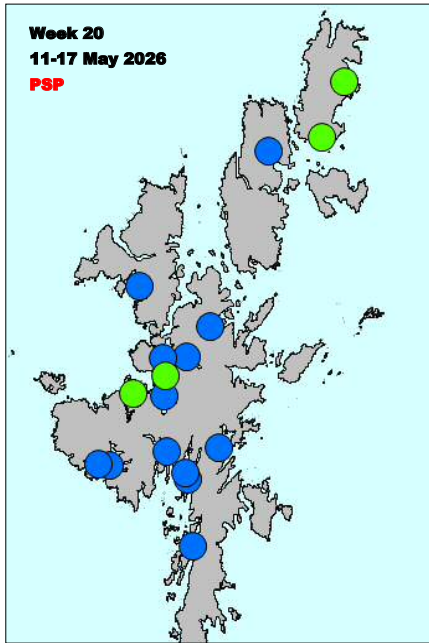
Biotoxin & Species	Green	Yellow	Amber	Red	Blue
PSP	<RL	RL - 399 µg/kg	400 - 800 µg/kg	>800 µg/kg	Not analysed
OA/DTX/PTX	<RL	1 - 79 µg/kg	80 - 160 µg/kg	>160 µg/kg	Not analysed
ASP	<LOQ	LOQ - 9.9 mg/kg	10 - 20 mg/kg	>20 mg/kg	Not analysed
YTX	<RL	1 - 1.7 mg/kg	1.8 - 3.75 mg/kg	>3.75 mg/kg	Not analysed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

Paralytic shellfish poisoning toxins & causative phytoplankton

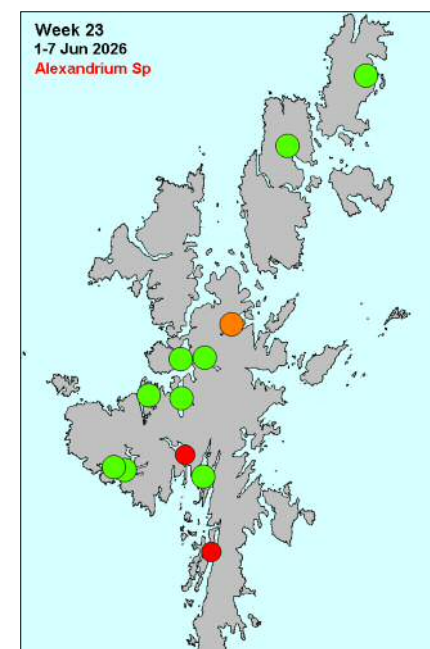
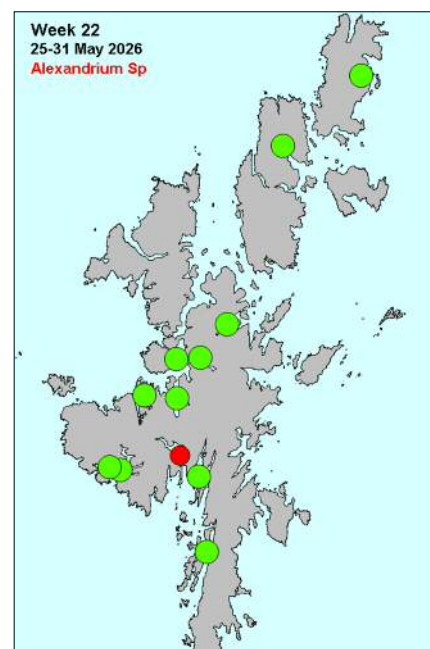
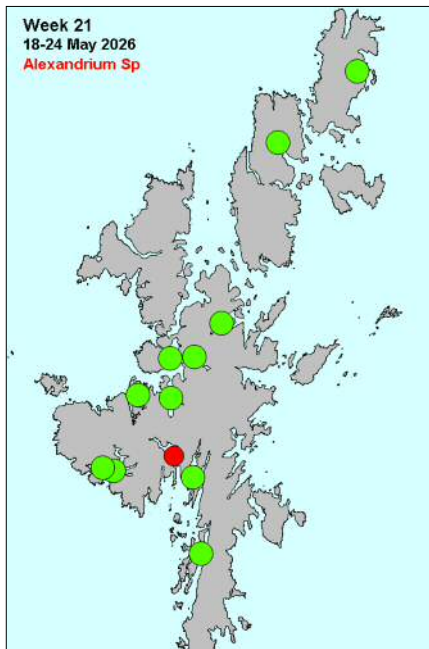
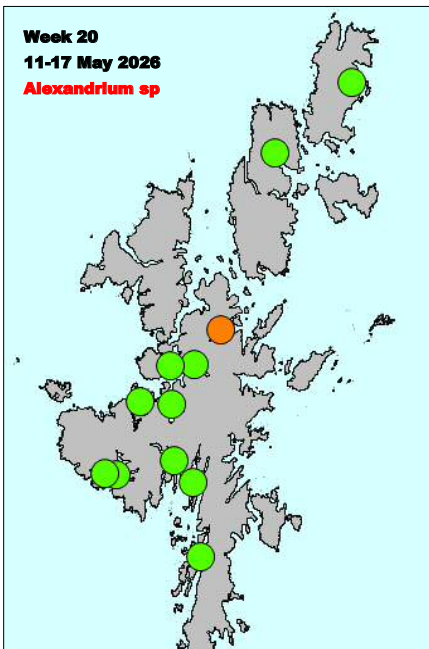
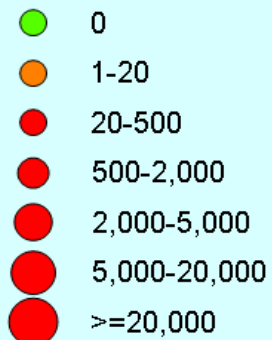
PSP

µg STX eq/kg



Alexandrium Sp.

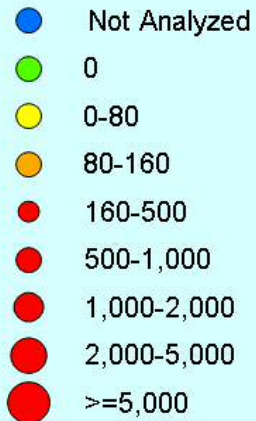
cells/l



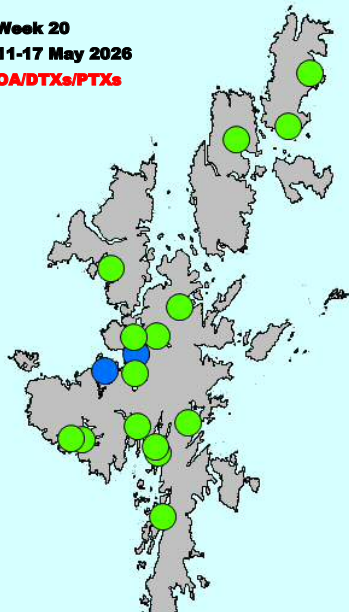
Diarrhetic shellfish poisoning toxins & causative phytoplankton

