

Data Visualization using Looker Data Studio

https://github.com/kaopanboonyuen/CP020002_SmartProcessManagement_2024s1

Topics

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

About Me



Kao
Panboonyuen

kao-panboonyuen 

AI Research Scientist

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Education: Ph.D. (AI) Chula

Position: AI Team Lead, MARS
PostDoc, Chula

Interests: Computer Vision, Deep Learning
Machine Learning, Remote Sensing

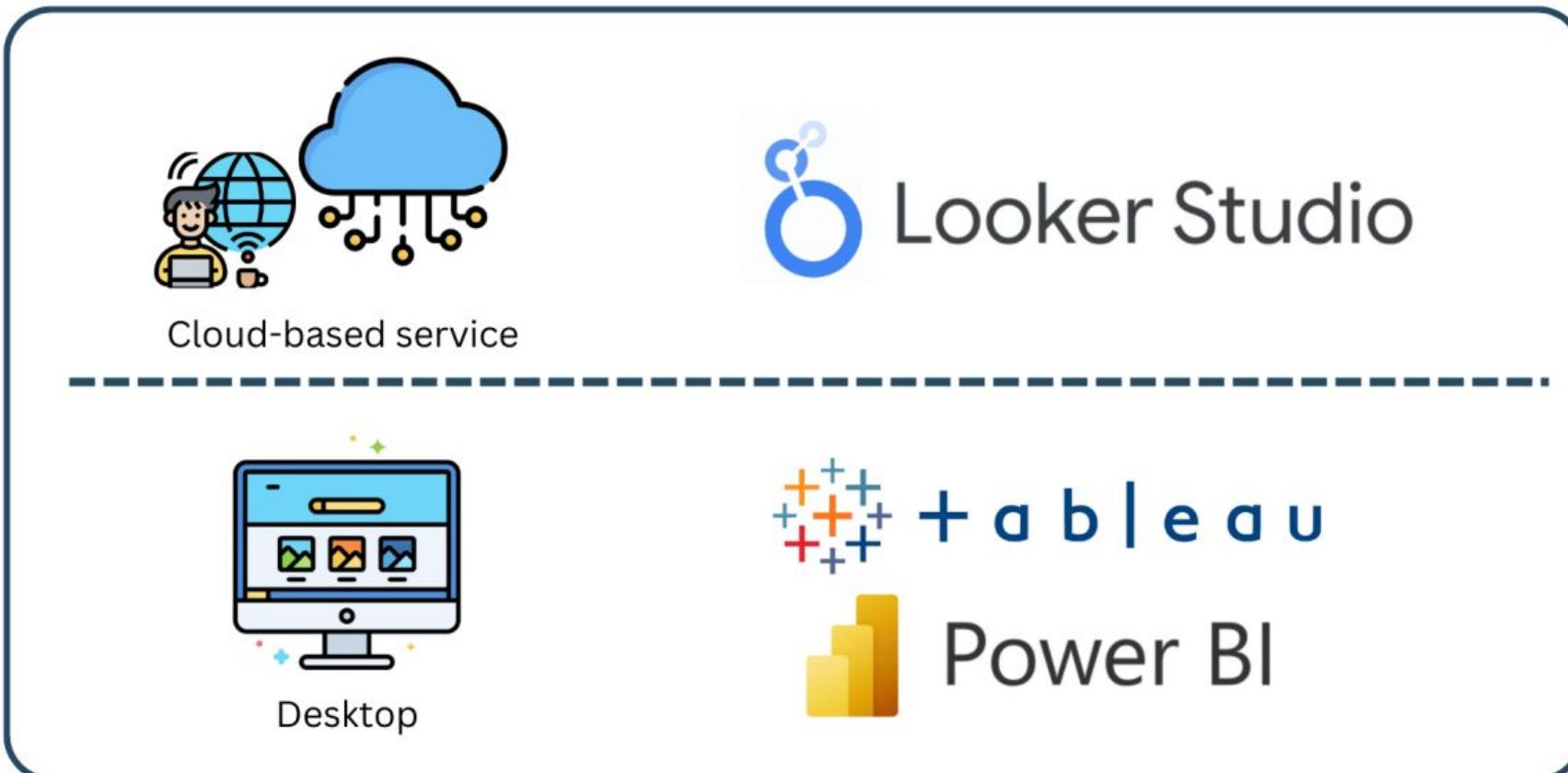


What is Looker Studio?

- 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.



How is Looker Studio a Better Tool as Compared to Other Tools?



GOOGLE LOOKER STUDIO



Google Looker Studio

Google's data visualization tool, Looker Studio (formerly Data Studio), is an excellent choice for those looking to take the dashboard and reporting game to the next level. Together with Conversionomics and our leveraging of Google BigQuery, we're able to seamlessly integrate into Data Studio and create impressive and interactive visualizations that are sure to impress.



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

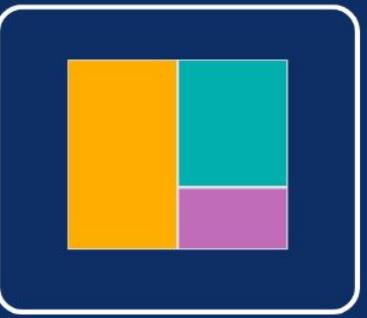
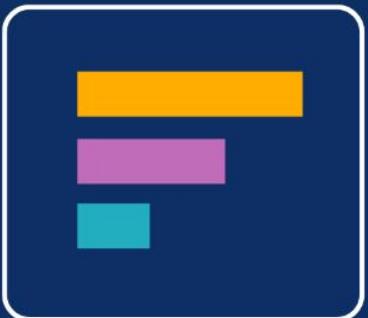
Google Connectors (23)

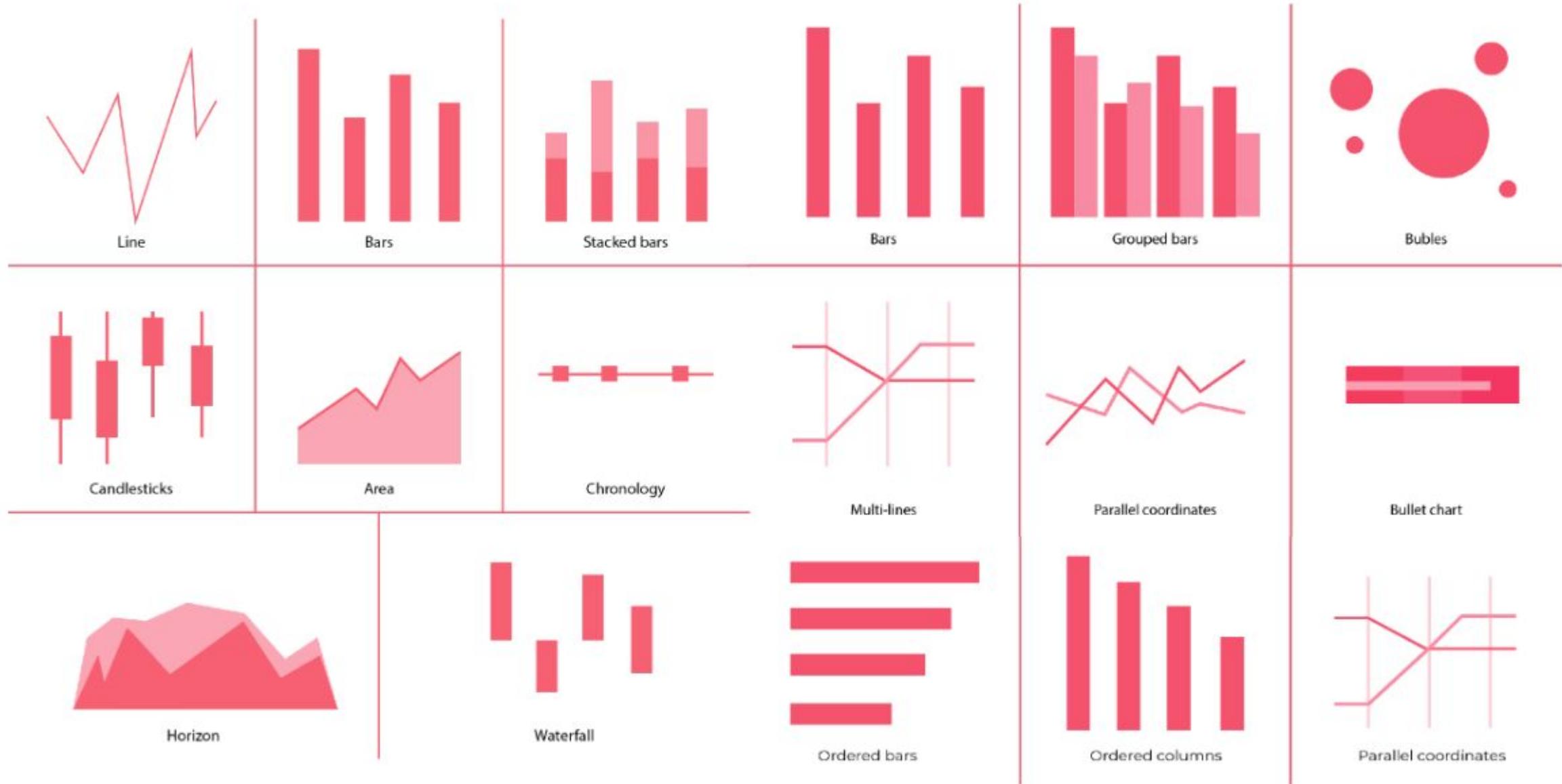
Connectors built and supported by Looker Studio [Learn more](#)

 Looker By Google Connect to your Looker semantic models.	 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.	 AppSheet By Google Connect to AppSheet app data.	 File Upload By Google Connect to CSV (comma-separated values) files.	 Amazon Redshift By Google Connect to Amazon Redshift.
 Campaign Manager 360 By Google Connect to Campaign Manager 360 data.	 Cloud Spanner By Google Connect to Google Cloud Spanner databases.	 Cloud SQL for MySQL By Google Connect to Google Cloud SQL for MySQL databases.	 Display & Video 360 By Google Connect to Display & Video 360 report data.
 Extract Data By Google Connect to Extract Data	 Google Ad Manager 360 By Google Connect to Google Ad Manager data.	 Google Cloud Storage By Google See your files in Google Cloud Storage.	 Microsoft SQL Server By Google Connect to Microsoft SQL Server databases.

