

Shetland Bulletin on the status of harmful & toxic algae Week 38, 14th - 20th Sep 2026

Biotoxin report:

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

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

DSP toxins: Nineteen samples were analysed this week. Toxins were detected in low concentrations in Scarvar Ayre, Braewick Voe, Sandsound Voe, Burra Holm, Wadbister Voe, Slyde and Busta Voe Lee.

PSP toxins: Seven samples were analysed this week. Toxins were not detected.

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

Harmful algae report:

Alexandrium: Twelve samples were analysed this week. *Alexandrium* was detected above trigger levels in North Flotta and at warning levels in East of Linga and Stream Sound.

Dinophysis: Twelve samples were analysed this week. *Dinophysis* was detected above trigger level in North Flotta and Slyde. It was found in low numbers in Parkgate, Sandsound Voe, Seggi Bight and Busta Voe Lee.

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 level in Baltasound Mussels, Parkgate, Sandsound Voe and Inner Site 1. It was found at warning level in Scarvar Ayre and in low numbers in Stream Sound, Braewick Voe and Seggi Bight.

Pseudo-nitzschia delicatissima: Twelve samples were analysed this week. *P. delicatissima* was detected at warning levels in Sandsound Voe. It was found in low numbers in all other sites except Parkgate.

Pseudo-nitzschia seriata: Twelve samples were analysed this week. *P. seriata* was detected above trigger level in Stream Sound, Parkgate, Sandsound Voe, North Flotta, Slyde and Busta Voe Lee. It was found in low numbers in all other sites.

Shetland: trends and forecast

Alexandrium/PSP: *Alexandrium* was detected above trigger level in one site and at warning level in two. Toxins were not detected. It is unlikely there will be a toxic bloom this week.

Dinophysis/DSP: *Dinophysis* was detected at trigger level in two sites and in low numbers at four sites. Toxins were detected in low concentrations in seven sites.

Pseudo-nitzschia/ASP: *P. delicatissima* was detected at warning level in one site and in low numbers in ten sites. *P. seriata* was detected above trigger in six sites, and in low numbers in six sites. Numbers were relatively low with the exception of Slyde, Sandsound Voe and Busta Voe Lee. Toxins were not detected.

AZA and YTX: No toxins were detected. It is extremely unlikely that there will be a toxic bloom this week.

P. lima was detected above trigger level in four sites, at warning level at one and at low numbers in five. This is a benthic species and numbers were relatively low with the exception of Baltasound and Parkgate, it is unlikely that there will be a toxic bloom this week.

Risk for **PSP:** Low Risk for **YTX:** Low

Risk for **DSP:** Med Risk for **AZA:** Low

Risk for **ASP:** Low/Med

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



Seafood Shetland

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/algatoxin/#.UY0TkcgTQ6O>

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

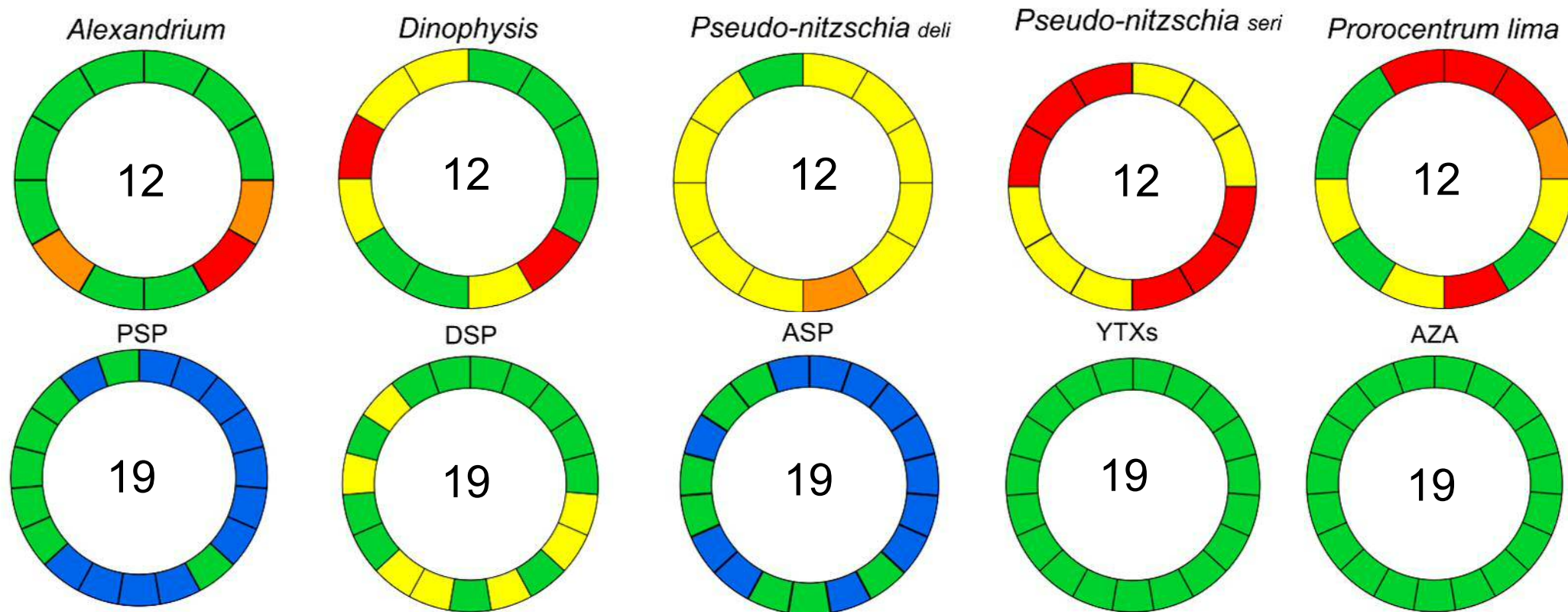
Lipophilic toxins (tested by LC-MS):

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					
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.

