

Spatial Analysis with Power BI

Veera Muangsin

Example: Rainfall in Thailand

RainDaily_Tabular.csv

File Origin

65001: Unicode (UTF-8)

Delimiter

Comma

Data Type Detection

Based on first 200 rows

code	name	latitude	longitude	tambon	amphoe	province	date	datetime	rain
ABRT	อนุบาลร้อยเอ็ด	16.05324	103.65983	รอบเมือง	เมืองร้อยเอ็ด	ร้อยเอ็ด	8/1/2017	8/1/2017 12:00:00 AM	0
ABRT	อนุบาลร้อยเอ็ด	16.05324	103.65983	รอบเมือง	เมืองร้อยเอ็ด	ร้อยเอ็ด	8/2/2017	8/2/2017 12:00:00 AM	0
ABRT	อนุบาลร้อยเอ็ด	16.05324	103.65983	รอบเมือง	เมืองร้อยเอ็ด	ร้อยเอ็ด	8/3/2017	8/3/2017 12:00:00 AM	0
ABRT	อนุบาลร้อยเอ็ด	16.05324	103.65983	รอบเมือง	เมืองร้อยเอ็ด	ร้อยเอ็ด	8/4/2017	8/4/2017 12:00:00 AM	0
ABRT	อนุบาลร้อยเอ็ด	16.05324	103.65983	รอบเมือง	เมืองร้อยเอ็ด	ร้อยเอ็ด	8/5/2017	8/5/2017 12:00:00 AM	13.2
ABRT	อนุบาลร้อยเอ็ด	16.05324	103.65983	รอบเมือง	เมืองร้อยเอ็ด	ร้อยเอ็ด	8/6/2017	8/6/2017 12:00:00 AM	23.4
ABRT	อนุบาลร้อยเอ็ด	16.05324	103.65983	รอบเมือง	เมืองร้อยเอ็ด	ร้อยเอ็ด	8/7/2017	8/7/2017 12:00:00 AM	0
ABRT	อนุบาลร้อยเอ็ด	16.05324	103.65983	รอบเมือง	เมืองร้อยเอ็ด	ร้อยเอ็ด	8/8/2017	8/8/2017 12:00:00 AM	0
ABRT	อนุบาลร้อยเอ็ด	16.05324	103.65983	รอบเมือง	เมืองร้อยเอ็ด	ร้อยเอ็ด	8/9/2017	8/9/2017 12:00:00 AM	0
ABRT	อนุบาลร้อยเอ็ด	16.05324	103.65983	รอบเมือง	เมืองร้อยเอ็ด	ร้อยเอ็ด	8/10/2017	8/10/2017 12:00:00 AM	0
ABRT	อนุบาลร้อยเอ็ด	16.05324	103.65983	รอบเมือง	เมืองร้อยเอ็ด	ร้อยเอ็ด	8/11/2017	8/11/2017 12:00:00 AM	0
ABRT	อนุบาลร้อยเอ็ด	16.05324	103.65983	รอบเมือง	เมืองร้อยเอ็ด	ร้อยเอ็ด	8/12/2017	8/12/2017 12:00:00 AM	0
ABRT	อนุบาลร้อยเอ็ด	16.05324	103.65983	รอบเมือง	เมืองร้อยเอ็ด	ร้อยเอ็ด	8/13/2017	8/13/2017 12:00:00 AM	0
ABRT	อนุบาลร้อยเอ็ด	16.05324	103.65983	รอบเมือง	เมืองร้อยเอ็ด	ร้อยเอ็ด	8/14/2017	8/14/2017 12:00:00 AM	0
ABRT	อนุบาลร้อยเอ็ด	16.05324	103.65983	รอบเมือง	เมืองร้อยเอ็ด	ร้อยเอ็ด	8/15/2017	8/15/2017 12:00:00 AM	0.6
ABRT	อนุบาลร้อยเอ็ด	16.05324	103.65983	รอบเมือง	เมืองร้อยเอ็ด	ร้อยเอ็ด	8/16/2017	8/16/2017 12:00:00 AM	0.4
ABRT	อนุบาลร้อยเอ็ด	16.05324	103.65983	รอบเมือง	เมืองร้อยเอ็ด	ร้อยเอ็ด	8/17/2017	8/17/2017 12:00:00 AM	1.6
ABRT	อนุบาลร้อยเอ็ด	16.05324	103.65983	รอบเมือง	เมืองร้อยเอ็ด	ร้อยเอ็ด	8/18/2017	8/18/2017 12:00:00 AM	11.2
ABRT	อนุบาลร้อยเอ็ด	16.05324	103.65983	รอบเมือง	เมืองร้อยเอ็ด	ร้อยเอ็ด	8/19/2017	8/19/2017 12:00:00 AM	1
ABRT	อนุบาลร้อยเอ็ด	16.05324	103.65983	รอบเมือง	เมืองร้อยเอ็ด	ร้อยเอ็ด	8/20/2017	8/20/2017 12:00:00 AM	3.2

Get Data

The screenshot displays the Microsoft Power BI Desktop application window. The title bar at the top reads 'Untitled - Power BI Desktop' and includes a search bar and a 'Sign in' button. Below the title bar is a ribbon with tabs for 'File', 'Home', 'Insert', 'Modeling', 'View', and 'Help'. The 'Home' tab is active, showing a 'Get data' button and other options like 'Refresh', 'New visual', 'New measure', 'Sensitivity (preview)', and 'Publish'. The main canvas area is empty, with a central instruction: 'Build visuals with your data. Select or drag fields from the Fields pane onto the report canvas.' Below this instruction is a small graphic showing a dashed box representing a visual and a list of fields being dragged into it. On the right side of the canvas, there are two panes: 'Visualizations' and 'Fields'. The 'Fields' pane is expanded, showing a search bar and a list of fields under the 'RainDaily_Tabular' dataset. The fields listed are: 'amphoe', 'code', 'date', 'datetime', 'latitude', 'longitude', 'name', 'province', 'rain', and 'tambon'. The 'Fields' pane is highlighted with a red border. The 'Visualizations' pane shows various chart types and options like 'Values', 'Drill through', 'Cross-report', and 'Keep all filters'. The bottom status bar shows 'Page 1' and a plus sign for adding new pages.

Build visuals with your data

Select or drag fields from the Fields pane onto the report canvas.

Fields pane content:

- RainDaily_Tabular
 - ☐ amphoe
 - ☐ code
 - ☐ date
 - ☐ datetime
 - ☐ latitude
 - ☐ longitude
 - ☐ name
 - ☐ province
 - ☐ rain
 - ☐ tambon

Map Visualization

The screenshot displays the Microsoft Power BI Desktop application. The main workspace shows a map visualization with a grid of streets and several grey circular markers of varying sizes. A tooltip is visible over one of the markers, displaying a small map and some data points. The ribbon at the top includes tabs for File, Home, Insert, Modeling, View, Help, Format, and Data / Drill. The Data / Drill tab is currently selected. The right-hand pane is divided into two sections: Visualizations and Fields. The Visualizations pane shows a list of visualization types, with the Map icon highlighted by a red circle. The Fields pane shows a list of data fields, including RainDaily_Tabular, amphoe, code, date, datetime, latitude, longitude, name, province, rain, and tambon. The bottom status bar indicates 'Page 1'.