OA/DTXs/PTXs

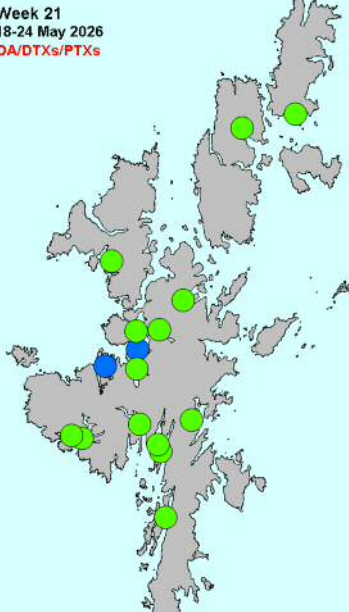
µg OA eq/kg



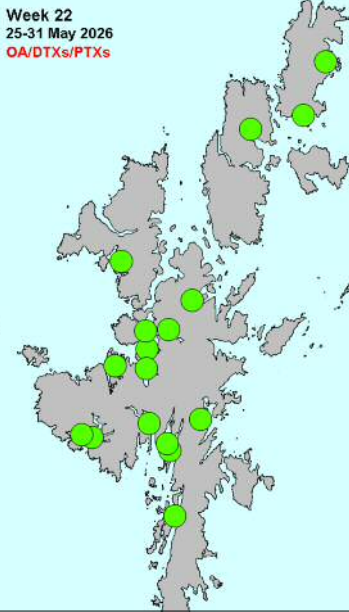
Week 20
11-17 May 2026
OA/DTXs/PTXs



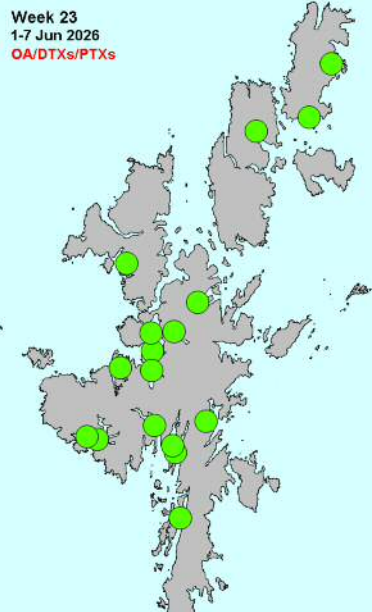
Week 21
18-24 May 2026
OA/DTXs/PTXs



Week 22
25-31 May 2026
OA/DTXs/PTXs

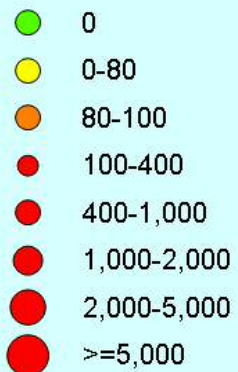


Week 23
1-7 Jun 2026
OA/DTXs/PTXs

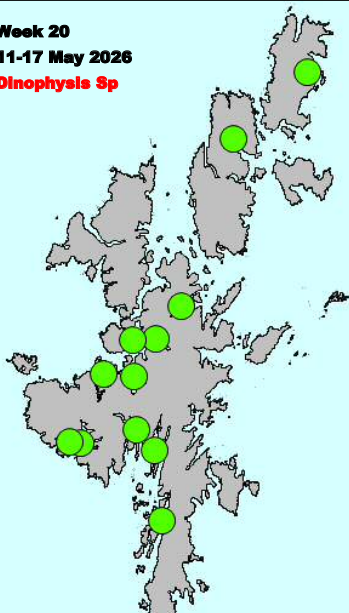


Dinophysis Sp.

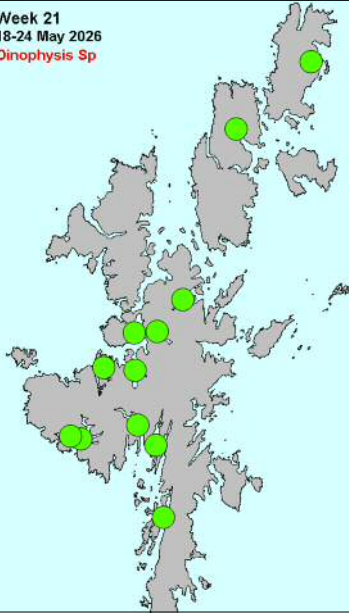
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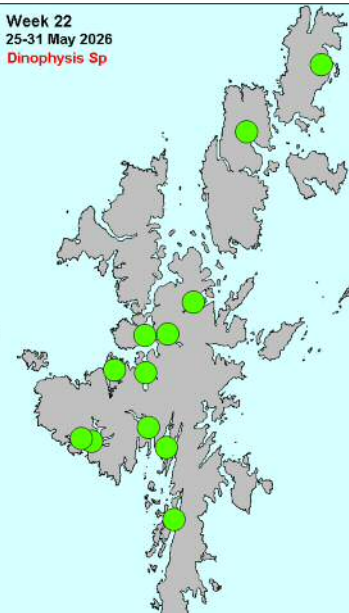
Week 20
11-17 May 2026
Dinophysis Sp