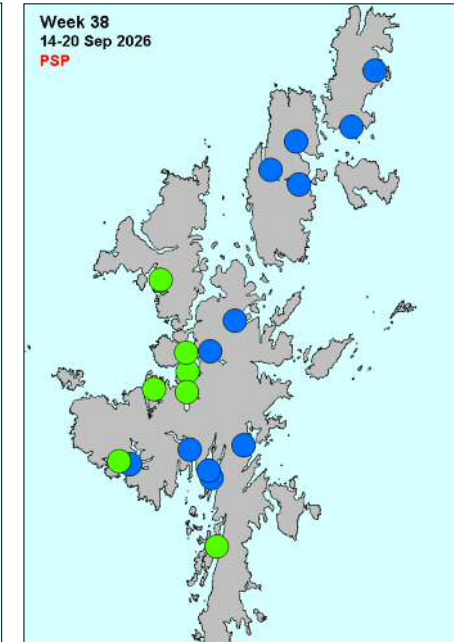
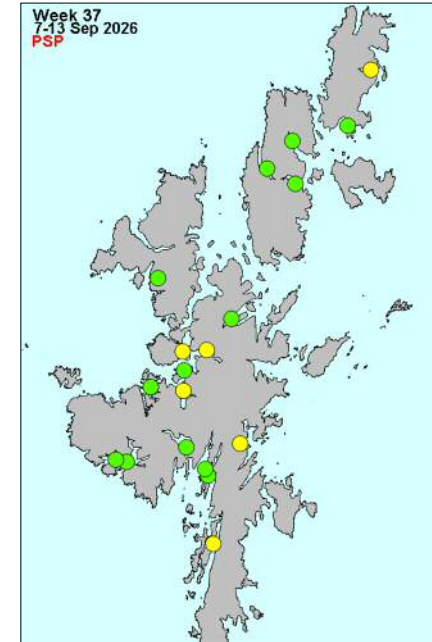
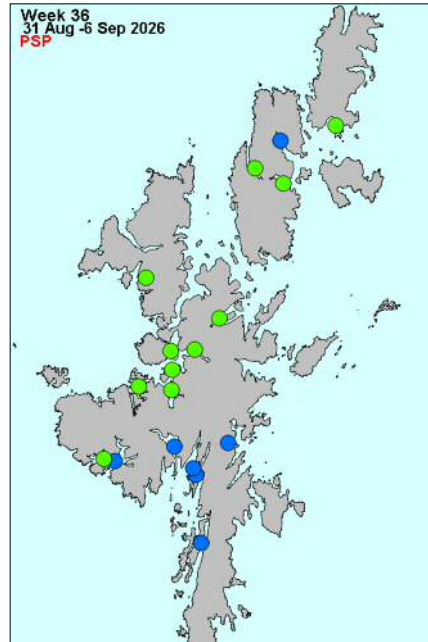
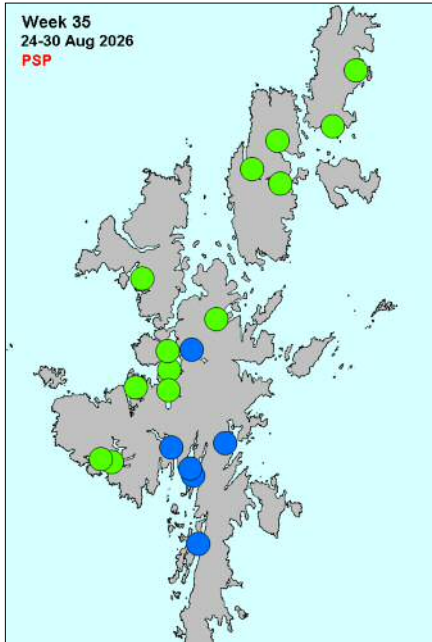
RL- reporting limit;
LOQ – Limit of quantification

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Paralytic shellfish poisoning toxins & causative phytoplankton

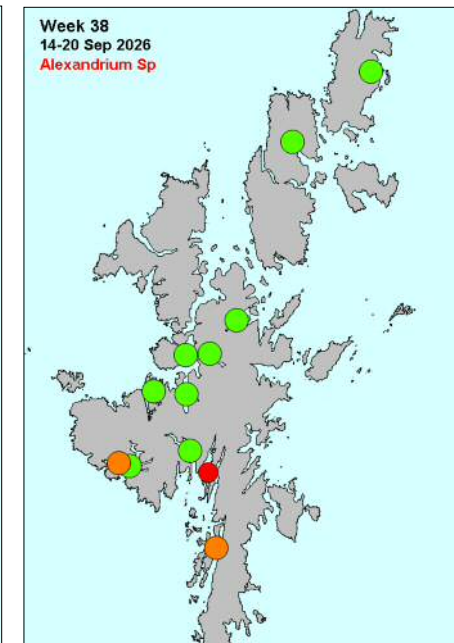
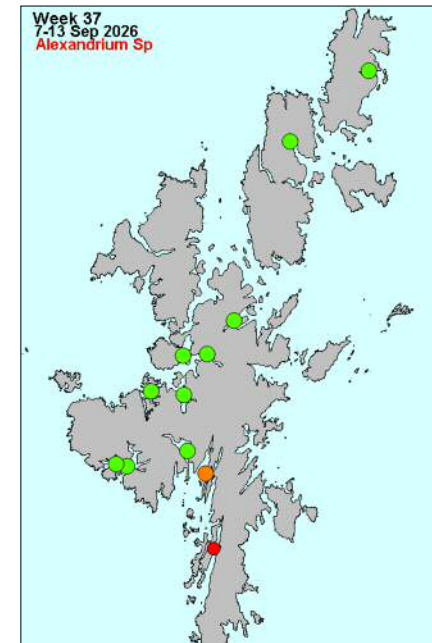
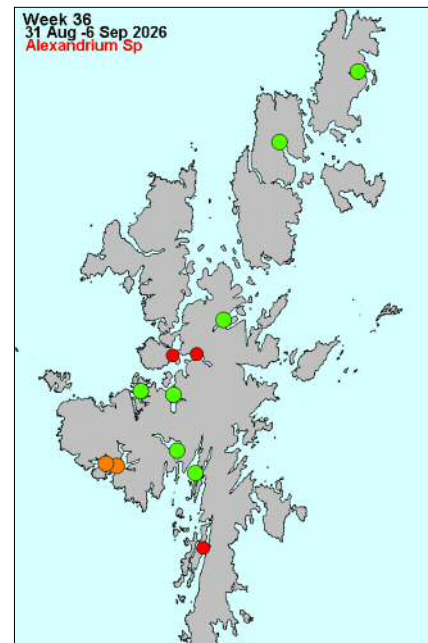
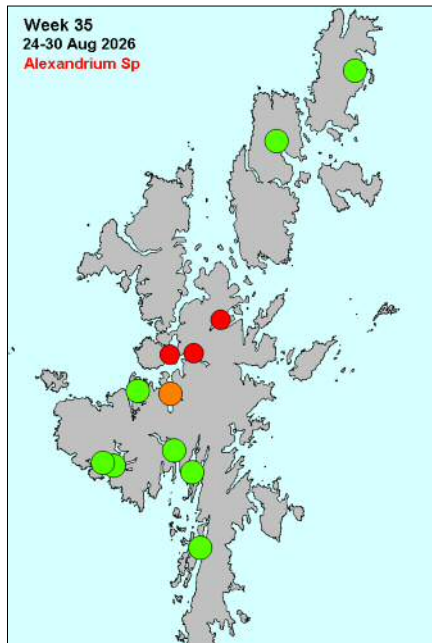
PSP

µg STX eq/kg



Alexandrium Sp.

