## BBS RUN TYPE CODE DEFINITIONS

The BBS provides a "RunType" code in the "weather.csv" file to help data users quickly identify which records meet BBS data quality criteria as defined below. The following table depicts how three data fields were used in combination to assign the RunType codes.

As the first row in the table shows, route data received a RunType code of 1 if those data had been collected under conditions that met BBS weather, date, time, and route completion criteria (in other words, QualityCurrentID = 1), the route was randomly established (i.e., RouteTypeDetailID = 1), and the observer followed the official BBS sampling protocol (RunProtocolID = 101).

Conversely, a RunType code of 0 was assigned when data failed to meet one or more of the aforementioned requirements. This occurred when one, or a combination of deficiencies was present (as depicted below) including: data exceeded suitable date, time, weather, and/or route completion criteria (i.e., QualityCurrentID = 0), data had been collected along a non-randomly established route (i.e., RouteTypeDetailID is not 1), and/or the official BBS sampling protocol had not been followed (RunProtocolID is not 101). Approximately 10% of data receive a RunType of 0.

***Please Note: *Starting with the 2017 data release, the BBS modified the way it assigns RunType codes. In years prior, RPID (RunProtocolID) was not used explicitly in the determination of the RunType code; it had previously been left to the user to make this discrimination.*

## RunType Code Determination Table

| Resultant RunType Code (Weather.txt) | The Three Fields Used to Determine RunType Code: RouteTypeDetailID (Routes.txt) | RPID *a.k.a. "RunProtocolID"* (Weather.txt) | QualityCurrentID† (Weather.txt) |
|---|---|---|---|
| **1** *Meets official BBS criteria* | **1** *Random route, consisting of 50 permanent stops* | **101** *Official BBS sampling protocol used* | **1** *Run meets BBS weather, date, time, and route completion criteria* |
| **0** *Does not meet official BBS criteria* | **1** | **101** | **0** *Does not meet one or more BBS weather, date, time, or route completion criteria* |
| **0** | **1** | **102 to 199** *Replicate run using official BBS sampling protocol* | **1** |
| **0** | **1** | **> 199** *Official BBS sampling protocol not used* | **1** |
| **0** | **1** | **Not 101** | **0** |
| **0** | **Not 1** *Not a random route* | **101** | **1** |
| **0** | **Not 1** | **101** | **0** |
| **0** | **Not 1** | **Not 101** | **1** |
| **0** | **Not 1** | **Not 101** | **0** |

† A QualityCurrentID of 0 indicates that route data had one or more of the following issues:

- Late finish of survey (> 6.5 hours to complete)
- Early start of survey (> 20 minutes before official start time)
- Late start of survey (> 30 minutes after official start time)
- Survey had been conducted too early or late in year (*For most of the BBS area acceptable start dates fall between 27 May and 7 July. However, in desert and extreme southern areas the start date may be as early as 1 May, and in Alpine areas the end data can be as late as 15 July*.)
- Incomplete survey (< 45 stops completed)
- Unacceptable weather. Acceptable (A) and Unacceptable (U) weather determinations are based on the following criteria (*note: A "U" may also have been assigned in cases where an observer left comments describing conditions that matched or exceeded those in the tables below or when weather data were absent; an "A" may have been assigned in cases where an observer left comments indicating that the poor start and/or end weather conditions affected 5 or fewer stops*):

If the start or finish SKY CONDITION was one of the following:


… then the following WIND CONDITION table was used:

START WIND

| END WIND | 0 | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|---|
| 0 | A | A | A | A | A | U A |
| 1 | A | A | A | A | A | U A |
| 2 | A | A | A | A | A | U A |
| 3 | A | A | A | A | A | U A |
| 4 | A | A | A | A | U | U |
| 5 | U A | U A | U A | U A | U | U |

If both the start and finish SKY CONDITION were any of the following:


… then the following WIND CONDITION table was used:

START WIND

| END WIND | 0 | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|---|
| 0 | A | A | A | A | A | U A |
| 1 | A | A | A | A | A | U A |
| 2 | A | A | A | A | A | U A |
| 3 | A | A | A | A | A | U A |
| 4 | A | A | A | A | A | U A |
| 5 | U A | U A | U A | U A | U A | U |

☐ = *All regions*

☐ = *Prairie regions:*
- *US Strata 7, 32-40, 53-55, and 86*
- *BCR 11 in Canada*

☐ = *Non-prairie regions*