

# Shetland Bulletin on the status of harmful & toxic algae Week 5, 26<sup>th</sup> Jan - 1<sup>st</sup> Feb 2026

## Biotoxin report:

**PSP toxins:** Four samples were analysed this week. No toxins were detected.

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

**ASP toxins:** Four samples were analysed this week. No toxins were detected.

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

**YTX toxins:** Five samples were analysed this week. No toxins were detected.

## Harmful algae report:

**Alexandrium:** One sample was analysed this week. *Alexandrium* was not detected.

***Pseudo-nitzschia delicatissima*:** One sample was analysed this week. *P. delicatissima* was detected in low numbers in East of Linga.

***Pseudo-nitzschia seriata*:** One sample was analysed this week. *P. seriata* was not detected.

***Dinophysis*:** One sample was analysed this week. *Dinophysis* was not detected.

***Prorocentrum lima*:** One sample was analysed this week. *P. lima* was not detected.

***Karenia mikimotoi*:** One sample was analysed this week. *Karenia* was not detected.

## Shetland: trends and forecast

***Alexandrium*/PSP:** No toxins were detected. Given the time of year, it is extremely unlikely there will be a toxic bloom this week.

***Dinophysis*/DSP:** No toxins were detected. Given the time of year, it is unlikely there will be a toxic bloom this week.

***Pseudo-nitzschia*/ASP:** No toxins were detected. 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

Risk for **AZA**: 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/algalt toxin/#.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

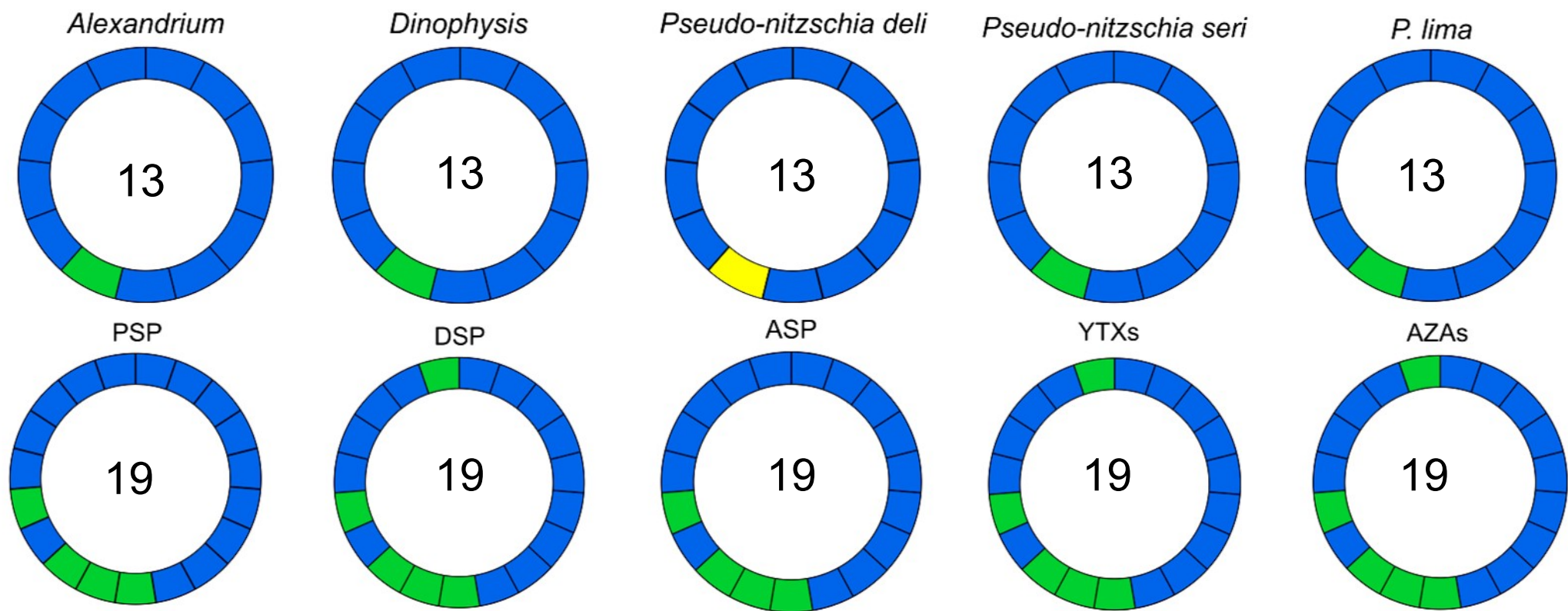
**Lipophilic toxins** (tested by LC-MS):

