

### The Question

Is there significant demand for photography holidays in Sri Lanka?

To assess the demand for photography holidays in Sri Lanka, it is essential to examine the activities that holidaymakers engage in, the destinations they favour during their travels and identify frequent photography holidaymakers.



MOST DESIRABLE ISLAND
IN THE WORLD



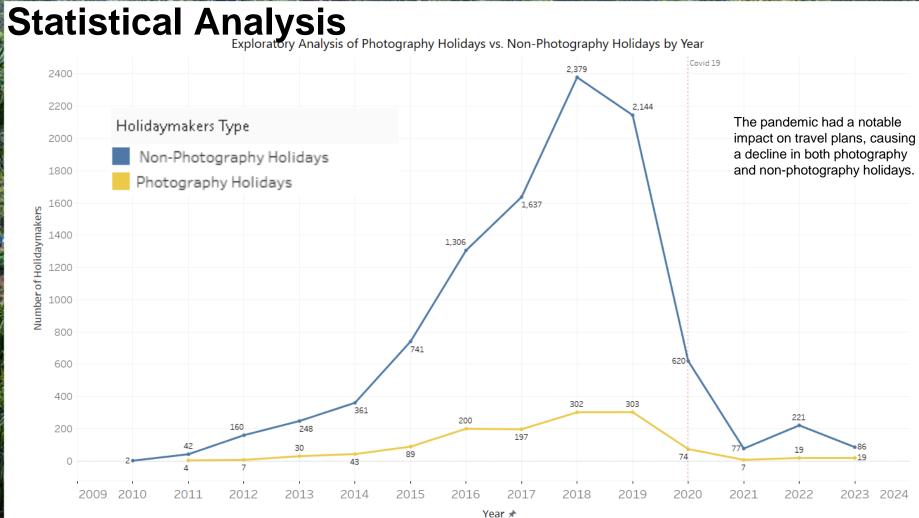


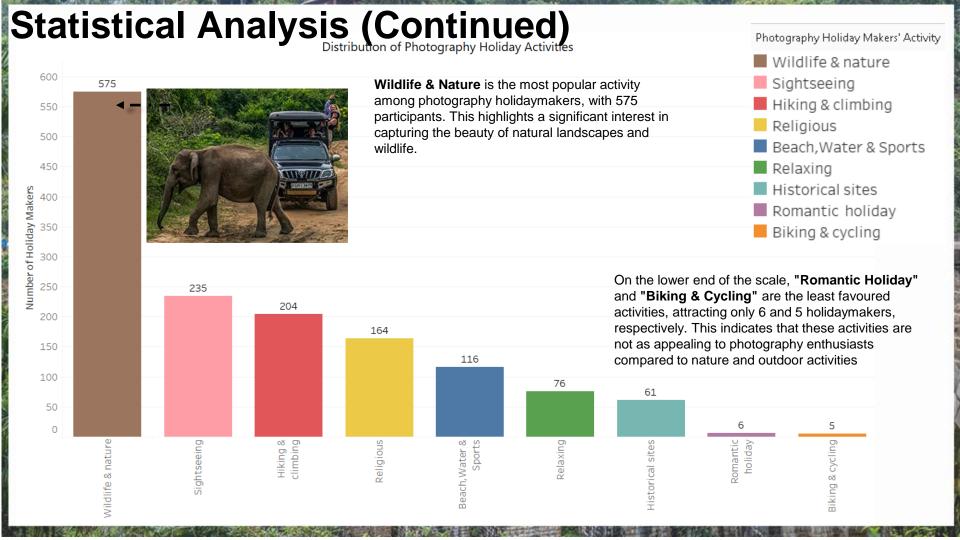
### **Data and Tools Used**

Repurposing publicly available dataset related to tourism and travel reviews in Sri Lanka from 2010 to 2023, the Ecocapture database was created from the source dataset. New tables such as country, activity and SIA (sentiment analysis) were created based on the source tables.

