

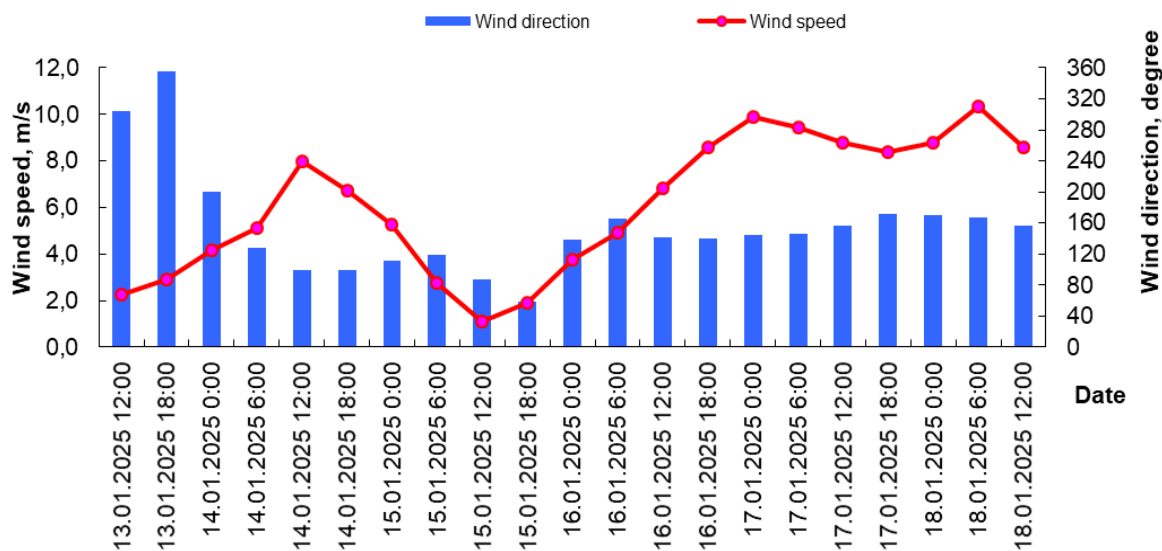


MINISTRY OF ECOLOGY AND NATURAL RESOURCES
OF THE REPUBLIC OF KAZAKHSTAN

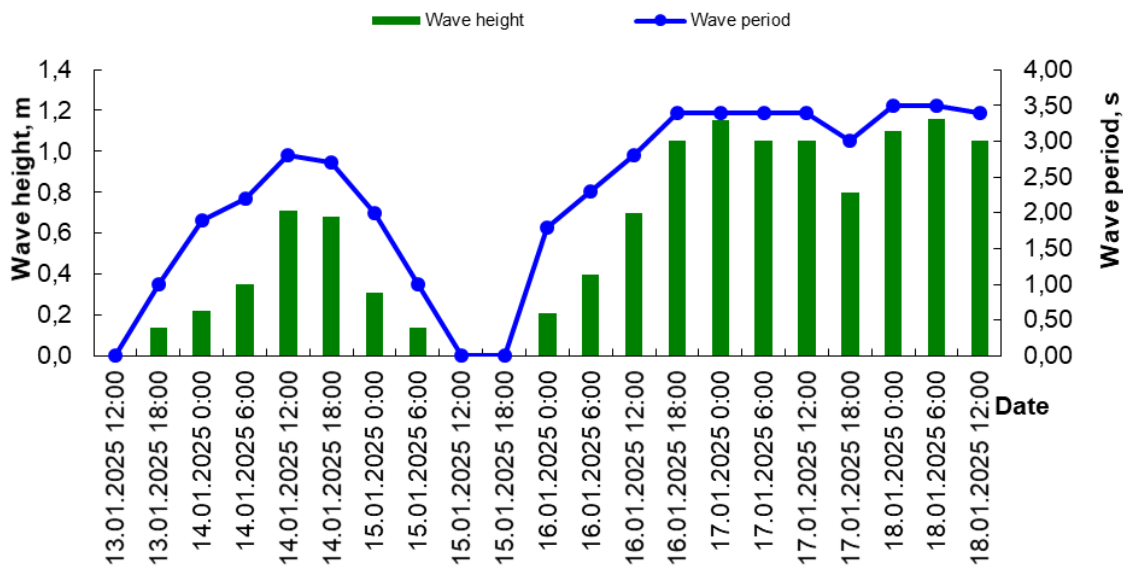
RSE «KAZHYDROMET»

