

## Supplementary Materials

**Table S1.** Number of regulated accommodations (hotels and apartments) exposed to floods.

<i>Municipality</i>	<i>Floods recurrence period</i>		
	<b>500 y</b>	<b>100 y</b>	<b>10 y</b>
ALCUDIA	36	0	0
ANDRATX	1	0	0
CALVIÀ	29	12	9
CAMPANET	1	0	0
FIELDS	7	0	0
ESPORLES	2	0	0
FELANITX	2	0	0
INCA	3	0	0
LLUCMAJOR	5	0	0
MANACOR	9	5	0
WALL	14	0	0
PALMA	5	1	0
POLLENÇA	13	2	0
SOLLER	21	15	8
SANT LLORENÇ DES CARDASSAR	6	6	0
SANTA MARIA DEL CAMÍ	1	0	0
SANTANY?	1	0	0
SELVA	1	0	0
VALLDEMOSSA	1	0	0
TOTAL	158	41	17

**Table S2.** Number of Airbnb vacation houses by flood recurrence period exposed to floods.

<i>Municipality</i>	<i>Flood recurrence periods</i>		
	<b>500 y</b>	<b>100 y</b>	<b>10 y</b>
ALARÓ	1	0	0
ALCÚDIA	477	0	0
ANDRATX	6	0	0
ARIANY	1	0	0
ARTÀ	7	0	0
BÚGER	9	0	0
BUNYOLA	2	0	0
CALVIÀ	44	15	10
CAMPANET	6	0	0
FIELDS	126	13	11
CAPDEPERA	17	0	0
ESPORLES	15	0	0
FELANITX	11	0	0
INCA	7	0	0
LLOSETA	3	0	0
LLUCMAJOR	17	0	0
MANACOR	36	17	4
MANCOR DE LA VALL	3	0	0
MARRATXÍ	19	11	1
MONTUÏRI	1	0	0
WALL	84	0	0
PALMA	172	96	6

PETRA	4	0	0
POLLENÇA	433	39	10
PUIGPUNYENT	3	0	0
SA POBLA	15	0	0
SANT LLORENÇ DES CARDASSAR	15	12	8
SANTA MARGALIDA	4	0	0
SANTANYÍ	9	0	0
SELVA	1	0	0
SES SALINES	1	0	0
SINEU	3	0	0
SOLLER	144	79	54
SON SERVERA	10	0	0
VALLDEMOSSA	1	0	0
VILAFRANCA DE BONANY	1	0	0
TOTAL	1708	282	104