(See appendix for more details) **Ecocapture Database** traveller country \_\_\_ InputID INT dateall traveller\_Location VARCHAR(200) Traveller ID INT InputID INT Traveller\_Country VARCHAR(200) Traveller Location VARCHAR(200) Traveller\_ID INT **CSV** Travel Date TEXT Travel Year INT location Reviews.CSV Travel Month INT InputID INT month TEXT Traveller ID INT Published Date TEXT Location TEXT City TEXT Province VARCHAR(200) My5QL comment Location\_Type TEXT InputID INT **XLSX** Traveller ID INT activity Title VARCHAR(200) InputID INT comments TEXT 🔾 **Country Mapper** Traveller ID INT activity VARCHAR(18) uote 🛄 InputID INT Traveller ID INT Power BI Helpful\_Votes INT III rating Sentiment analysis.py InputID INT InputID INT Traveller ID INT Traveller ID INT Location\_Name VARCHAR(200) processed\_comments VARCHAR(9000) Rating INT sentiment\_comments VARCHAR(10)

Qc Data extraction.py

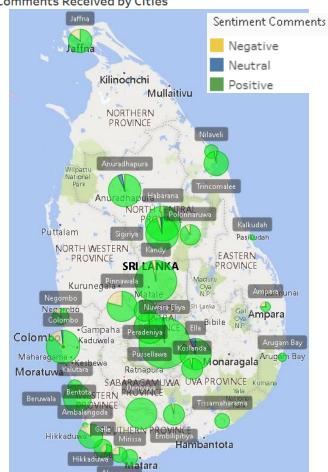




## Statistical Analysis (Continued)

Photography Holidays Sentiment Positive Comments Received by Cities

City	Positive =	Neutral	Negative
Nuwara Eliya	115	2	
Habarana	55		1
Kandy	52		1
Sigiriya	47	1	1
Pussellawa	40		1
Colombo	40	1	
Beruwala	36		1
Pinnawala	34		
Ella	34	2	
Anuradhapura	32	2	1
Kalametiya	30		
Deniyaya	29		
Weligatta	26		
Saliyapura	26		1
Jaffna	24		
Trincomalee	21		1
Hikkaduwa	20		6
Embilipitiya	18		1
Peradeniya	17		
Galle	14		
Koslanda	12		1
Haputale	12	1	
Polonnaruwa	10		1
Katukitula	10		1
Negombo	8		1
Ahangama	7		1
Tissamaharama	6		
Nilaveli	6		
Mirissa	6		
Kalutara	6		
Unawatuna	2		1
Ampara	2		1
Ambalangoda	2		
Kalkudah	1		
Bentota	1		
Arugam Bay	1		



**Nuwara Eliya** tops the list with 115 positive comments, indicating it is highly favored by photography holidaymakers.

**Habarana** follows with 55 positive comments, suggesting it is also a popular destination for photography enthusiasts.

**Kandy** has received 52 positive comments, reflecting its appeal to photographers interested in capturing its cultural and historical charm.

The presence of neutral and negative comments for certain cities provides a more comprehensive view of visitor sentiment. For instance, **Hikkaduwa** has 20 positive comments but also 6 negative comments, indicating mixed experiences.

Overall, the table highlights the cities most favoured for photography holidays based on positive feedback from visitors, with **Nuwara Eliya** standing out as the top choice.