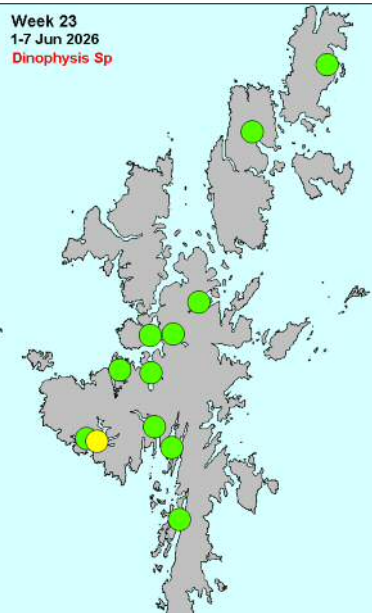
Week 21
18-24 May 2026
Dinophysis Sp



Week 22
25-31 May 2026
Dinophysis Sp

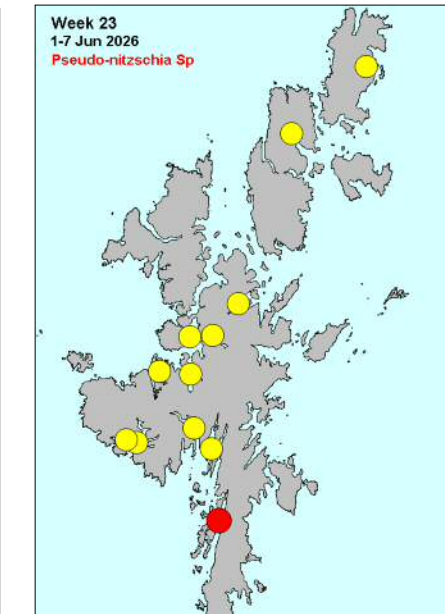
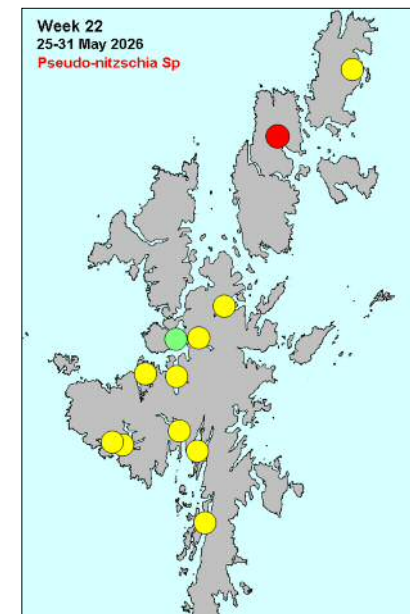
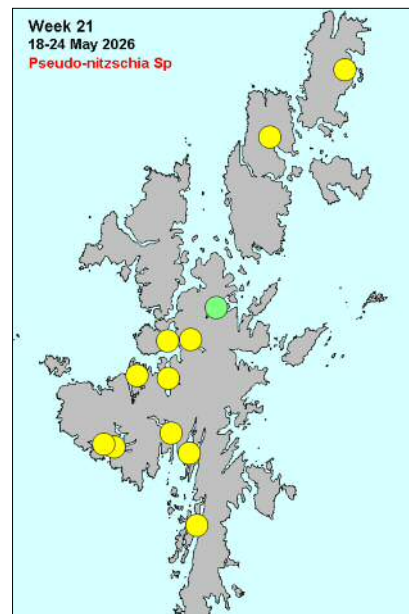
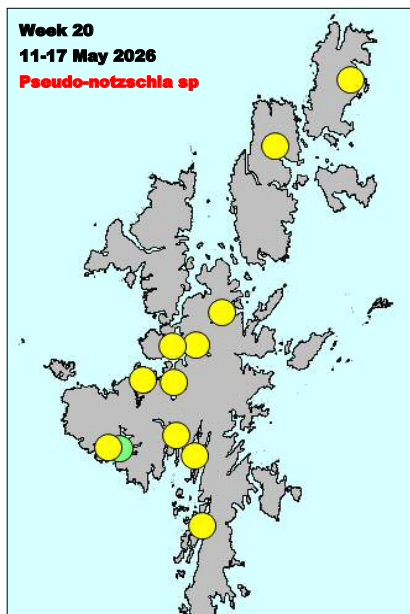
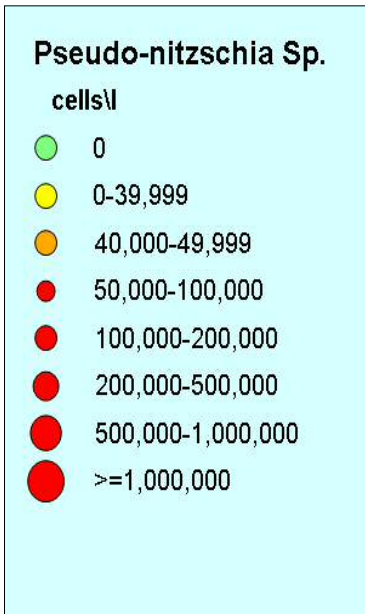
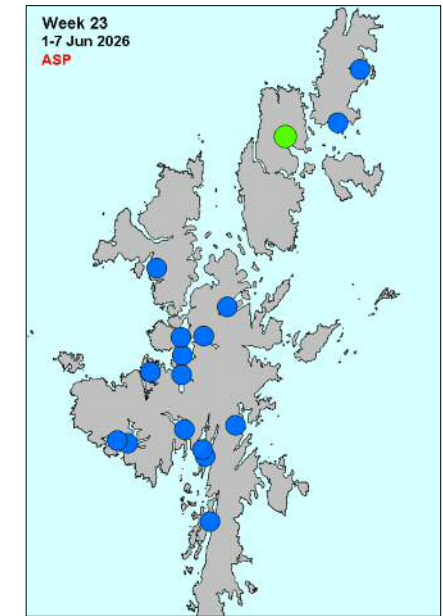
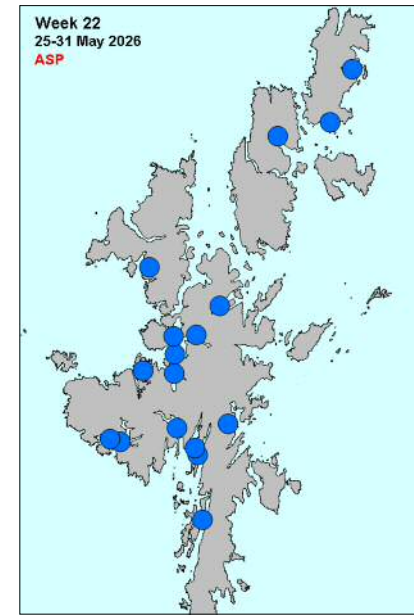
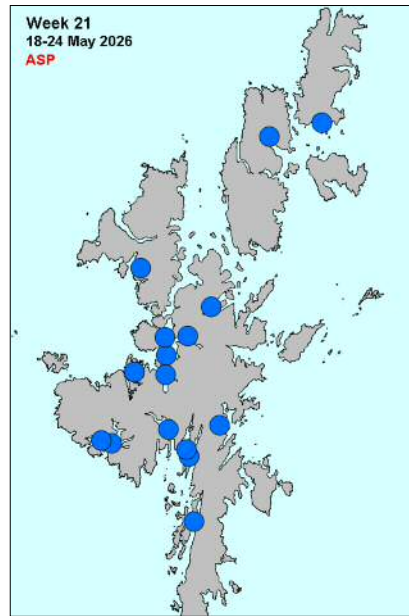
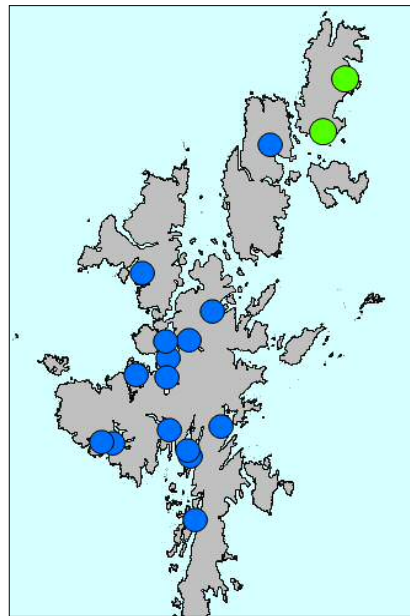
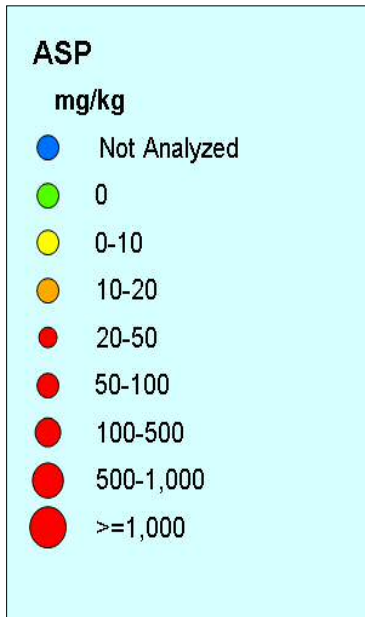