Wave and wind forecast for the Middle part of the Caspian Sea with a 5-day
advance for the period January 13 – 18, 2025

Wind condition in the 21050 unit

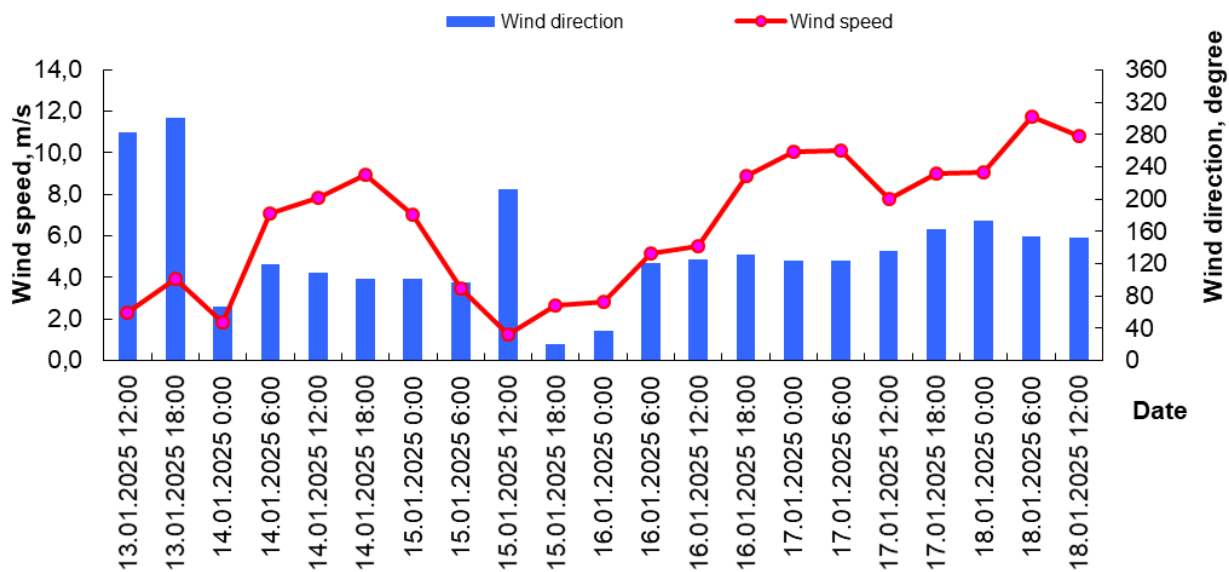


Wave condition in the 21050 unit

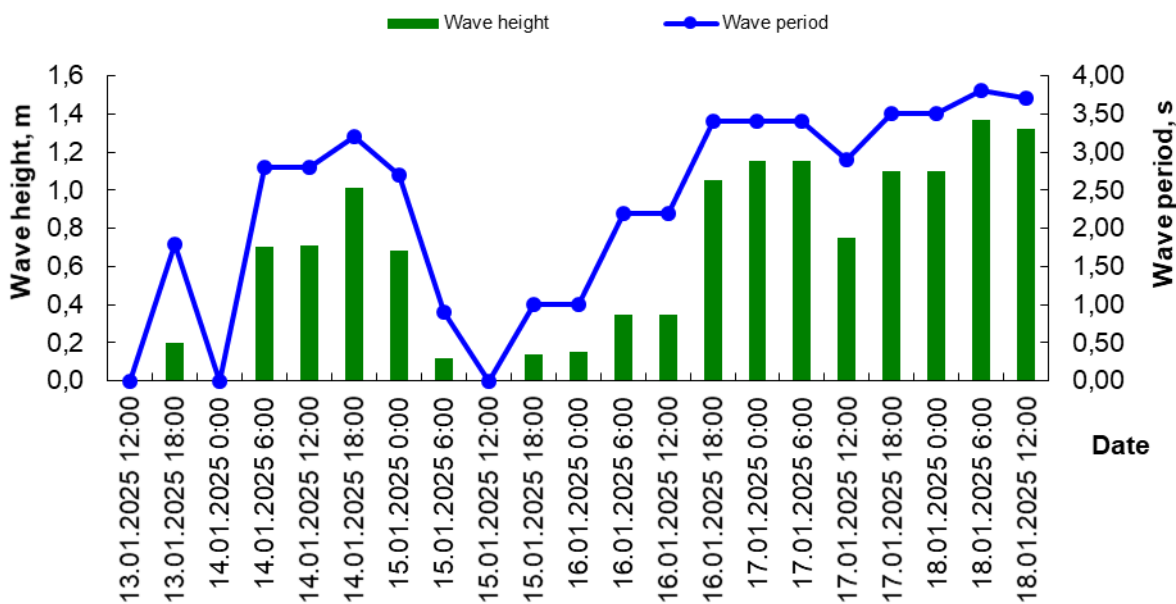


| Date Time | Wind speed (WS) and wind direction (WD) | | Wave height (H) and wave period (τ) | |
|------------------|---|----------|--|------|
| | WS, m/s | WD, rumb | H, m | t, s |
| 13.01.2025 12:00 | 2 | W | 0,00 | 0,00 |
| 13.01.2025 18:00 | 3 | NW | 0,14 | 1,00 |
| 14.01.2025 0:00 | 4 | NE | 0,22 | 1,90 |
| 14.01.2025 6:00 | 5 | SE | 0,35 | 2,20 |
| 14.01.2025 12:00 | 8 | E | 0,71 | 2,80 |
