

Biotoxin report:

- ASP toxins:** Four samples were analysed this week. Toxins were detected in low concentrations in Stream Sound.
- AZA toxins:** Seventeen samples were analysed this week. Toxins were not detected.
- DSP toxins:** Seventeen samples were analysed this week. Toxins were detected at action concentration in Braewick Voe, at warning concentrations in Scarvar Ayre and Slyde and in low concentrations in Stream Sound, Cole Deep, North Flotta, Seggi Bight and Busta Voe Lee.
- PSP toxins:** Eight 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 above trigger levels in Stream Sound, East of Linga and Seggi Bight. It was found at warning levels in Scarvar Ayre, Braewick Voe, Slyde and Busta Voe Lee.
- Dinophysis:** Twelve samples were analysed this week. *Dinophysis* was detected at trigger level in Scarvar Ayre, Braewick Voe, Seggi Bight and Slyde. It was found in low numbers in Stream Sound, Parkgate, East of Linga, North Flotta 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 Sandsound Voe and Seggi Bight. It was found in low numbers in Balta Sound Mussels, Stream Sound, Scarvar Ayre, Braewick Voe, East of Linga and Inner Site 1.
- Pseudo-nitzschia delicatissima:** Twelve samples were analysed this week. *P. delicatissima* was found above trigger level in Stream Sound. It was found in low numbers in all other sites except Scarvar Ayre.
- Pseudo-nitzschia seriata:** Twelve samples were analysed this week. *P. seriata* was detected in low numbers in all sites except for Sandsound Voe and Seggi Bight.

Shetland: trends and forecast

- Alexandrium/PSP:** *Alexandrium* was detected above trigger level in three sites and at warning levels in four. Toxins were not detected. It is unlikely there will be a toxic bloom this week.
- Dinophysis/DSP:** *Dinophysis* was detected at trigger level in four sites and in low numbers at five sites. Toxins were detected at action level in one site, at warning levels in two sites and in low concentrations in five. Care should be taken.
- Pseudo-nitzschia/ASP:** *P. delicatissima* was detected above trigger in one site and in low numbers in ten sites. *P. seriata* was detected in low numbers in ten sites. Toxins were detected in low concentrations in one site. It is 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 above trigger level in two sites and at low numbers in six. However this is a benthic species and it is unlikely that there will be a toxic bloom this week.

- Risk for **PSP:** Low Risk for **YTX:** Low
- Risk for **DSP:** High 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

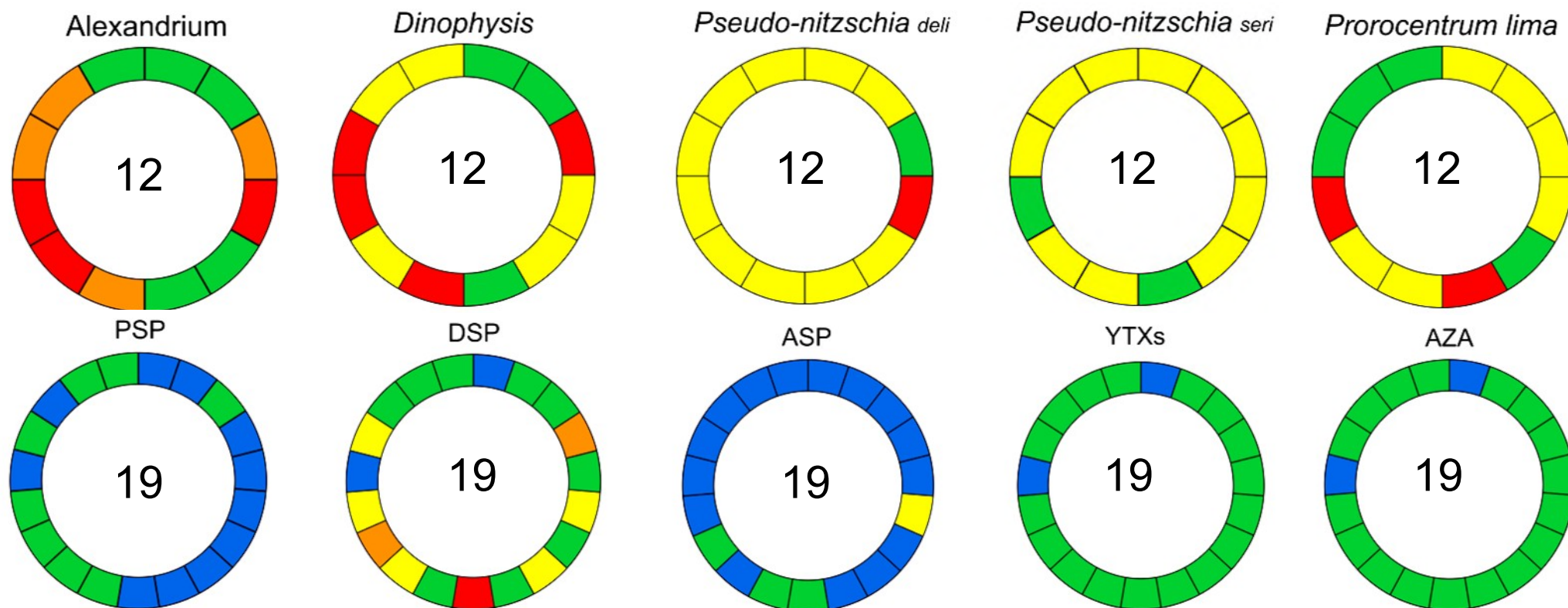
Primary data for biotoxins and biotoxin producing phytoplankton available at: <http://www.food.gov.uk/enforcement/monitoring/shellfish/algatoxin/#.UY0TkcgTQ6O>

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 ug/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.

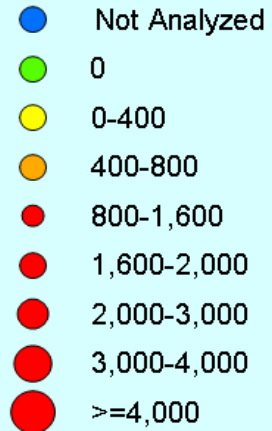
RL- reporting limit;
LOQ – Limit of quantification

Shetland Bulletin on the status of harmful & toxic algae Week 31, 27th Jul - 2nd Aug 2026

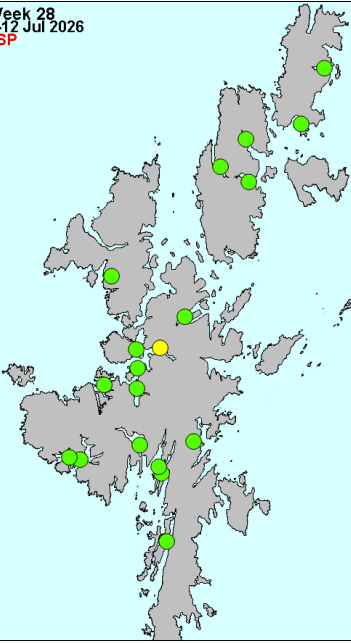
Paralytic shellfish poisoning toxins & causative phytoplankton

