



## List of GTS bulletin headers for buoy data

*Table 1: Data distributed from the US Argos Global Processing Centre, Lanham, USA*

| Bulletin header (BUOY) | Bulletin header (BUFR) | Deployment area                    | Remark                   |
|------------------------|------------------------|------------------------------------|--------------------------|
| SSVX02 KARS            | IOBX02 KARS            | GDP                                | Same                     |
| SSVX07 KARS            | IOBX07 KARS            | Arctic                             | New                      |
| SSVX08 KARS            | IOBX08 KARS            | TAO, PIRATA, RAMA                  | Was SSVX40 for TAO       |
| SSVX12 KARS            | IOBX12 KARS            | Arctic, Antarctic, sea ice         | Arctic, Antarctic merged |
| SSVX13 KARS            | IOBX13 KARS            | GDP                                | New                      |
| SSVX42 KARS            | IOBX42 KARS            | NOAA/NDBC, Southern Hemisphere     | Was SSVX02               |
| SSVX44 KARS            | IOBX44 KARS            | NE Pacific Ocean (USA, and Canada) | Was SSVX18               |
| SSVX48 KARS            | IOBX48 KARS            | NOAA/NDBC, Northern Hemisphere     | Was SSVX08               |
| SSVX96 KARS            | IOBX96 KARS            | NDBC                               | Same                     |
| SSVX02 KARS            | IOBX06 KARS            | GDP                                | Former IOBX02            |
| SSVX08 KARS            | IOBX10 KARS            | TAO, PIRATA, RAMA                  | Former IOBX08            |
| SSVX12 KARS            | IOBX16 KARS            | Arctic and Antarctic               | Former IOBX12            |
|                        | IOBX18 KARS            | Other Drifter Buoys                | Former IOBX03            |
|                        | IOBX04 KARS            | Other Moored Buoys                 |                          |

*Table 2: Data distributed from the French Argos Global Processing Centre, Toulouse, France*

| Bulletin header (BUOY) | Bulletin header (BUFR) | Deployment area                        | Remark                   |
|------------------------|------------------------|--|--------------------------|
| SSVX01 LFVW            | IOBX01 LFVW            | North Atlantic                         | Same                     |
| SSVX03 LFVW            | IOBX03 LFVW            | Southern Hemisphere and ISABP<br>ISABP | Same                     |
| SSVX07 LFVW            | IOBX07 LFVW            | Arctic, Antarctic, and sea ice         | Arctic, Antarctic merged |
| SSVX11 LFVW            | IOBX11 LFVW            | TAO/PIRATA/RAMA networks               | New                      |
| SSVX13 LFVW            | IOBX13 LFVW            | GDP                                    | New                      |
| SSVX39 LFVW            | IOZX39 LFVW            | French West Indies                     | Was SSVX19               |
| SSVX13 LFVW            | IOBX05 LFVW            | GDP                                    | Former IOBX13            |
| SSVX11 LFVW            | IOBX09 LFVW            | Triton                                 | Former IOBX11            |
| SSVX07 LFVW            | IOBX15 LFVW            | Arctic, Antarctic, and sea ice         | Former IOBX07            |
| SSVX01 LFVW            | IOBX17 LFVW            | Other Drifter Buoys                    | Former IOBX01            |

|  |             |                    |     |
|--|-------------|--------------------|-----|
|  | IOBX19 LFVW | Other Moored Buoys |     |
|  | IOBX06 LFVW | Drifting buoys     | New |

**Backup procedure in case one of the two Argos global processing centres fails** (Tables 1 and 2 only): If one centre fails, the other centre processes all the data, i.e. the data it normally processed plus the data the other centre normally processes. Hence, when an Argos centre is in backup mode, it will generate bulletins with even and odd numbers (in normal mode, only even numbers are used by Lanham, and odd numbers by Toulouse). In other words:

- In case the French Argos Global Processing Center in Toulouse fails, the US Argos Processing Center in Largo is switched to backup mode. In that case, GTS bulletins normally distributed from Toulouse under TTAAii LFVW bulletin headers are distributed from Lanham under TTAAii KARS bulletin headers (e.g. SSVX01 LFVW becomes SSVX01 KARS and is sent out from Lanham).
- In case the US Argos Global Processing Center in Largo fails, the French Argos Processing Center in Toulouse is switched to backup mode. In that case, GTS bulletins normally distributed from Lanham under TTAAii KARS bulletin headers are distributed from Toulouse under TTAAii LFVW bulletin headers (e.g. SSVX04 KARS becomes SSVX04 LFVW and is sent out from Toulouse).