HOW TO USE

Data Visualization in your Infographics





To create a chart

Time series

Bar chart

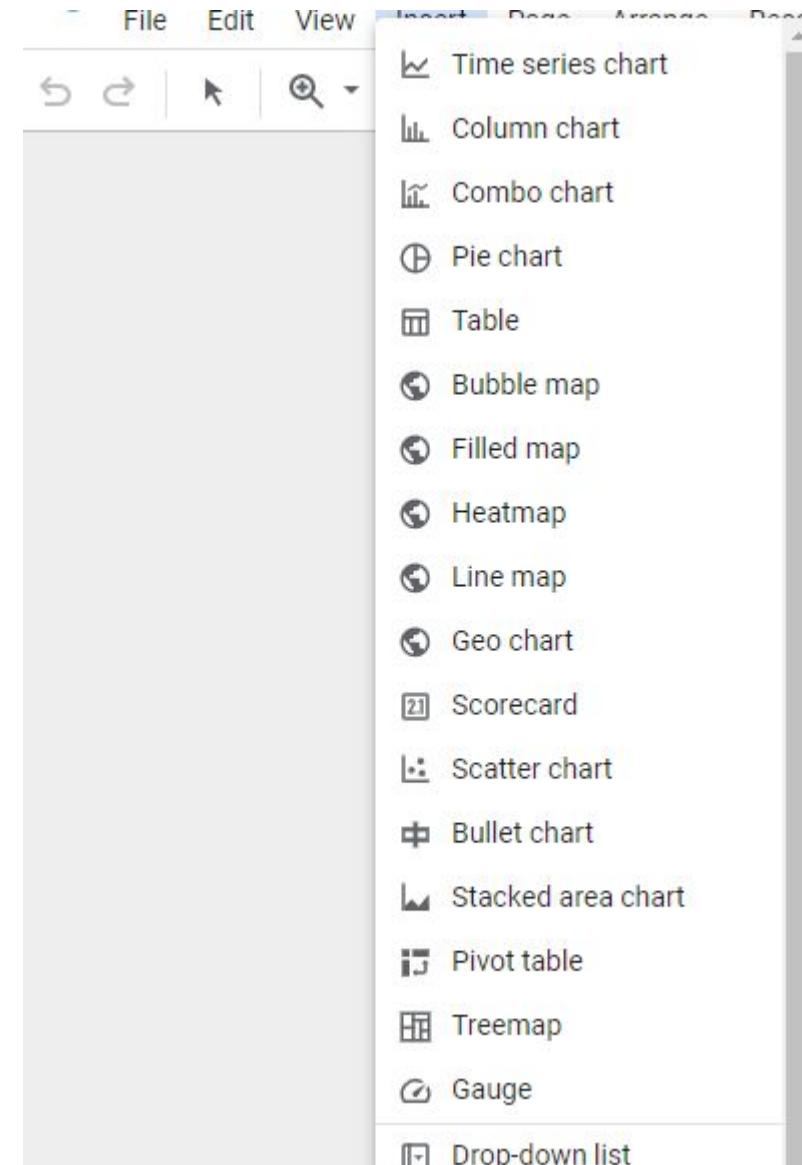
Pie chart

Tables

Scorecards

Bullet charts

Much more.



Sharing Reports

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

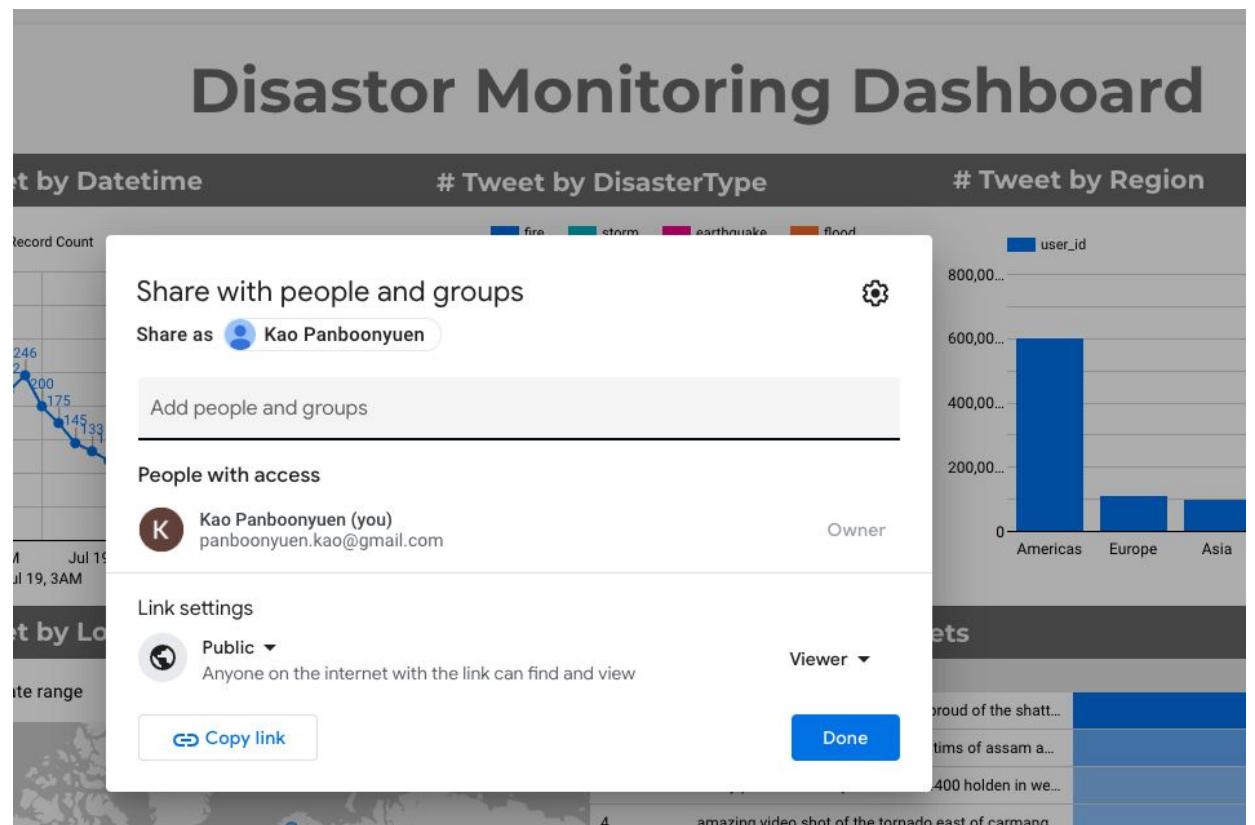
Invite people.

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 various templates.
- "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

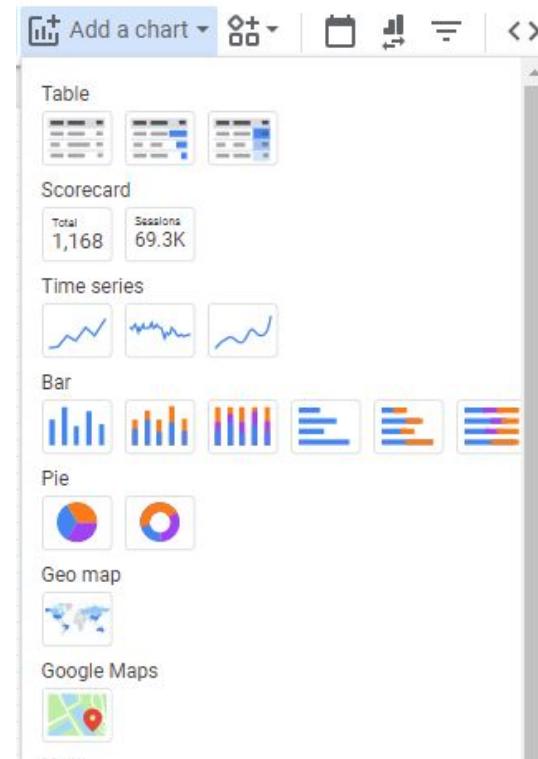
1. Edit table schema.