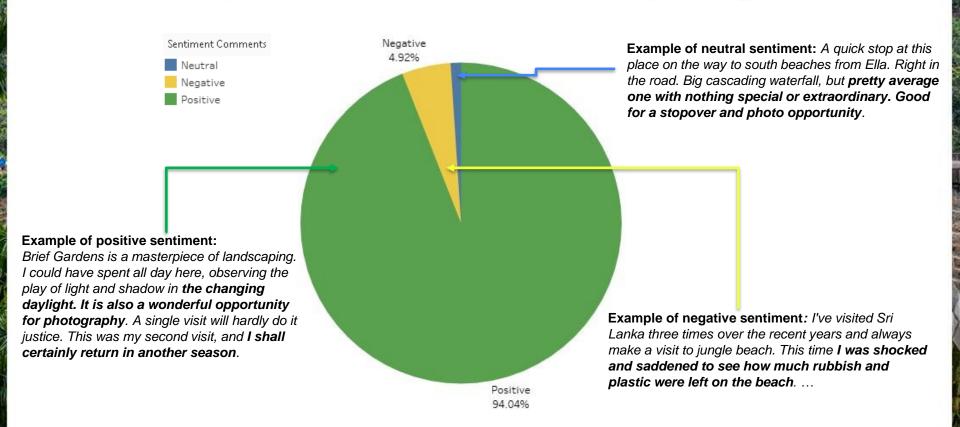
## Statistical Analysis (Continued)

Top Repeat Visitors for Photography Holidays: Arrival by Country (2010-2023)



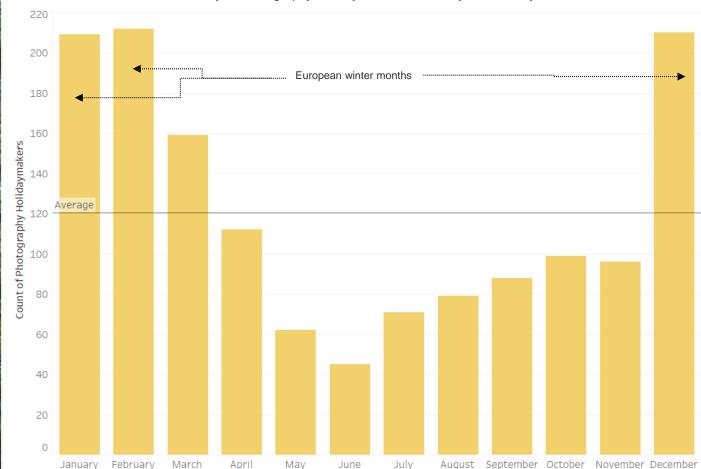
## Statistical Analysis (Continued)

Photography Holidaymakers' Overall Sentiment Comments (Percentage)



Insights



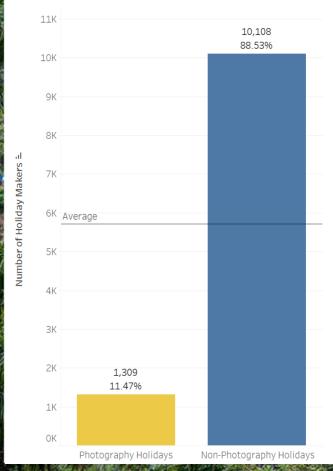


The highest traffic for photography holiday activities occurs in the European winter months of January, February, March and December, with a noticeable dip during the summer months, particularly in June.

This seasonality trend is relevant for understanding the peak times for photography holiday activities and can be useful for planning and marketing strategies in the photography tourism industry.

## Insights (Continued)

Overall Photography Holidays vs. Non-Photography Holidays: Year 2010 to 2023



11.47% of the holidaymakers indicates a niche yet dedicated group of travellers who specifically seek out photography focused trips.

