

DATA BUOY COOPERATION PANEL (DBCP)

FORMAT FOR NATIONAL REPORTS ON CURRENT AND PLANNED BUOY PROGRAMMES

Country	Russian Federation
Year	2021

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		
Number and type of buoys	(a) deployed during the year (since 5 Sept 2020)	15 SVP-B/40H (9 iceST-B/40, 6 SVP-B/40H)
	(b) operational as of 08 Aug 2021	8 SVP-B/40H
	(c) reporting on GTS as of 31 August	8 SVP-B/40H
Purpose of programme <i>(check/uncheck boxes using [] or [x] as appropriate)</i>	(a) operational	<input checked="" type="checkbox"/>
	(b) met / ocean research	<input checked="" type="checkbox"/>
	(c) developmental	<input checked="" type="checkbox"/>
Main deployment areas		
Vandalism incidents	(a) Number of incidents 0 If vandalism incidents have occurred during the year, please provide the details using the form in the annex.	

(repeat table above as often as necessary)

2. PLANNED PROGRAMMES:

Agency or programme		
Number and type of buoys	planned for deployment in the next 12 months	10-30 SVP-B/40H
Purpose of programme <i>(check/uncheck boxes using [] or [x] as appropriate)</i>	(a) operational	<input checked="" type="checkbox"/>
	(b) met / ocean research	<input checked="" type="checkbox"/>
	(c) developmental	<input checked="" type="checkbox"/>
Main deployment areas	Arctic Ocean (METAREAs XX, XXI)	

(repeat table above as often as necessary)

3. TECHNICAL DEVELOPMENTS:

(a) Buoy design	<ul style="list-style-type: none"> ● Lagrangian SVP-B/40H, Marlin-Yug Ltd ● Lagrangian iceBTC2(5)/40-11TOP, Marlin-Yug Ltd
(b) Instrumentation	<ul style="list-style-type: none"> ● surface air pressure ● surface ice/snow/water temperature ● surface air temperature ● GPS positioning ● Sea surface layer / ice temperature profile 200-500 cm

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

Ref	Title	Type¹
1	Tolstosheev, A.P., Lunev, E.G., Motyzhev, S.V. and Dykman, V.Z., 2021. Seawater Salinity Estimating Module Based on the Sound Velocity Measurements. Physical Oceanography, [e-journal] 28(1), pp. 122-131. doi:10.22449/1573-160X-2021-1-122-131	(3) Instrumentation
2	Life of a Research Buoy – An Arctic Buoy Story. Interview with Thomas Rackow, Daniel Watkins and Vasily Smolyanitsky. October 2021.: PolarPredictNews #19	(2) Operations, (8) Other
3	Smolyanitsky V.M., Petrovsky T.V., Smirnov K.G., Sokolov V.T.. Results of developing network of meteorological drifting buoys in the Eurasian Arctic in 2018-2020 (in Russian: Результаты поддержки сети метеорологических дрейфующих буев в Евразийской Арктике в 2018–2020 годах// Russian Polar Studies vol.1, 2021).	(2) Operations, (8) Other

(repeat rows in the table above as necessary)

5. ADDITIONAL COMMENTS:

(a) Quality of buoy data	<ul style="list-style-type: none"> ● Regular QC provided by AARI and manufacturer ● Regular QC by Eumetnet
(b) Communications	<ul style="list-style-type: none"> ● ARGOS ● Iridium
(c) Buoy lifetimes	<ul style="list-style-type: none"> ● Maximum 721 days (with SLP channel closed), 419 days fully functional ● 2 days minimum (broken by ice) ● 234 median lifetimes ● Lifetime greatly depends a) whether or not the buoy will survive freeze-up or/and approaching ice edge with high dynamics b) time spent under uniform conditions (open water or level ice or coast)
(d) Data Accessibility ²	<ul style="list-style-type: none"> ● WMO GTS ● IABP data portal ● AARI drifting buoys data portal
(e) New Observations ³	<ul style="list-style-type: none"> ● Filling gaps in synoptic measurements in Eurasian Arctic ● Test of thermistor strings / assessment of snow/ice/ocean thermal flux
(f) GFCS and WIGOS ⁴	<ul style="list-style-type: none"> ● Support for YOPP 3rd SOP (MOSAIC) and TOP
(g) Additional Requirements ⁵	<ul style="list-style-type: none"> ● None
(h) DBCP Linkages ⁶	<ul style="list-style-type: none"> ● Improved accuracy of nowcast/forecast products for Eurasian Arctic
(i) Contribution to UN Decade and UN SDGs ⁷	<ul style="list-style-type: none"> ● Surface currents, ice drift patterns and thermal fluxes in the surface layer in Eurasian Seas in present day Arctic

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

² How does the international community access the ocean observing data provided by your Organization

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)?

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)?

⁵ What additional requirements (other than climate) does your organization have that are currently not adequately addressed by the DBCP?

⁶ How would your organization benefit from DBCP's closer linkages to the Global Ocean Observing System(GOOS), Data Management and Modelling Communities?

⁷How do your ocean observing networks contributing to the UN decade on Ocean Science and UN Sustainable Development Goals .

(j) Other (i.e. Impact of COVID19 on observing systems and mitigation efforts)	● As in 2020 all 2021 deployments shifted to August 2021 and further
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