



# Data Visualization using Looker Data Studio

<https://github.com/kaopanboonyuen/GISTDA2023>

# Topics

- Part 1: Introduction to Looker Studio
- Part 2: Disaster Analysis Dashboard
- Part 3: Physician Analysis Dashboard



# What is Looker Studio?

- Looker Studio is a data visualization platform that makes reports easier to create and understand.
- 
- You can do all of the following in Looker Studio:
  - Use graphics, tables or bar charts.
  - Decide what type of numbers and data you want to share.
  - Add text to explain data points or what's displayed in the report.
  - Change fonts and colors.
  - Brand the report with your client's logo.
  - Add a video to explain something to your client.

# Looker Studio Vs. Data Studio

While Looker Studio touts many of the same features as the former Data Studio, the new name also brings new features.

- Free version and Pro version (paid).
- Different modeling method (LookML).
- Looker integration with Google Sheets.
- More flexible data modeling features.
- Supports 50+ SQLs and databases.
- Merging features from different data sources.
- One of the key differences between Looker and Data Studio is the way data is modeled. Looker Studio uses LookML (Looker Modeling Language).

# Getting Started With Looker Studio

There are a few key areas to ensure your first Google Looker Studio report is a success. These include:

- Choosing a template or **dashboard**.
- Connecting data sources.
- Choosing metrics that matter.
- **Sharing reports**.

# Screenshot from Looker Studio, March 2023

Looker Studio Search Looker Studio ? ⚙️ 👤

Create Recent Reports Data sources Explorer

Recent

Start with a Template

Blank Report Looker Studio Tutorial Report Looker Studio Acme Marketing Google Analytics Search Console Report Search Console Google Ads Overview Google Ads

Template Gallery

Shared with me

Owned by me

Trash

Templates

Name	Owned by anyone	Last opened by me
Medical Resources Dashboard	Kao Panboonyuen	Mar 29, 2023
Disaster Monitoring Dashboard (2023)	Kao Panboonyuen	Mar 29, 2023

# Connect A Data Source

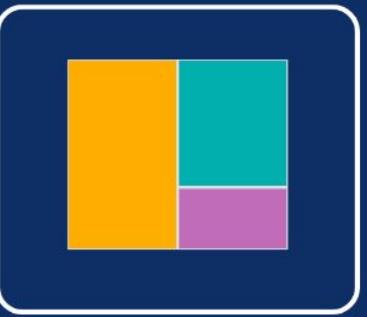
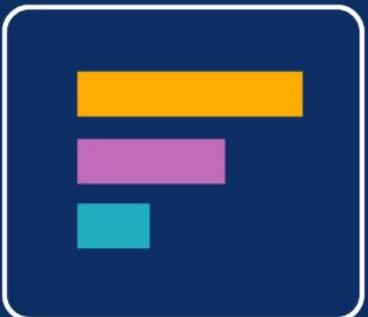
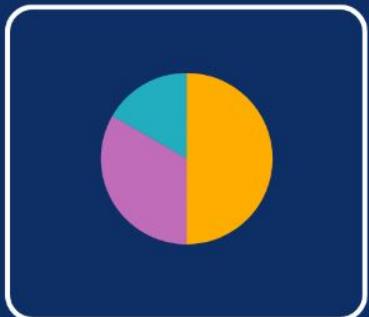
## Google Connectors (23)

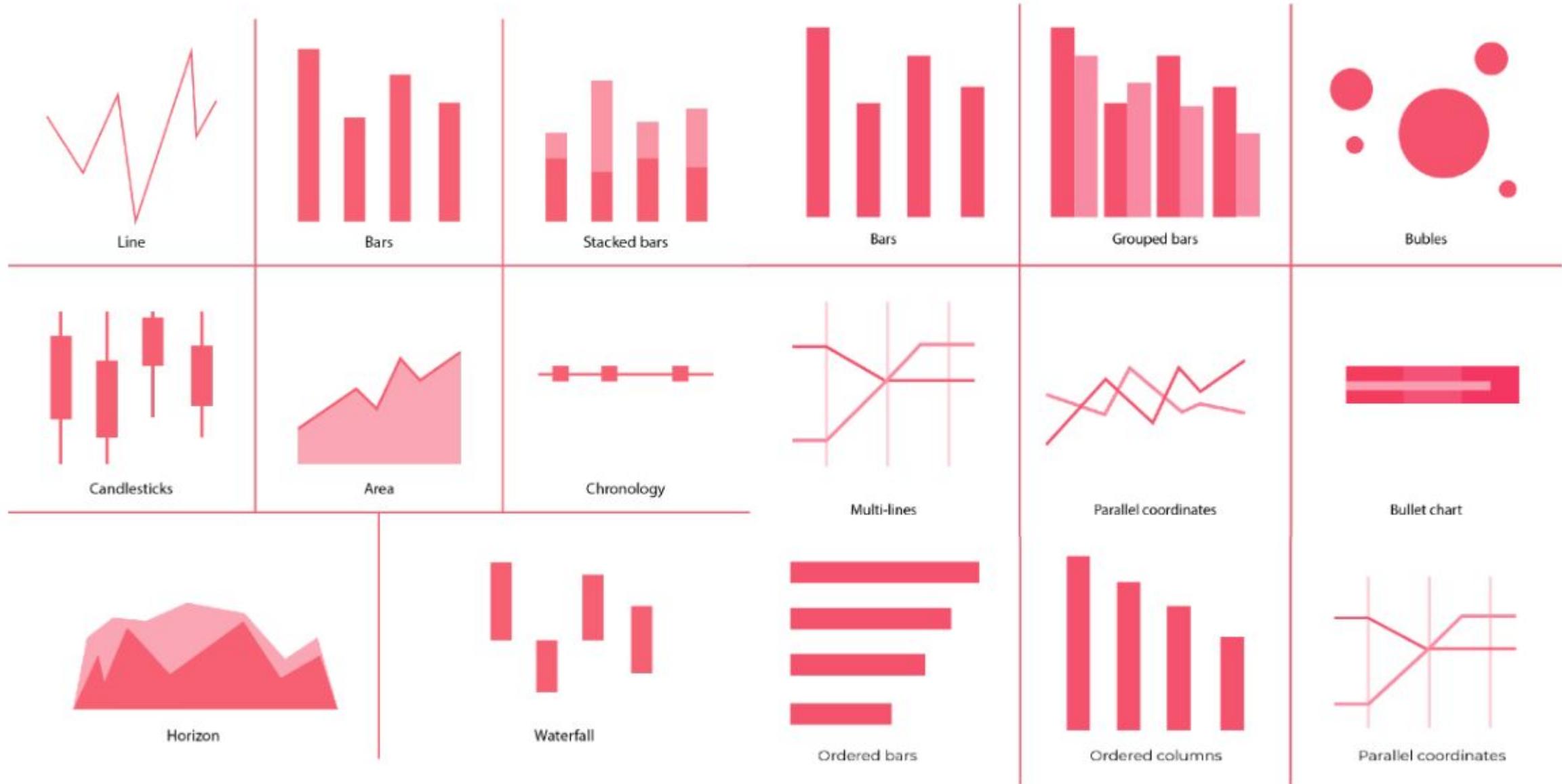
Connectors built and supported by Looker Studio [Learn more](#)

 <b>Looker</b> By Google Connect to your Looker semantic models.	 <b>Google Analytics</b> By Google Connect to Google Analytics.	 <b>Google Ads</b> By Google Connect to Google Ads performance report data.	 <b>Google Sheets</b> By Google Connect to Google Sheets.
 <b>BigQuery</b> By Google Connect to BigQuery tables and custom queries.	 <b>AppSheet</b> By Google Connect to AppSheet app data.	 <b>File Upload</b> By Google Connect to CSV (comma-separated values) files.	 <b>Amazon Redshift</b> By Google Connect to Amazon Redshift.
 <b>Campaign Manager 360</b> By Google Connect to Campaign Manager 360 data.	 <b>Cloud Spanner</b> By Google Connect to Google Cloud Spanner databases.	 <b>Cloud SQL for MySQL</b> By Google Connect to Google Cloud SQL for MySQL databases.	 <b>Display &amp; Video 360</b> By Google Connect to Display & Video 360 report data.
 <b>Extract Data</b> By Google Connect to Extract Data	 <b>Google Ad Manager 360</b> By Google Connect to Google Ad Manager data.	 <b>Google Cloud Storage</b> By Google See your files in Google Cloud Storage.	 <b>Microsoft SQL Server</b> By Google Connect to Microsoft SQL Server databases.

HOW TO USE

# Data Visualization in your Infographics





# To create a chart

Time series

Bar chart

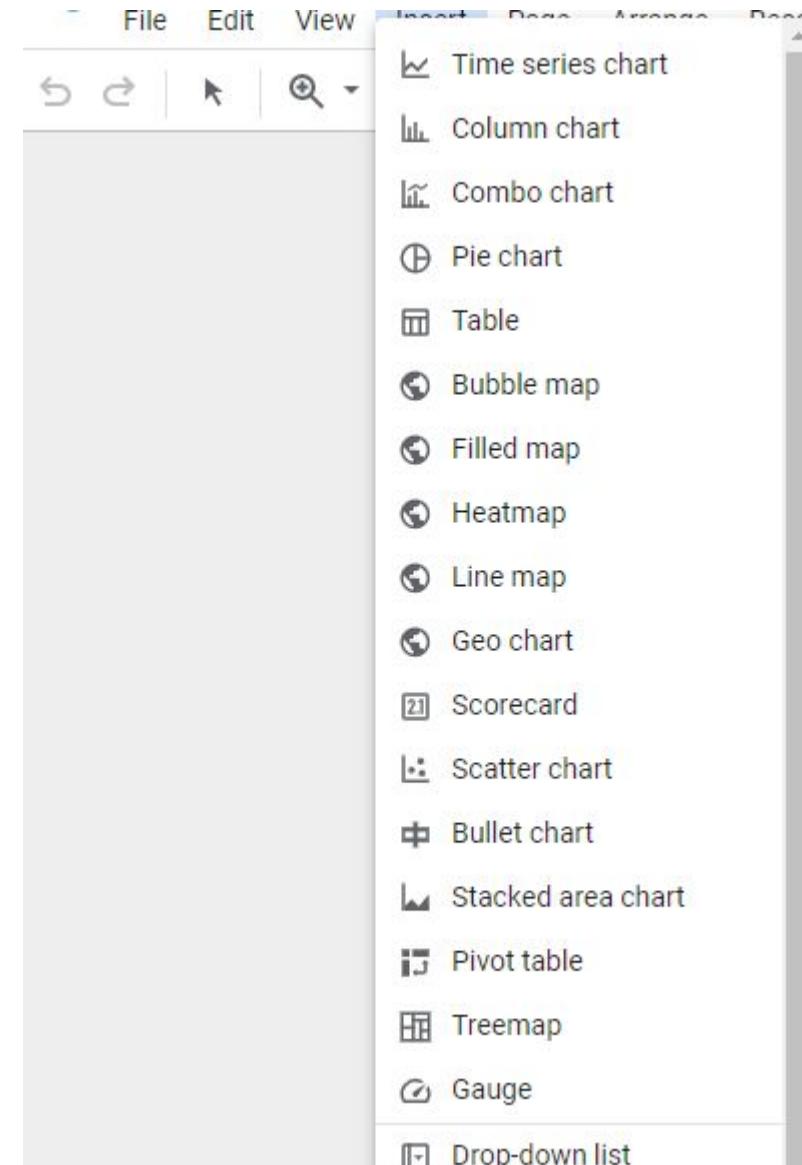
Pie chart

Tables

Scorecards

Bullet charts

Much more.



