Checks performed by the function airdas\_check from package swfscAirDAS:

* Event codes are one of the following: #, \*, 1, A, C, E, O, P, R, s, S, t, T, V, W
* Latitude values are between -90 and 90 (inclusive)
* Longitude values are between -180 and 180 (inclusive)
* The effort dot matches effort determined using T, R, O, and E events
* There is an O event between each T event, and vice versa, i.e. the data does not start a new transect while still on a transect and does not end a transect when already not on a transect
* T or R events do not occur while already on effort
* E events do not occur while already off effort
* When the file ends, the data must be off effort and not still on a transect (i.e. an O event must occurred more recently than a T event)
* All Data# columns for non-C events are right-justified
* NAs are allowed for all data values when off effort except: altitude, speed, species, and group size
* The following events have NA (blank) Data# columns: \*, R, E, O
* For PHOCOENA data, all non-C events have NA (blank) Data6 and Data7 columns

In addition, event/column pairs must meet the following requirements:

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| **Item** | **Event code** | **Requirement** |
| Viewing conditions | V | Must be one of: e, g, p, o, or NA (blank). Not case sensitive |
| Altitude | A | Can be converted to a numeric value, and is not NA |
| Speed | A | Can be converted to a numeric value, and is not NA |
| HKR | W | Characters must consist of: n, h, k, r, or NA (blank). Not case sensitive; y is also accepted for PHOCOENA data |
| Percent overcast | W | Must be a whole number between 0 and 100 (leading zeros are ok) |
| Beaufort | W | Must be a whole number between 0 and 9 |
| Jellyfish | W | Must be one of 0, 1, 2, or 3 |
| Horizontal sun | W | Must be one of 0:12 (leading zeros are ok) |
| Vertical sun | W | Must be one of 0:4 (leading zeros are ok) |
| Observers | P | Each entry must be two characters, and no observer code can be used twice in the same P event |
| Sighting (mammal) | S | Angle must be a whole number between -90 and 90 (leading zeros are ok) |
| Sighting (mammal) | S | Group size must be a whole number between 1 and 5000 (leading zeros are ok) |
| Sighting (mammal) | S | Species codes must be specified in sp.codes, and the first must not be NA |
| Sighting (mammal) | S | Observer code must be exactly two characters, and one of the current observers as specified by the most recent P event |
| Sighting (mammal) | S | Angle must be negative if sighting made by left observer, and positive if made by right observer |
| Sighting info | 1 | Species percentages can be converted to numeric values, and sum to 100 |
| Sighting info | 1 | Unused columns (DateTime, Lat, Lon, and Data1-4) of a '1' event must be NA (blank) |
| Sighting info | 1 | Every S code with multiple species has a 1 code immediately after it |
| Sighting info | 1 | For every 1 code with *n* non-NA sighting percentages, the event before is an S event with *n* non-NA species codes |
| Resight | s | Angle can be converted to a numeric value (leading zeros are ok) |
| Resight | s | Unused resight columns (Data3-7) must be NA (blank) |
| Turtle sighting | t | Angle must be a whole number between -90 and 90 (leading zeros are ok) |
| Turtle sighting | t | Group size must be a whole number between 1 and 10 (only included in CARETTA data; leading zeros are ok)) |
| Turtle sighting | t | Species code must be not NA and specified in sp.codes |
| Turtle sighting | t | Observer code must be exactly two characters |
| Turtle sighting | t | Turtle size must be a whole number between 1 and 9 (leading zeros are ok); one of s, m, l is also accepted for CARETTA data |
| Turtle sighting | t | Travel direction must be a whole number between 0 and 360 (only included in TURTLE data; leading zeros are ok)) |
| Turtle sighting | t | Tail visible must be one of y, n, u, or NA (blank). Case sensitive |
| Turtle sighting | t | In TURTLE data, the Data7 column must be NA (blank) |