**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					
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

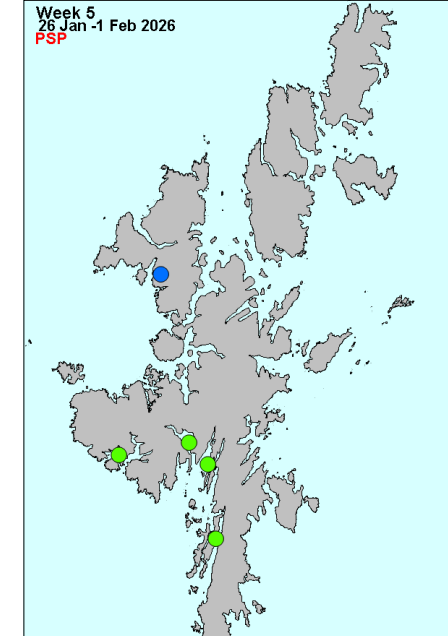
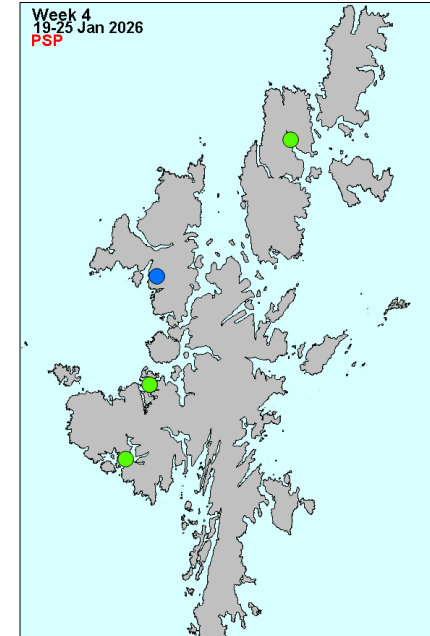
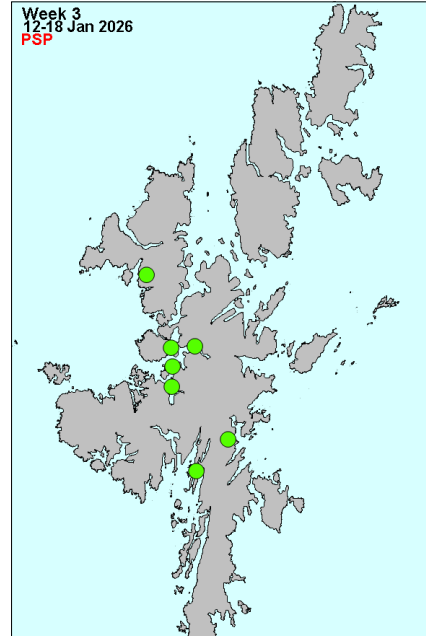
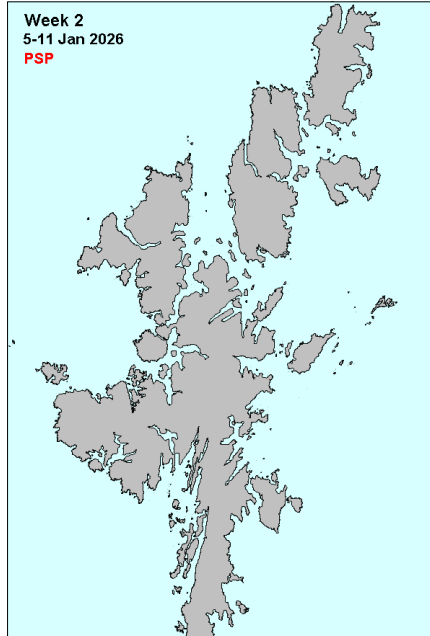
**NOTE:**  
This page is intended as a quick overview of the situation in the Shetland Islands. If the status for a particular species or biotoxin is amber or red please check the relevant pages in the bulletin for more details and specific locations.  
RL- reporting limit;  
LOQ – Limit of quantification

## Paralytic shellfish poisoning toxins & causative phytoplankton

### PSP

µg STX eq/kg

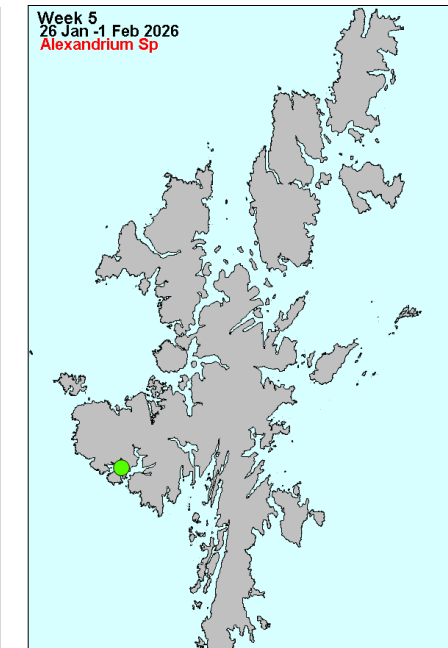
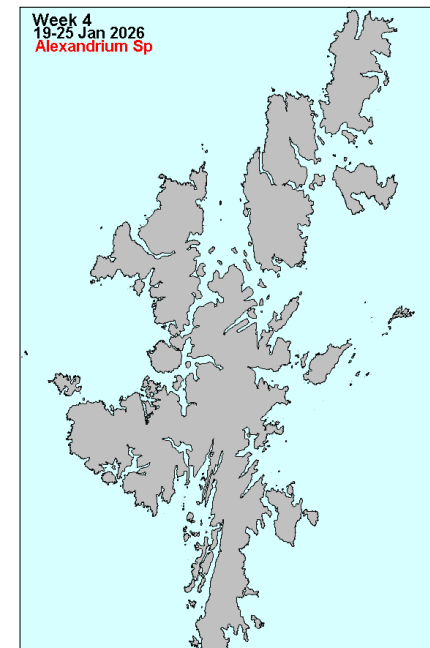
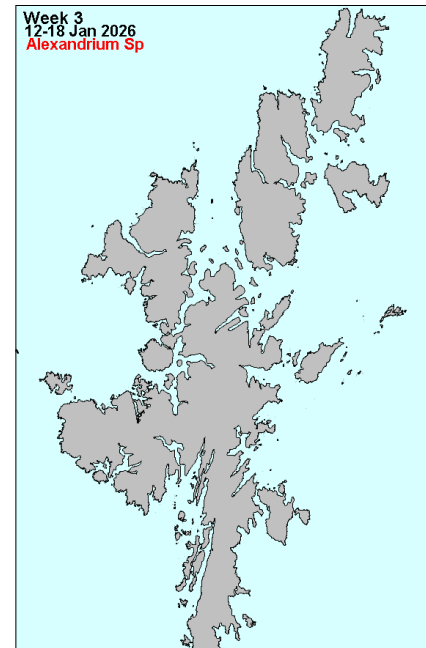
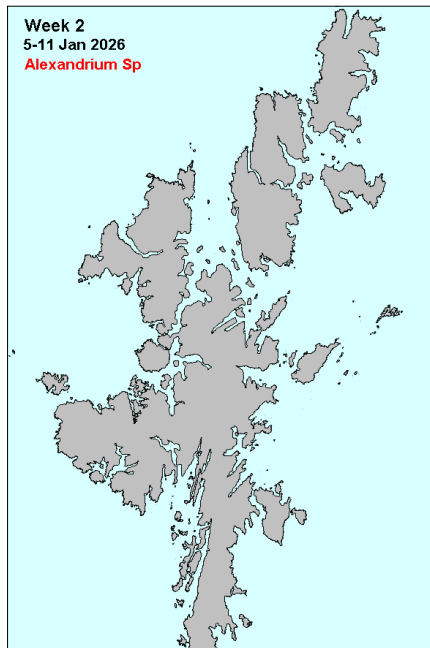
- Not Analyzed
- 0
- 0-400
- 400-800
- 800-1,600
- 1,600-2,000
- 2,000-3,000
- 3,000-4,000
- >=4,000