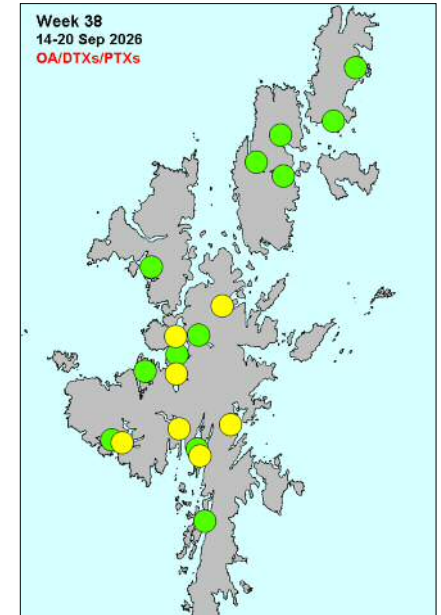
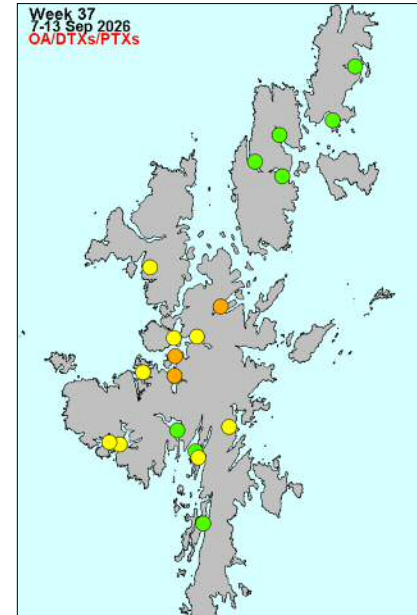
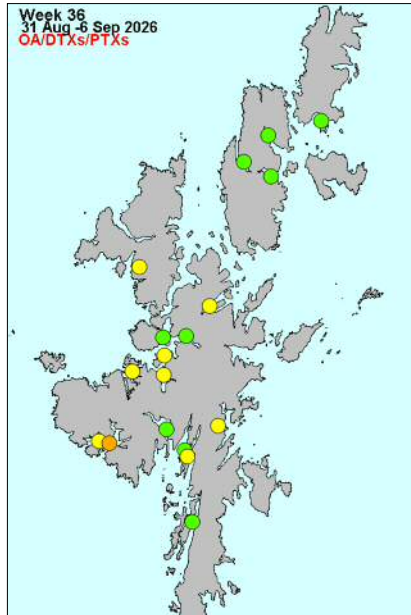
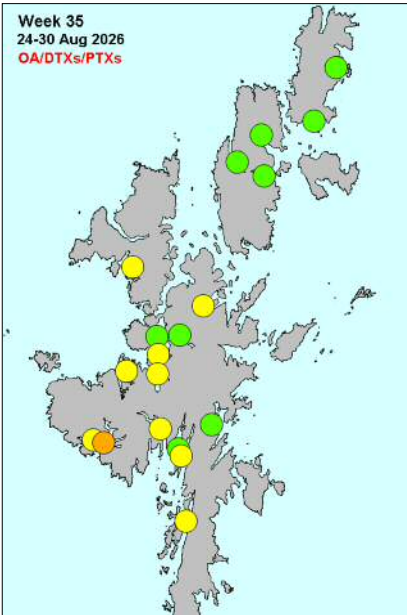
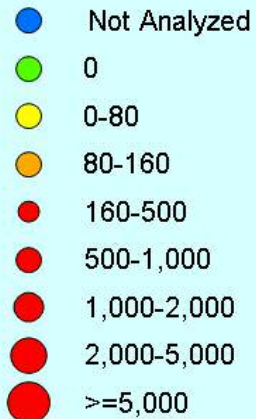
cells/l



Diarrhetic shellfish poisoning toxins & causative phytoplankton

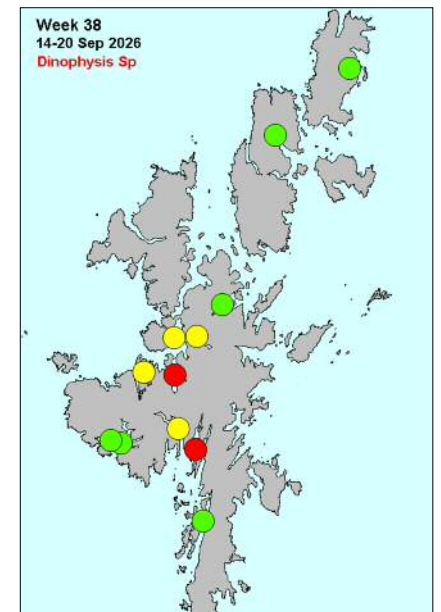
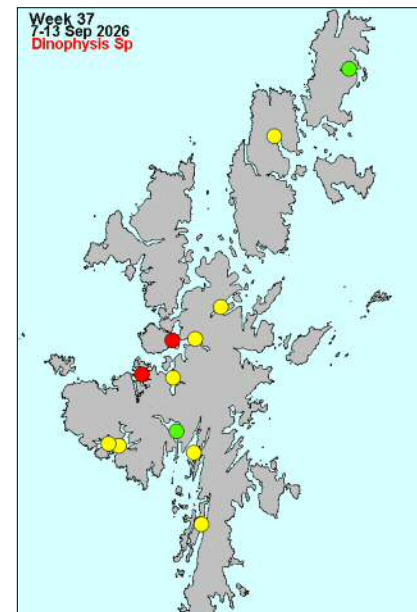
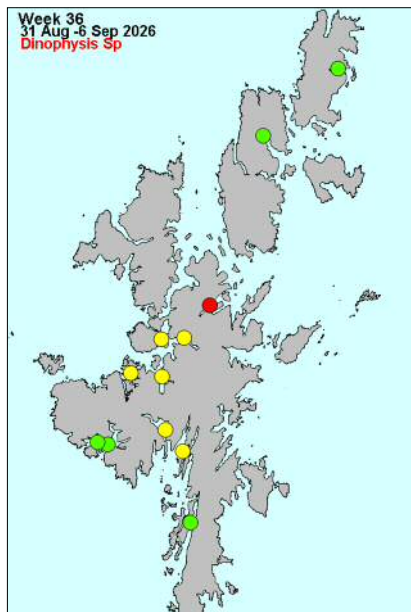
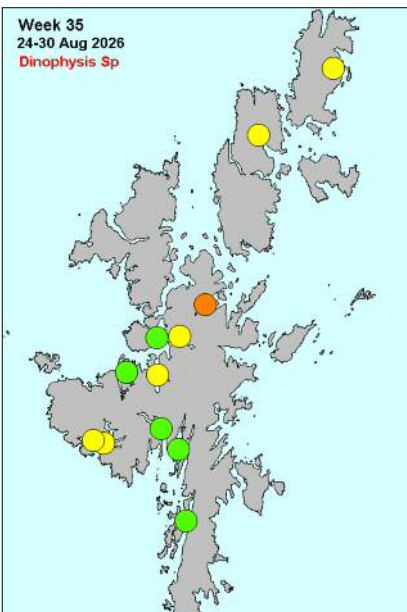
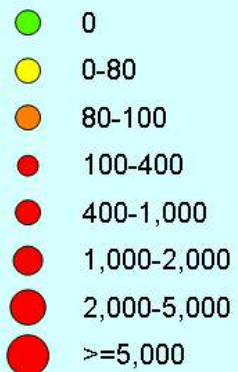
OA/DTXs/PTXs