PSP

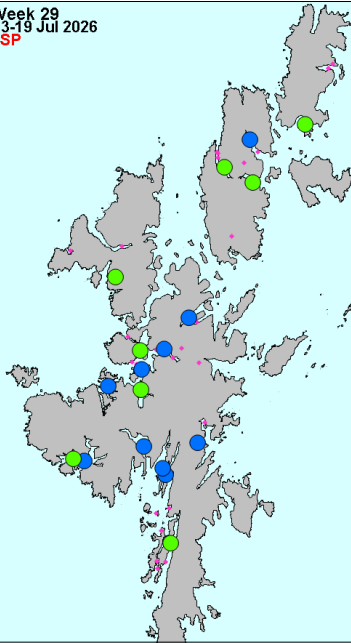
µg STX eq/kg



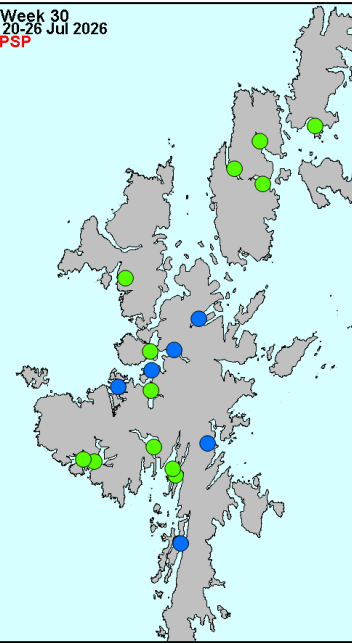
Week 28
6-12 Jul 2026
PSP



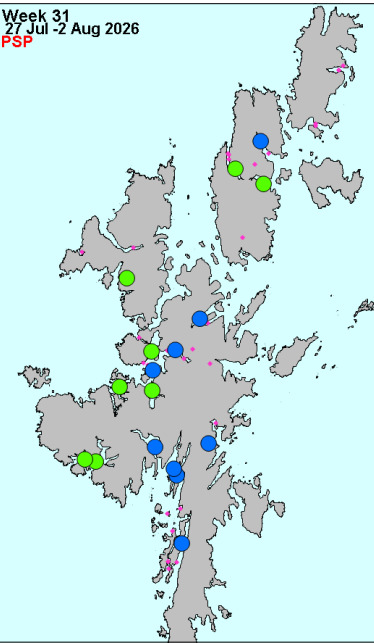
Week 29
13-19 Jul 2026
PSP



Week 30
20-26 Jul 2026
PSP

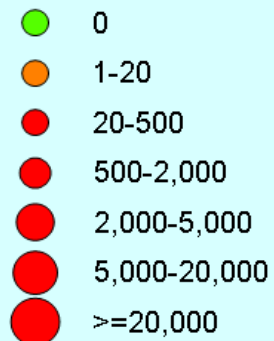


Week 31
27 Jul - 2 Aug 2026
PSP

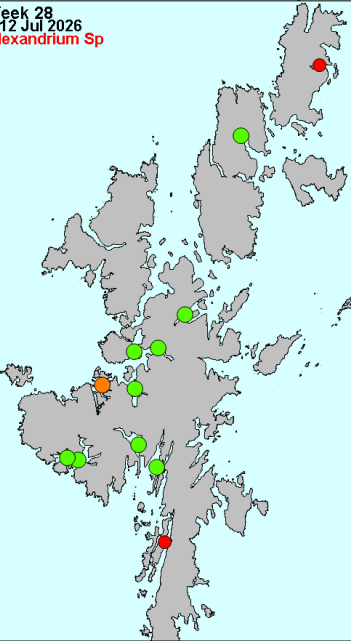


Alexandrium Sp.

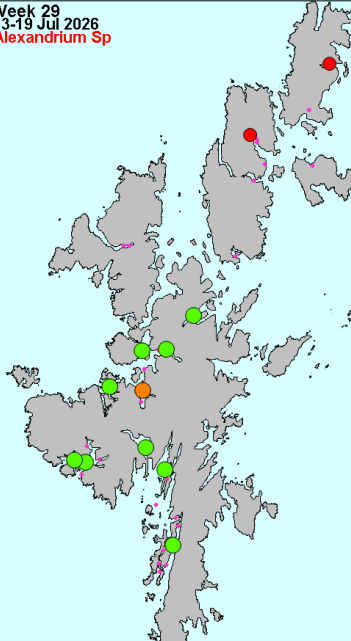
cells/l



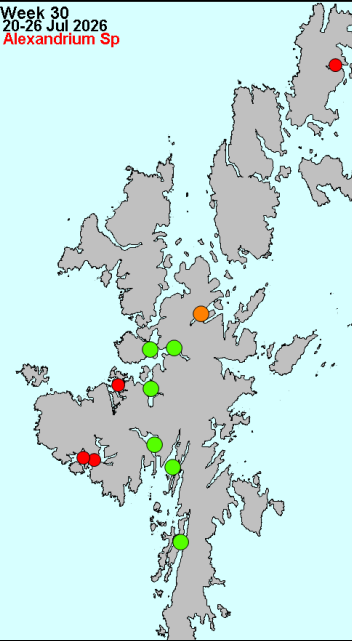
Week 28
6-12 Jul 2026
Alexandrium Sp



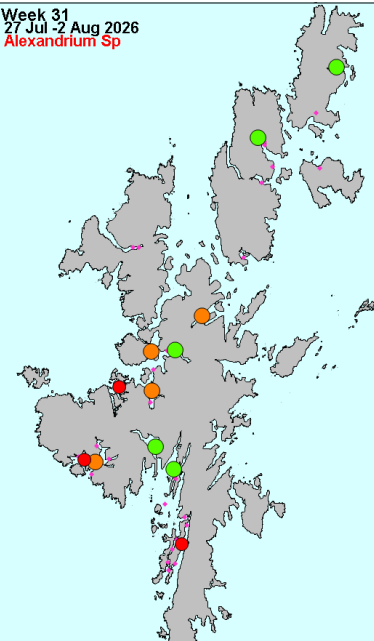
Week 29
13-19 Jul 2026
Alexandrium Sp



Week 30
20-26 Jul 2026
Alexandrium Sp



Week 31
27 Jul - 2 Aug 2026
Alexandrium Sp



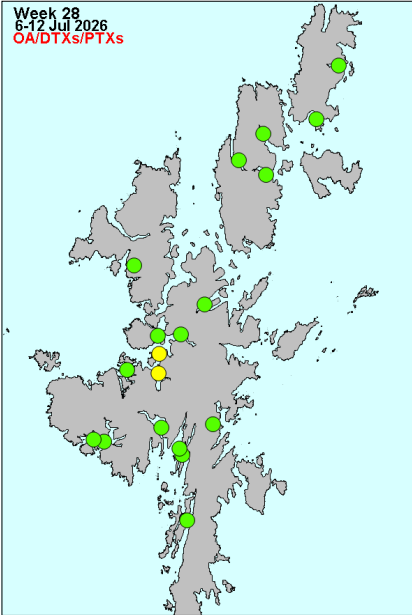
Diarrhetic shellfish poisoning toxins & causative phytoplankton

