

BUSINESS INTELLIGENCE

Task 01

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FLOW



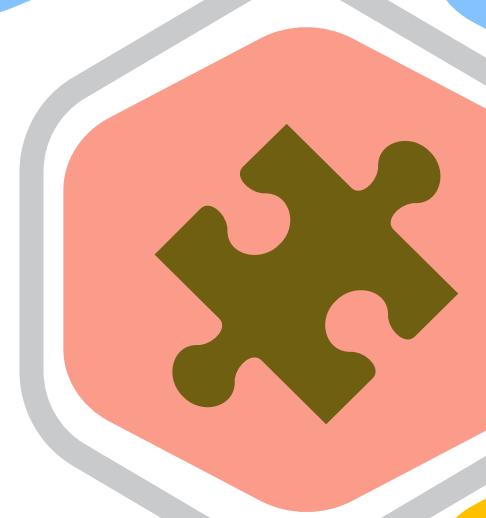
Selection & Approach



Goals & AOL



Results & Insights



Processes



Appendix



Goals

- Topic Selection.
- Building our own Schema.
- Forming Analytical questions (Based on our topic).
- Visualizing the Results.

AOL

America Online

AOL (Formerly AOL Inc.) is an American Web portal and online service provider based on New York city.

On **August 4, 2006**, AOL research headed by Dr. Abdur Chowdhury, released a compressed text file on one of its websites containing **twenty million** search keywords for over **650,000 users** over a **3-month** period intended for research purposes.

However personally identifiable information was present in many of the queries and therefore AOL acknowledged and removed the data On August 7, 2006.

Screenshot on 8th of April 2006

<https://web.archive.org/web/20060408012219/http://www.aol.com/>

The screenshot captures the AOL homepage from April 7, 2006. At the top, the AOL logo is prominently displayed. The main navigation bar includes links for Main, My AOL, Video On Demand, and Join AOL. Below the header, a banner reads "Good Evening" and "April 7, 2006". The main content area features a "Who's Sorry And Who Isn't?" news quiz with three celebrity photos. The "Headlines" section lists recent news items such as "Scores Dead in Baghdad Mosque Blast", "Bickering Senate Shelves Immigration Bill", and "Deadly Tornadoes Strike Tennessee". To the right, there are sections for AOL Sports (Favre Ready for Announcement, Women's Hoops Coach Dies at 28), AOL Directory (links to AOL High Speed, Games, Money & Finance, etc.), and AOL Radio (listing stations like XM Watercolors, Gretchen Wilson Live, and Chuck D's Top 20). A central video player shows a clip from "Friends". The right sidebar includes sections for "Get Your Local Weather", "The Daily Catch" (Girls Gone Gossip), "Enhanced Video Search" (George Clooney), and "Get Things Done: Find, Plan, Buy" (AOL Autos, AOL Shopping, AOL Travel). The bottom right corner shows a small circular icon with the number 4.

What are the most searched Keywords?

A collage of various search terms and website names in blue and white text. The words include: golf, center, photos, video, island, best, north, schools, worldkids, washington, homes, tax, show, dog, song, life, tv, old, art, game, jersey, used, city, map, phone, house, medical, day, church, nude, lake, children, long, water, company, us, virginia, michigan, news, ohio, women, movie, department, california, aol, car, store, sex, auto, games, history, girls, family, beach, american, pics, white, air, online, credit, restaurant, music, club, home, real, school, love, big, estate, john, health, florida, georgia, university, south, bookwest.

What are the related events happened?

The screenshot shows the 'On This Day' website interface for April 2006. The top navigation bar includes links for 'On This Day', 'History', 'Film & TV', 'Music', 'Sport', and social media icons for Facebook and Twitter. Below the date, there are tabs for 'ALL', 'EVENTS', 'DEATHS', and 'WEDDINGS'. A secondary row of month tabs allows selection from January to December. Under the 'EVENTS' tab, specific dates are listed with their descriptions. Two events are circled in red: 'Apr 2 Over 60 tornadoes break out, hardest hit is Tennessee with 29 people killed.' and 'Apr 13 Powerful tornadoes rip through Iowa City, Iowa.'

DATE	DESCRIPTION
Apr 1	The Serious Organised Crime Agency, dubbed the 'British FBI', is created in the United Kingdom.
Apr 2	Over 60 tornadoes break out, hardest hit is Tennessee with 29 people killed.
Apr 2	Kraft Nabisco Championship Women's Golf, Mission Hills CC: Australian Karrie Webb beats Lorena Ochoa of Mexico with a birdie on the 1st playoff hole; earlier eagles same hole to force the playoff
Apr 3	68th NCAA Men's Basketball Championship: Florida beats UCLA, 73-57; Gators first title; center Joakim Noah named tournament Most Outstanding Player
Apr 4	25th NCAA Women's Basketball Championship: Maryland beats Duke, 78-75 OT; Terrapins' first national title; Laura Harper MOP
Apr 6	NZSL (New Zealand sign language) is made an official language of New Zealand
Apr 8	Shedden massacre: The bodies of eight men, all shot to death, are found in a field in Ontario, Canada. The murders are soon linked to the Bandidos motorcycle gang.
Apr 8	159th Grand National: 11-1 Irish shot Numbersixvalverde, ridden by Niall Madden wins by 6 lengths from defending champion Hedgehunter
Apr 10	Hundreds of thousands protest H.R. 4437 (aka the "Sensenbrenner Bill") in the United States.
Apr 13	Powerful tornadoes rip through Iowa City, Iowa.
Apr 17	110th Boston Marathon: Kenyan double; Robert Kipkoech Cheruiyot wins 2nd men's title in 2:07:14; Rita Jeptoo takes women's title in 2:23:38
Apr 22	243 people are injured in pro-democracy protest in Nepal after Nepali security forces open fire on protesters against King Gyanendra.



TOPIC FINALIZED TO
NATURAL DISASTERS

Finding the Categories of Natural Disasters

ExtractionTL

This November is Wikipedia Asian month. Join the contest and win a postcard from Asia.

Natural disaster

From Wikipedia, the free encyclopedia

For other uses, see [Natural disaster \(disambiguation\)](#).

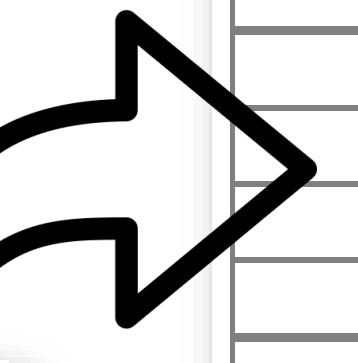
A natural disaster is a major adverse event resulting from natural processes of the Earth; examples are floods, hurricanes, tornadoes, volcanic eruptions, earthquakes, tsunamis, and other geologic processes. A natural disaster can cause loss of life or damage property.^[1] and typically leaves some economic damage in its wake, the severity of which depends on the affected population's resilience (ability to recover) and also on the infrastructure available.^[2]

An adverse event will not rise to the level of a disaster if it occurs in an area without vulnerable population.^{[3][4]} In a vulnerable area, however, such as Nepal during the 2015 earthquake, an earthquake can have disastrous consequences and leave lasting damage, which can require years to repair.

