



# TUTORIALS OF MAKING COVID-19 DATA VISUALIZATION

By : Gadis Aura Az Zahra Hsb



## Step 1

The screenshot shows the Google Data Studio web interface. At the top, the URL bar contains "datastudio.google.com". Below the URL bar, the header includes the Data Studio logo, a search bar, and user profile icons. The main navigation bar has tabs for "Recent", "Reports" (which is selected), "Data sources", and "Explorer". On the left, a sidebar titled "Recent" lists "Shared with me", "Owned by me", "Trash", and "Templates". The "Templates" section is expanded, showing a "Blank Report" option. In the center, there's a "Start with a Template" section featuring several report cards: "Blank Report" (selected), "Tutorial Report", "Acme Marketing Google Analytics", and "Search Console Report". To the right, a "Template Gallery" dropdown is open, showing "Google Search Console" and "Search Console Report".

<https://datastudio.google.com>



Visit <https://datastudio.google.com>  
Login or sign up with your Gmail account  
Then Create New Report / Blank Report



## Step 2

The screenshot shows a web browser displaying the Kaggle website at [kaggle.com/hendratno/covid19-indonesia](https://kaggle.com/hendratno/covid19-indonesia). The page title is "COVID-19 Indonesia Dataset". The main content features a map of Indonesia with red and yellow regions, and a close-up image of a COVID-19 virus. Below the title, it says "Based on reports from official sources". A user profile for "Hendratno" is shown, indicating the dataset was updated 3 months ago (Version 81). Navigation tabs include Data (selected), Tasks (1), Code (17), Discussion, Activity, and Metadata. A prominent blue button at the bottom contains the URL <https://www.kaggle.com/hendratno/covid19-indonesia>.



Download the dataset from Kaggle

## Step 3

The screenshot shows the 'Add data to report' interface in Google Data Studio. At the top, there are navigation icons, a title bar 'Untitled Report', and a toolbar with options like 'Share', 'View', and 'More'. Below the toolbar is a menu bar with 'File', 'View', 'Page', and 'Help'. The main area is titled 'Add data to report' and contains a search bar labeled 'Search'. There are several data source cards: 'Google Analytics' (By Google, Connect to Google Analytics), 'Google Ads' (By Google, Connect to Google Ads performance report data), 'Google Sheets' (By Google, Connect to Google Sheets), 'BigQuery' (By Google, Connect to BigQuery tables and custom queries), 'File Upload' (highlighted with a red box, By Google, Connect to CSV (comma-separated values) files), and 'Campaign Manager 360' (By Google, Connect to Campaign Manager 360 data).



Upload/add the dataset to Google Data Studio

## Step 4

The screenshot shows the 'Add data to report' dialog in Google Data Studio. At the top, it displays basic report statistics: TOTAL FILE SIZE (4 MB), NUMBER OF FILES (1), CREATION DATE (10/15/21 12:56 AM), and LAST MODIFIED DATE (10/15/21 12:56 AM). Below this, a table lists the uploaded file: covid\_19\_indonesia\_time\_series\_all.csv. The 'Status' column for this file shows 'Uploaded'. A red box highlights this status entry. At the bottom right of the dialog, there are 'Cancel' and 'Add' buttons, with 'Add' also being highlighted by a red box.

TOTAL FILE SIZE	NUMBER OF FILES	CREATION DATE	LAST MODIFIED DATE
4 MB (4% of 100MB used)	1	10/15/21 12:56 AM	10/15/21 12:56 AM

**ADD FILES** File must contain the same schema. [Learn More](#)

File name	Uploaded at	Size	Status
covid_19_indonesia_time_series_all.csv	10/15/21 12:56 AM	4 MB	Uploaded

[CREATE NEW DATA SET](#) [DELETE DATA SET](#)

[Cancel](#) [Add](#)