Untitled - Power BI Desktop

Search

Sign in

File Home Insert Modeling View Help Format Data / Drill

Get data Refresh New visual New measure Sensitivity (preview) Publish

Select or drag fields to populate this visual

Visualizations

Filters

Location

Add data fields here

Legend

Add data fields here

Latitude

Add data fields here

Longitude

Add data fields here

Size

Add data fields here

Tooltips

Add data fields here

Drill through

Fields

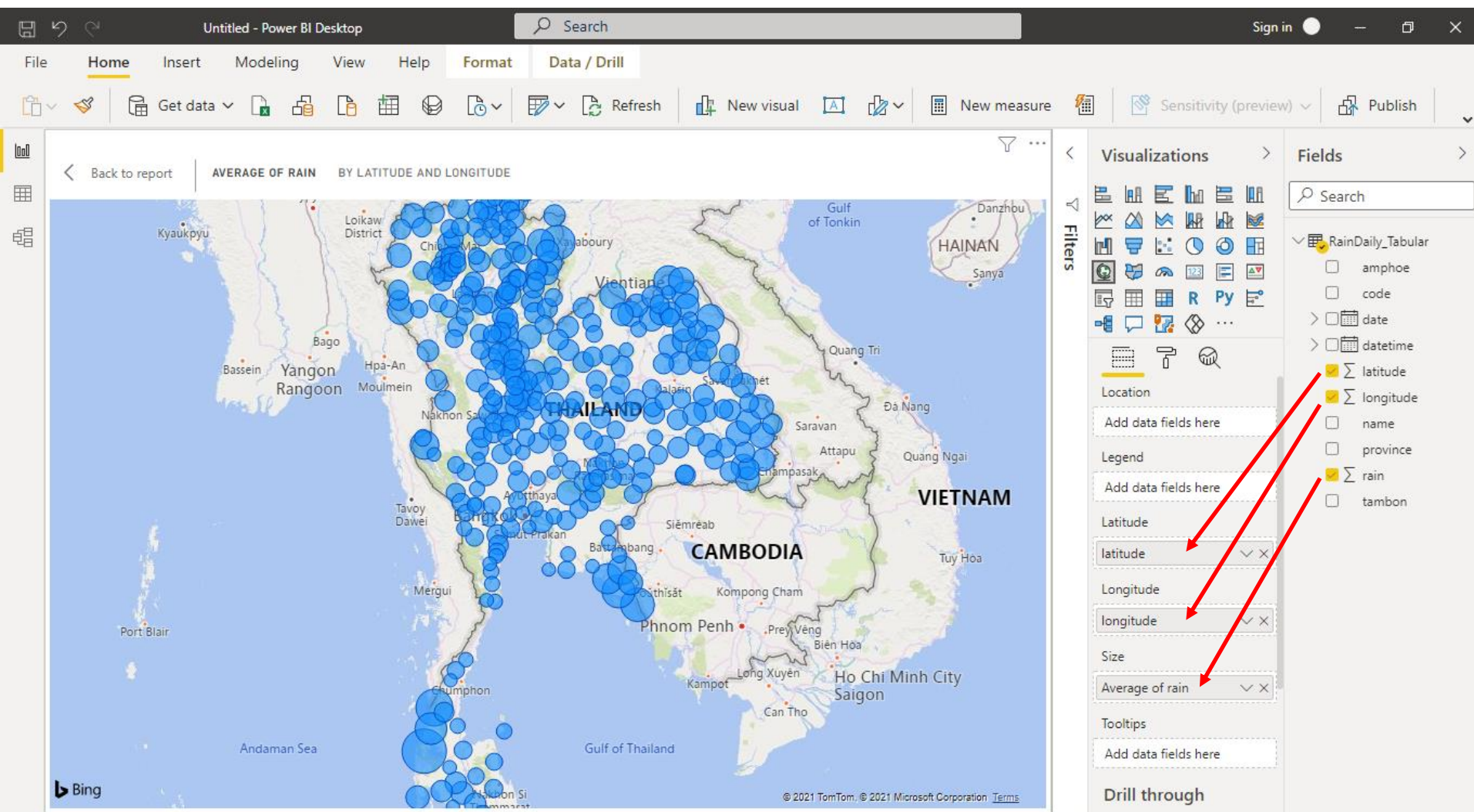
Search

RainDaily_Tabular

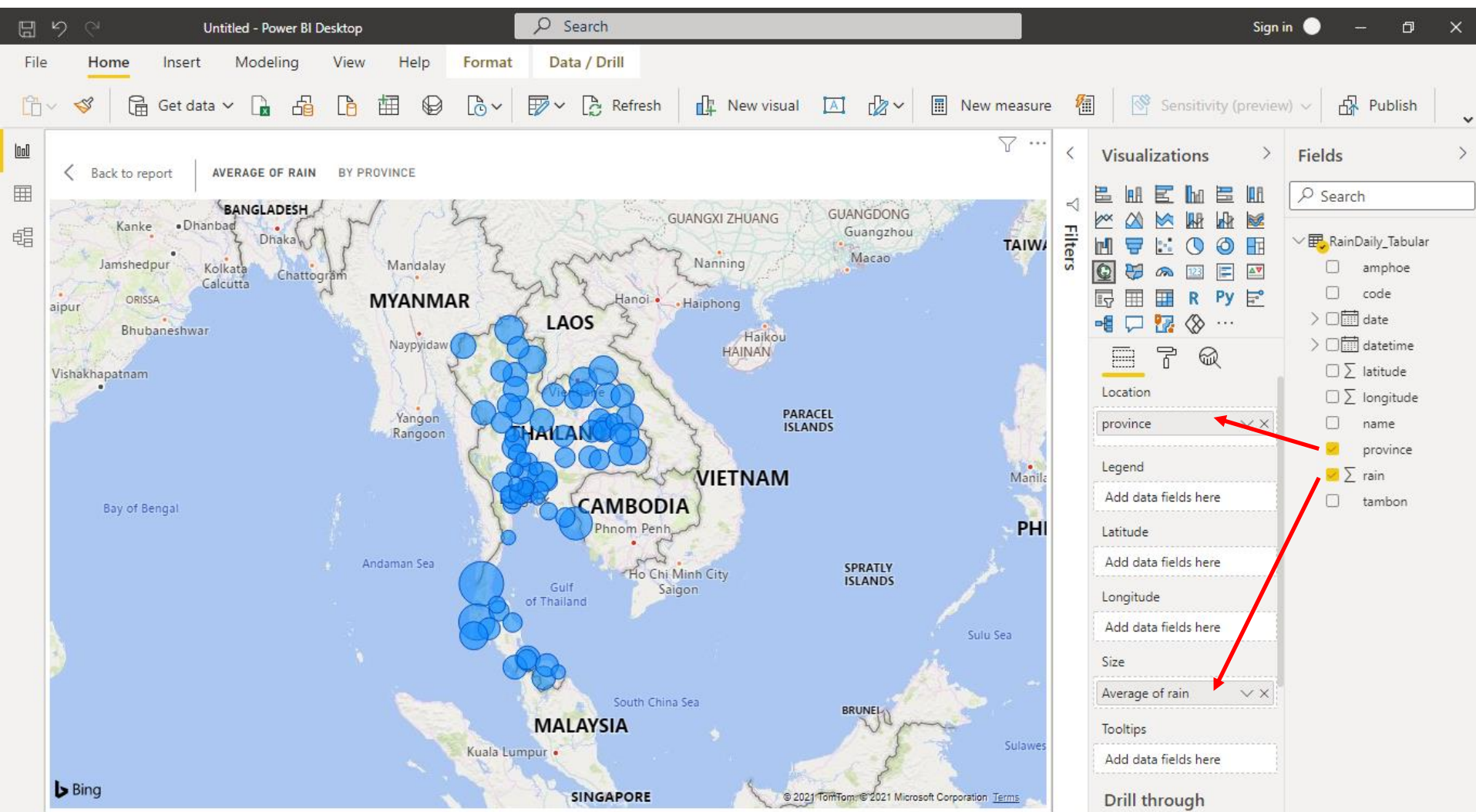
- ☐ amphoe
- ☐ code
- ☐ date
- ☐ datetime
- ☐ latitude
- ☐ longitude
- ☐ name
- ☐ province
- ☐ rain
- ☐ tambon

Page 1

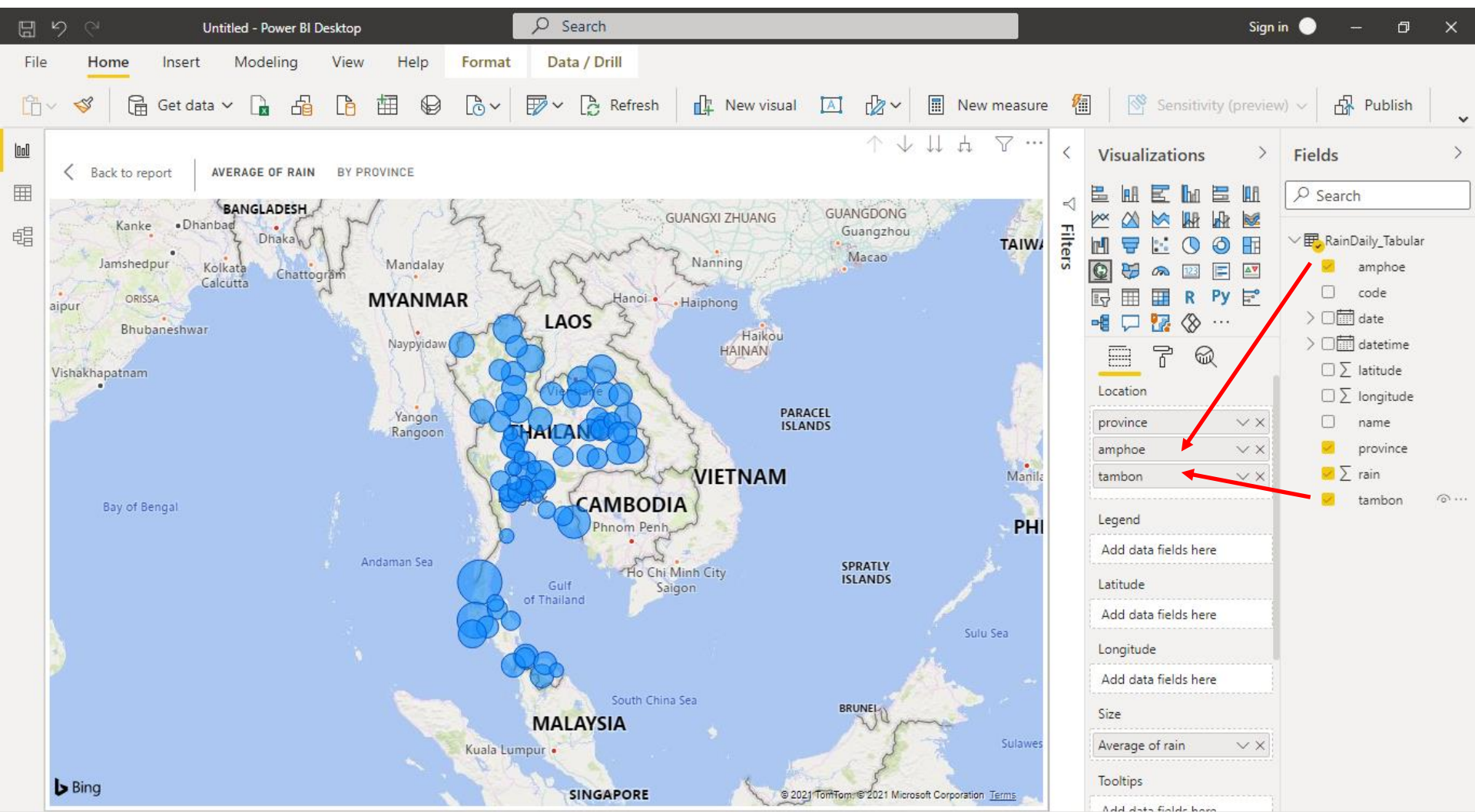
Use latitude and longitude of weather station