Contents [hide]

- 1 Geological disasters
 - 1.1 Avalanches and landslides
 - 1.2 Earthquakes
 - 1.3 Sinkholes
 - 1.4 Volcanic eruptions
- 2 Hydrological disasters
 - 2.1 Floods
 - 2.2 Tsunami
 - 2.3 Limnic eruptions
- 3 Meteorological disasters
 - 3.1 Cyclonic storms
 - 3.2 Blizzards
 - 3.3 Hailstorms
 - 3.4 Ice storms
 - 3.5 Cold waves
 - 3.6 Heat waves
 - 3.7 Droughts
 - 3.8 Thunderstorms
 - 3.9 Tornadoes
- 4 Wildfires
- 5 Space disasters
 - 5.1 Impact events and airburst
 - 5.2 Solar flare
- 6 Protection by international law
- 7 Location
- 8 Disproportionate impact on women
- 8.1 Direct impact



Catergory of Natural Disasters, Source: Wikipedia
(https://en.wikipedia.org/wiki/Natural_disaster)

Category ID	Disaster Category	Parent Category	Relevant Tags
0	natural disaster		natural disaster
1	geological disaster	0	geological disaster
2	hydrological disaster	0	hydrological disaster
3	meteorological disaster	0	meteorological disaster
4	wildfire	0	wildfire
5	space disaster	0	space disaster
6	avalanche	1	avalanche,snowslide
7	landslide	1	landslide,landslip
8	earthquake	1	earthquake,seismic wave
9	sinkhole	1	sinkhole,cenote,swallow hole
10	volcanic eruption	1	volcanic eruption,lava,volcanic ash,cooled ash
11	flood	2	flood
12	tsunami	2	tsunami,seismic sea wave
13	limnic eruption	2	limnic eruption
14	cyclonic storm	3	cyclone,tropical cyclone,hurricane,typhoon
15	blizzard	3	blizzard,winter storm,ground blizzard
16	hailstorm	3	hailstorm,hailstone
17	ice storm	3	ice storm,freezing rain
18	cold wave	3	cold wave,cold snap,cold spell
19	heat wave	3	heat wave
20	drought	3	drought,hot dry wind
21	thunderstorm	3	thunderstorm,storm,lightning
22	tornado	3	tornado
23	forest fire	4	forest fire
24	meteor shower	5	meteor shower
25	air burst	5	air burst
26	solar flare	5	solar flare

Transforming the Categories

ETransformationL

Category of Natural Disasters, Source: Wikipedia (https://en.wikipedia.org/wiki/Natural_disaster)			
Category ID	Disaster Category	Parent Category	Relevant Tags
0	natural disaster		natural disaster
1	geological disaster	0	geological disaster
2	hydrological disaster	0	hydrological disaster
3	meteorological disaster	0	meteorological disaster
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14	cyclonic storm	3	cyclone,tropical cyclone,hurricane,typhoon
15	blizzard	3	blizzard,winter storm,ground blizzard
16	hailstorm	3	hailstorm,hailstone
17	ice storm	3	ice storm,freezing rain
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```
1 "Catergory of Natural Disasters, Source: Wikipedia
2 (https://en.wikipedia.org/wiki/Natural\_disaster)",,
3 Category ID,Disaster Category,Parent Category,Relevant Tags
4 0,natural disaster,,natural disaster
5 1,geological disaster,0,geological disaster
6 2,hydrological disaster,0,hydrological disaster
7 3,meteorological disaster,0,meteorological disaster
8 4,wildfire,0,wildfire
9 5,space disaster,0,space disaster
10 avalanche,1,"avalanche,snowslide"
11 landslide,1,"landslide,landslip"
12 earthquake,1,"earthquake,seismic wave"
13 sinkhole,1,"sinkhole,swallow hole"
14 volcanic eruption,1,"volcanic eruption,volcanic ash,cooled ash"
15 flood,2,flood
16 tsunami,2,"tsunami,seismic sea wave"
17 limnic eruption,2,limnic eruption
18 cyclonic storm,3,"cyclone,tropical cyclone,hurricane,typhoon"
19 blizzard,3,"blizzard,winter storm,ground blizzard"
20 hailstorm,3,"hailstorm,hailstone"
21 ice storm,3,"ice storm,freezing rain"
22 cold wave,3,"cold wave,cold snap,cold spell"
23 heat wave,3,heat wave
24 drought,3,"drought,hot dry wind"
25 thunderstorm,3,"thunderstorm,storm,lightning"
26 tornado,3,tornado
27 forest fire,4,forest fire
28 meteor shower,5,meteor shower
29 air burst,5,air burst
30 solar flare,5,solar flare
~
```

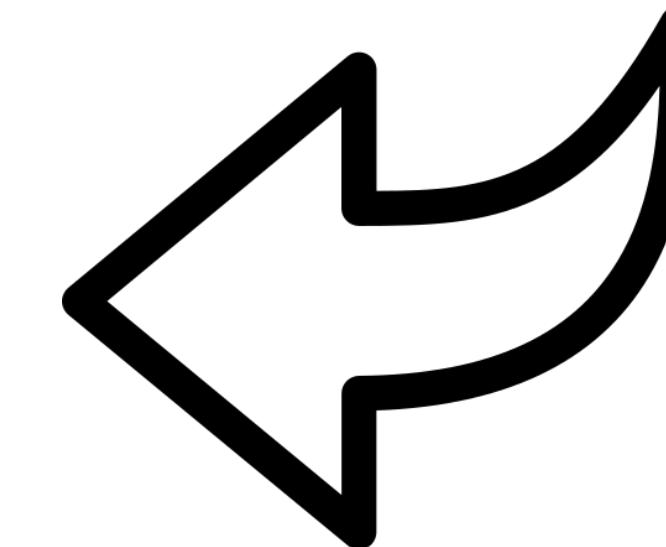
Loading the Categories of Natural Disasters

ETLoad

```
CREATE TABLE AOL_SCHEMA.NATURAL_DISASTER_CATEGORY(
    "CATEGORY_ID" DEC(36,0),
    "CATEGORY" VARCHAR(512),
    "PARENT_CATEGORY_ID" DEC(36),
    "RELEVANT_TAGS" VARCHAR(1024)
);
```

