For the primary analysis of our hurricane data, our group took the data of the last twenty-five years, from 1999 to 2024 and plotted the hurricane routes over the Gulf of Mexico. We’re going to be focusing on the data that was collected for our visualization, which is focused on the Gulf of Mexico and a part of the Caribbean Sea, or the area between latitude five and thirty-five and the longitude negative one hundred and negative seventy. With this data we will be looking at the where the moved, their duration, and the average intensity while in our recording area. With this we will be breaking down our data by year to help us identify if there are any major trends we can notice, or even if there are any major differences throughout the years.

In 1999, there were only 10 hurricanes in the gulf, but only three noteworthy ones. The noteworthy hurricanes for that year were Bret, Irene, and Katrina, with Bret starting just north of Coatzacoalcos and continuing to move north before making an almost 80° turn to the left and moving in between Corpus Christi and Progreso before dissipating between near the Rio Grande River over 126 hours, with an average intensity of 65.91kt over that period. Irene started deep in the Caribbean sea, moving north to hit 3 major cities directly, Havana, Key West, and Miami, relatively fast over its 114 hour lifespan with an average intensity of 52.5kt. The final noteworthy hurricane is Katrina starting in the Caribbean Sea but even lower that Irene, Katrina moved northeast and eventually hitting Belize City before dissipating at the where Mexico meets the ocean. Katrina was only around for 90 hours with a low intensity of 26.88kt but it covered a large distance relatively fast. Overall, 1999 had an overall storm length of 66 and an average intensity of about 38kj, **COMPARE TO OTHER YEARS**

In 2000, there were only 12 hurricanes in the gulf

In 2001, there were only 8 hurricanes in the gulf

In 2002, there were only 11 hurricanes in the gulf

In 2003, there were only 10 hurricanes in the gulf

In 2004, there were only 4 hurricanes in the gulf

In 2005, there were only 19 hurricanes in the gulf

In 2006, there were only 4 hurricanes in the gulf

In 2007, there were only 11 hurricanes in the gulf

In 2008, there were only 12 hurricanes in the gulf

In 2009, there were only 5 hurricanes in the gulf

In 2010, there were only 12 hurricanes in the gulf

In 2011, there were only 11 hurricanes in the gulf

In 2012, there were only 8 hurricanes in the gulf

In 2013, there were only 8 hurricanes in the gulf

In 2014, there were only 5 hurricanes in the gulf

In 2015, there were only 4 hurricanes in the gulf

In 2016, there were only 10 hurricanes in the gulf

In 2017, there were only 11 hurricanes in the gulf

In 2018, there were only 6 hurricanes in the gulf

In 2019, there were only 10 hurricanes in the gulf

In 2020, there were only 18 hurricanes in the gulf

In 2021, there were only 12 hurricanes in the gulf

In 2022, there were only 9 hurricanes in the gulf

In 2023, there were only 7 hurricanes in the gulf

In 2024, there were only 9 hurricanes in the gulf