## To increase demand for "photography holidays" in Sri Lanka, consider these strategies:

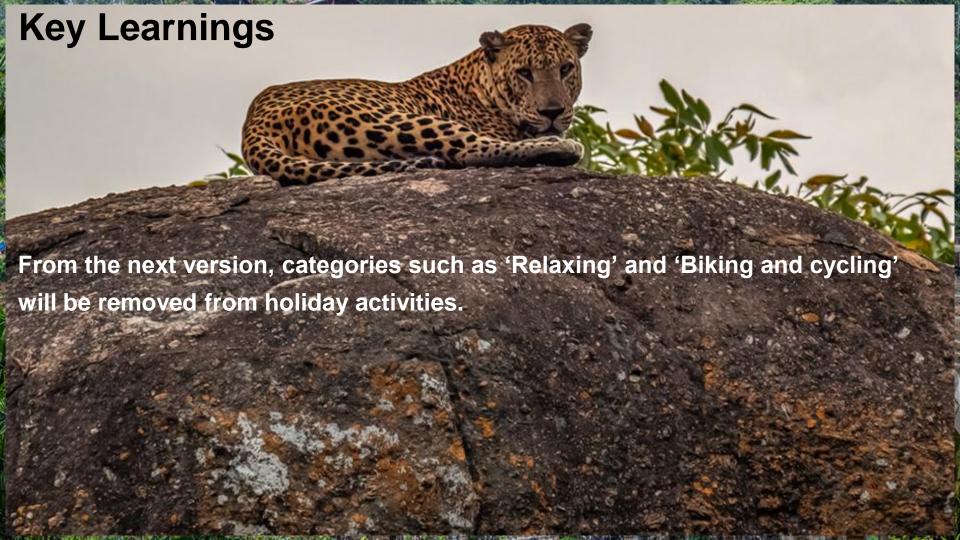
- Promote stunning and lesser-known photography spots in Sri Lanka, such as the Sigiriya Rock Fortress, Ella's Nine Arches Bridge, and the beautiful tea plantations in Nuwara Eliya.
- Partner with well-known travel photographers and influencers to showcase the beauty of Sri Lanka through their lenses. Their followers can be inspired to book similar trips.
- Offer workshops led by professional photographers, covering various aspects like wildlife photography, landscape photography, and cultural photography.
- Provide exclusive access to special locations and events, such as early morning shoots at ancient temples or private wildlife safaris in Yala and Wilpattu National Parks.
- Create tailored itineraries that include diverse photography opportunities during the European winter months.
- Promote eco-friendly and sustainable practices, appealing to environmentally conscious travellers.
- Implement a loyalty program offering discounts or special perks for repeat holidaymakers.

# **Summary Conclusions**

Overall, the data supports the hypothesis that there is a significant demand for photography holidays in Sri Lanka, with holidaymakers engaging in specific photo related activities, visiting popular locations, and a substantial portion being repeat visitors.

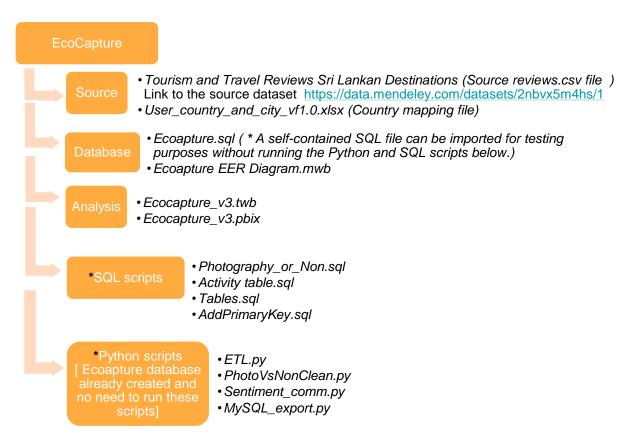
This insight can help tourism operators better tailor their offerings to meet the needs and interests of photography enthusiasts.







#### Eco capture directory



#### **Country Mapping**

Identifying and addressing missing or unclear country names by linking them to the data points associated with city name entries. [Ref. ETL.py line number 55 to 73]

#### Country mapping spec.

Traveller_Location	Countr	Country2	Country3 -
?			
?Thens			
100 Mile House, Canada	Canada		
Aalborg		Denmark	
Aberdeenshire		United Kingdom	
Addison, Texas	Texas		United States

#### **Mappable Countries Traveller Location** Traveller Country Abertawe United Kingdom Addison, Texas United States Adelaide Australia Adelaide Sth Aust Australia Adelaide, Australia Australia Al Ain **United Arab Emirates** Algeria Algeria Netherlands Amsterdam Amsterdam, Noord-Holland, Netherlands Netherlands Austria Austria Bali Indonesia Bali, Indonesia Indonesia Thailand Bangkok Barueri, Sp Brazil Belem, Pa Brazil Bern Switzerland Brooklyn, Ny **United States** Budapest Hungary Burton-On-Trent United Kingdom Cambridge Uk United Kingdom Christchurch Nz New Zealand United States Darwin Australia **United States** Devonport New Zealand Denmark

