•One observation table per station, once information is entered save as a pipe delimited file (observations \_table\_<specifier>\_<label>.psv)

( Note that there is a <specifier> component in the top-level directory and the file names that ties together different files. It is acceptable for a data provider to generate separate Data Delivery Package (DDPs) that refer to the same <specifier>. For example, the Source Configuration and Station Configuration components might be delivered in an initial DDP and the actual data (Header Table and Observation Table) could be sent later. The <specifier> would be used by both the provider and recipient in order to identify the connection between the DDPs.) The specifier should be the date of the current run:

**(observations\_table \_”insert date of run”\_EG000062417.psv)**

**e.g. observations\_table \_r202010\_EG000062417.psv**

• There must be the same number of header\_table and observations\_table files.

• The rows in the header\_table and observations\_table files must be paired

• Observations tables contain row for each observation value, observation id element column 1 relate to each obs value per report timestamp e.g 3 variable 3 entries per report date stamp.

|  |  |  |  |
| --- | --- | --- | --- |
| ***Table Column*** | ***kind*** | ***Element name*** | ***Notes*** |
| [column 1] | Varchar(pk) | observation\_id | **This has to be a unique for each observation.** Enter primary\_station\_id + station\_record\_number+observed\_variable+value\_significance e.g  0-20000-0-70231-1-1945-08-07-44-13 (if the observed value is derived from a mingled station of a different source then the station\_record\_number will be different. E.g.0-20000-0-70231-**2**-1945-08-07-44-13 |
| [column 2] | Varchar | report\_id | Enter report ID should match up to header table column 1 |
| [column 3] | Int | data\_policy\_licence | Using **primary\_id + station\_record\_number** find ***data\_policy\_licence*** from station config file |
| [column 4] | Timestamp with time zone | date\_time | Enter timestamp for observation should e.g.  1945-08-07 09:00:00-08 should match up with header column report\_timestamp |
| [column 5] | Int | date\_time\_meaning | 1 beginning Date / time specified indicates the  start of the period over which the  observation was made.  2 end Date / time specified indicates the  end of the period over which the  observation was made.  3 middle Date / time specified indicates the  middle of the period over which the observation was made.  **For daily Enter 1 Synop enter 2 For monthly enter 1** |

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| **Table Column** | **kind** | **Element name** | **Notes** |
| [column 6] | Int | observation\_duration | Enter observation frequency  0 = instantaneous (less than 2 seconds)  1 = 2 seconds  2 = 5 seconds  3 = 10 seconds  4= 30 seconds  5 = I minute  6 =2 minute  7 = 5 minute  8 = 10 minute  9 = 1 hour  10 = 3 hour  11 = 6 hour  12 = 9 hour  12 = 12 hour  13 = 1 day  14 = monthly  15 = mixed frequency |
| [column 7] | Numeric | longitude | Enter primary\_id **longitude** |
| [column 8] | Numeric | latitude | Enter primary\_id **latitude** |
| [column 9] | Int | crs | Rule: always enter NULL for land stations until further notice |
| [column 10] | Int | z\_coordinate | Rule: Not applicable to land Always NULL |

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| **Table Column** | **kind** | | **Element name** | **Notes** |
| [column 11] | Int | | z\_coordinate\_type | Rule: Not applicable to land Always NULL |
| **[column 12]** | **Numeric** | | **observation\_height\_above\_station\_surface** | **See table below for rules to populate with values based on each variable** |
| [column 13] | Int | | observed\_variable | Enter code for observed variable for timestamp (Precip=44, Temp=85, Snowfall=55, Snow depth=53, MSLP=58, Wind Speed=107, Wind Dir=106, Relative Humidity=38) |
| [column 14] | Int | secondary\_variable | | Rule: always enter NULL for land stations until further notice |
| [column 15] | Numeric | observation\_value | | Enter actual observed value |
| [column 16] | Int | value\_significance | | Enter code for value significance (0=maximum, 1=minimum, 2=mean,12= instantaneous value of observed parameter,13 =accumulations over period) See CDM table 116 for all codes |
| [column 17] | Int | secondary\_value | | Leave blank for now |
| [column 18] | Int | units | | Enter units of observations code see BUFR table units for codes (printed) Table taken from WMO, 2015a: Manual on Codes (WMO-No 306), Volume I.2, Part B - Binary Codes, WMO, Geneva. e.g (Kelvin =005, mm= 710, pascal=032, degrees rue=320, meters per second=731, |
| [column 19] | Int | code\_table | | Rule: always enter NULL for land stations until further notice |