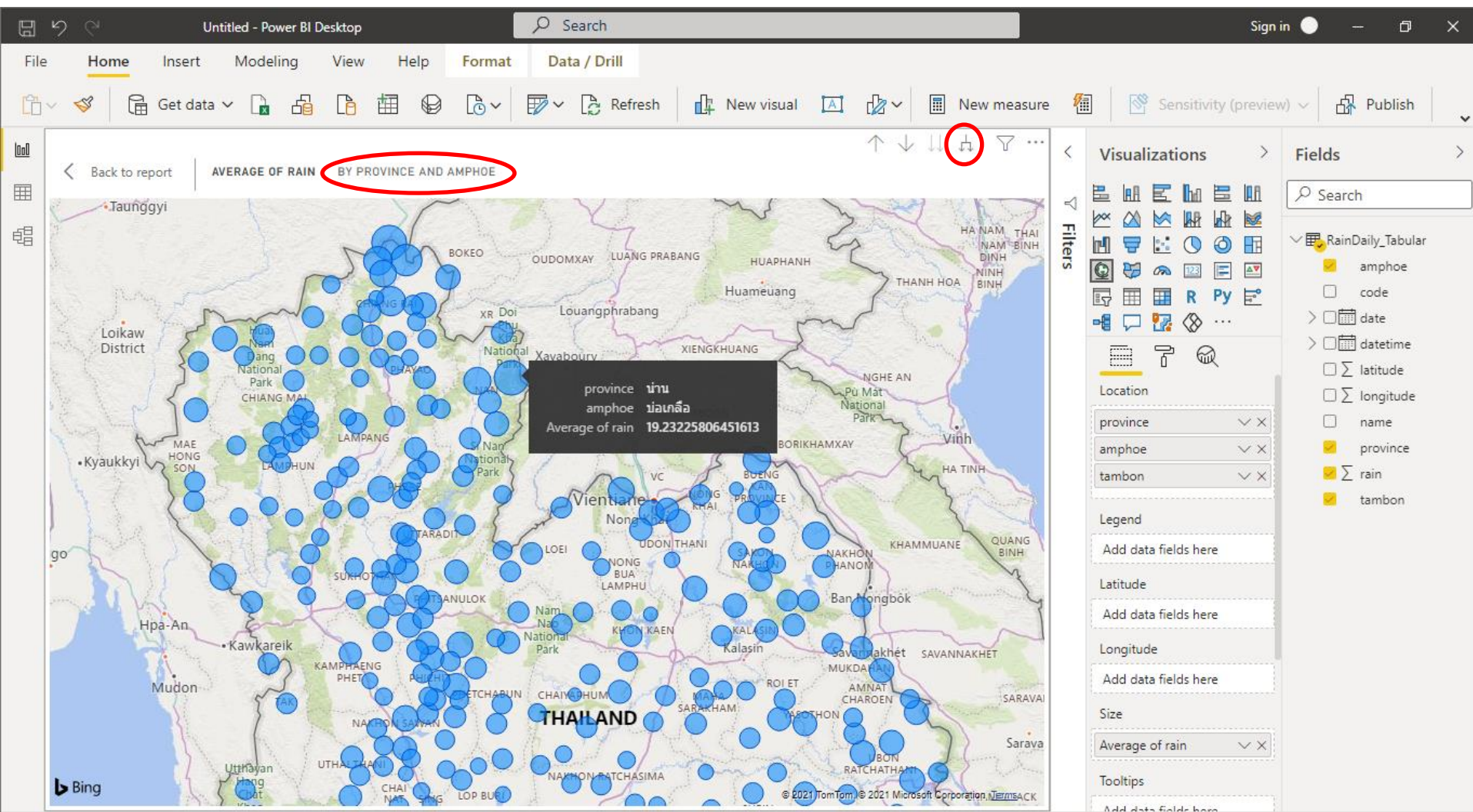
Use province name as location



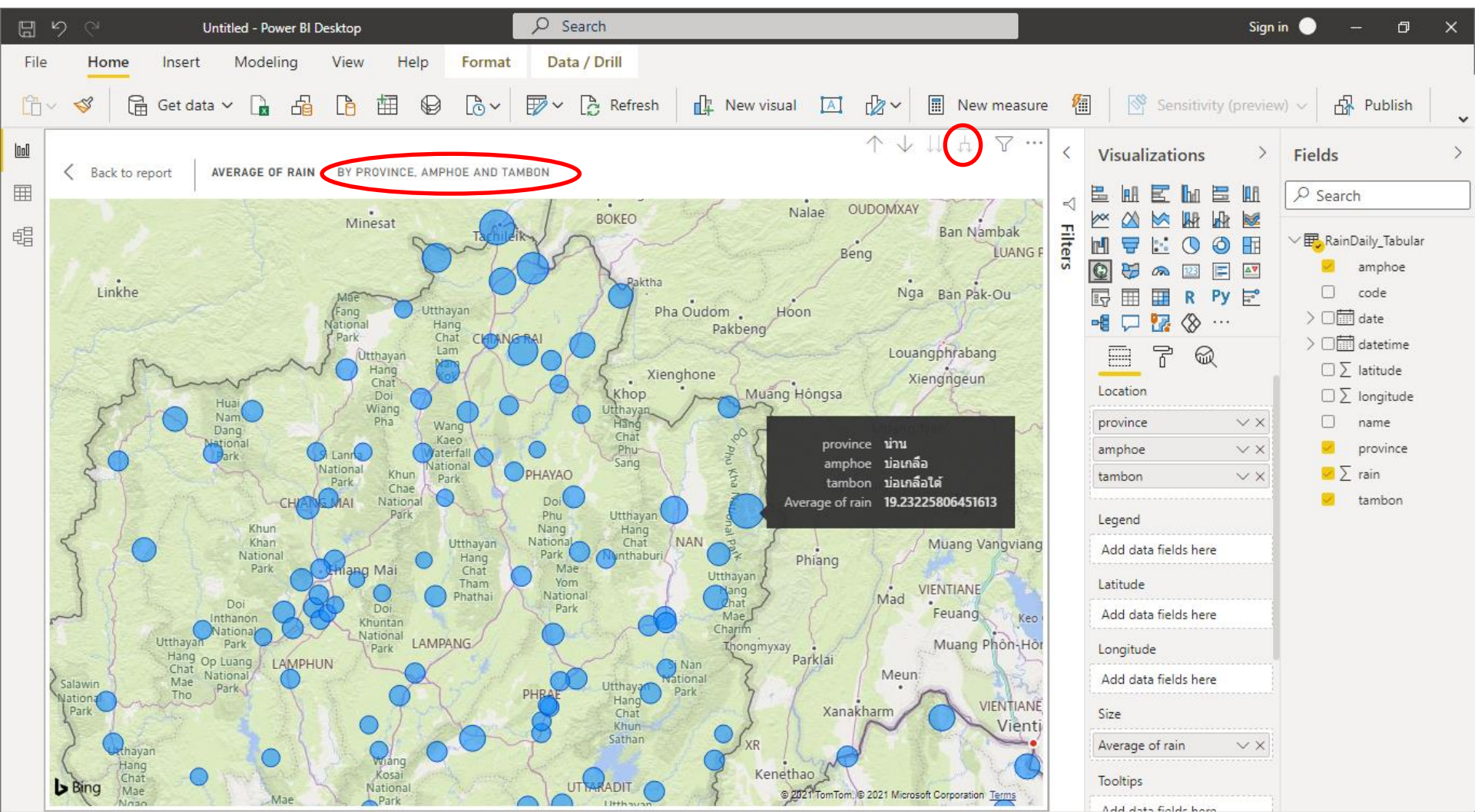
Hierarchical Location



Drill Down



Drill Down



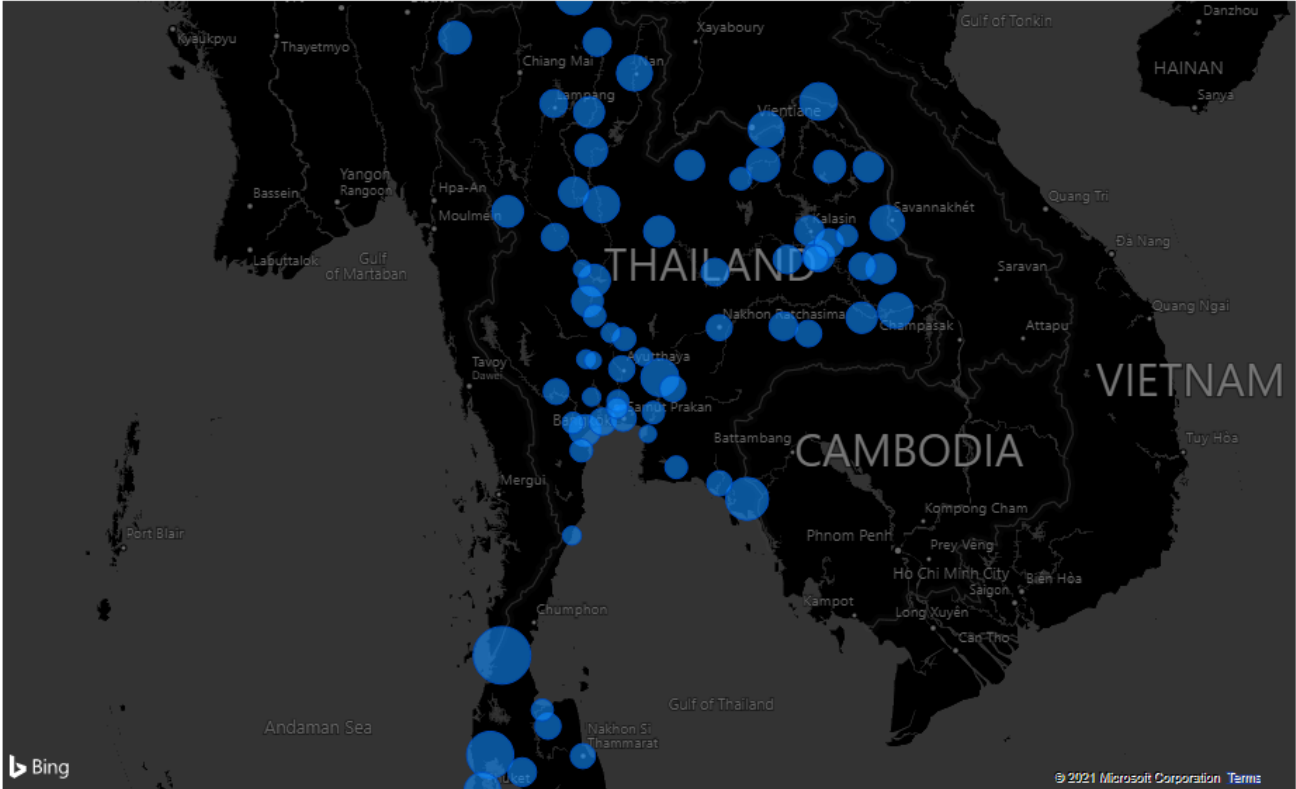
Map Styles

Untitled - Power BI Desktop

File Home Insert Modeling View Help Format Data / Drill

Get data New visual New measure Sensitivity (preview) Publish

Back to report AVERAGE OF RAIN BY PROVINCE



Visualizations

Filters

Search

Map styles

Theme

Dark

Aerial

Dark

Light

Grayscale

Road

Heat map Off

Title On

Background On

Lock aspect Off

Fields