| 14.01.2025 18:00 | 7 | E | 0,68 | 2,70 |
| 15.01.2025 0:00 | 5 | E | 0,31 | 2,00 |
| 15.01.2025 6:00 | 3 | E | 0,14 | 1,00 |
| 15.01.2025 12:00 | 1 | SW | 0,00 | 0,00 |
| 15.01.2025 18:00 | 2 | N | 0,00 | 0,00 |
| 16.01.2025 0:00 | 4 | NE | 0,21 | 1,80 |
| 16.01.2025 6:00 | 5 | SE | 0,40 | 2,30 |
| 16.01.2025 12:00 | 7 | SE | 0,70 | 2,80 |
| 16.01.2025 18:00 | 9 | SE | 1,05 | 3,40 |
| 17.01.2025 0:00 | 10 | SE | 1,15 | 3,40 |
| 17.01.2025 6:00 | 9 | SE | 1,05 | 3,40 |
| 17.01.2025 12:00 | 9 | SE | 1,05 | 3,40 |
| 17.01.2025 18:00 | 8 | S | 0,80 | 3,00 |
| 18.01.2025 0:00 | 9 | S | 1,10 | 3,50 |
| 18.01.2025 6:00 | 10 | SE | 1,16 | 3,50 |
| 18.01.2025 12:00 | 9 | SE | 1,05 | 3,40 |