# Sharing Reports

The following options are available for sharing a Looker Studio report:

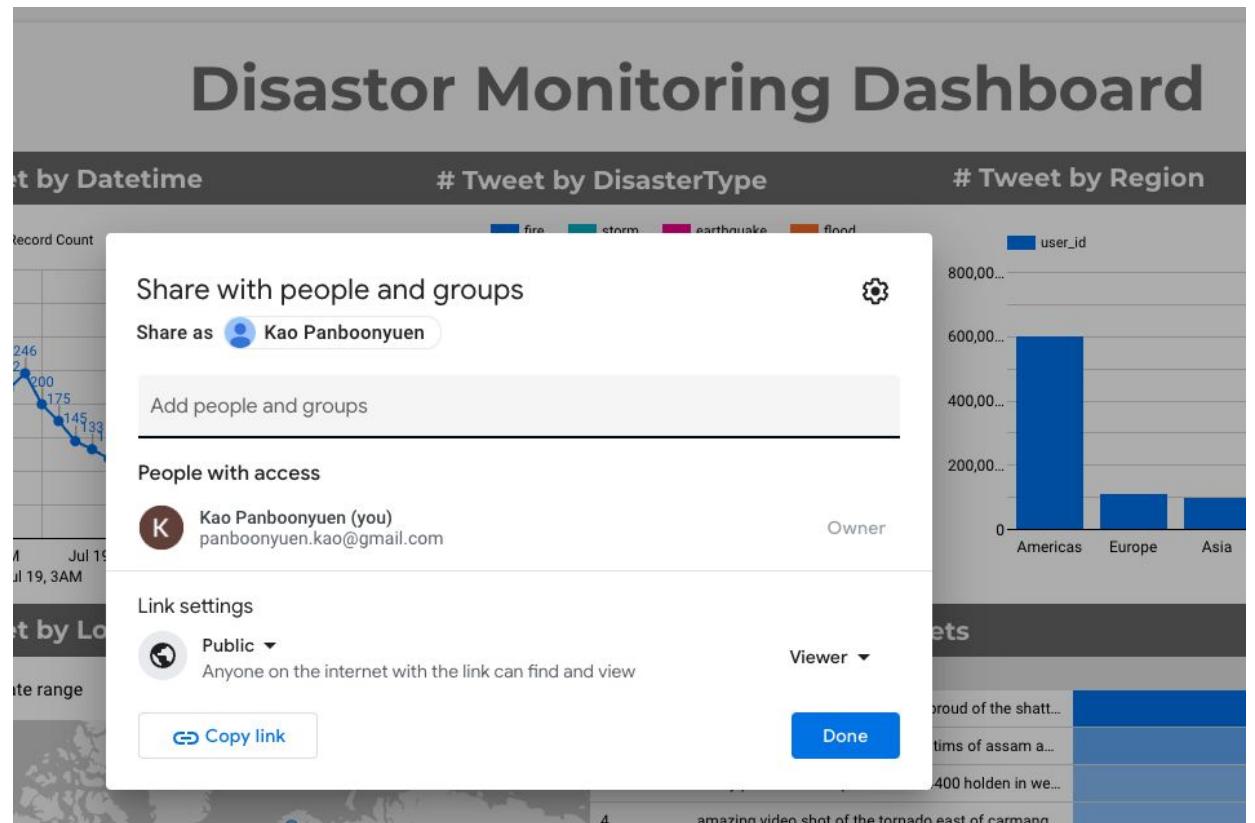
Invite people.

Schedule email delivery.

Get report link.

Embed report.

Download report.



# Sharing Reports

You can choose from:

- **Restricted.** Only people who you have shared the report with can open the link.
- **Unlisted.** Anyone on the internet with the link can view (or edit – choose this setting carefully).
- **Public.** Anyone on the internet with the link can find and view (or edit – choose this setting carefully).

# Part 1: Introduction to Looker Studio

# Part 1: Introduction to Looker Studio

The screenshot shows the Looker Studio interface. At the top, there is a search bar labeled "Search Data Studio". Below the search bar are four tabs: "Recent" (which is selected), "Reports" (highlighted in blue), "Data sources", and "Explorer". To the right of the tabs are icons for help, settings, and user profile.

On the left side, there is a sidebar with the "Data Studio" logo and several navigation items: "Create" (with a plus sign icon), "Recent" (selected and highlighted in blue), "Shared with me", "Owned by me", and "Trash".

The main content area has three sections:

- "Start with a Template": It shows three options: "Blank Report" (Data Studio), "Tutorial Report" (Data Studio), and "Acme Marketing" (Google Analytics).
- "Template Gallery": A dropdown menu showing a preview of a template named "ACME" with various charts and data points.
- "Recent": A table listing recent reports. The columns are "Name", "Owned by anyone", and "Last opened by me". The data is as follows:

Name	Owned by anyone	Last opened by me
Untitled Report	Kittipoch Saengsai	Aug 17, 2020
Medical Resources 2018 Dashboard	Kittipoch Saengsai	Aug 17, 2020
Disaster Monitoring Dashboard	Kittipoch Saengsai	Aug 17, 2020

- Cloud-based Data visualization tools.
- Easy to use. Just like using traditional presentation tool to represent data.
- Free to use. Can embed the data individually up to 100Mb per report.
- Connect to external data with plenty of external data connections.

# Start using Looker Studio

1. Go to <https://lookerstudio.google.com/>
2. Select menu **Create > Report**
3. In **Add data to report** section, select **File Upload**.
4. Upload your .csv file. (Up to 100Mb)
5. When **Status** shows **Uploaded**, Select **Add**.

The screenshot shows the Looker Studio interface. On the left, there's a navigation sidebar with 'Create' highlighted. The main area has a 'File Upload' card with an 'Upload' button, a 'By Google' note, and a 'Connect to CSV (comma-separated values) files.' instruction. To the right is a table showing uploaded data sets, with one entry for 'text\_filtered.csv'. At the bottom right are 'Cancel' and 'Add' buttons.

File name	Uploaded at	Size	Status
text_filtered.csv	8/17/20 8:05 AM	3 MB	● Uploaded

DELETE DATA SET

Cancel Add

# Basic steps to use Looker Studio

## 1. Edit table schema.

- ▶ Select Resource > Manage added data sources.

← EDIT CONNECTION | FILTER BY EMAIL

Index	Field	Type
1	clean_text	RBC Text
2	country	Country
3	country_code	Country Code
4	created_at	Date (YYYYMMDD)
5	date	Date (YYYYMMDD)
6	disaster_type	RBC Text
7	favorite_count	123 Number
8	followers_count	123 Number
9	friends_count	123 Number
10	text	RBC Text