### Alexandrium Sp.

cells/l

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



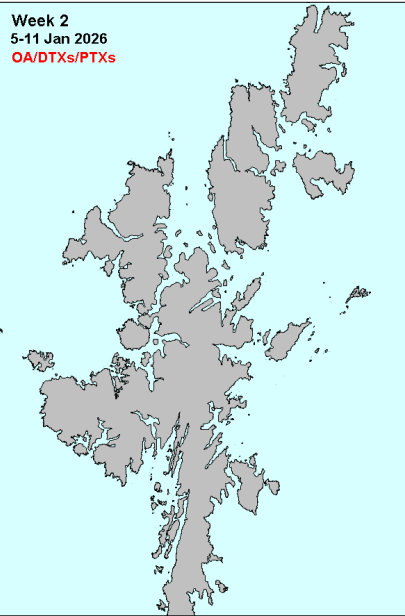
## Diarrhetic shellfish poisoning toxins & causative phytoplankton

### OA/DTXs/PTXs

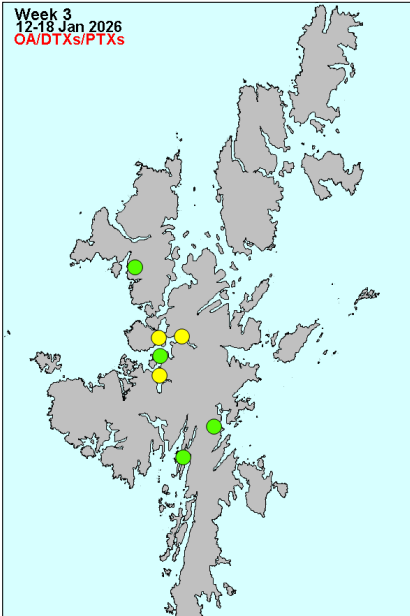
µg OA eq/kg



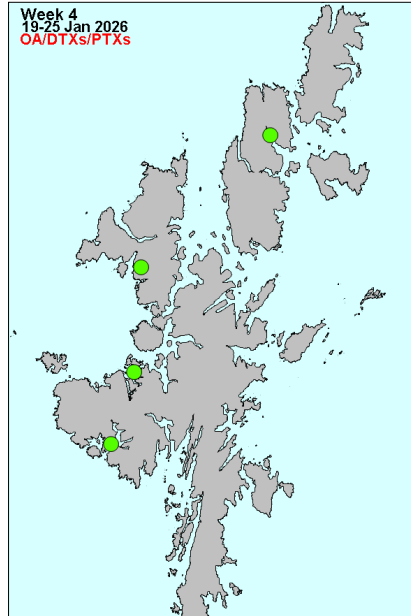
Week 2  
5-11 Jan 2026  
OA/DTXs/PTXs



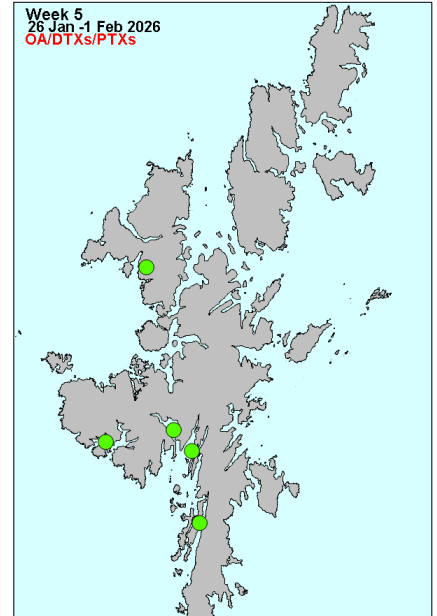
Week 3  
12-18 Jan 2026  
OA/DTXs/PTXs



Week 4  
19-25 Jan 2026  
OA/DTXs/PTXs

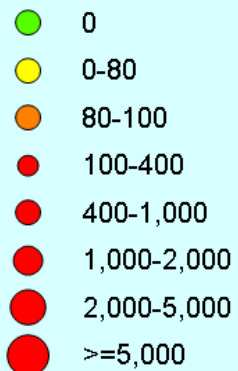


Week 5  
26 Jan - 1 Feb 2026  
OA/DTXs/PTXs

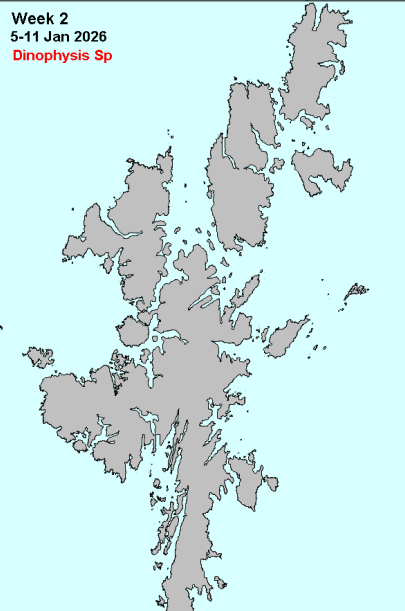


### Dinophysis Sp.

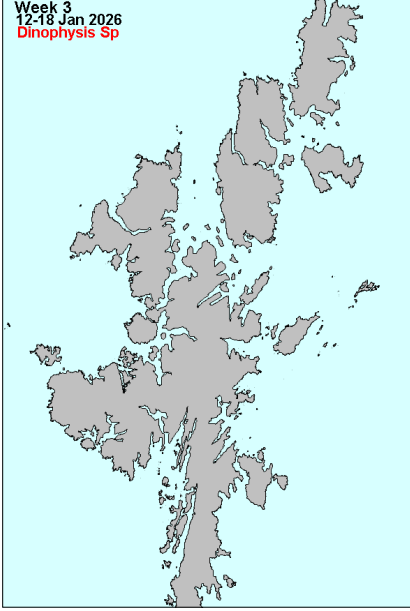
cells/l



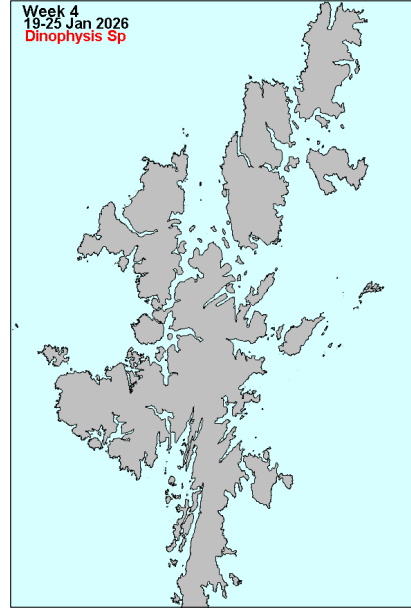
Week 2  
5-11 Jan 2026  
Dinophysis Sp



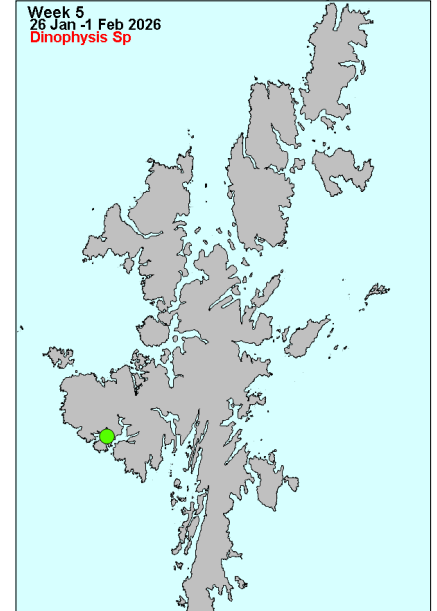
Week 3  
12-18 Jan 2026  
Dinophysis Sp



Week 4  
19-25 Jan 2026  
Dinophysis Sp



Week 5  
26 Jan - 1 Feb 2026  
Dinophysis Sp





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## Amnesic Shellfish Poisoning & causative phytoplankton



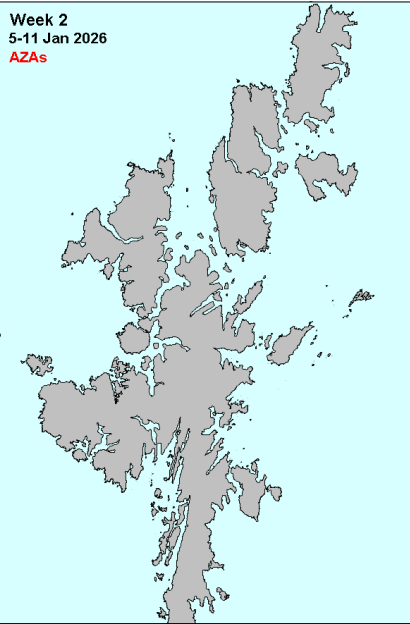
## Azaspiracid & Yessotoxin shellfish poisoning toxins