Unmappable					
Traveller Location	Traveller Country				
?	?				
?Thens	?				
A********@Gmail.Com	?				
Asia	?				
Cristinegelato	?				
Eastofeast	?				
Li?Er	?				
М	?				
Never Never Land	?				
Oz	?				
Planet Earth	?				
Singa	?				
South Pacific	?				
Southernerbuzz	?				
Various	?				
World	?				

#### **Country Mapping (Continued)**

Example of the country-mapped table "v\_countrydate". [Ref. Table.sql line number 7 to 33]

inputID	Traveller_ID	Traveller_Country	Travel_Date	Travel_Year	Travel_Month	month
10001	1	Australia	2019-07	2019	7	July
10002	2	Australia	2019-06	2019	6	June
10003	3	Australia	2019-07	2019	7	July
10004	4	Portugal	2019-06	2019	6	June
10005	5	Italy	2019-07	2019	7	July
10006	6	United Arab Emirates	2019-06	2019	6	June
10007	7	Indonesia	2018-07	2018	7	July
10008	8	Canada	2019-05	2019	5	May
10009	9	New Zealand	2019-04	2019	4	April
10010	10	United Kingdom	2018-09	2018	9	September
20010	11	United Kingdom	2019-04	2019	4	April
20011	12	Japan	2019-01	2019	1	January
20012	13	Australia	2019-04	2019	4	April
20013	14	United Kingdom	2019-02	2019	2	February
20014	15	Germany	2019-01	2019	1	January
20015	16	Ukraine	2018-05	2018	5	May
20016	17	United Kingdom	2018-07	2018	7	July
20017	18	India	2018-10	2018	10	October
20018	19	United Kingdom	2018-02	2018	2	February
20019	20	Vietnam	2018-10	2018	10	October

Selecting photography holidays from comments.

Matching words and phrases selected from "Text" column using REGEXP.

Located_City	Location	Location_Typ e	User_ID	User_Locati on	_	User_Contri butions	Travel_Dat e	Published_Da te	Rating	Helpful_Vot es	Title	Text
Hikkaduwa	Hikkaduwa, Galle District, Southern Province	Beaches	User 511	Wangaratta	en_US	658		2018-10- 05T21:16:36- 04:00	5	1	Beautiful beach	A lovely stretch of beach with some evidence of tsunami still present. Great <b>photography</b> opportunties
Nuwara Eliya	Nuwara Eliya, Central Province	Bodies of Water	User 2176	Mumbai, India	en_IN	53		2019-01- 02T22:39:13- 05:00	5	0	Beautiful, scenic lake	Beautiful, scenic lake with great water sports activities that makes for a great place to spend a few hours and click great photographs!
Kandy	Kandy, Kandy District, Central Province	Bodies of Water	User 2376	Selby, United Kingdom	en_UK	72		2019-04- 05T00:49:36- 04:00	3	0	Ok	The lake is pretty but not spectacular. We walked around some of it but to be honest I didn't find many views that warranted taking a <b>photo</b> - and I'm always <b>snap</b> happy! However if you're visiting Kandy it's quite pleasant for a stroll.
Kandy	Kandy, Kandy District, Central Province	Bodies of Water	User 237	Dibba Al Bay Ah, Oman	en_US	162		2019-04- 04T06:54:02- 04:00	5	0	To know more about kandy	Beautiful lake, as I heard from the local people items holy as items connected to the Temple of the Sacred Tooth Relic. Cozy place, a lot of people walking around. Close to the local market. One of the place to have pictures
Nuwara Eliya	Nuwara Eliya, Central Province	Farms	User 2752	Doha, Qatar	en_US	52		2018-12- 05T07:30:12- 05:00	4	0		The guide for The tea factory Mr. Abdullah was very good and proficient. He covered all the details related to tea processing  Later we took some snaps of spectacular views from tea estate  On return they provide a complementary black tea and restaurant is good with few simple eateries  Overall a not to be missed experience