```
IMPORT INTO AOL_SCHEMA.NATURAL_DISASTER_CATEGORY
FROM LOCAL CSV FILE 'C:\\semicolon-separated.csv' COLUMN SEPARATOR = ';' ;
```

	Disaster_Category_with_Tags_from_Wikipedia.csv	semicolon-separated.csv
1	0;natural disaster;;natural disaster	
2	1;geological disaster;0;geological disaster	
3	2;hydrological disaster;0;hydrological disaster	
4	3;meteorological disaster;0;meteorological disaster	
5	4;wildfire;0;wildfire	
6	5;space disaster;0;space disaster	
7	6;avalanche;1;avalanche,snowslide	
8	7;landslide;1;landslide,landslip	
9	8;earthquake;1;earthquake,seismic wave	
10	9;sinkhole;1;sinkhole,swallow hole	
11	10;volcanic eruption;1;volcanic eruption,volcanic ash,cooled ash	
12	11;flood;2;flood	
13	12;tsunami;2;tsunami,seismic sea wave	
14	13;limnic eruption;2;limnic eruption	
15	14;cyclonic storm;3;cyclone,tropical cyclone,hurricane,typhoon	
16	15;blizzard;3;blizzard,winter storm,ground blizzard	
17	16;hailstorm;3;hailstorm,hailstone	
18	17;ice storm;3;ice storm,freezing rain	
19	18;cold wave;3;cold wave,cold snap,cold spell	
20	19;heat wave;3;heat wave	
21	20;drought;3;drought,hot dry wind	
22	21;thunderstorm;3;thunderstorm,storm,lightning	
23	22;tornado;3;tornado	
24	23;forest fire;4;forest fire	
25	24;meteor shower;5;meteor shower	
26	25;air burst;5;air burst	
27	26;solar flare;5;solar flare	
28		



Disaster types Keywords in Different Languages

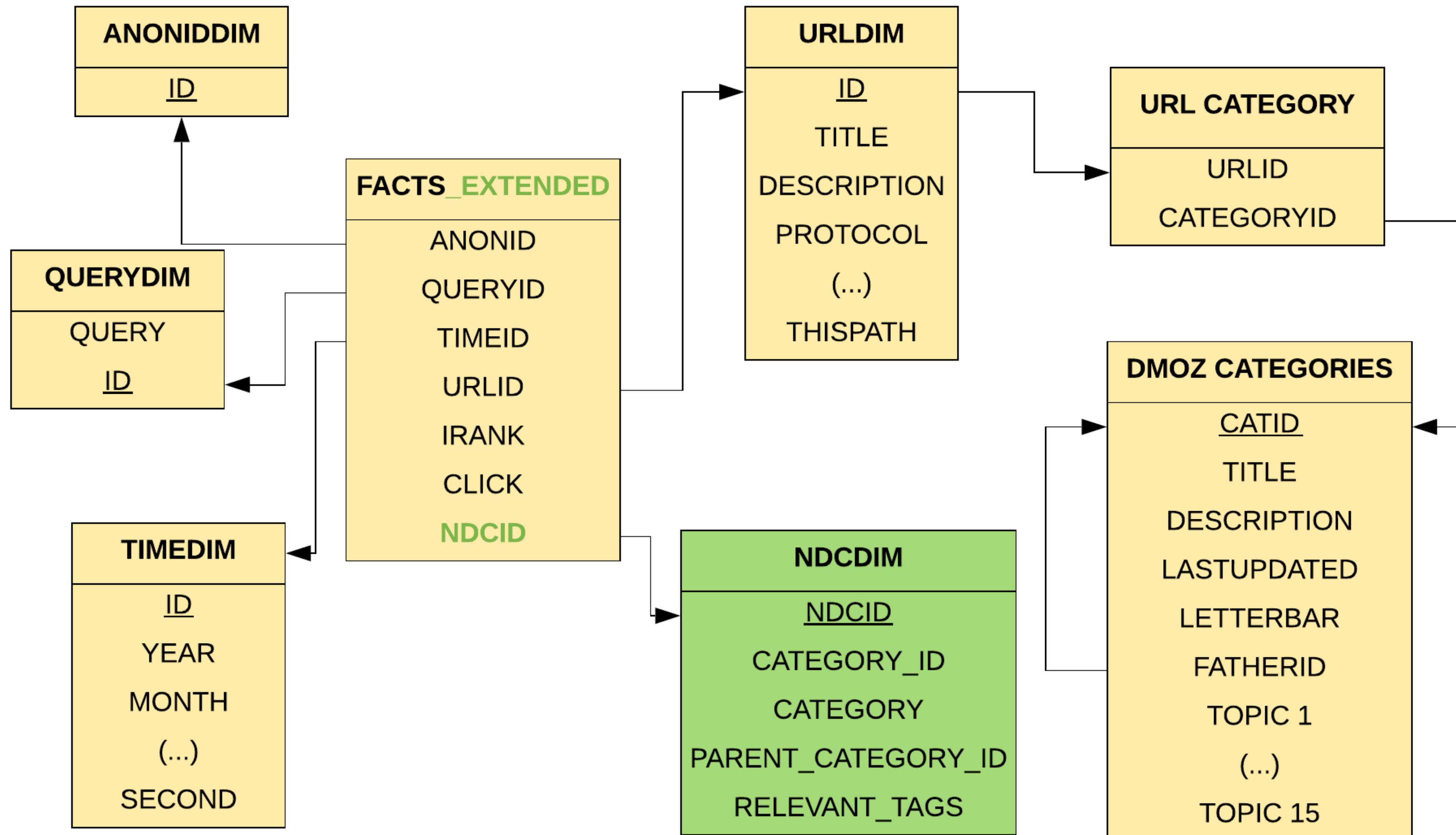
English	Spanish	Tagalog (Filipino)	French	German
Natural disaster	desastre natural	natural na sakuna	catastrophes naturelles	Naturkatastrophen
Geological disaster	desastre geológico	kalamidad sa heolohikal	catastrophe géologique	geologische Katastrophe
Hydrological disaster	desastre hidrológico	kalamidad sa hayolohikal	catastrophe hydrologique	hydrologische Katastrophe
