

Shetland Bulletin on the status of harmful & toxic algae Week 29, 13th - 19th Jul 2026

Biotoxin report:

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

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

DSP toxins: Eighteen samples were analysed this week. Toxins were detected in low concentrations in Cole Deep, Braewick Voe, Wadbister Voe and Slyde.

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

YTX toxins: Eighteen 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 Baltasound Mussels, and Inner Site 1. It was found at warning level in Slyde.

Dinophysis: Twelve samples were analysed this week. *Dinophysis* was detected at trigger level in East of Linga and Inner Site 1. It was detected at warning level in Slyde. It was found in low numbers in Stream Sound, Scarvar Ayre, Braewick Voe, Parkgate and Seggi Bight.

Karenia mikimotoi: Twelve samples were analysed this week. *Karenia* was detected in low numbers in Slyde.

Prorocentrum lima: Twelve samples were analysed this week. *P. lima* was detected above trigger level in Baltasound Mussels and Scarvar Ayre. It was found in low numbers in Braewick Voe, East of Linga, North Flotta, Seggi Bight and Busta Voe Lee.

Pseudo-nitzschia delicatissima: Twelve samples were analysed this week. *P. delicatissima* was found above trigger level in Stream Sound and North Flotta. It was found at warning level in East of Linga and in low numbers in all other sites except Baltasound Mussels and Scarvar Ayre.

Pseudo-nitzschia seriata: Twelve samples were analysed this week. *P. seriata* was detected in low numbers in all sites except for Baltasound Mussels, Sandsound Voe, Inner Site 1 and Busta Voe Lee.

Shetland: trends and forecast

Alexandrium/PSP: *Alexandrium* was detected above trigger level in two sites and at warning levels in one. 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 at warning level in one and in low numbers at five sites. Toxins were detected in low concentrations in four. Care should be taken in East of Linga, Inner Site 1 and Slyde.

Pseudo-nitzschia/ASP: *P. delicatissima* was detected above trigger in two sites at warning level in one and in low numbers in seven sites. *P. seriata* was detected in low numbers in eight sites. Toxins were not detected. 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 two sites and at low numbers in five. 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



SeafoodShetland

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/algaltotoxin/#.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

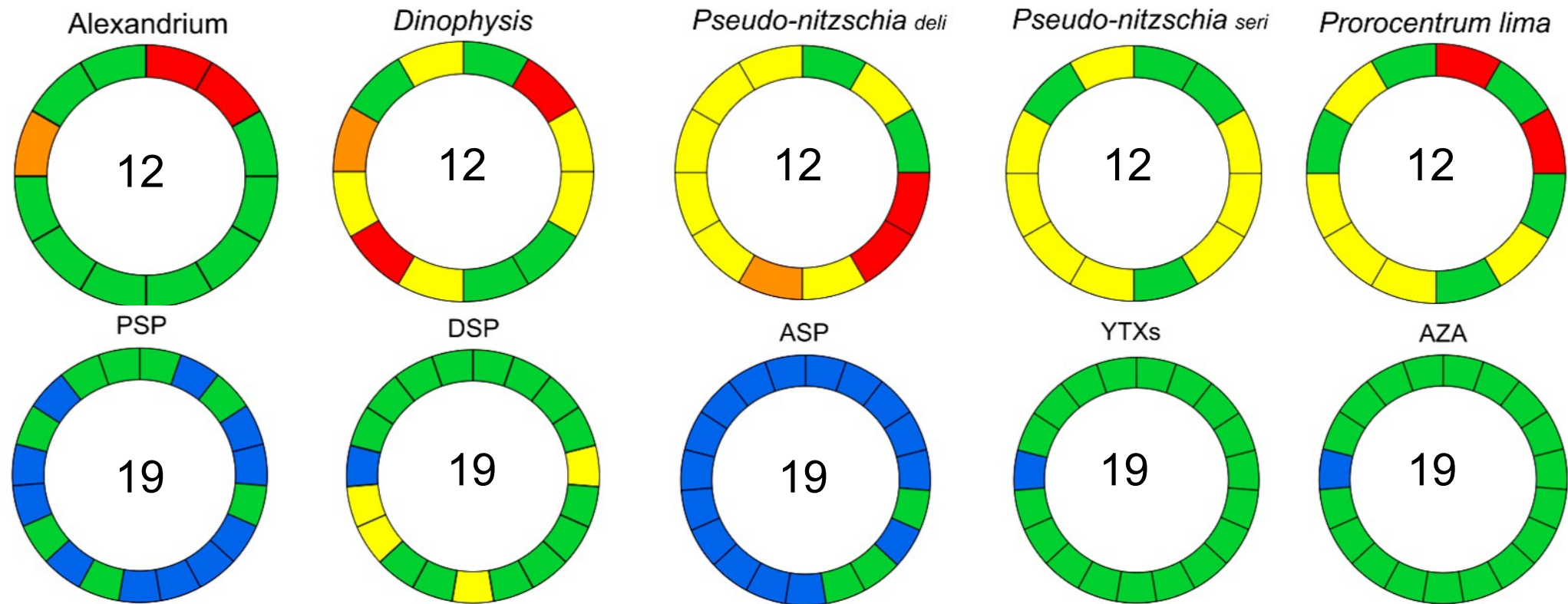
Lipophilic toxins (tested by LC-MS):

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
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

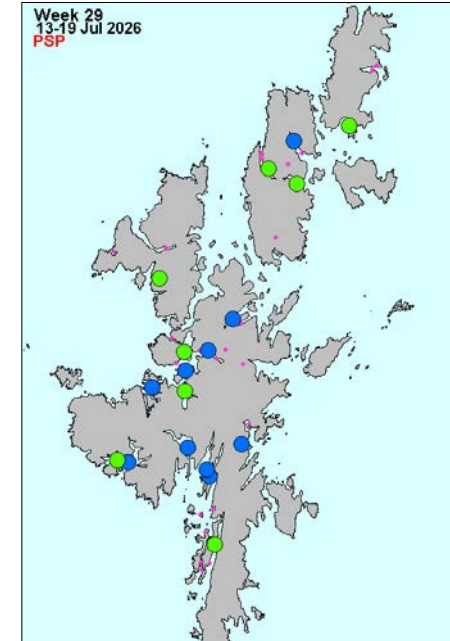
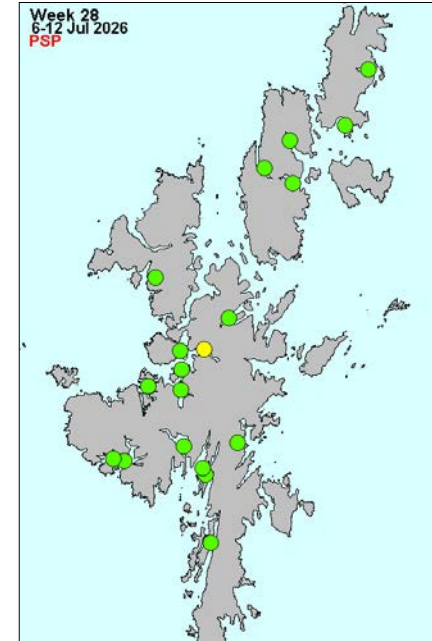
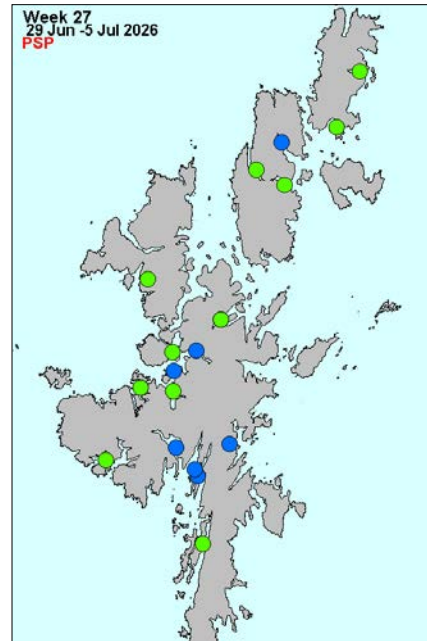
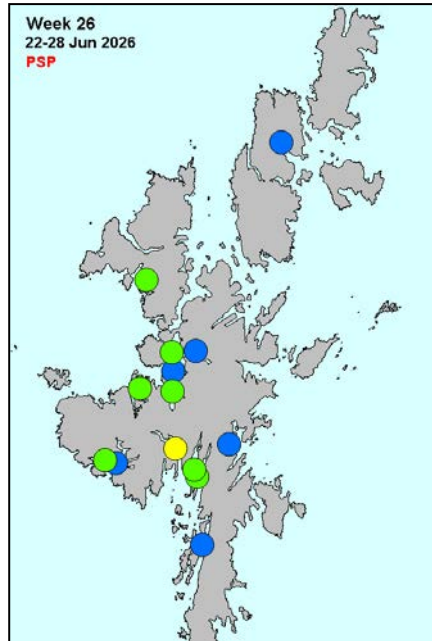
Shetland Bulletin on the status of harmful & toxic algae Week 29, 13th - 19th Jul 2026