µg OA eq/kg



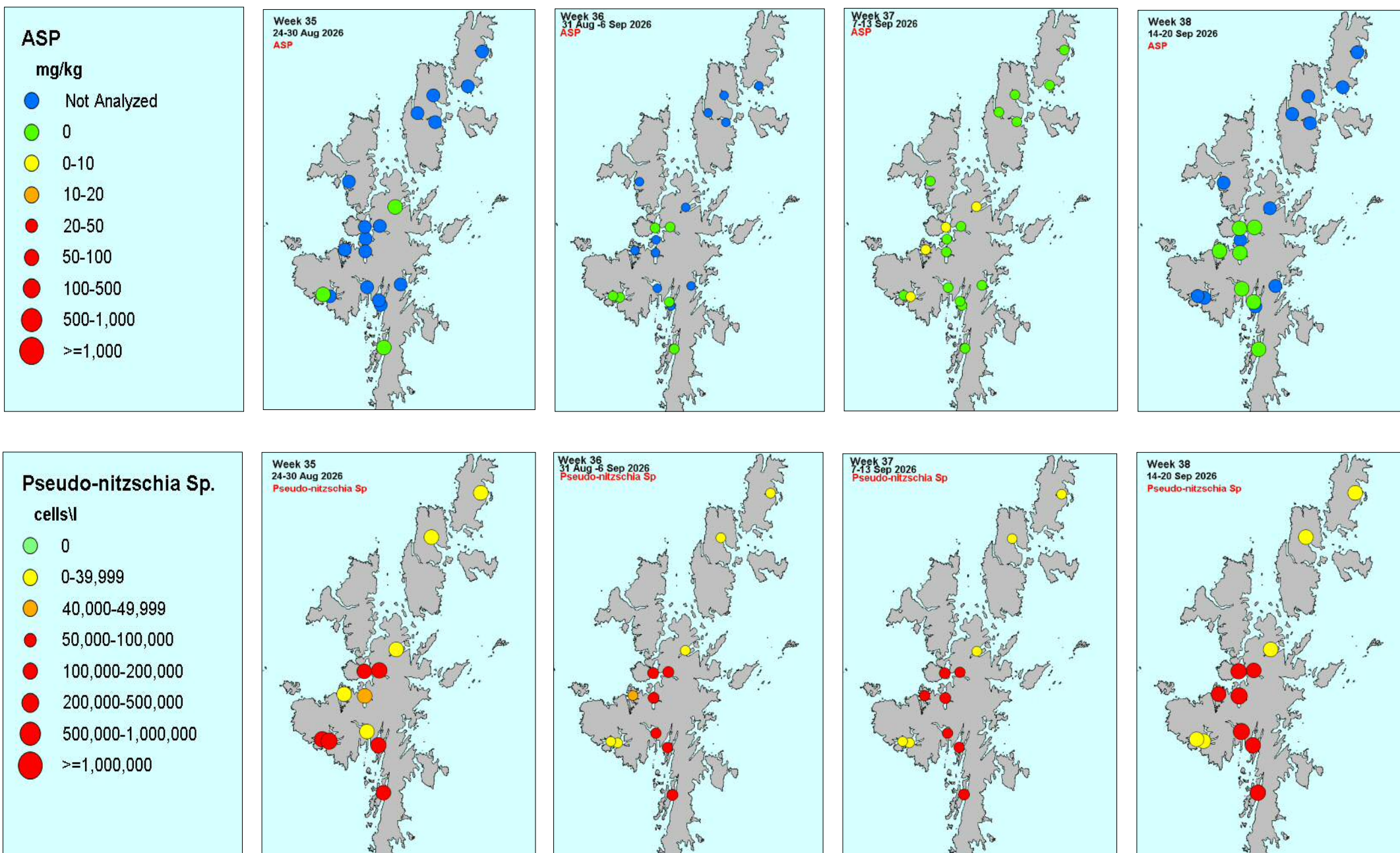
Dinophysis Sp.

cells/l



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Amnesic Shellfish Poisoning & causative phytoplankton



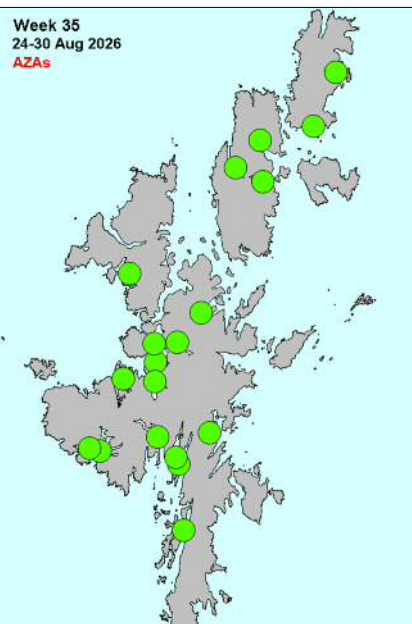
Azaspiracid & Yessotoxin shellfish poisoning toxins

