Cancer Rates from 2012-2016 Melanoma

Objective

- **The Obj. is to prove my hypothesis about the relationship of Melanoma and UV rays**

- **Make a valid map for the rate of Melanoma in New York State**

- **Verify the map with the assistance of a map of UV rays**

- **Use the data and verify if Melanoma rates and UV rays are related**

Areas Of The Investigation

- The area of the most UV ray rates investigation will be conducted on the entirety of the United States.

- The area of the cancer rates from 2016 will be investigated on the entirety of New York state.
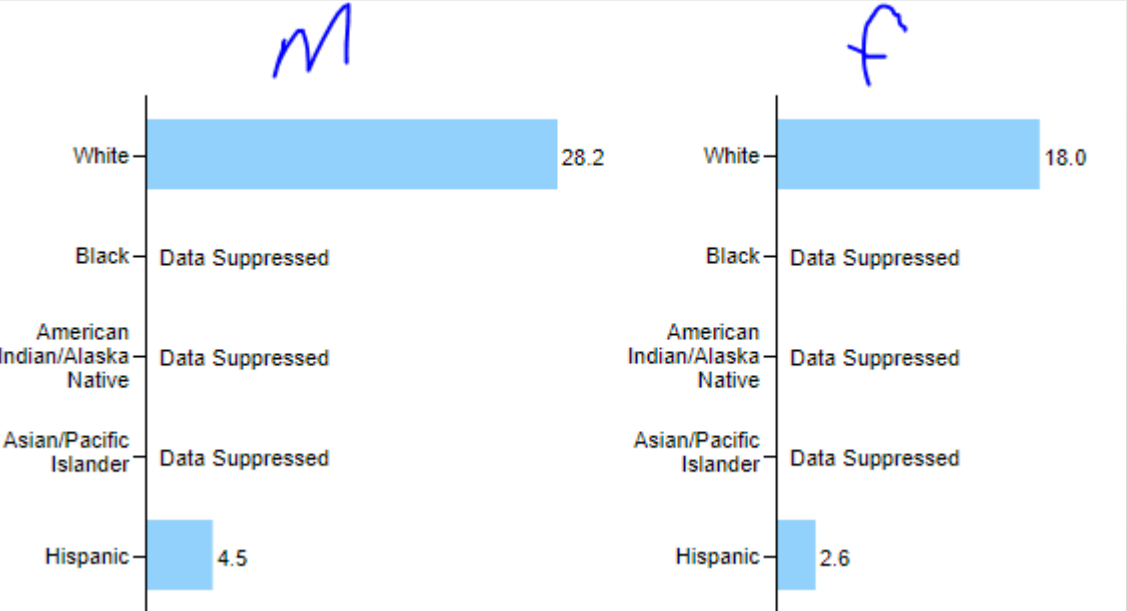
Data Collected

- This is the data collected for cancer rates in New York State.
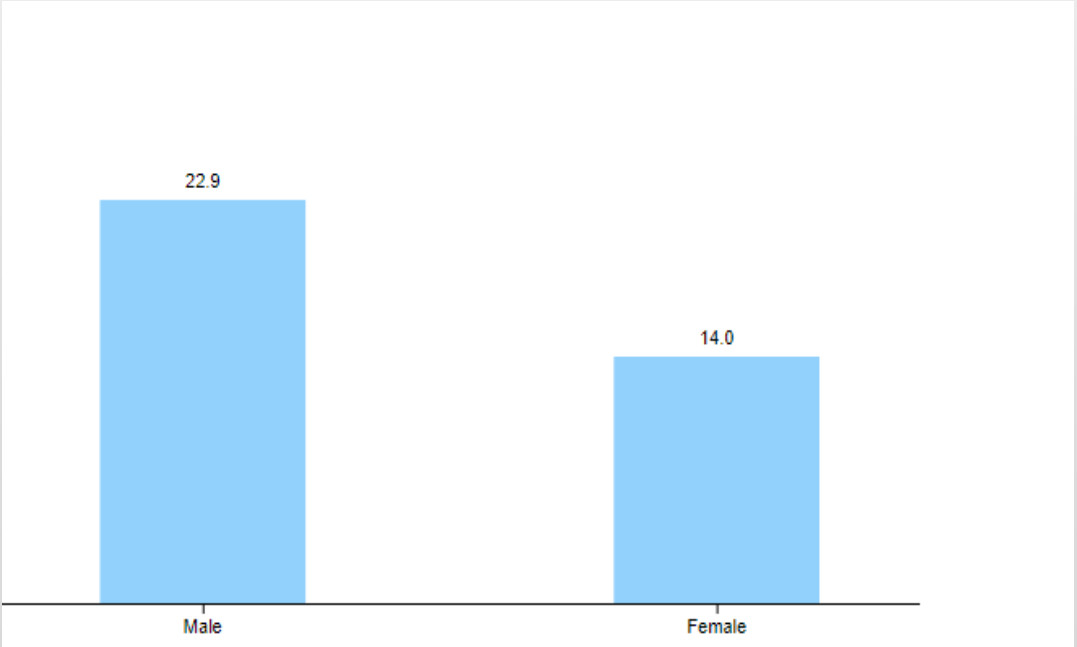
- The UV rays' data is too large to fit. 3109 rows.