Paralytic shellfish poisoning toxins & causative phytoplankton

PSP

µg STX eq/kg

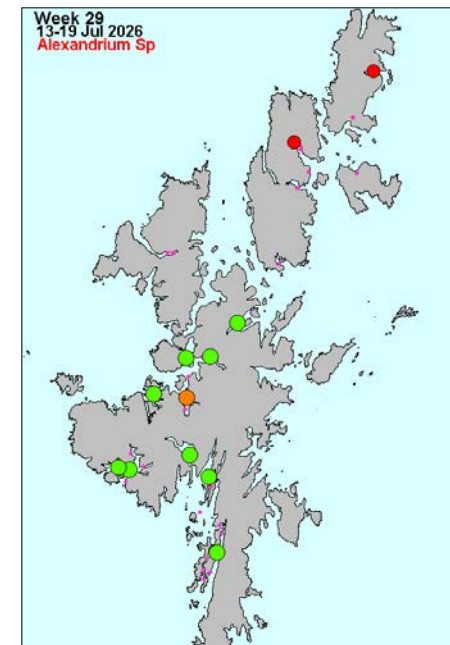
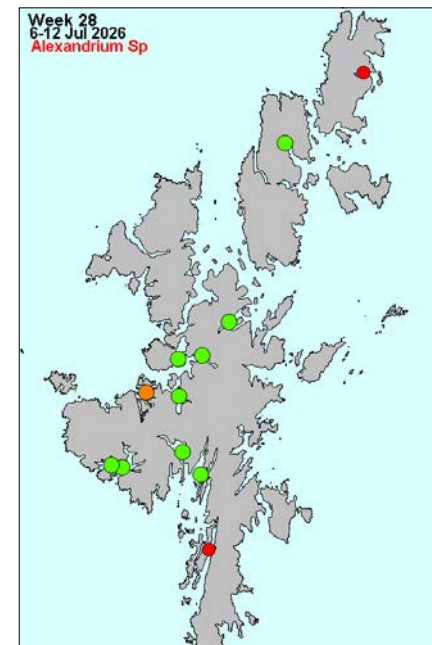
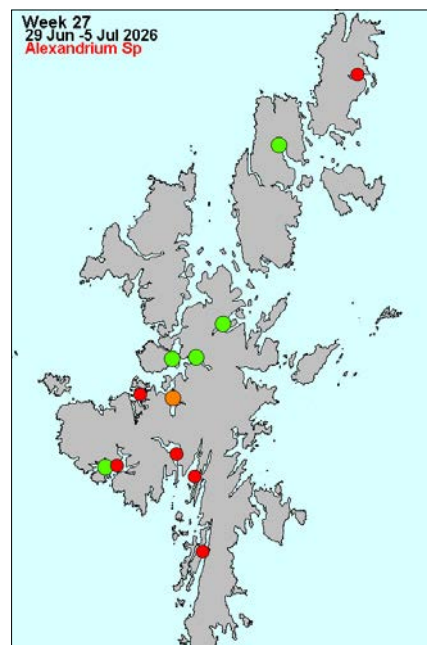
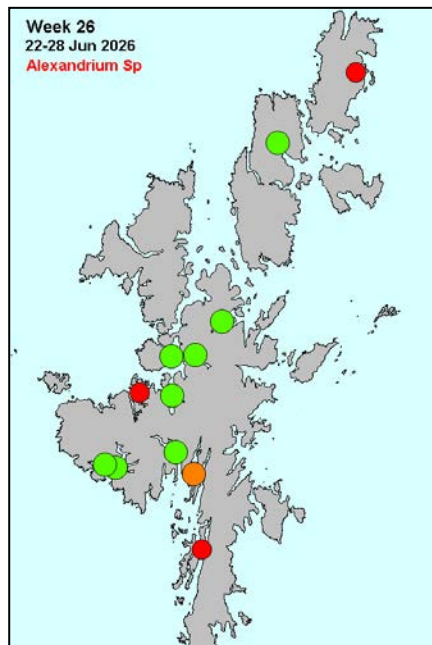
- Not Analyzed
- 0
- 0-400
- 400-800
- 800-1,600
- 1,600-2,000
- 2,000-3,000
- 3,000-4,000
- >=4,000



Alexandrium Sp.

cells/l

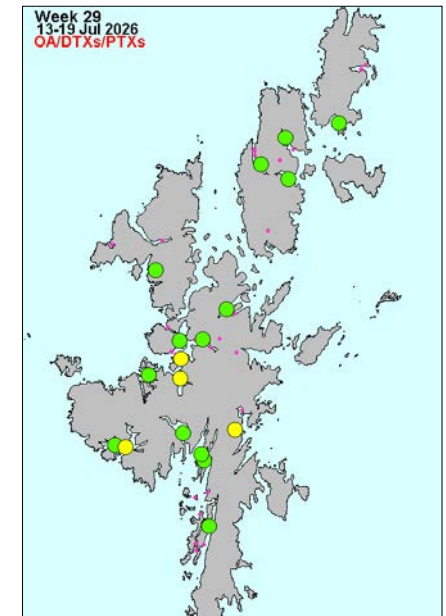
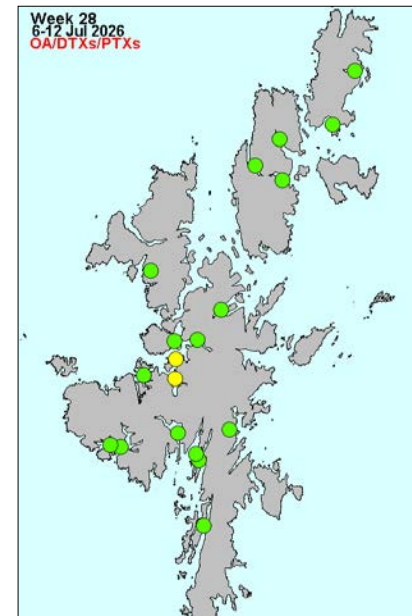
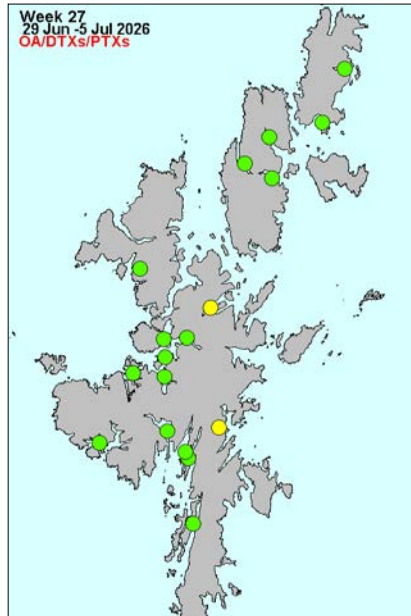
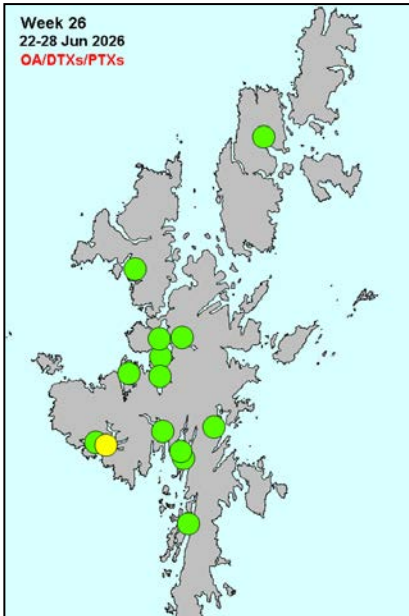
- 0
- 1-20
- 20-500
- 500-2,000
- 2,000-5,000
- 5,000-20,000
- >=20,000