Wind condition in the 21141 unit

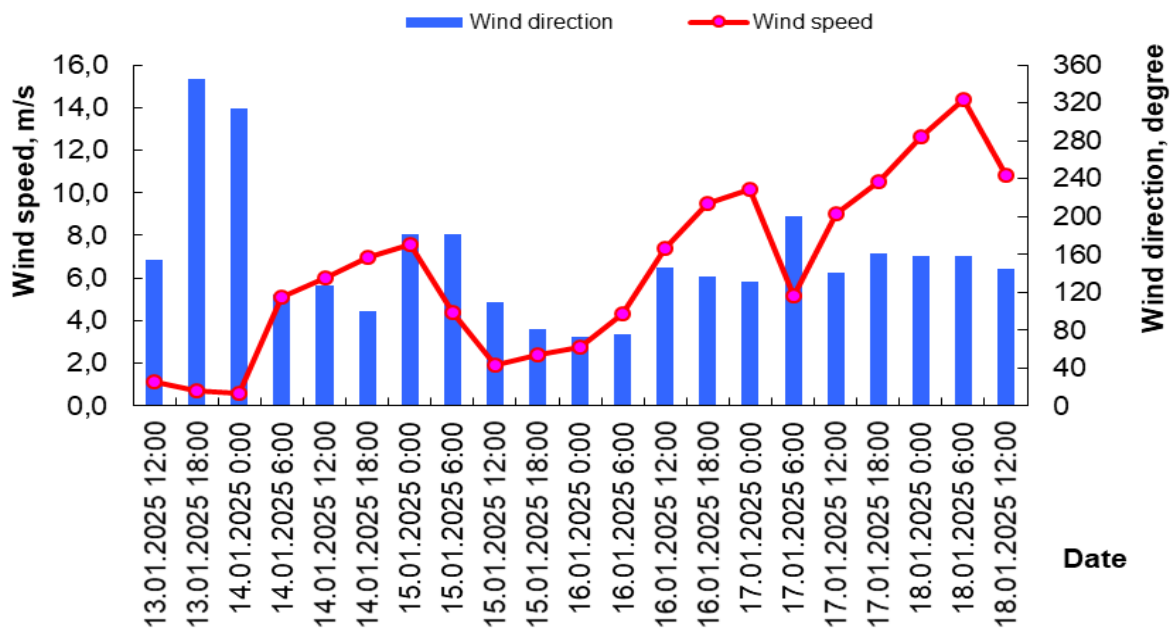


Wave condition in the 21141 unit

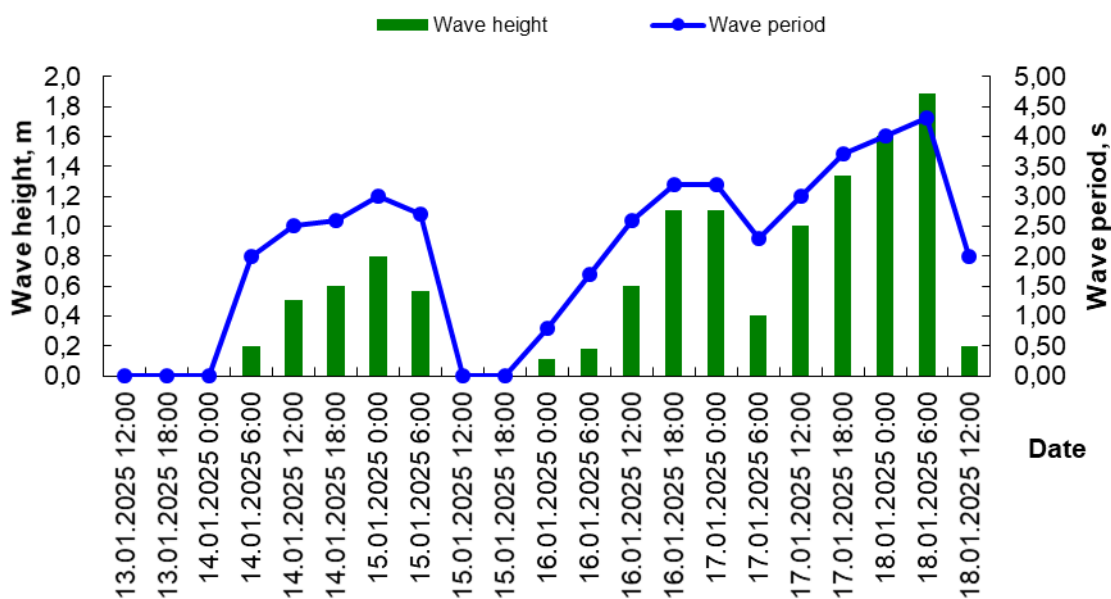


| Date Time | Wind speed (WS) and wind direction (WD) | | Wave height (H) and wave period (τ) | |
|------------------|---|----------|--|------|
| | WS, m/s | WD, rumb | H, m | t, s |
| 13.01.2025 12:00 | 2 | W | 0,00 | 0,00 |
| 13.01.2025 18:00 | 4 | NW | 0,20 | 1,80 |
| 14.01.2025 0:00 | 2 | NE | 0,00 | 0,00 |
| 14.01.2025 6:00 | 7 | SE | 0,70 | 2,80 |
| 14.01.2025 12:00 | 8 | E | 0,71 | 2,80 |
| 14.01.2025 18:00 | 9 | E | 1,01 | 3,20 |
| 15.01.2025 0:00 | 7 | E | 0,68 | 2,70 |
| 15.01.2025 6:00 | 3 | E | 0,12 | 0,90 |
| 15.01.2025 12:00 | 1 | SW | 0,00 | 0,00 |
| 15.01.2025 18:00 | 3 | N | 0,14 | 1,00 |
| 16.01.2025 0:00 | 3 | NE | 0,15 | 1,00 |
| 16.01.2025 6:00 | 5 | SE | 0,35 | 2,20 |
| 16.01.2025 12:00 | 5 | SE | 0,35 | 2,20 |
| 16.01.2025 18:00 | 9 | SE | 1,05 | 3,40 |
| 17.01.2025 0:00 | 10 | SE | 1,15 | 3,40 |
| 17.01.2025 6:00 | 10 | SE | 1,15 | 3,40 |
| 17.01.2025 12:00 | 8 | SE | 0,75 | 2,90 |
| 17.01.2025 18:00 | 9 | S | 1,10 | 3,50 |
| 18.01.2025 0:00 | 9 | S | 1,10 | 3,50 |
| 18.01.2025 6:00 | 12 | SE | 1,37 | 3,80 |
| 18.01.2025 12:00 | 11 | SE | 1,32 | 3,70 |