**Remark concerning GDP:** GDP drifters deployed world-wide may also participate in a DBCP regional action groups (e.g. ISABP if deployed in the South Atlantic). Nevertheless, reports from GDP Lagrangian drifters are normally included under the specific GDP bulletin headers as shown in tables 1 and 2.

*Table 3: Data routed from the National Data Buoy Center (NDBC), Mississippi, USA, based on data received from Service Argos Inc. (SAI), Landover MD, USA*

| Bulletin header (BUOY) | Bulletin header (BUFR) | Deployment area                      | Remark                        |
|------------------------|------------------------|--------------------------------------|-------------------------------|
| SNVD01 KWNB            |                        | Coastal USA                          |                               |
| SIVD15-18 KWNB         |                        |                                      |                               |
| SNVD15-18 KWNB         |                        |                                      |                               |
| SMVD15-18 KWNB         |                        |                                      |                               |
| SSVX02 KWNB            |                        |                                      | TAO Adrift                    |
| SSVX08 KWNB            |                        |                                      | TAO Moored Buoys              |
|                        | IOBF08 KWNB            | nominal position east of 180         | TAO Moored Buoys              |
|                        | IOBG08 KWNB            | nominal position on or west of 180   | TAO Moored Buoys              |
| S?VD15 KWNB            |                        | Atlantic offshore and Gulf of Mexico | FM 13 Moored Buoys            |
| S?VD17 KWNB            |                        | Pacific offshore                     | FM 13 Moored Buoys            |
| S?VD19 KWNB            |                        | Alaska and Bering Sea                | FM 13 Moored Buoys            |
| S?VD20 KWNB            |                        | Atlantic Coastal                     | FM 13 Moored Buoys            |
| S?VD22 KWNB            |                        | Pacific Coastal                      | FM 13 Moored Buoys            |
| S?VD45 KWNB            |                        | Great Lakes                          | FM 13 Moored Buoys            |
| S?VE15 KWNB            |                        | Hawaii                               | FM 13 Moored Buoys            |
| SZIO01 KWNB            |                        | Indian Ocean                         | DART Buoy messages            |
| SZNT01 KWNB            |                        | North Atlantic                       | DART Buoy messages            |
| SZPN01 KWNB            |                        | North Pacific                        | DART Buoy messages            |
| SZPS01 KWNB            |                        | South Pacific                        | DART Buoy messages            |
| SXVX?0 KWNB            |                        | Southeast                            | FM65 Non-directional wave obs |

|             |             |                         |                                    |
|-------------|-------------|-------------------------|------------------------------------|
| SXVX?1 KWNB |             | Gulf of Mexico          | FM65 Non-directional wave obs      |
| SXVX?2 KWNB |             | Northeast               | FM65 Non-directional wave obs      |
| SXVX?3 KWNB |             | Great Lakes             | FM65 Non-directional wave obs      |
| SXVX?4 KWNB |             | Mid-Atlantic            | FM65 Non-directional wave obs      |
| SXVX?5 KWNB |             | Atlantic/Gulf of Mexico | FM65 Directional wave obs          |
| SXVX?6 KWNB |             | Pacific                 | FM65 Non-directional wave obs      |
| SXVX?7 KWNB |             | Pacific                 | FM65 Non-directional wave obs      |
| SXVX?8 KWNB |             | Pacific                 | FM65 Non-directional wave obs      |
| SXVX?9 KWNB |             | Pacific                 | FM65 Directional wave obs          |
| SOVD83 KWNB |             |                         | FM64 TESAC Messages                |
|             | IOBX01 KWNB |                         | Drifter data in non validated BUFR |
|             | IOBX03 KWNB |                         | Saildrones                         |
|             | IOSX05 KWBC |                         | Gliders                            |
|             | IOBX03 KWNB |                         | OpenGTS Pilot                      |