**Table S3.** Land-cover changes 2000-2018 by municipality.

MUNICIPAL- ITIES	Artificialization Surfaces			Agriculture			Forest		
	Hectares 2018–2000	% Differ- ence	% Municipal 2018	Hectares 2018– 2000	% Differ- ence	% Municipal 2018	Hectares 2018– 2000	% Differ- ence	% Municipal 2018
Alaró	3.92	4.38	2.04	–301.83	–11.28	51.99	297.91	16.53	45.97
Alcúdia	285.51	48.17	14.71	–526.28	–18.90	37.82	167.07	6.89	43.40
Algaida	–135.39	–57.34	1.12	–40.05	–0.57	77.61	175.43	10.13	21.26
Andratx	–58.77	–10.08	6.77	–272.56	–17.29	16.84	330.09	5.91	76.37
Ariany	–1.33	–4.42	1.24	–81.36	–4.25	79.37	82.69	22.62	19.39
Artà	68.01	30.35	2.09	–1554.21	–24.79	33.79	1483.90	19.89	64.10
Banyalbufar	31.43		1.75	–137.61	–33.51	15.22	106.06	7.67	83.02
Binissalem	–17.15	–13.30	3.76	–57.65	–2.09	90.98	74.80	91.68	5.26
Búger	25.14		3.04	–42.48	–5.61	86.27	17.35	24.37	10.69
Bunyola	35.86	11.55	4.09	–193.41	–6.42	33.32	159.68	3.11	62.59
Calvià	215.99	9.23	17.71	–567.57	–15.65	21.19	348.88	4.12	61.08
Campanet	15.60	56.99	1.24	–129.87	–6.86	50.97	114.27	7.42	47.79
Fields	61.79	19.45	2.54	–339.60	–2.91	75.87	187.34	6.88	19.47
Capdepera	178.81	37.75	11.93	–492.16	–18.65	39.24	311.34	13.20	48.79
Consell	–8.87	–12.16	4.68	8.87	0.68	95.32	0.00	#DIV/0!	0.00
Costitx	0.00	0.00	0.00	–56.03	–4.20	83.23	56.03	27.82	16.77
Deyá	27.31	0.00	1.81	–178.93	–28.49	29.83	150.94	17.20	68.31
Escorca	–40.06	–100.00	0.00	–439.45	–62.53	1.90	631.43	4.90	97.28
Esporles	–20.78	–13.28	3.85	–172.78	–14.51	28.86	193.56	8.88	67.29
Estellencs	0.00	0.00	0.00	–88.36	–24.82	20.11	88.20	9.05	79.88
Felanitx	193.83	44.86	3.69	–857.18	–6.13	77.43	662.60	26.12	18.87
Fornalutx	4.16	0.00	0.21	–158.59	–24.66	24.89	154.36	11.84	74.90
Inca	49.13	18.89	5.31	–115.39	–2.31	83.81	66.26	11.66	10.89
Lloret de Vis- talegre	0.00	0.00	0.00	48.63	3.66	79.00	–48.63	–11.73	21.00
Lloseta	62.57	193.32	7.85	–126.71	–13.81	65.40	64.13	24.74	26.74
Llubí	6.07	13.03	1.51	–117.88	–3.54	92.09	111.82	100.39	6.40
Llucmajor	137.93	12.34	3.84	–741.87	–3.58	61.22	601.23	5.56	34.93
Manacor	288.18	34.56	4.32	–1193.41	–6.07	71.12	903.51	16.50	24.55
Mancor de la Vall	13.99	116.69	1.31	–222.54	–21.55	40.75	208.56	22.12	57.94
Maria de la Salut	–7.66	–10.46	2.15	–85.01	–3.73	72.03	92.67	13.34	25.82
Marratxí	58.67	3.96	28.42	–121.54	–3.44	63.05	62.87	15.74	8.53
Montuïri	22.22	85.20	1.18	–15.48	–0.42	89.91	–6.74	–1.81	8.91
Wall	122.52	64.20	5.35	–236.40	–6.43	58.72	71.50	13.93	9.99
Palma	837.18	14.30	34.27	–900.36	–9.52	43.82	59.14	1.40	21.88
Petra	40.38	50.20	1.73	–264.00	–4.84	74.24	223.62	15.34	24.03
Pollença	282.99	99.01	3.77	–356.89	–8.82	24.48	69.48	0.65	71.72