Wind condition in the 21142 unit

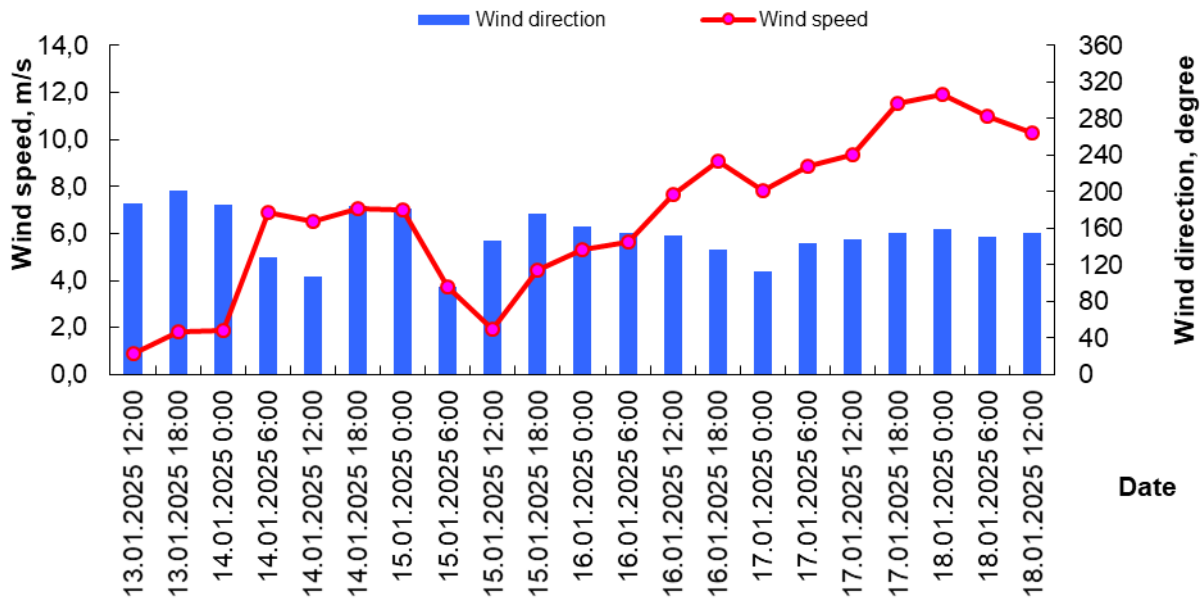


Wave condition in the 21142 unit

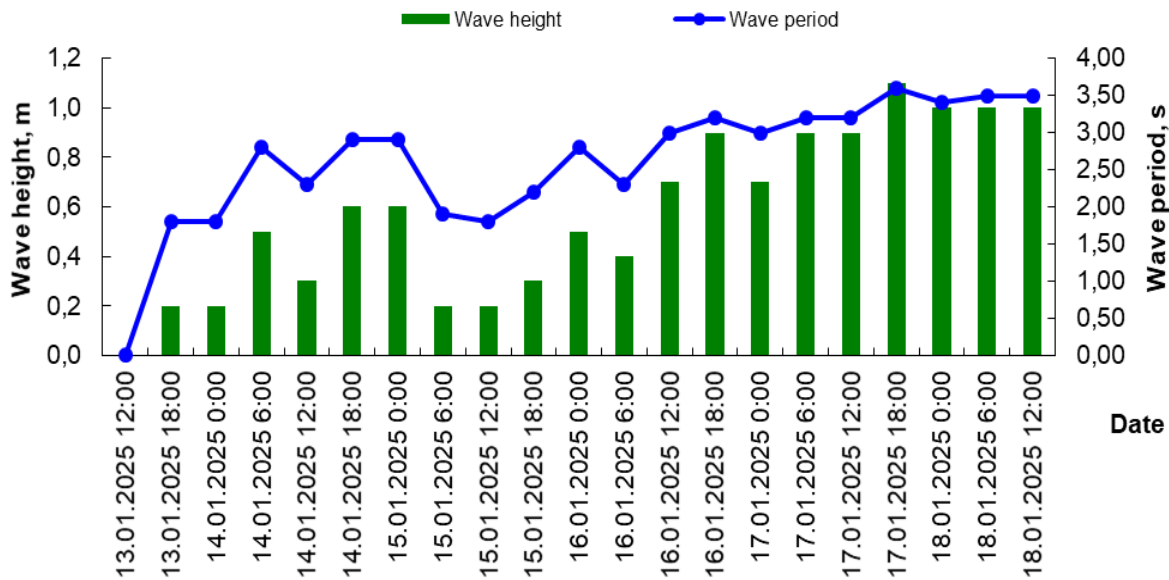


| Date Time | Wind speed (WS) and wind direction (WD) | | Wave height (H) and wave period (τ) | |
|------------------|---|----------|--|------|
| | WS, m/s | WD, rumb | H, m | t, s |
| 13.01.2025 12:00 | 1 | SE | 0,00 | 0,00 |
| 13.01.2025 18:00 | 1 | N | 0,00 | 0,00 |
| 14.01.2025 0:00 | 1 | NW | 0,00 | 0,00 |
| 14.01.2025 6:00 | 5 | SE | 0,20 | 2,00 |
| 14.01.2025 12:00 | 6 | SE | 0,51 | 2,50 |
| 14.01.2025 18:00 | 7 | E | 0,60 | 2,60 |
| 15.01.2025 0:00 | 8 | S | 0,80 | 3,00 |
| 15.01.2025 6:00 | 4 | S | 0,57 | 2,70 |
| 15.01.2025 12:00 | 2 | E | 0,00 | 0,00 |
| 15.01.2025 18:00 | 2 | E | 0,00 | 0,00 |
| 16.01.2025 0:00 | 3 | E | 0,11 | 0,80 |
| 16.01.2025 6:00 | 4 | E | 0,18 | 1,70 |
| 16.01.2025 12:00 | 7 | SE | 0,60 | 2,60 |
| 16.01.2025 18:00 | 10 | SE | 1,11 | 3,20 |
| 17.01.2025 0:00 | 10 | SE | 1,11 | 3,20 |
| 17.01.2025 6:00 | 5 | S | 0,40 | 2,30 |
| 17.01.2025 12:00 | 9 | SE | 1,00 | 3,00 |
| 17.01.2025 18:00 | 11 | S | 1,34 | 3,70 |
| 18.01.2025 0:00 | 13 | S | 1,60 | 4,00 |
| 18.01.2025 6:00 | 14 | S | 1,89 | 4,30 |
| 18.01.2025 12:00 | 11 | SE | 0,20 | 2,00 |