Meteorological disaster	desastre meteorológico	kalamidad ng meteorolohiko	catastrophe météorologique	Wetterkatastrophe
Wildfire	Incendio forestal	napakalaking	incendies	ein Lauffeuer
Space disaster	desastre espacial	kalamidad sa espasyo	catastrophe spatiale	Weltraumkatastrophe
Avalanche	avalanchas	mga avalanches	avalanches	Lawinen
Landslide	Corrimiento de tierra	paggupo ng lupa	glissement de terrain	Erdrutsch
Earthquake	terremoto	lindol	tremblement de terre	Erdbeben
Sinkholes	Dolina	mga lababo	Doline	Dolinen
	erupción volcánica/	pagsabog ng bulkan/		
Volcanic eruption/ Volcano	Volcán	Bulkan	éruption volcanique / Volcan	Vulkanausbruch/ Vulkan
Flood	inundar	baha	inonder	Flut
Tsunami	Tsunami	Tsunami	Tsunami	Tsunami
Limnic eruption	Erupción límbica	Ang pagsabog ng limnic	Éruption limnique	Limnische Eruption
Cyclonic storm	tormenta ciclónica	bagyo ng cyclonic	tempête cyclonique	Zyklonsturm
Blizzard	tormenta de nieve	pagbagsak	blizzard/ tempête de neige	Schneesturm
Hailstorm	Granizada	ulan ng yelo	Averse de grêle	Hagel
Ice storm	Tormenta de nieve	Bagyo ng yelo	Tempête de glace	Eissturm
Coldwaves	olas frías	malamig na alon	vagues de froid	kalte Wellen
Heatwaves	Olas de calor	Matinding tag-init	vagues de chaleur	Hitzewellen
Drought	sequía	tagtuyot	sécheresse	Dürre
Thunderstorm	Tormenta	Bagyo	Orage	Gewitter
Tornado	tornado	buhawi	tornade	Tornado
Forest fire	incendio forestal	sunog sa gubat	feu de forêt	Waldbrand
Meteor shower	Lluvia de meteoros	Meteor shower	Pluie de météorites	Meteorregen
Air burst	Explosión de aire	Sumabog ang hangin	Air éclaté	Die Luft platzte
Solar flare	Erupción solar	Ang sunog ng solar	Éruption solaire	Sonneneruption

Meaning for Earthquake which is searched for 45 times

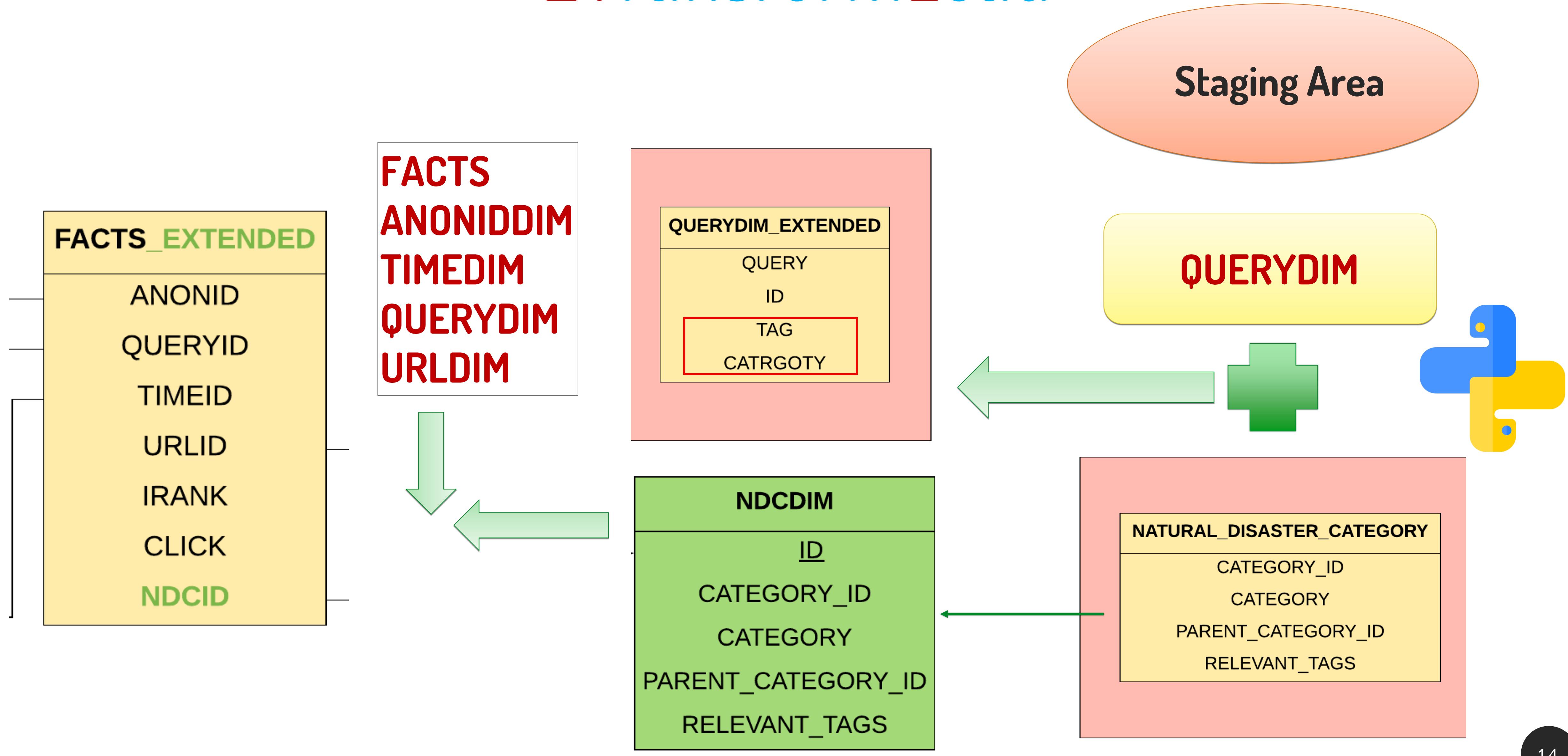