	Area	County	CancerTyp	Year	Sex	AgeAdjust	CaseCoun	Population
1	Area	County	CancerTyp	Year	Sex	AgeAdjust	CaseCoun	Population
2	New York	Bronx Cou	Melanom	2012-2016	Male and	4.3	294	7225933
3	New York	Queens C	Melanom	2012-2016	Male and	8.2	1071	11622232
4	New York	Franklin C	Melanom	2012-2016	Male and	14.6	45	255963
5	New York	Kings Cou	Melanom	2012-2016	Male and	8.5	1133	13106099
6	New York	Schenecta	Melanom	2012-2016	Male and	16.3	156	775797
7	New York	Rockland	Melanom	2012-2016	Male and	16.2	295	1614331
8	New York	Greene Co	Melanom	2012-2016	Male and	19.2	62	240088
9	New York	Richmond	Melanom	2012-2016	Male and	17.3	478	2371877
10	New York	New York	Melanom	2012-2016	Male and	17.3	1643	8235025
11	New York	Sullivan C	Melanom	2012-2016	Male and	18.9	90	380446
12	New York	Ulster Cou	Melanom	2012-2016	Male and	18.9	215	902915
13	New York	Montgom	Melanom	2012-2016	Male and	18.8	56	248072
14	New York	Oneida Co	Melanom	2012-2016	Male and	16.6	233	1164262
15	New York	Onondaga	Melanom	2012-2016	Male and	18.8	511	2340592
16	New York	Columbia	Melanom	2012-2016	Male and	20.4	84	309275
17	New York	Dutchess	Melanom	2012-2016	Male and	21	379	1480279
18	New York	Albany Co	Melanom	2012-2016	Male and	21.9	388	1539493
19	New York	Chemung	Melanom	2012-2016	Male and	21.9	119	438055
20	New York	Cattaraug	Melanom	2012-2016	Male and	22.9	112	392901
21	New York	Cortland C	Melanom	2012-2016	Male and	19.5	47	242906
22	New York	Steuben C	Melanom	2012-2016	Male and	22.2	134	490362
23	New York	Delaware	Melanom	2012-2016	Male and	22	71	231970
24	New York	Putnam C	Melanom	2012-2016	Male and	20.3	126	497721
25	New York	St. Lawrer	Melanom	2012-2016	Male and	22.8	142	556904
26	New York	Wayne Co	Melanom	2012-2016	Male and	22.8	125	459600
27	New York	Westches	Melanom	2012-2016	Male and	20.2	1197	4858549
28	New York	Orange Co	Melanom	2012-2016	Male and	20.1	407	1882827
29	New York	Herkimer	Melanom	2012-2016	Male and	19.8	71	316707
30	New York	Nassau Co	Melanom	2012-2016	Male and	22.5	1916	6797963
31	New York	Oswego C	Melanom	2012-2016	Male and	21.5	143	602158
32	New York	Hamilton	Melanom	2012-2016	Male and	Data Supp	Data Supp	23545
33	New York	Essex Cou	Melanom	2012-2016	Male and	24.1	66	192095
34	New York	Erie Count	Melanom	2012-2016	Male and	28.3	1584	4615380
35	New York	Fulton Co	Melanom	2012-2016	Male and	23.1	72	270769
36	New York	Lewis Cou	Melanom	2012-2016	Male and	26.3	43	134858
37	New York	Monroe C	Melanom	2012-2016	Male and	26.3	1128	3744283
38	New York	Allegany C	Melanom	2012-2016	Male and	25	73	238334
39	New York	Jefferson	Melanom	2012-2016	Male and	25.9	147	590097
40	New York	Livingston	Melanom	2012-2016	Male and	27.5	103	322901
41	New York	Cayuga Co	Melanom	2012-2016	Male and	28.4	139	393507
42	New York	Chautauq	Melanom	2012-2016	Male and	26.5	219	658515
43	New York	Chenango	Melanom	2012-2016	Male and	28.3	90	245842
44	New York	Broome C	Melanom	2012-2016	Male and	27.2	330	985766
45	New York	Tompkins	Melanom	2012-2016	Male and	23.1	117	520340
46	New York	Orleans C	Melanom	2012-2016	Male and	33.8	81	209327
47	New York	Seneca C	Melanom	2012-2016	Male and	25.7	53	175065
48	New York	Madison C	Melanom	2012-2016	Male and	24.2	105	360262
49	New York	Suffolk Co	Melanom	2012-2016	Male and	26.5	2373	7494294
50	New York	Tioga Cou	Melanom	2012-2016	Male and	26.2	82	248313
51	New York	Wyoming	Melanom	2012-2016	Male and	24.1	60	205650
52	New York	Yates Cou	Melanom	2012-2016	Male and	35.2	52	125799
53	New York	Clinton Co	Melanom	2012-2016	Male and	25.6	123	406883
54	New York	Warren Co	Melanom	2012-2016	Male and	27.4	122	324399
55	New York	Ontario Co	Melanom	2012-2016	Male and	30.6	209	546185
56	New York	Washingt	Melanom	2012-2016	Male and	23.2	90	312273
57	New York	Schoharie	Melanom	2012-2016	Male and	26.8	56	158695
58	New York	Genesee C	Melanom	2012-2016	Male and	24.2	93	294446
59	New York	Rensselae	Melanom	2012-2016	Male and	23.5	223	798840
60	New York	Niagara C	Melanom	2012-2016	Male and	28.9	388	1066830
61	New York	Otsego Co	Melanom	2012-2016	Male and	29	116	305415
62	New York	Schuyler C	Melanom	2012-2016	Male and	33.5	41	91045
63	New York	Saratoga C	Melanom	2012-2016	Male and	27.8	382	1125877