AZAs

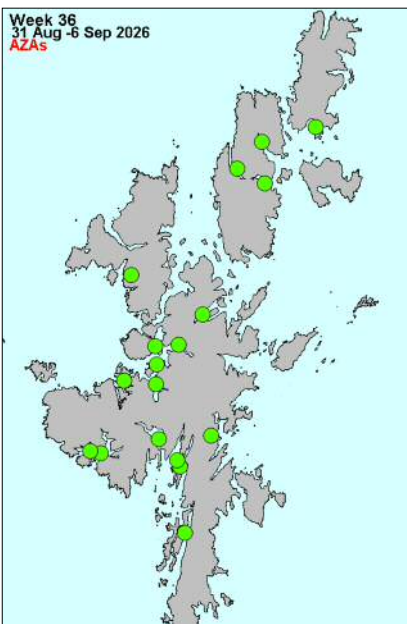
µg AZA1 eq/kg



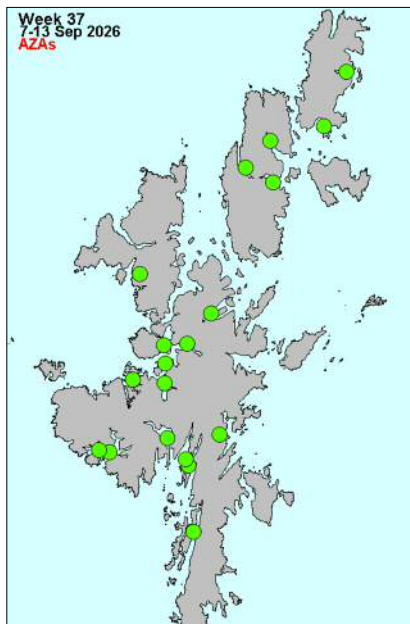
Week 35
24-30 Aug 2026
AZAs



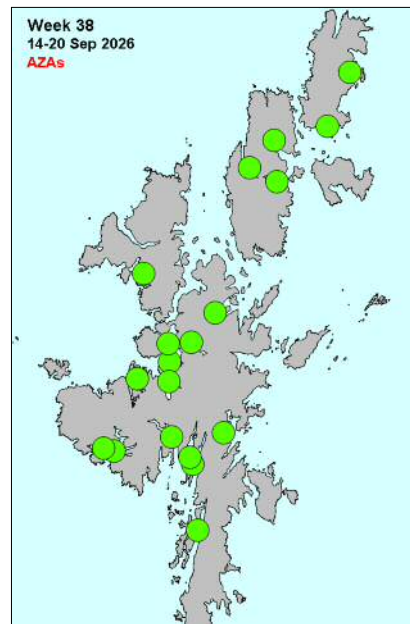
Week 36
31 Aug - 6 Sep 2026
AZAs



Week 37
7-13 Sep 2026
AZAs

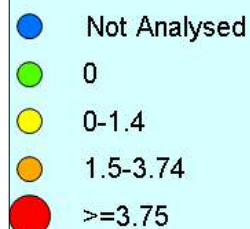


Week 38
14-20 Sep 2026
AZAs

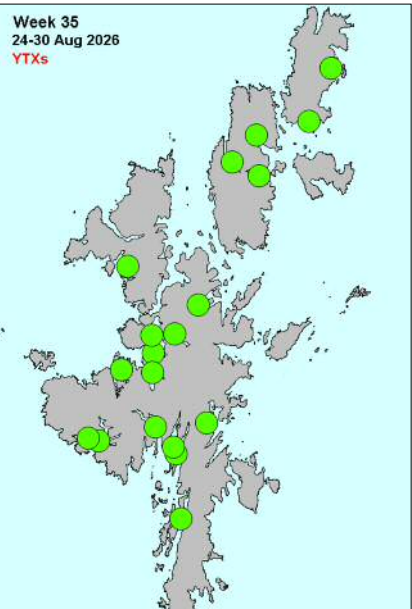


YTXs

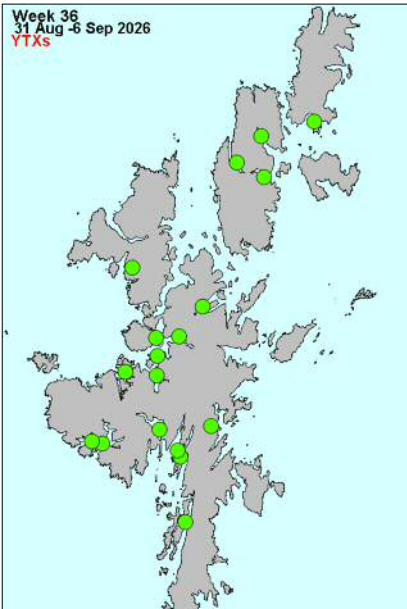
mg YTX eq/kg



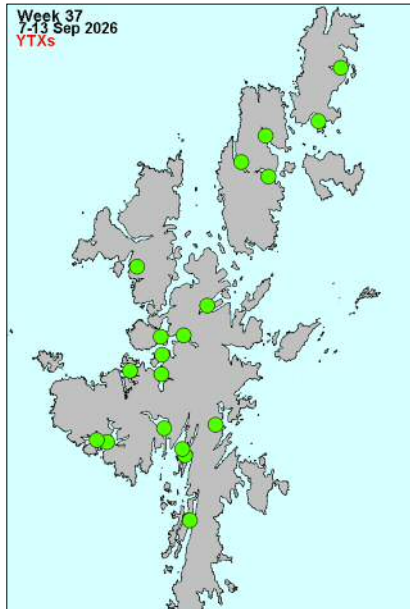
Week 35
24-30 Aug 2026
YTXs



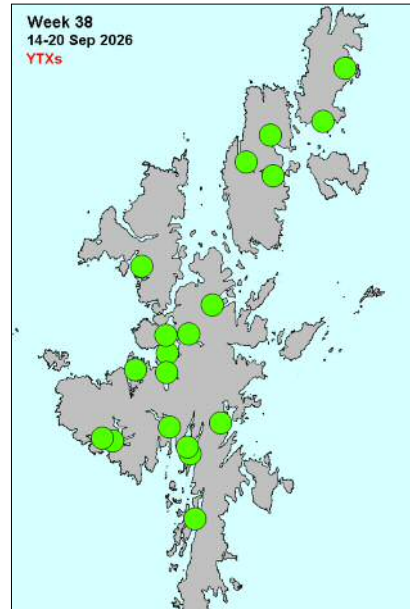
Week 36
31 Aug - 6 Sep 2026
YTXs



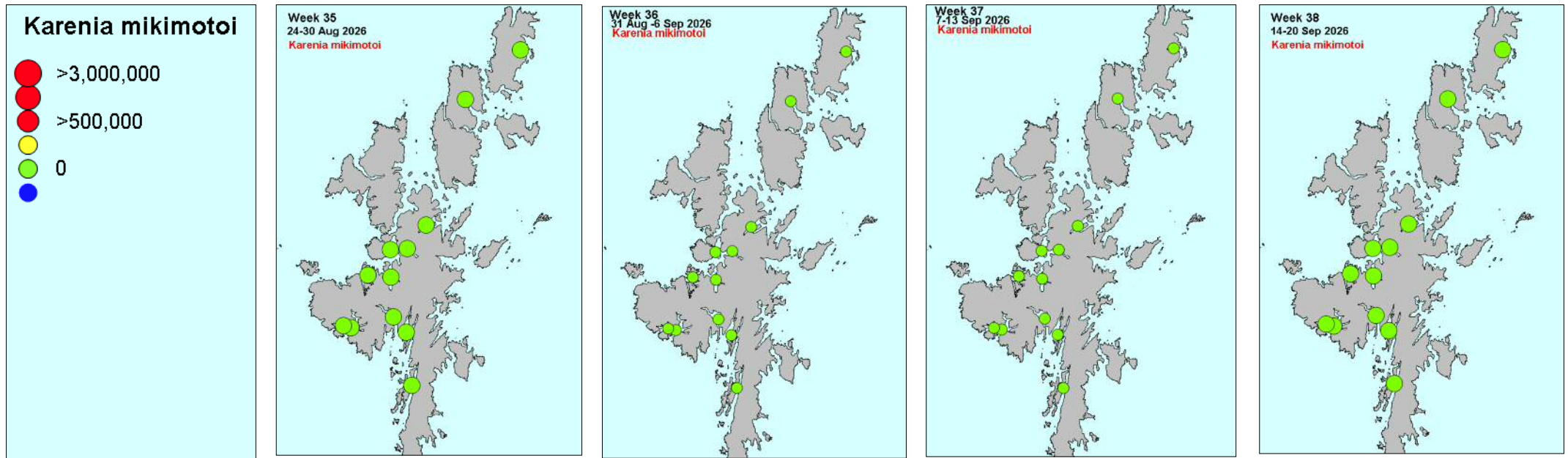
Week 37
7-13 Sep 2026
YTXs



Week 38
14-20 Sep 2026
YTXs



Karenia mikimotoi



Chain forming Phytoplankton

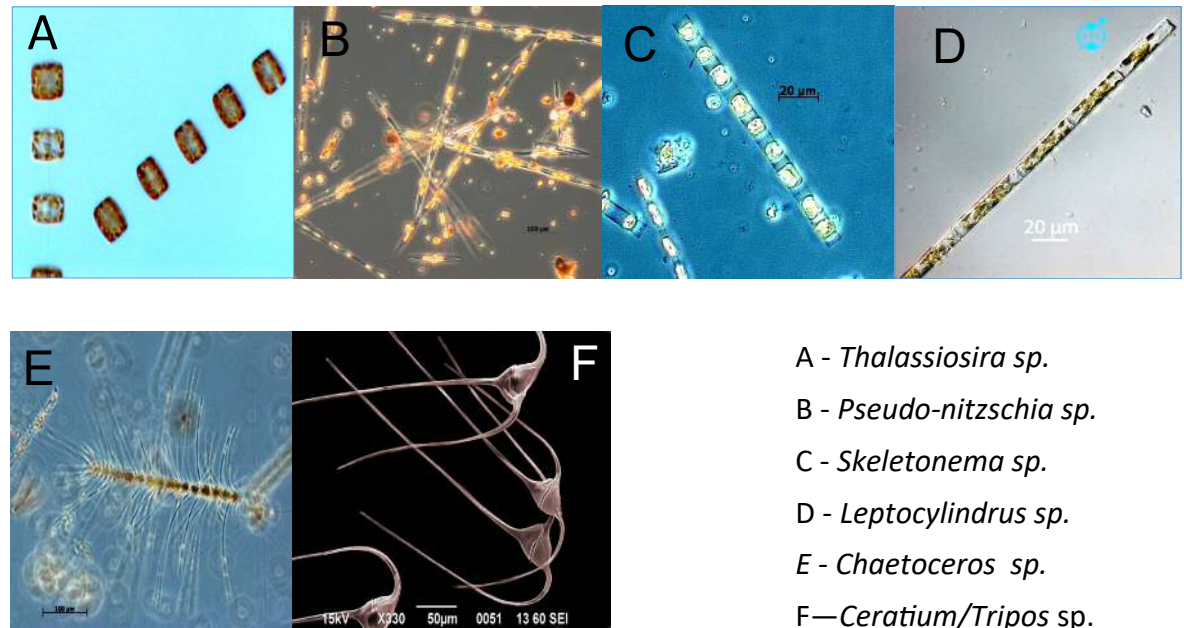