Wait until the dataset is already uploaded



## Step 5

The screenshot shows a Google Data Studio interface. At the top, there's a navigation bar with back, forward, and refresh buttons, followed by the URL `datastudio.google.com/reporting/5f0d7321-ad06-4749-b99b-11feb9fd2ade/page/4LxcC/edit`. Below the URL is the title "Untitled Report" and a menu bar with File, View, Page, Help. The main area has tabs for Add page, Add data, Add a chart, Add a control, Theme and layout. A modal dialog box is centered over the page, titled "You are about to add data to this report". It lists a single file: "covid\_19\_indonesia\_time\_series\_all.csv". Below the file name is a note: "Note that Report Editors can create charts using the new data source(s), and can add dimensions and metrics not currently included in the report." There's a checkbox for "Don't show me this again" and two buttons at the bottom: "CANCEL" and "ADD TO REPORT". The "ADD TO REPORT" button is highlighted with a red box. In the background, the main Data Studio interface shows a "File Upload" section with a "Data Sets" table containing the same file entry, and a "TOTAL FILE SIZE" of 4 MB.

Click ADD TO REPORT

## Step 6

The screenshot shows the Google Data Studio interface during the creation of a report. The top navigation bar includes 'File', 'Edit', 'View', 'Insert', 'Page', 'Arrange', 'Resource', and 'Help'. Below the navigation is a toolbar with icons for 'Add page', 'Add data', 'Add a chart', 'Add a control', and 'Theme and layout'. A sidebar on the right is titled 'Chart > Table' and contains sections for 'DATA' and 'STYLE'. The 'DATA' section shows a data source named 'covid\_19\_indonesia' with a 'BLEND DATA' button. It lists dimensions: 'Date' (selected), 'Location ISO Code', and 'Location'. Metrics listed include 'Record Count' (selected) and 'New Active Cases'. The main workspace displays a table chart titled 'Record Count' with the following data:

Location ISO Code	Record Count
1. ID-JI	549
2. ID-JK	496
3. ID-N	495
4. ID-JB	495
5. ID-R	495
6. ID-BT	491
7. ID-JT	489
8. ID-SG	487

Pagination at the bottom of the table indicates 1-34 / 34.

Dataset Uploaded



## Step 7

The screenshot shows the Google Data Studio interface during the creation of an 'Untitled Report'. The main area displays a table chart titled 'Record Count' with the following data:

Location ISO Code	Record Count
1. ID-JI	549
2. ID-JK	496
3. IDN	495
4. ID-JB	495
5. ID-RI	495
6. ID-BT	491
7. ID-JT	489
8. ID-SG	487

The sidebar on the right contains the 'Chart > Table' configuration panel. The 'DATA' tab is selected, showing the data source as 'covid\_19\_indonesia' and the dimension 'Date' highlighted in green. A red arrow points from the text 'Add Location to Dimension' to the 'Location ISO Code' dimension field, which is also highlighted in green. The 'STYLE' tab is visible but not selected.

Add Location to Dimension

Location ISO Code	Record Count
1. ID-JI	549
2. ID-JK	496
3. IDN	495
4. ID-JB	495
5. ID-RI	495
6. ID-BT	491
7. ID-JT	489
8. ID-SG	487

Chart > Table

**DATA** **STYLE**

Data source: covid\_19\_indonesia

Date Range Dimension: Date

Dimension: Location ISO Code

Metric: Record Count

Available Fields:

- Type to search
- Kind
- Latitude
- Location
- Location ISO Code
- Longitude
- Name
- New Active Cases
- New Cases
- New Cases per Million
- New Deaths
- New Deaths per Million
- ADD A FIELD
- ADD A PARAMETER

## Step 8

The screenshot shows the Google Data Studio interface during Step 8. On the left, a table visualization displays data with 'Location' in the first column and 'Record Count' in the second column. The data includes:

Location	Record Count
1. Jawa Timur	549
2. DKI Jakarta	496
3. Indonesia	495
4. Jawa Barat	495
5. Riau	495
6. Banten	491
7. Jawa Tengah	489
8. Sulawesi Tenggara	487

On the right, the metric panel is open under 'Chart > Table'. It shows the 'DATA' tab selected, with 'Record Count' currently assigned to the metric. A red arrow points to the 'Record Count' button in the 'Metric' section. The 'Available Fields' sidebar lists various metrics like 'New Cases' and 'New Deaths per Million'.

