**DATA BUOY COOPERATION PANEL (DBCP)**

**FORMAT FOR NATIONAL REPORTS ON CURRENT AND   
PLANNED BUOY PROGRAMMES**

|  |  |
| --- | --- |
| **Country** | RUSSIAN FDERATION |
| **Year** | 2022 |

**Please Identify your Programme’s Major Opportunities and Challenges/Risks during the upcoming year and how DBCP can most effectively assist your Programme.**

1. ***CURRENT PROGRAMME:***

**Please Identify your Programme’s Major Opportunities and Challenges/Risks during the upcoming year and how DBCP may assist your Programme.**

|  |  |  |
| --- | --- | --- |
| **Agency or programme** | Roshydromet support for marine observational network / GOOS / GBON | |
| Number and type of buoys | (a) deployed during the year (July - October) | 8 drifting buoys of iceSVP-B (4), iceBTC (4) types |
| (b) operational as of 1 October | 8 |
| (c) reporting on GTS as of 1 October | 8 |
| Purpose of programme  *(check/uncheck boxes using [\_] or [x] as appropriate)* | (a) operational | [x] |
| (b) met / ocean research | [ ] |
| (c) developmental | [x] |
| Main deployment areas | Eurasian Arctic and Arctic Basin (METAREAs XX,XXI) | |
| Vandalism incidents | (a) Number of incidents: NONE | |

Arctic and Antarctic Research Institute (AARI) of Roshydromet in cooperation with the IABP continued to support implementation of the WMO GBON / GOOS in the Eurasian Arctic (METAREAs XX, XXI). Due to available logistics deployments were done mostly at the boundary of the Eurasian Seas and the Arctic Basin.

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| **Agency or programme** | Roshydromet support for the distributed network of the ice strengthened mobile platform “North Pole” | |
| Number and type of buoys | (a) deployed during the year (October) | 15 drifting buoys of iceSTB and iceBTC types |
| (b) operational as of 1 October | All |
| (c) reporting on GTS as of 1 October | 0 |
| Purpose of programme  *(check/uncheck boxes using [\_] or [x] as appropriate)* | (a) operational | [ ] |
| (b) met / ocean research | [x] |
| (c) developmental | [x] |
| Main deployment areas | Arctic Basin | |
| Vandalism incidents | (a) Number of incidents: NONE | |

Since September 2022 the Arctic and Antarctic Research Institute (AARI) of Roshydromet started to support the Ice strengthened Mobile Platform “North Pole” including distributed network (DN) of observations during her maiden trip in 2022/2023. Technically composition of DN is similar to previous general network.

***2. PLANNED PROGRAMMES:***

|  |  |  |
| --- | --- | --- |
| **Agency or programme** | Roshydromet support for marine observational network / GOOS / GBON | |
| Number and type of buoys | planned for deployment in the next 12 months | 20…30 drifting buoys of iceSVP-B, iceSTB and iceBTC types |
| Purpose of programme  *(check/uncheck boxes using [\_] or [x] as appropriate)* | (a) operational | [x] |
| (b) met / ocean research | [x] |
| (c) developmental | [X] |
| Main deployment areas | Eurasian Arctic and Arctic Basin (METAREAs XX,XXI) | |

***3. TECHNICAL DEVELOPMENTS:***

|  |  |
| --- | --- |
| (a) Buoy design | * Marlyn-Yug under agreement with Roshydromet/AARI, all of ice-strengthened design with possibility of automatic deployment on open water and manned deployment on ice |
| (b) Instrumentation | * Barometric, surface temperature measurements for all types * Thermal strings from 110 cm to 60 m for iceBTC buoys * Tiltmeters for icemeteo buoys, GNSS for all types |

***4. PUBLICATIONS (on programme plans, technical developments, QC reports, etc.):***

|  |  |  |
| --- | --- | --- |
| ***Ref*** | ***Title*** | ***Type[[1]](#footnote-1)*** |
|  | none |  |