Diarrhetic shellfish poisoning toxins & causative phytoplankton

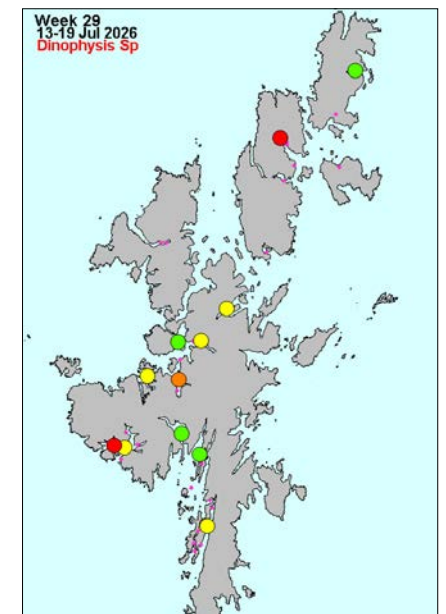
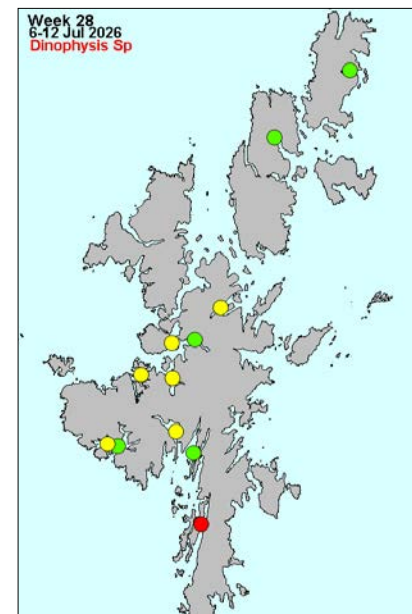
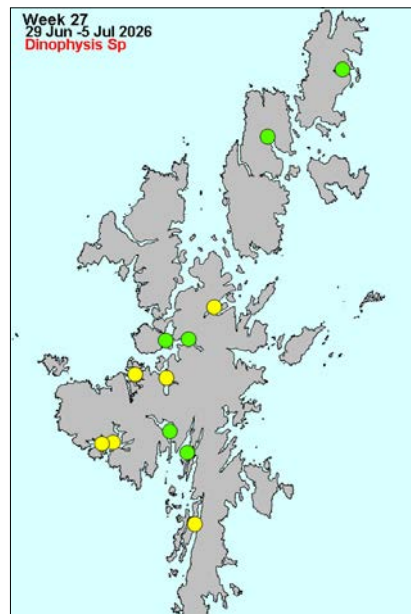
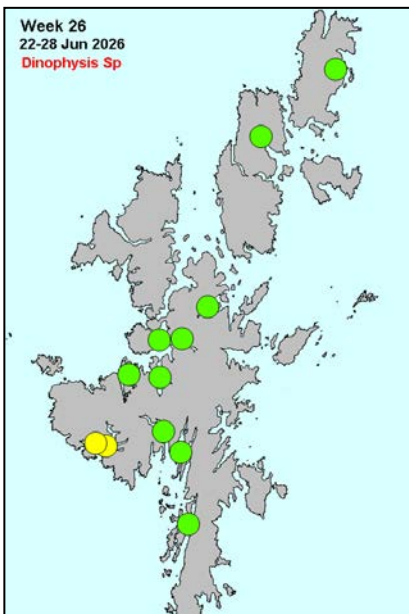
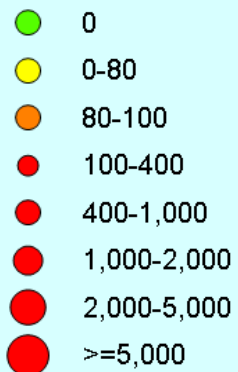
OA/DTXs/PTXs