Then, add New Cases to Metric and remove Record Count from Metric

## Step 9

The screenshot shows a Google Data Studio report titled "Untitled Report". On the left, there is a table with two columns: "Location" and "New Cases". The table lists 13 locations from 1 to 13, with their corresponding new case counts. A red box highlights the value "189,70" for the location "Riau". The right sidebar is titled "Chart > Table" and contains sections for "DATA" and "STYLE". The "DATA" section includes options for "Auto date range", "Comparison date range", and a "Table Filter" button. The "STYLE" section includes a search bar and a list of available fields such as Latitude, Location, Location ISO Code, Location Level, Longitude, Name, New Active Cases, New Cases, New Cases per Million, New Deaths, New Deaths per Million, New Recovered, Population, Population Density, Province, and buttons for "ADD A FIELD" and "ADD A PARAMETER".

	Location	New Cases
1.	Indonesia	2,455,912
2.	DKI Jakarta	636,346
3.	Jawa Barat	440,379
4.	Jawa Tengah	285,348
5.	Jawa Timur	189,70
6.	Kalimantan Timur	85,702
7.	Riau	74,899
8.	Daerah Istimewa Yogyakarta	72,560
9.	Sulawesi Selatan	67,280
10.	Banten	61,689
11.	Sumatera Barat	55,675
12.	Bali	54,079
13.	Sumatera Utara	38,840

We want to remove  
Indonesia from the lists bcs  
we just need to show  
Province in "Location"  
How?



Just scroll down & Click the  
"Add A Filter" menu

## Step 10

The screenshot shows the Google Data Studio interface during the creation of a filter. At the top, the URL is [datastudio.google.com/reporting/5f0d7321-ad06-4749-b99b-11feb9fd2ade/page/4LxcC/edit](https://datastudio.google.com/reporting/5f0d7321-ad06-4749-b99b-11feb9fd2ade/page/4LxcC/edit). The main area displays a table of 'New Cases' by 'Location'. The sidebar on the right is titled 'Filter picker' and lists the same data. Below the table, a 'Create Filter' dialog is open. The 'Name' field contains 'covid\_19\_indonesia\_time\_series\_all.csv'. The filter conditions are set to 'Exclude' 'Location' 'Contains' 'Indonesia'. There are also 'AND' and 'OR' buttons. A note at the bottom says 'This filter has 1 clause'. A blue 'SAVE' button is visible.

Location	New Cases
1. Indonesia	2,455,912
2. DKI Jakarta	636,346
3. Jawa Barat	440,379
4. Jawa Tengah	285,348
5. Jawa Timur	180,705

Filter picker

New Cases

Location

1. Indonesia

2. DKI Jakarta

3. Jawa Barat

4. Jawa Tengah

5. Jawa Timur

CREATE A FILTER

Name: covid\_19\_indonesia\_time\_series\_all.csv

Exclude Location Contains Indonesia

AND OR

This filter has 1 clause

SAVE

Then, choose Exclude – Location – Contains – Indonesia to remove Indonesia from the lists

## Step 11

The screenshot shows a Google Data Studio report titled "Untitled Report". The main area displays a table with 13 rows, each representing a location and its corresponding number of new cases. The table is sorted by "New Cases" in descending order. The locations listed are: DKI Jakarta, Jawa Barat, Jawa Tengah, Jawa Timur, Kalimantan Timur, Riau, Daerah Istimewa Yogyakarta, Sulawesi Selatan, Banten, Sumatera Barat, Bali, Sumatera Utara, and Kalimantan Selatan. The "New Cases" column contains values such as 636,346, 440,379, 285,348, etc. A blue border surrounds the entire table. To the right of the table is a sidebar titled "Chart > Table" which includes sections for "DATA" and "STYLE". The "DATA" section shows a list of available fields including Latitude, Location, Location ISO Code, Location Level, Longitude, Name, New Active Cases, New Cases, New Cases per Million, New Deaths, New Deaths per Million, New Recovered, Population, Population Density, Province, and additional options for adding fields or parameters.

