**DATA BUOY COOPERATION PANEL (DBCP)**

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

|  |  |
| --- | --- |
| **Country** | JAPAN |
| **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** | Japan Meteorological Agency (JMA) |
| Number and type of buoys | (a) deployed during the year | 13 drifting ocean data buoys with air-pressure, sea surface temperature and wave height/period sensors |
| (b) operational as of 31 August | 2　drifting ocean data buoys with air-pressure, sea surface temperature and wave height/period sensors |
| (c) reporting on GTS as of 31 August | 2　drifting ocean data buoys with air-pressure, sea surface temperature and wave height/period sensors |
| Purpose of programme*(check/uncheck boxes using [\_] or [x] as appropriate)* | (a) operational | [x] weather and sea condition monitoring |
| (b) met / ocean research | [ ] |
| (c) developmental | [ ] |
| Main deployment areas | Sea area around Japan |
| Vandalism incidents | (a) Number of incidents N/A |

|  |  |
| --- | --- |
| **Agency or programme** | Japan Agency for Marine-Earth Science and Technology (JAMSTEC) |
| Number and type of buoys | (a) deployed during the year | N/A |
| (b) operational as of 31 August | 3 surface moorings for meteorological and subsurface oceanographic (1 buoy, 2 RAMA buoys) |
| (c) reporting on GTS as of 31 August | 2 surface moorings for meteorological and subsurface oceanographic (2 RAMA buoys) |
| Purpose of programme*(check/uncheck boxes using [\_] or [x] as appropriate)* | (a) operational | [x] buoy |
| (b) met / ocean research | [x] buoy |
| (c) developmental | [ ] |
| Main deployment areas | buoy: 13N-137E Surface Met-Ocean mooring and the eastern Indian Ocean as RAMA array |
| Vandalism incidents | (a) Number of incidents N/A |

|  |  |
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| **Agency or programme** | Okinawa Institute of Science and Technology Graduate University(OIST) |
| Number and type of buoys | (a) deployed during the year | N/A |
| (b) operational as of 31 August | 1 surface drifting buoy |
| (c) reporting on GTS as of 31 August | N/A |
| Purpose of programme*(check/uncheck boxes using [\_] or [x] as appropriate)* | (a) operational | [ ] |
| (b) met / ocean research | [x]Oceanographic research |
| (c) developmental | [ ] |
| Main deployment areas | Off Onna Village Okinawa for the operational buoy |
| Vandalism incidents | (a) Number of incidents N/A |

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| --- | --- |
| **Agency or programme** | Kyoto University (KU) |
| Number and type of buoys | (a) deployed during the year | 18 (drifting buoy) |
| (b) operational as of 31 August | 17 (drifting buoy) |
| (c) reporting on GTS as of 31 August | 17 (drifting buoy) |
| Purpose of programme*(check/uncheck boxes using [\_] or [x] as appropriate)* | (a) operational | [ ] |
| (b) met / ocean research | [x] |
| (c) developmental | [ ] |
| Main deployment areas |  |
| Vandalism incidents | (a) Number of incidents N/A |

***2. PLANNED PROGRAMMES:***

|  |  |
| --- | --- |
| **Agency or programme** | Japan Meteorological Agency (JMA) |
| Number and type of buoys | planned for deployment in the next 12 months | 16 drifting ocean data buoys with air-pressure, sea surface temperature and wave height/period sensors |
| Purpose of programme*(check/uncheck boxes using [\_] or [x] as appropriate)* | (a) operational | [x] weather and sea condition monitoring |
| (b) met / ocean research | [ ] |
| (c) developmental | [ ] |
| Main deployment areas | Sea area around Japan |

|  |  |
| --- | --- |
| **Agency or programme** | Japan Agency for Marine-Earth Science and Technology (JAMSTEC) |
| Number and type of buoys | planned for deployment in the next 12 months | 2 surface moorings for meteorological and subsurface oceanographic (1 buoy, 1 RAMA buoy) |
| Purpose of programme*(check/uncheck boxes using [\_] or [x] as appropriate)* | (a) operational | [x] buoy |
| (b) met / ocean research | [x] buoy |
| (c) developmental | [ ] |
| Main deployment areas | buoy: 13N-137E and 5S-95E Surface Met-Ocean moorings and the eastern Indian Ocean as RAMA array |

|  |  |
| --- | --- |
| **Agency or programme** | Okinawa Institute of Science and Technology Graduate University(OIST) |
| Number and type of buoys | planned for deployment in the next 12 months | 10 surface drifting buoys |
| Purpose of programme*(check/uncheck boxes using [\_] or [x] as appropriate)* | (a) operational | [ ] |
| (b) met / ocean research | [x]Oceanographic research |
| (c) developmental | [ ] |
| Main deployment areas |  |

|  |  |
| --- | --- |
| **Agency or programme** | Kyoto University (KU) |
| Number and type of buoys | planned for deployment in the next 12 months | 5 (drifting buoy) |
| Purpose of programme*(check/uncheck boxes using [\_] or [x] as appropriate)* | (a) operational | [ ] |
| (b) met / ocean research | [x] |
| (c) developmental | [ ] |
| Main deployment areas |  |

***3. TECHNICAL DEVELOPMENTS:***

|  |  |
| --- | --- |
| (a) Buoy design | * (KU)
* Size: 42cm x 31cm
* Weight: 5.3kg (7.4kg with external ballast chain)
* Solar Powered,
 |
| (b) Instrumentation | * (KU)
* Ocean surface wave sensor
* Sea surface temperature sensor
 |

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

|  |  |  |
| --- | --- | --- |
| ***Ref*** | ***Title*** | ***Type[[1]](#footnote-1)*** |
| 1 |  |  |
| 2 |  |  |
| 3 |  |  |
| 4 |  |  |

*(repeat rows in the table above as necessary)*

***5. ADDITIONAL COMMENTS:***

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| --- | --- |
| (a) Quality of buoy data | * (KU) Approximately +/- 2cm accuracy depends on field of view, weather conditions,and GPS system status
* ±0.1°C absolute accuracy ±0.02°C resolution
 |
| (b) Communications | * (JAMSTEC) No RAMA buoy data transmissions since May 2022
* (KU) Iridium SBD (satellite)
 |
| (c) Buoy lifetimes | * (KU) Not specified
 |
| (d) Data Accessibility[[2]](#footnote-2) | * (KU) Plan to submit the data to GTS
 |
| (e) New Observations[[3]](#footnote-3) | * (KU) Plan to put more buoys around the Western North Pacific
 |
| (f) GFCS and WIGOS[[4]](#footnote-4) |  |
| (g) Additional Requirements[[5]](#footnote-5) |  |
| (h) DBCP Linkages[[6]](#footnote-6) |  |
| (i) Contribution to UN Decade and UN SDGs[[7]](#footnote-7) | ● ● ●  |
| (j) Other (i.e. Impact of COVID19 on observing systems and mitigation efforts) | * (JAMSTEC) Planned RAMA maintenance cruise is suspended since 2021.
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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](https://wmoomm.sharepoint.com/%3Aw%3A/s/wmocpdb/EQ1z8KndbxREkzE6RH4NFkkBDdvOItne74OP8f4voMMSbg?e=pgru6r)

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

|  |  |
| --- | --- |
| **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 and 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 and 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](https://wmoomm.sharepoint.com/%3Aw%3A/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)