English	Spanish	Tagalog (Filipino)	French	German
Natural disaster	desastre natural	natural na sakuna	catastrophes naturelles	Naturkatastrophen
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Wildfire	Incendio forestal	napakalaking	incendies	ein Lauffeuer
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Earthquake	terremoto	lindol	tremblement de terre	Erdbeben
Sinkholes	Dolina	mga lababo	Doline	Dolinen
	erupción volcánica/	pagsabog ng bulkan/		
Volcanic eruption/ Volcano	Volcán	Bulkan	éruption volcanique / Volcan	Vulkanausbruch/ Vulkan
Flood	inundar	baha	inonder	Flut
Tsunami	Tsunami	Tsunami	Tsunami	Tsunami
Limnic eruption	Erupción límbica	Ang pagsabog ng limnic	Éruption limnique	Limnische Eruption
Cyclonic storm	tormenta ciclónica	bagyo ng cyclonic	tempête cyclonique	Zyklonsturm
Blizzard	tormenta de nieve	pagbagsak	blizzard/ tempête de neige	Schneesturm
Hailstorm	Granizada	ulan ng yelo	Averse de grêle	Hagel
Ice storm	Tormenta de nieve	Bagyo ng yelo	Tempête de glace	Eissturm
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Heatwaves	Olas de calor	Matinding tag-init	vagues de chaleur	Hitzewellen
Drought	sequía	tagtuyot	sécheresse	Dürre
Thunderstorm	Tormenta	Bagyo	Orage	Gewitter
Tornado	tornado	buhawi	tornade	Tornado
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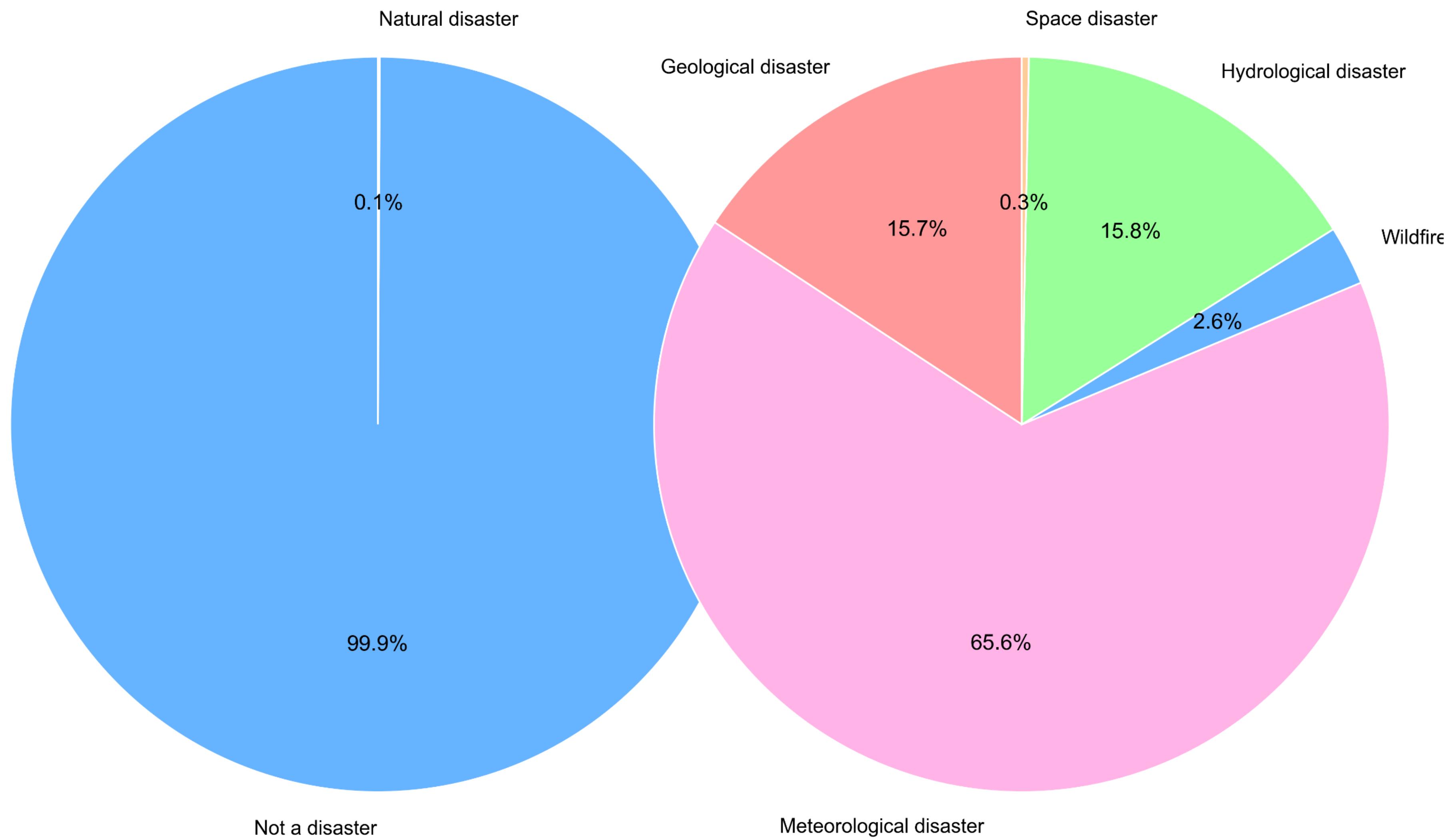
OUR SCHEMA



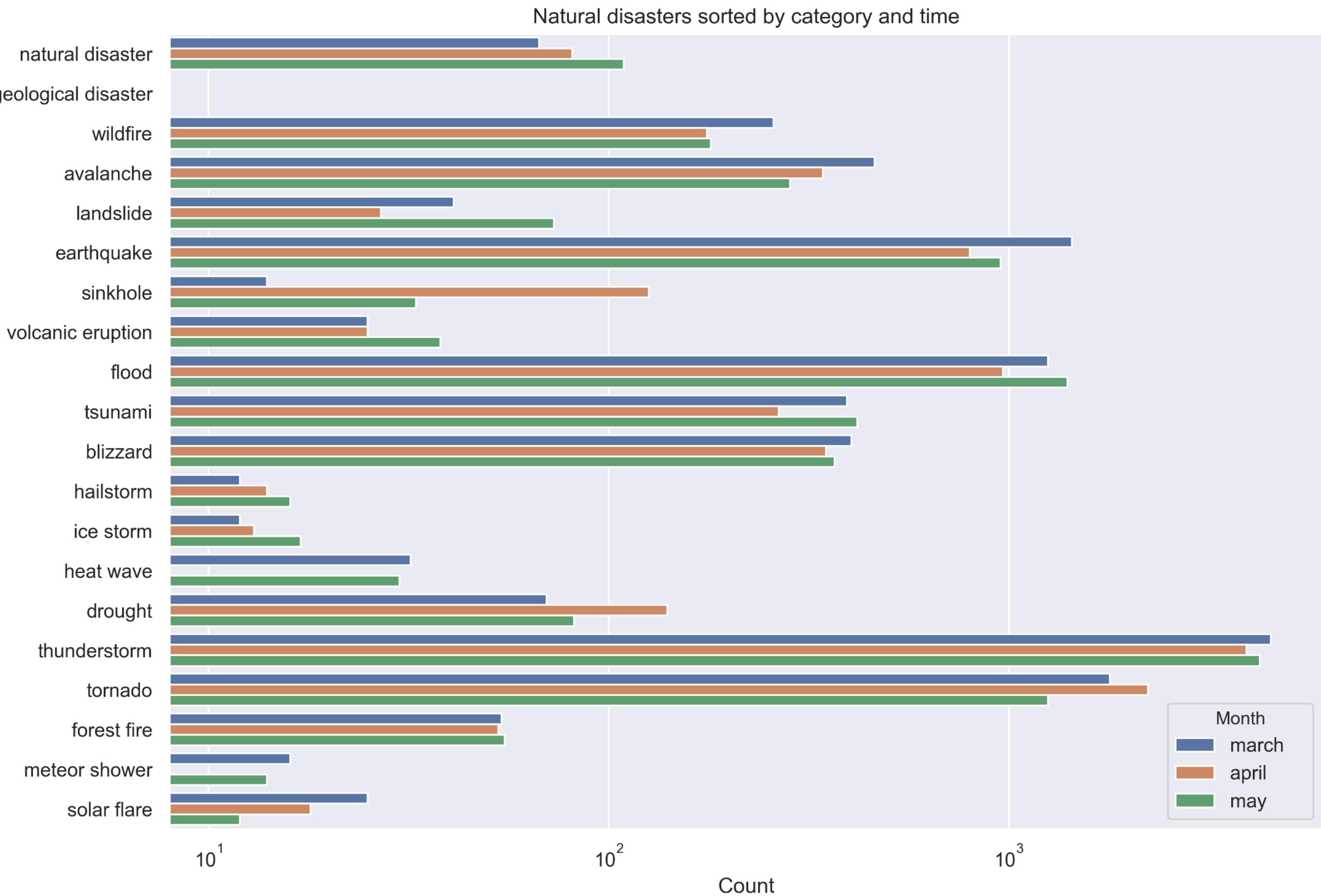
ETransformLoad



Ratio of Top level Natural Disasters



The disaster Keywords count per Month.

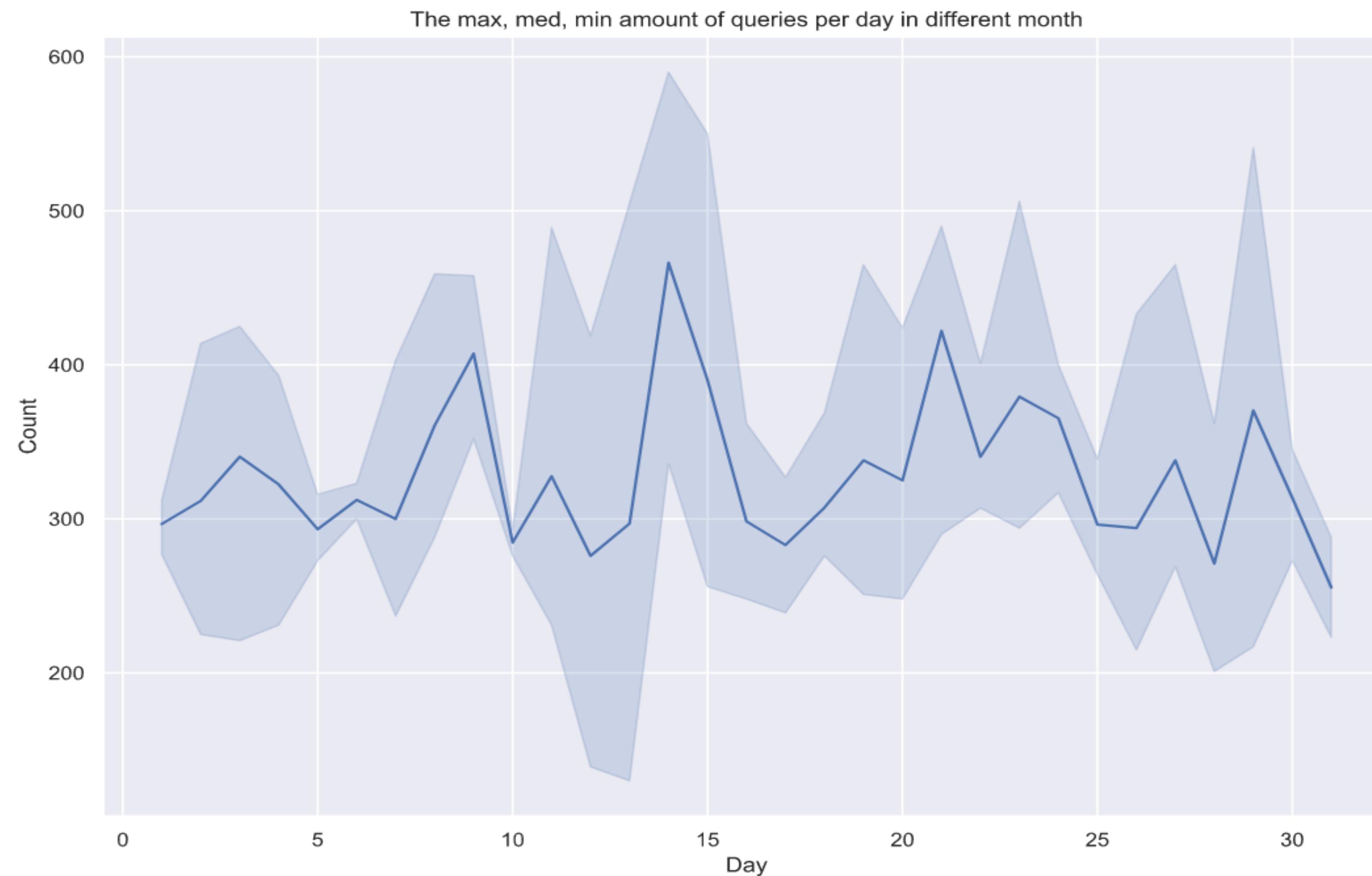


Disaster	Month	Count
natural disaster	march	67
natural disaster	april	81
natural disaster	may	109
natural disaster		257
geological disaster	april	2
geological disaster		2
wildfire	march	258
wildfire	april	176
wildfire	may	180