<b>Porreres</b>	78.59	71.56	2.17	-489.54	-6.61	79.68	410.95	35.26	18.15
<b>Puigpunyent</b>	-10.36	-6.49	3.53	-219.08	-20.97	19.53	229.44	7.59	76.94
<b>Sa Pobla</b>	73.09	40.68	5.21	-107.30	-2.99	71.67	-23.67	-3.01	15.72
<b>Sant Joan</b>	44.91	0.00	1.17	-129.21	-3.81	84.66	84.29	18.27	14.17
<b>Sant Llorenç des Cardassar</b>	105.80	32.81	5.23	-731.22	-11.52	68.53	625.21	41.01	26.24
<b>Santa Eugènia</b>	-66.19	-72.55	1.24	34.12	2.67	64.84	32.07	4.90	33.93
<b>Santa Margalida</b>	92.72	27.85	4.93	-552.25	-9.81	58.79	459.03	17.16	36.28
<b>Santa Maria del Camí</b>	-15.59	-12.40	2.93	-19.03	-0.79	63.47	34.62	2.82	33.60
<b>Santanyí</b>	25.52	3.57	5.96	-677.40	-7.25	69.73	654.12	28.01	24.05
<b>Rainforest</b>	-8.43	-19.37	0.72	-70.79	-2.44	58.15	79.22	4.12	41.13
<b>Sencelles</b>	-309.71	-84.17	1.10	333.99	7.88	86.59	-24.28	-3.60	12.30
<b>Ses Salines</b>	26.22	13.62	5.63	-96.45	-3.18	75.65	19.88	3.24	16.29
<b>Sineu</b>	28.08	27.25	2.75	-128.40	-3.29	79.06	100.31	13.07	18.20
<b>Sóller</b>	161.79	81.67	8.44	-791.15	-37.01	31.60	628.55	32.64	59.94
<b>Son Servera</b>	30.96	7.65	10.26	-215.27	-7.98	58.42	184.00	16.05	31.31
<b>Valldemossa</b>	6.11	9.44	1.65	-135.49	-12.28	22.60	129.31	4.15	75.75
<b>Vilafranca de Bonany</b>	15.97	26.10	3.22	-45.10	-2.00	92.17	29.14	35.86	4.61
<b>Grand total</b>	3058.67	15.43	955.61	-15167.50	-7.02	8389.73	11925.55	9.68	5642.23

**Table S4.** Python program for extracting the Flickr Python program.

```
import requests
import csv
from google.colab import drive

# Mount Google Drive
drive.mount('/content/drive')

# Flickr API settings
API_ENDPOINT = "https://api.flickr.com/services/rest/"
API_KEY = "662028500c11bca5d9272016d3d4369" # Replace with your real API key

# Function to obtain metadata of the photos inside the bounding box of Mallorca
def get_photo_metadata(bbox, min_date, max_date, page=1):
    params = {
        "method": "flickr.photos.search",
        "api_key": API_KEY,
        "bbox": bbox,
        "min_upload_date": min_date,
        "max_upload_date": max_date,
        "extras": "geo,owner_name,date_taken",
        "format": "json",
        "nojsoncallback": "1",
        "page": page,
        "per_page": 500 # Maximum allowed by Flickr
    }

    response = requests.get(API_ENDPOINT, params=params)
```

```

data = response.json()
metadata = [{
    "id": photo["id"],
    "owner_name": photo["ownername"],
    "date_taken": photo["datetaken"],
    "latitude": photo["latitude"],
    "longitude": photo["longitude"]: photo["longitude"].
} for photo in data["photos"]["photo"] if photo.get("latitude") and
photo.get("longitude")]
return metadata, data["photos"]["pages"]]

# Define the bounding box for Majorca
bbox = "2.2534,39.2415,3.4663,39.9612"
min_date = "2015-01-01"
max_date = "2019-10-31"

all_metadata = []

# Collect metadata from all pages
metadata, total_pages = get_photo_metadata(bbox, min_date, max_date)
all_metadata.extend(metadata)
for page in range(2, total_pages + 1):
    meta, _ = get_photo_metadata(bbox, min_date, max_date, page)
    all_metadata.extend(meta)

# Convert and save metadata directly to CSV file
def save_in_csv(data, path_csv):
    with open(path_csv, 'w', newline='') as file:
        csv_writer = csv.DictWriter(file, fieldnames=["id", "owner_name", "date_taken",
"latitude", "longitude"])
        csv_writer.writeheader()
        for item in data:
            csv_writer.writerow(item)

# Specify the path in your Google Drive for the CSV file
path_csv = '/content/drive/My Drive/fotos_mallorca_2015_2019_attributes.csv'.

# Save data in CSV
save_in_csv(all_metadata, path_csv)

print(f "Metadata for {len(all_metadata)} photos has been saved to the file {path_csv}." )

```