	Location	New Cases
1.	DKI Jakarta	636,346
2.	Jawa Barat	440,379
3.	Jawa Tengah	285,348
4.	Jawa Timur	189,705
5.	Kalimantan Timur	83,762
6.	Riau	74,899
7.	Daerah Istimewa Yogyakarta	72,560
8.	Sulawesi Selatan	67,280
9.	Banten	61,689
10.	Sumatera Barat	55,675
11.	Bali	54,079
12.	Sumatera Utara	38,040
13.	Kalimantan Selatan	37,176

Yayyy.... already removed



## Step 12

The screenshot shows the Google Data Studio interface. On the left, there is a table titled "New Cases" with the following data:

Location	New Cases
DKI Jakarta	636,346
Jawa Barat	440,379
Jawa Tengah	285,348
Jawa Timur	189,705
Kalimantan Timur	83,762
Riau	74,899
Daerah Istimewa Yogyakarta	72,560
Sulawesi Selatan	67,280
Banten	61,689
Sumatera Barat	55,675
Bali	54,079
Sumatera Utara	38,040
Kalimantan Selatan	37,176

On the right, a sidebar titled "Chart > Table" is open, showing various chart and map options. A red box highlights the "Filled map" option, which is the second item in the second row of the grid.

Then, change the chart style from "Table" to "Google Maps"

## Step 13

The screenshot shows a Google Data Studio report titled "Untitled Report". The main area displays a map of Southeast Asia and the Pacific region, with various countries and bodies of water labeled. The map is styled with blue and grey colors. In the bottom left corner of the map area, there is a small "Google" watermark. Below the map, the text "Record Count 15,788" is visible. The top navigation bar includes links for File, Edit, View, Insert, Page, Arrange, Resource, and Help. The toolbar below the navigation bar contains icons for Add page, Add data, Add a chart, Add a control, and Theme and layout. On the right side of the screen, there is a sidebar titled "Chart > Google Maps". This sidebar features a grid of chart preview thumbnails, with one specific chart highlighted in blue. Below the thumbnails, there are tabs for "DATA" and "STYLE". Under the "DATA" tab, the "Data source" section is expanded, showing a list of fields: "covid\_19\_indonesia", "Date Range Dimension", "Date", "Fields", "Location", and "Location Level". The "Edit data source" button is located within this section and is highlighted with a red box. To the right of the "Data source" list, there is a "Available Fields" section with a search bar and a list of available fields: Latitude, Location, Location ISO Code, Location Level, ADD A FIELD, and ADD A PARAMETER.

Click "Edit Data Source"

## Step 14

The screenshot shows the Google Data Studio interface during the configuration of a report. A modal window titled "Chart > Google Maps" is open, displaying various visualization options. In the background, a world map is visible with a specific area highlighted over Southeast Asia. On the left, the data source panel shows a CSV file named "covid\_19\_indonesia\_time\_series\_all.csv" with several fields listed: Population, Population Density, Province, and Special Status. A dropdown menu is open over the "Province" field, showing a list of dimension types: Continent, Subcontinent, Country, Country subdivision (1st level), Country subdivision (2nd level), Designated market area, City, Postal code, Address, and Latitude, Longitude. The "Country subdivision (1st level)" option is currently selected. At the bottom of the modal, there are buttons for "ADD A FIELD", "ADD A PARAMETER", and "DONE". A status bar at the top right indicates "12 hours" and "Community visualizations access: On".

Then, scroll to dimension "Province" and change type from "Text" to "Geo" and choose "Country Subdivision (1st Level)

## Step 15

The screenshot shows the Google Data Studio interface during the creation of an 'Untitled Report'. A modal dialog box is centered over the main workspace, displaying the following message:

**i You are changing Province from Text to Country subdivision (1st level).**  
If you're sure you want to make this change, click CONTINUE.