µg OA eq/kg

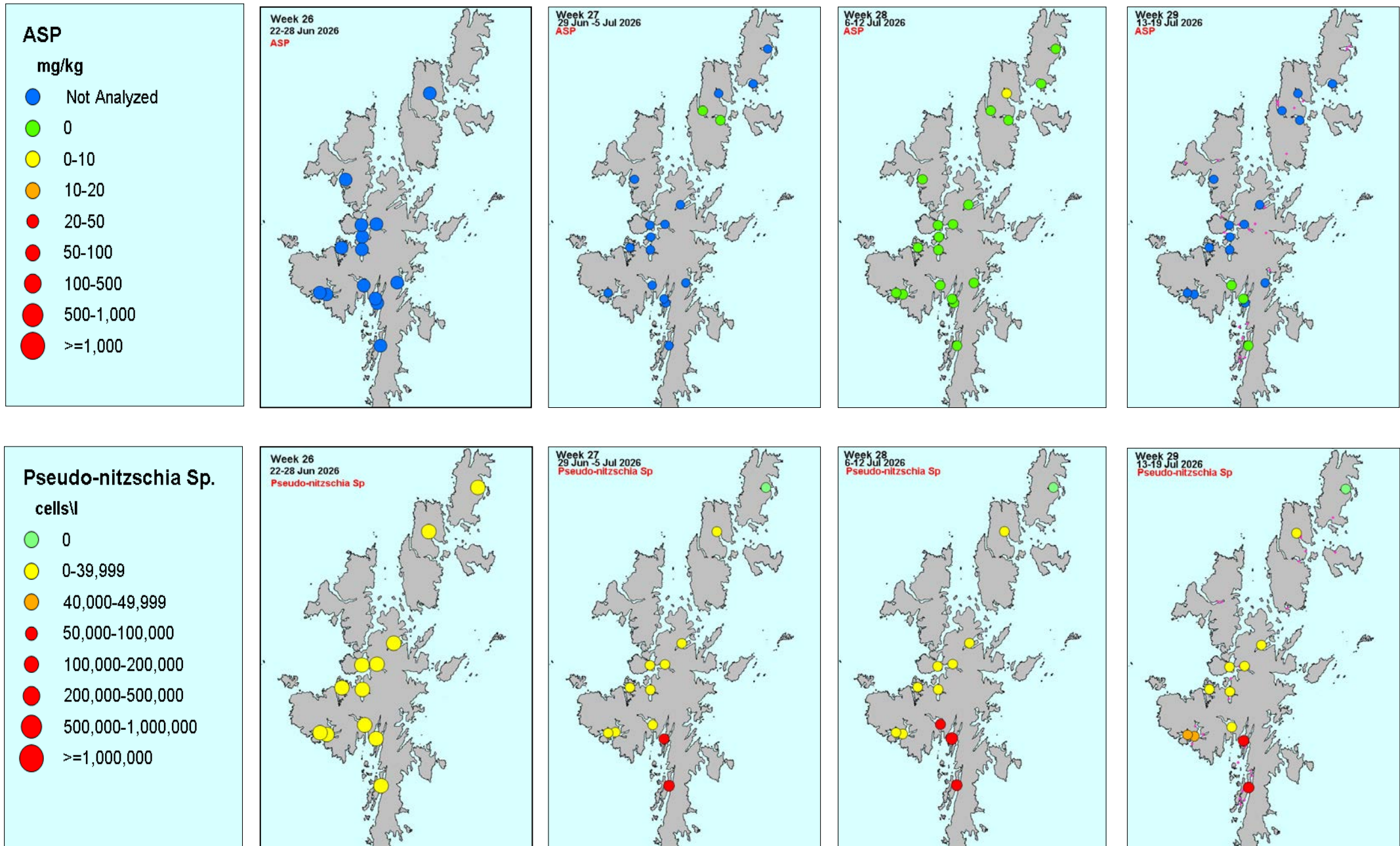


Dinophysis Sp.

cells/l



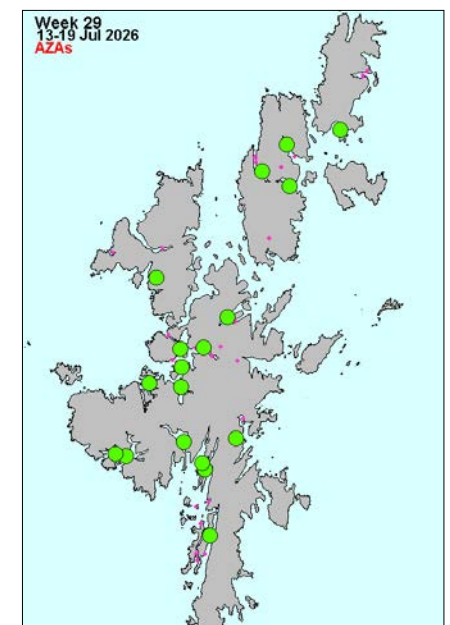
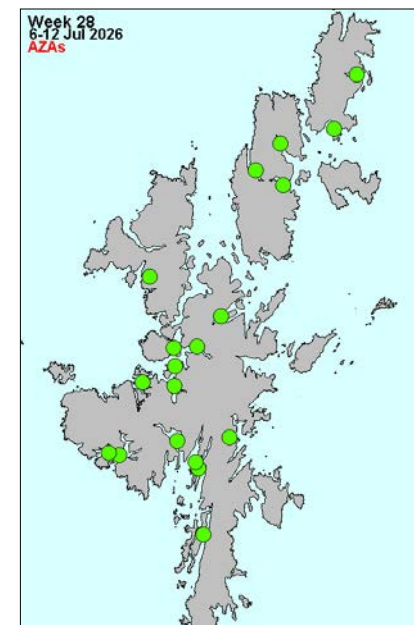
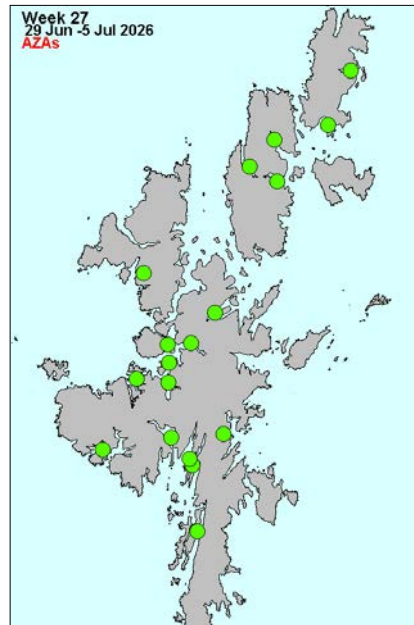
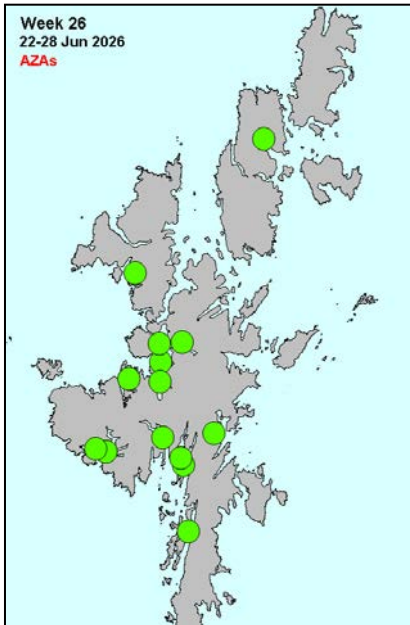
Amnesic Shellfish Poisoning & causative phytoplankton



Azaspiracid & Yessotoxin shellfish poisoning toxins

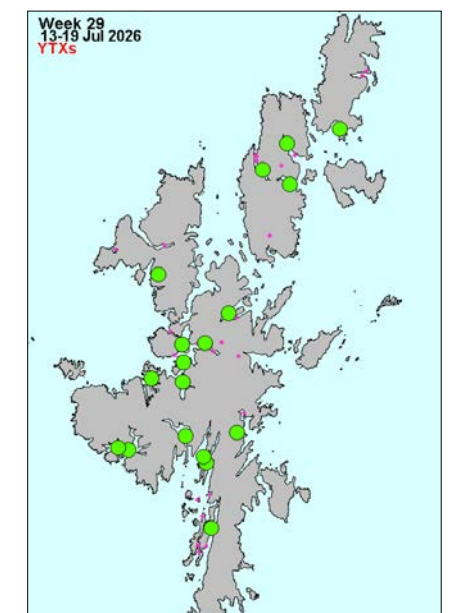
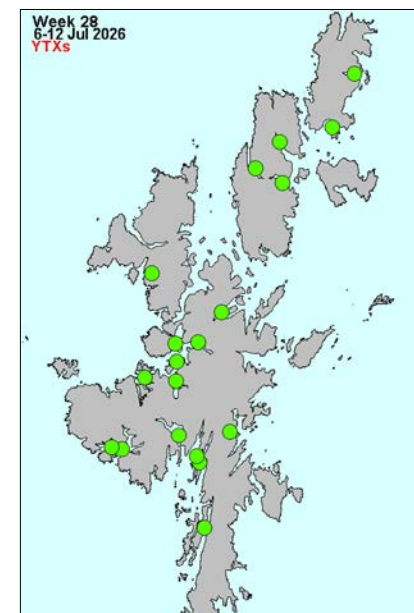
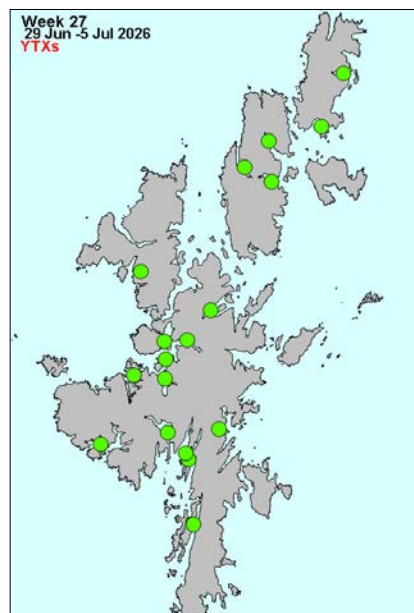
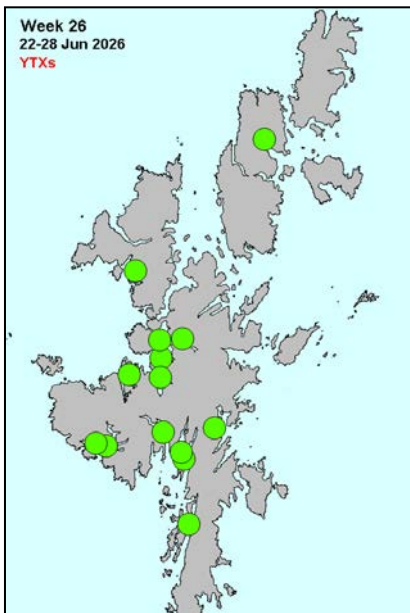
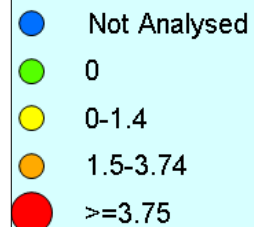
AZAs