Week 23
1-7 Jun 2026
Dinophysis Sp



Shetland Bulletin on the status of harmful & toxic algae Week 23, 1st - 7th June 2026

Amnesic Shellfish Poisoning & causative phytoplankton



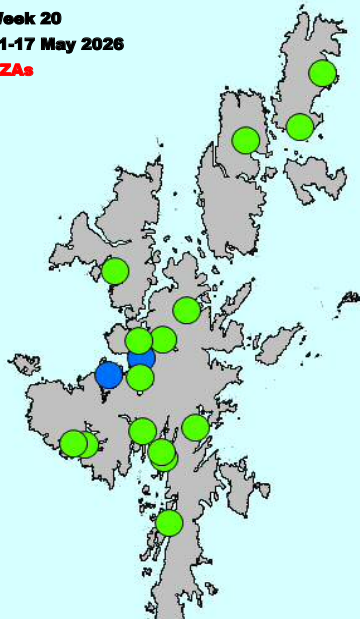
Azaspiracid & Yessotoxin shellfish poisoning toxins

AZAs

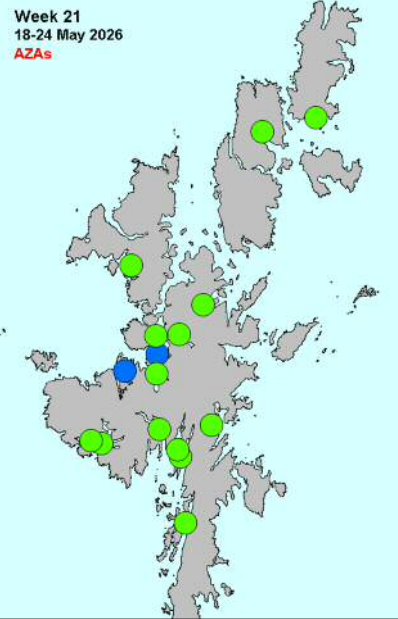
µg AZA1 eq/kg



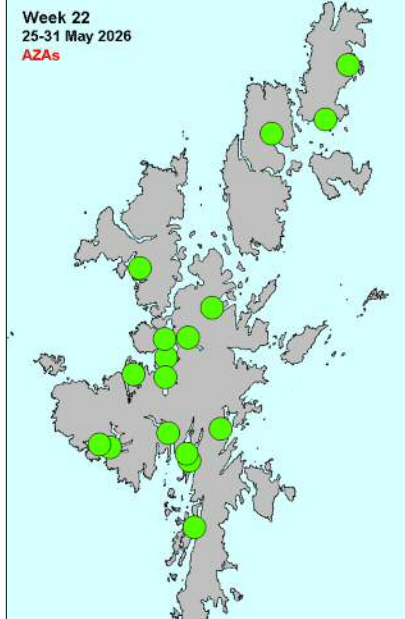
Week 20
11-17 May 2026
AZAs



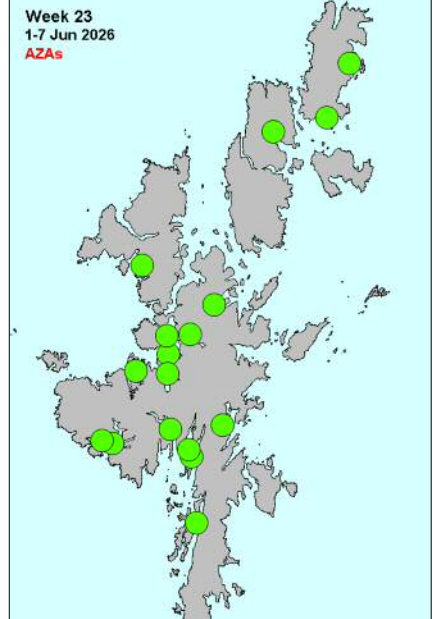
Week 21
18-24 May 2026
AZAs



Week 22
25-31 May 2026
AZAs

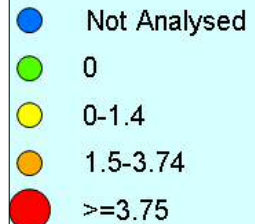


Week 23
1-7 Jun 2026
AZAs

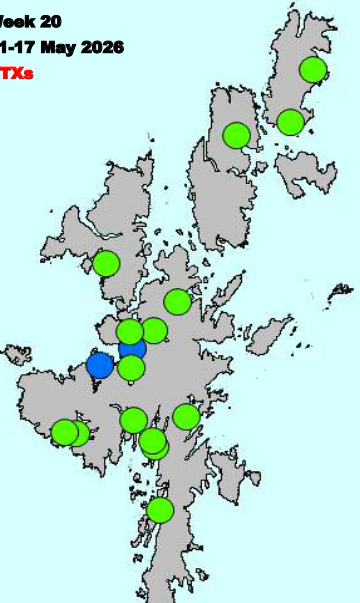


YTXs

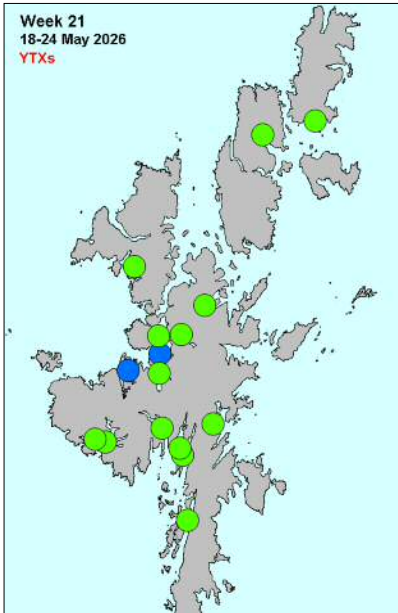
mg YTX eq/kg



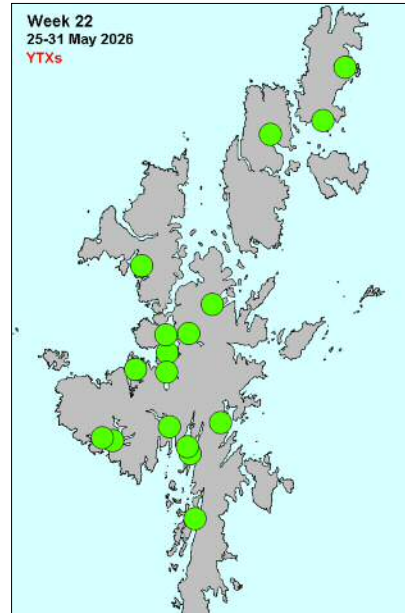
Week 20
11-17 May 2026
YTXs



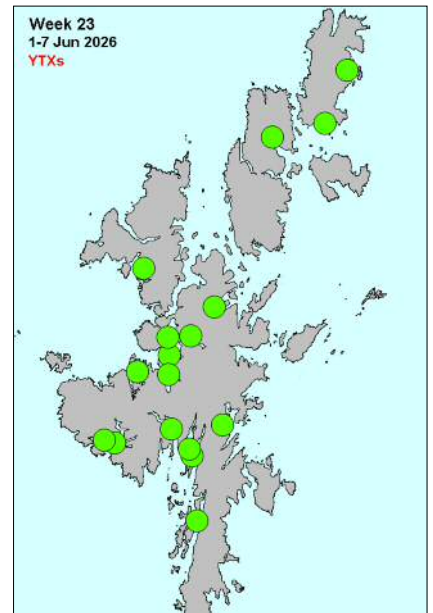