Below the message are two buttons: **CANCEL** and **CONTINUE**. The **CONTINUE** button is highlighted with a blue background. In the background, the report canvas shows a world map with a specific region highlighted, and a sidebar on the right displays various chart and visualization options.

At the bottom of the screen, there is a table titled 'Fields' listing four data sources:

Field	Type	Default Aggregation	Description
Population	Number	Sum	
Population Density	Number	Sum	
Province	Text	None	
Special Status	Text	None	

Below the table are buttons for **REFRESH FIELDS** and **42 / 42 Fields**.

Click Continue

## Step 16

The screenshot shows the Google Data Studio interface with an 'Untitled Report'. A map of Southeast Asia is displayed, showing countries like Indonesia, Malaysia, and Papua New Guinea in blue. The map has a legend in the bottom right corner. The 'Chart > Google Maps' panel is open on the right side. In the 'DATA' tab, under 'Location', the 'Country' field is selected and highlighted with a green background. A red arrow points from the text below to this green-highlighted 'Country' field. Other fields listed include Province, Special Status, Time, Total Active Cases, Total Cases, Total Cities, Total Deaths, and various metrics like New Cases, New Deaths, etc.

Chart > Google Maps

**DATA**    **STYLE**

Data source: covid\_19\_indonesia...

BLEND DATA: Date Range Dimension: Date

Fields: Location: Country (highlighted with a red arrow)

Province

Special Status

Time

Total Active Cases

Total Cases

Total Cities

Total Deaths

Add dimension

Record Count

Default date range: Auto

Custom

Available Fields:

- New Cases
- New Cases per Million
- New Deaths
- New Deaths per Million
- New Recovered
- Population
- Population Density
- Record Count
- Total Active Cases
- Total Cases
- Total Cases per Million
- Total Cities
- Total Deaths
- Total Deaths per Million

ADD A FIELD

ADD A PARAMETER

Add / drag "Province" to Location,  
and remove "Country" from Location

## Step 17

The screenshot shows the Google Data Studio interface. On the left, there is a map of Southeast Asia with various regions labeled: Sri Lanka, Maldives, Thailand, Laos, Cambodia, Vietnam, Malaysia, Singapore, Brunei, Indonesia, and Papua New Guinea. The map includes labels for the Gulf of Thailand, Palawan, Negros, Mindanao, Basilan Island, Celebes Sea, Java Sea, Banda Sea, Timor Sea, and Bismarck Sea. Below the map, it says "Record Count 457" and "549". On the right, there is a sidebar titled "Theme and layout" which displays two theme cards: "Constellation" and "Groovy". The "Constellation" card is highlighted with a red border. Both cards feature a title, a "Text" section with sample text, and a "Chart" section with a bar chart and a pie chart. At the bottom of the sidebar, there is a button labeled "Extract theme from image".