µg AZA1 eq/kg

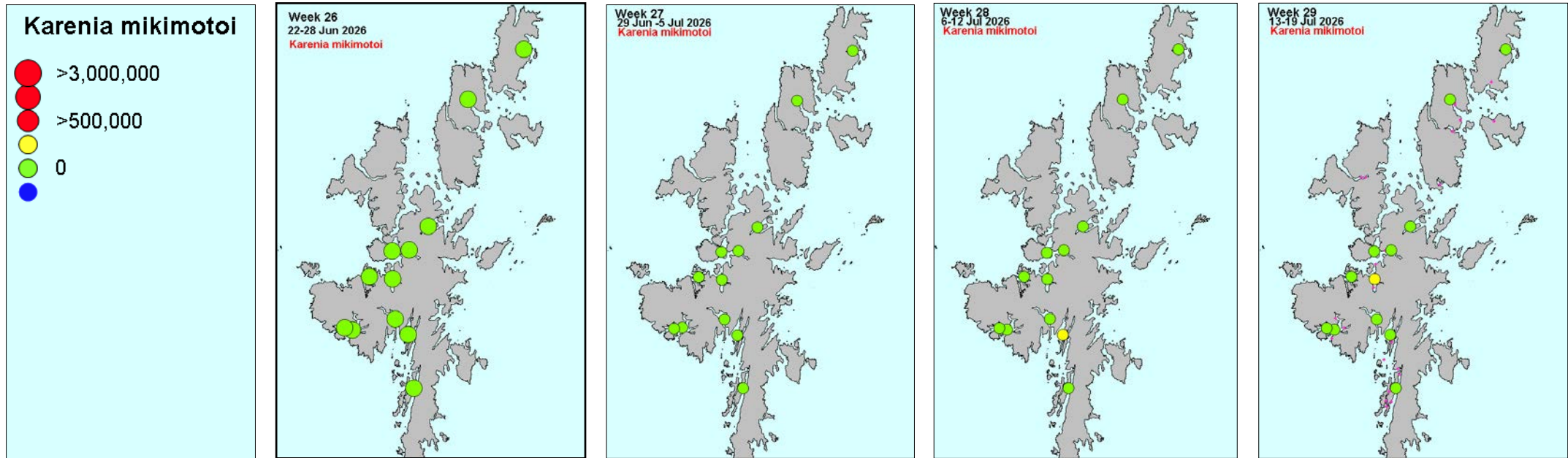


YTXs

mg YTX eq/kg



Karenia mikimotoi



Chain forming Phytoplankton

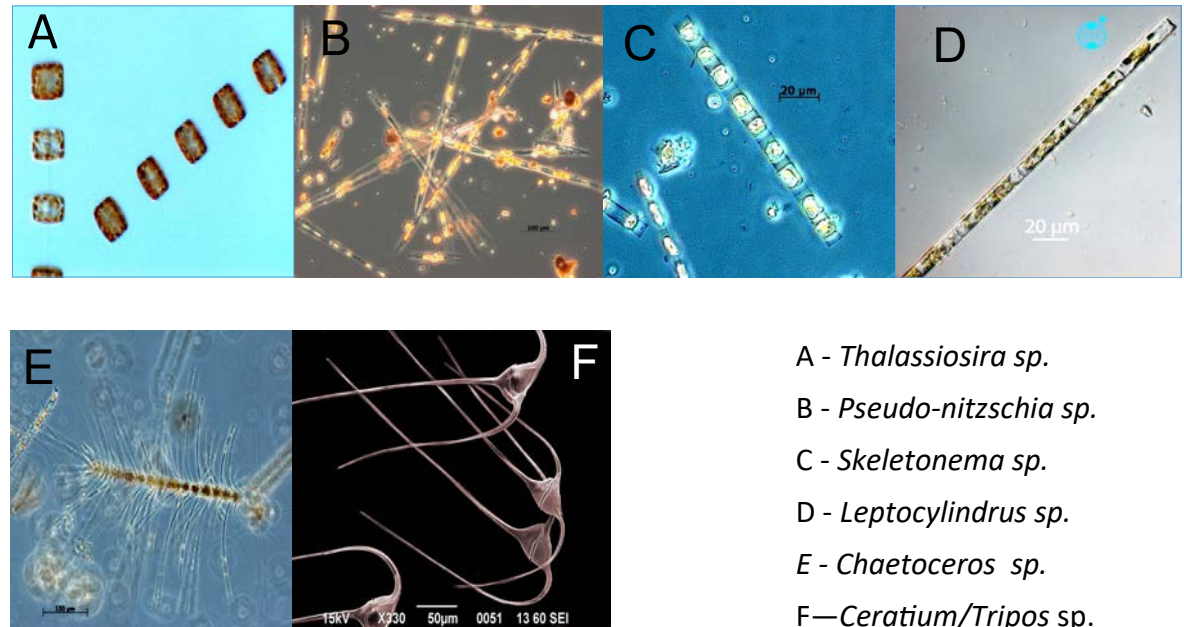
High densities of chain forming diatoms including, but not limited to the genus, *Chaetoceros*, *Skeletonema*, *Leptocylindrus*, *Rhizosolenia*, *Thalassiosira*, *Corethron* and *Pseudo-nitzschia*, the centric species *Coscinodiscus wailesii*, and species with long spines such as *Ceratium* (*Tripes*)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

Status

Twelve samples were analysed this week, *Karenia* was detected in low numbers in Slyde.

The IFCB at Cole Deep is detecting *Leptocylindrus* and small flagellates. The one at Scalloway is offline for maintenance.

