

| Variable Name     | Description   | Data Type | Values                | Source   | Missing Values |
|-------------------|---|-----------|-----------------------|--|----------------|
| year              | The year the withdrawal was made.   | Integer   | 2017                  | Spar Nord  | None           |
| month             | The month the withdrawal was made.  | text      | January : December    | Spar Nord  | None           |
| day               | The day of month the withdrawal was made.   | Integer   | 1 : 31                | Spar Nord  | None           |
| weekday           | The day of the week the withdrawal was made.  | text      | Sunday : Saturday     | Spar Nord  | None           |
| hour              | The hour of day the withdrawal was made.  | Integer   | 1 : 24                | Spar Nord  | None           |
| atm_status        | Is the atm still in service or has it been closed permanently   | text      | Active   Inactive     | Spar Nord  | None           |
| atm_id            | An arbitrary unique ID number for each ATM  | text      | 1 : 113               | Spar Nord  | None           |
| atm_manufacturer  | The manufacturer of the ATM   | factor    | NCR   Diebold Nixdorf | Spar Nord  | None           |
| atm_location      | A text string describing the location of the atm, typically a city. If the string contains "Intern", the atm is located inside a Spar Nord branch and can only be used within opening hours | text      | 113 unique strings    | Spar Nord  | None           |
| atm_streetname    | The streetname of the street where the atm is located   | text      | 83 unique strings     | Spar Nord  | None           |
| atm_street_number | The streetnumber where the atm is located   | integer   | 1 : 452               | Spar Nord  | None           |
| atm_zipcode       | The zipcode where the atm is located  | integer   | 1550 : 9990           | Spar Nord  | None           |
| atm_lat           | Latitude of the atm location, coordinates are WGS84   | numeric   | 55.06 : 57.72         | www.dawa.aws.dk - Styrelsen for Dataforsyning og Effektivisering (SDFE) and Google | None           |

|                    |  |         |                       |  |      |
|--------------------|--|---------|-----------------------|--|------|
| atm_lon            | Longitude of the atm location, coordinates are WGS84   | numeric | 8.408 : 12.612        | www.dawa.aws.dk - Styrelsen for Dataforsyning og Effektivisering (SDFE) and Google | None |
| currency           | Currency of the withdrawal   | text    | DKK   EUR   GBP   USD | Spar Nord  | None |
| card_type          | The type of card that was used in the withdrawal. If it ends with the string "- on-us" it means it is a card issued by Spar Nord and hence, a Spar Nord customer.  | text    | 12 unique strings     | Spar Nord  | None |
| transaction_amount | The amount of money processed in the transaction   | integer | 0 : 10000             | Random Function Generation for Analysis purpose                                    | None |
| service            | The atm service used. Some atms allow deposits, but deposits are stripped from the data, so only withdrawals are included.   | text    | Withdrawal            | Spar Nord  | None |
| message_code       | Error codes. Missing value means the withdrawal was made without error.  | text    |                       | Spar Nord  | Yes  |
| message_text       | Error text message corresponding to an error code. Missing value means the withdrawal was made without error.  | text    |                       | Spar Nord  | Yes  |
| weather_lat        | Longitude of the weather measurement location, coordinates are WGS84. Weather data is joined to the atm data by the cartesian minimum distance between the atm lat, lon and the weather lat, lon. Hence, the location of the weather | numeric | 8.450 : 12.614        | https://openweathermap.org/  | None |

|                     |   |         |   |   |      |
|---------------------|---|---------|---|---|------|
|                     | measurement may not be the same city as the atm location.   |         |   |   |      |
| weather_lon         | Latitude of the weather measurement location, coordinates are WGS84. Weather data is joined to the atm data by the cartesian minimum distance between the atm lat, lon and the weather lat, lon. Hence, the location of the weather measurement may not be the same city as the atm location. | numeric | 55.06 : 57.72   | <a href="https://openweathermap.org/">https://openweathermap.org/</a> | None |
| weather_city_id     | The city id of the city where the measurement was taken   | Integer |   | <a href="https://openweathermap.org/">https://openweathermap.org/</a> | None |
| weather_city_name   | The name of the city where the measurement was taken  | text    | 53 unique strings   | <a href="https://openweathermap.org/">https://openweathermap.org/</a> | None |
| temp                | Temperature at the moment of measurement within the hour. The temperature is provided only in Kelvins   | numeric | 260.0 : 302.1   | <a href="https://openweathermap.org/">https://openweathermap.org/</a> | None |
| pressure            | Atmospheric pressure (on the sea level), hPa  | Integer | 974 : 1057  | <a href="https://openweathermap.org/">https://openweathermap.org/</a> | None |
| humidity            | Humidity, %   | Integer | 0 : 174   | <a href="https://openweathermap.org/">https://openweathermap.org/</a> | None |
| wind_speed          | Wind speed. Unit Default: meter/sec   | Integer | 0 : 77  | <a href="https://openweathermap.org/">https://openweathermap.org/</a> | None |
| wind_deg            | Wind direction, degrees (meteorological)  | Integer | 0 : 360   | <a href="https://openweathermap.org/">https://openweathermap.org/</a> | None |
| rain_3h             | Rain volume for the last 3 hours  | numeric | 0.1 : 25.4  | <a href="https://openweathermap.org/">https://openweathermap.org/</a> | Yes  |
| clouds_all          | Cloudiness, %   | Integer | 0 : 100   | <a href="https://openweathermap.org/">https://openweathermap.org/</a> | None |
| weather_id          | Weather condition id  | Integer |   | <a href="https://openweathermap.org/">https://openweathermap.org/</a> | None |
| weather_main        | Group of weather parameters (Rain, Snow, Extreme etc.)  | text    | Clear   Clouds   Drizzle   Fog   Haze   Mist   Rain   Snow   Thunderstorm   TORNADO | <a href="https://openweathermap.org/">https://openweathermap.org/</a> | None |
| weather_description | Weather condition within the group  | text    | 32 unique strings   | <a href="https://openweathermap.org/">https://openweathermap.org/</a> | None |