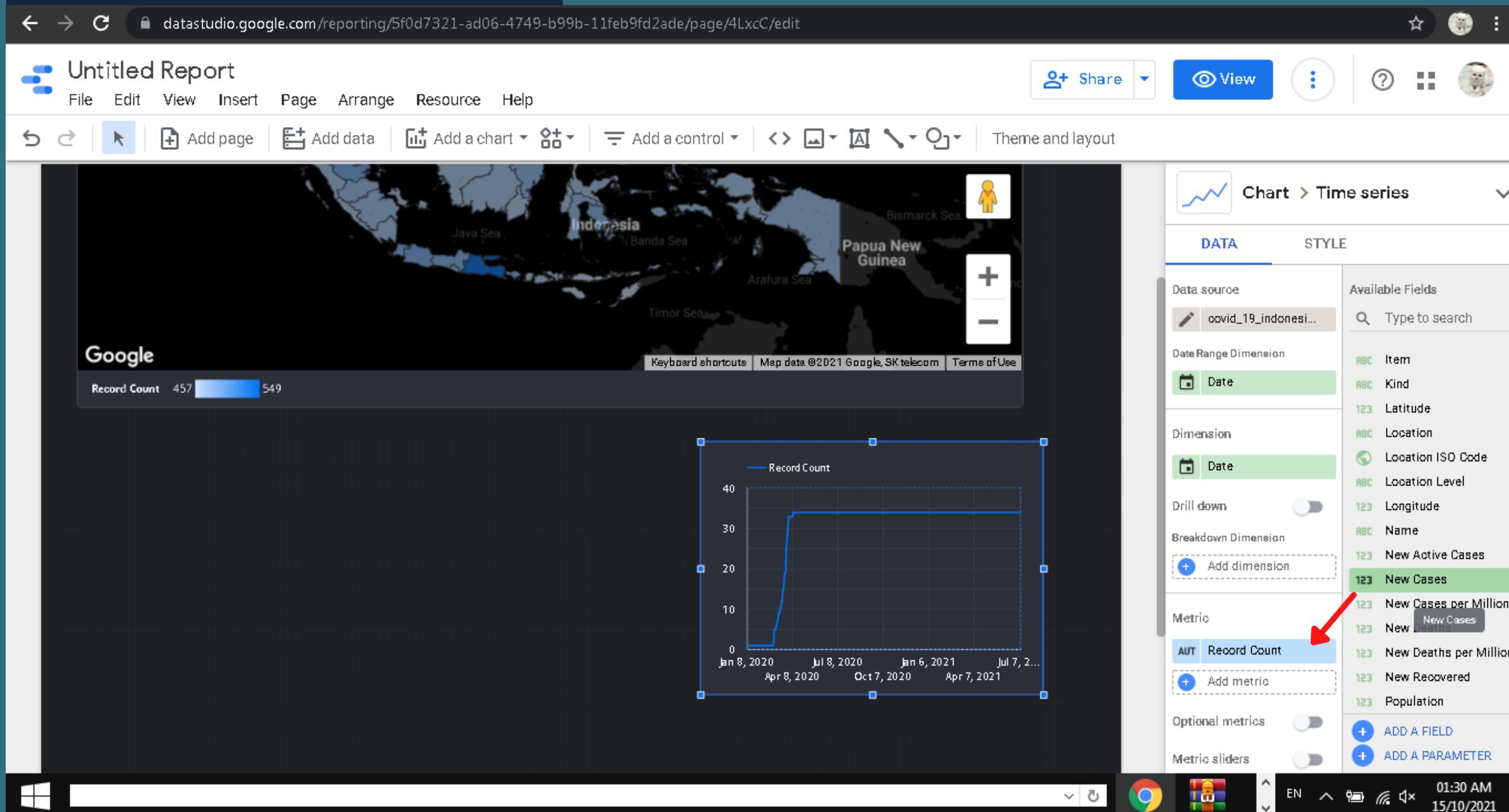
its already finished.  
We can change the  
chart style to Dark Mode

## Step 18

The screenshot shows the Google Data Studio interface during the creation of an 'Untitled Report'. The main area displays a map of Southeast Asia with a dark theme. A sidebar on the left contains a navigation menu and a 'Record Count' indicator (457 / 549). The top navigation bar includes links for File, Edit, View, Insert, Page, Arrange, Resource, Help, Share, and View. The toolbar features icons for Add page, Add data, Add a chart (selected), Add a control, and Theme and layout. A large central panel shows a 'Time series chart' icon from a library of visualization options. To the right, there are three preview cards: 'Edge' (Constellation, Text, Pie chart), 'Constellation' (Text, Bar chart, Pie chart), and 'Groovy' (Text, Bar chart, Pie chart). At the bottom right of the central panel is a button labeled 'Extract theme from image'.