### AZAs

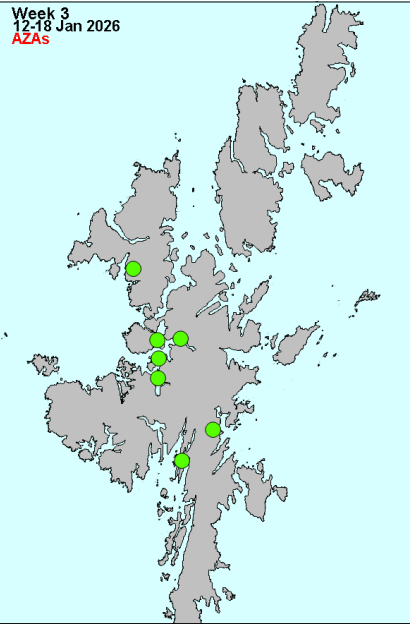
µg AZA1 eq/kg

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

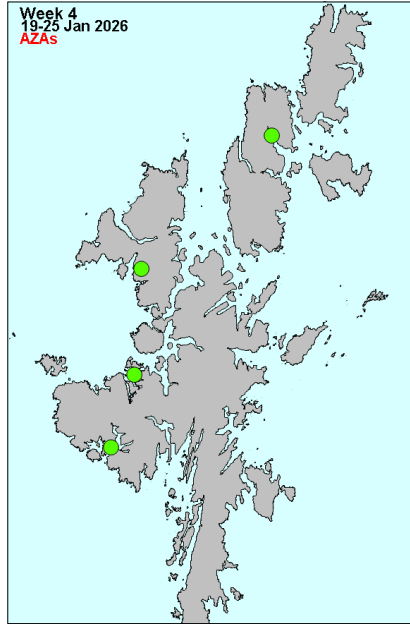
Week 2  
5-11 Jan 2026  
AZAs



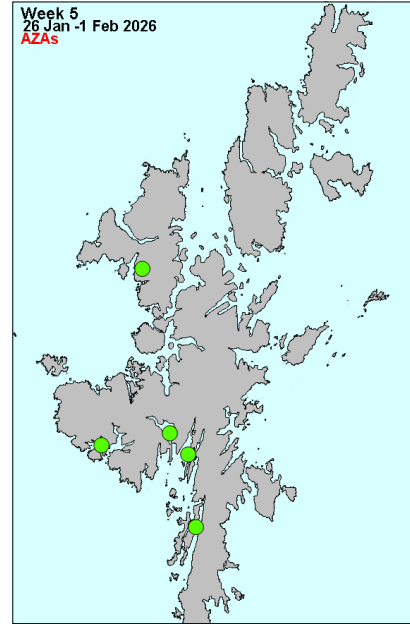
Week 3  
12-18 Jan 2026  
AZAs



Week 4  
19-25 Jan 2026  
AZAs



Week 5  
26 Jan -1 Feb 2026  
AZAs

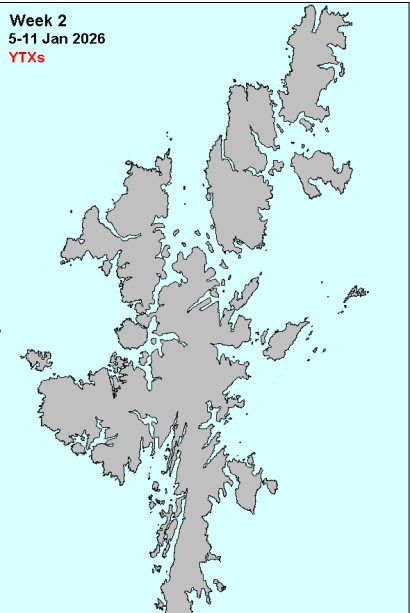


### YTXs

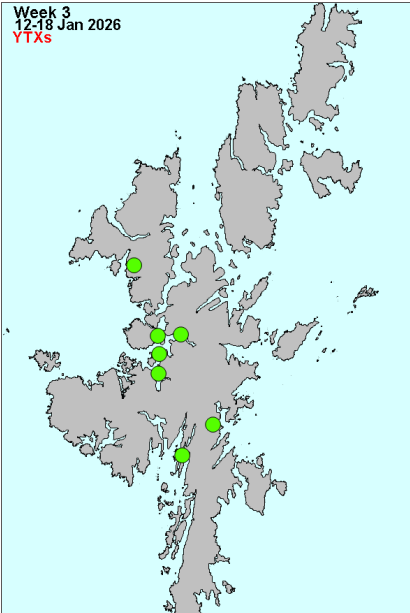
mg YTX eq/kg

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

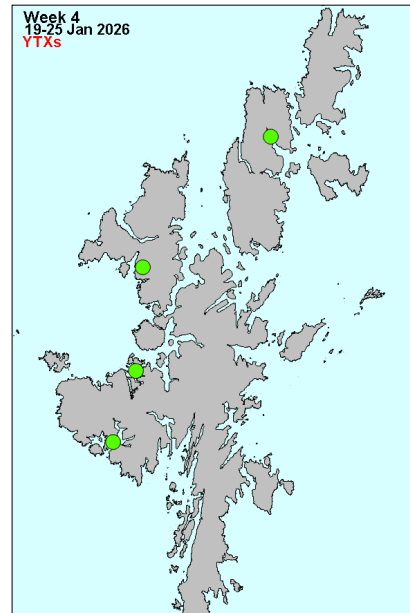
Week 2  
5-11 Jan 2026  
YTXs



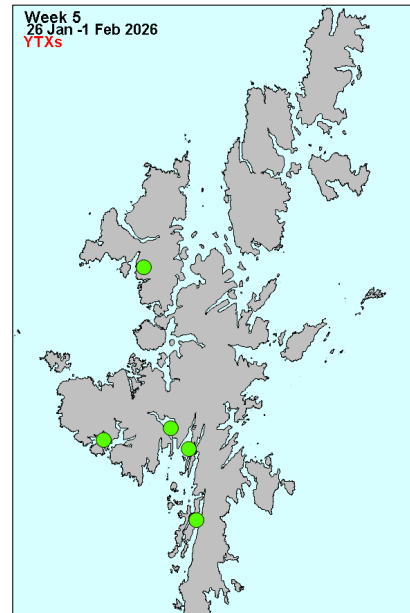
Week 3  
12-18 Jan 2026  
YTXs



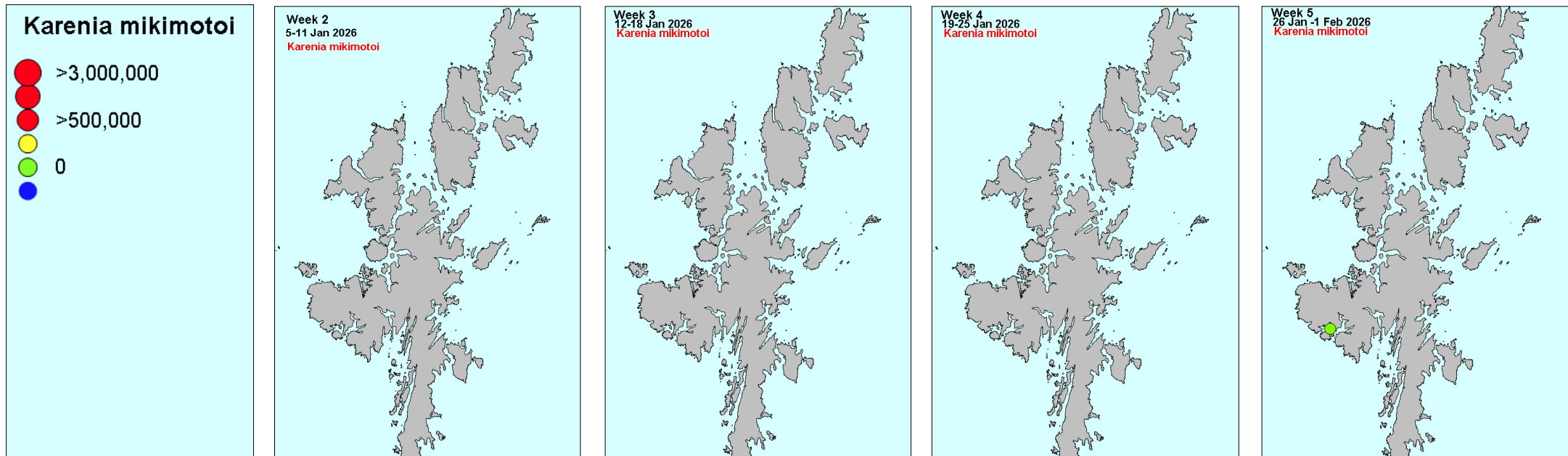