- ▶ 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	Total

2. Add a Chart.



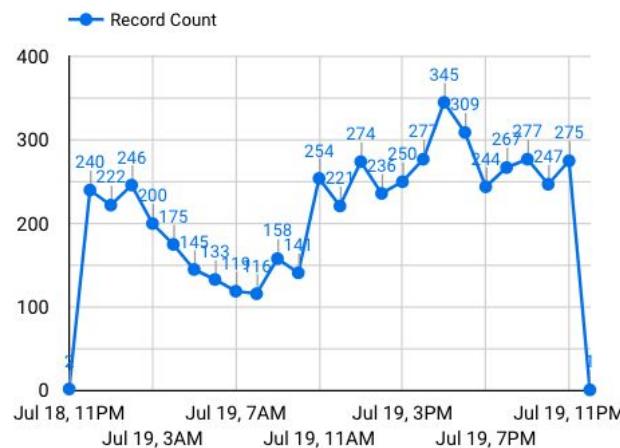
3. Customizes Chart Data and Style.

DATA **STYLE**

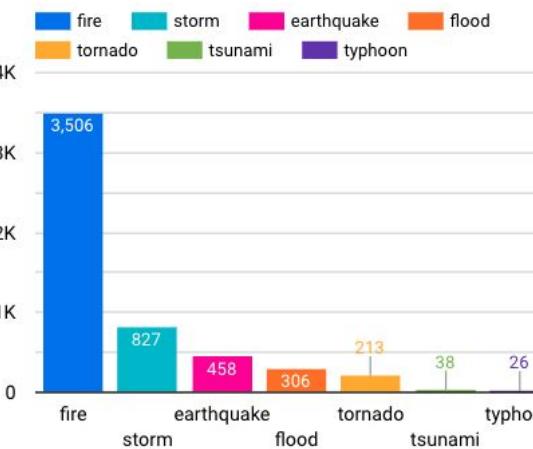
Data source	Available Fields
text_filtered.csv	<input type="text"/> Type to search clean_text country country_code created_at date disaster_type lang place_full_name place_name place_type profile_image region screen_name text twitter_id user_name
BLEND DATA	<input type="button"/> ?
Date Range Dimension	<input type="text"/> created_at
Dimension	<input type="text"/> created_at
Drill down	<input type="checkbox"/>
Breakdown Dimension	<input type="button"/> Add dimension
Metric	<input type="text"/> Record Count <input type="button"/> Add metric

Disastor Monitoring Dashboard

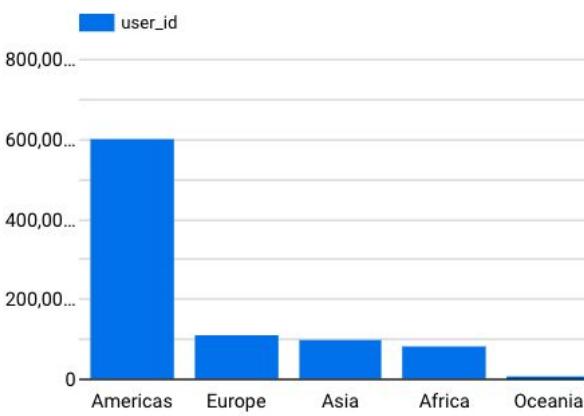
Tweet by Datetime



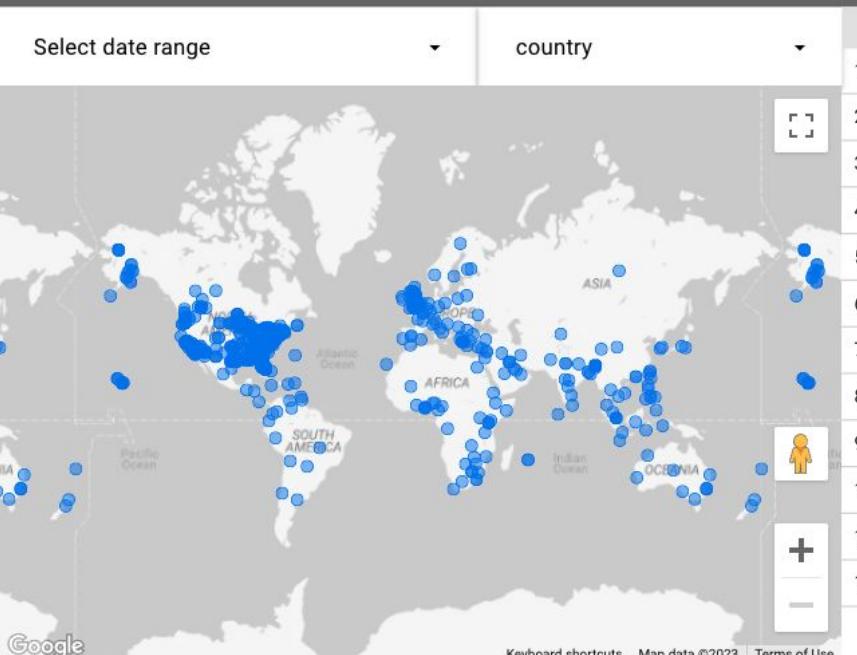
Tweet by DisasterType



Tweet by Region



Tweet by Location



Most Retweeted Tweets

clean_text	retweet_count
ghana 🇬🇭🇬🇭🇬🇭 you should be proud of the shatt...	2,202
join hands for helping the flood victims of assam a...	1,354
heavy police and fire presence at 4400 holden in we...	1,027
amazing video shot of the tornado east of carmang...	982
m5.3 earthquake σεισμός strikes 23 km nw of athe...	905
excited to finally announce that i am joining the fire...	647
finally after all the stop and starts delays unforesee...	590
11 37pm fireworks then tear gas deployed puertoric...	434
m5.1 earthquake σεισμός strikes 23 km nw of athe...	372
if unsealepstein is "the happening" wouldn't that be ...	243
m5.3 earthquake σεισμός strikes 23 km nw of athe...	180
found our biggest offset yet for the fault that cause...	169

Thailand Physician Resource

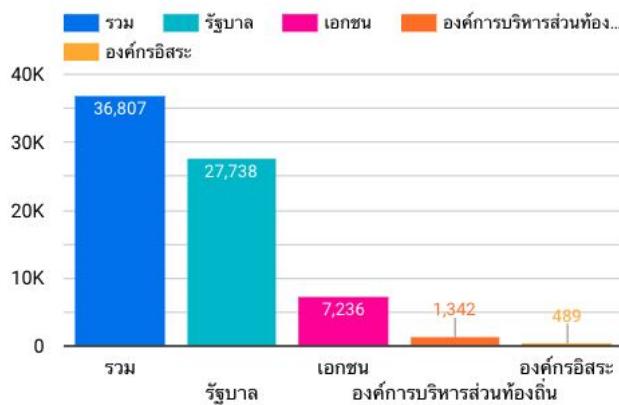
#Total Physicians

จำนวนแพทย์
36,807

จำนวนสถานพยาบาล
1,271

จำนวนเตียง
149,641

#Physician by Department

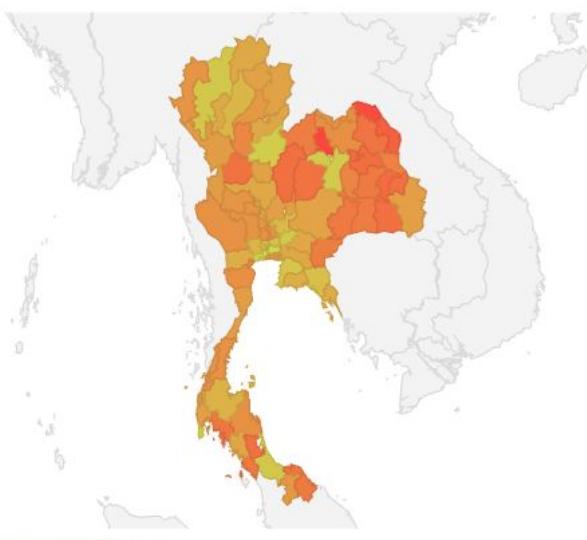


#Physician by Region



#Population per Physician

ภาค จังหวัด



#Highest Population Per Physician

จังหวัด	สัดส่วนประชากรต่อแพทย์
กาฬสินธุ์	3,731
เพชรบูรณ์	3,719
ศรีสะเกษ	3,697
พัทลุง	3,669
อ่าวนางเจริญ	3,666