wildfire		614
avalanche	march	462
avalanche	april	343
avalanche	may	284
avalanche		1089
landslide	march	41
landslide	april	27
landslide	may	73
landslide		141
earthquake	march	1438
earthquake	april	799

What is the search count, per Disaster, per month?

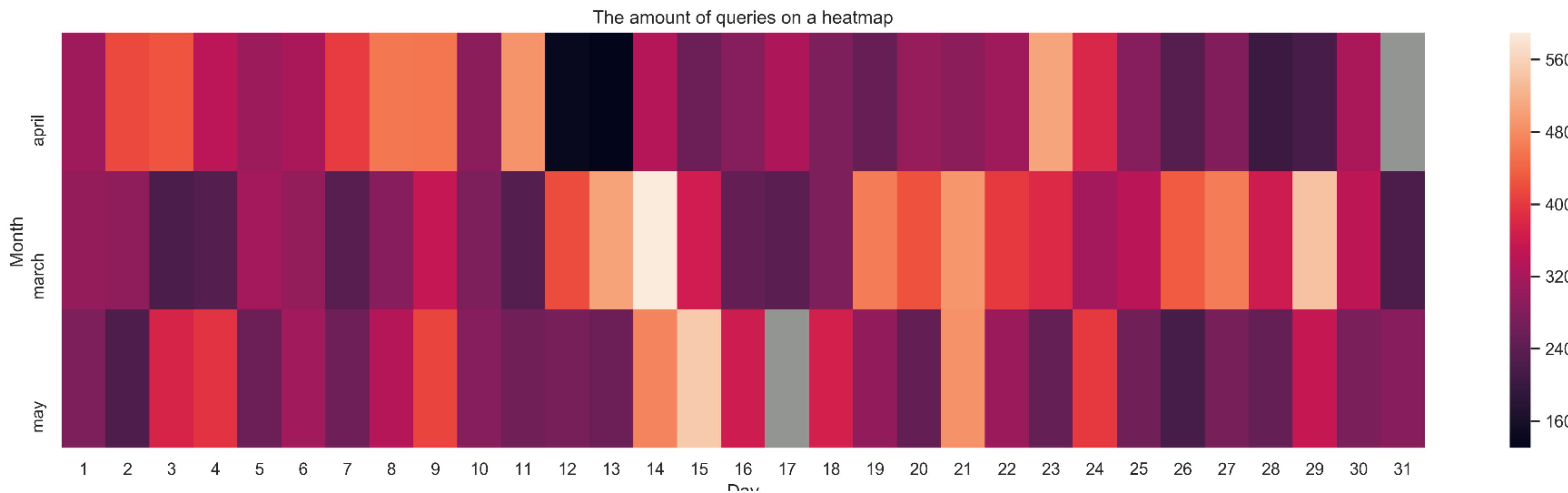
```
1  SELECT
2      NDCCDIM.CATEGORY,
3          CFETD."MONTH" AS MONTH_OF_THE_YEAR,
4          CFETD.COUNT
5  FROM (
6      SELECT
7          AOLND.NDCID AS "NDCID", TD."MONTH" AS "MONTH", COUNT(AOLND.NDCID) AS "COUNT"
8      FROM
9          AOLND, TIMEDIM TD
10     WHERE
11         TD.ID = AOLND.TIMEID
12     GROUP BY
13         CUBE (AOLND.NDCID, TD."MONTH")
14     ) CFETD
15     LEFT JOIN
16         NDCCDIM
17     ON
18         CFETD.NDCID = NDCCDIM.ID
19     ORDER BY
20         NDCCDIM.CATEGORY_ID, MONTH(TO_DATE(CFETD."MONTH", 'MONTH'));
```

Are there specific days, people wondered about Natural Disasters?



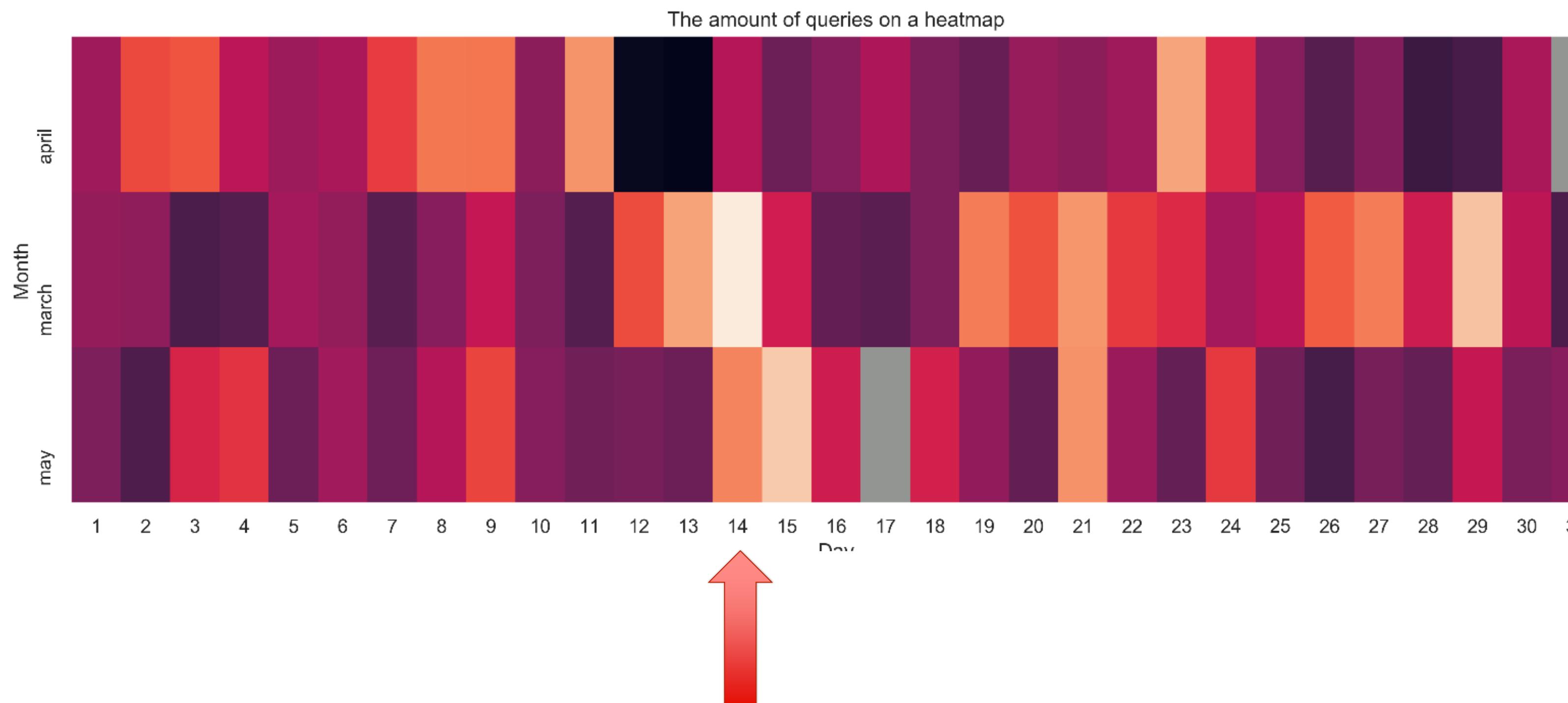
Month	Day	Count
march	1	301
march	2	296
march	3	221
march	4	231
march	5	316
march	6	300
march	7	237
march	8	288
march	9	352
march	10	276
march	11	231
march	12	419
march	13	505
march	14	590
march	15	364
march	16	248
march	17	239
march	18	276
march	19	465
march	20	424

Are there specific days, people wondered about Natural Disasters? (cont.)



Month	Day	Count
march	1	301
march	2	296
march	3	221
march	4	231
march	5	316
march	6	300
march	7	237
march	8	288
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Are there specific days, people wondered about Natural Disasters? (cont.)

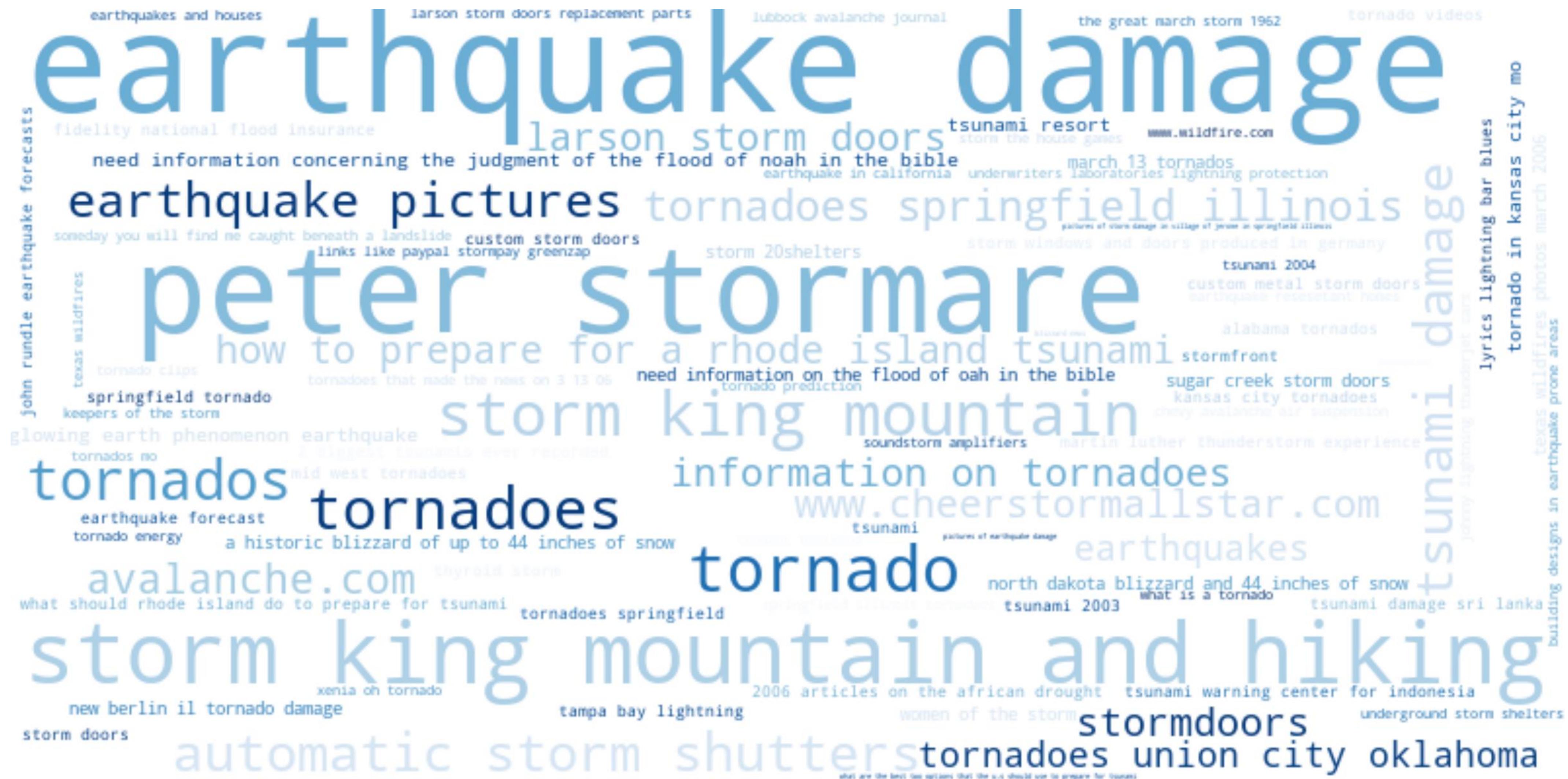


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march	14	590
march	15	364
march	16	248
march	17	239
march	18	276
march	19	465
march	20	424

The Frequencies of search about disasters