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

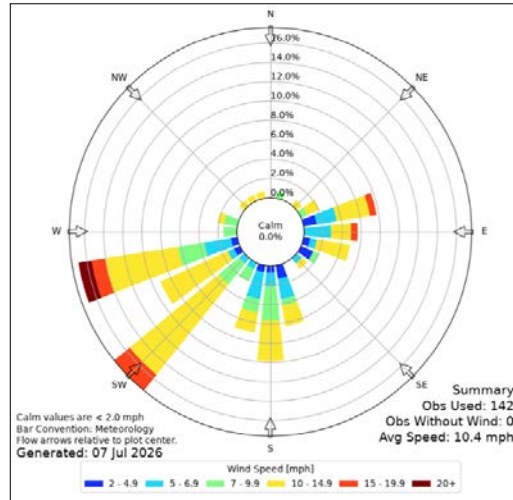


A - *Thalassiosira* sp.
B - *Pseudo-nitzschia* sp.
C - *Skeletonema* sp.
D - *Leptocylindrus* sp.
E - *Chaetoceros* sp.
F—*Ceratium/Tripes* sp.

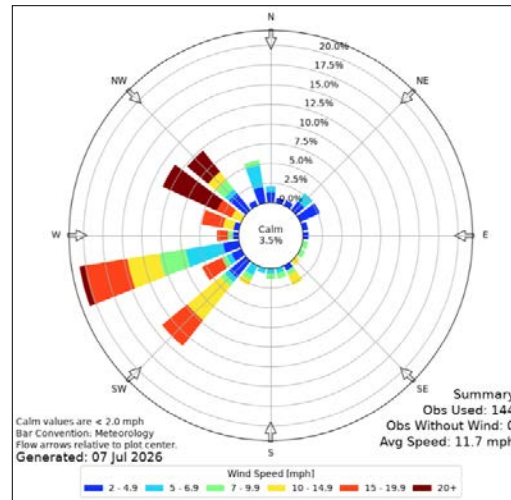
Shetland Bulletin on the status of harmful & toxic algae Week 29, 13th - 19th Jul 2026

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

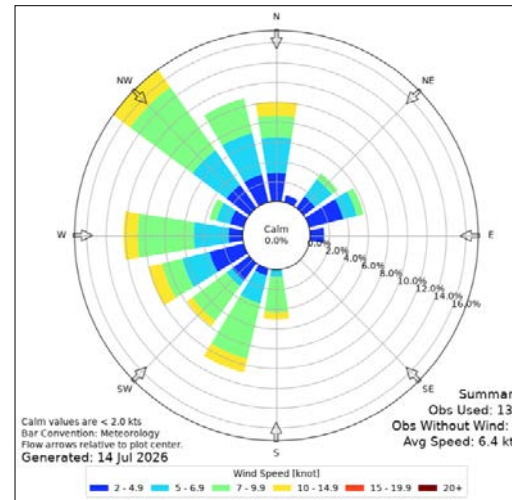
Week 26



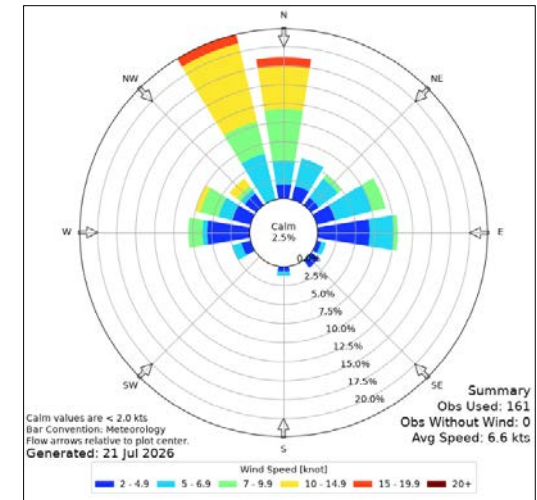
Week 27



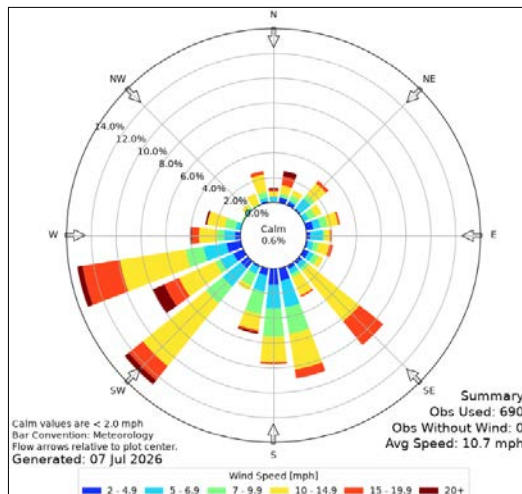
Week 28



Week 29



June



Status:

Over the past week the average wind direction has been from the north.

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.

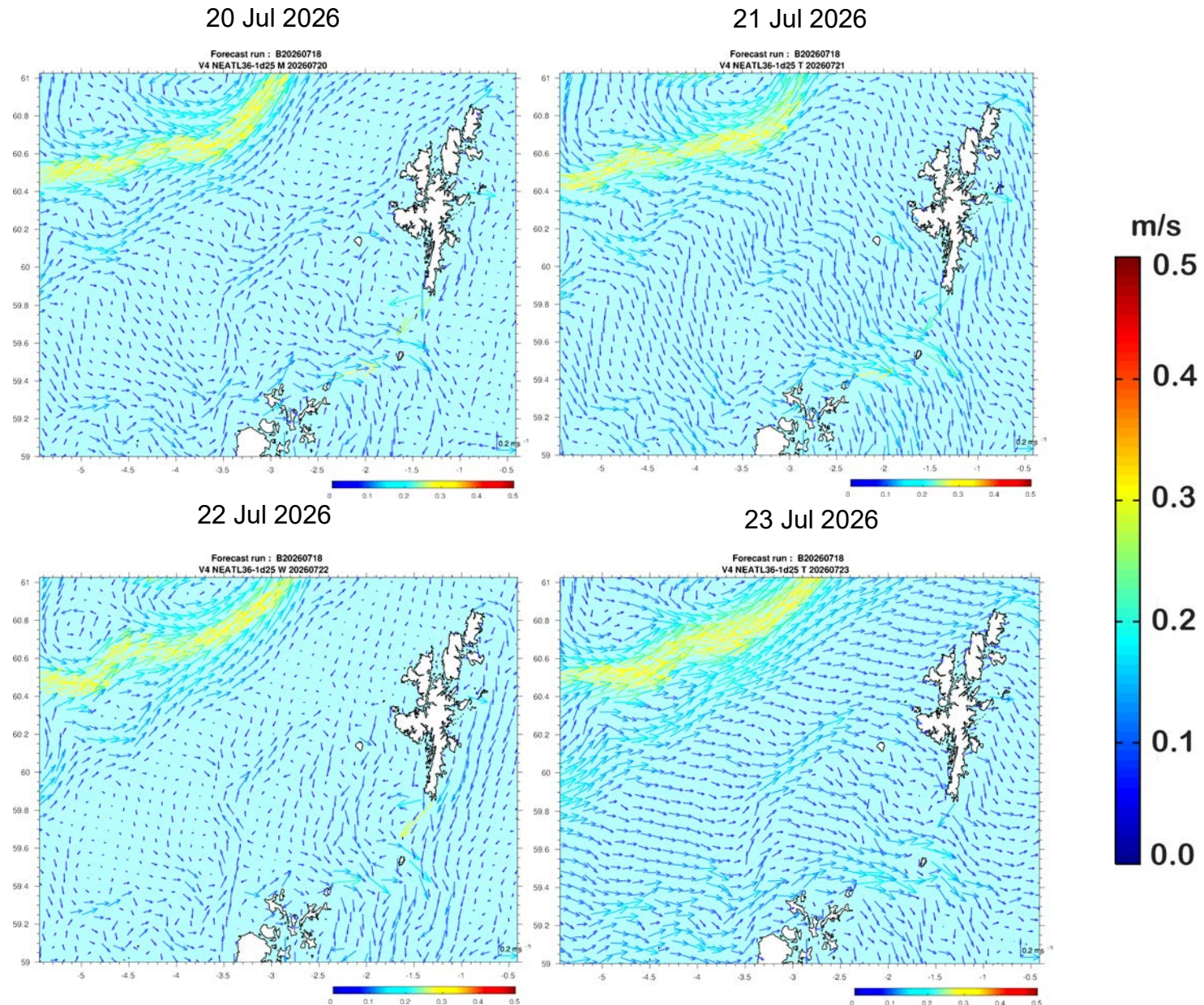
Why do we think this?