High densities of chain forming diatoms including, but not limited to the genus, *Chaetoceros*, *Skeletonema*, *Leptocylindrus*, *Rhizosolenia*, *Thalassiosira*, *Corethron* and *Pseudo-nitzschia*, the centric species *Coscinodiscus wailesii*, and species with long spines such as *Ceratium* (*Tripos*)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

Status

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

The IFCB at Cole Deep is showing the presence of *Pseudo-nitzschia* and small flagellates. The IFCB at Scalloway remains of-line for maintenance.

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

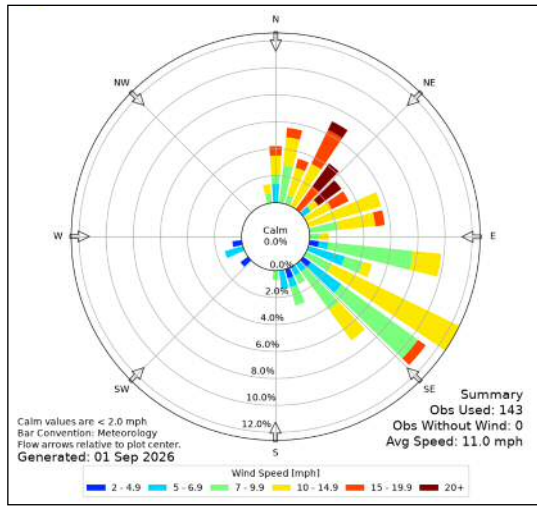


A - *Thalassiosira* sp.
B - *Pseudo-nitzschia* sp.
C - *Skeletonema* sp.
D - *Leptocylindrus* sp.
E - *Chaetoceros* sp.
F - *Ceratium/Tripos* sp.

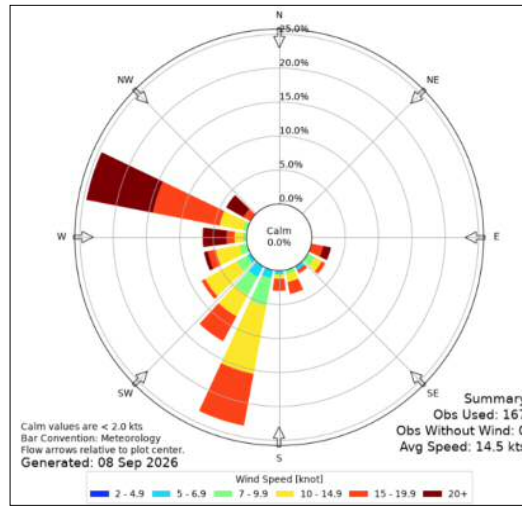
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Mean wind direction observed in Shetland for current and three preceding weeks