Week 21
18-24 May 2026
YTXs



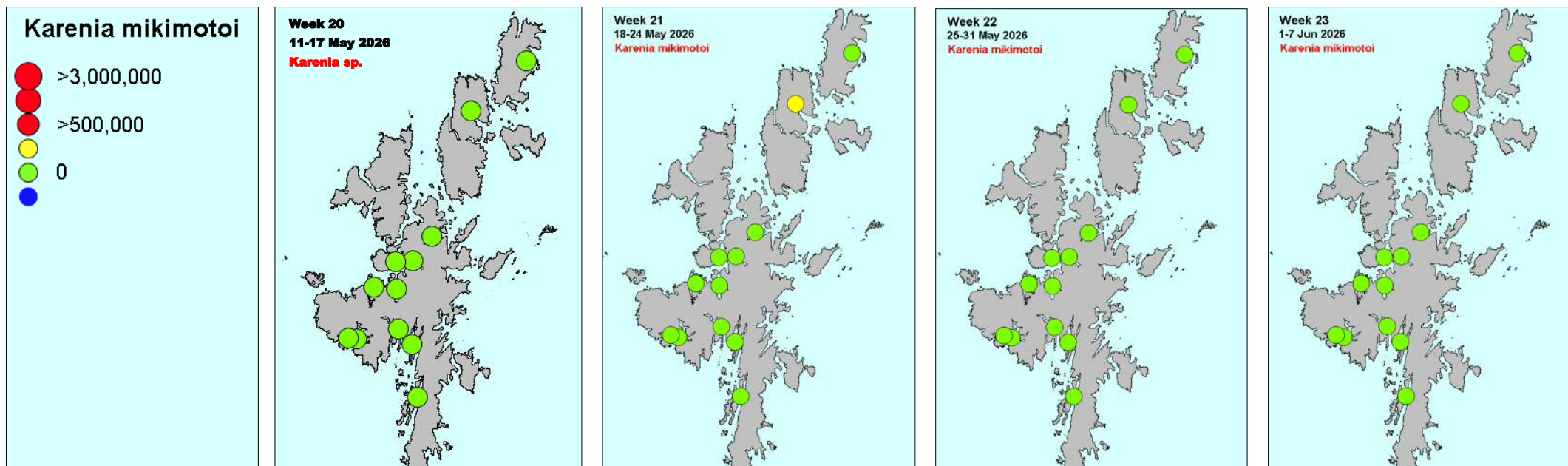
Week 22
25-31 May 2026
YTXs



Week 23
1-7 Jun 2026
YTXs



Karenia mikimotoi



Chain forming Phytoplankton

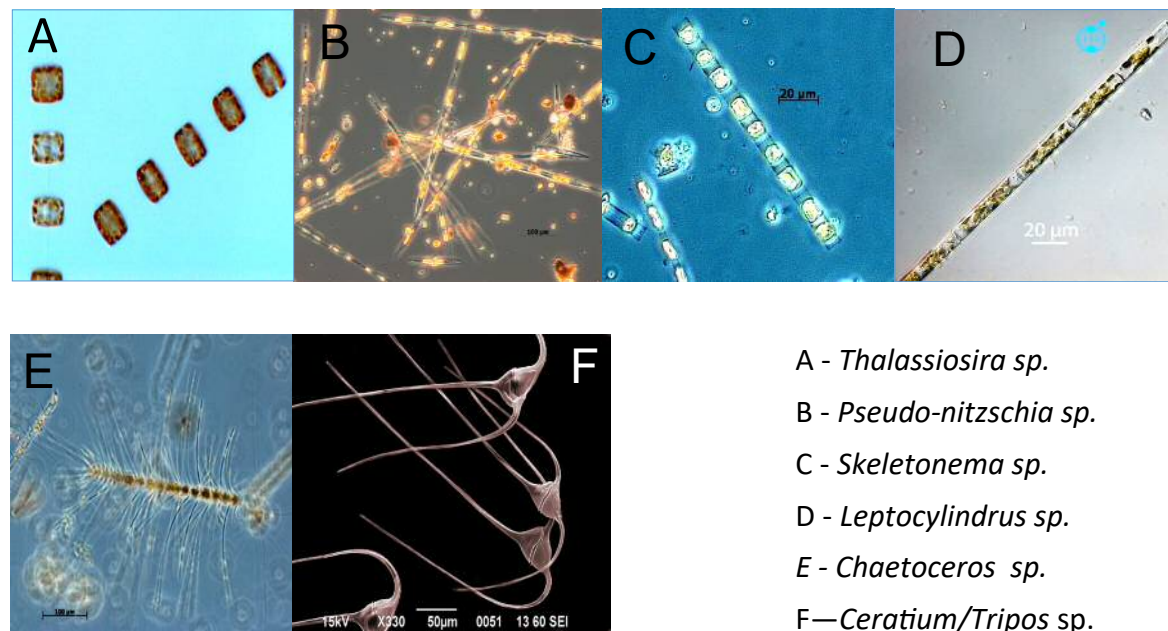
High densities of chain forming diatoms including, but not limited to the genus, *Chaetoceros*, *Skeletonema*, *Leptocylindrus*, *Rhizosolenia*, *Thalassiosira*, *Corethron* and *Pseudo-nitzschia*, the centric species *Coscinodiscus wailesii*, and species with long spines such as *Ceratium (Tripos)*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

Status

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

The IFCB at Cole Deep is detecting chains of *Leptocylindrus*, *Thalassiosira sp* and small flagellates. The one at Scalloway is offline for maintenance.