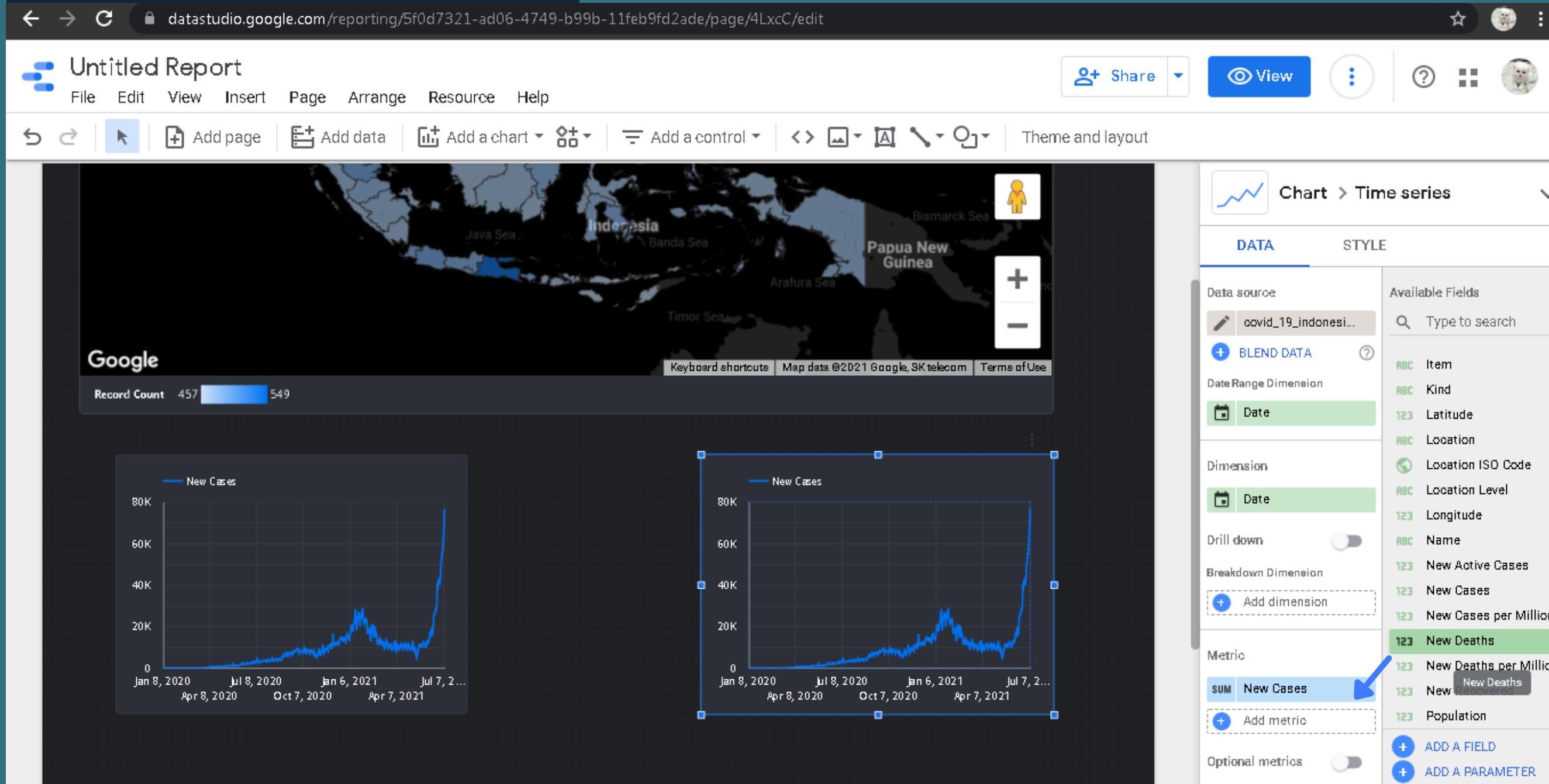
Add a chart "time series" to visualize covid-19 cases report based on the time

## Step 19



Change "Record Count" to "New Cases" to get  
the New Cases data of Covid-19

## Step 20



Then, change "new cases" to "new deaths" to get the new deaths data of covid-19