*Table 4: Data routed from NOAA, Washington DC, USA, based on data received from Service Argos*

| Bulletin header (BUOY) | Bulletin header (BUFR)      | Deployment area                 | Remark            |
|------------------------|-----------------------------|---------------------------------|-------------------|
| SSVX12 KWBC            |                             | Arctic Ocean                    |                   |
| SSVX02 KWBC            |                             | NOAA/NDBC Global                |                   |
| SNVD01 KWBC            |                             | NOAA/NDBC, Global               |                   |
| SNVE01 KWBC            |                             | NOAA/NDBC, Global               |                   |
| SSVX04 KWBC            |                             | Arctic, IABP                    |                   |
| SSVX42 KWBC            |                             | NOAA/NDBC, Southern Hemisphere  | Was SSVX02 KWBC   |
| SSVX48 KWBC            |                             | NOAA/NDBC, Northern Hemisphere  | Was SSVX08 KWBC   |
| SNVD01 KWNB            |                             | Coastal USA                     |                   |
| SIVD15-18 KWNB         |                             |                                 |                   |
| SNVD15-18 KWNB         |                             |                                 |                   |
| SMVD15-18 KWNB         |                             |                                 |                   |
| SOVD03 KWBC            |                             |                                 | FM64 TESAC        |
| SOVD06 KWBC            |                             |                                 | FM64 TESAC        |
| SOVD83 KWBC            |                             |                                 | FM64 TESAC        |
| SOVD83 KWNB            |                             |                                 | FM64 TESAC        |
|                        | ISSA[A-L][15/17/20/22] KWNB |                                 | NOAA              |
|                        | IOB[B/C]18 KPML             | OceanSITES Pacific              | From PMEL         |
| SSVX08 KWNB            | IOBF08 KWNB                 | East of 180                     | TAO data          |
|                        | IOBG08 KWNB                 | on or West of 180               |                   |
|                        | IOBX05 KWBC                 | Arctic, IABP(Old BUFR template) | From Pacific Gyre |
|                        | IOBX06 KWBC                 | Official new template 315009    | From Pacific Gyre |

|  |             |                              |                                  |
|--|-------------|------------------------------|----------------------------------|
|  | IOBX01 KWBC | Non validated BUFR format    | SIO data                         |
|  | IOBX02 KWBC | Official new template 315009 | SIO data <b>AND</b><br>NAVOCEANO |
|  | IOBX08 KPML | New                          | Moored buoys;<br>PIRATA, RAMA    |

Table 5: Data routed from Montreal

| Bulletin header (BUOY) | Bulletin header (BUFR) | Deployment area | Remark  |
|------------------------|------------------------|-----------------|---|
| SSVX02 CWA0            | IOBX02 CWA0            | All Oceans      |   |
| SSVX05 CWA0            | IOBX05 CWA0            | All Oceans      |   |
|                        | IOBX18 CWA0            | All Oceans      | Volunteered (third party, commercial) non-<br>MSC drifting buoys;<br>Was IOBX12 |
|                        | IOBX16 CWA0            | All Oceans      | Non-commercial MSC drifting buoys;<br>Was IOBX15                                |
| SOVD05 CWA0            |                        | All Oceans      | FM-65 WAVEOB  |
| SXCN19 CWA0            |                        | All Oceans      | FM-18   |

Table 6: Data routed from Halifax Local User Terminal (LUT)

| Bulletin header (BUOY) | Bulletin header (BUFR) | Deployment area          | Remark |
|------------------------|------------------------|--------------------------|--------|
| SIVD17 CWHX            |                        | NorthWest Atlantic Ocean |        |
| SSVX01 CWHX            |                        | NorthWest Atlantic Ocean |        |
| SNVD17 CWHX            |                        | NorthWest Atlantic Ocean |        |

Table 7: Data routed from the Centre de Meteorologie Marine, Brest

| Bulletin header (BUOY) | Bulletin header (BUFR)  | Deployment area | Remark       |
|------------------------|-------------------------|-----------------|--------------|
| SSV[D/F]50 LFPW        |                         | Wave buoys      |              |
| SSVX13 LFPW            | IOB[A-L]nn LFPW         |                 | SVP drifters |
|                        | ISS[D/E][11/30/41] LFPW |                 | Moored buoys |