Week 4  
19-25 Jan 2026  
YTXs



Week 5  
26 Jan -1 Feb 2026  
YTXs



## *Karenia mikimotoi*



## Chain forming Phytoplankton

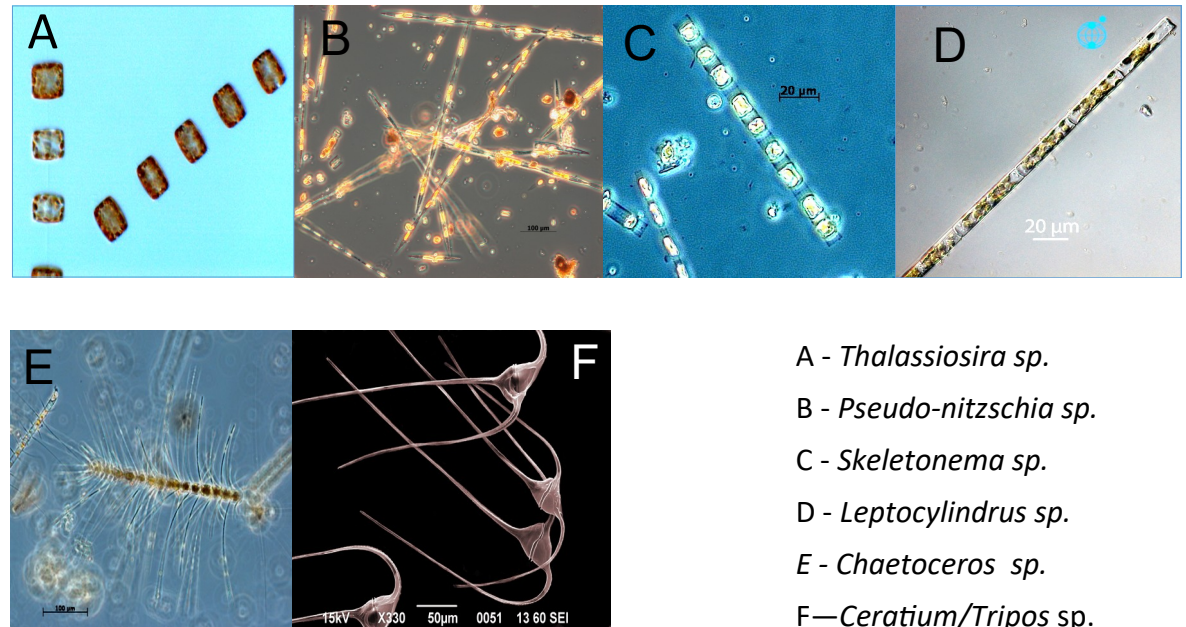
High densities of chain forming diatoms including, but not limited to the genus, *Chaetoceros*, *Skeletonema*, *Leptocylindrus*, *Rhizosolenia*, *Thalassiosira*, *Corethron* and *Pseudo-nitzschia*, the centric species *Coscinodiscus wailesii*, and species with long spines such as *Ceratium* (*Tripos*)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

### Status

One sample was analysed this week. *Karenia* was not detected.

The IFCB's at Cole Deep and Scalloway are mainly detecting small flagellates.