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

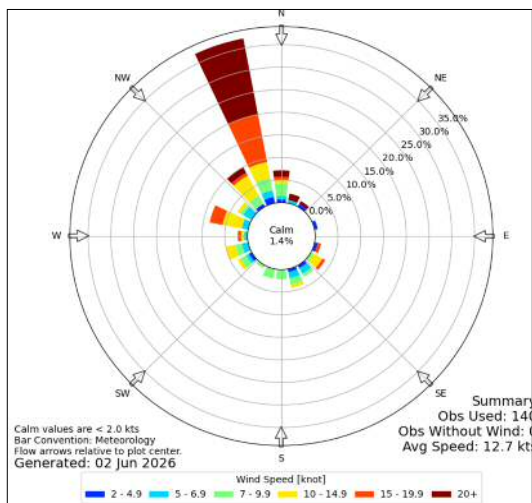


A - *Thalassiosira sp.*
 B - *Pseudo-nitzschia sp.*
 C - *Skeletonema sp.*
 D - *Leptocylindrus sp.*
 E - *Chaetoceros sp.*
 F - *Ceratium/Tripos sp.*

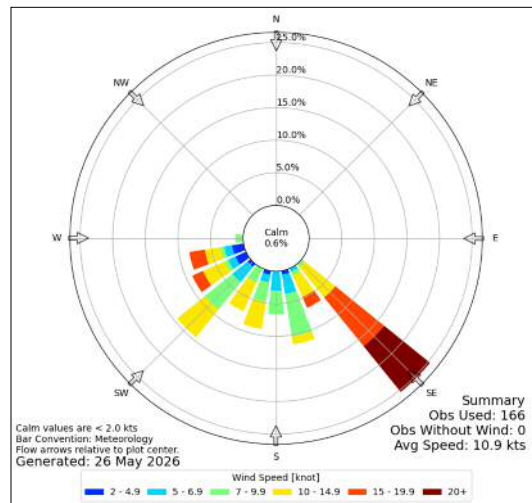
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Mean wind direction observed in Shetland for current and three preceding weeks

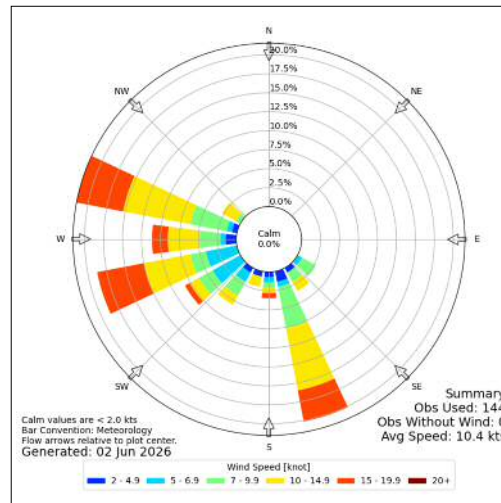
Week 20



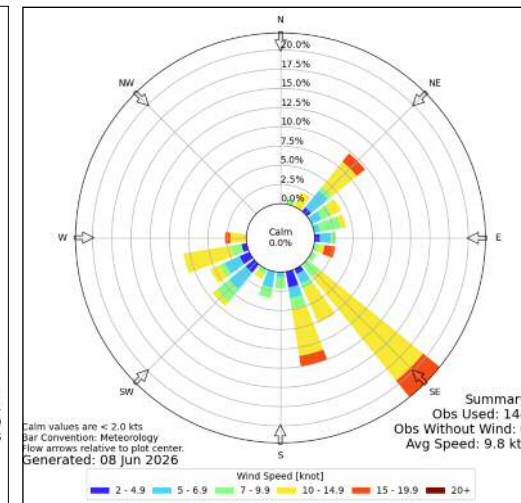
Week 21



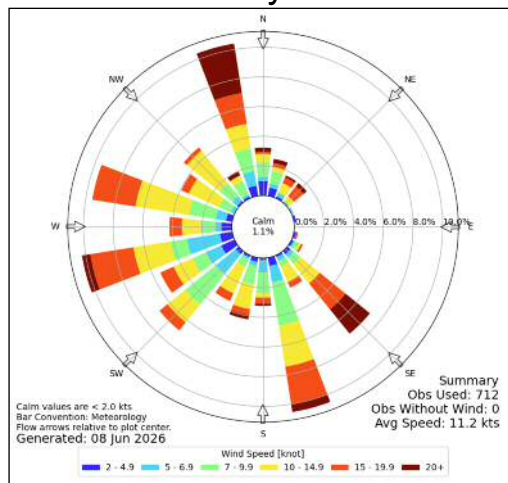
Week 22



Week 23



May



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 east.

Predictions:

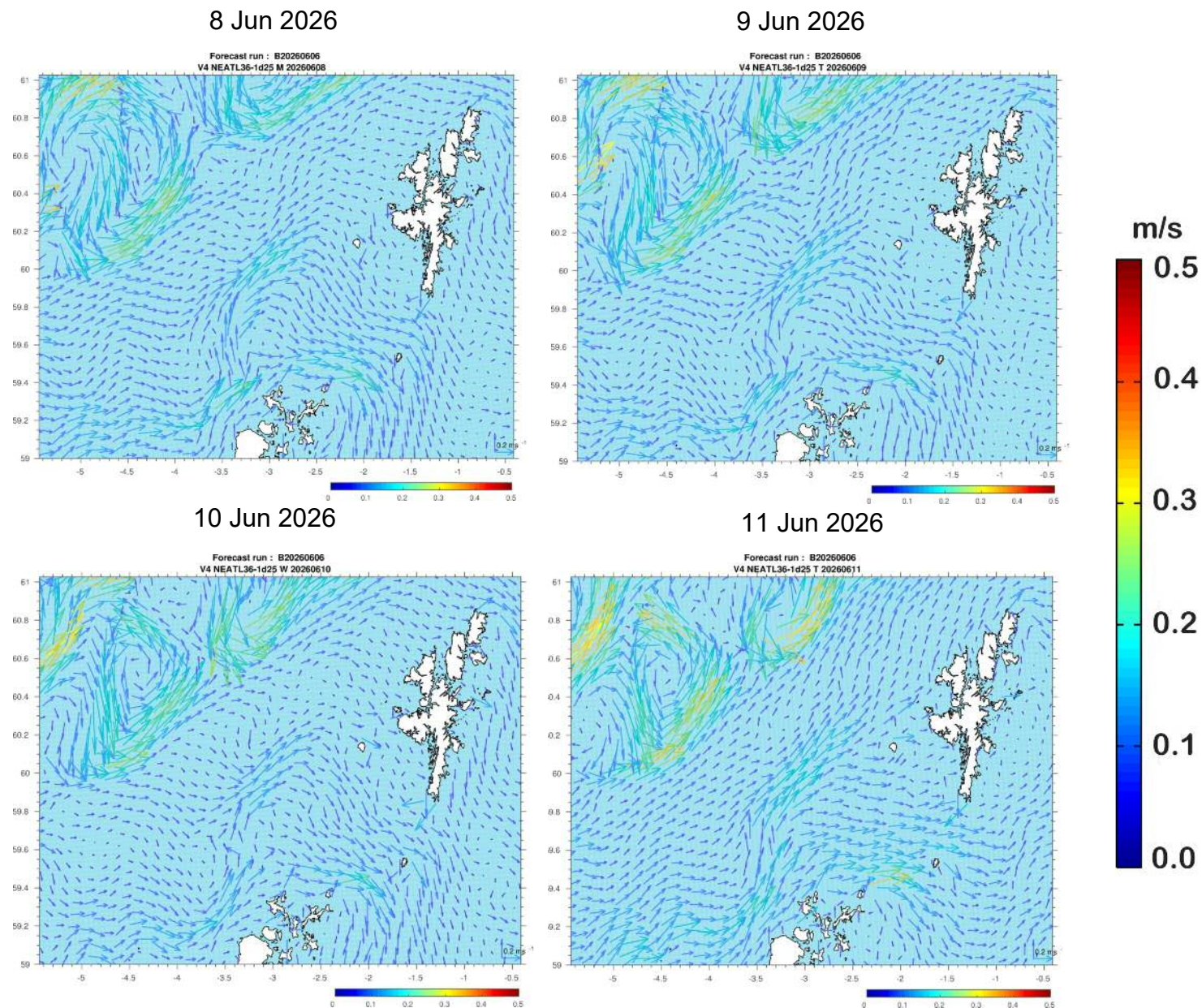
The risk of wind blown *Dinophysis* blooms in Shetland is **low** this week.