## 2. Add a Chart.



## 3. Customizes Chart Data and Style.

**DATA**

Data source: text\_filtered.csv

BLEND DATA

Date Range Dimension: created\_at

Dimension: created\_at

Drill down

Breakdown Dimension: Add dimension

Metric: Record Count

Add metric

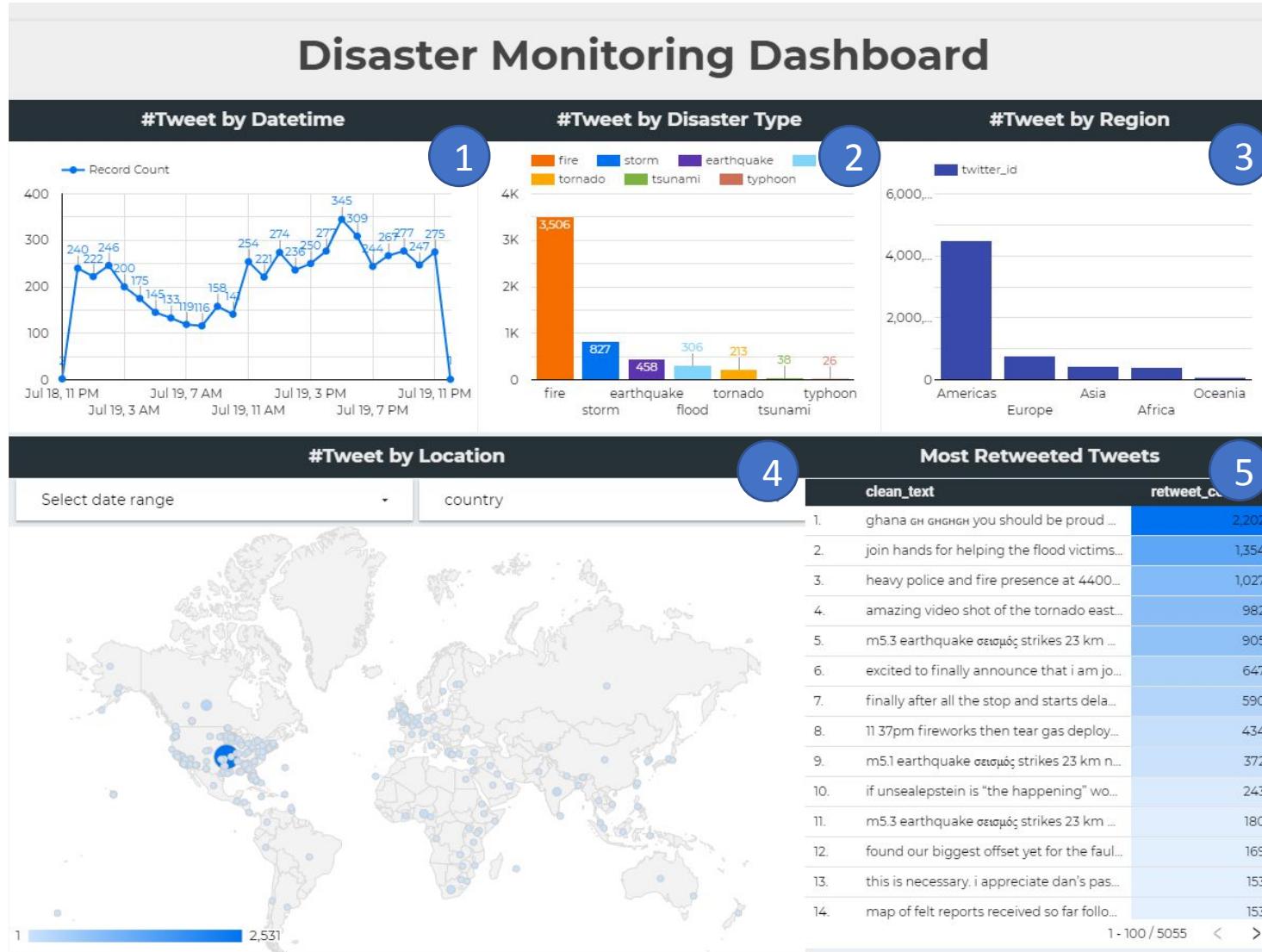
**STYLE**

Available Fields:

- clean\_text
- country
- country\_code
- created\_at
- date
- disaster\_type
- lang
- place\_full\_name
- place\_name
- place\_type
- profile\_image
- region
- screen\_name
- text
- twitter\_id
- user\_name

# Part 2: Disaster Analysis Dashboard

# Part 2: Disaster Analysis Dashboard



## Preview

<https://lookerstudio.google.com/reporting/fdb581e6-7095-45f3-be04-11fbe72cf54>

# Part 2: Disaster Analysis Dashboard

Tweet Details						
created_at	text	disaster_type	country	retweet_count	favorite_count	id
1. Jul 19, 2019, 6 AM	Ghana GH GHGH, you should be proud of @shattawalegh! The @Beyonce Shatta song is fire 🎵🔥🔥 #Shatta...	fire	Ghana	702	6	6
2. Jul 19, 2019, 8 AM	Ghana GH GHGH, you should be proud of @shattawalegh! The @Beyonce Shatta song is fire 🎵🔥🔥 #Shatta...	fire	Ghana	1,100		
3. Jul 19, 2019, 8 PM	Heavy police and fire presence at 4400 Holden in West Philadelphia. Reports of flames and heavy smoke, at ...	fire	United States	682		
4. Jul 19, 2019, 5 AM	Join Hands for helping the #flood victims of #Assam and other affected states, My SandArt at Puri beach in ...	flood	India	677		
5. Jul 19, 2019, 7 AM	Join Hands for helping the #flood victims of #Assam and other affected states, My SandArt at Puri beach in ...	flood	India	677		
6. Jul 19, 2019, 5 PM	Excited to finally announce that I am joining the #FireEmblem family! I voice Byleth in the upcoming #FireE...	fire	United States	647		
7. Jul 19, 2019, 11 AM	M5.3 #earthquake (#σεισμός) strikes 23 km NW of #Athens (#Greece) 3 min ago. Effects reported by eyewitness...	earthquake	Hellas	604		
8. Jul 19, 2019, 11 AM	Finally, after all the stop and starts, delays, UNFORESEEN EXPENSES, mental stress, FIRE, and what not. I hav...	fire	Nigeria	590		
9. Jul 19, 2019, 5 AM	11:37pm Fireworks then tear gas deployed #puertorico #PuertoRicoMarcha #RickyVeteYa https://t.co/wKPqss...	fire	United States	434		
10. Jul 19, 2019, 11 AM	M5.1 #earthquake (#σεισμός) strikes 23 km NW of #Athens (#Greece) 12 min ago. Updated map of its effects: h...	earthquake	Hellas	372		
11. Jul 19, 2019, 2 AM	Heavy police and fire presence at 4400 Holden in West Philadelphia. Reports of flames and heavy smoke, at ...	fire	United States	345		
12. Jul 19, 2019, 5 PM	Amazing video shot of the tornado east of Carmangay on Thursday, courtesy Sara Banman! #abstorm https://...	storm	Canada	248		
13. Jul 19, 2019, 5 PM	Amazing video shot of the tornado east of Carmangay on Thursday, courtesy Sara Banman! #abstorm https://...	tornado	Canada	248		
14. Jul 19, 2019, 7 PM	Amazing video shot of the tornado east of Carmangay on Thursday, courtesy Sara Banman! #abstorm https://...	storm	Canada	243		
15. Jul 19, 2019, 7 PM	Amazing video shot of the tornado east of Carmangay on Thursday, courtesy Sara Banman! #abstorm https://...	tornado	Canada	243		
16. Jul 19, 2019, 6 PM	If #UnsealEpstein is "the happening", wouldn't that be a logical moment for "the tweet" by @realDonaldTrump...	storm	United Kingdom	243		
17. Jul 19, 2019, 11 AM	M5.3 #earthquake (#σεισμός) strikes 23 km NW of #Athens (#Greece) 3 min ago. Read eyewitnesses' stories & a...	earthquake	Hellas	180		
18. Jul 19, 2019, 12 AM	Found our BIGGEST offset yet for the fault that caused the M7.1 earthquake. This channel is offset about 13 fe...	earthquake	United States	169		
19. Jul 19, 2019, 12 AM	This is necessary. I appreciate Dan's passion. We should all burn with this fire. I'm a man of color before any...	fire	United States	153		
20. Jul 19, 2019, 12 PM	M5.3 #earthquake (#σεισμός) strikes 23 km NW of #Athens (#Greece) 3 min ago. Effects reported by eyewitness...	earthquake	Hellas	151		
21. Jul 19, 2019, 4 PM	M5.3 #earthquake (#σεισμός) strikes 23 km NW of #Athens (#Greece) 3 min ago. Effects reported by eyewitness...	earthquake	Hellas	150		
22. Jul 19, 2019, 5 AM	Third day in a row that a customer has open carried a sidearm in my store. It is completely legal, but still scar...	fire	United States	146		
23. Jul 19, 2019, 12 AM	So the Air Force is warning us not to storm #AREA51. Guess I'm going to have to wear my Chuck Norris short...	storm	United States	112		
24. Jul 19, 2019, 1 PM	Flames still high: The fire at @MGEMadison has caused power outages and road closures across downtown ...	fire	United States	100		
25. Jul 19, 2019, 9 AM	Thursday Lightning Strike at 929am in Chicago #storm #news #weather #ilwx #chicago https://t.co/5sEUbaL...	storm	United States	100		

## Preview

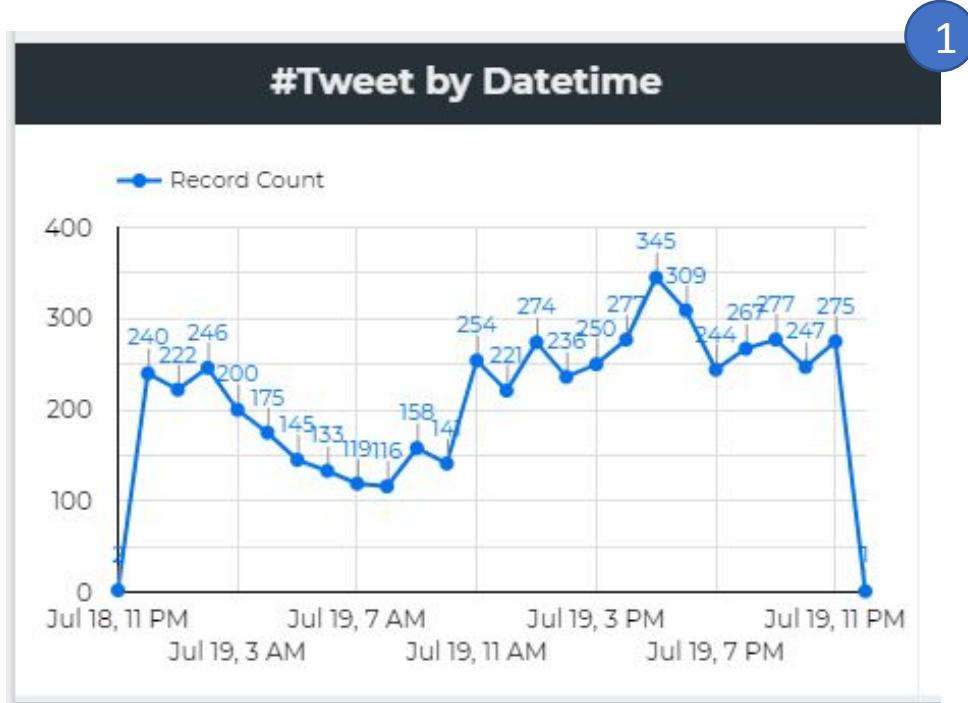
<https://lookerstudio.google.com/reporting/fdb581e6-7095-45f3-be04-11fbe72cf54>

# Materials

- File : disaster\_text.csv
- Schema :

Index	Field	Type	Default Aggregation					
1	clean_text	RBC Text	None	13	longitude	123 Number	Sum	
2	country	Country	None	14	place_full_name	RBC Text	None	
3	country_code	Country Code	None	15	place_name	RBC Text	None	
4	created_at	Date Hour (YYYYMMDDhh)	None	16	place_type	RBC Text	None	
5	date	Date (YYYYMMDD)	None	17	profile_image	URL	None	
6	disaster_type	RBC Text	None	18	region	RBC Text	None	
7	favorite_count	123 Number	Sum	19	retweet_count	123 Number	Sum	
8	followers_count	123 Number	Sum	20	screen_name	RBC Text	None	
9	friends_count	123 Number	Sum	21	text	RBC Text	None	
10	lang	RBC Text	None	22	twitter_id	123 Number	None	
11	latitude	123 Number	Sum	23	user_id	123 Number	Sum	
12	lat_lon	Latitude, Longitude	None	24	user_name	RBC Text	None	
				25	Record Count	123 Number	Auto	