```
1  SELECT
2      TD."MONTH" AS MONTH_OF_THE_YEAR, TD.DAY_OF_THE_MONTH, COUNT(AOLND.NDCID) AS "COUNT"
3  FROM AOLND, TIMEDIM TD
4  WHERE
5      TD.ID = AOLND.TIMEID
6  GROUP BY
7      ROLLUP (TD."MONTH", TD."DAY_OF_THE_MONTH")
8  ORDER BY MONTH(TO_DATE(TD."MONTH", 'MONTH')), TD."DAY_OF_THE_MONTH";
```

What Happened in 14th March?



What Happened in 14th March?

1	Query	Count	Rank
2	earthquake damage	62	1
3	peter stormare	46	2
4	storm king mountain and hiking	35	3
5	tornado	17	4
6	storm king mountain	16	5
7	tornadoes	14	6
8	tornados	13	7
9	tsunami damage	11	8
10	automatic storm shutters	11	8
11	earthquake pictures	9	9
12	tornadoes springfield illinois	8	10
13	avalanche.com	7	11
14	how to prepare for a rhode island tsunami	6	12
15	stormdoors	6	12
16	information on tornadoes	6	12
17	larson storm doors	6	12
18	www.cheerstormallstar.com	6	12
19	tornadoes union city oklahoma	5	13
20	earthquakes	5	13
21	need information concerning the judgment of the	5	13
22	tornado in kansas city mo	5	13
23	glowing earth phenomenon earthquake	5	13
24	tsunami resort	5	13
25	women of the storm	4	14
26	march 13 tornados	4	14
27	texas wildfires photos march 2006	4	14
28	need information on the flood of oah in the bible	4	14
29	new herlin il tornado damage	4	14

Category	Count	Rank
thunderstorm	220	1
tornado	135	2
earthquake	112	3
tsunami	49	4
flood	25	5
avalanche	17	6
wildfire	13	7
blizzard	11	8
drought	4	9
landslide	2	10
volcanic eruption	1	11
forest fire	1	11



Challenges



WHO

WHEN

WHERE

How

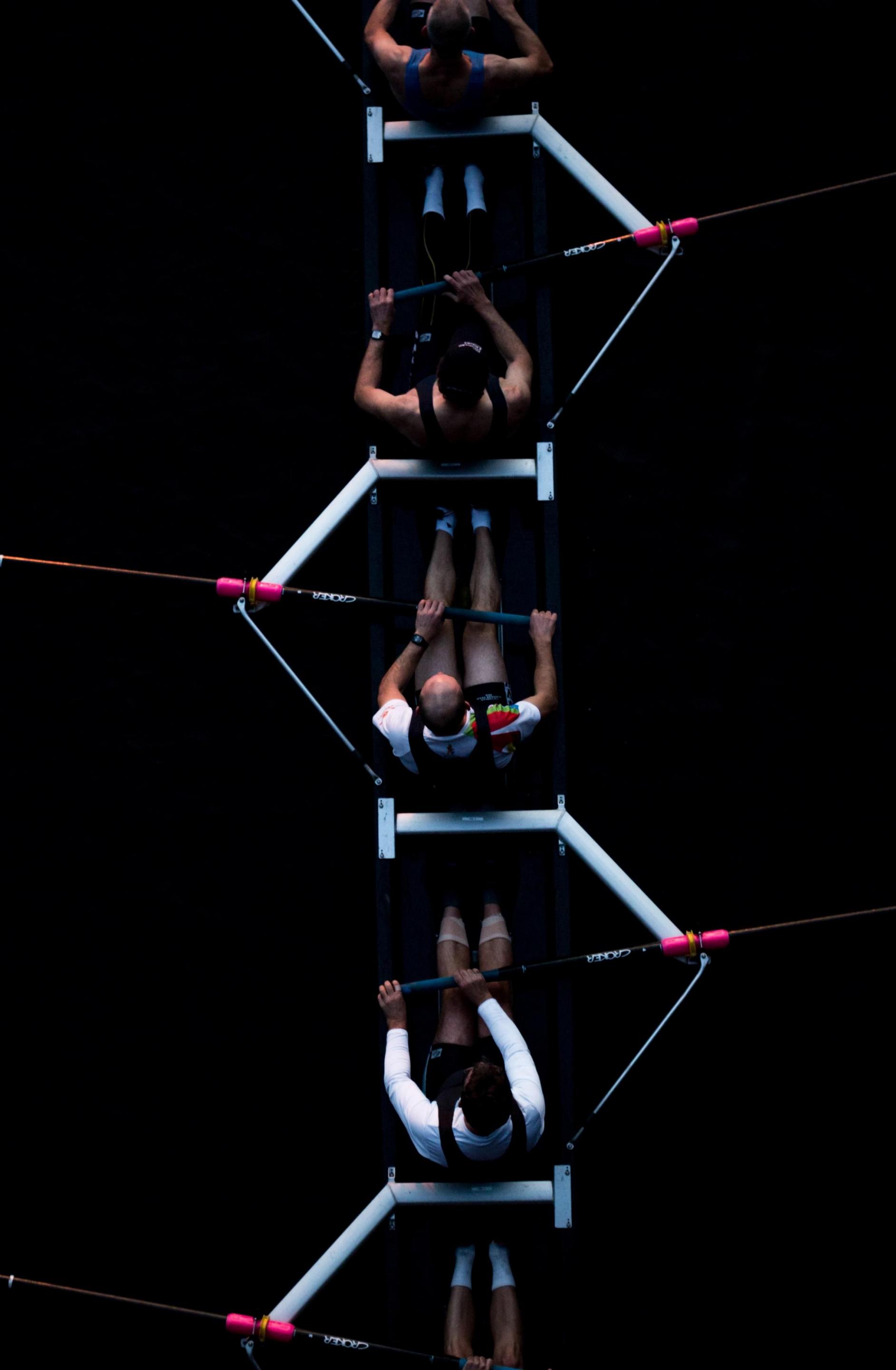
Why

WHAT

Questions ?

Anything to clarify about the stuff we have done?





“ No one can whistle a
Symphony.
It takes a whole Orchestra
to play it. ”

- Thank You -



Appendix

The rest of the stuff behind this project starts from here onwards



Loading the External Databases

ETLoad

