MINDATE Function

Computes the minimum value found in all row values in a Datetime column.

If a row contains a missing or null value, it is not factored into the calculation. If no Datetime values are found in the source column, the function returns a null value.

Wrangle vs. SQL: This function is part of Wrangle , a proprietary data transformation language. Wrangle is not SQL. For more information, see *Wrangle Language*.

Basic Usage

```
mindate(myDates)
```

Output: Returns the minimum Datetime value from the `myDates` column.

Syntax and Arguments

```
mindate(function_col_ref)
```

Argument	Required?	Data Type	Description
function_col_ref	Y	string	Name of column to which to apply the function

For more information on syntax standards, see *Language Documentation Syntax Notes*.

function_col_ref

Name of the column the Datetime values of which you want to calculate the minimum date.

- Column must contain Datetime values.
- Literal values are not supported as inputs.
- Multiple columns and wildcards are not supported.

Usage Notes:

Required?	Data Type	Example Value
Yes	Datetime (column reference)	`datTransactions`

Examples

> **Tip:** For additional examples, see *Common Tasks*.

This example shows how you can use the following functions to perform some analysis on Datetime columns.

- `MINDATE` - Calculates the earliest (minimum) date from a column of Datetime column values. See *MINDATE Function*.
- `MAXDATE` - Calculates the latest (maximum) date from a column of Datetime column values. See *MAXDATE Function*.
- `MODEDATE` - Calculates the most frequent (mode) date from a column of Datetime column values. See *MODEDATE Function*.

Source:

The following dataset contains a set of three available dates for a set of classes:

classId	Date1	Date2	Date3
c001	2020-03-09	2020-03-13	2020-03-17
c002	2020-03-09	2020-03-06	2020-03-21
c003	2020-03-09	2020-03-16	2020-03-23
c004	2020-03-09	2020-03-23	2020-04-06
c005	2020-03-09	2020-04-09	2020-05-09
c006	2020-03-09	2020-08-09	2021-01-09

Transformation:

To compare dates across multiple columns, you must consolidate the values into a single column. You can use the following transformation to do so:

Transformation Name	`Unpivot columns`
Parameter: Columns	`Date1,Date2,Date3`
Parameter: Group size	`1`

The dataset is now contained in three columns, with descriptions listed below:

classId	key	value
Same as previous.	DateX column identifier	Corresponding value from the DateX column.

You can use the following to rename the `value` column to `eventDates`:

Transformation Name	`Rename columns`
Parameter: Option	`Manual rename`
Parameter: Column	`value`
Parameter: New column name	`eventDates`

Using the following transformations, you can create new columns containing the min, max, and mode values for the Datetime values in `eventDates`:

Transformation Name	`New formula`
Parameter: Formula type	`Single row formula`
Parameter: Formula	`MINDATE(eventDates)`

Parameter: New column name	`earliestDate`

Transformation Name	`New formula`
Parameter: Formula type	`Single row formula`
Parameter: Formula	`MAXDATE(eventDates)`
Parameter: New column name	`latestDate`

Transformation Name	`New formula`
Parameter: Formula type	`Single row formula`
Parameter: Formula	`MODEDATE(eventDates)`
Parameter: New column name	`mostFrequentDate`

Results:

classId	key	eventDates	mostFrequentDate	latestDate	earliestDate
c001	Date1	2020-03-09	2020-03-09	2021-01-09	2020-03-06
c001	Date2	2020-03-13	2020-03-09	2021-01-09	2020-03-06
c001	Date3	2020-03-17	2020-03-09	2021-01-09	2020-03-06
c002	Date1	2020-03-09	2020-03-09	2021-01-09	2020-03-06
c002	Date2	2020-03-06	2020-03-09	2021-01-09	2020-03-06
c002	Date3	2020-03-21	2020-03-09	2021-01-09	2020-03-06
c003	Date1	2020-03-09	2020-03-09	2021-01-09	2020-03-06
c003	Date2	2020-03-16	2020-03-09	2021-01-09	2020-03-06
c003	Date3	2020-03-23	2020-03-09	2021-01-09	2020-03-06
c004	Date1	2020-03-09	2020-03-09	2021-01-09	2020-03-06
c004	Date2	2020-03-23	2020-03-09	2021-01-09	2020-03-06
c004	Date3	2020-04-06	2020-03-09	2021-01-09	2020-03-06
c005	Date1	2020-03-09	2020-03-09	2021-01-09	2020-03-06
c005	Date2	2020-04-09	2020-03-09	2021-01-09	2020-03-06
c005	Date3	2020-05-09	2020-03-09	2021-01-09	2020-03-06
c006	Date1	2020-03-09	2020-03-09	2021-01-09	2020-03-06
c006	Date2	2020-08-09	2020-03-09	2021-01-09	2020-03-06
c006	Date3	2021-01-09	2020-03-09	2021-01-09	2020-03-06