# Charts in dashboard



**DATA**

Data source: text\_filtered.csv

BLEND DATA

Date Range Dimension: date

Dimension: created\_at

Drill down:

Breakdown Dimension:

Metric: AUT Record Count

Add metric:

Optional metrics:

Metric sliders:

Default date range: Auto  Custom

Auto date range: Comparison date range: None

Filter: ADD A FILTER

Interactions: Apply filter

**STYLE**

Series #1: Line  Bars

2

Cumulative:  Show Points:

Show data labels:

Trendline: None

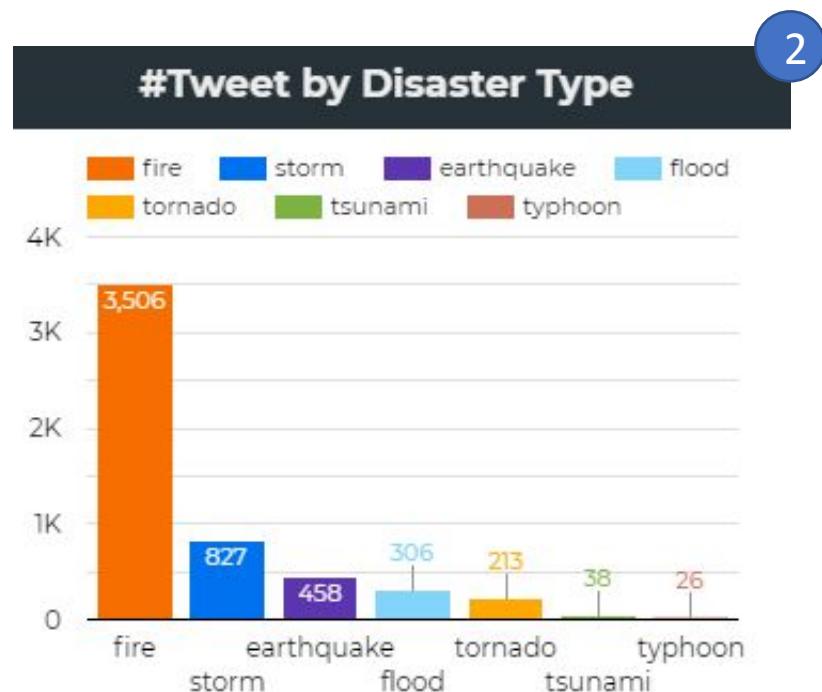
Reference Lines: Add a reference line

General: Missing Data: Line To Zero

Smooth:

Axes: Show axes   
Reverse Y-axis direction   
Reverse X-axis direction

# Charts in dashboard



**DATA**      **STYLE**

Data source: text\_filtered.csv

Date Range Dimension: date

Dimension: disaster\_type

Drill down: disaster\_type

Breakdown Dimension: disaster\_type

Metric: Record Count

Optional metrics: None

Metric sliders: None

Sort: Record Count (Descending)

Secondary sort: Record Count (Descending)

Default date range: Auto

Available Fields:

- clean\_text
- country
- country\_code
- created\_at
- date
- disaster\_type
- lang
- lat\_lon
- place\_full\_name
- place\_name
- place\_type
- profile\_image
- region
- screen\_name
- text
- user\_name
- favorite\_count
- followers\_count
- friends\_count
- latitude
- longitude
- retweet\_count
- twitter\_id
- user\_id
- Record Count

Color by: Dimension values

Manage dimension value colors

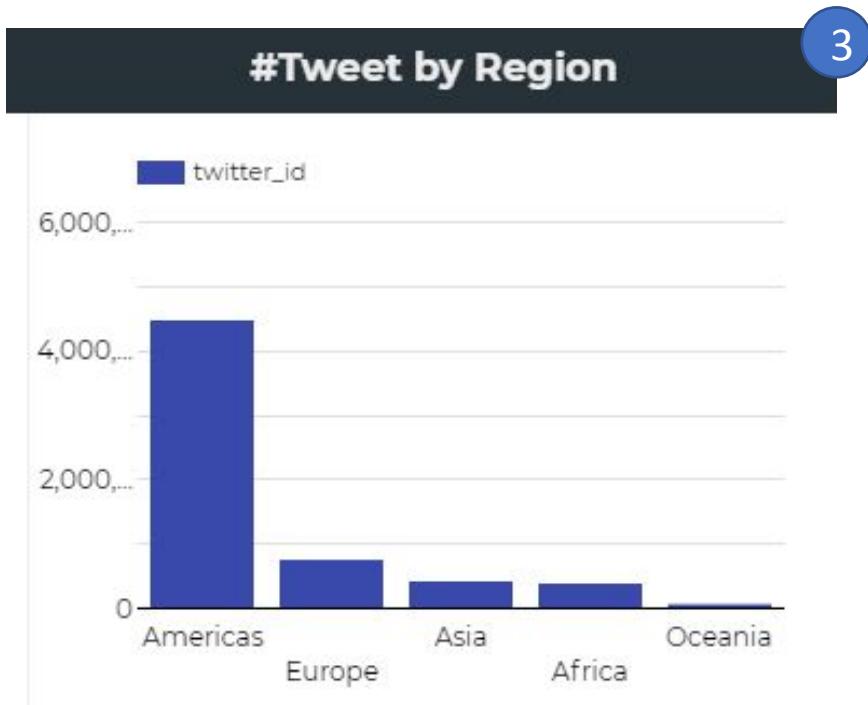
Reference Lines: Add a reference line

Axes: Show axes

Reverse Y-axis direction

Reverse X-axis direction

# Charts in dashboard



**DATA**      **STYLE**

Data source: text\_filtered.csv

Date Range Dimension: date

Dimension: region

Drill down:

Breakdown Dimension:

Metric: SUM twitter\_id

Optional metrics:

Metric sliders:

Sort: SUM twitter\_id

Default date range: Auto

Available Fields:

- clean\_text
- country
- country\_code
- created\_at
- date
- disaster\_type
- lang
- lat\_lon
- place\_full\_name
- place\_name
- place\_type
- profile\_image
- region
- screen\_name
- text
- user\_name
- favorite\_count
- followers\_count
- friends\_count
- latitude
- longitude
- retweet\_count
- twitter\_id
- user\_id
- Record Count

**DATA**      **STYLE**

Bar chart

Bars: 10

Show data labels:

Color by:

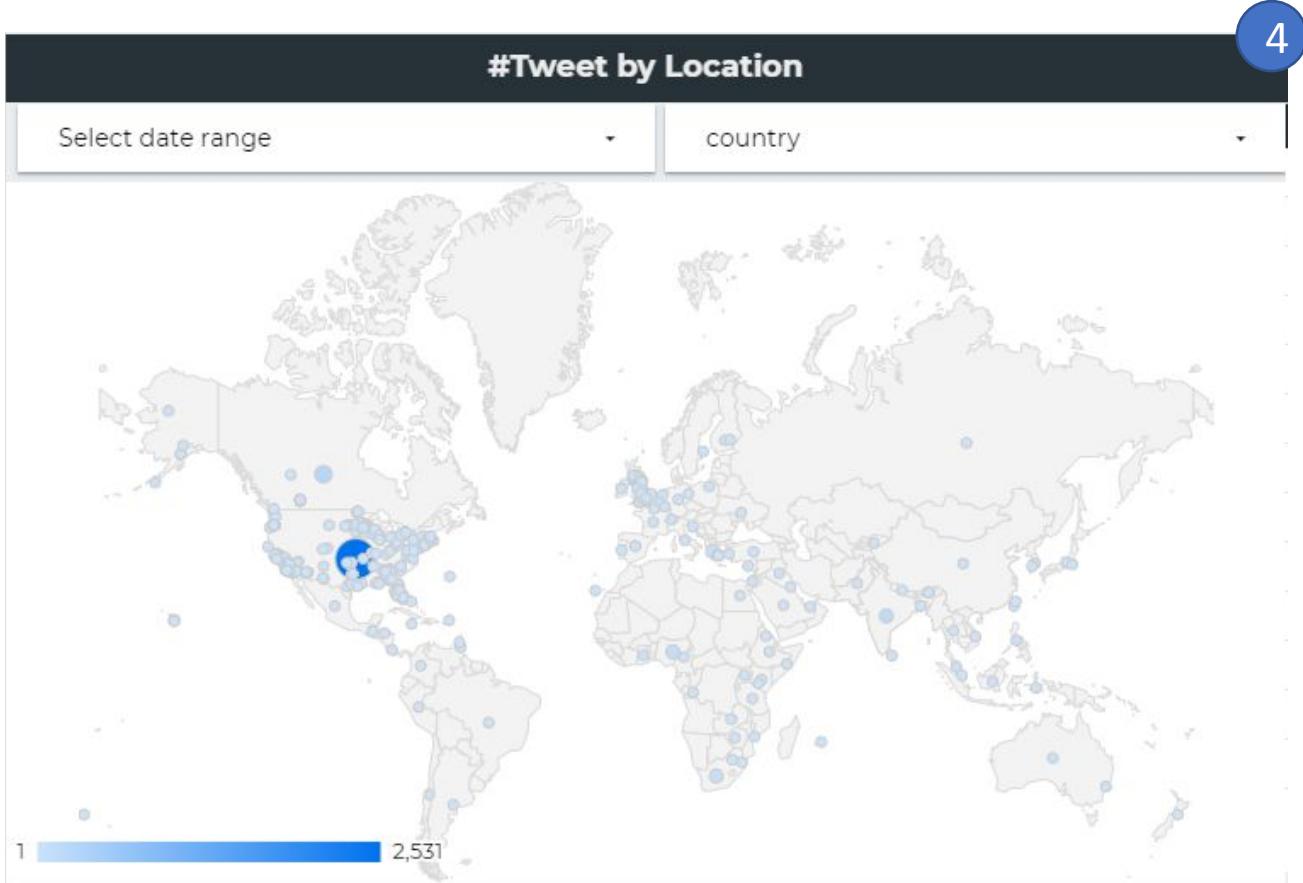
Reference Lines:

Axes:  Show axes

Reverse Y-axis direction:

Reverse X-axis direction:

# Charts in dashboard



**DATA**

Data source: text\_filtered.csv

+ BLEND DATA

Date Range Dimension: date

Geo dimension: lat\_lon

Drill down

Metric: AUT Record Count

Optional metrics

Metric sliders

Zoom area: World

Default date range: Auto

Custom

Auto date range

Filter: Geo Map Filter

+ ADD A FILTER

Interactions

Apply filter

**DATA**

Data source: text\_filtered.csv

+ BLEND DATA

Date Range Dimension: date

Dimension: country

Default selection: value1, value2, value3

Metric: AUT Record Count

Show values

Compact numbers

Decimal precision: auto

Order

Metric: Descending

Ascending

Show top #: 5000

Default date range: Auto

Custom

Auto date range

(For filter box)

# Charts in dashboard

5

Most Retweeted Tweets	
clean_text	retweet_count
1. ghana GH GHGH you should be proud ...	2,202
2. join hands for helping the flood victims...	1,354
3. heavy police and fire presence at 4400...	1,027
4. amazing video shot of the tornado east...	982
5. m5.3 earthquake σεισμός strikes 23 km ...	905
6. excited to finally announce that i am jo...	647
7. finally after all the stop and starts dela...	590
8. 11 37pm fireworks then tear gas deploy...	434
9. m5.1 earthquake σεισμός strikes 23 km n...	372
10. if unsealepstein is "the happening" wo...	243
11. m5.3 earthquake σεισμός strikes 23 km ...	180
12. found our biggest offset yet for the faul...	169
13. this is necessary. i appreciate dan's pas...	153
14. map of felt reports received so far follo...	153

1 - 100 / 5055 < >

DATA      STYLE

Data source: text\_filtered.csv

BLEND DATA

Date Range Dimension: date

Dimension: clean\_text

Add dimension

Drill down

Metric: retweet\_count

Add metric

Optional metrics

Metric sliders

Rows per Page: 100

Show summary row

Sort: retweet\_count

Descending

Ascending

Available Fields:

- clean\_text
- country
- country\_code
- created\_at
- date
- disaster\_type
- lang
- lat\_lon
- place\_full\_name
- place\_name
- place\_type
- profile\_image
- region
- screen\_name
- text
- user\_name
- favorite\_count
- followers\_count
- friends\_count
- latitude
- longitude
- retweet\_count
- twitter\_id
- user\_id
- Record Count

# Charts in dashboard

Select date range  text Contains  country  disaster\_type

created_at	text	disaster_type	country	retweet_cou...
1. Jul 19, 2019, 6 AM	Ghana GH GHGH, you should be proud of @shattawalegh! The @Beyonce Shatta song is fire 🔥🔥 #Shatta...	fire	Ghana	1,102
2. Jul 19, 2019, 8 AM	Ghana GH GHGH, you should be proud of @shattawalegh! The @Beyonce Shatta song is fire 🔥🔥 #Shatta...	fire	Ghana	1,100
3. Jul 19, 2019, 8 PM	Heavy police and fire presence at 4400 Holden in West Philadelphia. Reports of flames and heavy smoke, at ...	fire	United States	682
4. Jul 19, 2019, 5 AM	Join Hands for helping the #flood victims of #Assam and other affected states, My SandArt at Puri beach in ...	flood	India	677
5. Jul 19, 2019, 7 AM	Join Hands for helping the #flood victims of #Assam and other affected states, My SandArt at Puri beach in ...	flood	India	677
6. Jul 19, 2019, 5 PM	Excited to finally announce that I am joining the #FireEmblem family! I voice Byleth in the upcoming #FireE...	fire	United States	647
7. Jul 19, 2019, 11 AM	M5.3 #earthquake (#σεισμός) strikes 23 km NW of #Athens (#Greece) 3 min ago. Effects reported by eyewitne...	earthquake	Hellas	604
8. Jul 19, 2019, 11 AM	Finally, after all the stop and starts, delays, UNFORESEEN EXPENSES, mental stress, FIRE, and what not. I hav...	fire	Nigeria	590
9. Jul 19, 2019, 5 AM	11:37pm Fireworks then tear gas deployed #puertorico #PuertoRicoMarcha #RickyVeteYa https://t.co/wKPqss...	fire	United States	434
1.. Jul 19, 2019, 11 AM	M5.1 #earthquake (#σεισμός) strikes 23 km NW of #Athens (#Greece) 12 min ago. Updated map of its effects: h...	earthquake	Hellas	372
1.. Jul 19, 2019, 2 AM	Heavy police and fire presence at 4400 Holden in West Philadelphia. Reports of flames and heavy smoke, at ...	fire	United States	345
1.. Jul 19, 2019, 5 PM	Amazing video shot of the tornado east of Carmangay on Thursday, courtesy Sara Banman! #abstorm https://...	storm	Canada	248
1.. Jul 19, 2019, 5 PM	Amazing video shot of the tornado east of Carmangay on Thursday, courtesy Sara Banman! #abstorm https://...	tornado	Canada	248
1.. Jul 19, 2019, 7 PM	Amazing video shot of the tornado east of Carmangay on Thursday, courtesy Sara Banman! #abstorm https://...	storm	Canada	243
1.. Jul 19, 2019, 7 PM	Amazing video shot of the tornado east of Carmangay on Thursday, courtesy Sara Banman! #abstorm https://...	tornado	Canada	243
1.. Jul 19, 2019, 6 PM	If #UnsealEpstein is "the happening", wouldn't that be a logical moment for "the tweet" by @realDonaldTrump...	storm	United Kingdom	243
1.. Jul 19, 2019, 11 AM	M5.3 #earthquake (#σεισμός) strikes 23 km NW of #Athens (#Greece) 3 min ago. Read eyewitnesses' stories &a...	earthquake	Hellas	180
1.. Jul 19, 2019, 12 AM	Found our BIGGEST offset yet for the fault that caused the M7.1 earthquake. This channel is offset about 13 fe...	earthquake	United States	169
1.. Jul 19, 2019, 12 AM	This is necessary. I appreciate Dan's passion. We should all burn with this fire. I'm a man of color before anyt...	fire	United States	153
2.. Jul 19, 2019, 12 PM	M5.3 #earthquake (#σεισμός) strikes 23 km NW of #Athens (#Greece) 3 min ago. Effects reported by eyewitne...	earthquake	Hellas	151
2.. Jul 19, 2019, 4 PM	M5.3 #earthquake (#σεισμός) strikes 23 km NW of #Athens (#Greece) 3 min ago. Effects reported by eyewitne...	earthquake	Hellas	150
2.. Jul 19, 2019, 5 AM	Third day in a row that a customer has open carried a sidearm in my store. It is completely legal, but still scar...	fire	United States	146
2.. Jul 19, 2019, 12 AM	So the Air Force is warning us not to storm #AREA51. Guess I'm going to have to wear my Chuck Norris short...	storm	United States	112
2.. Jul 19, 2019, 1 PM	Flames still high: The fire at @MCEMadison has caused power outages and road closures across downtown ...	fire	United States	100
2.. Jul 19, 2019, 9 AM	Thursday Lightning Strike at 929am in Chicago #storm #news #weather #ilwx #chicago https://t.co/5sEUbaL...	storm	United States	100

DATA      STYLE

Data source

Date Range Dimension

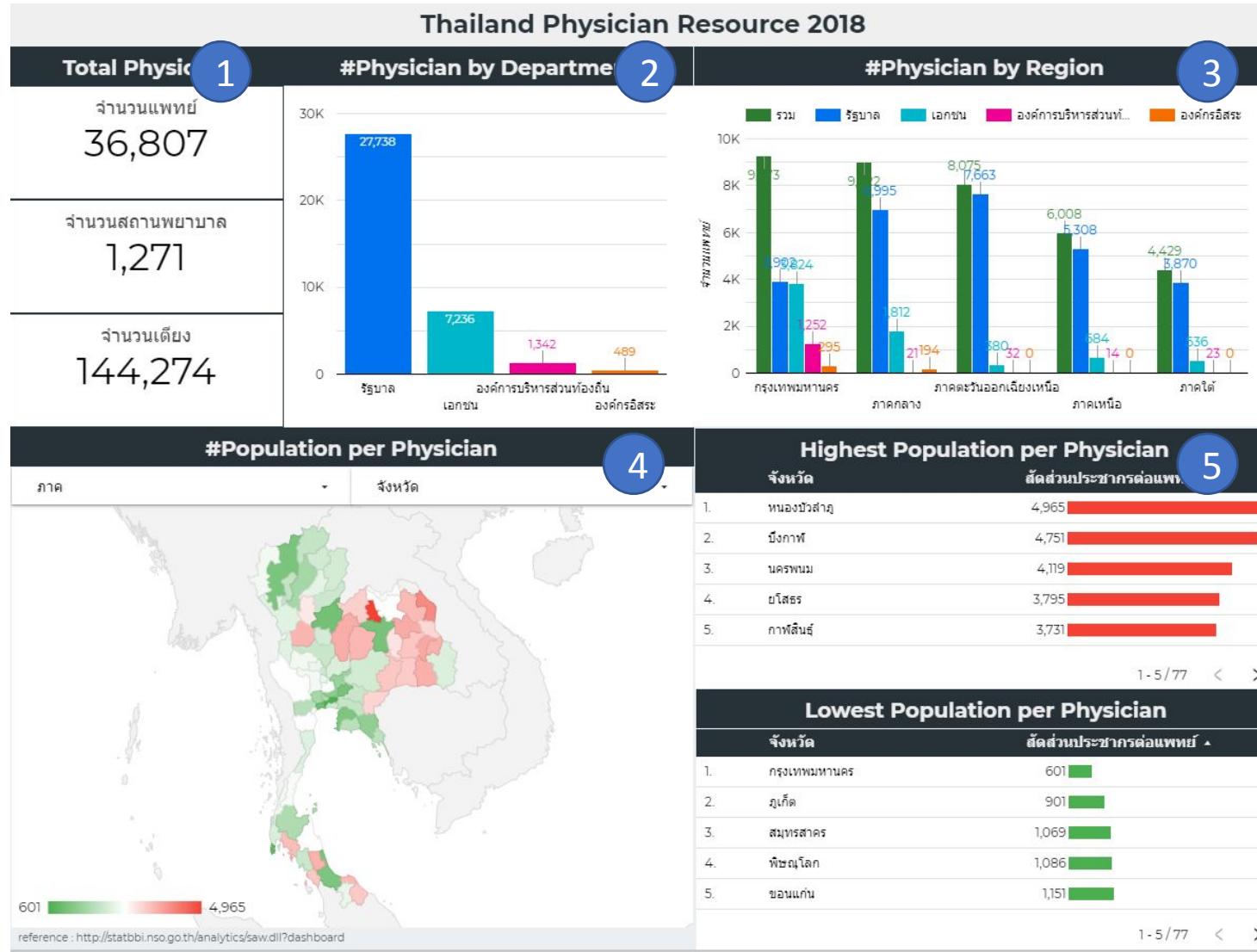
Dimension

Drill down

Metric            Descending  Ascending

# Part 3: Physician Analysis Dashboard

# Part 3: Physician Analysis Dashboard



## Preview

<https://lookerstudio.google.com/reporting/7ce70378-0657-4876-ad0b-60277a161587>

# Materials

- File : med\_resources\_text.csv

(Data reference : <http://statbbi.nso.go.th/analytics/saw.dll?dashboard>)