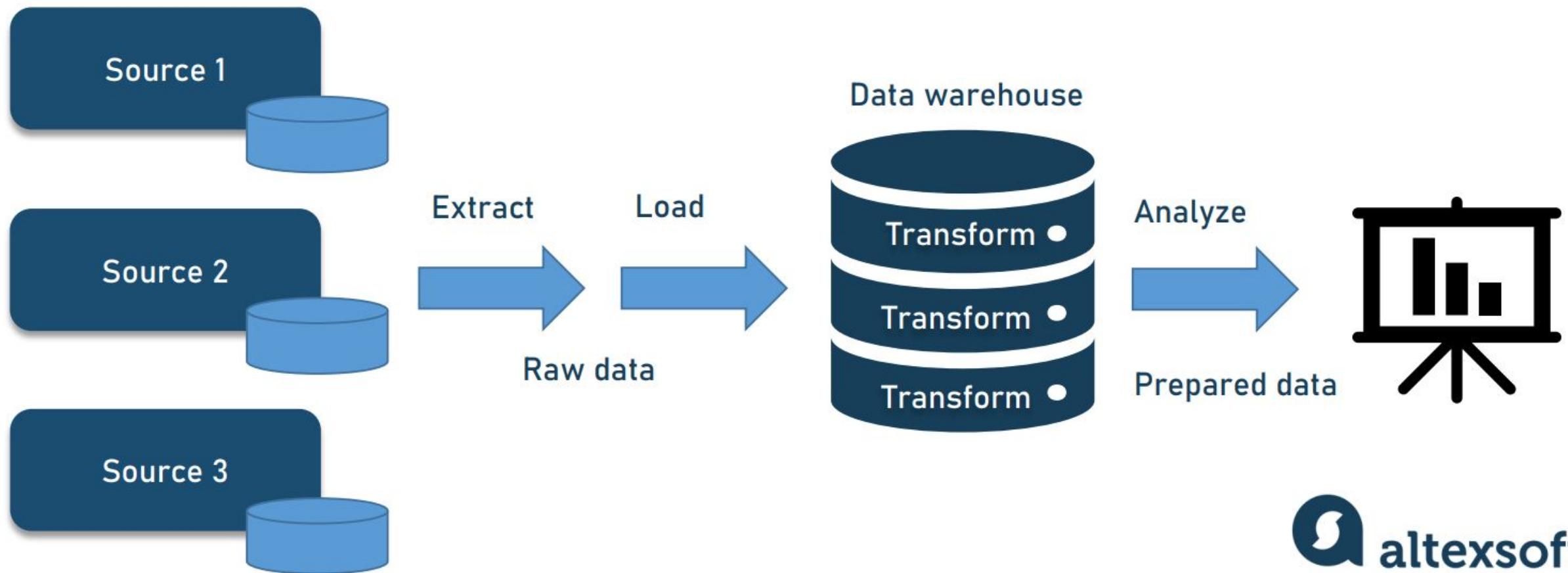
1 - 77 / 77 < >

#Lowest Population Per Physician

จังหวัด	สัดส่วนประชากรต่อแพทย์
กรุงเทพมหานคร	601
ภูเก็ต	901
สมุทรสาคร	1,069
พิษณุโลก	1,086

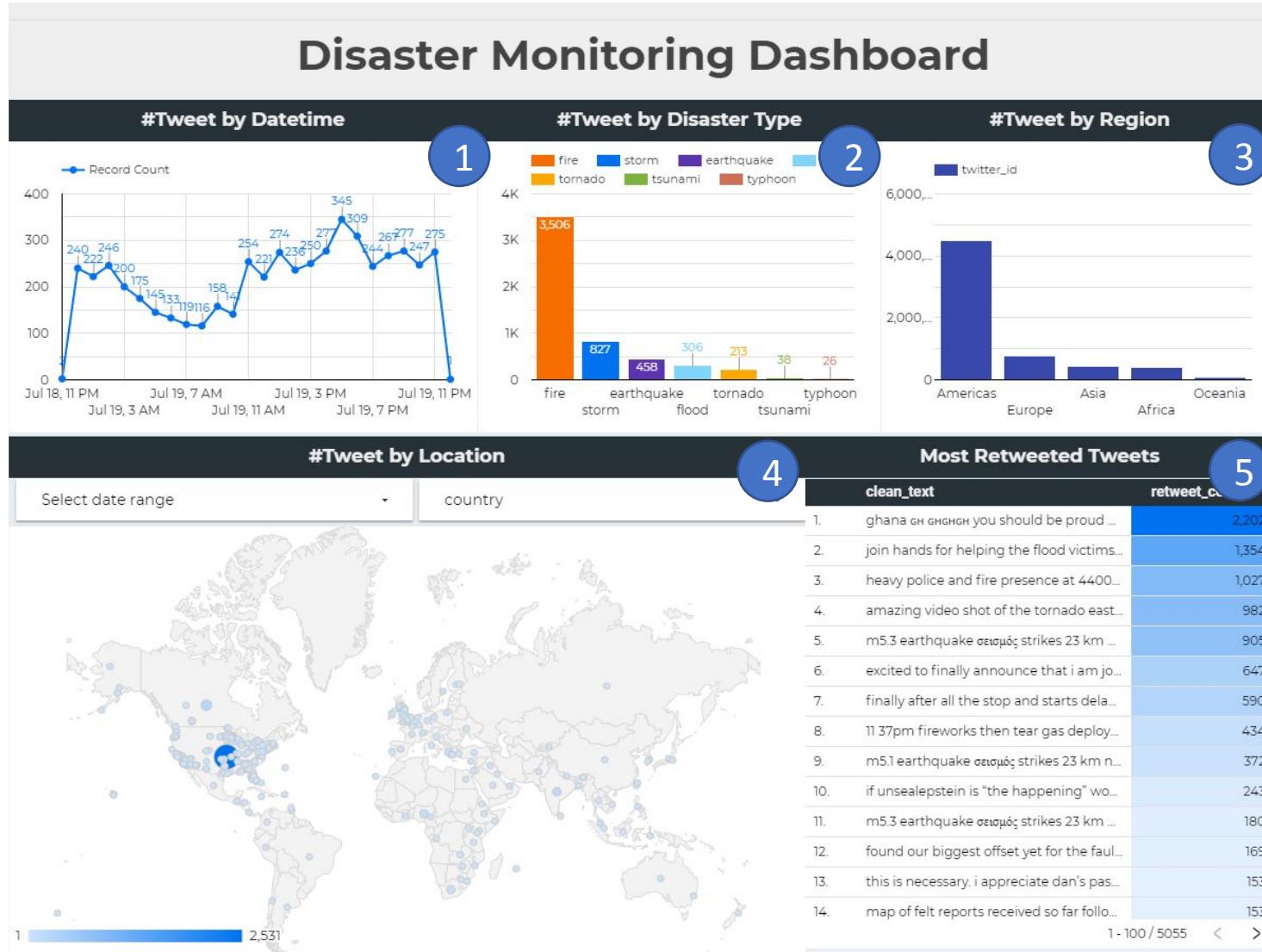
1 - 77 / 77 < >

ELT PIPELINE



Part 2: Disaster Analysis Dashboard

Part 2: Disaster Analysis Dashboard



Part 2: Disaster Analysis Dashboard

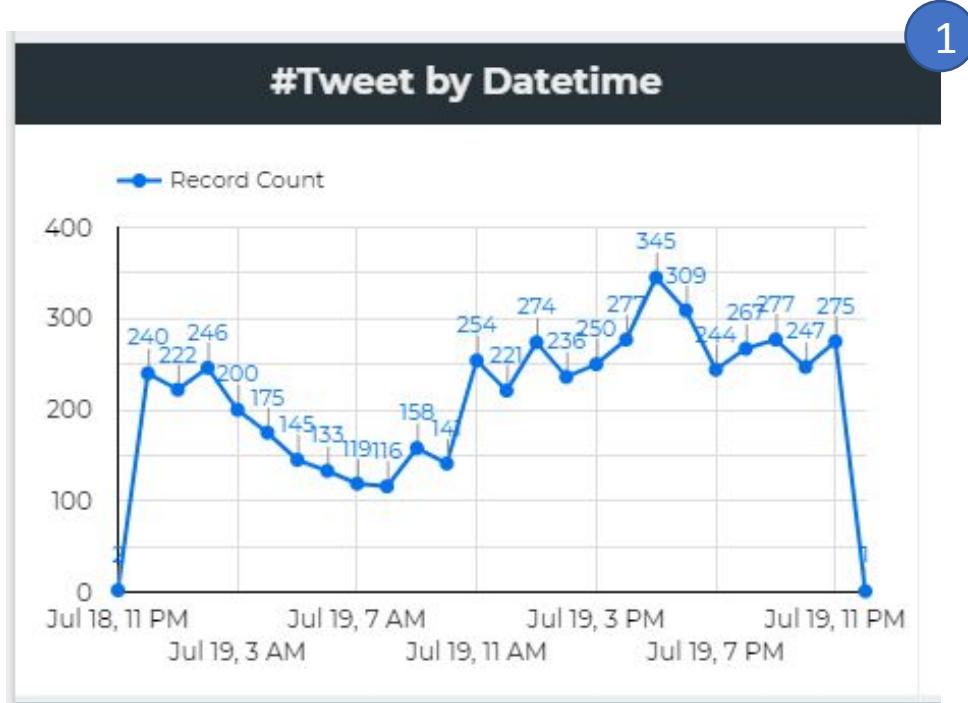
Tweet Details						
created_at	text	disaster_type	country	retweet_count	favorite_count	id
1. Jul 19, 2019, 6 AM	Ghana GH GHGH, you should be proud of @shattawalegh! The @Beyonce Shatta song is fire 🎤🔥🔥 #Shatta...	fire	Ghana	702	6	602
2. Jul 19, 2019, 8 AM	Ghana GH GHGH, you should be proud of @shattawalegh! The @Beyonce Shatta song is fire 🎤🔥🔥 #Shatta...	fire	Ghana	1,100	1,100	603
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	682	604
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	677	605
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	677	606
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	647	607
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	604	608
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	590	609
9. Jul 19, 2019, 5 AM	11:37pm Fireworks then tear gas deployed #puertorico #PuertoRicoMarcha #RickyVeteYa https://t.co/wKPqss...	fire	United States	434	434	610
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	372	611
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	345	612
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	248	613
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	248	614
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	243	615
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	243	616
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	243	617
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	180	618
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	169	619
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	153	620
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	151	621
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	150	622
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	146	623
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	112	624
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	100	625
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	100	626
1 - 100 / 5301 < >						