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 north. It is unlikely that there will be an advected bloom of *Dinophysis* in the coming week.

Shetland Bulletin on the status of harmful & toxic algae Week 29, 13th - 19th Jul 2026

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.

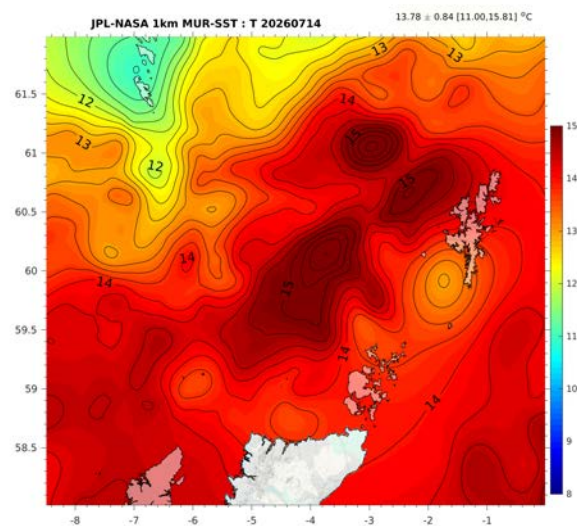


Forecast provided by the model-NEATL-PHY-1/36°-AF-D-PGS (IBI36QV4R1-PGS) courtesy of Mercator.

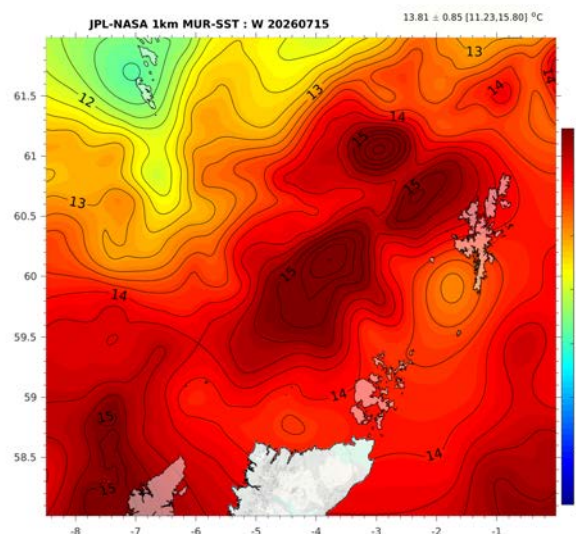
Shetland Bulletin on the status of harmful & toxic algae Week 29, 13th - 19th Jul 2026

