# GBON GAP Analysis

# GBON implementation webinar – RA-II

Timo Pröscholdt
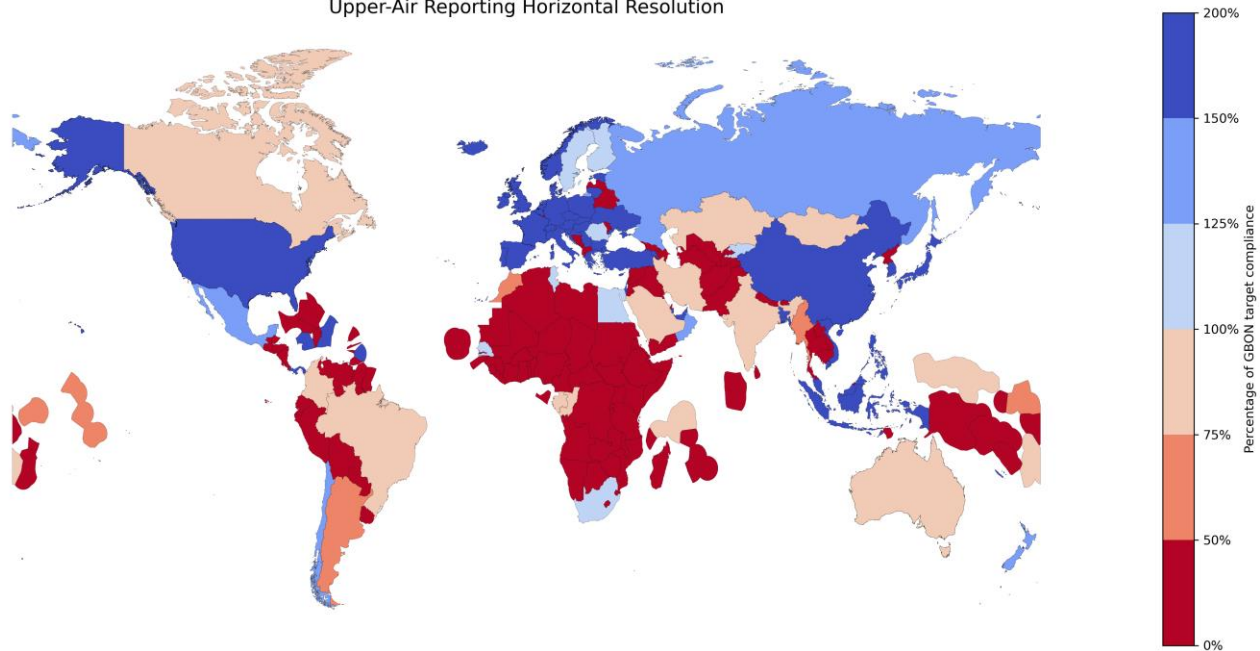
**WMO OMM**

**World Meteorological Organization**
Organisation météorologique mondiale

WEATHER CLIMATE WATER
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# Upper-Air Reporting Horizontal Resolution



Radiosondes Stations making 1-daily report at least 60% of times in Jan 2022

Percentage of GBON target compliance

200%
150%
125%
100%
75%
50%
0%

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# The GAP analysis

- Based on 2020 Gap Analysis, but using WDQMS data from January 2022

- Results are aggregated by WMO Member

- Four numbers are established for surface and upper-air, by Member
  - Target
  - Number of baseline stations
  - Number of reporting stations
  - Number of rehabilitation stations

- Thresholds used:
  - Target: Surface Area of Member in relation to GBON resolution (Surface and UA)
  - Baseline: station is in OSCAR/Surface (and has made at least one sounding for UA)
  - Reporting: 30% of expected reports, on 60% of days

- Gap analysis is done by geographical area (example BCT: British Virgin Islands, Anguilla, Cayman Islands, Montserrat, Turks and Caicos Islands)

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# Example

| WMO Member: Switzerland | | | | | |
|---|---|---|---|---|---|
| Surface area: 41.290 square km | | | | | |
| | | | | | |
| Station type | Target | Reporting | Gap (total) | Gap (improve) | Gap (new) |
| GBON Surface Land stations (standard density) | 2 | 138 | 0 | 0 | 0 |
| GBON Surface Land stations (high density) | 5 | 138 | 0 | 0 | 0 |
| GBON Upper-Air stations over land | 1 | 1 | 0 | 0 | 0 |

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# Example

| WMO Member: Afghanistan | | | | | |
|---|---|---|---|---|---|
| Surface area: 652.860 square km | | | | | |
| | | | | | |
| Station type | Target | Reporting | Gap (total) | Gap (improve) | Gap (new) |
| GBON Surface Land stations (standard density) | 17 | 0 | 17 | 12 | 5 |
| GBON Surface Land stations (high density) | 66 | 0 | 66 | 12 | 54 |
| GBON Upper-Air stations over land | 3 | 0 | 3 | 3 | 0 |

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# Why is the GAP analysis important?

- Baseline for GBON compliance
- Results were used in GBON letter (Table Annex IV)
- Seeding of GBON stations in OSCAR/Surface
- Input to national Gap analysis

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