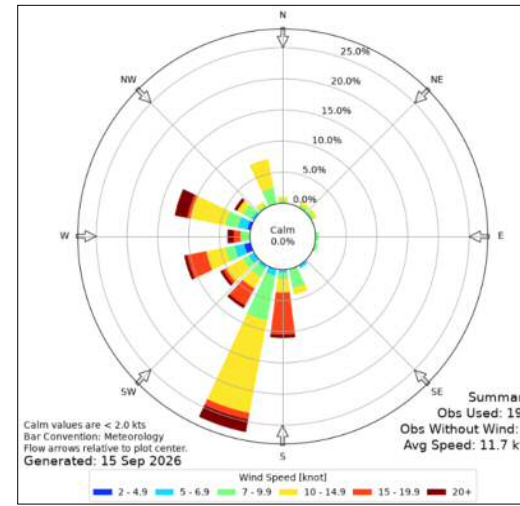
Week 35



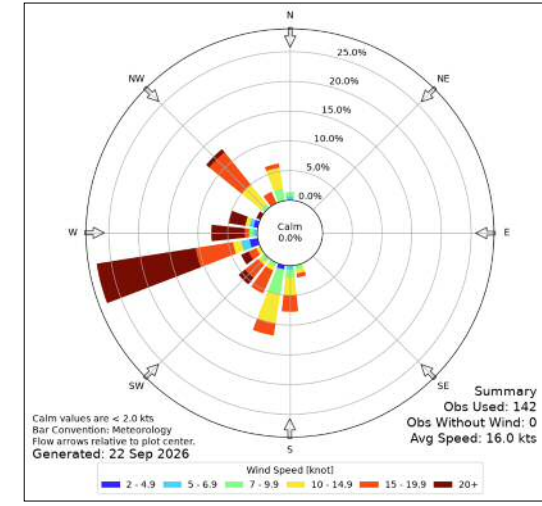
Week 36



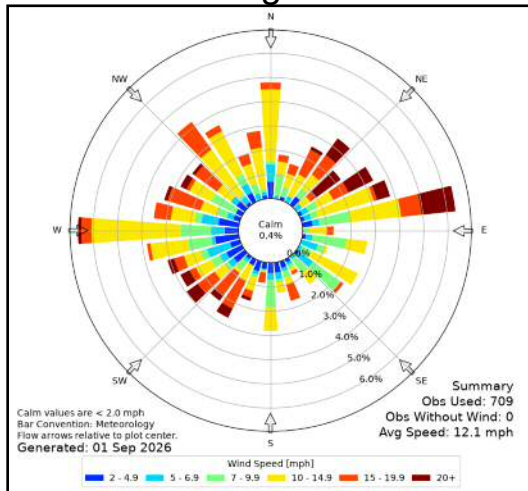
Week 37



Week 38



August



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?

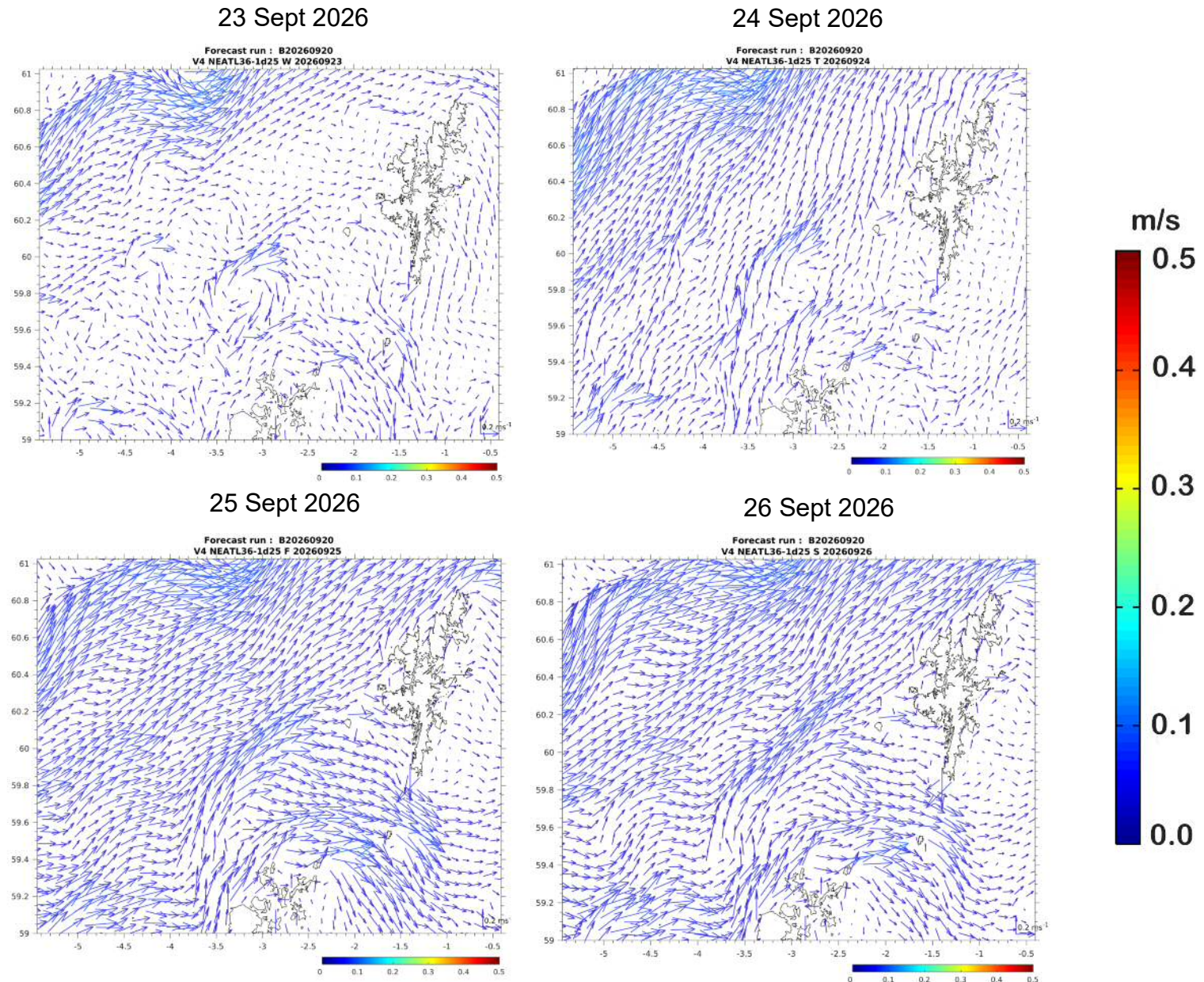
During the summer *Dinophysis* can bloom out at sea and at shelf fronts found off the West of Shetland. Westerly winds can then blow these blooms into shore. Westerly winds may also retain *Dinophysis* cells in Westerly facing voes and inlets where their numbers may increase. Wind for the past week has been on average from the south. Looking at the forecasted surface currents and chlorophyll concentrations, Due to the time of year it is unlikely that there will be an advected bloom of *Dinophysis* in the coming week.