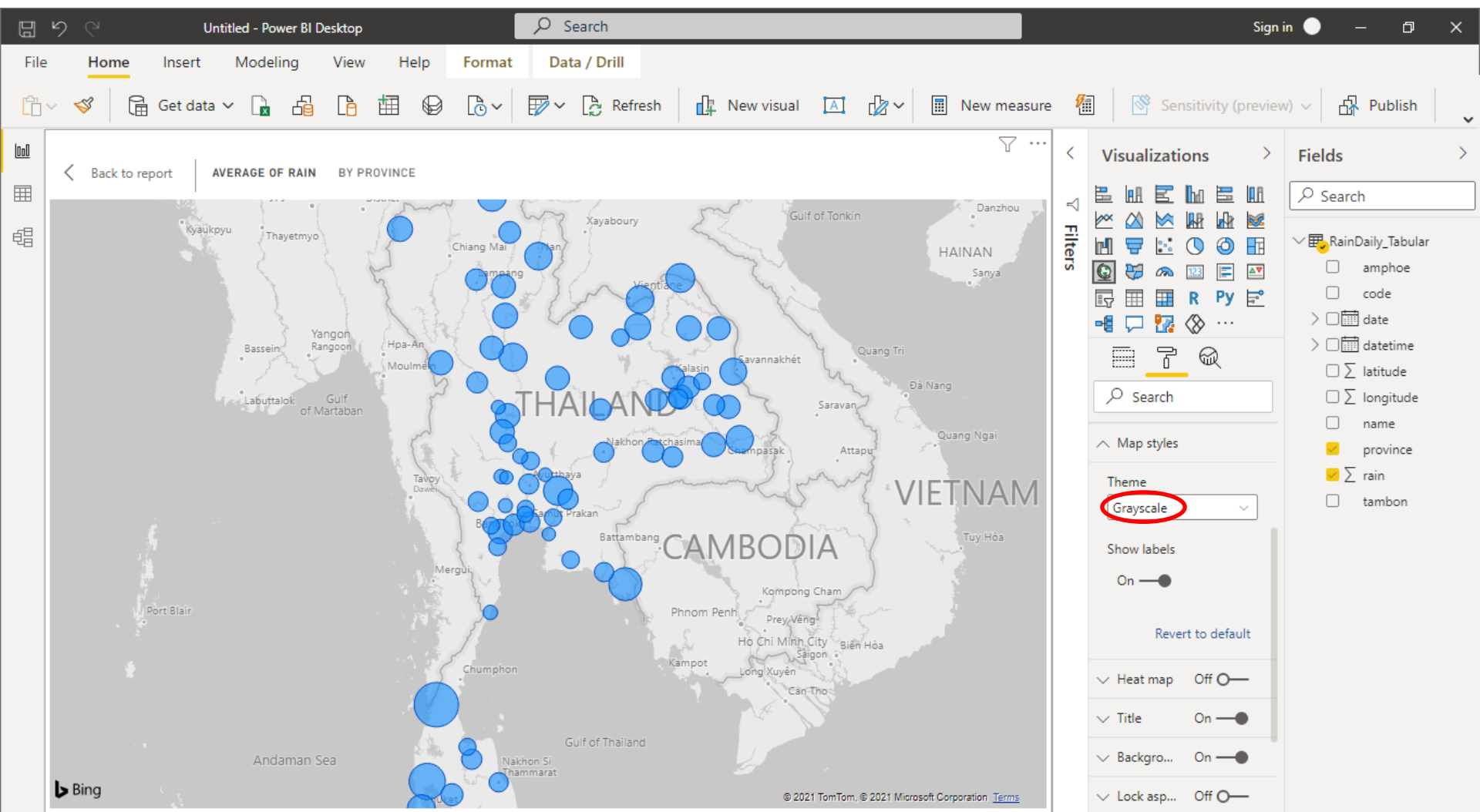
Search

RainDaily_Tabular

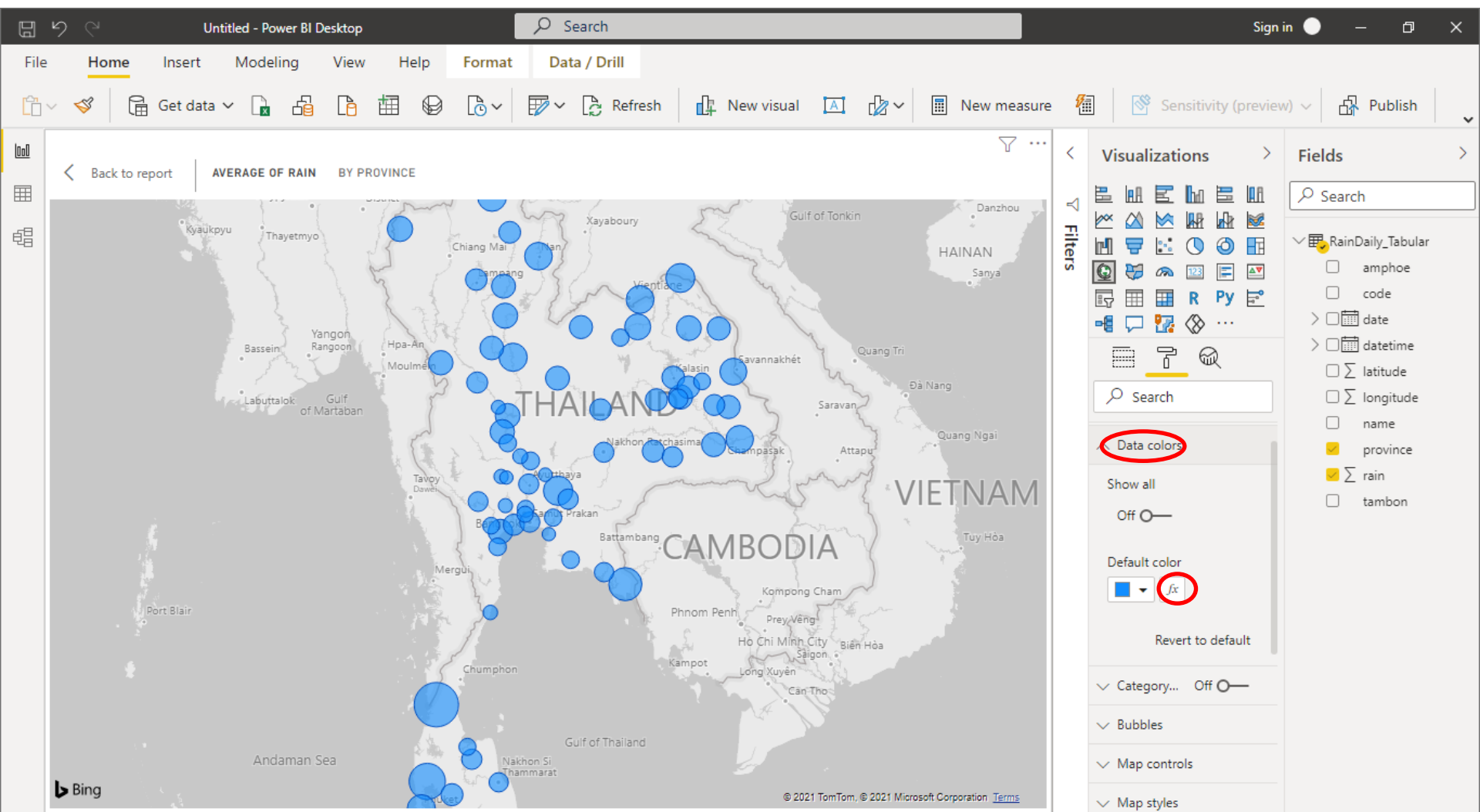
- ☐ amphoe
- ☐ code
- ☐ date
- ☐ datetime
- ☐ latitude
- ☐ longitude
- ☐ name
- ☒ province
- ☒ rain
- ☐ tambon

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Map Styles



Color



Color

Untitled - Power BI Desktop

Search

Sign in

File Home Insert Modeling View Help Format Data / Drill

Get data

Back to report

Fields

Search

RainDaily_Tabular

- ☐ amphoe
- ☐ code
- ☐ date
- ☐ datetime
- ☐ latitude
- ☐ longitude
- ☐ name
- ☒ province
- ☒ rain
- ☐ tambon