Wind condition in the Bautino Bay

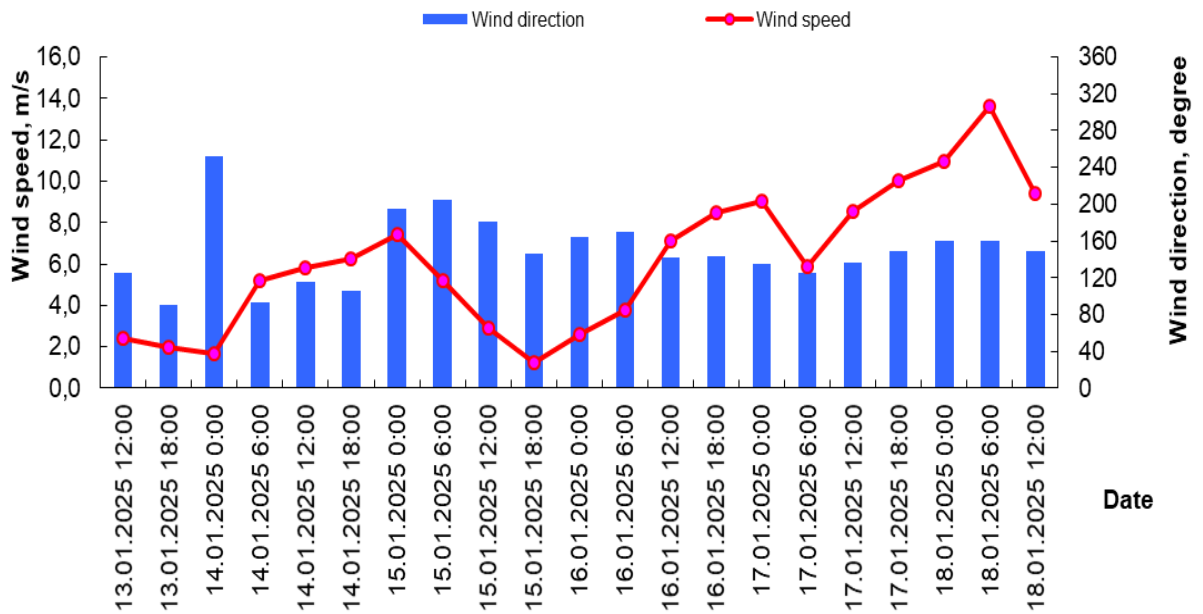


Wave condition in the Bautino Bay

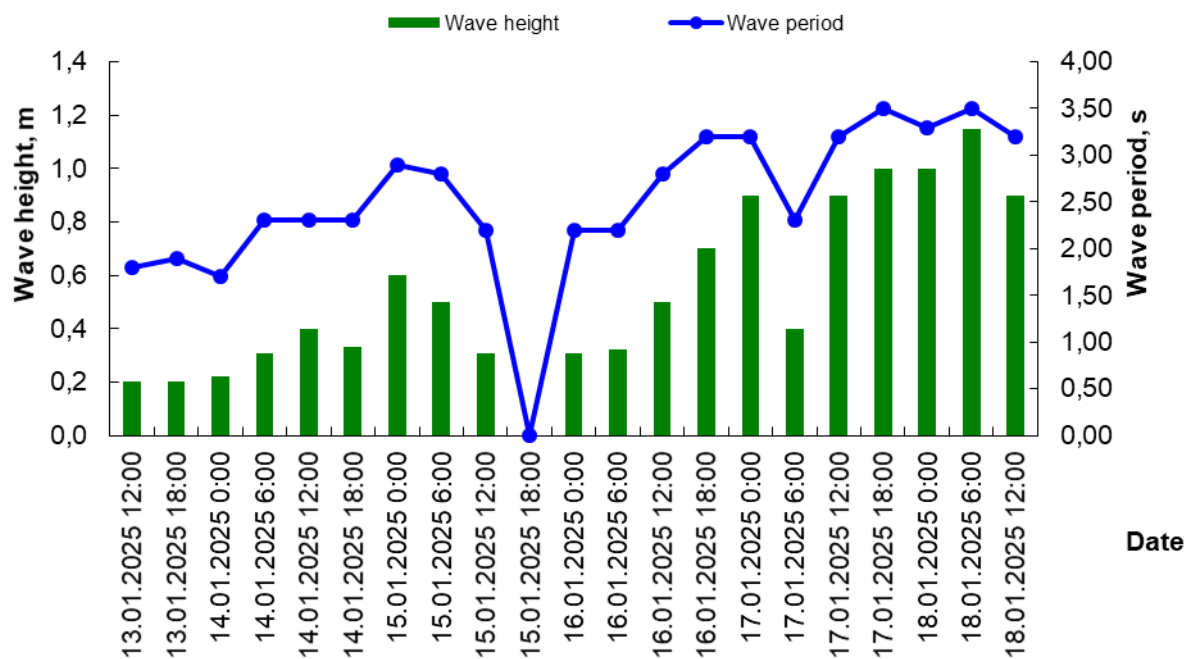


| Date Time | Wind speed (WS) and wind direction (WD) | | Wave height (H) and wave period (τ) | |
|------------------|--|----------|--|------|
| | WS, m/s | WD, rumb | H, m | t, s |
| | | | | |
| 13.01.2025 12:00 | 1 | S | 0,00 | 0,00 |
| 13.01.2025 18:00 | 2 | S | 0,20 | 1,80 |
| 14.01.2025 0:00 | 2 | S | 0,20 | 1,80 |
| 14.01.2025 6:00 | 7 | SE | 0,50 | 2,80 |
| 14.01.2025 12:00 | 7 | E | 0,30 | 2,30 |
| 14.01.2025 18:00 | 7 | S | 0,60 | 2,90 |
| 15.01.2025 0:00 | 7 | S | 0,60 | 2,90 |
| 15.01.2025 6:00 | 4 | E | 0,20 | 1,90 |
| 15.01.2025 12:00 | 2 | SE | 0,20 | 1,80 |
| 15.01.2025 18:00 | 4 | S | 0,30 | 2,20 |
| 16.01.2025 0:00 | 5 | S | 0,50 | 2,80 |
| 16.01.2025 6:00 | 6 | SE | 0,40 | 2,30 |
| 16.01.2025 12:00 | 8 | SE | 0,70 | 3,00 |
| 16.01.2025 18:00 | 9 | SE | 0,90 | 3,20 |
| 17.01.2025 0:00 | 8 | SE | 0,70 | 3,00 |
| 17.01.2025 6:00 | 9 | SE | 0,90 | 3,20 |
| 17.01.2025 12:00 | 9 | SE | 0,90 | 3,20 |
| 17.01.2025 18:00 | 12 | SE | 1,10 | 3,60 |
| 18.01.2025 0:00 | 12 | S | 1,00 | 3,40 |
| 18.01.2025 6:00 | 11 | SE | 1,00 | 3,50 |
| 18.01.2025 12:00 | 10 | SE | 1,00 | 3,50 |