Table 8: Data routed from the Japan Meteorological Agency

| Bulletin header (BUOY)  | Bulletin header (BUFR)       | Deployment area                                     | Remark |
|-------------------------|------------------------------|---|--------|
| SSVX01 RJTD             |                              | Pacific Ocean (Japan, marine<br>stations and buoys) |        |
| SSVB01 -<br>SSVB19 RJTD |                              | Pacific Ocean (Japan, marine<br>stations and buoys) |        |
|                         | IOB[A-D, I-L]1[1-<br>3] RJTD | Pacific Ocean (Japan, marine<br>stations and buoys) |        |

Table 9: Data routed from the India

| Bulletin header | Bulletin header | Deployment area | Remark |
|-----------------|-----------------|-----------------|--------|
|-----------------|-----------------|-----------------|--------|

| (BUOY)      | (BUFR) |  |  |
|-------------|--------|--|--|
| SSVX01 DEMS |        | Indian Ocean (India, North Indian Ocean) |  |

Table 10: Data routed from the Korean Meteorological Administration

| Bulletin header (BUOY) | Bulletin header (BUFR) | Deployment area | Remark |
|------------------------|------------------------|-----------------|--------|
| SMVX01 RKSL            |                        | North Pacific   |        |
| SMVX25 RKSL            |                        | North Pacific   |        |
| SNVX21 RKSL            |                        | North Pacific   |        |
| SSWB41 RKSL            |                        | North Pacific   |        |
| SSWB19 RKSL            |                        | North Pacific   |        |
| SSWX01 RKSL            |                        | North Pacific   |        |

Table 13: Additional Bulletins sent from European Centres

| Bulletin header (BUOY) | Bulletin header (BUFR)  | Deployment area              | Remark                |
|------------------------|-------------------------|------------------------------|-----------------------|
| SMVB01 EGRR            |                         | Northern Atlantic and Arctic |                       |
| SMVD01 EGRR            |                         |                              |                       |
| SMVD10 EHDB            |                         |                              |                       |
| SMVX25 EDZW            |                         |                              |                       |
| SMVX42 EDZW            |                         |                              |                       |
| SMVX43 EDZW            |                         |                              |                       |
| SMVX45 EDZW            |                         |                              |                       |
| SNVX21 EDZW            |                         |                              |                       |
| SSVF01 BIRK            |                         |                              |                       |
| SSVF11 LIIB            |                         |                              |                       |
| SSVF21 EIDB            |                         |                              | Ireland Moored Buoys  |
|                        | IOBA21 EIDB             |                              | Ireland Moored Buoys  |
|                        | IOB[A/D][01-20] LEMM    | Mediterranean and Atlantic   | Spain                 |
|                        | IOBD23 LIIB             | Mediterranean                | (Italy) provisional   |
|                        | IOBD01 LGAT             |                              | Greece                |
|                        | ISSX81 EDZW             |                              | (Germany) BSH/DWD     |
|                        | ISS[A/D][01/11/16] EGRR |                              | (UK)                  |
|                        | IOWAnn EGRR             |                              | (UK) Wave data only   |
|                        | ISSA22 EIDB             |                              | (Ireland)             |
|                        | IOBA01 LPMG             |                              | Portugal Moored Buoys |

Table 14: Data routed from Southern Atlantic

| Bulletin header (BUOY) | Bulletin header (BUFR) | Deployment area | Remark |
|------------------------|------------------------|-----------------|--------|
| SSVX01 SBBR            |                        | Brazil          |        |

Table 15: Data routed from China Meteorological Administration

| Bulletin header | Bulletin header | Deployment area | Remark |
|-----------------|-----------------|-----------------|--------|
|-----------------|-----------------|-----------------|--------|

| <b>(BUOY)</b> | <b>(BUFR)</b> |  |  |
|---------------|---------------|--|--|
|               | IOBK01 BABJ   |  |  |

*Table 16: Data routed from Hong Kong, China*

| <b>Bulletin header<br/>(BUOY)</b> | <b>Bulletin header<br/>(BUFR)</b> | <b>Deployment area</b> | <b>Remark</b>  |
|-----------------------------------|-----------------------------------|------------------------|----------------|
|                                   | IOBC01VHHH                        |                        | Drifting buoys |