Default color - Data colors

Format by

Color scale

Based on field

Average of rain

Summarization

Average

Default formatting

As zero

Minimum

Lowest value

Maximum

Highest value

Enter a value

Enter a value

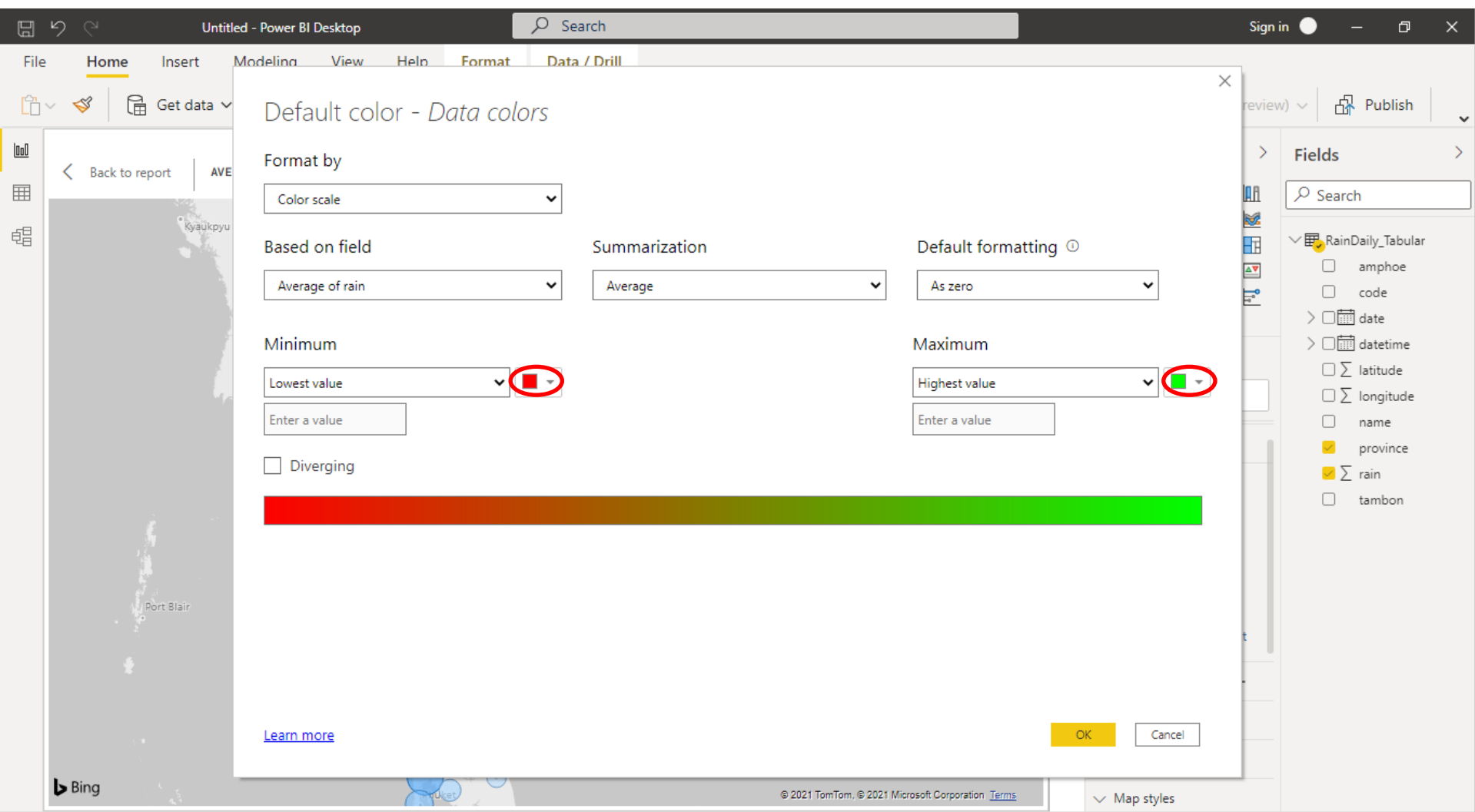
☐ Diverging

Learn more

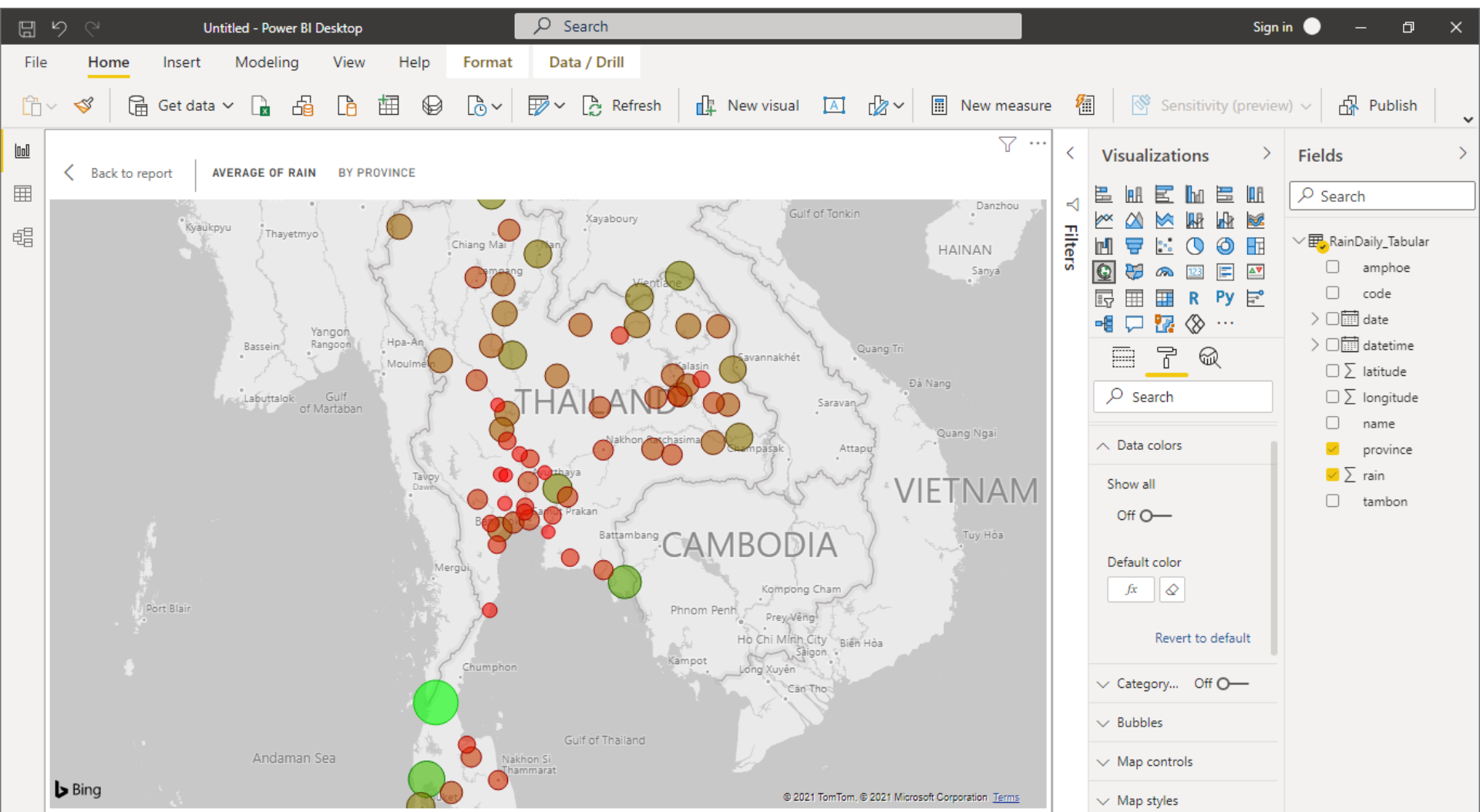
OK Cancel

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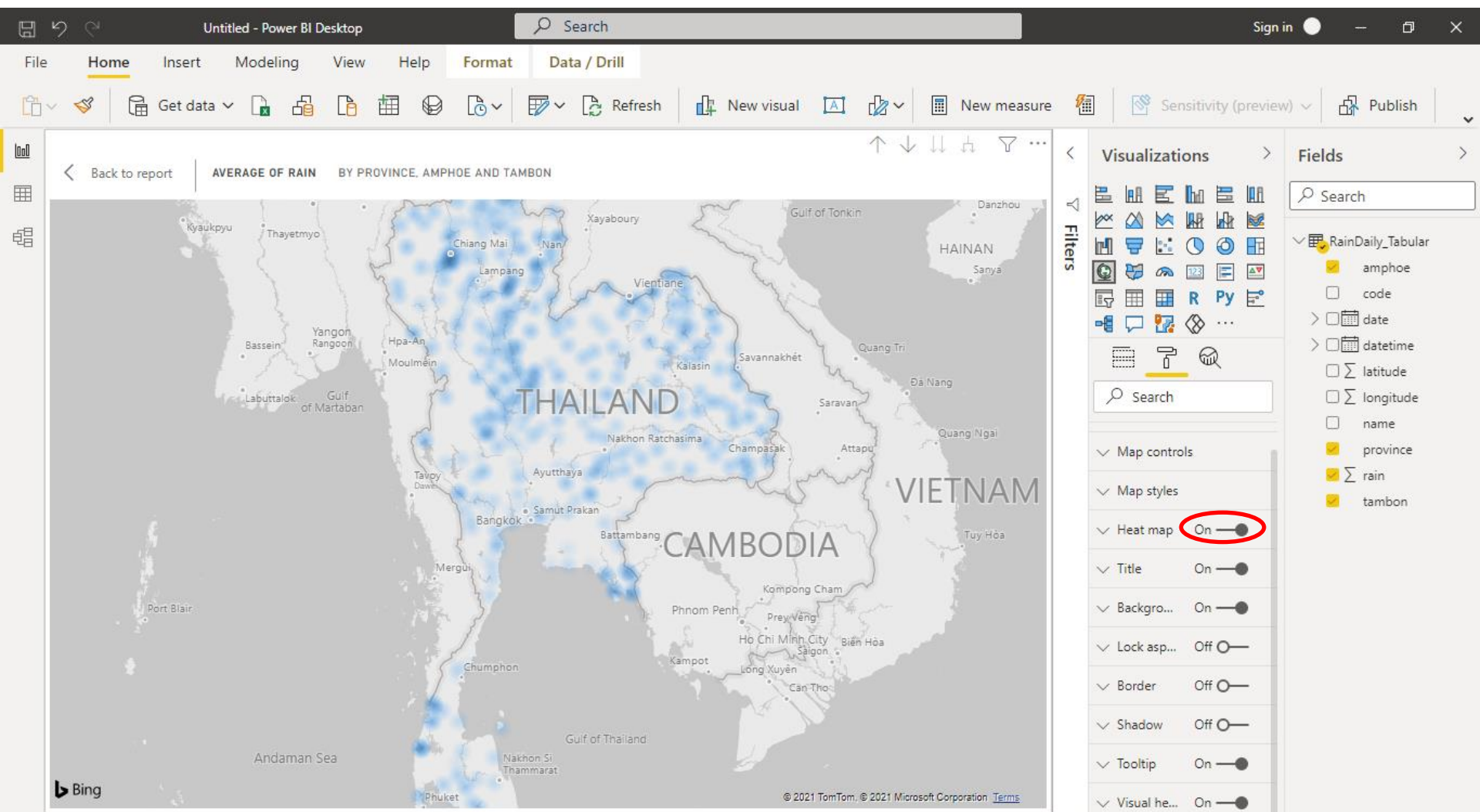
Map styles



