Title

Waves Exploration

Problem Statement and Background

Using data collected by buoys on oceanic wave patterns over a 30-month period, we will be looking at data dealing with wave hei as well as plotting and predicting the wave pattern in the future given certain parameters base on the collected data. These are ou wave height).Using the location and direction of the wave currents, being able to plot the patterns of the waves. Plot the patterns time of year or ocean temperature. After analyzing what time and temperatures occur with the waves, it would be in our best inter relationship between shark attacks to wave occurrence we can see when it is safe to surf as well as should surfing not even be ar beaches have shark nets for protection. So almost all shark attacks are random. We plan to use our data to see if these attacks a dataset has 24,000 rows and 6 columns. While the second dataset has 511 rows and 11 columns .I plan to collect more data as th many data to work with so it should come out very clean and consistent. I haven't recently change attributes of the waves dataset or wrote a function that would clean it up. So far in my data I did not have any surprises. The majority of shark attacks occur near drop-offs, where divers often swim. The wave height should not be a surprise where the attacks will take place.
Sharks have three main types of ways to attack. The hit-and-run attacks, the bump-and-bit attacks, and then the typical sneak att common shark attack, and the least dangerous. It usually involves surfers, swimmers, or anybody in the wrong area of the water. potentially fatal injuries, which is what people see in the movies a lot. In sneak attacks, a shark will stealthily appear without warni searching for food. With the visibility being limited during the twilight hours.
In my notebook I have displayed several graphs to link the relationships of the waves dataset. I first made a density plot of the "sig period. With this I was able to put a graph together to look at the significant wave height over time and at what time it is the highes plot to show the frequency of the maximum wave height at certain sea surface temperatures. This will allow me to determine wha temperature is steady up and down. With this information I can further link the shark attacks wave temperature to the maximum w to show the frequency of the significant wave height at certain sea surface temperatures. The relationship is very similar to that of height and sea surface temperature. I made this plot so I could better look at the relationship and to see more if they are related w waves as well as shark attacks. For now I plan to take advantage of the data I have in my shark dataset. In this dataset I am going certain types of sharks will attack in specific water temperatures. This is important for research because some shark species are r what water temperatures are safe to swim in.
In conclusion, I have gathered a lot of data which I am still excited to work around. At first I thought my whole project would be on have even more data as well as more conclusions to why certain waves occur how they do and if it has an impact on certain crea

Citations

Coastal Data System - Waves (Mooloolaba) - Open Data Portal | Queensland Government. (2019). Retrieved October 20, 2019, f (https://www.data.qld.gov.au/dataset/coastal-data-system-waves-mooloolaba)