(date and month) 2024

GBON National Gap Analysis

Systematic Observations   
Financing Facility



**GBON National Gap Analysis Report**

**[Country Name]**

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| --- | --- |
| **Beneficiary Country Focal Point and Institute** |  |
| **Peer Advisor Focal Point and Institute** |  |

**1.** **Country information from the GBON Global Gap Analysis**

*Please provide in this Table the country information as provided by the WMO Global GBON Gap Analysis*.

**Table I. WMO GBON Global Gap Analysis (June 2023).** Illustration of the information that the WMO Secretariat provides to each country

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| **A. GBON horizontal resolution requirements** | **B. Target** | **C. Reporting (GBON compliant)[[1]](#footnote-2)** | **D. Gap to improve** | **E. Gap new** | **F. Gap total** |
|  | **[# of stations]** | | | | |
| **Surface stations**  Standard density[[2]](#footnote-3) 200 km |  |  |  |  |  |
| **Upper-air stations over land**  Standard density2500km |  |  |  |  |  |

**2.** **Analysis of existing GBON stations and their status against GBON requirements**

*Please complete the two tables below and add remarks and Annexes with technical details as needed.*

**Table II. Assessment of existent stations per their operational status and network ownership**

|  |  |  |  |  |
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| **GBON Requirements** | **Existing observation stations (# of stations)** | | | |
| **NMHS network** | | **Third-party network** | |
| **Reporting (GBON compliant) [[3]](#footnote-4)** | **To improve** | **Reporting (GBON compliant) 3** | **To improve** |
| **Surface land stations** Standard density [[4]](#footnote-5) 200km Variables: SLP, T, H, W, P, SD |  |  |  |  |
| **Upper-air stations operated from land** Horizontal resolution4: 500km  Vertical resolution: 100m, up to 30 hPa  Variables: T, H, W |  |  |  |  |
| **Surface marine stations in Exclusive Economic Zones**:7 500 km  Variables: SLP, SST |  |  |  |  |
| **Upper-air stations operated in Exclusive Economic Zones**:**[[5]](#footnote-6)** 1000 km  Vertical resolution: 100m, up to 30 hPa  Variables: T, H, W |  |  |  |  |

**Table III. Assessment of existing GBON stations per station characteristics.** Station type: S: Surface, UA: Upper-Air; M: Marine; Owner of the station: NMHS or name of third-party; GBON variables: SLP: Atmospheric pressure; T: Temperature; H: Humidity; W: wind; P: Precipitation; SD: Snow depth; SST: Sea surface temperature; Reporting cycle: Number of observation reports exchanged internationally per day (0-24); GBON compliance: whether the station is GBON compliant or not (see GBON guide on compliance criteria).

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| **Station name** | **Station type (S/UA/M[[6]](#footnote-7))** | **Owner (NMHS/3rd party)** | **Funding source** | **GBON variable measured** | | | | | | | **Reporting cycle (obs/day)** | | **GBON Compliant (Y/N)** |
| **SLP** | **T** | **H** | **W** | **P** | **SD** | **SST** |  | |  |
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**3.** **Results of the GBON National Gap Analysis**

Please complete the two tables below and add remarks and technical details in Annexes as needed.

**Table IV. Results of the GBON national gap analysis.** SLP: Atmospheric pressure; T: Temperature; H: Humidity; W: wind; P: Precipitation; SD: Snow depth; SST: Sea surface temperature**.**

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| --- | --- | --- | --- | --- | --- | --- |
| **GBON requirements** | **Global GBON target** | **Approved national target** | **Reporting** | **Gap** | | |
| **To improve** | **New** | |
| **[# of stations]** | | | | | |
| **Surface land stations** |  |  |  |  | |  |
| **Upper-air stations operated from land** |  |  |  |  | |  |
| **Surface marine stations in Exclusive Economic Zones:[[7]](#footnote-8)**  Density 500 km  Variables: SLP, SST  Observing cycle: 1h |  |  |  |  | |  |
| **Upper-air stations operated in Exclusive Economic Zones: [[8]](#footnote-9)** Density 1000 km  Vertical resolution: 100 m,  up to 30 hPa  Variables: T, H, W  Observing cycle: twice a day |  |  |  |  | |  |

**3.1** **[[9]](#footnote-10)Recommended existing surface, upper-air and marine[[10]](#footnote-11) stations to be designated to GBON**

**Table V. Recommended existing surface, upper-air and marine stations to be designated to GBON.**

|  |  |
| --- | --- |
| **Station name** | **Station type (S/UA/M[[11]](#footnote-12))** |
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|  |  |
|  |  |

***[\*\*Add here (i) a map of existing surface and upper-air stations with 200km/500 (diameter) km circles (500km/1000km for SIDS) to indicate the coverage of existing stations; and (ii) optional: Include newly proposed stations in the map in (i) \*\*]***

**4. Report completion signatures**

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| --- |
| **Peer Advisor signature** |
| **Beneficiary Country signature** |
| **WMO Technical Authority screening signature** |

1. The rationale for classifying surface and upper-air stations as reporting is based on the WIGOS Data Quality Monitoring System (WDQMS) for the chosen time period (WMO GBON Global Gap analysis, June 2023). Stations with data availability more than 80% on at least 80% of days, are considered as reporting. Other listed stations are counted as having the possibility to be improved. [↑](#footnote-ref-2)
2. For SIDS, for the WMO GBON Global Gap Analysis in June 2023, the EEZ area has been added to the total surface area which is the basis for the target number of stations. The standard density requirements for SIDS have been calculated with 500 km for surface stations and 1000 km for upper-air stations. [↑](#footnote-ref-3)
3. The rationale for classifying surface and upper-air stations as reporting is based on the WIGOS Data Quality Monitoring System (WDQMS) for the chosen time period during the development of National Gap Analysis Stations with data availability more than 80% on at least 80% of days, are considered as reporting. Other listed stations are counted as having the possibility to be improved. [↑](#footnote-ref-4)
4. For SIDS, for the WMO GBON Global Gap Analysis in June 2023, the EEZ area has been added to the total surface area which is the basis for the target number of stations. The standard density requirements for SIDS have been calculated with 500 km for surface stations and 1000 km for upper-air stations. [↑](#footnote-ref-5)
5. Although GBON marine stations and stations in EEZ are not part of initial SOFF scope, peer advisors are encouraged to analyze in this step when considered relevant e.g. SIDS, the status of current marine stations for future GBON marine observations investments. [↑](#footnote-ref-6)
6. Please see guidance on marine stations in Section 2 on Scope. [↑](#footnote-ref-7)
7. Although GBON marine stations are not part of initial SOFF scope, peer advisors are encouraged to analyze in this step when considered relevant e.g. SIDS, the need for future GBON marine observations investments according to the GBON requirements. [↑](#footnote-ref-8)
8. Although GBON marine stations are not part of initial SOFF scope, peer advisors are encouraged to analyze in this step when considered relevant e.g. SIDS, the need for future GBON marine observations investments according to the GBON requirements. [↑](#footnote-ref-9)
9. Although GBON marine stations are not part of initial SOFF scope, peer advisors are encouraged to analyze in this step when considered relevant e.g., SIDS, the need for future GBON marine observations investments according to the GBON requirements. [↑](#footnote-ref-10)
10. Although GBON marine stations are not part of initial SOFF scope, peer advisors are encouraged to analyze in this step when considered relevant e.g., SIDS, the need for future GBON marine observations investments according to the GBON requirements. [↑](#footnote-ref-11)
11. Please see guidance on marine stations in Section 2 on Scope. [↑](#footnote-ref-12)