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

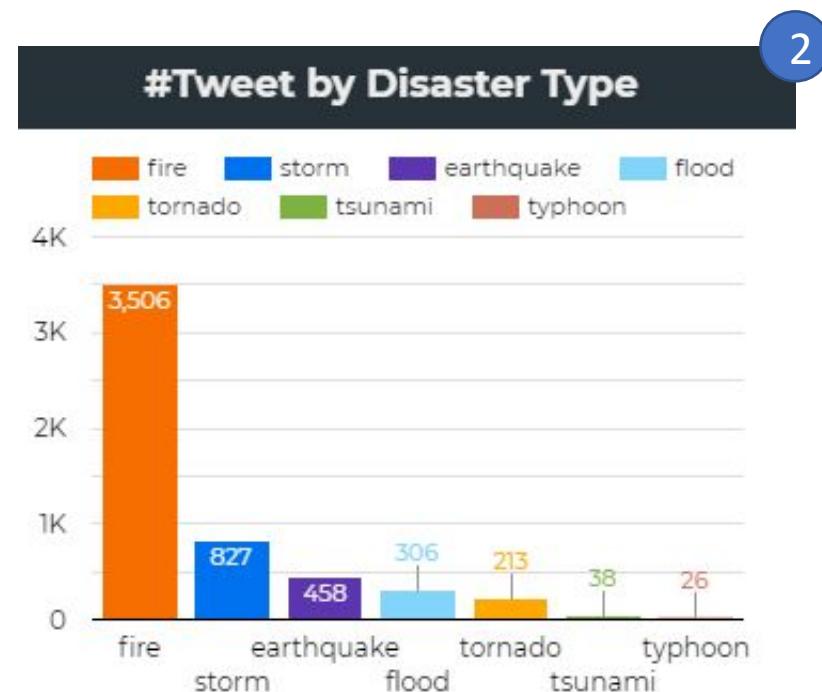
Reference Lines: Add a reference line

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

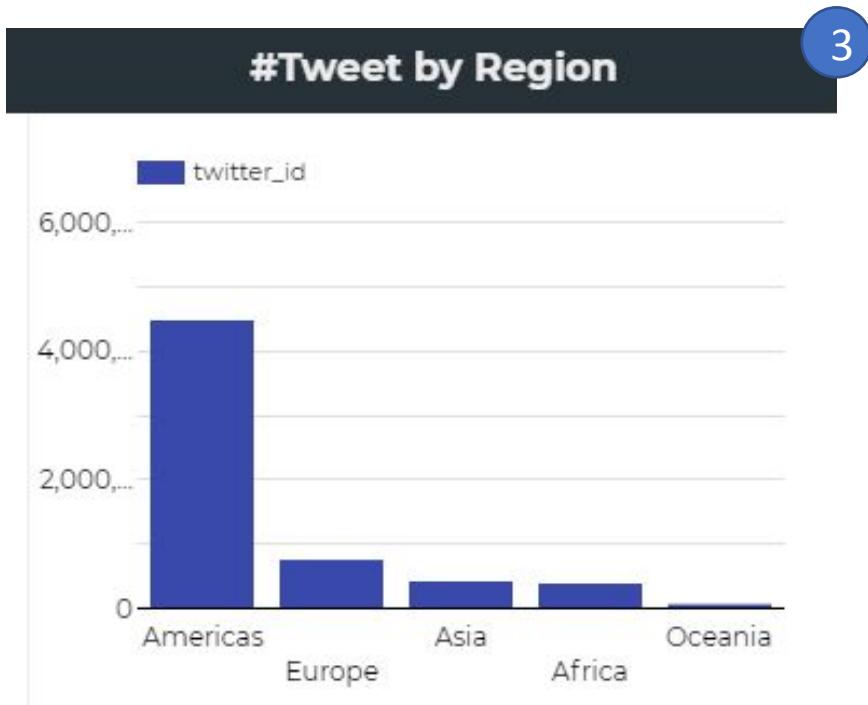
Reference Lines: Add a reference line

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:

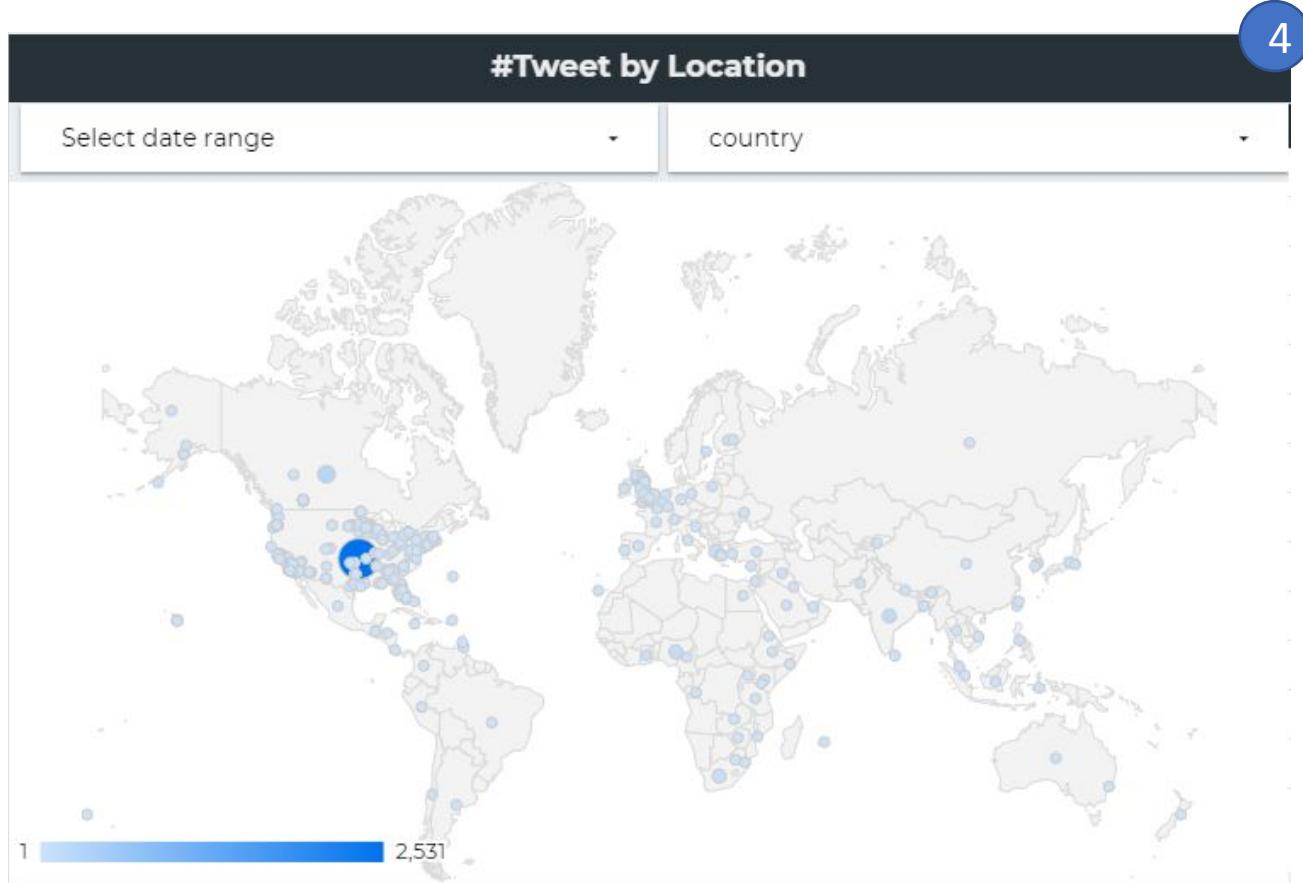
Reference Lines:

Axes: Show axes

Reverse Y-axis direction:

Reverse X-axis direction:

Charts in dashboard



4

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

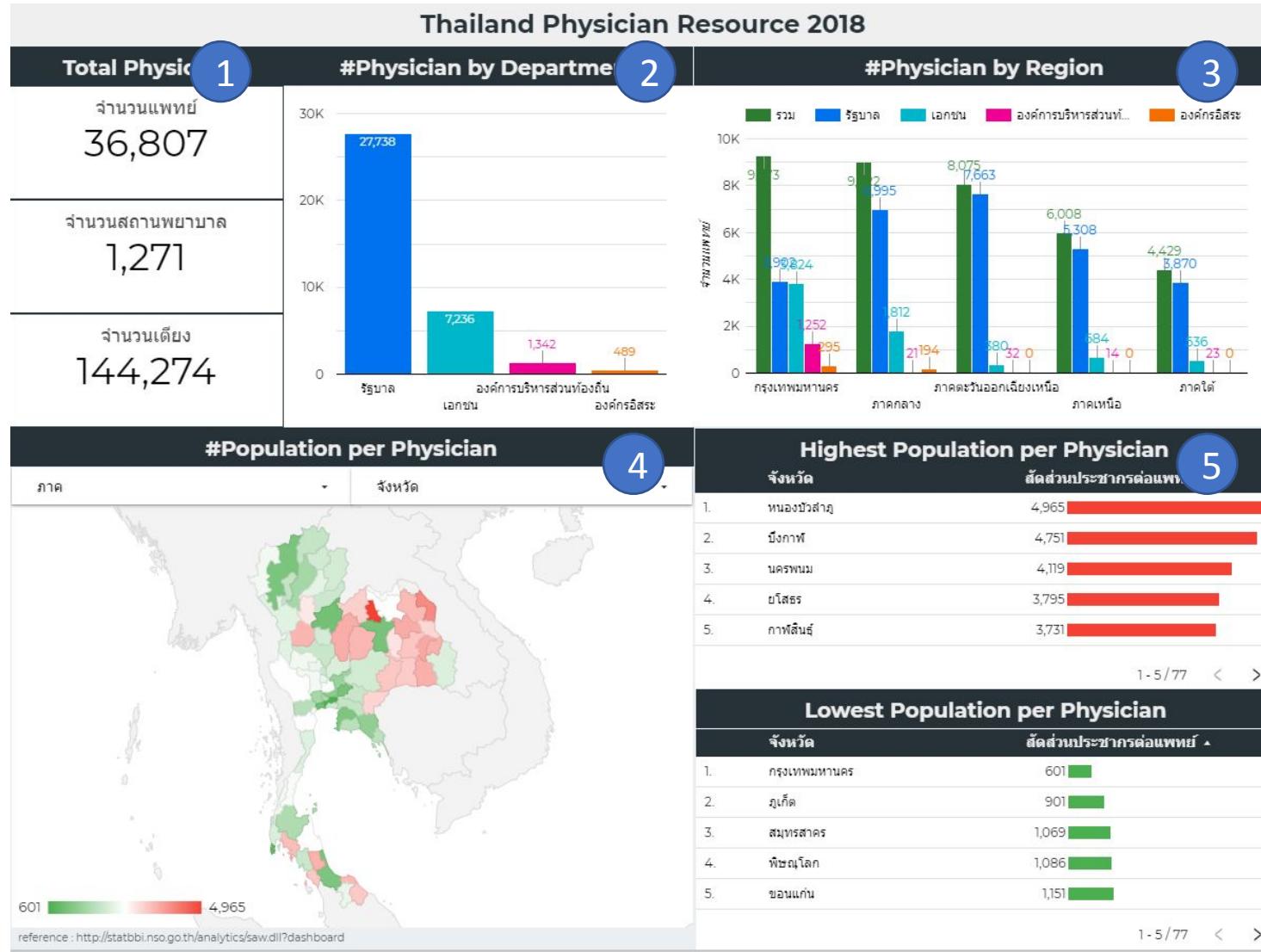
Dimension

Drill down

Metric Descending Ascending

Part 3: Physician Analysis Dashboard

Part 3: Physician Analysis Dashboard



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: ABC แบบการบริหาร Equal to (=) รวม

AND

ABC แบบการบริหาร

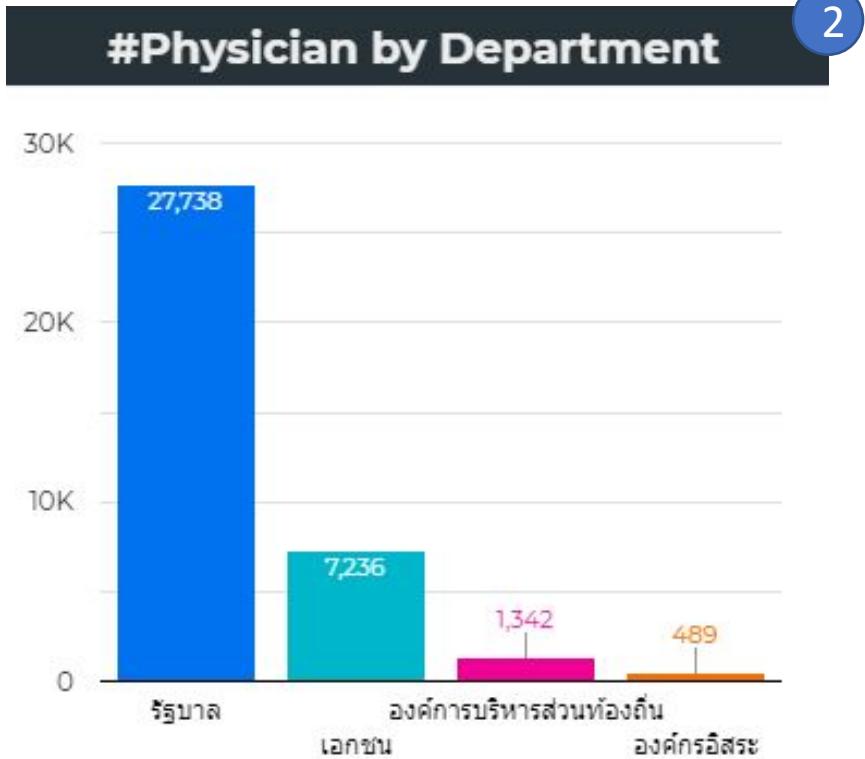
DATA	STYLE
Data source: med_resources.csv	Data source: med_resources.csv
+ BLEND DATA	+ BLEND DATA
Date Range Dimension	Date Range Dimension
+ Add dimension	+ Add dimension
Metric	Metric
SUM จำนวนแพทย์	SUM จำนวนสถานพยาบาล
Optional metrics	Optional metrics
Default date range	Default date range
Comparison date range	Comparison date range
None	None
Filter	Filter
Scorecard Filter	Scorecard Filter
+ Exclude All Data	+ Exclude All Data
+ ADD A FILTER	+ ADD A FILTER

DATA STYLE

DATA STYLE

DATA STYLE

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	จังหวัด แบบการบริหาร ภาค 123 จำนวนเตียง 123 จำนวนทันตแพทย์ 123 จำนวนพยาบาลเทคนิค 123 จำนวนพยาบาลวิชาชีพ 123 จำนวนแพทย์ 123 จำนวนเภสัชกร 123 จำนวนสถานพยาบาล 123 สัดส่วนประชากรต่อห้าม...
Drill down	
Breakdown Dimension แบบการบริหาร	จังหวัด แบบการบริหาร ภาค 123 จำนวนเตียง 123 จำนวนทันตแพทย์ 123 จำนวนพยาบาลเทคนิค 123 จำนวนพยาบาลวิชาชีพ 123 จำนวนแพทย์ 123 จำนวนเภสัชกร 123 จำนวนสถานพยาบาล 123 สัดส่วนประชากรต่อห้าม...
Metric จำนวนแพทย์	จังหวัด แบบการบริหาร ภาค 123 จำนวนแพทย์ 123 จำนวนพยาบาลเทคนิค 123 จำนวนพยาบาลวิชาชีพ 123 จำนวนแพทย์ 123 จำนวนเภสัชกร 123 จำนวนสถานพยาบาล 123 สัดส่วนประชากรต่อห้าม...
Optional metrics	
Metric sliders	
Sort จำนวนแพทย์	จังหวัด แบบการบริหาร ภาค 123 จำนวนแพทย์ 123 จำนวนพยาบาลเทคนิค 123 จำนวนพยาบาลวิชาชีพ 123 จำนวนแพทย์ 123 จำนวนเภสัชกร 123 จำนวนสถานพยาบาล 123 สัดส่วนประชากรต่อห้าม...
<input checked="" type="radio"/> Descending	
<input type="radio"/> Ascending	
Secondary sort จำนวนแพทย์	จังหวัด แบบการบริหาร ภาค 123 จำนวนแพทย์ 123 จำนวนพยาบาลเทคนิค 123 จำนวนพยาบาลวิชาชีพ 123 จำนวนแพทย์ 123 จำนวนเภสัชกร 123 จำนวนสถานพยาบาล 123 สัดส่วนประชากรต่อห้าม...
<input checked="" type="radio"/> Descending	
<input type="radio"/> Ascending	
Filter	
Bar Chart 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