## Selecting photography holidays from comments (Continued). [Ref. Photography\_or\_Non.sql]

CASE

WHEN LOWER(Comments) like LOWER("%photo%") or LOWER(Comments) REGEXP LOWER('some beautiful pictures|swimming and pictures|picture friendly|take very nice pictures| taking pictures|pictures we did look great|took some pictures|take some lovely pictures|took a lot of pictures|nice pictures to take|took pictures| get some pretty pictures|place to have pictures|take some pictures|great for pictures|picture worthy moment|good for pictures|take pictures|take really nice pictures| nicer and for pictures|backdrop for pictures|get some pictures|picture opportunities|had a picture|amazing for good pictures|take some picture|panoramic pictures| reasonable picture of the process|take lots of pictures|taking picture|take a picture|pictures you can take|great pictures|good pictures|perfect for pictures| took lots of pictures|take nice pictures|take some great pictures|click pictures|check my pictures|stopped for picture|take toooooooooo many pictures| take a tripod for better pictures! take as many pictures taken bunch of pictures |capture nice pictures| pictures are allowed wanted to take pictures every get a decent picture|to take picture|got a picture|got some really great pictures|got some fantastic pictures|did take some nice pictures|lots of pictures| get some incredible pictures|place for some good pictures|time to take fantastic pictures|capture fabulous pictures|we had nice pictures|time to take a lot of pictures| plenty of time to take pictures took some really nice pictures with all the pictures took some nice pictures you can have pictures can click pictures we took a few pictures some pictures attached i wanted a picture some pictures attached take a picture with them could take a pictures i look at the lovely pictures we took some pictures great picture opportunities close up pictures took many pictures some good pictures click a few pictures could take a picture take several pictures we got great pictures snap a picture|some amazing pictures|view for pictures|phenomenal pictures|stop fot a picture|can take lot of pictures|capturing pictures|picture perfect experience| do some pictures|take few pictures|take a bunch of pictures|place to make pictures|decent picture|site for some pictures|click goreat pictures|nice for a picture| area for pictures take a few pictures taken pictures close enough for pictures have beautiful pictures take a nice picture taking many pictures monks for a picture every corner demands a picture|love make pictures|picture perfect||great picture spot|picturesque stroll|picture-taking|can take pictures|take some beautiful snaps| click a lot of pics|click loads of pics|tots of pics|took pics|taking pics|clicked fews pics|pic of the waterfall|mountains pics|take some pics|click a lot of pics| many pics|lovely pics|nice for clicks|around for clicks|options for clicks|cameras clicking|some good clicks|click a pic|clicking some pics|fabulous pics| snapshot worthy|wonderful snap|lot of snaps|take snaps|camera|snap a picture|some snaps|snapping breathtaking pics|snapshot|bird watching') THEN "Photography" ELSE 1

END AS photography

#### **Activity table**

Creating an activity table that holidaymakers undertake.

Please note that the activity table is generated only for the photography holidaymakers. [Ref. Activity Table.sql]

InputID	Traveller_ID	activity
10006	6	Beach_Water_Sports
10006	6	wildlife_nature
30510	502	Hiking_climbing
42153	2004	Biking_cycling
42374	1516	Historical_Sites
42122	1979	Sightseeing
42383	641	Religious
10006	6	Relaxing
45901	4959	Romantic_holiday

#### **Activity table (Continued)**

Example of the "Photo Visit Rating Dataset (v\_photovisit\_rating)" after excluding non-photography visitors. [Ref. Table.sql line number 36 to 64]