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



A - *Thalassiosira* sp.

B - *Pseudo-nitzschia* sp.

C - *Skeletonema* sp.

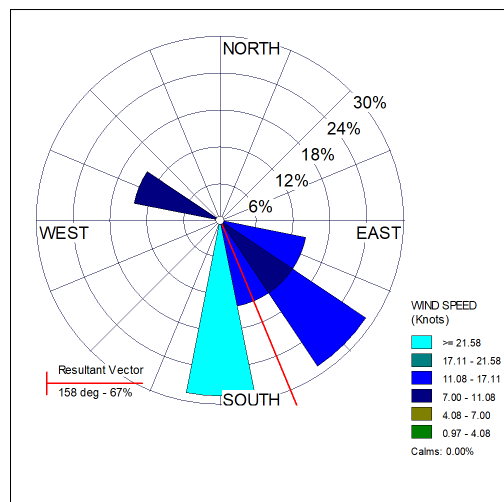
D - *Leptocylindrus* sp.

E - *Chaetoceros* sp.

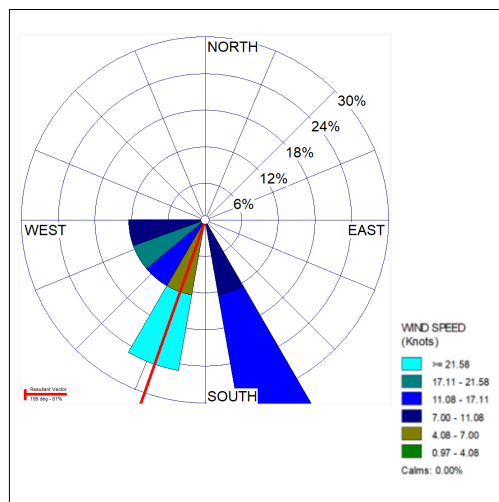
F—*Ceratium/Tripos* sp.

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

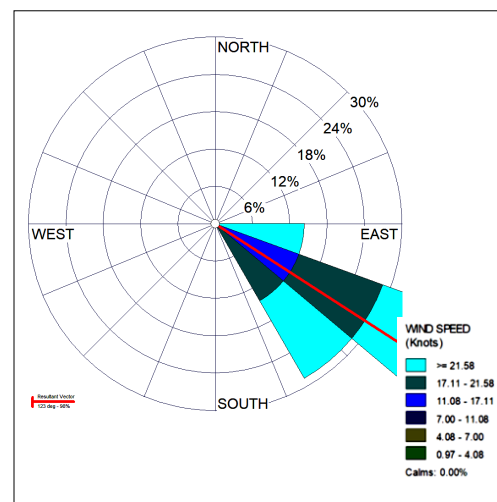
Week 2



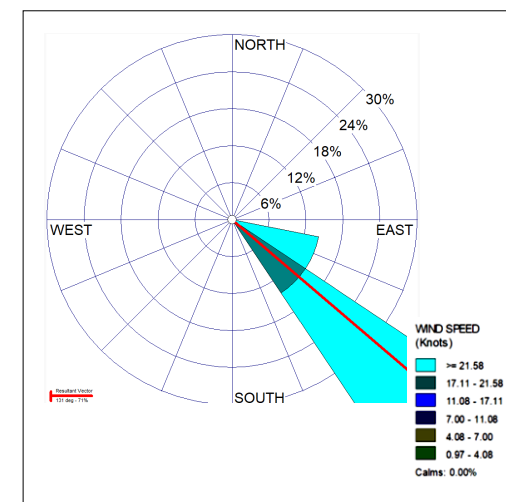
Week 3



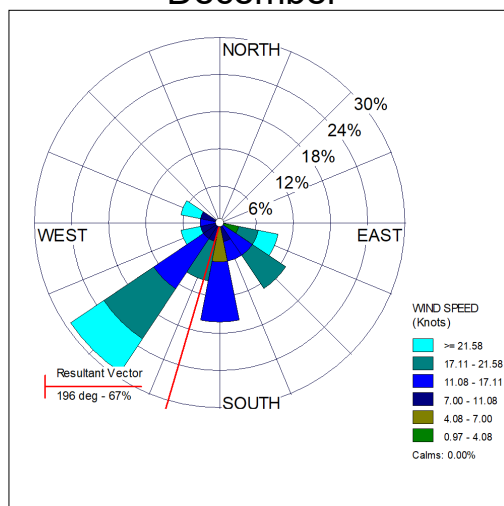
Week 4



Week 5



December



### Status:

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

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?