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| --- | --- | --- | --- |
| ***Table Column*** | ***kind*** | ***Element name*** | ***Notes*** |
| [column 20] | Int | conversion\_flag | Enter conversion flag code see CDM table 99  (0=Both original (non SI) and converted (SI) values available, see conversion method.  1=Only original value in non-Si units available no conversion has been performed. See original value field.  2= Original value in SI units available no conversion required.  3= Value coded-see code\_table for details. |
| [column 21] | Int | location\_method | Rule: always enter NULL for land stations until further notice |
| [column 22] | numeric | location\_precision | Rule: always enter **NULL** for land stations until further notice |
| [column 23] | Int | z\_coordinate\_method | Rule: Not applicable to land Always NULL |
| [column 24] | Numeric | bbox\_min\_longitude | Rule: Not applicable to land Always NULL |
| [column 25] | Numeric | bbox\_max\_longitude | Rule: Not applicable to land Always NULL |
| [column 26] | Numeric | bbox\_min\_latitude | Rule: Not applicable to land Always NULL |
| [column 27] | Numeric | bbox\_max\_latitude | Rule: Not applicable to land Always NULL |
| [column 28] | Int | spatial\_representativeness | Rule: always enter NULL for land stations until further notice |

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| **Table Column** | **kind** | **Element name** | **Notes** |
| [column 29] | Int | quality\_flag | Enter 1 if a qc flag in GHCNd or USAF otherwise enter 0  0 - Passed  1 - Failed  2 - Not checked  3 - Missing |
| [column 30] | int | numerical\_precision | Enter numeric precision of data e.g 1, 2 or 0 |
| [column 31] | Varchar | sensor\_id | Rule: always enter a NULL value for land stations until further notice |
| [column 32] | Int | sensor\_automation\_status | Rule: always enter a NULL value for land stations until further notice |
| [column 33] | Int | exposure\_of\_sensor | Rule: always enter a NULL value for land stations until further notice |
| [column 34] | int | original\_precision | Enter precision of original value e.g 1, 2 or 0 |
| [column 35] | Int | original\_units | Enter units of original observations code see BUFR table units for codes (printed) Table taken from WMO, 2015a: Manual on Codes (WMO-No 306), Volume I.2, Part B - Binary Codes, WMO, Geneva. e.g (Kelvin =005, mm= 710, pascal=032, degrees rue=320, meters per second=731, degrees Celsius 060 |
| [column 36] | Int | original\_code\_table | Rule: always enter NULL for land stations until further notice |
| [column 37] | Numeric | original\_value | Enter original observation value |
| [column 38] | Int | conversion\_method | See CDM table **conversion\_method for codes** |
| [column 39] | Int[] | processing code | Rule: always enter NULL for land stations until further notice |
| [column 40] | Int | processing\_level | Enter 0 for now |

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| --- | --- | --- | --- |
| ***Table Column*** | ***kind*** | ***Element name*** | ***Notes*** |
| [column 41] | Int | adjustment\_id | Rule: always enter NULL for land stations until further notice |
| [column 42] | Int | traceability | Rule: always enter a NULL value for land stations until further notice |
| [column 43] | Int | advanced\_qc | Rule: always enter a NULL value for land stations until further notice |
| [column 44] | Int | advanced\_uncertainty | Rule: always enter a NULL value for land stations until further notice |
| [column 45] | Int | advanced\_homogenisation | Rule: always enter a NULL value for land stations until further notice |
| [column 46] | int | advanced\_assimila  tion\_feedback | Rule: always enter a NULL value for land stations until further notice |
| [column 47] | varchar | source\_id | Source\_ID is available for each observation in the QFF file |

Table shows the rules for populating the Observation\_height\_above\_station\_surface field.

|  |  |  |
| --- | --- | --- |
| CDM\_code | Variable\_ name | Observation\_height\_above\_station\_surface metres (m) |
| 85 | Temperature | 2 |
| 36 | Dew point temperature | 2 |
| 58 | Sea Level Pressure | 2 |
| 57 | Surface level Pressure | 2 |
| 106 | Wind Speed | 10 |
| 107 | Wind Direction | 10 |
| 55 | snow water equivalent | 1 |
| 53 | Snow depth | 0 |
| 45 | Fresh Snow | 1 |
| 44 | Precipitation | 1 |