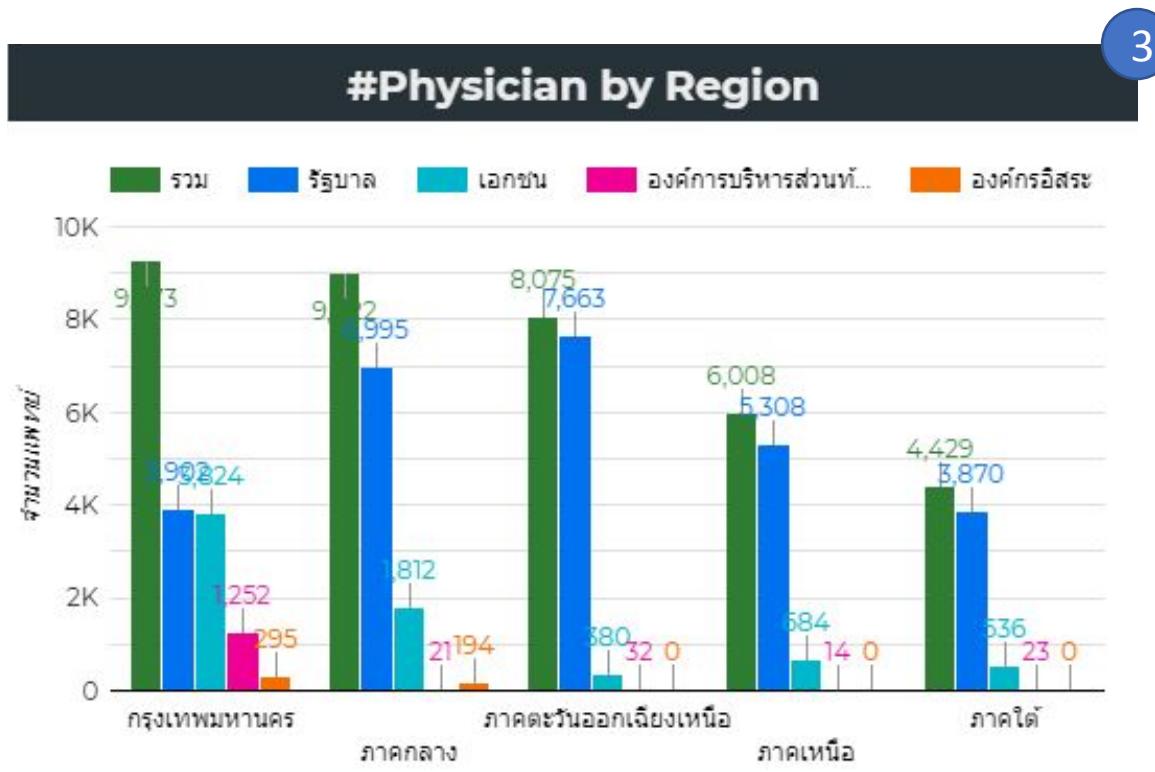
Axes

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)