OA/DTXs/PTXs

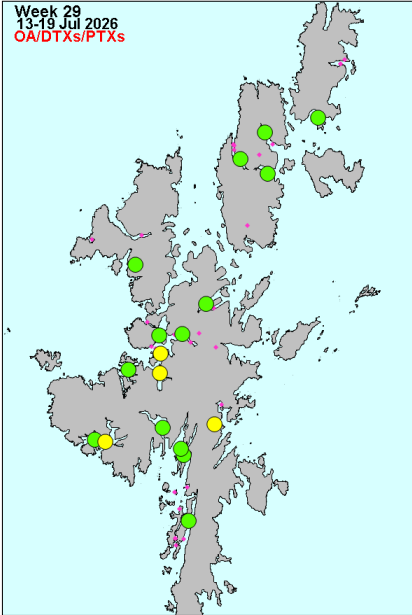
µg OA eq/kg



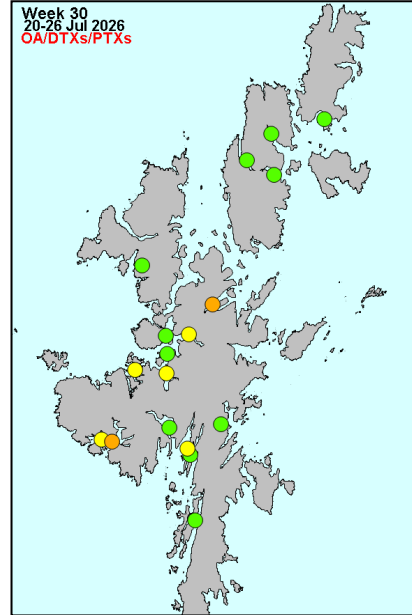
Week 28
6-12 Jul 2026
OA/DTXs/PTXs



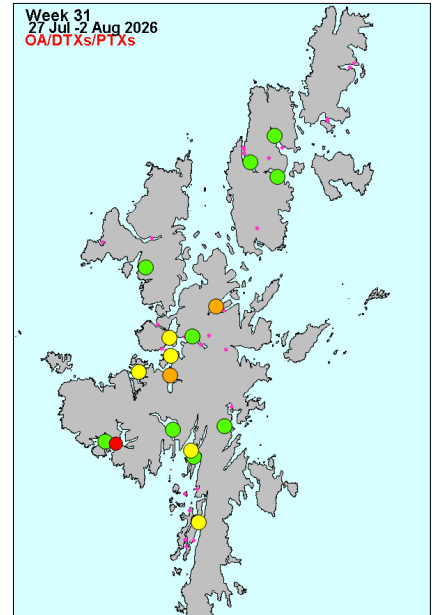
Week 29
13-19 Jul 2026
OA/DTXs/PTXs



Week 30
20-26 Jul 2026
OA/DTXs/PTXs

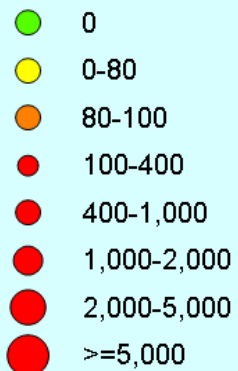


Week 31
27 Jul - 2 Aug 2026
OA/DTXs/PTXs

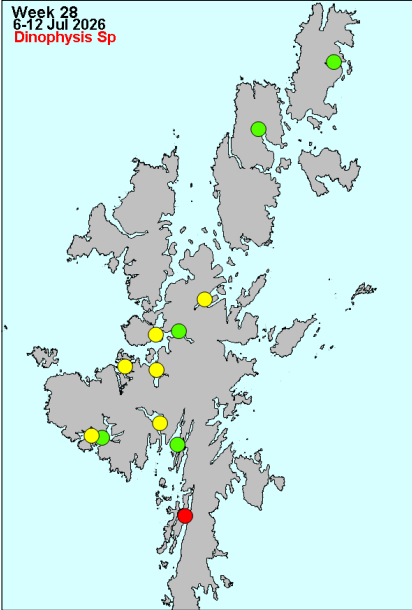


Dinophysis Sp.