- Schema :

Index	Field	Type	Default Aggregation
1	จังหวัด	Region	None
2	จำนวนเตียง	Number	Sum
3	จำนวนบันดแพทย์	Number	Sum
4	จำนวนพยาบาลเทคนิค	Number	Sum
5	จำนวนพยาบาลวิชาชีพ	Number	Sum
6	จำนวนแพทย์	Number	Sum
7	จำนวนเภสัชกร	Number	Sum
8	จำนวนสถานพยาบาล	Number	Sum
9	แผนการบริหาร	Text	None
10	ภาค	Text	None
11	สัดส่วนประชากรต่อบันดแพทย์	Number	Sum
12	สัดส่วนประชากรตอพยาบาล	Number	Sum
13	สัดส่วนประชากรตอพยาบาล...	Number	Sum
14	สัดส่วนประชากรตอแพทย์	Number	Sum
15	สัดส่วนประชากรตอเภสัชกร	Number	Sum
16	Record Count	Number	Auto

# Charts in dashboard

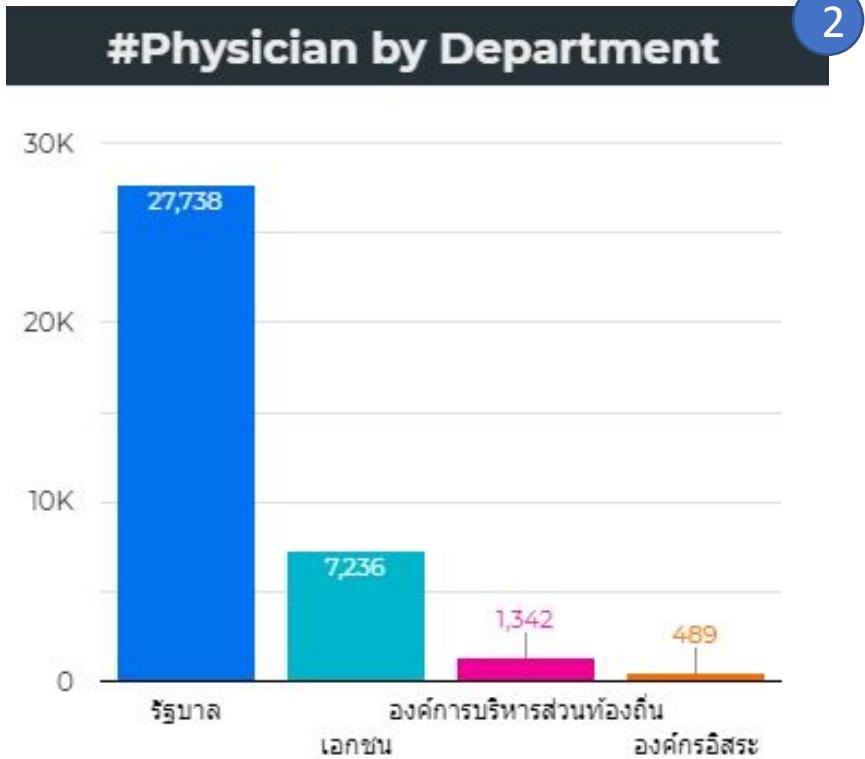


Edit Filter

Name	Exclude All Data	Data source	med_resources.csv
Exclude	RBC แบบการบริหาร	Equal to (=)	รวม
AND			

<b>DATA</b>	<b>STYLE</b>	<b>DATA</b>	<b>STYLE</b>	<b>DATA</b>	<b>STYLE</b>
Data source <input type="button" value="Edit"/> med_resources.csv	BLEND DATA	Data source <input type="button" value="Edit"/> med_resources.csv	BLEND DATA	Data source <input type="button" value="Edit"/> med_resources.csv	BLEND DATA
Date Range Dimension <input type="button" value="Add dimension"/>		Date Range Dimension <input type="button" value="Add dimension"/>		Date Range Dimension <input type="button" value="Add dimension"/>	
Metric <b>SUM จำนวนแพทย์</b>		Metric <b>SUM จำนวนสถานพยาบาล</b>		Metric <b>SUM จำนวนเตียง</b>	
Optional metrics	<input type="checkbox"/>	Optional metrics	<input type="checkbox"/>	Optional metrics	<input type="checkbox"/>
Default date range		Default date range		Default date range	
Comparison date range	None	Comparison date range	None	Comparison date range	None
Filter		Filter		Filter	
Scorecard Filter <input type="button" value="Edit"/> <b>Exclude All Data</b>	<input type="button" value="ADD A FILTER"/>	Scorecard Filter <input type="button" value="Edit"/> <b>Exclude All Data</b>	<input type="button" value="ADD A FILTER"/>	Scorecard Filter <input type="button" value="Edit"/> <b>Exclude All Data</b>	<input type="button" value="ADD A FILTER"/>

# Charts in dashboard



DATA	STYLE
Data source med_resources.csv	Available Fields
BLEND DATA	Type to search
Date Range Dimension Add dimension	จังหวัด แบบการบริหาร ภาค 123 จำนวนเตียง 123 จำนวนทันตแพทย์ 123 จำนวนพยาบาลเทคนิค 123 จำนวนพยาบาลวิชาชีพ 123 จำนวนแพทย์ 123 จำนวนเภสัชกร 123 จำนวนสถานพยาบาล 123 สัดส่วนประชากรต่อห้าม...
Dimension แบบการบริหาร	จำนวนแพทย์ แบบการบริหาร 123 จำนวนแพทย์ 123 จำนวนเภสัชกร 123 จำนวนสถานพยาบาล 123 สัดส่วนประชากรต่อห้าม...
Drill down	
Breakdown Dimension แบบการบริหาร	จำนวนแพทย์ แบบการบริหาร 123 จำนวนแพทย์ 123 จำนวนเภสัชกร 123 จำนวนสถานพยาบาล 123 สัดส่วนประชากรต่อห้าม...
Metric จำนวนแพทย์	จำนวนแพทย์ แบบการบริหาร 123 จำนวนแพทย์ 123 จำนวนเภสัชกร 123 จำนวนสถานพยาบาล 123 สัดส่วนประชากรต่อห้าม...
Optional metrics	
Metric sliders	
Sort จำนวนแพทย์	จำนวนแพทย์ Descending Ascending
Secondary sort จำนวนแพทย์	จำนวนแพทย์ Descending Ascending
Filter	Exclude All Data ADD A FILTER
	ADD A FIELD

**DATA**

Bar chart





---

Bars	Series
10	10

---

Stacked Bars       100% Stacking

Show Total Card

Show data labels

---

Color by

Single color

Bar order

Dimension values

 Manage dimension value colors

---

Reference Lines

 Add a reference line

---

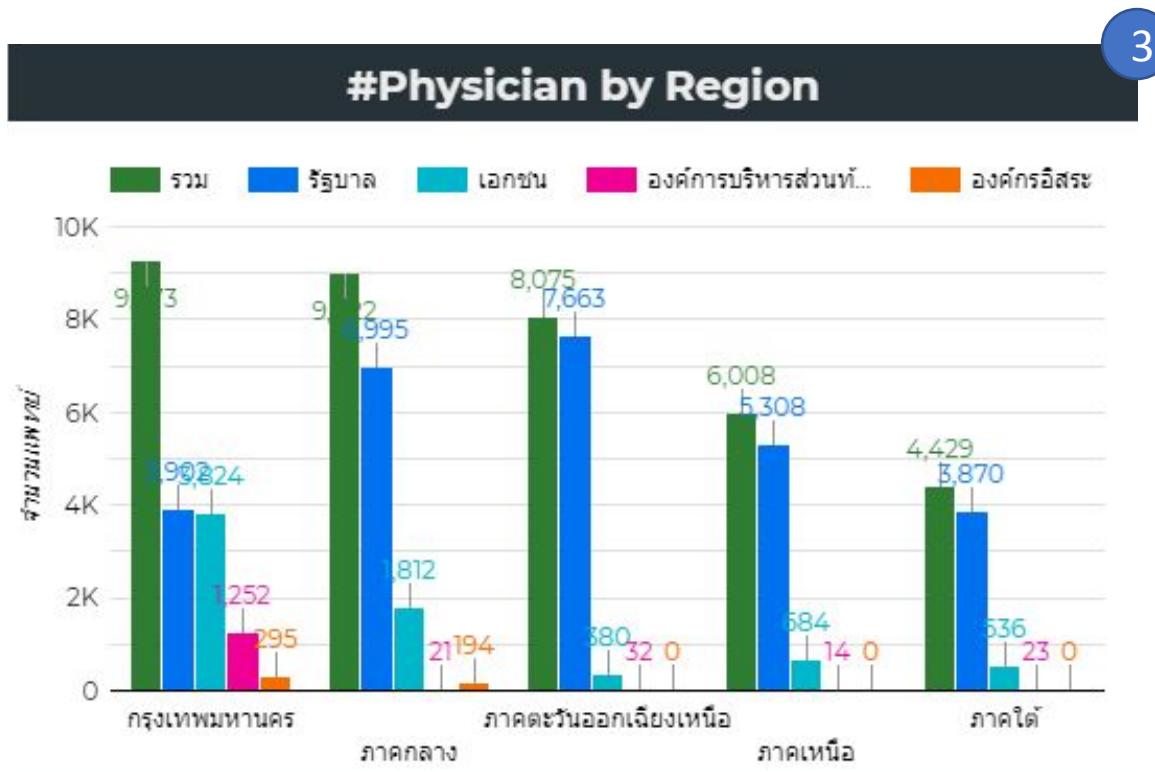
Axes

Show axes

Reverse Y-axis direction

Reverse X-axis direction

# Charts in dashboard



**DATA**      **STYLE**

Data source: med\_resources.csv

Available Fields: จังหวัด, แบบการบริหาร, ภาค, จำนวนเตียง, จำนวนบ้านพัฒนาชุมชน, จำนวนพยาบาลวิชาชีพ, จำนวนแพทย์, จำนวนเภสัชกร, จำนวนสถานพยาบาล, สัดส่วนประชากรต่อหัวเมือง, สัดส่วนประชากรต่อพื้นที่, สัดส่วนประชากรต่อแพทย์, สัดส่วนประชากรต่อเภสัชกร, จำนวนแพทย์, Record Count.