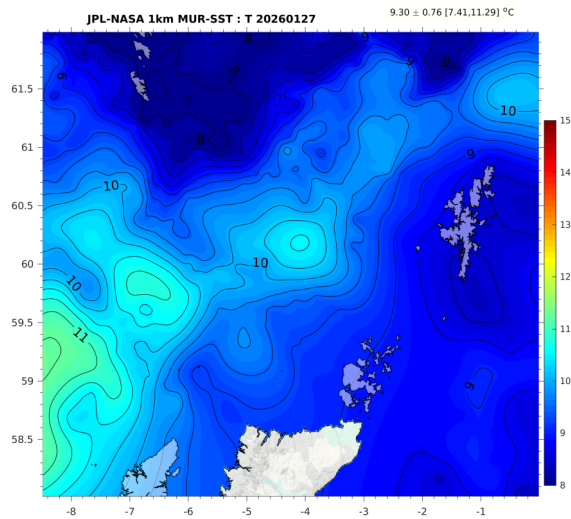
During the summer *Dinophysis* can bloom out at sea and at shelf fronts found off the West of Shetland. Westerly winds can then blow these blooms into shore. Westerly winds may also retain *Dinophysis* cells in Westerly facing voes and inlets where their numbers may increase. Wind for the past week has been predominantly from the south east. It is unlikely that there will be an advected bloom of *Dinophysis* in the coming week.



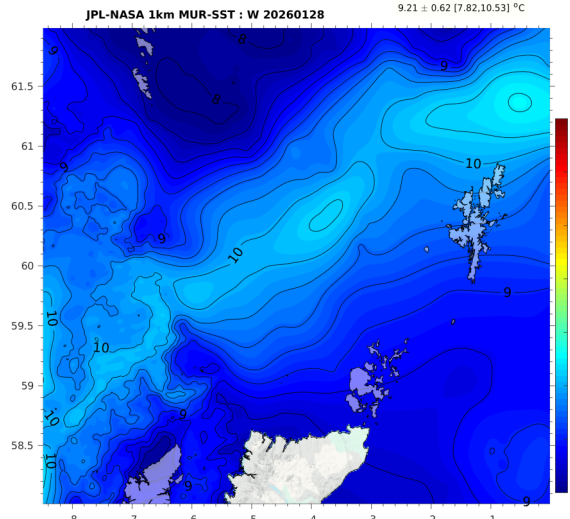
# Shetland Bulletin on the status of harmful & toxic algae Week 5, 26<sup>th</sup> Jan - 1<sup>st</sup> Feb 2026

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

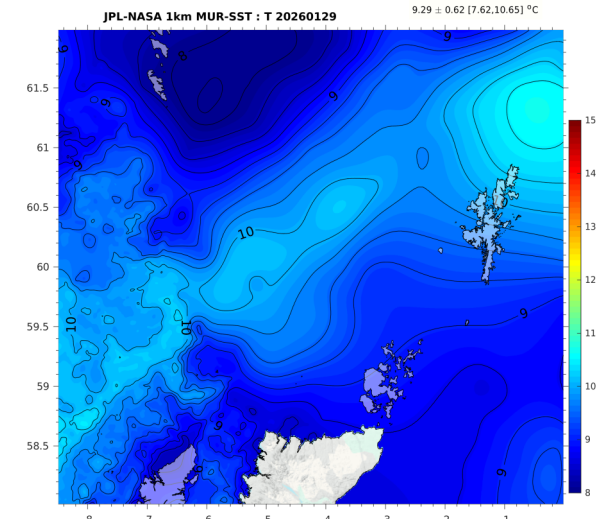
27 Jan 2026



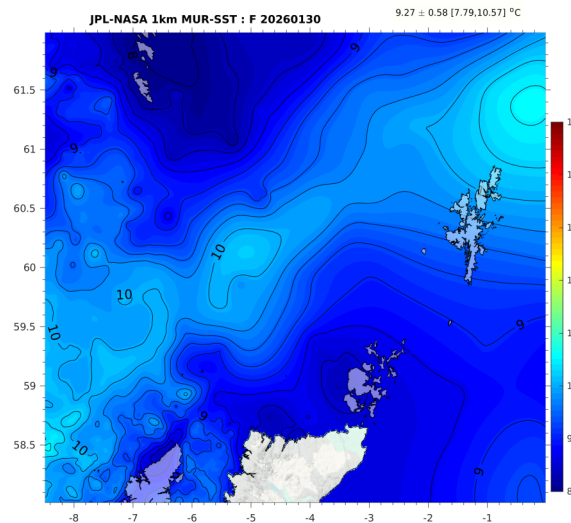
28 Jan 2026



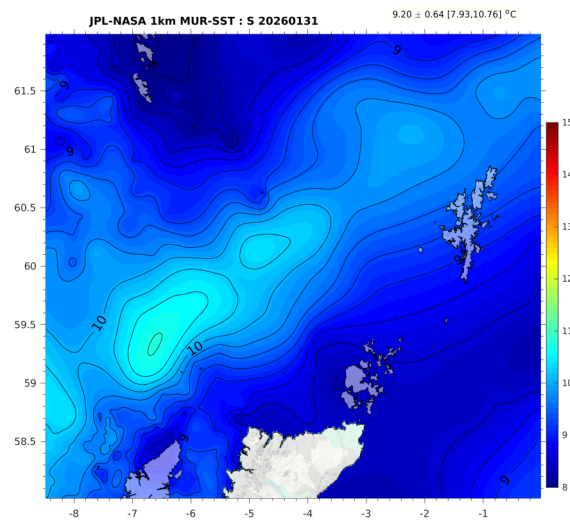
29 Jan 2026



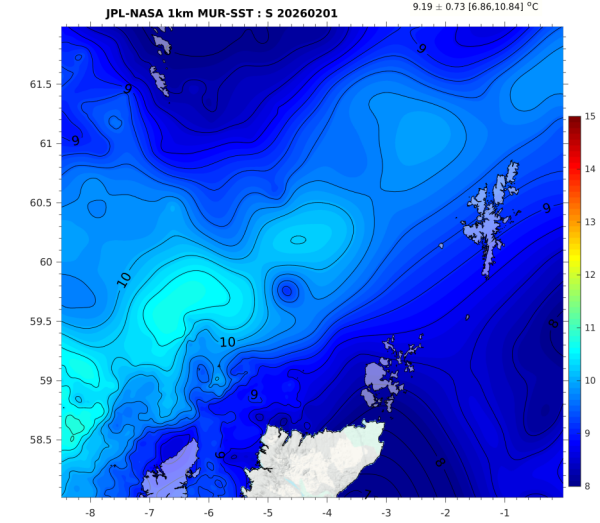
30 Jan 2026



31 Jan 2026



1 Feb 2026



Maps provided courtesy of the Jet Propulsion Laboratory, NASA

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## Wind and rain forecast for next three days in Shetland