Status:

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

Forecasted Sea Surface currents

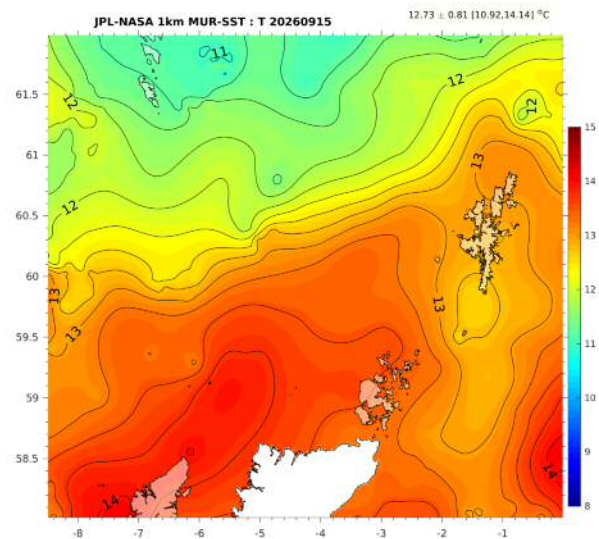
These diagrams show the predicted current directions around Shetland for the next couple of days. Greens to reds indicate stronger currents. In general strong currents run parallel to the deep water channel between the Faroes and Shetland. Problems can arise when these currents turn Eastwards potentially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



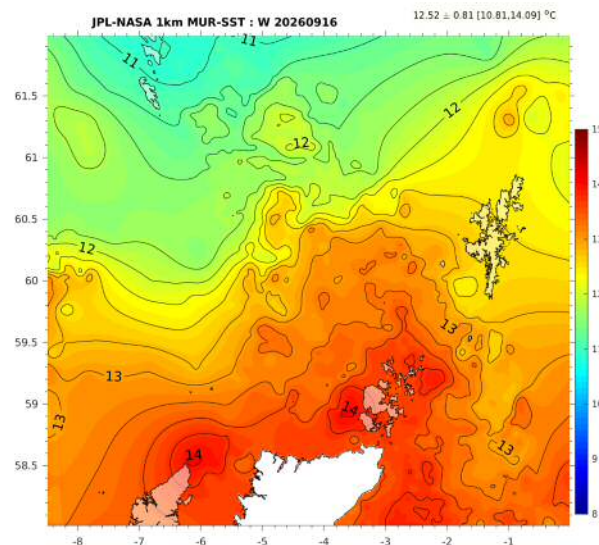
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Sea Surface temperature (°C) in preceding 6 days in the Shetland Islands

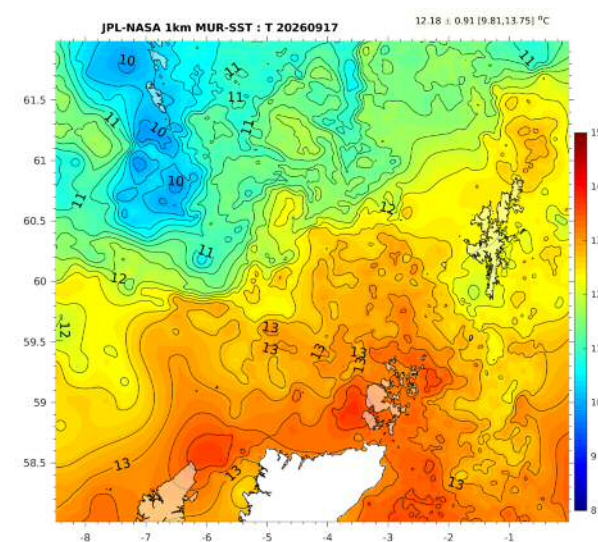
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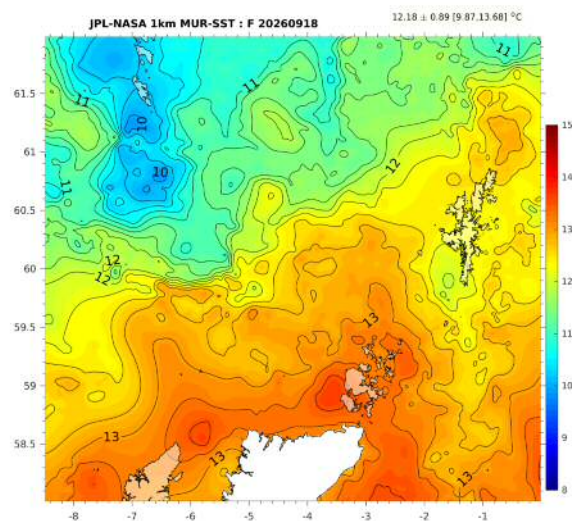
16 Sep 2026



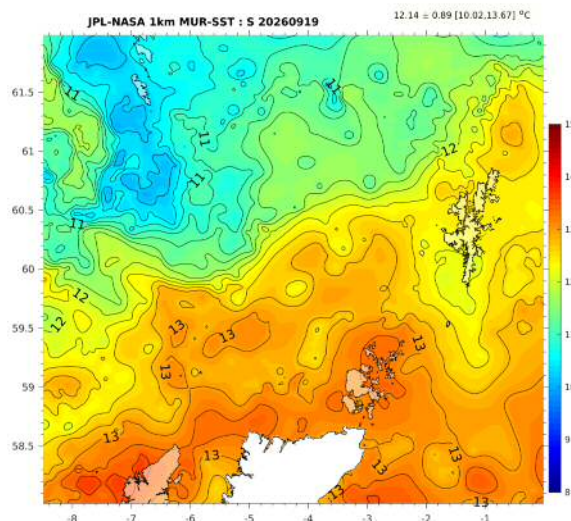
17 Sep 2026



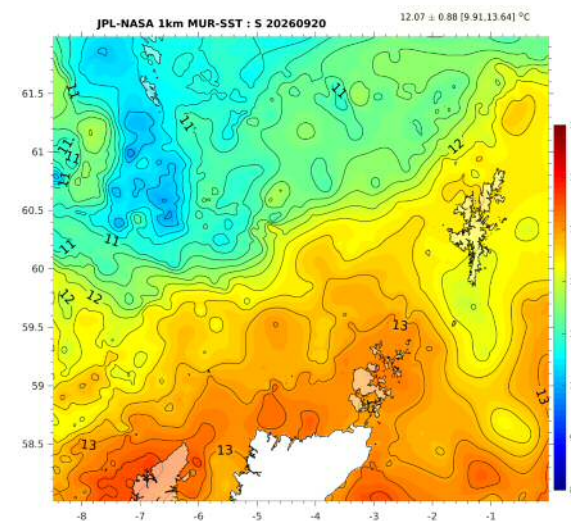
18 Sep 2026



19 Sep 2026



20 Sep 2026



Maps provided courtesy of the Jet Propulsion Laboratory, NASA

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Chlorophyll concentrations (mg/m³)