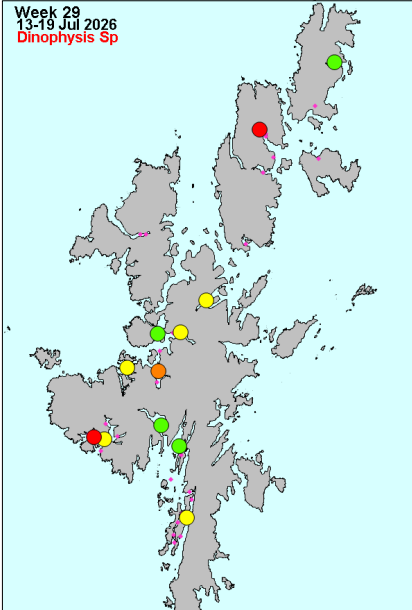
cells/l



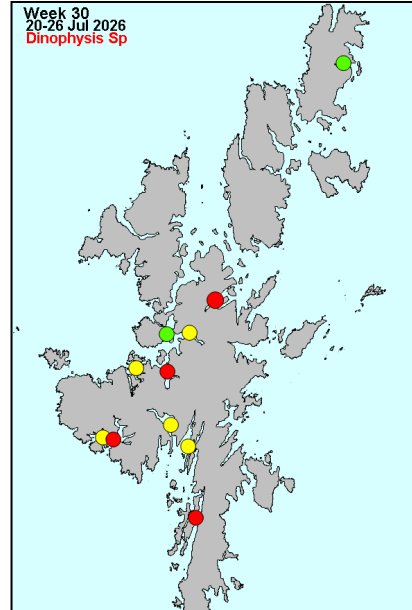
Week 28
6-12 Jul 2026
Dinophysis Sp



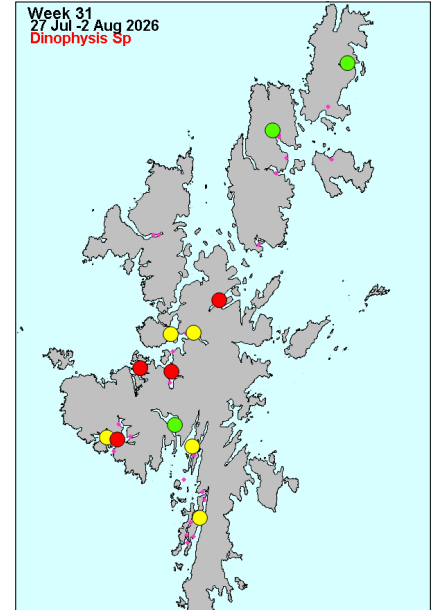
Week 29
13-19 Jul 2026
Dinophysis Sp



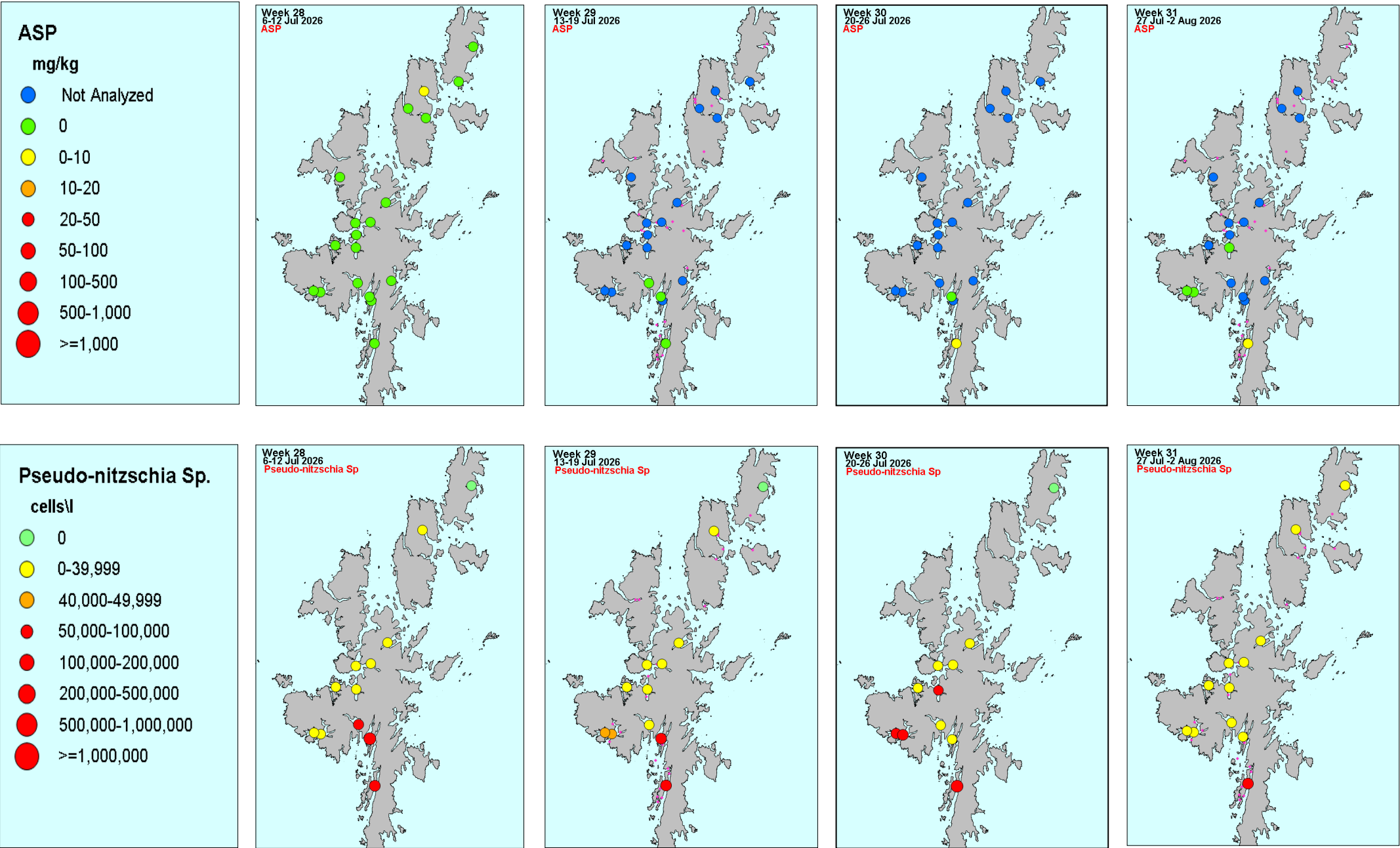
Week 30
20-26 Jul 2026
Dinophysis Sp



Week 31
27 Jul - 2 Aug 2026
Dinophysis Sp



Amnesic Shellfish Poisoning & causative phytoplankton



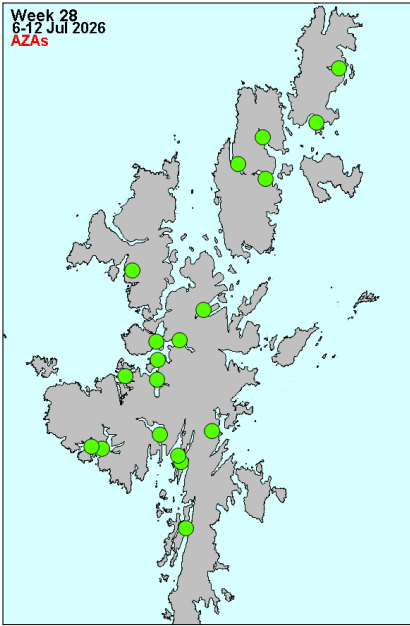
Azaspiracid & Yessotoxin shellfish poisoning toxins