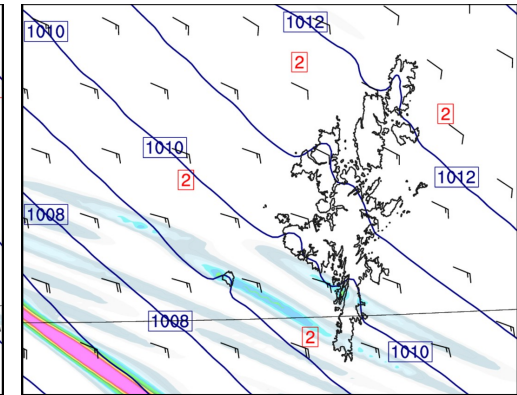
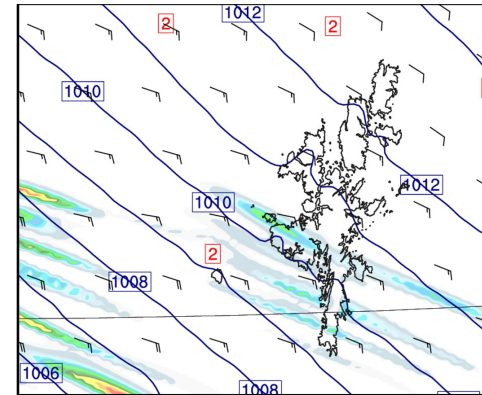
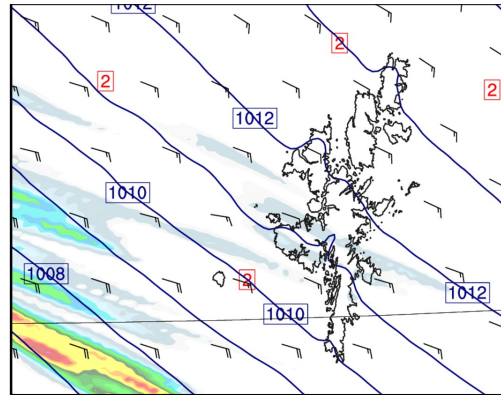
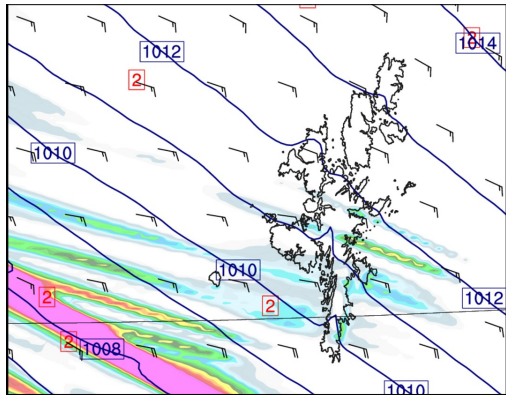
6 AM

12 Noon

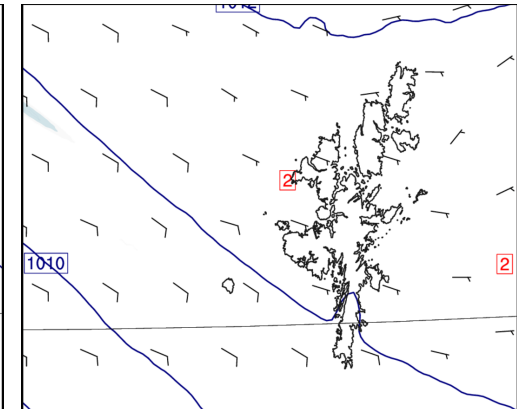
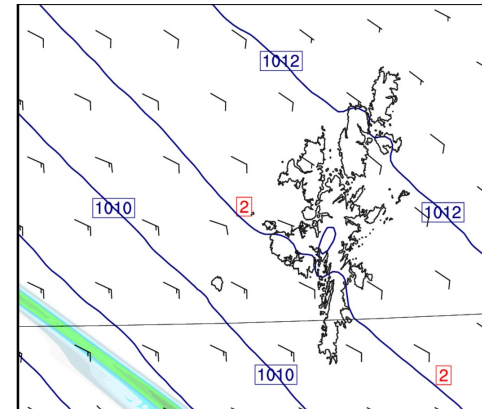
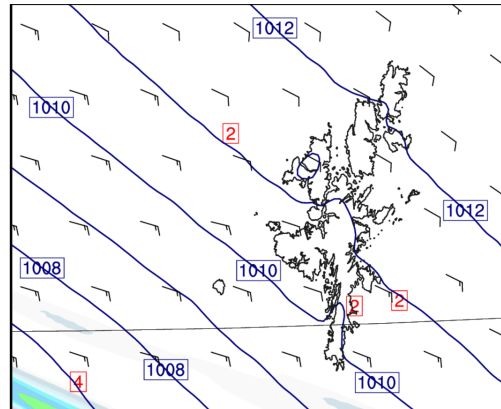
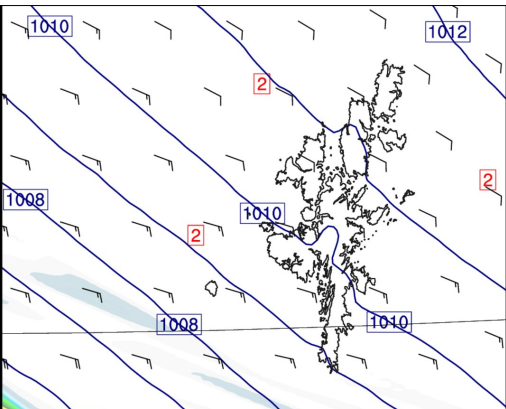
6 PM

12 PM

4 Feb



5 Feb



6 Feb