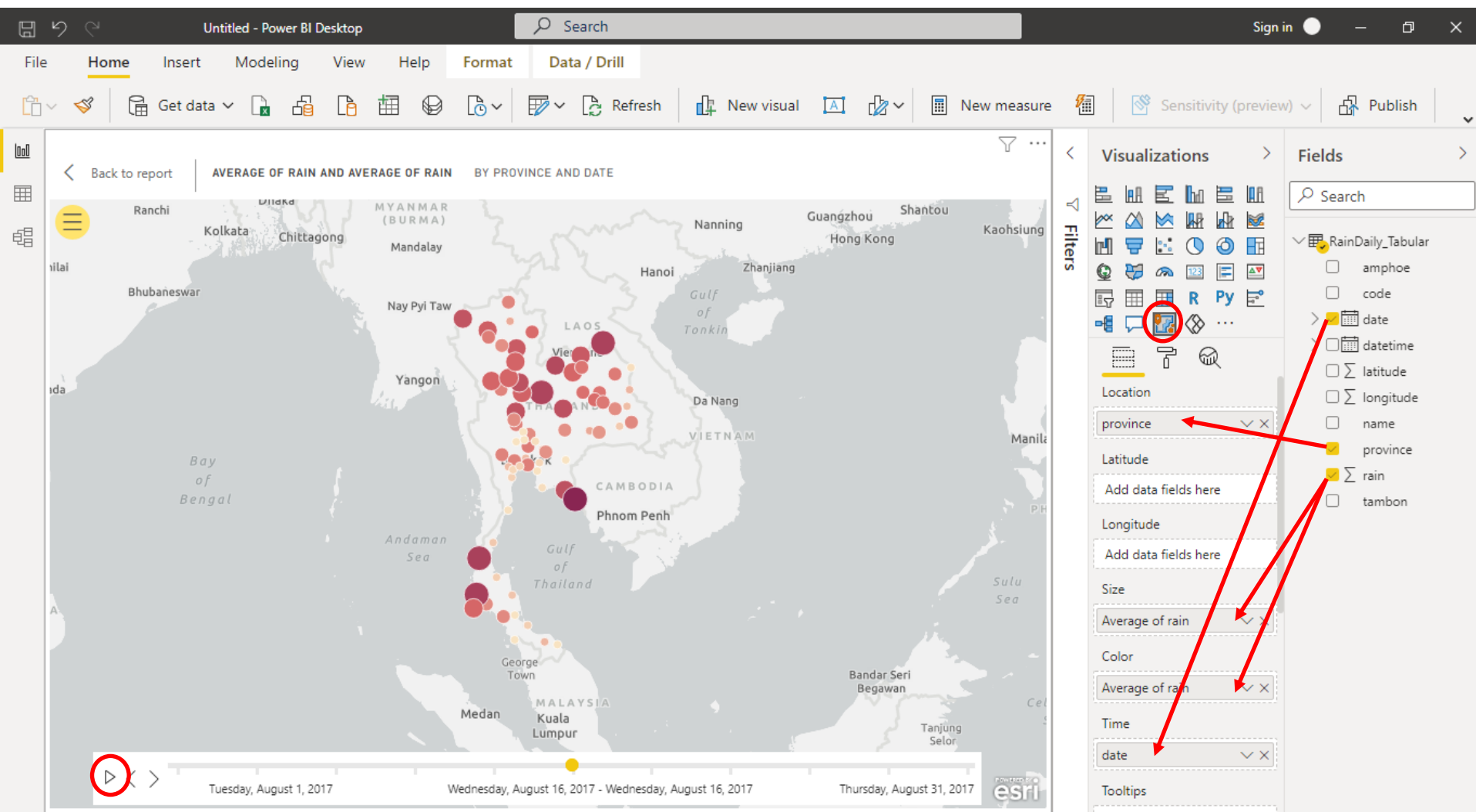
Color

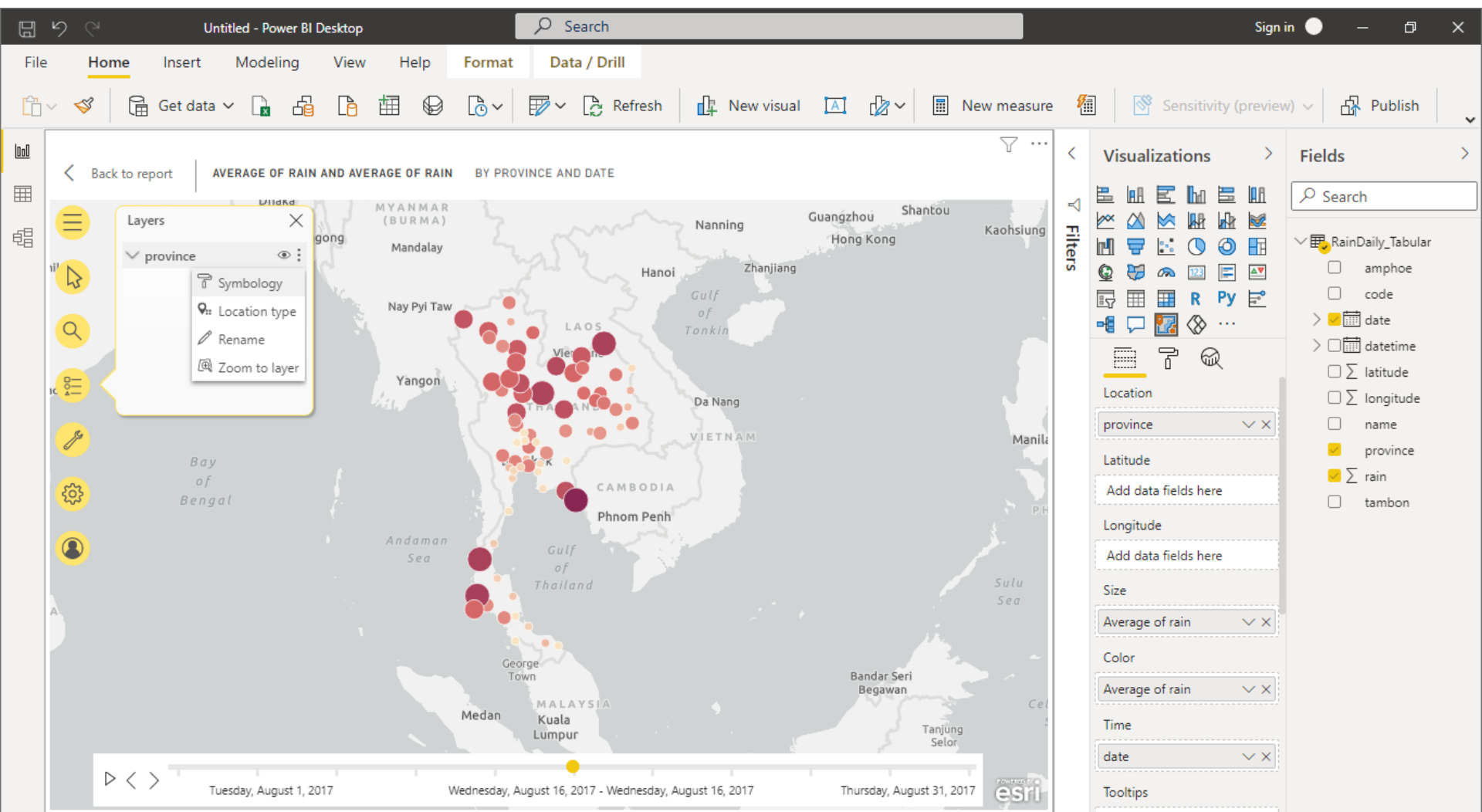


Heatmap

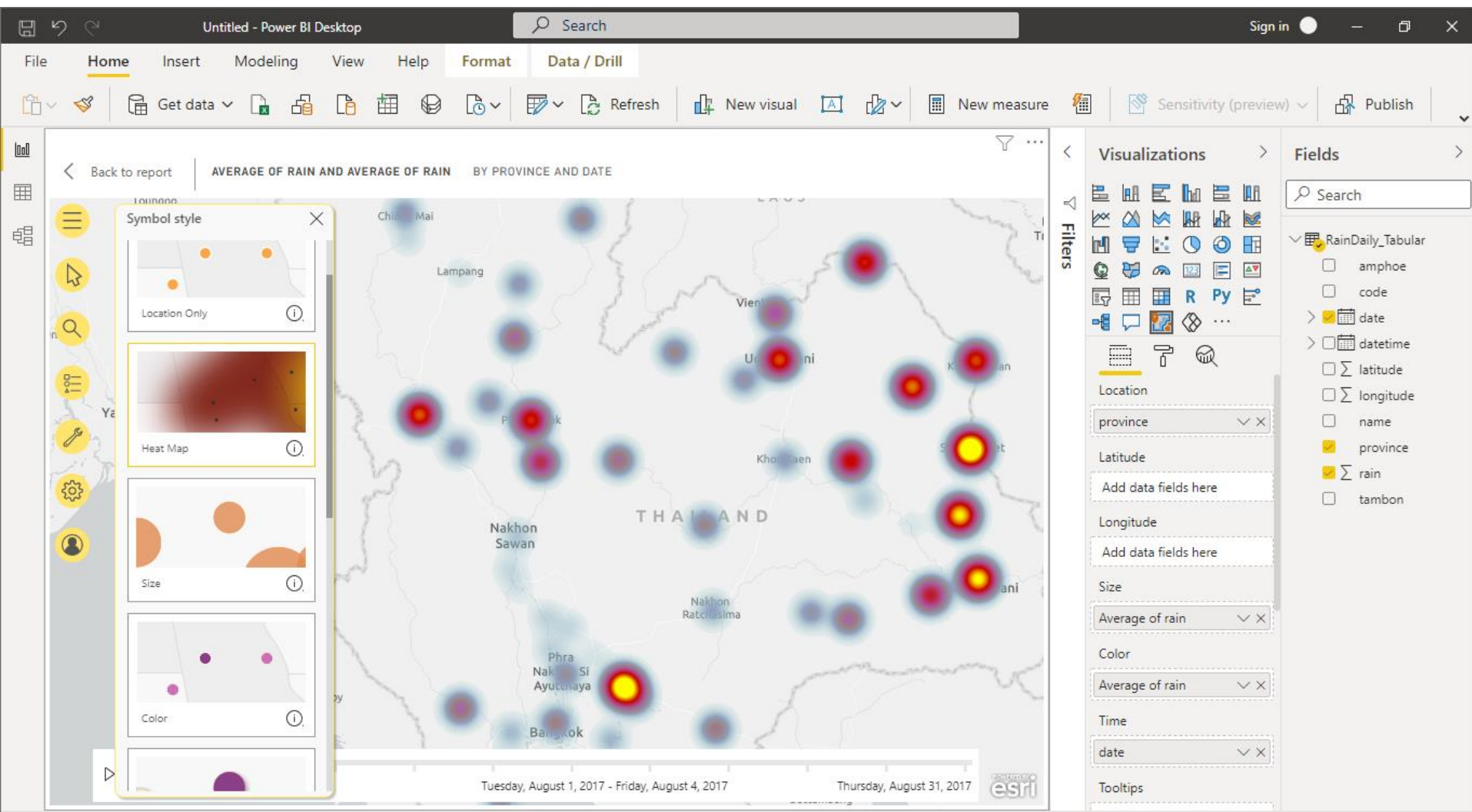


ArcGIS Map

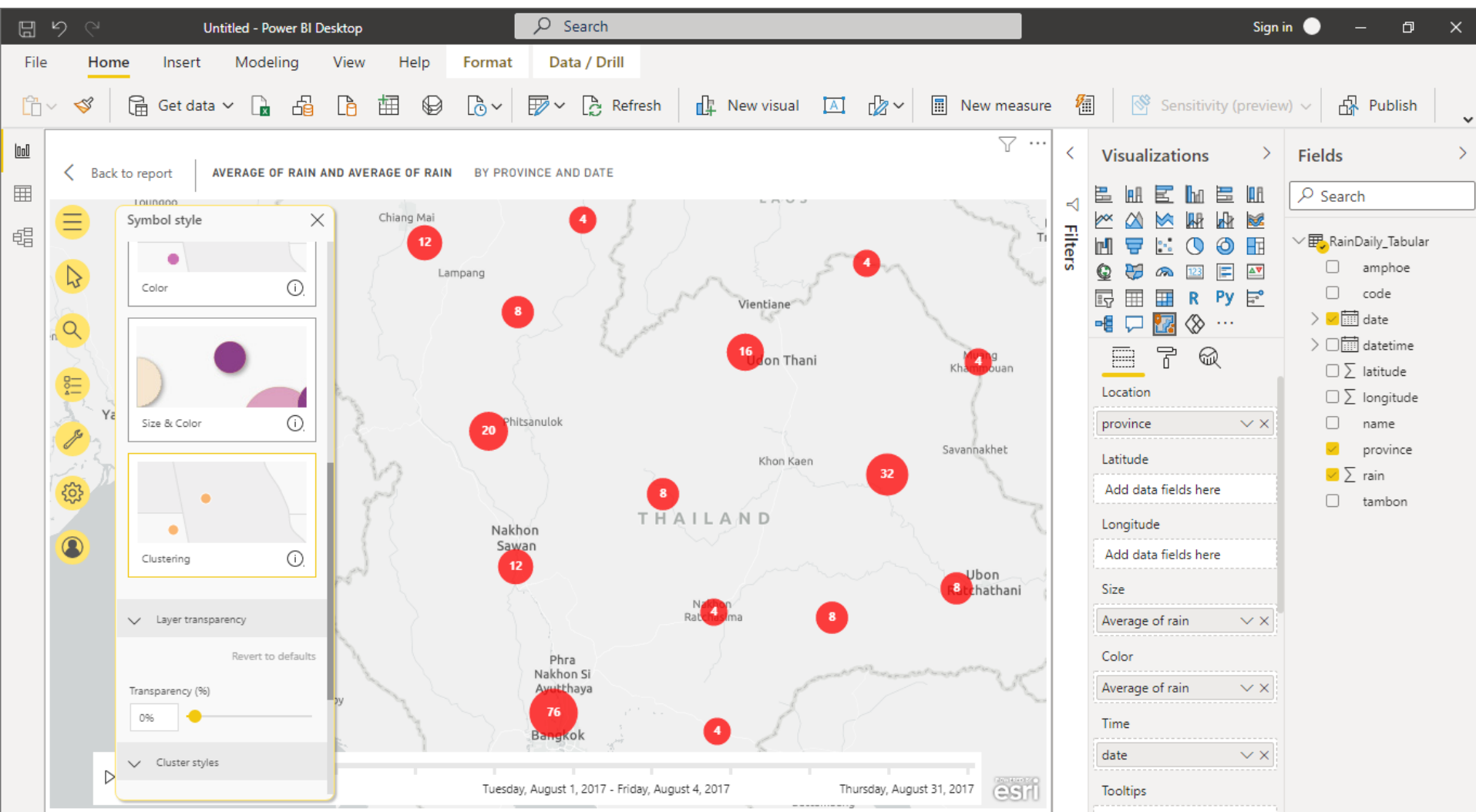




ArcGIS Map: Heat Map



ArcGIS Map: Clustering Map



Taxi Origin-Destination

Taxi OD Data

taxi_od_1000.csv

File Origin

Delimiter

Data Type Detection

1252: Western European (Windows)

Comma

Based on first 200 rows

taxi_ID	trip_ID	time	hour	status	latitude	longitude	rounded_latitude	rounded_longitude	distance_meter	duration_min
AK2306	AK2306_T_6203	23-Sep-16 6:03:00 AM	6	O	13.73136425	100.650322	13.73	100.65	null	null
AK2306	AK2306_T_6203	23-Sep-16 6:14:00 AM	6	D	13.73135662	100.6502838	13.73	100.65	5	11
AK2306	AK2306_T_6204	23-Sep-16 6:20:00 AM	6	O	13.73130798	100.6501999	13.73	100.65	null	null
AK2306	AK2306_T_6204	23-Sep-16 6:46:00 AM	6	D	13.73575211	100.6769485	13.74	100.68	7456	26
AK2306	AK2306_T_6206	23-Sep-16 6:50:00 AM	6	O	13.73414803	100.6917877	13.73	100.69	null	null
AK2306	AK2306_T_6206	23-Sep-16 7:26:00 AM	7	D	13.75986385	100.6820679	13.76	100.68	7163	36
AK2306	AK2306_T_6208	23-Sep-16 7:51:00 AM	7	O	13.73508644	100.6920547	13.74	100.69	null	null
AK2306	AK2306_T_6208	23-Sep-16 8:37:00 AM	8	D	13.77928257	100.6778336	13.78	100.68	11417	46
AK2306	AK2306_T_6210	23-Sep-16 8:46:00 AM	8	O	13.75575733	100.6800919	13.76	100.68	null	null
AK2306	AK2306_T_6210	23-Sep-16 9:02:00 AM	9	D	13.7764349	100.6737595	13.78	100.67	2476	16
AK2306	AK2306_T_6212	23-Sep-16 9:28:00 AM	9	O	13.76348686	100.6513519	13.76	100.65	null	null
AK2306	AK2306_T_6212	23-Sep-16 9:31:00 AM	9	D	13.76329994	100.6499252	13.76	100.65	235	3
AK2306	AK2306_T_6214	23-Sep-16 9:41:00 AM	9	O	13.76949406	100.6388321	13.77	100.64	null	null
AK2306	AK2306_T_6214	23-Sep-16 9:43:00 AM	9	D	13.77286339	100.6319122	13.77	100.63	841	2
AK2306	AK2306_T_6216	23-Sep-16 10:01:00 AM	10	O	13.80350208	100.6180191	13.8	100.62	null	null
AK2306	AK2306_T_6216	23-Sep-16 10:07:00 AM	10	D	13.79077721	100.6109772	13.79	100.61	1650	6
AK2306	AK2306_T_6218	23-Sep-16 10:18:00 AM	10	O	13.76608276	100.6086731	13.77	100.61	null	null
AK2306	AK2306_T_6218	23-Sep-16 10:28:00 AM	10	D	13.76246834	100.6162796	13.76	100.62	2758	10
AK2306	AK2306_T_6222	23-Sep-16 11:08:00 AM	11	O	13.77886581	100.6077042	13.78	100.61	null	null
AK2306	AK2306_T_6222	23-Sep-16 12:55:00 PM	12	D	13.76039696	100.6454391	13.76	100.65	10610	107



The data in the preview has been truncated due to size limits.