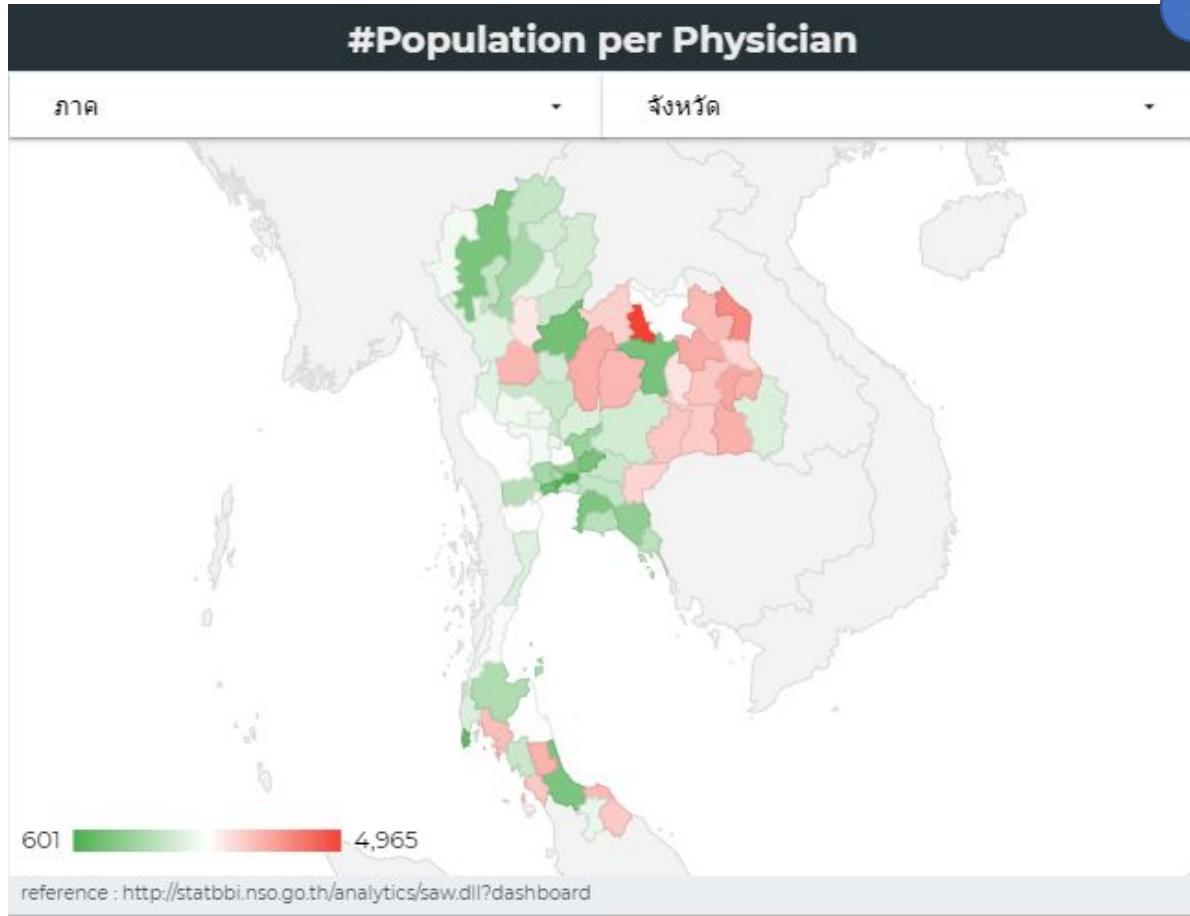
Secondary sort: จำนวนแพทย์

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

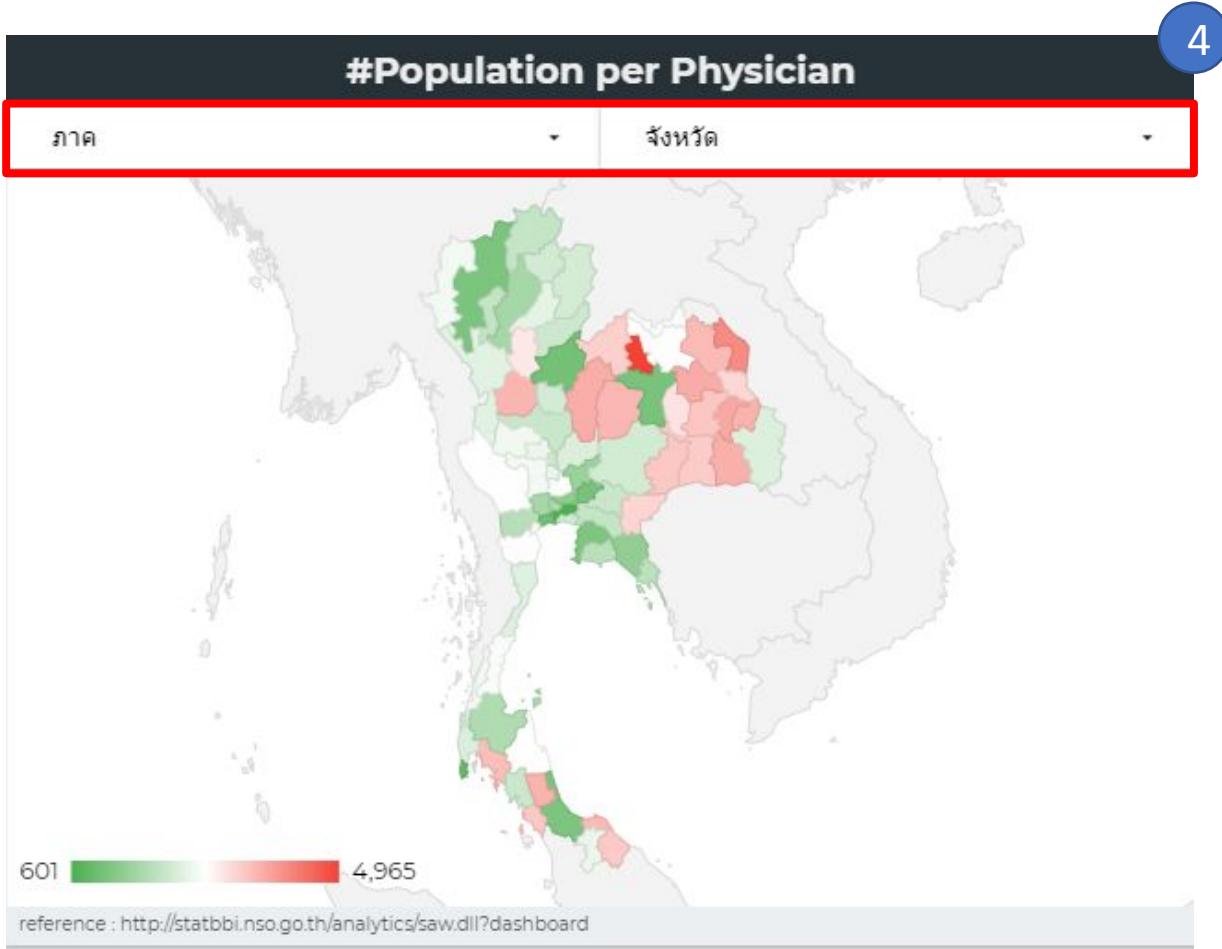
Filter: All Data Only ADD A FILTER

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

Default selection value1, value2, value3

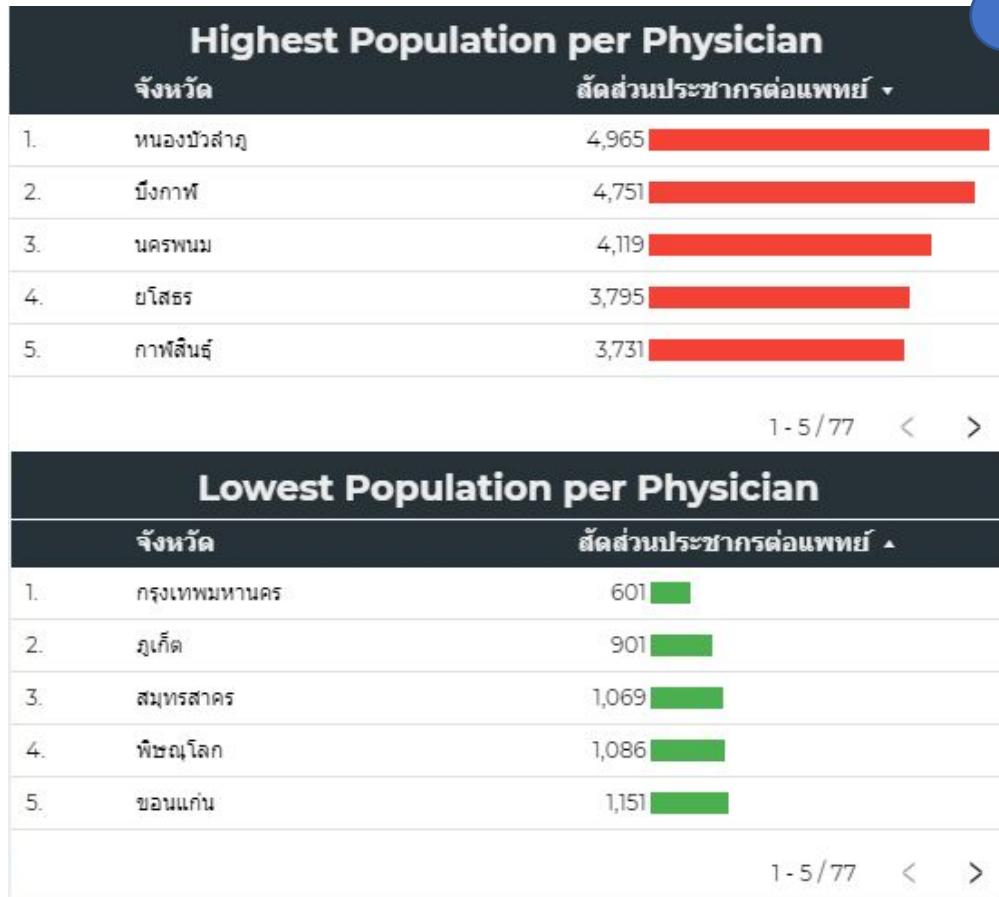
Metric AUT Record Count

Show values

Compact numbers

Decimal precision auto

Charts in dashboard



DATA STYLE

Data source: med_resources.csv

+ BLEND DATA

Date Range Dimension: Add dimension

Dimension: จังหวัด

+ Add dimension

Drill down: Off

Metric: SUM สัดส่วนประชากรต่อ...

+ Add metric

Optional metrics: Off

Metric sliders: Off

Rows per Page: 5

Show summary row: Off

Sort: SUM สัดส่วนประชากรต่อ... Descending

Ascending

DATA STYLE

Data source: med_resources.csv

+ BLEND DATA

Date Range Dimension: Add dimension

Dimension: จังหวัด

+ Add dimension

Drill down: Off

Metric: SUM สัดส่วนประชากรต่อ...

+ Add metric

Optional metrics: Off

Metric sliders: Off

Rows per Page: 5

Show summary row: Off

Sort: SUM สัดส่วนประชากรต่อ... Ascending

Descending

Metrics: Column #1

Bar

Show number: checked

Compact numbers: Off

Decimal precision: auto

Show target: Off

Show axis: Off

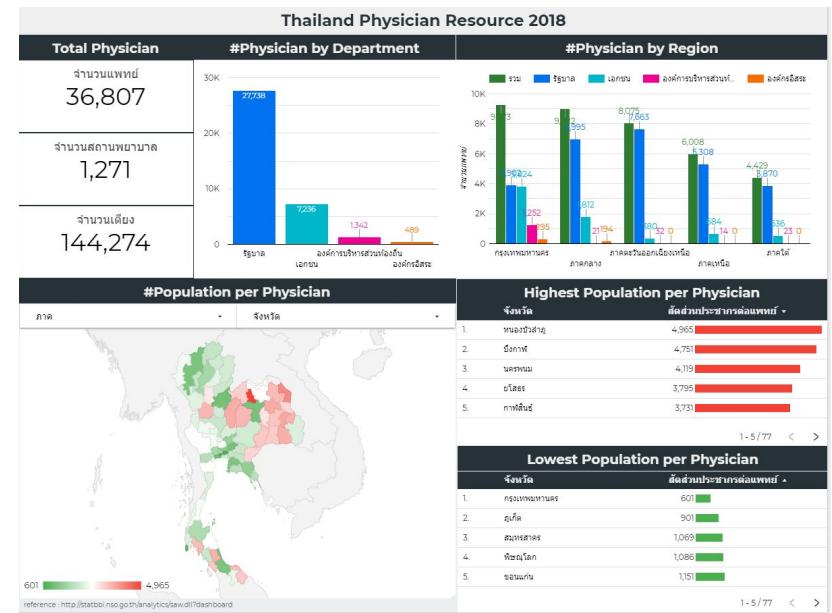
Finished Dashboards



Tweet Details

Select date range: Jul 19, 2019, 6 AM - Jul 19, 2019, 11 AM

created_at	text	disaster_type	country	retweet_cou...
Jul 19, 2019, 6 AM	Ghana oh ghana, you should be proud of @shattawaleigh! The @Beyonce Shatta song is fire 🔥🔥🔥 #Shatta...	fire	Ghana	1,102
Jul 19, 2019, 8 AM	Ghana oh ghana, you should be proud of @shattawaleigh! The @Beyonce Shatta song is fire 🔥🔥🔥 #Shatta...	fire	Ghana	1,100
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, MySandArt 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, MySandArt at Puri beach in ...	flood	India	677
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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, 7 PM	Amazing video shot of the tornado east of Carmangay on Thursday, courtesy Sara Banman! #abstorm https://...	tornado	United Kingdom	243
Jul 19, 2019, 6 PM	If UruseiEpstein is "the happening", wouldn't that be a logical moment for "the tweet" by @realDonaldDr... ...	storm	United States	169
Jul 19, 2019, 11 AM	M5.3 #earthquake (#eqaqc) strikes 23 km NW of Athens (#Greece) 3 min ago. Read eyewitness' stories &...	earthquake	Hellas	160
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	153
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	151
Jul 19, 2019, 12 PM	M5.3 #earthquake (#eqaqc) strikes 23 km NW of Athens (#Greece) 3 min ago. Effects reported by eyewitne...	earthquake	Hellas	150
Jul 19, 2019, 4 PM	M5.3 #earthquake (#eqaqc) strikes 23 km NW of Athens (#Greece) 3 min ago. Effects reported by eyewitne...	earthquake	Hellas	146
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	112
Jul 19, 2019, 12 AM	So the Air Force is warning us not to storm #AREAST!. Guess I'm going to have to wear my Chuck Norris short...	storm	United States	100
Jul 19, 2019, 1 PM	Flames still high. The fire at @MCEMedison 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/5sEUbaL...	storm	United States	100



Q & A

Thank you