***5. ADDITIONAL COMMENTS:***

|  |  |
| --- | --- |
| (a) Quality of buoy data | * AARI operational control * Manufacturer Marlyn-Yug control |
| (b) Communications | * AARI: Data transmission is performed via Iridium SBD |
| (c) Buoy lifetimes | * iceSVP-B, IceSTB: 6 months …. 1 year (expected) * iceBTC: 3 months …. 1 year (expected) * icemeteo 3…. 6 months (expected) |
| (d) Data Accessibility[[2]](#footnote-2) | * AARI: <http://wdc.aari.ru/datasets/d0018/buoys/> |
| (e) New Observations[[3]](#footnote-3) | * AARI: surface salinity (planned for spring 2023) |
| (f) GFCS and WIGOS[[4]](#footnote-4) | * Access to buoy data via WIGOS is planned for implementation in 2023 through WIS portal Moscow |
| (g) Additional Requirements[[5]](#footnote-5) |  |
| (h) DBCP Linkages[[6]](#footnote-6) |  |
| (i) Contribution to UN Decade and UN SDGs[[7]](#footnote-7) | * Yes, through the new direct measurements of the Arctic ocean surface parameters like heat flux and salinity |
| (j) Other (i.e. Impact of COVID19 on observing systems and mitigation efforts) | none |

Note: It is recommended that this form is filled in electronically and returned also electronically to the Secretariat. A template of the form can be downloaded from the following SharePoint site:

<https://wmoomm.sharepoint.com/:w:/s/wmocpdb/EQ1z8KndbxREkzE6RH4NFkkBDdvOItne74OP8f4voMMSbg?e=pgru6r>

**ANNEX - FORM FOR REPORTING INCIDENTS OF VANDALISM ON DATA BUOYS**

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Country** | | |  | | | | | |
| **Contact person e-mail** | | |  | | | | | |
| **Year** | **Buoy Location** | | **Type of Buoy**  **(e.g. Tsunami / Met -Ocean Buoy/Drifter/ARGO floats/ Other)** | **Type of damage to buoy** | **Buoy id/WMO id** | **Number of days of transmission lost** | **Cost of replacement** | **Remarks**  **(e.g. whether photos have been taken)** |
| **Latitude** | **Longitude** |  |
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| **Efforts taken against vandalism** | | |  | | | | | |
| **Awareness meeting Organised** | | |  | | | | | |
| **Suggestions (if any)** | | |  | | | | | |
| **Photos on Vandalism** | | | (please include pictures if available; and email electronic versions to [dbcp-tc@jcommops.org](mailto:dbcp-tc@jcommops.org) and [karen.grissom@noaa.gov](mailto:karen.grissom@noaa.gov) ) | | | | | |

Note: It is recommended that this form is filled in electronically and returned electronically also to OceanOPS([dbcp-tc@jcommops.org](mailto:dbcp-tc@jcommops.org) and [karen.grissom@noaa.gov](mailto:karen.grissom@noaa.gov) ). A template of the form can be downloaded from the following SharePoint site: <https://wmoomm.sharepoint.com/:w:/s/wmocpdb/EXsq1FXv0vpHmOjQA-tTobwBMrNnjXnaQok3oudPhKIb3A?e=2IR9Wh>

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1. : Types of publications: (1) Implementation, (2) Operations, (3) Instrumentation, (4) Quality Management, (5) Data Management, (6) Data collection and/or location, (7) Data use, (8) Other [↑](#footnote-ref-1)
2. How does the international community access the ocean observing data provided by your Organization [↑](#footnote-ref-2)
3. What new ocean observations does your Organization plan to make in the upcoming year (i.e. new parameters, expanding geographic scope, filling spatial or latency gaps)? [↑](#footnote-ref-3)
4. How do your Organization’s observations contribute to the WMO’s Integrated Global Observing System (WIGOS) and/or Global Framework for Climate Services (GFCS)? [↑](#footnote-ref-4)
5. What additional requirements (other than climate) does your organization have that are currently not adequately addressed by the DBCP? [↑](#footnote-ref-5)
6. How would your organization benefit from DBCP’s closer linkages to the Global Ocean Observing System(GOOS), Data Management and Modelling Communities? [↑](#footnote-ref-6)
7. How do your ocean observing networks contributing to the UN decade on Ocean Science and UN Sustainable Development Gloas . [↑](#footnote-ref-7)