Wind condition in the Kuryik Bay



Wave condition in the Kuryik Bay



| Date Time | Wind speed (WS) and wind direction (WD) | | Wave height (H) and wave period (τ) | |
|------------------|---|----------|--|------|
| | WS, m/s | WD, rumb | H, m | t, s |
| 13.01.2025 12:00 | 2 | SE | 0,20 | 1,80 |
| 13.01.2025 18:00 | 2 | E | 0,20 | 1,90 |
| 14.01.2025 0:00 | 2 | W | 0,22 | 1,70 |
| 14.01.2025 6:00 | 5 | E | 0,31 | 2,30 |
| 14.01.2025 12:00 | 6 | SE | 0,40 | 2,30 |
| 14.01.2025 18:00 | 6 | E | 0,33 | 2,30 |
| 15.01.2025 0:00 | 7 | S | 0,60 | 2,90 |
| 15.01.2025 6:00 | 5 | SW | 0,50 | 2,80 |
| 15.01.2025 12:00 | 3 | S | 0,31 | 2,20 |
| 15.01.2025 18:00 | 1 | SE | 0,00 | 0,00 |
| 16.01.2025 0:00 | 3 | S | 0,31 | 2,20 |
| 16.01.2025 6:00 | 4 | S | 0,32 | 2,20 |
| 16.01.2025 12:00 | 7 | SE | 0,50 | 2,80 |
| 16.01.2025 18:00 | 8 | SE | 0,70 | 3,20 |
| 17.01.2025 0:00 | 9 | SE | 0,90 | 3,20 |
| 17.01.2025 6:00 | 6 | SE | 0,40 | 2,30 |
| 17.01.2025 12:00 | 9 | SE | 0,90 | 3,20 |
| 17.01.2025 18:00 | 10 | SE | 1,00 | 3,50 |
| 18.01.2025 0:00 | 11 | S | 1,00 | 3,30 |
| 18.01.2025 6:00 | 14 | S | 1,15 | 3,50 |
| 18.01.2025 12:00 | 9 | SE | 0,90 | 3,20 |

Made by: Kurmangalieva A.K.

Checked by: Shishkina G.