Extract Table Using Examples

Load

Transform Data

Cancel

Taxi OD data is ready

Build visuals with your data

Select or drag fields from the Fields pane onto the report canvas.

Visualizations

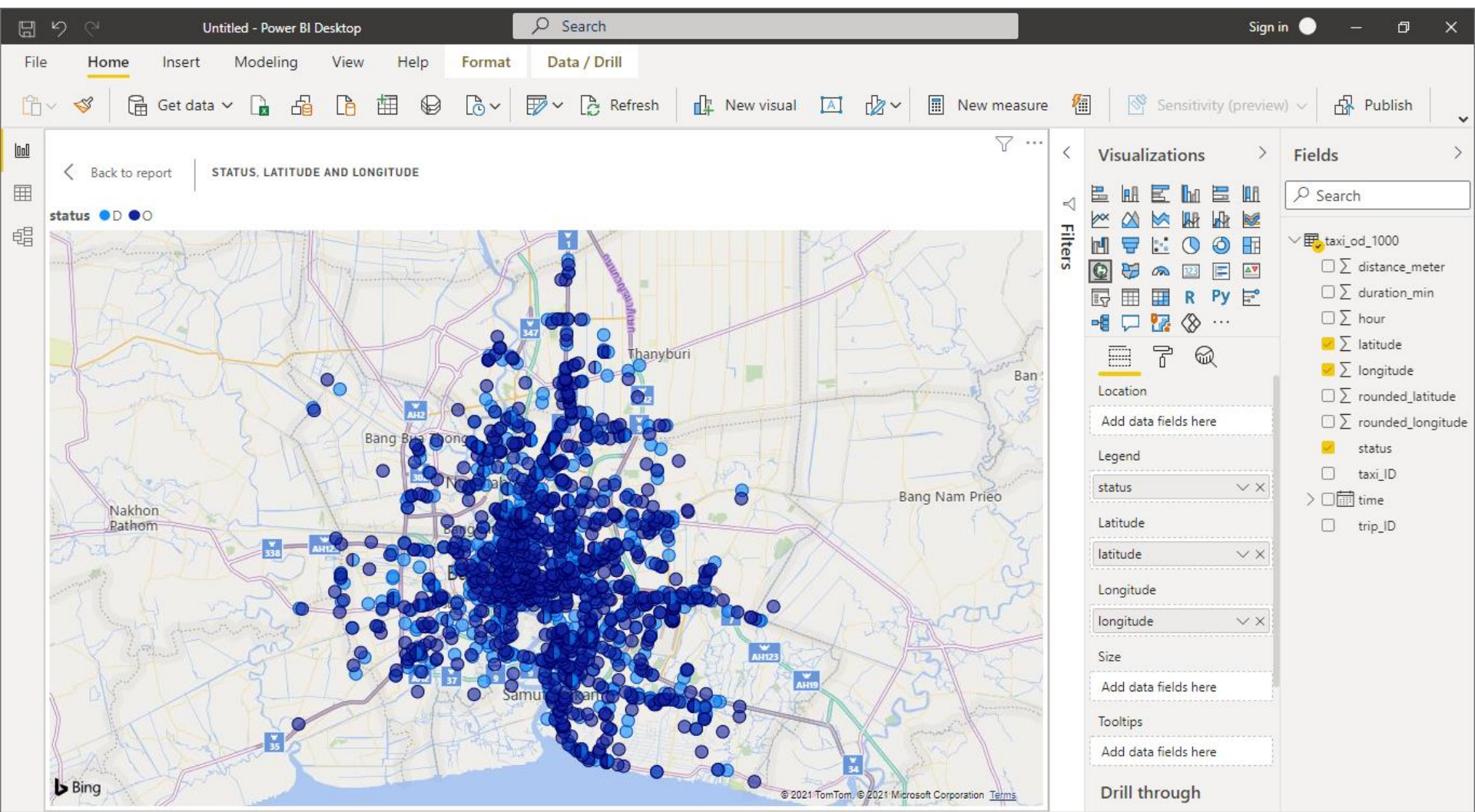
Fields

taxi_od_1000

- ☐ distance_meter
- ☐ duration_min
- ☐ hour
- ☐ latitude
- ☐ longitude
- ☐ rounded_latitude
- ☐ rounded_longitude
- ☐ status
- ☐ taxi_ID
- ☐ time
- ☐ trip_ID

Page 1

Origin & Destination Locations



Add a new column

Untitled - Power BI Desktop

Search

File Home Help **Table tools**

Name taxi_od_1000 Mark as date table Manage relationships New measure Quick measure New column New table

taxi_ID	trip_ID	time	hour	status	latitude	longitude	rounded_latitude	rounded_longitude	distance_meter	duration_min
AK2306	AK2306_T_6203	23-Sep-16 6:03:00 AM	6	O	13.73136425	100.650322	13.73	100.65		
AK2306	AK2306_T_6203	23-Sep-16 6:14:00 AM	6	D	13.73135662	100.6502838	13.73	100.65	5	11
AK2306	AK2306_T_6204	23-Sep-16 6:20:00 AM	6	O	13.73130798	100.6501999	13.73	100.65		
AK2306	AK2306_T_6204	23-Sep-16 6:46:00 AM	6	D	13.73575211	100.6769485	13.74	100.68	7456	26
AK2306	AK2306_T_6206	23-Sep-16 6:50:00 AM	6	O	13.73414803	100.6917877	13.73	100.69		
AK2306	AK2306_T_6206	23-Sep-16 7:26:00 AM	7	D	13.75986385	100.6820679	13.76	100.68	7163	36
AK2306	AK2306_T_6208	23-Sep-16 8:37:00 AM	8	D	13.77928257	100.6778336	13.78	100.68	11417	46
AK2306	AK2306_T_6208	23-Sep-16 7:51:00 AM	7	O	13.73508644	100.6920547	13.74	100.69		
AK2306	AK2306_T_6210	23-Sep-16 8:46:00 AM	8	O	13.75575733	100.6800919	13.76	100.68		
AK2306	AK2306_T_6210	23-Sep-16 9:02:00 AM	9	D	13.7764349	100.6737595	13.78	100.67	2476	16
AK2306	AK2306_T_6212	23-Sep-16 9:28:00 AM	9	O	13.76348686	100.6513519	13.76	100.65		
AK2306	AK2306_T_6212	23-Sep-16 9:31:00 AM	9	D	13.76329994	100.6499252	13.76	100.65	235	3
AK2306	AK2306_T_6214	23-Sep-16 9:41:00 AM	9	O	13.76949406	100.6388321	13.77	100.64		
AK2306	AK2306_T_6214	23-Sep-16 9:43:00 AM	9	D	13.77286339	100.6319122	13.77	100.63	841	2
AK2306	AK2306_T_6216	23-Sep-16 10:07:00 AM	10	D	13.79077721	100.6109772	13.79	100.61	1650	6
AK2306	AK2306_T_6216	23-Sep-16 10:01:00 AM	10	O	13.80350208	100.6180191	13.8	100.62		
AK2306	AK2306_T_6218	23-Sep-16 10:28:00 AM	10	D	13.76246834	100.6162796	13.76	100.62	2758	10
AK2306	AK2306_T_6218	23-Sep-16 10:18:00 AM	10	O	13.76608276	100.6086731	13.77	100.61		
AK2306	AK2306_T_6222	23-Sep-16 11:08:00 AM	11	O	13.77886581	100.6077042	13.78	100.61		
AK2306	AK2306_T_6222	23-Sep-16 12:55:00 PM	12	D	13.76039696	100.6454391	13.76	100.65	10610	107
AK2306	AK2306_T_6224	23-Sep-16 1:04:00 PM	13	O	13.75687313	100.6182327	13.76	100.62		
AK2306	AK2306_T_6224	23-Sep-16 1:33:00 PM	13	D	13.73677254	100.6206589	13.74	100.62	8683	29
AK2306	AK2306_T_6226	23-Sep-16 2:11:00 PM	14	D	13.78858566	100.678009	13.79	100.68	7717	19
AK2306	AK2306_T_6226	23-Sep-16 1:52:00 PM	13	O	13.74224472	100.694664	13.74	100.69		
AK2306	AK2306_T_6228	23-Sep-16 2:30:00 PM	14	O	13.81109715	100.7171402	13.81	100.72		
AK2306	AK2306_T_6228	23-Sep-16 2:54:00 PM	14	D	13.77783775	100.6643219	13.78	100.66	6938	24
AK2306	AK2306_T_6229	23-Sep-16 3:01:00 PM	15	O	13.7775288	100.6642227	13.78	100.66		

Table: taxi_od_1000 (2,000 rows)

Fields

Search

taxi_od_1000

- distance_meter
- duration_min
- hour
- latitude
- longitude
- rounded_latitude
- rounded_longitude
- status
- taxi_ID
- time
- trip_ID

Add a new column

Untitled - Power BI Desktop

Search

File Home Help **Table tools**

Name taxi_od_1000 Mark as date table Manage relationships New measure Quick measure New column New table

taxi_ID	trip_ID	time	hour	status	latitude	longitude	rounded_latitude	rounded_longitude	distance_meter	duration_min
AK2306	AK2306_T_6203	23-Sep-16 6:03:00 AM	6	O	13.73136425	100.650322	13.73	100.65		
AK2306	AK2306_T_6203	23-Sep-16 6:14:00 AM	6	D	13.73135662	100.6502838	13.73	100.65	5	11
AK2306	AK2306_T_6204	23-Sep-16 6:20:00 AM	6	O	13.73130798	100.6501999	13.73	100.65		
AK2306	AK2306_T_6204	23-Sep-16 6:46:00 AM	6	D	13.73575211	100.6769485	13.74	100.68	7456	26
AK2306	AK2306_T_6206	23-Sep-16 6:50:00 AM	6	O	13.73414803	100.6917877	13.73	100.69		
AK2306	AK2306_T_6206	23-Sep-16 7:26:00 AM	7	D	13.75986385	100.6820679	13.76	100.68	7163	36
AK2306	AK2306_T_6208	23-Sep-16 8:37:00 AM	8	D	13.77928257	100.6778336	13.78	100.68	11417	46
AK2306	AK2306_T_6208	23-Sep-16 7:51:00 AM	7	O	13.73508644	100.6920547	13.74	100.69		
AK2306	AK2306_T_6210	23-Sep-16 8:46:00 AM	8	O	13.75575733	100.6800919	13.76	100.68		
AK2306	AK2306_T_6210	23-Sep-16 9:02:00 AM	9	D	13.7764349	100.6737595	13.78	100.67	2476	16
AK2306	AK2306_T_6212	23-Sep-16 9:28:00 AM	9	O	13.76348686	100.6513519	13.76	100.65		
AK2306	AK2306_T_6212	23-Sep-16 9:31:00 AM	9	D	13.76329994	100.6499252	13.76	100.65	235	3
AK2306	AK2306_T_6214	23-Sep-16 9:41:00 AM	9	O	13.76949406	100.6388321	13.77	100.64		
AK2306	AK2306_T_6214	23-Sep-16 9:43:00 AM	9	D	13.77286339	100.6319122	13.77	100.63	841	2
AK2306	AK2306_T_6216	23-Sep-16 10:07:00 AM	10	D	13.79077721	100.6109772	13.79	100.61	1650	6
AK2306	AK2306_T_6216	23-Sep-16 10:01:00 AM	10	O	13.80350208	100.6180191	13.8	100.62		
AK2306	AK2306_T_6218	23-Sep-16 10:28:00 AM	10	D	13.76246834	100.6162796	13.76	100.62	2758	10
AK2306	AK2306_T_6218	23-Sep-16 10:18:00 AM	10	O	13.76608276	100.6086731	13.77	100.61		
AK2306	AK2306_T_6222	23-Sep-16 11:08:00 AM	11	O	13.77886581	100.6077042	13.78	100.61		
AK2306	AK2306_T_6222	23-Sep-16 12:55:00 PM	12	D	13.76039696	100.6454391	13.76	100.65	10610	107
AK2306	AK2306_T_6224	23-Sep-16 1:04:00 PM	13	O	13.75687313	100.6182327	13.76	100.62		
AK2306	AK2306_T_6224	23-Sep-16 1:33:00 PM	13	D	13.73677254	100.6206589	13.74	100.62	8683	29
AK2306	AK2306_T_6226	23-Sep-16 2:11:00 PM	14	D	13.78858566	100.678009	13.79	100.68	7717	19
AK2306	AK2306_T_6226	23-Sep-16 1:52:00 PM	13	O	13.74224472	100.694664	13.74	100.69		
AK2306	AK2306_T_6228	23-Sep-16 2:30:00 PM	14	O	13.81109715	100.7171402	13.81	100.72		
AK2306	AK2306_T_6228	23-Sep-16 2:54:00 PM	14	D	13.77783775	100.6643219	13.78	100.66	6938	24
AK2306	AK2306_T_6229	23-Sep-16 3:01:00 PM	15	O	13.7775288	100.6642227	13.78	100.66		