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 on average from the south west. However, given the time of year, it is unlikely that there will be an advected bloom of *Dinophysis* in the coming week.

Forecasted Sea Surface currents

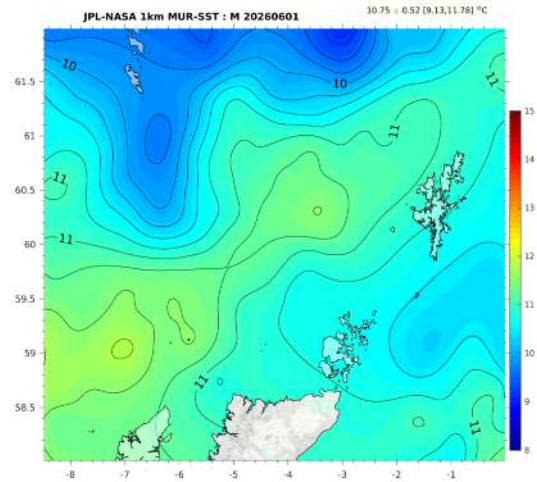
These diagrams show the predicted current directions around Shetland for the next couple of days. Greens to reds indicate stronger currents. In general strong currents run parallel to the deep water channel between the Faroes and Shetland. Problems can arise when these currents turn Eastwards potentially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



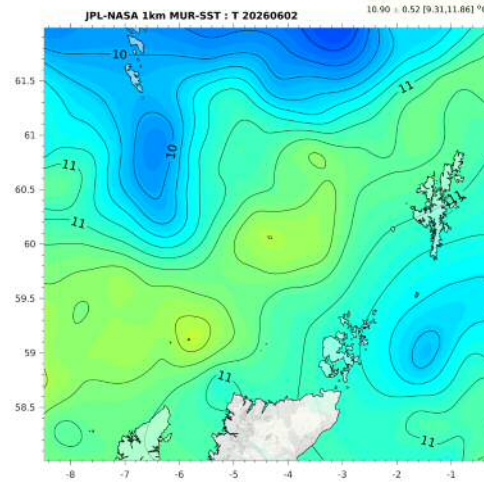
Shetland Bulletin on the status of harmful & toxic algae Week 23, 1st - 7th June 2026