Date Range Dimension: Add dimension

Dimension: ภาค (selected)

Drill down: Off

Breakdown Dimension: แบบการบริหาร (selected)

Metric: จำนวนแพทย์ (selected)

Optional metrics: Off

Metric sliders: Off

Sort: Descending (selected)

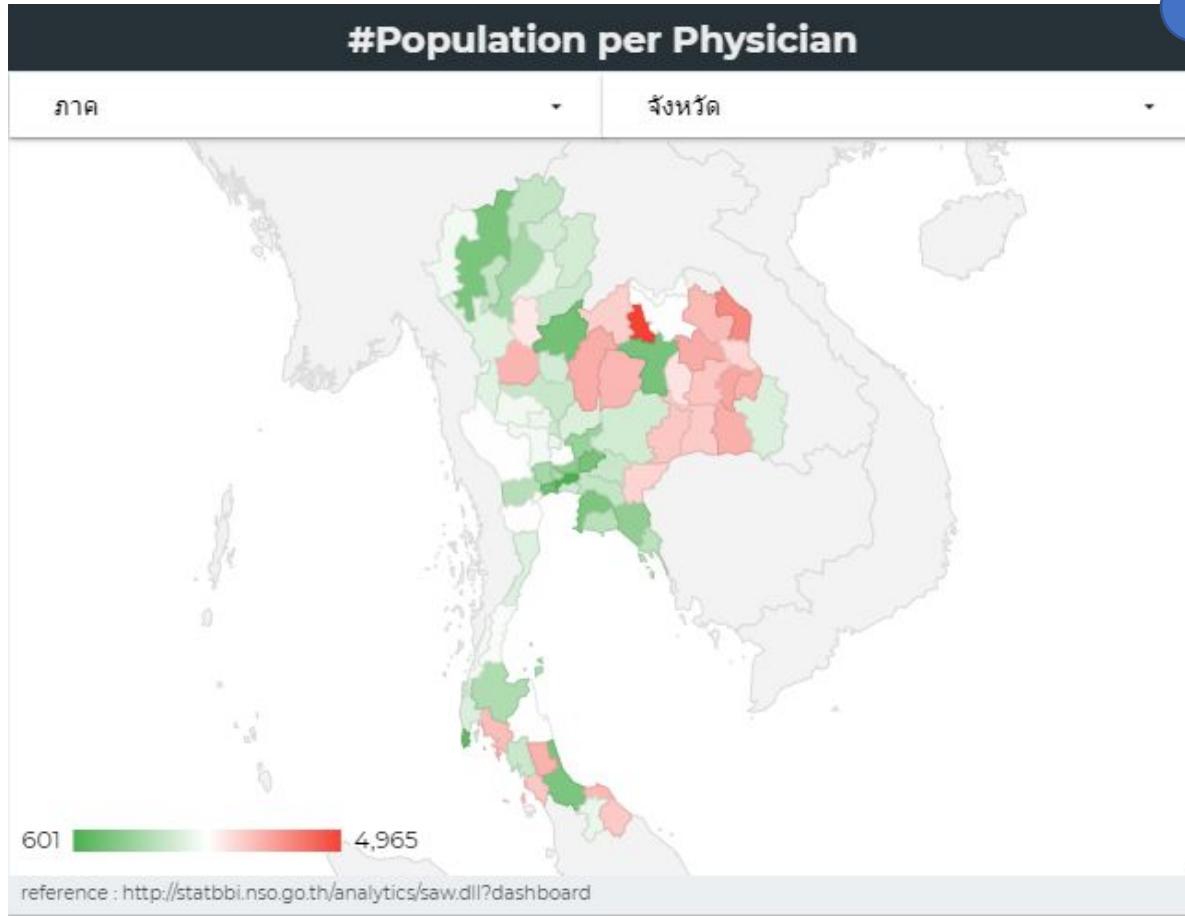
Secondary sort: จำนวนแพทย์

Reference Lines: Add a reference line

Axes: Show axes (selected)

Style: Bar chart, Bars: 10, Series: 10, Stacked Bars: Off, Show data labels: On

# Charts in dashboard



Create Filter

Name: All Data Only Data source: med\_resources.csv

Include: ABC ແນນການບໍລິຫານ Equal to (=) ຮວມ

AND

**DATA** **STYLE**

Data source: med\_resources.csv

+ BLEND DATA

Date Range Dimension: Add dimension

Geo dimension: จังหวัด

Drill down:

Metric: SUM สัดส่วนປະຊາດຕອ...

Optional metrics: Add metric

Zoom area: Thailand

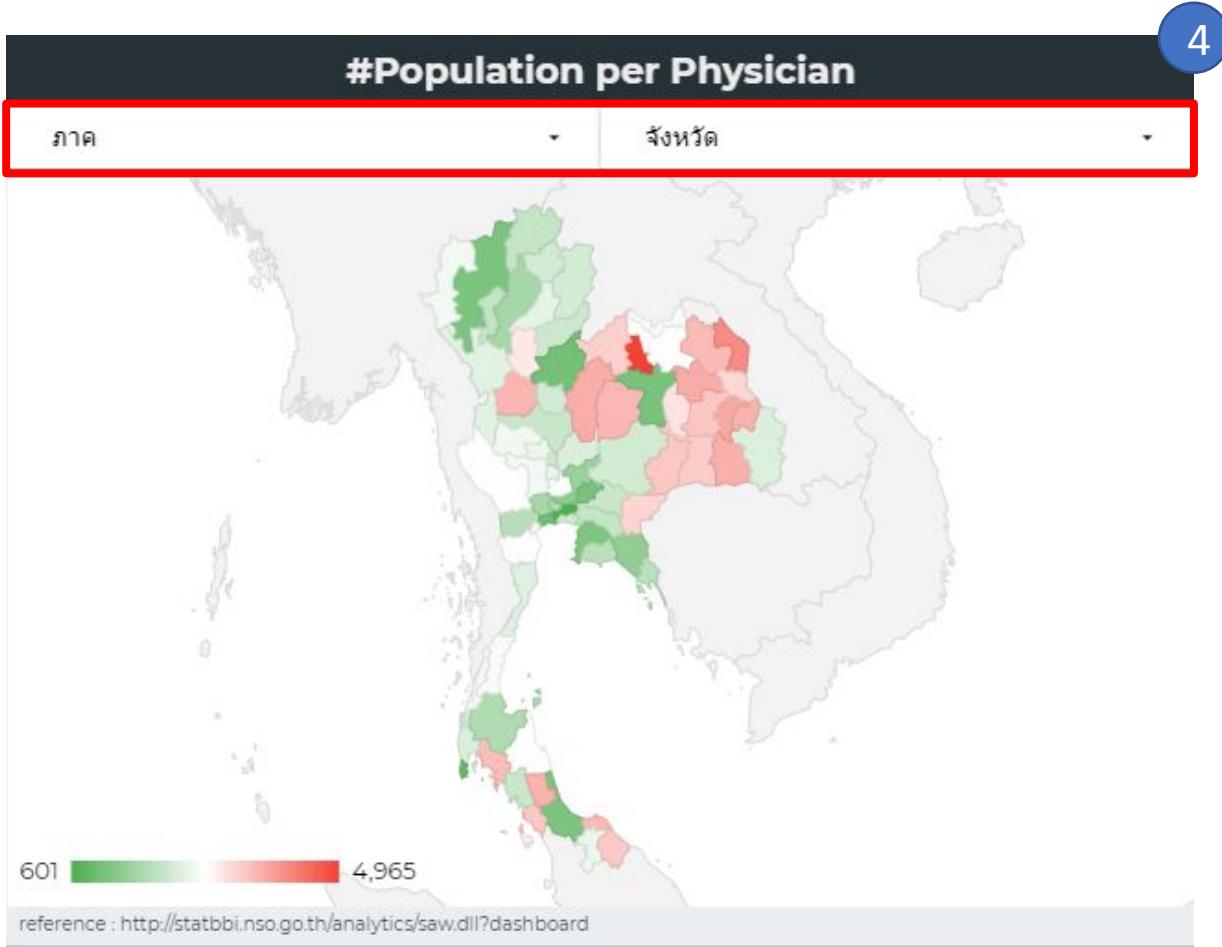
Filter: All Data Only  ADD A FILTER

**DATA** **STYLE**

Geo Map Chart:

Show legend:

# Charts in dashboard



**DATA** **STYLE**

Data source  med\_resources.csv

+ BLEND DATA ?

Date Range Dimension  Add dimension

Dimension  ภาค  จังหวัด

Default selection value1, value2, value3

Metric  AUT Record Count

Show values

Compact numbers

Decimal precision  auto

**DATA** **STYLE**

Data source  med\_resources.csv

+ BLEND DATA ?