Fields

Search

- New measure
- New column
- New quick measure
- Refresh data
- Edit query
- Manage relationships
- Incremental refresh
- Manage aggregations
- Copy Table
- Rename
- Delete from model
- Hide in report view
- Mark as date table
- Unhide all
- Collapse all
- Expand all

Table: taxi_od_1000 (2,000 rows)

Speed (km/h)

$\text{speed_kmh} = \text{taxi_od}[\text{distance_meter}] / \text{taxi_od}[\text{duration_min}] / 1000 * 60$

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Search

File Home Help Table tools Column tools

Name Column 123 Whole number % \$ % , .00 →0 Auto Σ Sum

1 $\text{speed_kmh} = \text{taxi_od_1000}[\text{distance_meter}] / \text{taxi_od_1000}[\text{duration_min}] / 1000 * 60$

taxi_ID	trip_ID	time	hour	status	latitude	longitude	rounded_latitude	rounded_longitude	distance_meter	duration_min	Column
AK2306	AK2306_T_6203	23-Sep-16 6:03:00 AM	6	O	13.73136425	100.650322	13.73	100.65			
AK2306	AK2306_T_6203	23-Sep-16 6:14:00 AM	6	D	13.73135662	100.6502838	13.73	100.65	5	11	
AK2306	AK2306_T_6204	23-Sep-16 6:20:00 AM	6	O	13.73130798	100.6501999	13.73	100.65			
AK2306	AK2306_T_6204	23-Sep-16 6:46:00 AM	6	D	13.73575211	100.6769485	13.74	100.68	7456	26	
AK2306	AK2306_T_6206	23-Sep-16 6:50:00 AM	6	O	13.73414803	100.6917877	13.73	100.69			
AK2306	AK2306_T_6206	23-Sep-16 7:26:00 AM	7	D	13.75986385	100.6820679	13.76	100.68	7163	36	
AK2306	AK2306_T_6208	23-Sep-16 8:37:00 AM	8	D	13.77928257	100.6778336	13.78	100.68	11417	46	
AK2306	AK2306_T_6208	23-Sep-16 7:51:00 AM	7	O	13.73508644	100.6920547	13.74	100.69			
AK2306	AK2306_T_6210	23-Sep-16 8:46:00 AM	8	O	13.75575733	100.6800919	13.76	100.68			
AK2306	AK2306_T_6210	23-Sep-16 9:02:00 AM	9	D	13.7764349	100.6737595	13.78	100.67	2476	16	
AK2306	AK2306_T_6212	23-Sep-16 9:28:00 AM	9	O	13.76348686	100.6513519	13.76	100.65			
AK2306	AK2306_T_6212	23-Sep-16 9:31:00 AM	9	D	13.76329994	100.6499252	13.76	100.65	235	3	
AK2306	AK2306_T_6214	23-Sep-16 9:41:00 AM	9	O	13.76949406	100.6388321	13.77	100.64			
AK2306	AK2306_T_6214	23-Sep-16 9:43:00 AM	9	D	13.77286339	100.6319122	13.77	100.63	841	2	
AK2306	AK2306_T_6216	23-Sep-16 10:07:00 AM	10	D	13.79077721	100.6109772	13.79	100.61	1650	6	
AK2306	AK2306_T_6216	23-Sep-16 10:01:00 AM	10	O	13.80350208	100.6180191	13.8	100.62			
AK2306	AK2306_T_6218	23-Sep-16 10:28:00 AM	10	D	13.76246834	100.6162796	13.76	100.62	2758	10	
AK2306	AK2306_T_6218	23-Sep-16 10:18:00 AM	10	O	13.76608276	100.6086731	13.77	100.61			
AK2306	AK2306_T_6222	23-Sep-16 11:08:00 AM	11	O	13.77886581	100.6077042	13.78	100.61			
AK2306	AK2306_T_6222	23-Sep-16 12:55:00 PM	12	D	13.76039696	100.6454391	13.76	100.65	10610	107	
AK2306	AK2306_T_6224	23-Sep-16 1:04:00 PM	13	O	13.75687313	100.6182327	13.76	100.62			
AK2306	AK2306_T_6224	23-Sep-16 1:33:00 PM	13	D	13.73677254	100.6206589	13.74	100.62	8683	29	
AK2306	AK2306_T_6226	23-Sep-16 2:11:00 PM	14	D	13.78858566	100.678009	13.79	100.68	7717	19	
AK2306	AK2306_T_6226	23-Sep-16 1:52:00 PM	13	O	13.74224472	100.694664	13.74	100.69			
AK2306	AK2306_T_6228	23-Sep-16 2:30:00 PM	14	O	13.81109715	100.7171402	13.81	100.72			
AK2306	AK2306_T_6228	23-Sep-16 2:54:00 PM	14	D	13.77783775	100.6643219	13.78	100.66	6938	24	
AK2306	AK2306_T_6229	23-Sep-16 3:01:00 PM	15	O	13.77775288	100.6642227	13.78	100.66			

Table: taxi_od_1000 (2,000 rows) Column: Column (1 distinct values)

Fields

Search

taxi_od_1000

Column

- distance_meter
- duration_min
- hour
- latitude
- longitude
- rounded_latitude
- rounded_longitude
- status
- taxi_ID
- time
- trip_ID

Speed (km/h)

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Search

File Home Help Table tools Column tools

Name speed_kmh 123 Decimal number % General \$ % , .00 Auto Σ Sum

1 speed_kmh = taxi_od_1000[distance_meter]/taxi_od_1000[duration_min]/1000*60

taxi_ID	trip_ID	time	hour	status	latitude	longitude	rounded_latitude	rounded_longitude	distance_meter	duration_min	speed_kmh
AK2306	AK2306_T_6203	23-Sep-16 6:03:00 AM	6	O	13.73136425	100.650322	13.73	100.65			
AK2306	AK2306_T_6203	23-Sep-16 6:14:00 AM	6	D	13.73135662	100.6502838	13.73	100.65	5	11	0.0272727272727273
AK2306	AK2306_T_6204	23-Sep-16 6:20:00 AM	6	O	13.73130798	100.6501999	13.73	100.65			
AK2306	AK2306_T_6204	23-Sep-16 6:46:00 AM	6	D	13.73575211	100.6769485	13.74	100.68	7456	26	17.2061538461538
AK2306	AK2306_T_6206	23-Sep-16 6:50:00 AM	6	O	13.73414803	100.6917877	13.73	100.69			
AK2306	AK2306_T_6206	23-Sep-16 7:26:00 AM	7	D	13.75986385	100.6820679	13.76	100.68	7163	36	11.9383333333333
AK2306	AK2306_T_6208	23-Sep-16 8:37:00 AM	8	D	13.77928257	100.6778336	13.78	100.68	11417	46	14.8917391304348
AK2306	AK2306_T_6208	23-Sep-16 7:51:00 AM	7	O	13.73508644	100.6920547	13.74	100.69			
AK2306	AK2306_T_6210	23-Sep-16 8:46:00 AM	8	O	13.75575733	100.6800919	13.76	100.68			
AK2306	AK2306_T_6210	23-Sep-16 9:02:00 AM	9	D	13.7764349	100.6737595	13.78	100.67	2476	16	9.285
AK2306	AK2306_T_6212	23-Sep-16 9:28:00 AM	9	O	13.76348686	100.6513519	13.76	100.65			
AK2306	AK2306_T_6212	23-Sep-16 9:31:00 AM	9	D	13.76329994	100.6499252	13.76	100.65	235	3	4.7
AK2306	AK2306_T_6214	23-Sep-16 9:41:00 AM	9	O	13.76949406	100.6388321	13.77	100.64			
AK2306	AK2306_T_6214	23-Sep-16 9:43:00 AM	9	D	13.77286339	100.6319122	13.77	100.63	841	2	25.23
AK2306	AK2306_T_6216	23-Sep-16 10:07:00 AM	10	D	13.79077721	100.6109772	13.79	100.61	1650	6	16.5
AK2306	AK2306_T_6216	23-Sep-16 10:01:00 AM	10	O	13.80350208	100.6180191	13.8	100.62			
AK2306	AK2306_T_6218	23-Sep-16 10:28:00 AM	10	D	13.76246834	100.6162796	13.76	100.62	2758	10	16.548
AK2306	AK2306_T_6218	23-Sep-16 10:18:00 AM	10	O	13.76608276	100.6086731	13.77	100.61			
AK2306	AK2306_T_6222	23-Sep-16 11:08:00 AM	11	O	13.77886581	100.6077042	13.78	100.61			
AK2306	AK2306_T_6222	23-Sep-16 12:55:00 PM	12	D	13.76039696	100.6454391	13.76	100.65	10610	107	5.94953271028037
AK2306	AK2306_T_6224	23-Sep-16 1:04:00 PM	13	O	13.75687313	100.6182327	13.76	100.62			
AK2306	AK2306_T_6224	23-Sep-16 1:33:00 PM	13	D	13.73677254	100.6206589	13.74	100.62	8683	29	17.9648275862069
AK2306	AK2306_T_6226	23-Sep-16 2:11:00 PM	14	D	13.78858566	100.678009	13.79	100.68	7717	19	24.3694736842105
AK2306	AK2306_T_6226	23-Sep-16 1:52:00 PM	13	O	13.74224472	100.694664	13.74	100.69			
AK2306	AK2306_T_6228	23-Sep-16 2:30:00 PM	14	O	13.81109715	100.7171402	13.81	100.72			
AK2306	AK2306_T_6228	23-Sep-16 2:54:00 PM	14	D	13.77783775	100.6643219	13.78	100.66	6938	24	17.345
AK2306	AK2306_T_6229	23-Sep-16 3:01:00 PM	15	O	13.7775288	100.6642227	13.78	100.66			

Fields

Search

taxi_od_1000

- distance_meter
- duration_min
- hour
- latitude
- longitude
- rounded_latitude
- rounded_longitude
- speed_kmh
- status
- taxi_ID
- time
- trip_ID

Table: taxi_od_1000 (2,000 rows) Column: speed_kmh (946 distinct values)

Taxi Dashboard