AZAs

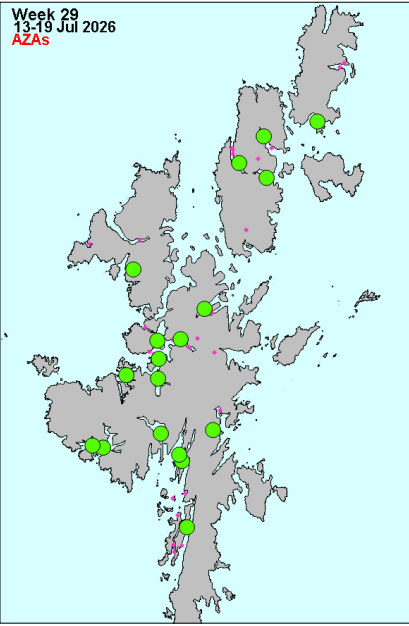
µg AZA1 eq/kg



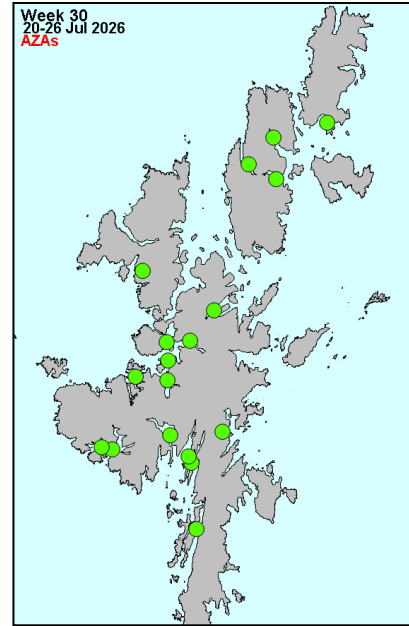
Week 28
6-12 Jul 2026
AZAs



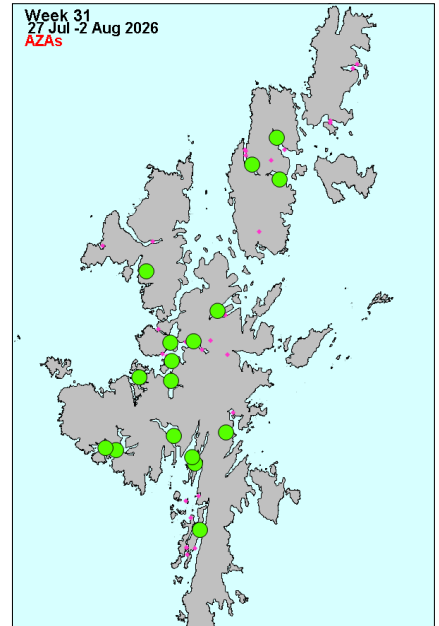
Week 29
13-19 Jul 2026
AZAs



Week 30
20-26 Jul 2026
AZAs

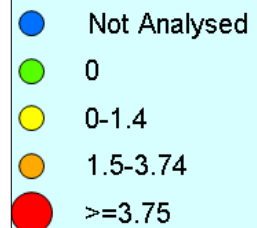


Week 31
27 Jul - 2 Aug 2026
AZAs

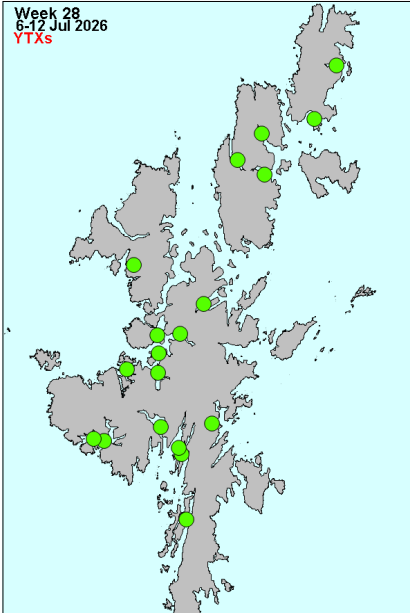


YTXs

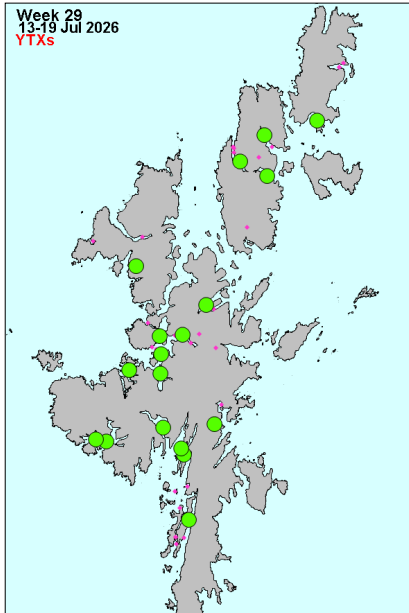
mg YTX eq/kg



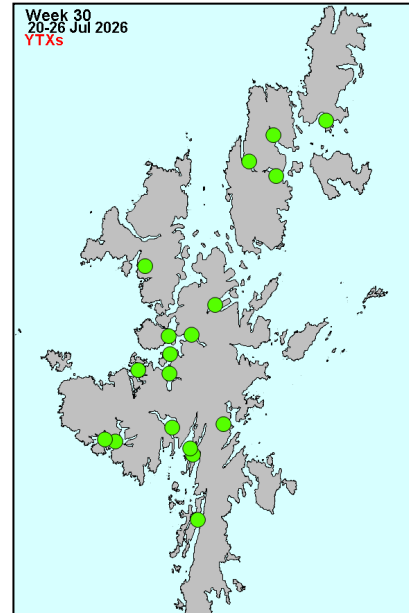
Week 28
6-12 Jul 2026
YTXs



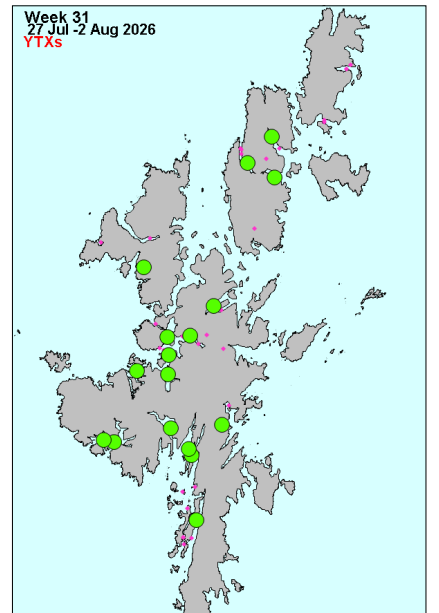
Week 29
13-19 Jul 2026
YTXs



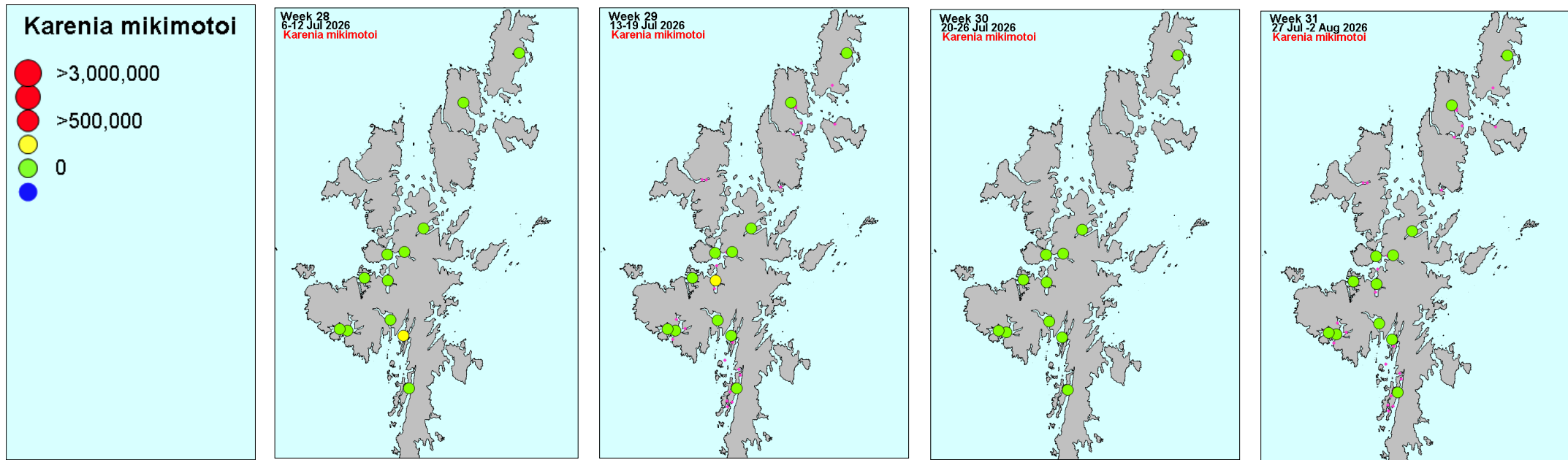
Week 30
20-26 Jul 2026
YTXs



Week 31
27 Jul - 2 Aug 2026
YTXs



Karenia mikimotoi



Chain forming Phytoplankton

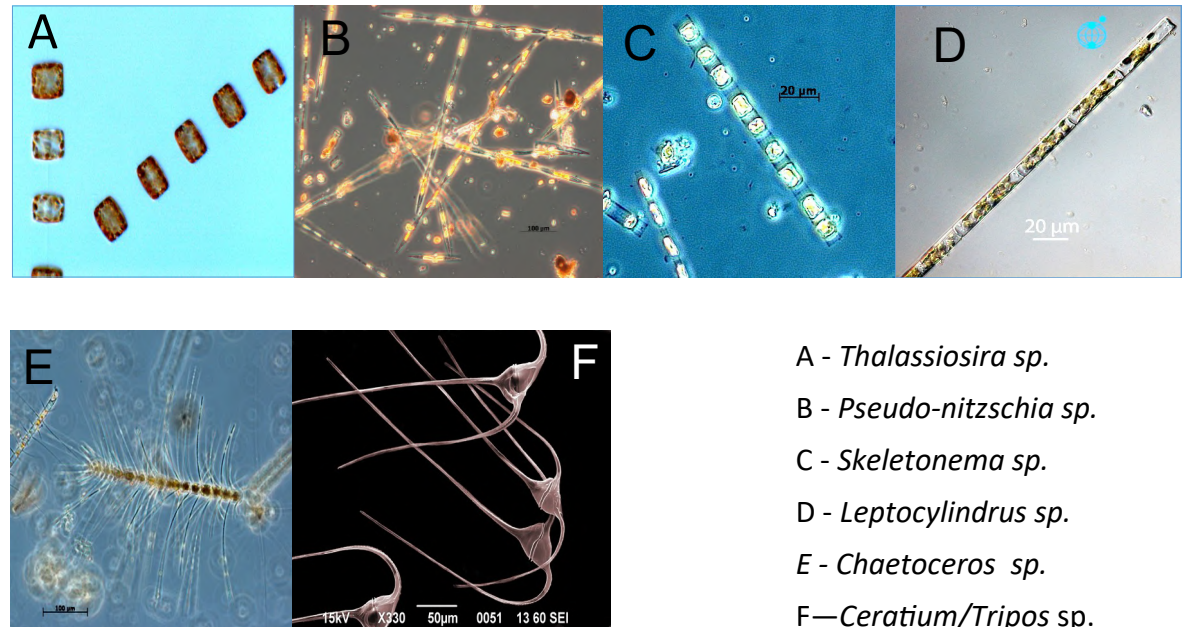
High densities of chain forming diatoms including, but not limited to the genus, *Chaetoceros*, *Skeletonema*, *Leptocylindrus*, *Rhizosolenia*, *Thalassiosira*, *Corethron* and *Pseudo-nitzschia*, the centric species *Coscinodiscus wailesii*, and species with long spines such as *Ceratium* (*Tripos*)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