InputID	Traveller_ID	Activity	Traveller_Country	City	Location_Type	Travel_Year	Travel_month	Month	Rating	Sentiment_comments
10006	6	Relaxing	United Arab Emirates	Arugam Bay	Beaches	2019	6	June	5	Positive
10006	6	wildlife_nature	United Arab Emirates	Arugam Bay	Beaches	2019	6	June	5	Positive
10006	6	Beach_Water_Sports	United Arab Emirates	Arugam Bay	Beaches	2019	6	June	5	Positive
30202	201	Relaxing	United Kingdom	Bentota	Beaches	2019	11	November	4	Positive
30202	201	Beach_Water_Sports	United Kingdom	Bentota	Beaches	2019	11	November	4	Positive
30510	502	Hiking_climbing	United Kingdom	Hikkaduwa	Beaches	2019	2	February	3	Positive
30510	502	Beach_Water_Sports	United Kingdom	Hikkaduwa	Beaches	2019	2	February	3	Positive
30519	511	Beach_Water_Sports	Australia	Hikkaduwa	Beaches	2018	10	October	5	Positive
30522	513	Relaxing	United Kingdom	Hikkaduwa	Beaches	2018	10	October	1	Positive

#### Photography vs non- Photography table

Distinguishing between photography visits and non-photography visits by setting a variable, such as "Photography." [Ref. Table.sql line number 69 to 101]

InputID	Traveller_ID	Traveller_Country	Photography	location_Typ e	Travel_Year	Travel_ month	month	rating	sentiment comments
00000	37	Netherlands	No. of the state o	Beaches	2018		luna -	1	Positive
20036	1		No photography			6	June	4	
55691	37	Netherlands	photography	Religious Sites	2018	7	July	4	Negative
20068	69	Italy	No photography	Beaches	2019	7	July	5	Positive
42068	69	United Kingdom	No photography	Beaches	2016	11	November	5	Positive
49905	69	Australia	photography	National Parks	2019	3	March	5	Positive
20098	99	China	No photography	Beaches	2016	8	August	5	Positive
41362	99	China	No photography	Beaches	2019	7	July	5	Positive
45306	99	China	photography	Gardens	2016	2	February	5	Positive
30143	143	United Kingdom	No photography	Beaches	2012	1	January	5	Positive
53670	143	United Kingdom	photography	Religious Sites	2011	12	December	3	Positive
47234	242	Australia	photography	Historic Sites	2019	3	March	5	Positive
48432	242	Australia	photography	Museums	2019	4	April	5	Negative
30265	263	Saudi Arabia	No photography	Beaches	2018	5	May	5	Positive
52280	263	Saudi Arabia	photography	Waterfalls	2016	5	May	4	Positive
30626	275	United Kingdom	No photography	Beaches	2019	2	February	4	Positive
52647	275	United Kingdom	photography	Waterfalls	2019	3	March	4	Positive
30323	321	Egypt	No photography	Beaches	2020	2	February	4	Positive
52365	321	Egypt	photography	Waterfalls	2020	1	January	4	Positive
52998	322	United Kingdom	No photography	Zoological Gard	2015	8	August	4	Positive
42456	322	United Kingdom	photography	Bodies of Water	2019	10	October	4	Positive
42869	322	United Kingdom	photography	Bodies of Water	2018	10	October	5	Positive
53207	423	Canada	No photography	Religious Sites	2019	12	December	4	Positive
47698	423	Canada	photography	Historic Sites	2020	1	January	5	Positive

#### References

- Link to the source dataset <a href="https://data.mendeley.com/datasets/2nbvx5m4hs/1">https://data.mendeley.com/datasets/2nbvx5m4hs/1</a>
- Sri Lanka Tourism Development Authority (SLTDA) <a href="https://www.sltda.gov.lk/en/statistics">https://www.sltda.gov.lk/en/statistics</a>
- Sentiment Analysis: First Steps With Python's NLTK Library <a href="https://codefather.tech/blog/nltk-python-sentiment-analysis/">https://codefather.tech/blog/nltk-python-sentiment-analysis/</a>