```
[1]: import pandas as pd

[2]: df = pd.read_csv("querydim.csv", names=["Query", "ID"], sep=';')
      keys_df = pd.read_csv("NATURAL_DISASTER_CATEGORY.csv", \
                           names=["Category ID", "Category", "Parent category ID", \
                           "TAGS"])

[3]: tags = ''
      for word in list(keys_df["TAGS"]):
          tags += word.replace("\r", "").replace(", ", "|") + '|'

      tags = tags[:-1]

[4]: df["TAG"] = df["Query"].str.extract("(" + tags + ")")

[ ]:

[5]: pure_tags = [x.replace("\r", "") for x in keys_df["TAGS"]]

[6]: def myFunc(x, *args):
      for the_tags in list(args):
          tags = the_tags.split(",")
          if str(x) in tags:
              return tags[0]
      return "Other"

      df["Category"] = df["TAG"].apply(func=myFunc, args=pure_tags)

[ ]:

[9]: df.to_csv("querydim_new.csv", sep=';')
```

Loading the External Databases

```
21
22
23 EXPORT AOL_SCHEMA.QUERYDIM
24   INTO LOCAL CSV FILE '/Users/elijahozhmegov/Education/Uni/Business Intelligence/The first task/disasters_AOL_Kaggle/querydim'
25   COLUMN SEPARATOR = ';' ;
26 EXPORT AOL_SCHEMA.NATURAL_DISASTER_CATEGORY
27   INTO LOCAL CSV FILE '/Users/elijahozhmegov/NATURAL_DISASTER_CATEGORY.csv'
28   COLUMN SEPARATOR = ',' ;
29
30 IMPORT INTO KAGGLE_DATA.FEDERAL_EMERGENCIES_AND_DISASTERS
31   FROM LOCAL CSV FILE '/Users/elijahozhmegov/Education/Uni/Business Intelligence/The first task/disasters_AOL_Kaggle/federal'
32   COLUMN SEPARATOR = ';' ;
33
34
35 DROP TABLE AOL_SCHEMA.QUERYDIM_EXTENDED;
36 CREATE TABLE AOL_SCHEMA.QUERYDIM_EXTENDED
37 (
38   "Pandas ID" INT PRIMARY KEY ,
39   "Query"      VARCHAR(1024),
40   "ID"         INT,
41   "Tag"        VARCHAR(64),
42   "Category"   VARCHAR(32)
43 );
44
45 IMPORT INTO AOL_SCHEMA.QUERYDIM_EXTENDED
46   FROM LOCAL CSV FILE '/Users/elijahozhmegov/Education/Uni/Business Intelligence/The first task/disasters_AOL_Kaggle/querydim'
47   COLUMN SEPARATOR = ';' ;
48

}
[2019-11-17 01:21:16] completed in 1 s 713 ms
> IMPORT INTO AOL_SCHEMA.QUERYDIM_EXTENDED
    FROM LOCAL CSV FILE '/Users/elijahozhmegov/Education/Uni/Business Intelligence/The first task/disasters_AOL_Kaggle/querydim'
    COLUMN SEPARATOR = ';' ;
[2019-11-17 01:23:34] 10154742 rows affected in 2 m 13 s 130 ms
[2019-11-17 09:24:16] Connected
> EXPORT AOL_SCHEMA.QUERYDIM INTO LOCAL CSV FILE '/Users/elijahozhmegov/Education/Uni/Business Intelligence/The first task/disasters_AOL_Kaggle/querydim'
[2019-11-17 09:25:27] 10154742 rows affected in 1 m 10 s 506 ms
```

Loading the External Databases

```
21
22
23 EXPORT AOL_SCHEMA.QUERYDIM
24   INTO LOCAL CSV FILE '/Users/elijahozhmegov/Education/Uni/Business Intelligence/The first task/disasters_AOL_Kaggle/querydim'
25   COLUMN SEPARATOR = ';' ;
26 EXPORT AOL_SCHEMA.NATURAL_DISASTER_CATEGORY
27   INTO LOCAL CSV FILE '/Users/elijahozhmegov/NATURAL_DISASTER_CATEGORY.csv'
28   COLUMN SEPARATOR = ',' ;
29
30 IMPORT INTO KAGGLE_DATA.FEDERAL_EMERGENCIES_AND_DISASTERS
31   FROM LOCAL CSV FILE '/Users/elijahozhmegov/Education/Uni/Business Intelligence/The first task/disasters_AOL_Kaggle/federal'
32   COLUMN SEPARATOR = ';' ;
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35 DROP TABLE AOL_SCHEMA.QUERYDIM_EXTENDED;
36 CREATE TABLE AOL_SCHEMA.QUERYDIM_EXTENDED
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38   "Pandas ID" INT PRIMARY KEY ,
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}
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> IMPORT INTO AOL_SCHEMA.QUERYDIM_EXTENDED
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[2019-11-17 09:25:27] 10154742 rows affected in 1 m 10 s 506 ms
```

Queries Related to Ranking

```
QUERYDIM.QUERY AS QUERY,  
URLDIM.URL AS URL,  
NDCDIM.CATEGORY AS CATEGORY  
FROM  
    AOLND  
LEFT JOIN  
    ANONIDDIM  
ON  
    ANONIDDIM.ID = AOLND.ANONID  
LEFT JOIN  
    TIMEDIM  
ON  
    TIMEDIM.ID = AOLND.TIMEID  
LEFT JOIN  
    QUERYDIM  
ON  
    QUERYDIM.ID = AOLND.QUERYID  
LEFT JOIN  
    URLDIM  
ON  
    URLDIM.ID = AOLND.URLID  
LEFT JOIN  
    NDCDIM  
ON  
    NDCDIM.ID = AOLND.NDCID  
WHERE  
    NDCDIM.ID != -1  
    AND MONTH(TO_DATE(TIMEDIM.MONTH, 'MONTH'))=3  
    AND DAY(TO_DATE(TIMEDIM.DAY_OF_THE_MONTH, 'DD'))=14  
ORDER BY  
    TIME_ ASC;
```

```
CREATE VIEW QUERY_0314 AS  
SELECT  
    ANONIDDIM.ANONID AS ANONID,  
    AOL_TIME(TIMEDIM.YEAR, TIMEDIM.MONTH, TIMEDIM.DAY_OF_THE_MONTH, TIMEDIM.HOUR, TIMEDIM.MINUTE, TIMEDIM.SECOND) AS TIME_,  
    QUERYDIM.QUERY AS QUERY,  
    URLDIM.URL AS URL,  
    NDCDIM.CATEGORY AS CATEGORY  
FROM  
    AOLND  
LEFT JOIN  
    ANONIDDIM  
ON  
    ANONIDDIM.ID = AOLND.ANONID  
LEFT JOIN  
    TIMEDIM  
ON  
    TIMEDIM.ID = AOLND.TIMEID  
LEFT JOIN  
    QUERYDIM  
ON  
    QUERYDIM.ID = AOLND.QUERYID  
LEFT JOIN  
    URLDIM  
ON  
    URLDIM.ID = AOLND.URLID  
LEFT JOIN  
    NDCDIM  
ON  
    NDCDIM.ID = AOLND.NDCID  
WHERE  
    MONTH(TO_DATE(TIMEDIM.MONTH, 'MONTH'))=3  
    AND DAY(TO_DATE(TIMEDIM.DAY_OF_THE_MONTH, 'DD'))=14
```

Queries Related to Ranking (cont.)

```
CREATE VIEW QG_QUERY_0314 AS
SELECT
    QUERY_0314.QUERY AS QUERY,
    COUNT(*) AS FREQ
FROM
    QUERY_0314
GROUP BY
    QUERY_0314.QUERY;

CREATE VIEW CG_QUERY_0314 AS
SELECT
    QUERY_0314.CATEGORY AS CATEGORY,
    COUNT(*) AS FREQ
FROM
    QUERY_0314
GROUP BY
    QUERY_0314.CATEGORY;
```

```
SELECT
    QG_QUERY_0314.QUERY QUERY,
    QG_QUERY_0314.FREQ FREQ,
    DENSE_RANK() OVER ( ORDER BY QG_QUERY_0314.FREQ DESC ) AS RANK
FROM
    QG_QUERY_0314
ORDER BY
    RANK;

SELECT
    CG_QUERY_0314.CATEGORY CATEGORY,
    CG_QUERY_0314.FREQ FREQ,
    DENSE_RANK() OVER ( ORDER BY CG_QUERY_0314.FREQ DESC ) AS RANK
FROM
    CG_QUERY_0314
ORDER BY
    RANK;
```