Status

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

The IFCB's at Cole Deep is offline for maintenance. The one at Scalloway is detecting *Leptocylindrus*, *Skeletonema* and *Ciliates*.

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

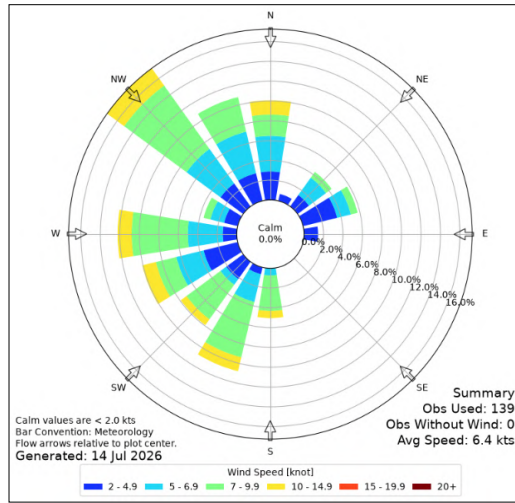


A - *Thalassiosira* sp.
B - *Pseudo-nitzschia* sp.
C - *Skeletonema* sp.
D - *Leptocylindrus* sp.
E - *Chaetoceros* sp.
F - *Ceratium/Tripos* sp.

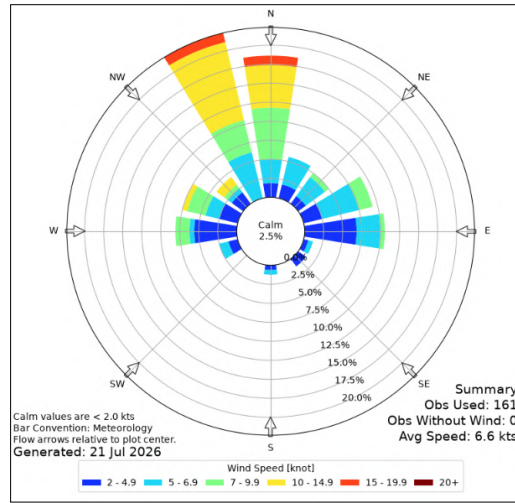
Shetland Bulletin on the status of harmful & toxic algae Week 31, 27th Jul - 2nd Aug 2026

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

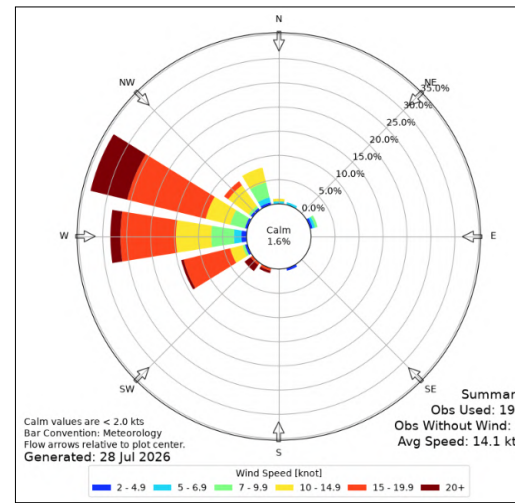
Week 28



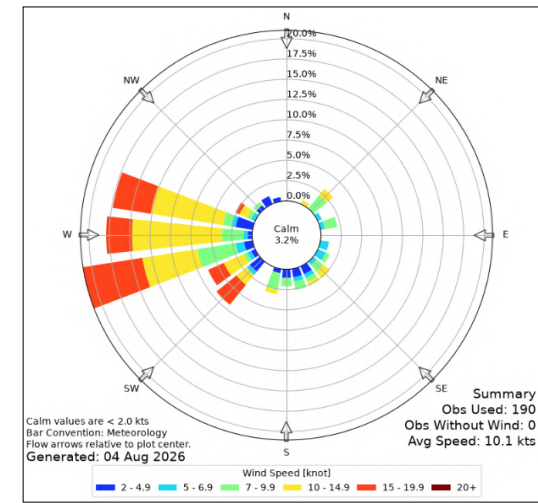
Week 29



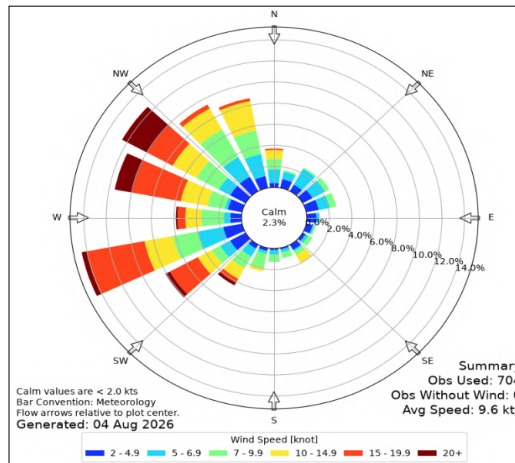
Week 30



Week 31



July



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?