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

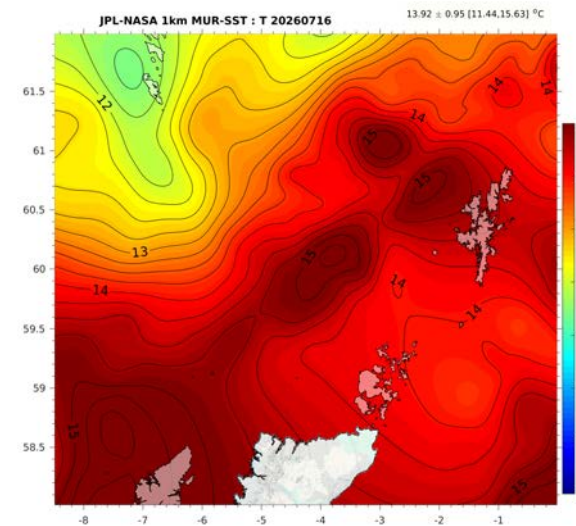
14 Jul 2026



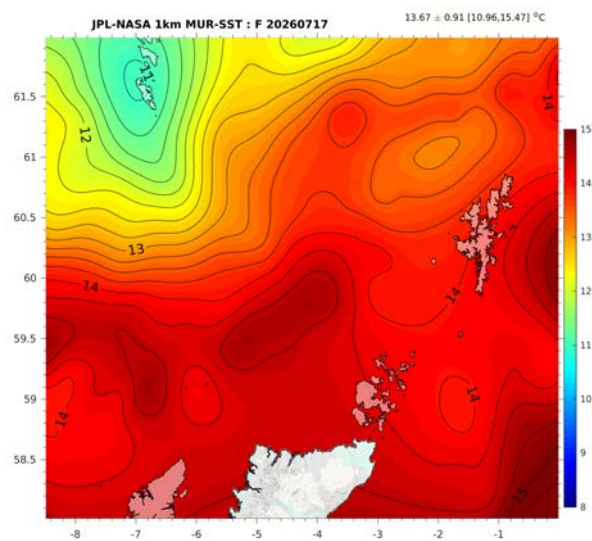
15 Jul 2026



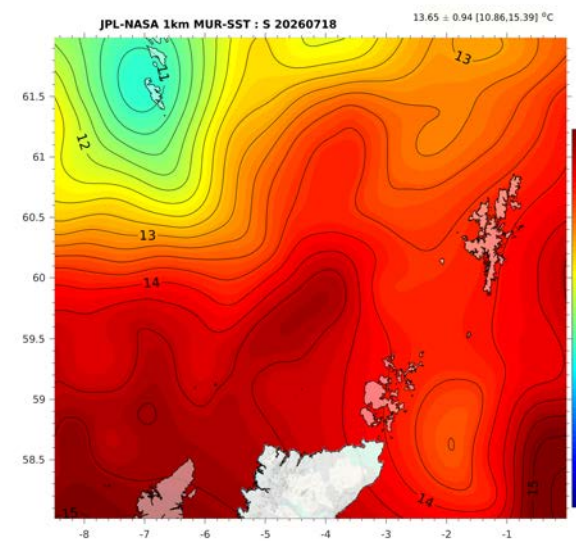
16 Jul 2026



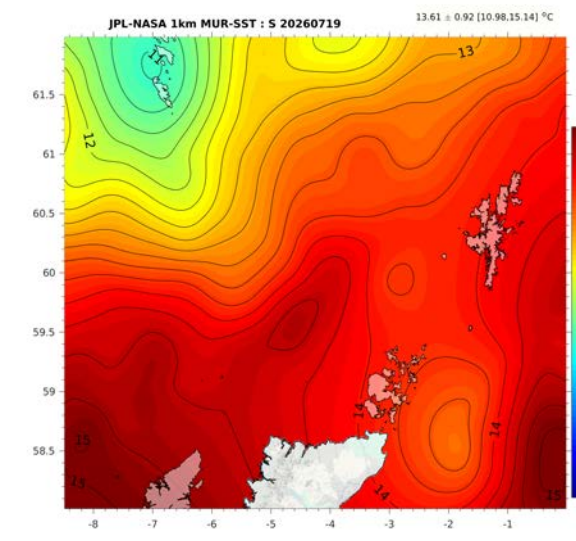
17 Jul 2026



18 Jul 2026



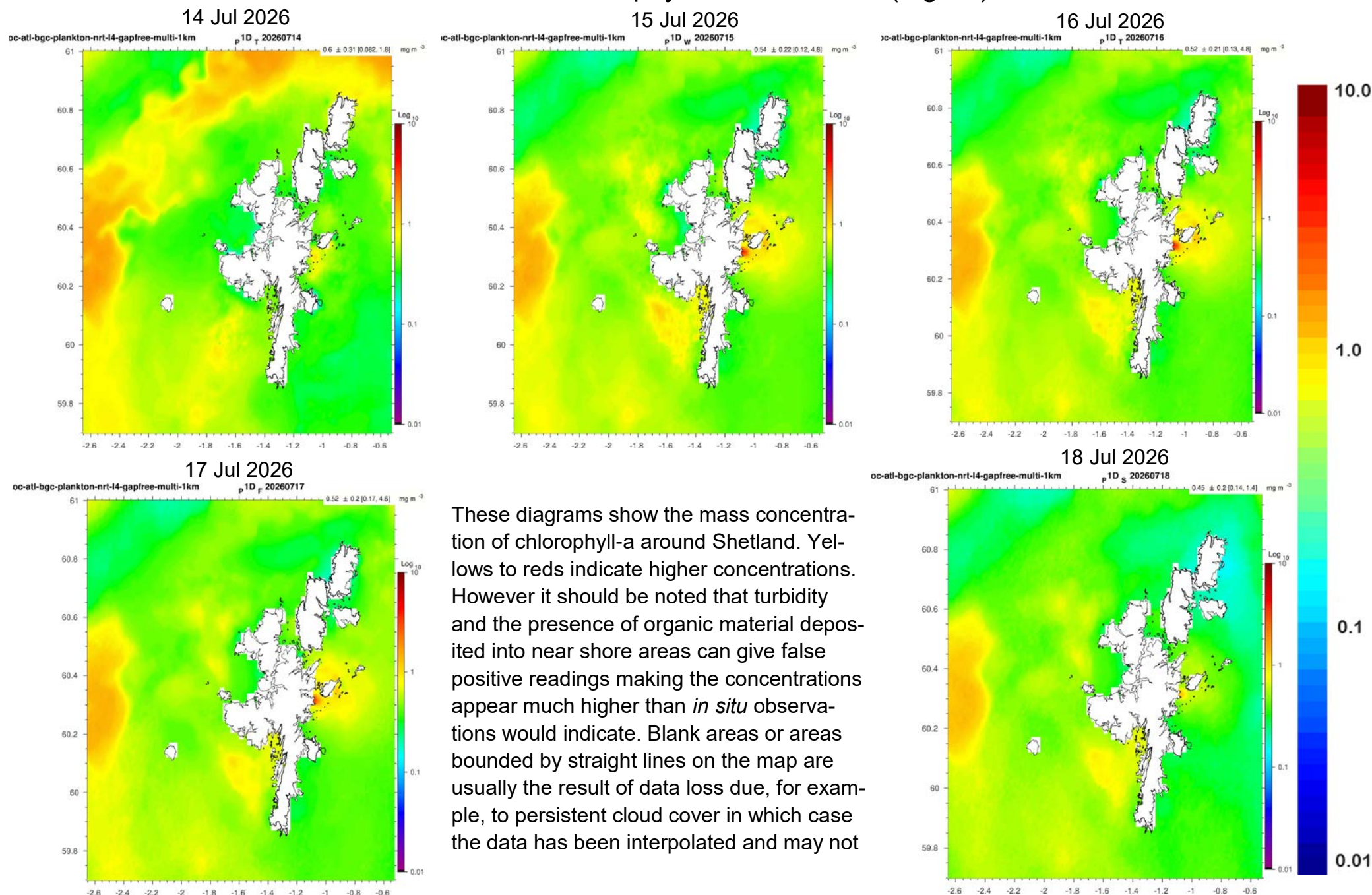
19 Jul 2026



Maps provided courtesy of the Jet Propulsion Laboratory, NASA

Shetland Bulletin on the status of harmful & toxic algae Week 29, 13th - 19th Jul 2026

Chlorophyll concentrations (mg/m³)



Shetland Bulletin on the status of harmful & toxic algae Week 29, 13th - 19th Jul 2026

Wind and rain forecast for next three days in Shetland

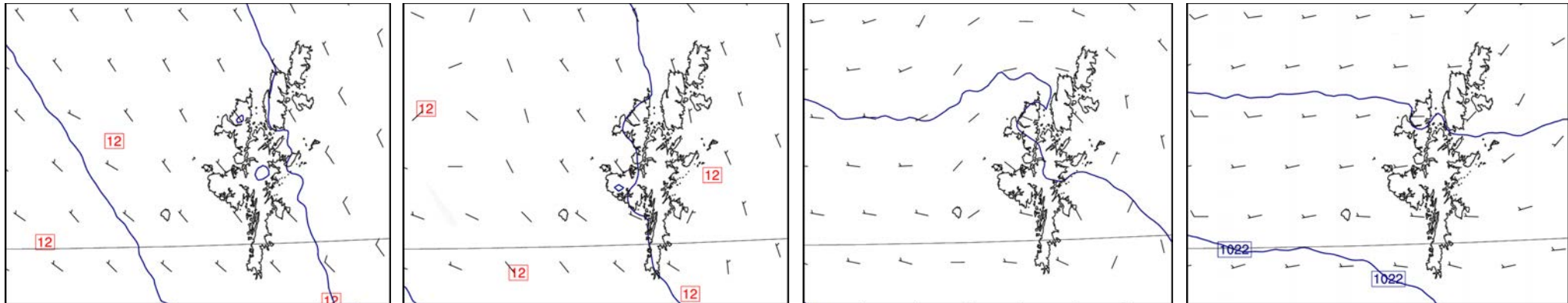
6 AM

12 Noon

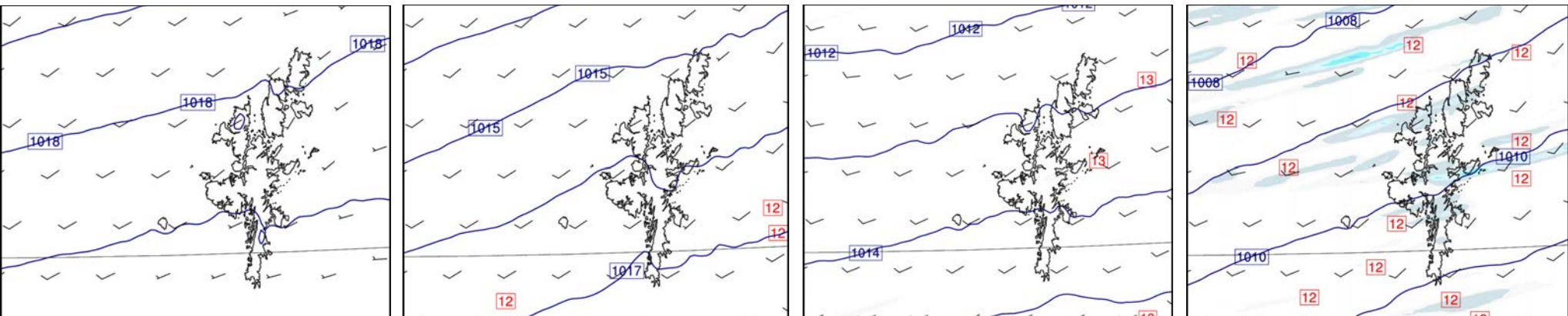
6 PM

12 PM

22 Jul



23 Jul



24 Jul