Date Range Dimension  Add dimension

Dimension  จังหวัด  ภาค

Default selection value1, value2, value3

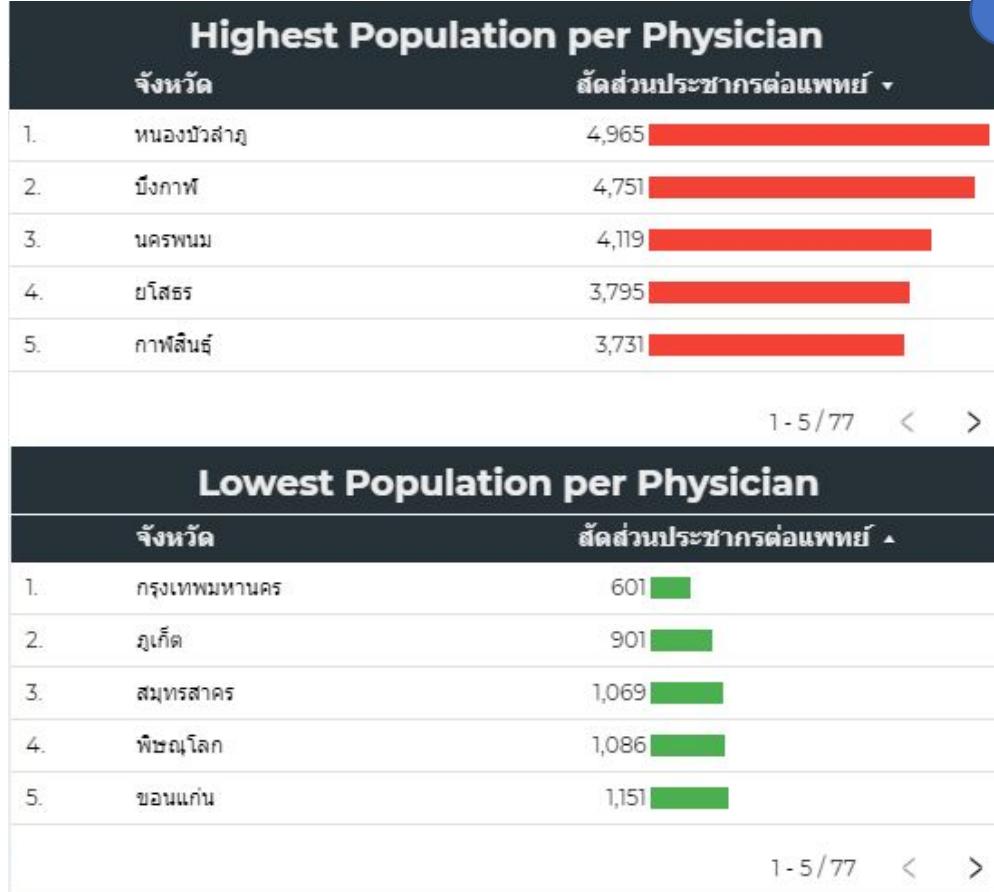
Metric  AUT Record Count

Show values

Compact numbers

Decimal precision  auto

# Charts in dashboard



5

**DATA** **STYLE**

Data source: med\_resources.csv

BLEND DATA

Date Range Dimension: Add dimension

Dimension: จังหวัด

Drill down: Off

Metric: SUM สัดส่วนประชากรต่อ...

Add metric

Optional metrics: Off

Metric sliders: Off

Rows per Page: 5

Show summary row: Off

Sort: DESCENDING

**DATA** **STYLE**

Data source: med\_resources.csv

BLEND DATA

Date Range Dimension: Add dimension

Dimension: จังหวัด

Drill down: Off

Metric: SUM สัดส่วนประชากรต่อ...

Add metric

Optional metrics: Off

Metric sliders: Off

Rows per Page: 5

Show summary row: Off

Sort: DESCENDING

**Metrics**

Column #1: Bar

Show number: On

Compact numbers: Off

Decimal precision: auto

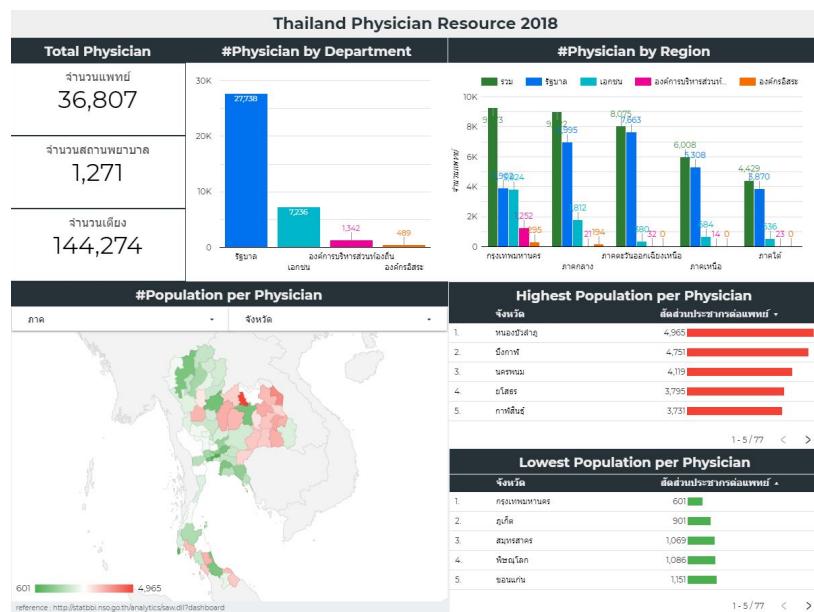
Show target: Off

Show axis: Off

# Finished Dashboards



Tweet Details							
Select date range	text	Contains	Enter a value	country	disaster_type		
created_at	text				disaster_type	country	retweet_count
Jul 19, 2019, 6 AM	Ghana oh Ghana, you should be proud of #shattawaleigh! The @Beyonce Shatta song is fire 🔥🔥🔥#Shatta...				fire	Ghana	1102
Jul 19, 2019, 8 AM	Ghana oh Ghana, you should be proud of #shattawaleigh! The @Beyonce Shatta song is fire 🔥🔥🔥#Shatta...				fire	Ghana	1100
Jul 19, 2019, 8 PM	Heavy police and fire presence at 4400 Holden in West Philadelphia. Reports of flames and heavy smoke, at ...				fire	United States	682
Jul 19, 2019, 5 AM	Join Hands for helping the #flood victims of #Assam and other affected states, My Sandart at Puri beach in ...				flood	India	677
Jul 19, 2019, 7 AM	Join Hands for helping the #flood victims of #Assam and other affected states, My Sandart at Puri beach in ...				flood	India	677
Jul 19, 2019, 5 PM	Excited to finally announce that I am joining the #fireEmblem family! I voice Bylten in the upcoming #FireE...				fire	United States	647
Jul 19, 2019, 11 AM	M5.3 #earthquake (#terremoto) strikes 23 km NW of #Athens (#Greece) 3 min ago Effects reported by eyewitne...				earthquake	Hellas	604
Jul 19, 2019, 11 AM	Finally, after all the stop and starts, delays, UNFORESEEN EXPENSES, mental stress, FIRE, and what not. I hav...				fire	Nigeria	590
Jul 19, 2019, 5 AM	11:37pm Fireworks then tear gas deployed #puertorico #PuertoRicoMarcha #RickyTreviña https://t.co/wPQgss...				fire	United States	454
Jul 19, 2019, 11 AM	M5.1 #earthquake (#terremoto) strikes 23 km NW of #Athens (#Greece) 12 min ago Updated map of its effects h...				earthquake	Hellas	372
Jul 19, 2019, 2 AM	Heavy police and fire presence at 4400 Holden in West Philadelphia. Reports of flames and heavy smoke, at ...				fire	United States	345
Jul 19, 2019, 5 PM	Amazing video shot of the tornado east of Carmangay on Thursday, courtesy Sara Banman! #abstorm https://...				storm	Canada	248
Jul 19, 2019, 5 PM	Amazing video shot of the tornado east of Carmangay on Thursday, courtesy Sara Banman! #abstorm https://...				tornado	Canada	248
Jul 19, 2019, 7 PM	Amazing video shot of the tornado east of Carmangay on Thursday, courtesy Sara Banman! #abstorm https://...				storm	Canada	243
Jul 19, 2019, 7 PM	Amazing video shot of the tornado east of Carmangay on Thursday, courtesy Sara Banman! #abstorm https://...				tornado	Canada	243
Jul 19, 2019, 6 PM	If #UnrealEngine is "the happening", wouldn't that be a logical moment for "the tweet" by @RealDonaDrift...				storm	United Kingdom	243
Jul 19, 2019, 11 AM	M5.3 #earthquake (#terremoto) strikes 23 km NW of #Athens (#Greece) 3 min ago. Read eyewitnesses' stories &...				earthquake	Hellas	180
Jul 19, 2019, 12 AM	Found our BIGGEST offset yet for the fault that caused the M7.1 earthquake. This channel is offset about 13 fe...				earthquake	United States	169
Jul 19, 2019, 12 AM	This is necessary. I appreciate Dan's passion. We should all burn with this fire. I'm a man of color before anyt...				fire	United States	153
Jul 19, 2019, 12 PM	M5.3 #earthquake (#terremoto) strikes 23 km NW of #Athens (#Greece) 3 min ago Effects reported by eyewitne...				earthquake	Hellas	151
Jul 19, 2019, 4 PM	M5.3 #earthquake (#terremoto) strikes 23 km NW of #Athens (#Greece) 3 min ago Effects reported by eyewitne...				earthquake	Hellas	150
Jul 19, 2019, 5 AM	Third day in a row that a customer has open carried a sidearm in my store. It is completely legal, but still scar...				fire	United States	146
Jul 19, 2019, 12 AM	So the Air Force is warning us not to storm BAREAUS! Guess I'm going to have to wear my Chuck Norris short...				storm	United States	112
Jul 19, 2019, 1 PM	Flames still high: The fire at @MGEMadison has caused power outages and road closures across downtown ...				fire	United States	100
Jul 19, 2019, 9 AM	Thursday Lightning Strike at 929am in Chicago #storm #news #weather #ilwx #chicago https://t.co/5eUBla...				storm	United States	100



# Q & A

Thank you