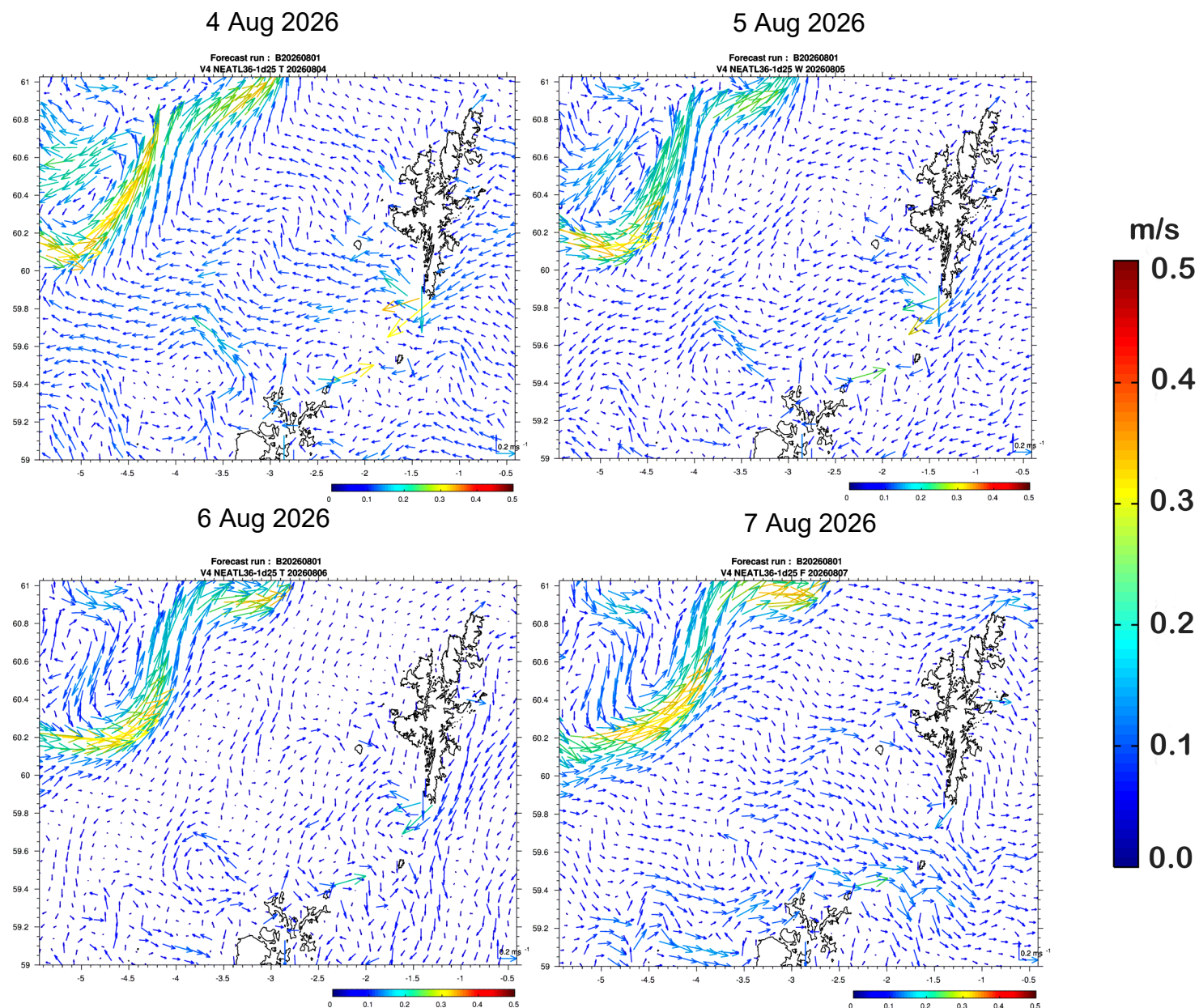
During the summer *Dinophysis* can bloom out at sea and at shelf fronts found off the West of Shetland. Westerly winds can then blow these blooms into shore. Westerly winds may also retain *Dinophysis* cells in Westerly facing voes and inlets where their numbers may increase. Wind for the past week has been on average from the west. However, looking at the forecasted surface currents and chlorophyll concentrations, 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 west.

Forecasted Sea Surface currents

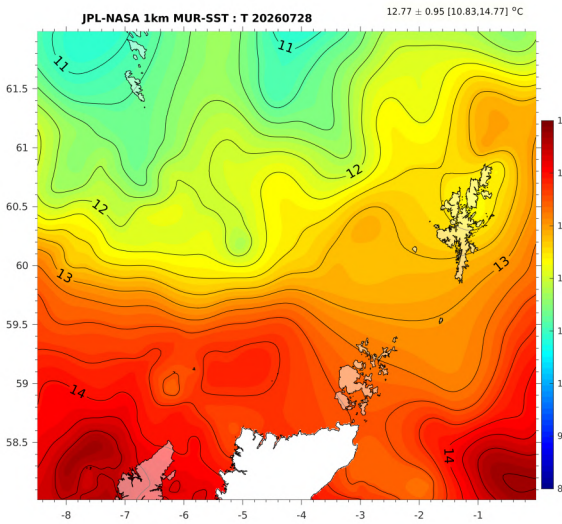
These diagrams show the predicted current directions around Shetland for the next couple of days. Greens to reds indicate stronger currents. In general strong currents run parallel to the deep water channel between the Faroes and Shetland. Problems can arise when these currents turn Eastwards potentially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



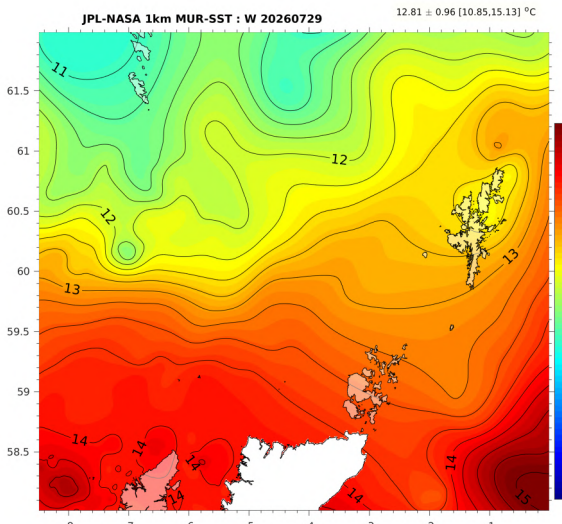
Shetland Bulletin on the status of harmful & toxic algae Week 31, 27th Jul - 2nd Aug 2026