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

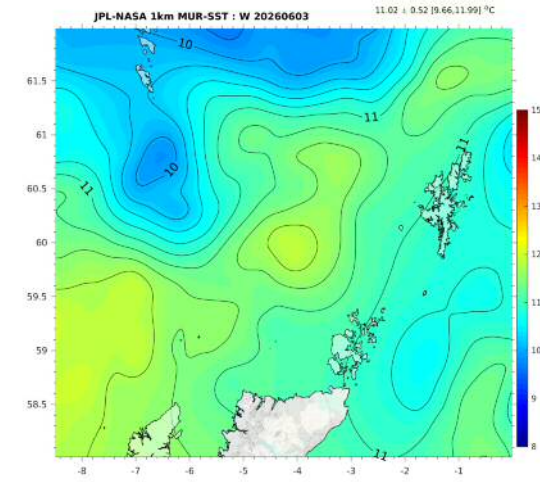
01 June 2026



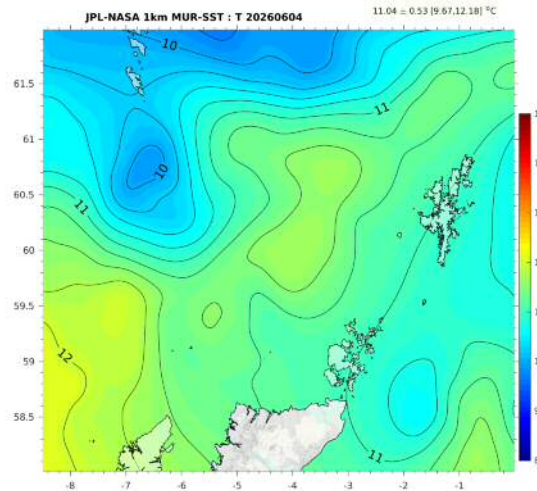
02 June 2026



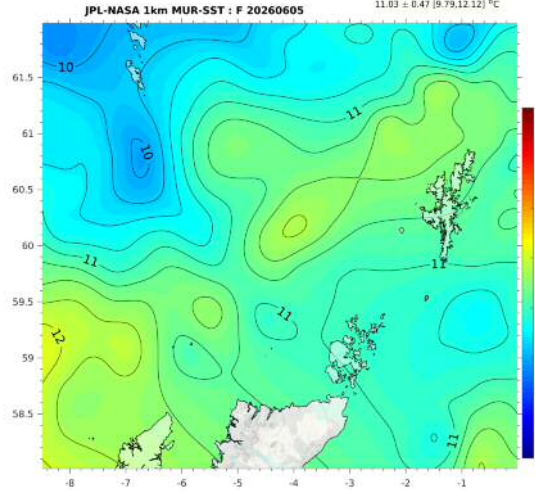
03 June 2026



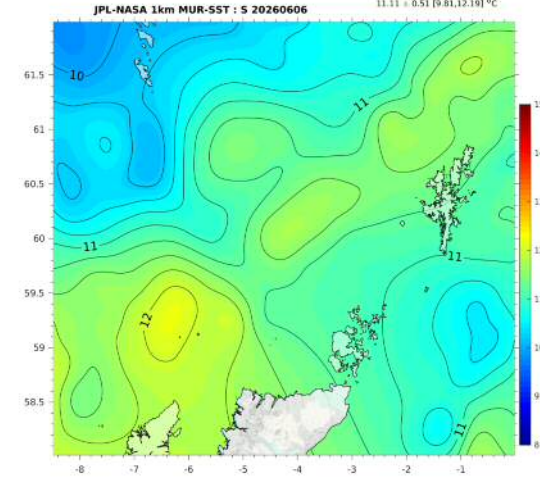
04 June 2026



05 June 2026

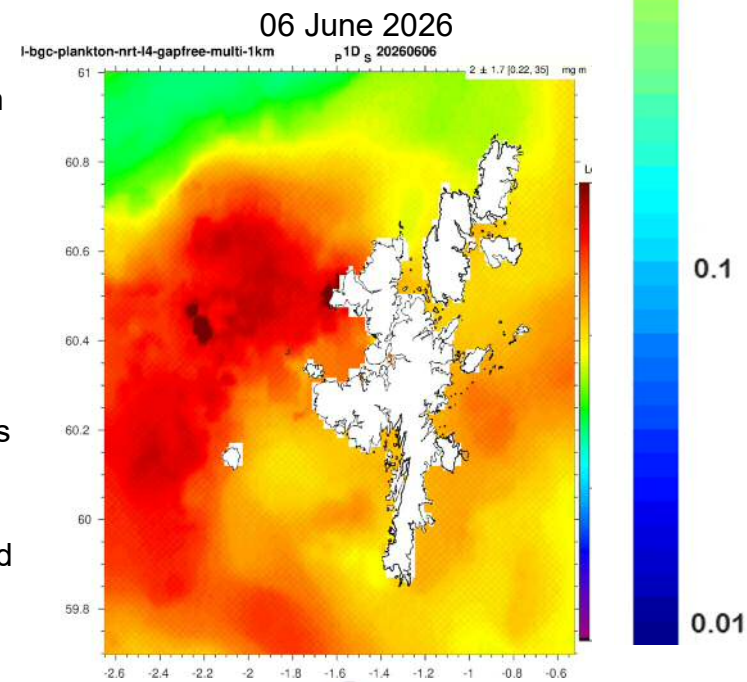
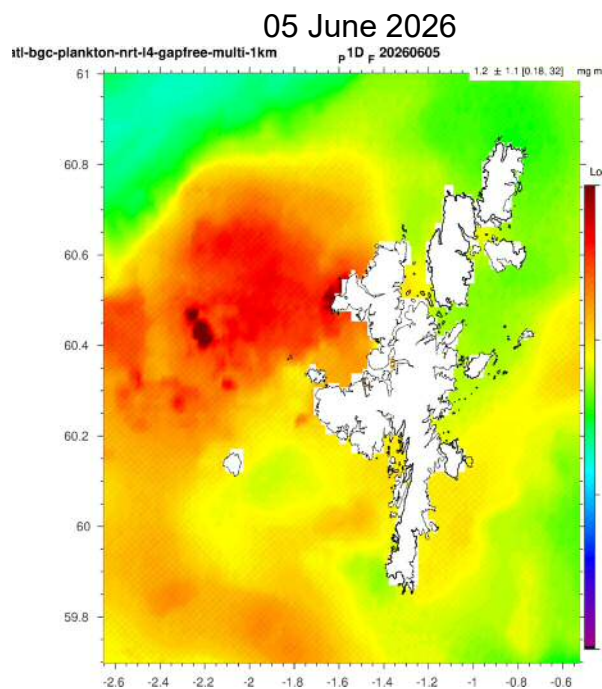
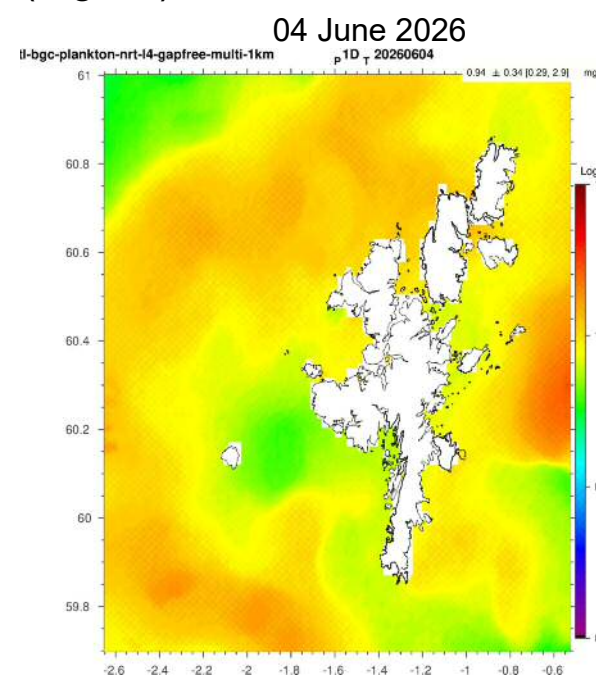
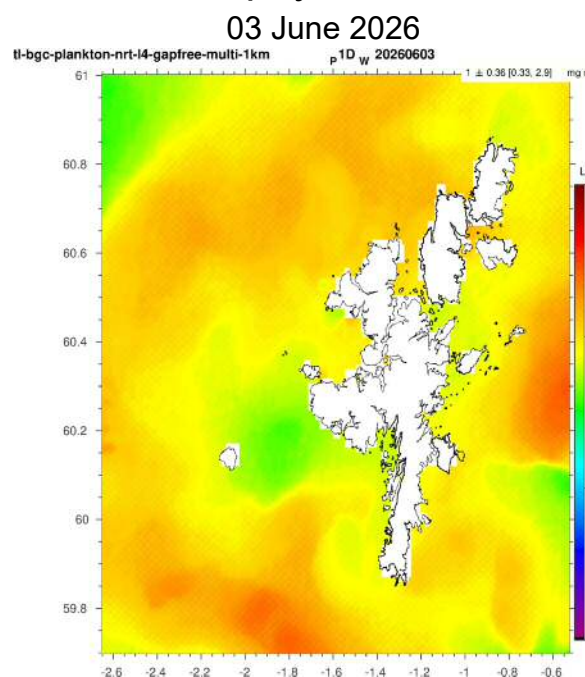
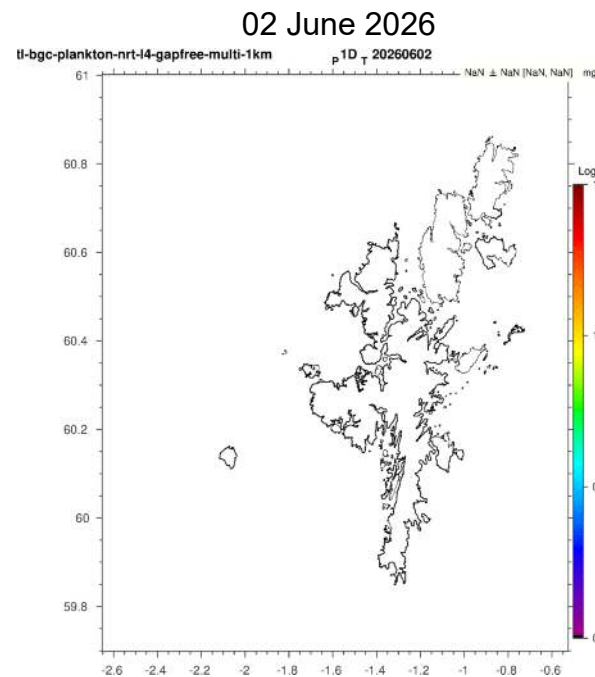


06 June 2026



Maps provided courtesy of the Jet Propulsion Laboratory, NASA

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. 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 concen-