Data Collected (Continued)

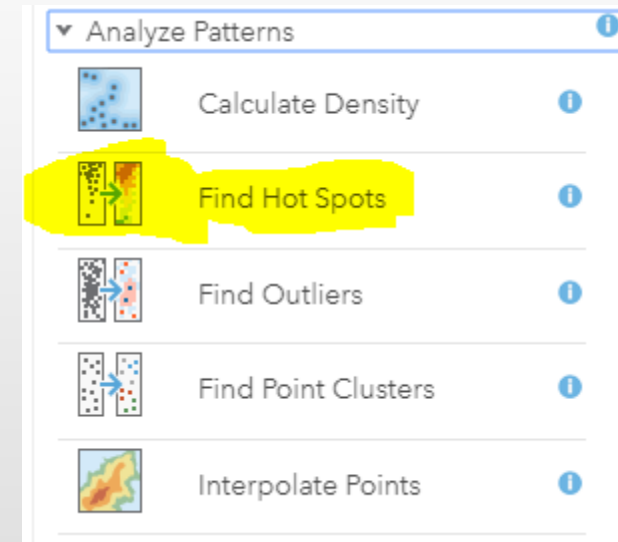Data collected for male and females(more enriched):
Amount is in 100,000

Data collected for males and females:
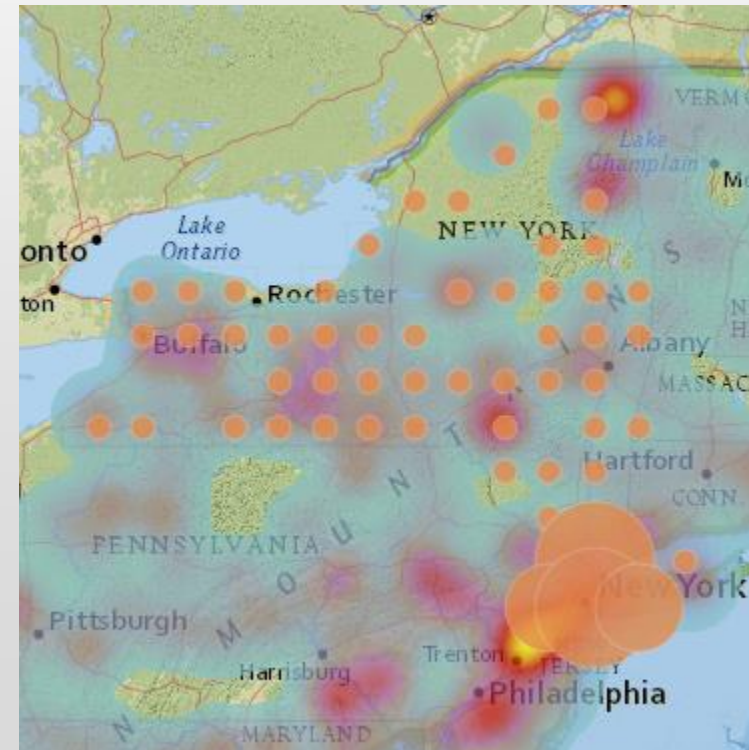Amount is in 100,000

Analysis used

Hotspot Analysis used.

I Found out that the amount of UV rays line up with the rate of melanoma.

Links and Credits

https://gis.cancer.gov/tools/uv-exposure/

https://gis.cdc.gov/Cancer/USCS/DataViz.html

Cancer Rates from 2012-2016
Melanoma

My Career Story

Who I am:

- Activities I like are watching documentaries

- School subjects I like are: Science, Math, and Technology

- My interest areas are: Realistic, Investigative, and Artistic

Where I am headed:

- My top Occupations are: Astronomer and animator

- An astronomer observes space and solves problems quickly

- Astronomers need a doctoral degree

- What I like about astronomers are: That they find new discoveries about the unexplored Universe.

My Career Story(continued)

How I can get there:

- During the school year I can work hard to improve my grades and take science and math classes

- During the summer I can contact mentors and learn more

- My teachers can help me on my career path

How GIS is related to astronomy:

- They both are science related careers

- They both need data to prove their points

- GIS is used in Astronomy

My Career Choices

Interests of GIS and GIS Related Occupations