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

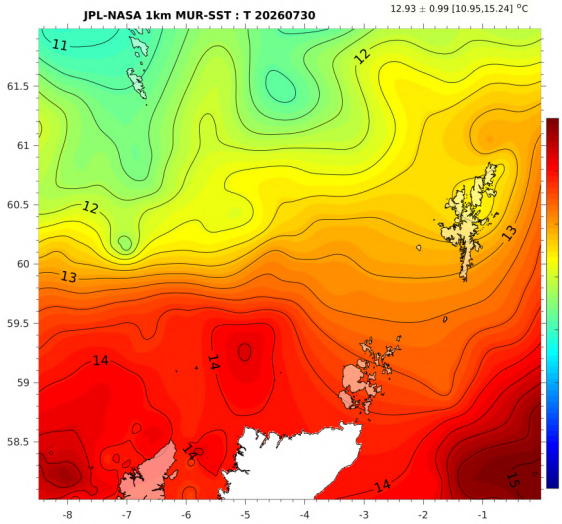
28 Jul 2026



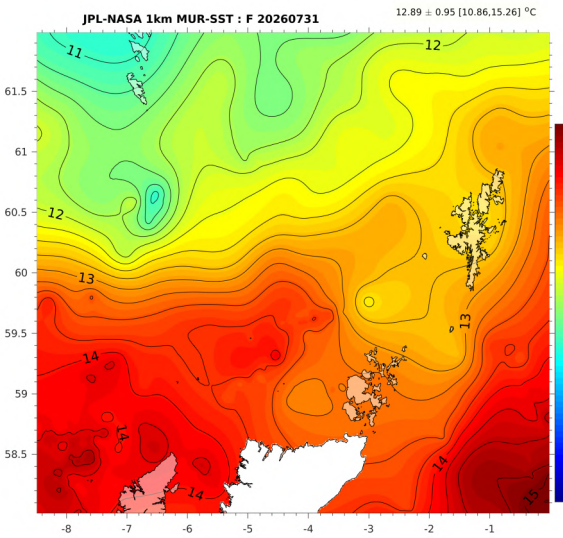
29 Jul 2026



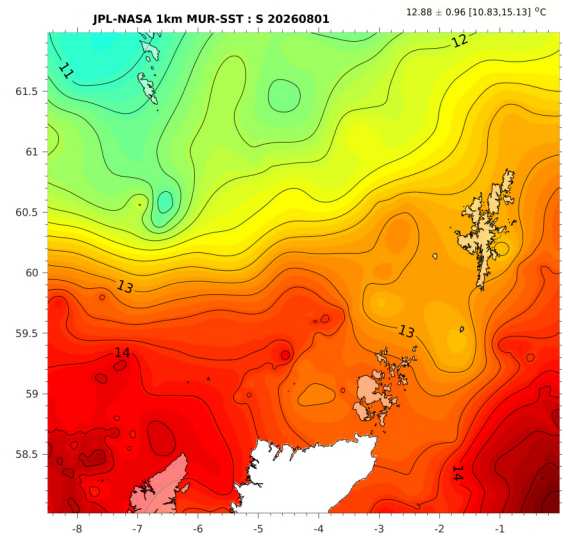
30 Jul 2026



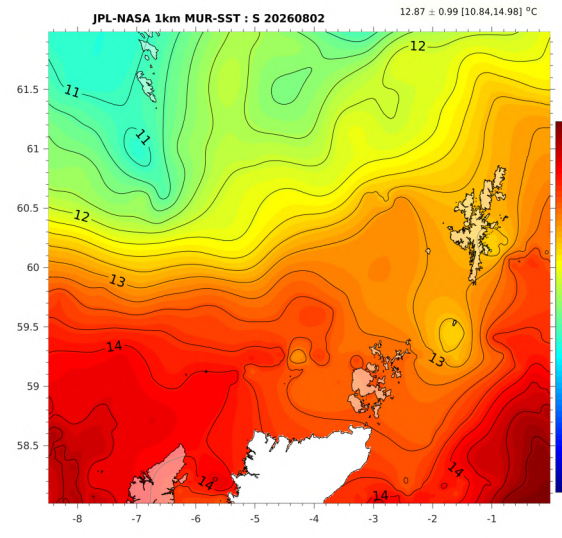
31 Jul 2026



1 Aug 2026

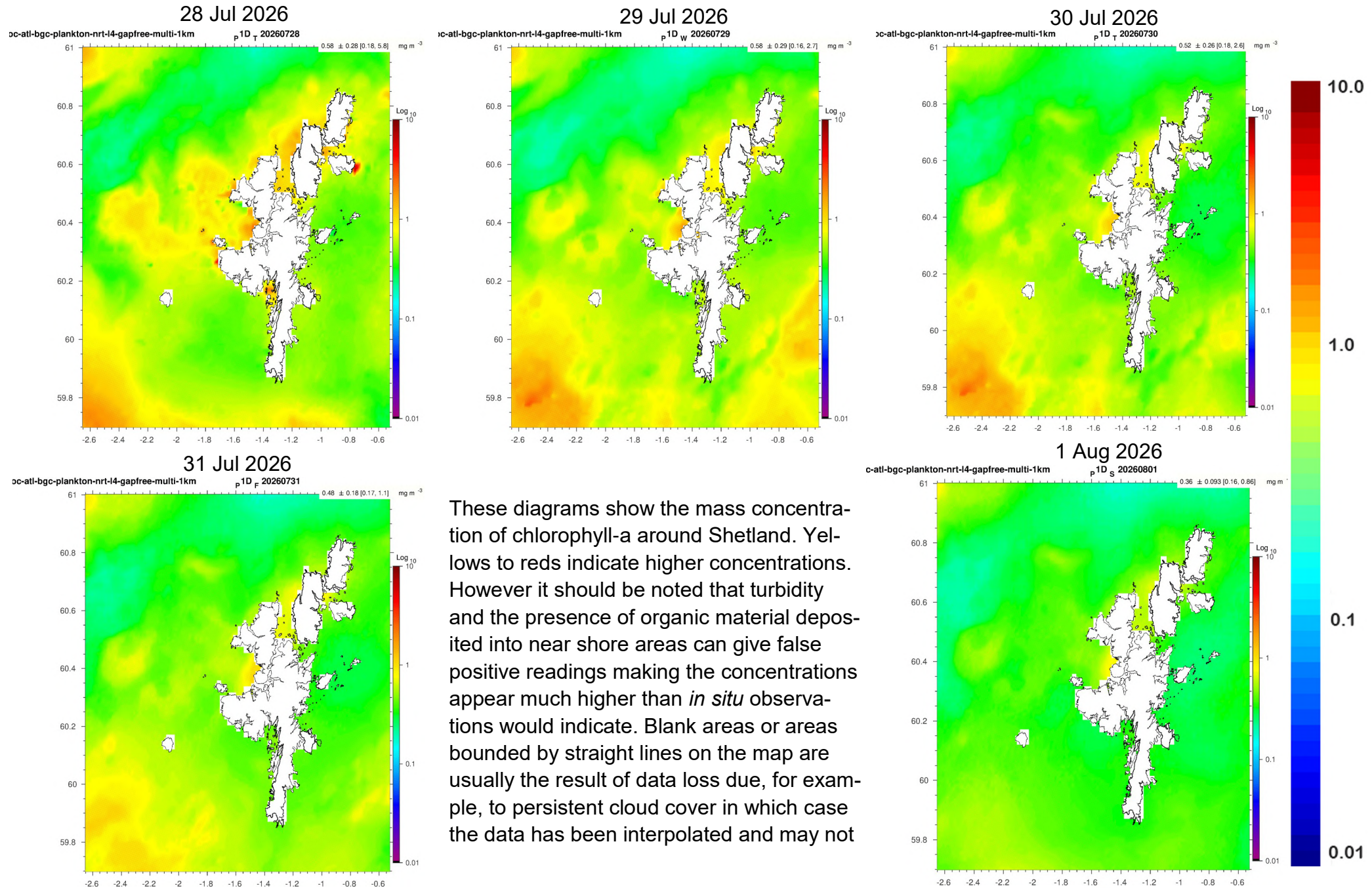


2 Aug 2026



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Chlorophyll concentrations (mg/m³)



Shetland Bulletin on the status of harmful & toxic algae Week 31, 27th Jul - 2nd Aug 2026

Wind and rain forecast for next three days in Shetland

